Monday A.M.

Union

**U11A Moscone South: 104 Monday 0800h**

*The 12 January 2010 M7.0 Haiti Earthquake I*

**Presiding:** E Calais, Purdue University; S E Hough, U.S. Geological Survey


**0815h U11A-02** The Role of Science and Engineering in Rebuilding a More Resilient Haiti (Invited): D Applegate

**0830h U11A-03** Networks in disasters: Multidisciplinary communication and coordination in response and recovery to the 2010 Haiti Earthquake (Invited): B G McA d o n, J Augenstein, L Comfort, L Huggins, N Krenitsky, S Scheinert, T Sarratt, M Siciliano, S Stebbins, P Sweeney, Title of Team: University of Pittsburgh Haiti Reconnaissance Team

**0845h U11A-04** The Role of Science and Engineering in Response and Reconstruction Following the 2010 Haiti Earthquake (Invited): W D Penning ton


**0915h U11A-06** The 2010 Haiti earthquake sequence: new insight of the tectonic pattern from aftershocks and marine geophysical data: Haiti-OBS cruise: B F Mercier De Lepinay, Y Mazabraud, F Klen gelhoef e r, V Clouard, Y Hello, D Graindorge, B Marca illo u, J Crozon, J Saurel, P Charvis, B S Mildor, A Deschamps, M Bouin, J Perrot

**0930h U11A-07** Seismic Monitoring and Post-Seismic Investigations following the 12 January 2010 Mw 7.0 Haiti Earthquake (Invited): J Altdorfer, A D ieuseul, W L Ellsworth, D D Given, S E Hough, M G Janvier, J Z Maharrey, M E Meremonte, B S Mildor, C Prepetit, A Yong

**0945h U11A-08** Triggering of the 2010 Haiti earthquake by hurricanes and possibly deforestation: S Wdowinski, I Tsukanov, S Hong, F Amelung

**A11B Moscone South: Poster Hall Monday 0800h**

*Ice and Mixed-Phase Precipitation Characterization in Passive and Active Microwave Remote Sensing, in Situ observations, and Modeling Perspectives I Posters*

**Presiding:** T Matsui, NASA GSFC; W Tao, NASA GSFC; B T Johnson, University of Maryland Baltimore County; G Skofronick-Jackson, NASA Goddard Space Flight Center; L Liao, UMBC; S Tanelli, Jet Propulsion Laboratory

**0800h A11B-0034** POSTER Synthetic GPM Simulator Development using GPM measurements: T Matsui, X Li, T Iguchi, W Tao

**0800h A11B-0035** POSTER Numerical experiment of lake-effect snowstorm in C3VP campaign using the WRF model coupled with spectral bin microphysics: T Iguchi, T Matsui, X Li, J J Shi, W Tao

**0800h A11B-0036** POSTER Numerical Simulations of a Snow Storm Using the WRF Model: Sensitivity tests of microphysics schemes and initial conditions: J J Shi, W Tao, T Matsui, A Y Hou, S E Lang, C D Peters-Lidard

**0800h A11B-0037** POSTER Comparing Aircraft Observations of Snowfall to Forecasts Using Single or Two Moment Bulk Water Microphysics Schemes: A Molthan

**0800h A11B-0038** POSTER Long-term evaluation of COSMO forecast models over Germany using Mesosat Second Generation (MSG) data: S Stapelberg, S Crewell, T Böhme, J Fischer, T Ackermans, A Seifert, N van Lipzig, T Reinhardt, C Selbach


**Aerospace Sciences**

**U11A Moscone South: Poster Hall Monday 0800h**

*High-Resolution Active Optical Remote Sensing of Atmospheric Processes I Posters*

**Presiding:** D M Tratt, The Aerospace Corporation; S Ismail, NASA Langley Research Center; S Lolli, Leosphere

**0800h A11A-0022** POSTER A new approach proposed to Fourier transform spectroscopy using a broad-band laser source: K Sung, P Chen, T J Crawford

**0800h A11A-0023** POSTER Trace Gas Measurements on Mars and Earth using Optical Parametric Generation: K Numata, H Riris, S Li, X Sun, J B Abshire

**0800h A11A-0024** POSTER LASE system upgrade and measurements from the NASA GRIP field experiment: S Kooi, S Ismail, R A Ferrare, J W Hair, A Notari, J E Collins, A R Nehrir, C F Butler, J Halverson

All information is current as of November 12, 2010
0800h  A11B-00040 POSTER Retrieval of the Physical Parameters for Frozen Precipitation: N Niamsuwan
0800h  A11B-00041 POSTER Precipitation Remote Sensing Using Combined Passive and Active Microwave Observations: B T Johnson
0800h  A11B-00043 POSTER Observations of snowfall by ground-based active and passive remote sensing: S Kneifel, U Lohner, S Crewell, S Redl
0800h  A11B-00044 POSTER Simulations of Radar Bright Band at Multiple Frequencies and Its Comparisons with Airborne Radar Measurements: L Liao, R Meneghini
0800h  A11B-00045 POSTER Analysis of observational cases measured by MRR and Parsivel disdrometer for understanding the physical characteristics of precipitation: J cha, K Chang, J Jeoung, J Bae, Y Choi, Y Kim, Title of Team: hydrometeo. Resource Res. team
0800h  A11B-00046 POSTER Snowflake Visualization: L F Bliven, P A Kucera, P Rodriguez
0800h  A11B-00047 POSTER Validation of Cloud Seeding using the Airborne Radar: K Chang, J Jung, J cha, C Lee, Y Choi, H Lee

A11C Moscone South: Poster Hall Monday 0800h

Innovative Applications of Satellite and Ground Observations in Evaluating Large-Scale Models: Beyond the Resemblance Test I Posters (joint with GC)

Presiding: X Huang, University of Michigan; S A Klein, Lawrence Livermore National Laboratory; Z Luo, City College of New York, CUNY

0800h  A11C-00049 POSTER Impact of horizontal resolution on climate model forecasts of tropical precipitation and diabatic heating for the TPW-ICE period: S A Klein, J S Boyle
0800h  A11C-00050 POSTER Inference of SST on humidity and temperature in the outflow of tropical deep convection: Observational basis for evaluating model simulations: Z Luo, D Kley, R H Johnson, G Liu
0800h  A11C-00051 POSTER Simulated atmospheric bridge across tropical ocean basins and its sensitivity to seasonal evolution in current and future climate regimes: H Chuang, X Huang
0800h  A11C-00053 POSTER Using Self Organizing Maps to evaluate the NASA GISS ARS SCM at the ARM SGP Site: X Dong, A D Kennedy, B Xi
0800h  A11C-00054 POSTER Classification of clouds and deep convection from GEOS-5 using satellite observations: W M Putman, M Suarez
0800h  A11C-00055 POSTER Convection-climate Feedbacks in ECHAM5 General Circulation Model: A Lagrangian Trajectory Perspective of Detrainment Cirrus Cloud Life Cycle: S Gehlot, J Quaas
0800h  A11C-00056 POSTER Investigating Climate Trends in 14 Years of AERI Observations at the ARM SGP Site: P J Gero, D Turner
0800h  A11C-00057 POSTER Evaluation of GEOS-5 analyses using six-year (2004-2010) observations of upper tropospheric water vapor and cloud ice from Aura MLS: J H Jiang, H Su, S Pawson
0800h  A11C-00058 POSTER Object Based Evaluation of GCM-Simulated Clouds and Radiation For the 1998 El Nino- La Nina Transition: C Hsu, A R Jongeward, D J Posselt, J Potter
0800h  A11C-00059 POSTER Can cloud-climate-feedbacks be constrained by comparison of low-cloud parametrizations in the ECHAM5 GCM using CALIPSO and CloudSat Satellite data?: C C Nam, J Quaas, E Roeckner, R Neggers, C Siegenthaler - Le Drian, F Isotta, B B Stevens
0800h  A11C-00060 WITHDRAWN
0800h  A11C-00061 POSTER Description of Cloud Occurrence from CloudSat-CALIPSO Cloud Mask Data and Comparison of the Measured Cloud Fraction with GCM Simulations: Q Zhang, G G Mace
0800h  A11C-00062 POSTER Nudged and forecast simulations in a multiscale modeling framework - maximizing the use of high value intermittent observations: G J Kooperman, M S Pritchard, R C Somerville
0800h  A11C-00063 POSTER EVALUATION OF NCEP GLOBAL FORECAST SYSTEM (GFS) CLOUD PROPERTIES USING SATELLITE RETRIEVALS: H Yoo, Z Li
0800h  A11C-00064 POSTER Studying sampling effects in MODIS and MISR aerosol data via GOCART model data: L Petrov, G G Leptoukh, M Chin, Q Tan, T L Diehl
0800h  A11C-00065 POSTER The MISR Cloud Motion Vector Product: 10 years of height resolved, cloud-track winds: K Mueller, M J Garay, V Jovanovic, C Moroney, D L Wu, D J Diner

A11D Moscone South: Poster Hall Monday 0800h

Multiscale Organization of Tropical Convection: Year of Tropical Convection (YOTC) I Posters

Presiding: D E Waliser, Jet Propulsion Laboratory/Caltech; M W Moncrieff, NCAR

0800h  A11D-00066 POSTER Determining the Factors for the Simulation of the Madden-Julian Oscillation: Use of NCEP CFS RAS Model: K Seo, J Choi, W Wang
0800h  A11D-00068 POSTER Boreal Summer ISO hindcast experiment: preliminary results from SNU: S Heo, I Kang, D Kim, Y Ham
0800h  A11D-00069 POSTER Electrically-Active Convection and Tropical Cyclogenesis in the Atlantic and East Pacific: K Leppert, W A Petersen
0800h  A11D-00070 POSTER Changes in the tropical hydrologic cycle in a warming environment: influence on organized deep convection: D J Posselt, S C van den Heever, G S Stephens
0800h  A11D-00071 POSTER Scale interaction of the Diurnal Cycle of Rainfall: Influence of Large-scale Circulations: S P Rauniyar, K J Walsh
0800h  A11D-00072 POSTER Moist thermodynamics of Madden Julian Oscillation in a high resolution regional model: S M Hagos, L Leung
0800h  A11D-00073 POSTER Vertical Structure of Diabatic Heating of Convectively-Coupled Kelvin Waves from TRMM Satellite Products: B L Sawliski, K Li, X Jiang, D E Waliser, Y L Yung
0800h  A11D-00074 POSTER Inter-comparison of deep convection over the Tibetan Plateau-Asian Monsoon Region and subtropical North America in boreal summer using CloudSat/CALIPSO data: Y Luo, R Zhang, W Qian, Z Luo

All information is current as of November 12, 2010
0800h A11D-0075 POSTER Tropical overshooting convection from CloudSat and ISCCP: H Takahashi, Z Luo

0800h A11D-0076 POSTER Investigating the atmospheric energy spectra using ECMWF analysis: Regional dependence: P Mukherjee, M Zhang

0800h A11D-0077 POSTER Spatial-Temporal Evolution of Kelvin Waves and the Vertical Structure of Associated Heating-Rates: Y L Ying, B L Slawski, K Li, X Jiang, D E Waliser

0800h A11D-0078 POSTER Interannual Variations of Clouds Observed by A-Train Satellites: R Bhawar, J H Jiang, H Su

0800h A11D-0079 POSTER Systematic Relation between Intraseasonal Variability and Mean State Bias in AGCM Simulations: D Kim, A H Sobel, E D Maloney, D M Frierson, I Kang

0800h A11D-0080 POSTER Variability in Rainfall Drop-Size Distributions observed at the Darwin ARM site: M P Jensen, S Giangrande, M J Bartholomew

0800h A11D-0081 WITHDRAWN

0800h A11D-0082 POSTER Variations in Convectively Coupled Wave Activity and their Relationship with the Background Environment: S Leroux, G N Kiladis

0800h A11D-0083 POSTER An improved 20-km AGCM for global warming experiments: T Ose, R Mizuta, H Yoshimura, H Murakami, H Endo, M Matsueda, A Kitoh

0800h A11D-0084 POSTER Modes of Intraseasonal Variability within the Inter-Americas Sea and the Modulation of Easterly Waves During 2008 and 2009: Y L Serra

0800h A11D-0085 POSTER Relating large scale dynamic patterns and cloud properties at Darwin, Australia: S M Evans, R Marchand, T P Ackerman

0800h A11D-0086 POSTER NASA Giovanni Tool for Visualization and Analysis Support for the YOTC Program: D Ostrenga, G G Leptoukh, D E Waliser, Z Liu, A K Savchenko

0800h A11D-0087 POSTER High-frequency Waves in the Asian Monsoon: Results From an Observational and Modeling Study: C A DeMott, C Stan, D A Randall, J L Kinter, M Khairoutdinov

0800h A11D-0088 POSTER Observational study of the 1997/1998 El Nino-Induced Changes in Rainfall Vertical Structure in the East Pacific: R Li, Q Min, Y Fu

0800h A11D-0089 POSTER An Observational Analysis of the Relation Between MJO and ENSO: V Krishnamurthy, B P Kirtman

A11E Moscone South: Poster Hall Monday 0800h Multisensor and Model Aerosol Data Intercomparison and Integration I Posters (joint with IN)

Presiding: G G Leptoukh, NASA; S A Christopher, UA Huntsville

0800h A11E-0090 POSTER MISR Aerosol Air Mass Type Mapping over Mega-City: Validation and Applications: P Patadia, R A Kahn


0800h A11E-0092 POSTER Retrieval of land surface properties for aerosol and radiation estimation from MODIS data: R Liu, Y Liu

0800h A11E-0093 POSTER Uncertainty analysis in global aerosol size distribution and composition using ensemble based data assimilation: J I Rubin, W Collins, A F Arellano

0800h A11E-0094 POSTER Aerosol Size Distribution Modification by Interaction with Fog or Clouds Observed by AERONET: T F Eck, B Holben, J S Reid, D M Giles, M Rivas Avila, R Singh, S N Tripathi, C Bruegge, A Sinyuk, O Dubovik, A Smirnov

0800h A11E-0095 POSTER Integrating CALIPSO aerosol profiles and AIRS CO observations into OMI aerosol algorithm: Z Chen, O Torres, H T Jethva, C Ahn

0800h A11E-0096 POSTER Wind speed dependence in the MODIS aerosol retrieval over ocean: S Mattoo, R G Kleidman, L A Remer, R C Levy, A Smirnov

0800h A11E-0097 POSTER MISR Global Aerosol Product Assessment by Comparison with AERONET: B J Gaitely, R A Kahn


0800h A11E-0099 POSTER Transport of North African Dust from the Bodélé Depression to the Amazon Basin: a case study: I Koren, Y Ben Ami, Y Rudich, P Artaxo, S T Martin, M O Andreae


0800h A11E-0101 POSTER Long-wave radiative forcing due to mineral dust aerosol: L N Gunn, W Collins

0800h A11E-0102 POSTER Using Spaceborne Aerosol Observations to Constrain Biomass Burning Emissions in the GO-CART Model: M M Petrenko, R A Kahn, M Chin

0800h A11E-0103 POSTER Time evolution of size distribution for smoke aerosols using photon correlation spectroscopy: R P Singh

0800h A11E-0104 POSTER Cross-Characterization of Aerosol Properties from Multiple Spaceborne Sensors Facilitated by Regional Ground-Based Observations: M Petrenko, C M Ichoku, G G Leptoukh

0800h A11E-0105 WITHDRAWN

0800h A11E-0106 POSTER Susceptibility of Aerosol Retrievals to Cirrus Contamination during the BASE-ASIA Campaign and at Global View: J Huang, C Hsu, T Tsay, M Jeong, B Holben, T Berkoff, E J Welton

0800h A11E-0107 POSTER Comparison of Observed Full Sky Polarization to Radiative Transfer Model Using AERONET Retrieval Inputs: N Pust, J A Shaw

0800h A11E-0108 POSTER Introducing... The MODIS Collection 6 Aerosol Products: R C Levy, L A Remer, S Mattoo, R G Kleidman

0800h A11E-0109 POSTER Aerosol optical and microphysical properties from POLDER-PARSOL multi-angle photo-polarimetric measurements: O Hasekamp, P Litvinov, A Butz

0800h A11E-0110 POSTER CALIOP/CALIPSO: Improvement in the retrieval algorithm and a few applications: M S Kaenerlenbogen, M Vaughan, J Redemann, R M Hoff, R Rogers, R A Ferrare, P B Russell, C A Hostetler, J W Hair, B Holben

0800h A11E-0111 POSTER Spatio-temporal variability of aerosol in the tropics and its relationship with the hydrological cycle: M D Zuluaga, C Hoyos, P J Webster

0800h A11E-0112 POSTER Application of a global aerosol forecast model for multi-spectral ocean color atmospheric corrections: C S Kearney, R W Gould, D L Westphal, P M Martinolich
**A11F Moscone South: Poster Hall**  
**Monday 0800h**  
**Sources, Evolution, and Sinks of Organics in the Troposphere I**  
**Posters**

**Presiding:** C L Heald, Colorado State University, H Coe, The University of Manchester

0800h  **A11F-0113 POSTER**  Explicit Modeling of Organic Chemistry and SOA Partitioning in Mexico City: J Lee-Taylor, S Madronich, B Aumont, M Camredon, E C Apel, A Hodzic, G S Tyndall, R Valorsfo


0800h  **A11F-0115 POSTER**  Mechanism for the Oxidation of Hydroxyacetone under Atmospheric Conditions: J J Orlando, G S Tyndall

0800h  **A11F-0116 POSTER**  Development of a new Structure-Activity Relationship (SAR) for gas-phase reactions of NO3 radicals with organic compounds: J Kerdouci, B Picquet-Varrault, J Doussin

0800h  **A11F-0117 POSTER**  The Heterogeneous Reactions of NO3 with Multicomponent Mixtures and Their Atmospheric Implications: A K Bertram, S Xiao, R Iannone

0800h  **A11F-0118 POSTER**  Photochemical transformation of nitrate in the presence of para-halogenated phenols in frozen solutions: O Abida, H D Osthoff, T C Sutherland

0800h  **A11F-0119 POSTER**  Isotope Effect of Deuterated Methoxy Radicals (CH3O, CH3OD) Reacting With O3: G S Tyndall, H Hu, T S Dibble, J J Orlando

0800h  **A11F-0120 POSTER**  Rate Constants for the Gas-phase Reactions of O3 with cis-Ocimene, β-Myrcene, and trans-β-Farnesene as a Function of Temperature: D Kim, R A Hites, P S Stevens

0800h  **A11F-0121 POSTER**  Kinetics and Products of Heterogeneous Oxidation of Oleic acid, Linoleic acid and Linolenic acid in Aerosol Particles by Hydroxyl radicals: T Nah, S R Leone, K R Wilson

0800h  **A11F-0122 POSTER**  Examination of Early-Stage Chemistry of Secondary Organic Aerosol Formation using a Flow Cell: A J Pettibone, W S McGivern

0800h  **A11F-0123 POSTER**  Chamber investigations of multigenerational chemistry: J F Hunter, K E Daumitt, D R Worsnop, J H Kroll

0800h  **A11F-0124 POSTER**  Experimental Studies of the Kinetics of the Reaction of OH Radicals with Ethanol at Low Pressure: J A Liljegren, P S Stevens

0800h  **A11F-0125 POSTER**  Photoenhanced NO2 loss on simulated urban grime: R Ammar, M E Monge, B D’anna, C George


0800h  **A11F-0127 POSTER**  Carbonyl group containing products from nopinone oxidation: A Kahnt, Y Innuma, A Heinold, O Boge, H Herrmann

0800h  **A11F-0128 POSTER**  Thermal and Photochemical Oxidation of Organic Compounds on Model Mineral Dust Particles Exposed to Nitrogen Dioxide: J Raff, B J Finlayson-Pitts, J Szanyi


0800h  **A11F-0130 POSTER**  Experimental determination of kinetic constraints in gas/aerosol partitioning of ambient organic aerosol: A Khlystov, R Saleh, A Shihadeh

0800h  **A11F-0131 POSTER**  Hygroscopocity frequency distributions of secondary organic aerosols: S R Suda, M D Petters, A Matsunaga, R C Sullivan, P J Ziemann, S M Kreidenweis

0800h  **A11F-0132 POSTER**  On the Evaporation Kinetics and Phase of Laboratory and Ambient Secondary Organic Aerosol: A Zelenyuk, T Vaden, D G Imre, J Beránek, M Shrivastava

0800h  **A11F-0133 POSTER**  Anthropogenic monoterpenepollution episdes in a forest environment in association with aerosol particles: L Liao, R Taipale, M Dal Maso, M Ehn, H Junninen, T Nieminen, V Kerminen, M T Kulmala

0800h  **A11F-0134 POSTER**  Spatial and Temporal Volatile Organic Compound Measurements in New England: Key Insight on Sources and Distributions: B C Sive, M L White, R S Russo, Y Zhou, J L Ambrose, K Haase, H Mao, R W Talbot

0800h  **A11F-0135 POSTER**  Volatile Organic Compounds (VOCs) variability at Western Europe mountain site (puy de Dôme, French): C Gaimoz, A Colomb, V Jacob, J Jaffrezo, K Sellegri, J Pichon, D Picard, M Ribeiro, L Bouvier, M Legrand

0800h  **A11F-0136 POSTER**  Source Signatures of Organic Compounds in the Particle Phase in Bakersfield, CA: S Liu, D A Day, L M Russell

0800h  **A11F-0137 POSTER**  In-Situ ambient aerosol measurement over Los Angeles during CalNex2010 using a newly developed combined Thermal desorption Aerosol GC (TAG) and Aerodyne Aerosol Mass Spectrometer (AMS) instrument: TAG-AMS: T Hohaus, A Lambe, B J Williams, L R Williams, J Kimmel, D Suerer, N M Kreisberg, S V Hering, G A Isaacman, D R Worton, A Goldstein, D R Worsnop, J Jayne


0800h  **A11F-0139 POSTER**  Using Aerosol Mass Spectrometry to Investigate Types and Sources of Organic Aerosol in Rocky Mountain National Park: M I Schurman, T Lee, Y Sun, B A Schichtel, S M Kreidenweis, J L Collett

0800h  **A11F-0140 POSTER**  Highly Polar Organic Compounds in Summer Cloud Water from Whiteface Mountain, NY: J A Sagona, J E Dukek, M Mazurek

0800h  **A11F-0141 POSTER**  Hygroscopocity parameter of biogenic aerosols subject to OH-initiated heterogeneous oxidation at Whistler, British Columbia: J P Wong, J G Slowik, J Abbott, W R Leaitch, A Macdonald, D J Cziczo

0800h  **A11F-0142 POSTER**  Evolution of aerosol downdown of a major highway: J Liggio, R M Staelber, J Brook, S Li, A L Vlasenko, S J Sjostedt, M Gordon, P Makar, C Mihele, G J Evans, C Jeong, J J Wentzell, G L Lu, P Lee

0800h  **A11F-0143 POSTER**  Measurement of the temperature dependent partitioning of semi-volatile organics onto aerosol near roadways: J J Wentzell, J Liggio, S Li, J Brook, R M Staelber, G J Evans, C Jeong, A Sheppard, G L Lu, M Gordon, C Mihele

0800h  **A11F-0144 POSTER**  Ergosterol, arbutin and manitol as tracers for biological aerosols: Y Rudich, N Burshtein, N Lang-Yona

0800h  **A11F-0145 POSTER**  Inferring absorbing organic carbon content from AERONET data: A T Arola, G L Schuster, G Myhre, S Kazadzis, S Dey, S N Tripathi

0800h  **A11F-0146 POSTER**  On the factors governing the abundance of oxalic acid in tropospheric aerosol particles: D van Pinxteren, C Neusuess, E Brüggemann, T Gnauck, K Müller, H Herrmann

All information is current as of November 12, 2010
0800h  A11F-0147 POSTER Analysis of Tropospheric Peroxy Radical Observations and Current Understanding of Tropospheric Photochemistry: C A Cantrell, R S Hornbrook, L Mauldin, E C Apel, F M Flocke, A Fried, S R Hall, A J Weinheimer, J H Crawford, J R Olson

0800h  A11F-0148 POSTER A heterogeneous open ocean source for glyoxal and iodine oxide: R Volkamer, S Coburn, B K Dix, M Leehner, R Sinreich, T Duhl, A B Guenther

0800h  A11F-0149 POSTER Analysis of the water-soluble organic content of submicron aerosols formed from the in-situ replication of marine bubble bursting processes: H DeWitt, P Quinn, T S Bates, D J Coffman, K Schulz

0800h  A11F-0150 POSTER Seasonal variation of black carbon aerosol at Happo, a remote mountain site: X Liu, Y Kondo, H Matsui, N Oshima, L Sahu, N Takegawa, K Nakagomi, M Kajino

0800h  A11F-0151 POSTER The average carbon oxidation state of organic aerosol: Synthesis of laboratory and ambient measurements: K E Daumit, J H Kroll


0800h  A11F-0153 POSTER Supercritical Fluid Extraction of Biogenic SOA in Northern Michigan: R M Flores, P V Doskey, J A Perlinger

0800h  A11F-0154 POSTER A GC-LIF System for Specific Detection of Multifunctional RONO2: L Lee, R C Cohen

A11G Moscone South: Poster Hall Monday 0800h Tropospheric Multiphase Chemistry: Aerosol Formation and Modification by Aqueous Phase Processes I Posters

Presiding: A G Carlton, U.S. EPA; B Ervens, NOAA

0800h  A11G-0155 POSTER Study on isoprene OH oxidation with a focus on liquid phase chemistry: S R Zorn, Q Chen, M I Guzman, M Kuwata, S Lee, Y Liu, M L Smith, S T Martin

0800h  A11G-0156 POSTER Multiphase Processing of Isoprene Oxidation Products - Kinetic and Product Studies: D Hoffmann, L Schoene, J Schindelka, H Herrmann

0800h  A11G-0157 POSTER Laboratory kinetic and mechanistic studies on the OH-initiated oxidation of acetone in the aqueous phase: T Schaefer, J Schindelka, H Herrmann

0800h  A11G-0158 POSTER Aqueous-phase oxidation of isoprene, methyl vinyl ketone and methacrolein: Contribution to transformation of oxidants and formation of SOA: Z Chen, X Zhang, H Wang, Y Zhao, D Huang, X Shen

0800h  A11G-0159 POSTER Aerosol yields and losses of aldehydes and amines from evaporating cloud droplets: D O De Haan, L N Hawkins, A D Rynaski, S Wood

0800h  A11G-0160 POSTER Aqueous glyoxal photooxidation in the presence of inorganic nitrogen: A potential source of organic nitrogen in aerosols and wet deposition: J R Kirkland, Y Tan, K E Altieri, S Seitzinger, B J Turpin


0800h  A11G-0162 POSTER Secondary organic aerosol formation through cloud processing of aromatic VOCs: P Herckes, J W Hutchings, B Ervens

0800h  A11G-0163 POSTER Secondary Organic Aerosol (SOA) production from the Aqueous Reactions of Phenols and Triplet Aromatic Carbenoids: J Smith, Y Sun, Y Lu, Q Zhang, C Anastasio

0800h  A11G-0164 POSTER Depression of ammonia uptake to acidic aerosols by competing reactive uptake of ambient organics: S Li, J Liggio, A L Vlasenko, C Stroud, P Makar

0800h  A11G-0165 POSTER Hygroscopicity of dicarbonyl-amine secondary organic aerosol products investigated with HTDMA: L N Hawkins, D O De Haan

0800h  A11G-0166 WITHDRAWN

0800h  A11G-0167 POSTER A case study for SOA formation by glyoxal processing in aqueous aerosol in Mexico City: E Waxman, B Ervens, R Volkamer

0800h  A11G-0168 POSTER Effects on Aerosol Formation of a Revised CMAQ Cloud Chemistry Module: S F Mueller, J W Mallard, Q Mao

0800h  A11G-0169 POSTER Multiphase chemical mechanism in GMI: simulation for nitrate and ammonium: H Bian, S Steenrod, M Chin, J M Rodriguez

0800h  A11G-0170 POSTER Constraints on reactive chlorine cycling mechanisms in remote marine air: M J Lawler, E S Saltzman, R Sander

0800h  A11G-0171 POSTER Photochemistry of iron(III)-carboxylato complexes in aqueous atmospheric particles – Laboratory experiments and modeling studies: C Weller, A Tilghner, H Herrmann

0800h  A11G-0172 POSTER Kinetic models of aerosol surface and bulk chemistry: M Shiraiwa, C Pfrang, U Pöschl


0800h  A11G-0174 POSTER Elemental composition of Asian aerosols observed at a mountain site over central Japan: Y Zaizen, H Naoe, H Takahashi, Y Igarashi

A11H Moscone West: 3006 Monday 0800h Atmospheric Sciences General Contributions: Clouds and Aerosol-Cloud Interactions I Posters

Presiding: S Menon, Lawrence Berkeley national Laboratory; J D Small, Jet Propulsion Laboratory

0800h  A11H-01 Response of polluted marine stratocumulus to more pollution: J A Coakley, B Schrist, W R Tahnk

0815h  A11H-02 Impacts of nucleation on cloud microphysical properties and aerosol indirect forcing: Y Lee, J R Pierce, A Nenes, P J Adams

0830h  A11H-03 Regional differences in aerosol effects on cloud properties and precipitation using historical long-term satellite records: J D Small, J H Jiang, H Su


0915h  A11H-06 Investigating ice in mid latitude marine stratocumulus using CALIOP, MODIS, andCloudSat observations: R Holz, S A Ackerman

0930h  A11H-07 Microphysical properties of ice clouds from polarization calculations: B H Cole, P Yang, J Riedi, B A Baum

All information is current as of November 12, 2010
0800h A11I-08 Observational and modeling studies of aerosol indirect effects: B Yi, P Yang, K P Bowman

A11I Moscone West: 3008 Monday 0800h Atmospheric Sciences General Contributions: Observations and Experimental Techniques I

Presiding: S Madronich, NCAR; B Schmid, Pacific Northwest National Lab


0815h A11I-02 Progress in Passive Sensors for Precision Greenhouse Gas Monitoring: E Georgieva, W S Heaps, W Huang


0845h A11I-04 Analysis of the PBL Height relationships using a backscatter LiDAR profiles and multi-spectral sunphotometer: D Daou, N T O'Neill, Y Blanchard, A Saha, M Karumudi, K B Strawbridge, M Travis

0900h A11I-05 Recent work in Canada for the proposed Chemical and Aerosol Sounding Satellite (CASS) mission: K A Walker, S M Melo, L M Moreau, G P Perron, J Bourdeau, J Michels

0915h A11I-06 Observing Supercells with Unmanned Aircraft: Results from the UAS Component of VORTEX-2: A L Houston, B Argrow, E Frew

0930h A11I-07 Aircraft Integrated, Low-Altitude Measurements of Carbon Dioxide, Methane, and Water Vapor: E S Berman, M M Fladeland, J S Liem, R Kolyer, M Gupta


A11J Moscone West: 3002 Monday 0800h Atmospheric Sciences General Contributions: Radiation and Climate I

Presiding: N G Andronova, University of Michigan; M Chin, NASA Goddard SFC

0800h A11J-01 Radiative forcing of earth’s surface temperature over the past 2009 years: A D Friend

0813h A11J-02 Mechanism of Radiative Forcing of Greenhouse Gas and its Implication to the Global Warming: R Shia

0826h A11J-03 Multi-decadal variations of atmospheric aerosols and their effects on surface radiation trends: M Chin, T L Diehl, M Wild, Y Qian, H Yu, D G Streets, H Bian, Q Tan, W Wang

0839h A11J-04 Atmospheric and Surface Contributions to Planetary Albedo and their Relationship to the Total Meridional Energy Transport: A Donohoe, D S Battisti

0852h A11J-05 Different views on the Arctic surface albedo: E Bierwirth, S Schmidt, P Pilewskie, A Ehrlich, M Wendisch, H Stark, A Bucholtz, C Schaaf, A Layapustin, C K Gatebe, M Roman

0905h A11J-06 The Poynting–Stokes Tensor And Radiative Transfer In Turbid Media: The Microphysical Paradigm: M I Mishchenko


0931h A11J-08 Characteristics of aerosol types from AERONET sunphotometer measurements: J Kim, J Lee, C H Song, S Kim, Y Chun, B Sohn, B Holben

0944h A11J-09 Change in Solar Radiation and Their Influence on Temperature in China: H Zhang, Q Yin

A11K Moscone West: 3004 Monday 0800h Impacts of Mineral Dust Aerosol on Global and Regional Climate I

Presiding: Y Gu, University of California, Los Angeles; H Liao, Institute of Atmospheric Physics

0800h A11K-01 WITHDRAWN

0800h A13E-0255 Springtime Trans-Pacific Transport of African and Asian Dust to the Western U.S. Mountain Ranges: Q Li, L Zhang, T D Fairlie


0830h A11K-03 The Global Distributions of Desert Dust Age in the Atmosphere and at Deposition: C S Zender, Q Han

0842h A11K-04 Role of dust-induced sea surface temperature responses in simulations of the climatic effect of mineral dust: H Liao, X Yue, H Wang, S Li, J Tang

0854h A11K-05 Response of the water cycle of West Africa and Atlantic to radiative forcing by Saharan dust: (Invited): W K Lau, K Kim

0909h A11K-06 Dust aerosol optical properties over northwestern China from recent ground-based field experiment and analysis of satellite observations: (Invited): Q Fu, J Huang, J Ge, J Su, T P Ackerman, S G Warren

0924h A11K-07 On the effect of insoluble dust particles on global CCN and droplet number: V Karydis, P Kumar, D Barahona, R Sotiropoulou, I N Sokolik, A Nenes

0936h A11K-08 Investigation of the Dust Indirect Effect on Clouds and Regional Climate Based on A-Train Satellite Data and the UCLA AGCM: Y Gu, K Liu, J H Jiang, H Su

0948h A11K-09 Determination of the Optical Properties of Dust and Pollution Aerosols, Their Radiative Forcing Climate Effects across China: Z Li

Atmospheric and Space Electricity

AE11A Moscone South: Poster Hall Monday 0800h Energetic Radiation From Thunderstorms I Posters (joint with SA, A)

Presiding: B E Carlson, University of Bergen; M Cohen, Stanford University; S A Cummer, Duke University; K Eck, New Mexico Tech


0800h AE11A-0323 POSTER Temporal Properties of Fermi TGFs: S Foley, M S Briggs, V Connaughton, G J Fishman, D Tierney
Biogeosciences

B11A Moscone South: Poster Hall Monday 0800h Biophysical Pulses in Variable Environments I Posters (joint with H)

Presiding: C A Williams, Clark University; G D Jenerette, University of California Riverside; R L Scott, USDA ARS

0800h  B11A-0333 POSTER Biologically-Effective Rainfall Pulses in Mediterranean and Monsoon Regions: R L Scott, A S Kowalski, V Resco, P Serrano-Ortiz, F Domingo


0800h  B11A-0335 POSTER Temporally-limited herbaceous plants significantly contribute to semi-arid woodland ecophysiological fluxes: A P Tyler, R L Scott, T E Huxman

0800h  B11A-0336 POSTER The role of synoptic, seasonal, and interannual climate on the carbon isotope ratio of ecosystem respiration in a semi-arid woodland: J Shim, H H Powers, C Meyer, W Pockman, N McDowell

0800h  B11A-0337 POSTER Does summertime photodegradation prime plant litter for microbial respiration upon the fall rain pulse in a California oak savanna?: J Hatala, R Vargas, S Ma, H Kobayashi, D D Baldocchi


0800h  B11A-0339 POSTER Legacies of an ice storm on the long-term carbon exchange of a temperate forest: A L Dunn, K Morgan
0800h  B11B-0355 POSTER Complementarities between Biomass and FluxNet data to optimize ORCHIDEE ecosystem model at European forest and grassland sites: T Thum, P Peylin, A Granier, A Ibm, L Linden, D Loustau, C Bacour, P Ciais

0800h  B11B-0356 POSTER Quantification of net ecosystem exchange sampling within two mature boreal aspen stands using airborne LiDAR and a flux footprint model: Scaling to MODIS: L E Chasmer, N Kljun, C Hopkinson, R M Petrone, T Milne, K Giroux, T A Black, K J Devito, Title of Team: Canadian Carbon Program & HEAD project

0800h  B11B-0357 POSTER Assessing the influence of drought on long-term growth and fertilisation in Quercus ilex through process-based modeling: N K Martin, N Delpierre, E Dufrene, S Ramal


0800h  B11B-0359 POSTER A multi-time scale, non-linear approach to understanding soil respiration: N R Nickerson, C Phillips, D A Risk

B11C Moscone South: Poster Hall  Monday  0800h Impacts of Land Use and Management on Soil Organic Carbon Dynamics I Posters (joint with PA)

Presiding: X Wang, University of Maryland

0800h  B11C-0363 POSTER Carbon budget of tropical forests in Southeast Asia and the effects of deforestation: approach from a process model and field measurements: M ADACHI, A Ito, A Ishida, H Kadir, P Ladpala, Y Yamagata

0800h  B11C-0364 POSTER Effects of Vegetation Type on Soil Carbon Dynamics Along the Kaidu River in the Yanqi Basin of Northwestern China: J Wang, X Wang, W Wang

0800h  B11C-0365 POSTER Corn-based feedstocks for biofuels: Implications for agricultural sustainability: Z Tan

0800h  B11C-0366 POSTER Long-term fertilization effects on soil organic carbon fractions in a red soil of southern China: X Tong, M Xu, X Wang, W Zhang, R Cong


0800h  B11C-0368 POSTER Reducing CH4 emission from rice paddies fields by altering water management: S Sudo, M Itoh

0800h  B11C-0369 POSTER REUSE OF WINERY WASTEWATER BY APPLICATION TO VINEYARD SOILS: K P Mosse, A F Patti, S Parikh, K L Steenwerth, M C Buwel, T R Cavagnaro

0800h  B11C-0370 POSTER DIRECTIONAL- AND CROSS-POLARIZATION 13C NMR EVIDENCE OF ALTERATIONS IN MOLECULAR COMPOSITION OF HUMIC SUBSTANCES FOLLOWING AFFORESTATION WITH EUCALYPT IN DISTINCT BRAZILIAN BIOMES: I R Silva, E M Soares, K Schmidt-Rohr, R Novais, N Barros, S Fernandes

0800h  B11C-0371 POSTER A Preliminary Assessment of Peat Degradation in West Kalimantan: G Z Anshari

0800h  B11C-0372 POSTER Adoption of Miscanthus as a bioenergy crop on US croplands: impacts on soil carbon and water: U Mishra, M S Torn

0800h  B11D-0373 POSTER Vegetation Phenology as a Constraint on Global Surface-Airmosphere Exchange: K S Hemes, I T Baker, N Parazoo, R Stockli, A Denning


Presiding: D Drewry, University of Illinois; A D Richardson, Harvard University; M Reichstein, Max-Planck-Inst. for Biogeoc.; D Papale, University of Tuscia; R Vargas, University of California-Berkeley

0800h  B11D-0374 POSTER Sea Level Rise Enhanced Halocarbon Production in Low-lying Coastal Ecosystem in the Southeastern US: A T Chow, W Conner, T Williams, B Song

0800h  B11D-0375 POSTER The role of patterning in peatland water table fluctuations and carbon exchange: P Wilson, N Shatilla, N T Roulet

0800h  B11D-0376 POSTER Biogeochemistry of plant-soil system in a limestone area: A case study of Mt. Kinsho-zan, Gifu prefecture, central Japan: S Ueno, K Sugitani, M Ono

0800h  B11D-0377 POSTER Applying Three Methods to the Simple Biosphere Model (SiB) for Improving the Representation of Spatially Variable Precipitation and Soil Moisture: I D Medina, A Denning

0800h  B11D-0378 POSTER Pore water chemistry in a disturbed and an undisturbed peat forests in Brunei Darussalam: Nutrient and carbon contents: L Gandois, A Cobb, K Abu Salim, I Chien Hei, L Lim Biaw Leng, R Corlett, C Harvey

0800h  B11D-0379 POSTER A semi-parametric Multivariate Gapfilling Model for Eddy Covariance Latent Heat Flux: M Li, Y Chen

0800h  B11D-0380 POSTER Spatial variability in soil CO2 production and CO2 efflux from a topographically complex mature black spruce forest, interior Alaska: K Kelsey, K P Wickland, R G Striegl, J C Neff

0800h  B11D-0381 POSTER Organic N Uptake by Different Plant Functional Types in a Boreal Peatland: A C Alfonso, T R Moore

0800h  B11D-0382 POSTER Early results from a terrestrial-marine BGC coupling study in Southeast Alaska: D R Fatland, A Vermilyea, R G Spencer, E W Hood, A Stubbins

0800h  B11D-0383 POSTER On the Temporal Correlation Between Photosynthesis and Soil Respiration: Reconciling Lags and Observations: R Vargas, D D Baldocchi, M Bahn, P J Hanson, K Hosman, L Kumula, J Pumpenan, B Yang

0800h  B11D-0384 POSTER Spring and Fall Hydro-Meteorological Conditions Explain the Interannual Variability in Carbon Exchange in a Boreal Peatland: M Bonnville, B S Strachan

0800h  B11D-0385 POSTER Growing Season CO2-Net Ecosystem Exchange and CH4 Fluxes Response to Increase Precipitation in a Boreal Peatland, Eastmain Region, Quebec, Canada: L Pelletier, M Garneau

0800h  B11D-0386 POSTER A comparison of coupled biogeochemical and biogeochemical dynamics across a precipitation gradient in Oregon using data assimilation: J C Petjiohn, B E Law, M D Williams, R Stoekli, P E Thornton, C K Thomas, T W Hudiburg, J Martin

All information is current as of November 12, 2010
0800h  **B11D-0387**  POSTER Invasion of a semi-arid shrubland by annual grasses increases autotrophic and heterotrophic soil respiration rates due to altered soil moisture and temperature patterns: M Mauritz, I Hale, D Lipson

0800h  **B11D-0388**  POSTER Response of high elevation rocky mountain (Wyoming, USA) forest carbon dioxide and water vapor fluxes to a bark beetle epidemic: J M Frank, W J Massman


0800h  **B11D-0390**  POSTER Influence of temporal variation in the vertical distribution of soil moisture on the surface radiation budget: Implications for semiarid land-temperature interactions: Z M Sanchez, S A Kurc

0800h  **B11D-0391**  POSTER Global Biogeochemical Cycle of Si: Its Coupling to the Perturbed C-N-P cycles in Industrial Time: A Lerman, D D Li, F T Mackenzie

0800h  **B11D-0392**  POSTER CO₂ Losses from Terrestrial Organic Matter through Photo degradation: S Rutledge, D I Campbell, D D Baldocchi, L A Schipper

0800h  **B11D-0393**  POSTER Persistent wind-induced enhancement of diffusive CO₂ fluxes in a mountain forest snowpack: D R Bowling, W J Massman

0800h  **B11D-0394**  POSTER The Biogeochemical Cycling of Nitrogen in Annual and Perennial Agroecosystems: A Fortuna, C Cogger

0800h  **B11D-0395**  POSTER Effects of nutrient supply on intrinsic water-use efficiency of temperate semi-natural grassland under rising atmospheric CO₂: J H Koehler, A Macdonald, P Poulton, K Auerwald, J H Schnyder

0800h  **B11D-0396**  POSTER Estimating the carbon loss under the influence of typhoons at a subtropical mountain forest: S Ding, J Juang, S Chang, Y Hsia, J Asanuma

0800h  **B11D-0397**  POSTER The nitrogen fate beyond the current nutrient mitigation measures: sustainability of an integrated agriculture: V Thieu, G F Billen, J Garnier, C Lancelot, N Gypens

0800h  **B11D-0398**  POSTER Abiotic and biotic effects on the biogentic production and emissions of carbon and nitrous oxides in variably saturated soils: S Rubol, S Manzoni, A Bellin, A M Porporato

0800h  **B11D-0399**  POSTER Quantification of uncertainty in eddy-covariance flux estimates of CO₂ and energy due to raw data processing: C Trotta, G Fratini, D Papale

0800h  **B11D-0400**  POSTER Underestimation of water vapour fluxes by eddy covariance closed-path systems due to relative humidity effects: G Fratini, N Arriga, C Trotta, D Papale

0800h  **B11D-0401**  POSTER LANDSCAPE VARIATION IN N AND P UPTAKE IN STREAMS IN THE KOLYMA RIVER BASIN: E C Seybold, J D Schade, T W Drake, E B Bulygina, S Chandra, R M Holmes, W V Sobczak, N Zimov

0800h  **B11D-0402**  POSTER Forests tend to cool the land surface in the temperate zone: An analysis of the mechanisms controlling radiometric surface temperature change in managed temperate ecosystems: P C Stoy, G G Katul, J Juang, M B Siqueira, K A Novick, R Essery, S Dore, T E Kolb, M C Montes-Helu, R L Scott

0800h  **B11D-0403**  POSTER Nitrate isotopes illuminate the black box of paddy soil biogeochemistry: water and carbon management control nitrogen sources and sinks: N S Wells, T J Clough, S E Johnson-Beebout, R J Buresh

0800h  **B11D-0404**  POSTER A Watershed Context for Interpreting the Landscape-Scale Spatial Heterogeneity of Biosphere-Aerosphere Carbon Exchange in Complex Terrain: R E Emanuel, D Riveros-Iregui, B L McGlynn, H E Epstein, D L Welsh

0800h  **B11D-0405**  POSTER Experimental flume study on Potamogeton natans and Ranunculus fluitans: macrophytes: impact of hydrodynamics on ¹⁵N-ammonium uptake rates: V Woule Ébongue, N Brion, N Hove, C Barrón, F Dehairs, K Bal, T Bouma, J Schoeylync, E de Deckere, P Meire

0800h  **B11D-0406**  POSTER VARIABILITY OF TOTAL BELOW GROUND CARBON ALLOCATION AMONGST COMMON AGRICULTURAL LAND MANAGEMENT PRACTICES: A CASE STUDY: K M Wacha, T Papanicolaou, C G Wilson

0800h  **B11D-0407**  POSTER MODIS-based global terrestrial estimates of gross primary productivity and evapotranspiration: Y Ryu, D D Baldocchi, H Kobayashi, J Li, C van Ingen, D Agarwal, K Jackson, M Humphrey

0800h  **B11D-0408**  POSTER How sensitive is the global peatland carbon pool to climate change?: J Talbot, S E Frolking

0800h  **B11D-0409**  POSTER Modeling Environmental Controls on Net Ecosystem CO₂ Exchange of a Tropical Bog: M Mezabahuddin, R F Grant, T Hirano

0800h  **B11D-0410**  POSTER Whole ecosystem approaches for assessing the coupling of N and P cycles in small streams: J D Schade, S A Thomas, E C Seybold, T Drake, K Lewis, K MacNeil, N Zimov

0800h  **B11D-0411**  POSTER Changes in soil moisture affect carbon and water fluxes from trees and soils differently in a young semi-arid ponderosa pine stand: N K Ruehr, J Martin, J C Pettijohn, B E Law

0800h  **B11D-0412**  POSTER Radiative forcing from forest disturbances: T L O’Halloran, B E Law, Z Wang, J Barr, C Schaaf, M Brown, M Goulden, M Goeckede, J D Fuentes, T A Black, V Engel

0800h  **B11D-0413**  POSTER Temporal and spatial variability of greenhouse gas fluxes from soil in an undisturbed forest in the Brazilian Amazon: R K Varner, M M Keller, R Cosme de Oliveira, P M Crill, M W Palace, M O Hunter, H P Silva, J Dias, E Neto
**B11F** Moscone South: Poster Hall  Monday  0800h
Nanoscale Insights Into Aqueous and High-Temperature Geochemistry I Posters (joint with EP, MR, V)

*Presiding:* A Fernandez-Martinez, Lawrence Berkeley National Laboratory; I C Bourg, Lawrence Berkeley National Lab; K Kwon, Lawrence Berkeley National Laboratory; J Penna, Lawrence Berkeley National Lab

0800h  **B11F-0420** POSTER Iron Polymerization and Arsenic Removal During *In-Situ* Iron Electrocoagulation in Synthetic Bangladeshi Groundwater: C M van Genuchten, J Penna, S Addy, A Gadgil

0800h  **B11F-0421** POSTER Complexity of Arsenate Adsorption at Iron and Aluminum Oxide-Water Interfaces: J G Catalano, P Fenter, C Park, Z Zhang

0800h  **B11F-0422** POSTER Solute-controlled dissolution thresholding at near-equilibrium calcite-water interfaces: M Xu, K G Knauss, S R Higgins

0800h  **B11F-0423** POSTER Adsorption in the Electric Double Layer at Clay-Water Interfaces: I C Bourg, G Sposito

0800h  **B11F-0424** POSTER Transformation of meta-stable aluminosilicate phases to kaolinite: Molecular structure and reaction pathways from solid-state NMR: H E Mason, R S Maxwell, S A Carroll

0800h  **B11F-0425** POSTER Ge isotope fractionation during adsorption processes onto the surface of Fe oxo(hydro)xides: M Tang, X Li, Y Liu

0800h  **B11F-0426** POSTER Size distributions and geometries of alkali halide nanoclusters probed using ES1 FT-ICR mass spectrometry and quantum chemistry: K Lemke, S Sadjadi, T Seward

0800h  **B11F-0427** POSTER Spectroscopic and DFT evidence for itinerant magnetism in mackinawite (tetragonal FeS): K Kwon, K Refson, S Bone, R Qiao, W Yang, Z Liu, G Sposito

0800h  **B11F-0428** POSTER Atomistic Simulations of Ion Diffusion in Clay Barriers: Diffusive Path Energy Barriers: A G Newton, T Kozaki

0800h  **B11F-0429** POSTER Identifying the crystallinity, phase, and arsenic uptake of the nanomolar schwertmannite using analytical high resolution transmission electron microscopy: R A French, B Kim, M Murayama, M F Hochella

0800h  **B11F-0430** POSTER Chemical and phase distributions in a multilayered organic matter-Ag nanoparticle thin film system: F M Michel, C Levad, Y Wang, Y Choi, P Eng, G E Brown

0800h  **B11F-0431** WITHDRAWN

0800h  **B11F-0432** POSTER Structure of Zn Surfaces Complexes on Biogenic Hexagonal Birnessite: J Penna, G Sposito, J Bargar


**B11G** Moscone South: Poster Hall  Monday  0800h
Dynamics of Trace Gas Exchange in Northern Ecosystems During Spring Thaw and Fall Freeze Posters (joint with A)

*Presiding:* T R Christensen, Lund University; P M Crill, Stockholms universitet; T Friberg, Univ. of Copenhagen

0800h  **B11G-0434** POSTER CO$_2$ efflux along the trans-Alaska pipeline in snow-thawing season: Y Kim

0800h  **B11G-0435** POSTER Determining the impact of Carex rostrata on methane cycling in a temperate fen: G L Noyce, R K Varner, J L Bubier


0800h  **B11G-0437** POSTER Scales of temporal variability in episodic CH$_4$ emissions: from hours to seasons: J P Goodrich, R K Varner, S E Frolking, B N Duncan, P M Crill

0800h  **B11G-0438** POSTER Shoulder season fluxes from high-Arctic Greenland (Invited): M Mastepanov, T R Christensen, C Sigggaard, M P Tamstorf, I L Strom, T Tagesson, M Lund


0800h  **B11G-0440** POSTER Statistical characterization of trapped bubbles in subarctic lake ice: Potential implications for methane emissions: M Wik, P M Crill, D Bastviken, ÅSA Danielsson, E Norbäck

0800h  **B11G-0441** POSTER Carbon Dioxide and Methane Flux During Spring Thaw in the Yukon River System (Invited): R G Striegl, M Dornstorf, P F Schuster, R Spencer

0800h  **B11G-0442** POSTER Spatial and Temporal Variability of Freeze back of Polygonal Tundra and Implications for Green House gas Emissions: M Langer, S Westermann, K Piel, S Muster, A Abnizova, J Boike

0800h  **B11G-0443** POSTER Episodical CO$_2$ emission during shoulder seasons in the arctic: T Friberg, B Elberling, B Hansen, M Lund, M Mastepanov

0800h  **B11G-0444** POSTER Carbon balances of freshwater ecosystems in summer and fall 2008 on Samoylov Island, Lena Delta, Siberia, Russia: A Abnizova, J Siemens, M Langer, J Boike

0800h  **B11G-0445** POSTER Soil moisture control on fall season methane efflux near Barrow, Alaska: C S Sturtevant, W C Oechel

**B11H** Moscone West: 2006  Monday  0800h
Application of Isotope and Genetic Platforms to Develop Spatial and Temporal Perspectives in Ecosystem Ecology I (joint with GC, OS, PP)

*Presiding:* P H Ostrom, Michigan State University; A J Welch, Smithsonian Conservation Biology Institute; C A Stricker, US Geological Survey; A Wiley, Michigan State University

0800h  **B11H-01** Stable isotopes as markers in trophic and foodweb studies: where do we go from here? (Invited): S Bearhop

0815h  **B11H-02** Uncovering patterns of spring migration in the monach butterfly using stable isotopes and demographic models: R Norris, N Miller, L Wassenaar, K Hobson

0830h  **B11H-03** Stable Isotope Analyses of Ancient Penguin Tissues Support the Krill Surplus Hypothesis in Antarctica: S D Emslie, M J Polito, W P Patterson

0845h  **B11H-04** Uses of molecular markers for understanding modern and historical ecosystems (Invited): V L Friesen

0900h  **B11H-05** Investigating variation in the nutritional ecology and genetics of White-tailed Ptarmigan: implications for climate change: S J Oyler-mccance, C A Stricker, C E Braun, G T Wann, C L Aldridge

0915h  **B11H-06** Isotopic and genetic insights into the persistence of the northern fur seal (Callorhinus ursinus) (Invited): P L Koch, E A Hadly, M L Pinsky, S D Newsome

0930h  **B11H-07** Genetic divergence among extant and extirpated colonies of an endangered pelagic seabird, the Hawaiian petrel: A J Welch, R C Fleischer, H F James
Dissolved Organic Matter Dynamics in Terrestrial and Aquatic Ecosystems I (joint with H)

Presiding: S P Inamdar, University of Delaware; M Miller, USGS

0800h B11J-01 Optical properties of natural dissolved organic matter (DOM) in aquatic ecosystems: Applications in ecosystem studies from headwater streams to the deep ocean. (Invited): R Jaffe

0820h B11J-02 Seasonality of DOC Mobilization after Clear-Cutting in Boreal First-Order Streams – Supply Limitation or Changing Flow Pathways?: J Schelker, K Eklof, K H Bishop, H Laudon

0835h B11J-03 The Effects of Ferric and Ferrous Iron on the Optical Properties of Dissolved Organic Matter: B Poulin, G Aiken

0850h B11J-04 A 125 year long record of DOC flux from a major temperate catchment: land-use vs. climate control?: G Clay, F Worrall, N K Howden, T P Burt

0905h B11J-05 EVALUATION OF THE RELATIONSHIP BETWEEN DISSOLVED ORGANIC MATERIAL, CHLOROPHYLL-A AND ALGAL SPECIES IN LAKES AND DRINKING WATER RESERVOIRS THROUGHOUT THE STATE OF COLORADO: A L Khan, D M McKnight

0920h B11J-06 Analytical Determinations of the Phenolic Content of Dissolved Organic Matter: T Pagano, J E Kenny

0935h B11J-07 Dynamics of photochemical and microbial processing of newly exposed terrestrial DOM in arctic surface waters (Invited): R M Cory, G W Kling

0955h Concluding Discussion Open discussion and questions

Urban Areas and Global Change I (joint with A, GC, H, PA)

Presiding: G Churkina, Leibniz Centre for Agricultural Landscape Research; K A Hibbard, NCAR

0800h B11J-01 Contrasts between urban and rural climate under climate change scenarios (Invited): K W Oleson, G B Bonan, J J Feddema

0820h B11J-02 Climate change and heat waves in Paris and London metropolitan areas: B Dousset

0840h B11J-03 FUTURE HEAT WAVES IN PARIS METROPOLITAN AREA: A Beaulant, A Lemonsu, S Somot, V Masson

0900h B11J-04 An observational analysis of urban effects on heavy rainfall Climatology: D Niyogi

0920h B11J-05 The Impact of Detailed Urban-Scale Processing on the Aerosol Direct Effect and its Impacts on the Climate: J B Cohen, C Wang, R G Prinn

0940h B11J-06 OBSERVATIONS OF URBAN HEAT ISLAND MITIGATION IN CALIFORNIA COASTAL CITIES DUE TO A SEA BREEZE INDUCED COASTAL-COOLING “REVERSE-REACTION” TO GLOBAL WARMING: R D Bornstein, B Lebassi, J Gonzalez

Monitoring Changes in Polar Ice Sheets and Sea Ice Using Airborne and Satellite Remote Sensing I Posters (joint with G)

Presiding: M Studinger, Goddard Earth Science and Technology Center/UMBC; S Martin, University of Washington; N T Kurtz, University of Maryland Baltimore County; J S Deems, National Snow and Ice Data Center

0800h C11A-0517 POSTER L-BAND SAR INTERFEROMETRY FOR MAPPING ARCTIC LANDFAST ICE: F J Meyer, A Mahoney, H Eicken, C L Denny

0800h C11A-0518 POSTER Discrimination of First Year Sea Ice Features Using Polarimetric SAR Data: M Hossain, J P Gill, J Yackel, Title of Team: Yes, all of the team members are agreed to submit.

0800h C11A-0519 WITHDRAWN

0800h C11A-0520 POSTER RECENT ELEVATION AND VOLUME CHANGES OF RUSSIAN ARCTIC ICE CAPS AS MEASURED BY ENVISAT RADAR ALTIMETER 2: E J Rinne, A Shepherd, D Wingham, A Muir

0800h C11A-0521 POSTER Constructing high-resolution, consistent and seamless ice thicknesses using a new data assimilation technique based on mass conservation: M Morlighem, E J Rignot, H L Seroussi, E Y Larour, H Ben Dhia, D Aubry

0800h C11A-0522 POSTER The Rapid Ice Sheet Change Observatory (RISCO): P Morin, I M Howat, Y Ahn, C Porter, E M McFadden

0800h C11A-0523 POSTER Characterizing Ice Sheet Surface Topography and Structure Using High-Altitude Waveform Airborne Laser Altimetry: M A Hofton, B Blair, S B Luthcke, D Rabine, C McIntosh, M Beckley

0800h C11A-0524 POSTER High-Resolution Maps of Outlet Glacier Surface Elevation Change from Combined Laser Altimeter and Digital Elevation Model Data: J F Levinsen, I M Howat, C C Tscherning

0800h C11A-0525 POSTER Ice Velocity Map of Antarctica measured with ALOS PALSAR: J Mouginot, B Scheuchl, E J Rignot

0800h C11A-0526 WITHDRAWN

0800h C11A-0527 POSTER Investigation of Antarctic ice streams south of 78 degrees south using interferometric RADARSAT-2 data: B Scheuchl, J Mouginot, E J Rignot


0800h C11A-0529 POSTER Insights into the Thwaites Glacier grounding zone from Operation IceBridge aerogravity: K J Tinto, R E Bell, J R Cochran, S Elieff, N Frearson

0800h C11A-0530 POSTER SURFACE VELOCITY MAPPING OF LAMBERT GLACIER-AMERY ICE SHELF SYSTEM USING FEATURE-TRACKING: Z Chi, A G Klein

0800h C11A-0531 POSTER Evolving ice fronts and surface speeds in the Amundsen Sea Embayment between 1972-2010: J A MacGregor, G A Catania, M Markowski, A Andrews

0800h C11A-0532 POSTER Changes of the Greenland ice sheet observed by ICESat: K Nielsen, L Sandberg, S B Simonsen

0800h C11A-0533 POSTER From Outlet Glacier Changes to Ice Sheet Mass Balance - Evolution of Greenland Ice Sheet from Laser Altimetry Data: B M Cσathsø, A Schenk, S Nagarajan, G S Babonis

All information is current as of November 12, 2010
0800h C11A-0534 POSTER Estimating snow accumulation in the percolation zone of the Greenland Ice Sheet using satellite radar scatterometry: J Miller, R R Forster, R Schroeder, K C McDonald, J E Box, E W Burgess

0800h C11A-0535 POSTER Airborne-Radar Images of the Bed of the Greenland Ice Sheet: K C Jezek, X Wu, P S Gogineni, C D Clark

0800h C11A-0536 POSTER Extending remote sensing estimates of Greenland ice sheet melting: M Heavner, R Loveland

C11B Moscone West: 3011 Monday 0800h

Presiding: T T Creys, Columbia University; G E Flowers, Simon Fraser University; L A Stearns, University of Kansas

0800h C11B-01 Evidence for Substantial Englacial Retention of Surface Meltwater: U K Rick, W Abdalati, M M Berlin, I Overeem, S B Luthcke, M R van den Broeke

0815h C11B-02 The influence of cryo-hydrologic warming on the ice temperature in the ablation zone – insights from a computational model: H Rajaram, T P Phillips, K Steffen

0830h C11B-03 Morphodynamics of supraglacial streams (Invited): L Karlstrom, M Manga, P Gajjar


0900h C11B-05 Rapid Meltwater Transport to Ice Sheet Beds with Impacts on Subglacial Hydraulics and Overall Motion (Invited): J R Rice, V C Tsai

0915h C11B-06 Recharge-discharge relations for glacial conduit systems: a simple theoretical approach: M D Covington, A Banwell, J Gulley, M O Saar, C M Wicks, I C Willis, N Arnold

0930h C11B-07 An Experimental Study of Ice-Bed Separation during Sliding over a Hard Bed (Invited): N R Iverson, B B Petersen

0945h C11B-08 Calving Glacier Dynamics Controlled by Small Fluctuations in Subglacial Water Pressure Revealed by Hot Water Drilling in Glacial Perito Moreno, Patagonia: S Sugiyama, P Skvarca, N Naito, H Enomoto, S Tsutaki, K Tone, S Marinsek, M Aniya

C11C Moscone West: 3010 Monday 0800h

Presiding: R L Hawley, Dartmouth College; Z Courville, CRREL; H Huwald, Ecole Polytechnique Federal de Lausanne; J F Burkhart, Norwegian Institute for Air Research


0815h C11C-02 Terrain and drift influences on snow surface aerodynamics (Invited): A Clifton, K C Leonard, C Manes, M Lehning

0830h C11C-03 Compact Probe for In-Situ Optical Snow Grain Size Stratigraphy (Invited): D F Berisford, N P Molotch, T H Painter, M T Durand

0845h C11C-04 Measuring Spatial and Temporal Gradients in Snowpacks using Fiber-optic Distributed Temperature Sensing (Invited): S W Tyler, J Dozier, C E Hatch, M Woernld

0900h C11C-05 In situ measurements of Antarctic snow compaction compared with predictions of models. (Invited): R Arthern, D G Vaughan, A M Rankin, R Mulvaney, E R Thomas

0915h C11C-06 Snow Densification in Greenland (Invited): E Morris, D Wingham

0930h C11C-07 Evolution of Density and Microstructure in Polar Firn (Invited): S Kipfstuhl, M Hörhold, J Freitag

0945h C11C-08 Measurement of the isotope diffusion rate in firn, in the lab and in the field (Invited): H A Meijer, G van der Wel, V Gkinis, V A Pohjola, R Van de Wal, P (Smeets

Education and Human Resources

ED11A Moscone South: Poster Hall Monday 0800h

Presiding: S Henderson, UCAR; M Stute, Lamont-Doherty Earth Obs; C E Walker, National Optical Astronomy Observatory; B J Mailloux, Barnard College; S M Pompea, Natl Optical Astronomy Obs; A L Schloss, University of New Hampshire; P L Gay, Southern Illinois University Edwardsville; B J Mendez, University of California, Berkeley; B H Day, NASA Ames Research Center

0800h ED11A-0571 POSTER Lessons Learned from the First Two Years of Nature’s Notebook, the USA National Phenology Network’s Plant and Animal Observation Program: T M Crimmins, A Rosemartin, E G Denny, J F Wetzlin, L Marsh

0800h ED11A-0572 POSTER BudBurst Buddies: A New Tool for Engaging the Youngest Citizen Scientists: L S Gardiner, S Henderson, D Ward

0800h ED11A-0573 POSTER Project BudBurst: People, Plants, and Climate Change: S Henderson, D Ward, K Havens, L S Gardiner, P Alaback


0800h ED11A-0575 POSTER The Networked Naturalist - Mobile devices for Citizen Science: D Estrin, E A Graham

0800h ED11A-0576 POSTER Cellphones as a Distributed Platform for Black Carbon Data Collection: N Ramanathan, M Ramana, M L Lukac, P Siva, T Ahmed, A Kar, I Rehman, V Ramanathan

0800h ED11A-0577 POSTER Designing Citizen Science Projects in the Era of Mega-Information and Connected Activism: S M Pompea

0800h ED11A-0578 POSTER Earthwatch and the HSBC Climate Partnership: Linking climate change and forests management one citizen scientist at a time: D B Stover, A Jones, K Kusek, D Debber, R Phillips, J Campbell

0800h ED11A-0579 POSTER GLOBE at Night: Raising Public Awareness and Involvement through Citizen Science: C E Walker, S M Pompea, R T Sparks


0800h ED11A-0581 POSTER Behaviors and Motivations observed in the Zooniverse: P L Gay, S Brown, A D Huang, C Lehman, Title of Team: Moon Zoo Team

0800h ED11A-0582 POSTER How MESSENGER Meshes Simulations and Games with Citizen Science: B Hirshon, C R Chapman, J Edmonds, J Goldstein, K G Hallau, S C Solomon, H Vanhala, H M Weir, Title of Team: MESSENGER Education and Public Outreach (EPO) Team
0800h ED11A-0583 POSTER Jupiter Observation Campaign: Citizen Science at the Outer Planets; J Houston Jones, A Wessen, Title of Team: Jane H. Jones, Solar System E/PO, Jet Propulsion Laboratory, Robert Pappalardo, Project Scientist Jet Propulsion Laboratory, Jason Perry, University of Arizona - Lunar and Planetary Laboratory, Steven Vance, Jet Propulsion Laboratory, Kerri Beisser, Johns Hopkins University Applied Physics Laboratory, Preston Dyches, Solar System E/PO, Jet Propulsion Laboratory


0800h ED11A-0586 POSTER Community-Based Wetland Restoration Workshop in the Lower Ninth Ward, New Orleans: H F Wang, L Craig, J A Ross, L Zepeda, Q Carpenter

0800h ED11A-0587 POSTER Learning about water resource issues in Bangladesh using interactive sand tanks: M Stute

0800h ED11A-0588 POSTER Water Conservation: A Tool to Build Understanding, Service and Awareness about Natural Resources Linda Ruiz McCall, Katherine K. Ellis, and Bridger Cameron: L R McCull, K K Ellis, B Cameron

0800h ED11A-0589 POSTER Using a Cast Iron Hand-Pump to Teach Students About Water Resources and Resource Allocation: B J Mailloux, K A Radloff

0800h ED11A-0590 WITHDRAWN

0800h ED11A-0591 WITHDRAWN

0800h ED11A-0592 POSTER PUBLIC PARTICIPATION IN EARTH SCIENCE FROM THE ISS: K J Willis, S Runco, W L Stefanov

0800h ED11A-0593 POSTER Communicating atmospheric science and research to diverse audiences using a field campaign: K C Clarke

0800h ED11A-0594 POSTER Tools and Techniques to Teach Earth Sciences to Young People: R Constantino, G Dicelis, E C Molina

0800h ED11A-0595 POSTER Engaging Citizen Scientists through Partnership with Interpreters: M Heavner, L Ferguson Craig, M Hekkers, C L Connor, E W Hood

0930h ED11C-03 Eye-tracking novice and expert geologist groups in the field and laboratory: R D Cottrell, K M Evans, R A Jacobs, B B May, J B Pelz, M R Rosen, J A Tarduno, J Voronov

0945h ED11C-04 Geoscience Data Puzzles: Developing Students’ Ability to Make Meaning from Data: K A Kastens, M Turrin

Geodesy

G11A Moscone South: Poster Hall Monday 0800h Estimating the Accuracy of Geodetic Measurements | Posters

Presiding: J A Henton, Natural Resources Canada; E Calais, Purdue University

0800h G11A-0614 POSTER Evidence for a slow subsidence of the Tahiti Island from GPS, DORIS, GRACE, and combined satellite altimetry and tide gauge sea level records: A Fadil, J Barriot, L Sichoix, P Ortega, P Willis, J Serafini

0800h G11A-0615 POSTER Improvement in the observation system for the GPS/A seafloor positioning: H Fujimoto, M Kido, Y Osada

0800h G11A-0616 POSTER Accuracy evaluation of Kinematic GPS analysis based on the difference of the IGS products: T Watanabe, K Tadokoro, T Okuda, R Ikuta, M Kuno

0800h G11A-0617 POSTER PSEUDORANGE MULTIPATH ESTIMATION AND ANALYSIS AT THE GPS RGNA NETWORK: G E Vasquez, M A Barron

0800h G11A-0618 POSTER Uncertainty estimation of the velocity model for stations of the TrigNet GPS network: M Hackl, R Malservisi, U Hugentobler

0800h G11A-0619 POSTER Errors Analysis in GPS Precise Point Positioning: Impact of Ambiguity Fixing: F Perosanz, F Fund, F Mercier, S Loyer, H Capdeville

0800h G11A-0620 POSTER Accuracy Assessment of High-Rate Kinematic GPS Based on Six-Degree-of-Freedom Shake Table Tests: G Wang, F Blume, C M Meertens, P Ibarnez, M Schulze

0800h G11A-0621 POSTER A GPS solution for Africa: contribution to AFREF: E E Saria, E Calais, D S Stamps, R M Fernandes, H O Farah


0800h G11A-0623 POSTER COMBINATION OF INSAR AND GPS TO MEASURE GROUND MOTIONS AND ATMOSPHERIC SIGNALS: S Zerbini, C Prati, M Errico, S Ferri, F Novali, S Scirpoli, L Tiberi


0800h G11A-0625 POSTER Investigating MAJ's Precision: Single Interferogram and Time Series Filtering: N Bechor Ben Dow, T Herring

0800h G11A-0626 POSTER In-situ Calibration of Borehole Strainmeter Using Green’s Functions for Surface Point Load at a Depth of Deployment: N Matsumoto, O Kamigaichi, Y Kitagawa, S Itaba, N Koizumi

0800h G11A-0627 POSTER Ocean Calibration Approach to Analysis of GRACE-Type Data: P L Bender, D N Wiese, S B Luthcke

0800h G11A-0628 POSTER Imaging of density distribution in the underground by the 3D tensor gravity inversion method: J Kasahara, Y Hasada, H Kondo, K Tsuruga
0800h **G11A-0629 POSTER** GRAV-D: The Challenge of High-Altitude Aerogravimetry: V A Childers, T M Diehl, S A Preaux, D R Roman

0800h **G11A-0630 POSTER** Quantifying the Effects of Survey Orientation on Airborne Gravity Data: S A Preaux, C Weil

0800h **G11A-0631 POSTER** Precision, Repeatability and Accuracy of A10 Absolute Gravimeter: Y Fukuda, J Nishijima, M Taniguchi


0800h **G11A-0633 POSTER** Streaky noise in seismic normal mode band observed at Syowa Station, Antarctica: H Hayakawa, K Shibuya, K Doi, Y Aoyama

---

**G11B Moscone South: Poster Hall** Monday 0800h

**Presiding:** R S Gross, Jet Propulsion Laboratory; F G Lemoine, NASA Goddard Space Flight Center; E C Pavlis, Univ. of Maryland, Baltimore C; W T Petracenko

0800h **G11B-0634 POSTER** VLBI2010’s Role in an Integrated Geodetic Site: C Ma, Title of Team: Goddard VLBI Group

0800h **G11B-0635 POSTER** Progress on the VLBI2010 Proof-of-Concept Geodetic VLBI System: A E Niell, Title of Team: VLBI2010 Broadband Development Team

0800h **G11B-0636 POSTER** VLBI2010 Simulations with VieVS: J Sun, A Pany, T Nilsson, J Boehm, H Schuh

0800h **G11B-0637 POSTER** Towards fully automated processing of VLBI sessions - results from ultra-rapid UT1 experiments: T Hobiger, M Sekido, Y Koyama, T Kondo, H Takiguchi, S Kurihara, K Kokado, K Nozawa, R Haas, T Otsubo, T Gotoh, T Kubo-oka

0800h **G11B-0638 POSTER** Radio Frequency Compatibility of VLBI, SLR, and DORIS at GGOS Stations: C Beaudoin, B E Corey, W T Petracenko

0800h **G11B-0639 POSTER** The Effect of an Uncalibrated Radome on ITRF: R Ruddick, M J Moore, G Johnston

0800h **G11B-0640 POSTER** The Effects of L2C Signal Tracking on High-Precision Carrier Phase GPS Positioning: H Berglund, F Blume, L H Estey, A A Borsa

0800h **G11B-0641 POSTER** Precise Positioning of Ships for Maritime Disasters Prevention Using GPS: J Ha, M Heo, S Chun, S Park, D Cho

0800h **G11B-0642 POSTER** Updates to the IGS Data Center Infrastructure: C E Noll, M Schmidt, B P Michael, Y Lu


0800h **G11B-0644 POSTER** GREMLIT: an airborne gradiometer to explore the Earth’s gravitational field in coastal area: B Foulon, B Christophe

0800h **G11B-0645 POSTER** Continuous Earth Rotation Monitoring with the large Ring Laser G: K U Schreiber, T Klügel, J P Wells, J Holdaway, A Gebauer

0800h **G11B-0646 POSTER** APREF Project: Results and Analysis: M J Moore, J Dawson, G Hu

0800h **G11B-0647 POSTER** Optimization Problems in Space Geodesy: D Coulot, F Deleflie, X Collilieux, I PANET, E Bernard, A Pollet

---

**G11C Moscone West: 2003** Monday 0800h

**Source Imaging and Rapid Assessment of Earthquakes Using Interferometric Synthetic Aperture Radar and Other Geodetic Data** (joint with S, IN, T, NS, NH)

**Presiding:** S Jonsson, KAUST; S E Owen, Jet Propulsion Laboratory; S Yun, JPL


0815h **G11C-02 POSTER** Geodetic fault model of the 2010 Haiti earthquake and GEO’s Geohazard Supersites. (Invited): F Amelung, S Jonsson, E Calais, F Greene, S Hong, S Wdowinski, T H Dixon


0845h **G11C-04 POSTER** Rapid Assessment and Mitigation of Cascadia Earthquakes Using the Combined PANGA and PBO Real-time GPS Networks: I Rabak, T I Melbourne, M Santillan, C W Scrivner, K Kinkaid, R Stahl

0900h **G11C-05 POSTER** Damage Assessment Map from Interferometric Coherence: S Yun, E J Fielding, M Simons, P A Rosen, S E Owen, F Webb

0915h **G11C-06 POSTER** Efficient Geolocation of InSAR Images from Motion Compensation Processors: C Wortham, H A Zebker

0930h **G11C-07 POSTER** Rapid Modeling of and Response to Large Earthquakes Using Real-Time GPS Networks (Invited): B W Crowell, Y Bock, M B Squibb


---

**Global Environmental Change**

**GC11A Moscone West: 3005** Monday 0800h

**The Future of Polar Science:** The Path Beyond the International Polar Year I (joint with C, PP, A, B, OS)

**Presiding:** J W White, University of Colorado; J Brigham-Grette, University of Massachusetts; J H Swift, USCG Scripps Institution of Oceanography; L M Brown, National Academy of Sciences

0800h **GC11A-01 POSTER** Building on IPY Data, Collaborations and Infrastructure to Understand the Changing Poles (Invited): R E Bell, I Krupnik, D Hik, K D Alverson, M R Drinkwater

0812h **GC11A-02 POSTER** NASA and polar science in the coming decade: T P Wagner, J A Kaye

0824h **GC11A-03 POSTER** The Need for System Scale Studies in Polar Regions: L D Hinzman, D Newman

0836h **GC11A-04 POSTER** Accessibility Dynamics in a Warming Arctic: S Stephenson, L C Smith, J A Nagwani

0848h **GC11A-05 POSTER** Future Atmospheric Research Priorities of the International Arctic Research Committee (IASC): J E Overland, V Rachold, S Bowden
0900h GC11A-06 Antarctic paleoclimatic and paleoglacial history: building on programs, operations and results from IPY (Invited): R D Powell, Title of Team: ACE Steering Committee, SCAR; ANDRILL Science Committee

0912h GC11A-07 Sea ice as a nexus of Arctic environmental and socio-economic change through the IPY and beyond (Invited): H Eicken

0924h GC11A-08 The Antarctic POLENET Project: Status, Initial Results, Future Challenges: T J Wilson, D A Wiens, J Winberry, R Smalley, C A Raymond, A Nyblade, A D Huerta, I W Dalziel, M G Bevis, R C Ast, S Anandakrishnan

0936h GC11A-09 Some Recent Advances and Future Directions in Permafrost Research: V E Romanovsky, G Grose, S S Marchenko

0948h GC11A-10 The Future of Polar Science: The Path Beyond the IPY (Invited): K A Erb

Geomagnetism and Paleomagnetism

GP11A Moscone South: Poster Hall Monday 0800h Geomagnetism and Paleomagnetism General Contributions I Posters

Presiding: G Acton, UC Davis

0800h GP11A-0733 POSTER Magnetic Properties of Rocks of the Kapuskasing Uplift (Ontario, Canada) and Origin of Long-Wavelength Magnetic Anomalies: D J Dunlop, O Ozdemir, V Costanzo-Alvarez


0800h GP11A-0735 POSTER Magnetic Monitoring of Serpentinitization Reactions, Experimentation vs Oceanic Rocks: J H Carlut, B Malviosin, F Brunet, M Cannat, H Horen

0800h GP11A-0736 POSTER Paleomagnetic and rock magnetic studies of basement basalts recovered during IODP Expeditions 320/321: Y Yamamoto, Title of Team: IODP Expedition 320/321 Scientific Party

0800h GP11A-0737 POSTER Full Vector Studies of the Last 10 Thousand Years Derived From The East Maui Volcano Hawaii: E Herrero-Bervera, M J Dekkers, H Bohnel, J T Hagstrum, D E Champion

0800h GP11A-0738 POSTER Simple tests for non-ideal behaviour during paleointensity experiments: G A Paterson

0800h GP11A-0739 POSTER An Integrated Thellier Experiment on Lava Samples to Test Protocols and the Distribution of Paleointensities: H Wang, D V Kent

0800h GP11A-0740 POSTER Archaeomagnetic analyses of Iron Age burnt hut floors from southern Africa: C A Scribner, L P Neukirch, J A Tarduno, M K Watkeys, T Huffman

0800h GP11A-0741 POSTER Anomalous paleointensity variation in the Late Cretaceous: B Chang, S Doh, Y Yu, W Kim

0800h GP11A-0742 POSTER Comparison of Paleointensity Methods using Historical Lavas from Fogo, Cape Verde: M C Brown, J M Feinberg, J A Bowles

0800h GP11A-0743 POSTER Absolute Geomagnetic Paleointensity as Recorded by ~ 1.08 Ga Lake Shore Traps (Keweenaw Peninsula, Upper Michigan): New results: E Kulakov, A V Smirnov, J F Diehl, M S Laird

0800h GP11A-0744 POSTER Paleomagnetic and paleointensity investigations of a 3.6 billion-year-old granite from India: J Voronov, J A Tarduno, M Mukul, R D Cottrell


0800h GP11A-0746 POSTER Tectonic Tales: Changes in Central Walker Lane Strain Accommodation near Bridgeport, California; as told by the Stanislaus Group: C W Carlson, C J Pluhar, J M Glen

0800h GP11A-0747 POSTER A critical review of recent paleomagnetic studies in the Lhasa block, Tibetan plateau: implications for the initial collision age between India and Asia and the amount of crustal shortening: X Tan, S A Gilder, K P Kodama

0800h GP11A-0748 POSTER Circular polarization for electric fields associated with seismic waves generated by blasting: M Matsushima, Y Honkura, M Kuriki, Y Ogawa

0800h GP11A-0749 POSTER NGDC Geomagnetic Observatory Holdings: J J Mabie

0800h GP11A-0750 POSTER Recent Advances in the MagIC Online Database: Rock- and Paleomagnetic Data Archiving, Analysis, and Visualization: R Minnett, A A Koppers, L Tauxe, C Constable

0800h GP11A-0751 POSTER MAGE Project: 4D Visualization of geomagnetic field: Y Yamagishi, T Hatakeyama

0800h GP11A-0752 POSTER Calculation of ferromagnetic resonance spectra for chains of magnetic particles: A J Newell

0800h GP11A-0753 POSTER Neoformation of magnetic minerals in claystones during early burial (<3 km): M Kars, C Aubourg, J Pozzi, J Girard

0800h GP11A-0754 POSTER Understanding magnetic remanence acquisition through synthetic sediment deposition experiments: J Jezek, D Bilardello, S A Gilder


0800h GP11A-0756 POSTER Development of a SERF Atomic Magnetometer for Paleomagnetic Applications: L P Neukirch, T Kornack, J A Tarduno

0800h GP11A-0757 POSTER Recent results from the Princeton MRI experiment: E J Spence, H Ji

Hydrology

H11A Moscone South: Poster Hall Monday 0800h Hydrology Experimental Hydrological Experiments Under Financial Constraints Posters

Presiding: R Hut, Delft University of Technology; J S Selker, Oregon State University; T Blume, GFZ German Research Centre for Geosciences; W Luxemburg, Delft University of Technology

0800h H11A-0787 POSTER A novel technique to measure subsurface flow velocity: S Bachmair, M Weiler

0800h H11A-0788 POSTER Acoustic throughfall measurements in a semi-arid cloud forest, Dhofar, Oman: First results: J Friesen, A Bawain, S de Jong, A Hildebrandt

0800h H11A-0789 POSTER A glass always half full: Reconsideration of the Wastes apparatus to apply constant head boundary conditions: T A Ferre, J S Selker

0800h H11A-0790 POSTER Distributed landsurface skin temperature sensing in Swiss Alps: N Van De Giesen, F Baerenbold, D F Nadeau, E Pardyjak, M B Parlange
2010 Fall Meeting

0800h  H11A-0791 POSTER The rising bubble technique for discharge measurements:  W Luxembourg, K Hilgersom, M van Eekelen
0800h  H11A-0792 POSTER The use of handheld GPS to determine tidal slack in estuaries: M Lievens, H Savenijen, W Luxembourg
0800h  H11A-0793 POSTER The Trans African Hydro Meteorological Observatory: R Hut, N Van De Giesen, J S Selker, M Andreini
0800h  H11A-0794 POSTER Field Method for Measuring the Shrinkage/Swelling Dynamics of Cracks Using a Low-Cost “Crack-o-meter”: R D Stewart, M R Abou Najim, D E Rupp, J S Selker
0800h  H11A-0795 POSTER Cloid-o-meter: A New Method for the Calculation of Shrinkage/Swelling Curves for Soil Clods by Integrating an Open Source Software Solution and Digital Imagery Analysis: M R Abou Najim, R D Stewart, D E Rupp, J S Selker
0800h  H11A-0796 POSTER Quantifying snow variability using an inexpensive network of ultrasonic depth sensors: E Boe, J P McNamara, H Marshall
0800h  H11A-0797 POSTER Prototype of a low cost multiparameter probe: K Koski, R Schwingle, M Pullin
0800h  H11A-0798 POSTER Optimizing Augmentation of a Hydrologic Gauging Network in a Double Dip Recession: G Aggett

H11A Moscone South: Poster Hall Monday 0800h Error Characterization of Precipitation Estimation and Development of Merged Multisensor Products I Posters

Presiding: A Behrangi, NASA Jet Propulsion Laboratory, California Institute of Technology; Y Tian, UMBC; T Kubota, Japan Aerospace Exploration Agency

0800h  H11B-0799 POSTER Performance of high-resolution satellite precipitation products over China: Y Shen, A Xiong, Y Wang, P Xie, Title of Team: precipitation merge team
0800h  H11B-0800 POSTER Snowpack Reconstructions Incorporating Climate for Mountain Ranges Implementing Weather Modification: S Anderson, C Moser, G A Tootle, H Grissino-Mayer, G Kerr
0800h  H11B-0801 POSTER Leveraging hydrologic predictability for optimal merging of high resolution satellite precipitation products: A S Gebregiorgis, F Hossain
0800h  H11B-0802 POSTER Bias Adjustment of high spatial/temporal resolution Satellite Precipitation Estimation relying on Gauge-Based precipitation over China: J Yu, Y Pan, Y Shen
0800h  H11B-0803 POSTER Quantifying Systematic Errors and Total Uncertainties in Satellite-based Precipitation Measurements: Y Tian, C D Peters-Lidard
0800h  H11B-0804 POSTER Assessment of Kriging Methods for Spatial Transfer of Satellite Rainfall Error Metrics from Gauged to Ungauged Satellite Gridboxes: T Tang, F Hossain
0800h  H11B-0805 POSTER Analyses of Chinese Hourly Precipitation Using Gauge Observations and Satellite Estimates Products: Y Pan, J Yu, Y Shen
0800h  H11B-0806 POSTER Global Satellite Mapping of Precipitation (GSMaP) with high resolution from microwave and infrared radiometer using Kalman filter: T Ushio, T Kubota, S Shige, Z Kawasaki
0800h  H11B-0807 POSTER Near-real-time global rainfall map using multi-satellite data by JAXA and its validation: T Kubota, M Kachi, R Oki, T Ushio, S Shige, K Aonashi, K Okamoto
0800h  H11B-0808 POSTER Variability of the raindrop size distribution at small spatial scales: A Berne, J Jaffrain
0800h  H11B-0809 POSTER Rainfall Observed Over Bangladesh 2000-2008: A Comparison of Spatial Interpolation Methods: M Pervez, G M Henebry
0800h  H11B-0810 POSTER Polarimetric, X-band Radar Network: Inter-Calibration Experiment: P Domaszczynski, W F Krajewski, A Kruger, D Ceynar, R Goska
0800h  H11B-0811 POSTER The concurrent multiplicative-additive approach for gauge-radar/satellite multisensor precipitation estimates: J Garcia-Pintado, G G Barberá, M Erena Arrabal, V M Castillo
0800h  H11B-0812 POSTER Variability of raindrop size distributions and radar reflectivity-rain rate relations in extreme Mediterranean precipitation: R Uijlenhoet, P Hazenberg, N Y, B Boudevillain, G Delrieu

H11C Moscone South: Poster Hall Monday 0800h From Pores to Catchments: Coupling Hydrologic Concepts and Models Across Multiple Scales I Posters

Presiding: S W Lyon, Stockholm University; R H Mohtar, Purdue University; J C Ascough, USDA-ARS-NPA; A L James

0800h  H11C-0813 POSTER Tracking Varying Mean Transit Time in a Semi-Arid Catchment: T Kubota, T A Troch, S W Lyon
0800h  H11C-0814 POSTER Landscape Characterization and Hydrologic Response Across Spatial Scales in a Sub-Arctic Environment: E M Karlsson, S W Lyon
0800h  H11C-0815 POSTER A Model for Estimating Evapotranspiration on a Watershed Scale: S E Tuttle, G Salvucci
0800h  H11C-0816 POSTER EFFECTIVE HYDRAULIC CONDUCTIVITY OF PARTIALLY INUNDATED SURFACES: LOAMY AGRICULTURAL SOILS. C Langhans, G Govers, J Diels
0800h  H11C-0817 POSTER Comparative application and analysis from a one dimensional and a multi-dimensional routing scheme and its impact on process oriented hydrological modeling with the Jena Adaptable Modelling System (JAMS) and the integrated hydrological, nutrient transport and erosion modeling system J2000-SE: H Kipka, B Pfennig, M Fink, S Kralisch, P Krause, W Flügel
0800h  H11C-0818 POSTER Scale effects on information content and complexity of streamflows: F Pan, Y A Pachepsky, A Guber, R L Hill
0800h  H11C-0819 POSTER Application of Strontium isotope to hydrological study of groundwater dynamics in a weathered granite catchment: M Katsuyama, S Nishimoto, Y Saitoh, T Nakano, M Tani
0800h  H11C-0820 WITHDRAWN
0800h  H11C-0821 POSTER Spatiotemporal variability in specific discharge within a boreal landscape: S W Lyon, M Nathanson, A Spans, T J Grabs, H Laudon, K H Bishop, J Seibert
0800h  H11C-0822 POSTER Dissecting the variable source area concept – Flow paths and water mixing processes: H E Dahlke, Z M Easton, S W Lyon, L D Brown, M T Walter, T Steenhuis
0800h  H11C-0823 POSTER Challenges to Defining Sediment Concentration-Discharge Relationships in the Ethiopian Highlands: C D Guzman, S A Tilahun, A D Zegeye, T Steenhuis
0800h  H11C-0824 POSTER Coupling Soil Water Movement and Discrete Element Method for Evaluating the Effects of Shrinkage Cracking on Soil Hydraulic Properties: R Jabakhanji
0800h  H11C-0825 POSTER Multiscale numerical modeling of levee breach processes: C E Kees, M W Farthing, I Akkerman, Y Bazilev
All information is current as of November 12, 2010
H11F Moscone South: Poster Hall  Monday  0800h  Managing Waters Resources Risks and Innovating Adaptation Strategies in a World of Change  I Posters (joint with GC, PA)

Presiding: N K Howden, University of Bristol; C M Brown, University of Massachusetts - Amherst; JJ McDonnell, Oregon State University; F I Chung, State of California

0800h  H11F-0866 POSTER What is the Nondominated Formulation? A Demonstration of de Novo Water Supply Portfolio Planning Under Deep Uncertainty: J R Kasprzyk, P M Reed, G W Characklis, B R Kirsch


0800h  H11F-0870 POSTER Analyzing Uncertainty and Risk in the Management of Water Resources in the State Of Texas: A Singh, R Hauffpauir, S Mishra, M Lavenue

0800h  H11F-0871 POSTER The role of climate and human changes on inter-annual variation in stream nitrate fluxes and concentrations: M Philippe, C Gascuel, A Pierre, D Patrick, R Laurent, M Jérome

0800h  H11F-0872 POSTER Prediction intervals for estimated water-quality concentrations and fluxes with serially-correlated residuals: S A Archfield, R M Hirsch, R M Vogel

0800h  H11F-0873 WITHDRAWN

0800h  H11F-0874 POSTER Assessing groundwater transport of non-point source pollutants to surface waters and wells: Nitrates in the Maurice Watershed, New Jersey: D B Abrams, H M Haitjema

0800h  H11F-0875 POSTER Common Pool Water Markets and their Role in Facilitating Land Use Change in Drying Climates: R L Teasley, M Milke, J P Raffensperger, M Zargar

0800h  H11F-0876 POSTER Correcting for low-frequency variability bias in GCM rainfall simulations: F Johnson, R Mehrotra, A Sharma

0800h  H11F-0877 POSTER Long-Term Changes in Streamwater Total Phosphorus in the Mississippi-Atchafalaya River Basin Using Weighted Regressions on Time, Discharge, and Season: B T Aulenbach

0800h  H11F-0878 POSTER Does Irrigation Buffer Agriculture from Climatic Variability? - Evidence from India: R Fishman


H11G Moscone South: Poster Hall  Monday  0800h  Measurements and Modeling of Storage Dynamics Across Scales I Posters

Presiding: J P McNamara, Boise State University; D Tetzlaff, University of Aberdeen; S K Carey, Carleton University

0800h  H11G-0888 POSTER The apparent groundwater age rejuvenation caused by the human activity in Jakarta area, Indonesia: M Kagabu, J Shimada, T Nakamura, R Delinom, M Taniguchi


0800h  H11G-0890 POSTER Storage excess: A new conceptual framework for subsurface water collection, storage and discharge at the watershed scale: T Sayama, J J McDonnell, A S Dhakal, K Sullivan

0800h  H11G-0891 POSTER Variability in Headwater Stream Behavior Across the United States: C Kelleher, T Wagar
0800h  H11G-0892 POSTER Vadoze zone hydrology in low relief terrain: the importance of lateral subsurface stormflow: C R Jackson, L Hopp, J J McDonnell


0800h  H11G-0894 POSTER Soil Moisture/ Tree Water Status Dynamics in Mid-Latitude Montane Forest, Southern Sierra Critical Zone Observatory, CA: P C Hartsough, A Malazian, M W Meadows, K Roudneva, J Storech, R C Bales, J W Hopmans

0800h  H11G-0895 POSTER Spatially distributed hydrologic response in a small catchment in the Swiss Alps: S Hernandez, S Simoni, A Rinaldo, M H Daniels, M B Parlange

0800h  H11G-0896 POSTER Calibrating SWAT with River flows, Groundwater table, and, GRACE: L Qiao

0800h  H11G-0897 POSTER A Screening Tool for Using Gravity in Hydrologic Investigations: A Hartz, T Ferré

0800h  H11G-0898 POSTER Spatial variation in water table responses across a hillslope: D R Haught, I H Tromp-van Meerveld

0800h  H11G-0899 POSTER Modeling soil-moisture storage distribution using a dynamic topographic wetness index: C Lanni, R Rigon, J J McDonnell

0800h  H11G-0900 POSTER A new heat-pulse probe method for the determination of ice and liquid water content in frozen soils: S K Carey, Y Zhang, M Trebeg

0800h  H11G-0901 POSTER Global Terrestrial Water Storage Response and Controls using GRACE: J T Reager, J S Famiglietti

0800h  H11G-0902 POSTER Impact of High-altitude Meadows on Runoff Dynamics Across Environmental and Elevational Gradients in the Sierra Nevada, California: J Helmschrot, J D Lundquist, P Krause

0800h  H11G-0903 POSTER Role of Storage in Arctic Basins: W R Bolton, D L Kane, L D Hinzman

0800h  H11G-0904 POSTER What happens when catchments get excited? Exploring the link between hydrologic states and responses across spatial scales: S Wrede, S W Lyon, N Martinez-Carreras, L Pfister, S Uhlenbrook

0800h  H11G-0905 POSTER Memory effects of depressional storage in Northern Prairie hydrology: K Shook, J W Pomeroy
0800h  **H11I-0928 POSTER Three-Dimensional Modeling of Groundwater Ages and Implications for Sustainable Groundwater Management in the Ordos Basin, Northwest China:** C Yu, G Cao, Y Yao, F Hu, C Zheng

0800h  **H11I-0929 POSTER Artificial Recharge Coupled with Flood Mitigation in Jeju, Korea:** Y Kim, Y Kim, M Koo, K Lee, D Moon, J M Barry, W Park

0800h  **H11I-0930 POSTER Assessment of Groundwater Supply Impacts for a Mine Site in Western Turkey:** E Agartan, H Yazicigil

0800h  **H11I-0931 POSTER Evaluation of Four Water Management Policies for Ogallala Aquifer Sustainability in the Texas High Plains:** J E Hernandez, P H Gowda, T A Howell, T H Marek, W Ha, L K Almas

0800h  **H11I-0932 POSTER A Hydrologic Model to Quantify Large Scale Biofuel Production Impact on Upper Mississippi River Basin Water Quality:** Y K Demissie, E Yan, M Wu

0800h  **H11I-0933 POSTER Applications of Ferrate(VI) to Wastewater Reclamation and Water Treatment:** H Kim, H Choi, K Lee, J Nam, I Kim

0800h  **H11I-0934 POSTER A Basin-based Analysis of Global Lake Stress from Scarcity of Sustainable Water Resource:** J Wang, Y Sheng

0800h  **H11I-0935 POSTER A GRACE-based Index of Global Freshwater Availability and Stress:** A S Richey, J S Famiglietti

---

**H11J Moscone West: 3018 Monday 0800h**

**CO2 Sequestration Inside Pores: From Molecules to Microbes I** (joint with B, V)

**Presiding:** S J Altman, Sandia National Laboratories; B Cardenas, University of Texas at Austin; D R Cole, Oak Ridge National Laboratory

0800h  **H11J-01 CO2 INTERACTION WITH GEOMATERIALS (Invited):** V Romanov, B H Howard, R J Lynn, R P Warzinski, T Hur, E M Myshakin, C L Lopano, V K Voora, W A Al-Saidi, K D Jordan, R T Cygan, G D Guthrie

0815h  **H11J-02 Molecular Simulations of Carbon Dioxide and Water: Cation Solvation and Wettability:** L J Criscenzi, J Bracco, R T Cygan

0830h  **H11J-03 Integrating Experiments, Characterization, and Modeling to Understand Carbonate Precipitation at the Pore Scale (Invited):** C Steefel, C N Noiriel, L Yang, D Trebotich, S Molins, J B Ajo Franklin

0845h  **H11J-04 Effects of CO2 (aq), pH, and Salinity on Biotite Dissolution Kinetics under Hydrothermal Conditions:** Y Hu, Y Jun

0900h  **H11J-05 Microbially enhanced carbon capture and storage – from pores to cores (Invited):** A C Mitchell, A B Cunningham, L Spangler, R Gerlach

0915h  **H11J-06 Mineralogy and Microbial Survival During Carbon Sequestration:** E U Santillan, K Gilbert, P Bennett

0930h  **H11J-07 Small-scale dissolution, precipitation, deformation and fracturing during CO2 sequestration (Invited):** P Meakin, H Austrheim, H Huang, A Malthe-Sorensens

0945h  **H11J-08 Toward development of parameters for permeability field variations due to fluid-rock reactions during geologic CO2 sequestration:** M O Saar, W E Seyfried

---

**H11K Moscone West: 3014 Monday 0800h**

**Hydrogeophysics: Advances in Measurement, Monitoring, and Modeling of Hydrological Processes I (joint with NS)**

**Presiding:** A Pidlisecky, University of Calgary; B Daflon, Center for Geophysical Investigation of the Shallow Subsurface

0800h  **H11K-01 Crosshole GPR reflection imaging of saline tracer movement in fractured granite (Invited):** C Dorn, N Linde, T Le Borgne, O Bour, L Baron

0815h  **H11K-02 Monitoring Spatio-temporal Dielectric Permittivity Variation in the Shallow Subsurface through Bayesian Inversion of GPR Data:** N Terry, Z Hou, S S Hubbard

0830h  **H11K-03 Ground penetrating radar response to water table drawdown and vadose zone dewatering:** M J Thoma, J H Bradford, W Barrash

0845h  **H11K-04 Rapid estimation of topsoil hydraulic properties from coupled inversion of TDR data during falling head infiltration:** C Mboh, J A Huisman, H Vereecken

0900h  **H11K-05 Soil water monitoring using heated distributed temperature sensing:** A M Strieg, S P Loheide

0915h  **H11K-06 Estimation of Unconfined Aquifer Hydrologic Properties Using Gravity and Drawdown Data:** D L Harry, J Woodworth, W E Sanford

0930h  **H11K-07 Differential Image Analysis to Extract Subsurface Flow Dynamics From High Resolution Surface Deformation Measurements:** C J Seto, S Ravela

0945h  **H11K-08 InSAR data produce specific storage estimates for an agricultural area in the San Luis Valley, Colorado:** J Reeves, R J Knight, H A Zebker, W Schreuder, P S Agram, T Lauknes

---

**H11L Moscone West: 3016 Monday 0800h**

**Precipitation Measurement, Validation, and Applications: From Watershed to Global Scales I (joint with A)**

**Presiding:** A Y Hou, NASA Goddard SFC; W K Berg, Colorado State University; B E Vieux

0800h  **H11L-01 Status and Future of Global Flood and Landslide Nowcasts and Forecasts Using Satellite Precipitation Observations (Invited):** R F Adler, H Wu, D B Kirschbaum, F Policelli, Y Hong, Y Tian, H Pierce

0815h  **H11L-02 Rainfall contributions from precipitation features with different sizes, convective intensities and durations over the tropics and subtropics (Invited):** E J Zipser, C Liu

0830h  **H11L-03 A second look at the CloudSat/TRMM intersect data:** Z Haddad, K Kuo, E A Smith, D Kiang, F J Turk

0845h  **H11L-04 Properties of Clouds and Precipitation Inferred from TRMM PR and TMI:** S J Munchak, C D Kummerow

0900h  **H11L-05 Spectral retrieval of latent heating profiles from TRMM PR data:** S Shige, Y N Takayabu, M Kachi, W Tao

0915h  **H11L-06 An Algorithm for Estimating Precipitation Using Combined Radar-Radiometer Observations from GPM:** M Greco, L Tian, W S Olson, S Tanelli

0930h  **H11L-07 Inter satellites Calibration of Microwave Radiometers for GPM:** T T Wilheit

0945h  **H11L-08 A stochastic simulator of intermittent 2d fields of raindrop size distributions:** M Schleiss, A Berne
**H I I M** Moscone West: 3020  Monday 0800h

Rocks, Fractures, Fluids, and Life: Insights From Underground Research Laboratories I (joint with B, ED, MR, NH, NS, T)

**Presiding:** L C Murdoch, Clemson University; D Elsworth, Pennsylvania State University; T C Onstott, Princeton Univ.; W M Roggenhen, SD School of Mines-Tech


0830h  **H I I M-03** Faults and fractures in Gallery 04 of the Mont Terri rock laboratory: characterization, simulation and application: V Mourzenko, J Thovert, P M Adler, C Nussbaum, P Pinettes

0845h  **H I I M-04** HPPP Hydromechanical tests and developments at the LSBB Underground Research Laboratory (France): Y Guglielmi, F Cappa, J Rutquist

0900h  **H I I M-05** Upward flow of supercritical CO2 with transition to gaseous conditions: Simulations for design of large-scale CO2 flow experiments at LUCI: C M Oldenburg, C A Peters, P F Dobson, D Dougherty

0915h  **H I I M-06** Microbial borehole observatories deployed within the oceanic crust: Design considerations and initial results from long-term colonization experiments (Invited): B N Orcutt, W Bach, K Becker, A T Fisher, S Hulme, B M Toner, C G Wheat, K J Edwards, Title of Team: IODP Expedition 327 Shipboard Party

0930h  **H I I M-07** Stimulation Controls and Mitigation of Induced Seismicity for EGS Project: Examples from the Newberry EGS Demonstration Project (Invited): S Petty, T T Cladouhos, W Osborn, J Iovenitti

0945h  **H I I M-08** Development of an ultra-high-resolution FBG strain sensor and laboratory experiments to evaluate its performance for application to the rock masses: T Tokunaga, Z He, Q Liu, K Mogi, H Matsui, Y Nakayama, A Hirata, Y Mizuta

---

Earth and Space Science Informatics

**IN11A Moscone South: Poster Hall**  Monday 0800h

Enabling and Encouraging Transparency in Science Data I Posters (joint with GC, PA, ED, NH)

**Presiding:** B E Wilson, Oak Ridge National Laboratory; K A Lehner, Columbia University; L M Raymond, Woods Hole Oceanographic Institution; W J Weber, Undidata Program Center

0800h  **IN11A-1061** POSTER The ICOS World Data System: From Concept to Reality: D M Clark, P Cilliers, M Diepenbroek, F Genova, R Harris, L Horta, J H Minster, M Mokrane, R E Neilan, L Rickards, T Watanabe, Y B Yan, M Zgurovsky, Title of Team: ICOS World Data System Scientific Committee

0800h  **IN11A-1062** WITHDRAWN

0800h  **IN11A-1063** POSTER Enhancing The Recognition, Reusability, And Transparency Of Scientific Data Using Digital Object Identifiers: B E Wilson, R B Cook, T W Beaty, W Lenhardt, J Grubb, L A Hook, C Sanderson

0800h  **IN11A-1064** POSTER The TPAC Digital Library: A Web Application for Publishing Large Catalogs of Earth Science Data: P Blain, T Pugh

0800h  **IN11A-1065** POSTER Data Stewardship and Long-Term Archive of ICESat Data at the National Snow and Ice Data Center (NSIDC): D K Fowler, J F Moses, R E Duerer, D Webster, D Korn

0800h  **IN11A-1066** POSTER ASTER Global DEM contribution to GEOS demonstrates open data sharing: T Sohre, K A Duda, D J Meyer, J Behnke, Title of Team: NASA ESDIS LP DAAC


0800h  **IN11A-1068** POSTER Data Publication: Addressing the Issues of Provenance, Attribution, Citation, and Accessibility: L M Raymond, C L Chandler, R K Lowry, E R Urban, G Moncoiffe, P Pissierssens, C Norton

0800h  **IN11A-1069** POSTER A Semantic Provenance-aware Expert Advisory System in a Web-based Science Data Analysis Tool: S Zednik, C Lynnes, P A Fox, G G Leptoukh, J Pan

0800h  **IN11A-1070** POSTER Metadata Means Communication: The Challenges of Producing Useful Metadata: P N Edwards, A L Batcheller

0800h  **IN11A-1071** POSTER Rebuilding and Organizing 1960’s era Nimbus Datasets to 2010 Data Stewardship Expectations: J F Moses, S J Kempfer, A Al-Jazzrawi, E Zamkoff, I V Gerasimov, J E Johnson, B M Trivedi

0800h  **IN11A-1072** POSTER Revealing passive microwave data production at NSIDC: D Scott, B W Billingsley, J Smith, W Meier

0800h  **IN11A-1073** POSTER Whose murk is this?: P J Samson

0800h  **IN11A-1074** POSTER Visualization and data sharing of COSMIC radio occultation dataset: Y Ho, W J Weber, J Chastang, D Murray, J McWhirter, Title of Team: integrated data viewer

0800h  **IN11A-1075** POSTER Mobile Application for the Delivery of Satellite Imagery and Cloud Products: L Nguyen, T L Chee, P Minnis, R Palikonda, D Spanenberg, J K Ayers

---

**IN11B Moscone South: Poster Hall**  Monday 0800h

Interoperability Barriers for Earth Science Data Systems I Posters (joint with AE, B, C, EP, GC, H, NH, V)

**Presiding:** S W Berrick, NASA; Y Enloe; H Hua, NASA/JPL; A Wilson, LASP

0800h  **IN11B-1076** POSTER Vocabulary for Virtual Observatories and Data Systems: J A Hourcle, T A King

0800h  **IN11B-1077** POSTER Building Format-Agnostic Metadata Repositories: M Cechini, D Pilone

0800h  **IN11B-1078** POSTER An Observational and Computational Variable Tagging System for Climate Change Informatics: L C Pouchard, W Lenhardt, M L Branstetter, A Runciman, D Wang, S Kao, A W King, Title of Team: Climate Change Informatics Team

0800h  **IN11B-1079** POSTER Improving the Interoperability of NASA HDF and HDF-EOS data: M Yang

0800h  **IN11B-1080** POSTER Common Patterns with End-to-end Interoperability for Data Access: J Gallagher, N Potter, M B Jones

0800h  **IN11B-1081** POSTER Results of the Collaborative Energy and Water Cycle Information Services (CEWIS) Workshop on Heterogeneous Dataset Analysis Preparation: S J Kempler, W L Teng, J G Acker, D R Belvedere, Z Liu, G G Leptoukh

0800h  **IN11B-1082** POSTER Achieving Interoperability in GEOSS - How Close Are We?: D K Arctur, S S Khalsa, S F Browdy

0800h  **IN11B-1083** POSTER Best Practices for Preparing Interoperable Geospatial Data: Y Wei, S Santha Vannan, R B Cook, B E Wilson, T W Beaty

0800h  **IN11B-1084** POSTER Web-based Altimeter Service: P S Callahan, B D Wilson, Z Xing, R G Raskin
Natural Hazards

NH11A  Moscone South: Poster Hall  Monday 0800h

Extreme Natural Events: Modeling, Prediction, and Mitigation I

Posters (joint with NG)

Presiding: A Ismail-Zadeh, Karlsruhe Institute of Technology; I Zaliapin, University of Nevada


0800h  NH11A-1103 POSTER Scenario-based extreme seismic hazard and risk assessment for the Baku city (Azerbaijan): A Ismail-Zadeh, G Babayev, J Le Mouel

0800h  NH11A-1104 POSTER Understanding Earthquake Hazard & Disaster in Himalaya - A Perspective on Earthquake Forecast in Himalayan Region of South Central Tibet: D Shanker, Paudyal, H Singh

0800h  NH11A-1105 POSTER Investigating the Seismic Response of a Large Rock Slope Instability (Randa, VS): J R Moore, J Burjánek, V S Gischig, S Loew, D Faeh

0800h  NH11A-1106 POSTER Application of New Liquefaction Hazard Mapping Techniques to the Sacramento-San Joaquin Delta: C R Real, K L Knudsen, M O Woods

0800h  NH11A-1107 POSTER NATURAL HAZARDS AT THE OTHER EXTREME: AN APPARENTLY SEASONAL HAZARD AT TAIHAPE LANDSLIDE, NEW ZEALAND: M J McSaveney, C Massey

0800h  NH11A-1108 POSTER The costal landslide from analogue experiments: perspectives and limitation: C Del Ventisette, T Nolesini, S Moretti, R Fanti

0800h  NH11A-1109 POSTER SUDDEN MORPHOMETRIC CHANGES INDUCED BY DIFFUSE MASS WASTING PROCESSES: S Moretti, N Casagli, F Catani, A Battistini, F Raspini

0800h  NH11A-1110 POSTER Solidification of Suspended Sediments with Two Characteristic Grain Sizes: G Zarski, R I Borja

0800h  NH11A-1111 POSTER A potential submarine landslide tsunami in South China Sea: Z Huang, Y Zhang, A D Switzer

0800h  NH11A-1112 POSTER Nonlinear analytical solution for landslide generated tsunamis: B Aydin, U Kanoglu, C Synolakis

0800h  NH11A-1113 POSTER GIS-based multi-criteria analysis for the evaluation of subsidence in coal mine: J Suh, Y Choi, H Park, H Kwon, S Yoon, W Go

0800h  NH11A-1114 POSTER Interagency Operating Plan for Pacific Northwest Volcanic Ash Events: J M Osienksy, S Birch

0800h  NH11A-1115 POSTER Statistical Approach to Detection of Strombolian Activity in Satellite Data: A K Worden, J Dehn, M Ripepe, A J Harris

0800h  NH11A-1116 POSTER Time series analysis to identify thermal precursors and develop forecasting algorithms: case studies from Bezymianny, Shiveluch, Kliuchevskoi and Karymsky: S M van Manen, J Dehn, S Blake

0800h  NH11A-1117 POSTER Data-Based Comparison of Frequency Analysis Approaches: Methodological Framework and Application to Rainfall / Runoff Data in France: M Lang, B Renard, K Koehanek, E Sauquet, F Garavaglia, E Paquet, J Soubeyrous; S Jourdain, J Veysseire, F Borchi, L Neppel, K Najib, P Arnaud, Y Aubert, A Auffray

0800h  NH11A-1118 POSTER Predictability and predictive ability of severe rainfall events over Italy: L Molini, A Parodi, N Rebora, G Craig, F Siccardi

0800h  NH11A-1119 WITHDRAWN

0800h  NH11A-1120 POSTER A comparative analysis of MODIS based spectral indices for drought monitoring over fire prone vegetation types: G Caccamo, L A Chisholm, R Bradstock, M L Puotinen

0800h  NH11A-1121 POSTER Localized Modeling of Storm Surge Effects on Civil Infrastructure using ADCIRC: J S Simon, J Baugh

0800h  NH11A-1122 POSTER Los Alamos Radiation Hydrocode Models of Asteroid Mitigation by a Subsurface Explosion: R Weaver, C S Pesko, W Dearholt

NH11B  Moscone South: Poster Hall  Monday 0800h

Hazard Associated with Snow- and Ice-Capped Volcanoes I

Posters (joint with A, C, EP, V, G)

Presiding: B R Edwards, Dickinson College; J F Larsen, Geophysical Institute; H Delgado Granado, Instituto de Geofisica, UNAM

0800h  NH11B-1123 POSTER Surface change detection in glacier regions using ALOS PALSAR data: N Tomiyama, M Ono

0800h  NH11B-1124 POSTER Glacier Destruction and Lahar Generation during the 2009 Eruption of Redoubt Volcano, Alaska: C F Waythomas

0800h  NH11B-1125 POSTER Stratigraphic reconstruction of the 13 ka BP debris avalanche deposit at Colima volcano (Mexico): effect of climatic conditions on the flow mobility: M Roverato, L Capra


0800h  NH11B-1127 POSTER Evidence for synchronous hydromagmatic and primary degassing activity during the 1991 eruption of Hudson Volcano, Chile: D J Krazmann, S Carey, R Scasso, J Naranjo


0800h  NH11B-1129 POSTER Construction of an Ice-Confined Basaltic Fissure Complex: Sveifluhals, SW Iceland: E C Mercurio, I P Skilling

0800h  NH11B-1130 POSTER Snow-ice-tephra-lava interactions during the 2010 Fimmvorduhals eruption: J Haklar, B R Edwards, M T Gudmundsson
**POSTER** Lava-ice interaction during the advance of a trachyandesitic lava flow down the Gigjökull outlet glacier in the April-May 2010 Eyjafjallajökull eruption, Iceland: B Oddsson, M T Gudmundsson, T Hognadottir, E Magnusson, F Hoskulsson

**POSTER** Hazards associated with alkaline glaciovolcanism at Hoodoo Mountain and Mt. Edziza, western Canada: comparisons to the 2010 Eyjafjallajökull eruption: B R Edwards

**POSTER** Interactions between mafic eruptions and glacial ice or snow: implications of the 2010 Eyjafjallajökull, Iceland, eruption for hazard assessments in the central Oregon Cascades: D McKay, K V Cashman

**POSTER** Evolution of Channels Draining Mount St. Helens: Linking Non-Linear and Rapid, Threshold Responses: A Simon

**POSTER** Geomorphologic field observations as a tool to improve lahar hazard assessment on the Southwestern flank of Cotopaxi volcano, Ecuador: S Ettinger

**POSTER** Simulating Explosive Volcanic Eruptions: G R Gisler

**POSTER** Subaerial lava pillars: Evidence for non-explosive magma-water interactions in Iceland: K Christie, T K Gregg

**POSTER** Ice cauldron formation during the initial phase of the Eyjafjallajökull eruption observed with an airborne SAR: E Magnusson, M T Gudmundsson, T Hognadottir, F Hoskulsson, B Oddsson

**POSTER** Ground penetrating radar survey of the ice-filled active crater of Mount Baker, Washington: M Park, D H Clark, J Caplan-Auerbach

**POSTER** Land-Ocean-Atmospheric Processes: Implication to Natural Hazards and the Global Carbon Cycle I (joint with A, IN, ED, GC, H, NH, NS, OS, S, DI, T, V)

**POSTER** The Potential for Triggered Seismicity Associated With Geologic Sequestration of CO2 in Saline Aquifers (Invited): M D Zoback

**POSTER** Real-time Seismicity Evaluation as a Tool for the Earthquake and Tsunami Short-Term Hazard Assessment (Invited): G A Papadopoulos

**POSTER** Drilling into Faults Quickly After Earthquakes (Invited): E E Brodsky, J J Mori, P M Fulton

**POSTER** Constraining the climate sensitivity of the global carbon cycle with paleoclimatic data (Invited): D Frank, J Esper, C Raible, U Büntgen, VTrouet, B Stocker, P Joos

**POSTER** Is Hurricane Activity in One Ocean Basin Tied to Another? (Invited): C Wang, S Lee

**POSTER** Ocean-Atmosphere Coupling associated with Typhoons/ Hurricane and their impacts on marine ecosystem (Invited): D L Tang

**POSTER** Use of UAVs in extreme environments: UAV observations of the Antarctic atmosphere and surface during winter (Invited): J J Cassano

**POSTER** Temporal and spatial variability, and extreme events of the Great Lakes ice cover: Impacts of ENSO and AO (Invited): J Wang, X Bai, A Clites, G Leshkevich, M C Colton, B M Lojgren

**Invited** The Uncertainty of Future Sea Level Rise: Bridging Science and End Users I (joint with OS, C, PA, GC)

**Presiding:** G L Geernaert, W T Pfeffer, University of Colorado; D Behar, San Francisco Public Utilities Commission; H Plag

**POSTER** Socio Economic Impacts of Sea Level Change: What Does Society Need from Science? (Invited): M A Davidson

**POSTER** Prospects for useful sea-level predictions from Earth-system models (Invited): W H Lipscomb

**POSTER** Coastal Hazards Maps: Actionable Information for Communities Facing Sea-Level Rise (Invited): J C Gibeaut, E Barraza

**POSTER** An ADAPTATION STRATEGY TO ADDRESS SEA LEVEL RISE ALONG COASTAL DEVELOPMENTS:

**Invited** D R Trivedi

**POSTER** Adaptation to Sea Level Rise in Coastal Units of the National Park Service (Invited): R L Beavers

**POSTER** How Shall We Tell Our People? The Art and Science of Communicating Sea-Level Rise to Coastal Audiences (Invited): S C Moser

**Invited** Back to Basics Posters (joint with S, NG, GP, MR)

**POSTER** Time-lapse 3D inversion of spectral induced polarization measurements: M Karaoulis, A Revil, D D Werkema, B J Minsley

**POSTER** GEOPHYSICAL INVERSION THROUGH HIERARCHICAL SCHEME: A Furman, J A Huisman

**POSTER** Time-lapse resistivity monitoring - two new approaches for imaging the evolution of a conductive contaminant: K H Hayley, L R Bentley, A Pidlisecky

**POSTER** Diffusion Rate Tomography for Time Domain Electromagnetic Induction Methods: E M Kazlauskas, C J Weiss

**POSTER** The ‘L’ Array, a method to model 3D Electrical Resistivity Tomography (ERT) data: R E Chavez Segura, G Chavez-Hernandez, C Delgado, A Tejero-Andrade

**POSTER** Uniform Asymptotic Expansion for the Helmholtz Green’s Function— Application to Inversion Preprocessing: M J Yedlin, J Virieux, D G Van Vorst

**POSTER** Monte Carlo simulations for deriving the precision in GPR velocity estimates: R A Clark, A Booth, T Murray

**POSTER** Innovative surface NMR signal processing to significantly improve data quality: F M Neyer, M Hertrich, S A Greenhalgh

**POSTER** Deconvolution of gravity gradient tensor data using an infinite dike model: M Beiki, L B Pedersen
Ocean Sciences

OS11A  Moscone South: Poster Hall  Monday  0800h
Ocean Sciences General Contributions: Geological Oceanography Posters

Presiding: V Kostylev, Natural Resources Canada; R L Evans, Woods Hole Oceanographic Institution

0800h OS11A-1171 WITHDRAWN
0800h OS11A-1172 POSTER Acoustic and Physical Properties of Mud Deposit in the Southern Continental Shelf of Korea: S Bae, D C Kim, G Lee, G Kim, Y Seo, G Cifci
0800h OS11A-1173 POSTER Morphological features and forming mechanism of Central Canyon in the Qingdongnan basin, northern South China Sea: M Su, X Xie, T Jiang, C Zhang, J Li, C Zhang, Y He
0800h OS11A-1174 POSTER Predictability of seabed texture: spatial scaling of grain size and bathymetry on glaciated and non-glaciated shelves: V Kostylev
0800h OS11A-1175 POSTER Sedimentary modeling and analysis of petroleum of the upper Tertiary sequences in southern Ulleung sedimentary Basin, East Sea (Sea of Japan): D Cheong, D Kim, Y Kim
0800h OS11A-1176 POSTER Reconstruction of Sedimentary Sequence in Kumano Forearc Basin of southwest Japan by IODP Core-Log Integration: N Sakurai, J Ashi, S Saito
0800h OS11A-1177 POSTER A Study of Storm-induced variations in the littoral sediment transport patterns of Central Monterey Bay: JJ Brower
0800h OS11A-1178 POSTER Studies on formation mechanism and source depth of mud volcanoes by using of drilling cores in the Kumano forearc basin, SW Japan: S Muraoka, J Ashi, T Kamatsumo, A Sakaguchi, F Inagaki
0800h OS11A-1179 POSTER Distribution and structure of active strike-slip faults in the Enshu forearc basin of the eastern Nankai subduction zone: T Ojima, J Ashi, Y Nakamura
0800h OS11A-1180 POSTER Dense Ocean Floor Network for Earthquakes and Tsunamis; DONET/ DONET2, Part2 -Development and data application for the mega thrust earthquakes around the Nankai trough: Y Kameda, K Kagawuchi, E Araki, H Harumoto, T Nakamura, M Nakano, S Kiami, K Akiyoshi, T Baba, M Ohori, T Hori, N Takahashi, S Kaneko, Title of Team: DONET Research and Development Group
0800h OS11A-1181 POSTER FERRIC IRON PRECIPITATION IN THE NAGAHAMA BAY, SATSUMA  IWO-JIMA ISLAND, KAGOSHIMA: T Nagata, S Kiyokawa, M Ikehara, K Oguri, S Goto, T Ito, K E Yamaguchi, T Ueshiba
0800h OS11A-1182 POSTER Establishment of Spatial Decision Support System model to predict the potential sites of polynuclear nodule deposits in the Clarion-Clipperton Fracture Zone of Northeastern Pacific: D Li, H ZHOU, Q YANG, N Zhou

OS11B  Moscone South: Poster Hall  Monday  0800h
Ocean Sciences General Contributions: Physical Oceanography I Posters

Presiding: J Hazewinkel, Scripps Inst of Oceanography

0800h OS11B-1183 POSTER PSI of the oceanic internal tide: J Hazewinkel, Y Tsang, K B Winters
0800h OS11B-1184 WITHDRAWN
0800h OS11B-1185 POSTER Circulations Caused by Interaction of Underwater Currents and Surface Waves: A Basovich

0800h OS11B-1186 POSTER Study the impacts of Coriolis-Stokes forcing on upper ocean circulation in a fully coupled wave-current model: Z Deng, G Han, X Zhang
0800h OS11B-1187 POSTER Analytic solution of the linear shallow water equations over a quadratic depth profile: G Ramirez, L Zavala
0800h OS11B-1188 POSTER Statistical mechanics explanation for the structure of ocean eddies and currents: A Venaille, P Bouchez
0800h OS11B-1189 POSTER Tangential oscillations of a circular disk in a stratified fluid: S Joubaud, T Dauxois
0800h OS11B-1190 POSTER The influence of the large scale circulation on an eastern boundary current: J Wang, P M Rizzoli, M A Spall
0800h OS11B-1191 POSTER Sensitivity of the Met Office operational ocean forecasting system to atmospheric forcing: C Guiavarch, J Siddorn, P Hyder, D Storkey
0800h OS11B-1192 POSTER Numerical study of effect of progressive surface wave on turbulence underneath: X Guo, L Shen
0800h OS11B-1193 POSTER Global variability of the wavenumber spectrum of oceanic mesoscale turbulence: Y Xu, L Fu
0800h OS11B-1194 POSTER Tsunami Warning Procedure Based on Pre-computed Tsunami Forecast Models: P Y Huang, W Knight, K Sterling, J Galbraith, P Whitmore
0800h OS11B-1195 POSTER Adjustment of the wind drag coefficient for storm surge forecasting using 4DVAR: S Peng, Y Li
0800h OS11B-1196 POSTER Parameters Optimization for Operational Storm Surge/Tide Forecast Model using a Genetic Algorithm: W LEE, S You, S Ryoo, Title of Team: Global Environment System Research Laboratory
0800h OS11B-1197 POSTER Bias for summer decay of interannual SST anomaly in the northern tropical Atlantic and its link with the Guinea Dome in coupled GCMs: T Doi, G A Vecchi
0800h OS11B-1198 POSTER The Response of Surface Currents to Wind Investigated by HF Ocean Surface Radar: Y Mao, M Heron
0800h OS11B-1199 POSTER Modeling the internal tide in combination with wind-driven circulation on the Oregon shelf: J Osborne, A L Kurapov, G D Egbert, M Kosro
0800h OS11B-1201 POSTER Numerical study of sources of baroclinic tides in Gaoping Submarine Canyon, southwestern Taiwan: M Chiu, S Jan
0800h OS11B-1202 POSTER Estimation of Vertical Velocities in the Equatorial Atlantic Cold Tongue: H Giordani, G Caniaux
0800h OS11B-1203 POSTER Effects of ocean mixed layer with 3-D ocean data on WRF model for Typhoon simulation: J Kwun, S You, S Ryoo, C Cho
0800h OS11B-1204 POSTER Mixing Levels in the Weakly Turbulent Deep Ocean: C Eddy, A M Thurnherr
0800h OS11B-1205 POSTER Numerically Predicted Distribution of Internal Tide Energy in the Global Ocean: Y Niwa, T Hibiya
0800h OS11B-1206 POSTER Retroflection from slanted and kinked coastlines: models for Agulhas leakage variability: V Zharkov, D Nof, W Weijer
0800h OS11B-1207 POSTER Annual and Interannual thermocline variability of the tropical Southern Indian Ocean: remote versus local forcing: L Trenary, W Han
0800h OS11B-1208 WITHDRAWN
0800h OS11B-1209 POSTER The Role of Environmental Forcing in Controlling Water Retention Gyres in Subsystems of Narragansett Bay: C Balt, C R Kincaid, D S Ullman
2010 Fall Meeting


P11A-1330 POSTER Determination of kinetic temperature at the top of the Titan atmosphere: D E Shemansky, J A Kammer, X Zhang, Y L Yung

P11A-1331 POSTER EUV-VUV photochemistry in the upper atmospheres of Titan and the early Earth: H Imanaka, M A Smith

P11A-1332 POSTER Noble gas isotopic composition as a key reference parameter in a planetary atmosphere evolution model: M Ozima


P11A-1334 POSTER Relaxation of Energetic O and He Escape in the Atmospheres of Terrestrial Planets: P Zhang, V Kharchenko, A Dalgarno


P11A-1336 POSTER Planetary Atmosphere Stability in the Habitable Zones of M-stars: F Tian

P11B Moscone South: Poster Hall Monday 0800h

Explosive Volcanism in the Solar System I Posters (joint with EP, V)

Presiding: B D Brand, University of Washington; N P Lang

P11B-1337 POSTER Pyroclastic Eruptions in a Mars Climate Model: The Effects of Grain Size, Plume Height, Density, Geographical Location, and Season on Ash Distribution: L A Kerber, J W Head, J Madeleine, L Wilson, F Forget


P11B-1339 POSTER The dynamics of pyroclastic density currents on Mars: B D Brand, A Clarke

P11B-1340 POSTER Rheological controls on roof failure in large caldera-forming eruptions: P M Gregg, S L de Silva, E B Grosfils

P11B-1341 POSTER Explosive Volcanism in Io’s Lava Lakes – The Key To Constraining Eruption Temperature?: A G Davies, L P Keszthelyi, A S McEwen

P11B-1342 POSTER Pyroclastic deposit differentiation from LiDAR roughness texture at Mount St. Helens: P L Whelley, E S Calder, L S Glaze

P11B-1343 POSTER Volcanic history of Amphitrites and Peneus Paterae, Mars: A tale of two volcanoes: N P Lang, C Kneuer, A Grincius

P11B-1344 POSTER Morphology and Composition of Localized Lunar Dark Mantle Deposits with LROC Data: O Gustafson, J F Bell, L R Gaddis, B R Hawke, M S Robinson, Title of Team: LROC Science Team


P11B-1346 POSTER Detailed geologic mapping of the Columbia Hills, Mars: West Spur to Cumberland Ridge: S B Cole, W A Watters, M S Rice, S W Squyres

P11B-1347 POSTER Dark-toned dunes in the western Medusae Fossae Formation: Characteristics, distribution, and source: D M Burr, J R Zimbelman, A J Brown, F B Qualls, T I Michaels, M Chojnacki

P11B-1348 POSTER A Spreading-Sagging Continuum for the Structure of Large Volcanoes on Earth and Other Planets: P K Byrne, E P Holohan, M Kervyn, A Dalgarno, V W Yde van Wyk de Vries, J B Murray, V R Trollop

P11C Moscone South: Poster Hall Monday 0800h

On the Nature, Origin, and Evolution of Water on Small Bodies I Posters (joint with SH)

Presiding: C Hibbitts, JHU-APL; R M Mastrapa, SETI Institute/NASA Ames

P11C-1349 POSTER Strategies for Mars Remote Laser-Induced Breakdown Spectroscopy Analysis of Sulfur in Geological Samples: J Tucker, M D Dyr, S Humphries, S M Clegg, R C Wiens, D Lane

P11C-1350 POSTER Far-ultraviolet Observations of the Comet C/2001 Q4 (NEAT): Y Lim, K W Min, W Han, J Edelstein

P11C-1351 POSTER Depletion of Ammonia Gas onto Jovian Ices: T Kasper, M H Wong, J Marschall, I De Pater, P N Romani, K Kalogerasik

P11C-1352 POSTER Between ice and gas: CO2 on the icy satellites of Jupiter and Saturn: C Hibbitts

P11C-1353 POSTER LDEX-PLUS: Lunar Dust Experiment with Chemical Analysis Capability to search for Water: M Horanyi, Z Sternovsky, E Gruen, S Kempf, R Srama, F Postberg

P11C-1354 POSTER The History of Ice at the Phoenix Mars Landing Site and Beyond: N Schorghofer


P11C-1356 POSTER Atomic carbon chemistry in photolyzed Triton-like ices: R P Hodysy, H R Howard, P V Johnson, J Goguen, I Kanik

P11C-1357 POSTER Effects of Orbital Evolution on Lunar Ice Stability: M A Siegler, B G Bills, D A Paige

P11C-1358 POSTER The Average Water Concentration within Cabeus Crater: Inferences from LRO/Diviner, LCROSS and Lunar Prospector: R C Elphic, L A Teodoro, V R Eke, D A Paige, M A Siegler, A Colaprete

P11C-1359 POSTER D/H enrichment at astrophysically-relevant temperatures: R M Escobrano, O Galvez, B Mate, M A Moreno, V J Herrero

P11D Moscone West: 2004 Monday 0800h

Planetary Environments and Life: What Do We Know? How Can We Learn From Analogs? I (joint with B, EP)

Presiding: M L Coleman, JPL; M A Voytek, USGS; R J Leveille, Canadian Space Agency


All information is current as of November 12, 2010
Paleoceanography and Paleoclimatology

**P11A Moscone South: Poster Hall Monday 0800h Advances at the Frontiers of Paleoproxy Validation I Posters (joint with OS, B)**

**Presiding:** D P Gillikin, Union College; R J Reeder, Stony Brook University; A D Wanamaker; D H Goodwin, Denison University; H J Spero, University of California Davis

0800h **P11A-1404 POSTER** A comparison between shell-based δ18O values from an extratropical setting (Gulf of Maine, USA) and atmospheric δ18O values for intervals of the last millennium: insights on regional hydrography and carbon dynamics: **A D Wanamaker**, K J Kreutz, D Introne, E C Beirne

0800h **P11A-1405 POSTER** Stable carbon isotopes in bivalve shells as a salinity proxy: **D P Gillikin**, C Poulin, R Mas, V Woule Ebongue, R Roberts, Y Paulet, A Lorrain

0800h **P11A-1406 POSTER** Stable Carbon Isotope Constraints on the Timing and Magnitude of Phytoplankton Blooms in San Francisco Bay: **D Goodwin**, P D Roopnarine

0800h **P11A-1407 POSTER** Donax do and don’t tell: The relationship of isotopic and elemental variations to environmental conditions in the shell chemistry of a common intertidal bivalve: **M B Hatch**, S A Schellenberg

0800h **P11A-1408 POSTER** Neodymium isotopes in biogenic carbonates: reliable archives of tNd: **P Montagna**, S L Goldstein, M Taviani, N Frank, M T McCulloch

0800h **P11A-1409 POSTER** Barbados Corals as Recorders of Amazon River Salinity Anomalies: **L Greer**, K Telfeyan, M M Arienzo, A D Rosenberg, A J Waite, P K Swart

0800h **P11A-1410 POSTER** Climate, productivity, and intermediate water nutrients: new records from bamboo coral Ba/Ca: **M LaVigne**, T M Hill, H J Spero, T P Guilderson

0800h **P11A-1411 POSTER** Sr/Ca Sensitivity to Aragonite Saturation in Cultured Coral Measured by NanoSIMS (Invited): **A C Gagnon**, J F Adkins, J Erezy

0800h **P11A-1412 POSTER** Magnesium isotope variability in aragonitic corals: a new paleothermometer?: **C P Saenger**, Z Wang, J Lough, A L Cohen

0800h **P11A-1413 POSTER** Miocene Coral Skeleton Rare Earth Element Patterns Reflect River Discharge: **R Mertz-Kraus**, T C Brachert, K P Jochum


0800h **P11A-1416 POSTER** Solution composition-dependence of the Ca isotope composition of inorganic calcite: **M S Gonzales**, J M Warkins, D J Depaolo

0800h **P11A-1417 POSTER** Mg isotope fractionation between aragonite and seawater: **Z Wang**, C Liu, G A Gaetani, A L Cohen, A Andrews

0800h **P11A-1418 POSTER** Surface Kinetic Model for the Fractionation of Trace Elements and Isotopes in Calcite Precipitated from Aqueous Solution: **D J Depaolo**, F J Ryerson, J M Watkins, I C Bourg, W Yang, L C Nielsen, J L Druhan


0800h **P11A-1420 POSTER** Intrashell isotopic and trace element variation at the micron-scale in cultured planktic foraminifers: **L Vetter**, H J Spero, C I Mora, S M Eggins, R Kozdon, J W Valley, B Hoenisch

0800h **P11A-1421 POSTER** Decoupling temperature signal from biological noise in Mg/Ca variability of *G. sacculifer* as a first step towards developing a proxy for ocean seasonality: **A Sadekov**, K Darling, U Faller, D Kroon, G Brummer

0800h **P11A-1422 POSTER** Seasonal variability in multi-elemental ratios and δ18O in planktonic foraminifera from the Cariaco Basin, Venezuela: **K E Wejnert**, R Thunell, M Bizimis, Y Astor

0800h **P11A-1423 POSTER** Derivation of Environmental Signals from Chemically Altered Speleothems: Initial Study: **J H Phillips**, P Aharon

0800h **P11A-1424 POSTER** Combined in-situ Trace Element, Pb, Sr Isotope Analysis and U-Th Dating of Speleothems and Ostracods: **K P Jochum**, D Scholz, R Mertz-Kraus, G Gleixner, F Guenther, A Schwab, D Kuzmin, B Stoll, U Weis, A V Lzmer, M O Andreae

0800h **P11A-1425 POSTER** Extending the calibration of marine barite Pb isotope records: **A M Erhardt**, A Paytan

0800h **P11A-1426 POSTER** Anoxic deep-sea microbial dolomite as a paleoceanographic archive - new insights from old "bugs": **N R Miller**, M I Leybourne

0800h **P11A-1427 POSTER** Revisiting mid-Paleozoic ocean chemistry with the combined measurement of 87Sr/86Sr and δ18O on Silurian brachiopods: **H Vollstaedt**, A Eisenhauer, A Krabbenhoft, V Liebetrau, F Boehm, J Farkas, A Tomasyovych, J Veizer

0800h **P11A-1428 POSTER** Cr isotopic composition of modern carbonates and seawater: **P Bonnand**, I J Parkinson, R H James, M Fehr, D P Connelly
0800h  PP11A-1429 POSTER Tracking changes in silicon isotopic composition during diatom descent and dissolution in the Cariaco Basin: W P Buckley, H D Scher, R Thunell, M A Brzezinski, T D Peterson

PP11B  Moscone South: Poster Hall  Monday 0800h
Cretaceous Arctic Environments: Proxies for Understanding Climate Change From the &quot;Other&quot; Greenhouse Interval I Posters
Presiding: A R Fiorillo, Museum of Nature and Science; P J McCarthy, University of Alaska; G R Upchurch, Texas State University; G A Ludvigson, University of Kansas

0800h  PP11B-1430 POSTER A Laughing Gas Greenhouse for the Proterozoic?: A L Roberson, J Roadt, I Haley, J F Kasting

0800h  PP11B-1431 POSTER Climate-carbon cycle simulations of the Permian-Triassic boundary: Implications for the extinction event: A Montenegro, P Spence, J K Meissner, M Eby, M Melchin, S T Johnston

0800h  PP11B-1432 POSTER Sensitivity of Late Permian climate to topographic changes and implications for mass extinctions: A Osen, C Scotese, A M Winguth, C Winguth

0800h  PP11B-1433 POSTER Geochemical Constraints on Paleoenvironmental Conditions in South Texas during OAE-2: T J Kearns, H D Rowe

0800h  PP11B-1434 POSTER INFLUENCE OF CHANGING HYDROLOGY ON PEDOGENIC CALCITE PRECIPITATION IN VERTISOLS, DANCE BAYOU, BRAZORIA COUNTY, TX: IMPLICATIONS FOR ESTIMATING PALEOATMOSPHERIC PCO2: J S Mintz, S G Driese, G A Ludvigson, D O Breekker

0800h  PP11B-1435 POSTER Evidence of secular frequencies in the Earth’s orbital motion during the Mid-Cretaceous (100-125 Ma) seen in modulations of certain Milankovitch cycles: D Flerkowski, L A Hinnow, C Huang


0800h  PP11B-1437 POSTER The climate change for Jehol Biota and its revolution in early Cretaceous in Western Liaoning, China: M Wang, J Weijers, C Wang, Title of Team: 973 Project and IGCP555

0800h  PP11B-1438 POSTER Latitudinal Variation in δ¹³C derived from Terrestrial Plants during the Cretaceous: C Strganac, L L Jacobs, K Ferguson, R D MacPhee, A R Fiorillo, J Hooker, Y Nishida, C Flemming

0800h  PP11B-1439 POSTER The Rise of Flowering Plants and Land Surface Physics: The Cretaceous and Eocene Were Different: G R Upchurch, T Feld


0800h  PP11B-1441 POSTER Turonian Ultra-thermal Conditions as Recorded in the High Canadian Arctic: Faunal Controls and Tectomagmatic Boundary Conditions: R Bono, J A Tarduno, R D Cottrell, P Higgins, D B Brinkman

0800h  PP11B-1442 POSTER Possible Cretaceous Arctic terrestrial ecosystem dynamics based on a rich dinosaur record from Alaska: A R Fiorillo, P J McCarthy, P P Flagg

0800h  PP11B-1443 POSTER The Role of Vegetation In High-Latitude Warming During the Latest Cretaceous: J O Upchurch, G R Upchurch, C A Shields, J T Kachel

0800h  PP11B-1444 POSTER Paleoenvironmental interpretation of an ancient Arctic coastal plain: Integrated paleopedology and palynology from the Late Cretaceous (Maastrichtian) Prince Creek Formation, North Slope, Alaska, USA: P J McCarthy, P P Flagg, A R Fiorillo

0800h  PP11B-1445 POSTER What Was the Oxygen Isotopic Composition of Cretaceous Arctic Precipitation?: G A Ludvigson, L A Gonzalez, J C Lollar, P J McCarthy

PP11C  Moscone South: Poster Hall  Monday 0800h
Paleoceanographic Insights Into Ocean Acidification I Posters (joint with OS, B, V)
Presiding: T M Hill, UC Davis; A D Russell, University of California, Davis; S C Flores, University of California, Davis

0800h  PP11C-1446 POSTER Development of the B/Ca and U/Ca surface water carbonate system proxies in the Pacific ocean: N B Quintana Krupinski, A D Russell, A Paytan, D K Pak

0800h  PP11C-1447 POSTER A core-top calibration of the benthic foraminiferal B/Ca proxy for deep water carbonate saturation for Nuttallides umbonifera: Facilitating paleoceanographic reconstructions: R E Brown, L D Anderson, E Thomas, J C Zachos

0800h  PP11C-1448 POSTER Re-calculating the pH record from boron isotopic composition of biogenic carbonates: G Paris, J Gaillardet, P Louvat

0800h  PP11C-1449 POSTER The difference between surface ocean carbonate chemistry and calcite dissolution in deep sea sediments as observed in tests of Globorotalia menardii: M Russo, F Mekik

0800h  PP11C-1450 POSTER Influence of pH and Temperature on Elemental and Isotopic Composition of Cultured Scleractinian Corals: T Auben, F Boehm, J Fietzke, A Eisenhauer, C Garbe-Schoenberg, J Erez

0800h  PP11C-1451 POSTER Cenozoic Seawater Sr/Ca ratios: Implications for coral reef development through ocean de-acidification: S M Sosdian, E L Grossman, C H Lear, K Tao, Y Rosenthal

0800h  PP11C-1452 POSTER Planktonic Foraminiferal Shell Weight Variability From The Cariaco Basin: Insights Into Carbon Dioxide Concentrations During the Last Glacial Period: M C McConnell, R Thunell, L C Peterson, Y Astor

0800h  PP11C-1453 POSTER Planktonic foraminiferal shell weight as a proxy for changing carbonate concentration in the Cariaco Basin, Venezuela: B J Marshall, M C McConnell, R Thunell

0800h  PP11C-1454 POSTER Benthic foraminifera record and geochemical studies to reconstruct the recent (~400 ya) paleoenvironment of Tomales Bay, California: S C Flores, T M Hill, A D Russell, G Brooks

PP11D  Moscone South: Poster Hall  Monday 0800h
Paleohistory of the Greenland Ice Sheet I Posters (joint with C, G)
Presiding: A E Carlson, University of Wisconsin-Madison; J S Stoner, Oregon State University

0800h  PP11D-1455 POSTER Magnetic Fingerprinting of Greenland Sediments: R G Hatfield, J S Stoner, A E Carlson, S E Strano

0800h  PP11D-1456 POSTER Long-term erosion and interglacial period exposure in Western Greenland from meteoric ¹⁰⁷Be in ice-bound sediment: J A Galey, L Corbett, P R Bierman, T Neumann, D H Rood, R C Finkel
0800h PP11D-1457 POSTER Extension of Greenland Ice Sheet outlets to the shelf edge bordering Baffin Bay during the last glacial cycle: C O’Coafagh, J A Dowdeswell, A E Jennings, A A Kilfeather, K Hogan, J T Andrews

0800h PP11D-1458 POSTER Deglacial ice sheet retreat along the southwest Greenland coast: preliminary 26Be exposure chronology: K Winsor, A E Carlson, M Caffée

0800h PP11D-1459 POSTER Preliminary Holocene History of the Southwest Greenland Ice Sheet: A E Carlson, K Winsor, A N LeGrande, F S Anslow, J F Harvey, D J Ullman, D S Murray


PP11E Moscone South: Poster Hall Monday 0800h

Sea Level, Near-Surface Currents, and the Stratigraphic Record: Recent Results | Posters (joint with G, OS)

Presiding: G Mountain, Rutgers University; C Fulthorpe, Institute for Geophysics; J Proust, CNRS & Rennes University; K H oyana gi, Shinshu University


0800h PP11E-1463 POSTER Regional Seismic Architecture Tied to Cores: Results from IODP Exp313: G Mountain, J Proust, D Monteverde, E ScienceParty

0800h PP11E-1464 POSTER Reconstructions of Lower To Middle Miocene Sea Level on the New Jersey Margin Based on Independent Palynological and Benthic Foraminiferal Data from IODP EXP 313: F M McCarthy, R Zanatta, M E Karz, U Kothoff, E ScienceParty


0800h PP11E-1466 POSTER Refinement of Late Early to Middle Miocene Diatom Biostratigraphy for the Eastern Coast of the United States – Application to IODP 313 Coring on the New Jersey Shallow Shelf: J A Barron, K G Miller, P Sugarmen, E ScienceParty, Title of Team: Scientific Team of IODP Leg 313

0800h PP11E-1467 POSTER A first approximation of sand distribution and provenance on the Canterbury Shelf, New Zealand - implications for across shelf vs. along shelf transport based on sediment cores recovered during IODP Expedition 317: C Bender, K M Marsaglia, G Browne, D Carson, J M Jaeger, D Kemp, H Lever, C M McHugh, N Murakoshi, M Richaud, S Tanabe, G Uramoto, C Fulthorpe, K Hoyanagi, P Blum, E Shipboard Scientific Party

0800h PP11E-1468 POSTER Correlation of Lithology to Sequence Stratigraphy: Canterbury Basin, New Zealand: K Ryan-Mishkin, C M McHugh, C Fulthorpe, D Morgan, E Shipboard Scientific Party

0800h PP11E-1469 POSTER Mio-Pliocene Benthic Foraminiferal Biofacies Changes in the Canterbury Basin: B A Christensen, J Dutton, D Brown, Title of Team: IODP Expedition 317 Shipboard Scientists

0800h PP11E-1470 POSTER Depositional sequences of offshore Canterbury, New Zealand, and preliminary results of stable isotope analyses of the samples from IODP Expedition 317: K Hoyanagi, S Koto, S Kawagata, C Fulthorpe, P Blum, E Shipboard Scientific Party


0800h PP11E-1472 POSTER Fossil ostracodes of continental shelf cores at IODP Site U1354 (Expedition 317): S Kusunoki, T Ohi, S Kawagata, K Ishida, E Shipboard Scientific Party

0800h PP11E-1473 POSTER Wireline log and seismic stratigraphic correlation along a shelf-slope transect in the Canterbury Basin, New Zealand: A L Slagle, G Guerin, E Shipboard Scientific Party


0800h PP11E-1475 POSTER Submerged Shelf Edge Features on Australia’s Great Barrier Reef and Their Response to Quaternary Sea-Level Changes: E A Abbey, J M Webster, R J Beaman

0800h PP11E-1476 POSTER ARE PHYSICAL PROPERTIES ABLE TO DIFFERENTIATE GLACIAL AND INTERGLACIAL CORAL IDENTITY?: T Lado-Insua, K Moran, L Anderson, J M Webster, S Morgan, A Fehr, J Loﬁ, V Lukies, D Loggia, Title of Team: IODP Expedition 325 Scientists

0800h PP11E-1477 POSTER Flume studies of mud deposition: Implications for shallow marine mud deposition and the stratigraphic record (Invited): J Schieber

0800h PP11E-1478 POSTER Miocene Shelf-Edge Deltas and their Influence on Deepwater Slope Morphology, Northwest Shelf of Australia: C Sanchez, C Fulthorpe, J A Austin, R J Steel

0800h PP11E-1479 POSTER Sea-level and provenance controlled clay mineral assemblage since the last 19 ka in the southern South China Sea: records of Core MD05-2894 off the Sunda Shelf: H Wang, Z Liu, C Colin, E Sathiamurthy, W S Hantoro, Y Zhao

0800h PP11E-1480 POSTER Influence of sea level and monsoon variability on sedimentation in the Western Tropical Pacific, Gulf of Papua: M McFadden, L C Peterson, S J Bentley, G R Dickens, A W Droxler, B Opdkye

0800h PP11E-1481 POSTER Sub-Millankovitch millennial and decadal cyclicity in Middle Eocene deep-marine laminated sediments, Ainsa Basin, Spanish Pyrenees: J I Scotchman, K T Pickering, S A Robinson

0800h PP11E-1482 POSTER Playing Hide and Seek with Hidden Glaciations: Confirming the Existence of Eocene Antarctic Ice Sheets: B W Smith, H D Scher, G Munn, S M Bohaty

PP11F Moscone West: 2007 Monday 0800h

Loess 2.0: Milestones and Recent Advances in the Study of Loess, Dust, and Other Eolian Sediment Archives I (joint with A, B, EP, GP, GC, OS)

Presiding: B M chalett, Humboldt-University of Berlin; E A Oches, Bentley University; H M Roberts, Aberystwyth University; Z Lai, Qinghai Institute of Salt Lakes, Chinese Academy of Sciences

0800h PP11F-01 Loess in polar ice cores: Have we found an acceptable explanation of our measured profiles? (Invited): J Steffensen
0815h PP11F-02 Contribution to the Holocene North Atlantic wind activity reconstruction from Lake Igoliku, South Greenland: C Massa, V Bichet, J Girardeau, C Petit, B Vannière, F Monna, ÉMILIE Gauthier, H Richard

0830h PP11F-03 The Role of Central and High Asia in Northern Hemisphere Short-term Climate Variability – a Paleoclimate Perspective: B Machalet, E A Oches, Z Lai, W Endlicher

0845h PP11F-04 Response of Colorado River runoff to dust radiative forcing in snow (Invited): T H Painter, J S Deens, J Belnap, A F Hamlet, C Landry, B Udall

0900h PP11F-05 The importance of the atmospheric cleansing for the long-range transport of the dust: the evidence from deep Antarctic ice cores records: J Petit, B Delmonte

0915h PP11F-06 Tracing changes in Southern hemisphere dust sources to Antarctica: G Winckler, A Borunda, M R Kaplan, H Fischer, R F Anderson

0930h PP11F-07 Insight to forcing of late Quaternary climate change from aeolian dust archives in eastern Australia: H A McGowan, S Marx, J Soderholm, J Denholm, L Petherick

0945h PP11F-08 PHYSICAL MODEL OF TRANSPORTATION PROCESSES OF LOESS DUST: X Qin, Y Mu, Z Yin

PP11G Moscone West: 2005 Monday 0800h The Early Pliocene Warm Period as an Analog for Future Warmth I (joint with GC)

Presiding: P S Dekens, San Francisco State University;
K T Lawrence, Lafayette College

0800h PP11G-01 Bering Sea conditions in the early Pliocene warm period (Invited): A C Ravelo, K Takahashi, I W Aiello, C A Alvarez Zarikian, D Andreassen, T M Aung, Y Hiki, Y Kanematsu, S Kender, J Lariviere, T Nagashima, Z N Stroynowski, Title of Team: Scientific Team of IODP Expedition 323

0815h PP11G-02 Plio-Pleistocene Bering Sea – North Pacific Ocean Circulation Dynamics Inferred from Sediment Source Changes at the Meji Drift, Northwest Pacific Ocean: S VanLaningham, B Haley, S Hillier, A H Alizai

0830h PP11G-03 The relative role of temperature gradients in the Pliocene climate (Invited): C M Brierley, A V Fedorov

0845h PP11G-04 Cooling Subsurface Temperatures in the Eastern Equatorial Pacific during the Pliocene and Linkages to Global Cooling: H L Ford, A C Ravelo, S A Hovan

0900h PP11G-05 The Oceanic, Atmospheric and Vegetation Response to Pliocene Closing of the Indonesian Passages: U Krebs-Kanzow, W Park, B Schneider

0915h PP11G-06 Southern Hemisphere Precession forcing of Southern Ocean Sea Surface Temperatures in a Warm Climate (Invited): A Martinez Garcia, A Rosell Mele, E McClymont, R Gersonde, G H Haug

0930h PP11G-07 Modeling the Early Pliocene Climate with Simple Data Assimilation: A V Fedorov, C M Brierley

0945h PP11G-08 Searching for Eustasy in Pliocene Sea-Level Records (Invited): M E Raymo, P J Hearty, M O'Leary, J Mitrovica, R DeConto, J D Inglis, M M Robinson

SPA-Acronomy

SA11A Moscone South: Poster Hall Monday 0800h Frontiers in Aeronomy I Posters

Presiding: L J Paxton, JHU/APL; J H Clemmons, The Aerospace Corporation; J P Thayer, University of Colorado

0800h SA11A-1556 POSTER Nonlinear interaction of atmospheric gravity waves (Invited): K Huang, S Zhang, F Yi

0800h SA11A-1557 POSTER Challenges in Understanding the Upper Atmosphere: L J Paxton

0800h SA11A-1558 POSTER The Ptolemaic Approach to Ionospheric Electrodynamics: V M Vasyliunas

0800h SA11A-1559 POSTER Convection Driven Frictional Heating: A New Approach to Determine Thermospheric Heating Rate: J Tu, P Song

0800h SA11A-1560 POSTER Advances in remote sensing of the Martian upper atmosphere: G Gronoff, C Simon, C J Mertens, J Liliensten

0800h SA11A-1561 POSTER AERONOMY FROM THE INTERNATIONAL SPACE STATION: A B Christensen, S A Budzien, R L Bishop, A W Stephon


0800h SA11A-1563 POSTER The Winds-ions-Neutral Composition Suite (WINCS): A C Nicholas, F Herrero, T T Finne, H H Jones

0800h SA11A-1564 POSTER Enhanced UV Data Products - Observing the Ionosphere in Greater Fidelity: B C Wolven, L J Paxton, J Comberiate, S W Hsieh, S R Nylund, R K Schafer, C Selby, D Smith, M Weiss, Y Zhang

0800h SA11A-1565 POSTER A Comparison of Electron Density Profiles Derived from the Low Resolution Airglow and Aurora Spectrograph (LORAA) Ultraviolet Measurements: Resolution of the 911 Å Conundrum: K Dymond, S A Budzien, C Coker, A C Nicholas, A W Stephon, R L Bishop, A B Christensen, J H Hecht, P R Strauss

0800h SA11A-1566 POSTER The ISS as a Launch Platform for Phenomena of Interest: C Swenson, C S Fish, J J Sojka, E M Stromberg, B Lloyd, T Neilson

0800h SA11A-1567 POSTER Using Satellite Aerodynamics to Sense Thermospheric Winds: D L Cooke, D Jackson


0800h SA11A-1569 POSTER Statistical Study of Storm-time Ionospheric Disturbances at Mid- and Low-latitudes: C Lin, Y Wu, R Hsu, Y Liu

0800h SA11A-1570 POSTER Nighttime Ionospheric Imaging and Tomographic Reconstruction Observatory: P B Dandenaull, S A Budzien, D H Chua, C Coker, K Dymond, A C Nicholas, A W Stephon

0800h SA11A-1571 POSTER Forecasting the Ionosphere and Scintillation Globally: Reaching the Next Level: C Coker, K Dymond, S A Budzien, C R Engler, J Huba, A C Nicholas, D H Chua, A W Stephon, P B Dandenaull, S E McDonald, K S Wood

All information is current as of November 12, 2010

SPA-Solar and Heliospheric Physics

SH11A Moscone South: Poster Hall  Monday  0800h

First Results from the Solar Dynamics Observatory I Posters

Presiding: J T Hoeksema, Stanford University


0800h  SH11A-1595 POSTER First Results from the EUV SpectroPhotometer (ESP) on the SDO Extreme Ultraviolet Variability Experiment (EVE): L V Didkovsky, D Judge, S R Wieman, T N Woods, A Jones, F Eparvier, D Woodraska, P C Chamberlin

0800h  SH11A-1596 POSTER Forward modeling of emission in AIA passbands from advanced radiative MHD simulations: B De Pontieu, J Martinez-Sykora, V H Hansteen

0800h  SH11A-1598 POSTER Differential Emission Tomography of AIA Images: R A Frazin, A M Vasquez, E Landi

0800h  SH11A-1600 POSTER AIA observations of a flare/CME system in conjunction with X-ray and radio data: H M Bain, S Krucker

0800h  SH11A-1601 POSTER Global and Local Helioseismology from HMI and AIA: R Howe, R Komm, I Gonzalez Hernandez, K Jain, F Hill, D A Haber, R Bogart


0800h  SH11A-1604 POSTER Investigation of Formation and Subsurface Dynamics of Active Regions by Local Helioseismology from SDO: A G Kosovichev, T L Duvall, J Zhao

0800h  SH11A-1605 POSTER The Evolution of Photospheric Flows in Active Regions: K Muglach, P W Schuck, J T Hoeksema, X Sun, Y Liu


0800h  SH11A-1607 POSTER First Result of Field Extrapolation Based on HMI Vector Magnetic Data: X Sun, J T Hoeksema, T Wiegelmann, K Hayashi, Y Liu

0800h  SH11A-1608 POSTER Calculating Non-Potentiality in Solar Active Regions Using SDO/HMI Vector Magnetic Field Data: M Bobra, J T Hoeksema
0800h  **SH11A-1609** *POSTER* Computing Electric Currents in Solar Active Regions with HMI Vector Magnetograms: L Lo, J T Hoeksema, P W Schuck, X Sun

0800h  **SH11A-1610** *POSTER* The Void Probability Distribution Observed in High-Resolution Hinode/SOT and SDO Magnetograms: F Berrilli, D Del Moro, F Giannattasio, S Scardigli, B Vitiicchie

0800h  **SH11A-1611** *POSTER* Studying Emerging Flux Regions With The SDO Data: Y Liu, H Team, Title of Team: HMI TEAM

0800h  **SH11A-1612** WITHDRAWN

0800h  **SH11A-1613** *POSTER* Observations and Magnetic Field Modeling of the Flare/CME Event on 2010 April 8: Y Su, V Surges, A A Van Ballegooijen

0800h  **SH11A-1614** *POSTER* Interpreting SDO/AIA observations of EUV waves, a comprehensive analysis with direct comparison to global MHD simulations: C Downs, I I Roussev, A Pourlidas, B van der Holst, N Lugaz

0800h  **SH11A-1615** *POSTER* Automated detection of oscillatory signals in the solar atmosphere: first results from SDO-AIA data: J Ireland, C Young, B De Pontieu, S W McIntosh

0800h  **SH11A-1616** *POSTER* Modeling the Time Variation of Coronal Holes Observed by SDO/AIA, Stereo A and B Using HMI Synchronous Frames: X Zhao, J T Hoeksema, Y Liu

0800h  **SH11A-1617** *POSTER* The Scale Sizes for Coronal Hole Jets: J W Cirtain

0800h  **SH11A-1618** *POSTER* MHD simulation of the evolution of the solar corona around August 1st 2010 using the HMI solar magnetic field data: K Hayashi, Title of Team: HMI team

**SH11B Moscone South: Poster Hall**  Monday  0800h

**Solar and Heliospheric Physics General Contributions I**

**Posters**

**Presiding:** I G Richardson, NASA Goddard Space Flight Cent

0800h  **SH11B-1619** *POSTER* The FIELDS experiment for Solar Probe Plus: S Bale, Title of Team: The SPP/FIELDS Team

0800h  **SH11B-1620** *POSTER* The Solar Wind Electrons Alphas and Protons (SWEAP) Investigation for Solar Probe Plus: J C Kasper, Title of Team: On behalf of the SWEAP Investigation Team


0800h  **SH11B-1626** *POSTER* First calibration results and antenna placement studies of the RPW ANT instrument on Solar Orbiter: M Santi, T H Oswald, H O Rucker, D Plettemeier, M Maksimovic, W MacHer

0800h  **SH11B-1627** *POSTER* Imaging the Solar Wind with SoloHI: R A Howard, A Pourlidas, S P Plunkett, C M Korendyke, D R McMullin, P C Liewer, M M Velli, Title of Team: SoloHI

0800h  **SH11B-1628** *POSTER* Solar Wind Measurements on Solar Orbiter: Discovering the Links Between the Solar Wind and the Atmosphere of our Sun: S A Livi, A B Galvin, T Zurubchen, M Collier, S T Lepri, L M Kistler

0800h  **SH11B-1629** *POSTER* Comparison of silicon nanoscale gratings to carbon foils for use in space plasma mass spectrometers: J A Gilbert, T Zurubchen, A F Kaplan, L J Guo

0800h  **SH11B-1630** *POSTER* Accelerator Tests of the Prototype Energetic Heavy Ion Sensor (EHIS) for GOES-R: J J Connell, C Lopare, R B McKibben


0800h  **SH11B-1633** *POSTER* A SupraThermal Ion Spectrometer for future Heliospheric (STISH) missions: F Allegrini, M I Desai, G C Ho, S A Livi, D J McComas, K S Nelson


0800h  **SH11B-1635** *POSTER* MEXART observations at 140 MHz: Calibration to perform the Interplanetary Scintillation (IPS) technique: P Villanueva, J C Mejia Ambriz, A Gonzalez-Esparza, E Aguilar-Rodriguez, A Carrillo Vargas, E Andrade Mascote

0800h  **SH11B-1636** *POSTER* Automatic Recognition of Complex Magnetic Regions on the Sun using GONG Magnetogram Images and Their Usefulness in Predicting Flares: G Steward, V Lobzinn, P J Wilkinson

0800h  **SH11B-1637** *POSTER* Evolution of magnetic field in flaring active regions: O Burtsese, G J Petrie

0800h  **SH11B-1638** *POSTER* The flare productivity of active regions: N Kuroda, S Christe

0800h  **SH11B-1639** *POSTER* Suppression of energetic electron transport by double layers in flares: T Li, J F Drake, M M Swisdak

0800h  **SH11B-1640** *POSTER* Wave-particle interactions in solar flares: P Pongkitiwanichakul, B D Chandran

0800h  **SH11B-1641** *POSTER* Hard X-ray and microwave sources located around the apex of a solar flare loop: S Masuda, M Shimojo, K Watanabe, T Minoshima, K Yaji

0800h  **SH11B-1642** *POSTER* A laboratory study of arched magnetic flux rope eruptions*: S Tripathi, W N Gekelman

0800h  **SH11B-1643** *POSTER* Characteristics of flare-related photospheric magnetic fields in asymmetric hard X-ray footpoints: Y Yang, C Z Cheng
0800h **SH11B-1644** POSTER Temporal Evolution of the Sea-Serpent Penumbral Filaments: **A Sainz Dalda**, L Bellost Rubio

0800h **SH11B-1645** POSTER An Invitation to the Improved Yohkoh Legacy data Archive: **A Takeda**, L W Acton, D McKenzie, K Yoshimura, S L Freeland

0800h **SH11B-1646** POSTER Signatures of transition region explosive events in hydrogen Ly-beta profiles: **L Xia**, M Zhang, H Tian, Y CHEN

0800h **SH11B-1647** POSTER Tiny Pores observed by HINODE/SOT: **K Cho**, S Song, J Chae, Y Kim, Y Park


0800h **SH11B-1649** POSTER Lagrangian Statistics of 3D MHD Convection: **J Pratt**, W Mueller

0800h **SH11B-1650** POSTER Turbulence in the solar chromosphere and its role in small scale energy deposition: **F Lepreti**, V Carbone, A Vecchio, K Reardon, V Capparelli, C Rossi

0800h **SH11B-1651** POSTER Streamer Waves and Associated Coronal Seismological Study: **Y CHEN**, S Feng, H Song, B Li, L Xia, X Li

0800h **SH11B-1652** POSTER Klein-Gordon Equations for Transverse Oscillations in Coronal Loops: J McKenzie, Q Hu, G M Webb

0800h **SH11B-1653** POSTER The Case for Ultra-High Spatial Resolution (~0.2") or better) EUV Solar Spectroscopy: Spatial Scales in the Transition Region and Corona Derived from SOHO/SUMER and Hinode/EIS Spectra: **G A Doschek**


0800h **SH11B-1655** POSTER First results for the Solar Ultraviolet Magnetograph Investigation (SUMI): R L Moore, J W Curtain, E West, K Kobayashi, B Robinson, A R Winebarger, T D Tarbell, B De Pontieu, S W McIntosh

0800h **SH11B-1656** POSTER The dynamics of the solar magnetic field: polarity reversals, butterfly diagram and quasi-biennial oscillations: **A Vecchio**, M Laurenza, D Meduri, V Carbone, M Storini

0800h **SH11B-1657** POSTER DAILY OBSERVATION AT PVSO: **C L Bentley**, W B Cade, A Razzaq, E Reddic

0800h **SH11B-1658** POSTER Solar Observations with the Allen Telescope Array: **P Saint-Hilaire**, G Bower, G J Hurford, G Keating

0800h **SH11B-1659** POSTER Spectroscopic Imaging of the Radio Sun with the Murchison Widefield Array Prototype: **D Oberoi**, L D Matthews, R Kennedy, Title of Team: Members of the MWA Collaboration

0800h **SH11B-1660** POSTER Statistical Analysis of Langmuir Waves Associated with Type III Radio Bursts: **S Vidojevic**, A Aslasky, M Maksimovic, M Drazic, S Hoang, O Aranckovic

0800h **SH11B-1661** POSTER ARBIS 3: A Software Package for Automated Radio Burst Identification: **V Lobzin**, I H Cairns, P A Robinson, G Steward, G Patterson

0800h **SH11B-1662** POSTER Thermal Correction to the Rate of Second Harmonic Plasma Emission: B Layden, J Percival, I H Cairns, P A Robinson

0800h **SH11B-1663** POSTER Role of linear mode conversion on solar and heliospheric radio emissions at oblique density inhomogeneities: **E Kim**, I H Cairns, P A Robinson


0800h **SH11B-1665** POSTER Evolution of the electron heat flux in the expanding solar wind: Helios observations: **S Sverak**, P M Travnick, P Helling, E Marsch

0800h **SH11B-1666** POSTER Study of solar wind dynamics using five spacecraft simultaneous measurements: Helios, Voyagers and IMP B: **E Romero Hernandez**, A Gonzalez-Esparza

0800h **SH11B-1667** POSTER Heliophysics: **M Austin**, M Guhathakurta, A Bhattacharjee, D W Longcope, J S Jokja

0800h **SH11B-1668** POSTER Non-polar Coronal Holes and Solar Wind: **N Karachik**, A A Pevtsov


0800h **SH11B-1670** POSTER The Recent Weakening Solar Wind as Observed by ACE and Wind: **J T Steinberg**, R M Skoug, P Ryland, J C Kasper, B A Maruca, S T Leprì

0800h **SH11B-1671** POSTER Local galactic cosmic ray increases within the sheaths of interplanetary coronal mass ejections: **A Jordan**, H E Spence, J Blake, D N Shaul, J Giacalone


0800h **SH11B-1673** POSTER NANO-DUST ANALYZER: E Gruen, M Horanyi, E Moebius, Z Sternovsky, S Auer, R Srama, A Juhas

0800h **SH11B-1674** POSTER Evidence that Some Reported Low-Frequency Solar Oscillations are Aliases: **A Moghtaderi**, D J Thomson


0800h **SH11B-1676** POSTER Solar-wind turbulence at kinetic wavelengths: hybrid-Vlasov simulations: **P Valentini**, F Califano, P Veltri

0800h **P31C-1556** POSTER Modeling the Solar Dust Environment at 9.5 Solar Radii: Revealing Radiance Trends with MESSENGER Star Tracker Data: **S B Strong**, T Strikwerda, D Lario, N Raouafi, R Decker

---

**SPA-Magnetospheric Physics**

**SM11A** Moscone South: Poster Hall Monday 0800h

**Dynamical Processes of the Cusp/Polar Cap Ionosphere I Posters (joint with SA)**

Presiding: J I Moen, University of Oslo; K Hosokawa, The Univ. of Electro-Communications; L P Dyrud, Johns Hopkins University APL

0800h **SM11A-1676** POSTER Simultaneous Traveling Convection Trench (VCT) Events and Pc 1-2 Wave Bursts at Cusp/Cleft Latitudes observed in Arctic Canada and Svalbard: **J L Posch**, A J Witte, M J Engebretson, D Murr, M Lessard, T Raiha, H J Singer

0800h **SM11A-1677** POSTER Determining the Propagation Direction and Velocity of Pc 1-2 Waves using Search Coil Magnetometers on Svalbard: **D Nguyen**, M Engebretson, J L Posch, M Lessard, D M Wright
0800h SM11A-1678 POSTER Observing ULF Pulsations at High Latitudes Using GPS TEC: D Murr, R Nikoukar, G S Bust, L Dyrud, V Pilipenko, M Engebretson

0800h SM11A-1679 POSTER Discovery of pulsed polar flares in the Jovian aurorae: B Bonfond, M F Vogt, D C Grodent, J M Gerard, A Radioti

0800h SM11A-1680 POSTER Dayside auroral emissions controlled by interplanetary magnetic field: a survey for dayside auroral excitation at 557.7 and 630.0 nm in Ny-Ålesund, Svalbard: Z Hu, H Yang, D Han, H Hu, D Huang, B Zhang, R Liu

0800h SM11A-1681 POSTER Localized Dayside Proton-induced Auroral Emissions in the Cusp and Polar Cap: C R Bryant, K A McWilliams, H U Frey

0800h SM11A-1682 POSTER Electrodynamicstics of high-latitude auroral arcs: V Safargaleev, A Kozlovsky

0800h SM11A-1683 POSTER Dependence of spectral width of polar cap HF echoes upon electric field: A V Koustov, S Shalimov, A Kozlovsky

0800h SM11A-1684 POSTER Decay of polar cap patches: K Hosokawa, J Moe, K Shiozaki, Y Otsuka

0800h SM11A-1685 POSTER A multi radar study of global polar cap patch dynamics and morphology: M G Johnsen, J M Holmes, J L. Semeter, A Stromme, U Lovhaug, D A Lorentzen


0800h SM11A-1688 POSTER The first in-situ observations of echoing HF radar backscatter targets: J I Moen, K Oksavik, T Abe, M Lester, Y Saito, J K Bekkeng, K S Jacobsen, T A Bekkeng


0800h SM11A-1692 POSTER AMPERE Science Data Reduction and Processing: H Korth, L Dyrud, B Anderson, C L Waters, R J Barnes

0800h SM11A-1693 POSTER Dependence of cusp ion structures on a satellite orbit: H Connor, J Raeder, K J Trattner

0800h SM11A-1694 POSTER Particle acceleration in the diamagnetic cusp: J Pilchowski, A Otto, E T Adamson, K Nykyri

0800h SM11A-1695 POSTER Cluster Observations of the earth’s mid-altitude magnetospheric cusp: Q Shi, Z Qong, Z Pu, S Fu, Y Wei, Y Wang

0800h SM11A-1696 POSTER Properties of energetic electrons in the high-altitude cusp and magnetosheath: B Walsh, T A Fritz

0800h SM11A-1697 POSTER The Relation Between Ionospheric Poynting Flux Enhancement and Cusp Reconnection: W Li, D J Knipp, J Lei, J Raeder

0800h SM11A-1698 POSTER Conjugacy between the two hemispheres at high latitudes in the null-separator model of the magnetosphere: K Kabin


0800h SM11B-1700 POSTER Access of Solar Electrons to the Polar Cap and Comparison with GEO Observations: T Mulligan, J F Fennell, J Blake

**SM11B Moscone South: Poster Hall  Monday 0800h**

**Magnetospheric Plasma Waves: Generation, Propagation, and Interaction With Energetic Particles**

*Posters (joint with AE, SA, SH)*

**Presiding:** Y Shprits, UCLA; C Kletzing, University of Iowa

0800h SM11B-1701 POSTER Two-dimensional finite element full-wave model for wave propagation and dissipation in Earth’s magnetosphere: E Valeo, J Johnson, E Kim, C Phillips

0800h SM11B-1702 POSTER The Latitudinal Extent of Chorus emissions as Observed by the Polar Plasma Wave Instrument: N L Bunch, M Spasojevic, Y Shprits

0800h SM11B-1703 POSTER Characteristics of electron distributions observed during large amplitude whistler wave events in the magnetosphere: L B Wilson, C A Cattell, P J Kellogg, K Goetz, J Wygant, A W Breneman, K Kersten

0800h SM11B-1704 POSTER IS THE SOURCE OF CHORUS EMISSIONS LOCATED AT THE LOCAL GEOMAGNETIC FIELD MINIMUM?: O Agapitov, V Krasnoselskih, T Dudok de Wit, G Rolland

0800h SM11B-1705 POSTER Dayside chorus waves at high L-shells: Conjugate observations of PENGUIN/AGO and THEMIS: K Min, K Keika, L J Lanzerotti, A J Gerrard, J Lee, Y Miyoshi, V Angelopoulos, M Spasojevic

0800h SM11B-1706 POSTER Control Over the Ground-Accessibility of ELF/VLF Chorus by a Discriminating Plasmasphere: D J Golden, M Spasojevic, U S Inan

0800h SM11B-1707 POSTER Laboratory Observations of Whistler Wave Resonances*: W E Amatucci, D D Blackwell, E M Tejero, C D Cothran, L Rudakov, G Ganguli, D N Walker

0800h SM11B-1708 POSTER Self-consistent Particle Simulation of Whistler-mode Triggered Emissions: M Hikishima, Y Omura, D Summers

0800h SM11B-1709 POSTER Direct measurement of nonlinear wave-particle interaction in the magnetosphere: A simulation study of whistler-mode chorus emissions: M Kitahara, Y Katoh, T Ono, H Kojima, Y Omura

0800h SM11B-1710 POSTER Energetic electron precipitation caused by wave particle interactions: J Lee, G K Parks, E Lee, J J. Hong, K Cho, Y Park, K W Min, B Tsurutani, M McCarthy, K Kim

0800h SM11B-1711 POSTER Calculation of Quasilinear Diffusion Coefficients Using Test Particle Simulations: X Tao, J Bortnik, J M Alber, K Liu

0800h SM11B-1712 POSTER High energy electron diffusion by resonant interactions with whistler waves in the inner radiation belt: J Ripoll, D Mourenas

0800h SM11B-1713 POSTER EMIC Wave Occurrence and Plasmaspheric Density During Geomagnetic Storms: A J Halford, B J Fraser, S Morley

0800h SM11B-1714 POSTER A case study of EMIC wave-associated He+ energization in the inner magnetosphere: J Zhang, L M Kistler, C Mouikis, M Lessard, C Weaver, B Kleeer, J Sauvaud, M W Dunlop

0800h SM11B-1715 POSTER Effects of Storm-time EMIC Wave on Radiation Belt Electrons: Q Zheng, A Glocer, M H Fok
0800h  **SM11B-1716 POSTER** Empirical modeling of quasilinear evolution of electromagnetic ion cyclotron instability for finite beta plasmas: J Seough, P H Yoon, K Kim, D Lee

0800h  **SM11B-1717 POSTER** Ion-cyclotron Instability in Current-carrying Maxwellian and Lorentzian (Kappa) Plasma with Anisotropic Temperatures: A Comparative Numerical Study: B Basu, N J Grossbard


0800h  **SM11B-1719 POSTER** Radiation belt diffusion via non-resonant interactions with spatially confined magnetosonic waves: J P McCollough, J M Albert, J Bortnik

0800h  **SM11B-1720 POSTER** Excitation of Magnetosonic Waves in the Terrestrial Magnetosphere: Particle-in-cell Simulations: K Liu, S P Gary, D Winske

0800h  **SM11B-1721 POSTER** Ion Bernstein Instability in the Magnetosphere: Linear Dispersion Theory: S P Gary, K Liu, D Winske, R E Denton

0800h  **SM11B-1722 POSTER** Calculating Wave Power from the Source Particle Distributions for EMIC Waves: L W Blum, E MacDonald, M Spasojevic, V K Jordanova, X Li

0800h  **SM11B-1723 POSTER** Evolution of Energetic Electron Distribution due to Interaction with Chorus Emissions: M Yoshikawa, Y Omura, D Summers, M Hikishima

0800h  **SM11B-1724 POSTER** Induced Nonlinear Scattering of Magnetospherically Reflecting Whistlers: C E Crabtree, L Rudakov, G Gangul, M Mithaiwala, V Galinsky, V Shevchenko

0800h  **SM11B-1725 POSTER** Non-linear Evolution of Velocity Ring Distributions: Generation of Whistler Waves: M Mithaiwala, L Rudakov, G Gangul

0800h  **SM11B-1726 POSTER** Observation of Electron Phase Bunching in Auroral Langmuir Waves: C Kletzing, S R Kaepller, S R Bounds, J W Labelle, M P Dombrowski

0800h  **SM11B-1727 POSTER** One-dimensional PIC (Particle In Cell) simulation of electrostatic solitary waves and double layers in a nonthermal electron distributed plasma: C Choi, K Rha, T Rhee, C Ryu, K W Min

0800h  **SM11B-1728 POSTER** Nonlinear Saturation of Cyclotron Maser Instability Associated With Energetic Ring-beam Electrons: K Lee, Y Omura, L Lee

0800h  **SM11B-1729 POSTER** A Comparative study of kinetic and inertial Alfvén wave instabilities in a Lorentzian dusty magnetoplasma: N Ruba, N Erkaev, D Langmayr, H Biernat

0800h  **SM11B-1730 POSTER** Electrostatic Solitary Waves (ESWs) observed by Kaguya near the Moon: K Hashimoto, M Hashitani, Y Omura, Y Kasahara, H Kojima, T Ono, H Tsunakawa

0800h  **SM11B-1731 POSTER** Vlasov simulation of electrostatic solitary structures in four-component plasmas: T Umeda, M A favoured Abdalla, J S Pickett, M L Goldstein

0800h  **SM11B-1732 POSTER** Nonlinear Mirror Mode Structures in the magnetosheath: Two- and Three-dimensional Hybrid Simulations: M Shoji, Y Omura, L Lee


0800h  **SM11B-1734 POSTER** Terrestrial Myriametric Radio Burst Observed by IMAGE and Geotail Satellites: S F Fung, L N Garcia, S A Boardsen, K Hashimoto, H Matsumoto

0800h  **SM11B-1735 POSTER** Understanding of the Dynamic Evolution of the Relativistic Electron Slot Region due to Radial and Pitch Angle Diffusion: K Kim, Y Shprits, D Subbotin, B Ni

0800h  **SM11B-1736 POSTER** The Modulation of VLF Wave Growth and Propagation by Global ULF Oscillations: C Watt, A W Degeling, R Rankin, E spanswick, E F Donovan

0800h  **SM11B-1737 POSTER** Direct Modulation of Electron Precipitation by Global ULF Oscillations: A W Degeling, C Watt, R Rankin, E Huntswick, E F Donovan

0800h  **SM11B-1738 POSTER** Estimation of the radial diffusion coefficient using REE-associated ground Pc 5 pulsations: A Fujimoto, K Yumoto

0800h  **SM11B-1739 POSTER** THEMIS measurements of the spatial structure and temporal evolution of a dayside poloidal ULF wave event: W Liu, T E Sarris, X Li, R E Ergun, V Angelopoulos, K Glassmeier

0800h  **SM11B-1740 POSTER** THEMIS Pi2 observations near the dawn and dusk sectors in the inner magnetosphere: H Kwon, K Kim, D Lee, E Lee, K Takahashi, V Angelopoulos, K Glassmeier, V Park, J W Bonnell, P R Sutcliffe

0800h  **SM11B-1741 POSTER** Space Technology 5 Multipoint Observations of Pc 2 Waves: J A Cumnock, G Le, J A Slavin, S M Imber

0800h  **SM11B-1742 POSTER** IDENTIFICATION OF FIELD LINE RESONANCES IN THE MAGNETOSPHERE USING THE SUPER DUAL AURORAL RADAR NETWORK (SUPERDARN): NEW “CROSS-POWER AND CROSS-PHASE” TECHNIQUE: L Mazzino, F R Fenrich

0800h  **SM11B-1743 POSTER** Gyrokinetic Particle Simulation Of Drift Compressional Modes In The Magnetosphere: P Porazik, Z Lin

0800h  **SM11B-1744 POSTER** Substorm Events Detected at High Latitude Groundbased Stations: J Lee, K Keika, A Lew, K Min

0800h  **SM11B-1745 POSTER** Multi-point measurements of the spatial extent and azimuthal mode number of ULF waves: T E Sarris, X Li, W Liu

0800h  **SM11B-1746 POSTER** Scattering of magnetic mirror trapped electrons by an Alfvén wave: Y Wang, W N Gekelman, P Pribyl, K Papadopoulos, A V Karavaev, X Shao, A S Sharma

0800h  **SM11B-1747 POSTER** Alfvén Wave Generation by a Rotating Magnetic Field Source: Theory, Modeling and Experimental Results: X Shao, A V Karavaev, N Gumerov, A S Sharma, K Papadopoulos, W N Gekelman, Y Wang, S T Vincena, P Pribyl

0800h  **SM11B-1748 POSTER** Pitch Angle Scattering of Electrons by Alfvén Waves Generated with Rotating Magnetic Field Source: A V Karavaev, X Shao, N Gumerov, A S Sharma, K Papadopoulos, W N Gekelman, P Pribyl, Y Wang, B Van Compernolle

0800h  **SM11B-1749 POSTER** Basic wave modes in multi-fluid MHD: V G Merkin, J Lyon

0800h  **SM11B-1750 POSTER** Effect of magnetosheath and solar wind flows on MHD wave mode conversion in the magnetosphere: K Kim, D Yu, D Lee

0800h  **SM11B-1751 POSTER** Generation of a few mHz compressional modes in the magnetosphere: D Lee, K Kim, K Kim

0800h  **SM11B-1752 POSTER** The South American Meridional B-field Array (SAMBA) and Pce-4-5 Wave Studies: N L Sterner, E Zesta, A Boudouridis, M Moldwin, E Yizengaw, P J Chi

0800h  **SM11B-1753 POSTER** The Nature of Magnetospheric Electron Velocity Distribution Functions from Wave Observations: R F Benson, A F Vinas, V A Osherovich, J Fainberg, C M Purser

All information is current as of November 12, 2010
0800h SM11C-1754 POSTER A statistical study of narrow-band ELF events observed at the South Pole: M A Young, M Lessard, C Weaver, A T Weatherwax

0800h SM11C-1755 POSTER Field Line Resonance at Mercury: K Lee, E Kim, J Johnson

SM11C Moscone South: Poster Hall Monday 0800h

Moon-Magnetosphere Interactions at Jupiter and Saturn I Posters (joint with P)

Presiding: K C Hansen, University of Michigan; F Plaschke, TU Braunschweig


0800h SM11C-1757 POSTER Surface charging of Saturn's moon Rhea: G H Jones, E Roussos, A J Coates, F J Crary

0800h SM11C-1758 POSTER The plasma environment of the magnetodisk of Saturn near Titan encounters as derived from ion densities measured by the Cassini/CAPS instrument: K Szego, Z Nemeth, G Erdos, L Foldy, M F Thomsen, D Delapp

0800h SM11C-1759 POSTER The Anatomy of Two Nightside Magnetodisk Crossings near Titan: Z Nemeth, K Szego, L Foldy, M F Thomsen, D Delapp, A J Coates, A Wellbrock, Z Bebesi

0800h SM11C-1760 POSTER Ion Composition of Titan's Ionosphere Observed during T9 Magnetotail Crossing: R E Johnson, E C Sirtler, R E Hartle, J F Cooper, M Shappirio, D G Simpson


0800h SM11C-1762 POSTER Titan’s “Memory” of Saturn’s Field as a Factor in its Plasma Interaction Features: D Ulusen, J G Luhmann, Y Ma, K Mardt, J H Waite, M K Dougerty, C T Russell, H Wei, S A Ledvina

0800h SM11C-1763 POSTER Dynamics of pickup ion velocity distribution in Titan’s plasma environment: 3D hybrid simulation and comparison with CAPS’s observations: D G Simpson, A S Lipatov, E C Sirtler, R E Hartle, J F Cooper

0800h SM11C-1764 POSTER Hybrid Model Simulations Of Titan’s Plasma Interactions: S A Ledvina, S H Brecht, T E Cravens

0800h SM11C-1765 POSTER Distribution of high energy electron drop-outs in the upper atmosphere of Titan: Z Bebesi, N Krupp, K Szego, Z Nemeth, G Erdos, M Fraenz, S M Krimigis, D G Mitchell, D T Young, M K Dougherty


0800h SM11C-1767 POSTER Electron Flux Modeling in the Enceladus Plume: N O Ozak, T E Cravens, M E Campbell, M Richard, I P Robertson, A J Coates, S A Ledvina

0800h SM11C-1768 POSTER The Source of Saturn’s Extended Neutral Cloud: B L Fleshman, P A Delamere, F Bagental

0800h SM11C-1769 POSTER PLANETARY MAGNETOSPHERE PROBED BY CHARGED DUST PARTICLES: Z Sternovsky, M Horanyi, E Gruen, R Srama, S Auer, S Kempf, H Krueger

0800h SM11C-1770 POSTER Observation and Simulation of Ion Flow Stagnation in the Enceladus Plume: R L Tokar, N Omidi, T Averkamp, Z Wang, D A Garnett, M F Thomsen, F J Crary

0800h SM11C-1771 POSTER Studying the dynamic influence of the ionospheric and plume components of Enceladus’ exosphere through simulations and observations: K Fisher, C S Paty, R L Tokar, M E Lindle, F J Crary, D T Young

0800h SM11C-1772 POSTER Hemisphere coupling currents at Enceladus: Analytical modeling of Cassini magnetometer observations: S Simon, J Saur, H Kriegel, F M Neubauer, U M Motschmann, M K Dougherty

0800h SM11C-1773 POSTER Characteristics of Jovian ionospheric Alfvén resonator observed by using wave modulations of L-burst emissions: T Koshida, T Shibata, S Taguchi, H Misawa

0800h SM11C-1774 POSTER Moon-Planet and Exoplanet-Star Couplings: Common Electrodynamic Interaction Mechanisms Throughout the Universe: J Saur, T Grumbusch, S Jacobsen

0800h SM11C-1775 POSTER Modeling of the longitudinal modulation of the Io interaction: S Hess, B Bonfond, P A Delamere, V J Dols, C Grodent, P M Zarka

0800h SM11C-1776 POSTER Io’s Plasma Interaction with the Jovian Magnetosphere: R Winglee, E M Harnett, J Waldock

0800h SM11C-1777 POSTER Simulation of Io’s Auroral Emission: Constraints on the Atmosphere in Eclipse: L Roth, J Saur, D F Strobel, K D Retherford, J R Spencer

0800h SM11C-1778 POSTER Io’s Extended Neutral Sulfur and Oxygen Clouds Supplied by Electron Impact Dissociation of an SO$_3$ Atmosphere: V J Dols, M H Burger, P A Delamere, F Bagental

0800h SM11C-1779 POSTER Kinetic processes at Io: O Sebek, P M Travinicek, R J Walker, P Hellinger

0800h SM11C-1780 POSTER Jovian’s plasma torus interaction with Europa. Plasma wake structure: 3D hybrid kinetic simulation and comparison with E4 flyby Galileo’s observations: A S Lipatov, J F Cooper, W R Paterson, E C Sirtler, R E Hartle


0800h SM11C-1782 POSTER Anticipating Juno: A Shinn, F Bagental

0800h SM11C-1783 POSTER Studying the dynamic influence of the ionospheric and plume components of Enceladus’ exosphere through simulations and observations: K Fisher, C S Paty, R L Tokar, M E Lindle, F J Crary, D T Young

0800h SM11C-1784 POSTER Hemisphere coupling currents at Enceladus: Analytical modeling of Cassini magnetometer observations: S Simon, J Saur, H Kriegel, F M Neubauer, U M Motschmann, M K Dougherty

0800h SM11C-1785 POSTER Characteristics of Jovian ionospheric Alfvén resonator observed by using wave modulations of L-burst emissions: T Koshida, T Shibata, S Taguchi, H Misawa

0800h SM11C-1786 POSTER Moon-Planet and Exoplanet-Star Couplings: Common Electrodynamic Interaction Mechanisms Throughout the Universe: J Saur, T Grumbusch, S Jacobsen

0800h SM11C-1787 POSTER Modeling of the longitudinal modulation of the Io interaction: S Hess, B Bonfond, P A Delamere, V J Dols, C Grodent, P M Zarka

0800h SM11C-1788 POSTER Io’s Plasma Interaction with the Jovian Magnetosphere: R Winglee, E M Harnett, J Waldock

0800h SM11C-1789 POSTER Simulation of Io’s Auroral Emission: Constraints on the Atmosphere in Eclipse: L Roth, J Saur, D F Strobel, K D Retherford, J R Spencer

0800h SM11C-1790 POSTER Io’s Extended Neutral Sulfur and Oxygen Clouds Supplied by Electron Impact Dissociation of an SO$_3$ Atmosphere: V J Dols, M H Burger, P A Delamere, F Bagental

0800h SM11C-1791 POSTER Kinetic processes at Io: O Sebek, P M Travinicek, R J Walker, P Hellinger

0800h SM11C-1792 POSTER Jovian’s plasma torus interaction with Europa. Plasma wake structure: 3D hybrid kinetic simulation and comparison with E4 flyby Galileo’s observations: A S Lipatov, J F Cooper, W R Paterson, E C Sirtler, R E Hartle


0800h SM11C-1794 POSTER Anticipating Juno: A Shinn, F Bagental

Study of Earth’s Deep Interior

DI11A Moscone South: Poster Hall Monday 0800h

New Views on the Lithosphere-Asthenosphere Boundary I Posters (joint with MR, S, T, V)

Presiding: M M Hirschmann, University of Minnesota; H Kawakatsu, Earthquake Research Institute; C A Ryichert, University of Bristol; J B Geherty, Columbia University

0800h DI11A-1820 POSTER Upper Mantle Convective Instability: linking the relatively abrupt flattening of seafloor with age and the seismic G-discontinuity through mantle melting?: M E Burau, E Parmentier, G Hirth

0800h DI11A-1821 POSTER Asthenospheric Mantle Flow by Viscous Fingering Instabilities: D S Weeraratne, E Parmentier

0800h DI11A-1822 POSTER An Experimental Investigation of Stress Driven Melt Segregation and Reactive Melt Infiltration: D S King, B K Holtzman, D L Kohlstedt

0800h DI11A-1823 POSTER Global mapping of Lithosphere/ Asthenosphere Boundary from surface wave tomography: G Burgos, J Montagner, E Beulcer, J Trampert, M H Ritzwoller, Y Capdeville, N M Shapiro
Oceanic Lithosphere:

0800h MR11A-1872 POSTER Intragranular dynamic recrystallization of quartz in naturally deformed quartzo-feldspathic mylonite: microkinking-induced bulging recrystallization: H Xia, J Liu, G A Davis

0800h MR11A-1873 POSTER ROLE OF SUBSTRATE ON QUARTZ CEMENTATION IN QUARTZ AGGREGATES: J R Farver, D Winslow, C Onasch

MR11B Moscone South: Poster Hall Monday 0800h Mudstone Multiphysics I Posters (joint with H, V, T)

Presiding: T A Dewers, Sandia National Laboratories; J E Heath, Sandia National Laboratories

0800h MR11B-1874 POSTER Adsorption, Permeability, and Effective Stress in the Barnett Shale, Texas, USA: J P Vermilyen, M D Zoback


0800h MR11B-1876 POSTER Sustaining Fracture Area and Conductivity of Gas shale Reservoirs for Enhancing Long-term Production and Recovery: R Suarez-Rivera, S Marino, A Ghassemi

0800h MR11B-1877 POSTER Gas adsorption in mudstones between reservoir layers of natural gas dissolved in water: K Onishi, K Kaku, Y Sato, H Kosukegawa, S Yamaguchi

0800h MR11B-1878 POSTER Use of Wireline Logs to Estimate Strength of Cap Rock Lithologies: E S Petrie, J P Evans

0800h MR11B-1879 POSTER Pore-Lining Composition and Capillary Breakthrough Pressure of Mudstone Caprocks: Scaling Efficiency of Geologic CO2 Storage Sites: J E Heath, T A Dewers, B J McPherson, P G Kotula

0800h MR11B-1880 POSTER Experimentally derived model to predict permeability behavior of mudstones: J Schneider, P B Flemings, R Day-Stirrat, J T Germaine

0800h MR11B-1881 POSTER Recent Advances in the Freely Available Discrete Fracture Reservoir Simulator, NFFLOW: S King, N Sams, K Gyovai, G S Bromhal, D Crandall


MR11C Moscone South: Poster Hall Monday 0800h Planetary Ices: From Deep Interiors to Astrobiology I Posters (joint with P)

Presiding: I Daniel, Universite de Lyon; B Militzer, Univ of CA-Berkeley

0800h MR11C-1883 POSTER Room-Temperature Equation of State for CO2-i: H P Scott, T W Kinney, M R Frank, J Lin

0800h MR11C-1884 POSTER Laser-Driven Shock Studies of Precompressed CO2 in the Diamond Anvil Cell: D K Spaulding, J R Rygg, J Eggert, S Uhlich, G Collins

0800h MR11C-1885 POSTER Rheology of two-phase aggregates of H2O and CO2 ices: T Kubo, W B Durham

0800h MR11C-1886 POSTER High pressure, high temperature studies of methane-water mixtures: T J Hittinger, A P Goncharov, D A Dalton, R S McWilliams, M Mahmood

0800h MR11C-1887 POSTER Observations of gas hydrate dissociation below the ice point with microfocus X-ray computed tomography: H Ohno, H Narita, J Nagao

0800h MR11C-1888 POSTER Thermoelectric properties of ice VII and its high-pressure polymorphs: Y Asahara, K Hirose, Y Ohishi, N Hiroa, M Murakami

0800h MR11C-1889 POSTER Experimental deformation and grain growth of pure water ice aggregates: S Diebold, J H De Bresser, W B Durham, L A Stern

0800h MR11C-1890 POSTER Complexity in low-temperature phase diagrams of planetary ices: phase transition in bischofite, MgCl2.6H2O: E Bobocoiu, R Caracas

0800h MR11C-1891 POSTER High Pressure Strength Study on NaCl: Z MI, S R Shieh, Title of Team: high pressure mineral physics group


Seismology

S11A Moscone South: Poster Hall Monday 0800h Recent Advances in Infrasound Science I Posters (joint with A, EP, OS, V)

Presiding: S Arrowsmith, Los Alamos National Laboratory; M A Hedlin, U.C. San Diego; A Hurko, IRIS DMC; J M Lees, University of North Carolina; S R McNutt, UAFGI; K T Walker, IGPP/SIO/UCSD

0800h S11A-1920 POSTER Observing Infrasound and Atmospheric Pressure with the NSF EarthScope USArray Transportable Array: F L Vernon, M A Hedlin, R W Busby, R Woodward

0800h S11A-1921 POSTER Tracking Severe Thunderstorm Outflows and Local Pressure Changes Using NSF EarthScope USArray TA Pressure Sensors: J E Tytell, F L Vernon, J A Eakins

0800h S11A-1922 POSTER A Network of Infrasonic Arrays in Utah: V Burlacu, S Arrowsmith, K L Pankow, M J Hale, C Hayward, B W Stump

0800h S11A-1923 POSTER A large scale infrasound array deployment in the American West: C L Talmadge, R Waxter, D Kleiner, S Nava, J Assink, H Buchanan, B Carpenter, J Heffington

0800h S11A-1924 POSTER A study of infrasonic signal evolution with range: J D Assink, R Waxter, C L Talmadge, P Blom, D P Drob

0800h S11A-1925 POSTER Travel Time and Signal Characteristics of Infrasonic Arrivals at Regional Distances: P T Negraru, E T Herrin, P Golden

0800h S11A-1926 POSTER Locating Events using Infrasound Data: S Arrowsmith, D Anderson, R W Whitaker

0800h S11A-1927 POSTER Recent enhancements of the PMCC infrasound signal detector: N Brachet, P Mialle, R S Matoza, A LE PICHON, Y Cansi, L Ceranna

0800h S11A-1928 POSTER On excitation problems of an elastodynamic system with an open boundary condition: N Kobayashi


0800h S11A-1930 POSTER Imaging the atmosphere using volcanic infrasound recorded on a dense local sensor network: O E Marcillo, J B Johnson, R Johnson
S11A-1931 POSTER Azimuthal Traveltime and Amplitude Anomalies of Tropospheric and Thermospheric Acoustic Waves From the Explosive Eruption of the Sakurajima Volcano in Japan: S Watada, N Arai, T Murayama, M Ikawami, M Mogami, T Oi, Y Imanishi, Y Kitagawa


S11A-1933 POSTER Infrasound Studies of Alaskan Volcanoes: S R Mcnutt, K Arnould, C Szuberla, J V Olson, C R Wilson

S11A-1934 POSTER Vent geometry detected from infrasound observation on Villarica volcano, Chile: A Goto, J B Johnson, R W Sanderson, J Anderson, N R Varley

S11A-1935 POSTER Volcanic Vent Geometry and Infrasonic Radiation via FDTD Modeling: K Kim, J M Lees

S11B Moscone South: Poster Hall Monday 0800h Role of Scattering in Seismic Interferometry and Time Reversal I Posters

Presiding: C S Larmat, Los Alamos National Laboratory; H Sato, Tohoku Univ

S11B-1936 POSTER Seismic interferometry for source-localized passive data in Nankai Trough area -Selection of receivers based on stationary sources: S Minato, T Matsuoka, T Tsuji, K Obana

S11B-1937 POSTER Reconstruction of Green’s function from random noise sources in a multiple scattering medium: L Mergerin, H Sato

S11B-1938 POSTER Retrieval of Green’s Function Having a Coda Tail from the Cross-Correlation Function in a Scattering Medium on the Basis of the First Order Born Approximation: H Sato

S11B-1939 POSTER Deep Structure and Earthquake Generating Properties in the Yamasaki Fault Zone Estimated from Dense Seismic Observation: K Nishigami, T Shibutani, H Katao, Y Yamaguchi, Y Mamada

S11B-1940 POSTER Retrieval of the Cross Correlation Function in a Random Inhomogeneous Medium for Uncorrelated Sources Using the Mean Wavefield: K Sawazaki, H Fujiwara

S11B-1941 POSTER Retrieval of acoustic Green’s function for random media and the fieldair approximation: Y Zheng, M C Fehler


S11B-1943 POSTER Two-dimensional sensitivity kernels for cross-correlation functions of background surface waves: K Nishida


S11B-1945 POSTER Source Distribution Corrected Ambient Noise Attenuation Measurements: N Harmon

S11B-1946 POSTER Time-space symmetry and convergence rate of coda correlations: role of multiple scattering: E F Larose, A Derode, M Campillo, P Roux

S11B-1947 POSTER Characteristics of the autocorrelation function decay rate of ambient noise: T Mouri, M Furumoto, Y Morita


S11B-1949 POSTER Time reversal source imaging and Gridd MT monitoring with W-phase in Japan: H Tsuruoka, L Rivera, H Kawakatsu, H Kanamori

S11B-1950 POSTER Averaging Horizontal-to-Vertical (H/V) Spectral Ratios of Earthquake Motions for Velocity Inversions Based on Diffuse Field Theory for Plane Waves: S Matsushima, F J Sanchez-Sesma, H Kawase

S11B-1951 POSTER Exploiting head-wave artifacts in seismic interferometry: T D Mikesell, K Van Wijk, J Nichols, A Calvert

S11B-1952 POSTER Mode Conversion and Energy Partitioning at Active Volcanoes: M Yamamoto, T Nishimura, T Tsutsui, M Iguchi

S11B-1953 POSTER Time-Reversal Study of the Hemet (CA) Tremor Source: C S Larmat, P A Johnson, R A Guyer

S11B-1954 POSTER Dependence of ‘Signal to Noise’ ratio of Green’s functions constructed from ambient seismic noise on stacking time using 17 years of data and 10 stations of German Regional Seismic Network (GRSN): D Garus, U Wegler

S11B-1955 POSTER Including wave interference in radiative transfer theory for P-SV waves: M M Haney, K Van Wijk, R Smieder

S11B-1956 POSTER Surface-Wave Isolation with the Interferometrically Obtained Green Tensor: K Van Wijk, T E Blum, A Lamb, T D Mikesell


Presiding: H Houston, University of Washington; T J Melbourne, Central Washington University

S11C-01 POSTER GPS and LBT inferences of the August 2010 and August 2009 ETS Events: T J Melbourne, R M Flase, M Santillan, C W Scrivner

S11C-02 Evolution of Cascadian ETS: Initiation, Propagation, and Rapid Tremor Reversals: H Houston, B Delbridge

S11C-03 Tremor as observed by the Array of Arrays in Cascadia: A Ghosh, J E Vidale, K C Creager

S11C-04 A 10-day tremor episode reverse-engineered with the EarthScope Array of Arrays: J E Vidale, A Ghosh, J Sweet, K C Creager

S11C-05 Striations and tremor duration controlling diverse tremor behavior: from western Shikoku to world tremor zones (Invited): S Ide

S11C-06 Coherent Tremor in the Cascadia Subduction Zone: J G Armbruster, W Kim


S11C-08 The source process of the 2009-2010 long-term slow slip event in the Bungo channel region based on Hi-net tilt and GEONET GPS data: H Hirose, T Kimura, K Obara
Tectonophysics

T11A Moscone South: Poster Hall Monday 0800h
Advances in Understanding the Central Andean Crust and Mantle Through Seismology and Geochemistry I Posters (joint with S, V)

Presiding: S M Kay, Cornell University; R W Clayton, Caltech

0800h T11A-2040 POSTER Did growth of high Andes slow down Nazca plate subduction?: J Quinteros, S V Sobolev

0800h T11A-2041 POSTER Surface topographic response to lithospheric instabilities and “driplets” beneath the central Andean: A Beiki-Ardakani, R N Pysyklywec, L M Schoenbohm

0800h T11A-2042 POSTER Numerical modeling of flat-slab subduction in South America: the influence of thick overriding lithosphere: V Manea, M Perez-Gussiyyne, M Manea

0800h T11A-2043 POSTER Local Seismicity And Seismo-Tectonic Structure Of The Aysén Region, Southern Chile: H Agurto, A Rietbrock, K Bataille, S E Barrientos, M R Miller

0800h T11A-2044 POSTER Local seismicity observed by a temporal network in the Villarrica-Valdivia region, South-Central Chile: Y Dziemra, M M Thorwart, C Siegmund, W Rabbel, D Comte, K Bataille, M Iglesia, C Prezzi


0800h T11A-2046 POSTER Shear-wave splitting and mantle anisotropy in the southern South American subduction zone: J G MacDougall, K M Fischer, M L Anderson


0800h T11A-2048 POSTER Lateral Crustal Velocity Variations across the Andean Foreland in San Juan, Argentina from the JHD Analysis and 3D P and S Velocity inversion: B B Asmerom, J Chiu, J Pujol, R Smallay

0800h T11A-2049 POSTER Shear Wave Velocity Structure of the Pampean Flat Slab Region from Ambient Noise Tomography: R C Porter, S L Beck, G Zandt, L M Warren, P M Alvarado, H J Gilbert

0800h T11A-2050 POSTER The SOUTHERN PUNA Seismic Experiment: Shape of the Subducting Nazca Plate, Areas of Concentrated Mantle and Crustal Earthquakes, and Crustal Focal Mechanisms: P Mulchay, C Chen, S M Kay, L D Brown, P M Alvarado, E A Sandvol, B Heit, X Yuan

0800h T11A-2051 POSTER SEISMIC ANISOTROPY BENEATH THE SOUTHERN PUNA PLATEAU: FJ Calisto Mory, D D Robinson, E A Sandvol, S M Kay, D Comte, P M Alvarado, B Heit, X Yuan

0800h T11A-2052 POSTER Missing shortening in the thick-skinned retroarc thrust belt of the central Andes, northwestern Argentina, ~25°S: D M Pearson, P A Kapp, P G deColles, P W Reiners

0800h T11A-2053 POSTER Sedimentary and provenance record of the Cianzo basin, Eastern Cordillera, NW Argentina: Implications for transition from postrift subsidence to Cenozoic Andean shortening: B C Sikka, B K Horton

0800h T11A-2054 POSTER High resolution image of the Lithosphere-Asthenosphere Boundary of the subducting Nazca plate beneath northern Chile: F Sodoudi, X Yuan, G Asch, R Kind


0800h T11A-2057 POSTER Provenance of Cretaceous-Oligocene Sedimentary Strata of the Floresta Basin, Eastern Cordillera, Colombia and Tectonic Implications: J Saylor, J Corredor, A Mora, B K Horton, J Nie

0800h T11A-2058 POSTER Tectonomorphic evolution of the Eastern Cordillera fold-thrust belt, Colombia: New insights based on apatite and zircon (U-Th)/He thermochronometers: B Ghorbal, D F Stockli, A Mora, B K Horton, V Blanco, N Sanchez

0800h T11A-2059 POSTER Controlled-Source Seismic Investigation of the Generation and Collapse of a Batholith Complex, Coast Mountains, Western Canada: K Wang, J A Hole, A L Stephenson, G Spence, K C Miller, S H Harder, G M Kaip, R M Clowes

T11B Moscone South: Poster Hall Monday 0800h
Earthquake Geology and Active Tectonics in South and East Asia I Posters (joint with S)

Presiding: Y Awata, K Chang, National Taiwan University of Technology; E Yeh, National Taiwan Normal University

0800h T11B-2060 POSTER Spatiotemporal variability in surface rupturing behavior of thrust fault: Insights from paleoseismology for the 2008 Iwate-Miyagi Nairiku, Japan, earthquake: T Maruyama, S Toda, M Omata, Y Kohrihi, Y Mori

0800h T11B-2061 POSTER Imaging of the seismic source fault in the fold-and-thrust belt, Niigata basin, central Japan: N Kato, H Sato, S Abe, N Kawai, H Saito, T Iwasaki, K Shiraishi, T Ishiyama, M Inaba

0800h T11B-2062 POSTER Crustal structure off the northwestern Sado Island in the eastern margin of the Japan Sea deduced from seismic reflection and reflection surveys: T Sato, T No, S Kodaira, N Takahashi, Y Kaneda, N Kato, E Kurashimo, T Ishiyama, S Koshiya, T Yoshida, T Toyoshima, M Ishikawa, S Toda, H Saito, S Abe, H Sato

0800h T11B-2063 POSTER Hidden Rift Structure Beneath a Thick Sedimentary Basin in the Niigata Region, Japan: T Takeda, B Enescu, Y Asano, K Obara, S Sekiguchi

0800h T11B-2064 POSTER 3-D simulation of temporal change in tectonic deformation pattern and evolution of the plate boundary around the Kanto Region of Japan due to the collision of the Izu-Bonin Arc: A Hashima, T Sato, T Ito, T Miyachi, H Furuya, N Tsumura, K Kameo, S Yamamoto

0800h T11B-2065 POSTER Kozu-Matsuda fault system in northern Izu collision zone, western part of Kanagawa Prefecture, central Japan: K Odawara, T Aketagawa, A Yoshida

0800h T11B-2066 POSTER Re-examination of the damage distribution and the source of the 1828 Sanjo Earthquake in central Japan: A Nishiyama, K Satake, T Yata, A Urabe

0800h T11B-2067 POSTER Hydrogen Gas Emissions from Active Faults and Identification of Flow Pathway in a Fault Zone: T Ishimaru, M Niwa, H Kurosawa, K Shimada

0800h T11B-2068 POSTER Basement Imaging Using Sp Converted Phases in Chia-Nan, Taiwan: J Wei, Y Wu, M Chuang, C Chang
Mw 7.1 Solomon Islands Earthquake: Y Kaneda, Y Yamamoto

Y Yamamoto, T Sato, K Kashiwase, H Fujimori, Y Kaneda

H Hsieh, H Yen, D Toan

T11C-2110 POSTER Tectonic Evolution of the Bajiyinduxi Group: Insights from Detrital Zircon Geochemistry, Bainaimiao, Inner Mongolia, China: C Gu, Z Zhou

T11C-2111 POSTER Analyses of fracture pattern and slope stability of road-cut sections in the northwestern Daegu, SE Korea: K Ko, J Choi, Y Kim, Title of Team: Geologic Structure and Geohazard Research Group

T11C-2112 POSTER The crustal and mantle velocity structure in central Asia from 3D traveltime tomography: Y Sun, R V Martin, M N Toksoz, S Pei

T11C-2113 POSTER THE CRUSTAL EVOLUTIONARY HISTORY OF THE CATHAYSIA BLOCK FROM THE PALEOPROTEROZOIC TO MESOZOIC: L Longming, M Sun, Y Wang, G Xing

T11D Moscone South: Poster Hall Monday 0800h Subduction Zone Segmentation Over Multiple Earthquake Cycles I Posters (joint with G, NH, S)

Presiding: C Goldfinger, Oregon State University; A J Meltzner, Nanyang Technological University; I Shennan, Durham University

T11D-2114 POSTER A New View on the Space-Time Pattern of Great or Large Earthquakes along the Northern Japan to Southern Kurile Trenches: T Harada, K Satake, K Ishibashi

T11D-2115 POSTER Three Kanto Earthquakes Inferred from the Tsunami Deposits and the Relative Sea Level Change in the Miura Peninsula, Central Japan: H Kim, K Shimazaki, T Chiba, T Ishibe, M Okamura, H Matsuoka, Y Tsuji, K Satake

T11D-2116 POSTER Water velocity inferred from tsunami boulders around Hashigui-iwa, Pacific side of central Japan: H Maemoku, A Nagai, M Shishikura, T Echigo, Y Namegaya

T11D-2117 POSTER Hyper-cycle of the Nankai Earthquake inferred from tsunami deposits accumulated in lakes along the Nankai Trough, past 2000 to 5000 years: M Okamura, H Matsuoka

T11D-2118 POSTER Delayed Segment Rupture during Great Earthquake along the Nankai Trough - Estimation from Historical Documents and Tsunami Trace Heights of the 1707 Hsei Earthquake -: K Imai, A Nishiyama, T Maeda, T Ishibe, K Satake, T Furumura

T11D-2119 POSTER Geometry of the Philippine Sea plate subducting beneath the southwestern Nankai seismogenic zone: A Nakanishi, S Kodaira, G Fujie, K Obana, T Takahashi, Y Yamamoto, T Sato, K Kashiwase, H Fujimori, Y Kaneda

T11D-2120 POSTER Difference of the seismic structure between the Hyuga-nada and the Nankai seismogenic segments: Y Yamamoto, K Obana, T Takahashi, A Nakanishi, S Kodaira, Y Kaneda

T11D-2121 POSTER Seismogenic Fault Geometry of 2010 Mw 7.1 Solomon Islands Earthquake: Y Kuo, C Ku, F W Taylor, B Huang, Y Chen, W Chao, H Huang, Y Kuo, Y Wu, J Suppe


T11D-2123 POSTER Subducting fracture zones control earthquake distribution and upper plate properties: examples from Sumatra and Kamchatka: C Gaedicke, R Freitag, U Barckhausen, D Franke, S Ladage, M Schnabl, N Tsukanov


T11D-2125 POSTER The Tsunami Geology of the Bay of Bengal Shores and the Predecessors of the 2004 Indian Ocean Event: C Rajendran, K Rajendran, S Seshachalam, V Andrade

T11D-2126 POSTER Stress Transfer Processes during Great Plate Boundary Thrusting Events: A Study from the Andaman and Nicobar Segments: V Andrade, K Rajendran

T11D-2127 POSTER The Structure of the Mentawai segment of the Sumatra subduction zone revealed by local earthquake travel time tomography: R Collings, A Riebrick, D Lange, F Tilman, D H Natawidjaja, B W Suwargadi

T11D-2128 POSTER Intralplate Splay Faults and Near-field Tsunami Generation during Giant Megathrust Earthquakes in Chile, Alaska, and Sumatra: G Pfäfer, J C Savage, W H Lee

T11D-2129 POSTER Testing the validity of using turbidites as an earthquake proxy on the Sumatran margin: E Sumner, M Siti, L C McNeill, J E Galetzka, D W Suwargadi

T11D-2130 POSTER Cascadia Segmentation: Sediment supply, structural influences, and a pinchout of the locked interface: C Goldfinger


T11D-2133 POSTER Late Holocene spatial patterns of coseismic land level changes and earthquake rupture areas, south-central Alaska: I Shennan, N Barlow, E Watcham

T11D-2134 POSTER The 2007 Tocopilla earthquake and its aftershock sequence - A subduction zone earthquake at the edge of the northern Chile seismic gap: S Eggert, M Sobiesiak, M Shizraei

T11D-2135 POSTER Long-term persistence of subduction earthquake segment boundaries – evidence from Mejillones Peninsula, N-Chile: P Victor, M Sobiesiak, S Nielsen, J Glodny, O Oncken

T11D-2136 POSTER 800,000-Year Record of Plate Boundary Earthquakes in the Atacama Desert, Northern Chile: A M Baker, L A Owen, J Rech, R W Allmendinger

T11D-2137 POSTER Chilean Segment Boundary Persistence over the Late Holocene: E Garrett, I Shennan, S Woodroffe, E Watcham

T11D-2138 POSTER Morphotectonic segmentation along the Nicoya Peninsula seismic gap, Costa Rica: J Marshall, S Morrish, A Butcher, B Ritzinger, K Wellington, E LaFromboise, M Protti, T Gardner, J Spotila
All information is current as of November 12, 2010
0800h V11A-2237 POSTER New Insights into Diking Processes from High Resolution Bathymetry of Pillow Ridges on the Juan de Fuca and Gorda Ridges: I A Yeo, D A Clague, J B Paduan, D W Caress

0800h V11A-2238 POSTER Pressures of Partial Crystallization of Magma from the Juan de Fuca Ridge: Implications for Crustal Accretion: J L Scott, M Barton

0800h V11A-2239 POSTER Uranium-series disequilibria of inflated sections of the Juan de Fuca Ridge: Implications for mantle melting: B M Dreyer, J B Gill, F C Ramos, D A Clague, S R Scott

0800h V11A-2240 POSTER PETROGENESIS OF NEAR-RIDGE SEAMOUNTS: AN INVESTIGATION OF MANTLE SOURCE HETEROGENEITY AND MELTING PROCESSES: N L Baxter, M R Perfit, C Lundstrom, D A Clague

0800h V11A-2241 POSTER Comparison of Magma Residence, Magma Ascent and Magma-Hydrothermal Interaction at EPR 9°N and Endeavour Segment: P J Michael, J B Gill, F C Ramos

0800h V11A-2242 POSTER Geochemistry of post-spreading lavas from fumarolic Mathematische and Galapagos spreading axes, revisited: L Tian, P R Castillo, D R Hilf

0800h V11A-2243 POSTER Crustal Assimilation and the Petrogenesis of Mid-Ocean Ridge Dacites: V Wanless, M R Perfit, W I Ridley, E M Klein, C B Grimes, J W Valley

0800h V11A-2244 POSTER Transformation of mantle to lower crust: melt-rock reaction processes in peridotites from Atlantis Massif, 30°N, Mid-Atlantic ridge: A Von der Handt, E Hellebrand

0800h V11A-2245 POSTER The Lowest δ7Li Yet Recorded in MORB Glasses: The Connection with Oceanic Core Complex Formation, Refractory Rutile-bearing Eclogitic Mantle Sources and Melt Supply: J F Casey, Y Gao, R Benavidez, C Dragoi

0800h V11A-2246 POSTER Plagioclase Ultra-Phyric Basalts (PUBs): Implications for the nature of the plumbing system at ultraslow-spreading ridges: A B Weinstieger, A Kent, F J Tepley, R L Nielsen


0800h V11A-2248 POSTER Geochemistry of mid ocean ridge basalts (MORB) from the northern Central Indian Ridge between 7°46 and 13°20 S: Implication of mantle heterogeneity influenced by Reunion hotspot plumes?: J Lee, I Lee, S Lee, J Kim


0800h V11A-2250 POSTER Renewed melting at the abandoned Skagi rift, northern Iceland: control by plume pulsing?: R L Walters, S M Jones, J Maelennan

0800h V11A-2251 POSTER Time Scales Associated With Tectono-Magmatic Reconfiguration During A Paleo-Rift Jump In Northwest Iceland: M S Riishusus, R A Duncan, L Kristjanson

0800h V11A-2252 POSTER In Search of the Layer 2/3 Boundary: A New Look at the Seismic Transition and Its Lithologic Significance: R L Carlson

0800h V11A-2253 POSTER Exploring the strength of newly formed oceanic lithosphere and its correlation with spreading rate and ridge depth anomalies: L M Kalnins, A B Watts

0800h V11A-2254 POSTER The Oceanic Lithosphere as Reactive Filter: Implications for MORB and Abyssal Peridotite Compositions: P I Luffi, C Lee, P M Antoshechkina

0800h V11A-2255 POSTER The Igneous Architecture of IODP Hole U1309D: Constructing Oceanic Crust from Multiple Sills: C A Christofferson, B E John, M J Cheadle, S M Swapp, C B Grimes

0800h V11A-2256 POSTER Variolites – results of liquid immiscibility or mingling? Evidence from variolitic lava, axial part of the Mid-Atlantic Ridge, 60N: E V Sharkov

0800h V11A-2257 POSTER INFLUENCE OF PLASTIC DEFORMATION IN ZIRCON ON ITS CHEMICAL COMPOSITION: EVIDENCE FOR GABBROS IN THE SPREADING ZONE OF THE MID-ATLANTIC RIDGE, MARKOV DEEP, 60N: T F Zinger, N S Bortnikov, E V Sharkov

0800h V11A-2258 POSTER “A bundle of columns” model for trace element fractionation during melting and melt migration in a vertically upwelling, chemically and lithologically heterogeneous mantle: L Yao, N J Dygert, M E Peterson, C Sun, D T Wetzel, Y Liang

0800h V11A-2259 POSTER Ni distribution in MORB-source mantle pyroxenites: Traces of melt-rock reaction on a cm-scale: D Sergeyev, A Dijkstra, T Pettke
0800h V11B-2273 POSTER Nd-Sr-Hf-Pb Isotopic Evidence for a Mantle Plume Origin for the Mafic Rocks from the Palaeotethyan Karakaya Complex, Turkey: K Sayit, B B Hanan, M Gönçioğlu, T Furman

0800h V11B-2274 POSTER Tectonic Controls on the Volumes and Petrological Evolution of Pantellerite-Trachyte-Phonolite Volcanoes in a Continental Rift Setting, Marie Byrd Land, Antarctica: W E LeMasurier

0800h V11B-2275 POSTER GEOCHEMICAL AND GEOCHRONOLOGICAL STUDIES OF CARBONIFEROUS MAGMATISM IN THE WEST JUNGGAR: RIDGE SUBDUCTION IN THE LATE PALEOZOIC: H Geng, M Sun

0800h V11B-2276 POSTER Metasomatic origin for the genesis of the latest Miocene–Quaternary intraplate basalts in northwestern Syria: G S Ma, J Malpas, C Xenophontos, K Suzuki

0800h V11B-2277 POSTER Origin of Aphyric Phonolitic Magmas: Natural Evidences and Experimental Constraints: M Masotta, C Freda, M Gaeta

0800h V11B-2278 POSTER Experimental investigation of properties of low degree partial melts of garnet peridotite and their role in OIB genesis: F A Davis, M M Hirschmann, M Humayun, R S Cooper

0800h V11B-2279 POSTER Testing the Requirement for Considerable Pyroxenite in the Source of OIB: B E Mandler, T Elliott

0800h V11B-2280 POSTER Constraints on metasomatic vein formation and implications for the petrogenesis of alkaline magmas: S Pilet, P Ulmer, M B Baker, E M Stolper, O Munteverdi

V11C Moscone South: Poster 3 Hall  Monday 0800h Geologic Maps and Quantitative Applications Posters (joint with T, ED, IN)


0800h V11C-2281 POSTER Surficial Geologic Mapping Using Digital Techniques Reveals Late-Phase Basin Evolution and Role of Paleoclimate, Death Valley Junction 30° × 60° Quadrangle, California and Nevada: J Slate, M Berry, C M Menges

0800h V11C-2282 POSTER Intimate Views of Cretaceous Plutons, the Colorado River Extensional Corridor, and Colorado River Stratigraphy in and near Topock Gorge, Southwest USA: K A Howard, B E John, J E Nielson, J M Miller, S S Priest

0800h V11C-2283 POSTER Evolution of the Three Sisters Volcanic Cluster, Oregon, over the past 100 ka—Animation of a Detailed Geologic Map (Invited): A T Calvert, J E Robinson, E W Hildreth, J Fierstein

0800h V11C-2284 POSTER Geology Of Mt. Jefferson, Oregon: A Showcase Of High Cascade Stratocone Magmatic Components: R M Conrey

0800h V11C-2285 POSTER Digital Map of Tephra Deposits of the Mono-Inyo Craters, CA: G Rogova, M I Bursik, K E Sieh, A J Meltzner, R L Dennen, R Collins, N Dahn, M LaGamba, C Shufelt, J Weinerth

0800h V11C-2286 POSTER Digital Bedrock Compilation: A Geodatabase Covering Forest Service Lands in California: D Elder, J A De La Fuente, M Reichert

0800h V11C-2287 POSTER Detailed geological mapping in vegetated terrain using airborne multispectral imagery and LiDAR data: An example from the Troodos ophiolite, Cyprus: S R Grebby, W D Cunningham, J Naden, K Tansey

0800h V11C-2288 POSTER New insights into eruptive activity and lava flow hazard at Nyamulagira volcano, D.R.C., from a new GIS-based lava flow map: B Smets, M Kervyn, F Kervyn, N D'Oreye, C Wauthier

0800h V11C-2289 POSTER Geologic Maps as the Foundation of Mineral-Hazards Maps in California: C T Higgins, R K Churchill, C I Downey, J P Clinkenbeard, M C Fonseca

0800h V11C-2290 POSTER Digital Geologic Map Database of Medicine Lake Volcano, Northern California: D W Ramsey, J M Donnelly-Nolan, T J Felger

0800h V11C-2291 POSTER Late Cenozoic geology and lacustrine history of Searles Valley, Inyo and San Bernardino Counties, California: M Nathenson, G L Smith, J E Robinson, P H Stauffer, J L Zigel

0800h V11C-2292 POSTER Spatio-temporal evolution of the Tuxtla Volcanic Field: S E Kobs Nawotniak, J Espindola, L Godinez

0800h V11C-2293 POSTER Preliminary Geologic Map of Newberry Volcano, Oregon: J M Donnelly-Nolan, D W Ramsey, R A Jensen, D E Champion, A T Calvert

0800h V11C-2294 POSTER Osa Creek gabbro-granite ring complex, Sierra Nevada, CA, by degassing-driven submucous of mafic-magmatic sheets: T W Sisson, J G Moore

0800h V11C-2295 POSTER Retreat of the Puget lobe of the Cordilleran Ice Sheet (Invited): R A Haugerud


0800h V11C-2297 POSTER Petrologic and petrographic variation of youthful eruptive products in the Tuxtla Volcanic Field, Veracruz, Mexico: C B Parrish, S E Kobs Nawotniak, K C Fredrick, J Espindola

0800h V11C-2298 POSTER Derivative Products Based on the Geologic Map of Lassen Volcanic National Park and Vicinity, Northern California: L J Muffler, M A Clynne

0800h V11C-2299 POSTER Geologic Map of Lassen Volcanic National Park and Vicinity, Northern California: M A Clynne, L J Muffler

0800h V11C-2300 POSTER Modeling Lahar Hazard Zones for Eruption-Generated Lahars from Lassen Peak, California: J E Robinson, M A Clynne

0800h V11C-2301 POSTER The “Large” in Large Igneous Provinces: Using Digital Geological Maps to Determine the Area, Magma Flux, and Potential Environmental Impact of the Wrangellia Flood Basalts: J S Scoates, A R Greene, D A Weis

0800h V11C-2302 POSTER Interpretation of 1.5-m resolution AUV bathymetry using ROV observations and samples at Davidson and Rodriguez Seamounts: J B Paduan, D A Clague, D W Caress, H Thomas, D Conlin, D Thompson

0800h V11C-2303 POSTER Structural Controls on Quaternary Andean Arc Volcanism, a Geologic Map-based and 3D Model Approach—Tatara-San Pedro Volcanic Complex, 36°S, Chile: R A Thompson, M A Dungan, M Pantea

0800h V11C-2304 POSTER Geological mapping of the vertical southeast face of El Capitan, Yosemite Valley, California (Invited): G M Stock, A P Glazner, K Ratajeski, B Law

0800h V11C-2305 POSTER MAPPING THE DEEPLY ERODED ROOTS OF A MAJOR STRIKE-SLIP FAULT SYSTEM: A SUMMARY OF RECENT BEDROCK MAPPING ALONG THE NORUMBEGA FAULT SYSTEM IN MAINE: D P West, S G Pollock, T W Grover
0800h  V11C-2306 POSTER Neogene Fault-normal Compression Revealed by a 3D Geologic Map Centered on the San Andreas Fault Zone in the Parkfield Region, California: R W Graymer, M A Roberts, D K McPhee


0800h  V11C-2308 POSTER Using geologic mapping to quantify lava flow risk on Mauna Loa: F Trusdell

0800h  V11C-2309 POSTER Aerial Surveys Using Consumer Electronics: Fast, Cheap and Best of All: Useful!: D K Lynch, K W Hudnut, D S Dearborn

0800h  V11C-2310 POSTER Paleomagnetic Determination of Deformation at the Sutter Buttes Volcano, California: B Hausback, D E Champion, A M Hansen

0800h  V11C-2311 POSTER EAST-CHINA GEOCHEMISTRY DATABASE (ECGD): A NEW NETWORKING DATABASE FOR NORTH CHINA CRATON: X Wang, W Ma

0800h  V11C-2312 POSTER Earth’s Volcanoes and their Eruptions: the 3rd edition of the Smithsonian Institution’s Volcanoes of the World: L Siebert, T Simkin, P Kimberly

V11D  Moscone South: Poster Hall  Monday  0800h

What Can Pyroclasts Tell Us? I Posters (joint with NH)

Presiding: U Kueppers, University of Munich; R J Brown, Open University; C Cimarelli, LMU Muenchen

0800h  V11D-2313 POSTER Ballistic Blocks Surrounding Kilauea’s Caldera: D Swanson, S Zolkos, B Haravitch

0800h  V11D-2314 POSTER Inversion of the tephra sedimentation process from the 1996 Ruapehu deposit: M Klawonn, C J Wolfe, L N Frazer, B F Houghton


0800h  V11D-2316 POSTER A kinetic model for bubbles growth and coalescence in viscous magmas: S Mancini, A Burgisser, F James, L Forestier Coste

0800h  V11D-2317 POSTER Reconstructing Pre-Fragmentation Bubble Size Distributions from Volcanic Ash using Stereo SEM Analysis: D L Sahagian, A A Proussevitch, G K Mulukutla, K Genareau

0800h  V11D-2318 POSTER Mass-conservative numerical scheme of bubble growth in incompressible viscous magmas: L Forestier Coste, A Burgisser, F James, S Mancini

0800h  V11D-2319 POSTER A modification of the method of Carey and Sparks (1986) to estimate eruption column height from maximum clast dispersal: J Espindola


0800h  V11D-2321 POSTER Vent Processes and Deposits of a Hiatus in a Violent Eruption: Quilotoa Volcano, Ecuador: J A Best, J Bustillos, M H Ort, K V Cashman, P A Mothes, A Di Muro, M Rosi

0800h  V11D-2322 POSTER Sibinal Pumice eruption, an example of transition from sub-Plinian to Plinian eruptive style at Tancaní Volcanic Complex, Mexico-Guatemala: J Arce, E Rangel, J L Macias, J E Gardner

0800h  V11D-2323 POSTER The complete fragmentation history of a strombolian eruption revealed using new bomb mapping method: L Colò, L Gurioli, A J Harris, B F Houghton, M Ripepe

0800h  V11D-2324 POSTER Fractal Analysis of Volcanic Deposits for Insights to Explosive Hawaiian Eruptions: A H Maria, O P Mills, H N Keimig

0800h  V11D-2325 POSTER Preliminary tephra-fall records from three lakes in the Anchorage, Alaska area: advances towards a regional tephrochronostratigraphic framework: K L Wallace, D S Kaufman, C J Schiff, K Kathan, A Werner, J Hancock, L A Hagel

0800h  V11D-2326 POSTER PELE’S HAIR: case studies from Kilauea: C B Cannata


0800h  V11D-2328 POSTER PYROCLASTS KEY TO AGE AND USE OF METER-SIZE GRANITE BASINS, SIERRA NEVADA, CA (Invited): J G Moore, M A Gorden, T W Sisson

0800h  V11D-2329 POSTER Anisotropy of Magnetic Susceptibility (AMS) of the Neogene Volcanic Succession at the Sierra Juarez – Las Pintas/Volcanic Province, Northeastern Baja California, Mexico: Preliminary Results: R Mendoza-Borunda, E Cañón-Tapia, F Suárez-Vidal, L Gradilla-Martínez

0800h  V11D-2330 POSTER Deep-sea ash layers reveal evidence of large Pleistocene and Holocene volcanic eruptions from Sumatra, Indonesia: J M Salisbury, A Kent, J R Patton, C Goldfinger, Y Surachman, U Udreikh

0800h  V11D-2331 POSTER Stratigraphic implications of early to late Pleistocene tephra layers in the three drill cores from the Uleung Basin, East Sea, Korea: J Chun, J Bahk, B Ryu

0800h  V11D-2332 POSTER Functional Stereology for 3D Particle Size Distributions from 2D Observations: a Practical Approach: A A Proussevitch, D L Sahagian, M Jutzeler

0800h  V11D-2333 POSTER Irregularity in Hawaiian Spatter Rampart Construction: May 24th, 1969 Mauna Ulu Eruption of Kilauea: C Parcheta, B F Houghton, D Swanson


0800h  V11D-2335 POSTER Eruption dynamics of the 7.7 ka Driftwood pumice-fall suggest mafic injection is a common eruption mechanism for Makushin Volcano, Alaska: A Lerner, P Crowley, R W Hazlett, K E Nikolaysen

0800h  V11D-2335A WITHDRAWN

0800h  V11D-2336 WITHDRAWN

V11E  Moscone West: 2020  Monday  0800h

Dynamics of Pyroclastic Density Currents I

Presiding: B J Andrews, UC Berkeley; J Dufek, Georgia Institute of Technology

0800h  V11E-01 POSTER Inversion of pyroclastic fall thickness data for the ultraplinian phase of the 1.8 ka Taupo eruption: input of field data into future models of ignimbrite erosion and emplacement. (Invited): R Carey, B F Houghton

0820h  V11E-02 POSTER Three-dimensional Moment Tensor, 3-D seismic and 3-D gravity data integrated to understand the 2008 eruption at Kilauea Volcano, Hawaii: (Invited): D Swanson

0840h  V11E-03 POSTER Pyroclastic density currents: insights from analogue laboratory experiments. (Invited): O Roche, S Montserrat, Y Niño, A Tamburrino
0900h  V11F-01 Mineral-melt partitioning of V and Sc at arcs: implications for mantle wedge oxygen fugacity: C M Jackson, E Cottrell, K A Kelley

0815h  V11F-02 Subduction Cycling of C-O-H Volatiles Constrained by Near-Solidus Phase Relations of Water-undersaturated, Carbonated Peridotite at 3 GPa: K Tsuno, R Dasgupta

0830h  V11F-03 Redox Conditions of Subduction Zone Magmas and Mantle (Invited): K A Kelley, E Cottrell

0845h  V11F-04 Mantle flow, melting, and the evolution of the sub-arc mantle in the Lau Basin - Tonga Arc system: P Hall, L B Cooper, T Plank

0900h  V11F-05 Wet melting along the Tonga Volcanic Arc: L B Cooper, T Plank, R J Arculus, E H Hauri, P Hall

0915h  V11F-06 Melt inclusions in sub-arc mantle xenoliths from the andesitic Avacha volcano (Kamchatka): A Bénard, D A Ionov, P Plechov

0930h  V11F-07 Melt production and mantle refertilisation above a subduction zone: Direct constraints from Antarctic Peninsula spinel-peridotite xenoliths: L C Gibson, S A Gibson, P T Leat

0945h  V11F-08 Fluid-Mobile Element Enrichment in the Mantle Wedge of Subduction Zones: A View From the Coast Range Ophiolite, California: J W Shervais, M M Jean

Union

012A Moscone South: 104 Monday 1020h Enabling and Encouraging Transparency in Science Data, and for Information Integration


1020h U12A-01 Persistent data archives, data publication, authorship and scientific recognition (Invited): J H Minster

1035h U12A-02 Enabling and Encouraging Transparency in Earth Science Data for Decision Making: S B Abbott

1105h U12A-03 Enabling New and More Transparent Science via DataONE—a Virtual Data Observation Network for Earth (Invited): W Michener

1120h U12A-04 Sharing Data in the Global Ocean Observing System (Invited): E J Lindstrom, A McCurdy, J Young, A S Fischer

1135h U12A-05 From Google Maps to Google Models (Invited): R V Moore

1150h U12A-06 An Information Integration Perspective on the Data Conservancy (Invited): S Choudhury

Atmospheric Sciences

12A Moscone West: 3002 Monday 1020h Climate Change, Air Quality, and Their Interrelations at the North American West Coast

Presiding: E Mccauely, California Air Resources Board; D D Parrish, NOAA/ESRL Chemical Sciences Division

1020h Introduction Eileen McCauley, David Parrish


1040h A12A-02 An Overview of the 2010 Carbonaceous Aerosol and Radiative Effects Study (CARES) Field Campaign: R A Zaveri, W J Shaw, D J Cziczo

1055h A12A-03 Overview of the chemistry and physics of the Los Angeles aerosol from CIRPAS Twin Otter deployment during CalNex 2010: S P Hersey, J S Craven, A Sorooshian, A R Metcalf, T L Latham, J J Lin, H T Duong, A Nenes, H H Jonsson, R C Flagan, J H Seinfeld, Title of Team: CalNex Twin Otter

1110h A12A-04 The CalNex Los Angeles Experiment: Overview and Early Results: J Stutz, J A De Gouw, J L Jimenez, J Surratt, J Seinfeld, T CalNex-LA Team, Title of Team: The CalNex-LA Team


1200h A12A-07 Aircraft and shipboard measurements of aerosol mixing state in southern and northern California during the Calnex 2010 and CARES field campaigns (Invited): K A Prather, J F Cahill, C J Gaston, K Suski, R A Zaveri, J Seinfeld

1215h An Overview of the 2010 Carbonaceous Aerosol and Radiative Effects Study (CARES) Field Campaign: R A Zaveri, W J Shaw, D J Cziczo

1230h A12B-01 Evaluating Climate Models with CLARREO (Invited): M G Mlynczak, D F Young, B A Wielicki, Y Huang, S S Leroy, D Feldman, W Collins

1245h A12B-02 Use of CloudSat observations of light rain for improving the character of model precipitation (Invited): G L Stephens, R Forbes

1300h A12B-03 Temperature and water vapor variance scaling from the Atmospheric Infrared Sounder, climate models, and aircraft data (Invited): B H Kahn, J Teixeira, E Fetzer, A Gettelman, S M Hristova-Veleva, X Huang, A Kochanski, S K Kruge, R Wood, M Zhao

1315h A12B-04 Understanding the surface and BL coupling of water, CO2 and cloud feedbacks. (Invited): A K Betts

1330h A12B-05 Advanced uncertainty evaluation of climate models and their future climate projections: H Järvinen, P Räsänen, M Laine, J Tamminen, P Ollinaho, A Oja, A Solonen, H Haario
1020h A12B-06 Quantifying the Relationship between Dynamical Cores and Physical Parameterizations by Geostatistical Methods: M S Yorgun, R B Rood

1144h A12B-07 The sensitivity of ISCCP optical depths to sub-pixel scale cloud field variability: Implications for climate model-ISCCP comparisons: G G Mace, S House, S Cooper, Q Min, S A Klein

1156h A12B-08 Evaluation of Low Clouds in the NCAR CAM3 and GFDL AM2 Using MISR and ISCCP Joint Histograms: B R Hillman, R Marchand, T F Ackerman

1208h A12B-09 Conditional averaging of the Cloud Radiative Effect as a higher order test of GCM radiation budgets: L Oreopoulos

A12C Moscone West: 3004 Monday 1020h Sources, Evolution, and Sinks of Organics in the Troposphere II

Presiding: C L Heald, Colorado State University; H Coe, The University of Manchester

1020h A12C-01 AGING OF DIESEL, WOOD BURNING, ALPHAPINEENE WITH UV-VIS LIGHT, ONLY VISIBLE LIGHT AND IN THE DARK (Invited): A S Prevot, R Chirico, M Heringa, P F DeCarlo, L Pfaffenberger, T Trittischer, J Dommen, E Weingartner, M Elsässer, J Schnelle-Kreis, R Zimmermann, U Baltensperger

1035h A12C-02 Photochemical aging of organic aerosol: Laboratory studies of the heterogeneous oxidation of oxidized organic species: J H Kroll, S H Kessler, T Nah, J D Smith, D L Che, A J Carrasquillo, J Jayne, D R Worsnop, K R Wilson

1050h A12C-03 Evolution of organic aerosol mass spectra upon heating: implications for OA phase and partitioning behavior: C D Cappa, K R Wilson, J D Smith, K Kolesar


1120h A12C-05 New constraints on the global secondary organic aerosol budget (Invited): D V Spracklen, J L Jimenez, K Carslaw, D R Worsnop, M J Evans, G Mann, Q Zhang, M Canagaratna, J D Allan, H Coe, G McFiggans, A Rap, P Forster

1135h A12C-06 The Influence of Semi-Volatile and Reactive Primary Emissions on the Abundance and Properties of Global Organic Aerosol: S Jathar, S Farina, P J Adams, A L Robinson, Title of Team: Center for Atmospheric Particle Studies

1150h A12C-07 Modeling the Multiday Evolution and Aging of Secondary Organic Aerosol During MILAGRO 2006: K Dzepina, C D Cappa, R Volkamer, S Madronich, P F DeCarlo, R A Zaveri, J L Jimenez


A12D Moscone West: 3006 Monday 1020h Three-Dimensional Cloud, Trace Gas, and Aerosol Retrievals I

Presiding: J Porter; D Huang, Brookhaven National Laboratory; P Kollia, McGill University; A B Davis, Jet Propulsion Laboratory

1020h A12D-01 Four dimensional lidar imaging of the atmosphere (Invited): E Eloranta

1035h A12D-02 A 3D lidar for atmospheric and pollution measurements: J B Nee, C Chiang, H Liaw

1050h A12D-03 Vertical Distributions of Cloud-Top Height Observed by MISR on the Terra Satellite, Including Thin Cirrus (Invited): R Davies, A Prasad


1120h A12D-05 3-D Aerosol Plume Tomography from MISR Observations: M J Garay, D J Diner, J V Martinchik, A B Davis

1135h A12D-06 Scanning Microwave Radiometry for Investigating Water Vapor and Cloud Distributions (Invited): S Crenew, S Kneifel, U Löhnert, J Schwein


1205h A12D-08 3D Scanning Cloud Radar Observations at Azores during the ARM AMF field campaign: Reconstruction and study of 3D cloud structures and properties: K Bowley, I Jo, A Tatareovic, P Kollia

Atmospheric and Space Electricity

AE12A Moscone South: 103 Monday 1020h Franklin Lecture (Workcast) (joint with SA, A)

Presiding: S A Cummer, Duke University

1020h AE12A-01 Twenty-five Years of New Discoveries in Atmospheric and Space Electricity (Invited): D D Sentman

Biogeochemistry

B12A Moscone West: 2002 Monday 1020h Dissolved Organic Matter Dynamics in Terrestrial and Aquatic Ecosystems II (joint with H)

Presiding: D Scott, Virginia Tech; S Kaushal, University of Maryland, College Park

1020h B12A-01 Riverine export of dissolved organic matter from an old, infertile landscape (Invited): J B Fellman, P F Grierson, P Raymond, R Spencer, N E Petit

1040h B12A-02 Spatial and Temporal Patterns of Nitrogen Transport in a Subtropical Urban Coastal Watershed: G Toor, K Banger, P Inglett, C Stanley

1055h B12A-03 Comparison of dissolved inorganic and organic carbon export in the rivers of tropical volcanic island; example from Guadeloupe, French West Indies: E Lloret, C Dessert, J Gaillardet, P Alberic, O Crispi, C Chaduteau, M F Benedetti


1125h B12A-05 DOM as a potential tracer for in-stream processes in small mountain catchments (JRB-SCM Critical Zone Observatory): J N Perdrial, J C McIntosh, P D Brooks, J Chorover

1140h B12A-06 Spatial and Temporal Variations of Dissolved Organic Matter in Florida Coastal Everglades: M Chen, N Maie, R Jaffe

1155h B12A-07 Fate of terrestrial DOC within stream biofilm communities: a stable isotope approach (Invited): T N Wiegner, L Kaplan, S E Ziegler, R H Findlay

1215h Concluding Discussion Open discussion and questions
**B12B  Moscone West: 2006  Monday 1020h**

**Stable Isotope Fluxes in Carbon and Water Cycles of Terrestrial Ecosystems I (joint with A, H, V)**

**Presiding:** M J Zeeman, Oregon State University; A Knobh, Chair of Bioclimatology; K P Tu, UC Berkeley

1020h B12B-01 Seasonal variations of the amount of carbon allocated to respiration after *in situ* 14CO2 pulse labelling of trees *(Invited):* D EPRon, M Dannoura, J Ngao, C Plain, D Berrelver, C Chipeaux, D Gerant, A Bosc, P Maillard, D Loustaunau, C Damesin, Title of Team: CATS Project (ANR-07-BLAN-0109)


1050h B12B-03 Temporal dynamics of 14CO2 and C18O18O near the ground and above a temperate deciduous forest: E A Santos, C Wagner-Riddle, X Lee, J S Warland, S E Brown, R M Staebler, P A Bartlett, K Kim


1135h B12B-06 Deuterium excess reveals diurnal sources of water vapor in forest air *(Invited):* C Lai


B12C  Moscone West: 2008  Monday 1020h

**Urban Areas and Global Change II (joint with A, GC, H, PA)**

**Presiding:** G Churkina, Leibniz Centre for Agricultural Landscape Research; K A Hibbard, NCAR

1020h B12C-01 Carbon emissions from cities and urban regions at multiple levels *(Invited):* S Dhakal

1040h B12C-02 How much urban population matters? Exploring the drivers of carbon emissions in 84 cities: P Romero Lankao

1100h B12C-03 Interannual variability of net ecosystem CO2 exchange in a suburban landscape: J McFadden, R Hiller

1120h B12C-04 Terrestrial carbon dynamics across gradients of urbanization: L Hutyra, S Raciti, P Rao, B Yoon, A L Dunn, N Phillips

1140h B12C-05 Greenhouse Gas Emissions From Urban Wastewater Treatment Plants: N C Sturchio, F Bellucci, M A Gonzalez-Meler, L Heraty, J A Kozak

1200h B12C-06 Interactive effects of cations on multi-decade trends in sulfate and acid deposition in North America and Europe: a new look at an old problem: K Lajtha, J A Jones

**Cryosphere**

C12A  Moscone West: 3010  Monday 1020h

**Characterization and Validation of Cold Season Land Surface and Hydrologic Properties Using Remote Sensing, Modeling, and Assimilation (joint with H)**

**Presiding:** D G Marks, USDA ARS NWRC; K C McDonald, Jet Propulsion Lab; S A Margulis, UCLA; A H Winstal, USDA-ARS NWRC; E Podest, JPL; M S Seyfried, USDA-ARS

1020h C12A-01 Enhancement of absorption of visible light in forest canopies caused by snowy backgrounds: B Pinty, J Widlowski, I Andredakis, M M Verstraete, O Arino, M Clerici, T Kaminiski, M Taberner

1040h C12A-02 Intercomparison of MODIS snow cover retrievals and their utility in hydrological applications *(Invited):* T H Painter, K E Ritterg, M Clark, J Dozier, N P Molotch

1100h C12A-03 Heterogeneity of Snow Water Equivalent Derived from MODIS Imagery and the Isobal Snowmelt Model *(Invited):* A Kahl, D G Marks, A H Winstal, K N Musselman, J Dozier

1120h C12A-04 Validation of a Bayesian reconstruction approach to estimate snow water equivalent via assimilation of MODIS fractional SCA data: M Girotto, S A Margulis, M T Durand, N P Molotch

1140h C12A-05 A Bayesian approach to estimating snow depth from passive microwave measurements using a multi-layer model and minimal prior information *(Invited):* M T Durand, D Liu

1200h C12A-06 Physically based modelling of alpine snow hydrology in the Canadian Rockies *(Invited):* J W Pomeroy, C DeBeer, M K MacDonald, X Fang, C Hopkinson

C12B  Moscone West: 3011  Monday 1020h

**Interactions of Ice Sheets and Glaciers With the Ocean I (joint with OS)**

**Presiding:** H A Fricker, Scripps Institution of Oceanography; I Padman, Earth & Space Research; K M Brunt, Scripps Institution of Oceanography

1020h C12B-01 Interactions of the Greenland Petermann Glacier with the ocean: An initial perspective *(Invited):* K K Falkner, H L Johnson, H Melling, A Muenchow, R M Samelson, Title of Team: Friends of Petermann

1035h C12B-02 Investigating role of ice-ocean interaction on glacier dynamic: Results from numerical modeling applied to Petermann Glacier: F M Nick, C J Van der Veen, A Vieli, F Pattyn, A Hubbard, J E Box

1050h C12B-03 Greenland’s Biggest Losers: J E Box, A Hubbard, I M Howat, B M Csaitho, D T Decker, R Bates, S M Tulaczyk


1120h C12B-05 The response of the calving front of Helheim Glacier to significant warming of fjord waters, 2009-2010 *(Invited):* T Murray, A J Luckman, K Scharer, F Cottier, S L Bevan, S Dye, A Goldsack, A L Hughes, T D James, N Selmes, H Valdimarsson

1135h C12B-06 Observations of subtidal circulation variability in Sermilik Fjord, Greenland, and its impact on ice-ocean interactions: D A Sutherland, L A Stearn, G S Hamilton, F Straneo

1150h C12B-07 Submarine melting at the grounding line of Greenland’s tidewater glaciers: Observations and Implications *(Invited):* E J Rignot, Y Xu, M N Koppes, D Menemenlis, M Schodlok, G Spreen

All information is current as of November 12, 2010
Education and Human Resources

ED12A Moscone South: 102 Monday 1020h
The Development of Geoscientists: From Novice to Professional II

Presiding: L M Gonzales, American Geological Institute; D W Mogk, Montana State University; S Rahman, YES Network; K A Kastens, Lamont-Doherty Earth Observatory

1020h ED12A-01 Turning a Student into a Researcher: Challenges and Strategies of Teaching Research Methods to Environmental Studies and Earth Science Juniors: J E Dmochowski

1035h ED12A-02 Summer Synthesis Institutes: A Novel Approach for Transformative Research and Student Career Development: J Wilson, C M Hermans

1050h ED12A-03 Preparing Students from a 21st Century Demographic for the Geoscience Workforce: D I Doser, A A Velasco

1105h ED12A-04 Launching an Academic Career: On the Cutting Edge Resources for Geoscience Graduate Students, Post-doctoral Fellows, and Early Career Faculty: R M Richardson, C J Ormand, H Macdonald, R W Dunbar, R M Allen-King, C A Manduca


1135h ED12A-06 The Association of Polar Early Career Scientists (APECS): A Model for the Professional Development of Scientists (Invited): J L Baeseman, Title of Team: APECS Leadership Team

1150h ED12A-07 WITHDRAWN

1205h ED12A-08 Earth Stewardship Science: International Research Networks based in Africa (Invited): S M Gaines

Geodesy

G12A Moscone West: 2003 Monday 1020h
Source Imaging and Rapid Assessment of Earthquakes Using Interferometric Synthetic Aperture Radar and Other Geodetic Data II (joint with S, IN, T, NS, NH)

Presiding: S Jonsson, KAUST; S E Owen, Jet Propulsion Laboratory; S Yun, JPL

1020h G12A-01 Joint coseismic and postseismic kinematic slip inversions in a Bayesian framework (Invited): K M Johnson, J Fukuda, J Sun

1035h G12A-02 Bayesian kinematic finite fault source models (Invited): S E Minson, M Simons, J L Beck

1050h G12A-03 InSAR time series analysis of the 2006 slow slip event on the Guerrero Subduction Zone, Mexico: D P Bekaert, A J Hooper, E Pathier, S Yun

1105h G12A-04 The 2010 Mw 6.9 Yushu (Qinghai, China) earthquake: constraints from InSAR, bodywave modeling and satellite imagery: B E Parsons, Z Li, J R Elliott, I Barisin, W Feng, J A Jackson, X Song, R J Walters, P Zhang


1135h G12A-06 Inference of co-seismic slip distribution via a joint inversion of GPS and aftershock data sets: The 2004 Parkfield example: A Ziv

1150h G12A-07 Mastering slip distributions by minimizing model parameterization errors: A case study with the 2010 Sierra El Mayor, Mexico earthquake: R B Lohman, W D Barnhart

Decadal-Scale Arctic Climate Variability: Observations and Modeling I (joint with A, C)

Presiding: G B Lesins, P Chylek, LANL; J Wang, NOAA Great Lakes Environmental Research Laboratory

1020h GC12B-01 Variations and trends in global and Arctic surface temperature and forecasts of global temperature a year ahead, 2000-2010. (Invited): C K Folland, J Kennedy, A Colman, J Knight, P Stott, D Smith, D E Parker


1050h GC12B-03 Hot Arctic-Cold Continents: Hemispheric impacts of Arctic change (Invited): J E Overland, K R Wood, M Wang

1105h GC12B-04 Long-term variability of Arctic climate: Trends and multidecadal fluctuations (Invited): I Polyakov, R V Bekryaev, V A Alexeev
1120h  GC12B-05 Intrinsic Versus Forced Variation in Coupled Climate Model Simulations of the Arctic Temperature during the 20th Century: M Wang, J E Overland, V Kattsov, J E Walsh, X Zhang

1122h  GC12B-06 Latitudinal distribution of the recent Arctic warming: P Chylek, G B Lesmins, M Wang

1144h  GC12B-07 Trajectories of arctic sea ice under anthropogenic warming scenarios: J Zhang, M Steele, A J Schweiger

1156h  GC12B-08 Distribution of the Northern Water Mass Formation completing the Atlantic Meridional Overturning Circulation: H R. Langehaug, P B Rhines, T Eldevik, C M Bitz

1208h  GC12B-09 Decadal variability of Arctic climate: cyclonic and anticyclonic circulation regimes: A Y Proshutinsky, M A Johnson

Hydrology

H12A Moscone West: 3018 Monday 1020h
Geologic CO2 Sequestration: Capillary and Solubility Trapping of Supercritical CO2 I

Presiding: R L Detwiler, University of California, Irvine; D Wildenschild, Oregon State University


1035h  H12A-02 The impact of local-scale processes on solubility and capillary trapping of injected CO2: S E Gasda, J M Nordbotten, M A Celia

1050h  H12A-03 Observations, Measurements, and Simulations of Convectively Enhanced Carbon Dioxide Dissolution (Invited): T J Kneafsey, K Pruess

1110h  H12A-04 Post-Injection Motion of CO2: Interplay of Saturation Gradients and Formation Heterogeneity: E Saadatpoor, S L Bryant

1125h  H12A-05 The Role of Fault Zones in Capillary and Dissolution Trapping of CO2 in the Southern San Joaquin Basin, California: Q Zhou, J T Birkholzer

1140h  H12A-06 Spreading and dissolution of CO2 in horizontal aquifers: theory and experiments: C W MacMinn, J A Neufeld, M A Hesse, H E Huppert

1155h  H12A-07 Geologic sequestration of supercritical carbon dioxide: An experimental study of capillary trapping and relative permeability (Invited): M Piri, M Akbarabadi

H12B Moscone West: 3014 Monday 1020h
Hydrogeophysics: Advances in Measurement, Monitoring, and Modeling of Hydrological Processes II (joint with NS)

Presiding: A Pidlisecky, University of Calgary; B Dafflon, Center for Geophysical Investigation of the Shallow Subsurface

1020h  H12B-01 Limiting aspects of using geophysical time-lapse measurements for contaminant site monitoring: H K French, E Bloem

1035h  H12B-02 Automated permanent resistivity monitoring of charge and discharge processes of subsurface aquifer at the Membach station, Belgium: J Deceuster, O Kaufmann, M J Van Camp, T Lecocq

1050h  H12B-03 SP Monitoring of Intermittent Flow Through Covered-Karst Sinkholes: P B Bumpus, S E Kruse

1105h  H12B-04 Geoelectrical investigation of the freshwater-saltwater interface in coastal Benin, West Africa: D McInnis, S E Silliman

1120h  H12B-05 Gravimetric response of water table fluctuations in the Sahelian Diffa site (East Niger): local effects including poroelasticity: B Hector, P Genthon, M Le Coz, J Hinderer, K Chalikakis, M Descloires

1135h  H12B-06 Experiments and numerical modeling of monitoring the water irrigation by time-lapse electrical resistivity tomography: Y Zhang, X Shi, L Li, T Liu, J Yang

1150h  H12B-07 Inversion of Guided Waves in GPR Data for 2D Permittivity and Conductivity Profiles in the Alaskan Arctic: K T Decker, M H Haney, J H Bradford

1205h  H12B-08 EM Sounding Characterization of Soil Environment toward Estimation of Potential Pollutant Load from Non-point Sources: Y Mori, J Ide, H Somura, T Morisawa

H12C Moscone West: 3016 Monday 1020h
Precipitation Measurement, Validation, and Applications: From Watershed to Global Scales II (joint with A)

Presiding: A Y Hou, NASA Goddard SFC; S A Braun, NASA/GSFC; Y Hong, University of Oklahoma; R S Teegavarapu, Florida Atlantic University

1020h  H12C-01 An experimental flood monitoring/forecast system for large floods using satellite precipitation (Invited): E F Wood, M Pan, J Sheffield

1035h  H12C-02 Continuous Forecasting and Evaluation of Derived Z-R Relationships in a Sparse Rain Gauge Network Using NEXRAD: S Rendon, B E Vieux, C S Pathak


1105h  H12C-04 THE NASA DUAL-FREQUENCY DUAL-POLARIZED DOPPLER RADAR (D3R) SYSTEM FOR GPM GROUND VALIDATION: C V Chandra, M Schwaller, M Vega, K V Misra, J Carswell, C Nguyen, W A Petersen

1120h  H12C-05 Creating synergy between ground and space-based precipitation measurements: JJ Gourley, Y Hong, W A Petersen, K Howard, Z Flamig, Y Wen

1135h  H12C-06 The NOAA-Hydrometeorology Testbed (HMT): A Vehicle for Collaborative Efforts on Hydrometeorological Research and Ground Validation in the GPM Era: T Schneider, R Cifelli, Title of Team: NOAA HMT

1150h  H12C-07 Preparation for GPM: Development of a Near Real-time High Resolution Multi-sensor Precipitation Estimation Product Based on Analyzing the Existing Precipitation Estimation Techniques: A Behrangi, S Sorooshian, K Hsu, T J Bellerby, G J Huffman, B Rajagopalan

1205h  H12C-08 Precipitation distribution along the Himalayan front, comparison of remotely sensed products: C Andermann, S Bonnet, R Glauguen

H12D Moscone West: 3020 Monday 1020h
Science Informing Decisions in the Colorado River Basin I (joint with GC, PP, PA)

Presiding: J R Prairie, Univ Colorado; C A Woodhouse, University of Arizona; A W Wood, NOAA/NWS; D W Pierce, Scripps Institution of Oceanography

1020h  H12D-01 Characterizing uncertainties in water availability in the Colorado River system using response surfaces: K Morino, R H Bark

1035h  H12D-02 Colorado River Water Availability Assessment Under Climate Variability: A J Yarberry, B Rajagopalan, J R Prairie
Ocean Sciences

OS12A Moscone West: 3009 Monday 1020h

Decision Support Systems for Coastal and Marine Resource Management I (joint with B, H, NH, PA)

Presiding: F E Muller-Karger, University of South Florida; C Eakin, National Oceanic and Atmospheric Administration; L S Guild, NASA Ames Research Center; M A Roffer, Roffer’s Ocean Fishing Forecasting Service, Inc.

1020h OS12A-01 Utilizing Ecosystem Information to Improve Decision Support Systems for Marine Fisheries (Invited): F Chavez, F Chai, Y Chao, B Wells, Title of Team: SAFARI team

1035h OS12A-02 Gulf of Mexico Ecological Forecasting - Atlantic Bluefin Tuna Population Assessment and Management using Synthetic Aperture Radar (SAR) Data: K Laygo, J Jones, J Huerta, B Holt

1050h OS12A-03 Integrated Modeling for the Assessment of Ecological Impacts of Sea Level Rise: S C Hagen, G Lewis, R Bartel, B Batten, W Huang, J Morris, D N Slinn, J Sparks, L Walters, D Wang, J Weishampel, G Yeh


1120h OS12A-05 A Decision Support System for Ecosystem-Based Management of Tropical Coral Reef Environments: F E Muller-Karger, C Eakin, L S Guild, R R Nemani, C Hu, S E Lyndes, J Li, M Vega-Rodriguez, Title of Team: Coral Reef Watch Decision Support System Team

1135h OS12A-06 Open Ocean Assessments for Management in the GEF Transboundary Waters Assessment Project (TWAP): A S Fischer, K D Alverson

1150h OS13A-1216 MarineMap: Web-Based Technology for Coastal and Marine Spatial Planning: W Mcclintock, Z Ferdana, M Merrifield, C Steinback, Title of Team: The MarineMap Consortium

1205h OS12A-08 An Integrated Gulf Coast Monitoring System Using Field, Remote Sensing and Model Results (Invited): E J D’Sa, D S Ko, G Stone, N D Walker

Natural Hazards

NH12A Moscone West: 3022 Monday 1020h

Geophysical Hazards and Social/Ecological Vulnerabilities I (joint with PA, OS, GC)

Presiding: B G McAdoo, Vassar College

1020h NH12A-01 Managing uncertainties of hazard risks – adaptation strategies to sustain human security: P Liotta, C D Klose

1035h NH12A-02 Revision of the IOC/ITST Post-Tsunami Field Guide (Invited): L A Dengler, Title of Team: IOC/ITST Core Working Group on the Post-Tsunami Field Guide

1050h NH12A-03 The German Indonesian Tsunami Early Warning System (GITEWS) - Past, Present and Future: A Rudloff, J Lauterjung, Title of Team: & GITEWS Project Team (AWI, BGR, DLR, GFZ, GKSS, GTZ, IFM-Geomar, KDM, UNU-EHS)

1105h NH12A-04 Spatial Analysis of Earthquake Fatalities in the Middle East, 1970-2008: First Results: M Khaleghy Rad, T J Fulp

1120h NH12A-05 Environmental and climate security: improving scenario methodologies for science and risk assessment: C M Briggs, H Carlsen

1135h NH12A-06 Three factors to enlarge tsunami disaster in Indonesia after the 2004 Indian Ocean tsunami: M Sugimoto, K Satake


Planetary Sciences

P12A  Moscone West: 2004  Monday 1020h
Planetary Environments and Life: What Do We Know? How Can We Learn from Analogs? II (joint with B, EP)

Presiding: J L Eigenbrode, NASA Goddard Space Flight Cent; M A Meyer, NASA HQ; V Hipkin, Canadian Space Agency


1035h  P12A-02  Saline Playas on Qinghai-Tibet Plateau as Mars Analog for the Formation-Preservation of Hydrous Salts and Biosignatures: A Wang, M Zheng, F Kong, P Sobron, D P Mayer

1050h  P12A-03  Constraining carbon sources and cycling of endolithic microbial communities in the Atacama Desert: L A Ziólkowski, G F Slater, A Davila, J Wierzchos

1105h  P12A-04  Reanalysis of the Viking results suggests percholate and organics at mid-latitudes on Mars: R Navarro-Gonzalez, E Vargas, J de la Rosa, A C Raga, C McKay

1120h  P12A-05  Microbial Perchlorate Reduction in the Unsaturated Zone of an Israeli Mars Analog Site: H Gali, Z Ronen, N Weissbrod


1150h  P12A-07  Mineralized iron oxidizing bacteria from hydrothermal vents: targeting biosignatures on Mars: R J Leveille

1205h  P12A-08  Basaltic caves at Craters of the Moon National Monument and Preserve as analogs for Mars: N W Himan, C D Richardson, L McHenry, J R Scott

Paleoclimatology

PP12B  Moscone West: 2005  Monday 1020h
Pliocene Climate I

Presiding: H J Dowsett, USGS; M M Robinson, US Geological Survey; M Williams, University of Leicester


1035h  PP12B-02  Mid-Pliocene to Early Quaternary Evolution of the Beringian Arctic from Deep Drilling at Lake El'gygytgyn, Chukotka: initial results (Invited): J Brigham-Grette, M Mellès, P Miyuk, A Andreev, J Snyder, W Wennrich, Title of Team: Lake El'gygytgyn Scientific Party

1050h  PP12B-03  Sediment Accumulation on Eirik Drift (Northern North Atlantic) during the Early Pliocene: Implications for a Strong, Stable Deep-Water Current System: J D Wright, G Mountain

1105h  PP12B-04  Late Pliocene cooling, sea ice and the establishment of a Ross Sea polynya: Geochemical and diatom assemblage constraints from McMurdo Sound, Antarctica: C Rieselsman, R B Dunbar, C M Sjønneskog, D A Mucciaroni, D Winter, M Olny, E Tuzzi, R M Mckay, R P Scherer

1120h  PP12B-05  The Pliocene record around the Prydz Bay margin: review and questions (Invited): P G Quilty


1150h  PP12B-07  Why did Africa became dry in the mid-Pliocene? (Invited): P B DeMenocal, S J Feakins, C Cleroux, J A Arbuszewski

1205h  PP12B-08  Pliocene Paleoenvironments of the Awash Valley, Ethiopia: The Isotope Record of Tooth Enamel and its Relevance to the Pliocene Paleoclimate of Northeastern Africa: Z K Bedaso, J G Wynn, Z Alemseged

Study of Earth's Deep Interior

DI12A  Moscone West: 3024  Monday 1020h
Observations and Interpretations of Lower Mantle, Low Shear Velocity Provinces I (joint with S, MR)

Presiding: C T Houser, University of California Santa Cruz; S Tanaka, JAMSTEC; M Murakami, Tohoku University

1020h  DI12A-01  Geometries, structural features and velocity structures of the Pacific Anomaly and comparison with the African Anomaly (Invited): Y He, L Wen

1035h  DI12A-02  Phase transitions in pyrolitic mantle and MORB materials and their electrical conductivities at lowermost mantle conditions (Invited): K Ohta, K Hirose, K Shimizu, T Lay, Y Ohishi

1050h  DI12A-03  The dynamics and thermo-chemical structure of LLVSP: observations and models (Invited): F Deschamps, P J Tackley, J Trampert

All information is current as of November 12, 2010
Tremors and Slow Slip Events from Acoustic and Optical Monitoring
E F Larose, M Campillo

from Laboratory Experiments:
P Le Bas, E G Daub, C Marone
P A Johnson

C Aiken
A Thomas

(Invited) - Effects of Fe on the thermodynamic properties of MgSiO₃ perovskite and post-perovskite (Invited): A Metsue, T Tsuchiya

Seismology


Presiding: D R Shelly, U.S. Geological Survey; R Burgmann, Univ California Berkeley

1020h S12A-01 Probing deformation at depth using passive seismology: case of the Mexico 2006 slow slip event: D N Rivet, M Campillo, N M Shapiro, V M Cruz-Atienza, M Radiguet, N Cotte, V Kostoglodov


1050h S12A-03 Variations in tremor activity and implications for lower crustal deformation along the central San Andreas Fault (Invited): D R Shelly

1105h S12A-04 Tidal triggering of LFEs near Parkfield, CA: A Thomas, R Burgmann, D R Shelly

1120h S12A-05 Tremor evidence for dynamically triggered creep events on the deep San Andreas Fault: Z Peng, D R Shelly, D P Hill, C Aiken

1135h S12A-06 Nonlinear Dynamical Triggering of Slow-Slip: P A Johnson, M W Knuth, B M Kaproth, B M Carpenter, R A Guyer, P Le Bas, E G Daub, C Marone

1150h S12A-07 The Physics of Tremors and Slow Slip: Insights from Laboratory Experiments: C Voisin, D Zigon, F Renard, E F Larose, M Campillo

1205h S12A-08 Fault Slip Embedded in Creep: Insight into Tectonic Tremors and Slow Slip Events from Acoustic and Optical Monitoring of Fractures: J E Elkhoury, O Lengline, J P Ampuero, J Schmittbuhl
**T12C** Moscone West: 2011 **Monday** 1020h
The Wilson Cycle Revisited: From Microplates and Mobile Terranes to Supercontinent Dispersals II (joint with G, GP, S, V)


1020h **T12C-01** Tectonic Inheritance at Transform Faults in Successive Wilson Cycles (Invited): W A Thomas

1040h **T12C-02** Reconstructing the Mid-Miocene to Recent evolution of the Woodlark Rift: S Baldwin, N A Zirakparvar, J P Catalano, P G Fitzgerald, L E Webb, T Little

1055h **T12C-03** Collision to subduction transitions play a fundamental role in the kinematics of marginal terranes: contemporary examples from the western Pacific (Invited): L M Wallace, S M Ellis, P Mann


1130h **T12C-05** Origin of the Siletz Terrane and its Implications for the 3D Structure of the Cascadia Forearc: P A McCrory, D S Wilson

1145h **T12C-06** Magmatic and kinematic history of Siletzia, a Paleoecne-Eoecene accreted oceanic terrane in the Oregon Coast Range: E Wells, D Bukry, J L Wooden, R M Friedman, P J Haeussler

1200h **T12C-07** Seismically Imaged Relict Slab from the 55 Ma Siletzia Accretion to Northwest USA: End of the Laramide and beginning of the Ignimbrite Flare-up (Invited): E Humphreys, B Schmandt

---

**Volcanology, Geochemistry, and Petrology**

**V12A** Moscone West: 2020 **Monday** 1020h
Building the Volcanic Oceanic Crust II (joint with OS, T)

*Presiding:* R C Searle, Durham University; K L Achenbach, Durham University

1020h **V12A-01** Introduction Roger Searle and Bramley Murton


1039h **V12A-03** Episode of magma injection 2007-2008 in Iceland’s lower crust: constraints from GPS and InSAR: B G Ofeigsson, A Hooper, F Sigmundsson, B Lund, P Einarsrson, H Geirsson, E C Sturkell


1108h **V12A-05** Modes of Accretion at Slower Spreading Ocean Ridges: H J Dick

1122h **V12A-06** Seismic images of the axial melt lens, Moho and deep penetrating faults at the sedimented Andaman Sea Spreading Centre (Invited): S C Singh, J Jardine, J Solar-Lam, A Williams-Jones, P J Haeussler

1137h **V12A-07** Constructing mid-ocean ridge flat-topped volcanoes: First evidence from AUV mapping in the Woodlark Basin: C W Devey, S Petersen, M Hannington, I Klaucke, K S Lackschewitz, J Mahlke, M Rothenbeck, J Stickelus

1151h **V12A-08** U-series data of recent volcanism at an Axial Volcanic Ridge (Invited): P W Van Calsteren, L E Thomas, Title of Team: JC024 shipboard party

1206h **V12A-09** Complex relationships between surficial geology, rock geochemistry and subsurface melt bodies at the 9N Overlapping Spreading Center, East Pacific Rise: E M Klein, M R Perfit, V Wanless, S M White, J A Nunnery, C L Waters, K W Sims

---

**Monday P.M.**

**U12B** Marriott:Yerba Buena Ballroom **Monday** 1230h
Science and Policy Union Lecture

*Presiding:* C L Johnson, University of British Columbia, Vancouver

1230h **U12B-01** Scientists, Science Advice, and Science Policy in the Obama Administration (Invited): J P Holdren

**U13A** Moscone South: Poster Hall **Monday** 1340h
The 12 January 2010 M7.0 Haiti Earthquake II Posters

*Presiding:* A Lerner-Lam, Lamont-Doherty Earth Observatory; R Momplaisir, Universite d’Etat d’Haiti

1340h **U13A-0001** POSTER Historical perspective on seismic hazard in Hispaniola and the NE Caribbean: U S Ten Brink, W Bakun, C H Flores

1340h **U13A-0002** POSTER Significant earthquakes on the Enriquillo fault system, Hispaniola, 1500-2010: W Bakun, C H Flores, U S Ten Brink
1340h  U13A-0003 POSTER Complex faulting during the Haiti earthquake inferred from geodesy: F Amelung, S Jonsson, E Calais, F Greene, S Hong, T H Dixon, S Wdowinski


1340h  U13A-0008 POSTER Structure of the Aftershock Zone of the Mw 7.0 Haiti Earthquake from the USGS-BME Portable Instrument Deployment: J Altidor, A Dieuseul, J G Armbruster, H Benz, C Dietel, W L Ellsworth, D Given, S E Hough, D Ketchum, J H Luergert, J Z Maharry, M E Meremonte, D E McNamara, B S Mildor, W D Mooney, R Sell


1340h  U13A-0011 POSTER Localized Damage Associated with Topographic Amplification During the 12 January 2010 Haiti Earthquake: S E Hough, A Yong, J Altidor, A Dieuseul, D D Given, B S Mildor

1340h  U13A-0012 POSTER TERRAIN CLASSIFICATION OF ASTER gDEM FOR SEISMIC MICROZONATION OF PORT-AU-PRINCE, HAITI, USING PIXEL- AND OBJECT-BASED ANALYTICAL METHODS: A Yong, S E Hough, B R Cox, E M Rathje, J Bachhuber, D Hulslander, L Christiansen, M Abrams

1340h  U13A-0013 POSTER Tsunamis triggered by the 12 January 2010 Earthquake in Haiti: H M Fritz, J V Hillaire, E Molliere, F Mohammed, Y Wei

1340h  U13A-0014 POSTER Solution notches, earthquakes, and sea level, Haiti: C R Schiffman, B S Mildor, R G Bilham


1340h  U13A-0016 POSTER The 12 Jan 2010, Haiti earthquake affected by aseismic fault creep: M Shirzaei, T R Walter

1340h  U13A-0017 POSTER Variation in dip of the Caribbean Plate along the Muertos Trough: X Xu, K M Keranen, E Asencio, J C Chang, G Keller

1340h  U13A-0018 POSTER Deformation partitioning at the junction between the Enriquillo fault and the Trans-Haitian belt: S Leroy, M Pubellier, N Ellouz, R Mombrais, D Boisson, H Amilcar

1340h  U13A-0019 POSTER Gravity Modeling of the Cerro Goden fault zone, NW Puerto Rico: G A Mattei, K M Keranen, E Asencio

1340h  U13A-0020 POSTER Global Seismic Hazard Assessment Program Maps Are Misleading: V G Kossobokov, A K Nekrasova

1340h  U13A-0021 POSTER Width of late Quaternary deformation of the Enriquillo-Plaintain Garden strike-slip fault zone in Haiti and the Jamaica Passage and implications for accumulated stress: P Mann, J L Bachhuber

U13B  Moscone South: 104  Monday 1350h

Extreme Natural Events: Modeling, Prediction, and Mitigation II

Presiding: A Ismail-Zadeh, Karlsruhe Institute of Technology; I Zaliapin, University of Nevada

1350h  Alik Ismail-Zadeh Introduction: Extreme Natural Hazards and Societal Implication - ENHANS

1355h  U13B-01 Predicting and mitigating impacts of extreme space weather (Invited): D N Baker


1431h  U13B-03 2010: Why is it flooding everywhere this year? Coincidence or a predictable climate phenomenon, and how can we respond? (Invited): U Lall


1504h  U13B-05 Extreme Volcanic Eruptions: return periods, impact and implications (Invited): R S Sparks

1522h  U13B-06 Connecting Capital and Catastrophe in a Modeled World - How re/insurance and public science interact to manage risk for societal benefit: R Douglas

Atmospheric Sciences

A13A  Moscone South: Poster Hall  Monday 1340h

Atmospheric Sciences General Contributions: Clouds and Aerosol-Cloud Interactions II Posters

Presiding: S Menon, Lawrence Berkeley national Laboratory; J D Small, Jet Propulsion Laboratory

1340h  A13A-0175 POSTER Reconstruction of the solution of the coagulation equation in two components from its orthogonal projections: an application to the physics of clouds: R Alvarez, J Guerrero, L Alfonso

1340h  A13A-0176 POSTER The effect of partial cloudiness on quantifying angular biases in GOES cloud property retrievals: R Boeke, P Minnis, P W Heck, R Palikonda, R F Arduini

1340h  A13A-0177 POSTER External Mixed Aerosols to Internally Mixed Aerosols: A Numerical Study of Cloud Processing Using a Bin Aerosol-microphysics Scheme Coupled With WRF: L Xue

1340h  A13A-0178 POSTER Comparison of CERES-MODIS and CloudSat/CALIPSO cloud properties with DOE ARM AMF measurements at Shouxian, China: Y Qiu, X Dong, B Xi, P Minnis

1340h  A13A-0180 POSTER Can in situ measurements be used to estimate the age of shallow cumulus clouds?: M Witte, P Y Chuang

1340h  A13A-0181 POSTER Numerical study of sea fogs off the west coast of the Korean Peninsula using a Single Column Model coupled with WRF: C Kim, S S Yum

1340h  A13A-0182 POSTER Examination of Cloud Climatologies Generated from a CALIOP Data Fused Cloud Mask: B Getzewich, D M Winker

1340h  A13A-0183 POSTER Assimilation of clear sky water vapor information from AIRS data: D Merkova

1340h  A13A-0184 POSTER Effect of land surface interactions on cloud convection processes – A mesoscale modeling study using the ARM CLASIC-2007 field observations: U Charusambot, D Niyogi, M A Miller

1340h  A13A-0185 POSTER A Case Study of a Double-Moment Cloud Microphysics Parameterization in Cloud Resolving Model Simulations: Z Liu, T P Ackerman, H Morrison

1340h  A13A-0186 POSTER Introduction of a Day/Night, Object-Based Quantitative Fog/Low Cloud Detection and Thickness Algorithm for GOES-R: C G Calver, M J Pavolonis

1340h  A13A-0187 POSTER Raindrop Size Distribution and Z-R Relation during the Black Rainstorm Warning in Hong Kong: S Lau, L S Chiu, Y Zhang, C Cheng

1340h  A13A-0188 POSTER Measurements and modeling of solar spectral absorption by liquid water clouds: B C Kindel, P Pilewskie, S Schmidt, O Coddington

1340h  A13A-0189 WITHDRAWN

A13B  Moscone South: Poster Hall  Monday  1340h

Atmospheric Sciences General Contributions: Observations and Experimental Techniques II Posters

Presiding: S Madronich, NCAR; B Schmid, Pacific Northwest National Lab

1340h  A13B-0190 POSTER Version 3.3 Data Products from EOS MLS: D Cuddy, P Wagner, W G Read, V Perun, H Nguyen

1340h  A13B-0191 POSTER Eddy Covariance Method or Technique?: Y G Getahun, R J Qualls

1340h  A13B-0192 POSTER Analysis of the possible measurement errors for the PM10 concentration measurement at Gosan, Korea: S Shin, Y Kim, C Jung

1340h  A13B-0193 POSTER Satellite (Timed, Aqua, Aura) and In Situ (Meteorological Rockets, Balloons) Measurement Comparability: F J Schmidlin, R A Goldberg, A Feofilov, R Rose

1340h  A13B-0194 POSTER Chemical Composition of Tropospheric Air Mass Encountered During High Altitude Flight (>11.5km) over Antarctica at Latitude 86° During the 2009 Fall Operation Ice Bridge Field Campaign: M M Yang, D R Blake, S Meinardi, S A Vay, Y Choi, M R Pippin, R Stauffer, A M Thompson


1340h  A13B-0196 POSTER Comparison of ground-based and satellite-based NO2 column measurements: First steps to correlating in-situ and remote measurements: T Knepp, M R Pippin, L Cowen, R Martin, J Geiger, J Murray, J Fishman, D O Neil, C Scott, C Franklin, R Kollmeyer, A Sorkin, T Jennings, J Seykman, A Quesnel, L sauvage, M A Yesaluskly, W Smith, D K Martins, A M Thompson, J R Herman, A Cede, N Abuasshan

1340h  A13B-0197 POSTER THE IMPACT OF ASSIMILATION WITH THE INCLUSION OF AMSU-A RADIANCES IN 4D-LETKF/AGCM SYSTEM: M S Medeiros, D L Herdies, J A Aravequía, S S Souza, Title of Team: Group on Data Assimilation Development

1340h  A13B-0198 POSTER The MODIS MOD07 collection 6 products: E E Borbas, S W Seemann, L Moy, W P Menzel

1340h  A13B-0199 POSTER Application of MODIS BRDF to AOD retrieval from Single Visible Channel of MTSAT-1R: M KIM, J Kim, M Wong, J Yoon, J Lee, D L Wu, P Chan, J E Nichol

1340h  A13B-0200 POSTER Evaluation of the retrospective seasonal prediction skills of the LC-LRGMME eleven-model ensemble: K Kim, M Kim, E Seo, J Chung, W Yun


1340h  A13B-0203 WITHDRAWN


1340h  A13B-0205 POSTER The Development of Airborne Data for Assessing Models (ADAM) – A central repository of airborne field campaign data archives: G Chen, M M Kleb, A A Aknan, C C Brown, D C Mangosing, A Thornhill, P L Rinsland

1340h  A13B-0206 POSTER Digital Array Gas Correlation Radiometry (DAGR): A New Approach to Passively Sensing the Planetary Boundary Layer: B Crowther, J Peterson, L L Gordley, M E Hervig, J Burton, C S Fish, G S Diskin, G W Sachse


1340h  A13B-0208 POSTER Anvil and Convective Lightning: A TRMM Perspective: M J Peterson, C Liu

1340h  A13B-0209 POSTER An Evaluation of Land-Surface Heterogeneity Effects on Atmospheric Boundary Layer Processes at Various Scales: M A Bolch, R Avisar

1340h  A13B-0210 POSTER Alaska climate divisions based on objective methods: H Angeloff, P A Bieniek, U S Bhatt, R Thoman, J E Walsh, C Daly, M Shulski

1340h  A13B-0211 POSTER Using the LibCF/GRIDSPEC extensions to interpret data on mosaic grids with CDAT: D Kindig, A Plater, V Balaji, S C Hankin, E J Hartnett, C Doutriaux, J Painter, A Sobol, M Wrobel

1340h  A13B-0212 POSTER Hilbert-Huang Transform: A Spectral Analysis Tool Applied to Sunspot Number and Total Solar Irradiance Variations, as well as Near-Surface Atmospheric Variables: B L Barnhart, W E Eichinger, J H Prueger
1340h A13B-0213 POSTER CESAR: Compact Echelle Spectrograph for Aeronautical Research: R Melchiorri, M Grill, E A Kendall, E Schiesser, T G Slanger, M Radovan, J Lacoursiere

1340h A13B-0214 POSTER RETRIEVAL OF THE SINGLE SCATTERING ALBEKO IN THE EL PASO-JUAREZ AIRSHED USING THE TUV MODEL AND A UV-MFRSR RADIOMETER: R Medina Calderon, Title of Team: Environmental Physics at UTEP

1340h A13B-0215 POSTER Terra and Aqua MODIS Instrument Status: X Xiong, B Wenny, J Sun, A Angal, W Barnes

1340h A13B-0216 POSTER Validating the reported random errors of ACE-FTS measurements through analysis of tropical variability: K Strong, M Toohey, P F Bernath, C Boone, K A Walker, A Jonsson, T G Shepherd


1340h A13B-0218 POSTER The S-component retrievals from ground-based MAX-DOAS observations: H Irie, H Takahshima, Y Kanaya, F Boersma, L Gast, F Wittrock, M Van Roozendael


1340h A13B-0221 POSTER The Retrieval of Vertical Air Motion from an Airborne W-Band using Mie Scattering: E Jung, B A Albrecht, P Kollias

1340h A13B-0222 POSTER Simulations of Radio Occultation using Ray Tracing Method with nonspherical symmetric atmosphere: W Yeh, M Chen, T Chi, Y Liou

A13C Moscone South: Poster Hall Monday 1340h Atmospheric Sciences General Contributions: Radiation and Climate II Posters

Presiding: N G Andronova, University of Michigan; M Chin, NASA Goddard SFC

1340h A13C-0223 POSTER Why do anthropogenic global warming skeptics have poorer scientific credentials than their opponents?: N L Rogers

1340h A13C-0224 POSTER The ARM Climate Research Facility – New Capabilities and the Expected Impacts on Climate Science and Modeling: J Voyles, J H Mather

1340h A13C-0225 POSTER Climatology of Extreme Winds in the Chukchi/Beaufort Seas/Alaska Region Using the North American Regional Reanalysis: S T Stegall, J Zhang

1340h A13C-0226 POSTER The Impact of Organic Coatings on Light Scattering by Sodium Chloride Particles: M J Ezell, Y Li, B J Finlayson-Pitts, Title of Team: AirUCI

1340h A13C-0227 POSTER Development of Metrology Tools for Quantification of Greenhouse Gases from Distributed Sources: K O Douglas, D Plusquellic, G T Fraser, J T Hodges, R D van Zee, A Possolo, D V Samarov, J R Whetstone

1340h A13C-0228 POSTER EXAMINING THE VALIDITY OF THE INDIAN SUMMER SINGULARITY ACROSS THE NORTHEAST UNITED STATES: M L Godek

1340h A13C-0229 POSTER Spatial and temporal variability of the refractivity over Tahiti from a coarse network of GPS stations: J Serafini, A Fadil, L Sichoix, J Barriot

1340h A13C-0230 POSTER Radiation simulations in the aerosol events: S Mukai, J Sano, M Nakata

1340h A13C-0231 POSTER Estimation of biomass burning aerosols derived from combination of GOSAT/CAI and PARASOL/POLDER: L Sano, S Mukai, M Nakata, N Kikuchi, B Holben

1340h A13C-0232 POSTER Preliminary results from measurement of methane at Gosan, Jeju Island, Korea for understanding emissions in East Asia: E Lee, J Kim, K Ahn, M Park, K Kim


1340h A13C-0234 POSTER Large variations in Southern Hemisphere biomass burning during the last 650 years from atmospheric carbon monoxide and its isotopes in Antarctica: Z Wang, J ChapPELLaz, K Park, J E Mak


1340h A13C-0236 POSTER Archean Earth Atmosphere Fractal Haze Aggregates: Light Scattering Calculations and the Faint Young Sun Paradox: D A Boness, B Terrell-Martinez

1340h A13C-0237 POSTER Rice Production Changes over East Asia in a CO2 Doubled Climate Induced by PNU CGCM: J Ahn, J Hong, K Shim, D Lee

A13D Moscone South: Poster Hall Monday 1340h Extreme Warm Season Precipitation in Mountainous Regions and Its Hydrologic Impacts: Modeling and Observations for Climate Studies Posters (joint with GC, H)

Presiding: J J Barsugli, University of Colorado at Boulder; R Rasmussen, National Center for Atmospheric Research; K M Mahoney, J F England, Bureau of Reclamation


1340h A13D-0239 POSTER Understanding potential changes in warm-season extreme precipitation events across the Colorado Front Range: A WRF-based modeling study: K M Mahoney, M A Alexander, J Scott, J J Barsugli, J F England, D A Raff


1340h A13D-0241 POSTER Summertime Rainfall Events in Eastern Oregon and Washington: N A Bond, A M Chiodi, N Larkin, J Barbour


1340h A13D-0243 POSTER Dynamical Downscaling of Tropical Storm Ivan in the Southern Appalachians: X Sun, A P Barros

1340h A13D-0244 POSTER Tropical orographic rainfall regimes: K A Reed, S W Nesbitt

1340h A13D-0245 POSTER High resolution regional climate modeling for flood hazard impact study in Germany: S Wagner, P Berg, D Duethmann, J Ihringer, H G Kunzmann, J Liebert, B Merz, G Schaedler, J Werhahn

All information is current as of November 12, 2010
All information is current as of November 12, 2010
A13G - Moscone South: Poster Hall Monday 1340h

**A13H Moscone South: Poster Hall Monday 1340h**

**Presiding:** M J Foster, University of Wisconsin-Madison; A K Heidinger, NOAA

1340h A13G-0289 POSTER Advancements in understanding the influence of aeolian dust on climate from the AVHRR: A T Evan

1340h A13G-0290 POSTER The AVHRR component of a long-term global active fire data record: I A Csizsar, L Giglio, W Schroeder, C O Justice

1340h A13G-0291 POSTER Microphysical cloud parameters in the PATMOS-X data set derived from 30 years of AVHRR measurements: A Walther, A K Heidinger

1340h A13G-0292 WITHDRAWN

1340h A13G-0293 POSTER HISTORIC AVHRR PROCESSING IN THE EUMETSAT CLIMATE MONITORING SATELLITE APPLICATION FACILITY (CMSAF): (Invited): K Karlsson

1340h A13G-0294 POSTER Extended AVHRR Polar Pathfinder (APP-x) Products for Studying the Cryosphere During the Satellite Era: X Wang, J R Key, Y Liu

1340h A13G-0295 WITHDRAWN

1340h A13G-0296 POSTER Developing NOAA's Climate Data Records From AVHRR and Other Data: J L Privette, J J Bates, E J Kears

1340h A13G-0297 POSTER Monitoring changes in biodiversity over Canada during the past three decades using a dynamic habitat index derived from a long-term AVHRR record: F M Fontana, N C Coops, K V Khlopenkov, A P Trishchenko, M A Walder

1340h A13G-0298 POSTER Understanding cloud processes in the climate system: The role of satellite observations: R Bennartz

1340h A13G-0299 POSTER Regional Assessment of Marine Boundary Layer Cloud Properties Using PATMOS-x: J Rausch, R Bennartz, A K Heidinger

1340h A13G-0300 POSTER A 30 year High -Spatial Resolution Cloud Climatology from NOAA's PATMOS-x Project: A K Heidinger, A Walther, M J Foster

1340h A13G-0301 POSTER AN AGREEMENT ASSESSMENT OF GLOBAL VEGETATION INDEX PRODUCTS FROM TERRA MODIS AND SPOT-4 VEGETATION FOR CONTINUITY STUDIES: J Tsend-Ayush, T Miura, K Didan, A Barreto-munoz

1340h A13G-0302 POSTER Identifying long-term changes in global cloud cover from the AVHRR: A C Ostendorff, A T Evan

1340h A13G-0303 POSTER Absolute calibration of AVHRR visible sensors using SCIAMACHY hyperspectral data and MODIS radiances: B Scarino, D R Doelling, D Morstad, A Gopalan, P Minnis, R Bhart, C Lukashin

1340h A13G-0304 POSTER AVHRR calibration approach that uses ray-matching, invariant desert, and deep convective cloud techniques: D Morstad, D R Doelling, B Scarino, A Gopalan, R Bhart, P Minnis

**A13H Three-Dimensional Cloud, Trace Gas, and Aerosol Retrievals II Posters**

**Presiding:** J Porter; D Huang, Brookhaven National Laboratory; P Kollia, McGill University; A B Davis, Jet Propulsion Laboratory


1340h A13H-0306 POSTER 3D Cloud Tomography, Followed by Mean Optical and Microphysical Properties, with Multi-Angle/Multi-Pixel Data: A B Davis, P A von Allmen, A Marshak, G Bal

1340h A13H-0307 WITHDRAWN

1340h A13H-0308 POSTER Effects of clouds on surface radiation from ground-based observation and Monte-Carlo radiative transfer model: N Jo, J Kim, H Cho, J Mok

1340h A13H-0309 POSTER Three-dimensional cloud retrievals from the 2009 DOE ARM cloud tomography field experiment: D Huang, A J Gasiewski, M P Cadeddu, W J Wiscombe

1340h A13H-0310 POSTER Study of Trade Wind Clouds Using Ground Based Stereo Cameras: J Porter

1340h A13H-0311 POSTER Cloud Base Height and Wind Speed Retrieval through Digital Camera Based Stereo Vision: F M Janeiro, F Wagner, P M Ramos

1340h A13H-0312 POSTER Airborne DOAS in South Africa: escaping flatland: S P Broccardo, K Heue, S Piketh, U Platt

1340h A13H-0313 POSTER Three-dimensional structure and seasonal cycle of aerosol over Africa, Atlantic, and Americas: A Adams, C Zhang, J M Prospero

1340h A13H-0314 POSTER Retrieving ice cloud properties by using a fast infrared radiative transfer model: C Wang, P Yang, A K Heidinger, S E Platnick, B A Baum

1340h A13H-0315 POSTER Retrieval of aerosol vertical profile using O2 A- and B-band SCIAMACHY measurements: S Sanghavi, U Platt

1340h A13H-0316 POSTER Advanced atmospheric measurements demonstrated by the 2.33 µm IIP Tropospheric Infrared Mapping Spectrometers (TIMS): J B Kumer, R L Rairden, A E Roche, R B Chatfield

1340h A13H-0317 POSTER Improving aerosol retrieval over urban areas: A J Picón, Y Wu, B Gross, F Moshary, S A Ahmed
1340h  A13H-0318 POSTER Development of an MFRSR Network for Aerosol-cloud interaction studies: L Bomidi, B Gross, F Moshary
1340h  A13H-0319 POSTER MOPITT Cloud Detection Adapted to Multispectral CO Retrievals: S Martinez-Alonso, M N Deeter, J C Gille, D Mao, H M Worden
1340h  A13H-0320 POSTER McIDAS-V: Advanced Visualization for 3D Remote Sensing Data: T Rink, T H Achtor
1340h  A13H-0321 POSTER Atmospheric Sampling of Aerosols to Stratospheric Altitudes using High Altitude Balloons: E A Jerde, E Thomas

A13I  Moscone West: 3002  Monday  1340h  Climate Change, Air Quality, and Their Interrelations at the North American West Coast II

Presiding: R A Zaveri, PNNL; J L Jimenez, University of Colorado-Boulder

1340h  A13I-01 Gas- and Particle-phase Chemical Composition Measurements Onboard the G1 Research Aircraft during the CARES Campaign: J E Shilling, L Alexander, J Jayne, E Fortner
1355h  A13I-02 Characterization of submicron aerosol chemistry, evolution, and volatility at Cool (California) during the CARES field campaign with a thermodenuder-high-resolution aerosol mass spectrometer: A Setyan, Q Zhang, M Merkel, Y Sun, C Song, T B Onasch, J Jayne, D R Worsnop, A Wiedensohler, J E Shilling, B A Flowers, M K Dubey, D Vovchuk
1410h  A13I-03 The Diurnal Cycle of Particle Sizes, Compositions, and Densities observed in Sacramento, CA during CARES Field Campaign: J Beranek, T Vaden, D G Imre, A Zelenyuk
1440h  A13I-05 Satellite Measurements to Enhance PM2.5 Air Quality Measurements: B V Scarnato, A W Strawa, R B Chattfield, M J Legg, P Hillyard
1455h  A13I-06 Aerosol Optical Properties at the Ground Sites during the 2010 CARES Field Campaign: D B Atkinson, J G Radney, J W Harworth
1525h  A13I-08 First Measurements of Individual-Particle Single Scattering Albedo: Observations and Potential Impacts on Radiative Forcing: S M Murphy, T J Sanford, K D Froyd, D M Murphy

A13J  Moscone West: 3008  Monday  1340h  High-Resolution Active Optical Remote Sensing of Atmospheric Processes II

Presiding: D M Tratt, The Aerospace Corporation; S Ismail, NASA Langley Research Center; S Lolli, Leosphere

1340h  A13J-01 Improving combined lidar-radar snowfall retrievals with Doppler spectra (Invited): E Eloranta
1355h  A13J-02 Initial Results of the Cloud, Aerosol Polarization and Backscatter Lidar at Summit, Greenland: R R Neely, M Hayman, J Thayer, R Hardesty, M O'Neill, M Shupe
1410h  A13J-03 Measurements of an Intrusion of Water Vapor into the High Arctic and its Effect on Wintertime Radiation: G J Nott, J G Doyle, G B Lesins, C P Thackray, C W Perro, T J Duck, J R Drummond
1425h  A13J-04 Investigation of multiple scattering processes resolved in clouds using a flash lidar: C S Weimer, Y Hu, E Saiki, T Delker, J Applegate, T Ramond
1440h  A13J-05 Seasonal variation of the mesospheric sodium layer at 23S: D M Simonich, B R Clemesha
1455h  A13J-06 Identification of Volcanic Ash over ALOMAR by LIDAR during the Eruption of Eyjafjallajokull in Island in April 2010: M A Gausa, S Blindheim, J E Kristjansson, X Chu
1510h  A13J-07 Assessment of Urban Planetary Boundary Layer Dynamics using Lidar, Microwave Radiometer and Ceilometer Observations over New York City Area: C Gan, Y Wu, B Gross, F Moshary
1525h  A13J-08 Research on Laser Frequency Stabilization of CO2 Laser measurement system: L Zhang, N Dai

A13K  Moscone West: 3006  Monday  1340h  Ice and Mixed-Phase Precipitation Characterization in Passive and Active Microwave Remote Sensing, in Situ Observations, and Modeling Perspectives II

Presiding: B T Johnson, University of Maryland Baltimore County; T Matsui, NASA GSFC; S Tanelli, Jet Propulsion Laboratory; W A Petersen, NASA Marshall Space Flight Center; W S Olson, University of Maryland Baltimore County; W Tao, NASA GSFC

1340h  A13K-01 Satellite Radiometer Remote Sensing of High Latitude Falling Snow: G Skofronick-Jackson, B T Johnson, J R Wang
1355h  A13K-02 The Light Precipitation Validation Experiment (LPVEx): Overview and Early Results (Invited): T S L'Ecuyer, W A Petersen, D N Moisseev
1410h  A13K-03 Scattering by Nonspherical Ice Particles at High Microwave Frequencies and Its Application to Snowfall Retrievals (Invited): G Liu
1425h  A13K-04 Role of non-convexity in characterizing single-scattering properties for ensembles of non-spherical precipitation particles: K Kuo, T Clune, C Pearson, W S Olson, G Skofronick-Jackson, J Graver, D Griffith
1440h  A13K-05 Toward estimating snowfall from space: Microphysical constraints from intensive in situ surface observations: N B Wood, T S L'Ecuyer, A Heymsfield, G L Stephens
1455h  A13K-06 The sensitivity of combined passive microwave and dual-frequency radar signatures to frozen particle size distribution and ice model assumptions and implications for GPM-like snowfall retrievals: M Kulie, M Hiley, R Bennartz
1510h  A13K-07 Derivation of Covariance Matrices for the Optimal Estimation Retrieval of Cloud and Precipitation Ice Using Microphysical Measurements from TC4 and Sparticus: M C Schwartz, G G Mace, P Lawson
1525h  A13K-08 Developing Winter Precipitation Algorithm over land from Satellite Microwave and C3VP Field Campaign observations: N Wang, K Gopal, R Ferraro

A13L  Moscone West: 3004  Monday  1340h  Sources, Evolution, and Sinks of Organics in the Troposphere III

Presiding: C L Heald, Colorado State University; H Coe, The University of Manchester

1340h  A13L-01 Insights into the role of organics in the growth of freshly nucleated particles (Invited): J N Smith, J Zhao, P M Winkler, P H McMurry, K C Barsanti
Sprite Discharge: Streamer Simulations to Infer the Pre-existing Electron Density in a T F Bell, U S Inan, J J Colman

Optical Signatures of Lightning-induced Electron Precipitation (joint with SA, A) J D Hill

University; Energetic Radiation From Thunderstorms II AE13A Moscone West: 3007 Monday 1340h

Energetic Radiation From Thunderstorms II (joint with SA, A)

Presiding: B E Carlson, University of Bergen; M Cohen, Stanford University; S A Cummer, Duke University; K Eack, New Mexico Tech


1355h AE13A-02 Energetic runaway electrons emitted from streamers: S J Celestin, V P Pasko

1410h AE13A-03 GBM Observations of Terrestrial Gamma-Ray Flashes (Invited): M S Briggs, Title of Team: The GBM TGF Team

1425h AE13A-04 Characterizing lightning processes associated with terrestrial gamma-ray flashes (Invited): G Lu, S A Cummer, R Blakeslee, J Li, F Han, D M Smith, X Shao, E W McCaul, D E Buechler, H Christian, J M Hall


1455h AE13B-02 VLF radiation from lightning: N G Lehtinen, T F Bell, U S Inan, J J Colman

1510h AE13B-03 Modeling of Sprite Beads: Using Numerical Streamer Simulations to Infer the Pre-existing Electron Density in a Sprite Discharge: A Luque, F Gordillo-Vázquez

1525h AE13B-04 A Modeling Study of Sprite Streamer Chemistry: N Liu, D D Sentman

Atmospheric and Space Electricity

AE13A Moscone West: 3007 Monday 1340h

Invited 62

AE13B Moscone West: 3007 Monday 1440h

Thunderstorm Effects in the Near-Earth Space Environment I (joint with SA, A)

Presiding: V P Pasko, Penn State University; T Neubert, Technical University of Denmark


1455h AE13B-02 VLF radiation from lightning: N G Lehtinen, T F Bell, U S Inan, J J Colman

1510h AE13B-03 Modeling of Sprite Beads: Using Numerical Streamer Simulations to Infer the Pre-existing Electron Density in a Sprite Discharge: A Luque, F Gordillo-Vázquez

1525h AE13B-04 A Modeling Study of Sprite Streamer Chemistry: N Liu, D D Sentman

Biogeo sciences

B13A Moscone South: Poster Hall Monday 1340h

Assessing Carbon Storage and Greenhouse Gas Emissions in Coastal and Inland Aquatic Systems I (joint with H, OS)

Presiding: B A Bergamaschi, USGS; K D Kroeger, USGS; G L Chmura, A F Rahman, Indiana University

1340h B13A-0446 POSTER Climate Feedbacks of a Northern Macrotidal and Microtidal Salt Marsh: G L Chmura, L M Killman, G R Guntennerg

1340h B13A-0447 POSTER Constraining organic carbon sequestration in coastal wetlands in response to sea-level rise using samples along a salinity gradient in southeast Louisiana: E K Williams, B E Rosenheim, A S Kolker

1340h B13A-0448 POSTER Spatiotemporal Trends of the Bay of Bengal Shoreline Retreat along the Sunderban Coasts and the Relevant Carbon Implications: A F Rahman, D Dragoni, B Elmasri

1340h B13A-0449 POSTER Carbon and 3D structure estimates of Neotropical mangrove forests from Lidar, InSAR and field data: T E Fatoyinbo, M Simard, C Giri


1340h B13A-0451 POSTER Regional-Scale Biogeochemical Modeling of Greenhouse Gas (GHG) Emissions from Wetland Ecosystems: O Abdul-Aziz, S Liu, C J Young, S Huang

1340h B13A-0452 POSTER Eddy Covariance Measured Methane and Carbon Dioxide Fluxes for a Restored Wetland, Sacramento – San Joaquin Delta, California, USA: F Anderson, M Detto, J G Verfaillie, J Hatala, D D Baldocchi, B A Bergamaschi, R Fujii

1340h B13A-0453 POSTER Estimation of water quality and plant primary production in Arctic wetlands using ground based spectrometry: C Andresen, V Lougheed, C Tweede

1340h B13A-0454 POSTER Process-based ecosystem modeling to predict carbon dioxide fluxes in the newly flooded black spruce forest and peatland: Y Kim, N T Roulet, C Li, S E Frolking, I B Strachan, C Peng, Y Prairie, C R Teodorou, A Tremblay

1340h B13A-0455 POSTER The carbon cycle of Lake Superior and its influence on regional carbon budgeting: G A McKinley, V Bennington, N R Urban, C P Mcdonald, N Arilla, A R Desai, D Pilcher, V Vays, Title of Team: CyCLeS (Cycling of Carbon in Lake Superior)


1340h B13A-0458 POSTER CAN DECOMMISSIONED OIL PADS IN BOREAL ALBERTA BE RECLAIMED TO CARBON ACCUMULATING PEATLANDS?: R Wieder, D H Vitt, S Mowbray

1340h B13A-0459 POSTER Simulation of changes in arctic terrestrial carbon stocks under using ecosys mathematical model: K Metivier, R F Grant, R H Humphreys, P Lafleur, H Zhang

1340h B13A-0460 POSTER Cross-Product Comparison of Multiple Resolution Microwave Remote Sensing Data Sets Supporting Global Mapping of Inundated Wetlands: E Podest, R Schroeder, K C McDonald, N Pinto, K Willacy, J Whitcomb, M Moghaddam, L L Hess, R Zimmermann
1340h  **B13B-0461** POSTER Bird Activity Analysis Using Avian Radar Information in Naval Air Station airport, WA: J Wang, E Herricks
1340h  **B13B-0462** POSTER Practical Solutions for the Design of Accelerated In Situ Bioremediation: M Zhang, M Yoshihika, M Takeuchi, T Komai
1340h  **B13B-0463** POSTER Rebuilding Pearlts on Mineral Soils Utilizing Lessons Learned from Past Pearlant Initiation: D H Vitt, S C Koropchak, B Xu, R Bloise, R Wieder, S Mowbray
1340h  **B13B-0464** POSTER Two-stage high-rate biogas (H2 and CH4) production from food waste using anaerobic mixed microflora: K Xu, D Lee, T Kobayashi, Y Ebie, Y Li, Y Inamori
1340h  **B13B-0465** POSTER An Examination of Intertidal Temperatures Through Remotely Sensed Satellite Observations: V Lakshmi
1340h  **B13B-0466** POSTER Inventory of Vegetation Spectral Properties in the South Bay Salt Ponds: A Database for Enhancing Decision Support and Restoration Mapping: A K Watson, W Hsu, R Marzion, K Sukita, E Minkin, B Fulfront, J W Skiles
1340h  **B13B-0467** POSTER Characteristics of modern pollen rain and the relationship to vegetation in sagebrush-steppe environments of Montana, USA: C Briles, V Bryant
1340h  **B13B-0468** POSTER Basin-Wide Amazon Forest Tree Mortality From a Large 2005 Storm: R Negrón Juarez, J Q Chambers, G Guimaraes, H Zeng, C Raupp, D M Marra, G Ribeiro, S S Saatchi, N Higuchi
1340h  **B13B-0469** POSTER Optimization of Biofuel and Biochar Production from the Slow Pyrolysis of Biomass: J Fang, B Gao, Title of Team: NSF REU in Water Resources
1340h  **B13B-0470** POSTER Methyl halide and chlorofluorocarbon emissions from a subsiding Sacramento-San Joaquin Delta island converted to rice fields: M H Khan, R C Rhew, M Whelan, K Zhou, S Deverel
1340h  **B13B-0471** POSTER Production of halomethanes and isoprene in the culture of bacteria isolated from brackish water: T Fujimori, G Tanai, M Kurihara, H Tamegai, S Hashimoto
1340h  **B13B-0472** POSTER Determining the Habitat Preference of Sand Lance (Ammodytes hexapterus) using Multibeam Bathymetry in the San Juan Islands, Washington: E Davidson, H Greene, F J Harmensen
1340h  **B13B-0473** POSTER Methane uptake by plants in boreal forests: E Sundqvist, A Lindroth, P M Crill, A Båth
1340h  **B13B-0474** WITHDRAWN
1340h  **B13B-0475** POSTER Aquatic Biogeochemical Prototype Activities at the National Ecological Observatory Network (NEON): K J Goodman, H Powell, T Cilke, A Price
1340h  **B13B-0476** POSTER Wind Disturbance Produced Changes in Tree Species Assemblage in the Peruvian Amazon: S W Rifai, J Q Chambers, R I Negrón Juarez, F Ramirez, R Tello, W Alegria Muñoz
1340h  **B13B-0477** WITHDRAWN
1340h  **B13B-0478** POSTER Direct Quantification of Microbial Community Respiration along a Contamination Gradient using a novel Hydrologic Smart Tracer: DJ Stanaway, R Haggerty, K P Feris
1340h  **B13B-0479** POSTER Nonlinear Relationship between Leaf Area Index and Fraction of Photosynthetically Active Radiation: E Nikoo, T Nasar, G Tremberger, T K Cheung, L P Johnson, S A Austin, M Marchese
1340h  **B13B-0480** POSTER Global Landsat Surface Reflectance Products Derived Using GLS 2000 and 2005 Images: R Narasimhan, M Feng, J O Sexton, C Huang, S Channan, E F Vermote, J G Masek, J R Townshend
1340h  **B13B-0481** WITHDRAWN
1340h  **B13B-0482** POSTER Holocene climate and vegetation changes revealed by lipid biomarkers from a peat and sediment sequence on Nightingale Island, central South Atlantic: Z Zhang, K Kjung, S Bjorck, R S Bradley
1340h  **B13B-0483** POSTER Structure, provenance and residence time of terrestrial organic carbon: insights from Programmed temperature Pyrolysis–Combustion of river sediments: X Feng, V Galy, B E Rosenberg, K M Roe, E K Williams
1340h  **OS31B-1415** POSTER Mapping Upper Amazon Palm Swamps with Spaceborne L-band Synthetic Aperture Radar: N Pinto, K C McDonald, E Podest, R Schroeder, R Zimmermann, V Horna
1340h  **OS31B-1420** POSTER Assessment of Decadal Change in North American Wetlands Based on JERS and PALSAR Space-Based L-band SAR Data: J Whitcomb, M Moghaddam, K C McDonald, E Podest, B D Chapman

1340h  **B13C-0464** POSTER Direct Quantification of Microbial Community Respiration along a Contamination Gradient using a novel Hydrologic Smart Tracer: DJ Stanaway, R Haggerty, K P Feris
1340h  **B13C-0468** POSTER Basin-Wide Amazon Forest Tree Mortality From a Large 2005 Storm: R Negrón Juarez, J Q Chambers, G Guimaraes, H Zeng, C Raupp, D M Marra, G Ribeiro, S S Saatchi, N Higuchi
1340h  **B13C-0469** POSTER Optimization of Biofuel and Biochar Production from the Slow Pyrolysis of Biomass: J Fang, B Gao, Title of Team: NSF REU in Water Resources
1340h  **B13C-0470** POSTER Methyl halide and chlorofluorocarbon emissions from a subsiding Sacramento-San Joaquin Delta island converted to rice fields: M H Khan, R C Rhew, M Whelan, K Zhou, S Deverel
1340h  **B13C-0471** POSTER Production of halomethanes and isoprene in the culture of bacteria isolated from brackish water: T Fujimori, G Tanai, M Kurihara, H Tamegai, S Hashimoto
1340h  **B13C-0472** POSTER Determining the Habitat Preference of Sand Lance (Ammodytes hexapterus) using Multibeam Bathymetry in the San Juan Islands, Washington: E Davidson, H Greene, F J Harmensen
1340h  **B13C-0473** POSTER Methane uptake by plants in boreal forests: E Sundqvist, A Lindroth, P M Crill, A Båth
1340h  **B13C-0474** WITHDRAWN
1340h  **B13C-0475** POSTER Aquatic Biogeochemical Prototype Activities at the National Ecological Observatory Network (NEON): K J Goodman, H Powell, T Cilke, A Price
1340h  **B13C-0476** POSTER Wind Disturbance Produced Changes in Tree Species Assemblage in the Peruvian Amazon: S W Rifai, J Q Chambers, R I Negrón Juarez, F Ramirez, R Tello, W Alegria Muñoz
1340h  **B13C-0477** WITHDRAWN
1340h  **B13C-0478** POSTER Direct Quantification of Microbial Community Respiration along a Contamination Gradient using a novel Hydrologic Smart Tracer: DJ Stanaway, R Haggerty, K P Feris
1340h  **B13C-0479** POSTER Nonlinear Relationship between Leaf Area Index and Fraction of Photosynthetically Active Radiation: E Nikoo, T Nasar, G Tremberger, T K Cheung, L P Johnson, S A Austin, M Marchese
1340h  **B13C-0480** POSTER Global Landsat Surface Reflectance Products Derived Using GLS 2000 and 2005 Images: R Narasimhan, M Feng, J O Sexton, C Huang, S Channan, E F Vermote, J G Masek, J R Townshend
1340h  **B13C-0481** WITHDRAWN
1340h  **B13C-0482** POSTER Holocene climate and vegetation changes revealed by lipid biomarkers from a peat and sediment sequence on Nightingale Island, central South Atlantic: Z Zhang, K Kjung, S Bjorck, R S Bradley
1340h  **B13C-0483** POSTER Structure, provenance and residence time of terrestrial organic carbon: insights from Programmed temperature Pyrolysis–Combustion of river sediments: X Feng, V Galy, B E Rosenberg, K M Roe, E K Williams
1340h  **OS31B-1415** POSTER Mapping Upper Amazon Palm Swamps with Spaceborne L-band Synthetic Aperture Radar: N Pinto, K C McDonald, E Podest, R Schroeder, R Zimmermann, V Horna
1340h  **OS31B-1420** POSTER Assessment of Decadal Change in North American Wetlands Based on JERS and PALSAR Space-Based L-band SAR Data: J Whitcomb, M Moghaddam, K C McDonald, E Podest, B D Chapman

Presiding: D Scott, Virginia Tech; M S Carbone, University of California
1340h B13C-0495 POSTER Alpine Microbial Community Responses to Climate Change and Atmospheric Nitrogen Deposition in Rocky Mountain National Park: B B Osborne, J Baron, M D Wallenstein, E Richer

1340h B13C-0496 POSTER Rock glacier ice as a microbial habitat: C E Florentine, M L Skidmore, S N Montross

1340h B13C-0497 POSTER Survey on Atmospheric Methane Oxidation in Young Glacier-Forefield Soils: M H Schroth, P Nauer, J A Zeyer

B13D Moscone South: Poster Hall  Monday  1340h Dissolved Organic Matter Dynamics in Terrestrial and Aquatic Ecosystems III Posters (joint with H)

Presiding: M Miller, USGS; S Kaushal, University of Maryland, College Park; D Scott, Virginia Tech

1340h B13D-0498 POSTER Fluvial organic carbon losses from a Bornean blackwater river: S Moore, V Gauci, S Page, C Evans, S Limin

1340h B13D-0499 POSTER Storm-event patterns and sources of dissolved organic matter (DOM) for stream runoff in a forested, mid-Atlantic watershed: S P Inamdar, S Singh, N Finger, M J Mitchell

1340h B13D-0500 POSTER Low contribution of litter derived carbon to dissolved organic matter in soils: A Scheibe, L Krantz, G Gleixner

1340h B13D-0501 POSTER Photodegradation of dissolved organic matter in two contrasting reaches of a regulated river: A A Oliver, R A Dahlgren, R G Spencer

1340h B13D-0502 POSTER Dissolved Organic Matter and Biogeochemical Hotspots in a Northern Peatland Catchment: S D Sebestyen, R K Kolka, M Jacobson, M T Tsui, J B Corner, J C Finlay, Jeremiaison, C P Mitchell, K A Watson, B Carlos

1340h B13D-0503 POSTER Characterization of dissolved organic matter during reactive transport: A Vazquez, S Hernández, C Rasmussen, J Chorover

1340h B13D-0504 POSTER Effect of Landscape-Watershed Attributes on CDOM in Florida's Gulf Coast Rivers: R N Conmy, J C Lehrter, J Jackson, P G Coble, R H Hastings

1340h B13D-0505 POSTER Evaluation of Watershed Characteristics on Dissolved Organic Matter (DOM) quality and quantity at the Hubbard Brook Experiment Forest, NH: P Kang, M J Mitchell

1340h B13D-0506 POSTER Factors affecting the hydrogen isotopic composition of dissolved organic matter along a salinity gradient: A A DeBond, S E Ziegler, M L Fogel, P L Morrill, R Bowden

1340h B13D-0507 POSTER OPTICAL ANALYSIS OF CHROMOPHORIC DISSOLVED ORGANIC MATTER AS A TRACER OF ORGANIC MATERIAL IN THE NEUSE RIVER ESTUARY, EASTERN NORTH CAROLINA: J L Dickson Brown, H W Paerl, C L Osburn

1340h B13D-0508 POSTER Quality of dissolved organic matter (DOM) in watershed compartments for a forested mid-Atlantic watershed: S Singh, S P Inamdar, N Finger, M J Mitchell, D F Levia, D Scott, H Bais

1340h B13D-0509 POSTER Acquisition of Fe from Natural Organic Matter by an Aerobic Pseudomonas Bacterium: Siderophores and Cellular Fe Status: K Koehn, C Dehner, J DuBois, P A Maurice

1340h B13D-0510 POSTER Testing the application of Teflon/quartz soil solution samplers for DOM sampling in the Critical Zone: Field and laboratory approaches: E M Dolan, J N Perdrial, A Vazquez, S Hernández, J Chorover

1340h B13D-0511 POSTER Predicting dissolved organic nitrogen export from a poorly drained lobolly pine plantation using the forestry version of DRAINMOD-NII: S Tian, M M Youssef, R W Skagggs, G M Chescheri, D M Amatya, Title of Team: Yes

1340h B13D-0512 WITHDRAWN

1340h B13D-0513 POSTER Natural dissolved organic matter dynamics in karstic aquifer: O'Leno Sink-Rise system, Florida, USA: J Jin, A R Zimmerman

1340h B13D-0514 POSTER Determining the impact of temporal and spatial conditions on dissolved organic carbon decomposition in the Kolyma River Watershed: M L Robbins, A Crowley, W V Sobczak, R M Holmes

1340h B13D-0515 POSTER A quantification of photoproduction of CO2 throughout the water column by degradation of terrigenous organic compounds present in the dissolved form for aquatic ecosystems of the boreal region in Quebec: J Plouhinec, M M Lucotte, A Oueller, Y Gelinas


B13E Moscone West: 2006 Monday  1340h Advances in High-Frequency Optical Measurements of Trace Gases and Their Isotopes I (joint with A, H)

Presiding: U Seibt, UCLA; C I Czmiclz, University of California, Irvine

1340h B13E-01 POSTER Performance of isotope ratio infrared spectroscopy (IRIS) for analyzing waters containing organic contaminants: Problems and solutions (Invited): A G West, G R Goldsmith, T E Dawson


All information is current as of November 12, 2010
C13B Moscone South: Poster Hall Monday 1340h

Ice Cores, Climate, and Ice Sheets: New Frontiers I Posters
(joint with A, PP)

Presiding: J W White, University of Colorado; D Dahl-Jensen, University of Copenhagen

1340h C13B-0545 POSTER New mineral dust record from the TALDICE ice core (East Antarctica): V Maggi, B Delmonte, S Albani, C Mazzola

1340h C13B-0546 POSTER Exploring the relation between crystal fabric and climate history in an ice-core record: J H Kennedy, E C Pettit, C L Di Prinzio, L A Wilen

1340h C13B-0547 POSTER Siple Dome Ice Cores: Implications for West Antarctic Climate and ENSO Events: T Jones, J W White

1340h C13B-0548 POSTER Factors affecting the reproducibility of trace element analyses of ice core samples: R H Rhoades, J Baker, M Millar, N Bertler


1340h C13B-0550 WITHDRAWN

1340h C13B-0551 POSTER Microstructural variations in the Siple Dome, Antarctica ice core: Evidence of climate change?: R W Obbard, K E Sieg, D Meese, I Baker

1340h C13B-0552 POSTER Properties of the Near Surface Firn at NEEM: K M Keegan, M R Albert, J Baker

1340h C13B-0553 POSTER The role of mineral dust aerosols in polar amplification: F Lambert, J KUG, R Park, P Jin, J H Lee

1340h C13B-0554 POSTER Arctic Circle Traverse 2010 (ACT-10): South East Greenland snow accumulation variability from firn coring and ice sounding radar: R R Forster, C Miege, J E Box, J McConnell, V B Spikes, E W Burgess

1340h C13B-0555 POSTER Synthetic Ice Core Modeling on the Prince of Wales icefield, Ellesmere Island, Canada: T Moran, S J Marshall

1340h C13B-0556 POSTER High resolution and high precision on line isotopic analysis of Holocene and glacial ice performed in the field: V Gkinis, T J Popp, S J Johnsen, T Blunier, M Bigler, C Stowasser, S Schüpbach, D Leuenberger

1340h C13B-0557 POSTER Continuous Measurements of CH4 Concentration from Ice Cores Using a Field-deployable Near-infrared Cavity Ring-down Spectrometer: C Stowasser, T Blunier, J Chappellaz, R Dallmayr, S Schüpbach, V Gkinis, T J Popp, E Crosson

1340h C13B-0558 POSTER An Automated Method for Annual Layer Counting in Ice Cores: M Winstrup, A Svensson

1340h C13B-0559 POSTER Micro-inclusions and Micro-structure: Their Effect on the Climate Record and on Ice Rheology: S Kipfstuhl, I Weikusat, S H Faria, A Svensson


1340h C13B-0561 POSTER Unusual Calcium Carbonate, Glass-Like Shards, and Low Latitude Diatoms in the GISP2 Ice Core --What Are They Telling Us?: D H Abbott, D Breger, L H Burckle, P Biscaye, J Cole-Dai

1340h C13B-0562 POSTER The WAIS Melt Monitor: An automated ice core melting system for meltwater sample handling and the collection of high resolution microparticle size distribution data: D J Breton, B G Koffman, K J Kreutz, G S Hamilton

1340h C13B-0563 POSTER Solid and gaseous inclusions in the EDML deep ice core: origins and implications for the physical properties of polar ice: S H Faria, S Kipfstuhl, C S Garbe, V Bendel, C Weikusat, I Weikusat

1340h C13B-0564 POSTER 3D Imaging Radar for Deep Ice Core Site Selection: J D Paden, W Blake, P S Gogineni, C Leuschen, C Allen, D Dahl-Jensen


1340h C13B-0566 POSTER Pairing of Byrd ice-core data and recent radar sounding results: interpretation and uncertainty: G Gutowski, C S Jackson, D A Young, D D Blankenship

1340h C13B-0567 POSTER First Measurements of Osmium Concentration and Isotopic Composition in a Summit, Greenland Ice Core: E C Osterberg, M Sharma, R L Hawley, Z Courville

1340h C13B-0568 POSTER Greenland ice cores as a proxy for northern hemisphere acid deposition history: D Pasteris, J McConnell, R Edwards

1340h C13B-0569 POSTER Ice-core Reconstructions of West Antarctic Sea-Ice Variability: A Neural Network Perspective: D B Reusch

1340h C13B-0570 POSTER Carbonyl sulfide in polar ice cores from Antarctica: K M Aydin, K R Verhulst, E S Saltzman
All information is current as of November 12, 2010
ED13A-0610 PAPER The Yellowstone REU Site Project: Building Confidence, Competence and Capacity: D W Mogk, D Henry

ED13A-0611 PAPER The University of Texas Institute for Geophysics Marine Geology and Geophysics Field Course: M B Davis, S P Gulick, M A Allison, J A Golf, D D Duncan, S Sastrup

ED13A-0612 PAPER The Research Experience for Undergraduates Program in Solar and Space Physics at the University of Colorado: M A Snow, E L Wood, E A Cobabe-Ammann, D N Baker, S Renfrow


ED13B Moscone South: 102 Monday 1340h Public Participation in Geoscience Research: Engaging Citizen Scientists II

Presiding: M Stute, Lamont-Doherty Earth Obs; C E Walker, National Optical Astronomy Observatory; B J Mailloux, Barnard College; S M Pompea, Natl Optical Astronomy Obs

ED13B-01 Using Hydrologic Data from Africa in a Senior-Level Course in Groundwater Hydrology (Invited): S E Silliman

ED13B-02 Water Scarcity within the Context of Climate Change and Land Use Change and Linkages to Food Production in Semi-arid Regions (Invited): B R Scanlon, L Longuevergne, G Favreau, C Zheng, G Cao, Y Shen

ED13B-03 Engaging Students in Water Resources Issues in Developing Countries (Invited): J Thomas, A Lutz

ED13B-04 EarthTrek - helping scientists to get citizens involved in real science. (Invited): G Lewis

ED13B-05 Discovery of Interstellar Dust Candidates in Stardust aerogel collectors through Stardust@home (Invited): A Westphal, A Butterworth, D Frank, B Hudson, R Lettieri, W Marchant, N Wordsworth, D Zevin, M 29,000 Dusters, Title of Team: ISPE team (names and affiliations at http://ssl.berkeley.edu/~westphal/ISPE/)


ED13B-07 Snapshots from Space: Citizen Participation in Space Missions Through Image Processing: E S Lakdawalla, J F Bell

ED13B-08 Online Citizen Science with Clickworkers & MRO HiRISE E/PO: V C Gulick, G Deardorff, B Kanefsky, Title of Team: HiRISE Science Team

Geodesy

G13A Moscone South: Poster Hall Monday 1340h Source Imaging and Rapid Assessment of Earthquakes Using Interferometric Synthetic Aperture Radar and Other Geodetic Data III Posters (joint with S, IN, T, NS)

Presiding: S Jonsson, KAUST; S E Owen, Jet Propulsion Laboratory; S Yun, JPL

G13A-0648 POSTER Rapid Estimates of Postseismic Slip from GPS Data in Northern California: I A Johanson

G13A-0649 POSTER Low Latency Geodetic Monitoring of Natural Hazards in New Zealand: S Edwards, N Fournier, R J Beavan

G13A-0650 POSTER Rapid Detection of Coseismic Displacements with PALSAR ScanSAR-ScanSAR Interferometry: M Hashimoto, T Ozawa, M Tobita, M Miyawaki, M Shimada

G13A-0651 POSTER GMTSAR Software for Rapid Assessment of Earthquakes: D T Sandwell, R J Mellors, X Tong, M Wei, P Wessel

G13A-0652 WITHDRAWN


G13A-0654 POSTER Non-planar Fault Model of the 2008 Yutian Normal Faulting Earthquake (M7.2), Xinjiang, China, and its implications: M Furuya, T Yasuda

G13A-0655 POSTER Detection of crustal deformation due to the 2010 Baja California, Mexico, Earthquake using ALOS / PALSAR data: J Okamoto, M Hashimoto

G13A-0656 POSTER Deformation in the central Gulf of California from the August 2009 M 6.9 event: C Plattner, F Amelung, R Malservisi, M Hackl, J J Gonzalez-Garcia

G13A-0657 POSTER Co-seismic slip distribution of the Mw7.0 Haiti Earthquake based on InSAR observations: L Xue, J Sun, Z Shen

G13A-0658 POSTER Relationship between two Solomon Islands Earthquakes in 2007 (M8.1), 2010 (M7.1), and Seismic Gap along the Subduction Zone, Revealed by ALOS/PALSAR: Y Miyagi, T Ozawa

G13A-0659 POSTER FEM models of coseismic deformation measured by DInSAR: Wenchuan (China) 2008 and L’Aquila (Italy) 2009 earthquakes: C Kyriakopoulos, E Trasatti, S Atzori, M Chini, C Bignami, S Stramondo, C Tolomei

G13A-0660 POSTER A joint inversion of focal mechanisms and GPS displacements for absolute crustal stress and coseismic fault slip using data from the 1999 Chi-Chi, Taiwan, earthquake: Y Yang, K M Johnson, R Y Chuang

G13A-0661 POSTER Coseismic and postseismic deformation from the 14 November 2007 Mw 7.8 Tocopilla earthquake, as investigated by INSAR, and seismic observations: M Motagh, B Schurr, A J Hooper, J Anderssohn, M Moreno, R Wang

G13A-0662 POSTER Slip distribution of the Apr 14, 2010 Mw 6.9 Yushu (Qinghai, China) earthquake constrained using InSAR observations: J Sun, Z Shen, M Wang, R Burgmann, X Xu

G13A-0663 POSTER Mechanical constraints on inversion of co-seismic geodetic data for fault slip and geometry: F Liang, J Sun, K M Johnson, Z Shen, R Burgmann

G13A-0664 POSTER Modeling time dependent poroelastic effects following the June 2000 Mw6.5 earthquakes in South Iceland using the finite element method: S Kawamoto, P Segall


G13A-0666 POSTER Application of PSI to Investigate the Berkeley Hills Landslides: L Lei, R Burgmann

G13A-0667 POSTER InSAR time series analysis of crustal deformation in southern California from 1992-2010: Z Liu, P Lundgren

G13A-0668 POSTER What do formal inversions of space geodetic data tell us about fault slip rates? Examples from Southern California. (Invited): E O Lindsey, Y Fialko

G13A-0669 POSTER Improving Atmospheric Corrections to InSAR Path Delays Using Operational Weather Forecasts: E Fishbein, E J Fielding, A W Moore, P A von Allmen, Z Xing, Z Li, L Pan
1340h  **G13A-0670 POSTER** Precise Leveling Survey at the central part of the Longitudinal valley fault, Southeast Taiwan: M Murase, N Matta, K Ozawa, W Chen, C Lin

1340h  **G13A-0671 POSTER** Detection of Creep Displacement by DInSAR using TerraSAR-X data around Active Fault in the Metro Manila, the Philippines: T Deguchi


1340h  **G13A-0673 POSTER** Present day velocity field in Central Nevada Seismic Belt observed by Interferometric synthetic aperture radar: F Greene, F Amelung, S Wdowski

1340h  **G13A-0674 POSTER** Polarization phase difference analysis of quad-pol RADARSAR-2 SAR data for mapping ground deformation along the Hayward fault in northern California: S V Samsonov, K F Tiamo

1340h  **G13A-0675 POSTER** Application of Interferometric Coherence Optimization for Radarsat-2 data over Hayward Fault, San Francisco: S Alipour, K Tiamo, S V Samsonov

---

**G13B Moscone West: 2003 Monday 1340h Estimating the Accuracy of Geodetic Measurements II**

**Presiding:** O de Viron, Université Denis Diderot & IPGP; M J Van Camp, Royal Observatory of Belgium

1340h  **G13B-01** Current Accuracy of Terrestrial Positions from Space Geodesy (Invited): J Ray

1355h  **G13B-02** Assessing the Accuracy of Earth Orientation Measurements (Invited): RS Gross

1410h  **G13B-03** Environmental effects and the validation of GPS time series (Invited): P Tregoning, C S Watson, S McClusky

1425h  **G13B-04** Comparison of Deep Drill Braced Monument (DDBM) and Borehole Strainmeter (BSM) Wellhead GPS antenna mounts: a Plate Boundary Observatory (PBO) case study from Dinsmore, CA: T B Williams, K E Austin, A A Borsa, K Feaux, M E Jackson, W Johnson, D Mencin

1440h  **G13B-05** ACCURACIES OF POSITIONING AND GEODATA USING HELICOPTERS FOR GEODETIC AND GEOPHYSICAL SURVEYS: O Bielenberg, U Meyer, M Vasterling

1455h  **G13B-06** How accurately can current, planned and proposed InSAR missions measure slow, long-wavelength tectonic strain? (Invited): T J Wright, M Garthwaite, H Jung, A Shepherd

1510h  **G13B-07** InSAR and GPS time series analysis: Crustal deformation in the Yucca Mountain, Nevada region: Z Li, W C Hammond, G Blewitt, C W K Creemer, H Plag

1525h  **G13B-08** Comparing Estimates of Ionospheric Phase in InSAR Data Using Azimuth Offsets, Faraday Rotation, and Split-Spectrum Processing: A C Chen, J Chen, H A Zebker

---

**Global Environmental Change**

**GC13A Moscone South: Poster Hall Monday 1340h Coastal and Near-Term Climates in a Changing World II Posters** (joint with A, OS, B, H, PA)

**Presiding:** W Collins, Lawrence Berkeley National Lab; M A Snyder, University of California, Santa Cruz; S C Jackson, UC Berkeley; T A O'Brien, University of California, Santa Cruz

1340h  **GC13A-0676 POSTER** Ten-year climatology of surface winds over the coastal China seas using QuikSCAT data and comparison with NCEP reanalysis: H Shi, X Cai, Y Song

1340h  **GC13A-0677 POSTER** An Analysis for Tropical Cyclone precipitation in Texas from 1950 to 2010: L Zhu

1340h  **GC13A-0678 POSTER** Chesapeake Bay Forecast System: Oxygen Prediction for the Sustainable Ecosystem Management: B Mathukumalli, W Long, X Zhang, R Wood, R G Murtugudde

1340h  **GC13A-0679 POSTER** How will coastal sea level respond to changes in natural and anthropogenic forcings by 2100?: S Jevrejeva, J Moore, A Grinsted

1340h  **GC13A-0680 POSTER** Modeled Global vs. Coastal Impacts on 1970 and 2005 Summer Daytime Temperature Trends in Coastal California: B L Habtezion, J Gonzalez, R D Bornstein


1340h  **GC13A-0682 POSTER** Quantification of Atmospheric Moisture Flux on California Precipitation and Snow Water Equivalent Under Projected Climates: Y Bao, N Miller


1340h  **GC13A-0684 POSTER** Nonlinear Dependence of Global Warming Prediction on Ocean State: M Liang, L Lin, K K Tung, Y L Yung, S Sun


1340h  **GC13A-0686 POSTER** Predicting near-term climate change using a hierarchy of dynamical and statistical models: R Saravanan, P Chang, L Ji

1340h  **GC13A-0687 WITHDRAWN**

1340h  **GC13A-0688 POSTER** Modeled global scale threshold sensitivity to Greenland ice melt: C S Jackson, P Chang, L Ji

1340h  **GC13A-0689 POSTER** Orbital Forcing at Monthly-to-Multidecadal Timescales: A Stine, P Huybers

---

**GC13B Moscone South: Poster Hall Monday 1340h Global Environmental Change General Submissions I Posters** (joint with A, B, H, OS, PA, C)

**Presiding:** F Mekik, Grand Valley State University; D J Wuebbles, Univ Illinois

1340h  **GC13B-0690 POSTER** Line by Line Analysis of Carbon Dioxide Absorption for Predicting Global Warming: D C Smith

1340h  **GC13B-0691 POSTER** The World’s Largest Experiment Manipulating Solar Energy Input To Earth Resumed In 2003: P L Ward

1340h  **GC13B-0692 POSTER** The Varying Equatorial Pacific- Equatorial Atlantic Teleconnection: Y Fang, J C Chiang, P Chang

1340h  **GC13B-0693 POSTER** Biophysical feedbacks between the Pleistocene megafauna extinction and climate: The first human induced global warming?: C Doughty, C Field, A Wolf

1340h  **GC13B-0694 POSTER** Climate change in Iceland: A Snorrason, H Bjornsson

1340h  **GC13B-0695 POSTER** Late Pleistocene and Holocene Fire History of the Swiftcurrent Lake basin, eastern Glacier National Park, Montana: J C Kutvirt, K R MacGregor, C A Riihimaki, A Myrbo

1340h  **GC13B-0696 WITHDRAWN**

1340h  **GC13B-0697 POSTER** THE ROLE OF GLOBAL EMISSION INVENTORY OF CARBONACEOUS EMISSIONS: H Fatima, O P Sharma, H Upadhyaya
1340h GC13B-0698 POSTER Soil emissions of CH4 and N2O in natural and managed ecosystems under elevated CO2: K van Groenigen, C W Olsenberg, B A Hungate

1340h GC13B-0699 POSTER "Microclimatic Impacts of Green Spaces: Sociological and Biophysical Scale Considerations for Municipal Site Developments": R Heins, A D Vanhoozer, Title of Team: Microclimatic Impacts of Green Spaces

1340h GC13B-0700 WITHDRAW

1340h GC13B-0701 POSTER The changing trophic status of shallow Minnesota lakes: evidence from stable isotopic and biological proxies: K M Theissen, K Zimmer, J B Corner, S Sugita, W Hobbs, J M Ramstack

1340h GC13B-0702 WITHDRAW

1340h GC13B-0703 POSTER Groundwater Recharge as affected by Climate Change in the Nakdong River Watershed: L Moung Jin, Title of Team: Knowledge & Intelligence Team

1340h GC13B-0704 POSTER The responses of Petunia to simulated pollutants in chamber conditions and its uses as bioindicator of pollution: I I Oguntimehin, H Kondo, H H Sakugawa

**GC13C Moscone South: Poster Hall Monday 1340h Regional Patterns of Global Warming: Models, Mechanisms, and Observations I Posters (joint with A, OS, H)**

**Presiding: A C Clement, RSMAS, University of Miami; S Xie, University of Hawaii**

1340h GC13C-0705 POSTER Impact of anthropogenic forcing on long-term precipitation trend in Africa in the 20th Century: H Kawase, T Takemura, T Nozawa

1340h GC13C-0706 POSTER Regional patterns of SST warming trend in the North Pacific based on CMIP3 multi-model simulations: K Oshima, Y Tanimoto, S Xie

1340h GC13C-0707 POSTER Global warming impacts on rainfall intensity and frequency—A regional view: C Chen, C Chou, C Chen


1340h GC13C-0709 POSTER The Interhemispheric SST Gradient in the 20th Century and in the Future, in Pacific and Atlantic: C Chang, J C Chiang, M F Wehner

1340h GC13C-0710 POSTER Characterizing seasonal markers using high-resolution water temperature data from small mountain ponds: J Daly, B Engel, J Hansen

1340h GC13C-0711 POSTER Understanding regional sea level change under CO2-induced global warming in a Model for Interdisciplinary Research on Climate version 3.2(MIROC3.2): T Suzuki

1340h GC13C-0712 POSTER Tropical Pacific present-day and future sea level changes in a linear, wind-driven model: D Wang, M A Cane

1340h GC13C-0713 POSTER Changes of Alpine Climate in East Asia - a study on Taiwan Yushan: L Tsai, K Liu

1340h GC13C-0714 POSTER Regional climate change modeling and observations for Korea: W Lee, S Yoo, S Choi, H Kwak, S Park, M Kafatos, H M El-Askary, A K Prasad

1340h GC13C-0715 POSTER A New Type of Captive Balloon for Vertical Meteorological Observation in Urban Area: M Nakamura, S Sakai, K Ono

1340h GC13C-0716 POSTER The characteristic of the Younger Dryas Event in Bilut Lake, Inner Mongolia, China: H Hsiao, S Song, H Chen, Y Wang, T Lee

1340h GC13C-0717 POSTER Response of Regional Monsoons to Global Warming: A Seth, S A Rauscher, M Rojas, A Giannini, S J Camargo

1340h GC13C-0718 POSTER Observed and Projected Changes in Precipitation Regime over Utah: S Wang, R R Gillies

1340h GC13C-0719 POSTER The Impacts of Reforestation on Wintertime Surface Albedo in the Northeastern United States, 1850-2005: E A Burakowski, C P Wake

1340h GC13C-0720 POSTER A multivariate Bayesian space-time approach to modeling Southeast United States regional hydroclimate: comparisons with RCMs and potential for probabilistic near-term projections: S Sobolowski, T M Pevsksky

1340h GC13C-0721 POSTER Trends in Extreme Temperatures and Dry Periods in the Northeastern United States: M Baber, C P Wake

1340h GC13C-0722 POSTER 21st Century Projected Northern Rocky Mountain River Discharges Under Greenhouse Forcings: J St. Jacques, S L Lapp, Y Zhao, E Barrow, D Sauchyn

1340h GC13C-0723 POSTER Regional Climate Response to Physiological Forcing of Carbon Dioxide in a Radiative-Convective Model: T W Cronin, R G Prinn

**GC13D Moscone South: Poster Hall Monday 1340h Toward a Global Greenhouse Gas Monitoring and Information System I Posters (joint with A, B, OS, PA, IN)**

**Presiding: R M Duren, JPL; J H Butler, NOAA Earth System Research Laboratory; D Rotman, Lawrence Livermore National Laboratory; P Ciais, CEA-CNRS-UVSQ**

1340h GC13D-0724 POSTER Implementing a Terrestrial Carbon Flux Model in Preparation for the Soil Moisture Active Passive Mission: J S Kimball, Y Yi, L A Jones, R R Nemani, R H Reichle, K C McDonald

1340h GC13D-0725 POSTER Numerical simulation of multiphase flows of CO2 storage in saline aquifers in Daqingzijing oilfield, China: D Yang

1340h GC13D-0726 POSTER Evaluating the North American In-Situ Carbon Dioxide Monitoring Network: Y P Shiga, A M Michalak, D Hammerling, A Chatterjee, S R Kawa, R J Engelen


1340h GC13D-0728 POSTER How will greenhouse gas observations meet changing requirements, laws, and demands?: J H Butler, P P Tans, C Sweeney, A E Andrews, J B Miller, S A Montzka


1340h GC13D-0731 POSTER Towards a Global Forest Carbon Monitoring and Information System for REDD: S S Saatchi, S Brown, N Harris, M A Lefsky, E Mitchard, L White, M R Silman, Y Malhi

All information is current as of November 12, 2010
1340h  **H13A-0936** POSTER Ensemble-based streamflow data assimilation for an operational distributed hydrologic model: M He, H Lee, Y Liu

1340h  **H13A-0937** POSTER Streamflow assimilation into operational hydrologic models via the Maximum Likelihood Ensemble Filter (MLEF) approach: H Lee, D Seo, Y Liu, M He, S K Regonda

1340h  **H13A-0938** POSTER The Role of Multimodel Combination and Data assimilation in Improving Streamflow Prediction: W Li, S Arumugam, R S Ranjithan

1340h  **H13A-0939** POSTER Estimating bathymetry and river depth in the Ohio River using simultaneous state-parameter estimation with an Ensemble Kalman filter: Y Yoon, M T Durand, E Clark, K Andreadis, C J Merry

1340h  **H13A-0940** POSTER Estimating discharge from inundation imagery: J C Neal, G Schumann, P D Bates, D C Mason

1340h  **H13A-0941** POSTER Improvement of the flood simulation with MASCARET using data assimilation: application to the Adour catchment: S M Ricci, A Picentini, O Thual, E Le Pape

1340h  **H13A-0942** POSTER Calibration of a rainfall-runoff hydrological model and flood simulation using data assimilation: A Picentini, S M Ricci, O Thual, M Coustau, A Marchandise

1340h  **H13A-0943** POSTER Evaluating the Use of Microwave Radiance and Snow Water Equivalent Data in Streamflow Prediction: C M DeChant, H Moradkhani, M Leisening

1340h  **H13A-0944** POSTER Ensemble-based snow data assimilation for an operational snow model: Y Liu, M He, D Seo, D Laurine, H Lee

1340h  **H13A-0945** POSTER Effect of Surface Soil Moisture Assimilation on SWAT Model Output: E Han, V Merwade, G C Heathman

1340h  **H13A-0946** POSTER A proto-type land surface OSSE testbed for obtaining high-resolution soil moisture data: R K Shrestha, P Houser


1340h  **H13A-0948** POSTER Improving crop biomass through asynchronous assimilation of LAI and soil moisture during multiple growing seasons of corn: T E Bongiovanni, K Nagarajan, J W Jones, A Monsivais Huertoer, J Judge

1340h  **H13A-0949** POSTER Application of the Tor Vergata Scattering Model to L Band Backscatter During the Corn Growth Cycle: A T Joseph, R van der Velde, B J Choudhury, P Ferrazzoli, P E O'Neill, E J Kim, R H Lang, T Gish

1340h  **H13A-0950** POSTER Improvement of Satellite Data Assimilation with Updated Microwave Land Emissivity Model in CRTM and New Momentum and Thermal Roughness Lengths in GFS: W Zheng, M B Ek, J Derber, H Wei, C J Meng

1340h  **H13A-0951** POSTER A Development of Three Dimensional Generalized Coupled Markov Chain Model for Subsurface Characterization: E Park

1340h  **H13A-0952** POSTER Continuous and discontinuous data assimilation methods for estimating a heterogeneous conductivity field by assimilating transient solute transport data via ensemble Kalman filter: X B Hu, J Tong

1340h  **H13A-0953** POSTER Understanding and capturing first-order stream flow processes in a data-driven model for a watershed in the Lampasas Cut Plains, Central Texas: S Potter, D Hoffman, B P Wilcox

**Hydrology**

**H13B-0959** POSTER Linking the acoustic properties of carbonate rocks to induced-chemical changes in the pore system upon injection of CO2-rich water: S Vialle, T Vanorio, G M Mavko

1340h  **H13B-0955** POSTER Dimension Reduction Method for Pore-Scale Reactive Transport Models: A M Tartakovsky, C Zhang, T D Scheibe, M Oostrom

1340h  **H13B-0956** POSTER Investigation of snap-off of sCO2 inside pores between packed ideal grains during imbibition: W Deng, B Cardenas, P Bennett

1340h  **H13B-0957** POSTER The role of different grain shapes in modifying intra-pore flow and transport phenomena: K Chaudhary, B Cardenas, P Bennett, R A Ketcham

1340h  **H13B-0958** POSTER Linking the acoustic properties of carbonate rocks to induced-chemical changes in the pore system upon injection of CO2-rich water: S Vialle, T Vanorio, G M Mavko

1340h  **H13B-0959** POSTER Mixing-induced calcite precipitation and dissolution kinetics in micromodel experiments: C J Werth, H Yoon, K Dekhoff, A J Valocchi, T A Dewers

1340h  **H13B-0960** POSTER Random Rate Models for Age Dependence in Precipitation and Dissolution Rates: D Reeves, D Rothman

1340h  **H13B-0961** POSTER Impact of carbonate precipitation on flow and reactive transport in porous media: C N Noiriel, L Yang, J B Ajo Franklin, C Steefel
1340h  
**H13B-0962** POSTER CHANGES IN SEAL CAPACITY OF FRACTURED CLAYSTONE CAPROCKS INDUCED BY DISSOLVED AND GASEOUS CO2 SEEPAGE: EVIDENCES FROM EXPERIMENTS AND MODELLING: M Andreani, P Gouze, L Luquot, G Pepe, J Dweik, P Jouanna

1340h  
**H13B-0963** POSTER Bayesian belief network for CO2 leak detection by near-surface flux rates for CO2 and perfluorocarbon (PFC) tracer: Y Yang, M J Small, E Ogretim, D D Gray, G B Bromhal, B R Strazisar, A W Wells

1340h  
**H13B-0964** POSTER Simulation of CO2 Leaks from an Injection Well and Implications on Subsurface Flow & Transport Conditions: J Wagoner, S M Ezedine, E A Burton

1340h  
**H13B-0965** POSTER Comparison of caprock pore networks which potentially will be impacted by carbon sequestration projects: K M Mouzakis, A Sitchler, J E McCray, G Rother, T Dewers, J E Heath

1340h  

1340h  
**H13B-0967** POSTER Effects of elevated CO2 on a methanogenic microbial enrichment from coal of the Powder River Basin, WY: A W Glossner, C T Mills, D Nummedal, K W Mandernack

1340h  
**H13B-0968** POSTER Extraction of Dissolved Gaseous Hydrocarbons from Brine at an Engineered CO2 Injection, Cranfield, Mississippi: K Romanak, T Zhang, C Yang, K Gilbert, P Bennett, S Hovorka

---

**H13C Moscone South: Poster Hall Monday 1340h**

**Geologic CO2 Sequestration: Capillary and Solubility Trapping of Supercritical CO2 II Posters**

**Presiding:** R L Detwiler, University of California, Irvine; D Wildenschild, Oregon State University

1340h  
**H13C-0969** POSTER Pore-Scale Modeling of Reactive-Multiphase-Buoyant Flow for Carbon Capture and Storage: S Anwar, J A Cunningham, M Trotz, M W Thomas, M Stewart

1340h  
**H13C-0970** POSTER RAPID MIGRATION OF CO2 SUPERCRTICAL. FLUIDS IN CALCITE CRISTALS: P Zuddas, O Lopez, S Salvi, Title of Team: Earth SciencesUMR1213

1340h  
**H13C-0971** POSTER Pore-Scale Research of Trapping Mechanisms and Caprock Sealing Efficiency Relevant to CO2 Sequestration: Experimental Capability Development at EML/ PNNL: T W Wietstrom, C Zhang, M Oostrom, J W Grate

1340h  
**H13C-0972** POSTER Evaluation of Displacement and Pore Pressure change Due to the Injections of Fluid in Geologic Formations: K Hsu, C Chang

1340h  
**H13C-0973** POSTER Geologic Controls Influencing CO2 Loss from a Leaking Well: K A Klise, M J Martinez, S A McKenna, P L Hopkins

1340h  
**H13C-0974** POSTER Physical Property Changes During CO2 Injection into Sandstone from Pukpyeong Formation, South Korea: Pore-scale Approach: J Han, Y Keehm

1340h  
**H13C-0975** POSTER Water and CO2 chemistry influences on the mechanical integrity of rocks: T W Darling, P Le Bas, J W Carey, P A Johnson

1340h  
**H13C-0976** POSTER Dissolution rate of CO2 during geologic sequestration: simple experiments and simulations of density-driven Rayleigh-Benard instabilities: M Szulczewski, C W MacMinn, R Juanes

1340h  
**H13C-0977** POSTER Intermediate-Scale Investigation of Capillary and Dissolution Trapping during CO2 Injection and Post-Injection in Heterogeneous Geological Formations: A Cihan, T H Illangasekare, Q Zhou, T Birkholzer, D Rodriguez

1340h  
**H13C-0978** POSTER Numerical Simulation of Impacts of Hydrological Properties of Geologic Storage Formations on Injection Efficiency of Carbon Dioxide: Ji Kim, J Kim

1340h  
**H13C-0979** POSTER Estimation of Potential Carbon Dioxide Storage Capacities of Onshore Sedimentary Basins in Republic of Korea: S Park, J Kim, Y Lee

1340h  

1340h  
**H13C-0981** POSTER Design and Analysis of Field Experiments for the Investigation of In-Situ CO2 Trapping: F F Fagerlund, A P Niemi, J Bensabat, M Rasmussen, K Rasmussen, L Tian, V Shtivelman, T Licha

1340h  
**H13C-0982** POSTER Analysis and Comparison of Carbon Capture & Sequestration Policies: E Burton, S M Ezedine, J Reed, J H Beyer, J L Wagoner

1340h  
**H13C-0983** POSTER Site closure monitoring of two CO2 plumes with VSP at the Frio Pilot: T M Daley, S Hovorka

1340h  
**H13C-0984** POSTER Sensitivity Analysis on the Long-term Behavior of CO2 Injected into Deep Saline Aquifer III: Y Kano, T Ishido

1340h  
**H13C-0985** POSTER Geochemical Modeling of CO2 Sequestration in Deep Saline Aquifers in Florida: M W Thomas, A Briley, M Trotz, M Stewart, J A Cunningham

1340h  
**H13C-0986** POSTER Exploring the effect of interfacial tension, viscosity, and flow rate on the effectiveness of capillary trapping of CO2: D Wildenschild, A L Herring, J W Carey, J M Young

---

**H13D Moscone South: Poster Hall Monday 1340h**

**High-Resolution Hydrogeophysical Characterization of Soils and Aquifers From Microscale to Field Scale I Posters (joint with NS)**

**Presiding:** L Hopp, Oregon State University

1340h  
**H13D-0987** POSTER Contribution of geophysical methods at catchment-scale to validate and refine hydrogeological conceptual models of Irish complex hard rock aquifers: J Comte, R Cassidy, C Friel, J McGettigan, U Offerdinger, J Vouillamoz, A Legtenenko, J Nitsche, K Pilatova, R M Flynn

1340h  
**H13D-0988** POSTER Assessing Hydraulic Connections Across Structural Blocks, Pahute Mesa, Nevada—Interpreting Hydraulic Properties: K J Halford, J M Fenelon, C Garcia, D S Sweetkind

1340h  
**H13D-0989** POSTER Assessing Hydraulic Connections Across Structural Blocks, Pahute Mesa, Nevada—Detecting Distant Drawdowns: C Garcia, J M Fenelon, K J Halford, D S Sweetkind

1340h  
**H13D-0990** POSTER A localized bedrock aquifer distribution explains discharge from a headwater catchment: K Kosugi, M Fujiitomo, S Katsura, H Kato, H Sando, T Mizuyama

1340h  
**H13D-0991** POSTER The use of CPT and other Direct Push methods for (hydro-)stratigraphic aquifer characterization – a field study: T Vienken, C Leven, P Dietrich

1340h  
**H13D-0992** POSTER Computing the Electrokinetic Response with Simple Models via Eigenvalue Decomposition: K L Kuhlman, B Malama

1340h  
**H13D-0993** POSTER Efficient methods for large-scale Linear Inversion for geostatistical applications: A Saibaba, P K Kitaniatis
1340h  H13D-0994 POSTER The Validation of Hydraulic Tomography for Field Pumping Tests: J Wen, S Huang, T J Yeh, J Lee
1340h  H13D-0995 WITHDRAWN
1340h  H13D-0996 POSTER Three-dimensional transient hydraulic tomography and comparison to other heterogeneity imaging methods: S J Berg, W A Illman
1340h  H13D-0997 POSTER Benefit of using geophysical information to estimate the distribution of hydrological properties for prediction of solute transport: Evaluation based on a field tracer test experiment and crosshole GPR data: B Dafflon, W Barrash, M A Cardiff
1340h  H13D-0998 POSTER Characterization and high resolution mapping of soil hydrogeophysical properties from ground penetrating radar and electromagnetic induction data in a vineyard in southern France: F Andre, R Van Durmen, S Saussez, C van Leeuwen, D Moghadas, B Delvaux, H Vereecken, L Sebastien
1340h  H13D-0999 POSTER Experimental Determination of GPR Groundwave Sampling Depth as a Function of Data Acquisition Parameters: T L Crist, A Benda, K R Grote
1340h  H13D-1000 POSTER Integrating Ground Penetrating Radar, Electrical Resistivity, Seismic Refraction, and Borehole Data to Image an Alluvial Aquifer in Three Dimensions: B L Bailey, S T Marshall, W P Anderson
1340h  H13D-1001 POSTER Estimation of soil hydraulic properties using hydrologic trajectories in transient GPR data: S M Moysey, A R Mangel
1340h  H13D-1002 WITHDRAWN
1340h  H13D-1003 POSTER Soil Property Mapping Over Large Areas Using Sparse Ad-hoc Samples: A Zhu, J Liu, C Qin, S Zhang, Y Chen, X Ma, Title of Team: The SoLiM Group
1340h  H13D-1004 POSTER Combination of comprehensive geophysical measurements and conventional soil sampling for high resolution soil mapping: U Werban, A Nuesch, T Vienken, P Dietrich, T Behrens
1340h  H13D-1006 POSTER Overcoming limitations of image analysis techniques for quantifying rizospheric physical properties: M Berli, N S Pillai, A K Mandava, K K Porteti, G Recinos, E E Regentova
1340h  H13D-1007 POSTER Space and time resolved X-ray diffraction as a tool to image mesosporous transport of water in a weakly-hydrated swelling clay: Y Meheust, H Hemmen, L Ramstad Alme, J O Fossum
1340h  H13D-1008 POSTER Detection Of Flow Instabilities Caused By Entrapped Air: MRI Infiltration-Outflow Experiment and 3D Transient Simulation Using CT-Derived Heterogeneity: M Cislerova, V Jelinkova, M Dohnal, M Snehota
1340h  H13D-1010 POSTER Combining fluorescence imaging and neutron radiography to simultaneously record dynamics of oxygen and water content in the root zone: N Rudolph, S E Oswald, S Nagl, N Kardjilov
1340h  H13D-1011 POSTER Imaging on a Shoestring: Cost-Effective Technologies for Probing Vadose Zone Transport Processes: C Corkhill, J W Bridge, G Barns, R Fraser, M Romero-Gonzalez, R Wilson, S Banwart
1340h  H13D-1013 POSTER Evaluation of a High-Resolution Benchtop Micro-CT Scanner for Application in Porous Media Research: M Tuller, C M Vaz, P O Lasso, R Kulkarni, T A Ferre

H13E Moscone South: Poster Hall Monday 1340h
Hydroclimatic Extremes: Monitoring, Diagnosis, and Prediction | 1 Posters (joint with A, NG)

Presiding: A AghaKouchak, University of California Irvine; U Lall, Columbia Univ
1340h  H13E-1014 POSTER Using Hydrologic and Climatologic Data to Distinguish Regional Drought Characteristics in GRACE Terrestrial Water Storage Datasets: A C Thomas, J Famiiglietti, M Rodell
1340h  H13E-1015 POSTER Forecasting Severe Floods for the Meghna River Basin: V E Toma, J JJAN, T M Hopson, P J Webster
1340h  H13E-1016 POSTER Trends in Precipitation Extremes over Southeast Asia: N Endo, J Matsumoto
1340h  H13E-1017 POSTER Future global population at risk of flooding: S Kanae, Y Hirabayashi
1340h  H13E-1018 POSTER Characterization of large-scale fluctuations and short-term variability of Seine river daily streamflow (France) over the period 1950-2008 by empirical mode decomposition and the Hilbert-Huang transform: N Massei, M Fournier
1340h  H13E-1019 POSTER Analysing the relations of hourly precipitation extremes and temperature over Japan based on ground observational records: N Utsumi, S Seto, S Kanae, T Oki
1340h  H13E-1020 POSTER Assessment of Long-term Trends in Extreme Precipitation: Implications of In-filled Historical Data and Temporal Window-Based Analysis: R S Teegavarapu, A Nayak, C S Pathak
1340h  H13E-1021 POSTER Evaluation of Spatial and Temporal Distribution of Precipitation Events and their Relation to Peak Flooding Events: N Gonzalez-Ramirez, R S Teegavarapu, L Chia Hung
1340h  H13E-1022 POSTER Simplified runoff model with radar rainfall data for an early flood warning system: K Shiraki, M Aoki
1340h  H13E-1023 POSTER Non-Stationary Annual Peak Flows in the Lower Peninsula of Michigan; Potential Evidence for Climate Change Observed in the Mid-20th Century: T A Dahl, J L Ryder, J P Selegean
1340h  H13E-1024 WITHDRAWN
1340h  H13E-1025 POSTER Is Oklahoma getting drier?: B Lin, T Fan, B Xi
1340h  H13E-1026 POSTER Analysis of the spatio-temporal variability of extreme hydro-meteorological events over Germany: L E Samaniego-Eguiguren, M Coskun, R Kumar, M Zink, S Attinger
1340h  H13E-1027 POSTER Understanding Changes in frequency of extreme rainfall over Central India: C B Krishnamurthy, U Lall
1340h  H13E-1028 POSTER Changing Flow Patterns In The Ganges And Brahmaputra Basins: Evidence Of Regional Climate Warming In The Eastern Himalayas?: D K Prashar, A S Akanda, D L Small, S Islam
1340h  H13E-1029 POSTER Climatological Variability in Southern Mexico: the case of the Oaxaca Pacific Coastal Basins: N Perez, T Kretzschmar, F Munoz-Arriola, T Cavazos
1410h  H13G-03 River flood events as natural tracer tests for investigating a coupled river-aquifer system: improved time-lapse 3D imaging of flow patterns by deconvolving ERT time-series:


1425h  H13G-04 Time-lapse resistivity measurements combined with soil water sampling to characterize solute movement in the unsaturated zone at Oslo airport, Gardermoen:

E Bloom, H K French, A Binley, D Schotanus, G Egg

1440h  H13G-05 Electrical Resistivity Imaging for Studying Dynamics of Vadose Zone Processes:

V Mitchell, A Pidlisecky, R J Knight

1455h  H13G-06 Streaming potential monitoring and modeling of drainage and imbibition: column and lysimeter experiments:

D Jougnot, N Linde, F Ciocca, I Lunati

1510h  H13G-07 Time-Lapse Geoelectrical Imaging of a Controlled Ethanol Release in Ottawa Sand:

R Henderson, D R Glaser, T C Johnson, D D Werkema, R J Versteeg, J W Lane

1525h  H13G-08 A Distribution-Based Parameterization for Difference Tomographic Imaging of Solute Plumes:

A Pidlisecky, K Singha, F D Day-Lewis

H13H  Moscone West: 3018  Monday 1340h
Managing Water Resources Risks and Innovating Adaptation Strategies in a World of Change II (joint with GC, PA)

Presiding: T P Burt, University of Durham; P M Reed, The Pennsylvania State University; W Chu, University of California, Irvine; N K Howden, University of Bristol

1340h  H13H-01 The Concept of ‘Peak Water’ for Managing Water Resources in a Rapidly Changing World (Invited):

P H Gleick


R Lempert


S L Granger, P Lean, J Kim, N P Molotch, D E Waliser, R Brakenridge, T Stough, C Mattman, A Hart, T G Farr, K Case, S Laki, L Lestak

1410h  H13H-04 Climate Change Impact on Meteorological, Hydrological, and Agricultural Drought: A case study of Central Illinois:

X Cai, D Wang, M I Hejazi, A J Valocchi

1428h  H13H-05 Statistical and dynamical climate predictions to guide water resources in Ethiopia:

P J Block, L M Goddard

1440h  H13H-06 Water quality trends spanning the periodic table, on timescales from hours to decades (Invited):

J W Kirchner, C Neal

1452h  H13H-07 The use of very long term water quality records from the UK: gaining perspective on problems of nitrate and DOC (Invited):

F Worrall, T P Burt, N K Howden, M Whelan

1504h  H13H-08 Effect of Cyclonic Precipitations on the Long-term dissolved and particulate fluxes of river in Taiwan (Invited):

A Galy, N Hovius, R G Hilton, A West, D Calmels, M J Bickle, M Horng, H Chen

1516h  H13H-09 Weighted Regressions on Time, Discharge, and Season (WRTDS): A new tool for description and exploration of long-term changes in surface-water quality:

R M Hirsch

1528h  H13H-10 Long term changes in U.S. river inorganic carbon chemistry (Invited):

P Raymond, L Jiang

H13I  Moscone West: 3016  Monday 1340h
Measurements and Modeling of Storage Dynamics Across Scales II

Presiding: J P McNamara, Boise State University; D Tetzlaff, University of Aberdeen; S K Carey, Carleton University

1340h  H13I-01 Estimating storage dynamics by combining top-down and bottom-up approaches:

P K Barthold, P Kraft, K B Vache, H G Frede, L Breuer


G E Grant, A J Jefferson, C Tague, S Lewis

1410h  H13I-03 Water storage dynamics and runoff response of a Boreal Shield headwater catchment:

C Oswald, M C Richardson, B A Branfireun

1425h  H13I-04 Soil water Storage, from Profile to Watershed (Invited):

M S Seyfried

1440h  H13I-05 Abrupt changes in soil water content variability for various time scales and at different depths at the catchment scale:

U Rosenbaum, M Herbst, J A Huisman, A Weurth, T J Petersen, A W Western, H Vereecken, H R Bogena

1455h  H13I-06 What is the total water storage in catchments and can tracers help?:

C Soulsby, D Tetzlaff, M hrachowicz, C Birkel

1510h  H13I-07 The Idiosyncrasies of Storage and Implications forCatchment Runoff (Invited):

C Spence

1525h  H13I-08 A parsimonious, process-based hydrological model for headwater catchments:

R C Sidle, K Kim, Y Tsuboyaama, I Hosoda

H13J  Moscone West: 3020  Monday 1340h
Patterns in Soil-Vegetation-Airmosphere (SVA) Systems: Monitoring, Modeling, and Data Assimilation II (joint with A, B, GC)

Presiding: S Crewell, University of Cologne; H Vereecken, Forschungszentrum Julich; S J Kollet, University of Bonn; A B Moradi, Helmholtz Centre for Environmental Research - UFZ

1340h  H13J-01 The Impacts of Multiscale Land-Cover Heterogeneity on Climate and Weather (Invited):

R Avissar, D Medvigy, R L Walko

1355h  H13J-02 Global water table depth from observations and a model synthesis (Invited):

Y Fan, H Li, G Miguez-Macho

1410h  H13J-03 The role of vegetation fraction on the thermodynamics of the land surface:

N A Brussell, S J Schymansky, A Kleidon

1425h  H13J-04 Nested mesoscale-LES WRF simulations: validation and application to diurnal cycles over heterogeneous land surfaces:

E Bou-Zeid, C Talbot, J A Smith

1440h  H13J-05 New insights in catchment processes via distributed soil moisture measurements and 3D hydrological modeling:

H R Bogena, G Sciuot, U Rosenbaum, M Herbst, J A Huisman, H Vereecken, B Diekkrueger

1455h  H13J-06 Measuring and modeling changes in land-atmosphere exchanges and hydrologic response in forests undergoing insect-driven mortality:

D J Gochis, P D Brooks, A A Harpold, B E Ewers, E Pendall, H R Barnard, D Reed, P C Harley, J Hu, J Biederman

1510h  H13J-07 Parameters Estimation of Coupled Water and Energy Balance Model Based on Stationary Constraints of Surface States:

J Sun, G Salucci, D Entekhabi

1525h  H13J-08 Root Patterns in Heterogeneous Soils:

A Dara, A B Moradi, A Carminati, S E Oswald
Earth and Space Science Informatics

IN13A Moscone South: Poster Hall Monday 1340h Climate Information Integration Posters (joint with A, B, GC, H, OS, PP, P, ED)

Presiding: D K Arctur, Open Geospatial Consortium, Inc.; B Domenico, UCAR; S Nativi, CNR & Univ. Florence; S Fiore, CMCC, Euro-Mediterranean Center for Climate Change

1340h IN13A-1089 POSTER Data Infrastructures for the next IPCC report: A European Perspective (Invited): M Stockhauser, M Lautenschlager, B Lawrence, S Kindermann, F Toussaint

1340h IN13A-1090 POSTER Data and Metadata Infrastructures at the World Data Centre for Climate: F Toussaint, M Lautenschlager

1340h IN13A-1091 WITHDRAWN

1340h IN13A-1092 POSTER The Climate-G Portal: a scientific gateway for climate change: S Fiore, G Aloisio, J D Blower, A Cofino, S Denvil, P A Fox, M Petididier, H Schwichtenberg

1340h IN13A-1093 POSTER The NSF Ocean Observatories Initiative Cyberinfrastructure and the open availability of related climate data: J A Orcutt, F L Vernon, M Arrott, O Schofield, C L Peach, A D Chave, J Graybeal, M James, M Meisinger

1340h IN13A-1094 POSTER Integrating climate data management and access with the Unified Access Framework, a GEO-IDE project: K O’Brien, K S Casey, T Habermann, S C Hankin, L McCulloch, K R McDonald, R Mendelsohn, G K Rutledge, R P Signell

1340h IN13A-1095 POSTER Crossing the Digital Divide: Connecting GIS, Time Series and Space-Time Arrays (Invited): D R Maidment, F Salas, B Domenico, S Nativi

1340h IN13A-1096 POSTER Advancing Climate Change and Impacts Science Through Climate Informatics: W Lenhardt, L C Pouchar, A W King, M L Branstetter, S Kao, D Wang

1340h IN13A-1097 POSTER MAPS (My Atlas and Plot Service) for Integrated Earth Observation Data: M Ichino, K Fukuda, N Sugiuira, R Funakoshi

1340h IN13A-1098 POSTER Modeling and Analysis Compute Environments, Utilizing Virtualization Technology in the Climate and Earth Systems Science domain: A Michaelis, R R Nemani, W Wang, P Votava, H Hashimoto

1340h IN13A-1099 POSTER Projected Applications of a “Climate in a Box” Computing System at the NASA Short-term Prediction Research and Transition (SPoRT) Center: G Jedlovec, A Molthan, B Zavodsky, J Case, F LaFontaine

1340h IN13A-1100 POSTER Test Driven Development: Lessons from a Simple Scientific Model: T L Clune, K Kuo

1340h IN13A-1101 POSTER Climate Modeling with a Million CPUs: M Tobis, C S Jackson

IN13B Moscone South: 302 Monday 1340h Enabling and Encouraging Transparency in Science Data II (joint with GC, PA, ED, NH)

Presiding: L M Raymond, Woods Hole Oceanographic Institution; W J Weber, Unidata Program Center

1340h IN13B-01 Approaching data publication as part of the scholarly communication enterprise: some obstacles, some solutions (Invited): T J Vision

1355h IN13B-02 Realities in Science Data and Information - Let's go for translucency: P A Fox

1410h IN13B-03 Identifying Data in the Earth Sciences (Invited): R E Duerr

1425h IN13B-04 Developing Incentives for Data Sharing in Ecology: C S Duke

1440h IN13B-05 A Clarification of the National Science Foundation Data Policy: C A Jacobs


1510h IN13B-07 Geo-Seas – building a unified marine geoscience data infrastructure for Europe: H M Glaives, D Schaap, C Graham, Title of Team: Geo-Seas Consortium Partners

1525h IN13B-08 Advancing Access, Attribution, and Integration of Earth & Ocean Science Data: Integrated Services of the Marine Geoscience Data System and the Geoinformatics for Geochemistry Program: K A Lehner, S M Carbotte, V Ferrini, R A Arko, S Chan, W B Ryan

Natural Hazards


Presiding: J S Wang, Lawrence Berkeley National Laboratory; G Waysand, Laboratoire Souterrain Bas Bruit de Rustrel-Pays d’Apt (LSBB); Y Guglielmi, University of Marseille

1340h NH13A-1139 POSTER Solar-terrestrial effect controls seismic activity to a large extent (Invited): G Duma

1340h NH13A-1140 POSTER Top-down and Bottom-up Coupling between Ionosphere and Solid Earth (Invited): F T Freund, M Lazarus, G Duma

1340h NH13A-1141 POSTER Einstein–De Haas Coupling of Geomagnetic Storms to the Earth’s Crust: R L Walkley, M Lazarus, J S Wang, R Dahlgren, F T Freund

1340h NH13A-1142 POSTER Comparison of the Microseismic Signature of Hurricanes Katrina (2005) and Isok (2006): S Sim, G Laske

1340h NH13A-1143 POSTER Discontinuous Galerkin method in frequency-space domain for wave propagation in 2D heterogeneous porous media: B Dupuy, L De Barros, S Garambois, J Virieux

1340h NH13A-1143A POSTER Magnetic pulsation generated by seismic wave motion of crust and upper mantle: K Taira, T Iyemori, D Han

1340h NH13A-1144 POSTER Uranium groundwater anomalies and active normal faulting: W Plastino, G F Panza, P P Povinec, Title of Team: on behalf of ERMES Collaboration (National Institute of Nuclear Physics - Gran Sasso National Laboratory)

1340h NH13A-1145 POSTER Detection and modeling of ionospheric GPS-TEC patterns induced by Rayleigh waves: L M ROLLAND, P Lognonné, H Munekane, E Astafyeva

1340h NH13A-1146 POSTER Seismo-ionospheric transfer function: dependence on time, location and other special features: E Astafyeva, L M ROLLAND, P Lognonne
**NH13B** Moscone South: Poster Hall | Monday | 1340h
Land-Ocean-Atmospheric Processes: Implication to Natural Hazards and the Global Carbon Cycle II Posters *(joint with A, IN, ED, GC, H, NH, NS, OS, S, DI, T, V)*

*Presiding: Y A Kontar,* University of Illinois at Urbana-Champaign; *F R Rack,* University of Nebraska-Lincoln; *R P Singh,* RTDC


1340h **NH13B-1148 WITHDRAWN**

1340h **NH13B-1149 POSTER** Biological Extreme Events - Past, Present, and Future: **V P Gutschick**

1340h **NH13B-1150 POSTER** The potential influence of thaw slumps and sea-level rise on the Arctic carbon cycle *(Invited): J C Rowland,* B T Crosby, B J Travis

1340h **NH13B-1151 POSTER** Climate-induced tree mortality: earth system consequences for carbon, energy, and water exchanges: **H D Adams,** A Macalady, D D Breshears, C D Allen, C Luce, P D Royer, T E Huxman

1340h **NH13B-1152 POSTER** Recent SST trends and Flood Disasters in Brazil: **Y Yamashiki,** S K Behera, S Inoue, S Netrananda, R D Silva, K T Takara, T Yamagata

---

**NH13C** Moscone West: 3022 | Monday | 1340h
Hazards Associated With Snow- and Ice-Capped Volcanoes II *(joint with A, C, EP, V, G)*

*Presiding: B R Edwards,* Dickinson College; *J F Larsen,* Geophysical Institute; *H Delgado Granado,* Instituto de Geofisica, UNAM; *C F Waythomas,* Alaska Volcano Observatory; *H Tuffen,* Lancaster University

1340h **NH13C-01 POSTER** Volcano-Ice Interaction during the April-May 2010 eruption of Eyjafjallajökull, Iceland *(Invited): L Capra*

1410h **NH13C-02 POSTER** Abrupt climatic changes as triggering mechanisms of massive volcanic collapses: examples from Mexico *(Invited): J S Walder*

1425h **NH13C-04 POSTER** Preparing for the next eruption in the Cascades: Unexpected outcomes from the 2004 – 2008 eruption of Mount St. Helens, Washington *(Invited): S P Schilling*

1455h **NH13C-05 POSTER** Variations in Lahar Matrices at Cotopaxi Volcano and their Hazard Implications *(Invited): P A Mothes*

1525h **NH13C-08 POSTER** Towards Developing Systematics for Using Periodic Studies of the Hydrothermal Manifestations As Effective Tool for Monitoring Largely ’Inaccessible’ Volcanoes: **M Alam**

---

**Near Surface Geophysics**

**OS13A** Moscone South: Poster Hall | Monday | 1340h
Inversion II: Uncertainty and Managing the Unknown Posters *(joint with GP, S, H, MR, NG)*

*Presiding: B Jafarpour,* Texas A&M University; *G Ng,* USGS Menlo Park

1340h **OS13A-1163 POSTER** Improved geophysical model assessment using Bayesian Markov Chain Monte Carlo sampling: **B J Minsley**

1340h **OS13A-1164 POSTER** Theoretical Study the Error Caused by Dipole Hypothesis of Large-loop TEM Response: **S Yan,** G Xue, N Zhou

1340h **OS13A-1165 POSTER** Iterative Spatial Resampling for Seismic Subsurface Characterization: **C Jeong,** T Mukerji, GMariethoz

1410h **OS13A-1166 POSTER** Experimental Design for Groundwater Pumping Estimation Using a Genetic Algorithm (GA) and Proper Orthogonal Decomposition (POD): **A J Siade,** W Cheng, W W Yeh

1430h **OS13A-1167 POSTER** Constrained optimisation of the parameters for a simple isostatic Moho model: **R J Lane**

---

**Ocean Sciences**

**OS13A** Moscone South: Poster Hall | Monday | 1340h
Decision Support Systems for Coastal and Marine Resource Management II Posters *(joint with B, H, NH, PA)*

*Presiding: F E Muller-Karger,* University of South Florida; *C Eakin,* National Oceanic and Atmospheric Administration; *L S Guild,* NASA Ames Research Center; *M A Roffer,* Roffer’s Ocean Fishing Forecasting Service, Inc.

1340h **OS13A-1213 POSTER** Analysis of the Degree of Artificialization of the Cities of Itapema and Balneário Camboriú – Santa Catarina (Brazil): **L Piatto,* M Polette

1340h **OS13A-1214 WITHDRAWN**

1340h **OS13A-1215 POSTER** Coastal Resilience: Using interactive decision support to address the needs of natural and human communities in Long Island Sound, USA: **B Gilmer,** A Whelchel, S Newkirk, M Beck, C Shepard, Z Ferdana

1340h **OS13A-07 POSTER** The Application of Remotely Sensed Data and Models to Benefit Conservation and Restoration Along the Northern Gulf of Mexico Coast: **D A Quattrocchi,** M G Estes, Jr., M Z Al-Hamdan, R Thom, D Woodruff, C Judd, J T Ellis, R Swann, H Johnson III

1340h **OS13A-1217 POSTER** Modeling the effects of climate change and acidification on global coral reefs: **C A Logan,** S D Donner, C Eakin, J P Dunne

1340h **OS13A-1218 POSTER** NOAA Coral Reef Watch: Decision Support Tools for Coral Reef Managers: **J Rauenzahn,* C Eakin, W J Skirving, T Burgess, T Christensen, S F Heron, J Li, G Liu, J Morgan, C Nim, B A Parker, A E Strong
1340h OS13A-1219 POSTER A High-Resolution SST Climatology Set for Next Generation NOAA Coral Reef Watch Decision Support System: J Li, C Eakin, F E Muller-Karger, L S Guild, R R Nemani, C Hu, S E Lynd, M S McCaffrey, K Teleki, T Christensen, G Liu, C Nim, T Burgess, S F Heron, W J Skirving, M Vega-Rodriguez

1340h OS13A-1220 POSTER Multi-sensor Oceanographic Correlations for Pacific Hake Acoustic Survey Improvement: M Brozen, N Hillyer, B Holt, E M Armstrong

1340h OS13A-1221 POSTER GCOOS Web Applications for Recreational Boaters and Fishermen: S Kobara, M K Howard, C Simionello, A E Jochens, Title of Team: Gulf of Mexico Coastal Ocean Observing System Regional Association (GCOOS-RA)

1340h OS13A-1222 POSTER Developing the capability to monitor and predict California coastal upwelling using an ocean circulation model: X Wang, S J Bograd, L Breaker, Y Chao, J Doyle, D G Foley, F B Schwing

OS13B Moscone South: Poster Hall Monday 1340h Marine Renewable Energy II Posters (joint with PA)

Presiding: S C James, Sandia National Laboratories; S C James, Sandia National Laboratories; V Neary, Oak Ridge National Laboratory; V Neary, Oak Ridge National Laboratory

1340h OS13B-1223 POSTER On the Maximum Extractable Power From a Tidal Channel: P F Cummins

1340h OS13B-1224 POSTER Simulating Environmental Changes Due to Hydrokinetic Energy Installations: S C James, C A Jones, J D Roberts

1340h OS13B-1225 POSTER Energy Extraction from a Hypothetical MHK Array in a Section of the Mississippi River: J Barco, S C James, J D Roberts, C A Jones, R A Jepsen


1340h OS13B-1227 POSTER Implementation of a boundary element method to solve for the near field effects of an array of WECs: J A Oskamp, H T Ozkan-Haller

1340h OS13B-1228 POSTER Development of a local ocean prediction model of the Fort Lauderdale region for energy extraction purpose: A Bozec, E Chassignet, H P Hanson

1340h OS13B-1229 POSTER Development of a Testing Platform for Scaled-Laboratory Studies of Marine Hydrokinetic Devices: M L Beninati, M A Volpe, D R Riley, M H Krane

1340h OS13B-1230 WITHDRAWN

1340h OS13B-1231 WITHDRAWN

OS13C Moscone South: Poster Hall Monday 1340h Ocean Exploration II Posters (joint with B, V)

Presiding: N Alvarado, NOAA/OAR; R A Beach, NOAA


1340h OS13C-1233 POSTER INDEX-SATAL 2010 EXPLORATION: Kawio Barat Submarine Volcano in the North Sulawesi, Indonesia, image from the deep: H Permana


1340h OS13C-1236 POSTER Video Observations by Telepresence Reveal Two Types of Hydrothermal Venting on Kawio Barat Seamount: D A Butterfield, J F Holden, T M Shank, V Tunnilliefe, J Sherrin, S Herrera, E T Baker, D Lovalvo, S Makarim, M A Malik, S Wirasantosa, S R Hammond

1340h OS13C-1237 POSTER Large research infrastructure for Earth-Ocean Science: Challenges of multidisciplinary integration across hardware, software, and people networks: M Best, C R Barnes, F Johnson, L Pautet, B Pirene, Title of Team: and Founding Scientists of NEPTUNE Canada

1340h OS13C-1238 POSTER A Major Upgrade for the U.S. Deep Submergence Vehicle Alvin: S E Humphris, C R German, A Bowen

1340h OS13C-1239 POSTER Near-Real Time Monthly Global Temperature and Salinity Gridded Data from New Ocean Exploration by Argo Floats: P C Chu, L Sun, C Fan

1340h OS13C-1240 POSTER Multibeam Synthesis of the Northwestern Hawaiian Islands Supports Diverse Research in the Papahanaumokuakea Marine National Monument: J R Smith, C D Kelley


1340h OS13C-1242 POSTER Development of levees on deep-sea channels: Insights from high-resolution AUV exploration of the Lucia Chica system, offshore central California: K L Maier, A Fildani, B Romans, C K Paull, T McHargue, S A Graham, D W Caress

1340h OS13C-1243 POSTER Rolling Deck to Repository (R2R): Automated Magnetic and Gravity Quality Assessment and Data Reduction: J J Morton, S O’Hara, V Ferrini, R A Arko

1340h OS13C-1244 POSTER Rolling Deck to Repository (R2R): Research Cruise Event Logging System Update: A R Maffei, C L Chandler, L Stolp

1340h OS13C-1245 POSTER Rolling Deck to Repository (R2R): Next Steps in Ocean Exploration for Data Dissemination and Discovery: S P Miller, S M Carbotte, K Stocks, V Ferrini, R A Arko, C L Chandler, A R Maffei, S R Smith, M A Bourassa, P D Clark, A D Sweeney, S H O’hara, J J Morton

1340h OS13C-1246 POSTER Rapid Characterization of Near-Surface Seafloor Sediment using a Free Fall Penetrometer: G K Mulukutla, J Melton

1340h OS13C-1247 POSTER Data System Upgrades within the National Deep Submergence Facility: S J McCue


1340h OS13C-1249 POSTER Real-time science and outreach from the UNOLS fleet via HiSeasNet: S Foley, J Berger, J A Orcutt, D Brice, D F Coleman, E M Grabowski

1340h OS13C-1250 WITHDRAWN
OS13D Moscone South: Poster Hall  Monday 1340h
Ocean Sciences General Contributions: Physical Oceanography II Posters
Presiding: C A Collins, Naval Postgraduate School

1340h OS13D-1253 WITHDRAWN
1340h OS13D-1254 POSTER Observation of 2009 Typhoon Morakot induced excess freshwater pulse in Taiwan surrounding seas: S Jan, Y Yang, J Wang, G Gawarkiewicz, J Kuo
1340h OS13D-1255 POSTER Temporal variability of the core depth of EUC in the Gulf of Guinea: I Muhammed, G Quartly, P Challenger
1340h OS13D-1256 POSTER Seasonal Overturning Circulation in the Red Sea: F Yao, I Hoteit, A Koehl
1340h OS13D-1257 POSTER Seasonally Recurring Errors of the Indian Ocean Temperature Forecasts with NCEP-CFS: D Lee, D G DeWitt
1340h OS13D-1258 WITHDRAWN
1340h OS13D-1259 POSTER Agesostrophic and quasi-geostrophic circulation in the Gulf of Tehuantepec, Mexico. HF-Radio measurements: X Flores-Vidal, C P Chavanne, R Durazo, P J Flamant
1340h OS13D-1260 POSTER Variation of eddy kinetic energy from the altimetric data in the East/Japan Sea: Y Son, K Chang, B Choi
1340h OS13D-1261 POSTER Adopting EMD Algorithm for Radar Image Analysis on Ocean Surface Wave and Current Measurements: H Cheng, H Chien
1340h OS13D-1262 POSTER Statistical Parameters of the Geostrophic Ocean Flow Field, Estimated from the Jason-1 - TOPEX/Poseidon Tandem Mission: M G Scharffenberg, D Stammer
1340h OS13D-1263 POSTER The California Undercurrent and Beyond: 5 Years of Seaglider Observations of Cross-Shore Structure in the Pacific Northwest Coastal Zone: N Pelland, C E Eriksen, C M Lee
1340h OS13D-1264 POSTER Hawaiian Lee Countercurrent and Eddy Modulations by the Pacific Decadal Oscillations: S Yoshida, B Qiu, P W Hacker
1340h OS13D-1265 POSTER The Deep Oxygen Minimum off the Central California Coast: C A Collins, L Ivanov, T Margolina, T A Rago
1340h OS13D-1266 POSTER Effects of tidally driven mixing in the production of the overflows in the Nordic Seas, using the Max Planck Institute Ocean Model MPI-OM: E Exarchou, J Von Storch, J H Jungclaus
1340h OS13D-1267 POSTER IMPACT OF ENSO ON WAVE CLIMATE IN THE SOUTH PACIFIC IN PRE-INDUSTRIAL AND FUTURE CLIMATES: A Vega, C Menkes, M Lengaigne, P Marchesiello, S Andreoufet, P Queffeulou, F Ardhuin
1340h OS13D-1268 WITHDRAWN
1340h OS13D-1269 POSTER Impact of tide-induced residual currents on the salinity distribution around the Changjiang Estuary: H WU
1340h OS13D-1270 POSTER Seasonal and interannual changes of the upper isothermal and isohaline layers off Baja California: J Gomez-Valdes, G Jeronimo, Title of Team: IMECOCAL
1340h OS13D-1271 POSTER Characteristics of Coastal Trapped Waves along the Southern and Eastern Coasts of Australia: K Maiwa, Y Masumoto, T Yamagata
1340h OS13D-1272 POSTER Intra-seasonal Mixed Layer Process Variability from the ECCO Ocean Data Assimilation Product: Preliminary Analysis Relevant to DYNAMO: D J Halkides, D E Waliser, T Lee, L E Lucas, R G Murtugudde
1340h OS13D-1273 POSTER Effects of small-scale, high-frequency ocean variability on surface material transport in the coastal ocean: J Schleicher, J Osborne, A L Kurapov, R M Samelson
1340h OS13D-1274 POSTER Seeking a computationally efficient approach to include gravitational self attraction in evolving ocean models: O F Lopez, R Hallberg
1340h OS13D-1275 POSTER Results from a winter 2009-2010 nearshore mooring test in 25 m water depth off Newport, Oregon: E P Dever, B W Waldorf, C M Risien
1340h OS13D-1276 POSTER The establishment of the atmosphere-ocean-wave circulation coupled models——The improvement of CGCMs’s simulations by the wave-induced vertical mixing: Z Song, F Qiao
1340h OS13D-1277 POSTER Transitions between Central-Pacific and Eastern-Pacific Types of ENSO: J Yu, S Kim
1340h OS13D-1278 POSTER Mechanisms of Cyclone Induced Subsurface High Salinity Intrusion in the Northern Arabian Sea: Z Wang, S F Dimarco, L Belabbassi
1340h OS13D-1279 WITHDRAWN
1340h OS13D-1280 POSTER The upstream spreading of bottom trapped plumes: R P Matano, E D Palma
1340h OS13D-1281 POSTER Mesoscale and submesoscale thermohaline structure in the California Current System from glider observations: R E Todd, D L Rudnick, R E Davis
1340h OS13D-1282 POSTER The AMANDES model for the Amazon estuary and shelf: Y Le Bars
1340h OS13D-1283 POSTER Internal gravity waves simulated by a 1/10 degree OGCM developed within the STORM project: J von Storch, Title of Team: The STORM-consortium
1340h OS13D-1284 POSTER Resolving the diurnal cycle in satellite derived sea surface temperatures and its significance on surface heat fluxes: R R Weish, M A Bourassa
1340h OS13D-1285 POSTER MOORING-BASED OBSERVATIONS OF BOUNDARY CURRENT IN THE NANSEN BASIN OF THE ARCTIC OCEAN: VERTICAL STRUCTURE AND VARIABILITY: A Pynushkov, I Polyakov
1340h OS13D-1286 POSTER LATERAL AND TIDAL ASYMMETRIES IN STARTIFICATION AT THE ENTRANCE TO A COASTAL PLAIN ESTUARY: N B Basdurak, A Valle-Levinson
1340h OS13D-1287 POSTER The alteration of Intermediate-Deep Water in Sagami Bay associated with the variations of the Kuroshio axis: Q Wang, Y Kitade, M Nemoto, J Yoshida
1340h OS13D-1288 POSTER Deep and surface circulation in the Northwest Indian Ocean from Argo, surface drifter, and in situ profiling current observations: S A Stryker, S F Dimarco, M M Stoessel, Z Wang
1340h OS13E-1298 POSTER Artic Submarine Slope Stability: D Winkelman, W Geissler

1340h OS13E-1299 POSTER Subaqueous Mass movements in Lake Mjoesa, Norway: C F Forsberg, H Heyerdahl, A Solheim

1340h OS13E-1295 POSTER Recurrent Pleistocene Mega-Faults in the Norway Basin, NE Atlantic Margin: B Hjelstuen, E Andreassen, H Hafldason

1340h OS13E-1296 POSTER Undulated sediment features on Mediterranean prodelta: distinguishing sediment transport structures from sediment deformation: R Urgeles, A Cattaneo, P Puig, C Liqute, B De Mol, N Sultan, F Trincardi

1340h OS13E-1297 POSTER Submarine Landslides: Characterization, Processes, and Their Sedimentary Record I Posters (joint with EP, NH)

Presiding: R Urgeles, Passeig Maritim de la Barceloneta; D C Mosher; J D Chaytor, U.S. Geological Survey; M Strasser, MARUM, University of Bremen

1340h OS13E-1300 POSTER Overview of Submarine Landslides From the Charlevoix-Kamouraska/Lower St. Lawrence Estuary Seismic Zone, Eastern Canada: G St-Onge, J Locat, P Lajeunesse, C Geneviève, H Gagné, B Sinkunas, G Philibert, D J Piper, T Mulder, C Hillaire-Marcel, J S Stoner

1340h OS13E-1291 POSTER Slope failure of continental frontal ridges offshore Vancouver Island, British Columbia: N Scholz, M Riedel, G Spence, B Dugan, H Daigle, R D Hyndman, T S James, K Naegeli

1340h OS13E-1292 POSTER Giant landslides along the northern Ligurian Margin (NW Mediterranean) using very high-resolution data: some insights into geohazard assessment: A Cattaneo, M Castro Díaz, E Fernandez-Nieto, A Manganey, S C Singh, A Chauhan, F Bouchut, M Castro Díaz

1340h OS13E-1293 POSTER Distribution of submarine landslides along the northern Ligurian Margin (NW Mediterranean) using very high-resolution data: some insights into geohazard assessment: V Hassoun, S Migeon, C Larroque, B F Mercier-de-Lepinay, A Cattaneo

1340h OS13E-1304 POSTER Subsurface Seismic Record of Sediment Failures in the Neogene of Deepwater West Africa: Causal Mechanisms and Characteristics: A P Oluboyo, D Zhunussov, M Huuse, R Gawthorpe
OS13G-02 Evidence From Three-Dimensional Seismic Reflection Images for Crustal Magma Bodies off the East Pacific Rise: J Canales, H D Carton, M Xu, M R Nedimovic, S M Carbotte, J C Mutter

1410h OS13G-03 Upper Crustal Seismic Velocity Structure of the Endeavour Segment, Juan de Fuca Ridge: R T Weekly, W S Wilcock, D R Toomey, E E Hoof, A E Wells

1425h OS13G-04 Hydrogen isotope exchange between n-alkanes and water under hydrothermal conditions: implications for abiogenic and thermogenic hydrocarbons in vent fluids: E P Reeves, J Seewald, S Sylva

1440h OS13G-05 Hydrothermal Plume Particulate Organic Material as a Transport Vector for a Diversity of Trace Minerals: J A Breier, M A Marcus, S Fakra, C R German, B M Toner

1455h OS13G-06 Siderophore production in high iron environments: S A Bennett, C L Hoffman, J W Moffett, K J Edwards

1510h OS13G-07 Larval abundance and dispersal at deep-sea hydrothermal vents in the southern Mariana Trough: S E Beaulieu, H Watanabe, S W Mills, F Pradillon, S Kojima, L S Mullineaux

1525h OS13G-08 Geological and geochemical controls on the distribution of Alviniconcha vent snail symbioses: Have we finally linked mantle to microbes? (Invited): P R Girguis, R Beinart, J Sanders, J Seewald

OS13H Moscone South: Poster Hall Monday 1440h Sverdrup Lecture (Webcast)

Presiding: P Schlosser, Columbia University

1440h OS13H-01 The Autonomous Revolution: Transforming Ocean Observation with Mobile Platforms (Invited): C C Eriksen

Planetary Sciences

P13A Moscone South: Poster Hall Monday 1340h Asteroids and Meteorites I Posters

Presiding: C S Plesko, Los Alamos National Laboratory; J Harvey, The Open University

1340h P13A-1360 POSTER Energy Deposition onto an Asteroid or Comet Nucleus from a Nuclear Burst: C S Plesko, R Weaver, W F Huebner

1340h P13A-1361 POSTER Lithium isotopes as an indicator of primary and secondary processes in unequilibrated meteorites: Chondrule cooling and aqueous alteration in CO chondrites: J L Sharrock, J Harvey, M Fehr, R H James, J J Parkinson

1340h P13A-1362 POSTER Near Earth Asteroids Accessible to Human and Robotic Exploration: N J Strange, D Landau, C Yam, F Biscani, D Izzo

1340h P13A-1363 POSTER Multiple NEO Rendezvous, Reconnaissance and In Situ Exploration: K Klaus, M S Elsperman, T Cook, D Smith

1340h P13A-1364 POSTER Ground Observation of the Hayabusa Reentry: The Third Opportunity of Man-made Fireball from Interplanetary Orbit: Y Ishihara, M Yamamoto, Y Hiramatsu, M Furumoto, K Fujita


Presiding: M L Coleman, JPL

1340h P13B-1365 POSTER A European Mars Simulation Wind Tunnel Facility: J P Merrison, H P Gunnlaugsson, S Knak-Jensen, N Per

1340h P13B-1366 POSTER OASES: Lessons learned from Oceanographic Exploration relevant to future Astrobiology expeditions: A Bowen, C R German, L L Whitcomb, D R Yoerger, M Jakuba, J C Kinsey, Title of Team: Oases science team

1340h P13B-1367 POSTER Developing Improved Water Velocity and Flux Estimation from AUVs – Results From Recent ASTEP Field Programs: J C Kinsey, D R Yoerger, R Camilli, C R German


1340h P13B-1370 POSTER Analyses Of A Large Climbing Dune In The Ea’u Desert Of Hawaii: Implications For Understanding Dark Dunes On Mars: R A Craddock, D Tirsch, G Nanson, S Tooth, M Langhans

1340h P13B-1371 POSTER Mud Volcanoes – Analogos to Martian Cones and Domes (by the thousands !): C Allen, D Oehler

1340h P13B-1372 POSTER Fluvial Channel Networks as Analogos for the Ridge-forming Unit, Sinus Meridiani, Mars: M J Wilkinson, J B DuBois

1340h P13B-1373 WITHDRAWN

1340h P13B-1374 POSTER The Sahara Desert as an Analogue to Sand Seas on Titan: J Radebaugh, R D Lorenz, C J Savage, T G Farr, S D Wall, N Lancaster, Title of Team: Cassini RADAR Team

1340h P13B-1375 POSTER Erosion of Theater-Headed Tributaries by Overland Flow in the Atacama Desert, Northern Chile: Analogos to Martian Valley Networks: R P Irwin, A Baptista, R A Craddock, A D Howard, S Tooth

1340h P13B-1376 POSTER Orbital and Ground-Truth Spectral Matching on the Upper Slopes of Kilimanjaro with Application to Martian Orbital Observations: U N Horodyskij

1340h P13B-1377 POSTER Hotspots on Venus and Earth: Topographic Comparisons: P R Stoddard, D M Jurdy

1340h P13B-1378 POSTER SAN FRANCISCO VOLCANIC FIELD, ARIZONA, AS AN ANALOG FOR LUNAR AND MARTIAN SURFACE EXPLORATION: K E Young, K Hodges, D Eppler, F Horz, G R Hofgren, J M Hurtado, Title of Team: Desert RATS Science Team

1340h P13B-1379 POSTER Minerals and Microorganisms in Evaporite Environments: P A Morris, R L Briggman

1340h P13B-1380 POSTER Ancient and Modern Salars of the Atacama Desert, Chile: A Terrestrial Analog for Evaporite Formation on Mars: M C Jungers, R Amundson, A M Heimsath, P R Christensen, C S Edwards

1340h P13B-1381 POSTER Yungay Atacama, Chile, and University Valley, Antarctica, as Mars analogs, based on aridity as indicated by soil salt profiles and other characteristics: S P Kounaves, S Douglas
P13B-1382 POSTER Sulfide weathering in the Werenskioldbreen, Spitsbergen – A polar terrestrial analogue for gypsum deposition in the North Polar Region of Mars: A Szyrkiewicz, M Modelska, S Buczynska, D Borrok, L Pratt

P13B-1383 POSTER Geobiological Assessment of Evaporite Deposits in the Great Salt Lake Desert: Preliminary Results: K Lynch, K Zabrusky, R Lossing, T M Hoehler, J R Spear

P13B-1384 POSTER Microbiological sampling of the atmosphere using a latex sounding balloon: W P Adkins, N Bryan, B C Christner, T G Guzik, M F Stewart, J R Giannancone

P13B-1385 POSTER Possible oxidants at Mars surface and their impact on organic matter: A Noblet, P J Coll, C Szopa, F Stalport


P13B-1388 POSTER Lipid Biomarker Preservation in Silica-Depositing Hydrothermal Analogs: L L Jahnke, M N Parenteau, J D Farmer

P13B-1389 POSTER Unusually high stable carbon isotopic values of methane from low organic carbon Mars analog hypersaline environments: C A Kelley, J A Poole, A Tazaz, J Chanton, B Bebout

P13B-1390 POSTER OPHIOLITES AND GAS SEEPS AS TERRESTRIAL ANALOGS FOR METHANE ORIGIN AND DEGASSING ON MARS: M Schoel, G Etiope


P13B-1392 POSTER Characterization of microbial metabolism and isotopic biosignatures in saline, alkaline, evaporitic systems of the Cariboo Plateau, B.C.: L Leoni, A L Brady, D S Lim, G F Slater

P13B-1393 POSTER Present-day serpentinization in the Tablelands, Gros Morne National Park, Newfoundland: a Mars Analogue Site: N Szponar, P L Morrill, W J Brazelton, M O Schrenk, D M Bower, A Steele

P13B-1394 WITHDRAWN

P13B-1395 POSTER Volcanic Rocks As Targets For Astrobiology Missions: N Banerjee

P13B-1396 POSTER On the probability of extant endolithic life on Mars: H J Sun

P13B-1397 POSTER Mapping Microbial Populations Relative to Sites of Ongoing Serpentinization: Results from the Tablelands Ophiolite Complex, Canada: M O Schrenk, W J Brazelton, Q Woodruff, N Szponar, P L Morrill


P13B-1399 POSTER Precursor Exploration Missions in Kelly Lake, British Columbia- MARSLIFE project: A C Trembanis, J Gutsche, S H Nebel

P13B-1400 POSTER A Survey of Plant Coverage and Distribution within the Haughton Impact Structure: L Artman, P Johnson-green

P13B-1401 POSTER Diversity of soil characteristics at the Haughton Impact Structure: P Johnson-green, L Artman

P13C Moscone South: Poster Hall Monday 1340h Rosetta Flybys of Asteroids 2867 Steins and 21 Lutetia I Posters

Presiding: C J Alexander, Jet Propulsion Laboratory; P D Feldman, Johns Hopkins University

1340h P13C-1402 POSTER Thermal Modeling of Rosetta Flyby Asteroid 21 Lutetia: P R Weissman, E D Rosenberg

1340h P13C-1403 POSTER The Irregular Shape of (21) Lutetia as Determined from Ground-based Observations: A Conrad, B Carry, W J Merline, J D Drummond, C R Chapman, P M Tamblyn, J C Christou, C Dumas, H A Weaver, Title of Team: Rosetta OSIRIS Instument Team

P13D Moscone South: 306 Monday 1340h Explosive Volcanism in the Solar System II (joint with EP, V)

Presiding: B D Brand, University of Washington; N P Lang

1340h P13D-01 CO2-related explosive alkaline magmatism in Gusev crater, Mars: Implications for oxygen fugacity and carbon inventory in the Noachian Martian mantle (Invited): T Usui, H Y McSween, B C Clark

1355h P13D-02 Comparisons of volcanic eruptions from linear and central vents on Earth, Venus, and Mars (Invited): L S Glaze, S M Balgo

1410h P13D-03 Has Martian History Been Dominated by Explosive Rather than Effusive Volcanism?: J L Bandfield, C S Edwards, D R Montgomery


P13E Moscone South: 306 Monday 1440h On the Nature, Origin, and Evolution of Water on Small Bodies II (joint with SH)

Presiding: C Hibbitts, JHU-APL; R M Mastrapa, SETI Institute/ NASA Ames

1440h P13E-01 Analysis of the behavior of the 3-3m absorptions in the M8 lunar reflectance observations and indications of OH sources and processes for airless bodies: T B Mc Cord, J Combe

1455h P13E-02 Probing adsorbed water on lunar regolith materials using thermal and non-thermal desorption (Invited): T M Orlando, J McLaren, M Poston, G Greives, A Alexandrov, M D Dyar, C Hibbitts


1525h P13E-04 Haumea, an intriguing Water Ice Surface in the transNeptunian Belt: N Pinilla-Alonso
Paleoceanography and Palaeoclimatology

PP13A Moscone South: Poster Hall Monday 1340h
Loess 2.0: Milestones and Recent Advances in the Study of Loess, Dust, and Other Eolian Sediment Archives III Posters

**Joint with A, B, EP, GP, GC, OS**

*Presiding: B Machalett, Humboldt-University of Berlin; E A Oches, Bentley University; H M Roberts, Aberystwyth University; Z Lai, Qinghai Institute of Salt Lakes, Chinese Academy of Sciences*

1340h PP13A-1483 POSTER Deciphering the Geochronological Framework of Serbian Loess Using Amino Acid Stratigraphy: E A Oches, B Machalett, W D McCoy, S Markovic

1340h PP13A-1484 POSTER Age and origin of ice-riche Yedoma silts at Duvanny Yar, northeast Siberia: a record of Beringian environmental change since the last interglacial: J Murton, M E Edwards, D Murton, M Bateman, J Haile

1340h PP13A-1485 WITHDRAWN

1340h PP13A-1486 POSTER A NEW HIGH-RESOLUTION CHRONOLOGY OF MEGADRODRURAL FOLLOWING THE MEDIEVAL CLIMATIC ANOMALY AND LITTLE ICE AGE IN THE CENTRAL GREAT PLAINS, USA: A F Hafsen, W C Johnson, P R Hanson, J Q Spencer, T Woodburn, A R Young

1340h PP13A-1487 POSTER Palaeoenvironmental implications of an aeolian luminescence chronology from the Qinghai Lake area, northeastern Qinghai-Tibetan Plateau: X Liu, Z Lai, D Madsen, Y Sun

1340h PP13A-1488 POSTER Understanding the timing and environmental significance of loess fluctuations in the Western Mediterranean: examples from Southern Spain: C E Gallant, S J Armitage, I Candy

1340h PP13A-1489 POSTER Loess Deposits in the Tashkent Region, Uzbekistan – New Insights by the Application of Highly-resolved Particle Size Analyses: N G Mavlyanova, H L Rakhatmutulaaev, B Machalett, IJ Smalley, K O’Hara-Dhand

1340h PP13A-1490 POSTER Intensive winds during glacial periods increased sand-dune activity and loess deposition: O Crouvi, Y Enzel, R Amit, A Gillespie

1340h PP13A-1491 POSTER High-Frequency, High-Magnitude Climate Shifts Recorded in Permian Loessite Deposits, Tropical Pangaea (Colorado, USA): M J Soreghan, G S Soreghan

1340h PP13A-1492 POSTER Magnetic characteristics of the Holocene loess deposits within the river basin Chirchik: A G Stelmakh

1340h PP13A-1493 POSTER Climate Effect of Dust Aerosol in Southern Chinese Loess Plateau: Y Mu, X Qin, Z Yin

1340h PP13A-1494 POSTER Palaeomagnetic stratigraphy indicators of loess deposits in Uzbekistan: H A Toychiev, A G Stelmakh

1340h PP13A-1495 POSTER Palaeosols in the loess deposits of eastern Uzbekistan: U K Abdunazarov, A G Stelmakh

1340h PP13A-1496 POSTER Aeolian Dust Dynamics and Synthetic Atmospheric Circulation Patterns in the Black Sea Region Since Marine Isotope Stage 15: C Markley, B Machalett, E A Oches, S Markovic, W Endlicher

1340h PP13A-1497 POSTER Modeling dust emission variations in Eastern Europe related to North-Atlantic abrupt climate changes of the last glacial period: A Sima, M Kageyama, D Rousseau, G Ramstein, M Schulz, Y Balkanski, P Antoine, F Dulac, C Hatte, F Lagroix, N Gerasimenko

1340h PP13A-1498 POSTER Eolian grain-size signature of the Sikouzi lacustrine sediments (Chinese Loess Plateau): Implications for Neogene evolution of the East-Asian winter monsoon: H Jiang, Z Ding


1340h PP13A-1500 POSTER The Ca Isotopic Composition of Dust-Producing Regions: M S Pantle, H J Tollerud, A Eisenhauer, C E Holmden

1340h PP13A-1501 POSTER New data on the late Pleistocene history of lake fluctuations in the Sevier Desert, Utah: C G Oviatt, J Q Spencer, Y Fan, A Leggett

1340h PP13A-1502 WITHDRAWN

1340h PP13A-1504 POSTER A high-resolution peat record from NW Iran reveals several episodes of enhanced atmospheric dust during the last 14000 years: O Sharifi, A Pourmand

1340h PP13A-1505 POSTER Eolian delivery of highly reactive iron to the glacial ocean of the late Paleozoic: S Sur, G S Soreghan, J D Owens, T W Lyons, M J Soreghan

1340h PP13A-1506 POSTER Using Ancient Dust to Track Atmospheric Circulation and Orogenesis in Western Equatorial Pangaea: G S Soreghan, M J Soreghan, G E Gehrels, M A Hamilton, P K Link, C Fanning, J E Evans, G A Augsburger

1340h PP13A-1507 POSTER Aeolian Delivery of Organic Matter to a Middle Permian Deepwater Ramp: S Artaian, B E Herbert, M M Tice

1340h PP13A-1508 POSTER Hydrogen isotope exchange experiments with Mt Mazama ash: G S Nolan, I N Bindeman, J L Palandri

1340h PP13A-1509 POSTER Engineering and geological characteristics of loess rocks of Chirchik-Akkhangaran region: M Shermatov, H A Toychiev, U K Abdunazarov, A G Stelmakh

PP13B Moscone South: Poster Hall Monday 1340h
Paleoceanography and Palaeoclimatology General Contributions Posters

*Presiding: F Meik, Grand Valley State University; B Hoenisch, Lamont-Doherty Earth Observatory*

1340h PP13B-1510 POSTER An Update on the RV Knorr Long Coring System after Seven Cruises: W B Curry, J E Broda

1340h PP13B-1511 POSTER Impact of paleosalinity on mixed-layer features in the western North Pacific: T Motoi

1340h PP13B-1512 POSTER Tropical-Subpolar Linkages in the North Atlantic during the last Glacial Period: M J Vauver coworkers, D A Hoddell

1340h PP13B-1513 POSTER Hydrographic changes in the eastern subpolar North Atlantic during the last deglaciation: H M Benway, J F McManus, D Oppo, J L Cullen

1340h PP13B-1514 POSTER Elemental Records of the Penultimate Glacial-Interglacial Cycle in the Cariaco Basin, Venezuela: K Gibson, L C Peterson

1340h PP13B-1515 WITHDRAWN

1340h PP13B-1516 POSTER Variations of the paleo-productivity in benthic foraminifera records in MIS 3 from western South China Sea: Y Niu, J Du, B Huang, M Chen

1340h PP13B-1517 POSTER Late Quaternary East Asian monsoon evolution deduced from elemental XRF scanning data in the western South China Sea: Z He, Z Liu, J Li, X Xie

1340h PP13B-1518 POSTER Past Changes in Carbon Flux and Cycling in A Large Subtropical Estuary: Evidence from U-Series Radioisotope Studies: S Luo, Y Wu
PP13C Moscone South: Poster Hall  Monday  1340h  
Presiding: P S Dekens, San Francisco State University;  
K T Lawrence, Lafayette College

1340h  PP13C-1534 POSTER The ePRISM experiment: An early Pliocene global paleoclimate reconstruction:  M M Robinson, H J Dowsett

1340h  PP13C-1535 POSTER New high-resolution topographic model for the Pliocene Greenland-Scotland Ridge:  H J Dowsett,  S M Jones, M M Robinson, A M Haywood

1340h  PP13C-1536 POSTER Simulating the Antarctic and Greenland ice sheets in the mid-Pliocene warm period - An ice sheet model intercomparison project:  A M Dolan,  S J Koening,  D J Hill,  R DeConto, A M Haywood

1340h  PP13C-1537 WITHDRAWN

1340h  PP13C-1538 POSTER MODULAR GROWTH IN BRYOZANS AND THE INFRINGEMENT OF PLIOCENE CLIMATE REGIMES:  B Okamura, A O’Dea, T Knowles, N Clark, M Williams

1340h  PP13C-1539 POSTER Early Pliocene Weddell Sea climate and seasonality reconstructed from bivalves and bryozoans:  M Williams,  N Clark, B Okamura, J Zalasiewicz, A Johnson, M J Leng, J Smellie, A Haywood, A Nelson-Laloe, P Taylor

1340h  PP13C-1540 POSTER Pliocene weathering processes recorded at mid-latitude in Southern Brazil:  S B Riffel, M P Vasconcelos, I O Carmo

1340h  PP13C-1541 POSTER Evidence of interannual shelf water variability along the Western Middle Atlantic during the Pliocene:  J Hudley, D M Surge

1340h  PP13C-1542 POSTER MID-PLIOCENE SEA SURFACE TEMPERATURE OF THE NORTH ATLANTIC SUBTROPICAL GYRE:  B P Lutz

1340h  PP13C-1543 POSTER The Kuroshio Extension during the Pliocene-Neogene climate transition: orbital-scale temperature reconstructions from ODP Site 1208:  N L Vent, K Billups, T Herbert

1340h  PP13C-1544 POSTER Pliocene and late Miocene soil temperatures in the Chinese Loess Plateau based on clumped-isotope thermometry of paleosol carbonates:  M B Suarez, B H Passey, A Akaikin

1340h  PP13C-1545 POSTER Orbital Scale Sea Surface Temperature and Carbonate Preservation Changes in the Southwest Pacific Ocean during the Pliocene Warm Period:  R P Caballero Gill, T Herbert

1340h  PP13C-1546 POSTER Investigating Pliocene warm-water upwelling (“permanent El Niño condition”) in littoral communities of Peru and southern California:  A E Prentice, E A Nesbitt

1340h  PP13C-1547 POSTER Indian Ocean Sea Surface Temperatures during the mid-Piacenzian:  D K Stoll, M M Robinson, H J Dowsett


PP13D Moscone South: Poster Hall  Monday  1340h  
The Early Pliocene Warm Period as an Analog for Future Warmth II Posters (joint with GC)

Presiding:  P S Dekens, San Francisco State University;  
K T Lawrence, Lafayette College

1340h  PP13D-1549 POSTER Sea Surface Temperatures in the Indo-Pacific Warm Pool During the Early Pliocene Warm Period:  P S Dekens, A C Ravelo, E M Griffith

1340h  PP13D-1550 POSTER Teleconnections in a Warmer Climate: Perspective from the Pliocene:  S P Shukla, M A Chandler, D H Rind, L E Sohl
1340h PP13D-1551 POSTER Variations in the Nd isotope composition of Late Miocene to Early Pliocene glacially derived sediments in Prydz Bay, East Antarctica: M Mabson, E L Pierce, C L Dale, T Williams, S R Hemming, T van de Flierdt, C Cook, S L Goldstein

1340h PP13D-1552 POSTER Prelude to the Plio-Pleistocene Glaciations: Southwest Pacific Sea Surface Temperature During the Late Miocene and Pliocene: K T Lawrence, L C Peterson, A L Brannick, C M Schaupp

1340h PP13D-1553 POSTER Alkenone-derived Mediterranean SST during the Serravallian to Messinian Stages of the late Miocene (6.3-12.9 Ma) reveals cooling prior to northern hemisphere glaciation: A Tzanova, T Herbert, L C Peterson

1340h PP13D-1554 POSTER Climate history in the south Atlantic subtropical gyre over the last 4 Ma: D E Wojcieszek, P S Dekens

1340h PP13D-1555 POSTER Pliocene Seasonality along the US Atlantic Coastal Plain Inferred from Growth Increment Analysis of Mercenaria carolinensis: I Z Winkelstern, D M Surge

PP13E Moscone West: 2007 Monday 1340h Paleoceanographic Insights Into Ocean Acidification II (joint with OS, V)

Presiding: T M Hill, UC Davis; A D Russell, University of California, Davis; S C Flores, University of California, Davis

1340h PP13E-01 Past ocean acidification events, sensitivity, and latitudinal saturation gradients (Invited): R E Zeebe

1355h PP13E-02 Combining calcite dissolution proxies with aragonite dissolution proxies to trace carbonate dissolution throughout the entire water column: An experiment with foraminifers and pteropods: F Mekik

1410h PP13E-03 Neoproterozoic ice ages, boron isotopes, and ocean acidification: S A Kasemann, A R Prave, A E Fallick, C J Hawkesworth, K Hoffmann

1425h PP13E-04 REVISED RECONSTRUCTION OF THE GLACIAL OCEAN DEEP SEA CARBONATE ION CONCENTRATION BASED ON FOSSIL FORAMINIFER ASSEMBLAGES: D M Anderson

1440h PP13E-05 High-resolution grain size analysis and its significance for detecting ocean acidification at the onset of the Paleocene-Eocene Thermal Maximum (PETM): 55Ma (Invited): T J Bralower, L Kump, L Eccles, G J Smith, T L Lindemann, G J Bowen, A Schneider Mor, E Thomas

1455h PP13E-06 Ocean Acidification during the Paleocene-Eocene Thermal Maximum: Constraints from Multiple Proxies (Invited): J C Zachos, L D Anderson, R E Brown, B Hoenisch, D Kelly, D E Penman, E Thomas, R E Zeebe

1510h PP13E-07 Reconstructing deep-sea acidification during the early Cenozoic (Invited): B Hoenisch, O Hyams, M S Raitzsch, E Thomas, J C Zachos, R E Zeebe

1525h PP13E-08 Acidification and Deoxygenation during Hyperthermal Events: Evidence from Seafloor Biota: E Thomas, J C Zachos, U Roehl

PP13F Moscone West: 2007 Monday 1340h Sea Level, Near-Surface Currents, and the Stratigraphic Record: Recent Results II (joint with G, OS)

Presiding: G Mountain, Rutgers University; C Fulthorpe, Institute for Geophysics; J Proust, CNRS &amp; Rennes University; K Hoyaanagi, Shinshu University


1355h PP13F-02 Core-seismic integration of lower-middle Miocene sequences of the New Jersey shallow shelf (IODP Exp. 313): Sequence boundaries are impedance contrasts: M Bassetti, K G Miller, D Montevertede, G Mountain, J Proust, E ScienceParty


1425h PP13F-04 Along-Strike Variation in the Signature of Contourite Deposition: Canterbury Basin, New Zealand: C Fulthorpe, H Lu, C M McHugh, E Shipboard Scientific Party


1455h PP13F-06 Preliminary Tectonic Subsidence Results: Outer Shelf and Upper Slope Sites, Canterbury Basin from IODP Expedition 317: M A Kominiz, Title of Team: Expedition 317 Shipboard Scientific Party

1510h PP13F-07 First results from IODP Expedition 325 to the Great Barrier Reef: unlocking climate and sea level secrets since the Last Glacial Maximum: J M Webster, Y Yokoyama, C Cotterill, Title of Team: Expedition 325 Scientists


SPA-Acronomy

SA13A Moscone South: 301 Monday 1340h Frontiers in Aeronomy II

Presiding: L J Paxton, JHU/APL; L J Paxton, JHU/APL;

J H Clemmons, The Aerospace Corporation; J P Thayer, University of Colorado

1340h SA13A-01 A perspective of the science and mission challenges in aeronomy: J F Spann

1355h SA13A-02 Global Modeling of Equatorial Plasma Bubbles: J Huba, G R Joyce, J Krall

1410h SA13A-03 Physical Modeling of Atmospheric Neutral Density Climatology, Variability and Weather: M Fedrizzi, T J Fuller-Rowell, M Codrescu

1425h SA13A-04 The Role of Precipitating Energetic Particles in Coupling Atmospheric Regions: S M Bailey, C E Randall, S C Solomon, S Yee, J U Kozyra, D N Baker

1440h SA13A-05 Mapping the transport of air parcels in the thermosphere due to the background wind: M G Conde, A J Ridley, M F Larsen
1455h  **SA13A-06** On the model-data convergence in optical aeronomy *(Invited)*: J L Semeter
1525h  **SA13A-08** A Satellite Mission Concept to Study Thermosphere-Ionosphere Coupling: T R Pedersen, E Zesta, C Y Huang, C S Lin, F A Marcos, P A Roddy, J O Ballenthin, E K Sutton, D L Cooke

---

**SPA-Solar and Heliospheric Physics**

**SH13A Moscone South: 309**  **Monday**  **1340h**

**First Results From the Solar Dynamics Observatory II**

*Presiding:* W D Pesnell, NASA / GSFC; P C Chamberlin, NASA/ GSFC; N E Hurlburt, Lockheed Martin ATC
1340h  **SH13A-01** First Results from SDO Extreme Ultraviolet Variability Experiment (EVE) *(Invited)*: T N Woods, Title of Team: SDO EVE Team
1400h  **SH13A-02** Multi-thermal observations of flares and eruptions with the Atmospheric Imaging Assembly on the Solar Dynamics Observatory. *(Invited)*: C J Schrijver, Title of Team: the AIA Science Team
1420h  **SH13A-03** Early SDO/HMI Magnetic Field Observations *(Invited)*: J T Hoeksema, Title of Team: HMI Magnetic Field Team
1440h  **SH13A-04** The Solar Dynamics Observatory Education and Public Outreach Program: The First Years: M Wawro, E Drobné, A Van Doren, D K Scherrer
1510h  **SH13A-06** Physical Properties of Solar Flares: New Results from EVE/SDO: H P Warren, J T Mariska, G A Doschek, Title of Team: The EVE Team
1525h  **SH13A-07** First SDO/AIA Observations of Global Coronal EUV “Waves”: Multiple Components and “Ripples”: W Liu, N V Nitta, C J Schrijver, A M Title, T D Tarbell

---

**SPA-Magnetospheric Physics**

**SM13A Moscone South: Poster Hall**  **Monday**  **1340h**

**Inner Magnetospheric Response to High-Speed Streams I Posters** *(Joint with SA, SH)*

*Presiding:* M W Liemohn; V Peroomian, UCLA
1340h  **SM13A-1783** POSTER Development of a fully self-consistent numerical simulation model for ring current dynamics in the inner magnetosphere: T Amano, K Seki, Y Miyoshi, T Umeda, Y Matsumoto, Y Ebihara, S Saito
1340h  **SM13A-1784** POSTER How different is the ring current during solar wind high-speed streams and Coronal Mass Ejections?: P C Brandt, M I Sintov, K Keika, A Y Ukhorskiy, S W Hsieh, I S Dandouras, Title of Team: The TWINS Science Team
1340h  **SM13A-1785** POSTER Detailed Sensitivity Analysis of Radiation Belt Models during High-Speed Solar Wind Streams: D R Creveling, J Koller
1340h  **SM13A-1786** POSTER Ground-based estimates of outer radiation belt energetic electron precipitation fluxes into the atmosphere: C J Rodger, M Chilver, R J Gamble, T Ulich, T Raia, A M Seppälä, J C Green, N R Thomson, J Sauvaud, M Parrot
1340h  **SM13A-1787** POSTER Magnetopause shadowing effects for radiation belt models during high-speed solar wind streams: J Koller, S Morley
1340h  **SM13A-1788** POSTER Comparing Magnetospheric Cross-Field Current Systems In ICME And CIR/HSS Driven Storms: M W Liemohn, R Ilie, D De Zeeuw, N Y Ganushkina
1340h  **SM13A-1789** POSTER Response of outer belt electrons and VLF waves to high-speed streams: Y Miyoshi, R Katoaka, Y Kasahara
1340h  **SM13A-1790** POSTER The Acceleration of Ions in the Near-Earth Magnetotail during CME- and CIR-driven Geomagnetic Storms: V Peroomian, M El-Alaoui
1340h  **SM13A-1791** POSTER Variations of Earth’s radiation belt intensities on time scales of days throughout the 11-year solar cycle: M R Presicci, D N Baker, S G Kanekal
1340h  **SM13A-1792** POSTER On the relationship between relativistic electron flux and solar wind velocity: Paulikas and Blake
1340h  **SM13A-1793** POSTER The Inner Edge of the Plasma Sheet: T Sotirelis, F Jiang, A R Lee, P T Newell
1340h  **SM13A-1794** POSTER Two-satellite observations of Pi2 pulsations in the inner magnetosphere: M Teramoto, M Nose, K Takahashi, P R Sutcliffe, D Lee
1340h  **SM13A-1795** POSTER Online 3-D Visualization of ENA Inversions with Simultaneous In-situ Measurements: M Kusterer, P C Brandt, R Demajistre, S W Hsieh, J D Vandegriff
1340h  **SM13A-1796** POSTER Persistent Excitation Over Several Days of EMIC waves in Association With a High Speed Stream: C Weaver, M Lessard, C J Farrugia, M J Engebretson
1340h  **SM13A-1797** POSTER Effect of Plasma Sheet Conditions and Induced Electric Fields on Geomagnetic Storm Development: S G Zaharia, V K Jordanova, D T Welling

---

**SM13B Moscone South: Poster Hall**  **Monday**  **1340h**

**Magnetospheric Response to Transient Solar Wind Features I Posters**

*Presiding:* Q Zong, UML CAR; H Zhang, NASA Goddard Space Flight Center
1340h  **SM13B-1798** POSTER Night-side DP-2 type fluctuations observed by the FM-CW Radar and MAGDAS stations: A Ikeda, K Yumoto, T Uozumi, S Abe, M Shinozuka, K Nozaki, A Yoshikawa, V Bychkov, B Shevtsov, Q Sugon, D McNamara
1340h  **SM13B-1799** POSTER An event of interplanetary shock – magnetosphere interaction: Comparison between spacecraft observations and MHD modeling: A A Samsonov, D G Sibeck, S Chen, H J Singer, H K Biernat, N Zolotova
1340h  **SM13B-1800** POSTER State transition of the magnetosphere-ionsphere compound system due to a northward turn of the interplanetary magnetic field revealed from a global MHD simulation and formation of the overshielding potential: S Fujita, T Kikuchi, T Tanaka
1340h  **SM13B-1801** POSTER The Two Basic Modes of Magnetospheric Convection Compared: G L Siscoe, C J Farrugia, P E Sandholt
1340h  **SM13B-1802** POSTER Geostationary magnetic field response to solar wind pressure variations: B J Jackel, B McKiernan

---

All information is current as of November 12, 2010
1340h **SM13B-1803** POSTER Geosynchronous magnetic field responses to interplanetary shocks: J Park, K Kim, S Sung, D Lee, K Park

1340h **SM13B-1804** POSTER Resonant interactions of ULF standing waves with ring current O+ ions during geomagnetic storms: B Yang, Q Zong, S Fu, X Li, A Korth, H Reme

1340h **SM13B-1805** POSTER A Perfect Substorm: ICME-driven Magnetic Activity Catches Galaxy 15 in the Wrong Place at the Wrong Time: M G Connors, C T Russell, V Angelopoulos, H J Singer, K Glassmeier

1340h **SM13B-1806** POSTER Modeling the Nose Events Observed by Cluster on April 11, 2002 with UBK Method: Y Wang, Q Zong

1340h **SM13B-1807** POSTER Evolution of low altitude and ring current ENA emissions from moderate magnetospheric storms: Continuous and simultaneous TWINS observations: P W Valek, P C Brandt, M H Fok, J Goldstein, D J McComas, J D Perez, E C Roelof, R M Skoug

1340h **SM13B-1808** POSTER TWINS ENA observations of ring current dynamics during an ICME-driven geomagnetic storm on 6 April 2010: E W Grimes, J D Perez, N Buzulukova, M H Fok, J Goldstein, D J McComas

1340h **SM13B-1809** POSTER Energetic Neutral Atom (ENA) Pitch Angle Distribution as a Function of Storm Phase – Precursor to Future Work in Mapping ENA/Ion Albedo with Storm Phase: D A Mackler, J Jahn, J Mukherjee, C J Pollock

1340h **SM13B-1810** POSTER Sources of the Oscillations Observed in the Magnetopause Layers: J Simunek, J Safrankova, Z Nemecek

1340h **SM13B-1811** POSTER The effects of a rapid IMF cone-angle change on Earth’s magnetopause and boundary fluctuations: K Hwang, M L Goldstein, D G Sibeck

1340h **SM13B-1812** POSTER Magnetopause Position Under Different Conditions: Z Nemecek, K Jelinek, J Safrankova, S Dusik, G Granko

1340h **SM13B-1813** POSTER MAGNETOSPHERIC PERTURBATIONS RELATED TO IMF DISCONTINUITY PASSING THROUGH THE MAGNETOSHEATH: THEMIS AND GROUND-BASED OBSERVATIONS: A V Dmitriev, A V Suvorova

1340h **SM13B-1814** POSTER IMF Bz as Dominant Factor for the LLBL Formation: O Tkachenko, J Safrankova, Z Nemecek, S Dusik

1340h **SM13B-1815** POSTER Magnetic field structures on ion gyro-radius scale across the magnetopause: Y Yao, C C Chaston, K Glassmeier, V Angelopoulos

1340h **SM13B-1816** POSTER Revising theoretical predictions of the motion and direction of FTE’s: Y M Collado-Vega, D G Sibeck

1340h **SM13B-1817** POSTER Relationship between energetic upstream ion and electron events observed by Wind spacecraft: K Ogasawara, M I Desai, G M Mason

1340h **SM13B-1818** POSTER Inductive Electric Fields in the Inner Magnetosphere during Geomagnetically Active Periods: S Ohtani, H Korth, K Keika, Y Zheng, P C Brandt, S B Mende

1340h **SM13B-1819** WITHDRAWN

**SM13C** Moscone South: 307  Monday  1340h

*Magnetospheric Plasma Waves: Generation, Propagation, and Interaction With Energetic Particles II (joint with AE, SA, SH)*

**Presiding:** B J Fraser, E MacDonald, Los Alamos National Laboratory

1340h **SM13C-01** Magnetospheric waves, particles, and spaceflight anomalies (Invited): L J Lanzerotti, J Lee, K Keika

1358h **SM13C-02** Loss Of Relativistic Electrons In The Inner Magnetosphere Via Wave Particle Interactions: S G Kaneval, J F Fennell, D N Baker, K K Davis

1412h **SM13C-03** Quantification of the Precipitation Loss of Radiation Belt Electrons Observed by SAMPEX (Invited): W Tu, X Li, R S Selesnick, M D Looper

1430h **SM13C-04** Comparison of the 3D VERB Code Simulations of the Dynamic Evolution of the Outer and Inner Radiation Belts With the Reanalysis Obtained from Observations on Multiple spacecraft: Y Shprits, D Subbotin, B Ni, M Dae, D A Kondrashov, M Hartinger, K Kim, K Orlova, T Nagai, R H Friedel, Y Chen

1444h **SM13C-05** Simulation of Radiation Belt Wave-Particle Interactions Using MHD-SDE Methods: A A Chan, S R Elkin, J M Albert

1458h **SM13C-06** Diffusion-Advection Modeling of Quasilinear and Nonlinear Wave-Particle Interactions: J M Albert, J Bortnik, W Li, R M Thorne

1512h **SM13C-07** Non resonant scattering by equatorially confined magnetosonic waves: J Bortnik, R M Thorne

1526h **SM13C-08** Free Energy to Drive the Magnetosonic Instability at Geosynchronous Orbit: M F Thomsen, M H Denton, L Chen, V K Jordanova, R M Thorne

**SM13D** Moscone South: 305  Monday  1430h

*Moon-Magnetosphere Interactions at Jupiter and Saturn II (joint with P)*

**Presiding:** S Simon, Universitaet zu Koeln; J Saur, Univ. of Cologne

1340h **SM13D-01** Modulation of the jovian ring current and magnetodisc due to impulsive volcanic activity on Io: C S Arridge, N A Achilleos, P Guio

1355h **SM13D-02** Surface Irradiation of Jupiter’s Moon Europa: M Rubin, V Tenishev, M R Combi, X Jia, K C Hansen, T I Gombosi

1410h **SM13D-03** What can we learn from the auroral footprints of the Jovian moons? (Invited): A Bonfond

1425h **SM13D-04** Discovery of the Enceladus Auroral Footprint. (Invited): A M Rymer, W R Pryor, Title of Team: CAPS, MIMI, UVIS and MAG science teams.

1440h **SM13D-05** Hybrid simulations of moon-magnetosphere interactions at Saturn (Invited): H Kriegel


1510h **SM13D-07** Fossil magnetic fields due to Titan’s plasma interaction revisited:The role of the electric conductivities in the ionosphere and in Titan’s interior: F M Neubauer, A Hoerdt, A Wennmacher, S Simon, C Bertucci, M K Dougherty

1525h **SM13D-08** Titan’s Thermospheric Response to Various Plasma Environments: J H Westlake, J M Bell, B A Magee, K Mandt, J H Waite
Study of Earth’s Deep Interior

DI13A Moscone South: Poster Hall Monday 1340h
Seismic Anisotropy in the Mantle: Progress, Prospects, and Pitfalls I Posters (joint with MB, S)

Presiding: S Merkel, CNRS - Universite Lille 1; T W Becker, USC; C Beghein, UCLA

1340h DI13A-1841 POSTER Seismic Anisotropy Beneath California: Constraints from Rayleigh Wave Tomography: J Seavey, D W Forsyth, C J Rau

1340h DI13A-1842 POSTER Observations of Surface Wave Azimuthal Anisotropy in Southern California by Direct Application of the Beamforming Method: C R Alvizzi, T Tanimoto

1340h DI13A-1843 POSTER Shear wave splitting beneath the Bighorn Mountains, Wyoming: Analyzing the need for models of complex anisotropy: M A Solomon, D Schutt

1340h DI13A-1844 POSTER Seismological Detection of Azimuthal Anisotropy in the Transition Zone: K Yuan, C Beghein

1340h DI13A-1845 POSTER Coupled-Mode Waveform Tomography: Imaging Upper Mantle Isotropic and Anisotropic Structure: D M Rieger, J J Park

1340h DI13A-1846 POSTER Nonlinear inversion for arbitrarily-oriented anisotropic models: Synthetic testing: P M Bremner, M P Panning

1340h DI13A-1847 POSTER Waveform modeling of short-scale shear-wave splitting variations across the Dead Sea basin: A Kavian, G Rumpker

1340h DI13A-1848 POSTER Shear Wave Splitting, Crustal Anisotropy, and Patterns of Mantle(?): Deformation: M J Fouch, D A Okaya, R Arrowsmith

1340h DI13A-1849 POSTER East Antarctic Seismic Anisotropy from Shear-wave Splitting Analysis of AGAP Seismograms: S Hernandez, D A Wiens, A Nyblade

1340h DI13A-1850 POSTER Complex deformation beneath Sulawesi from local and teleseismic shear-wave splitting observations: J F Di Leo, J Woekey, J O Hammond, J M Kendall

1340h DI13A-1851 POSTER Modeling shear wave splitting observations from Iceland: Y V Fu, A Li, G Ito, S Hung

1340h DI13A-1852 POSTER Upper and mid-mantle anisotropy beneath the Tonga slab: M D Long, B J Foley

1340h DI13A-1853 POSTER Seismic anisotropy beneath the Japan subduction zone from teleseismic receiver functions: E A Wirth, M D Long

1340h DI13A-1854 POSTER Low Poisson Ratios in Subduction Zones: B R Hacker, G A Abers

1340h DI13A-1855 POSTER ANISOTROPY AND ATTENUATION IN A RETREATING SUBDUCTION ZONE: SOUTHERN ITALY: P Baccheschi, L Margheriti, M S Steckler, P De Gori, E Boschi

1340h DI13A-1856 POSTER Is the stagnant slab of the Pacific plate seismically anisotropic: Y Tono, Y Fukao, Y Gao, S Tsuboi

1340h DI13A-1857 POSTER Seismic anisotropy around subduction zones caused by small-scale convection in the mantle wedge and the density anomaly in the subslab mantle: M Morishige, S Honda

1340h DI13A-1858 POSTER Fabric anisotropies and seismic properties within peridotites in mantle wedge regions along the northwestern pacific margin: K Michibayashi

1340h DI13A-1859 POSTER The effect of aluminum and water on the development of orthopyroxene fabrics: N Miyajima, G M Manthilake, F Heidelbach, D J Frost


1340h DI13A-1861 POSTER Plastic Deformation of Wadsleyite and Seismic Anisotropy in the Mantle Transition Zone: T Kawazoe, T Ohuchi, Y Nishihara, N Nishiyama, T Irifune

1340h DI13A-1862 POSTER A new method for the experimental study of dislocations in high pressure minerals: S Merkel, C Nsr, G Ribarik, T Ungar, G Vaughan, P Cordier

1340h DI13A-1863 POSTER Deformation of MgSiO3 Post-Perovskite and D’ Anisotropy: L M Miyagi, W Kanitpanyacharoen, P M Kaercher, K K Lee, H Wenk

Mineral and Rock Physics

MR13A Moscone South: Poster Hall Monday 1340h
Deep Mantle Properties I Posters (joint with DI, S, T)

Presiding: R M Wentzcovich, Univ Minnesota; K Hirose, Tokyo Tech; D A Yuen, University of Minnesota; T Lay, Univ. California Santa Cruz

1340h MR13A-1893 POSTER Micro-XANES measurements of ferropericlase inclusions in diamonds from the lower mantle: S Odake, H Ishibashi, B Harte, H Kagi

1340h MR13A-1894 POSTER Mg-ferrite precipitates in magnesio-wüstite inclusions in diamond from superdeep origin: extraordinary nonstoichiometry of a deep mantle Mg-wüstite: R Wirth, L Dobzhinetskaya, B Harte, H W Green

1340h MR13A-1895 POSTER High-pressure Raman spectroscopic study of magnetite Fe3O4: A Kyono, M Ahart, T Yamanaka, B Mysen, H Mao, R J Hemley

1340h MR13A-1896 POSTER Compositional effects on the vibrational properties of (Mg,Fe)O: W Steinhardt, J M Jackson, J K Wicks, W Sturhahn

1340h MR13A-1897 POSTER Electrical conductivities of deep mantle materials: K Ohta, K Hirose, K Shimizu, Y Ohishi

1340h MR13A-1898 POSTER Measuring thermal conductivity of materials under high temperature-pressure conditions in a laser heated diamond anvil cell: R Hrubia, S Saxena, A Durgyin

1340h MR13A-1899 POSTER Thermal Conductivity Measurements of Periclase (MgO) at High Pressure and Temperature using Time Domain Thermoreflectance: D A Dalton, A F Goncharov, W Hsieh, D Cahill

1340h MR13A-1900 POSTER Thermal Conductivity of Argon at High Pressures and High Temperatures: M L Wong, A F Goncharov, D A Dalton, J Ojwang, V Struzhkin, Z Konopkova, P Lazor

1340h MR13A-1901 POSTER Cubic silicon carbide and boron nitride as possible primary pressure calibrants for high pressure and temperature scale: K K Zhuravlev, A F Goncharov, S N Tkachev, Y Ohishi


1340h MR13A-1903 POSTER Pressure induced spin transition and its effects on diffusion of Fe2+ in ferropericlase: S Saha, D Morgan, A K Bengston, J A Van Orman, K L Crispin

1340h MR13A-1904 POSTER Grain-growth kinetics of ferropericlase up to 25 GPa: Implications for deformation mechanism in the Earth’s lower mantle: N Tsujino, Y Nishihara
1340h  **MR13A-1905** POSTER Elastische anomalies and acoustic dissipation associated with spin state transitions in LnCoO$_2$ (Ln=La, Nd, Gd) and Co$_2$O$_3$: analogue behaviour for spin state transitions in minerals: Z Zhang, M A Carpenter, J Koppensteiner, W Schranz

1340h  **MR13A-1906** POSTER Toward Quantitative, High-Shear Strain Deformation Experiments at Lower Mantle Conditions: L Slivka, LM Miyagi, G Amulele, K Otsuka, Z Du, S Karato

1340h  **MR13A-1907** POSTER Anelasticity and Transient Creep in NaMgF$_3$ Perovskite at High Pressure: D J Weidner, L Li, M T Vaughan, L Wang


1340h  **MR13A-1909** POSTER Development of a double-stage DDIA apparatus and its application to in-situ melting experiments at high pressures: Z Jing, Y Wang, Y Tange, N Hilairet, T Yu, T Sakamaki

1340h  **MR13A-1910** POSTER Very low sound velocities in iron-rich (Mg,Fe)O: Implications for the core-mantle boundary region: J K Wicks, J M Jackson, W Sturhahn

1340h  **MR13A-1911** POSTER Sound Velocities and Density of (Mg$_{55}$Fe$_{45}$)$_{3}O$ ferropericlase up to 1.4 Mbar: B Chen, J M Jackson, W Sturhahn, D Zhao, J Zhang, C A Murphy, J K Wicks

1340h  **MR13A-1912** POSTER Electronic Spin and Valence States of Iron in Lower-Mantle Perovskite and Post-Perovskite: J Liu, J Lin, Z Miao

1340h  **MR13A-1913** POSTER Thermal Equation of State of (Mg,Fe)$_3$SiO$_3$ Perovskite in a Ne Pressure Medium: A S Wolf, J M Jackson, P K Dera, V Prakapenka

1340h  **MR13A-1914** POSTER Seismic detection of post-perovskite at the core-mantle boundary: L J Cobden, I Mosca, J Trampert, J E Ritsema, L P Steixrude

1340h  **MR13A-1915** POSTER Equations of state for perovskite and ferromercurial based on the consistent pressure scales and the lower mantle density model: T Komabayashi

1340h  **MR13A-1916** POSTER High-temperature compression of iron-bearing silicate perovskite and the density model of the lower mantle: A Sasaki, T Komabayashi, K Hirose, Y Ohishi

1340h  **MR13A-1917** POSTER High-pressure stability relations of the NaI and Ca-ferrite-type phases on the join NaAlSi$_3$O$_7$-MgAl$_2$O$_4$: S Imada, K Hirose, Y Ohishi

1340h  **MR13A-1918** POSTER Compression of MgSiO$_3$ and (Mg,Fe)$_3$O$_3$ perovskites based on the pressure generation technique using sintered diamond anvils in a Kawai-type apparatus: D Yamazaki, E Ito, T Yoshino, A Shimojuku, A Yoneda, S Shan, X Guo, Y Higo, K Funakoshi

1340h  **MR13A-1919** POSTER Elastic Constants of Single Crystal Stishovite Determined by High Frequency Resonant Ultrasound Spectroscopy (HRUS): A Yoneda, T Cooray, A Shatskiy, H Sohag

1340h  **MR13B Moscone West: 3024** Monday 1340h Stability, Elasticity, and Rheology of Hydrous Phases: Geodynamical Implications (joint with S, DI, T, V)

**Presiding:** B Reynard, CNRS; M Mookherjee, Bayerisches Geoinstiut; I Katayama, Hiroshima Univ

1340h  **MR13B-01** Metamorphic Petrology Meets Rock Mechanics: Solution-Transfer Creep and Reaction Weakening of Serpentinite Sheared Against Crustal Rocks (Invited): D E Moore, D A Lockner

1355h  **MR13B-02** Drastic change in the rheology of serpentinite-bearing faults induced by dehydration: M Takahashi, S Uehara, K Mizoguchi, K Masuda

1410h  **MR13B-03** Mechanical strength of serpentinites: lizardite is weaker than antigorite: E Amiguet, B Reynard, B Van De Moortele, N Hilairet, Y Wang

1425h  **MR13B-04** Rheological contrast between serpentines and olivine and weakening of a subducting plate interface: K Hirauchi, Y Katayama

1440h  **MR13B-05** Rheology of hydrous phases in subduction zone settings (Invited): G Hirth

1455h  **MR13B-06** HIGH-PRESSURE ELASTICITY OF ANTIGORITE AND SEISMOLOGICAL IMAGING OF MANTLE HYDRATION: B Reynard, L Bezacier, J D Bass

1510h  **MR13B-07** Kinetics and mechanism of dehydration of antigorite, talc and 10 AA phase: consequences for subduction zone seismicity: I Daniel, M Chollet, K T Koga, G Morard, B Van De Moortele

1525h  **MR13B-08** Deformation mechanisms in Phase D to 45 GPa and implications for the seismic anisotropy in deep subducted slabs: A D Rosa, C Sanchez Valle, C Nisr, C Bollinger, S Evans, S Merkel

**Seismology**

**S13A Moscone South: Poster Hall Monday 1340h Crust and Mantle Seismic Structure I Posters**

**Presiding:** M E Celnick, Boston University

1340h  **S13A-1957** POSTER The role of geological structure in crustal seismic anisotropy: identification and quantification of “structural anisotropy”: D A Okaya, S E Johnson, S Vel

1340h  **S13A-1958** POSTER Island-wide crustal seismic anisotropy observed beneath BATS and TAIGER broadband stations in Taiwan: P Hsing, W Liang, E T Chang

1340h  **S13A-1959** POSTER Lateral variation of shallow S-wave velocity structure in south Taiwan revealed from Rayleigh wave analysis for TAIGER explosion: Y Lai, B Huang, H Yen, D A Okaya, C Wang, F T Wu

1340h  **S13A-1960** POSTER STUDY OF GROUND MOTION POLARIZATION IN FAULT ZONES: A RELATION WITH BRIETTLE DEFORMATION FIELDS?: M Pischitta, A Rovelli, J B Fletcher, F Salvini, Y Ben-Zion


1340h  **S13A-1962** POSTER Crustal velocity structure along the Ganghwa-Yeongdeok seismic refraction survey line in South Korea: M Choi, C Baag, J M Lee, K Kim, H Jung

1340h  **S13A-1963** POSTER The shallow P-velocity structure of the southern Dead Sea basin derived from near-vertical incidence reflection seismic data in project DESIRE: T Byberg, M Paschke, M Stiller, M H Weber, Title of Team: DESIRE Group

1340h  **S13A-1964** POSTER Subduction-to-Strike-Slip-Transition in the Southwestern Caribbean Imaged Using Deeply-Penetrating Seismic Reflection Lines and Tomography: T Alvarez, C A Vargas, P Mann, J Latchman

1340h  **S13A-1965** POSTER A new model of crustal structure of Siberia: Y Cherepanova, I M Artemieva, H Thybo

1340h  **S13A-1966** POSTER Shallow seismic structure of Mexico and vicinity from ambient noise tomography: B Gaite, A Villasenor, M Herrera, A Iglesias, J F Pacheco

1340h  **S13A-1967** WITHDRAWN
1340h S13A-1968 POSTER Moho-reflected shear wave from seismic noise correlations in southern Korea: J Shin, H Cho
1340h S13A-1970 POSTER Imaging Turkey’s Crust with Receiver Functions and Ambient Noise: Y Cubuk, E A Vanacore, E Saygin, T Taymaz
1340h S13A-1971 POSTER Tomographic images and focal mechanisms beneath the Tatun volcano group, northern Taiwan: H Pu, C Lin, T Chang, K Konstantinou, K Wen
1340h S13A-1972 POSTER Teleseismic waveform analysis of deep-focus earthquake for the preliminary estimation of crustal structure of the northern part of Korea: H Cho, J Shin
1340h S13A-1973 POSTER The Observability of Multiply Reflected P Wave: M Foundotos, G Nolet
1340h S13A-1974 POSTER Defining the Moho boundary using earthquake PmP reflections in order to investigate arc-continent collisional deformation within Taiwan: T Thomas, D A Okaya, C Wang
1340h S13A-1975 POSTER Receiver Function From Deep Borehole Seismograms: H Takenaka, T Murakoshi
1340h S13A-1976 POSTER Crustal Structure and Composition of the Congo Craton by P-wave Receiver Function Analysis: I K Mulamba, R J Durheim, A A Nyblade, J Julia, Title of Team: The AfricaArray Team
1340h S13A-1977 POSTER Shear wave velocity structure of the Bushveld Complex, South Africa: E M Kgawsame, A Nyblade, P Dirks, R J Durheim
1340h S13A-1978 POSTER The seismic properties of cratonic mantle xenoliths: M E Celnick, C A Dalton, U Faul
1340h S13A-1979 POSTER Receiver function structure beneath a broad-band seismic station in south Sumatra: K A Macpherson, D Hidayat, S Goh
1340h S13A-1980 POSTER Crustal thickness and Vp/Vs ratio estimation under a broad band station on Kenai Peninsula using Receiver Functions: O M Romero, D I Doser
1340h S13A-1981 POSTER Crustal Velocity Structure under Singapore Inferred from Receiver Functions Study: M Y Walling, K A Macpherson, D Hidayat, K Megawati
1340h S13A-1982 POSTER Crust and mantle structure of Ascension Island from receiver function analysis: S Nippess, A Lodge
1340h S13A-1983 POSTER Structural Attributes of the Cascadia Subduction Zone from Receiver Function Waveform Inversion: R Hansen, M G Bostock
1340h S13A-1984 POSTER Receiver Function Imaging of Dipping Structures - Technique and Applications: H Liu, F Niu
1340h S13A-1986 POSTER A Joint Rayleigh and Love Wave Analysis for the Hawaiian PLUME Project: K A Anarde, G Laske

S13B Moscone South: Poster Hall Monday 1340h Monitoring Temporal Changes of Earth’s Properties With Seismic Waves I Posters (joint with G, NH, NS, T, V)

Presiding: F Brenguier, Institut de Physique du Globe de Paris; E F Larose, LGIT - CNRS, U Wegler, BGR
1340h S13B-1989 POSTER Characterizing and comparing seismicity at Cascade Range (USA) volcanoes: S C Moran, W A Thelen
1340h S13B-1990 POSTER Repeating earthquakes and prospecting for temporal change in rock properties associated with geodetic deformation at Kilauea Volcano, Hawaii: E D Montgomery-Brown, C H Thurber, E M Syracuse, C J Wolfe, P Okubo, M P Poland, A Miklius
1340h S13B-1991 POSTER Ambient noise recovery of surface wave Green’s functions: Application at Hawaiian volcanoes: S Ballmer, C J Wolfe, P Okubo, M M Haney, C H Thurber
1340h S13B-1992 POSTER Seismic noise analysis at Kusatsu-Shirane volcano, Japan: T Yamawaki
1340h S13B-1993 POSTER Understanding the dynamics of a geyser from temporal monitoring of seismic source: E C Cros, P Roux, J Vandemeulebrouck, S Kedar
1340h S13B-1995 POSTER CRUSTAL FRACTURING FIELD AND PRESENCE OF FLUID AS REVEALED BY SEISMIC ANISOTROPY: M Pastori, D Piccinini, P De Gori, L Margheriti, M R Barchi, D Di Bucci
1340h S13B-1997 POSTER Evaluating the temporal stability of coda Q in southern California using similar event clusters: L E Sumiejski, P M Shearer
1340h S13B-1998 POSTER Using repeating earthquakes to determine temporal medium changes: theory and an example: H Long
1340h S13B-1999 POSTER CHANGES IN SEISMICITY AND STRESS IN RESPONSE TO FLUID INJECTION, PARADOX VALLEY, COLORADO: R P Denlinger, E A Roeloffs, D R O’Connell
1340h S13B-2000 POSTER Evolving characteristics of seismicity induced by long-term fluid injection at Paradox Valley, Colorado: L V Block, C Wood
1340h S13B-2001 WITHDRAWN
1340h S13B-2002 POSTER Temporal Changes in Seismic Velocity at the Longman-Shan Fault Ruptured in the 2008 M8 Wenchuan Earthquake and Their Implications: J Su, Y Li, T Chen
1340h S13B-2003 POSTER Temporal changes of seismic velocity near the epicenter of the Wenchuan earthquake from ambient noise correlation: Z Liu, J Huang
1340h S13B-2004 POSTER Distribution of similar earthquakes in aftershocks of inland earthquakes: M Hayashi, Y Hiramatsu, G The aftershock observations of the 2007 Noto Hanto
1340h S13B-2005 POSTER Seismic Noise Auto-Correlation Function Changes Correlate with the Crustal Deformation for off-Izu Seismic Swarms: T Ueno, T Saito, K Shiomi, B Enescu, H Hirose
1340h **S13B-2006** POSTER Monitoring of the Micro-seismic Activity along the Salt Lake Fault Zone: Central Anatolia: D KALAFAT, Title of Team: Kivac KEKOVALI, Zafer ÖGÜTCÜ, Yavuz GÜNEŞ, Mehmet YILMAZER, Mehmet KARA, Ethem GÖRGÜN, Mustafa ÇOMOGLU, Selda A.PORYAZ, Pinar DENIZ, M.Feyza ÖCAL, Didem SOMUT, Kadiyie KILIÇ, Aysegül KÜSMEZER, Murat SUVARIKLI, Muzaffer GÜL, Özkan ÇOK

1340h **S13B-2007** POSTER Dynamic triggering of low magnitude earthquakes in the Middle American Subduction Zone: C R Escudero, A A Velasco

1340h **S13B-2008** POSTER Seismic Noise Correlation and Group Velocity study of Cameroon, West Africa: D Zandomeneghi, M Guidarelli, A Aoudia, I J Hamling

1340h **S13B-2009** POSTER Temporal variations of Seismic Velocities after the 2006 Mw6.1 Taitung Earthquake in Taiwan: T Yu, S Hung

1340h **S13B-2010** POSTER Locating a small change in a multiple scattering environment: T Planès, V Rossetto, L MARGERIN, E F Larose

1340h **S13B-2011** POSTER Temporal changes in Q value of a fracturing rock sample under triaxial conditions: N Yoshimitsu, H Kawakata, N Takahashi

1340h **S13B-2012** POSTER Numerical analysis of wave-induced fluid flow effects related to mesoscopic heterogeneities for realistic models of porous media: J G Rubino, K Holliger

1340h **S13B-2013** POSTER Temporal Variations of Seismic Coda: Attenuation-Coefficient View: J B MOROZOV

1340h **S13B-2014** POSTER A Scale Model for CO2 Sequestration: A E Malcolm, J Wilson, C Herhold, N Consul, B Joseph, E Davidson, C Harvey

1340h **S13B-2015** POSTER Short-core acoustic resonant bar test and x-ray CT imaging on sandstone samples during super-critical CO2 flooding and dissolution: S Nakagawa, T J Kneafsey, T M Daley, B M Freifeld

1340h **S13B-2016** POSTER OBSERVING AND MODELING SEISMIC NOISE VARIATIONS: E Stutzmann, M Schimmel, F Ardhuin, A Mangeney

1340h **S13B-2017** POSTER Modeling microseism generation off Southern California with a numerical wave model: Coastal wave reflection and open ocean interactions: N Graham, R W Clayton, S Kedar, F Webb, C E Jones

**S13C Moscone South: Poster Hall**

**Monday 1340h Seismic Networks and Instrumentation Posters**

**Presiding:** J F Clinton, Swiss Seismological Service; L S Gee, USGS

1340h **S13C-2018** POSTER Caltech/USGS Southern California Seismic Network: Recent Developments: R Bhadha, S Chen, J Crumme, E Hauksson, K Solanki, V I Thomas, M Watkins, R Yip, E Yu, D Given, R Peats, S Schwarz


1340h **S13C-2020** POSTER Products and Services Available from the Southern California Earthquake Data Center (SCEDC) and the Southern California Seismic Network (SCSN): E Yu, A Bhaskaran, S Chen, R Chowdhury, S Meisenhelter, K Hutton, D Given, E Hauksson, R W Clayton

1340h **S13C-2021** POSTER The SCEDC Seismic Station Information System software: Database for Populating, Archiving, and Distributing Seismic Station Metadata: F R Chowdhury, E Yu, E Hauksson, D Given, V I Thomas, R W Clayton

1340h **S13C-2022** POSTER EMERALD: A Flexible Framework for Managing Seismic Data: J D West, M J Fouc'h, R Arrousmith

1340h **S13C-2023** POSTER New data products available at the IRIS DMC: C M Trabant, M Bahavar, A Hukto, R Karstens


1340h **S13C-2025** POSTER The GSN Data Quality Initiative: J P Davis, K R Anderson, L S Gee

1340h **S13C-2026** POSTER Estimating Pole/Zero Errors in GSN-IU Network Calibration Metadata: A T Ringler, C R Hutt, H F Bolton, T Storm, L S Gee

1340h **S13C-2027** POSTER GEOSCOPE Observatory Recent Developments: N Leroy, C Pardo, S Bonaima, E Stutzmann, A Maggi

1340h **S13C-2028** POSTER Concordia CCD - A Geoscope station in continental Antarctica: A Maggi, J Léveque, J Thoré, M Bes de Berc, A Bernard, S Danesi, A Morelli, A Delladio, D Sorrentino, E Stutzmann, Title of Team: The GEOSCOPE team

1340h **S13C-2029** POSTER Characterization Of Station Quality From The CHILE RAMP Deployment – Direct Burial Sensor Installation And Its Data: E Y Arias, B C Beaudoin, N Barstown, G Slad

1340h **S13C-2030** POSTER AcquiControl: Seismic Data Logger Control via iPhone: S Golden, B Horkley

1340h **S13C-2031** POSTER The PBO borehole seismometer network: W Johnson, O Fox, D Mencin, W Gallaber, M H Gottlieb, K M Hodgkinson, C Pyatt, E Van Boskirk, M E Jackson

1340h **S13C-2032** POSTER Update on the Center for Engineering Strong Motion Data: H R Haddadi, A F Shakal, C D Stephens, D H Oppenheimer, M Huang, W S Leith, J G Parrish, W U Savage

1340h **S13C-2033** POSTER A high and low noise model for strong motion accelerometers: J F Clinton, C Cauzzi, M Olivieri

1340h **S13C-2034** POSTER Digitization Procedures of Analogue Seismograms from the Adam Dziewonski Observatory (HRV) at Harvard, MA: M Torpey, M Ishii

1340h **S13C-2035** POSTER Real-time seismic observation using new compact ocean bottom cabled system in Japan Sea: M Shinohara, T Kanazawa, T Yamada, S Nakagawa, H Shiobara, M Kozhukizu, Y Machida, T Shinbo, K Nakagishi, H Utada, K Yamazaki

1340h **S13C-2036** POSTER A trawl-resistant ocean bottom seismometer: A H Barclay, D Gassier, S C Webb, T Kocynski, V Oletu, J B Gahery, M Tolstoy

1340h **S13C-2037** POSTER Shielding sensors to reduce the noise floor on Ocean Bottom Seismometers (OBS): S C Webb, A Barclay

1340h **S13C-2038** POSTER BBOBS-NX : broadband ocean bottom seismometer of the next generation: H Shiobara, T Kanazawa, M Shinohara, T Isse, H Sugioka, A Ito

1340h **S13C-2039** POSTER New data logger for improving operation efficiency in ocean-bottom seismic observation: S Suzuki, Y Ito, R Hino, K Saito, N Hasegawa, K Nissato, M Sakanushi
Toward Elucidating the Physics of Fault Tremor and Slow Slip (joint with G, H, MR, T)

Presiding: M. R. Brudzinski, Miami University; A. M. Rubin, Princeton University

1340h 13SD-01 Slow-Slip Scaling Laws Inferred from Cascadia Tremor Swarms: K. C. Creager, A. Wech, J. E. Vidale
1355h 13SD-02 Integrating observations from the lower stability transition of the seismogenic zone (Invited): M. R. Brudzinski
1410h 13SD-03 Migration Patterns and Scaling Laws of Slow Slip and Tremor Resulting From the Collective Behavior of Fault Asperities Mediated by Transient Creep (Invited): J. P. Ampuero
1425h 13SD-04 Designer friction laws for bimodal slow slip propagation speeds: A. M. Rubin

1440h 13SD-05 Numerical Simulation of Slow Slip and Dynamic Rupture in the Cascadia Subduction Zone: P. Segall, A. M. Bradley
1455h 13SD-06 Slow Slip Earthquakes Controlled by Solitary Porosity Waves: S. A. Miller, Y. Y. Podladchikov
1510h 13SD-07 Episodic Tremor and Slip on a Frictional Interface with Critical Zero Weakening in Elastic Solid: Y. Ben-Zion
1525h 13SD-08 Modeling Activity of Very-Low-Frequency Earthquakes in Shallow Subduction Zone Considering Splay Faults and High Pore Pressure Zones: B. Shibazaki, Y. Ito, K. Ujije

Tectonophysics

T13A Moscone South: Poster Hall Monday 1340h From Sediment Inputs to Seismogenesis at Subduction Zones I Posters (joint with S, V, G, NH)

Presiding: M. Strasser, MARUM, University of Bremen; M. Underwood, University of Missouri

1340h T13A-2141 POSTER Regional distribution and sedimentary history of the incoming sediments in the Nankai Trough: M. Higashi
1340h T13A-2143 POSTER Luminescence dating of gravity deposits on Site C0006 and C0007 of IODP Exp.316 and its implications for large earthquake recurrences in Nankai Trough, Japan: T. Jiang, S. Li, C. Li, X. Xie, B. Li, J. Ren
1340h T13A-2147 POSTER Regional distribution of volcaniclastic layer and its implication for segmentation of the Nankai seismogenic zone: T. Sasaki, J. Lim, M. Higashi, J. Park
1340h T13A-2149 POSTER OCCURRENCE AND HYDRATION STATE OF SMECTITE MINERALS IN HOLE C0009 OF THE NanTroSEIZE PROJECT (EXPEDITION 319): A. M. Schleicher, B. A. van der Pluijm, Title of Team: Expedition 319 Scientists
1340h T13A-2150 POSTER Coseismic dehydration from illite-rich faults and its implications on the slip-weakening, frictional heating, and earthquake energetics: T. Hirono, W. Tanikawa
1340h T13A-2151 POSTER Preliminary results of three-dimensional stress orientation in the accretionary prism in Nankai Subduction Zone, Japan by anelastic strain recovery measurements of core samples retrieved from IODP NanTroSEIZE Site C0009: W. Lin, T. B. Byrne, Y. Yamamoto, Y. Yamamoto
1340h T13A-2152 POSTER Deformation partitioning in the Nankai accretionary prism sediments: M. Stipp, M. Rolfs, Y. Kitamura, J. H. Behrmann
1340h T13A-2153 POSTER What controls the polarity change of decollement reflection along the Nankai Trough?: J. Lim, T. Sasaki, M. Higashi, J. Park
1340h T13A-2156 POSTER The Impact of Accretionary Prism Heterogeneity on Seafloor Displacement during Large Subduction Zone Earthquakes: E. Screaton, S. Ge, R. Reguero
1340h T13A-2157 POSTER Excess pore pressure and fluid flow within the NanTroSEIZE transect offshore the Kii Peninsula, Japan: K. T. Rowe, E. Screaton
1340h T13A-2158 POSTER Pore pressure evolution at the plate interface along the Cascadia subduction zone from the trench to the ETS transition zone: R. M. Skarbek, A. W. Rempel, D. A. Schmidt
1340h T13A-2159 POSTER Fault interaction in the Kumano forearc basin, Nankai Trough, Japan: A. H. Barnes, G. F. Moore, B. Boston, J. Barnes
1340h T13A-2160 POSTER Normal fault orientations in the Kumano forearc basin, Nankai Trough, from coherency data and automatic fault extraction: G. F. Moore, B. Boston, J. Barnes, A. H. Barnes, Y. N. Kido
1340h T13A-2161 POSTER Extension axes in the Kumano forearc basin from inversion of fault populations mapped in a 3D seismic volume, Nankai Trough, SE Japan: A Sacks, D M Safer, D M Fisher
1340h T13A-2162 POSTER Particle size distribution in micro-shear bands from NanTroSEIZE drilling of the Nankai accretionary prism, Japan: C M Browne, N W Hayman, K Milliken, R Reed, Title of Team: Expedition 319 Scientific Party
1340h T13A-2163 POSTER P and S wave velocity measurements on sediments from the hanging-wall of megasplay fault, NanTroSEIZE Stage 1: Y Hashimoto, H J Tobin, M W Knuth
1340h T13A-2164 POSTER Preliminary results of high resolution subbottom survey and surface sediment sampling by ROV “NSS” in the Nankai subduction zone off Kumano: J Ashi, Title of Team: KH-10-3 Science Party
1340h T13A-2165 POSTER Quantification of Free Gas in the Kumano Forearc Basin detected from Borehole Physical Properties: IODP NanTroSEIZE drilling Site C0009: M Doan, M Conin, P Henry, T Wiersberg, Scientific Team of IODP Drilling Leg 319
1340h T13A-2166 POSTER S-anisotropy and stress direction-Results from logging at site C0009 of IODP expedition 319, NanTroSEIZE-: H Ito
1340h T13A-2167 POSTER Numerical modeling for branching faults in a subduction system: S Tamura, S Ide
1340h T13A-2168 POSTER Numerical simulation of formation process of fault zone structures considering various mechanical fault properties: R Ando
1340h T13A-2169 POSTER Estimation of slip parameters of a slip zone in the shallow portion of an accretionary prism: Y Hamada, T Hiroto, T Ishikawa
1340h T13A-2170 POSTER Strengthening of fault at seismic slip rate caused by gouge formation: O Kuwano, T Hatano
1340h T13A-2171 POSTER Geochemical signals for determining slip mechanism occurred in an ancient megasplay fault within the Shimanto accretionary complex: G Honda, T Ishikawa, T Hiroto, H Mukoyoshi
1339h T13A-2172 POSTER Deformation and Fluid Flow in an Ancient Erousive Subduction Channel: Insight from the Northern Apennines of Italy: F Remitti, P Vannucchi, G Bettelli, C Boschì, L Dallai
1340h T13A-2173 POSTER Hydration of the incoming plate in the Kuril subduction zone: G Fujie, S Kodaira, M Yamashita, T Sato, T Takahashi, N Takahashi, N Naguchi
1340h T13A-2175 POSTER THERMAL AND HYDRAULIC CONTROLS ON SERPENTINIZATION AT THE OUTER RISE OF SUBDUCTION ZONES: G S Atalan, E Scraton
1340h T13A-2176 POSTER Crustal structure along the active Costa Rican volcanic arc: D Lizzaralde, W S Holbrook, H J Van Avendonk, M Mora Fernandez, G E Alvarado, S H Harder
1340h T13A-2178 POSTER Crustal structure across the Central American Volcanic Arc in Costa Rica from TICO-CAVA seismic refraction data: J L Hayes, W S Holbrook, D Lizzaralde, H Avendonck, A D Bullock, M Mora Fernandez, S H Harder, G E Alvarado
1340h T13A-2180 POSTER Seismic structure of the Nicaragua convergent margin in the area of the 1992 tsunamigenic slow earthquake from wide-angle (WAS) and multichannel seismic (MCS) data: M Prada Dacasa, A Meléndez, V Sallares, C R Ranero, K D McIntosh, I Greve, Hery
1340h T13A-2181 POSTER New seismological and geochemical constraints on the anomalous structure beneath the Klyuchevskoy Group in Kamchatka, Russia: A Nikulin, V L Levin, A Shuler, M J Carr, M E West
1340h T13A-2183 POSTER Growth of sediment diapirs in subduction zones: N C Miller, M D Behn
1340h T13A-2184 POSTER Peridote-water interaction generating migration pathways of H2-rich fluids in subduction context: Common processes in the ophiolites of Oman, New-Caledonia, Philippines and Turkey: E P Deville, A Prinzhofer, D Pillot, C Vacquand, O Sissmann
1340h T13A-2185 POSTER Bathymetry of the Sunda margin, Indonesia: morphological features of the upper plate slopes relate to the location and extent of the seismogenic zone: A Krabbenhoeft, W Weinrebe, H Kopp, E R Fluhr, S Ladage, C A Papenberg, L Planert


1340h  T13B-2194 POSTER Fluid Flow Patterns in a Submarine Volcano: Simulating the Hydrothermal Evolution of Brothers Volcano: G Gruen, C E de Ronde, T Driesser, C A Heinrich

1340h  T13B-2195 POSTER A comparison of transpressional boundaries: what New Zealand can tell us about tectonics in New Guinea: M W Herman, K P Furlong, H Benz, G P Hayes


1340h  T13B-2197 POSTER Two Primary Basalt Magmatypes from Northwest Rota-1 Volcano, Mariana Arc: Y Tamura, O Ishizuka, R J Stern, H Shukuno, K H Kawahata, R W Embley, Y Tatsumi, A Nunokawa, S H Bloomer

1340h  T13B-2198 POSTER Differences between boninitic and tholeiite primary magmas in Izu-Bonin-Mariana arc: constraints from an Os isotope perspective: R Sendra, K Shimizu, K Suzuki


1340h  T13B-2200 POSTER Euler Pole Determination of the Philippine Sea Plate Relative to the Caroline Plate from Bathyemetric Information Collected at Ayu Trough: H Choi, S Lee

1340h  T13B-2201 POSTER Analysis on the origin of toroidal motion and its application to the Philippine Sea plate: T Matsuyama, H Iwamori

---

**T13C Moscone South: Poster Hall Monday 1340h**


**Presiding:** S Baldwin, Syracuse University; L E Webb, University of Vermont

1340h  T13C-2202 POSTER The Alpine Tethys Rift System in Western Europe: From Variscan Inheritance to Alpine Inversion: G Manatschal

1340h  T13C-2203 POSTER Structural style of inversion of rifts and passive margins: Feedback between mountain building and surface processes. Application to the Pyreneean Cantabrian Ms: R S Huismans

1340h  T13C-2204 POSTER Temporal and geochemical constraints on active volcanism in southeastern Papua New Guinea: J P Catalano, S Baldwin, P G Fitzgerald, L E Webb, K Hollocher

1340h  T13C-2205 POSTER Structure and composition of the Southern Mariana Forearc: new observations and samples from Shinkai 6500 dive studies in 2010: Y Ohara, M K Reagan, O Ishizuka, R J Stern

1340h  T13C-2206 POSTER Disappearance of Sea Floor of the Paleo-asian Ocean: Geological Evidence from the Dong Ujimqin, Inner Mongolia, China: Z Zhou, T Zhang, B Wang, Y Yu

1340h  T13C-2207 POSTER Early Paleozoic Subduction of the Paleo-asian Ocean: Evidence from Geochronology and Geochemistry Studies of Baimaimiao Metavolcanic Rocks, Inner Mongolia, China: C Liu, T WANG, W Liu

1340h  T13C-2208 POSTER North-vergent thrust faults in accreted oceanic sediments and arc volcanics, Central Asian Orogenic Belt, Inner Mongolia: E Van Guilder, C Raja, H Sun, D Su, J Baek, S R Paterson, V Memeti, W Cao, T Zhang, Z Zhiguang

1340h  T13C-2209 POSTER Continuum-based 4D Plate Reconstructions: Linking Non-rigid Lithospheric Kinematics to Rigid Plate Motion: E A Kneller, C A Johnson, T A Queffelec, L Nachtegaal

1340h  T13C-2210 POSTER A kinematic model for the formation of the Siletz terrane by capture of coherent fragments of the Farallon and Resurrection plates (Invited): D S Wilson, P A McCrory

1340h  T13C-2211 POSTER Insights into the Tectonic Development of the Klamath Mountains Province from Thermal Data and Modeling: R E Piotrasczke, K P Furlong, S M Cashman, P J Kamp, M Danišk, E Kirby

1340h  T13C-2212 POSTER A comparison of transpressional boundaries: what New Zealand can tell us about tectonics in New Guinea: M W Herman, K P Furlong, H Benz, G P Hayes

1340h  T13C-2213 POSTER The Mobile Margin of (Far) North America: GPS Constraints on Active Deformation in Alaska and the Role of the Yakutat Block: J Elliott, J T Freymueller, C F Larsen, R J Motyka

1340h  T13C-2214 POSTER ‘Extra-regional’ strike-slip fault systems in Chile and Alaska: the North Pacific Rim orogenic Stream vs. Beck’s Butttress: T F Redfield, D W Scholl, P G Fitzgerald

1340h  T13C-2215 POSTER Continuation, southern of Oaxaca City (southern Mexico) of the Oaxaca-Juarez terrane boundary and of the Oaxaca Fault. Based in MT, gravity and magnetic studies: J O Campos-Enriquez, F Corbo, J Arzate-Flores, S Belmonte-Jimenez, C Arango-Galván

1340h  T13C-2216 POSTER Analysis of the morphology and deformation of the collision zone between the Muertos thrust belt and the aseismic Beata Ridge in the NE Caribbean plate: J Granja Bruña, A Carbo-Gorosabel, M Llanes Estrada, A Munoz Martin, M Druet, M Gomez, U S Ten Brink, M Vitolla

1340h  T13C-2217 POSTER Spatial and temporal variation of fault slip and distributed off-fault deformation, Santa Cruz Mountains, central California: E M Horsman, R W Graymer

1340h  T13C-2218 POSTER Quaternary uplift and subsidence of Catalina Ridge and San Pedro Basin, Inner California Continental Borderland, offshore southern California; results of high-resolution seismic profiling: R Francis, M R Legg

1340h  T13C-2219 POSTER Cenozoic deep-water sedimentary basin formation at the Australia-Pacific plate boundary, southern New Caledonia Trough and Taranaki Basin, New Zealand: J R Baur, R Sutherland, T A Stern


1340h  T13C-2221 POSTER Position of New Zealand, Australia and Antarctica during the Paleogene and Late Cretaceous: A J Chambord, R Sutherland, E G Smith

1340h  T13C-2222 POSTER The Early Opening of the Indian Ocean: An African Perspective: C Gaina, C Labails, C Reeves

1340h  T13C-2223 POSTER Revisiting the magnetic anomalies along the West Australian margin identifies a new continental fragment that accreted to Sumatra during the Early Eocene: A Gibbons, J M Whittaker, P Müller
1340h  T13C-2244 POSTER 1.0 GA OPHIOLITE ON NORTH MARGIN OF THE YANGTZE CRATON CLARIFIES SOUTH CHINA'S AMALGAMATION WITH RODINIA: T M Kusky, S Peng, L Wang, X Jiang, J Wang

1340h  T13C-2225 POSTER Polyphase rifting within Rodinia as seen through multiple episodes of mafic volcanism within the Canadian Cordillera: G M Cox, G P Halverson, C F Roots, F A Macdonald, D Plavsà

1340h  T13C-2226 POSTER A Geodynamic Template for Super-Continent Dispersal based on CAMP Geochemostrical and Isotopic Signatures From the Culpepper Basin of Virginia: B B Hanan, A Sinha, J W Shervais

1340h  T13C-2227 POSTER Correlating basaltic composition with stages of geodynamic settings associated with breakup of supercontinent Rodinia: A Sinha, B B Hanan

1340h  T13C-2228 POSTER A numerical model of mantle convection with deformable, mobile continental lithosphere within three-dimensional spherical geometry: M Yoshida

T13D Moscone West: 2020  Monday 1340h Advances in Understanding the Central Andean Crust and Mantle Through Seismology and Geochimistry II (joint with S, V)

Presiding: R W Clayton, Caltech; S M Kay, Cornell University

1340h  T13D-01 Seismic-tomography modeling of spatial variations in subduction geometry along the Andes (Invited): S van der Lee, S M Lloyd, R M Russo

1355h  T13D-02 Upper Mantle Flow Beneath the Subducted Nazca Plate: Slab Contortions and Flattening (Invited): R M Russo

1410h  T13D-03 Lithospheric deformation overlying a shallowly subducting slab: insights from the Eastern Sierras Pampeanas seismic array (Invited): P M Alvarado, H J Gilbert, T J Richardson, M L Anderson, R Martino

1425h  T13D-04 An Unusual Wadati-Benioff Zone Beneath West-Central Argentina: L Linkimer, S L Beck, G Zandt, P M Alvarado, M L Anderson, H J Gilbert

1440h  T13D-05 CRUSTAL INVESTIGATIONS IN THE SOUTHERN PUNA PLATEAU BY RECEIVER FUNCTIONS FROM THE PUNA DELAMINATION (PUDEL PROJECT) SEISMIC ARRAY IN THE CENTRAL ANDES: B Heit, X Yuan, P Kumar, R Kind, S M Kay, E A Sandvol, R Alonso, B Coira, D Comte, L D Brown


1510h  T13D-07 The Role of Crustal Recycling in Accretionary Orogens: the U-Pb Age and Hf Isotope Evidence of Detrital Zircon from the then proto-Andes: C Reimann, H Bahlburg

1525h  T13D-08 Chemistry of Post 12 Ma Los Frailes Volcanic Complex Igimbrites in Bolivia and the Role of Magmatism in the Uplift of the Central Andean Altiplano Plateau: S M Kay, C B Keller, B Coira, N Jiménez, P J Caffe

T13E Moscone West: 2011  Monday 1340h Contemporary Stress Field:Where We Come From and Where We Are Going I (joint with S, V, G)

Presiding: S Pierdominici, INGV; A Zang, GFZ German Research Centre for Geosciences

1340h  T13E-01 Complete stress tensor determination by microearthquake analysis: R Slunga

1355h  T13E-02 The recent tectonic stress districts and strong earthquakes in China: F Xie, H Zhang

1410h  T13E-03 Intraplate Crustal Stress Orientation and Magnitude (Invited): M D Zoback, M Zoback

1425h  T13E-04 Earthquake Focal Mechanisms Imply Homogeneous Stress at Seismogenic Depths: J L Hardebeck

1440h  T13E-05 A hybrid method for estimating the state of stress in ICDP-sponsored deep vertical boreholes (Invited): B C Haimson

1455h  T13E-06 Determination of Stress State in Deep Subsea Formation by Combination of Hydrofracturing Test and Core Analysis – A Case Study in the Integrated Ocean Drilling Program (IODP) Expedition 319: T Ito, A Funato, H Ito, M Kinoshita

1510h  T13E-07 Sources and Significance of In Situ Stress Heterogeneity: T W Doe

1525h  T13E-08 Non-Andersonian Faulting Above Evaporites in the Nile Delta (Invited): M R Tingay, P Bentham, A De Feyter, A Kellner

T13F Moscone West: 2018  Monday 1340h The Cenozoic West Antarctic Rift System (WARS): Observations, Interpretations, Models, and Implications I (joint with C, V, S)

Presiding: R Granot, Institut de Physique du Globe de Paris; F J Davey, GNS Science; S A Henrys, GNS Science; B P Luyendyk, Univ California

1340h  T13F-01 A Review of Marine Geophysical Constraints on the Motion Between East and West Antarctica in the Cenozoic (Invited): S C Cande, J M Stock

1355h  T13F-02 Polar heat flow inferred from satellite magnetic data (Invited): M E Purucker, C Fox Maule

1410h  T13F-03 Feedback between magmatic, tectonic and glacial processes in the West Antarctic Rift System (Invited): S Rocchi

1425h  T13F-04 Recent to contemporary stress of the West Antarctic Rift from drill core and volcanic alignment studies (Invited): T S Pauleus, T J Wilson, R D Jarrard, D R Schmitt, S Pierdominici, P Montone, C Millan, A Läufer, T Wonik, D Handwerger

1440h  T13F-05 PEERING BENEATH THE TRANSANTARCTIC MOUNTAINS RIFT FLANK WITH NEW GRAVITY DATA: L Anderson, F Ferraccioli, T A Jordan, A B Watts, E Armadillo, E Bozzo

1455h  T13F-06 Turning up the Heat on the Antarctic Ice Sheet (From Below): Challenges and Near-Term Opportunities for Measuring Antarctic Geothermal Fluxes (Invited): S M Tulaczyk, S Hesssannahde

1510h  T13F-07 Revised East-West Antarctic plate motions since the Middle Eocene: R Granot, S C Cande, J Stock, D Damase

1525h  T13F-08 The case for nearly continuous extension of the West Antarctic Rift System, 105-25 Ma (Invited): D S Wilson, B P Luyendyk

T13G Moscone West: 2016  Monday 1340h The Formation and Deformation of the Mediterranean Basins, Continental Margins, and Arcs I (joint with GP, MR, NH, S, V, G)

Presiding: X A Garcia, Unitar de Tecnología Marina, CSIC; C R Ranero, ICREA at CSIC

1340h  T13G-01 Shaping the Mediterranean mobile belt by small scale convection (Invited): C Faccenna, T W Becker

1355h  T13G-02 3D Deformation and Evolution of Mediterranean Basins: Insights From Crustal and Mantle Anisotropy: S Lebedev, B Endrun, T M Meier, J Adam, C Trel

1410h  T13G-03 Continental collision and slab break-off: 3-D modelling results and implications for the Mediterranean: J Van Hunen, C Faccenna
Volcanology, Geochemistry, and Petrology

**V13A Moscone South: Poster Hall Monday 1340h Dynamics of Pyroclastic Density Currents II Posters**

**Presiding:** B J Andrews, UC Berkeley; J Dufek, Georgia Institute of Technology

1340h V13A-2337 POSTER Vegetation damage as a proxy for physical characteristics of PDCs: N Pollock, K S Harpp, D Geist, J Dufek, P A Mothes

1340h V13A-2338 POSTER The Soldier Meadow Tuff: Eruptive and depositional processes and relationship to the High Rock Caldera, NW Nevada: J Smith, B Hausback, C D Henry, D Noble

1340h V13A-2339 POSTER A closer look at the pyroclastic density current deposits of the May 18, 1980 eruption of Mt St Helens: C A Mackaman-Lofland, B D Brand, J Dufek

1340h V13A-2340 POSTER Topographic effects on run-out distance and liftoff of pyroclastic density currents: W S Gange, B J Andrews, M Manga

1340h V13A-2341 POSTER The effect of topography on pyroclastic flow mobility: S E Ogburn, E S Calder

1340h V13A-2342 POSTER Titan2D simulations of dome-collapse pyroclastic flows for crisis assessments on Montserrat: C Widiwijayanti, B Voight, D Hidayat, A Patra, E Pitman

1340h V13A-2343 POSTER Substrate Erosion and Force Chain Dynamics in Dense Granular Flows: J Estep, J Dufek

1340h V13A-2344 POSTER Volcaniclastic dunes from the 2006 deposits of Tungurahua volcano, Ecuador: G DOUILLET, J B Hanson, F Goldstein, U Kueppers, ÈVE Tsang-Hin-Sun, J Bustillos, C Robin, D B Dingwell

1340h V13A-2345 POSTER The thermal evolution of pyroclastic density currents: Exploring the thermal histories of juvenile clasts of Tungurahua and Cotopaxi, Ecuador: M C Benage, J Dufek, W Degruyter

1340h V13A-2346 POSTER Ash Deposition Mechanisms and Plume Scrubbing in the 2008 Okmok Eruption, Umnak Island, Alaska: J A Unema, M H Orr, J F Larsen, C A Neal, J R Schafer, P Webley

1340h V13A-2347 POSTER Particle morphologies and formation mechanisms of fine volcanic ash aerosol collected from the 2006 eruption of Augustine Volcano, Alaska: P G Rinkleff, C F Cahill

1340h V13A-2348 POSTER Bursting and Jetting Drives Ballistic-Dominated Eruptions at Stromboli (Italy): L Vanderkluysen, A J Harris, L Colò, M Ripepe, J Dehn

**V13B Moscone South: Poster Hall Monday 1340h Innovative Geothermal Exploration Methods I Posters (joint with T)**

**Presiding:** D F Stockli, The University of Kansas; B Martini, Ormat Technologies

1340h V13B-2349 POSTER Spectral reflectance analysis of hydrothermal alteration in drill chips from two geothermal fields, Nevada: A K Lamb, W M Calvin

1340h V13B-2350 POSTER Geothermal Exploration in Pilgrim, Alaska: First Results From Remote Sensing Studies: A Prakash, M Nolan, K Schafer, C Haselwimmer, G Holdmann

1340h V13B-2351 POSTER Use of high-resolution satellite images for characterization of geothermal reservoirs in the Tarapaca Region, Chile: A A Arellano-Baeza, C Montenegro A.

1340h V13B-2352 POSTER An Integrated Chemical Geothermometry System for Geothermal Exploration: N F Spycher, E L Sonnenthal, B M Kennedy


1340h V13B-2354 POSTER Pervasive, high temperature hydrothermal alteration in the RN-17B drill core, Reykjanes Geothermal System-Iceland Deep Drilling Project: R A Zierenberg, P Schiffman, N E Marks, M H Reed, W A Elders, G O Fridleifsson

1340h V13B-2355 POSTER A Reduction in the Rate of Subsidence Observed At The Geysers Geothermal Field, Northern California, Between 1994 and 2010: M A Floyd, J G Funning, B Lipovsky, P Gettings

1340h V13B-2356 POSTER Geothermal prospecting by geochemical methods in the Quaternary volcanic province of Dhamar (central Yemen): A A Minissale, O Vaselli, M Mattath, G Montegrossi, F Tassi, A Ad-Dukhain, U Kalberkamp, A Al-Sabri, T Al-Kohlani

1340h V13B-2357 POSTER An Experiment to Test Geophysical Methods For Monitoring Fluid Re-Injection at the Wairakei Geothermal Field, New Zealand: G R Jiracek, E Bowles-martinez, D W Feucht, J Ryan, T G Caldwell, S C Bannister, T Bertrand, S Bennie, S Bourguignon

1340h V13B-2358 POSTER Utilizing ground penetrating radar to image vents and fractures in geothermal environments: A J Dougherty, B Lynne

1340h V13B-2359 POSTER Geothermal Exploration in the Great Basin: W M Calvin

1340h V13B-2360 POSTER Multiple data sets converge on a geologic structural model for Glass Buttes, Oregon geothermal prospect: P Walsh, B Martini, C Lide, D Boschmann, J H Dilles, A Meigs

1340h V13B-2361 POSTER The effect of topography driven groundwater flow on deep subsurface temperatures in the Roer Valley Graben (southern Netherlands): E Luijendijk, M A Person, R Van Balen, M ter Vooorde

1340h V13B-2362 POSTER The Lithospheric Temperature Structure of the South Australian Heat Flow Anomaly: G Baines, G Backé
V13C Moscone South: Poster Hall Monday 1340h

Supervolcanoes: Modeling of Eruption Scenarios and Their Regional and Global Impacts I Posters

Presiding: M R Rampino, New York University; F Dobran, Hofstra University


1340h V13C-2364 POSTER Magmatic evolution of the Ilopango Caldera, El Salvador, Central America: D Zezin, C P Mann, W Hernández, J Stix

1340h V13C-2365 WITHDRAWN

1340h V13C-2366 POSTER Inner structure of La Pacana Caldera (Central Andes, Chile) using gravimetry data: F Delgado, A Pavez Alvarado

1340h V13C-2367 POSTER Storage and eruption of large volumes of rhyolite lava: Example from Solfatara Plateau, Yellowstone Caldera: K Befus, J E Gardner, R Zinke

1340h V13C-2368 POSTER Supervolcanoes in the Mid-Pacific Mountains?: P Wilde

1340h V13C-2369 POSTER Active source seismic investigation of the formation of the Ontong Java Plateau: S Miura, N Noguchi, M F Coffin, S A Kawagle, R T Verave, S Kodaira, Y Fukao

1340h V13C-2370 POSTER Did the TBJ Ilopango eruption cause the AD 536 event?: R Dull, J R Soutron, S Kutterolf, A Freundt, D Wahl, P Sheets

1340h V13C-2371 POSTER Was the Tunguska 1908 event a late byproduct of a Permo-Triassic Venshore?: V Vannucchi, J P Morgan, C L Andronicos, D Della Larga

1340h V13C-2372 POSTER On the Hemispheric Asymmetry of Sulphate Aerosol Loading and Deposition After Major Tropical Volcanic Eruptions: M Toohey, U Niemeier, S Kutterolf, C Timmreck, K Krueger

1340h V13C-2373 POSTER A new eruptive model for the 1.61 Ma eruption of the Otowi Member of the Bandelier Tuff, Valles Caldera, New Mexico: G W Cook, J A Wolf, S Self

1340h V13C-2374 POSTER How Many Explosive Eruptions are Missing from the Geologic Record? Analysis of the Quaternary Record of Large Magnitude Explosive Eruptions in Japan: K Kiyosugi, C Connor, R S Sparks, H S Crosswell, L Siebert, S Takarada

1340h V13C-2375 POSTER Microphysical Controls on Ascent of Water-Rich Ash Clouds from Supereruptions: A R Van Eaton, M Herzog, C J Wilson, J McGregor

1340h V13C-2376 POSTER Can the structure of an explosive caldera affect eruptive behaviour?: C P Willcox, M Branney, G Carrasco-Nuñez, D Barford

1340h V13C-2377 POSTER Modelling caldera collapse into a crystal mush, with application to the Bandelier Tuff, Valles caldera, New Mexico: S R Krahm, J A Wolf, M Jellinek, F C Ramos

1340h V13C-2378 POSTER Constraints on eruption processes and source conditions of explosive caldera-forming events using volcanogenic tsunamis: insights from the Krakatau and Kikai eruptions: F Maeno, I Imamura

1340h V13C-2379 POSTER Examination of Near-Field Entrainment of High-speed Jets: F Saffaraval, S Solowitz, L G Martin

V13D Moscone South: Poster Hall Monday 1340h

Ultrahigh-Pressure Metamorphism: 25 Years After the Discovery of Coesite and Microdiamond I Posters (joint with MR, DI, T)

Presiding: Q Wang, Nanjing University; C G Mattinson, Central Washington University

1340h V13D-2380 POSTER U-Pb zircon geochronology of coesite-bearing eclogites from the southern Dulan area of the North Qaidam UHP terrane, northwestern China: Spatially and temporally extensive UHP metamorphism during continental subduction: J Zhang

1340h V13D-2381 POSTER Geochemical characteristics of crustal anatexis of UHPM gneisses during their exhumation, Sulu UHPM terrane, China: H Xu, K Ye, J Zhang, Y Song

1340h V13D-2382 POSTER High-Pressure Crystal Chemistry of Norbergite: A N Lindoo, S A Gramsch, A Kyono

1340h V13D-2383 POSTER Linking Cenozoic (U)HP exhumation to orogen-scale deformation in the western Alps: J P Butler, C Beaumont, R Jameson

1340h V13D-2384 POSTER Petrofabrics and Water Contents of Peridotites from the Western Gneiss Region (Norway): Implications for Fabric Transition of Olivine in Continental Subduction Zones: Q Wang, Q Xia, S O’Reilly, W L Griffin, E Beyer

1340h V13D-2385 POSTER Petrofabrics and Seismic Properties of Minerals and Rocks from the Dadie-Sulu UHP Terrane: F Shi, J Zhang, H Xu, Y Wang

1340h V13D-2386 POSTER Petrological and geochemical records of short-lived, high temperature metamorphism during exhumation of the Sulu UHP metamorphic terrane: K Zong, Y Liu, X Zhang, Y Ye, C Gao

1340h V13D-2387 POSTER Strength and petrofabric of SiO2 across the phase boundary of quartz-coesite: J Zhang, Y Wang, Q Liu

1340h V13D-2388 POSTER Chemistry and metamorphic evolution of Kulet eclogite from the Kochetav Massif, Kazakhstan: R Y Zhang, J G Liou, V S Shatsky, Y Ogasawara, C Lo

1340h V13D-2389 POSTER Ultra-deep subduction of continental material: Results from coupled thermodynamic-thermomechanical numerical modelling: S Zlotnik, J C Afonso

1340h V13D-2390 POSTER Granulite-facies metamorphism and partial melting associated with UHP rocks, North Qaidam terrane, NW China: C G Mattinson, B D Christensen, J L Wooden, J Zhang, D K Bird


1340h V13D-2392 POSTER Flat versus steep subduction: contrasting modes for the formation and exhumation of high- to ultrahigh-pressure rocks in continental collision zones: Z Li, Z Xu, T Gerya, N M Ribe

1340h V13D-2393 POSTER Calculation of stability of sodic phases in high-pressure metapelites and observation of Sambagawa metamorphic rocks: Y Kouketsu, M Enami

V13E Moscone South: Poster Hall Monday 1340h

Volcanism and Environmental Change I Posters (joint with GC)

Presiding: S M Straub, Lamont Doherty Earth Observatory at Columbia University; M G Tejada, University of the Philippines

1340h V13E-2394 POSTER Volcanic signals into the ocean under global warming: T T Sakamoto, H Shigogama
1340h  **V13E-2395** POSTER Magma dynamics and wall-rock composition control the environmental impact of magmatic events: N Arndt, C Ganino, A Pécher, C Chauvel, M Zhou, F Tornos

1340h  **V13E-2396** WITHDRAWN

1340h  **V13E-2397** POSTER Tracing volatile loss during the eruption of individual flood basalt flows in the Columbia River Flood Basalt Province: K W Burton, C Vye, A Gannoun, S Self


1340h  **V13E-2399** POSTER Is there a causal relationship between the timing of emplacement of large igneous provinces and their destructive consequences? Constraints from the Lesotho eruptive sequence (Karoo traps): M Moulin, F Fluteau, V E Courtillot, J Marsh, G DELEPECH, X Quidelleur, M Gérard

1340h  **V13E-2400** POSTER Volatiles Release from The Siberian Traps and the End-Permian Environment: B A Black, L T Elkins-Tanton, M C Rowe, J Ukstins Peate


1340h  **V13E-2402** POSTER Stable isotope, cation chemistry and petrographic evidence of multiple water sources influencing the alteration of Antarctic hyaloclastites: J V Antibus, K S Panter, T I Wilch, N W Dunbar, W C McIntosh


---

**V13F Moscone West: 3001** Monday 1340h

**Generation and Evolution of Alkaline to Subalkaline Magmas II (joint with DI, MR)**

**Presiding:** R Meyer, Massachusetts Institute of Technology; S Pilet, University of Lausanne; R Gertisser, Keele University

1340h  **V13F-01** Mantle pyroxenites as source of the compositional variability in alkali basalts? (Invited): S Lambart, D Laporte, P Schiano, A Provost

1355h  **V13F-02** Reaction between MORB-Pyroxenite-derived Partial Melts and Subsolidus Peridotite at 3 GPa and Generation of Alkaline Ocean Island Basalts: A Mallik, R Dasgupta

1400h  **V13F-03** Temperature and pressure dependence of Ni partitioning between olivine and high-MgO silicate melts: A K Matzen, M B Baker, J Beckett, E M Stolper

1425h  **V13F-04** Melting of metasomatized subcontinental mantle: New experiments and a new predictive models for plagioclase, spinel and garnet lherzolite melting: T L Grove, C B Till, J A Barr, M J Krawczynski

1440h  **V13F-05** Small-scale convection induces temporal and spatial variability in Hawaiian plume volcanism (Invited): M D Ballmer, G Ito, J Van Hunen, P J Tackley

1455h  **V13F-06** Apatite as a record of extreme differentiation in the uppermost part of the Bushveld Complex (Invited): J A VanTongeren, E A Mathez

1510h  **V13F-07** The alkaline magma squeezed upward by the plate flexure prior to subduction off the Chile and Japan Trenches: N Hirano, S Machida, N Abe

1525h  **V13F-08** Jurassic (~160 Ma) Lamprophyric Xenoliths from Southern Louisiana Salt Domes: A Unique Perspective on Gulf of Mexico Crust (Invited): R J Stern, E Y Anthony, M Ren, J Kimura, B Lock, I O Norton

---

**V13G Moscone West: 2022** Monday 1340h

**The Subduction Filter: Effects on the Mantle, Arcs, and Continents III (joint with DI)**

**Presiding:** C Chauvel, University of Grenoble; T Plank, Columbia University; J P Davidson, University of Durham

1340h  **V13G-01** The Thermal Evolution of the Lower Arc Crust During Basalt Emplacement: Importance of Melt Advection out of the Lower Crust in Maintaining a Relatively Cool Steady State Geotherm: R A Lange, E Hetland

1355h  **V13G-02** Re-OS-PGE constraints on continental lithosphere assembly: a case study in eastern Russia: W R Nelson, D A Ionov, S B Shirey, V S Prikhod’ko

1410h  **V13G-03** Making and breaking an Island arc: a new perspective from the Oligocene Kyushu-Palau arc: O Ishizuka, R N Taylor, M Yuasa, Y Ohara

1425h  **V13G-04** The composition of the modern juvenile arc crust and the nature of crustal deaminates in arcas (Invited): O E Jagoutz, M W Schmidt

1440h  **V13G-05** Distinguishing mantle and crustal contributions in a continental arc volcano: Tatar-San Pedro, Chilean Andes: J Jweda, S L Goldstein, M Dungan, C H Langmuir, J P Davidson

1455h  **V13G-06** Differentiation and source processes at Mt Pelee and The Quill; active volcanoes in the Lesser Antilles Arc: J P Davidson, M Wilson

1510h  **V13G-07** Slab Contributions to Cascades Magmas: Constraints from Central Oregon and Northern California: D M Ruscitto, P J Wallace

1525h  **V13G-08** Protracted Storage and Lower Crust Differentiation at Baru Volcano, Panama: P J Hidalgo, T O Rooney

---

**V13H Moscone West: 3005** Monday 1340h

**What Can Pyroclasts Tell Us? II (joint with NH)**

**Presiding:** U Kueppers, University of Munich; R J Brown, Open University; C Cimarelli, LMU Muenchen

1340h  **V13H-01** Pyroclasts and fragmentation: ‘misdirection’ from size distributions for wall-rock particles (Invited): B F Houghton, R J Carey, D Swanson


1410h  **V13H-03** Kimberlite pyroclasts – what and why?: L A Porritt, J K Russell, R A Cas

1425h  **V13H-04** Origin and consequences of polynodal grain size distributions of the tephra fall deposit from the August 2006 paroxysmal phase of Tungurahua volcano, Ecuador: J Eychenne, J L Le Pennec, L Troncoso, M Gouhier, J Nedelec

1440h  **V13H-05** Centimeter-High Antidunes within Pyroclastic Deposits: Are They Products of Surge or Density Current?: S Yoshida, R Hemmi, Y Nemoto

---

All information is current as of November 12, 2010
1510h  V13H-07 Voluminous juvenile lithic fragments in the pumice-fall deposit of the 1108 eruption of Asama volcano: Evidence of repeated compaction and fragmentation in the shallow conduit: M Nakamura, T Kichis, M Yasui, Y Nagahashi, T Yoshida

1525h  V13H-08 The Disruption of Tephra Fall Deposits by Basaltic Lava Flows: R J Brown, T Thordarson, S Self, S Blake

Union

<table>
<thead>
<tr>
<th>U14A</th>
<th>Moscone South: 104</th>
<th>Monday</th>
<th>1600h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overview of the Deep Horizon Oil Spill</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Presiding: J J Bates, NOAA; D L Rice, NSF; O B Brown, CICS-NC

1600h  U14A-01 USGS Scientists in the Deepwater Horizon Oil Spill: Making a Difference (Invited): M K McNutt

1624h  U14A-02 NASA Earth Science Activities Related to the Deepwater Horizon Oil Spill (Invited): M H Freilich

1648h  U14A-03 NOAA Response to the Deepwater Horizon Oil Spill: Protecting Oceans, Coasts and Fisheries (Invited): J Lubchenco

1712h  U14A-04 National Science Foundation Contribution to the Deepwater Horizon Oil Spill Response (Invited): T L Killeen

1736h  U14A-05 Undersea plumes of oil and dissolved gas and sedimented oil along the seafloor alter the ocean system following the BP oil well blowout. (Invited): S B Joye, A R Diercks, A Teske, D L Valentine

Atmospheric Sciences

<table>
<thead>
<tr>
<th>A14A</th>
<th>Moscone West: 3002</th>
<th>Monday</th>
<th>1600h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate Change, Air Quality, and Their Interrelations at the North American West Coast III</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Presiding: P Quinn, NOAA; J Wang, Brookhaven Natl Lab


1615h  A14A-02 The impact of port emissions and marine biogenics on the single-particle chemistry of marine aerosol measured on board the R/V Atlantis during the CalNEX 2010 field campaign: C J Gaston, P Quinn, T S Bates, K A Prather


1700h  A14A-05 Ambient Measurements of Black Carbon Using the New SP-AMS In Conjunction with Other Instruments: H Coe, J D Allan, J W Taylor, M J Flynn, P D Williams, G R McMeeking, G Kok, D Baumgardner, T B Onasch, E Fortner, J Jayne, D R Worsnop


1730h  A14A-07 Cloud activation properties of organic aerosols observed at an urban site during CalNex-LA: F Mei, P L Hayes, A M Ortega, J Jimenez, J Wang


1600h  A14B-01 The heat balance of the equatorial trough zone, revisited: Part II (Invited): G L Stephens, M A Rogers, Z Luo

1614h  A14B-02 Large-scale tropical transients in aquaplanet simulations with zonally symmetric sea surface temperature distributions (Invited): Z Kuang

1628h  A14B-03 A Multi-Scale Interaction Model for Madden-Julian Oscillation: B Wang, F Liu

1642h  A14B-04 Leading modes of submonthly tropical convective activity: G N Kiladis

1655h  A14B-05 Multi-scale energy conversion during composite Madden-Julian Oscillation: L Zhou, A H Sobel, R G Murtugudde

1708h  A14B-06 PV generation for the MJO, convectively coupled Rossby and Kelvin waves: C Zhang, J Ling

1721h  A14B-07 ARM Data sets for the Year of Tropical Convection (YOTC): S A McFarlane, C N Long, J H Mather, R Jundt, M P Jensen, K Johnson, R A Mc Cord

1734h  A14B-08 Investigation of the physical mechanisms responsible for the recent MJO forecast improvements in the ECMWF model during the YoTC period: L Hirons, P Inness, F Vitart

1747h  A14B-09 Evaluating the Community Atmospheric Model (CAM) against satellite data during YOTC: C Hannay, D Williamson, R B Neale, J Olson, D Shea


1615h  A14C-02 Derivation of tropospheric aerosol properties from A-Train observations: D Tanre, Title of Team: The PARASOL Scientific Team
**Atmospheric and Space Electricity**

**AE14A Moscone West: 3007**

**Monday 1600h**

**Thunderstorm Effects in the Near-Earth Space Environment II** *(joint with SA, A)*

**Presiding:** D D Sentman, Univ Alaska Fairbanks; C Hanuise, LPC2E/CNRS

1600h **AE14A-01** Physical characteristics of TLEs inferred from ISUAL observations *(Invited): C Kuo,* A B Chen, H Su, R Hsu, H U Frey, S B Mende, Y Takahashi, L Lee

1615h **AE14A-02** Correlated High Speed Video, Medium Range Electric-Field, and Magnetic-field observations of Sprites: R G Sonnenfeld, T Kanmae, C Hstenbaek-Nielsen, M G McHarg, J Li, G Lu, S A Cummer, W W Hager, R K Haaland

1630h **AE14A-03** High-speed observations of sprite halo and streamer onset: H C Stenbaek-Nielsen, M G McHarg, R K Haaland, T Kanmae

1645h **AE14A-04** High Speed Telescopic Imaging of Sprites: M G McHarg, H C Stenbaek-Nielsen, T Kanmae, R K Haaland

1700h **AE14A-05** Gigantic Jets produced by an isolated tropical thunderstorm near Réunion Island: S Soula, O van der Velde, J Montanya, P Huet, C Barthe

1715h **AE14A-06** Electric jets following the occurrence of sprites: L Lee, J Chou, S Huang, S Chang, Y Wu, Y Lee, C Kuo, A B Chen, H Su, R Hsu, H U Frey, S B Mende, Y Takahashi, L Lee

1730h **AE14A-07** Photographic and LMA observations of a blue starter over a New Mexico thunderstorm: H E Edens, P R Krehbiel, W Rison, S J Hunyady

1745h **AE14A-08** Ongoing Explorations of Exceptional Lightning Discharges in Several Meteorological Regimes: W A Lyons, T A Warner, S A Cummer, T J Lang, R E Orville

**Biogeosciences**

**B14A Moscone West: 2006**

**Monday 1600h**

**Impacts of Land Use and Management on Soil Organic Carbon Dynamics II** *(joint with PA)*

**Presiding:** X Wang, University of Maryland


1620h **B14A-02** Soil organic carbon dynamics and its response to organic amendments under long-term fertilization in intensive rice systems in subtropical China: W Zhang, X Wang, M Xu

1640h **B14A-03** Soil carbon and nitrogen variations in wheat-corn double cropping systems under long-term fertilization in China *(Invited): R Cong,* M Xu, X Wang, W Zhang

1700h **B14A-04** Effects of management of ecosystem carbon pools and fluxes in grassland ecosystems: R Ryals, W L Silver

1715h **B14A-05** Analysis of carbon and nitrogen turnover in riparian soils undergoing restoration: D A Barry, J Battle-Aguilar, A Brovelli, J Luster, J Shrestha, P Niklaus


1745h **B14A-07** Effects of Changing Cultivation System on Soil Carbon Dynamics in Cotton Field of Northwestern China: Z Li, X Wang, C Tian

All information is current as of November 12, 2010
B14B Moscone South: 103 Monday 1600h
Sagan Lecture (Webcast) (joint with P)

Presiding: J W Harden, U.S. Geological Survey

1600h B14B-01 Isotope geochemistry and the study of habitability and life on other planets (Invited): J Eiler

Cryosphere

C14A Moscone West: 3011 Monday 1600h
Advances in Glacier Geophysics and Quantitative Glaciological Field Methods I (joint with EP, G, GC, H, NH, NS, NG, OS)

Presiding: D C Finnegan, Cold Regions Research & Eng. Lab; B Kulessa, Swansea University; T Murray, Swansea University; L A Stearns, University of Kansas; S Anandakrishnan, Pennsylvania State University; G S Hamilton, University of Maine

1600h C14A-01 Simultaneous observations of ice motion, calving and seismicity on the Yahtse Glacier, Alaska. (Invited): C F Larsen, T C Bartholomau, S O’Neal, M E West


1630h C14A-03 Experiences with the use of ground based interferometric radar near the calving front of Kebnekaise, Svalbard. (Invited): C Rolstad Denby, A Chapuis, R Norland

1645h C14A-04 3-D modelling of glacier calving processes (Invited): F J Navarro

1700h C14A-05 Inversion of IceBridge gravity data for continental shelf bathymetry beneath the Larsen ice shelf (Invited): J L Cochran, R E Bell, N Frearson, S Elieff


1730h C14A-07 Understanding the influence of supraglacial lakes in Greenland using surface-based geophysics and a physical model. (Invited): G A Catania, T Neumann, L C Andrews

C14B Moscone West: 3010 Monday 1600h
Seasonal Snow Covers in a Changing Climate: Implications for Hydrological, Biogeochanical, and Ecological Processes I (joint with B, GC, H)

Presiding: A W Nolin, Oregon State University; T E Link, University of Idaho; G Greenwood, University of Bern

1600h C14B-01 It’s Not Just About The Snow: Interactions Between Snowpack And Groundwater Dynamics Mediate Streamflow Response To Climate Warming In Mountainous Terrains (Invited): G E Grant, C Tague, S Lewis

1615h C14B-02 Ecohydrological response to snowmelt dynamics from plot to regional scales: N P Mlototch, K N Musselman, E Trujillo, P D Brooks, J R McConnell, M W Williams

1630h C14B-03 Response of seasonal snow cover to forest disturbance (Invited): S Boon

1645h C14B-04 Connections Between Forest Disturbance and Snowpack in a Pacific Northwest Watershed: A E Sproles, A W Nolin

1700h C14B-05 Past and future contributions of glacier melt to Columbia River streamflow: R D Moore, G Jost, V Radic, F S Anslow, A Jarosch, G K Clarke, B Menounos, R D Wheate, T Murdock, A T Werner

1715h C14B-06 Influence of dust deposition on snowpack melt rate and ecohydrological processes in a subalpine forest: G E Maurer, D R Bowling

1730h C14B-07 Northern Hemisphere cryosphere radiative forcing and albedo feedback during 1979–2008: M G Flanner, K M Shell, M J Barlage, D K Perovich, M A Tschudi

1745h C14B-08 The role of the seasonal snowpack in discharge trends in northern Eurasia: T J Troy, J Sheffield, E F Wood

Education and Human Resources

ED14A Moscone South: 102 Monday 1600h
Public Participation in Geoscience Research: Engaging Citizen Scientists III

Presiding: S Henderson, UCAR; A L Schloss, University of New Hampshire

1600h ED14A-01 Leveraging mobile phones for environmental and agricultural data collection: A look at What’s Invasive! and Project BudBurst Mobile (Invited): E A Graham, D Estrin

1615h ED14A-02 Air Twitter: Mashing Crowdsourced Air Quality Event Identification with Scientific Earth Observations (Invited): E M Robinson

1630h ED14A-03 Dreamers, Poets, Citizens, and Scientists: Motivations for Engaging in GalaxyZoo Citizen Science: S J Slater, T Mankowski, T F Slater, Title of Team: Center for Astronomy & Physics Education Research CAPER Team

1645h ED14A-04 CoCoRAHS (The Community Collaborative Rain, Hail and Snow Network): Enthusiastic Backyard Citizen Scientists Monitoring Precipitation across the United States (Invited): H W Reges, N J Doesken, N Newman, J Turner, Z Schwalbe, Title of Team: CoCoRAHS Headquarters Team

1700h ED14A-05 Lessons from a 5 yr citizen-science monitoring program, Mountain Watch, to engage hikers in air quality/visibility and plant phenology monitoring in the mountains: G Murray, D Weihrauch, K Kimball, C McDonough

1715h ED14A-06 ‘Citizen Creepmeters’: involving high school students in monitoring of fault movements using inexpensive equipment: GJ Funning, J R Blueford, K York, G McAlpine

1730h ED14A-07 Using the 2010 Eyjafjallajökull eruption as an example of citizen involvement in scientific research: E W Klemetti

1745h ED14A-08 NEON Citizen Science: Planning and Prototyping (Invited): W Gram

Geodesy

G14A Moscone West: 2008 Monday 1600h
Measuring and Modeling of Active Tectonic Processes in Alaska at the Beginning of the EarthScope Era I (joint with C, NH, S, T)

Presiding: J M Sauber, NASA GSFC; J T Freymueller, University of Alaska Fairbanks; D H Christensen, Geophysical Institute

1600h G14A-01 Impact of the Yakutat collision on the seismotectonics of Yukon and Alaska – New results and future projects (Invited): S Mazzotti


1630h G14A-03 The role of the Denali fault, slab geometry, and rheology in the deformation of the overriding plate in Alaska: M Jadamec, M I Billen, S Rosks
1645h  **G14A-04**  Observations of Glacier Dynamics in the St. Elias Mountains *(Invited)*:  **E W Burgess**,  R R Forster,  D K Hall

1700h  **G14A-05**  Use of Potential Fields Data to Identify Petrological Controls on Seismicity within South-Central and Southeastern Alaska:  **D J Doser**,  A M Veilleux,  H Rodriguez,  A De La Pena,  N Mankhemthong

1715h  **G14A-06**  Seismic imaging along a 600 km transect of the Alaska Subduction zone *(Invited)*:  **J A Calkins**,  G A Abers,  J T Freymueller,  S Rondenay,  D H Christensen

1730h  **G14A-07**  Integrating Surface and Seismic Observations as Constraints on Mantle Deformation and Rheology in the Alaska-Aleutian Subduction Zone *(Invited)*:  **M I Billen**,  J M Jadamec


---

**G14B Moscone West: 2003 Monday 1600h**  
**The Next Generation Global Geodetic Observing Networks II (joint with PA)**

**Presiding:**  **R S Gross**,  Jet Propulsion Laboratory;  **F G Lemoine**,  NASA Goddard Space Flight Center;  **E C Pavlis**,  Univ. of Maryland;  **B T Petarkencho**

1600h  **G14B-01**  ITRF and its dependence on integrated global geodetic networks *(Invited)*:  **Z Altamimi**,  X Collilieux

1615h  **G14B-02**  Impact of reference frame uncertainties on global sea level change estimates *(Invited)*:  **G T Mitchum**

1630h  **G14B-03**  Precise Geodetic Infrastructure: National Requirements for a Shared Resource:  **J H Minster**,  Z Altamimi,  G Blewitt,  W E Carter,  A A Cazenave,  H Dragert,  T Herring,  K M Larson,  J C Ries,  D T Sandwell,  J M Wahr,  J L Davis,  D A Feary,  L A Shanley,  Title of Team:  NRC Committee on the National Requirements for Precision Geodetic Infrastructure

1645h  **G14B-04**  Modern Ground Space Geodetic Network for Space Geodesy Applications:  **M R Pearlman**,  E C Pavlis,  Z Altamimi,  C E Noll

1700h  **G14B-05**  Current Trends in Satellite Laser Ranging:  **G M Appleby**,  G Kirchner,  J McGarry,  T Murphy,  C E Noll,  E C Pavlis,  M R Pearlman,  F Pieron

1715h  **G14B-06**  VLBI2010: Next Generation VLBI System for Geodesy and Astrometry:  **W T Petarkencho**,  H Schuh,  A E Niell,  D Behrend,  B E Corey

1730h  **G14B-07**  On the definition and realization of an ITRF-compatible global vertical reference system *(Invited)*:  **M G Sideris**

1745h  **G14B-08**  A review of the GGP network and scientific challenges *(Invited)*:  **J Hinderer**,  **J Boy**,  D J Crossley,  S Rosar

---

**Hydrology**

**H14A Moscone West: 2003 Monday 1600h**  
**Error Characterization of Precipitation Estimation and Development of Merged Multisensor Products II (joint with A, GC, NH)**

**Presiding:**  **A Behrangi**,  NASA Jet Propulsion Laboratory, California Institute of Technology;  **Y Tian**,  UMBC;  **T Kubota**,  Japan Aerospace Exploration Agency

1600h  **H14A-01**  Error Sources of Rainfall Retrievals from Active and Passive Microwave Sensors *(Invited)*:  **S Shige**,  A Taniguchi,  S Kida,  T Kubota

1615h  **H14A-02**  Validation of Satellite-derived Precipitation Estimates at Hourly and Daily Time Scales *(Invited)*:  **J Janowiak**

1630h  **H14A-03**  A Brief Review of History, Principles, and Progress of Merging Radar-Rainfall and Rain Gauge Data *(Invited)*:  **W F Krajewski**

1645h  **H14A-04**  Assessment of Quantitative Precipitation Forecasts from Operational NWP Models *(Invited)*:  **M R Sapiano**

1700h  **H14A-05**  Inter-Product Verification of Incremental Complexities in the NWS Multi-sensor Precipitation Estimator Algorithm:  **L qin**,  **E H Habib**,  D Seo

1715h  **H14A-06**  Quantifying Error in the CMORPH Satellite Precipitation Estimates:  **B Xu**,  S Yoo,  P Xie

1730h  **H14A-07**  Error Decomposition in Satellite-Derived Precipitation Estimates:  **A AghaKouchak**,  K Hsu,  A Behrangi,  S Sorooshian

1745h  **H14A-08**  A Study of Warm-cloud rain Detection using A-Train Satellite Data:  **R Chen**,  Z Li,  R J Kuligowski,  R Ferrari

---

**H14B Moscone West: 2002 Monday 1600h**  
**From Pores to Catchments: Coupling Hydrologic Concepts and Models Across Multiple Scales II**

**Presiding:**  **S W Lyon**,  Stockholm University;  **R H Mohtar**,  Purdue University;  **J C Aescough**,  USDA-ARS-NPA;  **A L James**

1600h  **H14B-01**  From the local to the regional scale. What is the effect of missing vertical heterogeneity moving from fully 3-D to 2-D depth averaged dispersion models?:  **G Darvini**,  P Salandin

1615h  **H14B-02**  Scaling soil hydraulic properties: Concepts and a research example *(Invited)*:  **T R Green**

1630h  **H14B-03**  A Topography-Based Scaling Algorithm for Soil Hydraulic Parameters at Hill-slope Scales:  **B P Mohanty**,  R B Jana

1645h  **H14B-04**  Investigating Plot and Watershed Scale Hydrologic and Biogeochemical Responses:  **Z M Easton**,  M T Walter,  T S Steenhuis

1700h  **H14B-05**  Linking catchment structure to hydrologic function: Implications of catchment topography for patterns of landscape hydrologic connectivity and streamflow dynamics:  **K G Jenco**,  B L McGlynn,  L A Marshall

1715h  **H14B-06**  Upscaling Physics-based Models to Estimate Catchment Scale Effects of Localised Tree Planting:  **C E Ballard**,  N Bulygina,  N McIntyre,  H S Wheater

1730h  **H14B-07**  A scaling hierarchy for hydrologic response to snowmelt in mountain basins *(Invited)*:  **S K Kampf**,  E E Richer,  C C Moore

1745h  **H14B-08**  Large-scale Runoff Generation and Routing: Efficient and Scale-independent Parameterisation using High-resolution Topography and Hydrography:  **L Gong**,  S Halldin,  C Xu

---

**H14C Moscone West: 2004 Monday 1600h**  
**Hydroepidemiology: Understanding Connections Between Hydrology and Human Health II (joint with B, PA)**

**Presiding:**  **A Bomblies**,  University of Vermont;  **D M Rizzo**,  University of Vermont;  **A Jutla**,  Tufts University;  **E Podest**,  JPL;  **K C McDonald**,  Jet Propulsion Lab

1600h  **H14C-01**  Linkage of Global Water Resources, Climate, and Human Health: A Conundrum for Which Cholera Offers a Paradigm *(Invited)*:  **R Colwell**


1630h  **H14C-03**  The Arsenic crisis in Bangladesh *(Invited)*:  **C Harvey**,  K Ashfaqe,  R B Neumann,  B Badruzzaman,  A Ali

---

All information is current as of November 12, 2010
1645h H14C-04 From Fall to Spring, or Spring to Fall? Seasonal Cholera Transmission Cycles and Implications for Climate Change: A S Akanda, A S Jutla, A Huq, R Colwell, S Islam, Title of Team: WE REASOn (Water and Environental Research, Education, and Actionable Solutions Network)

1700h H14C-05 Connections of water and malaria in Africa: E A Eltahir


1730h H14C-07 Remote Sensing Proxies for Vector-borne Disease Risk Assessment (Invited): A Anyamba

1745h H14C-08 Mapping Neglected Swimming Pools from Satellite Data for Urban Vector Control: C M Barker, F S Melton, W K Reisen

H14D Moscone West: 3016 Monday 1600h Megascale Hydrogeology: The Promise and Challenge of Examining Groundwater Systems at Regional and Continental Scales I (joint with G)

Presiding: T Gleeson, UBC; J Lemieux, Université Laval; Y Fan, Rutgers University


1618h H14D-02 Large Scale Variability of Ground Water Storage: the Mississippi River Basin (Invited): M Rodell, T Townsend, J S Famiglietti, B Li, J Nigro

1636h H14D-03 Thermal Springs of North America: Heat Flow or Hydrogeology?: G A Ferguson, S E Grasby

1648h H14D-04 A Physically-Based Approach to Assess the Impact of Climate Change on Canadian Water Resources (Invited): E A Sudicky, J Chen, W R Peltier, Y Park

1706h H14D-05 Ice-Sheet Aquifer Interactions within the midcontinent, USA: Implications for CO2 Sequestration (Invited): M A Person, A Banerjee, J C McIntosh, M E Schlegel, C W Gable, D Cohen, J Rupp

1724h H14D-06 Regional scale groundwater flow systems and age distribution in basins with depth-decaying hydraulic conductivity: X Jiang, J Lan, X Wang, S Ge, G Cao, F Hu

1736h H14D-07 Mega-scale Groundwater Flow in the Submarine Plover Aquifer, Continental Shelf of Northern Australia: G Garven, B James, J Gale


H14E Moscone West: 3014 Monday 1600h Uncertainty Analysis Approaches in Hydrologic Modeling I

Presiding: R S Teegavarapu, Florida Atlantic University; C S Pathak, South Florida Water Management; S U Senarath, SFWMD

1600h H14E-01 Quantile hydrologic model selection and uncertainty assessment: S PANDE, M A Keyzer, H Savenije, A K Gosain

1615h H14E-02 Bayesian Analysis Of Stormwater Quality Treatment: Application To A Surface Sand Filter And A Subsurface Gravel Wetland: P Avellaneda, T P Ballester, R Roseen, J Houle, E Linder

1630h H14E-03 Cumulative density function of runoff rate along heterogeneous hill slopes: P Wang, D M Tartakovsky


1700h H14E-05 Monte Carlo simulation to characterize stormwater runoff uncertainty in a changing climate: G S Karlivots, J C Adam


1745h H14E-08 Temporal variability in the stage-discharge relation: J Guerrero, J Westerberg, S Halldin, C Xu, L Lundin

H14F Moscone West: 3018 Monday 1600h Water Security and Sustainability II

Presiding: J A Tindall, US DOI - USGS; A A Campbell, E H Moran, USGS

1600h H14F-01 Water Security – National and Global Issues: J A Tindall, A A Campbell, E H Moran

1615h H14F-02 Water System Resiliency: Lessons from Boston’s 2010 Water Emergency: N Phillips, Title of Team: Boston Urban Metabolism ULTRA-ex Team

1630h H14F-03 Quantifying the Dimensions of Water Crisis in India: Spatial Water Deficits and Storage Requirements: S Pervere, N Devineni, U Lal

1645h H14F-04 Sensitivity of Storage Systems in India: Role of Human Behavior Responsive to Low Frequency Climate Variations: N Devineni, S Pervere, U Lal

1700h H14F-05 WITHDRAWN

1715h H14F-06 A Holistic Assessment of the Sustainability of Groundwater Resources in the North China Plain: G Cao, C Zheng, J Liu, W Li

1730h H14F-07 A worldwide view of groundwater depletion: L P Van Beek, Y Wada, C Van Kempen, J W Reckman, S Vasak, M F Bierkens

1745h H14F-08 Incorporating Risk and Indicators into a Water Security Framework: D M Allen, K Bakker, M W Simpson, E Norman, G Dunn

Earth and Space Science Informatics

IN14A Moscone South: 302 Monday 1600h Interoperability Barriers for Earth Science Data Systems II (joint with AE, B, C, EP, GC, H, NH, V)

Presiding: S W Berrick, NASA; Y Enloe; H Hua, NASA/JPL; A Wilson, LASP

1600h IN14A-01 NASA’s Standards Process For Earth Science Data Systems (Invited): R Ullman, Y Enloe

1615h IN14A-02 Interoperability Barriers in NASA Earth Science Data Systems from the Perspective of a Science User (Invited): K Kuo

1630h IN14A-03 Reducing barriers to interoperability through collaborative development of standards for Earth science information systems: G S Percivall, D K Arctur
1645h  IN14A-04 Consistent Inventories – the Largest Obstacle to Interoperable Data Systems (Invited): P C Cornillon, J Gallagher, D Holloway
1700h  IN14A-05 Advances in the NetCDF Data Model, Format, and Software: R K Rew, E J Hartnett, D Heimbigner, J L Caron
1715h  IN14A-06 LASP Time Series Server (LaTiS): Overcoming Data Access Barriers via a Common Data Model in the Middle Tier (Invited): D M Lindholm, A Wilson
1730h  IN14A-07 Interoperable Data Systems for Satellite, Airborne, and Terrestrial LiDAR Data: C M Meertens, C Baru, B Blair, C J Crosby, T M Haran, D J Harding, M A Hofton, S S Khalsa, J McWhirter
1745h  IN14A-08 Global interoperability in the oceanographic sea surface temperature community: E M Armstrong, K S Casey, J Vazquez, T Habermann, A Bingham, C K Thompson, C J Donlon

IN14B Moscone South: 310  Monday  1600h  Software Engineering for Climate Modeling (joint with A, G, GC, OS)

Presiding: T Clune, NASA GSFC; T J Lee, NASA

1600h  IN14B-01 Do Over or Make Do? Climate Models as a Software Development Challenge (Invited): S M Easterbrook
1620h  IN14B-02 Emergence of a Common Modeling Architecture for Earth System Science (Invited): C DeLuca
1640h  IN14B-03 Making Sense of Complexity with FRE, a Scientific Workflow System for Climate Modeling (Invited): A R Langenhorst, V Balaji, A Yakovlev
1715h  IN14B-05 Constraints and Opportunities in GCM Model Development: G A Schmidt, T Clune
1730h  IN14B-06 NOAA-GFDL’s Workflow for CMIP5/IPCC AR5 Experiments: J P Krasting, V Balaji, A R Langenhorst, S Nikonov, A Radhakrishnan, R J Stouffer
1745h  IN14B-07 Programming Makes Software; Support Makes Users: A L Batcheller

Natural Hazards

NH14A Moscone West: 3022  Monday  1600h  Extreme Natural Events: Modeling, Prediction, and Mitigation III (joint with NG)

Presiding: A Ismail-Zadeh, Karlsruhe Institute of Technology; I Zaliapin, University of Nevada

1600h  NH14A-01 Hurricane Risk Assessment: Wind Damage and Storm Surge (Invited): N Lin, E H Vanmarcke, K Emanuel
1620h  NH14A-02 Does It Make Sense to Modify Tropical Cyclones? A Decision-Analytic Assessment: K Klima, M G Morgan, J Grossmann
1635h  NH14A-03 Extreme precipitation events: Comparative evaluation of high resolution regional climate models in European Alpine region: N K Awan, A Gobiet, M Suklitsch
1650h  NH14A-04 Precursory Activation and Quiescence Prior to Major Earthquakes: J B Rundle, J R Holliday, D L Turcotte, K F Tiampo, W Klein, W Graves
1705h  NH14A-05 Landslide hazard, vulnerability and risk assessment: methods, limits and challenges (Invited): F Guzzetti
1725h  NH14A-06 Tsunami Modeling, Forecast and Warning (Invited): K Satake


Ocean Sciences

OS14A  Moscone West: 3009  Monday  1600h  Integrated Studies at Oceanic Spreading Centers: Linking Spreading Center Processes Across Disciplinary Boundaries II (joint with B, T, V)

Presiding: G W Luther, Univ Delaware; N W Hayman, University of Texas

1615h  OS14A-02 Metal Sulfide and Pyrite Nanoparticles form in Hydrothermal Vent Waters (Invited): G W Luther, M Yucel, A Gartman
1645h  OS14A-04 Evidence for deep sea hydrothermal fluid-mineral equilibrium from multiple S isotopes: J M McDermott, S Ono, M K Tivey, J Seewald
1700h  OS14A-05 Characterization of the in situ magnetic and lithologic architecture of Hess Deep using near-bottom vector magnetic data: C J MacLeod, M Tominaga, M Tivey, A Morris, D J Shillington
1715h  OS14A-06 Ocean crustal fault rocks and the chemo-mechanical record of hydrothermal fluid flow: N W Hayman, J A Karson
1730h  OS14A-07 Cumulative moment release along-axis at the EPR ISS from May 2005 to April 2006: M Tolstoy, F Waldhauser, D R Bohnenstiehl, L Doermann, A R Stolzmann
1745h  OS14A-08 MICROBATHYMETRY REVEALS LANDSLIDE ACTIVITY SHAPING THE WALLS OF THE MID-ATLANTIC RIDGE AXIAL VALLEY: M Cannat, H Ondrás, A Mangeney, Y Fouquet

Planetary Sciences

P14A  Moscone South: 306  Monday  1600h  Evolution of Planetary Atmospheres II (joint with A)

Presiding: F Tian, University of Colorado; Y L Yung, Caltech; S D Domagal-Goldman, University of Washington; C Goldblatt, University of Washington

1600h  P14A-01 The atmospheric evolution of Venus the habitable planet. (Invited): K J Zahnle, Y Abe, A Abe-Ouchi, N H Sleep
1630h  P14A-03 Variations in the magnitude of non mass dependent sulfur fractionation in the Archean atmosphere: M Claire, J F Kasting
1645h  P14A-04 Evolution Of The Martian Atmosphere And Climate (Invited): B M Jakosky
1700h  PP14A-05 Titan atmosphere and evolution (Invited):
C P McKay

1715h PP14A-06 Atmospheric replacement and late formation of N2 on undifferentiated Titan during the Late Heavy Bombardment:
Y Sekine, H Genda, S Sugita, T Kadono, T Matsui

1730h PP14A-07 WITHDRAWN

1745h PP14A-08 Characterization of extrasolar planetary atmospheres by thermal infrared photography: R Pierrehumbert, J P Lloyd

**P14B Moscone South: 308 Monday 1600h Rosetta Flybys of Asteroids 2867 Steins and 21 Lutetia II**

**Presiding:** C J Alexander, Jet Propulsion Laboratory; P D Feldman, Johns Hopkins University

1600h  P14B-01 The Rosetta Encounters with (2867) Steins and (21) Lutetia – An Overview (Invited): R Schulz, M Kuppers, K Wirth

1612h PP14B-02 Imaging Asteroid (21) Lutetia with OSIRIS onboard Rosetta (Invited): H Keller, C Barbieri, D Koschny, P L Lamy, H Rickman, R Rodrigo, H Sierks, Title of Team: OSIRIS Team


1636h P14B-04 Lutetia: First results of VIRTIS - M data analysis: A Coradini, F Capaccioni, S Erard, G Arnold, E Ammannito, M Capria, M De sanction, G Filacchione, F Tosi, Title of Team: VIRTIS team

1648h P14B-05 Ultraviolet Exploration of 21 Lutetia by the Alice UV Spectrometer Aboard Rosetta: J Parker, S A Sterk, A J Steffl, P D Feldman, H A Weaver, M F A'Hearn, M Versteeg, E Birath, A Graps, L M Feaga, J Scherrer, D Slater, N Cunningham, J Bertaux

**P14C Moscone South: 308 Monday 1700h Asteroids and Meteorites II**

**Presiding:** P J McCausland, Univ Western Ontario; K K Min, University of Florida

1700h  P14C-01 Thermal weathering of airless rocky bodies: J L Molaro, S Byrne

1715h P14C-02 Alkaline Element Fractionations in LL-chondritic Breccias: K Misawa, T Yokoyama, O Okano

1730h P14C-03 Quantitative shock stage analysis in olivine and pyroxene bearing meteorites via in situ micro-XRD: P J McCausland, R L Flemming, M R Izawa

1745h P14C-04 Single-Grain (U-Th)/He Ages of Phosphates from St. Severin Chondrite: K K Min, P W Reiners, D L Shuster

**Paleoceanography and Palaeoclimatology**

**PP14A Moscone West: 2005 Monday 1600h Cretaceous Arctic Environments: Proxies for Understanding Climate Change From the “Other” Greenhouse Interval II**

**Presiding:** A R Fiorillo, Museum of Nature and Science; P J Mccarthy, University of Alaska; G R Upchurch, Texas State University; G A Ludvigson, University of Kansas

1600h  PP14A-01 Where were Arctic Alaska and Beringia during the Cretaceous?: L A Lawver, L M Gahagan, I O Norton


1630h PP14A-03 Cretaceous high latitude climate—Are we closing the model-data gap? (Invited): C J Poulsen, J Zhou


1700h PP14A-05 An intermodel comparison of the response of the mid-Cretaceous Arctic climate to CO2 forcing: J Zhou, C Poulsen

1715h PP14A-06 Paleoclimatological implications of Mid-Cretaceous paleosol sphaerosiderites from 70 degrees paleornoth, central Spitsbergen: T White

1730h PP14A-07 Simulating the Warm Arctic Environment for the Latest Cretaceous Using the Community Climate System Model (CCSM3) (Invited): C A Shields, G R Upchurch, J T Kiehl, J Scherer, C Scosese


**PP14B Moscone West: 2007 Monday 1600h Paleohistory of the Greenland Ice Sheet II (joint with C, G)**

**Presiding:** A E Carlson, University of Wisconsin-Madison; J S Stoner, Oregon State University

1600h  PP14B-01 Greenland’s early glacial history in the context of late Cenozoic global cooling (Invited): R DeConto, S J Koenig, D Pollard

1615h PP14B-02 Glacial-interglacial variability of the Greenland Ice Sheet in the Pliocene: S J Koenig, R DeConto, D Pollard

1630h PP14B-03 The North Atlantic/Arctic climate system with reduced Greenland Ice: insights from isotopic stages 11 and 5 (Invited): A de Vernal, C Hillaire-Marcel

1645h PP14B-04 Importance of Insolation Anomalies for Eemian Greenland Ice Sheet Melt: W Van De Berg, M R van den Broeke, J Ettema, E van Meijgaard, F Kaspar

1700h PP14B-05 Greenland Ice Sheet retreat during the Eemian: M Helsen, R Van de Wal, M R van den Broeke, W Van De Berg, J Oerlemans

1715h PP14B-06 Reconstruction of the Greenland Ice Sheet since LGM (Invited): K H Kjaer, N K Larsen, S Funder, K Kjeldsen

1730h PP14B-07 Greenland Ice Sheet Retreat from the Central West Greenland Shelf during the Last Deglaciation and the early Holocene (Invited): A E Jennings, M E Walton, C O’Coafah, A Kilfeather, M Moros, J T Andrews

1745h PP14B-08 Holocene relative sea level changes in Greenland: a review: O Bennike
**SPA-Acronomy**

**SA14A** Moscone South: 301  Monday  1600h

Ice Layers in the Mesopause Region: The Role of Dynamics and Relationship to the Environment in Which They Form I (joint with A)

*Presiding:* J M Russell, Hampton University; S M Bailey, Virginia Tech

1600h  **SA14A-01** Homogeneous nucleation of amorphous solid water particles in the upper mesosphere: E J Jensen, B J Murray

1615h  **SA14A-02** First determination of the fractal perimeter dimension of noctilucent clouds/polr mesospheric clouds (Invited): C von Savigny, L Brinkhoff, S M Bailey, C E Randall, J M Russell

1630h  **SA14A-03** CIPS/AIM Observation of Polar Mesospheric Cloud Structures and NOGAPS-ALPHA Analysis of the Environment in Which These Structures Form: B Thuraiarajah, S M Bailey, D E Siskind, J D Lumpe, K Nielsen, C E Randall, M J Taylor, J Russell

1645h  **SA14A-04** Characteristics of gravity waves in the summer polar mesosphere and their dynamical effects on polar mesospheric clouds (Invited): M J Taylor, Y Zhao, P Pautet, C E Randall, A Chandran, S M Bailey, J Russell

1700h  **SA14A-05** Middle Atmospheric Interannual Variability as Recorded by Three years of the NOGAPS-ALPHA Analysis (Invited): D E Siskind

1715h  **SA14A-06** The roles of the saturation vapor pressure and water vapor partial pressure in controlling different stages of the polar mesospheric cloud season: P Rong, J Russell, M E Hervig, S M Bailey

1730h  **SA14A-07** An improved method for mesospheric ice temperature retrieval from 850 cm-1 libration and 3200 cm-1 vibration bands: S V Petelina, A Y Zasetsky

1745h  **SA14A-08** Combined studies of noctilucent clouds by Odin and AIM (Invited): J Gumbel, K Hultgren, S M Bailey, S Benze, B Karlsson, J D Lumpe, C E Randall

---

**SPA-Solar and Heliospheric Physics**

**SH14A** Moscone South: 309  Monday  1600h

First Results From the Solar Dynamics Observatory III

*Presiding:* W D Pesnell, NASA / GSFC; P C Chamberlin, NASA/ GSFC; N E Hurlburt, Lockheed Martin ATC

1600h  **SH14A-01** Ubiquitous Alvenic Motions in Quiet Sun, Coronal Hole and Active Region Corona: S W McIntosh, B De Pontieu, M Carlsson, V H Hansteen, Title of Team: The SDO/AIA Mission Team

1615h  **SH14A-02** SDO/AIA Observation of Kelvin-Helmholtz Instability in the Solar Corona associated with CME: L Ofman, B J Thompson

1630h  **SH14A-03** The Genesis of an Impulsive CME observed by AIA on SDO: S Patsourakos, A Vourlidas, G Stenborg

1645h  **SH14A-04** Data-Driven Simulations of Coronal Magnetic Fields: A First Attempt with SDO Data: C Cheung, M L DeRosa

1700h  **SH14A-05** Sunspot Seismology with the Solar Dynamics Observatory Helioseismic and Magnetic Imager: D C Braun, A C Birch, A D Crouch, C Clack, D Dombroski, M Rempel

1715h  **SH14A-06** Analysis of Photospheric Convection Cells with SDO/HMI: P E Williams, W D Pesnell

1730h  **SH14A-07** Tracking Vector Magnetograms from the Solar Dynamics Observatory: P W Schuck, X Sun, K Muglach, J T Hoeksema

1745h  **SH14A-08** Initial Results from SDO/HMI Time-Distance Helioseismology Data Analysis Pipeline: J Zhao, R S Bogart, S P Couvidar, T L Duvall, A C Birch, K Parchevsky, A G Kosovichev, J G Beck

---

**SPA-Magnetospheric Physics**

**SM14A** Moscone South: 305  Monday  1600h

Dynamical Processes of the Cusp/Polar Cap Ionosphere II (joint with SA)

*Presiding:* J Moen, University of Oslo; K Hosokawa, The Univ. of Electro-Communications; L P Dyrd, Johns Hopkins University APL

1600h  **SM14A-01** Cusp/polar cap dynamics challenge science and communications/GNSS (Invited): H C Carlson

1625h  **SM14A-02** Distributed ground-based optical observations of polar cap patches: J M Holmes, T R Pedersen, M G Johnsen, R Esposito

1640h  **SM14A-03** Inter-Hemispheric Comparison of GPS Phase Scintillation at High Latitudes during the Magnetic-Cloud-Induced Geomagnetic Storm of April 5-7, 2010: P Prikryl, L Spogli, P T Jayachandran, C N Mitchell, B Ning, G Li, D W Danskin, E L Sparks, E F Donovan, L Alfonst, G De Franceschi, V Romano

1655h  **SM14A-04** On the characteristic feature of the electron density irregularities in the cusp: T Abe, J Moen

1710h  **SM14A-05** First observations of ionospheric irregularities and flows over the south geomagnetic pole from the SuperDARN HF radar at McMurdo Station, Antarctica: W A Bristow, R T Parris, J Spaleta

1725h  **SM14A-06** The Influence of Solar Sector Structure on the Ionosphere: K A McWilliams, D R Hugybaer

1740h  **SM14A-07** Initial Results from the Resolute Bay Incoherent Scatter Radar: M J Nicolls, H Bahcivann, C J Heinseelman

---

**SM14B** Moscone South: 307  Monday  1600h

Magnetospheric Plasma Waves: Generation, Propagation, and Interaction With Energetic Particles III (joint with AE, SA, SH)

*Presiding:* J Bortnik, UCLA; L J Lanzerotti, NJIT

1600h  **SM14B-01** Origin of Earth's diffuse aurora (Invited): R M Thorne, B Ni, X Tao, R B Horne, N P Meredith

1618h  **SM14B-02** Identifying the Driver of Pulsating Aurora using THEMIS: J W Bonnell, T Nishimura, J Bortnik, W Li, R M Thorne, L R Lyons, V Angelopoulos, S B Mende, O LeContel, C M Cully, R E Ergun, H Auster

1633h  **SM14B-03** ELF wave intensification in conjunction with fast earthward flow in the mid-tail plasma sheet ———- A THEMIS survey: J Liang, B Ni, C M Cully, E F Donovan, R M Thorne, Title of Team: THEMIS team

1647h  **SM14B-04** Modulation of whistler-mode chorus waves: W Li, R M Thorne, J Bortnik, T Nishimura, L Chen, V Angelopoulos

1701h  **SM14B-05** Modeling of His spectrum from ray tracing study of chorus waves: L Chen, J Bortnik, W Li, R M Thorne

1715h  **SM14B-06** Predicting and testing the chip rate of whistler-mode chorus: C M Cully

1730h  **SM14B-07** Chorus emissions measured by Cluster spacecraft at different L-shells: E Macusova, O Santolik, J S Pickett, D A Gurnett, N Cornilleau Wehrlin

1745h  **SM14B-08** Non-Linear Processes Associated with the Generation of Whistler Waves and their Effects on Electrons: V Decyk, D Schriver, M Ashour-Abdalla, P M Travnieck, D Wingham, J S Pickett, O Santolik, M L Goldstein
Mineral and Rock Physics

MR14A Moscone West: 3024 Monday 1600h
Physical State of Planetary Cores I (joint with DI, V)

Presiding: R Caracas, Ecole Normale Superieure; Y Fei, Carnegie Institution of Washington

1600h MR14A-01 Characterizing planetary cores with spin and gravity measurements (Invited): J Margot
1615h MR14A-02 Planetary cores: a geodynamic perspective (Invited): F Nimmo
1630h MR14A-03 Electrical and Thermal Conductivity of Liquid Iron at Core Pressures and Temperatures: First-Principles Calculations: N de Kokker, G Steinle-Neumann, V Vlcek
1645h MR14A-04 Viscosity of Iron: E Abramson, J Brown
1700h MR14A-05 Constraints on the Composition of the Earth’s Liquid Outer Core from Shock Wave Density and Sound Velocity Measurements: Y Fei, H Huang, L Cai, F Jing, H Xie, L Zhang, Z Gong
1715h MR14A-06 Geochemistry of Planetary Cores: Insights from Iron Meteorites: R J Walker
1730h MR14A-07 Core-mantle partitioning of oxygen on Earth and Mars (Invited): K Tsuno, D J Frost, D C Rubie
1745h MR14A-08 Isotope fractionation during core formation (Invited): A Shahar, E D Young, V J Hillgren, Y Fei

Seismology

S14A Moscone West: 2009 Monday 1600h
Recent Advances in Infrasound Science II (joint with A, EP, OS, V)

Presiding: S Arrowsmith, Los Alamos National Laboratory; M A Hedlin, U.C. San Diego; A Hurtko, IRIS DMC; J M Lees, University of North Carolina; S R McNutt, UAFGI; K T Walker, IGPP/SIO/UCSD

1600h S14A-01 Investigation of the infrasound produced by geophysical events such as volcanoes, thunder, and avalanches: the case for local infrasound monitoring (Invited): B Johnson, O E Marcello, R O Arecchi, R Johnson, H E Edens, H Marshall, S Havens, G P Waite
1615h S14A-02 Harmonic Tremor and Gliding: Acoustic Chug Swarms at Tungurahua, Ecuador: J M Lees, M C Ruiz
1630h S14A-03 Low-frequency Acoustic/Seismic Coupling in Deep Sediments: Skyquakes Look Like Earthquakes in the Mississippi Embayment (Invited): C Langston
1645h S14A-04 Finite-Difference Time-Domain Modeling of Infrasonic Waves Generated by Supersonic Auroral Arcs: V P Pasko
1700h S14A-05 Probing atmospheric structure with infrasonic ambient noise interferometry (Invited): M M Haney, L G Evers, J Fricke
1715h S14A-06 Seismo-Acoustic Studies in the European Arctic (Invited): S J Gibbons
1730h S14A-07 Infrasonic source location imaging with the USArray: Application to one year of seismic data: K T Walker, R Shelby, M A Hedlin, C D deGroot-Hedlin
1745h S14A-08 Using the Transportable Array to Explore the Relationship between Atmospheric Pressure and Ground Displacement: R Woodward, R W Busby, K Hafner

Tectonophysics

T14A Moscone West: 2011 Monday 1600h
Active Monitoring in Geophysics I (joint with S, NH, G)

Presiding: V A Korneev, Lawrence Berkeley National Laboratory; M S Zhdanov, University of Utah

1600h T14A-01 4D imaging of velocity variation of the underground by single ultra-stable seismic source and multi-receivers (Invited): J Kasahara, Y Hasada, K Tsuruga, N Fujii
1620h T14A-02 PERSPECTIVES OF ELECTROMAGNETIC SOUNDING IN THE ARCTIC OCEAN (Invited): E Velikhov, S Korotaev, M Kruglyakov, D Orekhova, I Popova, Y Schors, V Shneyer, I Trofimov, M S Zhdanov
1700h T14A-04 Short-term and Imminent Precursors of Haiti M7.0 Earthquake: Earth Degassing and Thermal Vortex Rotated Movement: Z Qiang, J Qiang, Z Zeng, J Wang, H Xie
1715h T14A-05 Geophysical Simulations Conducted by the SEG Advanced Modeling Project (SEAM) for a Deepwater Subsalt Resource: M C Fehler
1730h T14A-06 Large-scale three-dimensional inversion of EarthScope MT data using the integral equation method: M S Zhdanov, A Gribenko, M Green, M Cuma
1745h T14A-07 Crustal heat production measurements near the Sudbury geo-neutrino observatory: Implications for calculating the crustal geo-neutrino flux: C Perry, C Planeau, J Mareschal

T14B Moscone West: 2020 Monday 1600h
Subduction Zone Segmentation Over Multiple Earthquake Cycles II (joint with G, NH, S)

Presiding: I Shennan, Durham University; A J Melztner, Nanyang Technological University; R C Witter, Oregon Dept of Geology and Mineral Industries; C Goldfinger, Oregon State University

1600h T14B-01 Fault Segmentation and Earthquake Generation in the Transition from Strike-slip to Subduction Plate Motion, Saint Elias Orogen, Alaska and Yukon (Invited): R L Bruhm, I Shennan, T L Pavlis
1615h T14B-02 What can coastal wetland stratigraphy tell us about megathrust segmentation at Cascadia? (Invited): A R Nelson
1630h T14B-03 Plate boundary segmentation and upper/lower plate structure in Cascadia: A M Trehu
1645h T14B-04 Holocene Paleoeartquake cycles in the region of the 2004 Sumatra-Andaman Earthquake Compared with other Paleoseismic Data: J R Patton, C Goldfinger, A E Morey, Y Surachman, U Udrehk
1700h T14B-05 Subducted seafloor relief stops rupture in South American great earthquakes: Implications for rupture behaviour in the 2010 Maule, Chile earthquake: R Sparkes, FJ Tilmann, N Hovius, J Hillier
1715h T14B-06 Seismotectonic segmentation along the Chilean megathrust (Invited): D Melnick, M Moreno
1730h T14B-07 Towards inferring earthquake patterns from geodetic observations of interseismic coupling (Invited): Y Kaneko, J Avouac, N Lapusta
1745h T14B-08 Dynamic Rupture Segmentation Along The Nankai Trough, Southwest Japan: S Hok, E Fukuyama, C Hashimoto
1600h T14C-01 Thermal and chemical modification of the lithosphere beneath the Colorado Plateau and implications for its Cenozoic evolution (Invited): M Roy

1615h T14C-02 Dynamic subsidence and uplift of the Colorado Plateau (Invited): L Liu, M Gurnis

1630h T14C-03 Crust and Mantle Structure Beneath the Colorado Plateau (Invited): S P Grand, J W van Wijk, W S Baldrige, R C Astner, J F Ni, D Wilson


1715h T14C-06 Seismic Evidence for Thermochemical Delamination and Convective Downwelling under the Western Colorado Plateau: A Levander, B Schmandt, M S Miller, K Liu, K E Karlstrom, R S Crow, C Lee, E Humphreys

1730h T14C-07 Strain rate field for Arizona and the Colorado Plateau estimated using campaign and continuous GPS velocities: A A Holland, R A Bennett, C W Kreemer, R Baker, K E Anderson, W E Lytle

1745h T14C-08 P, S, and Rayleigh wave tomography of the southwestern U.S. upper mantle: B Schmandt, D W Forsyth, C J Rau, E Humphreys

T14D Moscone West: 2016 Monday 1600h The Formation and Deformation of the Mediterranean Basins, Continental Margins, and Arcs II (joint with GP, MR, NH, S, V, G)

Presiding: F D Pearce, MIT

1600h T14D-01 Arabia/Africa/Eurasia kinematics and the Dynamics of Post-Oligocene Mediterranean Tectonics: S McClusky, R E Reilinger

1615h T14D-02 Dynamics of subduction, accretion, exhumation and slab roll-back: Mediterranean scenarios: C Tirel, J Brun, E B Burov, M J Wortel, S Lebedev

1630h T14D-03 Plate boundary re-organization in the western Mediterranean: M J Wortel, R M Govers, M Baes

1645h T14D-04 Initiation of the post-Oligocene subduction phase in the Western Mediterranean (Invited): R M Govers, M J Wortel, M Baes

1700h T14D-05 Probing the deep structure and geodynamics of the Gibraltar Arc System by integrating new data sets from the IberArray platform (Invited): J Gallart

1715h T14D-06 Seismic structure and crustal nature of the geological provinces off the SW Iberian margin: results of the NEAREST-SEIS wide-angle seismic survey: V Sallares, S Martinez, A Gailler, M Gutscher, R Bartolome, E Gracia, J Diaz

1730h T14D-07 Seismic Characterization of the Transition from Continental to Oceanic Subduction along the western Hellenic Subduction Zone: F D Pearce, S Rondenay, H Zhang, M Sachpazi, M Charalampakis, L Royden

1745h T14D-08 Reconciling the geological history of western Turkey with plate circuits and mantle tomography: N Kaymakci, D J Van Hinsbergen, W Spakman, T H Torsvik

Volcanology, Geochemistry, and Petrology

V14A Moscone West: 2022 Monday 1600h The Subduction Filter: Effects on the Mantle, Arcs, and Continents IV (joint with DI)

Presiding: C Chauvel, University of Grenoble; T Plank, Columbia University; W M White, Cornell Univ.

1600h V14A-01 Crustal overprint on mantle-derived U-series disequilibria in arc magmas: A warning signal from Volcán Llaima, Chile: O Reubi, B Bourdon, M Dungan, J Koornneef, D Selles, C H Langmuir, S Aciego


1630h V14A-03 Crustal reworking during a long-lived magma pulse: 11 m.y. isotopic record from the Ancaquilecha Volcanic Cluster, central Andes: B A Walker, A Grunder

1645h V14A-04 A ~9.4 Ma Ash Record from the Andaman Arc Accretionary Wedge: Petrochemical Implications for Arc Evolution: T R Cawthern, J E Johnson, J G Bryce, J Blichtert-Tofe, J A Flores


1715h V14A-06 Predicting the Isotopic Composition of Subduction-Filtered Subducted Oceanic Crust and Sediment: W M White

1730h V14A-07 Geochemical Tracers of Subducted Materials in a Complex Continental Magmatic Arc: The Case of the Trans-Mexican Volcanic Belt: P E Schaaf

1745h V14A-08 Global Flux Balance in the Terrestrial $H_2O$ Cycle: Reconsidering the Post-Arc Subducted $H_2O$ Flux: R Parai, S Mukhopadhyay

V14B Moscone West: 3001 Monday 1600h Volcanism and Environmental Change II (joint with GC)

Presiding: S M Straub, Lamont Doherty Earth Observatory at Columbia University; M G Tejada, University of the Philippines

1600h V14B-01 SO$_2$ emissions from persistently active explosive volcanoes: can we estimate their contribution using satellite instruments?: J Smekens, A B Clarke

1615h V14B-02 Volcanic gas impacts on vegetation at Turrialba Volcano, Costa Rica: R Teasdale, M Jenkins, J Pushnik, J L Houpin, D L Brown

1630h V14B-03 The Impact of a Laki-style Eruption on Cloud Drops, Indirect Radiative Forcing and Air Quality: K Carslaw, A Schmidt, G Mann, K J Pringle, P Forster, M Wilson, T Thordarson


<table>
<thead>
<tr>
<th>Time</th>
<th>Session Code</th>
<th>Location</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800h</td>
<td>U21A-0003</td>
<td>Moscone South: Poster Hall</td>
<td>POSTER Melting phase relations of K- and Na-bearing carbonatite at 3-21 GPa with implications to deep carbon cycle</td>
</tr>
</tbody>
</table>

**Union**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Code</th>
<th>Location</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920h</td>
<td>U21A-0010</td>
<td>Moscone South: Poster Hall</td>
<td>POSTER Single-crystal elastic properties of carbonates along the MgCO$_3$-FeCO$_3$ join</td>
</tr>
</tbody>
</table>

**Frontiers of Geophysics: Society's Growing Vulnerability to Natural Hazards and Implications for Geophysics Research**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Code</th>
<th>Location</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1830h</td>
<td>U15A-01</td>
<td>Moscone South: 103</td>
<td>Society’s Growing Vulnerability to Natural Hazards and Implications for Geophysics Research</td>
</tr>
<tr>
<td>1840h</td>
<td>U15A-01</td>
<td>Moscone South: 103</td>
<td>Society’s Growing Vulnerability to Natural Hazards and Implications for Geophysics Research</td>
</tr>
</tbody>
</table>

**Union**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session Code</th>
<th>Location</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920h</td>
<td>U21A-0011</td>
<td>Moscone South: Poster Hall</td>
<td>POSTER An experimentally-based thermodynamic model for the system CaCO$_3$-MgCO$_3$-FeCO$_3$ at pressures to 6 GPa and implications for carbon mobility in subduction zones</td>
</tr>
<tr>
<td>0800h</td>
<td>U21A-0012</td>
<td>Moscone South: Poster Hall</td>
<td>POSTER Thermodynamic properties of carbonate-bearing fluids at high P-T conditions and the deep carbon cycle</td>
</tr>
<tr>
<td>0800h</td>
<td>U21A-0013</td>
<td>Moscone South: Poster Hall</td>
<td>POSTER Metal ion effects on the kinetics of abiogenic formation of glycylglycine and diketopiperazine under the simulated conditions of the Lost City hydrothermal field</td>
</tr>
</tbody>
</table>
0800h  **U21B** Moscone South: 104  **Tuesday**  0800h  The Magnitude 8.8 Chilean Earthquake of 27 February 2010

**Presiding:** S E Barrientos, Universidad de Chile; B A Brooks, University of Hawaii; K Wang, Geological Survey of Canada; D Melnick, University of Potsdam

0800h  **U21B-01** The Maule, 2010, earthquake – geophysical and kinematic observations of the South American margin prior to the earthquake (Invited): O Oncken, C A Haberland, M Moreno, D Melnick, F Tilmann, Title of Team: TIPTEQ research groups

0815h  **U21B-02** The 2010 Chile Earthquake – Variations in the Rupture Mode: S L Beck, D Comte, T Lay, E Kiser, M Ishii

0830h  **U21B-03** The February 27, 2010 Mw 8.8 Maule Earthquake as Observed by GPS and Strong Motion Instruments (Invited): R I Madariaga, C Vigny, M Lancieri, S Ruiz, J A Campos, Title of Team: The Montessus de Ballore International Laboratory


0915h  **U21B-06** Normal modes excited by the 2010 Chile earthquake: no evidence for an ultra-slow component to the source (Invited): E Okal, S Hongsresawat, S A Stein

0930h  **U21B-07** Near Field Modeling for the Maule Tsunami from DART, GPS and Finite Fault Solutions (Invited): D Arcas, C Chamberlin, M Lagos, M Ramirez-Herrera, L Tang, Y Wei

0945h  **U21B-08** Ground Shaking and Earthquake Engineering Aspects of the M 8.8 Chile Earthquake of 2010 - Applications to Cascadia and Other Subduction Zones (Invited): J F Cassidy, R Boroschek, C Ventura, S Huffman

### Atmospheric Sciences

**A21A** Moscone South: Poster Hall  **Tuesday**  0800h  Attribution of the Change in CO2, CH4, and N2O

**Presiding:** M J Prather, UC Irvine; J Fuglestvedt, CICERO; A K Jain, University of Illinois

0800h  **A21A-0018** POSTER Well Known . . . to a Few People: Attribution of Excess Atmospheric CO2 and Resulting Global Temperature Change to Fossil Fuel and Land Use Change Emissions: S E Schwartz

0800h  **A21A-0019** POSTER First observations of 14CO2 at the Boulder Atmospheric Observatory (BAO): B W LaFrenche, G Petron, A E Andrews, J B Miller, S J Lehman, S A Montzka, B R Miller, T P Guilderson

0800h  **A21A-0020** POSTER Urban Evapotranspiration and Carbon Dioxide Flux in Miami – Dade, Florida: T Bernier, W Hopper

0800h  **A21A-0021** POSTER On the development of a methodology for extensive in-situ and continuous atmospheric CO2 monitoring: K Wang, S Chang, T Jhang

0800h  **A21A-0022** POSTER Carbon Isotopic Constraints on Arctic Methane Sources, 2008-2010: R E Fisher, D Lowry, M Lanoiselle, S Sristikantharajah, E G Nisbet

0800h  **A21A-0023** POSTER Global distributions of nitrous oxide and implications for emissions: Measurements from the HIPPO (Hiaper Pole to Pole Observations) campaign and comparisons to a global model: E A Kort, B C Daube, K Ishijima, P K Patra, R Jimenez Pizarro, S C Wofsy


0800h  **A21A-0025** POSTER Top-down Constraints on the Landscape-scale Nitrous Oxide Budget in the Upper Midwest: X Zhang, T J Griffis, X Lee, J M Baker, M Erickson, J J Fassbinder

0800h  **A21A-0026** POSTER Intensive flux measurements and analysis of greenhouse gases from an upland cabbage field at Kunsan, Korea: D Kim, U Na

**A21B** Moscone South: Poster Hall  **Tuesday**  0800h  Biomass Burning: New Findings and Analyses From Multiple Perspectives I Posters (joint with B, PA)

**Presiding:** R J Yokelson, Univ Montana; S M Kreidenweis, Colorado State Univ

0800h  **A21B-0027** POSTER WRF-Chem simulated wildfire transport and impacts: Q Tan, M Chin, X Zhang, J J Shi, M M Petrenko, S Kondragunta, T Matsui

0800h  **A21B-0028** POSTER CO2 Emission signatures from Biomass Burning Plumes Sampled during ARCTAS: Y Choi, S A Vay, G S Diskin, G W Sachse, A J Soja, J Woo

0800h  **A21B-0029** POSTER Detailed Analysis of the EOS-MODIS Instrument’s Fire Radiative Power Product: L Ellison, C M Ichoku

0800h  **A21B-0030** POSTER Model assessing the impact of biomass burning on air quality and photochemistry in Mexico City: W Lei, G Li, C Wiedinmyer, R Yokelson, L T Molina


0800h  **A21B-0032** POSTER Effect of Biomass Burning and Regional Background Aerosols on CCN Activity Derived from Airborne In-situ Measurements: S Lee, Y Ghim, S Kim, S Yoon

0800h  **A21B-0033** POSTER Absorption properties of biomass burning aerosol: A closure study using the IJRC community radiative transfer model and ARCTAS measurements: H Guan, R W Bergstrom, Y Shinzoku, A D Clarke, S Schmidt

0800h  **A21B-0034** POSTER Correlation of Al and height of biomass plumes: Implications of the optical properties of large biomass plumes: R W Bergstrom, M J Penning de Vries, H Guan, L T Iraci

0800h  **A21B-0035** POSTER Do Polyethylene Plastic Covers Affect Smoke Emissions from Debris Piles?: D R Weise, H Jung, D Cocker, E Hosseini, Q Li, M Shrivastava, M McCorison

0800h  **A21B-0036** POSTER Analysis of Fresh and Aged Aerosols Produced by Biomass Combustion: A S Holden, Y Desyaterik, A Laskin, J Laskin, B A Schichtel, W C Malm, S M Kreidenweis, J L Collett

All information is current as of November 12, 2010.

0800h A21B-0038 POSTER Improved parameterization of wildfire NOx emissions using MODIS fire radiative power and OMI tropospheric NO2 columns: A K Mebust, A R Russell, R C Hudman, L C Valin, R C Cohen

0800h A21B-0039 POSTER Heterogeneous Oxidation of Biomass Burning Aerosol Surrogates by O3, NO2, NO3, and N2O5: D A Knopf, J H Slade, S Forrester, D Linville


0800h A21B-0042 POSTER Impact of mercury from the Canadian boreal forest wildfires to New England: G Hwang, R W Talbot

0800h A21B-0043 POSTER Recent Innovations in the BlueSky Smoke Modeling Framework and Assessment of Plume Injection Height with MISR and CALIPSO: S M Ruffuse, N Larkin, T Strand, K J Craig, J L DeWinter, N Wheeler

0800h A21B-0044 WITHDRAWN

0800h A21B-0045 POSTER Argus 1000 Measurements and Analysis of Carbon Dioxide Concentrations Near Forest Fires in Russia: K A Sinclair, R K Jagpal

0800h A21B-0046 POSTER A laboratory fuel efficiency and emissions comparison between Tanzanian traditional and improved biomass cooking stoves and alternative fuels: B R Mitchell, J C Maggio, K Paterson

0800h A21B-0047 WITHDRAWN

0800h A21B-0048 POSTER Study of the formation of the “Black Cloud” and its dynamics over Cairo, Egypt using MODIS and MISR sensors: H S Marey, J C Gille, H M El-Askary, E A Shalaby, M E El-Raey

0800h A21B-0049 POSTER Studying the radiative environment of individual biomass burning fire plumes using multi-platform observations: an example ARCTAS case study on June 30, 2008: J Redemann, M Vaughan, Y Shinozuka, P B Russell, J M Livingston, A D Clarke, L A Remer, C A Hostetler, R A Ferrare, J W Hair, P Pielewskie, S Schmidt, E Bierwirth


0800h A21B-0051 POSTER Louisiana Air Quality - UsingASTER, Landsat 5, and MODIS to Assess the Impact of Sugarcane and Marsh Burning Practices on Local Air Quality: R R Reahard, R Clark, C Robin, J Zeringue, J L McCarty

0800h A21B-0052 POSTER A detailed study of the 2010 fires in Russia by multiple satellite instruments: what can we learn from the UV Aerosol Indices?: M J Penning de Vries, T Wagner, M D Fromm


0800h A21B-0054 POSTER Characterization of Boreal Biomass Burning with Satellite and Airborne Measurements: D Chu, R A Ferrare, C A Hostetler

0800h A21B-0055 POSTER Size Distribution Measurements of Ambient Biomass Burning Particulate Matter During Recent Southern California Wildfires: D Curtis, C McCreary, R Okoshi

0800h A21B-0056 POSTER Biomass Burning Emissions and Deposition in the Legal Amazon: E A Ellicott, E F Vermote

0800h A21B-0057 POSTER A gas chromatographic instrument for measurement of hydrogen cyanide in the lower atmosphere: J L Ambrose, Y Zhou, K Haase, H R Mayne, R W Talbot, B C Sive


0800h A21B-0059 POSTER UTLS hydration by the smoke plume from 2009 Australian Black Saturday bushfire: J M Siddaway, S V Petelina, A Feofilov, A Y Zasetsky, A R Klekociuk, J Urban

0800h A21B-0060 POSTER Overview of the Fire Lab at Missoula Experiments (FLAME): S M Kreidenweis, J L Collett, H Moosmuller, W P Arnott, W Hao, W C Malm


0800h A21B-0063 POSTER Overview of Asian Biomass Burning and Dust Aerosols Measured during the Dongsha Experiment in the Spring of 2010: N Lin, S Tsay, S Wang, G Sheu, K Chi, C Lee, J Wang

0800h A21B-0064 POSTER Biomass burning: A significant source of nutrients for Andean rainforests: P F Fabian, R Rollenbeck, Title of Team: University of Marburg, Germany

0800h A21B-0065 POSTER Spatial and temporal variability in the ratio of trace gases emitted from biomass burning: T T Van Leeuwen, G van der Werf

0800h A21B-0066 POSTER Intercontinental Transport of Smoke from the Siberian Forest Fires of May 2003: J A Smith, P R Colarco, A da Silva, O B Toon

0800h A21B-0067 POSTER Biomass Burning Emissions From Large and Mega Fires in East Siberia: A Ito

0800h A21B-0068 POSTER Wildfire Contribution to Black Carbon in the Western U.S. Mountain Ranges: Y Mao, Q Li, L Zhang, Y Jin, Y Chen, J T Randerson

0800h A21B-0069 POSTER A Wildland Fire Emission Inventory for the Western United States – Uncertainty Across Spatial and Temporal Scales: S P Urbanski, W Hao

A21C Moscone South: Poster Hall Tuesday 0800h Climate Change, Air Quality, and Their Interrelations at the North American West Coast V Posters

Presiding: E McCauley, California Air Resources Board; R A Zaveri, PNNL; D D Parrish, NOAA/ESRL Chemical Sciences Division

0800h A21C-0070 POSTER A Study of Elevated and Surface-Based Inversions in the Interior of Alaska: J A Mayfield, G J Fochesatto
All information is current as of November 12, 2010

**Presiding:** X Zhang, University of Alaska Fairbanks; J E Walsh, University of Alaska Fairbanks; V A Alexeev, International Arctic Research Center

**0800h** A21E-0140 POSTER Downward Arctic Oscillation signal associated with moderate weak stratospheric polar vortex and the cold 2009 December: L Wang, W Chen

**0800h** A21E-0141 POSTER Submonthly Fluctuations of Northern Hemisphere Zonal-Mean Circulation: Phase Transition and Stratosphere-Troposphere Interactions: X Li, J Li, X Zhang

**0800h** A21E-0142 POSTER Land-atmosphere coupling in response to anomalous snowmelt and its impact on subarctic summer climate: S Matsumura, K Yamazaki, T Sato

**0800h** A21E-0143 POSTER Summer North Atlantic Oscillation: decadal change, impact, and possible mechanisms: J Sun

**0800h** A21E-0144 POSTER A vorticity based analysis of the Beaufort Anticyclone: K J Gleicher, J E Walsh, W Chapman

**0800h** A21E-0145 POSTER Arctic Oscillation and Cold Surge in the Northern Hemisphere at 2009/2010 Winter: S Kim, B Kim, H Lee, Y Kim

**0800h** A21E-0146 POSTER Intrabasin and downstream change in correlation between the PDO and streamflow in a complex mountainous environment: R Thorne, M Woo

**0800h** A21E-0147 POSTER An Atmospheric Teleconnection Linking ENSO and Southwestern European Precipitation: J L Shaman, E Tziperman

**0800h** A21E-0148 POSTER MERRA Arctic Synoptic Variability: R I Cullather, M G Bosilovich

**0800h** A21E-0149 POSTER Sensitivity of WRF Simulations of a Polar Low to Initial and Boundary Conditions Prescribed by Different Reanalysis Data Sets: P Doubrava Moreira, X Zhang, J Inoue, J Krieger, J Zhang

**0800h** A21E-0150 POSTER Influence of a warm ocean current on regional climate in winter: N Hirose, K Fukudome, K Nishimura, M Yamamoto

**0800h** A21E-0151 POSTER OBSERVED PRECIPITATION TRENDS IN FAIRBANKS, ALASKA AND CHANGES IN ATMOSPHERIC CONDITIONS: V A Alexeev

**0800h** A21E-0152 POSTER The association between a weakening AMOC and the ENSO and NAO inter-annual variability: N Kvamstø, T Breiteig

**0800h** A21E-0153 WITHDRAWN

**0800h** A21E-0154 POSTER Large-scale climate controls of Interior Alaska river ice breakup: D Newman, P A Bieniek, U S Bhatt, L Rundquist, S Lindsey, X Zhang, R Thoman

**0800h** A21E-0155 POSTER Transformed Eddy-PV Flux and Positive Synoptic Eddy Feedback onto Low-Frequency Flow: H Ren, F Jin, J KUG, L Gao

**0800h** A21F-0156 POSTER Deliquescence, efflorescence and ice nucleating ability of NaCl/hydrated NaCl particles under upper tropospheric conditions: M E Wise, K J Baustian, M A Freedman, T Koop, M A Tolbert

**0800h** A21F-0157 POSTER New cloud chamber experiments on the heterogeneous ice nucleation ability of oxalic acid in the deposition nucleation and immersion freezing modes: O Moehler, R Wagner, H Saathoff, M Schnaiter, T Leisner

**0800h** A21F-0158 POSTER Ice Formation of Coated Black Carbon Particles: B Friedman, G Kulkarni, J Beranek, A Zelenyuk, D J Cziczko, J A Thornton

**0800h** A21F-0159 POSTER Marine Phytoplankton as Efficient Ice Nuclei in Immersion and Deposition Modes: P A Alpert, J Y Aller, D A Knopf

**0800h** A21F-0160 POSTER Characterizing Biological Particles in the Atmosphere at two Sites in Colorado: E Garcia, A J Prenni, J Prenni, J Rivest, P J DeMott, S M Kreidenweis

**0800h** A21F-0161 POSTER Chemical processing does not always impair heterogeneous ice nucleation of mineral dust particles: R C Sullivan, P J DeMott, A J Prenni, L Minambres, S M Kreidenweis, O Moehler

**0800h** A21F-0162 POSTER Measurements of Atmospheric Ice Nuclei Concentrations at Two Canadian Sites: Downtown Toronto and Whistler, British Columbia: J C Corbin, W R Leaitch, G J Evans, A Macdonald, J Abbatt

**0800h** A21F-0163 POSTER Influence of particle surface modifications on the immersion freezing behavior of supercooled droplets: D Niedermeier, S Hartmann, T Claus, H Wex, A Kiselev, R C Sullivan, M D Petters, P J DeMott, O Sietzer, B Reimann, U Bundke, R A Shaw, B Sierau, A Buchholz, T F Mentel, P Reitz, J Schneider, F Stratmann

**0800h** A21F-0164 POSTER Experimental evidence that nucleation of ice on clay mineral dust is a stochastic process: B J Murray, T W Wilson, S L Broadley, J D Atkinson

**0800h** A21F-0165 POSTER Laboratory Investigation of the “Inside-Out” Contact Nucleation Hypothesis: C Gurganus, R A Shaw

**0800h** A21F-0166 POSTER Parameterization of heterogeneous ice nucleation on mineral dust particles: An application in a regional scale model: M Niemand, B Vogel, H Vogel, P Connolly, H Klein, H Bingemer, C Hoos, O Moehler, T Leisner

**0800h** A21F-0167 POSTER Aerosol Effects on Cirrus Clouds and Climate in NCAR CAM5: Impacts of Heterogeneous Ice Nuclei: X Liu, X Shi, D Barahona, A Nenes, E J Jensen, A Gettelman

**0800h** A21F-0168 POSTER Modeling of the Arctic Cloud and Radiation Processes Observed during SHEBA: Importance of Heterogeneous Ice Nucleation: E Girard, P Du

**0800h** A21F-0169 POSTER Theoretical Basis for Convective Inivgiration due to Increased Aerosol Concentration: Z J Lebo, Y CHEN, J Seinfeld

**0800h** A21F-0170 POSTER The Influence of Kinetically-limited Growth of Ice Crystal on Homogeneous Freezing Rates in Cold Clouds: J Y Harrington, C Zhang
0800h A21F-0171 POSTER The Accommodation Coefficient of Water Molecules on Ice: Results from Cirrus Cloud Experiments at the Aerosol Chamber AIDA: J Skrotzki, P Connolly, M Niemand, H Saathoff, O Moehler, V Ebert, T Leisner

0800h A21F-0172 POSTER Comparison between measured and simulated far-infrared spectra: E Baugher, P Yang, K P Bowman, M G Mlynczak, R Cageao, B A Baum, Title of Team: The Far-Infrared Spectroscopy of the Troposphere (FIRST) Project

0800h A21F-0173 WITHDRAWN

0800h A21F-0174 POSTER Aerosol-Cloud interaction simulations for liquid and ice clouds with a Single Column Model (SCM) using McRAS cloud physics with ARM data and satellite retrievals: P S Bhattacharjee, Y Sud, R Yang

A21G Moscone South: Poster Hall Tuesday 0800h Regional Climate Modeling I Posters (joint with GC, H)

Presiding: R W Arritt, Iowa State University; L Leung, Pacific Northwest National Laboratory

0800h A21G-0175 POSTER Dynamic downscaling of CFS winter seasonal simulations over the United States using the ETA/SSIB-3 model: F De Sales, Y Xue

0800h A21G-0176 POSTER CWRF Downscaling U.S. Seasonal-Interannual Hydroclimatic Prediction: X Yuan, X Liang

0800h A21G-0177 POSTER Regional downscaling of NCEP CFS seasonal forecasts by NCEP RSM: Y Zhang, H H Juang

0800h A21G-0178 POSTER Dynamical Downscaling NCEP Global Climate Forecast System (GFS) Seasonal Predictions Using Regional Atmospheric Modeling System (RAMS) - Evaluation with North American Regional Reanalysis: L Lu, Y Zheng, R A Pielke, Title of Team: dynamical downscaling using RAMS

0800h A21G-0179 POSTER Uncertainties in MM5 climate simulations: physics configuration vs. driving conditions: S Jerez, J J Gomez-Navarro, P Jimenez-Guerrero, R Lorente-Plazas, J P Montavez

0800h A21G-0180 POSTER Analysis of the Effect of Interior Nudging on Temperature and Precipitation Distributions of Multi-year Regional Climate Simulations: C G Nolte, T L Orte, J H Bowden, M J Otte

0800h A21G-0181 POSTER Approaches for Assessing Downscaled Climate: L Chen, X Fan, Z Ma

0800h A21G-0182 POSTER Comparison of Grid Nudging and Spectral Nudging Techniques for Dynamical Climate Downscaling within the WRF Model: X Fan, L Chen, Z Ma

0800h A21G-0183 POSTER INVESTIGATING THE USE OF A HIGH RESOLUTION LANDUSE DATA FOR DOWNSCALING NUMERICAL WEATHER FORECASTING MODELING: B Kamble, A Irmak

0800h A21G-0184 POSTER Regional climate modeling over the Maritime Continent: Assessment of RegCM3-BATS1e and RegCM3-IBIS: R L Gianotti, D Zhang, E A Eltahir

0800h A21G-0185 POSTER Validation of the HIRHAM simulated Indian Summer Monsoon Circulation: S Polanski, A Rinke, K Dethloff

0800h A21G-0186 POSTER A new time-stepping method for regional climate models: P D Williams

0800h A21G-0187 POSTER Development and Application to Oklahoma City of a New Mass, Energy, Vorticity, and Potential Enstrophy Conserving Scheme for 3D Nonhydrostatic Atmospheric Flows with Complex Boundaries: G S Ketefian, M Z Jacobson

0800h A21G-0188 POSTER Testing the ability of RIEMS2.0 (Regional Integrated Environment Modeling System) on regional climate simulation in East Asia: D Zhao, C Fu, X Yan

0800h A21G-0189 POSTER Regional climate model values in agricultural applications: D Shin, S Cocke

0800h A21G-0190 POSTER Forecasting energy security impacts of biofuels using regional climate models: X Yang, E Campbell, M A Snyder, L Sloan, L M Kueppers

0800h A21G-0191 POSTER Projection of Summer Climate on Tokyo Metropolitan Area using Pseudo Global Warming Method: S A Adachi, F Kimura, H Kusaka, M Har

0800h A21G-0192 POSTER Characterizing the Impacts of Historical Land-use Conversions on the Micro-climate of a Subtropical Metropolitan Area: C Tien, J Jiang, Y Wang


0800h A21G-0194 POSTER Influence of historical land use transformation on the Greater Horn of Africa climate: Case Study over Kenya: R O Anyah, V O Otiendo

0800h A21G-0195 POSTER Assessment of regional climate change and development of climate adaptation decision aids in the Southwestern US: K Darmenova, G Higgins, H Kiley, D Apling

0800h A21G-0196 POSTER An assessment of precipitation in the Iberian Peninsula: WRF regional simulations for a wet and dry year: R M Cardoso, P M Soares, P M Miranda

0800h A21G-0197 POSTER A method to treat climate changes of year-to-year variations in the pseudo-global-warming method as a dynamical downscaling: Y Wakazuki, M Hara, F Kimura, Title of Team: Regional Climate Modeling Research Team

0800h A21G-0198 POSTER Regional Climate Simulations with WRF: Application of a Regression Model to Correct Biases in CCSM Forcing Data: R C McCoy, J Jin, H Gu, S Wang, C Hawkins, D G Tarboton, R R Gillies

0800h A21G-0199 POSTER Analogue Downscaling of Seasonal Rainfall Forecasts: A N Charles, B Timbal, H Hendon

0800h A21G-0200 POSTER On the Role of Boundary Conditions in Simulations of Mineral Aerosols by Regional Climate Models: M P Marcella, E A Eltahir


A21H Moscone West: 3002 Tuesday 0800h Climate Change, Air Quality, and Their Interrelations at the North American West Coast IV

Presiding: J Stutz, University of California Los Angeles; R Volkamer, Univ. of Colorado, Boulder

0800h A21H-01 Observations of plumes containing gaseous mercury from point sources in the Los Angeles Basin during the 2010 CalNex ship cruise: P S Weiss-Penzias, B M Lerner, E J Williams, T S Bates

0815h A21H-02 Characterization of emissions sources in the California-Mexico Border Region during Cal-Mex 2010: M A Zavala, W Lei, G Li, N Bei, H Barrera, D Tejeda, L T Molina, Title of Team: Cal-Mex 2010 emissions team
All information is current as of November 12, 2010
**AE21A Moscone South: Poster Hall Tuesday 0800h**

**Sensing Lightning From Space: From Mission Concept to Applications I Posters (joint with A)**

*Presiding: E Defer, CNRS-Observatoire de Paris; S J Goodman, NOAA; J Grandell, EUMETSAT*

0800h AE21A-0254 POSTER The plasmapause observed by DEMETER satellite during 2005-2009: Y Ho, J G Liu, M Parrot, J Pinçon

0800h AE21A-0255 POSTER The midlatitude electron density enhancement observed by DEMETER: H Jhuang, J G Liu, M Parrot

0800h AE21A-0256 POSTER A Lightning Detector Onboard Austrian Nanosatellite (LiNSAT): G Jaffer, O Koudelka, K Schwingschnuch, H Eichelberger

0800h AE21A-0257 POSTER EUMETSAT Meteosat Third Generation (MTG) Lightning Imaging: From mission requirements to product development: J Grandell, R Stuhlmann, M Dobber, A Bennett, D Biron, E Defer, U Finke, H Hoeller, P Lopez, D M Mach, A Mäkelä, S Soula, Title of Team: MTG Lightning Imager Science Team

0800h AE21A-0258 WITHDRAWN

0800h AE21A-0259 POSTER GOES Infrared and Reflectance 0-1 hour Lightning Initiation Indicators: Development and Initial Testing within a Convective Nowcasting System: J R Meckikalski, R Harris, W MacKenzie, P A Durkee, H Iakenderian, L Bickmeier, K E Nielsen

0800h AE21A-0260 POSTER Using WWLLN and TRMM data to investigate lightning activity and convective parameters in 2005 - 2010 tropical cyclones: N N Solorzano, J J Thomas, R H Holzworth

0800h AE21A-0261 POSTER Severe storm activity in Brazil from 1999 to 2006 inferred from observations by the Lightning Imaging Sensor: O Pinto

0800h AE21A-0262 POSTER Analysis of TRMM-LIS Lightning and Related Microphysics Using a Cell-Scale Database: A Le Roy, W A Petersen

0800h AE21A-0263 POSTER Total lightning flash characteristics observed from TRMM Lightning Imaging Sensor (LIS) and their relationship with regional convection and precipitation type: R I Albrecht, K Gopalan, N Wang, E C Bruning, S J Goodman, R R Ferraro

0800h AE21A-0264 POSTER Properties of Convective Clouds and Associated Lightning Activity over Western Europe as Sensed by A-TRAIN and LINET: E Defer, H Betz

---

**AE21B Moscone South: Poster Hall Tuesday 0800h**

**Thunderstorm Effects in the Near-Earth Space Environment III Posters (joint with SA, A)**

*Presiding: D D Sentman, Univ Alaska Fairbanks; C Hanuise, LPC2E/CNRS; V P Pasko, Penn State University; T Neubert, Technical University of Denmark*

0800h AE21B-0265 WITHDRAWN

0800h AE21B-0266 WITHDRAWN

0800h AE21B-0267 POSTER Midlatitude Nighttime and Daytime D Region Ionosphere Variations Measured from Radio Atmospherics: F Han, S A Cummer

0800h AE21B-0268 POSTER Observation of the Formation of Gravity Waves from Thunderstorms: E Blanc, T Farges, S Soula, J Marty

0800h AE21B-0269 POSTER High temporal and spatial-resolution detection of D-layer fluctuations by using time-domain lightning waveforms: E H Lay, X Shao

0800h AE21B-0270 POSTER High-speed Telescopic Imaging of a Sprite Streamer Head: T Kannae, H C Steenback-Nielsen, M G McHarg, R K Haaland

0800h AE21B-0271 POSTER Triangulation of Sprite Features: R K Haaland, W H Fellman, H C Steenback-Nielsen, M G McHarg, T Kannae

0800h AE21B-0272 POSTER A study of the nature of lightning that produces transient luminous events such as sprites: T J Lang, S A Cummer, W A Lyons, S A Rutledge, J Li

0800h AE21B-0273 POSTER TLEs and their electromagnetic characteristics from 2010 Taiwan ground campaign: S Huang, A B Chen, J Chou, L Lee, S Chang, Y Wu, Y Lee, C Hsu, G Yang, C Kuo, H Su, R Hsu

0800h AE21B-0274 POSTER Deconvolving the lightning sferic VLF source waveform from its temporally-superimposed ionospheric reflections: A B Jacobson, R H Holzworth, X Shao

0800h AE21B-0275 POSTER Modeling Long-Distance ELF Radio Atmospherics Generated by Rocket-Triggered Lightning: R C Moore, B Kunduri, S Anand, N Dupree, M Mitchell, D Agrawal

0800h AE21B-0276 POSTER VLF subionospheric disturbances and ELF transients associated with TLEs: observations and modelling: Y Hobara, M Hayakawa, H Fujii, M Iwamoto, K Ohta

0800h AE21B-0277 POSTER Global Optical Lightning Intensity near the Equator from the C/NOFS Satellite: M C Reeves, R H Holzworth, A Jacobson, M P McCarthy, M L Hutchins, R F Pfaff

0800h AE21B-0278 POSTER Positions of sources of lightning-related HF signatures measured by the DEMETER satellite: D Pisa, O Santolik, M Parrot

0800h AE21B-0279 POSTER In situ Electric Field Observations of Schumann Resonances in the Low Latitude Ionoosphere and Their Implications for Tropospheric-Ionospheric Electromagnetic Coupling Mechanisms: F Simoes, R F Pfaff, H Freundreich, K R Bromund, S C Martin

0800h AE21B-0280 POSTER The COBRAT project (Coupled Observations from Balloon Related to Asim and Taranis): J Pinçon, J Renard

0800h AE21B-0281 POSTER IME-HF ANALYSER FOR THE TARANIS SATELLITE: I Kolmasova, J Chum, O Santolik, F Hruska, J Rauch

0800h AE21B-0282 POSTER Occurrence of Transient Luminous Event and Lightning during El Niño and La Niña: Y Wu, A B Chen, J Chou, S Chang, L Lee, Y Lee, C Kuo, H Su, R Hsu, H Hsu, H U Frey, S B Mende, Y Takahashi, L Lee

0800h AE21B-0283 POSTER Optical Remote Sensing of Electric Fields Above Thunderstorms: B M Burns, B E Carlson, D Lauben, M Cohen, D Smith, U S Inan

0800h AE21B-0284 POSTER Investigation of the Exponential Growth Rate of Sprite Streamer Characteristics: B Kosar, N Liu, H K Rassoul

0800h AE21B-0285 POSTER On the inception of streamers from sprite halos events produced by lightning discharges with positive and negative polarity: J Qin, S J Celestin, V P Pasko

0800h AE21B-0286 POSTER Velocity and Current of Lightning Sprites: J Rai, M K Paras
Biogeoosciences

**B21A Moscone South: Poster Hall Tuesday 0800h**

**Adaptation of Vegetation to Global Change I Posters (joint with GC, H)**

**Presiding:** S J Schymanski, Max Planck Institute for Biogeochemistry; K P Tu, UC Berkeley; S Zaehele, Max Planck Institute for Biogeochemistry

0800h **B21A-0287** POSTER The Response of African Land Surface Phenology to Large Scale Climate Oscillations: M E Brown, K de Beurs, A Vrielings

0800h **B21A-0288** POSTER Multiproxy, Cross-Biome Analysis Of Ecosystem Dynamics During Late-Glacial And Holocene Climatic Change In North-Central North America: P Camill, C E Umbanhowar, C E Geiss, R E Teed, J A Dorale, J A Lynch


0800h **B21A-0290** POSTER The influence of soil-site factors on sugar maple (Acer saccharum Marsh.) growth response to climatic change in central Ontario: K Schutten, Z Gedalof


0800h **B21A-0292** POSTER The Role of Sphagnum Mosses in Methane Cycling of a Temperate Fen: B J Young, R K Varner, T Larmola, J L Bubier

0800h **B21A-0293** POSTER Evaluating Spruce Peatland Responses Under Climatic and Environmental Change Using a Replicated In Situ Field Manipulation: P J Hanson, R K Kolka, R J Norby, B Palik, S D Wullschleger, C T Garten, S D Sebestyen, P E Thornton, J Bradford, P J Mulholland, D E Todd, C Iversen, J Warren

0800h **B21A-0294** POSTER Response of vegetation structure and function to experimental drought and flooding in an Alaskan fen: A C Churchill, T N Hollingworth, A D McGuire, M R Turetsky

0800h **B21A-0295** POSTER Tentative critical levels of tropospheric ozone for agricultural crops in Japan: T Yonekura

0800h **B21A-0296** POSTER Ecophysiological Responses of Invasive and Native Grass Communities with Simulated Warming: B Quade, S Ravi, T E Huxman

0800h **B21A-0297** POSTER Physiological responses during short-term acclimation to increasing atmospheric CO2 concentration in Pinus nigra: K S Maseyk, P Biron, P Richard, I. Canale, T Bariac

0800h **B21A-0298** POSTER Warming Nights and Increased Precipitation Event Size Decrease Picea engelmannii Productivity: A N Orgill, M Lafin, B J Walker, R A Gill

0800h **B21A-0299** POSTER Altered Water Extraction and Hydraulic Redistribution of Agricultural Crop Soybean at Daily Time Scales in Open-Air Elevation of CO2 under Drought: P G Schmitz, S B Gray, C Bernacchi, A D Leakey, P Kumar, S P Long

0800h **B21A-0300** POSTER Effect of soil frost on growing season nitrogen uptake by fine roots of mature trees in northern hardwood forests of the United States: A M Socci, P H Templar

0800h **B21A-0301** POSTER Spatial Predictive Process Models Yield Improved Forecasts of Vegetation Response to Climate Change: A Swanson, S Z Dobrowski, A Mynsberge

0800h **B21A-0302** POSTER Modeling the Influence of Vegetation Root Distribution for a Changed Climate: J Song, J J Hatzis

0800h **B21A-0303** POSTER Modeling adaptation of wetland plants under changing environments: R Muneepeerakul, C P Muneepeerakul

0800h **B21A-0304** POSTER Ozone-induced reductions in photosynthesis and transpiration: Parameterizing the Community Land Model (CLM): D Lombardozzi, G B Bonan, S Levis, J P Sparks

0800h **B21A-0305** POSTER Strategies of a Bornean tropical rainforest water use as a function of rainfall regime: anisohydric or isohydric: T Kumagai, A M Porporato

0800h **B21A-0306** POSTER Evaluation of the Terrestrial Ecosystem Formation and Diversity in a Modified Dynamic Global Vegetation Model: X Zeng, P Shao, X Song

0800h **B21A-0307** POSTER Effects of change in growing season on water use efficiency of lowland rice estimated using a coupled land surface and crop growth model: A Maruyama, T Kuwagata

0800h **B21A-0308** POSTER Does optimal adaptation allow prediction of water use by vegetation without calibration?: S J Schymanski, M Sivapalan, M L Roderick, R Leuning

0800h **B21A-0309** POSTER Modeling Mediterranean forests functional adjustments under drought constraints: regional applications for carbon budget and vegetation dynamics: J J Ruffault, F Mouillot, S Rambal

0800h **B21A-0310** POSTER Impacts on the surface energy budget across the Central U.S. maize/soybean ecosystem from increasing carbon dioxide and ozone concentrations: J Bryant, K Richter, M Williams, A D Leakey, T E Twine

0800h **B21A-0311** POSTER The role of root distribution in eco-hydrological modeling in semi-arid regions: G Sivandran, R L Bras

**B21B Moscone South: Poster Hall Tuesday 0800h**

**Omnics Approaches to Geobiology I Posters**

**Presiding:** J M Dick, Arizona State University; A Poret-Peterson, Arizona State University; E Shock, Arizona State University

0800h **B21B-0312** WITHDRAWN

0800h **B21B-0313** POSTER Patterns in bacterial and archaeal community structure and diversity in western Beaufort Sea sediments and waters: J J Hamdan, M Sikaroodi, R B Coffin, P M Gillette

0800h **B21B-0314** POSTER Community Proteogenomics of a Cold-methane Seep Sediment at Nyegga, Mid-Norwegian Margin: R Stokke, I Roalkvam, A Lanzen, Y Chen, H Hafldinsson, I Steen

0800h **B21B-0315** POSTER Anaerobic oxidation of methane in the terrestrial subsurface environments: M Takeuchi, H Yoshioka, Y Seo, S Tanabe, H Tamaki, Y Kamagata, H A Takahashi, S Igari, D Mayumi, S Sakata

0800h **B21B-0316** POSTER Looking For a Needle in the Haystack: Deciphering Indigenous 1.79 km Deep Subsurface Microbial Communities from Drilling Mud Contaminants Using 454 Pyrotag Sequencing: Y Dong, I Cann, R Mackie, N Price, T M Flynn, R Sanford, P Miller, N Chia, C G Kumar, P Kim, M Sivaguru, B W Fouke

0800h **B21B-0317** POSTER Metabolic Strategies in Energy-Limited Microbial Communities in the Anoxic Subsurface (Frassasi Cave System, Italy): R L McCauley, D S Jones, I Schaperdoth, L Steinberg, J L Macalady

0800h **B21B-0318** POSTER Abundance and Distribution of Diagnostic Carbon Fixation Genes in a Deep-Sea Hydrothermal Gradient Ecosystem: H N Blumenfeld, D S Kelley, P R Girguis, M O Schrenk

All information is current as of November 12, 2010
21C Moscone South: Poster Hall Tuesday 0800h Phosphorus: From Geochemistry to Genomes to Global Sustainability I Posters (joint with GC, OS, PP, V)

Presiding: A Poret-Peterson, Arizona State University; J R Corman, Arizona State University; JJ Elser, Arizona State University

0800h B21C-0325 POSTER The paradox of algal blooms in oligotrophic waters: P V Sundareshwar, S Upadhyay, M B Abessa, S Honomichl, B Berdanier, S Spaulding, C Sandvik, A Trennepohl

0800h B21C-0326 POSTER Using oxygen isotopes of phosphate to investigate phosphate release from sediments and phosphate input from waste water treatment plants into Lake Erie: K Roberts, T Klass, S Watson, B Mah, A Paytan

0800h B21C-0327 POSTER Can Polyphosphate Biochemistry Affect Biological Apatite Saturation?: S J Omelon, N Matsuura, I Gorlikov, C Wynnnyckyj, M D Grynpas

0800h B21C-0328 POSTER Crossing the pedogenetic threshold: Apparent phosphorus limitation by soil microorganisms in unglaciated acidic eastern hardwood forests: J L Deforest, K A Smeno, J D Burke

0800h B21C-0329 POSTER Changes in soil phosphorus fractions following woody plant invasion of grassland: I B Kantola, T W Bouton, T R Felley, C T Hallmark

0800h B21C-0330 POSTER P Limitation and Microbial Biogeochemistry in Acidic Forest Soils of the Northeastern United States: K A Smeno, J L Deforest, J D Burke, H L Elliot, L A Kluber, S R Carring-Kyker

0800h B21C-0331 POSTER Phosphorus Speciation and Phosphate Oxygen Isotope Systematics of Type Euxinic Marine Deposits from Middle Devonian North America: C P Carney, M A Arthur


0800h B21C-0333 POSTER Ecosystem effects of cultural eutrophication in a large, tropical lake: J R Corman, S Chandra, C Davis, M Dixon, N Giron, E Rejmankova, A Roegner, J Vesela, J J Elser

0800h B21C-0334 POSTER Characterization of P status in forest soils: stocks, fluxes and models: D L Achat, C Morel, M Bakker, L Augusto, A Gallet-Budynek, M Gonzalez, M Jonard
POSTER Energy and Carbon Exchanges Along an Urbanization Gradient in Montreal, Canada: O Bergeron, I B Strachan

POSTER Gaseous Losses of Carbon and Nitrogen from Grass and Gravel Lined Urban Waterways in a Semi-Arid Region: C Ferlin, E L Gallo, A M Peterson, K A Lohse, P D Brooks


POSTER Linking Nocturnal Eddy Fluxes to Land Use-Land Cover in a Heterogeneous Landscape Surrounding the Urban-suburban Tower near Baltimore, Maryland: N Z Saliendra, J L Hom, R Pouyat, D Nowak, G M Heisler, M Patterson, I Yselionis

POSTER Land cover change in the Seattle metropolitan region: An examination of spatio-temporal changes and the carbon consequences of urbanization: B Yoon, L R Huttyra

POSTER Assessment of the potential of urban organic carbon dynamics to off-set urban anthropogenic emissions: P Gottschalk, G Churkina, M Wattenbach, U Cubasch

POSTER Estimating Carbon Storage and Sequestration by Urban Trees at Multiple Spatial Resolutions: J Wu, A Tran, A Liao

POSTER Human and natural influences on carbon dioxide in Salt Lake City: Investigating observed concentrations with a multiple box model: C Stwertka, C Strong

POSTER Mapping of the CO2 and anthropogenic heat emission under spatially explicit urban land use scenarios: K Nakamichi, Y Yamagata, H Seya

POSTER Modeling Coupled Climate and Urban Land Use Change in the Eastern United States: F S Melton, S J Goetz, W Wang, C Milesi, D M Theobald, R R Nemani

POSTER Geographically explicit urban land use change scenarios for Mega cities: a case study in Tokyo: Y Yamagata, H Bagan, H Seya, K Nakamichi

POSTER Urban expansion in Tokyo metropolitan area between 1972 and 2002: H Bagan, Y Yamagata

POSTER Potential Drivers of Urban Heat Island in Northeast USA Cities: P Zhang, M L Imhoff, R E Wolfe, L Bounoua

POSTER What’s behind the warming signals in eastern China megacity areas?: Y Hu, G Jia

POSTER Regional Climate Response to Surface Albedo Changes from Cool (reflective) Roofs and Desert Based Solar Electricity Generation: D Millstein, S Menon

POSTER Eco-hydrologic role of urban parks in Queretaro City: S Medina Frutos, E Gonzalez-Sosa, C A Mastachi-Loza, M A Gutierrez-Lopez, Title of Team: CIAQ


POSTER Evolution of the Parisian urban climate under a global changing climate: A Lemonsu, R Kounkou-Arnaud, J Desplat, J Salagnac, V Masson

POSTER The Arizona Sun Corridor: Quantifying climatic implications of megapolitan development: M Georgescu, M Moustaou, A Mahalov

POSTER Investigation of Long-Term Impacts of Urbanization and Global Warming in a Coastal Tropical Region: D E Comarazamy, J Gonzalez, J C Luvall

B21E-0350 POSTER Modeling based analysis of urban influences on severe thunderstorms: M Le, D Niyogi, Title of Team: Indiana State Climate Office

B21E-0351 POSTER Urbanization and the Regional Rainfall Climatology of the Baltimore Metropolitan Region: J A Smith, M L Baecck, G Villarini, B K Smith, D B Wright

B21E-0352 POSTER A Regional Study of Urban Fluxes from a Coupled WRF-ACASA Model: M Falk, R D Pyles, S Marras, D Spano, R L Snyder, K Paw U

B21E-0353 POSTER The influence of air-conditioning on street temperatures in the city of Paris: C S de Munck, G Pigeon, V Masson, C Marchadier, F Meunier, B Tréméac, M Merchat

B21E-0354 POSTER Towards improving energy budgets in urban canopy models: Z Wang, E Bou-Zeid, J A Smith, S Xu, S Miller, D Schreiber

B21E-0355 POSTER Pollutant Removal, Dispersion and Entrainment over Two-Dimensional Idealized Street Canyons: an LES Approach: C Wong, C Liu

B21E-0356 POSTER On the Air Pollutant Removal Mechanism from Two-Dimensional Urban Street Canyons: C Liu, W Cheng, T N Chung, C Wong

B21E-0357 POSTER Favorable Street Canyon Aspect Ratios for Pollutant Removal- a Large-Eddy Simulation Approach: T N Chung, C Liu

B21E-0358 POSTER Including Cities in Projections of Global Climate Change (Invited): M McCarthy, M Best, R Betts

B21F Moscone West: 2002 Tuesday 0800h

Cryospheric Biogeochemistry II (joint with C, H, V)

Presiding: E W Hood, University of Alaska Southeast; M Tranter, University of Bristol; D Nemergut, University of Colorado - Boulder; J C Priscu, Montana State University; D Scott, Virginia Tech

0800h B21F-01 POSTER Pedogenesis on ice (Invited): A J Hodson


0830h B21F-03 POSTER Seasonal hydrological cycle control on age, abundance and lability of carbon exported from the Greenland ice sheet: M P Bhatia, S B Das, M A Charette, L Xu, E B Kujawinski

0845h B21F-04 POSTER A subzero microbial habitat in the basal ice of an Antarctic glacier (Invited): B C Christner, S M Doyle, S N Montross, M L Skidmore, D Samyn, R Lorrain, J Tisson, S Fitzsimons

0900h B21F-05 POSTER Tectonics, Microbes and Ice: Subglacial volcanism as a generator for microbial habitat beneath the West Antarctic Ice Sheet: M L Skidmore, D D Blankenship, S P Carter

0915h B21F-06 POSTER Chemoautotrophic Bacterial Production in the Redoxcline of an Ice-Covered Antarctic Lake (Invited): J Mikucki, W Kong, J Priscu, R Morgan-Kiss

0930h B21F-07 POSTER Towards an understanding of the source of protein-like fluorescence in glacially exported organic matter. (Invited): J D Barker, Y Chin, W B Lyons

0945h B21F-08 POSTER Nitrogen composition and sources across a glaciated catchment in the Canadian Rocky Mountains: M Lafreniere
B21G  Moscone West: 2004  Tuesday  0800h
Interacting Biogeochemical Cycles: Linking Carbon, Water, and Nutrient Fluxes From Organisms to Globe II (joint with H)

Presiding:  M Reichstein, Max-Planck-Inst. for Biogeo.; D Drewry, University of Illinois

0800h  B21G-01  Ecosystem carbon-water interactions of tropical pasture and afforestation:  S Wolf, W Eugster, N Buchmann
0815h  B21G-02  Time scales of biogeochemical and organismal responses to individual precipitation events:  J von Fischer, A L Angert, D J Augustine, C Brown, F A Dijkstra, J D Derner, R A Hufbauer, N Fierer, D G Milchunas, J C Moore, H Steltzer, M D Wallenstein
0830h  B21G-03  Microbial respiration and root respiration follow divergent seasonal and diel temporal patterns in a temperate forest:  E A Davidson, K E Savage, J Tang
0845h  B21G-04  Seasonality of carbon fluxes in a seasonal environment: controls on litterfall and soil respiration in a tropical forest:  W L Silver, Title of Team: Canopy Trimming Experiment Team
0900h  B21G-05  Carbon and water interactions and the footprint of climate-change activities (Invited):  R B Jackson
0930h  B21G-06  Stimulation of both photosynthesis and respiration in response to warmer and drier conditions in a boreal peatland ecosystem:  L F Flanagan, K H Syed

B21H  Moscone West: 2006  Tuesday  0800h
Phenologies, Change, and Sustainability I (joint with GC, H, A)

Presiding:  G M Henley, South Dakota State University;  K de Beurs, Virginia Polytechnic Institute and State University;  J L Betancourt, U.S. Geological Survey;  J F Brown, USGS

0800h  B21H-01  Phenological control over ecosystem-atmosphere carbon exchange (Invited):  R K Monson, D J Moore, L Scott-Denton, S P Burns
0820h  B21H-02  Plants and pixels: Comparing phenologies from the ground and from space (Invited):  T Rutishauser, R Stoekli, F Jeanneret, J Peruelas
0840h  B21H-03  Forecasting phenological responses to climate change: Using hierarchical models to bridge local processes and regional predictions (Invited):  J Díez, I Ibáñez
0900h  B21H-04  Evolved Phenological Asynchrony as a Baseline for Climate-change Impacts. (Invited):  M C Singer, C Parmesan
0920h  B21H-05  Remotely-sensed phenologies of C3 and C4 grasses in Hawaii using MODIS Vegetation Indices:  S Pau, C J Still

Cryosphere

C21A  Moscone South: Poster Hall  Tuesday  0800h
Advances in Glacier Geophysics and Quantitative Glaciological Field Methods II Posters (joint with EP, G, GC, H, NH, NS, NG, OS)

Presiding:  D C Finnegan, Cold Regions Research & Eng. Lab;  B Kulessa, Swansea University;  S Anandakrishnan, Pennsylvania State University;  G S Hamilton, University of Maine;  T Murray, Swansea University

0800h  C21A-0503  POSTER Solving Free Surface Flows For Steady State Without Time Stepping:  J Brown

0800h  C21A-0504  POSTER Internal ice layer architecture determined by automatic processing of Radar-Echo Sounding data: Ruford Ice Stream, Subglacial Lake Ellsworth and Fletcher Promontory:  G Hiess, R C Hindmarsh, L Sime, H F Corr, E C King, O J Marsh, H D Pritchard, N Ross

0800h  C21A-0505  POSTER Using radar-derived measurements of basal reflectivity to locate Antarctic subglacial lakes:  K E Lapo, J R Stamp, B W Youngblood, B C Welch, R W Jacobel

0800h  C21A-0506  POSTER Using A Wireless In Situ Probe To Monitor Subglacial Processes:  J Hart, K Martinez

0800h  C21A-0507  POSTER Basal ice flow regime influenced by glacial lake formation in Rhoenegletscher, Switzerland:  D Nishimura, S Tsutaki, S Sugiyama

0800h  C21A-0508  POSTER Hydrogeophysical characterisation of ice-marginal moraines, with reference to moraine dam stability, Miage Glacial Lake, Italy:  S S Thompson, B Kulessa

0800h  C21A-0509  POSTER Joint inversion of multi-component seismic and ground-penetrating radar GPR) data for ice-physical properties, and application to the Larsen C ice shelf:  B Kulessa, E C King, B E Barrett, D Jansen, A J Luckman, P Sammonds


0800h  C21A-0511  POSTER Measurements of seismic attenuation in ice: A potential proxy for englacial temperature?:  L E Peters, S Anandakrishnan

0800h  C21A-0512  POSTER Accurate seismic phase identification and arrival time picking of glacial icequakes:  G A Jones, S H Doyle, C Dow, B Kulessa, A Hubbard

0800h  C21A-0513  POSTER Development of a Four-Element Geophone for Reflection Seismic Profiling on Glaciers:  S Anandakrishnan, D Voigt, L E Peters

0800h  C21A-0514  POSTER Marine Geophysical Surveying Along the Hubbard Glacier Terminus, Southeast Alaska:  J A Goff, M Davis, S P Gulick, D E Lawson, B A Willems

0800h  C21A-0515  POSTER Flow Characteristics of Tidewater Glaciers in Greenland and Alaska using Ground-Based LiDAR:  D C Finnegan, L A Stearns, G S Hamilton, S O’Neel

0800h  C21A-0516  POSTER GPS measurements of flow variations at a large Greenland outlet glacier due to ocean tidal forcing:  J de Juan, P Elosegui, M Nettles, J L Davis, T Larsen, G S Hamilton, L A Stearns

0800h  C21A-0517  POSTER Three dimensional monitoring of a major calving event at Helheim Glacier using stereo terrestrial photography:  T D James, T Murray, N Selmes, K Scharrer

0800h  C21A-0518  POSTER Innovative Camera and Image Processing System to Characterize Cryospheric Changes:  A Schenk, B M Csatho, S Nagarajan

0800h  C21A-0519  WITHDRAWN
C21B  Moscone South: Poster Hall  Tuesday  0800h  Glacial Hydrology: Causes and Effects II Posters (joint with EP, H)

**Presiding:** T T Creyts, Columbia University; G E Flowers, Simon Fraser University; L A Stearns, University of Kansas

0800h  C21B-0520 POSTER Airborne Hyperspectral Imaging of Supraglacial Lakes in Greenland’s Ablation Zone: J Adler, A E Behar, N T Jacobson

0800h  C21B-0521 POSTER Electrical Resistivity Methods to Characterize Sediment Deformation; Examples from Large-scale Glaciotectonic Structures in Michigan, USA: R L Van Dam

0800h  C21B-0522 POSTER Development of a Micro Subglacial Lake Exploration Device: A E Behar

C21C  Moscone South: Poster Hall  Tuesday  0800h  Innovations in Observing and Modeling Components of the Cryosphere I Posters (joint with EP, NG)

**Presiding:** J N Bassis, University of Michigan; U C Herzfeld, Univ Colorado Boulder; T L Mote, University of Georgia; M R Anderson, University of Nebraska; D R MacAyeal, University of Chicago; H Mayer, University of Colorado

0800h  C21C-0545 POSTER The effect of temperature in contact problems: S nowicki, O V Sergienko

0800h  C21C-0546 POSTER The parallel ice sheet model (PISM) as a flow-line model: A Aschwanden, C Khroulev, E Bueler

0800h  C21C-0547 POSTER Regional Modeling of Outlet Glaciers Using the Parallel Ice Sheet Model (PISM): D N Delligiustina, E Bueler, A Aschwanden, C Khroulev, R M Hock

0800h  C21C-0548 POSTER Modeling the flow of the Antarctic Ice Sheet with the SeaRISE set-up: influence of different treatments of the flow regimes: T Sato, R Greve

0800h  C21C-0549 POSTER A Simple Method to Account for the Effects of Longitudinal Stress Gradients in a Shear-deformational Glacier Ice-flow Model: S Adhikari, S J Marshall

0800h  C21C-0550 POSTER Incorporating horizontal membrane stresses into calculations of balance velocities: R Williams, R C Hindmarsh, R Arthern

0800h  C21C-0551 POSTER Three-dimensional full-Stokes modeling of grounding line dynamics: L Favier, O Gagliardini, G Durand, T Zwinger

0800h  C21C-0552 POSTER Investigating the Greenland ice sheet evolution under changing climate using a three-dimensional full-Stokes model: H Seddik, R Greve, T Zwinger, F Gillet-Chaulet, O Gagliardini

0800h  C21C-0553 POSTER Initialization of a full-Stokes finite element model of the Greenland ice-sheet using inverse methods: F Gillet-Chaulet, O Gagliardini, M Nodet, C Ritz, G Durand, T Zwinger, H Seddik, R Greve

0800h  C21C-0554 POSTER Investigating the Evolution of Greenland Ablation Zone Surface Morphology: Implications for Supraglacial Lake Basin Storage Capacity: N S Amador, D J Lampkin
POSTER A fracture mechanics view of iceberg calving from large ice shelves: M LeDoux, C L Hulbe

POSTER A principled stopping criterion for the reconstruction of basal properties in ice sheets: M Habermann, D A Maxwell, M Truffer

POSTER The Statistical Physics of Iceberg Calving and the Emergence of Universal Calving Laws: J N Bassin

POSTER A sub-grid parameterization of Alpine Glaciers in land surface models: C B Lawrence, J S Famiglietti

POSTER Rapid retreat of Alaska Glaciers by Floation and Passive Calving: B F Molnia

POSTER Modeling the mass balance of the Wolverine Glacier Alaska USA using the PTAA model: D Korn

POSTER What do glaciers tell us about climate variability and climate change?: G Roe

POSTER Estimated thickness of seasonally thawed layer for the Verhne-Charsky Basin, north of the Chita region, Russia: comparison of approaches: D Aleksyutina, R Motenko

POSTER A Comparison of Observed Antarctic Uplift Rates with Postglacial Rebound Model Predictions: A L Darlington, T S James, E R Ivins

POSTER Accuracy of Antarctica inter-annual mass variability from GRACE: K Pangaluru, I Velicogna, S C Swapson, A J Monaghan

POSTER Elevated East Antarctic outlet glaciers during warmer-than-present climates in southern Victoria Land: K Swanger, D R Marchant, J M Schaef er, G Winckler, J J Head

POSTER Transition from the DMSP SSM/I to SSMIS sensors for NSIDC near-real-time snow and ice climate records: P Gibbons, W Meier, D Scott

POSTER Loss of Arctic Snow Cover and Sea Ice Extent Across the Land-Ocean Boundary During the Melt Season: A Bliss, M R Anderson

POSTER Assessment of the stability of satellite snow cover CDRs using station snow depth observations: T L Mote

POSTER Extracting complex subglacial water dynamics through tight coupling of flow models to airborne radar sounding and satellite altimetry: S P Carter, H A Fricker, D D Blankenship, J V Johnson, S F Price, W H Lipscomb

POSTER Geometry and Mesh Representations for Ice Sheet Modeling: T Tautges, I Grindeanu

POSTER Trends and variability in summer sea ice cover in the Canadian Arctic based on the Canadian Ice Service Digital Archive: S Howell, A C Tivy, B Alt, S McCourt, R Chagnon, C Grocker, T G Carri eres, J Vackel

POSTER Extreme Variability Within the Northern Hemisphere Snow Extent Season: D A Robinson, T W Estilow, G Henderson, D J Leathers

POSTER Climate Data Records (CDRs) for Ice Motion, Ice Age, and Melt Pond Fraction: M A Tschudi, J A Maslanik, C Fowler, J C Stroeve, I G Rigor

POSTER Enabling Climate Science Investigations by Students Using Cryosphere Climate Data Records (CDRs): T S Ledley, B Youngman, W Meier, E Bardar

POSTER Future climate and surface mass balance of the Antarctic ice sheet using a regional atmospheric climate model: a contribution to Ice2Sea: S Ligtenberg, M R van den Broeke, J Lenaerts, W van de Berg, E van Meijgaard

POSTER What do glaciers tell us about climate variability and climate change?: G Roe

POSTER Estimated thickness of seasonally thawed layer for the Verhne-Charsky Basin, north of the Chita region, Russia: comparison of approaches: D Aleksyutina, R Motenko

POSTER A Comparison of Observed Antarctic Uplift Rates with Postglacial Rebound Model Predictions: A L Darlington, T S James, E R Ivins

POSTER Accuracy of Antarctica inter-annual mass variability from GRACE: K Pangaluru, I Velicogna, S C Swapson, A J Monaghan

POSTER Elevated East Antarctic outlet glaciers during warmer-than-present climates in southern Victoria Land: K Swanger, D R Marchant, J M Schaef er, G Winckler, J J Head

POSTER Transition from the DMSP SSM/I to SSMIS sensors for NSIDC near-real-time snow and ice climate records: P Gibbons, W Meier, D Scott

POSTER Loss of Arctic Snow Cover and Sea Ice Extent Across the Land-Ocean Boundary During the Melt Season: A Bliss, M R Anderson

POSTER Assessment of the stability of satellite snow cover CDRs using station snow depth observations: T L Mote

POSTER Extracting complex subglacial water dynamics through tight coupling of flow models to airborne radar sounding and satellite altimetry: S P Carter, H A Fricker, D D Blankenship, J V Johnson, S F Price, W H Lipscomb

POSTER Geometry and Mesh Representations for Ice Sheet Modeling: T Tautges, I Grindeanu

POSTER Trends and variability in summer sea ice cover in the Canadian Arctic based on the Canadian Ice Service Digital Archive: S Howell, A C Tivy, B Alt, S McCourt, R Chagnon, C Grocker, T G Carri eres, J Vackel

POSTER Extreme Variability Within the Northern Hemisphere Snow Extent Season: D A Robinson, T W Estilow, G Henderson, D J Leathers

POSTER Climate Data Records (CDRs) for Ice Motion, Ice Age, and Melt Pond Fraction: M A Tschudi, J A Maslanik, C Fowler, J C Stroeve, I G Rigor

POSTER Enabling Climate Science Investigations by Students Using Cryosphere Climate Data Records (CDRs): T S Ledley, B Youngman, W Meier, E Bardar

POSTER Future climate and surface mass balance of the Antarctic ice sheet using a regional atmospheric climate model: a contribution to Ice2Sea: S Ligtenberg, M R van den Broeke, J Lenaerts, W van de Berg, E van Meijgaard

POSTER What do glaciers tell us about climate variability and climate change?: G Roe

POSTER Estimated thickness of seasonally thawed layer for the Verhne-Charsky Basin, north of the Chita region, Russia: comparison of approaches: D Aleksyutina, R Motenko

POSTER A Comparison of Observed Antarctic Uplift Rates with Postglacial Rebound Model Predictions: A L Darlington, T S James, E R Ivins

POSTER Accuracy of Antarctica inter-annual mass variability from GRACE: K Pangaluru, I Velicogna, S C Swapson, A J Monaghan

POSTER Elevated East Antarctic outlet glaciers during warmer-than-present climates in southern Victoria Land: K Swanger, D R Marchant, J M Schaef er, G Winckler, J J Head

POSTER Transition from the DMSP SSM/I to SSMIS sensors for NSIDC near-real-time snow and ice climate records: P Gibbons, W Meier, D Scott

POSTER Loss of Arctic Snow Cover and Sea Ice Extent Across the Land-Ocean Boundary During the Melt Season: A Bliss, M R Anderson

POSTER Assessment of the stability of satellite snow cover CDRs using station snow depth observations: T L Mote

POSTER Extracting complex subglacial water dynamics through tight coupling of flow models to airborne radar sounding and satellite altimetry: S P Carter, H A Fricker, D D Blankenship, J V Johnson, S F Price, W H Lipscomb

POSTER Geometry and Mesh Representations for Ice Sheet Modeling: T Tautges, I Grindeanu

POSTER Trends and variability in summer sea ice cover in the Canadian Arctic based on the Canadian Ice Service Digital Archive: S Howell, A C Tivy, B Alt, S McCourt, R Chagnon, C Grocker, T G Carri eres, J Vackel

POSTER Extreme Variability Within the Northern Hemisphere Snow Extent Season: D A Robinson, T W Estilow, G Henderson, D J Leathers

POSTER Climate Data Records (CDRs) for Ice Motion, Ice Age, and Melt Pond Fraction: M A Tschudi, J A Maslanik, C Fowler, J C Stroeve, I G Rigor

POSTER Enabling Climate Science Investigations by Students Using Cryosphere Climate Data Records (CDRs): T S Ledley, B Youngman, W Meier, E Bardar

POSTER Future climate and surface mass balance of the Antarctic ice sheet using a regional atmospheric climate model: a contribution to Ice2Sea: S Ligtenberg, M R van den Broeke, J Lenaerts, W van de Berg, E van Meijgaard

POSTER What do glaciers tell us about climate variability and climate change?: G Roe

POSTER Estimated thickness of seasonally thawed layer for the Verhne-Charsky Basin, north of the Chita region, Russia: comparison of approaches: D Aleksyutina, R Motenko

POSTER A Comparison of Observed Antarctic Uplift Rates with Postglacial Rebound Model Predictions: A L Darlington, T S James, E R Ivins

POSTER Accuracy of Antarctica inter-annual mass variability from GRACE: K Pangaluru, I Velicogna, S C Swapson, A J Monaghan

POSTER Elevated East Antarctic outlet glaciers during warmer-than-present climates in southern Victoria Land: K Swanger, D R Marchant, J M Schaef er, G Winckler, J J Head

POSTER Transition from the DMSP SSM/I to SSMIS sensors for NSIDC near-real-time snow and ice climate records: P Gibbons, W Meier, D Scott

POSTER Loss of Arctic Snow Cover and Sea Ice Extent Across the Land-Ocean Boundary During the Melt Season: A Bliss, M R Anderson

POSTER Assessment of the stability of satellite snow cover CDRs using station snow depth observations: T L Mote

POSTER Extracting complex subglacial water dynamics through tight coupling of flow models to airborne radar sounding and satellite altimetry: S P Carter, H A Fricker, D D Blankenship, J V Johnson, S F Price, W H Lipscomb

POSTER Geometry and Mesh Representations for Ice Sheet Modeling: T Tautges, I Grindeanu

POSTER Trends and variability in summer sea ice cover in the Canadian Arctic based on the Canadian Ice Service Digital Archive: S Howell, A C Tivy, B Alt, S McCourt, R Chagnon, C Grocker, T G Carri eres, J Vackel

POSTER Extreme Variability Within the Northern Hemisphere Snow Extent Season: D A Robinson, T W Estilow, G Henderson, D J Leathers

POSTER Climate Data Records (CDRs) for Ice Motion, Ice Age, and Melt Pond Fraction: M A Tschudi, J A Maslanik, C Fowler, J C Stroeve, I G Rigor

POSTER Enabling Climate Science Investigations by Students Using Cryosphere Climate Data Records (CDRs): T S Ledley, B Youngman, W Meier, E Bardar

POSTER Future climate and surface mass balance of the Antarctic ice sheet using a regional atmospheric climate model: a contribution to Ice2Sea: S Ligtenberg, M R van den Broeke, J Lenaerts, W van de Berg, E van Meijgaard
ED21A Moscone South: Poster Hall Tuesday 0800h
Learning and Understanding Complexity in the Geosciences I Posters (joint with A, B, GC, MR, OS, V)

Presiding: C Gautier, University of California Santa Barbara; D R Zalles, SRI International

0800h ED21A-0650 POSTER EcoCasting: Using NetLogo models of aquatic ecosystems to teach scientific inquiry: C K Buzby, K Jona

0800h ED21A-0651 POSTER Two Active Learning Techniques Promoted Student Learning of Introductory Earth Science Concepts but Failed to Improve Metacognitive Skills: G Mora

0800h ED21A-0652 POSTER Introducing College Undergraduates to the Role of Feedbacks in the Climate System Using Numerical Models: L J Shellito

0800h ED21A-0653 POSTER Exsolution as an Example of Complex-System Behavior: D W Mogk, B L Dutrow


0800h ED21A-0655 POSTER Geology 201: Non-linear processes in geofluids or Why does the Earth look the way it does?: C H Orr, C M Cooper

0800h ED21A-0656 POSTER MiTEP's Collaborative Field Course Design Process Based on Earth Science Literacy Principles: C A Engellmann, W I Rose, J E Huntoon, M F Klawiter, K Hungwe

0800h ED21A-0657 POSTER Alaska High School Students Integrate Forest Ecology, Glacial Landscape Dynamics, and Human Maritime History in a Field Mapping Course at Cape Decision Lighthouse, Kuiu Island, Southeast Alaska: C L Connor, R Carstensen, L Domke, S Donohoe, A Clark, D Cordero, C Otsea, M Hakala, R Parks, S Lanwermeyer, Title of Team: Discover Design Research (DDR)

0800h ED21A-0658 POSTER 3D GEOLOGICAL FRAMEWORK MODELS AS A TEACHING AID FOR GEOSCIENCE: H Kessler, E Ward, Title of Team: Geological Models for Teaching Project Team

0800h ED21A-0659 POSTER High School Students' Understanding of Change over Time and System Complexity: A Focus on the Cryosphere: K S McNeal, J Libarkin, T S Ledley, C Guthrie

0800h ED21A-0660 POSTER Student Misconceptions: A Qualitative Study of Conceptual Barriers in Plate Tectonics and in the Solar System among Upper Elementary Students: L M Brodsky, S Corrigan

0800h ED21A-0661 POSTER Student Conceptions of Eutrophication in a Field-Based Undergraduate Course: K L Rowbotham, H L Petcovic, C M Koretsky

0800h ED21A-0662 POSTER Sense of Place and the National Parks, Strategies for Communicating the Interconnected Nature of Earth Science: E C Vye, W I Rose, J E Huntoon, B L Nash

0800h ED21A-0663 POSTER Potential impacts of invasive European earthworms and soil moisture on herbaceous species richness within the Ojibwa Red Lake Reservation: C Thayer, S M Top, T R Filley, J Jourdain, S Zurn-Birkhimer, T Kroeger, P Welle, M Jenkins, A Johnson, Title of Team: GEMscholars


0800h ED21A-0665 WITHDRAWN

ED21B Moscone South: Poster Hall Tuesday 0800h
National and International Programs in Geosciences and Space Sciences Education I Posters (joint with A, B, OS)

Presiding: J W Farrington, WHOI; M Feder, National Research Council; C Michalopoulos, NOAA; S A Stockman, NASA

0800h ED21B-0666 POSTER OPPORTUNITIES FOR SPACE SCIENCE EDUCATION USING CURRENT AND FUTURE SOLAR SYSTEM MISSIONS: M Mattiella Novak, K Beisser, L Butler, D Turney

0800h ED21B-0667 POSTER THE I-CLEEN PROJECT (INQUIRING ON CLIMATE & ENERGY), ENHANCING AN ENQUIRY-BASED APPROACH TO EARTH SYSTEM SCIENCES IN ITALIAN CLASSROOMS: M cattadori

0800h ED21B-0668 POSTER Teaching Marine Geoscience at Sea: Integrated Ocean Drilling Program’s School of Rock Explores Cascadia Subduction Zone - Cores, Logs, and ACORKs: M Reagan, J Collins, K A Ludwig, S Slough, M L Delaney, S A Hovan, Title of Team: Expedition 328 Scientists

0800h ED21B-0669 POSTER Expanding Earth and Space Science through the Initiating New Science Partnerships In Rural Education (INSPIRE): S Radencic, K S McNeal, D Pierce, D Hare

0800h ED21B-0670 POSTER STEM Education in Jordan Applicable to Developing Future Geophysicists: An Example Combining Electrical Engineering and Medical Research: A Fraiwan, L Khadra, W Shahab, D L Olgaard

0800h ED21B-0671 POSTER Informal STEM Education in Antarctica: K Chell

0800h ED21B-0672 POSTER The City University of New York and NASA Goddard Space Fight Center Heliophysics Education Consortium: L P Johnson, P Marchese, C Ng, S A Austin, J Frost, T K Cheung, G Trembeler, I Robbins, P Paglione, C Damas, J C Steiner, E Rudolph


0800h ED21B-0674 POSTER Rocks, Rain, and Climate: a GIFT Workshop for Teachers in Brazil: M J Passow, N Krusche, C D Carneiro

0800h ED21B-0675 POSTER Cassini Scientist for a Day: Encouraging Science Research and Writing for Students on National and International Scales: R Zimmerman Brachman, E Piazza

0800h ED21B-0676 POSTER STAR Library Education Network: a hands-on learning program for libraries and their communities: P Dusenbery

0800h ED21B-0677 POSTER WWGD(What Would Galileo Do?): Developing a Science Process Teacher Workshop at the Astronomical Society of the Pacific: J G Manning, G Schultz, B Kruse

0800h ED21B-0678 POSTER Dark Skies Awareness Cornerstone Project for the International Year of Astronomy: C E Walker, S M Pompea, Title of Team: IYA Dark Skies Awareness Working Group

0800h ED21B-0679 WITHDRAWN

0800h ED21B-0680 POSTER The Urbino Summer School in Paleoeclimatology: Investing in the future of paleoclimatology: S A Schellenberg, S Galeotti, H Brinkhuis, R M Leckie
Presiding: M P Poland, U.S. Geological Survey; K Kraft, Mesa Community College; R Teasdale, California State University, Chico

0800h  ED21C-0681 POSTER Introductory Earth science education by near real time animated visualization of seismic wave propagation across Transportable Array of USArray: J Attanayake, A Ghosh, A Amosu

0800h  ED21C-0682 POSTER Incorporating Real-time Earthquake Information into Large Enrollment Natural Disaster Course Learning: K P Furlong, H Benz, G P Hayes, A Villasenor

0800h  ED21C-0683 POSTER After an Earthquake: Accessing Near Real-Time Data in the Classroom: T K Bravo, B Coleman, M Hubenthal, T J Owens, T Jaber, R Welti, B R Weertman

0800h  ED21C-0684 POSTER Internet-accessible, near-real-time volcano monitoring data for geoscience education: the Volcanoes Exploration Project—Pu’u ‘O’o: M P Poland, R Teasdale, K Kraft

0800h  ED21C-0685 POSTER Analysis of GPS Data Using Near Real-Time Data from the Volcano Exploration Project in the Community College Classroom (Invited): M House, E Nagy-Shadman, B Wilbur

0800h  ED21C-0686 POSTER VEPP Exercise: Volcanic Activity and Monitoring of Pu’u ‘O’o, Kilauea Volcano, Hawaii: L A Rodriguez

0800h  ED21C-0687 POSTER Using the VEPP website in a Master of Education in Earth Sciences course (Invited): E Richardson


0800h  ED21C-0689 POSTER NOAA/APT Satellite Data for Online and Real Time Monitoring of Tungurahua Volcanic Eruption and Temperature Profile in Ecuador: G Jaffer, R Nader, O Koudelka

0800h  ED21C-0690 POSTER Where’s the data? Summary of key polar data resources for education and research: L Lukes

0800h  ED21C-0691 POSTER In the Footsteps of Roger Revelle: a Partnership between SIO, ONR and Middle School Science Students: D Brice, T B Applegate, S Foley, R A Knox, P Mauricio

0800h  ED21C-0692 POSTER Incorporating Science News Into Middle School Curricula: Current Events in the 21st Century Classroom: E DiMaggio

0800h  ED21C-0693 POSTER Improving Student Understanding of Geological Rates via Chronotopographic Analysis: S R Linneman, D H Clark, P Buly

0800h  ED21C-0694 POSTER Stone Soup Projects: Using real-time resources and creative partnering to meet multiple needs: S Mclean, R Searle, K Zala

0800h  ED21C-0695 POSTER Watershed Dynamics: Using Web-based GIS to Access Data and Study the Hydrosphere: C K Buzby, K Jona

0800h  ED21C-0696 POSTER UV Radiation: a new first year physics/life sciences laboratory experiment: S V Petelina, J M Siddaway

0812h  ED21D-02 The Year of the Solar System: An E/PO Community’s Approach to Sharing Planetary Science: S S Shipp, D Boonstra, C Shupla, H Dalton, D Scalise, Title of Team: Planetary Science E/PO Community

0820h  ED21D-03 NASA Nationwide and the Year of the Solar System (Invited): K Ferrari

0832h  ED21D-04 Developing Nontraditional Partnerships to Disseminate the Space Science Story (Invited): C Galindo, J S Allen, J Garcia, D Martinez

0844h  ED21D-05 Discovery and New Frontiers: Science Missions Seeking New Answers to Timeless Questions (Invited): S Asplund

0856h  ED21D-06 International Observe the Moon Night – An Opportunity to Participate in the Year of the Solar System While Sharing the Excitement of Lunar Science and Exploration with the Public: L Bleacher, D Daou, B H Day, B C Hsu, A P Jones, B Mitchell, A J Shaner, S S Shipp


0912h  ED21D-08 Bringing a Chemical Laboratory Named Sam to Mars on the 2011 Curiosity Rover: P R Mahaffy, L Bleacher, A Jones, S K Arreya, H L Manning, M Cabane, C R Webster, Title of Team: SAM Team

0920h  ED21D-09 MESSENGER Education and Public Outreach Arranges a Ride to the Innermost Planet: H M Weir, C R Chapman, J Edmonds, J Goldstein, K G Hallau, B Hirshon, H Vanhala, S C Solomon, Title of Team: MESSENGER Education and Public Outreach Team

0928h  ED21D-10 (Nearly) Seven Years on Mars: Adventure, Adversity, and Achievements with the NASA Mars Exploration Rovers Spirit and Opportunity: J F Bell, Title of Team: The Mars Exploration Rover Science and Engineering Teams

0936h  ED21D-11 From Earth to the Solar System: A New Online Exhibit to Help Celebrate NASA’s Year of the Solar System: D Scalise

Earth and Planetary Surface Processes


Presiding: M P Poland, Caltech; L S Sklar, San Francisco State University


0800h  EP21A-0725 POSTER Common Spacecraft Bus for Earth Science Decadal Survey Missions: T Cook, K Klaus, M S Elsperman


0800h  EP21A-0727 POSTER The Relationship of the Increase in the “Time of the Earth Day,” from 18 Hours to 24 Hours, to the Increase in the Size of the Earth, Using the Laws of the Conservation of Momentum: S A Cimorelli, C Samuels

0800h  EP21A-0728 POSTER Mud volcanoes discovered near the Crommelin South Crater, Mars: M Pondrelli, A Rossi, G G Ori, D Praeg, S Ceramicola

0800h **EP21A-0730** POSTER Granular Flow Dynamics on Earth, Moon, and Mars from analytical, numerical and field analysis: A Lucas, A Mangeney, D Mhge

0800h **EP21A-0731** POSTER Salt-Induced Physical Weathering of Stone: M Schiro, E Ruiz-Aguado, C Rodriguez-Navarro

0800h **EP21A-0732** WITHDRAWN

0800h **EP21A-0733** WITHDRAWN

0800h **EP21A-0734** POSTER Evidence for a Crustal-scale Thrust Belt along the Northwestern Margin of the Tharsis Rise: Implications for Possible Plate Subduction on Mars: A Yin

0800h **EP21A-0735** POSTER Remote sensing of the hydrologic history of the eastern Sahara: T G Farr, R G Blom, P Paillou


0800h **EP21A-0737** POSTER Space agriculture: the effect of micro- and hypo-gravity on soil hydraulics and biogeochemistry in a bioregenerative soil-based cropping unit: F Maggi, C E Pallud

0800h **EP21A-0738** POSTER Modeling shrub population dynamics in response to overgrazing and climate change in the southwestern US desert: E C Stabert, D J Furbish


0800h **EP21A-0740** POSTER Surface Deformation Mapping Applications using Ground Based Interferometric Radar: J J Legarsky, F G Gomez, B Rosenblad, E Loehr

0800h **EP21A-0741** POSTER 3D mapping and sedimentary analysis of extensive tsunami deposits near Tokachi, Hokkaido, Japan: K L Delbecq, A L Moore, E W Marshall IV, Y Nishimura, Y Nakamura, K Hirakawa

0800h **EP21A-0742** POSTER Channel initiation and landsliding: objective mapping on lidar DTMs in Japan: Y S Hayakawa, C P Stark, P Passalacqua, T Oguchi


0800h **EP21A-0745** POSTER Death and landscape dynamics: The effect of tree throw on sediment transport and landscape evolution: G R Hancock, K Evans, J J McDonnell, L Hopp, S Reaney

0800h **EP21B-0746** POSTER The Role of Solar Radiation as a Driver of Eco-geomorphic Feedbacks and Landscape Evolution (Invited): E Istanbulbulluoglu, J H Flores

0800h **EP21B-0747** POSTER The Influence of Landscape Morphology on Peatland Dynamics and Carbon Accumulation Inferred from Ground Penetrating Radar (GPR) and Peat Core Analysis: J L Loisel, J T Nolan, Z Yu, A Parkesian, L D Slater

0800h **EP21B-0748** POSTER Holocene Tectonic and Sedimentary Evolution of Coastal San Diego: J M Maloney, N W Driscoll, D S Brothers, J M Babcock, G Kent

0800h **EP21B-0749** POSTER Erosion rates, stochasticity, and abiotic vs. biotic bedrock to soil production mechanisms in the Oregon Coast Range: J A Marshall, J J Roering

0800h **EP21B-0750** POSTER A rill erosion-vegetation threshold analysis approach for the assessment of restoration success in water-limited reclaimed ecosystems: J M Nicolau, M Moreno de las Heras, R Diaz Sierra, M A Zaval

0800h **EP21B-0751** POSTER Evidence for biologic response to pedogenesis along the Merced River chronosequence, Central Valley, California: S E Reed, R Amundson

0800h **EP21B-0752** POSTER Linking morphology to ecosystem structure using air-borne sensors for monitoring the Earth System: A Taramelli, C Giardino, E Valentini, M Bresciani, L Gaserperi

0800h **EP21B-0753** WITHDRAWN

0800h **EP21B-0754** POSTER Floodplain Responses to Rapid Climate Changes at the End of the Last Ice Age in Arctic Alaska: D H Mann, P Groves, M Kunz

**EP21C** Moscone South: Poster Hall Tuesday 0800h

**Megaflooding: Causes, Processes, and Effects Posters (joint with H, P)**

**Presiding:** D M Burr, University of Tennessee; P A Carling, University of Southampton

0800h **EP21C-0754** POSTER Rapid Formation of a Modern Bedrock Canyon by a Single Flood Event (Invited): M P Lamb, M A Fostand


0800h **EP21C-0756** POSTER Evidence of a 700-year Lake Agassiz megaflood in the slackwater deposits of Mississippi River tributaries: H Wang, A Stumpf, R C Berg, E D McKay III

0800h **EP21C-0757** POSTER Ground Penetrating Radar Stratigraphy of Megaflood Gravel Dune: P A Carling, C S Bristow, H, P

0800h **EP21C-0758** POSTER Erosional and Depositional Processes of the 18 March 2007 Lahar at Mt. Ruapehu, New Zealand: B C Kastl, S A Fagents, B F Houghton

0800h **EP21C-0759** POSTER Experimental constraints on the dynamics of martian outflow channels: H J Lenferink, T Perron, A R Koss

0800h **EP21C-0760** POSTER Retreat of a Giant Cataract in a Martian Outflow Channel: S Gupta, N H Warner, J Kim, S Lin, J Muller

0800h **EP21C-0761** POSTER Global Inventory of Terrestrial Glacial MegaFloods: V R Baker

0815h EP21D-02 Processes driving storm-scale coastal change along the Outer Banks, North Carolina: Insights from during-storm observations using CLARIS (Invited): K L Brodie

0830h EP21D-03 Modeling Gaussian distributions of wave runup using parameterizations for setup and swash: H F Stockdon

0845h EP21D-04 Beach response to extreme events: Observations and modeling: K Splinter, D R Strauss, R Tomlinson


0915h EP21D-06 Coastal-change vulnerability in the northern Gulf of Mexico: A Bayesian approach: P Howd, N G Plant, E R Thieler, E A Pendleton

0930h EP21D-07 A novel method for quantifying the maximum depth of beach erosion over a one-year period at Onslow Beach, North Carolina resolves along- and across-beach variability: A B Rodriguez, S R Fegley, P L Rodriguez

0945h EP21D-08 Feedback mechanisms linking barrier island transgression and storm response with beach-dune interaction: C Houser

Geodesy

G21A Moscone South: Poster Hall Tuesday 0800h Ground-Based Geodetic Techniques and Science Applications Posters (joint with B, C, E, F, H, NH, T, V)

Presiding: J M Sauber, NASA GSFC; J T Freymueller, University of Alaska Fairbanks; D H Christensen, Geophysical Institute


0800h G21A-0788 POSTER Fire in the Mojave Desert: The role of microtopography on floral reestablishment following fire: C E Soulard, T Esque, D Bedford, S Bond

0800h G21A-0789 POSTER Identifying sediment sources and quantifying rates of erosion along the North Fork Toltle River near Mount St. Helens, WA: J Pitlick, C M Meertens, J J Major, J Normandeau, K Spicer

0800h G21A-0790 POSTER Motion measurement of destabilized slopes in Switzerland with the GPRH-I ground-based real-aperture radar (Invited): C L Werner, T Strozz, A Wiesmann, U Wegmuller, A Kos, R Delaloye, H Raetzo

0800h G21A-0791 POSTER The Integration of TLS and Continuous GPS to Study Landslide Deformation: A Case Study at the El Yunque National Forest, Puerto Rico: D A Phillips, G Wang, J Joyce, F O Rivera, G Galan, C M Meertens


0800h G21A-0793 POSTER Intersecting kink bands quantified by laser scanning and differential geometry: R E Dunham, J G Criden

0800h G21A-0794 POSTER Using TLS to Improve Models of Volcano Conduit Processes (Invited): C Connor, L Connor


G21B Moscone South: Poster Hall Tuesday 0800h Measuring and Modeling of Active Tectonic Processes in Alaska at the Beginning of the EarthScope Era II Posters (joint with C, NH, S, T)

Presiding: J M Sauber, NASA GSFC; J T Freymueller, University of Alaska Fairbanks; D H Christensen, Geophysical Institute

0800h G21B-0798 POSTER EARTHSCOPE TRANSPORTABLE ARRAY (TA): PLANS FOR ALASKA: K Hafner, R W Busby, R Woodward

0800h G21B-0799 POSTER A Decade of Shear-Wave Splitting Observations in Alaska: A K Bellesilies, D H Christensen, G A Abergs, R A Hansen, G L Pavlis, X Song

0800h G21B-0800 POSTER NASA's DESDynI in Alaska: J M Sauber, M A Hofton, R L Bruhns, R R Forster, E W Burgess, M M Cotton

0800h G21B-0801 POSTER MAPPING SUB-GLACIER GEOMORPHOLOGY AND STRUCTURE IN A COLLISIONAL OROGEN; AN EXAMPLE FROM THE AGASSIZ AND MALASPINA GLACIERS, AK: M M Cotton, R L Bruhns, J M Sauber

0800h G21B-0802 POSTER Interpretations of Complete Bouguer Gravity Anomalies from the GRAV-D Project in Alaska: T M Diehl, S A Preaux, V A Childers


0800h G21B-0805 WITHDRAWN

0800h G21B-0806 POSTER The relationship of near-surface active faulting to megathrust splay fault geometry in Prince William Sound, Alaska: S Finn, L M Liberty, P J Haeussler, C Northrup, T L Pratt

0800h G21B-0807 POSTER Using passive source seismic data to determine the crustal structure of the Aleutian island arc: H A Janiszewski, G A Abergs, J A Calkins, D J Shillington

0800h G21B-0808 POSTER Regional variability in SKS splitting measurements near the Alaska subduction zone: J Hanna, M D Long
**G21C Moscone West: 2008 Tuesday 0800h**

**Development and Testing of Methods for Detecting and Estimating Unsteady Motion in Geodetic Time Series I (joint with T, NS, NG, IN)**

**Presiding:** S D Williams, Proudman Oceanographic Laboratory; J R Murray-Moralea, U.S. Geological Survey

0800h G21C-01 Transient deformation detection utilizing results from time-dependent inversion of Global Positioning System data: J R Murray-Moralea, Z Liu

0815h G21C-02 Online transient deformation detection using a particle-based Network Inversion Filter: J Fukuda, P Segall

0830h G21C-03 Detection of Anomalous Strain Transients Using Principal Component Analysis and Covariance Descriptor Analysis Methods (Invited): S Kedar, R A Granat, D Dong, J W Parker

0845h G21C-04 Transient event detection from a multi-scale analysis of continuous GPS observations (Invited): Z Zhan, P Muse, M Simons, C Tape

0900h G21C-05 Transient signal detection using GPS measurements: Application of PBO data in Alaska: K J, T Herring

0915h G21C-06 A Multiscale Approach to InSAR Time Series Analysis: E A Hetland, P Muse, M Simons, N Lin, C J DiCaprio

0930h G21C-07 An Algorithm for Automatically Detecting Offsets in Geodetic Time Series: S E Owen, F Webb, A W Moore, S Kedar, D Dong

0945h G21C-08 Using the SSA method to analyze VLBI time series: K Le Bail, E Nilsson, J M Gipson

**G21D Moscone West: 2008 Tuesday 0800h**

**The Art and Science of Volcano Geodesy I (joint with V, S, NH)**

**Presiding:** M Battaglia, Sapienza - University of Rome

0800h G21D-01 Untangling temporally and spatially overlapping volcano deformation source signals at Hawaii Island (Invited): T R Walter, M Shirzaei

0815h G21D-02 Kiluea volcano source models constrained by InSAR and GPS observations: P Lundgren, M P Poland, A Miklius, S Yun, Z Liu, A Bertran-Ortiz, A Pepe, F Casu, R Lanari

0830h G21D-03 Anatomy of an unstable volcano through InSAR data: multiple processes affecting flank instability at Mt. Etna in 1994-2008: G Solaro, V Acocella, S Pepe, J Ruch, M Neri, E Sansosti

0845h G21D-04 Characterizing a decade of behavior at Volcán de Colima, Mexico using long term InSAR and thermal remote sensing data: J Sorge, G Williams-Jones, R Wright, N R Varley

0900h G21D-05 Activity of Nyiragongo and Nyamulagira Volcanoes (Dem. Rep. of Congo) Revealed Using Geological, Geophysical, and InSAR data: C Wauthier, V Cayol, A Hooper, F Kervyn, P Marinkovic, N D’Oreye, M P Poland

0915h G21D-06 Space imaging of a 300 years old cooling magma chamber: Timanfaya volcano (Lanzarote, Canary Islands): P J Gonzalez, K F Tiampo

0930h G21D-07 Correlating variations in GPS and shear-wave splitting: Is there a common source?: K Ungler, M K Savage, N Fournier, T Ohkura

0945h G21D-08 Subsidence of the collapsed caldera of Miyakajima, Japan, 2006-2009 (Invited): Y Aoki, E D Montgomery-Brown

**Global Environmental Change**

**GC21A Moscone South: Poster Hall Tuesday 0800h**

**Proxy Records and Modeling Studies of Glacial and Climatic Changes From the American Cordillera I Posters (joint with C, PP)**

**Presiding:** N D Stansell, The Ohio State University; B G Mark, Ohio State University

0800h GC21A-0852 POSTER Glacier Sensitivity Across the Andes: E A Sagredo, T V Lowell, S Rupper

0800h GC21A-0853 POSTER Comparison of Glacial Records From 10°S and 11°S in the Peruvian Andes Suggests Similar Forcings but Different Local Influences: J A Smith, D T Rodbell

0800h GC21A-0854 POSTER A ~20,000 year history of glacial variability in the tropical Andes recorded in lake sediments from the Cordillera Blanca, Peru: N Stansell, D T Rodbell, C M Moy

0800h GC21A-0855 POSTER 18,000 years of environmental change in the Eastern Cordillera of the Bolivian Andes: J J Williams, W D Gosling, A L Coe, S J Brooks

0800h GC21A-0856 POSTER A late Holocene record of trace metal deposition in lake sediments near Queleccaya Ice Cap, Peru: S A Beal, M A Kelly, B P Jackson, E C Ostergberg, J S Stroup, R A Baker


0800h GC21A-0858 POSTER Modeling the Climatic Controls and Topographic Form of Modern and Late Pleistocene Tropical Peruvian Glaciers: B G Mark, N Stansell, J G Fairman, M A Plummer, D T Rodbell

0800h GC21A-0859 POSTER Cosmogenic age constraints on the last deglaciation in Southern Patagonia (49 - 50°S): D S Murray, B S Singer, A E Carlson, M W Caffee

0800h GC21A-0860 POSTER Was the Late-glacial advance at ~14.0 ka B.P. in Torres del Paine (Patagonia, 51S) the most extensive glacial pulse of Oxygen Isotope Stage 2?: J Garcia, B L Hall, M R Kaplan, J M Schaefer, R M Vega, R Schwartz, R C Finkel

0800h GC21A-0861 POSTER A 6000 year, quantitative reconstruction of precipitation variability in central Washington from lake sediment oxygen isotopes and predictive models: B A Steinman, M Abbott, M F Rosenmeier, N Stansell

0800h GC21A-0862 POSTER Reconstructing paleo precipitation amounts using a terrestrial hydrologic model: Lake Titicaca and the Salar de Uyuni, Peru and Bolivia: J A Nunnery, P A Baker, M T Coe, S C Fritz


0800h GC21A-0864 POSTER Glacial flour in lacustrine sediments: Records of alpine glaciation in the western U.S.A. during the last glacial interval: J G Rosenbaum, R L Reynolds

0800h GC21A-0865 POSTER The Utility of Proximal-Accretion Stratigraphy in Lateral Moraines: M A Samolczyk, G Osborn
**Posters**

**GC21B** Moscone South: Poster Hall Tuesday 0800h

**Solar Irradiance Calibrations, Observations, and Implications I**

*Presiding: R C Willson, ACRIM; G Kopp, CU / LASP; W E McClintock, University of Colorado; M A Snow, University of Colorado*

0800h **GC21B-0866** POSTER The space instrument SOVAP of the PICARD mission: S Dewitte, C Conscience, M Mefta, A Chevalier, D Crommelynck

0800h **GC21B-0867** POSTER Traceability of Satellite TSI observations and their significance for the TSI database: R C Willson, R Helizon, S Kwan

0800h **GC21B-0868** POSTER Spectral analysis of the TSI satellite records, their comparison and interpretation: N Scafetta

0800h **GC21B-0869** POSTER ACRIM III Radiometer Cavity Reflectance at a Variety of Wavelengths across the Solar Spectrum: S R Lorentz, J S Morrill, L M Hanssen, J Zeng

0800h **GC21B-0870** POSTER Fall 2010 Total Solar Irradiance Calibration Workshop: J S Morrill, D G Socker, R C Willson, G Kopp

0800h **GC21B-0871** POSTER Recent Ground-Based Photometry Compared with Space-Based TSI: G A Chapman, A Cookson, D Preminger

0800h **GC21B-0872** POSTER A survey of diffraction effects in various total solar irradiance monitors: E L Shirley, A Therniesen, Q Gong

0800h **GC21B-0873** POSTER The preliminary measurements from the Bolometer Oscillation System (BOS) on board PICARD: P Zhu, M V Ruymbeke, M Meftah, F Clette, S Dewitte, A Chevalier, F van Ruymbeke, J Noel

0800h **GC21B-0874** POSTER Possible Influence of Aperture Heating on VIRGO Radiometry on SOHO: C Frohlich

0800h **GC21B-0875** POSTER New SSI and TSI reconstruction suggests large value of the radiative solar forcing: A Shapiro, W K Schmutz, G Thuillier, E Rozanov, M Haberreiter, M Schoell, A Shapiro, S Nyeki


0800h **GC21B-0877** POSTER Trends in solar UV and EUV irradiance: An update to the MgII Index and a comparison of proxies and data to evaluate trends of the last 11-year solar cycle: R A Viereck, M Snow, M T DeLand, M Weber, L Puga, D Bouwer

0800h **GC21B-0878** POSTER Solar Ultraviolet Irradiance Variability During the Decline of Cycle 23: M A Snow, W E McClintock, T N Woods, J W Harder, E C Richard

0800h **GC21B-0879** POSTER The Solar Ultraviolet Spectrum Estimated Using the Mg II K Index and Ca II K disk Activity: D R McMillin, J S Morrill, L E Floyd

0800h **GC21B-0880** POSTER Modeling the Observed Atmospheric OH Response to the Solar Cycle: S Wang, S P Sander, K Li, Y L Yung, M Liang, N J Livesey, M L Santee

0800h **GC21B-0881** POSTER Solar Irradiance Data Products at the LASP Interactive Solar Irradiance Datacenter (LISIRD): A Ware DeWolfe, A Wilson, D M Lindholm, C K Pankratz, M A Snow, T N Woods

0800h **GC21B-0882** POSTER Examination of the Earth’s Radiation budget using satellite observations and modeling data: S Koumoutsaris, L Bengtsson

**GC21C** Moscone South: Poster Hall Tuesday 0800h

**Stable Isotopes in Modern and Ancient Boreal Forest Systems: Indicators of Past Environmental Change I**

*Presiding: A Z Csank, University of Arizona; T J Porter, Carleton University*

0800h **GC21C-0883** POSTER Multiple tree-ring isotopes as environmental indicators of diffuse atmospheric pollution in a peri-urban area: A Doucet, M M Savard, C Bégin, T B Ouarda, J Marion

0800h **GC21C-0884** POSTER Stable-Isotope Perspectives on Holocene Environmental Change at Archaeological Sites in the Middle Tanana Valley, Interior Alaska: W C Johnson, E P Gaines

0800h **GC21C-0885** POSTER Large scale convergence of tree leaf temperatures: evidence from stable oxygen isotope analysis of two datasets of tree wood cellulose collected worldwide: X Song, B R Helliker, M Barbour, M Saurer

0800h **GC21C-0886** POSTER Hydrogen apparent fractionation between source water and epicuticular waxes of Pinus sylvestris in North East Finland: S L Newberry, J Grace, N Pedenitchouk

0800h **GC21C-0887** POSTER Climatic changes during the early Medieval and recent periods inferred from δ13C and δ18O of Siberian larch trees: O V Sidorova, Title of Team: Matthias Saurer, Rolf Siegwolf


**Regional Patterns of Global Warming: Models, Mechanisms, and Observations II**

*Invited: D G Socker, R C Willson, G Kopp, J H Durre, W E McClintock, E L Shirley, J S Morrill, R Helizon, S Wang, C Frohlich, L Bengtsson*

0800h **GC21D-01** On the regional characteristics of past and future sea-level change (Invited): T A Timmermann, S McGregor

0815h **GC21D-02** The role of atmospheric circulations in regional climate change: C Deser, A S Phillips, H Teng

0830h **GC21D-03** Global Warming Pattern Formation: Sea Surface Temperature and Rainfall: S Xie, C Deser, G Vecchi, J Ma, H Teng, A T Wittenberg

0845h **GC21D-04** Decadal predictability of tropical Indo-Pacific Ocean temperature trends due to anthropogenic forcing in a coupled climate model: A Solomon, M Newman

0900h **GC21D-05** The Interhemispheric gradient in 20th century and future tropical marine climate change (Invited): J C Chiang

0915h **GC21D-06** A Long, Consistent Surface Wind Dataset for Climate Change Analysis: Application over the Equatorial Atlantic: H Tokinaga, S Xie

0930h **GC21D-07** The role of regional SST warming variations in the drying of Meso-America in future climate projections: S A Rauscher, F Kucharski, D B Enfield

0945h **GC21D-08** An assessment of monsoon precipitation changes during 1901-2001: Observation and Model Simulation: T Zhou, L Zhang

**Indicators of Past Environmental Change I Posters**

*Invited: W C Johnson, E P Gaines, S Wang, L Bengtsson*

0800h **GC21D-07** POSTER The role of regional SST warming variations in the drying of Meso-America in future climate projections: S A Rauscher, F Kucharski, D B Enfield

0800h **GC21D-08** POSTER An assessment of monsoon precipitation changes during 1901-2001: Observation and Model Simulation: T Zhou, L Zhang
Geomagnetism and Paleomagnetism

**GP21A Moscone South: Poster Hall**  
**Tuesday 0800h**  
**Geomagnetic Field Modeling and Interpretation of Satellite, Observatory, Marine, and Aeromagnetic Data I Posters**  
(joint with OS, SA, SM, DI, T, P)

**Presiding:** M E Everett, Texas A&M

0800h  **GP21A-0984** POSTER Swarm: ESA’s Magnetic Field Mission: R Haagmans, Y Menard, R Floberghagen, G Plank, M R Drinkwater

0800h  **GP21A-0985** POSTER A buried volcano in the Calabrian Arc (Italy) revealed by high-resolution aeromagnetic data: R De Riis, R Dominici, G Ventura, I Nicolosi, M Chiappini, F Speranza

0800h  **GP21A-0986** POSTER Closed Loop Simulation for a Magnetic Gradiometry Mission: S Kotsiaros, N Olsen

0800h  **GP21A-0987** POSTER Quantification of induced and remanent magnetizations in the lithospheric mantle and consequences for long wavelength magnetic anomalies: E C Ferre, S A Friedman, J A Conder, F Martin Hernandez, D Ravat

0800h  **GP21A-0988** POSTER Sq effect on the regional electromagnetic response functions in the period band between a few hours and one day: H Utada, H Shimizu, K Baba, N A Palshin

0800h  **GP21A-0989** POSTER Mapping hydrothermal alteration in Yellowstone National Park using magnetic methods: C Bouligand, J M Glen

0800h  **GP21A-0990** POSTER NEW MAGNETIC STUDY OF THE MID ATLANTIC RIDGE BETWEEN KURCHATOV AND HAYES FRACTURE ZONES: J M Luis, J M Miranda

0800h  **GP21A-0991** POSTER Determining the Attitude of a Spinning Satellite Using Magnetic Field Data: D Mozzoni, B B Ferguson, J C Cain

0800h  **GP21A-0992** POSTER CHAOS-4 – A high-resolution geomagnetic field model derived from low-altitude CHAMP data: N Olsen, H Luhr, T J Sabaka, I Michaelis, J Rauberg, L Toffner-Clausen

0800h  **GP21A-0993** POSTER Observability and Implication of Magnetic signals from different ocean circulation models: K H Singh, W Kuang, A V Kushinov, T J Sabaka

Hydrology

**H21A Moscone South: Poster Hall**  
**Tuesday 0800h**  
**Energy-Water Interdependence Posters**

**Presiding:** J A Tindall, US DOI - USGS; E H Moran, USGS

0800h  **H21A-1013** POSTER Energy—Water Interdependence: E H Moran, J A Tindall, A A Campbell


0800h  **H21A-1015** POSTER Urban Resource Islands: a new perspective on the water-energy nexus: D Perrone, J Murphy, G M Hornberger

H21A-1017 POSTER In Hot Water: Thermoelectric Power and Thermal Pollution: N T Madden
H21A-1018 POSTER Current and future water needs of the shale gas industry in Texas: J Nicot
H21A-1019 POSTER Impact of Various Biofuel Feedstock Production Scenarios on Water Quality in the Upper Mississippi River Basin: M Wu, Y Demissie, E Yan
H21A-1022 POSTER Renewable Water: Direct Contact Membrane Distillation Coupled With Solar Ponds: F I Suarez, S W Tyler, A E Childress
H21A-1023 WITHDRAWN

H21B Moscone South: Poster Hall Tuesday 0800h
Groundwater/Surface Water Interactions: Dynamics and Patterns Across Spatial and Temporal Scales I Posters

Presiding: C E Hatch, University of Nevada Reno; J H Fleckenstein, Helmholtz Center for Environmental Research (UFZ); J D Gomez, New Mexico Tech; D F Boutt, Univ of Massachusetts; S Ge, University of Colorado

0800h H21B-1024 POSTER Implementation of Alternative Infiltration Parameters to Compensate for Coarse Temporal Resolution in Regional Hydrologic Models: N Sepulveda
0800h H21B-1026 POSTER An integrated surface water-groundwater modeling in the Upper Snake River Basin, Idaho: X Jin, V R Sridhar

0800h H21B-1027 POSTER Role of Climate Variability in Modulating Surface Water and Groundwater Interaction over the Southeast United States: N Almanaseer, S Arumugam, J D Bales
0800h H21B-1028 POSTER Hydraulic Fracturing Return Waters and Legacy Landscapes: D J Bain, A R Michanowicz, K J Ferrar
0800h H21B-1029 POSTER Assessing the spatial variability of constraints on groundwater abstractions due to potential adverse resource impacts on surface water ecosystems – a GIS based approach: K A Watson, A S Mayer, H W Reeves

0800h H21B-1030 POSTER Bioherms: the conduits of connection between regional (bedrock) and surface (peatland) aquifers in the James Bay Lowlands: Diamond mining and the fate of peatlands: P N Whittington, J S Price

0800h H21B-1031 WITHDRAWN
0800h H21B-1032 POSTER Linking hydrology and pore-water biogeochemistry: results from a lake water manipulation experiment: C Neumann, J Beer, C Blodau, S Peiffer, J H Fleckenstein

0800h H21B-1033 POSTER The Role of Trans Tensional Structures and Lake Mead Reservoir in Groundwater Flow in Black Canyon, Lake Mead National Recreation Area, NV-AZ: J Juster, S Beard

0800h H21B-1034 POSTER Spatial patterns of hyporheic flow and biogeochemical cycling around cross-vane restoration structures: R P Gordon, L K Lautz, T Daniluk

0800h H21B-1035 POSTER Integrated Analysis of the Hydrology of a Mitigated Wetland in El Paso, Texas Utilizing Water Quality and Electrical Conductivity: R Gonzalez, M Lucero, J I Villalobos, D I Doser, Z Sheng, Title of Team: wetland, conductivity, salinity, water quality

0800h H21B-1036 POSTER Variation of Hyporheic Exchange Metrics along an Urbanization Gradient: E T Hester, E N Cranmer

0800h H21B-1037 POSTER Use of an Instrumented Mini-Well Matrix to Document Hydraulic and Transport Fluctuations in the Hyporheic Zone: E S Hinlein, D W Ostendorf

0800h H21B-1038 POSTER Temporal and spatial variability of surface water and groundwater interactions in a semi-arid agricultural valley: C G Ochoa, A Fernald, S Guldan, V C Tidwell

0800h H21B-1039 POSTER Use of Continuous-Time Water Quality Sensors to Examine Hyporheic Exchange between Groundwater and an Alpine Stream: East Fork Jemez River, NM: L R Sherson, D Van Horn, C Dahm, L J Crossley

0800h H21B-1040 POSTER The Role of Channel Bar Influences on Groundwater / Surface Water Interactions: C L Shope, J E Constantz, C A Cooper, W A McKay


0800h H21B-1042 POSTER Types and Variability of In-Channel and Bank Storage in Beaded Arctic Streams: M F Merck, B T Neilson

0800h H21B-1043 POSTER Coordinated use of physical measurements and environmental tracers to characterize stream-aquifer interactions along two small, groundwater-connected streams: C Kikuchi, T A Ferre, J M Welker, B R Cohn

0800h H21B-1044 POSTER Monsoon-driven Total Heat and Temperature Variations at the GW-SW Interface – Implications for Biogeochemical Processes: S Bartsch, C L Shope, J H Fleckenstein, S Peiffer

0800h H21B-1045 POSTER Water, heat and solute fluxes through hyporheic zones at stream restoration sites and their associated reference stream: T Daniluk, L K Lautz, R P Gordon

0800h H21B-1046 POSTER Polymictic pool behavior in Sierra Nevada Streams: R G Lucas, M H Conklin, S W Tyler, F I Suarez, J E Moran, B K Escher

0800h H21B-1047 POSTER Advection vs. conduction - Heat and water transport in a lowland river under groundwater up-welling conditions: T Blume, S Krause

0800h H21B-1048 POSTER Effect of Instream Geomorphic Structures and Hydraulic Conductivity on Stream Temperature Dynamics: G T Menichino, E T Hester

0800h H21B-1049 POSTER Hyporheic Flow and Heat Transport Within a Bed-to-Bank Transect of a Large Regulated River: Colorado River, Austin, TX: K Gerecht, B Cardenas, A J Guswa, A H Sawyer, T Swanson, J D Nowinski

0800h H21B-1050 POSTER CHARACTERIZING VERTICAL STREAMBED WATER FLUXES USING TEMPERATURE AND HEAD DATA ON VARIOUS SPATIAL SCALES: Y Hyun, H Kim, S Lee, K Lee
**H21C Moscone South: Poster Hall Tuesday 0800h**

Groundwater/Surface Water Interactions: Linking Physical and Biogeochemical Processes in Modeling and Management Frameworks I Posters (joint with B)

*Presiding: A S Mayer, Michigan Technological Univ; A S Ward, Pennsylvania State University; A H Sawyer, Univ of Texas-Austin; H W Reeves, U.S. Geological Survey; W M Wollheim, Institute for the Study of Earth Ocean and Space; D M McKnight, Univ Colorado*

0800h  **H21C-1051** POSTER Use of an Analytical Model to Screen New or Increased Groundwater Withdrawals for Potential Impacts on Streamflow: H W Reeves

0800h  **H21C-1052** POSTER Multi-parameter Analysis and Visualization of Groundwater Quality during High River Discharge Events: R M Page, P Huggenberger, G Lischied

0800h  **H21C-1053** POSTER Managing Water Resources Using WebGIS: Development and Application of an ArcGIS Explorer Toolkit - uWATER: Y F Lin, Y E Yang

0800h  **H21C-1054** WITDrawN

0800h  **H21C-1055** POSTER Development of interactive graphic user interfaces for modeling reaction-based biogeochemical processes in batch systems with BIOGEOCHEM: C Chang, M Li, G Yeh

0800h  **H21C-1056** POSTER Resazurin as a Proxy for Estimating Stream Respiration: R A Gonzalez Pinzon, R Haggerty, A Argerich, M Briggs, L K Lautz, D Lemke, D K Hare

0800h  **H21C-1057** POSTER Impact of Human Activity on Groundwater Recharge in Shule River Basin, Northwest China: P Huang, Z Wang

0800h  **H21C-1058** POSTER Infiltration of pesticides in surface water into nearby drinking water supply wells: F Malaguerra, H Albrechtsen, P J Binning

0800h  **H21C-1059** POSTER Estimating watershed irrigation capacity with an integrated hydrological model in the Lower Platte River basin, Nebraska: G Ou, X Chen

0800h  **H21C-1060** POSTER The role of stream network complexity in hydrologic turnover, nutrient retention, and watershed outlet signatures: J M Mallard, T P Covino, B L McGlynn

0800h  **H21C-1061** POSTER Exploring interactions of geomorphic setting, flow variability, and restoration on nitrate uptake and transient storage in streams: J Mueller Price, B P Bledsoe, D W Baker

0800h  **H21C-1062** POSTER Influence of riparian zones on stream nutrients in Great Lakes watershed flood plains: A G Bobba, P Chambers, J S Spoelstra, C Talbot

0800h  **H21C-1063** POSTER The Effect of Beaver Dams on Geochemistry of the Hyporheic Zone at Varied Depth and Location over a Range of Discharges During Flood Recession: D K Hare, M Briggs, L K Lautz

0800h  **H21C-1064** POSTER Temporal variations in riverbed hydraulic properties due to sediment transport during floods: Implications for groundwater-surface water interaction and composition: S C Simpson, T Meixner

0800h  **H21C-1065** POSTER Extreme Groundwater Discharge to a Eutrophic Seepage Lake and the Effect on Lake Restoration: P K Engesgaard, B Nilsson, J Kidmose, M C Frandsen

0800h  **H21C-1066** POSTER Evaluating the Possible Role of Phosphorus Release from Sediments on Stream Restoration: A Timm, P McGinley

0800h  **H21C-1067** POSTER Seasonal Variation in Phosphorus and Ammonium Uptake Related to Changes in Transient Storage Characteristics: A Argerich, R Haggerty, R A Gonzalez Pinzon

0800h  **H21C-1068** WITDrawN

**H21D Moscone South: Poster Hall Tuesday 0800h**

Megascale Hydrogeology: The Promise and Challenge of Examining Groundwater Systems at Regional and Continental Scales II Posters (joint with G)

*Presiding: T Gleeson, UBC; J Lemieux, Université Laval; Y Fan, Rutgers University*

0800h  **H21D-1073** POSTER Geochemical evidence for groundwater mixing in the western Great Artesian Basin and recognition of deep inputs in continental-scale flow systems: L J Crossley, K E Karlstrom, A Love, S Priestley, P Shand

0800h  **H21D-1074** POSTER The influence of boreholes on the regional scale groundwater flow in a fractured rock: S Ji, N Ko, Y Koh, J Choi

0800h  **H21D-1075** POSTER Factors Influencing Density-Dependent Groundwater Flow in the Michigan Basin: J F Sykes, S D Normani, Y Yin

0800h  **H21D-1076** POSTER Robustness of Vertically Averaged Models for CO$_2$ sequestration: E Keilegavlen, J M Nordbotten

0800h  **H21D-1077** POSTER Correlating optical, microwave and thermal remote sensing signals with groundwater head measurement time series: E H Sutanduajda, S de Jong, F van Geer, M F Bierkens

0800h  **H21D-1078** POSTER Compilation of regional ground water monitoring data to investigate 60 years of ground water dynamics in New England: D F Boutt, K M Weider

0800h  **H21D-1079** POSTER A comparison of the spatial and temporal variability of groundwater storage and GRACE terrestrial water storage: B Li, M Rodell

0800h  **H21D-1080** WITDrawN

0800h  **H21D-1081** POSTER Towards a seamless model of Quaternary sediments for continental-scale hydrogeology in North America: M Ross, M N Schumacher, J CHEN, E A Sudicky

0800h  **H21D-1082** POSTER U-series dates on travertine deposits in the Great Artesian Basin as paleohydrogeology and neotectonic indicators: S Priestley, K E Karlstrom, L J Crossley, A Love, V Polyak, Y Asmerom, E Embid

**H21E Moscone South: Poster Hall Tuesday 0800h**

Precipitation Measurement, Validation, and Applications: From Watershed to Global Scales III Posters (joint with A)

*Presiding: A Y Hou, NASA Goddard SFC; S A Braun, NASA/GSFC; B E Vieux, W K Berg, Colorado State University; R S Teegavarapu, Florida Atlantic University; Y Hong, University of Oklahoma*

0800h  **H21E-1083** POSTER Assimilation of precipitation-affected microwave radiiances in a cloud-resolving WRF ensemble data assimilation system: S Q Zhang, M Zupanski, A Y Hou, X Lin, S Cheung
0800h **H21E-1084** POSTER Cross Validation of Space-borne Radar Measurements of Different Hydrometeors using Ground Polarimetric Radar: **Y Wen**, Y Hong, J J Gourley, G Zhang, T J Schuur, Z Flaimig, K R Morris, Q Cao

0800h **H21E-1085** POSTER Community-based Services that Facilitate Interoperability and Inter-comparison Between Precipitation Data Sets from Multiple Sources: **Z Liu**, S J Kjempler, W L Teng, G G Leptoukh, D Ostrenga

0800h **H21E-1086** POSTER Preservation of extremes in multi-sensor merging of precipitation: **M Ebtehaj**, E Foufoula-Georgiou

0800h **H21E-1087** POSTER A Modified Global Model for Predicting the Tritium Distribution in Precipitation, 1960-2005: **Y Zhang**, S Ye, J Wu

0800h **H21E-1088** POSTER Recent Improvements to the TRMM Microwave Imager Land Rainfall Algorithm: **K Gopalan**, N Wang, R Ferraro, C Liu

0800h **H21E-1089** POSTER The relationship between snowflake characteristics and snow gauge collection efficiency: **J M Theriault**, K Ikeda, R Rasmussen, S Landolt, S Ziegler, A Jachcik

0800h **H21E-1090** POSTER Visualization of GPM Standard Products at the Precipitation Processing System (PPS): **O Kelley**

0800h **H21E-1091** POSTER Application of GSMaP and MODIS/SeaWiFS Downward Surface Short Wave Radiation in the Land Simulation System: Yesterday’s Earth at EORC (YEE): **T Oki**, M Kachi, T Kubota, H Fuji, H Murakami

0800h **H21E-1092** POSTER On the Sensitivity of TRMM Microwave Imager Channels to Over-Land Rainfall: **G Liu**, **Y You**

0800h **H21E-1093** POSTER Reflectivity Uncertainties and their Impact on Raindrop Size Distribution Parameters Retrieved from Vertically Pointing Doppler Profiling Radars: **C R Williams**, P E Johnston, D A Carter

0800h **H21E-1094** POSTER Regime Dependant Microphysical Variability in Darwin, Australia: **B Dolan**, S A Rutledge, T J Lang

0800h **H21E-1095** POSTER A Unified Description of the Statistics of Radar and Gauge Rainfall Data in terms of a Stochastic Dynamical Model: **P K Kundu**, J Travis

0800h **H21E-1096** POSTER The GPM Common Calibrated Brightness Temperature Product: **J Stout**, J Chou


0800h **H21E-1098** POSTER Evaluating Satellite Precipitation Products for Climate Applications: **W K Berg**

0800h **H21E-1099** POSTER A Study on Identification of Hydrometeor Phases Using Ku- and Ka-Band Dual-Wavelength Radar: R Meneghini, **L Liao**

0800h **H21E-1100** POSTER Analysis of the variability in the rainfall gauge observations using independent component analysis for the tropical Tahiti Island (French Polynesia): **L Sichoux**, G Ramillien, F Frappart, J Barriot

0800h **H21E-1101** POSTER Development of a Physically Based Land Surface Emissivity for TMI: **F J Turk**, L Li, Z Haddad

0800h **H21E-1102** POSTER Transformation of Brightness Temperatures between GMI and Existing Satellite Microwave Sensors: **Y Ji**

0800h **H21E-1103** POSTER Evaluation of High-Resolution Satellite Rainfall Products over the Nile Basin for Climatologic and Hydrologic Applications: **E H Habib**, A Haile, M ElSaadani, M E Elshamy, D Amin, R J Kuligowski

0800h **H21E-1104** POSTER Evaluating Flood Prediction Skill of TMPA Rainfall Products over Tar River Basin Using a Distributed Hydrologic Model: **H J Vergara**, Y Hong, J J Gourley, Y Zhang, E N Anagnostou

0800h **H21E-1105** POSTER On the probability distribution of drop diameter at the ground during stratiform and convective rain: **C De Michele**, M Ignaccolo

0800h **H21E-1106** POSTER An Observing System Simulator for GPM Precipitation Products in Regions of Complex Terrain: Initial development and QPE Applications in the Southern Appalachians: **J Tao**, A P Barros

0800h **H21E-1107** POSTER Enhancements to an ANN-based satellite rainfall estimation methodology: **V G Anantharaj**, M Mahrooghy, N H Younan, J V Aaestos

0800h **H21E-1108** POSTER Hydrologic evaluation of the TRMM-based multi-satellite precipitation analysis data at basin scale: **B Yong**, L Ren, Y Hong, J J Gourley

0800h **H21E-1109** POSTER Hydroclimatologic Analyses of Extreme Rainfall and Flooding in Atlanta, Georgia Using Long-Term Radar-Rainfall Datasets: **D B Wright**, J A Smith, M L Baec, G Villarini

0800h **H21E-1110** POSTER Radar rainfall estimation of stratiform winter precipitation in the Belgian Ardennes: **P Hazenberg**, H Leijnse, R Uijlenhoet

0800h **H21E-1111** POSTER Pixel-Based Very-Short-Term Precipitation Forecasting for Hydrological Application: **A Zahraei**, J J Gourley, V Lakshmanan, Y Hong, K Hsu, S Sorooshian

0800h **H21E-1112** POSTER Atmosphere-Truth Z-R Rainfall Estimates: A Fresh Approach to an Old Problem: **J F Henz**

**H21F** Moscone South: Poster Hall Tuesday

0800h Uncertainty Analysis Approaches in Hydrologic Modeling II Posters

**Presiding:** R S Teegavarapu, Florida Atlantic University; C S Pathak, South Florida Water Management; S U Senarath, SFWMD

0800h **H21F-1113** POSTER Calibration of hydrologic models using flow-duration curves: **I Westerberg**, P Younger, J Guerrero, K Beven, J Seibert, S Halldin, C Xu

0800h **H21F-1114** POSTER Analytical derivation of Horton index using a conceptual soil water balance model by cumulant expansion theory: **S Kim**, D Choi

0800h **H21F-1115** POSTER ASSESSING THE UNCERTAINTY IN WATERSHED NONPOINT SOURCE POLLUTION SIMULATIONS WITH PROBABILISTIC COLLOCATION METHOD (PCM): **Y Zheng**, W Wang

0800h **H21F-1116** POSTER Manage Short-term Flood Events and Long-term Water Needs via Reservoir Operation: A Risk Analysis Study: W Cheng, N Hsu, C Wei, W Cheng

0800h **H21F-1117** POSTER Combination of a latin hypercube sampling and of an simulated annealing method to optimize a physically based hydrological model: D Robert, I Braud, J COHARD, I Zin, M Vauclin

0800h **H21F-1118** POSTER Evaluation of scale dependent hydrologic sensitivities in the NCAR Community Land Model: **R S Singh**, N L Miller

0800h **H21F-1119** POSTER Propagation of information in a pilot-point based multi-objective calibration exercise for a surface-subsurface distributed hydrologic model: **M P Maneta**, W W Wallender

0800h **H21F-1120** POSTER Analysis of hydrogeological structure uncertainty by estimation of hydrogeological acceptance probability of geostatistical models: **D R Harp**, V V Vesselinov
0800h H21F-1121 POSTER Predicting Peak Discharge Uncertainty from Standard Methods Due To Variability in Hydrologic Characteristics: A C Wilson, R E Beighley, G E Moglen, R L Ray

0800h H21F-1122 POSTER Application of Variance-Based and Regression-Based Global Sensitivity Analysis Methods to a Distributed Parameter Hydrologic Model: T Dessalene, S U Senarath, R J Novoa

0800h H21F-1123 POSTER Evaluating the Performance of the Generalized Likelihood Uncertainty Estimation Approach on Predictive Uncertainty under Different Sampling and Behavioral Threshold Considerations: S U Senarath, R J Novoa

H21G Moscone South: Poster Hall Tuesday 0800h
Water Resources Science and Strategies for Adaptation to Climate Variability and Change I Posters (joint with A, B, GC, PA)

Presiding: M J Friedel, US Geological Survey; J J Gurdak, San Francisco State University; S McNeely, National Center for Atmospheric Research; J A Tindall, US DOI - USGS; B R Lintner, Rutgers

0800h H21G-1124 POSTER Integrated modeling of climate change and urbanization impacts on water management: E Chung, K S Lee, J Oh, J Song

0800h H21G-1125 POSTER Hindcasting 2000 years of Pacific sea and land surface temperature changes: M J Friedel

0800h H21G-1126 POSTER The fractal nature of climate change - 2000 years in retrospect: A A Esfahani, M J Friedel

0800h H21G-1127 POSTER Parameter Uncertainty Analysis of Reservoir Operating Rules for Implicit Stochastic Optimization: P Liu, J Yi, S Guo, X Xu

0800h H21G-1128 POSTER Linking weather generators and hydrological models for streamflow assessments with seasonal climate outlooks: S Tong, Y Chen, M Li, C Tung


0800h H21G-1130 POSTER Climate Change Impacts in the Upper Rio Grande Catchment: T Heikkila, T U Siegfried, S L Sellars, E Schlag.

0800h H21G-1131 POSTER Hydrologic Sensitivity to Climatic Change in Southern Wisconsin: E Murdock, K W Potter, Z Schuster

0800h H21G-1132 POSTER Optimality Conditions for A Two-Stage Reservoir Operation Problem: J Zhao, X Cai, Z Wang


0800h H21G-1134 POSTER Global water resources assessment at a sub-annual timescale: Application to climate change impact assessment: T Yamamoto, N Hanasaki, K Takahashi, Y Hijioka

0800h H21G-1135 POSTER Can climate change cause the Yellow River to dry up?: S Liang

0800h H21G-1136 POSTER Climate change trend in the tropical and Caribbean regions and its hydrological impacts: S G Setegn, A M Melesse

0800h H21G-1137 POSTER Future Global Water Resources with respect to Climate Change and Water Withdrawals: S J Murray, P Foster, C Prentice

0800h H21G-1138 POSTER Optimizing Reservoir Operation to Adapt to the Climate Change: S Madadgar, I Jung, H Moradi-khani

0800h H21G-1139 POSTER Assessing Future Water Resources: Incorporating the Influence of Climate Change and Land Use Change: M T Griffin, J S Arrigo

0800h H21G-1140 POSTER Assessing the Climate Change Impact on Rainfall IDF Curves in the Apalachicola River Basin, Florida: D Wang, S C Hagen, G Yeh, P Bacopoulos

0800h H21G-1141 POSTER Modeling Economic Impacts of Environmental Flows in California’s Yuba River Watershed: D E Rheinheimer, S Yarnell, J H Viers

0800h H21G-1142 POSTER Applicability of CS616 Soil Water Sensors for Miami-Dade County, Florida: K Koryto, K Migliaccio

0800h H21G-1143 POSTER Effects of climate variability and change on infiltration and recharge beneath natural grasslands in semiarid regions of the High Plains, USA: B C Everett, J J Gurdak, P B McMahon, B W Bruce

0800h H21G-1144 POSTER Developing Stochastic Deep Drainage Surfaces In Cox’s Creek Catchment: S Bennett, R W Vervoort, T F Bishop, Title of Team: Hydrology Research Lab

0800h H21G-1145 WITHDRAWN

0800h H21G-1146 POSTER Urban Expansion Dynamic and its Impact on Water Infiltration and Stream-flow in Huntsville City, Alabama: M F Wagaw, T Gabre, G Kebede, C Wilson, C Davis

0800h H21G-1147 POSTER Rainfall erosivity estimates from climate change multi-model, multi-scenario projections in southern Appalachian region: S Hoomehr, J S Schwartz, Y Lam, J S Fu

0800h H21G-1148 WITHDRAWN

0800h H21G-1149 POSTER Response of shallow groundwater depth to climate change and human activity in Weihai, China: S Han, Y Hu, Z Gao, S Wang, L Gao

0800h H21G-1150 POSTER Sustainable use of groundwater in Atoll Islands: M Taniguchi, S Nakada, Y UMEZAWA, H Yamano

0800h H21G-1151 POSTER Recharge response to interannual and multidecadal climate variability and implications for groundwater resources of the Central Valley aquifer, California: A M Kuss, J J Gurdak

0800h H21G-1152 WITHDRAWN

0800h H21G-1153 POSTER Development of Adaptation Technologies to a Non-Reservoir Water Resources System in Taiwan: C Lin, C Tung, T Liu

0800h H21G-1154 POSTER Recession Slope Analysis Coefficients, Low Flows, Groundwater and Precipitation Responses for Climate Change Studies: A N Sharma, V Pereira, M T Walter

0800h H21G-1155 POSTER A Plan of Water Resource Exploitation and Groundwater Recharge in West-Sout Part of Taiwan: S Huang, J Wen, C Lin, C Hsu

0800h H21G-1156 POSTER Development of sustainable groundwater extraction practices for a major superficial aquifer supporting a groundwater dependent ecosystem: K R Smettem, R Froend, M Davies, B Stock, M Martin, C Robertson, D Eamus

0800h H21G-1157 POSTER Estimating groundwater recharge on a temperate humid to semiarid volcanic island (Jeju, Korea) from water table fluctuations, CI mass balance, apparent CFC-12 ages and ‘H renewal: K B Hagedorn, A I El-Kadi, A Mair, R Whittier
**H21H** Moscone West: 3018 Tuesday 0800h Advances in Hydrologic Modeling and Prediction I (joint with A, NH)

*Presiding:* M B Smith, National Weather Service; J Demargne, NOAA/NWS/Office of Hydrologic Development; A W Wood, NOAA/NWS; N Mizukami, NOAA/NWS/OHD; V Fortin, Environment Canada, Canadian Meteorological Centre

0800h **H21H-01** Estimating and communicating hydrometeorological uncertainty in a context of operational hydrological ensemble forecasts: T Mathevet, M Ramos, J Gailhard, P Bernard, R Garçon

0815h **H21H-02** COMPARING POSTPROCESSING APPROACHES TO CALIBRATING OPERATIONAL RIVER DISCHARGE FORECASTS: T M Hopson, P J Webster, A W Wood

0830h **H21H-03** Application of a global hydrologic prediction system to the Zambezi River Basin (Invited): N Voisin, F Pappenberger, R Buizza, D P Lettenmaier

0845h **H21H-04** Evaluating hydrological ensemble predictions using a large and varied set of catchments (Invited): M Ramos, V Andreasian, C Perrin, C Loumagne

0900h **H21H-05** Hydrologic Forecasting in Mountainous Terrain (Invited): R K Hartman

0915h **H21H-06** Understanding the Dynamic Interaction between Precipitation and Distributed Watershed Model Behavior (Invited): T Wagener, P M Reed, J B Kollat, K L van Werkhoven

0930h **H21H-07** A DIFFERENT SOIL CONCEPTUALIZATION FOR THE TOPKAPI MODEL APPLICATION WITHIN THE DMIP 2 (joint with GC, PA): G Coccia, C Mazzetti, E Ortiz, E Todini

0945h **H21H-08** Improving Radar QPE’s in Complex Terrain for Improved Flash Flood Monitoring and Prediction: R Cifelli, D P Streubel, D Reynolds

**H21I** Moscone West: 3014 Tuesday 0800h Evapotranspiration I: Land Surface Exchanges and the Atmospheric Boundary Layer (joint with A, PA, B)

*Presiding:* E Bou-Zeid, Princeton University; M B Parlange, EPFL - Lausanne; M Chamecki, Pennsylvania State University

0800h **H21I-01** Investigating impacts of soil moisture and atmospheric stability on land-ABL interactions and cloud development (Invited): S A Margulis, H J Huang

0815h **H21I-02** On land surface modeling in large-eddy simulations of atmospheric boundary layers: C van Heerwaarden, E Bou-Zeid, J Vila-Guerau Arelano

0830h **H21I-03** The Effect of Energy Flux Partitioning on the Atmospheric Boundary Layer Height: C W Higgins, T Mimouni, D F Nadeau, E Pardyjak, M B Parlange

0845h **H21I-04** Wind sheltering of lakes and wetlands: the effect of stability on turbulent canopy wakes and evaporation: C D Markfort, F Porte-Agel, H G Stefan

0900h **H21I-05** A large-eddy simulation study of the impact of different land-atmosphere coupling schemes on the dynamics of the nocturnal boundary layer (Invited): J R Stoll, N D Shingleton, F Bosveld

0915h **H21I-06** Angle-of-Arrival Fluctuations of Light Propagating through the Intermittent Nocturnal Atmospheric Surface Layer: A Muschinski, K Hu, L M Root, S Tikhule, S N Wijesundara

0930h **H21I-07** Thermal circulation patterns and turbulent fluxes along steep mountain slopes: D F Nadeau, E Pardyjak, C W Higgins, H Huwald, F Baerembold, M B Parlange

0945h **H21I-08** Stability Effects on Coherent structures in the Unstable Atmospheric Surface Layer: D Li, E Bou-Zeid

**H21K** Moscone West: 3016 Tuesday 0800h High-Resolution Hydrogeophysical Characterization of Soils and Aquifers From Microscale to Field Scale II (joint with NS)

*Presiding:* C B Graham, Purdue University; K L Kuhlman, Sandia National Laboratories; J W Bridge, The University of Sheffield; H Vereecken, Forschungszentrum Julich

0800h **H21K-01** Beyond the Black Box: Coupling x-ray tomographic imaging of multi-phase flow processes to numerical models and traditional laboratory measurements (Invited): D Wildenschild, M L Porter, M G Schaap, V Joekar-Niasar, P Schjonning, L Wollesen de Jonge, P Moldrup

0817h **H21K-02** Capabilities and limitations of neutron imaging for studying soil-root system (Invited): A B Moradi

0834h **H21K-03** Geophysical imaging to inform hyporheic flow and solute transport dynamics in 2- and 3-dimensions (Invited): A S Ward, M Fitzgerald, T J Voltz, M N Gooseff, K Singh

0851h **H21K-04** WITHDRAWN

0908h **H21K-05** A saline pulse test method monitored with the self-potential method to characterize hydraulic connectivity (Invited): A Revil

0925h **H21K-06** Estimating complex dielectric permittivity of soils from spectral ratio analysis of swept frequency (FMCW) ground-penetrating radar data (Invited): J H Bradford, H Marshall

0942h **H21K-07** Present and Future Hydrogeophysics: New Ways of Looking at Hydrology (Invited): T A Ferre
Earth and Space Science Informatics

IN21A Moscone South: Poster Hall Tuesday 0800h Information Fusion: Issues, Barriers, and Approaches Posters (joint with A, B, GC, H, NH, PA)

Presiding: G Percivall, Open Geospatial Consortium; S Nativi, CNR & Univ. Florence; P A Fox, Rensselaer Polytechnic Inst.; S J Cox

0800h IN21A-1318 POSTER Experiences and Lessons Learned in Information Fusion Development Collaboratives (Invited): D K Arctur, G Percivall

0800h IN21A-1319 WITHDRAWN

0800h IN21A-1320 POSTER Data Fusion and Visualization with the OpenEarth Framework (OEF): D R Nadeau, C Baru, M J Fouch, C J Crosby

0800h IN21A-1321 POSTER A Systematic Approach for Climate Change Decision Support: S Kumar, S J Cantrell, G J Higgins, F VanWijngaarden

0800h IN21A-1322 POSTER Geospatial Data Fusion and Multigroup Decision Support for Surface Water Quality Management: A Y Sun, O Osidele, R T Green, H Xie

0800h IN21A-1323 WITHDRAWN

0800h IN21A-1324 POSTER Automating Data Submission to a National Archive: T T Work, C L Chandler, R C Groman, M D Allison, S R Gegg, Title of Team: The Biological and Chemical Oceanography Data Management Office

0800h IN21A-1325 POSTER ADVANCING INTERDISCIPLINARY APPROACHES FOR RESEARCH AND APPLICATIONS FOR FORESTRY, BIODIVERSITY AND DROUGHT: J S Pearlman, M Craglia, F Bertrand, S Nativi, G Gaigalas, G Dubois, S Niemeyer, S Fritz

0800h IN21A-1326 POSTER Information Fusion Issues in the UK Environmental Science Community: J R Giles

0800h IN21A-1327 POSTER A Publish-and-Subscribe System for Publicizing Earth Science Information and Services: C Peng

IN21B Moscone South: Poster Hall Tuesday 0800h Model Fusion I Posters (joint with GC, PA)

Presiding: J R Giles, British Geological Survey; H Kessler, British Geological Survey

0800h IN21B-1330 POSTER Integrated OpenMI Modeling of a Surface Water - Lake - Groundwater system and a management framework of the overexploited aquifer under Climate Change: N Mylopoulos, A Loukas, P Sidiropoulos, L Vasilidis

0800h IN21B-1331 POSTER Combining disparate data for decision making: M E Gettings

0800h IN21B-1332 POSTER MICROWAVE BRIGHTNESS TEMPERATURE SIMULATION AT C-BAND IN TIBET PLATEAU BASED ON PHYSICAL MODELS—A CASE STUDY IN MAQU AREA: Y Li, L Zhang, L Jiang, L Chai

0800h IN21B-1333 POSTER Reducing the invasiveness of modelling frameworks: G Donchyts, F Baart

0800h IN21B-1334 POSTER MODEL FUSION TOOL - THE OPEN ENVIRONMENTAL MODELLING PLATFORM CONCEPT: H Kessler, J R Giles

0800h IN21B-1335 POSTER Evaluation of a Wavelet Data Compression Technique for High-Resolution Earth System Models: N Wang, J Bao, J Lee

0800h IN21B-1336 POSTER Coupling urban growth scenarios with nearshore biophysical change models to inform coastal restoration planning in Puget Sound, Washington: K B Byrd, J Kreider, W Labiosa

0800h IN21B-1337 POSTER Computational Challenges in Integrated Regional Earth System Modeling (iRESM): K Kleese van Dam, K A Hibbard, I Gorton, Y Liu

IN21C Moscone South: Poster Hall Tuesday 0800h Uncertainty, Error, and Quality of Observational Data I Posters (joint with A, NG, GC, OS, P)

Presiding: R G Raskin, Jet Propulsion Laboratory; A J Braverman, Jet Propulsion Laboratory; S R Sain, NCAR

0800h IN21C-1338 POSTER Nested-observation error covariance matrix in 1dVAR approach: C Park, A K Heidinger

0800h IN21C-1339 POSTER Objective Assessment of Tropospheric Airborne In-situ Measurement Uncertainties: A Thornhill, G Chen, M M Kleb

0800h IN21C-1340 POSTER Integrating stations from the National Gravity Database into a local GPS-based land gravity survey: T Shoberg, P Stoddard

0800h IN21C-1341 POSTER Investigating Biases When Quantifying Aerosol-Cloud-Precipitation Interactions: H Duong, A Soroshian, G Feingold

0800h IN21C-1342 POSTER Multi-Resolution Variational Analysis of Sea Surface Temperature and Uncertainty Estimation: T M Chin, J Vazquez, E M Armstrong

0800h IN21C-1343 POSTER Increasing the Accuracy of MODIS Snow Product using Quantitative Restoration for MODIS Band 6 on Aqua: G Bonev, I Gladkova, M Grossberg

All information is current as of November 12, 2010
Natural Hazards

NH21A Moscone South: Poster Hall Tuesday 0800h
Geophysical Hazards and Social/Ecological Vulnerabilities II Posters (joint with PA, OS, GC)

Presiding: B G McAdoo, Vassar College

0800h NH21A-1360 POSTER NATURAL AND MAN-MADE HAZARDS IN THE CAYMAN ISLANDS: D A Novelo-Casanova, G Suarez
0800h NH21A-1391 POSTER A socioeconomic assessment of climate change-enhanced coastal storm hazards in the U.S. Pacific Northwest: H M Baron, P Ruggiero, E Harris
0800h NH21A-1392 POSTER Social vulnerability analysis of earthquake risk using HAZUS-MH losses from a M7.8 scenario earthquake on the San Andreas fault: G R Noriega, L Grant Ludwig
0800h NH21A-1393 POSTER Tsunami risk zoning in south-central Chile: M Lagos
0800h NH21A-1394 POSTER A comparison of geochemical characteristics of tsunami sediments with rocks, soils and marshy sediments in Sri Lanka: D JAYAWARDANA, H Ishiga, A Pitawala
0800h NH21A-1395 POSTER PREDICTION OF TSUNAMI INUNDATION IN THE CITY OF LISBON (PORTUGAL): M Baptista, J Miranda, R Omira, J Catalao Fernandes
0800h NH21A-1396 POSTER Natural Reworking of Tsunami Evidence in Chandipur Beach, India: T Ghosh, A Mukhopadhyay
0800h NH21A-1398 POSTER ON A MONITORING NETWORK OF TERRITORY ELEMENTS FOR EMERGENCY MANAGEMENT: A Teramo, A Marino, D Termini, M Teramo, C Saccà, M Romeo, D De Domenico, D Lupò
0800h NH21A-1399 POSTER Processing of the Tsunami Catalogue for Martinique Island: J Roger, F Accary
0800h NH21A-1400 POSTER Social creation of Risk: Flood and Land Subsidence in Guadalajara Metropolitan Zone, Mexico (case study): P F Zarate-del Valle, D Vargas del Rio
0800h NH21A-1401 POSTER The Effect of El Niño on Agricultural Water Balances in Guatemala: D Pedreros, J Michaelsen, L V Carvalho, C C Funk, G J Husak

Nonlinear Geophysics

NG21A Moscone South: 308 Tuesday 0800h
Multiphase Flow: An Interdisciplinary Challenge I (joint with V, H)

Presiding: J Suckale, MIT; I L Belien, University of Oregon; K V Cashman, University of Oregon; R Juanes, Massachusetts Institute of Technology

0800h NG21A-01 Directional solidification of a binary alloy in a Hele-Shaw cell: instability, convection, and chimney formation (Invited): R F Katz, A Anderson, M G Worster, R E Goldstein
0815h NG21A-02 The influence of particle shape and volume fraction on the rheology of crystal-bearing magma: S Mueller, E W Llewellyn, H M Mader
0830h NG21A-03 Explosive Fragmentation Criteria and Velocities for Vesicular Magma: M J McGuinness, B Scheu, A C Fowler
0845h NG21A-04 Convection chimneys in three-phase magmas (Invited): A Rust, A C Fowler, M J McGuinness, S Mitchell
0900h NG21A-05 The Askja volcano eruption in 1875 - where did all the water come from? (Invited): S Geiger, M Lupi, R Carey, T Thordarson, B F Houghton
0915h NG21A-06 Pore-scale interfacial dynamics during gas-supersaturated water injection in porous media – on nucleation, growth and advection of disconnected fluid phases (Invited): D Or, M Ioannidis
0930h NG21A-07 Numerical simulation of diagenetic alteration and its effect on residual gas in tight gas sandstones: M Prodanovic, S L Bryant, J S Davis
0945h NG21A-08 Two-phase gravity currents in geological CO2 storage: J A Neufeld, M Golding, M A Hesse, H E Huppert
0800h  **NH21B-1403 POSTER** Forecasting Winter Storms in the Sierra: A Social Science Perspective in Keeping the Public Safe without Negatively Impacting the Local Tourism Industry: R Milne, J Wallmann, D T Myrick

0800h  **NH21B-1404 POSTER** Using Regional Snowfall Indices to Evaluate Climatological Trends in High-Impact Snow Storms: M R Gerbush, D A Robinson, T W Estilow, M F Squires, J H Lawrimore, R R Heim

0800h  **NH21B-1405 POSTER** Development and Application of a Regional Snowfall Impact Scale: J H Lawrimore, M F Squires, D A Robinson

0800h  **NH21B-1406 POSTER** Development a GIS Snowstorm Database: M F Squires

---

**NH21C Moscone South: Poster Hall Tuesday 0800h**

**The Uncertainty of Future Sea Level Rise: Bridging Science and End Users II Posters (joint with OS, C, PA, GC)**

*Presiding:* G L Geernaert, W T Pfeffer, University of Colorado; D Behar, San Francisco Public Utilities Commission; R Bindschadler, NASA; H Plag

0800h  **NH21C-1407 POSTER** Parametric uncertainty in the response of the Greenland Ice Sheet to future warming: P J Applegate, N Kirchner, E J Stone, R Greve

0800h  **NH21C-1408 POSTER** Moving beyond ice loss scenarios for Antarctica: C M Little, M Oppenheimer, N Urban

0800h  **NH21C-1409 POSTER** Is there a societal need for decadal local sea level forecasts?: H Plag

0800h  **NH21C-1410 WITHDRAWN**

0800h  **NH21C-1411 POSTER** Regional mean Sea Level Changes in the German Bight in the 20th Century: F Albrecht, T Wahl, J Jensen, R Weisse

0800h  **NH21C-1412 POSTER** Mapping developed coastal flood zones for climate change adaptation planning: Accounting for tides, waves, sea level rise and flood defense structures: T Gallien, J Schubert, Y Poon, B F Sanders

0800h  **NH21C-1413 POSTER** Observed patterns of sea level change in the German Bight related to global scale sea level variations: T Wahl, F Albrecht, J Jensen, R Weisse

0800h  **NH21C-1414 POSTER** The influence of uncertainty in past sea level reconstructions on 21st century mean sea level projections: T P Phillips, B D Hamlington, R Nerem, R R Leben

0800h  **NH21C-1415 POSTER** NOAA’S ROLE IN THE MONITORING AND PREDICTION OF SEA-LEVEL RISE: HISTORICAL DATASETS AND SCIENTIFIC GAPS: D H Levinson, P M Scholz

0800h  **NH21C-1416 POSTER** The thermosteric component of sea level change for the 0-2000 m layer, 1955-2009: S Levitus

0800h  **NH21C-1417 POSTER** Assessing coastal vulnerability in light of a changing climate: a multi-hazard, multi-timescale approach: E Harris, P Ruggiero, H Baron

0800h  **NH21C-1418 POSTER** The Cool Hand Luke Effect: Failure to Communicate Effectively (Invited): M A Davidson

0800h  **NH21C-1419 POSTER** How to place your bet on the future coastal environment (Invited): N G Plant, E R Thieler, B T Gutierrez

0800h  **NH21C-1420 WITHDRAWN**

---

**Ocean Sciences**

**OS21A Moscone South: Poster Hall Tuesday 0800h**


*Presiding:* R Pedersen, University of Bergen; D S Kelley, University of Washington; T M Shank, Woods Hole Oceanographic Institution

0800h  **OS21A-1468 POSTER** Dodo Field and Solitaire Field: Newly Discovered Hydrothermal Fields at the Central Indian Ridge: K Tamaki, Title of Team: Shipboard scientists of YK09-13 Leg1 Cruise

0800h  **OS21A-1469 POSTER** Cameras on the NEPTUNE Canada seafloor observatory: Towards monitoring hydrothermal vent ecosystem dynamics: K Robert, M Matabos, J Sarrazin, P Sarradin, R W Lee, K Juniper

0800h  **OS21A-1470 POSTER** Long-term tilt and acceleration data from the Logatchev Hydrothermal Vent Field, Mid-Atlantic Ridge, measured by the Bremen Ocean Bottom Tiltmeter: H W Villingier, M Fabian

0800h  **OS21A-1471 POSTER** Observation of hydrothermal flows with acoustic video camera: M Mochizuki, A Asada, K Tamaki, Title of Team: Scientific Team of YK09-13 Leg 1

0800h  **OS21A-1472 POSTER** 3D time-dependent Modeling of Hydrothermal Plumes: Y Tao, A Koschinsky, S Rosswog, M Brüggen

0800h  **OS21A-1473 POSTER** Middle Valley in perspective: New outlooks from changes in local hydrothermal venting: E K Ingerbytzien, K Becker, E E Davis, S Hulme, C G Wheat

0800h  **OS21A-1475 POSTER** Catalysis of Methane Production in Serpentinitization Systems: L Jones, C Oze, J Goldsmith, R J Rosenbauer

0800h  **OS21A-1476 POSTER** Phase equilibria in the FeO-Fe$_2$O$_3$-NiO-H$_2$O-HCl system: An experimental study with implications for the stability of Ni-bearing phases at ultramafic-hosted hydrothermal systems: R H Hoover, D Foustoukos

0800h  **OS21A-1477 POSTER** Magnesium-hydroxide-sulfate-hydrate formation at 200°C: Implications for sulfur fixation at the Lost City hydrothermal field: N G Grozeva, D D Sylwerson, W E Seyfried

0800h  **OS21A-1478 POSTER** Fluorescence sensing system for seafloor massive sulfides: T Yamazaki, D Okanishi, H Nagano, N Nakatani, R Arai

0800h  **OS21A-1479 POSTER** Geophysical survey of Hydrothermal vents in the Lau Basin: C Kim, E Jeong, C Park, H Kim, H Joo

0800h  **OS21A-1480 POSTER** Fe stable isotope fractionation in modern and ancient hydrothermal Fe-Si deposits: K Moeller, R Schoenberg, I H Thorseth, L Øvreås, R Pedersen

0800h  **OS21A-1481 POSTER** Loki’s Castle: A sediment-influenced hydrothermal vent field at the ultra-slow spreading Arctic Mid-Ocean Ridge: T Baumberger, G L Frueh-Green, R Pedersen, I H Thorseth, M D Lilley, K Moeller

0800h  **OS21A-1482 POSTER** Barite chimneys from two hydrothermal sites along the slow-spreading Arctic Ridge system: Initial isotope and mineralogical results: B Eickmann, M A Van Zuilen, I H Thorseth, R Pedersen

0800h  **OS21A-1483 POSTER** Mineralogy and Geochemistry from Trollveggen Vent Field Chimneys and Metalliferous Sediments (Mohns Ridge, West Jan Mayen Fracture Zone at 71°N): ÁGATA S Dias, I Cruz, R Fonseca, F J Barriga, R Pedersen

All information is current as of November 12, 2010
OS21B Moscone South: Poster Hall Tuesday 0800h

Dynamics and Forecasting Western Boundary Currents I

Presiding: H E Hurlburt, Naval Research Laboratory; J G Richman, Naval Research Laboratory; H E Hurlburt, Naval Research Laboratory; N Usui, Meteorological Research Institute; H Tsujino, Meteorological Research Institute; N Usui, Meteorological Research Institute

0800h OS21B-1490 POSTER THE ENERGETICS OF THE GLOBAL OCEAN: THE IMPACT OF MODEL RESOLUTION AND DATA ASSIMILATION: J G Richman, P J Hogan, P G Thoppil

0800h OS21B-1491 POSTER Mean transport structure of the deep western boundary current east of Abaco: Model results and observations: X Xu, H E Hurlburt

0800h OS21B-1492 POSTER High-resolution simulations of the western boundary current and associated atmospheric variability in a Coupled Regional Climate Model of the Atlantic: M Li, J Hsieh, P Chang, R Saravanan

0800h OS21B-1493 POSTER Long-Term Observations of a Coastal Countercurrent on the Southeast Florida Shelf: A Soloviev

0800h OS21B-1494 POSTER Kuroshio Pathways in a Climatologically-Forced Model: E M Douglass, S R Jayne, F O Bryan, S Peacock, M E Maltrud

0800h OS21B-1495 POSTER Effects of Stratification on the Kuroshio Path Variation Studied by a Nested-Grid OGCM: M Kurogi, H Hasumi, Y Tanaka

0800h OS21B-1496 POSTER A long-term hindcast of the Kuroshio using a high resolution GC: H Tsujino, S Nishikawa, K Sakamoto, G Yamanaka

0800h OS21B-1497 POSTER Estimation of strait transport in the East China Sea: J Moon, N Hirose, N Usui, H Tsujino

0800h OS21B-1498 POSTER Dynamics of a "mini" western boundary current, the East Korea Warm Current in the Japan/East Sea: P J Hogan, H Hurlburt

0800h OS21B-1499 POSTER Adjoint sensitivity studies of coastal upwelling at northeast of Taiwan: G Gopalakrishnan, B D Cornuelle, I Hoteit

0800h OS21B-1500 POSTER Validation, Verification, and Exploitation of an Ocean Model for Decision Support: R E Stone, R T Tokmakian

0800h OS21B-1501 WITHDRAWN

0800h OS21B-1502 POSTER A Real-time Operational Global Ocean Forecast System: A Mehra, I Rivin

OS21C Moscone South: Poster Hall Tuesday 0800h

Integrated Studies at Oceanic Spreading Centers: Linking Spreading Center Processes Across Disciplinary Boundaries III Posters (joint with B, T, V)

Presiding: L G Montesi, University of Maryland

0800h OS21C-1503 POSTER Boron contents and isotopic compositions of the hydrothermally altered oceanic crust from the Troodos ophiolite, Cyprus: S Matsukura, K Yamaoka, T Ishikawa, H Kawahata

0800h OS21C-1504 POSTER Depth profiles of trace elements and stable isotopic compositions (O, H, B, Sr) of the hydrothermally altered oceanic crust in the Oman ophiolite: K Yamaoka, T Ishikawa, H Kawahata

0800h OS21C-1505 POSTER Consequences of off-axis melt delivery at the Moho: Sr and Nd isotopic results from the Oman ophiolite: M Nicolle, D Bosch, L C Reisberg, D Joussetel, A Shepherd

0800h OS21C-1506 POSTER Linking Sr systematics to the cooling of the lower oceanic crust – evidence from the geochemistry of oceanic gabbros: T M Kirchner, K M Gillis

0800h OS21C-1507 POSTER Fractional crystallization and replenishment of the magma chamber at the East Pacific Rise 9°50′ N: R C Horne, L B Hebert, L Liu, R P Lowell

0800h OS21C-1508 POSTER Modeling the Hydrothermal Convection Cell at East Pacific Rise 9°50′N: Focus on Recharge: A Farough, R P Lowell

0800h OS21C-1509 POSTER Modeling of 3D crustal shear structures from compliance measurements near East Pacific Rise 9°50′: Y Zha, S L Nooner, W C Crawford, S C Webb

0800h OS21C-1510 POSTER Relationship between ridge segmentation and Moho transition zone structure from 3D multichannel seismic data collected over the fast-spreading East Pacific Rise at 9°50′N: O Aghaei, M R Nedimovic, J Canales, H D Carton, S M Carbotte, J C Mutter

0800h OS21C-1511 POSTER Axial magma chamber segmentation along the East Pacific Rise from Clipperton to Siqueros Fracture Zone: M Marjanovic, S M Carbotte, H D Carton, J C Mutter, M R Nedimovic, J Canales

0800h OS21C-1512 POSTER Upper Crustal Structure above Off-axis Magma Lenses at RIDGE-2000 East Pacific Rise Integrated Study Site from 3D Multichannel Seismic Reflection Data: S Han, S M Carbotte, H D Carton, K R Newman, J Canales, M R Nedimovic

0800h OS21C-1513 POSTER 3D multi-channel seismic imaging of melt-rich lenses beneath and off the East Pacific Rise Integrated Study Site: M Xu, J Canales, H D Carton, S M Carbotte, M R Nedimovic, J C Mutter

0800h OS21C-1514 POSTER Three-dimensional seismic reflection images of axial melt lens and seismic layer 2A between 9°42′N and 9°57′N on the East Pacific Rise: H D Carton, S M Carbotte, J C Mutter, J Canales, M R Nedimovic, O Aghaei, M Marjanovic, K R Newman
All information is current as of November 12, 2010
**OS21E** Moscone South: Poster Hall Tuesday 0800h

**Prediction of Multiscale/Multiphysics Coastal Ocean Flows Using Model Coupling Approaches Posters** (joint with NG)

**Presiding:** H Tang, CCNY; T J Campbell, Naval Research Laboratory

0800h **OS21E-1547** POSTER Water Quality Model ROMS-ICM; Development and Calibration: C S Kim, H Lim, C F Cerco

0800h **OS21E-1548** WITHDRAWN

0800h **OS21E-1549** POSTER Dynamics of Low-frequency fluctuations in San Francisco Bay due to upwelling: S Subbaya, O B Fringer

0800h **OS21E-1550** POSTER Applications of two-way nested models for ocean forecasts: Y Lu


0800h **OS21E-1552** POSTER Coastal Atmospheric Circulation Around An Idealized Cape During Wind-Driven Upwelling Studied From A Coupled Ocean-Atmosphere Model: N Perlin, E D Skyllingstad, R M Samelson

0800h **OS21E-1553** POSTER Hybrid Approaches for Simulation of Coastal Hydrodynamics --- Coupling of FVCOM/CFD and FVCOM/Shallow Water Model: H Tang, X Wu, W Cheng, S Skraats

0800h **OS21E-1554** POSTER A real-time ocean prediction experiment downscaled to Japanese coastal region: S Nakada, N Hirose, T Senjyu, T Tsuji, N Okei

0800h **OS21E-1555** POSTER A real-time, Coupled, Refined Forecasting System for Coastal Prediction: B N Armstrong, J C Warner, R P Signell

---

**OS21F** Moscone South: Poster Hall Tuesday 0800h

**Refining the XBT Data Set: Implications for Global Climate Posters** (joint with A, G, GC)

**Presiding:** J M Lyman, JIMAR/PMEL; J K Willis, Jet Propulsion Laboratory; T Wong, NASA Langley Research Center

0800h **OS21F-1556** POSTER Effects of different XBT corrections on historic and recent ocean heat content calculations (Invited): T Boyer, S Levitus, J I Antonov

0800h **OS21F-1557** WITHDRAWN

0800h **OS21F-1558** POSTER Exploring the impact of model and data uncertainties in the detection and attribution of upper-ocean warming (Invited): P J Gleckler, B D Santer, C M Domingues, D W Pierce, T P Barnett, K M Achutaraao, J A Church, M Ishii, K E Taylor

0800h **OS21F-1559** POSTER Tracking the Flow of Energy in the Climate System with the NCAR CCSM4 (Invited): J Fasullo, K E Trenberth

0800h **OS21F-1560** POSTER Interannual Variability of Top-of-atmosphere Global Radiation Budget during NASA EOS/Terra period: Connection to Ocean Science: T Wong, N G Loeb, D R Doelling

0800h **OS21F-1561** POSTER Impact of XBT Depth Bias Corrected Observations on Decadal Climate Prediction with a Coupled Climate Model: S Yasunaka, M Ishii, M Kimoto, T Mochizuki, H Shiogama

0800h **OS21F-1562** POSTER Application of Pseudo Salinity Profiles to the Ensemble Coupled Data Assimilation System: Y Chang, S Zhang, A J Rosati

0800h **OS21F-1563** POSTER XBTs and the Earth’s Energy Balance: Computing Ocean Heat Content during the Satellite Era: J K Willis

0800h **OS21F-1564** POSTER The impact of recent XBT corrections on global upper ocean heat content: J M Lyman

0800h **OS21F-1565** POSTER Assessing XCTD Fall Rate Errors using Concurrent XCTD and CTD Profiles in the Southern Ocean: J Millar, S T Gille, J Sprittall, M Frants

0800h **OS21F-1566** POSTER A Study of Expendable Bathythermograph (XBT) Temperature and Depth Biases From XBTs Manufactured in the Early 2000s and Six XBT Data Acquisition Systems: M O Baringer, R L Molinari, G J Goni, D P Snowden

---

**OS21G** Moscone West: 3009 Tuesday 0800h

**Lessons Learned From the Deepwater Horizon Oil Spill: Biological and Chemical Oceanography I** (joint with B, PA)

**Presiding:** R C Highsmith, University of Mississippi; S B Joye, University of Georgia

0800h **OS21G-01** The Discovery of Deep Oil Plumes at the Deepwater Horizon Oil Spill Site (Invited): A R Diercks, V L Asper, R C Highsmith, M Woolsey, S E Lohrenz, K McLetchie, A Gossett, M Lowe III, D Joung, L McKay

0815h **OS21G-02** Long-Lived, Sub-Surface Layers of Toxic Oil in the Deep-Sea: A Molecular Organic and Isotopic Geochemical Approach to Understanding their Nature, Molecular Distribution, Origin and Impact to the Northern Gulf of Mexico: D J Hollander, K H Freeman, G Ellis, A F Diefendorf, E B Peebles, J Paul

0830h **OS21G-03** Using Optical Plume Velocimetry to Estimate the Volume of Oil Released From the 2010 Gulf of Mexico Leak: T J Crone, M Tolstoy

0845h **OS21G-04** A collaborative report on the synthesis of subsurface data from the Deepwater Horizon response effort: A R Parsons, S L Cross, Title of Team: Joint Analysis Group (JAG) for Surface and Sub-Surface Oceanography, Oil and Dispersant Data

0900h **OS21G-05** The Detection of Elevated Methane Concentration Indicate the Presence of Deep-Water Plumes Northwest of the DWH Site: K G Sleeper, R Bell, T Short, J Chanton, R Wilson, M D’Emidio, L Macelloni

0915h **OS21G-06** Methane Flux to the Atmosphere from the Deepwater Horizon Oil Leak: S A Yvon-Lewis, L Hu, J D Kessler, F Garcia Tigreros, E W Chan, M Du

0930h **OS21G-07** Fluorescence characteristics of oil during the Deepwater Horizon oil spill: P G Coble, R N Conmy, M Wood, K Lee, P Kepkay, Z Li

0945h **OS21G-08** Trace element distributions in waters affected by the Deepwater Horizon oil spill: D Joung, A M Shiller

---

**OS21H** Moscone West: 3007 Tuesday 0800h

**Submarine Slideslides: Characterization, Processes, and Their Sedimentary Record II** (joint with EP, NH)

**Presiding:** R Urgeles, Passeig Maritim de la Barceloneta; D C Mosher, J D Chaytor, U.S. Geological Survey; M Strasser, MARUM, University of Bremen

0800h **OS21H-01** Mass-transport deposits and the advantages of a real three-dimensional perspective (Invited): L G Moscardelli, L J Wood

0815h **OS21H-02** Case Studies of Massive Gravity Slides Imaged in 3D Seismic Volumes: Passive Margin and Basinal Settings (West Africa and Northwest Europe): U K Benjamin, A N Le, A P Oluboyo, D H Irving, M Huisse

0830h **OS21H-03** 3D seismic interpretation of MTDs in the Adriatic Basin (Italy) and comparison with modern examples: G Dalla Vallee, F Trincardi, F Gamberi, P Rocchini, A Errera, L Baglioni
0845h OS21H-04 Characteristics of tsunamis generated by 3D deformable granular landslides: F Mohammed, H M Fritz, B McFall
0900h OS21H-05 Landsliding as the progressive growth of a slipping region: Initiating dynamic rupture propagation by local pore-pressure increase and its potential for arrest: R C Viesca-Falguères, J R Rice
0915h OS21H-06 The Relationship of Sediment Dilution And Pore Pressure Dissipation to Slope Failure Styles During Breaching: Y You, P B Flemings, D C Mohrig
0930h OS21H-07 The effect of shearing rate and slope angle on the simple shear response of marine clays: G Biscontin, C Rutherford
0945h OS21H-08 Sliding-surface-liquefaction of sand-dry ice mixture and submarine landslides: H Fukuoka, A Tsukui

Planetary Sciences

P21A Moscone South: Poster Hall Tuesday 0800h Interiors of Terrestrial Planets and Super-Earth Exoplanets I Posters (joint with DI)

Presiding: J P Lowman, University of Toronto

0800h P21A-1577 POSTER Modeling the Internal Structure of Mars Using Normal Mode Relaxation Theory: T M Pithawala, R R Ghent, B G Bills
0800h P21A-1578 POSTER Mantle plume interactions and the spacing of Tharsis and Elysium on Mars: I Rose, M Manga
0800h P21A-1579 POSTER Investigation of the Hydros Melting of the Early Martian Mantle: A Pommier, T L Grove
0800h P21A-1580 POSTER In situ X-ray observation of melting temperature of FeS-H system under high pressure: Implications for the core of Ganymede: Y Shibazaki, E Ohtani, H Terasaki, R Tateyama, T Sakamaki, T Tsuchiya, K Funakoshi, Y Higo
0800h P21A-1581 POSTER Possible magnetic field contributions generated in oxides in Super Earths: W J Nellis
0800h P21A-1582 POSTER Thermodynamic properties, melting temperature and viscosity of the mantles of super Earths: V Stamenkovic, T Spohn, D Breuer
0800h P21A-1583 POSTER Ab initio melting curve of iron at extreme pressures: implications for exoplanets’ cores: J Bouchez, G Morard, D C Valencia, S Mazevet, F J Guyot
0800h P21A-1584 POSTER Post-pyrite transition in SiO2: K Ho, S Wu, K Umemoto, R M Wentzcovitch, M Ji, C Wang
0800h P21A-1585 POSTER Fluid dynamics in a librating triangular ellipsoidal planet: K Zhang, K Chan, X Liao
0800h P21A-1586 POSTER The Onset of Plate Tectonics on Super-Earths Using a Damage Rheology: B J Foley, D Bercovici, W Landuyt
0800h P21A-1588 POSTER The effects of mantle compressibility on mantle dynamics, magmatism and degassing for super-Earths: X Liu, S Zhong
0800h P21A-1589 POSTER Coupled thermal- and orbital-evolution of close-in super Earths with convective regulated tidal dissipation inside it: C Tachinami, D A Yuen
0800h P21A-1590 POSTER The expected interior and surface environment of CoRoT-7b: R Ziethe, P Wurz, H Lammer
0800h P21A-1591 POSTER Tidally heated compressible mantle convection in planets and moons: J Besserer, G Choblet, G Tobie, M Behounkova, O Cadek, A Mosquet
0800h P21A-1592 POSTER Tidally-induced thermal runaway on extrasolar Earth: Impact on habitability: M Behounkova, G Tobie, G Choblet, O Cadek
0800h P21A-1593 POSTER Mantles of terrestrial planets immediately following magma ocean solidification: A L Scheinberg, L T Elkins-Tanton, S Zhong, E Parmentier
0800h P21A-1594 POSTER Global constraints to the properties of convection-driven magnetic fields in Super Earths: J J Zuluaga, P A Cuartas Restrepo
0800h P21A-1595 POSTER Spherical wavelet analysis of gravity and topography of the terrestrial planets: P Audet

P21B Moscone South: Poster Hall Tuesday 0800h The Shape of Things to Come: Using Topography to Investigate the Evolution of Outer Solar System Satellites I Posters

Presiding: L M Prockter, Applied Physics Lab; G Patterson, Johns Hopkins University Applied Physics Laboratory

0800h P21B-1598 POSTER The topography of chaos terrain on Europa: G Patterson, L M Prockter, P Schenk
0800h P21B-1599 POSTER The Morphology of Europa’s Ridges Examined in a Detailed Topographic and Kinematic Survey: C E Coulter, S A Kattenhorn
0800h P21B-1600 POSTER Rheological constraints on ridge formation on icy Satellites: M L Rudolph, M Manga
0800h P21B-1601 POSTER Covert Contraction on Ganymede: Cyclic Tectonic Inversion of Extensional Faults to Accommodate Crustal Contraction: D W Sims, A P Morris
0800h P21B-1602 POSTER Fault Scarp Offsets and Fault Population Analysis on Dione: S Tarlow, G C Collins
0800h P21B-1603 POSTER Shape and Topography of Saturn’s Satellites from Imaging Data: R W Gaskell, N Mastrodemos, B Rizk
0800h P21B-1604 POSTER Global Topography of Titan from Cassini RADAR Data (Invited): R D Lorenz, Title of Team: Cassini RADAR Team
0800h P21B-1605 POSTER Shapes and Gravitational Fields of Two- Layer Maclaurin Spheroids: Application to Planets and Satellites: G Schubert, K Zhang, D Kong, J D Anderson, R Helled

P21C Moscone South: 306 Tuesday 0800h The Amazing Nature, Origin, and Evolution of Outer Planet Satellites I (joint with SM, C)

Presiding: B J Buratti, JPL; C J Hansen, JPL; A R Hendrix, JPL/Caltech; K K Khurana, University of California at Los Angeles

0800h P21C-01 Formation of the Jovian and Saturnian Satellite Systems (Invited): R M Canup
0815h P21C-02 A refined model of Ganymede’s internal magnetic field (Invited): X Jia, M G Kwelston, K K Khurana, R J Walker

All information is current as of November 12, 2010
**Public Affairs**

**PA21A Moscone South: Poster Hall Tuesday 0800h**


*Presiding: S Petrov, AGU*

- **0800h PA21A-1634** WITHDRAWN
- **0800h PA21A-1637** POSTER A bottom up approach for engineering catchments through sustainable runoff management: M Wilkinson, P F Quinn, J Jonczyk, S Burke

**PA21B Moscone South: Poster Hall Tuesday 0800h**

*Institutional Support for Science and Scientists in an Age of Public Scrutiny I Posters (joint with GC, H, B, NH, ED)*

*Presiding: F Grifo, Union of Concerned Scientists; J M Gulledge, Pew Center on Global Climate Change; A H Teich, American Association for the Advancement of Science; K S White, AAAS*

- **0800h PA21B-1639** POSTER Science, Society and Policy: K S White, A H Teich
- **0800h PA21B-1640** WITHDRAWN
- **0800h PA21B-1641** POSTER Maintaining Credibility with the Media and Public in Uncertain Times: D Hosansky
- **0800h PA21B-1642** POSTER NEON: Transforming Environmental Data into Free, Open Information: B Wee

**PA21C Moscone South: Poster Hall Tuesday 0800h**

*Priorities and Pitfalls: Pathways for Effective Science Communication I Posters (joint with B, ED, GC, NH, H)*

*Presiding: R M Richardson, University of Arizona; M L La Grave, S Schneider, GEOTECHNOLOGIEN; J W Harden, U.S. Geological Survey*

- **0800h PA21C-1643** POSTER Propaganda, News, or Education: Reporting Changing Arctic Sea Ice Conditions: K Leitzell, W Meier
- **0800h PA21C-1644** POSTER Landsat as a Political Entity: Meaningful Communication for a National Asset: L E Rocchio
- **0800h PA21C-1645** POSTER A Comparison of the Societal Impacts and Warning Operations for the 1989 and 2010 Huntsville, Alabama Tornadoes: A M Betancourt-Negron, M Coyne, K Scotten, J L Lee
- **0800h PA21C-1646** POSTER Using your data for education and outreach: L Lukes
- **0800h PA21C-1647** POSTER Covering Climate Change in Wikipedia: R W Arritt, W Connolley, I Ramjohn, S Schulz, A D Wickert
- **0800h PA21C-1648** POSTER Brave New Media World: Science Communication Voyages through the Global Seas: C L Clark, A Reisewitz, A Reisewitz
- **0800h PA21C-1650** POSTER How to Talk About Science: Lessons from a Middle School Science Classroom: B J Cushman-Patz

**Public Affairs General Contributions Posters (joint with GC, H, ED, NH)**

*Presiding: S Bougan Petrov, Ball Aerospace*

- **0800h PA21D-1651** WITHDRAWN
- **0800h PA21D-1652** POSTER Estimating Plot Scale Impacts on Watershed Scale Management: C L Shope, J H Fleckenstein, J D Tenhunen, S Peiffer, B Huwe
- **0800h PA21D-1653** POSTER Cities as Water Supply Catchments to deliver microclimate benefits: J Beringer, N J Tapper, A Coutts, M Loughnan
- **0800h PA21D-1654** POSTER Reutilization of waste LCD panel glass as a building material: K Min, H Lee, E Seo, W Lee
- **0800h PA21D-1655** POSTER Future water resources in an Alpine watershed of Italy under climate change scenarios: D Bocchiola, B Groppelli, A Soncini, R Rosso
- **0800h PA21D-1656** POSTER MARCH 08, 2010 BASYURT-KARAKOCAN (ELAZIG) EARTHQUAKE: EASTERN TURKEY: D KALAFAT, C Zulfikar, E Vuran, Y Kamer
- **0800h PA21D-1658** POSTER Monitoring REDD+: From Social Safeguards to Social Learning: A Ravikumar, K Andersson
- **0800h PA21D-1660** POSTER WATER INTENSITY OF ELECTRICITY FROM GEO THERMAL RESOURCES: G S Mishra, W E Glassley
- **0800h PA21D-1661** POSTER Supporting Climatic Trends of Corn and Soybean Production in the USA: V Mishra, K A Cherkauer, J P Verdin
- **0800h PA21D-1662** WITHDRAWN
Paleoclimatology and Paleoceanography

PP21A Moscone South: Poster Hall Tuesday 0800h
Glacial Inception and Termination: Reconciling Observations, Theories, and Models I Posters (joint with B)

Presiding: M jochum, nc; S Peacock, NCAR; B L Otto-Bliesner, NCAR

0800h PP21A-1663 POSTER Spatial and temporal variation of the last ice age mega-floods in the Pacific Northwest: Sediment provenance using single-aliquot K/Ar dating: J Gombiner, I L Hendy, S R Hemming, M Q Fleisher, E Pierce, G Mesko, C L Dale, Title of Team: AGES - Argon Geochronology for the Earth Sciences

0800h PP21A-1664 POSTER Timing the last interglacial–glacial transition in glacial sedimentary sequences of the Hudson Bay lowlands (Canada): M Roy, G Allard, B Ghaleb, M Lamothe

0800h PP21A-1665 POSTER Can Geothermal Abyssal Heating be a Trigger of Abrupt Climate Change?: S Huang

0800h PP21A-1666 POSTER Rhone glacier last deglaciation in western Lake Geneva from seismic reflection and sedimentary data: S Girardclos, A Rachoud-Schneider, N Brutsch

0800h PP21A-1667 POSTER Impact of continental ice sheet on tropical Pacific climate and the implication on north-south interhemispheric teleconnection: S Lee, J Chiang

0800h PP21A-1668 POSTER Atmospheric CO2 Link to Climate at Onset of the Last Glacial Termination: J Ahn, E Brook

0800h PP21A-1669 POSTER Relative importance of CH4, CO2 and insolation in Laurentide Ice Sheet inception at 115 kyr BP: F O Othonio, D H Bromwich, R Oglesby

0800h PP21A-1670 POSTER ITCZ-monsoonal association during the last glacial (Cariaco Basin, Northern Arabian Sea): C Lai, G H Haug, A Lueckge

0800h PP21A-1671 POSTER Detailed Tropical Sea Level Record Spanning the Younger Dryas Chronzone: N A Abdul, R A Mortlock, J D Wright, R G Fairbanks

0800h PP21A-1672 POSTER Precise prediction of glacial cycle with its rhythm: C Lai, Y Tseng, W Yu, P Chueh

0800h PP21A-1673 POSTER High-resolution Atlantic and Pacific stacks of benthic Ω18O for the last glacial cycle: J Stern, L E Lisiecki

0800h PP21A-1674 POSTER A reconstruction of late Quaternary Mediterranean Outflow Water from radiogenic Nd, Pb and Sr isotopes: R Stumpf, M Frank

0800h PP21A-1675 POSTER The tropical Atlantic response to abrupt climate change during Interglacial 12: J E Hertzberg, D E Black, L C Peterson, R Thunell, G H Haug

0800h PP21A-1676 WITHDRAWN

0800h PP21A-1677 POSTER Evidence for millennial-scale oscillations to 735 ka utilizing high-resolution Quaternary climate records from Santa Barbara Basin, CA: S M White, T M Hill, J Kennett, R J Behl

0800h PP21A-1678 POSTER Orbital forced rhythmites in the upper Lamar Limestone (Guadalupian) of the Delaware Basin, West Texas, USA: Y Jin, C Xuan, P J Noble


0800h PP21A-1680 POSTER Constraining the stable isotope budget for Antarctic Bottom Water: New results from the abyssal southwestern Atlantic: J L Hoffman, D C Lund

0800h PP21A-1681 POSTER Milankovitch forcing and meridional moisture flux in the atmosphere: Insight from a zonally averaged ocean-atmosphere model: L A Mysak, A Antico, F Vimeux, O Marchal

0800h PP23C-05 POSTER Results from IODP Exp. 323 to the Bering Sea: sea ice history and seasonal productivity for the last 5 Ma: Z N Stroynowski, J Onodera, Title of Team: Exp. 323 Shipboard Scientific Party
0800h PP21B-1695 POSTER High-resolution variation of biogenic opal content in the Bering Sea (IODP Expedition 323, Site U1343) from the late Pliocene to early Pleistocene (2.2 Ma to 1.4 Ma): S KIM, B Khim, T K Takahashi, Title of Team: IODP Expedition 323 Scientists

0800h PP21B-1696 POSTER Paleoproducitivity and intermediate-water ventilation in the subarctic Northwest Pacific during the last deglaciation: B Khim, K Ikehara, T Sagawa, A Shibahara, M Yamamoto

0800h PP21B-1697 POSTER Past Bering Sea Circulation and Implications for Millennial-Scale Climate Change in the North Pacific: S A Schlung, A C Ravelo, I W Aiello, Title of Team: IODP Expedition 323 Shipboard Scientific Party

0800h PP21B-1698 POSTER An integrated study of physical properties, downhole logging and seismic data from deep drilling in Lake El’gygytgyn, Chukotka, NE Siberia: C Gebhardt, J Kueck, F Niessen, E’gygytgyn Scientific Party, Title of Team: El’gygytgyn Scientific Party


0800h PP21B-1700 POSTER Applications of TEX86 and M/B/C/BT indices to paleotemperature estimations in Holocene sediments from the Chukchi Shelf: Y Park, M Yamamoto, L V Polyak

0800h PP21B-1701 POSTER Pliocene and Quaternary climate evolution of the high Western Arctic derived from initial geochemistry and FTIRs data of the Lake El'gygytgyn sediments, NE Siberia: V Wennrich, M Kukkonen, C Meyer-Jacob, P Minyuk, P Rosen, J Brigham-Grette, M Melles, Title of Team: El’gygytgyn Scientific Party

PP21C Moscone South: Poster Hall Tuesday 0800h Molecules Modern to Ancient I Posters (joint with B, OS)

Presiding: P J Polissar, Lamont-Doherty Earth Institute; P J Polissar, Lamont-Doherty Earth Institute; S J Feakins, University of Southern California; S J Feakins, University of Southern California

0800h PP21C-1702 POSTER Effect Of Substrates On The Fractionation Of Hydrogen Isotopes During Lipid-Biosynthesis By Haloarcula marismortui: S S Dirghang, M Pagni

0800h PP21C-1703 POSTER Foliar Stable Isotope Dynamics in a Closed-Canopy Tropical Forest: Towards a Better Understanding of Terrestrial Productivity in the Past: H V Graham, K H Freeman, S Wing

0800h PP21C-1704 POSTER Variation in n-Alkane Distributions of Modern Plants: Questioning Applications of n-Alkanes in Chemotaxonomy and Paleoeocology: R T Bush, F A McInderney

0800h PP21C-1705 POSTER Effects of Aridity and Vegetation on Plant-wax δD in Modern Lake Sediments: P J Polissar, K H Freeman


0800h PP21C-1708 POSTER Using Carbon and Nitrogen Isotopic Ratios as Paleoclimate Proxies in Baffin Island Lakes: C Florian, G H Miller, M Fogel

0800h PP21C-1709 POSTER Changes in the planktonic community of tropical hypersaline Isabela crater-lake as response to climatic variability traced by lipid biomarkers and their stable isotopic composition: L Romero-Viana, G H Haug, U Kienel, D Sachse

0800h PP21C-1710 POSTER Ecological Constraints on Hydrology in Early Hominid Environments: C Magill, G M Ashley, K H Freeman

0800h PP21C-1711 POSTER The hydrologic cycle of the western coast of North America since the late Miocene: J Larriviére, A C Ravelo, P Polissar

0800h PP21C-1712 POSTER Quantitative Investigation of Post-Burial H Isotope Exchanges in Organic Molecules: Y Wang, A L Sessions

0800h PP21C-1713 POSTER ASSESSMENT OF A POST-DEPOSITIONAL DIAGENETIC BIAS IN THE UK37* INDEX: IMPLICATIONS TO ESTIMATE PLIOENE-PLEISTOCENE SST IN THE BENGUELA UPWELLING: A Rosell Mele

PP21D Moscone West: 2007 Tuesday 0800h Advances at the Frontiers of Paleoproxy Validation II (joint with OS, B)

Presiding: D P Gillikin, Union College; L Vetter, University of California Davis; A D Wanamaker, D H Goodwin, Denison University

0800h PP21D-01 Annually resolved oceanic carbon dynamics in the temperate North Atlantic during recent centuries: B R Schone, A D Wanamaker, J Fiebig, J Thebault, K J Kreutz

0815h PP21D-02 Quantifying the metabolic contribution to δ13C of shell carbonate of Arctica islandica: an experimental calibration: E C Beirne, A D Wanamaker

0830h PP21D-03 Modeling the carbon isotope composition of bivalve shells (Invited): C Romanek

0845h PP21D-04 14C and δ13C in Mytilus californianus shells as a proxy of upwelling intensity: J E Ferguson, K R Johnson, G M Santos, L Meyer, K Acaylar, A K Tripati

0900h PP21D-05 Proxies for Metabolic Carbon (Cm) and/or Dissolved Inorganic Carbon (DIC) Contributions to Mollusk Shell Carbonate: P Higgins

0915h PP21D-06 New Insights into the Carbon Isotope Variations in Coral Skeletals (Invited): P K Swart


0945h PP21D-08 Controls on Sr/Ca in Scleractinian Corals: The Effects of Ca-ATPase and Ca channels on Skeletal Chemistry: N Allison, I Cohen, A A Fincher, J Erez

PP21E Moscone West: 2005 Tuesday 0800h Reconciling Models of Hyperthermal Events in Earth History I (joint with B, GC)

Presiding: T Dunkley Jones, Imperial College London; T Dunkley Jones, Imperial College London; C O Chun, Goethe University Frankfurt; C O Chun, Goethe University Frankfurt; R E Zeebe, University of Hawaii; R E Zeebe, University of Hawaii; A S Cohen, The Open University; A S Cohen, The Open University

0800h PP21E-01 Hyperthermal climate events in the Mesozoic-Palaeogene greenhouse world: current status, challenges, novel approaches (Invited): T Wagner
SPA-Acronyms

SA21A  Moscone South: Poster Hall  Tuesday  0800h  Ice Layers in the Mesopause Region: The Role of Dynamics and Their Relationship to the Environment in Which They Form II Posters (joint with A)

Presiding: J M Russell, Hampton University; S M Bailey, Virginia Tech

0800h  SA21A-1758 POSTER The Charge and Mass of Meteoritic Smoke Particles (CHAMPS) Rocket Campaign: S Knappmiller, S H Robertson, Z Sternovsky, J Farmer, S Dickson

0800h  SA21A-1759 POSTER Meta-equilibrium state of multi-species ambipolar diffusion and its relevance to Polar Summer Mesospheric Echoes: P M Bellan

0800h  SA21A-1760 POSTER Seasonal and height variation of gravity wave activities observed by a meteor radar at King Sejong Station (62°S, 57°W), Antarctica: Y Kim, C Lee, J Kim, J Choi, G Lee

0800h  SA21A-1761 POSTER Tomographic Observations of Noctilucent Clouds: K Hultgren, J Gumbel, D A Degenstein, A E Bourassa, N D Lloyd

0800h  SA21A-1762 POSTER SBUV Trends in PMC Ice Water Content: M T DeLand, G E Thomas, E P Shepley, J J Olivero

0800h  SA21A-1763 POSTER Latitudinal and inter-hemispheric variation of stratospheric effects on mesospheric ice layer trends: U Berger, F Luebben, G Baumgarten

0800h  SA21A-1764 POSTER Evolution of an “Ice-void” in a NLC-display Observed from the Ground: J T Stegman, P Pautet, M J Taylor

0800h  SA21A-1765 WITHDRAWN


0800h  SA21A-1767 POSTER Gravity Wave Tuning in WACCM/CARMA for Application to PMC Studies: S Benze, C Bardeen, M E Hervig

SPA-Solar and Heliospheric Physics

SH21A  Moscone South: Poster Hall  Tuesday  0800h  Changing the Paradigm of the Global Heliosphere Through Remote and In situ Measurements by IBEX and Voyager I Posters

Presiding: E R Christian, NASA Goddard

0800h  SH21A-1790 POSTER Impact of Recent Voyager, IBEX, and Cassini Results on Science and Strategy for an Interstellar Probe Mission: R L McNutt, M Gruntman, S Krimigis, E C Roelof, R F Wimmer-Schweingruber, R E Gold

0800h  SH21A-1791 POSTER Flow of neutral interstellar helium into the heliosphere as inferred from IBEX-Lo observations and simulations: M Bzowski, M A Kubiak, M Hlond, E Moebius, T Leonard, D Heitzler, H Kucharek, P A Bochsler, N A Schwadron, G B Crew, D J McComas, S A Fuselier

0800h  SH21A-1792 POSTER New Horizons Cruise Observations of Lyman Alpha from the Interplanetary Medium: R Gladstone, S A Stern, W R Pryor

0800h  SH21A-1793 POSTER Suprathermal Ion Spectral Tails Throughout the Heliosphere: to 9 AU with Cassini, to 17 AU with New Horizons, and in the Outer Heliosphere and Heliosheath with Voyager 1 and 2: M E Hill, D C Hamilton, R L McNutt, R B Decker
0800h SH21A-1794 POSTER Magnetic Field Fluctuations in Different Sheaths: J Safrankova, O Gutynska, Z Nemecek, A Lynnyk, J D Richardson

0800h SH21A-1795 POSTER Component Reconnection at the Heliopause: T E Moore, F Alouani-Bibi, M Opher, G Toth, D J McComas

0800h SH21A-1796 POSTER Acceleration of ions and electrons during magnetic reconnection in a multi-island environment: K M Schoeffler, J F Drake, M M Swisdak


0800h SH21A-1798 POSTER Interstellar Neutral Hydrogen - Direct Observation by IBEX-LO: L A Saul, P Wurz, E Moebius, D J McComas, S A Fuselier, L Petersen, D F Moreno

0800h SH21A-1799 POSTER Heliospheric energetic neutral atom intensities at 1 AU derived from global fitting of the IBEX-HI data set: R Demajistre, H O Funsten, M Gruntman, P H Janzen, D J McComas, D B Reisenfeld, E C Roelof, N A Schwadron

0800h SH21A-1800 POSTER Hydrogen deflection in the heliosphere and the effect of local interstellar magnetic field: F Alouani-Bibi, M Opher, D Alexashov, G Toth, V Izmodenov

0800h SH21A-1801 POSTER Spectral properties of regions and structures in IBEX's global ENA sky maps: M A Dayeh, R W Ebert, H O Funsten, S A Fuselier, P H Janzen, G Livadiotis, D J McComas, D B Reisenfeld, N A Schwadron

0800h SH21A-1802 POSTER Characterizing interstellar and secondary helium in the heliosphere: H Mueller


0800h SH21A-1804 POSTER Tomography of the Heliosphere: Ulysses Dust Measurements: A Juhasz, M Horanyi

0800h SH21A-1805 POSTER Using spectral slopes to characterize the origin of ENAs in the IBEX sky maps: G Livadiotis, M A Dayeh, H O Funsten, P H Janzen, D J McComas, D B Reisenfeld, N A Schwadron

0800h SH21A-1806 POSTER Determining the Distance to the IBEX ENA Ribbon: E R Christian, Title of Team: The IBEX Science Team

0800h SH21A-1807 POSTER Three-dimensional MHD modeling of the solar wind with pick-up protons from the Sun to Voyagers 1 and 2: T R Detman, D S Intriligator, M Dryer, W Sun, C S Deehr, J Intriligator

0800h SH21A-1808 POSTER Update on Voyager 2 High Energy Ions in the Outer Heliosphere and Heliosheath: D S Intriligator, J Intriligator, W D Miller, W R Webber, R B Decker, E C Sittler

0800h SH21A-1809 POSTER The energy spectrum of heliospheric ENAs and properties of their parent protons: C L Prested, M Bzowski, H O Funsten, S A Fuselier, P H Janzen, M A Kubiak, D J McComas, D B Reisenfeld, N A Schwadron, P Wu

0800h SH21B-1811 POSTER 3D Heliospheric Simulations of Heavy Neutral Particles from the Interstellar Medium: A D Kawamura, J Heerikhuisen, N V Pogorelov

0800h SH21B-1812 POSTER Survey of solar wind behavior to prepare for use in global heliospheric models: L J Thatcher, H Mueller

0800h SH21B-1813 POSTER Simulations of an IBEX Ribbon Model: J Heerikhuisen, N V Pogorelov, G P Zank


0800h SH21B-1815 POSTER Unsteady Solar Wind at the Termination Shock and in the Heliosheath: S Borovikov, N V Pogorelov

0800h SH21B-1816 POSTER LIMP direction inferred from the mechanism for IBEX ribbon generation based on SW-LIC interaction vs 2-3 kHz radio emission: R Ratkiewicz, S Grzedzielski, M Strumik, J Grygorczuk

0800h SH21B-1817 POSTER Comparisons of the Interstellar Magnetic Field Directions obtained from the IBEX Ribbon and Interstellar Polarization Measurements: P C Frisch, B Andersen, A Berdyugin, H O Funsten, M Magalhaes, D J McComas, V Pirola, N A Schwadron, J D Slavin, S J Wiktorewicz

0800h SH21B-1818 POSTER Pickup ion dynamics at the heliospheric termination shock observed by Voyager 2: R H Burrows, G P Zank, G M Webb

0800h SH21B-1819 POSTER Determining the location of termination shock using signature of Galactic cosmic ray modulation by global merged interaction region in the heliosheath: X Luo, M Zhang, H K Rassoul

0800h SH21B-1820 POSTER Interstellar Pickup Ion Acceleration at the Heliospheric Termination Shock: E Smith, J A le Roux

0800h SH21B-1821 POSTER Inner Heliosheath Size and Pressure: G Gloeckler, L A Fisk

0800h SH21B-1822 POSTER Fluid and MHD Instabilities of Heliopause Driven by Plasma-Neutral Interaction: B Dasgupta, V A Florinski, G P Zank, A Bandypadhyay, A Khare, J Heerikhuisen

0800h SH21B-1823 POSTER Energetic neutral atom mapping of heliosphere boundaries using STEREO/STE observations: K P Schmidt, L Wang, P R Lin

SH21C Moscone South: 309 Tuesday 0800h Coordinated Results With Solar Dynamics Observatory I

Presiding: S E Gibson, NCAR; C J Schrijver, Lockheed Martin Advanced Technology Center

0800h SH21C-01 Invited: R Komm

0818h SH21C-02 Invited: W D Pesnell

0830h SH21C-03 Invited: B De Pontieu

0848h SH21C-04 Invited: S W Mcintosh

0900h SH21C-05 Invited: J W Brosius, G Holman, P C Chamberlin
0912h SH21C-06 Toward better understanding of the origin of CMEs using combined SDO/AIA and STEREO/SECCHI data (Invited): N V Nitta

0930h SH21C-07 The Birth of Coronal Mass Ejections As Seen by STEREO and SDO: A Vourlidas, S Patsourakos

0942h SH21C-08 Ionospheric Sensitivity to SDO-EVE Spectral Variability (Invited): J J Sojka, R W Schunk, M David

SPA-Magnetospheric Physics

SM21A Moscone South: Poster Hall Tuesday 0800h Magnetoospheric and Auroral Acceleration: Cause and Effect I Posters

Presiding: C Watt, University of Alberta; R Rankin, University of Alberta; D J Knudsen, University of Calgary

0800h SM21A-1878 POSTER Characterizing magnetospheric electrons from ALIS observations of discrete auroral arcs and quasi-stationary modeling of auroral acceleration: H Lamy, C Simon, M Echim, J M De Keyser, B Gustavsson, T Sergienko, I Sandahl, U Brandstrom

0800h SM21A-1879 POSTER A multi-point perspective on the formation of polar cap arcs: kinetic modeling and observations by Cluster and TIMED: J M De Keyser, R Maggiolo, M Echim, C Simon, Y Zhang, J Troitignon

0800h SM21A-1880 POSTER Electron thermal effects on electron acceleration and energy cascades in geomagnetic field line resonances: P A Damiano, J Johnson, A N Wright

0800h SM21A-1881 POSTER Features and Mechanisms of Substorm Onset and Expansion: C Z Cheng, T Chang

0800h SM21A-1882 POSTER Observational evidence for a kinetic ballooning instability during substorm: T Chang, C Z Cheng, J C Chiang, A B Chen

0800h SM21A-1883 POSTER Auroral Power and Magnetic Wave Activity During Substorms: K R Murphy, J Rae, C E Watt, I R Mann, H U Frey, H J Singer

0800h SM21A-1884 POSTER Polar, DMSP, and FAST spacecraft-based investigation of the evolution of high altitude, night side, wave Poynting flux as an energy source for low-latitude auroral electron acceleration during major storms: S A Thaller, J R Wygant, J P Dombrek, T Nishimura, L Dai, C A Catell, A Hamre, F Mozer, C T Russell

0800h SM21A-1885 POSTER Deducing spatial properties of auroral primary particle distributions from ground-based optical imaging: I Sandahl, T Sergienko, K Axelsson, B Gustavsson, U Brandstrom


0800h SM21A-1888 POSTER Large-scale Aspects of Pulsating Aurora: Spatial/Temporal Evolution, Relation to Substorms, and Duration: K M Rychert, S Jones, M Lessard, E F Donovan, E L Spanswick

0800h SM21A-1889 POSTER Spatiotemporal variations and generation mechanisms of flickering aurora: A Yaegashi, T Sakanoi, R Kataoka, K Asamura, M Sato, Y Miyoshi, S Okano


SM21B Moscone South: Poster Hall Tuesday 0800h Physical Processes in the Magnetotails of Intrinsic and Induced Magnetospheres I Posters (joint with P)

Presiding: C S Arridge, University College London; N André, Centre d’Etude Spatiale des Rayonnements

0800h SM21B-1891 POSTER Transverse instability and perpendicular electric field in two-dimensional electron phase-space holes: M Wu, Q Lu, C Huang, S Wang

0800h SM21B-1892 POSTER Relating Jupiter’s auroral features to magnetospheric sources: M F Vogt, M G Kivelson, K K Khurana, R J Walker, B Bonfond, A Radioti

0800h SM21B-1893 POSTER Entropy of a non-equilibrium plasma: T K Nakamura

0800h SM21B-1894 POSTER Multi-Fluid/Multi-Scale Simulations of Plasmoid Production at Saturn: A Kidder, R Winglee, E M Harnett, C S Paty

0800h SM21B-1895 POSTER Composition of the <7.5 keV/Q Plasma in Jupiter’s Magnetotail from ~150 to 2550 R: R W Ebert, D McComas, F Bagenal, H A Elliott, M E Hill

0800h SM21B-1896 POSTER Cassini observations of plasmoids and travelling compression regions in Saturn’s magnetotail in 2006: C M Jackman, J A Slavin, M K Dougherty


0800h SM21B-1898 POSTER The Mutual Impedance Probe Technique for Plasma Parameters Measurements: the ROSETTA RPC/MIP Results during the Earth’s Flybys: J Trotignon, J Lébreton, J Rauch


0800h SM21B-1900 POSTER The solar wind interaction with Comet Machholz (C/2004 Q2) as revealed by amateur images: Y Ramanjooloo, G H Jones, C S Arridge
0925h  SM21C-06  Auroral Precipitation as a Driver of Neutral Upwelling in the Cusp: B Sadler, A Otto, M Lessard, E J Lund, H Lühr

0940h  SM21C-07  Aurora and convection channel events in response to solar wind - magnetosphere - ionosphere interaction processes (Invited): P E Sandholt, C J Farrugia

SM21D  Moscone South: 307  Tuesday  0800h  

Magnetospheric Plasma Waves: Generation, Propagation, and Interaction With Energetic Particles IV (joint with AE, SA, SH)

Presiding:  V K Jordanova, Los Alamos National Laboratory; J M Albert, Air Force Research Lab

0800h  SM21D-01  Theory and Simulations on Whistler-mode and EMIC Triggered Emissions (Invited): Y Omura

0818h  SM21D-02  OVERVIEW OF EMIC TRIGGERED CHORUS EMISSIONS IN CLUSTER DATA: B Grison, J S Pickett, Y Omura, O Santolik, M J Engebretson, I S Dandouras, A Masson, P M Decreau, M L Adrian, N Cornilleau Wehrlin

0832h  SM21D-03  Two-dimensional hybrid simulation of the growth, effects, and distribution of magnetospheric electromagnetic ion cyclotron waves: R E Denton, Y Hu

0847h  SM21D-04  Hybrid Simulations of EMIC waves In Dipolar Magnetic Field: N Omidi, R M Thorne, J Bortnik

0901h  SM21D-05  Generation of Electromagnetic Ion Cyclotron (EMIC) Waves in a Compressed Dayside Magnetosphere: M Usanov, I R Mann, R D Sydora

0916h  SM21D-06  A statistical study of EMIC waves as seen by the GOES satellites at geostationary orbit: L B Clausen, J B Baker, H J Singer, J M Ruohoniemi

0930h  SM21D-07  A Statistical Study of EMIC Waves at Geosynchronous Orbit: B J Fraser, R Grew, H J Singer

0945h  SM21D-08  CRRES observations of ion composition during EMIC mode wave events: E MacDonald, B A Larsen

Study of Earth’s Deep Interior

DI21A  Moscone South: Poster Hall  Tuesday  0800h  

Mantle Heterogeneities I Posters (joint with MR, S, T, V)

Presiding:  R Caracas, Ecole Normale Superieure; L Bosch, ETH Zurich; F Albarede, Ecole Normale Superieure de Ly

0800h  DI21A-1940  POSTER Heterogeneous lower mantle shear attenuation from ScS-S differential t* measurements via instantaneous frequency: S Durand, S R Ford, J Matas, V Lekic, B A Romanowicz

0800h  DI21A-1941  POSTER Thermal plumes as mixers and samplers of the mantle. Laboratory experiments: T Floriane, A B Davaille, G Brandeis, A Limare

0800h  DI21A-1942  POSTER Numerical Modeling of Gravity, Geoid, and the Thermal Structure of Oceanic Lithosphere: D Davis, C J Grose

0800h  DI21A-1943  POSTER Self-consistent high P,T equation of state of stishovite and wustite: Implications for the lower mantle: M M Armientroux, A Kavner

0800h  DI21A-1944  POSTER The compositional signature of seismic velocities in the upper mantle: a hopeless problem?: J C Afonso, D Schutt

0800h  DI21A-1945  POSTER The Earth’s spectrum constrained directly from global seismic data: an evolutionary-algorithm approach: S Della Mora, L Boschi, T W Becker, D Giardini

0800h  DI21A-1946  POSTER Dynamical consequences of mantle heterogeneity in two-phase models of mid-ocean ridges: R F Katz


0800h  DI21A-1948  POSTER New attempts to identify core-mantle interactions in plume-derived materials using ultra-high precision tungsten isotope measurements: M Touboul, I S Puchtel, R J Walker

0800h  DI21A-1949  POSTER Negative dynamic topography of the East European Craton: metasomatised cratonic lithosphere or mantle downwelling?: I M Artemieva


0800h  DI21A-1951  POSTER Alkaline lavas from southern Mendoza, Argentina, extend the Patagonian DUPAL mantle field to the north: N Soager, P M Holm, E Llambias

0800h  DI21A-1952  POSTER EMI – young HIMU rock association at the Cape Verde Islands revisited: on the role of oceanic carbonatites: P M Holm, T F Kokefelt, C T Dyrh

0800h  DI21A-1953  POSTER A Role for Upper Mantle Garnet Field Topography in the Structure of the Geoid over Young Seafloor?: C J Grose, D M Davis

DI21B  Moscone South: Poster Hall  Tuesday  0800h  

Observations and Interpretations of Lower Mantle, Large, Low Shear Velocity Provinces II Posters (joint with S, MR)

Presiding:  C T Houser, University of California Santa Cruz; S Tanaka, JAMSTEC; M Murakami, Tohoku University

0800h  DI21B-1954  POSTER The large low velocity province and the vertical flow beneath the Pacific: K Kawai, R J Geller, T Tsuchiya

0800h  DI21B-1955  POSTER Geographical distribution of D’ discontinuity and the boundary of LLSVP in the western Pacific: K Idehara, S Tanaka, N Takeuchi

0800h  DI21B-1956  POSTER Constraints on the Large Shear Velocity Province beneath the Pacific Ocean from joint ocean floor and islands broadband seismic experiments in French Polynesia: D Suettsugu, S Tanaka, H Shibara, H Sugio, T Kanazawa, Y Fukao, G Barruel, D Reymond

0800h  DI21B-1957  POSTER Utilizing Thermal & Thermo-Chemical Mantle Circulation Models to Constrain the Origin of Earth’s Lower Mantle Seismic Signature: D Davies, E E Styles, S D Goes, J H Davies, J E Ritsma

0800h  DI21B-1958  POSTER Towards the Petrophysics and Petrology of Earth’s Deep Mantle and the Core Mantle Boundary: H J Mueller

0800h  DI21B-1959  POSTER New results show that the long term stability of Large Low Shear Wave Velocity Provinces (LLSVPs) on the CMB has lasted for at least 540 My: K C Burke, T H Torsvik

0800h  DI21B-1960  POSTER The Evolution of the Earth’s Mantle Structure and Surface and Core-mantle Boundary Heat Flux since the Paleozoic: N Zhang, S Zhong

0800h  DI21B-1961  POSTER Toward mineralogical interpretation of LLVSP: High-P,T elasticity of deep mantle materials: J Tsuchiya, T Tsuchiya

**DI21C** Moscone West: 3024  Tuesday  0800h  
**Structure and Dynamics of Earth's Core I** (joint with MR, S, T, V)  

*Presiding: H Tkalcic,* The Australian National University;  
Y Kuwayama, Ehime University;  
F Niu, Rice University

---

**0800h** DI21C-01  Inner Core Melting and Freezing: Where and How (Invited): V F Cormier

**0815h** DI21C-02  Lopsided growth of Earth’s inner core: a new interpretation for seismic hemispherical variations in the uppermost inner core (Invited): M Calvet, M Monnerane, L Margerin, A Souriau

**0830h** DI21C-03  The Phoenix inner core - convection, melting, and the structure of the inner core and lowermost outer core (Invited): R Deguen, T Alboussiere, P CARDIN, M Melzani

**0845h** DI21C-04  Grain Growth and Loss of Texture during Annealing of Alloys, and the Translation of Earth’s Inner Core: M I Bergman, D Lewis, L Shulka, I Myint, S Karato, A Abreu

**0857h** DI21C-05  Convection in the inner core: S Cottaar, B A Buffett

**0909h** DI21C-06  Regional variation of inner core anisotropy from seismic normal mode observations: A F Deuss, J C Irving, J H Woodhouse

**0921h** DI21C-07  Depth extent of hemispherical difference in equatorial path velocities in the upper inner core: S Tanaka

**0933h** DI21C-08  Elastic isotropy of iron under core conditions and other recent advances (Invited): R E Cohen, X Sha

**0948h** DI21C-09  Earth’s Inner Core as a Conglomerate of Anisotropic Domains: H Tkalcic

---

**MR21A** Moscone South: Poster Hall  Tuesday  0800h  
Melt-Solid Density Inversions in the Earth and Planetary Interiors I Posters (joint with DI, V)

*Presiding: J W Hernlund,* University of California, Berkeley

---

**0800h** MR21A-1986 POSTER  The Partial Molar Volume and Compressibility of the FeO Component in Model Basalts (Mixed CaAl2SiO6-CaMgSi2O6-CaFeSi2O6 Liquids) at 0 GPa: evidence of Fe3+ in 6-fold coordination: X Guo, R A Lange, Y Ai

**0808h** MR21A-1987 POSTER  Sound velocity and density of kilauea basalt glass at high pressure: A E Gleason, B Chen, R Jeanloz


**0809h** MR21A-1990 POSTER  Spin crossover in liquid Fe3Si2O6 at high pressures: an ab initio Molecular Dynamics study: D Munoz Ramo, L P Stixrude

**0809h** MR21A-1991 POSTER  How to form a Basal Magma Ocean? Insights from two-phase flow numerical modeling: G C Richard, S Labrosse

---

**MR21B** Moscone South: Poster Hall  Tuesday  0800h  
The Post-Perovskite Transition and the D” Layer I Posters (joint with S, DI, V)

*Presiding: H Liu,* Harbin Institute of Technology;  
J P Brodholt

---

**0800h** MR21B-1994 POSTER  A Paris-Edinburgh cell at HPCAT for studying melts at high pressures: C Park, C Kenney-Benson, T Yu, Q Mei, T Sakamaki, G Shen, Y Wang

**0800h** MR21B-1995 POSTER  High-temperature Brillouin scattering study of hapolgranitic glasses and liquids: Effects of F, K, Na and Li on Tg and elastic properties: M H Manghnani, A Hushur, Q C Williams, D B Dingwell

---

**MR21A** Moscone South: Poster Hall  Tuesday  0800h  
Melt-Solid Density Inversions in the Earth and Planetary Interiors I Posters (joint with DI, V)

*Presiding: J W Hernlund,* University of California, Berkeley

---

**0800h** MR21A-1986 POSTER  The Partial Molar Volume and Compressibility of the FeO Component in Model Basalts (Mixed CaAl2SiO6-CaMgSi2O6-CaFeSi2O6 Liquids) at 0 GPa: evidence of Fe3+ in 6-fold coordination: X Guo, R A Lange, Y Ai

**0808h** MR21A-1987 POSTER  Sound velocity and density of kilauea basalt glass at high pressure: A E Gleason, B Chen, R Jeanloz


**0809h** MR21A-1990 POSTER  Spin crossover in liquid Fe3Si2O6 at high pressures: an ab initio Molecular Dynamics study: D Munoz Ramo, L P Stixrude

**0809h** MR21A-1991 POSTER  How to form a Basal Magma Ocean? Insights from two-phase flow numerical modeling: G C Richard, S Labrosse

---

**MR21B** Moscone South: Poster Hall  Tuesday  0800h  
The Post-Perovskite Transition and the D” Layer I Posters (joint with S, DI, V)

*Presiding: H Liu,* Harbin Institute of Technology;  
J P Brodholt
2010 Fall Meeting

All information is current as of November 12, 2010


0800h S21B-2021 POSTER Spatial distribution of precisely determined hypocenters and focal mechanisms in the Izu-Honshu collision zone, central Japan: Y Yukutake, T Takeda, R Honda, A Yoshida

0800h S21B-2022 POSTER Improving intraplate seismicity detection through lake-deployed hydrophones: N Bellino, J A Conder

0800h S21B-2023 POSTER The Future of Earthquake Relocation Tools: T Lecocq, C Caudron

0800h S21B-2024 POSTER Seismicity of the Lake Tahoe-Reno Area, Nevada and California: K D Smith, S E Hauksson

0800h S21B-2025 POSTER Earthquake Relocations in the Eastern Tennessee Seismic Zone: The Control of Ancient Basement Structure on Present-Day Seismicity in an Intraplate Setting: C A Powell, M Withers, G Vlahovic, P Arroucau

0800h S21B-2026 POSTER New Views of Earthquake Swarms at Lo ‘ihi Submarine Volcano, Hawaii: Using Cross-Correlation and Double Difference Locations: G Horning, E Laubbattus, J Caplan-Auerbach, P Okubo

0800h S21B-2027 POSTER Source process of the 1999 Xiyuan earthquake of M5.4 as revealed by relocation of earthquake sequence: Z Yang, Y Chen, B Stump, R B Herrmann, R Zhou, C Hayward

0800h S21B-2028 POSTER Study of Seismic Clusters at Bahia de Banderas Region, Mexico: F J Nunez-Cornu, M Rutz-Lopez, C Suarez-Plascencia, E Trejo-Gomez

0800h S21B-2029 POSTER Constraining the depth of earthquakes in Iran and Central Asia using a combination of Array techniques and waveform modeling at regional and teleseismic distances with special attention to the latest 27 August 2010 deadly Semnan-Damghan earthquake in Iran: A Alinaghi, F Krueger

0800h S21B-2030 POSTER Earthquake relocations and location error estimates in the Puerto Rico Island: Q Zhang, G Lin, A M Lopez Venegas, V A Huerfano, L Soto-Cordero

0800h S21B-2031 POSTER Improving three dimensional velocity model for Puerto Rico - Virgin Islands for rapid earthquake relocations: V A Huerfano, A M Lopez, L Castillo, G Baez - Sanchez, L Soto-Cordero, G Lin, Q Zhang


0800h S21B-2033 POSTER Crustal structure of the Dead Sea basin from local earthquake tomography: A Hofstetter, C Durbath, M M Calo

0800h S21B-2034 POSTER High Resolution Hypocenter Relocation for Events in Central Java, Indonesia using Double-Difference Technique: D P Sahara, S Widiyanarto, A D Nugraha, R Sule, B G Luehr

0800h S21B-2035 POSTER Preliminary result of Taiwan 3-D stress field estimated using P wave polarity data: Y Wan, Y Wu, S Sheng, Z Shen

0800h S21B-2036 POSTER Shallow seismicity migration in a normal fault test site in northern Apennines (Italy): A Amato, T Braun, M Cattaneo, L Chiaraluce, M Coco, E D’Alema, R Di Stefano, M Frapicini, D Latorre, S Marzorati, G Monachesi, M Moretti, N Piana Agostinetti, D Piccinini, G Saccorotti, L Valoroso, G Selvaggi


0800h S21B-2039 POSTER New perspectives on the 2007 seismic swarm in the Anahim Volcanic Belt, British Columbia, from earthquake cross-correlation and high-resolution relocations: J A Hutchinson, J Caplan-Auerbach

0800h S21B-2040 POSTER Monitoring microseismicity in the northern Dead Sea basin using portable small-aperture seismic mini-arrays: A Inbal, A Ziv, H G Wust-Bloch, Z Ben-Avraham

S21C Moscone South: Poster Hall Tuesday 0800h

Earthquake Source Studies I Posters

Presiding: C W Ebeling, B A Erickson, Stanford University

0800h S21C-2041 POSTER Global Instrumental Seismic Catalog: earthquake relocations for 1900-present: A Villasenor, E Engdahl, D A Storchak, I Bondar

0800h S21C-2042 POSTER The 20 March 2008, Mw 7.1, Northern Tibet Normal Faulting Earthquake: S Baag, C J Ammon, M Cleveland

0800h S21C-2043 POSTER Intermediate-deep earthquakes within young Cocos plate beneath Central Mexico: A hypothesis test for dehydration embrittlement and shear instability: T Song

0800h S21C-2044 POSTER Relations between earthquake activities and configuration of the subducting Pacific plate interface along the Japan Trench: T Yamada, K Nakahigashi, A Kuwano, Y Machida, K Mochizuki, M Shinohara, T Kanazawa, R Hino, T Takanami

0800h S21C-2045 POSTER Tsunami simulation for the great 1707 Hoei, Japan, earthquake: T Furumura, K Imai, T Maeda

0800h S21C-2046 POSTER Historic and prehistoric earthquake events revealed by slope basin turbidites of the Nankai Trough, Japan: M Iwai

0800h S21C-2047 POSTER Subsurface Characterization of Mystic Lake Paleoseismic site on the Claremont Fault Using CPT Data: Evidence for Straightening of the northern San Jacinto Fault, California: G I Marliyani, T K Rockwell, N Onderdonk, S F McGill

0800h S21C-2048 POSTER Paleoseismic Study on the Peninsula Section of the San Andreas Fault South of Crystal Springs Reservoir, San Mateo County, California: J A Zachariasen, C S Prentice, O Kozaci, R R Sickler, J N Baldwin, A Sanquini, K L Knudsen

0800h S21C-2049 POSTER spL, an effective seismic phase for determining focal depth at near distances: J Chong, S Ni

0800h S21C-2050 POSTER Rapid Estimates of the Source-Time Function and Mw using Empirical Green’s Function Deconvolution: H Benz, R B Herrmann

0800h S21C-2051 POSTER Evaluation of Seismic Moments of Small Events Using Borehole Records of the Kik-net: T Akazawa, K Irikura, A Petukhin, K Hada

0800h S21C-2052 POSTER Grid-based Moment Tensor Inversion Technique Apply for Earthquakes Offshore of Northeast Taiwan: H Cheng, S Lee, K Ma
All information is current as of November 12, 2010
0800h  **T21A-2125** POSTER Frequency-dependent seismic monitoring in a fractured reservoir: G Goloshubin, D Silin

0800h  **T21A-2126** POSTER Active monitoring of hydraulic and mechanical properties variations during the hydraulic stimulation of a fractured porous reservoir: Some preliminary results from the HPPP Project: F Cappa, Y Guiglielmi

0800h  **T21A-2127** POSTER Hydraulic fracture monitoring using active and passive seismic sources: T Seher, S Rondenay, H Djikpesse

0800h  **T21A-2128** POSTER ACTIVE MONITORING OF HYDRAULIC FRACUTURES USING SLOW WAVES IN THE FRACTURE AND TUBE WAVES IN THE BOREHOLE: G A Maximov, A Derov, D Lesonen, B Kashdan, M Lazarkov

0800h  **T21A-2129** POSTER Magnetoo acoustic Seismic Sensor and its Applications: V A Korneev, A S Belyakov

0800h  **T21A-2130** POSTER The Corinth Rift Laboratory (CRL) strainmeters: calibration and data analysis: A Canitano, P Bernard, A T Linde, S I Sacks, F Boudin

0800h  **T21A-2131** POSTER Submarine UXO Detection Using Resonance Scattering Sonar: R Gritto, V A Korneev, L R Johnson

0800h  **T21A-2132** POSTER The 2010 Southern California Ocean Bottom Seismometer Deployment: C M Booth, M D Kohler, D S Weeraratne

0800h  **T21A-2133** CONTINUOUS SOURCE MONITORING: THE HYATT POWER PLANT GENERATORS: R A Uhrhammer

0800h  **T21A-2134** POSTER Monitoring of the Nojima Fault structure using Accurately Controlled Routinely Operated Signal System (ACCROSS): Y Kobayashi, T Watanabe, K Yamaoka, R Ikuta, K Nishigami

0800h  **T21A-2135** POSTER Imaging a Time-variant Earthquake Focal Region along an Interplate Boundary: K Tsuruga, J Kasahara, Y Hasada, N Fujii

0800h  **T21A-2136** POSTER Three-Dimensional Seismic Tomography Beneath Tangshan, China: J C Chang, K M Keranen, G Keller, G Qu, S H Harder

0800h  **T21A-2137** POSTER Searching for Earthquake Sources in the Lower Tagus Valley (Portugal): First Results: J F Borges, M A Ferry, J P Carvalho, D D Fitzenz

0800h  **T21A-2138** POSTER Simulation of tsunami propagation with space-varying seafloor topography: T Ohata, H Mikada, T Goto, J Takekawa

0800h  **T21A-2139** POSTER Monitoring of Magnetotelluric Impedance Tensor near Parkfield, CA: E Bowles-martinez, K N Kappler, G D Egbert, G A Newman

0800h  **T21A-2140** POSTER Using 3D Simulation of Elastic Wave Propagation in Laplace Domain for Electromagnetic-Seismic Inverse Modeling: P Petrov, G A Newman

0800h  **T21A-2141** POSTER A Comprehensive Feasibility Study of Marine CSEM Using Analytical Calculation: T Furukawa, K H Lee, K Yamane

0800h  **T21A-2142** POSTER 3D inversion of time-lapse CSEM data for reservoir monitoring: N Black, G A Wilson, M S Zhdanov

0800h  **T21A-2143** POSTER A quantitative comparison of the effects of stabilizing functionals in 3D regularized inversion of marine CSEM data: G A Wilson, M Cuma, M S Zhdanov, A Gribenko, N Black

0800h  **T21A-2144** POSTER Shallow and deep control on the thermal structure of basins - predictions from 3D models: M Scheck-Wenderoth, Y P Maystrenko

0800h  **T21A-2145** POSTER Construction of a statistical validation system for formulation of a rule well featuring crustal activities: M Kawamura, T Kudo, K Yamaoka

0800h  **T21B** Moscone South: Poster Hall  Tuesday 0800h

Contemporary Stress Field: Where We Come From and Where We Are Going II Posters (joint with S, V, G)

**Presiding:** M Mariucci, Istituto Nazionale di Geofisica e Vulcanologia, via di Vigna Murata, 605 00143; P Montone, Istituto Nazionale di Geofisica e Vulcanologia, via di Vigna Murata, 605 00143; A Zang, GFZ German Research Centre for Geosciences

0800h  **T21B-2146** POSTER Modelling Hydraulic Fracture Breakdown, Shut-in, and Reopening for In Situ Stress Testing: A P Bunger, E Detournay, A Lakirouhani

0800h  **T21B-2147** POSTER Effective Stress Approximation using Geomechanical Formulation of Fracturing Technology (GFIT) in Petroleum Reservoirs: A Haghi, M Asef, R Kharrat

0800h  **T21B-2148** POSTER Predicting Stress-induced Anisotropy around a Borehole: X Fang, M Fehler, Z Zhu, M N Toksoz, Title of Team: Earth Resources Laboratory

0800h  **T21B-2149** POSTER Hydrofracturing In-situ stress measurements before and after the Wenchuan earthquake in China: W Chenghu, Q Guo, Title of Team: Division of In-situ Stress Measurement, Qiliang Guo, Yanshan Zhang, Shiguang Zhao

0800h  **T21B-2150** POSTER Imprint of global mantle convection on the intra-plate stress field of Eurasia: K Ruckstuhl, R M Govers, M J Wortel

0800h  **T21B-2151** POSTER Crustal Stress in the Finders Ranges, South Australia, From Earthquake First Motion Data: P R Cummins, N Balfour, D Love

0800h  **T21B-2152** WITHDRAWN

0800h  **T21B-2153** POSTER Revisiting Earthquake Focal Mechanisms in the Central and Eastern U.S. Utilizing Independent Stress Data from the World Stress Map: O Hurd, M D Zoback

0800h  **T21B-2154** POSTER Recent Tectonic Stress Field Zoning in Tienshan Area and its Dynamic Genesis: H Zhang, F Xie, X Cui

0800h  **T21B-2155** POSTER Contemporay stress state in Italy: updated map: M Mariucci, P Montone, S Pierdominici

0800h  **T21B-2156** POSTER Recent tectonic stress field state in Italy from numerical modelling analysis: S Pierdominici, O Heidbach

0800h  **T21B-2157** POSTER Mapping Crustal Stress and Strain in Southwest British Columbia: N Balfour, J Cassidy, S E Dosso, S Mazzotti

0800h  **T21B-2158** POSTER Evolving Stress State and Deformation Mechanism in the Himalayan Foreland Fold-and-Thrust Belt, Northern Pakistan: I Ahmad, N Dasti

0800h  **T21B-2159** POSTER Do geological field survey and remote sensing record the same fractures? The case of the corallian Loyalty Islands (SW Pacific): J Thovert, D Huaman, I Ahmad, T Kudo, K Yamaoka, R Ikuta, S Rondenay, H Djikpesse, I Furukawa, J Cassidy, S E Dosso, O Heidbach, K Ruckstuhl

0800h  **T21B-2160** POSTER Present-day stress-field in the Cooper basin of Australia: implications for petroleum exploration: G Backé, R King

0800h  **T21B-2161** POSTER Stress State of the I lan ChinShui Geothermal Area, NE Taiwan: T Sun, E Yeh, W Lin, C Liu, C Lu, Y Wu, S Song, J Hung

0800h  **T21B-2162** POSTER Stress- Controlled Fracture Permeability and a Possible Cause of Hydrothermal Overflow in Seokmo Geothermal Site, South Korea: Y Oh, C Chang

0800h  **T21B-2163** POSTER Geomechanical Response to CO2 Sequestration: preliminary analysis using the example of Snøhvit, Norway: L Chiaramonte, S Johnson, J A White
0800h T21D-2198 POSTER West Antarctic Rift System: Extension and Collapse of a West Antarctic Plateau: A D Huerta, A E Blythe
0800h T21D-2199 POSTER Differential Movement across Byrd Glacier, Transantarctic Mountains, Antarctica: A combined (U-Th)/He and DEM Analysis: D J Foley, E Stump, M C Van Soest, K X Whipple, K Hodges
0800h T21D-2200 POSTER ROSSMAP; Regional Seismic Stratigraphic Correlations in the Victoria Land Basin and the Timing of Rifting Episodes: B W Davy, S A Henrys, T J Wilson, C R Fielding, R H Levy, Title of Team: ANDRILL MIS-Science Team
0800h T21D-2201 POSTER Seismic and Gravity Data Help Constrain the Stratigraphic and Tectonic History of Offshore New Harbor, Ross Sea, Antarctica: M A Speece, S F Pekar, G S Wilson, D A Sunwall, K J Tinto
0800h T21D-2202 POSTER Two-dimensional Tomographic Inversion Model of Ross Island, Antarctica: S Marai, R C Aster, H A Knox, D Zandomeneghi, C M Snelson, P R Kyle
0800h T21D-2203 POSTER Neogene Fault and Feeder Dike Patterns in the Western Ross Sea: W R Magee, T J Wilson

T21E Moscone South: Poster Hall Tuesday 0800h

The Colorado Plateau and Its Margins II Posters (joint with S, V, G, GP, DI)

Presiding: I W Bailey, University of Southern California; M S Miller, University of Southern California; A Levander, Rice University; C Lee, Rice University

0800h T21E-2204 POSTER Permeability variation around faults in the Joe Lott Tuff Member of the Mount Belknap Volcanics, southwestern Utah: C H Okubo
0800h T21E-2205 POSTER Late Neogene exhumation of the Piceance basin, N.W. Colorado, USA: Integrated analysis of multiple thermochrometers and subsidence modeling: A J Vernon, JJ Kendall, T P Becker, P E Patterson, P W Reiners, J Kapp
0800h T21E-2206 POSTER Evidence from carbonate clumped isotope (\(\Delta_4\)) thermometry for the Late Cretaceous ‘Nevadaplano’ in the northern Basin and Range Province: K E Snell, P L Koch, J Eiler
0800h T21E-2207 POSTER Melt in the mantle beneath the Amagmatic Zone, Southern Nevada: C J Rau, D W Forsyth
0800h T21E-2208 POSTER Retrograded eclogite xenoliths from mid-Tertiary potassic lavas along the southwest margin of the Colorado Plateau: T J Schroeder, N Riggs, M H Ort
0800h T21E-2209 POSTER Effect of Shear Tractions on Deformation of Western North America: A Ghosh, T W Becker, E Humphreys
0800h T21E-2210 POSTER Combined Investigation of V\(_S\) and Density Structure Beneath the Colorado Plateau Based on Gravity, Receiver Function and Rayleigh Wave Phase Velocity Data: I W Bailey, M S Miller, A Levander, K Liu
0800h T21E-2211 POSTER Correlation of the 410 km Discontinuity Low Velocity Layer with Tomographic Wavespeed Variations: Z Zhang, K G Duerer
0800h T21E-2212 POSTER Seismic Investigations of an Accommodation zone in the Northern Rio Grande Rift, New Mexico, USA: W S Baldridge, J Valdes, O Nederob, B Pirampus, L W Braile, J F Ferguson, M C Benage, M Litherland
0800h T21E-2213 POSTER Receiver Function Analysis of the Lithospheric Structure Beneath the Western Great Plains: S Thurner, Y Zhai, A Levander
0800h T21E-2214 POSTER Apatite (U-Th)/He Thermochronology from the Henry Mountains Laccolith Complex, Southeastern Utah, USA: K E Murray, P W Reiners
0800h T21E-2215 POSTER New incision rates along the Colorado River system based on cosmogenic burial dating of terraces: implications for regional controls on differential incision: A L Darling, K E Karlstrom, D E Granger, A Aslan, E Kirby, W B Ouiemer, D D Coblenz, Title of Team: CREST Working Group
0800h T21E-2216 POSTER Correlation of Earthquakes with Faults along the Southwestern Margin of the Colorado Plateau, Northern Arizona: V S Cronin, D S Lancaster, D S Brumbaugh
0800h T21E-2217 POSTER Mante Lithosphere Support of Colorado Rocky Mountain Elevation: 3D Tomography from CREST: J K MacCarthy, R C Aster, S M Hansen, J C Stachnik, K G Duerer, K E Karlstrom, Title of Team: The CREST Group
0800h T21E-2218 WITHDRAWN
0800h T21E-2219 POSTER Petrogenesis of the Mount Taylor volcanic field and comparison to the Jemez Mountains volcanic field, New Mexico: K Fellah, J A Wolff, F E Goff

T21F Moscone West: 2011 Tuesday 0800h

Earthquake Geology and Active Tectonics in South and East Asia II (joint with S)

Presiding: Y Chan, Academia Sinica; T B Byrne, University of Connecticut

0800h T21F-01 WITHDRAWN
0815h T21F-02 Integrated structural model for active arc-continental collision from southern Taiwan to central Taiwan inferred from seismogenic views: S Nagai, Y Wang, K Ma, Y Wu, H Huang
0830h T21F-03 Deep structure and deformation history of the rapidly growing Tainan anticline, southwestern Taiwan: O Marc, J Suppe, S Huang, M Le Beon, M Huang, J Hu
0845h T21F-04 Spatial distribution and focal mechanisms of the earthquakes recorded in southern Central Range of Taiwan and their tectonic implications: K Lai, Y Wu, Y Chen, Y Chan
0900h T21F-05 Fault zone structure and inferences on past activities of the active Shanchiao Fault in the Taipei metropolis, northern Taiwan: C Chen, J Lee, Y Chan, C Lu
0915h T21F-06 Using Broadband Seismic Waveforms to Image Seismogenic Structures of Taiwan (Invited): W Chi
0930h T21F-07 Early Continental Rifting of the South China Sea: C Lee, M Chiu, C Chan
0945h T21F-08 Active tectonic features and seismogenic structures in Taiwan submarine arc-continent collision zone (Invited): A T Lin, C Liu, S Hsu

T21G Moscone West: 2016 Tuesday 0800h

Interaction Between Magmatic and Tectonic Processes in Continental and Incipient Oceanic Riffs I (joint with G, S, V, GP)

Presiding: D Keir, University of Leeds; C Pagli, U. Leeds; J Biggs, University of Bristol; E Rivalet, University of Leeds

0800h T21G-01 The importance of rift history for volcanic margin formation (Invited): J Collier, J J Armitage, T A Minshull
0820h T21G-02 Source-limited dike propagation at the base of the lithosphere: implications for rift initiation: C Havlin, E Parmentier, G Hirh
0835h T21G-03 Formation and Stability of Magmatic Segments in the Main Ethiopian Rift (Invited): J W van Wijk, E K Beutel, C J Ebinger, D Keir
0855h T21G-04 The Role of Magma During Continent-Ocean Transition: Evidence from Seismic Anisotropy: J M Kendall, J D Bastow, D Keir, G W Stuart
All information is current as of November 12, 2010
The 2008-2010 Eruption of Halema'uma'u, Kilauea: Eruption, Ascent, and Plume Dynamics Presentations (joint with NH, NS)

Presiding: J P Kauahikaua, Hawaiian Volcano Observatory; B F Houghton, University of Hawaii; M R Patrick, USGS-HVO; R J Carey, University of Hawaii

V21C Moscone South: Poster Hall Tuesday 0800h

0800h V21B-2334 POSTER Oxygent, hydrogen, and compositional characterization of Bezymyanny volcano, Kamchatka, Russia: a 2000-year geochemical history based on analysis of individual phenocrysts and glasses from tephra sections and surface lavas: K M Wickham, I N Bindeman, V Ponomareva, P E Izbekov, M Portnyagin

V21D Moscone South: Poster Hall Tuesday 0800h

Causes and Consequences of Rhyolite Volcanism at Chaitén Volcano, Southern Chile I Presentations (joint with NH)

Presiding: J M Castro, Monash University; J S Pallister, USGS; A Amigo, SERNAGEOMIN; F J Swanson, US Forest Service


0800h V21D-2351 POSTER Landscape-scale effects of the 2008 Chaitén (Chile) eruption on vegetation disturbance and regeneration from satellite image analysis: K M Moore, J A Jones, F J Swanson, C Crisafulli


0800h V21D-2353 POSTER From Chaitén to the Chilean volcano monitoring network Jorge Munoz, Hugo Moreno, Servicio Nacional de Geología y Minería, Chile, jmunoz@sernageomin.cl: J Muñoz, H Moreno

0800h V21D-2354 POSTER Volatile Contents, Degasging Behaviour and Hydration of Early-erupted Rhyolitic Pyroclasts and Ashes from Vulcan Chaitén, Chile: H Tuñón, C S Riley, J M Castro

0800h V21D-2355 POSTER Monitoring the Chaiten Rhyolite Dome: Interpretation of Airborne Thermal and Aeromagnetic Data: M Bernstein, A Pavez Alvarado, P L Whelley, E S Calder, H Rymer

0800h V21D-2356 POSTER Tephra fall deposits from Chaitén-Michinmahuida volcanoes: constraints on granulometry, geochemical data and 14C ages: A Amigo, L E Lara

Developing monitoring capability of a volcano observatory: the example of the Vanuatu Geohazards Observatory: **S. Todoran**, E Garaebiti, G E Jolly, S Sherburn, B Scott, A D Jolly, N Fournier, C Miller

Assessment of Glassy and Vesicular Textures on Silicic Lava Domes through Analysis of Ground-based and Airborne LIDAR Data: **S. W. Anderson**, D C Finnegan, M Bulmer

Refining the Workflow of UV Camera Measurements: Data Collection from Low Emission Rate Volcanoes under Variable Conditions: **I. D. Brewer**, C A. Werner, P A. Nadeau


Automated System for Anomalous Volcanic Crustal Deformation Detection and Source Estimation by Using Real Time Observation Data of NIED: **H. Ueda**, E Fujita, M Ukawa, Y Kohno, T Tanada

The Surface Temperature Characteristics of Earth's Active Lavas: Implications for the Design of Earth Observation Missions: **R. Wright**

The influence of big earthquakes on volcanism in Chile since 1900, including the recent M=8.8 offshore Maule event: **C. A. Farias**, J A. Valdivia


Seismic expression of magma-induced crustal strains and localized fluid pressures during initial eruptive stages, Soufrière Hills volcano, Montserrat: **V. Miller**, B Voight, C J. Ammon, E Shalev, G Thompson

Volcanic earthquakes and tremor associated with the 2010 eruption of Shinmoe-dake in Kirishima volcano group, Japan: **J. Ikikawa**, A Watanabe, H Tsuji, T Kyama, Y Morita, T Ohminato, M Takeo, S Nakada, Y Aoki, Y Maeda

Precursory seismicity associated with the May 29, 2010 undersea eruption south of Sarigan Island, Northern Mariana Islands: C K Searcy, **J. A. Power**, P Webley

Repeating LP events and increases in high-frequency seismic energy preceding the December 1999 eruption of the quiescently active Telica volcano, Nicaragua: **M. Rodgers**, D C. Roman, H Geirsson, P LaFemina, A Muñoz, C Guzman, V Tenorio


Tracking Magma Through the Crust to Eruption

Presiding: **T. Arnadottir**, Inst. of Earth Sciences; **C. J. Bean**, University College Dublin
**Atmospheric Sciences**

**A22A Moscone West: 3004** Tuesday 1020h

**Biomass Burning: New Findings and Analyses From Multiple Perspectives II (joint with B, PA)**

**Presiding: Y Shinozuka**, ORAU/NASA Ames Research Center; S P Urbanski, US Forest Service


1050h A22A-02 Emission Rates and Optical Properties of Pollutants Emitted from a Traditional and an Improved Wood-Burning Cookstove: T Kirchstetter, O L Hadley, C Preble, A Gadgil

1105h A22A-03 OH Reactivity and Potential SOA Yields from Volatile Organic Compounds and Other Trace Gases Measured in Controlled Laboratory Biomass Burns: J B Gilman, C Warneke, W C Kuster, P D Golden, P R Veres, J M Roberts, J A De Gouw, I R Burling, R J Yokelson


1150h A22A-06 Examination of Smoke Maker Ratios from Controlled Laboratory Burns vs. Wildfires and Prescribed Burns: A P Sullivan, S M Kreidenweis, J L Collett

1205h A22A-07 Nitrated Secondary Organic Tracer Compounds in Biomass Burning Smoke: Y Inuma, O Boge, R Gräfe, H Herrmann

**A22B Moscone West: 3002** Tuesday 1020h

**Climate Change, Air Quality, and Their Interrelations at the North American West Coast VI**

**Presiding: A H Goldstein**, University of California, Berkeley; D D Parrish, NOAA/ESRL Chemical Sciences Division


1035h A22B-02 Ambient Concentrations and Emissions of a Comprehensive Suite of Volatile Organic Compounds at the CalNex-Bakersfield Supersite: D R Gentner, A H Goldstein

1050h A22B-03 Measurements of Volatile Organic Compounds At A Ground Site In The Los Angeles Basin During CalNex 2010: W C Kuster, J B Gilman, M Graus, C Warneke, J A De Gouw

1105h A22B-04 Ground based organic and inorganic acids measurements using negative-ion proton-transfer chemical-ionization mass spectrometry in Pasadena, CA during CalNex 2010: P R Veres, J M Roberts, A K Cochran, C Warneke, J A De Gouw

1120h A22B-05 Cloud property retrievals from surface spectral transmittance and airborne spectral reflectance: Comparisons with satellite, microwave, and in-situ observations during CalNex: P J McBride, S Schmidt, P Pilewskie, S Lance, P Minnis, K M Bedka, D E Wolfe


1150h A22B-07 Evaluation of Real-time Air Quality Model Forecasts and Their Emissions During the CalNex-2010 Field Campaign: S A McKeeen, G A Grell, S Peckham, W Gong, S Menard, H Landry, J McQueen, Y Tang, J McHenry, D Olerud

1205h A22B-08 Airmass Characteristics of Surface Air Quality over California: G Pfister, C Wiedinmyer, D P Edwards, L K Emmons

**A22C Moscone West: 3006** Tuesday 1020h

**Fast Physics in Climate Models: Parameterization and Evaluation II (joint with NG)**

**Presiding: Y Liu**, Brookhaven Natl Lab; L Donner, GFDL/NOAA

1020h **Introduction**

1040h A22C-01 Use of the PDF method to parameterize subgrid variability and drive microphysical schemes *(Invited):* V E Larson, B M Griffin, D P Schanen

1044h A22C-02 WITHDRAWN

1056h A22C-03 Biases in parameterized autoconversion and accretion rates due to subgrid variations and correlations of cloud water, droplet number, and drizzle water: J Wang, G Senum, Y Liu, P H Daum, L I Kleinman, R L McGraw

1108h A22C-04 A new parameterization for predicting the fast response of stratiform cloud to unresolved diabatic radiative heating: T J Garrett, C T Schmidt

1120h A22C-05 Parameterizing convective organization: B E Mapes, R B Neale

1132h A22C-06 Exploring the role of mesoscale forcing on deep convection: F Robinson, D Gerstle, S C Sherwood, C Liu, D J Kirshbaum

1144h A22C-07 Observational Evaluation of Mass Flux Parameterizations of Fair-Weather Cumuli: B A Albrecht, P Kollias

1156h A22C-08 Cloud-Aerosol Interactions in a Multiscale Aerosol Climate Model: S J Ghan, W Minghuai, R C Easter, E Kassianov, M Ovchinnikov, Y Qian, V E Larson, D P Schanen, H Yu, H Morrison, M Khairoudinov

1208h A22C-09 Microphysics Parameterization in Convection and its Effects on Cloud Simulation in the NCAR CAM5: G J Zhang, X Song

**A22D Moscone West: 3008** Tuesday 1020h

**Greenhouse Gas Measurements Using Active Optical Remote Sensing I (joint with B)**

**Presiding: E V Browell**, NASA Langley Research Ctr; J B Abshire

1020h A22D-01 Applications of active remote sensing of CO2 to atmospheric studies of regional greenhouse gas sources and sinks *(Invited):* J D Davis, E V Browell, M P Butler, A Denning, L I Diaz Isaac, F Gibert, S Ismail, G Koch, T LAUVAUX, N L Miles, P J Rayner, S Richardson, C Sweeney

1045h A22D-02 An Advanced Ground-Based 1.6μm DIAL for Daytime Measurements of Vertical CO2 Concentration Profiles in the Atmosphere: C Nagasawa, M Abo, Y Shibata, T Nagai, T Sakai, M Tsukamoto, T Honda

1100h A22D-03 On the use of active remote sensing of CO2 for estimating surface fluxes. *(Invited):* P J Rayner, F Chevalier, M Vaughan, L Feng
1125h  **A22D-04** Atmospheric Airborne Pressure Measurements using the Oxygen A Band for the ASCENDS Mission: H Riris, M Rodriguez, M Stephen, W Hasselbrack, G Allan, J Mao, S R Kawa, C J Weaver

1140h  **A22D-05** Lessons of space-based CO₂ measurements based on recent results from GOSAT project (Invited): O Uchino, I Morino, Y Yoshida, T Yokota

1205h  **A22D-06** Ultraprecise laboratory reference data to support remote sensing: D A Long, D K Havey, M Okumura, C E Miller, J T Hodges

---

**Biogeosciences**

**B22A** Moscone West: 2006 Tuesday 1020h

*Adaptation of Vegetation to Global Change II (joint with GC, H)*

**Presiding:** S J Schymanski, Max Planck Institute for Biogeochemistry; K P Tu, UC Berkeley; S Zaehle, Max Planck Institute for Biogeochemistry

**1020h  B22A-01** Global change, soil water content, stomatal behavior and the statistics of rainfall (Invited): G D Farquhar, F Sun, M L Roderick, W Lim

**1035h  B22A-02** Plant water use efficiency shapes co-evolution of stomata size and density over geologic time (Invited): S Assouline, D Or

**1050h  B22A-03** Mechanisms Controlling Species Responses to Climate Change: Thermal Tolerances and Shifting Range Limits. (Invited): R F Sage, O Bykova, H Coiner

**1105h  B22A-04** Photosynthetic physiology of eucalypts along a subcontinental rainfall gradient in northern Australia: L A Cernusak, L B Hutley, J Beringer, P R Isaac, J A Holtum, B L Turner

**1120h  B22A-05** Thermal Acclimation and Adaptation of Net Ecosystem Carbon Exchange (Invited): Y Luo, S Niu, S Fei, W Yuan, Z Zhang, D Schimel, . FLUXNET Pls

**1135h  B22A-06** Co-Existence, Competition And Collapse: What Do New Demographic Data From Amazonia Tell Us About Ecosystem Resilience To Future drying? (Invited): R A Fisher

**1150h  B22A-07** Optimality Versus Resilience In Patterns Of Carbon Allocation Within Plants Under Climate Change: V Srinivasan, P Kumar, M Sivapalan

**1205h  B22A-08** The Jena Diversity Model: Towards a Richer Representation of the Terrestrial Biosphere for Earth System Modelling: R Pavlick, B Reu, K Bohn, J Dyke, A Kleidon

---

**B22B** Moscone West: 3016 Tuesday 1020h

*Eolian Processes: Biophysical Drivers and Biogeochemical Implications I (joint with EP, H)*

**Presiding:** S Ravi, University of Arizona; J Li, UCLA; T M Zobeck, USDA, Agricultural Research Service

**1020h  B22B-01** Distribution of Atmospheric Mineral Dust across Dryland Ecosystems (Invited): R L Reynolds, H Goldberg, M E Miller, J C Neff, D Fernandez, M C Reheis

**1035h  B22B-02** Quantifying surface moisture influences on aeolian transport (Invited): J M Nield, G F Wiggs

**1050h  B22B-03** Sediment transport in the lee of obstacles: separating the effects of flow separation and upwind surface heterogeneity: K C Leonard, K Burri, M Lehning, B A Walter

**1105h  B22B-04** A field study of flow turbulence and sediment transport dynamics on a beach surface in the lee of a coastal foredune under offshore winds: A C Baas, D Jackson, J A Cooper, K Lynch, I Delgado-Fernandez, M Beyers, Z S Lee

---

**B22C** Moscone West: 3018 Tuesday 1020h

*Ecological Migration and Dispersal From a Geophysical Perspective I*

**Presiding:** J M Ramirez, Universidad Nacional Colombia; M E Power, Univ. California Berkeley; E C Waymire, Oregon State University; J A Jones, Oregon State University

**1020h  B22C-01** Riverine Landscapes: Exploring Connectivity, Extinction Risk, and Biogeography in an Alternative Geometry (Invited): W Fagan

**1040h  B22C-02** Large scale effects of localized physical heterogeneity on environmental processes (Invited): E Thomann, T Appuhamillage, V A Bokil, E C Waymire, B D Wood

**1100h  B22C-03** Impact of Landscape Topology and Spatial Heterogeneity on the Shape and Parameters of Dispersal Kernels (Invited): I Rodriguez-Iturbe, R Muneeppearkul, A Rinaldo, S A Levin

**1120h  B22C-04** Seasonal and spatial variation of bug flux in a northern California drainage network under a Mediterranean climate: implications for reciprocal subsidies between coupled ecosystems: M E Power, D Moreno-Mateos, H Uno, C Bode, W Rainey

**1140h  B22C-05** Conditions for Extinction of Species under Advection-Diffusion Dispersal in River Networks: a Mathematical Model: J M Ramirez

**1200h  B22C-06** First passage time: Connecting random walks to functional responses in heterogeneous environments (Invited): M A Lewis, H McKenzie, E Merrill

---

**B22D** Moscone West: 2002 Tuesday 1020h

*Environmental Aspects of Bioenergy Production I (joint with PA, H)*

**Presiding:** U Mishra, University of California Berke; M S Torn, Berkeley Lab/UCB; E H DeLucia, University of Illinois

**1020h  B22D-01** Impacts of bioenergy feedstock production on environmental factors in the Central U.S. using an agroecosystem model (Invited): T E Twine, A D VanLoocke, M Williams, C Bernacchi

**1035h  B22D-02** Air Emissions and Health Benefits from Using Sugarcane Waste as a Cellulosic Ethanol Feedstock: C Tsao, E Campbell, Y Chen, G Carmichael, M Mena-Carrasco, S Spak

**1050h  B22D-03** Water Quality and Quantity Implications of Biofuel Intercropping at a Regional Scale (Invited): S F Christopher, S H Schoenholtz, J Nettles

1120h  **B22D-05** Quantifying the Climate Impacts of Land Use Change (Invited): K J Anderson-Teixeira, P K Snyder, T E Twine  
1135h  **B22D-06** Biofuel production and climate mitigation potential from marginal lands in US North Central region:  
I Gelfand, R Sabajpal, X Zhang, R C Izaurralde, G P Robertson  
1150h  **B22D-07** Factors Driving Biofuel Crops’ Influence on Climate: A Jones, M S Torn, W J Riley, W Collins  
1205h  **B22D-08** Designing bioenergy crop buffers to mitigate nitrous oxide emissions and water quality impacts from agriculture:  
G Gopalakrishnan, C M Negri  

**B22E** Moscone West: 2004 Tuesday 1020h  
**Interacting Biogeochemical Cycles: Linking Carbon, Water, and Nutrient Fluxes From Organisms to Globe III (joint with H)**  

**Presiding:** D Drewry, University of Illinois; R Vargas, University of California-Berkeley  

1035h  **B22E-02** Comparative analysis of carbon, water, and energy exchanges in co-located mid-latitude forests at various stages of development: C A Williams, J W Munger, J Hadley, D R Fitzjarrald  
1050h  **B22E-03** Integrating water, carbon, and nutrient cycling at the landscape scale (Invited): A M Porporato, S Manzoni, G Vico  
1120h  **B22E-04** Inter-annual Variability of Evapotranspiration in a Semi-arid Oak-savanna Ecosystem: Measured and Modeled Buffering to Precipitation Changes: N Raz-Yaseef, O Sonnentag, H Kobayashi, D D Baldocchi  
1135h  **B22E-05** Quantifying the impacts of pinion mortality on ecosystem-scale carbon and water cycling: a twinned flux tower approach: A M Fox, M E Litvak, N McDowell, T Rahn, M G Ryan  
1150h  **B22E-06** Ecohydrology and biogeochemistry of seasonally-dry ecosystems: X Feng, A M Porporato  
1205h  **B22E-07** Multi-sensor synthesis of vegetation pattern over a large climatic gradient transect in Africa: K Guan, E F Wood, K K Caylor  

**C22A** Moscone West: 3010 Tuesday 1020h  
**Characterization of Grain Size and Other Snowpack Properties I (joint with H, GC)**  

**Presiding:** N Rutter, Northumbria University; M Sandells, NCEO, University of Reading; J J Davenport, The University of Reading; H Marshall, Boise State University; R J Gurney, ner-cesn  
1020h  **C22A-01** The determination of snow grain size from infrared spectra of snow (Invited): A A Kokhanovsky  
1035h  **C22A-02** Deep profiles of snow specific surface area at Dome C, Antarctica, and application to passive microwave remote sensing. (Invited): G Picard, L Arnaud, N Champollion, F Domine, M Fily  
1050h  **C22A-03** Measuring the specific surface area of snow using optical methods, and application to remote sensing in Antarctica (Invited): F Domine, J Gallet, S Morin, G Picard, L Arnaud, N Champollion  
1105h  **C22A-04** Measurements of snow radiometric and microstructure properties over a transect of plot-scale field observations: Application to snow thermodynamic and passive microwave emission models (Invited): A Langlois, A Royer, B Montpetit, A Roy, C Derksen  
1020h  **C22A-05** WITHDRAWN  
1120h  **C33A-0517** Snow grain size measurements in Antarctica and analysis of variability at regional, local and sample scale: S M Ingvander, P Jansson, I Brown  
1135h  **C22A-06** Plot-scale observations of snow surface roughness (Invited): S R Fassnacht  
1150h  **C22A-07** Sensitivity of passive microwave brightness temperatures to snow cover properties through a seasonal cycle: observations and simulations: C Derksen, P Toose, J Lemmyteninen, C Fuller, A Langlois, A Royer, N Rutter  
1205h  **C22A-08** Impact of small-scale microstructure variations on passive microwave brightness temperature: M Sandells, N Rutter, C Derksen, A Langlois, J Lemmyteninen, A Royer, P Toose  

**C22B** Moscone West: 3011 Tuesday 1020h  
**Monitoring Changes in Polar Ice Sheets and Sea Ice Using Airborne and Satellite Remote Sensing III (joint with G)**  

**Presiding:** M Studinger, Goddard Earth Science and Technology Center/UMBC; S Martin, University of Washington; N T Kurtz, University of Maryland Baltimore County; J S Deems, National Snow and Ice Data Center  
1020h  **C22B-01** Improvements in the determination of ice sheet mass fluxes and freshwater fluxes using Icebridge data. (Invited): E J Rignot, M Schrodk, D Menemenlis, M Studinger, J R Cochran, K E Bell  
1035h  **C22B-02** Combining ICESat and Ice bridge altimetry data with surface velocity data to constrain the mechanisms of ice surface elevation change (Invited): B E Smith, J R Joughin  
1050h  **C22B-03** recent changes the in flow of the Ross Ice Shelf, West Antarctica (Invited): C L Hulbe, T A Scambos, J A Bohlander, C M LeDoux  
1105h  **C22B-04** Tributary Glacier Elevation and Mass Loss in the Larsen A and B Ice Shelf Embayments, 2001-2009: T A Scambos, C A Shuman, E Berthier  
1120h  **C22B-05** New constraints on the structure and dynamics of the East Antarctic Ice Sheet from the joint IPY/Ice Bridge ICECAP aerogeophysical project: D D Blankenship, D A Young, M J Siegert, T D van Ommen, J L Roberts, A Wright, R C Warner, J W Holt, N W Young, E Le Meur, B Legresy, M Cavite, Title of Team: ICECAP Team  
1135h  **C22B-06** Tracking Changes in Northwest and Southeast Greenland with NASA’s Operation IceBridge and the Airborne Topographic Mapper: J G Sonntag, W B Krabill, S S Manizade, J Yungel  
1150h  **C22B-07** A new, multi-resolution bedrock elevation map of the Greenland ice sheet: J A Griggs, J L Bamber, Title of Team: GISBed Consortium  
1205h  **C22B-08** Operation IceBridge Alaska: C F Larsen, A Johnson, S L Zirnheld, P Claus
Education and Human Resources

ED22A  Moscone South: 102  Tuesday 1020h
The Future of Cyber-Education in the Geosciences: New Directions and Opportunities I (joint with IN)

Presiding: J G Ryan, University of South Florida; S C Eriksson, UNAVCO; K A Lehner, Columbia University

1020h  ED22A-01 Geospatial Technology and Geosciences – Defining the skills and competencies in the geosciences needed to effectively use the technology (Invited): A Johnson

1035h  ED22A-02 New Collaborative Strategies for Bringing the Geosciences to Students, Teachers, and the Public: Progress and Opportunities from the National Earth Science Teachers Association and Windows to the Universe: R M Johnson, A Herrold, M A Holzer, M J Passow

1050h  ED22A-03 The Disproportionate and Potentially Negative Influence of Research Universities on the Quality of Geoscience Education: P J Samson


1120h  ED22A-05 Cyberlearning for Climate Literacy: Challenges and Opportunities: M S McCaffrey, S M Buhr, A U Gold, T S Ledley, M E Mooney, F Niepold

1135h  ED22A-06 MGDS: Free, on-line, cutting-edge tools to enable the democratization of geoscience data: A M Goodwillie, W B Ryan, S O’Hara, V Ferrini, R A Arko, J Coplan, S Chan, S M Carbotte, F O Nitsche, J J Bonczkowski, J J Morton, R Weissel, A Leung

Earth and Planetary Surface Processes

EP22A  Moscone South: 310  Tuesday 1020h
Quantifying Event-Scale Landscape Change I (joint with GC, H, NH)

Presiding: S DeLong, University of Arizona; J P Johnson, The University of Texas at Austin


1050h  EP22A-03 Quantifying the Influence of Hillslope Form, Aspect and Burn Severity on Post-Wildfire Hillslope Erosion Rates: L M Perreault, E M Yager, R E Aalto

1105h  EP22A-04 Experimental Study of Bedrock Incision Processes by Both Suspended Load and Bedload Abrasions: P Chatanantavet, K X Whipple, M A Adams

1120h  EP22A-05 Monitoring the event-scale evolution of a rapidly eroding bedrock gorge: K L Cook, J Suppe

Geodesy

G22A  Moscone West: 2008  Tuesday 1020h
GPS/GNSS Network Solutions for Science: New Techniques, Data Systems, Results, and Implications I (joint with IN, NH, T, S)

Presiding: T Herring, MIT; W R Thatcher, U S Geological Survey

1020h  G22A-01 The ITRF combination and the increasing number of estimated parameters (Invited): Z Altamimi, X Collilieux, L Metivier, I PANET, D Coulard, O Jamet

1035h  G22A-02 A System to Produce Precise Global GPS Network Solutions for all Geodetic GPS Stations in the World: B Glewitt, C W Kreamer

1050h  G22A-03 Dense Regional GPS Networks for Real-Time Crustal Motion and Seismic Monitoring (Invited): Y Bock, B W Crowell, D Melgar Motezuma


1120h  G22A-05 The Pacific Northwest GPS Velocity Field (Invited): R McCaffrey, R W King, S J Payne

1135h  G22A-06 Combined Analysis of CGPS-Derived Velocity and Deformation Fields in the Western U.S: D Dong, Y Bock, F Webb, P Fang, S Kedar, P Jamason, S E Owen, M B Squibb, B W Crowell

1150h  G22A-07 Horizontal strain rate estimation using discrete geodetic data and its application to Southern California (Invited): Z Shen, Y Zeng

G22B  Moscone West: 2020  Tuesday 1020h
The Art and Science of Volcano Geodesy II (joint with V, S, NH)

Presiding: M Battaglia, Sapienza - University of Rome; M P Poland, U.S. Geological Survey

1020h  G22B-01 Surface deformation versus eruption rates of the two Eyjafjallajökull 2010 eruptions; implications for the magma plumbing system and origin of melts: R Pedersen, F Sigmundsson, S Hreinsdottir, T Arnadottir, A Hoskuldsson, M T Gudmundsson, E Magnusson

1035h  G22B-02 Eyjafjallajökull Magma Monitoring From Time Series Data of TerraSAR-X: J C Martins, K Spaans, A J Hooper, F Sigmundsson, K Feigl

1105h  GC22B-04 Deformation and Stress from a Finite Uniformly Pressurized Triaxial Ellipsoidal Cavity: Approximate Solution and Application to the Campi Flegrei Caldera, Italy: L Crescentini, A Amoruso

1120h  GC22B-05 Calibrating nonlinear volcano deformation source parameters in FEMs: The pinned mesh perturbation method. (Invited): T Masterlark, J Stone, K Feigl

1135h  GC22B-06 Mesh parameterization opens the door to FEM-based inverse methods for estimating nonlinear source parameters of volcano deformation: J Stone, T Masterlark, K Feigl

1150h  GC22B-07 Measurement of post-eruptive deformation and depositional features from the 2009 Redoubt Volcano Eruption using high-resolution digital elevation models: D B McAlpin, F Meyer, P Webley

1205h  GC22B-08 Analysis of GPS-measured deformation before, during, and after the 2004-2008 dome-building eruption of Mount St. Helens, Washington: M Lisowski, M Battaglia, M P Poland

Global Environmental Change

GC22A  Moscone West: 3001  Tuesday 1020h Can We Counteract Global Warming? I (joint with A, PA)

Presiding: A Robock, Rutgers University; K Caldeira, Carnegie Institution


1032h GC22A-02 Efficient formation of stratospheric aerosol for geoengineering by emission of condensable vapour from aircraft (Invited): J R Pierce, D K Weisenstein, P Heckendorn, T Peter, D Keith

1044h GC22A-03 Stratospheric geoengineering with black carbon aerosols: B Kravit, A Robock

1056h GC22A-04 Climate Responses to Stratospheric SRM: Results from a Perturbed Physics Ensemble Modeling Experiment: K Ricke, D J Rowlands, D Keith

1108h GC22A-05 Efficacy of geoengineering to limit 21st century sea level rise: J C Moore, S Jevrejeva, A Grinsted


1132h GC22A-07 Impacts on the Hydrological Cycle of Counteracting Global Warming with Albedo Changes over Oceans or Land: G Bala, K Caldeira, R R Nemani, L Cao, G A Ban-Weiss, H Shin

1144h GC22A-08 Assessing the Regional Disparities in Geoengineering impacts: P J Irvine, A J Ridgwell, D J Lunt

1156h GC22A-09 Effects of Stratospheric Sulfate Geoengineering on Food Supply in China: L Xia, A Robock

Poster Summaries: One slide by each poster presenter with short summary

1020h GC22B  Moscone West: 3005 Uncertainty Quantification and Its Application to Climate Change I (joint with A, IN, PP, NG)

Presiding: M Boslough, Sandia National Laboratories; D Higdon, Los Alamos National Laboratory

1020h GC22B-01 Characterizing and Quantifying Uncertainty Within a Vulnerability and Response Option Analysis Framework (Invited): R Lempert

1035h GC22B-02 Climate sensitivity estimated from the past 450,000 years: C Snyder

1050h GC22B-03 Implications of long timescale feedbacks for the range of plausible future temperature fluctuations. (Invited): P Huybers

1105h GC22B-04 Paleoclimatic Warming Increased Carbon Dioxide Concentrations: D Lemoine

1120h GC22B-05 Climate model parameter optimization and sensitivity and the challenges of precipitation: J Neelin, J C McWilliams, A Bracco, H Luo, J E Meyerson

1135h GC22B-06 Generation of Pareto Optimal Ensembles of Calibrated Parameter Sets for Climate Models: K R Dalbey

1150h GC22B-07 Quantifying uncertainty of simulations from NCAR Community Atmospheric Models at regional scales: C L Waters-Tormey, W Li, J J Barsugli

1205h GC22B-08 Interpreting regional climate projections (Invited): D W Nychka

Geomagnetism and Paleomagnetism

GP22A  Moscone West: 2003  Tuesday 1020h Recent Progress in Magnetic Fabrics and Applications to Earth Sciences I

Presiding: F Martin Hernandez, Universidad Complutense; C L Waters-Tormey, Western Carolina University

1020h GP22A-01 Anisotropy of Magnetic Susceptibility: Preliminary results from IODP Expedition 318 to Wilkes Land (Invited): L Tauxe, S Sugisaki

1035h GP22A-02 An automated system to measure ARM anisotropy, pARM spectra and high resolution AF demagnetization curves: M Wack, S A Gilder

1105h GP22A-03 WITHDRAWN


1150h GP22A-05 Constraints on Magnetite-Silicate Strain Partitioning from Magnetic Fabrics in Experimentally-Deformed Synthetic Shear Zones: J L Till, M J Jackson, B M Moskowitz

1150h GP22A-06 AMS and AARM Data Bearing on the Emplacement of the Early Eocene Shonkin Sag and Square Butte Laccolith, north-central Montana: D K Holm, J W Geissman, T J Naibert, N K George

1150h GP22A-07 Using AMS of weakly deformed red beds for determining the spatial and temporal evolution of layer parallel shortening fabrics in the Cordilleran of Wyoming, USA: A Yanke, A B Weil

1205h GP22A-08 A new inclination shallowing correction of the Mauch Chunk Formation of Pennsylvania, based on high field-AIR results: Implications for the Carboniferous North American APW path and Pangea reconstructions: D Bilardello, K P Kodama

Hydrology

H22A  Moscone South: 103  Tuesday 1020h Langbein Lecture (Webcast)

Presiding: D P Lettenmaier, University of Washington

1020h H22A-01 Opportunities for Impacting the Trajectory of Hydrologic Model Development (Invited): W G Gray
Earth and Space Science Informatics

IN22A Moscone South: 302 Tuesday 1020h
Advances in Cyberinfrastructure for the Earth and Environmental Sciences I (joint with GC, NG)

Presiding: C E Tweedie, Univ Texas at El Paso; A A Velasco; G R Keller, University of Oklahoma; J A Gamon, University of Alberta

1020h IN22A-01 Cyberinfrastructure for Online Access to High-Quality Data: Advances and Opportunities (Invited): C Baru

1040h IN22A-02 Progress toward a Semantic eScience Framework; building on advanced cyberinfrastructure: D L McGuinness, P A Fox, P West, E Rozell, S Zednik, C Chang

1055h IN22A-03 Swiss Experiment: Design, implementation and use of a cross-disciplinary infrastructure for data intensive science: N Dawes, A Salehi, A Clifton, M Bavay, K Aberer, M B Parlane, M Lehning

1110h IN22A-04 Software Tool Support to Specify and Verify Scientific Sensor Data Properties to Improve Anomaly Detection: I Gallegos, A Q Gates, C Tweedie, Title of Team: CyberShare

1125h IN22A-05 WIDTHERN DRAWN

Near Surface Geophysics

NS22A Moscone West: 3020 Tuesday 1020h
Near-Surface Geophysics General Contributions I (joint with GP, H, NG, S)

Presiding: C J Weiss, Virginia Tech; L H Cox, Montana Tech

1020h NS22A-01 The National Geoelectromagnetic Facility - an open access resource for ultra wideband electromagnetic geophysics (Invited): A Schultz, S Urfahart, M Slater

1035h NS22A-02 Fractional diffusion in geologic systems (Invited): R Schumer, M M Meerschaert, B Baeumer

1050h NS22A-03 Fractional calculus demystified (don’t get lost in the math and keep your physics straight) (Invited): A Cortis

1105h NS22A-04 Mechanisms Resulting in Induced Polarization: M Skold, A Revil, P Vaudelet, F Martinez

1120h NS22A-05 Predicting heat and mass transfer in fractured porous media (Invited): S Geiger, A Cortis, S Emmanuel

1135h NS22A-06 Geothermal structure of Australia’s east coast basins: C R Danis, C O’Neill

1150h NS22A-07 Seismic Attenuation due to Patchy Saturation: Y Masson, S R Pride

1205h NS22A-08 Field Experiment Provides Ground Truth for Surface NMR Measurement: R J Knight, J D Abraham, J C Cannia, K I Dubac, B Grau, E D Grunewald, T Irons, Y Song, D Walsh

Ocean Sciences

OS22A Moscone West: 3014 Tuesday 1020h
Carbon System Dynamics in Large River-Dominated Coastal Margins I (joint with H, B)

Presiding: S E Lohrenz, Univ Southern Mississippi; S E Lohrenz, Univ Southern Mississippi; W Cai, University of Georgia; W Cai, University of Georgia

1020h OS22A-01 Isotopic Composition and Export Fluxes of Organic Carbon Species from the Lower Mississippi River (Invited): L Guo

1035h OS22A-02 Comparison of carbon chemistry data in the East China Sea between the 1990s and 2000s: implications for the impact of eutrophication from the Changjiang River (Invited): W Chou, G Gong, C Tseng, C Hung


1105h OS22A-04 The CO2 System In The Scotian Shelf Region Of The Northwestern Atlantic: From Seasonal To Interannual Variability: E H Shadwick, H Thomas, K Azetsu-Scott, A Comeau, S E Craig, E Head, E Horne, C Hunt, B J Greenan, J Salisbury

1120h OS22A-05 Pore water constraints on organic carbon and biogenic Si deposition and remineralization in the sediments underlying the Amazon Plume: L Chong, W Berelson, J Fleming, N Rollins, J McManus


1150h OS22A-07 Enhanced ocean acidification in the northern Gulf of Mexico hypoxic bottom waters: W Cai, X Hu, W Huang, M C Murrell, J C Lehrer, S E Lohrenz, Y Wang, X Guo, F Chen, K Gunderson

1205h OS22A-08 Water and Nutrient Fluxes from Land to Coast in North America Driven by Climate Change, Land Use, and Nitrogen Deposition During 1900-2008: M Liu, H Tian, Q Yang, X Song, J Yang, G Chen, X Xu, W Ren

OS22B Moscone West: 3009 Tuesday 1020h
Lessons Learned From the Deepwater Horizon Oil Spill: Biological and Chemical Oceanography II (joint with B, PA)

Presiding: R C Highsmith, University of Mississippi; S B Joye, University of Georgia

1020h OS22B-01 Entry of Oil to the Coastal Planktonic Food Web During the Deepwater Horizon Spill (Invited): W M Graham, R H Condon, R H Carmichael, I D’Ambra, H K Patterson, F J Hernandez, Jr.

1035h OS22B-02 A Horizon of Natural Gas in the Deep Gulf of Mexico Dominates the Microbial Landscape (Invited): D L Valentine, J D Kessler, M C Redmond, S D Mendes, M B Heintz, C Farwell, L Hu, F Kinnaman, S A Yvon-Lewis, M Du, E W Chan, F Garcia Tigreros, C Villanueva

1050h OS22B-03 Formation of marine snow and enhanced enzymatic activities in oil-contaminated seawater: K Ziervogel, L McKay, T Yang, B Rhodes, L Nigro, T Gutierrez, A Teske, C Arnst

1105h OS22B-04 Bacterial communities of surface and deep hydrocarbon-contaminated waters of the Deepwater Horizon oil spill: T Yang, L M Nigro, L McKay, K Ziervogel, T Gutierrez, A Teske
OS22C Moscone West: 3007 Tuesday 1020h
Submarine Landslides: Characterization, Processes, and Their Sedimentary Record III (joint with EP, NH)

Presiding: R Urgeles, Passeig Marítim de la Barceloneta; D C Mosher; J D Chaytor, U.S. Geological Survey; M Strasser, MARUM, University of Bremen

1020h OS22C-01 I. Physical properties and age of mid-slope sediments dredged from the Eastern Australian Continental Margin and the implications for continental margin erosion processes: T Hubble, P Yu, D Airey, S L Clarke, R Boyd, J Keene, N Exon, J V Gardner

1035h OS22C-02 Sedimentary Characteristics and Ages of Submarine Mass Movements around Puerto Rico and the Virgin Islands: J D Chaytor, U S Ten Brink

1050h OS22C-03 Identification and dating of a submarine landslide in the western Argentine Basin - an interdisciplinary approach: S Henkel, M Strasser, T Schwenk, D Winkelmann, N Riedinger, J Hüsener, M Formolo, J Tomasini, S Krastel, S Kasten

1105h OS22C-04 Submarine tsunamigenic landslides at Stromboli Volcano: characterization and estimation of recurrence time: D Casalbore, F L Chiocci, C Romagnoli, A Bosman

1120h OS22C-05 Slow-motion gravitational collapse on the flanks of a rapidly subsiding transform basin: the Marmara Sea, Turkey: D J Shillington, L Seeger, C C Sorlien, M S Steckler, H Kurt, G Çifçi, C Imren, D Dondurur, S Gürçay, D Timur, E Demirbag

1135h OS22C-06 Response of submarine slopes to shaking by earthquakes: Examples from Sagami and Nankai troughs, Japan: K Ikehara, J Ashi

1150h OS22C-07 Evidence for seismic strengthening and climate influence in creation of an anomalously large slope failure, Aleutian-Yakutat margin, Gulf of Alaska: R Reece, S P Gulick, G L Christeson

1205h OS22C-08 Slide Activity along the eastern slope of the Gela Basin (offshore Sicily): First results from expedition MSM-15/3: K Huhn, M Strasser, T Freudenthal, F Foglini, F Trincardi, D Minisini, Title of Team: MSM15/3 working group

Planetary Sciences

PP22A Moscone South: 306 Tuesday 1020h
Titan: The Methane Cycle and Potential for Watery Warm Spots I

Presiding: C J Alexander, Jet Propulsion Laboratory; R M Lopes, Jet Propulsion Laboratory, Caltech; R Nelson, Jet Propulsion Laboratory; C Sotin, Jet Propulsion Laboratory

1020h PP22A-01 Radiogenic Argon Release from Titan: Sources, Efficiency, and Role of the Ocean (Invited): W B McKinnon

1035h PP22A-02 Distinct Aqueous and Hydrocarbon Cryovolcanism on Titan and Other Icy Satellites (Invited): J S Kargel, R Furfaro, P Candelaria


Paleoceanography and Paleoclimatology

PP22A Moscone West: 2007 Tuesday 1020h
Advances at the Frontiers of Paleo-proxy Validation III (joint with OS, B)

Presiding: M LaVigne, University of California Davis; A D Russell, University of California, Davis; L Vetter, University of California Davis

1020h PP22A-01 Resolving ontogenetic from gametogenic and outer crust calcification in planktic foraminifers (Invited): S M Eiggs, H J Spero, L Vetter, B Hoenisch

1035h PP22A-02 Assessing the intratest Mg/Ca variability in the planktonic foraminifer Neogloboquadrina dutertrei: Does shell morphology play a role?: J S Fehrenbacher, P A Martin

1050h PP22A-03 Crystal structural controls on boron incorporation in Calcium Carbonate: Implications for the B-isotope paleo-pH proxy (Invited): N Hemming

1105h PP22A-04 Ion microprobe measurements of boron and oxygen isotopes in deep-sea coral: toward a better understanding of vital effects? (Invited): C Rollion-Bard, D Blamart, J Cuif, Y Dauphin

1120h PP22A-05 Distinguishing Phosphate Structural Defects From Inclusions in Calcite and Aragonite by NMR Spectroscopy (Invited): B L Phillips, H E Mason
PP22A-06 Simulation of FeCO₃ ion clusters in aqueous solution: Implications for crystal growth: A F Wallace, P Raiteri, G Julian, J J DeYoreo, J F Banfield

PP22A-07 EXAFS Reveals the Mechanism of U Isotope Fractionation During Adsorption to Mn Oxohydroxide: L E Wasylchenki, G Brennecka, J Bargar, S Weyer, A D Anbar

1205h PP22A-08 Calcium Isotope Signature of Amorphous Calcium Carbonate: A Probe of Crystallization Pathway? (Invited): A C Gagnon, D J Depaolo, J J DeYoreo

PP22B Moscone West: 2005 Tuesday 1020h Cenozoic Evolution of Ocean and Climate Systems: New Results From Ocean Drilling I (joint with B, GP, GC, OS)

Presiding: H Pälike, University of Southampton; H Pälike, University of Southhampton; M W Lyle, Texas A&M University; M W Lyle, Texas A&M University; A C Ravelo, University of California, Santa Cruz; A C Ravelo, University of California, Santa Cruz; H Brinkhuis; H Brinkhuis

1020h PP22B-01 Insights into the East Antarctic ice sheet history from sediments recovered from the Wilkes Land margin during IODP Expedition 318 (Invited): C Escutia, H Brinkhuis, R B Dunbar, A Klaus, Title of Team: Scientific Team of IODP Drilling Expedition 318


1105h PP22B-04 Toward the Cenozoic Megasplice - high-resolution XRF core scanning data and improved composite records from IODP Expedition 320: implications for fine scale paleoceanography (Invited): T Westerhold, P R Bown, T Dunkley Jones, M W Lyle, T C Moore, H Pälike, U Roehl, R H Wilkens, Title of Team: Expedition 320/321 Scientists


1135h PP22B-06 Preliminary data from IODP Site U1338 of the Pacific Equatorial Age Transect (PEAT IODP Expedition 320/321): a study on the interaction between paleoenvironment and evolution of selected calcareous nannofossil taxa: I Raffi, M Ciummelli, J Backman, Title of Team: IODP Expedition 320/321 Shipboard Scientific Party

1150h PP22B-07 Calcareous phytoplankton perturbations through the Eocene/Oligocene Transition: P R Bown, T Dunkley Jones, Title of Team: Expedition 320/321 Shipboard Party

1205h PP22B-08 Commotion in the Ocean: Tasmanian Gateway Tectonics and Initiation of Circum-Antarctic Circulation: H D Scher, J Whittaker, S Williams, M L Delaney

SPA-Acronomy

SA22A Moscone South: 301 Tuesday 1020h Connections Between the Lower and Upper Atmosphere and Ionosphere I (joint with A)

Presiding: R A Akmaev, NOAA SWPC; R S Lieberman, NorthWest Research Associates


1035h SA22A-02 WAVE-DRIVEN LONGITUDINAL AND LOCAL TIME VARIABILITY IN THE ITM: WHAT CONTRIBUTES TO THE “WAVE-4”: J Oberheide, J M Forbes, X Zhang, S L Bruinsma


1105h SA22A-04 Connection between Tropospheric Activities and Ionospheric behaviors Simulated by a Whole Atmosphere-Ionosphere Coupled Model: H Jin, Y Miyoshi, H Fujiwara, H Shinagawa, K Terada, N Terada, M Ishii, Y Otsuka, A Saito

1120h SA22A-05 Seasonal and longitudinal variations of the solar quiet current system during solar minimum determined by CHAMP satellite magnetic field observations: N M Pedatella, J M Forbes, A D Richmond

1135h SA22A-06 Ionospheric variations associated with stratospheric sudden warmings: current understanding and future challenges (Invited): L P Goncharenko, A J Coster, J L Chau

1150h SA22A-07 Dynamic and electrodynamic response to stratospheric warmings simulated by the Whole Atmosphere Model (WAM) (Invited): T J Fuller-Rowell, R A Akmaev, H Wang, F Wu, T Fang, M Fedrizzi, E A Araujo-Pradere


SPA-Solar and Heliospheric Physics

SH22A Moscone South: 309 Tuesday 1020h Solar Dynamics Observatory Data Access and Analysis Tools I (joint with IN)

Presiding: J B Gurman, NASA Goddard Space Flight Center; P H Scherrer, Stanford University

1020h SH22A-01 AIA and HMI Data from the SDO Joint Science Operations Center (Invited): R S Bogart

1040h SH22A-02 Guided searches to SDO Data using the Helioseismology Events Knowledgebase (Invited): N E Hurlburt, C Cheung, C J Schrijver, Title of Team: HEK team


1115h SH22A-04 SDO Data Access Using the Virtual Solar Observatory (VSO) (Invited): A R Davey, Title of Team: The VSO Team

1155h SM22A-06 Finding Magnetic Features and Emerging Flux Regions in HMI Data with SWAMIS: D A Lamb, C DeForest
1210h Summary Joseph Garman

SPA-Magnetoospheric Physics

SM22A Moscone South: 307 Tuesday 1020h Magnetoospheric Plasma Waves: Generation, Propagation, and Interaction With Energetic Particles V (joint with AE, SA, SH)

Presiding: A A Chan, Rice University; S P Gary, Los Alamos National Laboratory

1020h SM22A-01 Radiation Belt Radial Diffusion Coefficients Derived From Ground-based and In-situ ULF Wave Measurements: I R Mann, J Rae, L Ozeki, K R Murphy, D K Milling, A A Chan, S R Elkin
1050h SM22A-03 Simulations and analysis of relativistic electron energization by ULF waves in the Radiation Belts: M Tornquist, D Vassiliadis, M Koepke, C Huang
1105h SM22A-04 Temporal and spatial ULF wave observations by SuperDARN radar: C L Waters, L Norouzi Sedeh
1135h SM22A-06 Multi-point observations of the Poynting vector associated with field line resonance: M Hartinger, V Angelopoulos, M Moldwin, K Glassmeier
1150h SM22A-07 Multipoint Observation of Quarter-Wave Length, Standing Alfvén Modes: Y Obana, I Yoshikawa, F W Menk, C L Waters, M D Sciffer, A Yoshikawa, M Moldwin, I R Mann, D Boteler
1205h SM22A-08 Ion-ion Hybrid Alfvén Wave Resonator: S T Vincena, J Maggs, G J Morales, W Farmer

SM22B Moscone South: 305 Tuesday 1020h Magnetoospheric Response to Transient Solar Wind Features II

Presiding: Q Zong, UML CAR; H Zhang, NASA Goddard Space Flight Center

1035h SM22B-02 Fast Acceleration of “Killer” Electrons and Energetic Ions by Interplanetary Shock Stimulated ULF Waves in the Inner Magnospheres: Q Zong
1050h SM22B-03 First IBEX Observations of the Terrestrial Plasma Sheet and a Likely Disconnection Event: D J McComas, M A Dayeh, H O Funsten, S A Fuselier, J Goldstein, J Jahn, P H Janzen, S M Petrinec, D B Reisenfeld, N A Schwadron
1105h SM22B-04 TWINS Observations of Anisotropic ENA Emissions from Trapped and Precipitating Ions: J Goldstein, P C Brandt, J D Perez, P W Valek, D J McComas, J A Redfern
1135h SM22B-06 Comparisons of Simulated and Observed Stormtime Magnetic Intensities, Ion Plasma Parameters, and ENA Proton Flux in the Ring Current During Storms: M W Chen, C Lemon, T B Guild, M Schulz, J L Roeder, G Le, T Lui, J Goldstein
1150h SM22B-07 Case study of nightside magnetospheric magnetic field response to interplanetary shocks: C Wang, T Sun, X Guo, J D Richardson
1205h SM22B-08 Magnetospheric ULF wave generation during an ICME-magnetosphere interaction: D Vassiliadis, X Shao, S F Fung, A S Sharma, M Tornquist

Study of Earth’s Deep Interior

DI22A Moscone West: 3024 Tuesday 1020h Structure and Dynamics of Earth’s Core II (joint with MR, S, T, V)

Presiding: H Tkalcic, The Australian National University; Y Kuwayama, Ehime University; F Niu, Rice University

1020h DI22A-01 Hemispherical Anisotropic Patterns of the Earth’s Inner Core: M Mattessini, A B Belonoshko, E Buforn, M Ramirez, S I Simak, A Udias, H Mao, R Ahuja
1032h DI22A-02 The crystal structure of iron at the inner core: S Tateno, K Hirose, Y Ohishi, Y Tatsumi
1044h DI22A-03 Composition of the Earth's inner core from high-pressure sound velocity measurements in Fe-Ni-Si alloys: D Antonangeli, J Siebert, J Badro, D Farber, F J Ryerson, G Morard, G Fiquet
1056h DI22A-04 Outer core compositional stratification from observed core wave speed profiles: G R Helffrich, S Kaneshima
1108h DI22A-05 Constraints on the magnetic field at the core-mantle and inner core boundaries from Earth’s nutations: M Dumberry, L Koot

DI22B Moscone West: 3024 Tuesday 1120h Time Variability of the Geomagnetic Field I (joint with GP)

Presiding: J E Mound, University of Leeds; P W Livermore, University of Leeds, UK; M Dumberry, Department of Physics

1120h DI22B-01 The Geomagnetic Field in the Archaean (Invited): A J Biggin, C G Langereis, M De Wit
1135h DI22B-02 Core heat flow drives geomagnetic superchron cycles (Invited): P E Driscoll
1150h DI22B-03 Magnetic flux expulsions and secular acceleration pulses at the core surface: is there a link? (Invited): A Chulliat
1205h DI22B-04 Earth’s Dynamo: Fore- and Hind- casting Limits from a Variational Data Assimilation Approach: L L Dimitrova, G D Egbert, W Kuang, A Tangborn

Mineral and Rock Physics

MR22A Moscone West: 3022 Tuesday 1020h Stability, Elasticity, and Rheology of Hydrous Phases: Geodynamical Implications II (joint with S, DI, T, V)

Presiding: B Reynard, CNRS; M Moorkerjee, Bayerisches Geoinstitut; I Katayama, Hiroshima Univ

1020h MR22A-01 The Stability of Phase D at High Pressure and Temperature: S Ghosh, M W Schmidt
1035h MR22A-02 High pressure behaviour of hydrous aluminosilicate phases in the lower mantle: M G Pama, T Boffa Ballaran, D J Frost, D M Trots, A Kurnosov, F Heidelbach, N Miyajima

All information is current as of November 12, 2010
MR22B Moscone South: 308 Tuesday 1020h
Superhard Materials: Synthesis and Systematics I (joint with DI)

Presiding: K K Lee, Yale University; K K Lee, Yale University; B Kiefer, New Mexico State Univ; B Kiefer, New Mexico State Univ

1020h MR22B-01 Characterization of Superhard Solids to Mbar Pressures (Invited): T S Duffy, Z Mao, D He

1035h MR22B-02 Extreme mechanical properties of materials under extreme pressure and temperature conditions (Invited): A Kaver, M M Armentrout, M Xie, M Weinberger, R B Kaner, S H Tolbert

1050h MR22B-03 Evolutionary search for novel superhard phases, or can TiO2 be the hardest oxide? (Invited): A R Oganov, A O Lyakhov

1105h MR22B-04 A superhard, quenchable carbon polymorph formed by the room-temperature compression of graphite (Invited): Y Wang, B Kiefer, K K Lee

MR22C Moscone South: 308 Tuesday 1120h
Mudstone Multiphysics II (joint with H, V, T)

Presiding: T A Dewers, Sandia National Laboratories; J E Heath, Sandia National Laboratories

1120h MR22C-01 Nanostructures and radionuclide transport in clay formations (Invited): Y Wang

1135h MR22C-02 Finite element analysis of grain-matrix microcracking in shale within the context of a multiscale modeling approach for fracture (Invited): R A Regueiro, S Yu

1150h MR22C-03 Pore-scale studies of gas shale: D Silin, J B Ajo Franklin, S Cabrini, T J Kneafsey, A MacDowell, P S Nico, V Radmilovic

1205h MR22C-04 Primary migration of hydrocarbon fluids through invasion-percolation cracking in a source rock: M Kobchenko, H Panahi, F Renard, A Malthe-Sorensens, J Scheibert, D Dyrsthe, P Meakin

Seismology

S22A Moscone West: 2009 Tuesday 1020h
Monitoring Temporal Changes of Earth’s Properties With Seismic Waves III (joint with G, NH, NS, T, V)

Presiding: F Brenguier, Institut de Physique du Globe de Paris; E F Larose, LGIT - CNRS; U Wegler, BGR

1020h S22A-01 Diffusion of laboratory ultrasonic waves: W Wei, L Fu

1035h S22A-02 Simulation of Seismic Scattering from Rock Fractures: C Petrovitch, N Teasdale, L J Pyrak-Nolte, M V De Hoop

1050h S22A-03 The Effect of Saturation on Shear Wave Anisotropy in a Transversely Isotropic Medium: W Li, L J Pyrak-Nolte

1105h S22A-04 ANALYSIS TECHNIQUES OF ACOUSTIC EMISSION DATA FOR DAMAGE ASSESSMENT OF REINFORCED CONCRETE STRUCTURES: G Garilli, E Proverbio, A Marino, D De Domenico, D Termin, A Teramo

1120h S22A-05 Microseismicity illuminates open fractures in the shallow crust: R J Lunn, S Pyrrouali, Z K Shipton, J D Kirkpatrick, A Farias do Nascimento

1135h S22A-06 Resolving temporal and spatial variations in seismic velocity using similar event clusters (Invited): P M Shearer, G Lin, E Hauksson

1150h S22A-07 Matched Field Detection of Microseismicity in a Geothermal Field: D C Templeton, D B Harris

1205h S22A-08 Temporal seismic velocity changes in the deep crust driven by aseismic afterslip of the great Sumatra earthquakes: W Yu, T Song, P G Silver

Tectonophysics

T22A Moscone West: 2011 Tuesday 1020h
Earthquake Geology and Active Tectonics in South and East Asia III (joint with S)

Presiding: X Xu, Institute of Geology, CEA; Y Awata

1020h T22A-01 Expression of Active Tectonics in Erosional Landscapes (Invited): K X Whipple, J A McDermott, B A Adams

1035h T22A-02 Location and mechanism of the 1933 Diexi earthquake and its association with the regional tectonic deformation prior to the 2008 Wenchuan earthquake: K Wang, Z Shen

1050h T22A-03 Deep structures of the Bayan Har Terrane, NE Tibetan Plateau, and their control on the strong earthquakes along the terrane boundaries: M Feng, M An, W Zhao, G Xue, Y Zhao, J Mechlie

1105h T22A-04 Yushu earthquake slip: implication of great earthquake migration along boundary fault system of Bayan Har block, Tibetan Plateau: XXu, G Yu, S Xinzhe, Title of Team: National Center for active fault studies

1120h T22A-05 Late Quaternary Kinematical Transformation and Slip Partitioning on the Southeastern Segment of the Xianshuihe Fault Zone: G Chen, X Xu, X Wen

1135h T22A-06 16ch high-resolution seismic reflection surveys on the active fault of upper fore-arc slope off Okinawa Island, central Ryukyu Island Arc, Southwest Japan: K Arai, T Inoue, T Sato, T Tuzino

1150h T22A-07 Preservation of Holocene Prehistoric Earthquakes, Sungai Pinang, Western Sumatra: T Dura, C M Rubin, H M Kelsey, B Horton, C Grand Pre, A D Hawkes, M Daryono, T Ladinsky
1205h  T22A-08  GPS Velocities and Structure Across the Burma Accretionary Prism and Shillong Plateau in Bangladesh: S H Akhter, M S Steckler, L Seber, N P Agostinetti, M G Kogan

T22B  Moscone West: 2018  Tuesday  1020h  From Sediment Inputs to Seismogenesis at Subduction Zones II (joint with S, V, G, NH)

Presiding: R E Wells, U.S. Geological Survey; C R Ranero, ICREA at CSIC

1020h  T22B-01  Tectonic development of forearc basins along the Western Sunda/Andaman Subduction Zone: J R Cochran, K R Katoju

1035h  T22B-02  3-D Seismic Imaging of Sedimentary Underplating at the Corner of the Cascadia Mantle Wedge: A J Calvert, L A Preston, A M Farahbod

1050h  T22B-03  Fluid flow in ocean crust cools the Cascadia subduction zone: B D Cozzens, G A Spinelli

1105h  T22B-04  A possible source of water in seismogenic subduction zones: J Kameda, A Yamaguchi, G Kimura, Title of Team: IODP Exp. 322 scientists

1120h  T22B-05  Preliminary Results From the Serpentinite, Extension and Regional Porosity Experiment Across the Nicaraguan Trench (SERPENT): K W Key, S Constable, R L Evans, S Naif, T Matsuno, D Lizzarello

1135h  T22B-06  IODP CRISP Program A: the first step toward drilling the Seismogenic Zone in Central America: (Invited): P Vannucchi, K Ujije

1150h  T22B-07  Estimating trench-fill thickness from satellite gravity data and implications for global estimation of megathrust-earthquake potential: K M Keranen, R J Blakely, D W Scholl, R E Wells, S H Kirby

1205h  T22B-08  Confirmation that Large-Magnitude Megathrust Earthquakes Are Linked to the Subduction of Thicker, Laterally Continuous Bodies of Trench Sediment: D W Scholl, S H Kirby, K M Keranen, R J Blakely, R E Wells

T22C  Moscone West: 2016  Tuesday  1020h  Interaction Between Magmatic and Tectonic Processes in Continental and Incipient Oceanic Rifts II (joint with G, S, V, GP)

Presiding: D Keir, University of Leeds; C Pagli, U. Leeds; J Biggs, University of Bristol; E Rivalta, University of Leeds

1020h  T22C-01  Length and Time Scales of Rifting and Magmatism in an Unusual Continental Arc, Taupo Volcanic Zone, New Zealand. (Invited): J V Rowland, C J Wilson

1040h  T22C-02  Insights into Rift-Related Extension in Western Saudi Arabia through Observations and Modeling of the 2009 Dike Intrusion in Harrat Lunayyir (Invited): S Jonsson, J S Pallister

1100h  T22C-03  InSAR observations of post-rifting deformation around the Dabbahu rift segment, Afar, Ethiopia: I J Hamling, T J Wright, L S BENNATI RASSION, E Calais, E Lewi, C Pagli

1115h  T22C-04  Kinematics and dynamics of the East African Rift from GPS geodesy and thin-sheet modeling: D S Stamps, E Calais, L M Flesch, D Koehn, E E Saria, H Dickinson

1130h  T22C-05  Recent Surface Deformation in the East African Rift: J Biggs, E Nissen, T Craig, J A Jackson, D P Robinson, E Lewi, I D Bastow


1200h  T22C-07  Magma plumbing systems deduced from comparison of multiple dike intrusions in an incipient seafloor spreading segment in Afar, Ethiopia: M Belachew, C J Ebinger, D M Cote, D Keir, J V Rowland, J O Hammond, A Ayele

Volcanology, Geochemistry, and Petrology

V22A  Moscone West: 2022  Tuesday  1020h  Bowen Lectures (Webcast)

1020h  V22A-01  The double-edged sword of high-precision U-Pb geochronology or be careful what you wish for. (Invited): S A Bowring

1120h  V22A-02  Volatiles in Earths interior (Invited): H Keppler

Tuesday P.M.

U23A  Moscone South: Poster Hall  Tuesday  1340h  Breakthroughs in Understanding and Developing Renewable Energy II Posters

Presiding: E C Weatherhead, U. Colorado; S K Avery

1340h  U23A-0014  POSTER Calculating the carbon emissions associated with San Jose’s Green Vision goals: E C Cordero, L Prada


1340h  U23A-0016  POSTER Renewable Energy Resources in Lebanon: R Hamdy


U23B  Moscone South: 103  Tuesday  1340h  Carbon in the Earth II

Presiding: C M Bertka, Carnegie Institution of Washington; R M Hazen


1410h  U23B-02  Opportunities and challenges in studies of deep life (Invited): K J Edwards

1425h  U23B-03  Petrology of Deep Storage, Ingassing, and Outgassing of Terrestrial Carbon (Invited): R Dasgupta

1440h  U23B-04  Carbon Cycle in the Subduction Zone and Deep Mantle: Constraints from Equilibrium Experiments at High Pressure and Temperature (Invited): Y Fei, K D Litaso

1455h  U23B-05  On the relative roles of carbonate and molecular CO2 in subduction zones: implications for Earth’s deep carbon cycle (Invited): C E Manning, A Kavner, A Chopolas

1510h  U23B-06  H2O and CO2 devolatilization in subduction zones: implications for the global water and carbon cycles (Invited): P E Van Keken, B R Hacker, E M Syracuse, G A Abers

1525h  U23B-07  Novel synchrotron x-ray probes for deep carbon (Invited): W L Mao
Incorporating Climate Change Impacts Into Policy Analysis
(joint with GC)

Presiding: R E Kopp, AAAS Science & Technology Policy Fellow; B Mignone; M C Sarofim, EPA; G B Dreyfus, AAAS S&T Policy Fellow

1400h Introduction

1405h U23C-01 From Science to Policy: How Climate Impacts Research Informers Decision-Making (Invited): K Hayhoe

1400h U23C-02 The U.S. Federal Government’s Efforts to Estimate an Economic Value for Reduced Carbon Emissions (Invited): A Wolverton

1415h U23C-03 Limitations and opportunities for the social cost of carbon (Invited): S K Rose

1430h U23C-04 Valuing Precaution in Climate Change Policy Analysis (Invited): R B Howarth

1445h U23C-05 Beyond Optimality: Risk Management Approaches to Climate Change (Invited): K Keller

1500h U23C-06 Risk Management Framework for Incorporating Climate Impacts into Policy Analysis (Invited): M D Webster, J M Reilly, S Paltsav, A P Sokolov, C Wang, R G Prinn

1515h Panel Discussion Moderated by Michael Oppenheimer

Atmospheric Sciences

A23A Moscone South: Poster Hall Tuesday 1340h Fast Physics in Climate Models: Parameterization and Evaluation III Posters (joint with NG)

Presiding: Y Liu, Brookhaven Natl Lab; L Donner, GFDL/NOAA; S Menon, Lawrence Berkeley national Laboratory

1340h A23A-0202 POSTER Comparison of a global-climate model to a cloud-system resolving model for the long-term response of thin stratocumulus clouds to preindustrial and present-day aerosol conditions: S Lee, J E Penner


1340h A23A-0204 POSTER Cloud microphysical properties in contrasting monsoon days as revealed by CAIPEEX and MODIS observation and by cloud permitting WRF simulation: K Chakravarty, P Mukhopadhyay, S Halder, S Taraphdar, B Goswami

1340h A23A-0205 POSTER Parameterization of the cloud-mediated radiative forcing of climate due to aerosols in the two-way coupled WRF-CMAQ over the continental United States: S Yu, R Mathur, J Pleim, D Wong, A G Carlton, S J Roselle, S Rao

1340h A23A-0206 POSTER Quantifying Uncertainty in Cloud Fraction Observations over the Southern Great Plains: W Wu, Y Liu, M P Jensen, T Toto

1340h A23A-0207 POSTER Radar derived storm dynamics for cloud-resolving model evaluation and climate model parameterization development: S M Collins, P T May, A Protat, A M Fridlind, A S Ackerman, C R Williams, A Varble, E J Zipser

1340h A23A-0208 POSTER Orographic propagating precipitation systems over the US in a global climate model with embedded explicit convection: M S Pritchard, M W Moncrieff, R C Somerville

1340h A23A-0209 POSTER Estimating Large-Scale Convection from a No-Microphysics WRF Simulation over the SGP: Z T Segele, L M Leslie, P Lamb

1340h A23A-0210 POSTER Using a two-moment bulk microphysics under the WRF framework to investigate effects of urban aerosols on thunderstorm and lightning in a megacity: Y Wang, Q Wang, R Zhang

1340h A23A-0211 POSTER Enhanced Cloud Region Classification for Evaluation of Model Fast Physics: W Lin, Y Liu, A M Vogelmann, D Lubin

1340h A23A-0212 POSTER Simulation Study on Ground Surface Water and Energy Balance in Arid and Semiarid Areas: X Zhang

1340h A23A-0213 POSTER Scale-based Biases in Observation and Model Representation of Aerosol Indirect Effects: A C McComiskey, G Feingold

1340h A23A-0214 POSTER Assessing the Significance of Varying AGCM Physics Packages on Idealized Tropical Cyclone Simulations: K A Reed, C Jablonowski

1340h A23A-0215 POSTER Impacts of a new radiation scheme capable of treating subgrid variability on the climate of the GEOS-5 AGCM: D Lee, L Oreopoulos, M Suarez

1340h A23A-0216 POSTER Treatment of LW and SW Radiative Processes in a Climate GCM: A A Lacis, V Oinas

1340h A23A-0217 POSTER Parameterization of Surface Solar Fluxes in Mountains: Application to the Tibetan Plateau: W Lee, K Liou, A D Hall


1340h A23A-0220 POSTER Influence of two convection schemes on the radiative energy budget: L Li

1340h A23A-0221 POSTER An integrated TKE based eddy-diffusivity/mass-flux boundary layer scheme for the dry convective boundary layer: M L Witek, J Teixeira, G Matheou

1340h A23A-0222 POSTER Comparison and Evaluation of SCM Results against Observations: H Song, W Lin, L Donner, Y Lin, A D Genio, A Wolf, R Neggers, Y Liu

1340h A23A-0223 POSTER Development of Boundary Layer Parameterization for Simulating Moist Convective Boundary Layers: K Suselj, J Teixeira, G Matheou

1340h A23A-0224 WITHDRAWN


1340h A23A-0226 POSTER Cloud-resolving modeling of aerosol indirect effects in idealized radiative-convective equilibrium with interactive and fixed sea-surface temperature: C Yang, M Khairoutdinov

1340h A23A-0227 POSTER Configuration and Use of WRF as a Cloud Resolving Model in Evaluation against Observations: S Endo, Y Liu, W Lin, G Liu

1340h A23A-0228 POSTER A Multi-Scale Three-Dimensional Variational Data Assimilation System and Its Application to Cloud Resolving Models: Z Li, Z Ye

All information is current as of November 12, 2010
1340h **A23A-0229** POSTER Direct and indirect effects of anthropogenic aerosols as simulated by SP-CAM global climate model with superparameterization of clouds: **M Khairoutdinov**, W Grabowski, H Morrison

1340h **A23A-0230** POSTER Evaluation of Parameterized Surface Fluxes with ARM Observations: **G Liu**, Y Liu, T Toto, M P Jensen, S Endo

1340h **A23A-0231** POSTER Drizzle Variability in Marine Stratocumulus in the Azores: **E P Luke**, P Kollias


1340h **A23A-0233** POSTER Evaluation of the total energy mass flux boundary layer scheme in the WRF model using DYCOMS2 data: **H J Huang**, A D Hall, J Teixeira

1340h **A23A-0234** POSTER The Parametrization of Momentum Transport in the Boundary Layer: **P M Soares**, P M Miranda, J Teixeira

1340h **A23A-0235** POSTER Parameterization of Ice Fall Speeds for Reducing Cloud Uncertainties in Climate Models: **S Mishra**, D L Mitchell, B A Baker, P Lawson

**A23B Moscone South: Poster Hall Tuesday 1340h**

**Greenhouse Gas Measurements Using Active Optical Remote Sensing II Posters (joint with B)**

**Presiding:** J B Abshire; C Nagasawa, Tokyo Metropolitan Univ


1340h **A23B-0237** POSTER Sub-Surface Carbon Dioxide Concentration Measurement Using a Fiber Based Sensor in a Call/Return Geometry for Carbon Sequestration Site Monitoring: **G R Wicks**, B Soukup, K S Repasky, J Carlsten, J L Barr, L Dobek

1340h **A23B-0238** POSTER Development of a Differential Absorption Lidar (DIAL) for Carbon Sequestration Site Monitoring: **W Johnson**, A Barres, A R Nehrir, K S Repasky, J Carlsten

1340h **A23B-0239** POSTER The Use of a Pseudo Noise Code for DIAL Lidar: **J Burris**, X Sun, J B Abshire

1340h **A23B-0240** POSTER Ground Based Test Results for Broad Band LIDAR: **W S Heaps**, E Georgieva, W Huang, B Baldauf, T McComb

1340h **A23B-0241** POSTER Validation of Airborne CO2 Laser Measurements: **E V Browell**, J T Dobler, S Kooi, M A Fenn, Y Choi, S A Vay, F W Harrison, B Moore, T S Zaccheo

1340h **A23B-0242** POSTER Recent Pulsed Airborne Lidar measurements of Atmospheric CO2 Column Absorption to 13 km altitudes: **J B Abshire**, H Riris, G R Allan, C J Weaver, J Mao, W Hasselbrack, X Sun, M R Rodriguez

1340h **A23B-0243** POSTER Airborne pulsed lidar measurements over Railroad Valley Nevada compared with GOSAT observations: **C J Weaver**, G R Allan, H Riris, W Hasselbrack, J B Abshire

1340h **A23B-0244** POSTER Signal and Noise Analysis of the Recent Airborne CO2 and O2 Measurements with an Integrated Path Differential Absorption Lidar: **X Sun**, J B Abshire, H Riris, A Amediek, G Allan, M R Rodriguez, W Hasselbrack


1340h **A23B-0246** POSTER A review of recent and planned remote column integrated Carbon Dioxide measurements; technique improvements and campaign results conducted at JPL to further the development of the ASCENDS mission: **G D Spiers**, R T Menzies, J C Jacob, L E Christensen, P Meras, D Crisp, S Forouhar, J Hyon, M W Phillips


1340h **A23B-0248** POSTER Performance predictions for a mid-IR lidar suitable for measuring N2O in the boundary layer: **G G Gimmestad**, D W Roberts, A J Mercer, D K Tan, D J Armstrong

1340h **A23B-0249** POSTER A Fast, Locally Adaptive, Interactive Retrieval Algorithm for the Analysis of DIAL Measurements: **D V Samarov**, R Rogers, J W Hair, K O Douglass, D Plusquellec

1340h **A23B-0250** POSTER Line selection and sensitivity analysis for oxygen sensing in the 1.26-1.27 micron spectral band for the ASCENDS mission: **N Prasad**, E V Browell, T S Zaccheo, B Karpowicz

1340h **A23B-0251** POSTER Development of Low SWAP Laser Transmitters at 1262nm and 1571nm: A Rosiewicz, S Coleman, N Prasad

1340h **A23B-0252** POSTER High Power, Eye Safe, Tunable 1.5 μm OPO Lidar Transmitter: **R Foltynowicz**, M Wojcik

1340h **A23B-0253** POSTER Development of the 1.6μm OPG/OPA system wavelength-controlled precisely for CO2 DIAL: **M Abo**, Y Shiibata, C Nagasawa

**A23C Moscone West: Poster Hall Tuesday 1340h**

**Biomass Burning: New Findings and Analyses From Multiple Perspectives III (joint with B, PA)**

**Presiding:** R J Yokelson, Univ Montana; H Moosmuller, Desert Research Institute

1340h **A23C-01** POSTER Emissions from vegetation fires and their influence on atmospheric composition over the Amazon Basin (Invited): **M O Andreae**, P Artaxo, M M Bela, S R de Freitas, C Gerbig, K M Longo, K T Wiedemann, S C Wofsy

1410h **A23C-02** Black carbon aerosol properties measured by a single particle soot photometer in emissions from biomass burning in the laboratory and field: **G R McMeeking**, J W Taylor, A P Sullivan, M J Flynn, S K Akagi, C M Carrico, J L Collett, E Fortner, T B Onasch, S M Kreidenweis, R J Yokelson, C Hennigan, A L Robinson, H Coe


1510h **A23C-06** Withdrewn
1525h A23C-07 Evolution of a Canadian biomass burning aerosol smoke plume transported to the U.S. East Coast: D J Miller, K Sun, M A Zondlo, D Kanter, P A Ginoux

A23D Moscone West: 3002 Tuesday 1340h Climate Change, Air Quality, and Their Interrelations at the North American West Coast VII

Presiding: S A McKeen, CIRES/NOAA-CSD


1410h A23D-03 First multi-site assessment of tropospheric baseline ozone along the U.S. west coast: O R Cooper, S J Oltmans, B J Johnson, M Trainer, D D Parrish, T B Ryerson, I B Pollack, P Cullis, M Ives, D W Tarasick, J A Al-Saadi, I Stajner


1440h A23D-05 LOWER BOUNDARY LAYER AND OZONE PROFILES OVER FRESNO DURING WILDFIRE EVENTS: S O Ogunjemiyo, S A Omolayo


A23E Moscone West: 3006 Tuesday 1340h Ice Formation and Multiplication in Tropospheric Clouds II

Presiding: O Moehler, Karlsruhe Institute of Technology; X Liu, Pacific Northwest National Laboratory

1340h A23E-01 Ice nucleation processes: theoretical expectations versus evidence from laboratory experiments and field measurements (Invited): E J Jensen

1355h A23E-02 Arctic Observations Supporting Liquid-Dependent Ice Nucleation at Low-Altitudes and Moderate Temperatures: G de Boer, H Morrison, M Shupe, R Hindler

1410h A23E-03 The origin and development of the ice phase in frontal layer clouds (Invited): T Choularton, Title of Team: Scientific Team of APPRAISE Clouds Programme

1425h A23E-04 Importance of Chemical Composition for Ice Nucleation: A Combined Field and Laboratory Approach: K J Baustian, M E Wise, D J Cziczo, A G Hallar, M A Tolbert

1440h A23E-05 Investigating and parameterizing physical, chemical, and thermodynamic dependencies of ice nuclei concentrations (Invited): P J DeMott, A J Prenni, R C Sullivan, X Liu, S M Kreidenweis, J M Carpenter, M Branson, O Moehler, A Glen, S D Brooks

1455h A23E-06 The Ice Nucleation Ability of Selected Atmospherically Abundant Fungal Spores: R Iannone, D I Chernoff, A K Bertram

1510h A23E-07 How important is biological ice nucleation in clouds on a global scale? (Invited): C Choose, J E Kristjansson, S M Burrows, J Chen, A Hazra

1525h A23E-08 Uncertainty in Representing Cloud Ice Nuclei Number Concentration in Climate Models and Its Impact on Model Simulations: S Xie, X Liu, J S Boyle, S A Klein, S J Ghan

A23F Moscone West: 3008 Tuesday 1340h Regional Climate Modeling II (joint with GC, H)

Presiding: R W Arritt, Iowa State University; L Leung, Pacific Northwest National Laboratory

1340h A23F-01 CORDEX: A Coordinated Regional Downscaling Experiment (Invited): C Jones

1355h A23F-02 Evaluation of the regional climate model REMO over several CORDEX domains throughout the globe: A Elizalde, A Haensler, S Hagemann, D Jacob, P Kumar, R Podzun, D Rechid, A Remedio, F Saeed, K Sieck, C Teichmann, C Wilhelm

1410h A23F-03 Ensemble Downscaling of Winter Seasonal Forecasts: The MRED Project: R W Arritt, Title of Team: The MRED Team

1425h A23F-04 Potential Improvement in Warm Season North American Monsoon Forecast Using Dynamically Downscaled GCM Data: H Chang, C L Castro, F Dominguez, B Ciancarelli

1440h A23F-05 How Useful Are Regional Climate Models For Downscaling Seasonal Forecasts?: A W Robertson, J Qian, V Moron, M Tippett, A Lucero

1455h A23F-06 Seasonal Analysis of a Regional Climate Model for the Western US using Climateprediction.net Beta Run Experiments: A Salahuddin, P Mote

1510h A23F-07 Using the WRF Regional Model to Produce High Resolution AR4 Simulations of Climate Change for Mesoamerica: R J Oglesby, C M Rowe, C Hays

1525h A23F-08 Comparison of the PRECIS regional climate model performance using lateral boundary conditions from GCM and reanalysis data over tropical South America: D McGlone, M Vuille

Atmospheric and Space Electricity

AE23A Moscone West: 3007 Tuesday 1340h Electricity and Lightning in Thunderstorms I (joint with A)

Presiding: T Marshall, University of Mississippi; W P Winn, New Mexico Tech; M Stolzenburg, University of Mississippi

1340h AE23A-01 Toward a Time-Domain Fractal Lightning Simulation: C Liang, B E Carlson, N G Lehtinen, M Cohen, D Lauben, U S Inan


1410h AE23A-03 High-Speed Video Observations of a Natural Lightning Stepped Leader: D M Jordan, J D Hill, M A Uman, S Yoshida, Z Kawasaki
Biogeosciences

B23A Moscone South: Poster Hall Tuesday 1340h Advances in High-Frequency Optical Measurements of Trace Gases and Their Isotopes II Posters (joint with A, H)

Presiding: U Seibt, UCLA; C I Czimczik, University of California, Irvine

1340h B23A-0379 POSTER DETECTING AND ELIMINATING INTERFERING ORGANIC COMPOUNDS IN WATERS ANALYZED FOR ISOTOPIC COMPOSITION BY CRDS: B A Richman, G S Hsiao, C Rella

1340h B23A-0380 POSTER Inter-comparison of three commercial instruments for water vapor isotope measurement: X Wen, X Sun, S Li, X Lee

1340h B23A-0381 POSTER Concentration effects on laser-based 18O and 2H measurements and the implications for vapour data with liquid standards: U Seibt, M Schmidt, K S Maseyk, C Lert, P Biron, P Richar, T Bariac

1340h B23A-0382 POSTER Development of an off-axis integrated cavity output spectrometer (OA-ICOS) for high frequency aircraft flux measurements of methane, nitrous oxide, and water vapor: C E Healy, J Munster, D S Sayres, M F Witinski, P J Anderson

1340h B23A-0383 POSTER Development and Deployment of a Fast, High-Precision Analyzer for Simultaneous N2O, CO, and H2O Measurements in Field Applications: R A Provencal, D S Baer, T G Owano, R Fellers

1340h B23A-0384 POSTER HIGH-FREQUENCY ISOPOE MEASUREMENTS IN NITROUS OXIDE BY USING MID-IR LASER ABSORPTION SPECTROSCOPY: F Dong, D S Baer

1340h B23A-0385 POSTER In Situ Stable Isotopic Detection of Anaerobic Oxidation of Methane in Monterey Bay Cold Seeps Via Off-Axis Integrated Cavity Output Spectroscopy: S D Wankel, M Gupta, J Leen, R A Provencal, V Parsotam, P R Girgues

1340h B23A-0386 POSTER FAST CARBON ISOPOE ANALYSIS OF CO USING CAVITY ENHANCED LASER ABSORPTION: WATER EFFECTS AND EXTENDED DYNAMIC RANGE: W I McAlexander, R Fellers, T G Owano, D S Baer

1340h B23A-0387 POSTER Portable multiwavelength continuous-flow cavity-ringdown spectrometer for Martian methane Isotopologues: T C Onstott, Y Chen, K K Lehmann

1340h B23A-0388 POSTER SOLUTION FOR MINIMIZING SURFACE HEATING EFFECT FOR FAST OPEN-PATH CO2 FLUX MEASUREMENTS IN COLD ENVIRONMENTS: J R Hupp, G G Burba, D K McDermitt, D J Anderson, R D Eckles

1340h B23A-0389 POSTER CALCULATING CO2 AND H2O EDDY COVARIANCE FLUXES FROM LOW-POWER GAS ANALYZER USING FAST MIXING RATIO: G G Burba, A Schmidt, R L Scott, J C Kathilankal, B E Law, D K McDermitt, C Hanson, D J Anderson, R D Eckles, M D Furtaw, M Velgersdyk

1340h B23B-0390 POSTER Methodological considerations for measuring 813C of CO2 by CRDS: B T Galfand, B M Giebel, D D Riemer, P K Swart

B23B Moscone South: Poster Hall Tuesday 1340h Application of Isotope and Genetic Platforms to Develop Spatial and Temporal Perspectives in Ecosystem Ecology II Posters (joint with GC, OS, PP)

Presiding: P H Ostrom, Michigan State University; A J Welch, Smithsonian Conservation Biology Institute; C A Stricker, US Geological Survey; A Wiley, Michigan State University

1340h B23B-0391 POSTER Inter-annual variation in the foraging ecology of a brown bear population in southwest Alaska: C A Stricker, S D Kovach, G H Collins, S D Farley, R O Rye, M T Hinkes

1340h B23B-0392 POSTER Stable Isotope (δ13C, δ15N, δ34S) Analysis and Satellite Telemetry Depict the Complexity of Gray Wolf (Canis lupus) Diets in Southwest Alaska: A Stanek, D E Watts, B R Cohn, P Spencer, B Mangipane, J M Welker

1340h B23B-0393 POSTER Oceanic δ15N biogeography: a novel top-down approach to examine nutrient dynamics in the equatorial Pacific Ocean: B S Graham, B Fry, B N Popp, V Allain, R Olson, F Galvan

1340h B23B-0394 WITHDRAWN

1340h B23B-0395 POSTER Stable Isotopic Insights into the Foraging Ecology of an Endangered Marine Predator, the Hawaiian Petrel: A E Wiley, P H Ostrom, H F James

1340h B23B-0396 POSTER Temporal δ13C records from bottlenose dolphins (Tursiops truncatus) reflect variation in foraging location and global carbon cycling: S L Rossman, N B Barros, P H Ostrom, H Gandhi, R S Wells

1340h B23B-0397 POSTER Variation in Fish δ13C and δ15N along a Climatic Gradient: An Isoscape Perspective for the West Florida Shelf: K R Radabaugh, S A Huelster, E B Peebles

1340h B23B-0398 POSTER Stable Isotopic Shifts in Fish Bones from Multiple Archeological Coastal Middens in Penobscot Bay, Maine: C Harris, B Johnson, W G Ambrose, B Bourque, P Dostie, E Crowley

1340h B23B-0399 POSTER Using stable isotope systematics and trace metals to constrain the dispersion of fish farm pollution: A Torchinsky, A E Shiel, M Price, D A Weis

1340h B23B-0400 POSTER A lithology-based model for Sr isotope and Sr values of bedrock and water in the conterminous US: C P Bataille, G J Bowen

B23C Moscone South: Poster Hall Tuesday 1340h Detecting Thresholds of Ecosystem Resilience in a Changing Climate I Posters (joint with GC, H)

Presiding: A White, New Mexico Institute of Mining and Technology; L Dong, New Mexico University; R Heinse, University of Idaho; C M Steele, New Mexico State University

B23C-0402 POSTER What does the 2003 SouthWest USA vegetation dieback event tell us about vegetation resilience to climate change? Results from a high-resolution land surface modeling exercise: R A Fisher, S A Rauscher, A B White, N McDowell, T Ringler

B23C-0403 POSTER Drought tolerance and forest resiliency in tropical Amazonia: A B Harper, T T Baker, A Denning, D Markewitz, P M Brando, R Strocki

B23C-0404 POSTER Evaluating the impacts of drought stress on arid and semi-arid ecosystems in Northeast Asia using satellite imagery data: N Do, S Kang, G Choi

B23C-0405 POSTER Climate controls on forest productivity along the climate gradient of the western Sierra Nevada: A E Kelly, M L Goulden

B23C-0406 POSTER Quantifying vegetation diversity and patterns of landscape change in the Mexican Yucatán Peninsula before, during, and after Hurricane Dean, August, 2007: Z J Christian, J Rogan, L Schneider, Title of Team: Environmental Disturbances in the Greater Yucatán

B23C-0407 POSTER Assessing ecosystem structure and health using the patch size distribution of vegetation in semiarid Australian landscapes: M Moreno de las Heras, P M Saco, G R Willgoose

B23C-0408 POSTER Influence of grazing and precipitation change on ecosystem carbon exchange along an elevation gradient in central Utah: R A Gill

B23C-0409 POSTER Canary in the Coal Mine: Monitoring Indicators and Thresholds of Ecological Integrity: L M Applegate


B23C-0411 POSTER Tracking the response of E. camaldulensis to moisture stress recovery using spectral reflectance: L A Chisholm

B23D Moscone South: Poster Hall Tuesday 1340h Environmental Aspects of Bioenergy Production II Posters (joint with PA, H)

Presiding: E R Hotchkiss, University of Wyoming; K J Goodman, NEON, Inc.; W H McDowell, University of New Hampshire; J B Fellman, University of Western Australia


1340h B23D-0413 POSTER Modelling the growth of Populus species using Ecosystem Demography (ED) model: D Wang, D S Lebauer, X Feng, M C Dietze

1340h B23D-0414 POSTER Expansion of Bioenergy Crops in the Midwestern United States: Implications for the Hydrologic Cycle under Climate Change: P V Le, P Kumar, D Drewry

1340h B23D-0415 POSTER A regional comparison of water-use efficiency for Miscanthus x giganteus and Panicum virgatum: A D VanLoocke, T E Twine, M Zeri, R Arundale, C Bernacchi

1340h B23D-0416 POSTER Carbon sequestration in response to rising atmospheric CO2 in active and abandoned pine plantations of the southeastern US: S C Davis, J E Drake, E H DeLucia

1340h B23D-0417 POSTER Root zone soil water dynamics and its effects on above ground biomass in cellullosic and grain based bioenergy crops of Midwest USA: A K Bhardwaj, S K Hamilton, R L Van Dam, K Diker, B Basso, Title of Team: GLBRC-Sustainability Thrust - 4.3 Biogeochemistry

1340h B23D-0418 POSTER Preparing the EPIC Model for Evaluating Bioenergy Production Systems: A Test of the Denitrification Submodel using a Long-Term Dataset: D H Manowitz, D E Schwab, R C Izaurralde

1340h B23D-0419 POSTER Expansion of woody biomass for bioenergy feedstock in the Southeastern US has local and remote climate impacts: L N Murphy, W J Riley, M S Torn, W Collins

1340h B23D-0420 POSTER Evaluating multi-scale grids for regional agro-ecosystem simulations of switchgrass and miscanthus: A V Di Vittorio, N L Miller

1340h B23D-0421 POSTER Biochemical Disincentives to Fertilizing Cellulosic Ethanol Crops: M E Gallagher, W C Hockaday, S Snapp, C McSwiney, J Baldock

B23E Moscone South: Poster Hall Tuesday 1340h Linking Dissolved Organic Matter Quality With Biogeochemical Cycles I Posters (joint with V, H)

Presiding: E R Hotchkiss, University of Wyoming; K J Goodman, NEON, Inc.; W H McDowell, University of New Hampshire; J B Fellman, University of Western Australia

1340h B23E-0422 POSTER An analysis of the chemical character of dissolved organic matter and soluble soil organic matter within the same catchment: R S Gabor, N Russell, D M McKnight

1340h B23E-0423 POSTER Isolation of dissolved organic matter from permafrost soil and freshwater environments of the Kolyma River basin, east Siberia, for high resolution structural analysis: I V Dubinenkov, I V Perminova, E B Bulynina, R M Holmes, S Davydo, P J Mann, J Vonk, S A Zimov

1340h B23E-0424 POSTER DOM in Northern Peatlands: Correlating Bulk Spectroscopic Properties with Molecular Composition: M M tfaily, J Corbett, J Chanton, W T Cooper


1340h B23E-0427 POSTER Controls of vegetation, hydrology, and climate on DOC production in Alaskan peatlands: K R Neufeld, M R Turetsky, E S Kane

1340h B23E-0428 POSTER Controls on DOM biogeochemistry across a gradient of streams within the Congo River Basin: R G Spencer, P J Mann, B Dinda, J Poulsen, G Fiske, C Linder, E B Bulygina, P J Hernes, J W Six, R Y Dyda, B Peucker-Ehrenbrink, T I Eglinton, R M Holmes

1340h B23E-0429 POSTER Examining Controls on Dissolved Organic Carbon Quantity and Quality in Large North American Rivers: K W Hanley, W M Wollheim, J Salisbury, G Aiken


1340h B23E-0431 POSTER Temporal evolution of hyporheic dissolved organic carbon: P J Gabrielsen
1340h B23F-0432 POSTER Estimating the Age Distribution of Oceanic Dissolved Organic Carbon: C L Follett, D C Forney, D Repera, D Rothman

B23F Moscone South: Poster Hall Tuesday 1340h Mercury Cycling in Heterogeneous Environments II Posters (joint with A, H, V)

Presiding: M S Bank, Harvard University, School of Public Health; J B Shanley, U. S. Geological Survey

1340h B23F-0433 POSTER Stable mercury isotope ratios as tracers for Hg cycling at the inoperative New Idria Hg mine, California: J G Wiederhold, A D Jew, G E Brown, B Bourdon, R Kretzschmar

1340h B23F-0434 POSTER Geoecological controls on net mercury retention in northern peatlands: R Bindler, J Rydberg

1340h B23F-0435 POSTER Mercury Export from the Yukon River Basin: a unique opportunity to assess global atmospheric sources at large scales and potential future response to climate change: P F Schuster, R Steigl, M Dornblaser, G Aiken, D P Krabbenhoff, J DeWild, K Butler

1340h B23F-0436 POSTER Characterization of the extent of Mercury Contamination in the Androscoggin River from a former Chlor-alkali Facility, Berlin, New Hampshire: A Chalmers, M C Marvin-DiPasquale, C Rosiu, D Luce, J Coles, M Zimmerman, T Smith

1340h B23F-0437 POSTER Streamwater Particulate Mercury and Suspended Sediment Dynamics in a Forested Headwater Catchment: A Rissiassi, K Hokanson, T M Scanlon

1340h B23F-0438 POSTER Spatial Patterns of Mercury Bioaccumulation in the Upper Clark Fork River Basin, MT: M F Staats, H Langner, J N Moore

1340h B23F-0439 POSTER Factors controlling methylmercury production in the Allequash Creek wetland: a multivariate statistical approach: J E Creswell, C Babiarz, M M Shafer, S Tan, T Schott, E E Roden, D E Armstrong

1340h B23F-0440 POSTER Importance of Forest Composition on Mercury Deposition through Litterfall and Accumulation in Soils: J J Juillerat, D S Ross


1340h B23F-0442 POSTER The mass dependent and independent equilibrium fractionation of stable mercury isotopes during laboratory synthesis of metacinnabar and other mercury-bearing phases: R S Smith, J G Wiederhold, B Bourdon, R Kretzschmar


1340h B23F-0444 POSTER Does Stormwater Management Create a Methylmercury Problem?: J B Shanley, A Chalmers, L Medalie

1340h B23F-0445 POSTER Gaseous Mercury Monitoring at a Complex Source: The Las Cuevas Decommissioned Mining Complex and Current Hg Storage Facility (Almadén District, Spain): P L Higuera, J M Esbri, W R Llanos, R Oyarzun, A Martínez-Coronado, Title of Team: Grupo de Estudios en Minería y Medioambiente - GEMM

1340h B23F-0446 POSTER Mercury speciation, fluxes, and fate in the volcanically acidified fluids of Copahue volcano, Argentina: T Kading, J C Varekamp, M Andersson, P Balcom, R P Mason

1340h B23F-0447 POSTER Production and Cycling of Methylmercury in High Arctic Wetland Ponds: I Lehnher, V L St. Louis

1340h B23F-0448 POSTER Mercury and other Mining-Related Contaminants in Ospreys along the Upper Clark Fork River, MT: H Langner, R Domenech, E Greene, M F Staats

1340h B23F-0449 POSTER Landscape controls on total and methyl mercury in the upper Hudson River basin of New York State: D A Burns, K R Murray, P M Bradley, M E Brigham, G Aiken, M Smith

1340h B23F-0450 POSTER Soil Redox Potential as a Control of Soil Total Gaseous Mercury Fluxes in Background Soils: C W Moore, M S Castro

1340h B23F-0451 POSTER Effects of Hypolimnetic Oxygenation on Mercury Cycling in Twin Lake, Washington: M Beutel, S Dent, B Reed, B Moore, D Yonge, E Shallenberger

1340h B23F-0452 POSTER Isotope tracing of Hg pollution from artisanal small scale gold mining in an aquatic ecosystem of Amapá, Brazil: R Adler Misereando, E K Silbergeld, J D Guimarães, S Ghosh, B A Bergquist

1340h B23F-0453 WITHDRAWN

1340h B23F-0454 POSTER Changes in Mercury Volatilization between Planted and Unplanted Soils: C Briggs, M S Gustin

1340h B23F-0455 POSTER Hg bioaccumulation in a contaminated flowing water system-sediment, macroinvertebrates, and fish interactions: C Pizarro-Barranza, M S Gustin, M Peacock

B23G Moscone South: Poster Hall Tuesday 1340h Phenologies, Change, and Sustainability II Posters (joint with GC, H, A)

Presiding: G M Henebry, South Dakota State University; K de Beurs, Virginia Polytechnic Institute and State University; J L Betancourt, U.S. Geological Survey; J F Brown, USGS

1340h B23G-0455 POSTER A Comparative Study of Vegetation Phenology Using MODIS and AmeriFlux Data: D Hui, V Chandola, C Wilson, L Gu, R R Vatsavai

1340h B23G-0456 POSTER Quantifying the impact of changes in crop area on evapotranspiration regimes in the US corn and soybean belts through phenological modeling and data assimilation: V Kovalsky, G M Henebry


1340h B23G-0458 POSTER National and international organization of phenology as a tool for science, management and education in a changing environment: J F Weltzin, Title of Team: National Coordinating Office of USA National Phenology Network

1340h B23G-0459 POSTER PHYSICAL PROCESSES AFFECTING THE DISTRIBUTION OF DUIDYDOMESPHENIA GEMINATA BIOMASS BLOOM IN RAPID CREEK, SOUTH DAKOTA: M B Abessa, P V Sundareswar, S Upadhayai

1340h B23G-0460 POSTER Toward Transfer Functions for Land Surface Phenologies: G M Henebry

1340h B23G-0461 POSTER Assessing Change and Variability in First Flowering Dates: An Initial Look at Rescued Legacy Data from North Dakota and Kansas: S Travers, G M Henebry

1340h B23G-0463 POSTER Forests and Phenology: Designing the Early Warning System to Understand Forest Change: T Pierce, M B Phillips, W W Hargrove, G Dobson, J Hicks, M Hutchins, K Lichtenstein

1340h B23G-0464 POSTER Toward a National Early Warning System for Forest Disturbances Using Remotely Sensed Land-Surface Phenology: W W Hargrove, J Spruce

1340h B23G-0465 POSTER An Intercomparison of Annual Seasonality estimates in the Shenandoah National Park from 2000 to 2009: A Hudson Dunn, J Jones, J F Brown

1340h B23G-0466 POSTER Vegetation Dynamics of NW Mexico using MODIS time series data: M Valdes, R Bonifaz, G Pelaez, A Leyva Contreras

1340h B23G-0467 POSTER An Evaluation of Data Fusion Products for the Analysis of Dryland Forest Phenology: J J Walker, K de Beurs, R H Wynne, F Gao

1340h B23G-0468 POSTER Continuous Monitoring of Dynamic Pulse-Driven Phenological Phases in a Semiarid Shrubland: K Nelson, S A Kure


1340h B23G-0470 POSTER Three Decades of Remote Sensing Based Tropical Forests Phenological Patterns and Trends: K Didan

1340h B23G-0471 POSTER Why we need to validate land surface phenology products: an update from the CEOS Land Product Validation subgroup: J T Morissette, J Dash, N Dwyer, J M Nightingale, J Nickeson, Title of Team: CEOS LPV Phenology Focus Group

1340h B23G-0472 POSTER Assessment of Remotely Sensed Land Surface Phenology Data for North America: Inter-comparison and Forecasting: G Zhang, S Ganguly, M A White, R R Nemani, S H Hiatt, H Hashimoto, C Milesi, W Wang, A Michaelis, P Votava, F S Melton, J L Dungan

1340h B23G-0473 POSTER Large-scale seasonal changes in leaf cover over the Amazon basin are explained by variations in solar radiation: S Caldararu, P I Palmer, D Purves

1340h B23G-0474 POSTER The relationship of GIMMS AVHRR NDVI, MODIS NDVI, SPOT NDVI and SeaWiFS NDVI for phenological analysis: J Chai, K de Beurs

1340h B23G-0475 POSTER Changing Climate And Timberline Dynamics Of The Carpathians During XX Century: V Martazinova, P Weisberg, V Maderych, E Ivanova, S Savchuk, A Shandra

1340h B23G-0476 POSTER The Phenology of Carbon Dioxide Exchange in Northern Peatlands: Patterns and Drivers: A Kross, N T Roulet, T Moore

1340h B23G-0477 POSTER Decadal trends of RSMA-based GV and NPV in western China during 2000-2008: J Gu, G S Okin

1340h B23G-0478 POSTER Global Land Cover Change in Drylands from 2001 to 2008 using MODIS data: J Cho, K Otsubki, T Oki

1340h B23G-0479 POSTER Linking Landsat observations with MODIS derived Land Surface Phenology data to map agricultural expansion and contraction in Russia: S Caliskan, K de Beurs

1340h B23G-0480 POSTER Phenological variations in China’s Loess plateau since 1981: D Yan, K de Beurs, J Fan

1340h B23H-0481 POSTER Constraining Terrestrial 13CO2, Surface Fluxes on Local to Regional Scales: C B Alden, J W White, J B Miller

1340h B23H-0482 POSTER Interpreting δD and δ18O isotopic signals of ambient water vapor in PNW coniferous forest using a high frequency CRDS analyzer: S T Allen, B J Bond, J J McDonnell, J R Brooks, C K Thomas

1340h B23H-0483 POSTER Soil moisture, temperature, and carbon substrate influences on soil respiration in a piñon-juniper woodland: E Berryman, J D Marshall, T Rahn, M E Litvak

1340h B23H-0484 POSTER Partitioning peat respiration with stable carbon isotopes: J Chanton, J Corbett, D J Burgide, P H Glaser, W T Cooper, M M taylor

1340h B23H-0485 POSTER Understanding how the leaf physiology of mangrove plants differs from fresh water plants: a fundamental step to use cellulose as a proxy for sea level rise: P Ellsworth, L O Sternberg

1340h B23H-0486 POSTER Deciduous and Evergreen Trees Rely on Deep Water Throughout the Year in a Subtropical Seasonal Forest: P Ellsworth

1340h B23H-0487 POSTER Isotope Techniques For The Partitioning of Evapotranspiration Into Its Constituent Components: S P Good, L Wang, K Kaylor


1340h B23H-0489 POSTER Using natural abundance of δ13C to partition ecosystem soil respiration: J Hunt, P Millard, A J Midwood, D Whitehead

1340h B23H-0490 POSTER Degassing of CO2 from headwater streams as a Rayleigh process: J G Metzger, B Andersen, G Lewis


1340h B23H-0492 POSTER An analysis of 13C/12C signals from the terrestrial biosphere using SIBCASA and CarbonTracker: I R van der Velde, J B Miller, K M Schaef er, G van der Werf, W Peters

1340h B23H-0493 POSTER Effects of complex carbon addition to soil CO2 efflux and isotopic composition to soils near dead and live piñon pine trees: H Powers, N McDowell, D O Breecker

1340h B23H-0494 POSTER Investigating temperature effects on methane production and oxidation in the rice ecosystem using stable carbon and hydrogen isotope ratios: A L Rice, A Sithole, M J Shearer, E Hanson, A Fisher, A K Khalil

1340h B23H-0495 POSTER Isotopic Variability in Surface Water Vapor and Precipitation in the Upper Midwest, USA: N M Schultz, T J Griffin, J M Baker, X Lee, M Erickson, X Zhang, W Xiao, N Hu

1340h B12B-07 POSTER 818O of water vapor and evapotranspiration in a temperate steppe: Z Hu, S Li, X Sun, X Wen, X Lee

1340h B23H-0497 POSTER A novel design for a dual stable isotope continuous labeling chamber: results on labeling efficiency and C and N allocation in Andropogon gerardii: J Soong, C Stewart, D Reuss, C Pinney, F M Cotrufo
**Evapotranspiration partitioning of a winter wheat and summer maize double-cropping system using isotopic labeling:** X Sun, X Wen, G Yu, X Lee

**A New Method to Quantify the Isotopic Signature of Leaf Transpiration: Implications for Landscape-Scale Evapotranspiration Partitioning Studies:** L Wang, S P Good, K K Cayler

**Measurements of Forest-Air Isotopic CO2 Exchange by Eddy Covariance:** R A Wehr, J W Munger, D D Nelson, J B McManus, M S Zahniser, S R Saleska

**Decadal patterns in δ18O of atmospheric CO2:** E Zakem, J W White

**Assessing how seasonal hydrological balance has changed during the warming 20th century in the montane forests of Southeast Asian monsoon region using a stable isotope dendroclimatological approach:** M Zhu, L D Stott

---

**Interacting Biogeochemical Cycles: Linking Carbon, Water, and Nutrient Fluxes From Organisms to Globe IV (joint with H)**

**Presiding:** A D Richardson, Harvard University; D Papale, University of Tuscia


**Local and Regional Studies of Water-Carbon Linkage Improve Global Climate Projections (Invited):** A Denning, I T Baker, A B Harper

**Modeling coupled cycles of carbon, water and nutrients in the terrestrial biosphere: DLEM model and its applications:** H Tian

**Coupled Biogeochemical Cycles and Global Change in Terrestrial Ecosystems:** A C Finzi

**Interactions between atmospheric circulation, nutrient deposition, and tropical forest primary production (Invited):** J T Randerson, Y Chen, B M Rogers, D C Morton, G van der Werf, N M Mahowald

**Global Nutrient Limitation in Terrestrial Vegetation from Remote Sensing:** J B Fisher, G Badgley, E Blyth

---

**Evapotranspiration Approaches to Geobiology II**

**Presiding:** J M Dick, Arizona State University; A Poret-Peterson, Arizona State University; E Shock, Arizona University

**Genomic Insights Into the First Cultured Member of the Zeta-Proteobacteria, the Fe-Oxidizing Mariaprofundus Ferrooxydans PV-1:** E Singer, D Emerson, E Webb, W Nelson, J Heidelberg, G Kuenen, J K Edwards

**Energy and Carbon Flow: Comparing ultramafic- and basalt-hosted vents:** M Perner, W Bach, R Seifert, H Strauss, J LaRoche

**A variety of Microbial Mats cover the Chimney Walls of the Loki’s Castle Hydrothermal Field:** H Dahle, I Roalkvam, S I Jorgensen, R Stokke, I H Thorseth, R Pedersen, I Steen

**Transcriptomic evidence for net methane oxidation and net methane production in putative ANaerobic MEthanotrophic (ANME) archaea:** K G Lloyd, M J Alperin, A Teske

**Metaproteomic Analysis of a Chemosynthetic Hydrothermal Vent Community Reveals Insights into Key-Metabolic Processes:** I Steen, R Stokke, A Lanzen, R Pedersen, L Øvreås, T Urich

**Nitrogen cycling in Hot Spring Sediments and Biofilms (Invited):** D R Meyer-Dombard, M S Burton, J R Havig, E Shock

**Integrated studies of uncultured microbes in the global ocean (Invited):** C Dupont, D Rusch, A Martiny, R Lasken

**Using metabolomics approaches to understand the effects of changing nutrient availability on cellular metabolism:** M B Higgins, J D Rabinowitz

---

**Quantifying the Impact of Vegetation and Soil Weathering Processes on the Hydrosphere Using Biogeochemical Tracers I (joint with EP, H, V)**

**Presiding:** B Georg, Trent University; A West, University of Southern California

**Vegetation: A natural capacitor for contaminant metals input into the Critical Zone (Invited):** S L Brantley, E Herndon, L Jin, D Eissenstat, P Raymond

**Calcium isotopic compositions as tracers of vegetation activity in boreal permafrost ecosystems (Kulingdakan watershed, Central Siberia):** M Bagard, A Schmitt, F J Chabaux, J Viers, O S Pokrovsky, A S Prokushkin, P Stille, B Dupré

**Fractionation of Fe isotopes during granite weathering, soil formation, and plant uptake in an Alpine glacier forefield:** R Kretzschmar, M Kiczka, J G Wiederhold, A Voegelin, S Kraemer, B Bourdon

**The source of dissolved silicon in soil surface solutions of a temperate forest ecosystem: Ge/Si and δ18O ratios as biogeochemical tracers:** J Cornelis, B Delvaux, D Cardinal, L André, J Ranger, S Opfergelt

**Magnesium isotope fractionation in volcanic soils controlled by clay mineralogy and exchangeable Mg:** S Opfergelt, B Georg, K Burton, B Delvaux, C Siebert, R Guicharnaud, Y Cabidoche, A Halliday

**Understanding Metal Sources and Transport Processes in Watersheds: a Hydropedologic Approach (Invited):** T D Bullen, S W Bailey, K J McGuire, P Brousseau, D S Ross, R Bourgault, M A Zimmer

**Contribution of Deep Groundwater to Weathering Budget in a Rapidly Eroding Mountain Belt, Taiwan: A Galy, D Calmels, N Hovius, A West, M J Bickle

**The role of soil weathering and hydrology in regulating chemical fluxes from catchments (Invited):** K Mahler, C P Chamberlain

---

**Assessing Past and Future Mass Changes of Earth's Mountain Glaciers and Ice Caps I Posters (joint with EP, GC, NH, H)**

**Presiding:** R M Hock, University of Alaska; J M Hagen, Department of Geosciences; S O’Neel, USGS

**Modeling past and future mass balance and discharge of Gulkana Glacier, Alaska:** A C Roth, R M Hock, A A Arendt, J Zhang

---

All information is current as of November 12, 2010

1340h  C23B-0618 POSTER Surface melt on the Greenland Ice Sheet in the Nuuk and Kangerflussuag regions: D van As, A Hubbard, A P Ahlstrom, A Mikkelsen, B Hasholt, M R van den Broeke, M L Andersen, S Nielsen, S Rysgaard

1340h  C23B-0619 POSTER Links between acceleration, melting, and supraglacial lake drainage at the western Greenland Ice Sheet: M J Hoffman, T Neumann, G A Catania, L C Andrews

1340h  C23B-0620 POSTER Seasonal variations in Greenland Ice Sheet motion: inland extent and behaviour at higher elevations in a land-terminating transect: I D Bartholomew, P W Nienow, A Sole, D Mair, T Cowton, M King, M Burke

1340h  C23B-0621 POSTER High resolution, long term reconstruction of surface evolution in northwestern Greenland for investigating dynamic glacier behavior: G S Babonis, B M Csatho, A Schenk, C J Van der Veen

1340h  C23B-0622 POSTER Extreme Short-term Variability in Southeast Greenland Outlet Glacier Dynamics: I M Howat, E M McFadden, Y Ahn, I R Joughin, B E Smith


1340h  C23B-0625 POSTER Changes in ice geometry and supraglacial hydrology, Sermeq Avannarleg ablation zone, West Greenland: W S McLamb, W Colgan, T P Phillips, W Abdalati, K Steffen, R J Motyka, H Rajaram


1340h  C23B-0627 POSTER Greenland Ice Margin Processes Inferred from Terrestrial River Discharge: A K Rennermalm, L C Smith, V W Chu, R R Forster, B Hagedorn, J E Box

1340h  C23B-0628 POSTER Greenland glacier calving rates from Extreme Ice Survey (EIS) time lapse photogrammetry: J Jung, J E Box, J D Balog, Y Ahn, D T Decker, P Hawbecker

1340h  C23B-0629 POSTER Greenland outlet glacier dynamics from Extreme Ice Survey (EIS) photogrammetry: P Hawbecker, J E Box, J D Balog, Y Ahn, R J Benson

1340h  C23B-0630 POSTER Multistability and critical thresholds of the Greenland Ice Sheet: A J Robinson, R Calov, A Ganopolski

1340h  C23C-0631 POSTER The kinematic response of Petermann Glacier, Greenland to ice shelf perturbation: A Hubbard, J E Box, R Bates, F Nick, A J Luckman, R Van de Wal, S H Doyle

1340h  C23C-0632 POSTER Changes and drivers of marine terminating outlets in Greenland: K Schrøer, T Murray, A Booth, T D James, A J Luckman, A L Hughes, A Goldsack, S L Bevan, S Cook, Y Drocourt, J Bradley, L Cordero Llana, J Mc Govern

1340h  C23C-0633 POSTER_tidewater Margin Dynamics in Central East Greenland Over two Decades: H Jiskoot, D Juhlín, H St.Pierre, M Citterio

1340h  C23C-0634 POSTER Seasonal speed-up of large Greenland marine-terminating outlet glacier related to surface melt-induced changes in subglacial hydrology: D Mair, A Sole, P W Nienow, I D Bartholomew

1340h  C23C-0635 POSTER Reconstruction of the latest 100 years of iceberg calving from Helheim Glacier, Southeast Greenland, on basis of marine sediment cores from Sermilik Fjord: C S Andersen, T J Andersen, A Kuipers, G Massé, K Weekstroom, A P Ahlstrom, N Noergaard-Pedersen, A Bjork, K H Kjaer

1340h  C23C-0636 POSTER Short Period Velocity Response to Tides and Calving Near the Terminus of Jakobshavn Isbrae: D B Podrasky, M Truffer, M A Fahnestock, M P Luethi

1340h  C23C-0637 POSTER Controls on the calving flux of North West Svalbard glaciers: D Mansell, A J Luckman, T Murray

1340h  C23C-0638 POSTER Larsen C Ice Shelf acceleration, surface elevation change, rheology and ice-ocean interaction: A Khazendar, M Schodlok, E Y Larour, E J Rignot

1340h  C23C-0639 POSTER Summer basal melt rate at the Larsen-C ice shelf, Antarctic Peninsula, measured by phase sensitive radar: N Gourmelen, A Shepherd, M McMillan, A Jenkins, M King

1340h  C23C-0640 POSTER Glaciological investigations on Fimbulisen, East Antarctica - first results from the 2009/10 field season: H Anschütz, A K Sinisalo, K Langley, E D Isaksson, J M Hagen, S Hamran, M Øyan, A Humbert, T Martma, J Kohler, O Nest

1340h  C23C-0641 POSTER Origin of surface undulations at the Kamb Ice Stream grounding line, West Antarctica: F Seiferth

1340h  C23C-0642 POSTER Simulations of Ocean Circulation under Static and Dynamic Ice Shelves: X S Asay-Davis, W H Lipscomb, S F Price

1340h  C23C-0643 POSTER Sea Level As A Stabilizing Factor For Marine Ice Sheets: N Gomez, J X Mitrovica, P Huybers, P U Clark, D Pollard

1340h  C23C-0644 POSTER Adaptive mesh refinement for large ice sheets using the Chombo toolkit: S L Cornford, D F Martin, R M Gladstone, A J Payne

1340h  C23C-0645 POSTER Exploring Mechanisms of Ice-Shelf Collapse Using a Laboratory Scale Model: J C Burton, A Boghosian, D D Styron, J M Amundson, L M Cathles, D S Abbots, D R MacAyeal

1340h  C23C-0646 WITHDRAWN

1340h  C23C-0647 POSTER Small iceberg bursts: melting breakwaters in the Southern Ocean: F Ardhuin, J Journadre, P Queffeulou, F Girard-Ardhuin

1340h  C23C-0648 POSTER The far field effect of ice shelf calving: the oceanographic effect of the decay of large tabular icebergs at South Georgia: M A Brandon, P Enderlein, E Murphy

1340h  C23C-0649 POSTER Ice shelf losses in the Canadian High Arctic, 2005-2010: L Copland, T Wohlleben, D Mueller, S G Pope, C A Mortimer
C23D  Moscone West: 3011  Tuesday  1340h
Ice Cores, Climate, and Ice Sheets: New Frontiers II (joint with A, PP)

Presiding: J W White, University of Colorado; D Dahl-Jensen, University of Copenhagen

1340h  Introduction Short Introduction of session by Convenors

1341h  C23D-01  The isotope records from WAIS Divide and US ITASE: climate in West Antarctica over the past two millennia (Invited): E J Steig, J W White, M Kuetel, Q Ding, G Hoffmann, D P Schneider, P A Mayewski, D A Dixon, K Taylor

1403h  C23D-02  Modeling methanesulfonic acid (MSA) deposition on Antarctica to understand the MSA-sea ice link: P J Hezel, B Alexander, E J Steig, C M Bitz

1418h  C23D-03  Past fire reconstructions in the EPICA ice core through the determination of specific molecular markers: C Barbante, P Gabrielli, N M Kehrwald, A Gambaro, R Zangrando

1433h  C23D-04  Multidecadal variability of atmospheric methane and the Inter Polar Gradient: 0-1800 C.E: L Mitchell, E Brook

1448h  C23D-05  Continuous Methane Concentration Measurements along the NEEM Core: T Blunier, J Chappellaz, S Schüpbach, C Stowasser, R Dallmøy, O Pascual, M Bigler, D Leuenberger


1518h  C23D-07  The North Greenland Eemian (NEEM) Ice Drilling: Isotopic Profiles, Regional Climate Changes, and Abrupt Climate Change (Invited): T J Popp, D Dahl-Jensen, S J Johnsen, J Steffensen, Title of Team: NEEM Isotope Consortium

Education and Human Resources

ED23A  Moscone South: Poster Hall  Tuesday  1340h
NASA's Year of the Solar System: Science Isn’t Done Until It’s Shared! II Posters (joint with P)

Presiding: D Scalise, NASA Astrobiology Institute; J S Allen, JSC/ESCG

1340h  ED23A-0697 POSTER FROM THE SUN TO PLUTO AND BEYOND - INSPIRING THE NEXT GENERATION OF EXPLORERS: K Beisser, M Mattiella Novak, L Butler, D Turney

1340h  ED23A-0698 POSTER Pieces of Other Worlds – Enhance YSS Education and Public Outreach Events with Extraterrestrial Samples: C Allen

1340h  ED23A-0699 POSTER Extreme Solar System in the Undergraduate Classroom: D Baker

1340h  ED23A-0700 POSTER Professionals and Emerging Scientists Sharing Science: P V Graff, J S Allen, K Tobola

1340h  ED23A-0701 POSTER Planetary Science Research Discoveries (PSRD) www.psrd.hawaii.edu: L Martel, J Taylor

1340h  ED23A-0702 POSTER Cosmochemistry Illustrated: Recruiting and Training the Next Generation of Cosmochemists: J Taylor, L Martel

1340h  ED23A-0703 POSTER New Horizons: Bridge to the Beginning - to Pluto and Beyond: H M Weir, K G Hallau, P Seaton, K Beisser, Title of Team: New Horizons Education and Public Outreach Team

1340h  ED23A-0704 POSTER NASA’s LADEE Mission: Opportunities for Citizen Science and Student Participatory Exploration: B H Day

1340h  ED23A-0705 POSTER NASA’s What’s Up Astronomy and Mission video series celebrates the Year of the Solar System: Fall 2010 - late summer 2012: J Houston Jones, Title of Team: Alice Wessen, Manager of Solar System Education and Public Engagement


1340h  ED23A-0707 POSTER NASA/AESP Support for the Year of the Solar System: A D Leavitt

1340h  ED23A-0708 POSTER Comets, Asteroids and Rubble Piles: not just debris: J B Harold, P Dunsebery


1340h  ED23A-0710 POSTER Mosaic Postcards from Mercury: K G Hallau, C R Chapman, J Edmonds, J Goldstein, B Hirosh, S C Solomon, H Vanhala, H M Weir, Title of Team: MESSENGER Education and Public Outreach Team

1340h  ED23A-0711 POSTER Our Place in Space: Exploring the Earth-Moon System and Beyond with NASA’s CINDI E/PO Program: M L Urquhart, M R Hairston

1340h  ED23A-0712 POSTER HiRISE: The People’s Camera: A S McEwen, E Eliason, V C Gulick, Y Spinoza, R A Beyer, Title of Team: HiRISE Team

1340h  ED23A-0713 POSTER Goldilocks and the Three Planets: M O Fillingim, D A Brain, L M Peticolas, D Yan, K Frick


ED23B  Moscone South: Poster Hall  Tuesday  1340h
The Future of Cyber-Education in the Geosciences: New Directions and Opportunities II Posters (joint with IN)

Presiding: J G Ryan, University of South Florida; S C Eriksson, UNAVCO; L A Guertin, Penn State Bradywine; K A Lehnert, Columbia University

1340h  ED23B-0715 POSTER Computer simulations for minds-on learning with “Project Spectra”: E L Wood, S Renfrow, N Marks, R Christofferson

1340h  ED23B-0716 POSTER Video Tutorials and Interactive Online Resources for Multibeam Sonar Software Training: L R Sautter, J Mode, P Duguid


1340h  ED23B-0718 POSTER A community initiative for developing data and modeling driven curriculum modules for hydrology education: B L Ruddell, V Merwade

1340h  ED23B-0719 POSTER HydroViz: A web-based hydrologic observatory for enhancing hydrology and earth-science education: E H Habib, Y Ma, D Williams

All information is current as of November 12, 2010

AGU 2010 Fall Meeting 181
1340h ED23B-0722 POSTER Planning for the Future of Geo-Cybereducation: Outcomes of the Workshop, Challenges, and Future Directions: J G Ryan, S C Eriksson

1340h ED23B-0723 POSTER Integrating LiDAR Data into Earth Science Education: S E Robinson, R Arrowsmith, R M De Groot, C J Crosby, A S Whitesides, J Colunga

ED23C Moscone South: 102 Tuesday 1340h Learning and Understanding Complexity in the Geosciences II (joint with A, B, GC, MR, OS, V)

Presiding: C Gautier, University of California Santa Barbara; D R Zalles, SRI International

1340h ED23C-01 Developing Students' Understanding of Complex Systems in the Geosciences (Invited): C A Manduca, D W Mogk, D M Bice, E Pyle, J Slotta

1355h ED23C-02 Structure, Behavior, Function as a Framework For Teaching and Learning about Complexity In Ecosystems: Lessons from Middle School Classrooms (Invited): C Hmelo-Silver, S Gray, R Jordan

1410h ED23C-03 Strategies and Rubrics for Teaching Complex Systems Theory to Novices (Invited): L S Fichter

1425h ED23C-04 Understanding Complexity: Pattern Recognitions, Emergent Phenomena and Causal Coupling: F Raia

1440h ED23C-05 Using place-based curricula to teach about restoring river systems: D R Zalles, B D Collins, C Updegrove, D R Montgomery, T G Colonnese, A J Sheikh, K Haynie, V Johnson, Title of Team: Data Sets and Inquiry in Environmental Restoration Studies (NSF GEO Project 0808076)

1455h ED23C-06 Environment, Energy and Sustainability from a Systems Perspective: N E Selin, M D Webster, J Trancik

1510h ED23C-07 Conceptual Challenges in Learning Ozone Formation for Collegiate Students: K E Howard, S H Chung, B T Jobson, T M VanReken, S A Brown

1525h ED23C-08 Concept Mapping to Assess Learning and Understanding of Complexity in Courses on Global Climate Change: S Rebich-Hespana, C Gautier

Earth and Planetary Surface Processes

EP23A Moscone South: Poster Hall Tuesday 1340h Coastal Geomorphology and Morphodynamics: Bridging Event and Long-Term Processes II Posters (joint with H, NH, GC)

Presiding: J E McNinch, Field Research Facility; C J Hatke, U.S. Geological Survey


1340h EP23A-0763 POSTER Impact of the tidal power dam in the Rance estuary: geomorphological changes, hydrosedimentary processes and reconstructions plans: A Susperregui

1340h EP23A-0764 POSTER Influence of storm surges and sea level on shallow tidal basin erosive processes: G Mariotti, S Fagherazzi, P L Wilberg, K McGlathery, L Carniello, A Defina

1340h EP23A-0765 POSTER Coastal system mapping: a new approach to formalising and conceptualising the connectivity of large-scale coastal systems: J French, H Burningham, R Whitehouse

1340h EP23A-0766 POSTER Large-Scale, Complex Shaped Coastline Responses to Different Forms of Local Shoreline Stabilization and Climate Change: K Ellis, A B Murray, J M Slott

1340h EP23A-0767 POSTER Sedimentological and Geophysical Signatures of a Relict Tidal Inlet along a Wave-Dominated Barrier, Assateague Island, Maryland, USA: C T Seminack, I V Buynevich, Z T Grimes, N Griffin, R J Goble

1340h EP23A-0768 POSTER Outer Banks Climate - Utilizing NASA Earth Observations to Establish a Methodology for Assessing Coastal Change in North Carolina: M A Vaughan, K Morgan, D Dodderidge, D Norman, C Burns, C Collins, J Warren

1340h EP23A-0769 WITHDRAWN


1340h EP23A-0771 POSTER Evaluation of conditions leading to inundation of the airstrip serving the remote village of Kaktovik, North Slope, Alaska: L H Erikson, B M Richmond, A Gibbs, B Jones


1340h EP23A-0773 POSTER Modeling rocky coastline evolution and equilibrium: P W Limber, A B Murray

1340h EP23A-0774 POSTER Seven years of geomorphic change in the head of Monterey Canyon, CA: Steady state equilibrium or monotonotic change?: D P Smith, R G Kvetek, E Ross, P Iampietro, C K Paull, M Sandeforsd

1340h EP23A-0775 POSTER An application of vessel-based LiDAR to quantify coastal retreat in Southern Monterey Bay, CA during the 2008-2009 year and the 2009-2010 El Nino: S Quan, R G Kvetek, D P Smith


1340h EP23A-0777 WITHDRAWN

1340h EP23A-0778 POSTER Investigating Causes and Consequences of 150 Years of Channel Morphology Evolution in San Pablo Bay, California: M V Wegen, J Roelvink, B E Jaffe

1340h EP23A-0779 POSTER Using delta-front bathymetry to understand river delta progradation: J B Shaw, D C Mohrig
1340h 
EP23B-0784 POSTER The effects of changes in flow rate on erosion volumes in young incising river systems: S S Day, K B Gran

1340h 

1340h 

EP23C Moscone South: 310 
Quantifying Present and Ancient Rates of Earth Surface Processes I (joint with H, PP, V)

Presiding: A Dosseto, University of Wollongong; A M Heimsalt, Arizona State University; E J Rhodes, UCLA

1340h 

1355h 
EP23C-02 Changes in chemical weathering intensity in the Himalayas over the past 30 kyr: A Dosseto, N Vigier

1400h 
EP23C-03 Lithium isotopes and water/rock interactions: Clues from low and high temperature hydrosystems: R Millot, J Gaillardet, N Vigier, B Sanjuan, P Nègre

1425h 
EP23C-04 Integrating Geochemical and Morphologic Evolution of Soil-Covered Hilltops in a Transient Tributary Basin: B A Weinman, K Yoo, S M Mudd, M D Hurst, K Maher, K Mayer, C Andersen

1440h 

1525h 

Geodesy

G23A Moscone South: Poster Hall 
Development and Testing of Methods for Detecting and Estimating Unsteady Motions in Geodetic Time Series II Posters (joint with T, NS, NG, IN)

Presiding: S D Williams, Proudman Oceanographic Laboratory; J R Murray-Moraleda, U.S. Geological Survey

1340h 
G23A-0810 POSTER The Detection of Offsets in GPS Experiment (DOGEs): S D Williams, M King

1340h 
G23A-0811 POSTER Correlation Weighted Spatial Filtering of Common-mode Noises and Detection of Regional Transient Signals in Continuous GPS Network: Y Tian, Z Shen

1340h 
G23A-0812 POSTER The Ups and Downs of Geodetically-Derived Deformation Rates in the Western Transverse Ranges Region, CA: S T Marshall, S E Owen, G J Funning

1340h 
G23A-0813 POSTER Case Study in Detection of Transient Crustal Deformation: B W Crowell, D Avraham, Y Bock, D Dong, P Fang, P Jamason, S E Owen, M B Squibb, F Webb

1340h 
G23A-0814 POSTER Detection of anomalous signals in temporally correlated data (Invited): J O Langbein

1340h 
G23A-0815 POSTER Analysis of spatio-temporal crustal deformation from dense, continuous GPS network data: E Chang, B F Chao

1340h 
G23A-0816 POSTER Time series and MinTSA analysis of strain accumulation along the Haiyuan fault (Gansu, China) over the 2003-2010 period, from ENVISAT InSAR data: R Jolivet, C Lasserre, N Lin, M Simons, M Doin, E A Hétard, P Muse, G Pelzter, S Jianbao, R Dailu

1340h 
G23A-0817 POSTER Multitemporal InSAR analysis at Betic-Rif arc: transient and steady state ground deformation style varieties: J Fernandez, P Gonzalez

G23B Moscone South: Poster Hall 
GPS/GNSS Network Solutions for Science: New Techniques, Data Systems, Results, and Implications II Posters (joint with IN, NH, T, S)

Presiding: A A Borsa, UNAVCO; G Blewitt, University of Nevada, Reno

1340h 
G23B-0818 POSTER A GPS/GNSS dense network used to monitor ionospheric positioning error: G Wauteter, S Lejeune, R Warnant

1340h 

1340h 
G23B-0820 POSTER Implications for stress changes along the Motagua fault and other nearby faults using GPS and seismic constraints on the M=7.3 2009 Swan Islands earthquake: S E Graham, M Rodriguez, R D Rogers, W Strauch, D Hernandez, C DeMets

1340h 
G23B-0821 POSTER Impact of acoustic velocity structure to measurement of ocean bottom crustal deformation: R Ikuta, K Tadokoro, T Okuda, S Sugimoto, T Watanabe, S Eto, M Ando

1340h 
G23B-0822 POSTER An investigation of Terrestrial Reference Frames for Sea-Level Studies: Experiences from the British Isles: D N Hansen, F N Teferle, S D Williams, M King

1340h 
G23B-0823 POSTER Results from an initial re-processing of the British Isles continuous GNSS Facility (BIGF) archive of CGPS data for 1997 to 2010: R Bingley, D N Hansen, J Leighton, F N Teferle, B David

1340h 
G23B-0824 POSTER Reanalysis of CORS and Global GPS Data at the National Geodetic Survey: J R Rohde, Title of Team: NGS GPS Reanalysis Team

1340h 

1340h 
G23B-0826 POSTER Exploring Lithospheric Deformation of Western US with Large GPS Networks: P Fang, Y Bock, B W Crowell, D Dong, P Jamason, S Kedar, A W Moore, S E Owen, M B Squibb, F Webb

1340h 
G23B-0827 POSTER Geodetic Seamless Archive Centers Modernization – Information Technology for Exploiting the Data Explosion: F M Boler, G Blewitt, C W Kreemer, Y Bock, C E Noll, J McWhirter, P Jamason, M B Squibb

1340h 
G23B-0828 POSTER Rigorous GNSS network solutions of unlimited size: H Boomkamp, Title of Team: IAG Working Group 1.1.1

1340h 
G23B-0829 POSTER The QuakeSim System for GPS Time Series Analysis: R A Granata, X Gao, M Pierce, J Wang

1340h 
G23B-0830 POSTER The EarthScope Plate Boundary Observatory (PBO) High-rate Real-time Cascadia network: K E Austin, A A Borsa, K Feaux, M E Jackson, T B Williams
G23C Moscone South: Poster Hall Tuesday 1340h

The Art and Science of Volcano Geodesy III Posters (joint with V, S, NH)

**Presiding:** M P Poland, U.S. Geological Survey; M Battaglia, Sapienza - University of Rome


1340h G23C-0832 POSTER Mapping three-dimensional surface deformation by combining multiple aperture interferometry and conventional interferometry: application to the June 2007 eruption at the Kilauea volcano, Hawaii: Z Lu, H Jung, M P Poland, A Miklius

1340h G23C-0833 POSTER First results from continuous gravity measurements at Kilauea Volcano, Hawaii: F Amelung, S Baker

1340h G23C-0834 POSTER Tracking lava flow emplacement on the east rift zone of Kilauea, Hawaii with InSAR coherence: H R Dieterich, D A Schmidt, M P Poland, K V Cashman

1340h G23C-0835 POSTER Continuous deflation at Askja, Iceland, as seen in InSAR and precise levelling: E de Zeeuw-van Dalsfen, E C Sturkell, F Sigmundsson, R Pedersen, A J Hooper

1340h G23C-0836 POSTER Volcanic and earthquake hazards at eastern Turkey volcanoes investigated by InSAR: H Bathke, T R Walter


1340h G23C-0838 POSTER MONITORING THE UPS AND DOWNS OF SUMATRA AND JAVA WITH D-INSAR TIME- SERIES: E Chaussard, F Amelung

1340h G23C-0839 POSTER A Time Series Analysis of Volcanic Deformation near Three Sisters, Oregon, using InSAR: S N Riddick, D A Schmidt

1340h G23C-0840 POSTER Finite Element Analysis Of Structural And Magmatic Interactions At Mono Basin (California): D La Marra, A Manconi, M Battaglia

1340h G23C-0841 POSTER Gravity and magnetic investigations of the Mono-Inyo Volcanic Chain, Mono Basin, California: A A Pera, D A Ponce, D K McPhee, M Battaglia

1340h G23C-0842 POSTER Detection of deformation time-series in Miyake-jima using PALSAR/InSAR: T Ozawa, H Ueda

1340h G23C-0843 POSTER ANALYSIS OF 2005-2010 DOME EXTRUSION AT THE VOLCAN DE COLIMA, MEXICO USING TILT METER SURVEYS: J J Ramirez-Ruiz, A C Eliseo, S J Hydon

1340h G23C-0844 POSTER Steady downslope movement on the western flank of Arenal Volcano, Costa Rica: S K Ebmeier, J Biggs, T A Mather, G Wade, F Amelung


1340h G23C-0846 POSTER Gravity and Geodetic Studies at Concepción volcano, Nicaragua: J A Saballos, R Malservisi, C Connor

1340h G23C-0847 POSTER Observations and modelling of inflation in the Lazuflre volcanic region, South America: J Pearse, P Lundgren

1340h G23C-0848 POSTER Boreshole Tiltmeter and CGPS Response to VLP Seismic Events under Cotopaxi Volcano, Ecuador: P A Mothes, M Lisowski, M C Ruiz, A Ruiz, P B Palacios Palacios

1340h G23C-0849 POSTER Gravity anomaly of a deep active intrusion beneath Uturuncu volcano in the central Andes: R del Potro, J Gottsmann, A Camacho, D D Muir, M Sunagawa

1340h G23C-0850 POSTER Inflation and deflation modeling at Sierra Negra and Fernandina volcanoes based on GPS measurements. Galapagos Islands, Ecuador: A G Ruiz Pasquale, D Geist, W Chadwick, D Johnson, N Viguouroux-Cailibot, K S Harpp, S Batt

1340h G23C-0851 POSTER The shallow magmatic system of Fernandina Volcano, Galapagos Islands. Evidence of multiple magma reservoirs from Satellite Radar Interferometry: M Bagnardi, F Amelung, S Baker

**Global Environmental Change**

GC23A Moscone South: Poster Hall Tuesday 1340h

Climate Modeling in Support of Policy Decision Making: Needs and Limitations I Posters (joint with A, PA)

**Presiding:** I T Foster, University of Chicago and Argonne National Laboratory; E J Moyer, University of Chicago; A Smith, London School of Economics; A Sanstad, Lawrence Berkeley National Laboratory

1340h GC23A-0889 POSTER Global warming targets and heatwave risk: R T Clark, J M Murphy, S J Brown


1340h GC23A-0892 POSTER Quantifying of uncertainty range of regional temperature change due to global warming using RCM: K Ishihara, T Takayabu

1340h GC23A-0893 POSTER Modeling the Heterogeneous Effects of GHG Mitigation Policies on Global Agriculture and Forestry: A Golub, B Henderson, T W Hertel, S K Rose, B Sohngen

1340h GC23A-0894 WITHDRAWN

1340h GC23A-0895 POSTER Bio-physical vs. Economic Uncertainty in the Analysis of Climate Change Impacts on World Agriculture: T W Hertel, D B Lobell


1340h GC23A-0897 POSTER Regional climate modeling and development of climate adaptation decision aids for energy use in the Southwestern US: G Higgins, K Darmenova, D Apling, H Kiley

1340h GC23A-0898 POSTER Modeling the Near-Term Risk of Climate Uncertainty: Interdependencies among the U.S. States: T S Lowry, G Backus, D Warren

1340h GC23A-0899 POSTER COUPLING CLIMATE MODELS AND FORWARD-LOOKING ECONOMIC MODELS: K Judd, W A Brock

1340h GC23A-0900 POSTER What We (also) Need to Know is How the Weather is Changing: M C MacCracken
1340h  GC23A-0901 POSTER Climate-agriculture interactions and needs for policy making; J G Phillips
1340h  GC23A-0902 POSTER Local and Regional Impacts of Large Scale Wind Energy Deployment; J Michalakes, S Hammond, J K Lundquist, P Moriarty, M Robinson
1340h  GC23A-0903 WITHDRAWN
1340h  GC23A-0905 POSTER Providing climate change information to managers: interpreting the science and estimating the uncertainty; D M Bachelet, D R Conklin, B Kerns
1340h  GC23A-0907 POSTER Integrating the Socio-economic and Physical Drivers of Land-use Change at Climate-relevant Scales: an Example with Biofuels; J Elliott, N Best, T Munson, I T Foster

GC23B  Moscone South: Poster Hall  Tuesday  1340h Decadal-Scale Arctic Climate Variability: Observations and Modeling II Posters  (joint with A, C)

Presiding: M Wang, University of Washington; I Polyakov, IARC/ UAF; C K Polland, UK Met Office

1340h  GC23B-0908 POSTER A dynamic ecosystem process model for understanding interactions between permafrost thawing and vegetation responses in the arctic; C Xu, B J Travis, R A Fisher, C J Wilson, N McDowell
1340h  GC23B-0909 POSTER WHY ARCTIC SUMMER ICE MINIMA OCCURRED IN 2007, 08, 09, AND 2010?: J Wang, X Bai
1340h  GC23B-0910 POSTER Regional Climate Modeling of Volcanic Eruptions and the Arctic Climate System: A Baffin Island Case Study: M Losic, A Robock
1340h  GC23B-0911 POSTER RECENT LARGE INCREASES IN FRESHWATER FLUXES FROM GREENLAND INTO THE NORTH ATLANTIC: J L Bamber, M R van den Broeke, J Ettema, E J Rignot
1340h  GC23B-0912 POSTER Investigating Gulf of Alaska climate and ecosystem variability at annual to centennial resolution over the Holocene: J A Addison, B P Finney, L Anderson
1340h  GC23B-0913 POSTER FINDING HIGH RESOLUTION RECORDS OF CONTINENT-OCEAN CLIMATE CHANGE IN THE HIGH ARCTIC: AN EXPLORATORY STUDY OF THE COLVILLE DELTA REGION: M A Allison, A Miller, T S Bianchi, K M Schreiner
1340h  GC23B-0914 POSTER Summer temperatures inferred from varved lacustrine sediment at Iceberg Lake in southcentral Alaska: K Diedrich, M G Loso
1340h  GC23B-0916 POSTER Influence of the continental ice retreat on Future Global Climate: A Hu, G A Meehl, W Han

GC23C  Moscone South: Poster Hall  Tuesday  1340h Improving the Simulation of Climate-Agriculture Interactions and Global Land Processes I Posters  (joint with A, B, IN, H)

Presiding: E Lee, MIT; J M Winter, NASA Goddard Institute for Space Studies; A C Ruane, NASA Goddard Institute for Space Studies; C A Schlosser, MIT

1340h  GC23C-0917 POSTER Development of the Vegetation Integrative Simulator for Trace Gases (VISIT): a Model for Simulating Atmosphere-ecosystem Biogeochemical Interactions: A Ito, M Inatomi
1340h  GC23C-0918 POSTER Including sugar cane in the agro-ecosystem model ORCHIDEE-STICS: A Valade, N Vuichard, P Ciais, N Viovy
1340h  GC23C-0919 POSTER BIOMAP A Daily Time Step, Mechanistic Model for the Study of Ecosystem Dynamics: J R Wells, R P Neilson, R J Drapek, B S Piret
1340h  GC23C-0920 POSTER Uncertainty of establishment scheme in the Community Land Model-Dynamic Global Vegetation Model: X Song, X Zeng
1340h  GC23C-0921 POSTER Simulating large-scale crop yield by using perturbed-parameter ensemble method: T Iizumi, M Yokozawa, G Sakurai, M Nishimori
1340h  GC23C-0922 POSTER Comparing the simulation of climate impacts on crop yields with observed and synthetic weather data: B Qian, R De Jong, J Yang, H Wang, S Gameda
1340h  GC23C-0923 POSTER An Integrated Biogeochemical and Biophysical Analysis of Bioenergy Crops: M Liang, Y Song, R Barman, A K Jain
1340h  GC23C-0924 POSTER Analysis of consistency of global net land-use change carbon emission scenario using offline vegetation model and earth system model: E Kato, M Kawamiya
1340h  GC23C-0925 POSTER Using Daily GCM Rainfall for Crop Yield Predictions: Advances and Challenges: A M Ines, J W Hansen, A W Robertson, W Baethgen, L Sun, M Indeje
1340h  GC23C-0926 POSTER Assessing the performance of dynamical and statistical downscaling techniques to simulate crop yield in West Africa: B Sultan, P Oettli, M Vrac, C Baron
1340h  GC23C-0927 POSTER Historical Weather Conditions and Maize Yields: E Butler, P Huybers
1340h  GC23C-0928 POSTER Area estimation of crop damage due to tropical cyclones using crop fragility curves for paddy rice in Japan: Y Masutomi, T Iizumi, K Takahashi, M Yokozawa
1340h  GC23C-0929 POSTER Assessment of Predictability of Philippine Rice Production with Climate Information: N Koide, A W Robertson, J Qian, A M Ines
1340h  GC23C-0930 POSTER The contribution of weather to recent maize and wheat yield trends in the US: a comparison of two approaches: G Maltais-landry, D B Lobell
1340h  GC23C-0931 POSTER Influence of drought in 2003 on winter wheat yield and nitrogen use efficiency: M Mesic, F Basic, I Kisic, Z Zgorelec, I Vukovic
1340h  GC23C-0932 POSTER The Future of Food: Regional Adaptation Strategies for Optimizing Grain Yields Under Climate Change: K A Nicholas, N Chhetri, E H Girvetz, H R McCarthy, T E Twine, C C Ummenhofer
1340h  GC23C-0933 POSTER Integrating a Detailed Agricultural Model in a Global Economic Framework: New methods for assessment of climate mitigation and adaptation opportunities: A M Thomson, R C Izaurralde, K Calvin, X Zhang, M Wise, T O West
1340h GC23C-0934 POSTER Climate change impacts on global rainfed agricultural land availability: X Zhang, X Cai
1340h GC23C-0935 POSTER Carbon-Water Coupling in Forests, Grasslands, and Shrublands in the Arid Western U.S: B SFelzer, T Cronin, C A Schlesser, J M Melillo, D W Kicklighter, S Dangal
1340h GC23C-0936 POSTER Impacts of wind-dispersed seed availability on the estimation of natural vegetation distributions to climate scenarios for the 21st century: E Lee, C A Schlesser, R G Prinn
1340h GC23C-0937 POSTER Projections of climate change impacts on crop yields in Africa and India from a DGVM: A Berg, B Sultan, N de Noblet-Ducoudrè
1340h GC23C-0938 POSTER Assessing changes to South African maize production areas in 2055 using empirical and process-based crop models: L Estes, B Bradley, M Oppenheimer, H Beukes, R E Schulze, M Tadross
1340h GC23C-0939 POSTER Modelling Changes to Crop Yield Under Climate Change Scenarios: J Gerber, D Deryng, D K Ray, N D Mueller, J A Foley, N Ramankutty
1340h GC23C-0940 POSTER Spatial Modeling of Indian Agriculture, Economic Activity and Population under Climate Change: G C McCord
1340h GC23C-0941 POSTER Potential Cultivation of Maize and Soybeans in the Amazon Basin: Current and Future Perspectives: F Justino
1340h GC23C-0942 POSTER MC1 Model Simulations Suggest that Fire Will Determine whether the Biosphere Acts as a Carbon Source or Sink in the 21st Century: R J Draper, R P Neilson, J M Lenihan, J R Wells
1340h GC23C-0943 POSTER Climatological sensitivity analysis of crop yield to changes in temperature and precipitation using particle filter: M Yokozawa, G Sakurai, T Iizumi
1340h GC23C-0944 POSTER Modeling Joint Climate and Bioenergy Policies: Challenges of integrating economic and environmental data. (Invited): C M Hellwinckel, T O West, D De La Torre Ugarte, R Perlack

GC23D Moscone South: Poster Hall Tuesday 1340h
The Biological Pump and Carbon Cycling in the Global and Arctic Ocean II Posters (joint with B, OS, C)

Presiding: S Honjo, Woods Hole Oceanographic Institution; T I Eglinton, Woods Hole Oceanographic Institution; R W Macdonald

1340h GC23D-0945 POSTER The Biological Pump in the Cypelagolic Arctic Ocean (Invited): S Honjo, T I Eglinton
1340h GC23D-0947 POSTER Investigation of O², NO³⁻, and associated parameters as indicators of Canadian Basin Deep Water ventilation: J A McAlister, K J Orians
1340h GC23D-0949 POSTER The Oceanic Flux Program: A three decade time-series of particle flux in the deep Sargasso Sea: J C Weber, M H Conte
1340h GC23D-0950 POSTER Fecal Pellet Flux in the Mesopelagic Sargasso Sea: D Kowee, O Shatova, M H Conte, J C Weber
1340h GC23D-0952 POSTER Export POC flux calculated from 234Th measurements, sediment traps and O2 supersaturation in the Eastern Tropical South Pacific: W Z Haskell, W Berelson, D E Hammond, M G Prokopenko, L Y Yeung, D G Capone
1340h GC23D-0954 POSTER Lagrangian Model of Sinking Biogenic Aggregates: T Jokulsdottir, D E Archer
1340h GC23D-0955 POSTER Constraining the North Pacific carbon sink: biological and physical processes: J Ayers, M Lozier

GC23E Moscone South: Poster Hall Tuesday 1340h
The Future of Polar Science:The Path Beyond the International Polar Year II Posters (joint with C, PP, A, B, OS)

Presiding: J W White, University of Colorado; J Brigham-Grette, University of Massachusetts; J H Swift, UCSD Scripps Institution of Oceanography; L M Brown, National Academy of Sciences

1340h GC23E-0956 POSTER Libre: Freeing Polar Data in an Information Commons: R E Duerr, M A Parsons
1340h GC23E-0957 POSTER Discoveries Within the Ice: Plans of the Ice Coring and Drilling Science Community: M R Albert, C R Bentley, M Twickler, Title of Team: IDPO/IDDO
1340h GC23E-0959 POSTER Towards structured model hierarchies for understanding the arctic system: A Roberts, J E Cherry, S M Elliott, L D Hinzman, J E Walsh
1340h GC23E-0961 POSTER The LARsen Ice Shelf System, Antarctica, LARISSA a Model for Antarctic Integrated System Science (AISS) Investigations using Marine Platforms: E W Domack, B A Huber, M Vernet, A Leventer, T A Scambos, E S Mosley-Thompson, C R Smith, M A De Batist, H Yoon, Title of Team: LARISSA
1340h GC23E-0962 POSTER An Antarctic Time Capsule: Compiling and Hosting 60 years of USGS Antarctic Aerial Photography: S Niebuhr, S Child, C Porter, B Herried, P J Morin
1340h GC23E-0963 POSTER The Antarctic Geospatial Information Center: Three Years of Supporting Antarctic Science and Operations: B Herried, P J Morin, M LaRue, C Porter, S Niebuhr, Title of Team: Antarctic Geospatial Information Center
1340h GC23E-0964 POSTER The Arctic Research Consortium of the United States (ARCUS): K R Creek, S E Fox, H V Wiggins
1340h GC23E-0965 POSTER SEARCH: Study of Environmental Arctic Change--A System-scale, Cross-disciplinary Arctic Research Program: H V Wiggins, H Eicken, S E Fox, Title of Team: SEARCH Science Steering Committee
All information is current as of November 12, 2010
### Geomagnetism and Paleomagnetism

**GP23A Moscone South: Poster Hall Tuesday 1340h**

**Frontiers in Electromagnetic Methods II Posters (joint with H, NS, T)**

**Presiding:** S Constable, Scripps Inst. Oceanography; K W Key, Scripps Institution of Oceanography

1340h **GP23A-0994** POSTER Electromagnetic depth sounding in the Earth’s crust: Survey and modeling of the effects of a meteorite impact on the conductivity structure in Southern Germany: J Kerch, K Bahr

1340h **GP23A-0995** POSTER Application of electrical and electromagnetic depth sounding in highly conductive sediments: The concept of vertical electrical anisotropy: A Köhler, K Bahr

1340h **GP23A-0996** POSTER Electromagnetic imaging of the oceanic Pacific-North American plate boundary in central California, USA: B D Wheelock, S Constable, K W Key

1340h **GP23A-0997** POSTER AN ANALYSIS ON 3D MARINE CSEM RESPONSES BASED ON A FINITE DIFFERENCE METHOD: N Han, M Nam, H Kim

1340h **GP23A-0998** POSTER Marine controlled-source electromagnetic sounding on submarine massive sulphides using 2.5-D simulation: N Imamura, T Goto, J Takekawa, H Mikada

1340h **GP23A-0999** POSTER Time-Domain vs. Frequency-Domain CSEM: Implications for Marine Exploration: D M Connell, K W Key

1340h **GP23A-1000** POSTER ANALYSIS ON 3D TOPOGRAPHY EFFECTS ON MAGNETOTELLURIC RESPONSES: M Nam, N Han, H Kim, Y Song


1340h **GP23A-1002** POSTER Deep geoelectrical structure inferred from sea-effect-corrected magnetotelluric (MT) data obtained at Jeju Island, Korea: J Yang, H Lee, H Yoo

**GP23B Moscone South: Poster Hall Tuesday 1340h**


**Presiding:** M H Heimpel, University of Alberta; N Gomez Perez, Carnegie Institution of Washington

1340h **GP23B-1003** POSTER Numerical Dynamo Simulations in a Full Sphere: P Marti, A Jackson

1340h **GP23B-1004** POSTER Investigation of a stratification due to the light element from CMB using a numerical simulation in a rotating spherical shell: H Matsui, B A Buffet

1340h **GP23B-1005** POSTER Observational and numerical models of Earth’s magnetic field: comparing like with like: C J Davies, C Constable

1340h **GP23B-1006** POSTER Magnetospheric Feedback Effects on Mercury’s Dynamo: N Gomez Perez, D Heyner, J Wicht, S C Solomon, K Glassmeier

1340h **GP23B-1007** POSTER Simulation of an Ice Giant-style Dynamo: K M Soderlund, J M Aurnou

1340h **GP23B-1008** POSTER Saturn's Very Axisymmetric Magnetic Field: New Upper Limit on the Dipole Tilt and Implications for the Interior of the Planet: H Cao, C T Russell, U R Christensen, M K Dougherty

1340h **GP23B-1009** POSTER The dynamical structure of giant planets: M H Heimpel, N Gomez Perez, J M Aurnou

1340h **GP23B-1010** POSTER Why are the Magnetic Fields of Jupiter and Saturn so Different?: H Houben

1340h **GP23B-1011** POSTER Using the "Current-Free" Magnetospheric Field Measurements to Model the Internal Field of Jupiter and Deduce its Rotation Rate: C T Russell, H Cao, S P Joy

1340h **GP23B-1012** POSTER Jovimagnetic Secular Variation: V A Ridley, R Holme

**GP23C Moscone West: 2003 Tuesday 1340h**

**Magnetostратigraphy: Not Only a Dating Tool II**

**Presiding:** L Jovane, Western Washington University; E Herrera-Bervera, University of Hawaii at Manoa

1340h **GP23C-01** How Accurate are Deep-Sea Sediments as Paleomagnetic Recorders: A case study from the North Atlantic?: S E Strano, J S Stoner, P F Almasi, G Bond

1355h **GP23C-02** Harnessing Paleomagnetic Secular Variation as a Long Distance Stratigraphic Tool (Invited): J S Stoner, G St-Onge, M H Davies, A C Mix, C Xuan

1410h **GP23C-03** Paleomagnetic-secular-variation based chronostratigraphy of the Late Quaternary (8-16,000 YBP) Tahiti coral reef: evidence for Melt-Water Pulses 1a and 1b and estimates of associated reef growth patterns (Invited): S Lund, E S Platzman, G Camoin, N Thouney

1425h **GP23C-04** Integrated magnetobiostratigraphy, paleoecological and paleoceanographic inferences of the middle Eocene-Oligocene interval from the Monte Cagnero Section, central Italy: L Jovane, J F Savian, S M Bohaty, P A Wilson, R Coccioni, F Frontalini, G Bancala, V Luciani, A Roberts


1455h **GP23C-06** High Resolution Magnetostratigraphy Susceptibility (MS) and Gamma Radiation (GR) Measurements from Three Coeval Upper Cretaceous Stratigraphic Sequences in Colorado: Testing MS and GR Variations Arising from Detrital Components in Variably Weathered Marine Sedimentary Rocks (Invited): B B Ellwood, J H Tomkin, W Wang

1510h **GP23C-07** Magnetostratigraphy and Block Rotation of the Canyon Sin Nombre Area, Western Salton Trough, CA: C J DeBoer, B A House, T C Peryam, R J Dorsey, M E Oskin

1525h **GP23C-08** Magnetostratigraphy and Paleomagnetism of the Plio-Pleistocene Arroyo Diablo and Borrego Formations in the Borrego Badlands, western Salton Trough, CA: B A House, R J Dorsey

All information is current as of November 12, 2010
Hydrology

**H23A  Moscone South: Poster Hall Tuesday 1340h**

Advances in Hydrologic Modeling and Prediction II Posters

**Presiding:** J Demargne, NOAA/NWS/Office of Hydrologic Development, A ABRISHAMCHI, University of Washington; M B Smith, National Weather Service; A W Wood, NOAA/NWS; N Mizukami, NOAA/NWS/ODH; V Fortin, Environment Canada, Canadian Meteorological Centre

- **1340h H23A-1158 POSTER** Effect of Streamflow Forecast Uncertainty on Real-Time Reservoir Operation: T Zhao, X Cai, D Yang

- **1340h H23A-1159 POSTER** Forcing a distributed hydrological model with ensemble precipitation forecasts to support dam operation during floods: O C Saavedra, T Koike, K Yang, T Graf, X Li, L Wang, X Han

- **1340h H23A-1160 POSTER** Comparison of Multiple Quantitative Precipitation Estimates for Warm-Season Flood Forecasting in the Colorado Front Range: H A Moreno, E R Vivoti, D J Gochis

- **1340h H23A-1161 POSTER** Identification of Atlantic Ocean Sea Surface Temperatures Drivers of French Streamflow: O A Aziz, G A Tootle, S Anderson

- **1340h H23A-1162 POSTER** Combined Effect of Uncertain Initial Condition and Atmospheric Forcing in Ensemble Streamflow Prediction: The Value of Data Assimilation and ESP: M Najafi, C M DeChant, H Moradkhani


- **1340h H23A-1164 POSTER** Developing an operational hydro-meteorological simulating and displaying system: Y Wang, D Shih, C Chen

- **1340h H23A-1165 POSTER** Generation of medium-range precipitation ensemble forecasts from the GFS ensemble mean at the basin scale: L Wu, J C Schaeke, J D Brown, J Demargne, R K Hartman

- **1340h H23A-1166 POSTER** Using the TIGGE database for ensemble hydrological forecasting: a study on 74 catchments in France (Invited): M Ramos, I Zalachori, T Mathevet, C Loumagne

- **1340h H23A-1167 POSTER** Verification of Experimental Short-Term Streamflow Ensemble Forecasts Produced by the U.S. National Weather Service: J Demargne, L Wu, S K Regonda, J D Brown


- **1340h H23A-1169 POSTER** CNRFC Experiences with Short-term Hydrologic Ensemble Streamflow Prediction (Invited): R K Hartman

- **1340h H23A-1170 POSTER** Estimation of Predictive Hydrological Uncertainty using Quantile Regression: A Weerts, H Winsemius, J Verkade

- **1340h H23A-1171 POSTER** Distributed Model Intercomparison Project Phase 2: Results of the Western Basin Experiments: M B Smith, V Koren, Z Zhang, Z Cui, N Mizukami, B Cosgrove, F Ding, D H Kitzmiller

- **1340h H23A-1172 POSTER** Diagnosis of inconsistencies in multi-year gridded precipitation data over mountainous areas and related impacts on hydrologic simulations: N Mizukami, M B Smith

- **1340h H23A-1173 POSTER** Automatic Calibration of a Distributed Rainfall-Runoff Model, Using the Degree-Day Formulation for Snow Melting, Within DMIP2 Project: F Frances, I Orozco

1340h H23A-1174 POSTER Evaluation of an energy balance snow model with MODIS albedo for predicting spring runoff in mountainous watersheds: L R Karsten, K J Franz

1340h H23A-1175 POSTER A Distributed Hydrological model Forced by DIMP2 Data and the WRF Mesoscale model: N E Wayand


1340h H23A-1177 POSTER Recognition of Effective Climate Variables on Dez Dam Inflow: M Tashrhyi, A ABRISHAMCHI, M Azimi

1340h H23A-1178 POSTER Uncertainty Evaluation and Appropriate Distribution for the RDHM in the Rockies: J Kim, L A Bastidas, E P Clark

1340h H23A-1179 POSTER Evaluation of Noah model performance in two basins in the Sierra Nevada Mountains on the Hydrologic Rainfall Analysis Project (HRAP) grid: J Dong, M B Ek


1340h H23A-1181 POSTER How a geology map of the Upper Santa Maria Valley in the Southern Swiss Alps played a critical role in solving a hydrogeologic enigma: M H Otz, I Otz

**H23B  Moscone South: Poster Hall Tuesday 1340h**

Droughts and Food Security II Posters (joint with GC, PA)

**Presiding:** D Niyogi, Purdue University; V Mishra, University of Washington; M J Hayes, University of Nebraska

- **1340h H23B-1182 POSTER** Modeling the hydrologic responses of the Pampanga River Basin, Philippines: A quantitative approach for identifying droughts: P A Jaranilla-sanchez, L Wang, T Koike

- **1340h H23B-1183 POSTER** Causes of over- and underestimation of low streamflows by use of index-streamgage approaches in the United States: K Eng, J E Kiang, Y Chen, D M Carlisle, G E Granato

- **1340h H23B-1184 POSTER** Responsiveness of Food Security Reporting to Environmental Variability and Agricultural Production Deficits: E B Brickley, M E Brown

- **1340h H23B-1185 POSTER** Climate change impacts on water availability: developing regional scenarios for agriculture of the Former Soviet Union countries of Central Asia: A Kirilenko, N Dronin

- **1340h H23B-1186 POSTER** Climate-Base Forecasts of Seasonal Streamflow in the Karoon River Basin Using Support Vector Machine Approach: A ABRISHAMCHI, S Shakeri, M Tadjrhy

- **1340h H23B-1187 POSTER** Is The Water Shortage Crisis Really One of the Most Dangerous?: M Narayanan

- **1340h H23B-1188 POSTER** An updated hydroclassification of streamflows at minimally-altered streamgages for the conterminous United States: D Wolock, S A Archfield, D M Carlisle, J G Kennen, K Eng, J E Kiang

- **1340h H23B-1189 POSTER** Global Drought Monitoring and Forecasting based on Satellite Data and Land Surface Modeling: J Sheffield, D B Lobell, E F Wood

- **1340h H23B-1190 POSTER** Bias correction of satellite rainfall estimation using a gauge-adjusted radar product: K B Tesfagiorgis, S E Mahani, R Khanbilvardi, D H Kitzmiller

All information is current as of November 12, 2010
1340h  H23B-1191 POSTER Predicting and Monitoring Drought for a Rice Cultivation Season in the Humid Tropics: D N Fernando, D A Robinson

1340h  H23B-1192 POSTER A statistical technique for defining rainfall forecast probabilities in southern Africa: G J Husak, T Magdzie

H23C  Moscone South: Poster Hall  Tuesday  1340h

Hydrogeophysics: Advances in Measurement, Monitoring, and Modeling of Hydrological Processes IV Posters  (joint with NS)

Presiding: A Pidlisecky, University of Calgary; B Dafflon, Center for Geophysical Investigation of the Shallow Subsurface

1340h  H23C-1193 POSTER A Geoelectrically-Monitored Tracer Test At The Macrodispersion Experiment (MADE) Site In Columbus, Mississippi: R D Swanson, K Singha, A Pidlisecky, D W Hyndman, J J Butler, G Bohling

1340h  H23C-1194 POSTER Long-Term Monitoring of Infiltration at a Managed Aquifer Recharge Site Using Electrical Resistivity Probes: R Cocksett, A Pidlisecky, R J Knight

1340h  H23C-1195 POSTER Bench-Scale Experiments to Evaluate ERT as a Monitoring Tool for Geologic CO2 Sequestration: S J Breen, R L Detwiler, C R Carrigan

1340h  H23C-1196 POSTER Monitoring three-dimensional moisture content development in the unsaturated zone using cross borehole geophysical methods: Exploring the lateral flow: E B Haarder, A Binley, K H Jensen, M C Looms, L Nielsen

1340h  H23C-1197 POSTER Automated Time-lapse GPR Imaging of an Ethanol Release: D R Glaser, R Henderson, R J Versteeg, D D Werkema, R Kinoshita, E Mattson

1340h  H23C-1198 POSTER Spectral induced polarization (SIP) measurement of NAPL contaminated soils: N Schwartz, J A Huissan, A Furman


1340h  H23C-1200 POSTER Markov chain Monte Carlo (MCMC) estimation of spectral induced polarization (SIP) as a distribution of simple Debye relaxations: J S Keery, A Binley, L D Slater

1340h  H23C-1201 POSTER Application of Self-potential Measurements to Investigate Groundwater Flow in Saijo Plain, Western Japan: F Hachani, M Tsujimura, Y Tosaki, T Goto, Y Ozaki, M Tokumasu

1340h  H23C-1202 POSTER Effect of heterogeneity of hydraulic conductivity on streaming potential: Y Ozaki, H Mikada, T Goto, J Takekawa, M Tsujimura, F Hachani

1340h  H23C-1203 POSTER Electromagnetic methods for rapidly characterizing porosity distributions in the upper part of the Biscayne aquifer, southern Florida: G J Mount, X Comas, K J Cunningham

1340h  H23C-1204 POSTER Monitoring of seismic electric signal in homogeneous sand as a function of water saturation: P Sénéchal, J Barrière, C Bordes

1340h  H23C-1205 POSTER Relationship between P-wave attenuation and water saturation in an homogeneous unconsolidated and partially saturated porous media: An experimental study: J Barrière, P Sénéchal, C Bordes, H Perroud

1340h  H23C-1206 POSTER A Laboratory Study to Determine the Effect of Partially Saturated Conditions on Relaxation: S Falzone, K Keating

1340h  H23C-1207 POSTER A Practical Property Transfer Model for Estimating and Upscaling the Specific Surface Area of Unconsolidated Sediments Using Textural Characteristics: K Draper, A L Ward

1340h  H23C-1208 POSTER NMR relaxation measurements on partially water saturated rocks (from a tight gas reservoir): R Jorand, N Klitzsch, C Clauser, B de Wijn

1340h  H23C-1209 POSTER Estimation of Field-scale Aquifer Hydraulic and Sorption Parameters Based on Borehole Spectral Gamma Methods: A L Ward, K Draper, N Hasan

1340h  H23C-1210 POSTER Comprehensive glacial sediment characterization and correlation with natural gamma log response to identify hydrostratigraphic units in a rotoosonic well core: A L Frahm, L D Lemke

1340h  H23C-1211 POSTER Assessing spatial variability of soil moisture and thermal properties within controlled agricultural plots using Distributed Temperature Sensing: S W Tyler, L Williamson, C E Hatch, P Srive, J Jensen, N Van De Giesen

1340h  H23C-1212 POSTER Actively Heated Fiber Optic Method for Distributed Soil Moisture Monitoring: C Sayde, J S Selker, L Rodriguez-Sinobas, M Gil-Rodriguez, R H Cuenca, S W Tyler, M English

1340h  H23C-1213 POSTER Detection of Flowing Fractures and Estimation of Fracture Continuum Permeability From Borehole Temperature Logging Data: Semi-Analytical Solution and Inverse Modeling Results: S Mukhopadhyay

1340h  H23C-1214 POSTER Introduction on groundwater monitoring system in China: J Yang, A Wang, G Wang

1340h  H23C-1215 POSTER Development of enabling scientific tools to characterize the geologic subsurface at Hanford: T C Kenna, M Herron, A L Ward


H23D  Moscone South: Poster Hall  Tuesday  1340h

Large Regional Aquifers: A Precious Resource at Risk II Posters  (joint with NS)

Presiding: T D Bullen, U.S. Geological Survey; P J Negrel, BRGM

1340h  H23D-1217 POSTER Using an Artificial Neural Network to forecast groundwater levels following the removal of a large dam, Milltown Montana Ashley Marks: A M Marks

1340h  H23D-1218 POSTER Heterogeneities and interconnections in groundwater: Coupled B, and Li isotope variations in a large aquifer system (Eocene sand aquifer, south western France): P J Negrel, R Millot, E PETELET-GIRAUD, C Guerrot, A Brenot, E Malcuirt

1340h  H23D-1219 POSTER Large sedimentary aquifer systems functioning. Constraints by classical isotopic and chemical tools, and RIE in the Eocene sand aquifer, SW France: E PETELET-GIRAUD, P J Negrel, R Millot, C Guerrot, A Brenot, E Malcuirt

1340h  H23D-1220 POSTER Chemical, multi-isotopic (Li-B-Sr-U-H-O) and thermal characterization of Triassic formation waters from the Paris Basin (France): C Guerrot, R Millot, C Innocent, P Négrel, B Sanjuan
H23D-1222 POSTER Groundwater study using drill holes in the Abukuma granitic province, NE Japan: chemical and isotopic features in the fracture zone around the geological tectonic line: H A Takahashi, H Tsukamoto, K Kazahaya, M Takahashi, N Morikawa, M Yasuhara, A Inamura, H Handa, T Nakamura

1340h H23D-1223 POSTER Future groundwater levels scenarios at the Guadalupe Valley Aquifer, BC, Mexico: J Campos-Gaytan, T Kretzschmar

1340h H23D-1224 POSTER Characteristics of permeability in carbonate areas of Korea: Y Park, Y Park, J Lee, H Lim, Y Keehm

1340h H23D-1225 POSTER Radium isotopes in groundwater around Fuji Volcano, Japan -application for groundwater dating on volcanic area:- T Ohta, Y Mihara

1340h H23D-1226 POSTER Nitrate Removal by Acid-Washed Sulfur Modified Iron (SMI) and Zero Valent Iron (ZVI): K Han, J Ko, U Hong, J Lim, S Park, S Kwon, Y Kim

1340h H23D-1227 POSTER Porosity and Velocity Relations of Grosmont Formation, Alberta, Canada: Y Keehm, D Hu

1340h H23D-1228 POSTER Groundwater under climate change: C Moecck, M Schirmer, D Hunkeler, Title of Team: Project of National Research Programme “Sustainable Water Management” (NRP 61)

1340h H23D-1229 POSTER Isotopic Systematics (U, nitrate and Sr) of the F-Area Acidic Contamination Plume at the Savannah River Site: Clues to Contaminant History and Mobility: J N Christensen, M E Conrad, M Bill, M Denham, J Wan, S Rakshit, W T Stringfellow, N Spycher

1340h H23D-1230 POSTER Assessment of groundwater storage derived from IPCC models in comparison with GRACE data for the Western US, and projections for the next 50 years: K Pitts, A F Bridger

1340h H23D-1231 POSTER A new interpretation of the Budyko Framework: The role of groundwater storage and streamflow persistence: O Wright, E Istanbulbulluoglu, T Wang


1340h H23D-1233 POSTER Role of vegetation in interplay of climate, soil and groundwater recharge in a global dataset: J H Kim, R B Jackson

H23E Moscone South: Poster Hall Tuesday 1340h Recent Advances in Groundwater Hydrology Posters

Presiding: B A Bekins, U.S. Geological Survey; G Bohling

1340h H23E-1234 POSTER COMPARISON OF STEADY STATE METHOD AND TRANSIENT METHODS FOR WATER PERMEABILITY MEASUREMENT IN LOW PERMEABILITY ROCKS: P F Boulin, P Bretonnier, N Gland

1340h H23E-1235 POSTER A Revisit of Drawdown Behavior during Pumping in Unconfined Aquifers: D Mao, L Wan, T Yeh

1340h H23E-1236 POSTER Characterization of the permeability near borehole with Wireline Formation Tester (WFT): Critical review of interpretation results from a collection of 420 data: M Noiroit, H Jourde, G Massonnet

1340h H23E-1237 POSTER Spatial and Temporal Variability of Local and Instantaneous Dispersivities Determined in a Porous Medium Lab Tank: J E Capilla, I Sanchez-Fuster, C Llopis-Albert

1340h H23E-1238 POSTER Solute transport in a well under slow-purge and no-purge conditions: M A Plummer, S L Britt, J M Martin-Hayden

1340h H23E-1239 POSTER Comparison of Stochastic and Wavelet Analyses of Spatial Variability of Hydraulic Conductivity and Hydraulic Head: R M Neupauer, M F Dilln

1340h H23E-1240 POSTER Efficient random walk particle tracking algorithm for modeling advection-dispersion transport in highly heterogeneous porous media: M Bechtold, J Vanderborght, O Ippisch, H Vereecken

1340h H23E-1241 POSTER Approximate Solution to the Generalized Boussinesq Equation: A S Telyakovskiy, J Mortensen

1340h H23E-1242 POSTER Dimension Constraint of Using 2-D Cross-Sectional Flow to Represent 3-D Groundwater Mounding beneath a Rectangular Recharge Area: J Zhang, S SrClair, C Tsai

1340h H23E-1243 POSTER Combine Grey System Theory and Markov Chain to Forecast Groundwater Level: C Huang, S Huang, J Wen, J Lee, C Tseng

1340h H23E-1244 POSTER Improved Eulerian-Lagrangian techniques for complex transport on unstructured computational meshes: M W Farthing, C E Kees, S E Howington, P Cheng, R Cheng, C T Miller

1340h H23E-1245 POSTER Application of POD-based Monte Carlo approach for the solution of stochastic groundwater flow problems: D Pasetto, A Guadagnini, M Putti

1340h H23E-1246 POSTER Massively parallel multiple interacting continua formulation for modeling flow in fractured porous media using the subsurface reactive flow and transport code PFLOTRAN: J Kumar, R T Mills, P C Lichtner, G E Hammond

1340h H23E-1247 POSTER Experimental Study of Flow and Solute Transport in a Channeled Single Fracture: J Qian, Z Chen, H Zhan, H Qin

1340h H23E-1248 POSTER Investigating the Role of Hydromechanical Coupling on Flow Systems in a Shallow Fractured Rock Aquifer: E J Earnest, D F Boutr


1340h H23E-1251 POSTER Hydrologic responses to local and distant earthquakes in Korea: H Lee, M Kim, N C Woo

1340h H23E-1252 POSTER Advances in basinal-scale groundwater modeling in China: Z Eryong

1340h H23E-1253 POSTER Defining Hydrogeological Boundaries for Mountain Front Recharge (MFR) Predictions in Multi-Catchment Mountainous Systems: L A Neilson-Welch, D M Allen

1340h H23E-1254 POSTER The Impact of Hsueh-Shan Tunnel Construction on the Hydrogeological Environment in Northern Taiwan: Y Chiu, Y Chia

1340h H23E-1255 POSTER Trends and Numerical Simulation of Land Subsidence Caused by Groundwater Exploitation in the North China Plain: X Wang, G Cao, J Liu, C Zheng


1340h H23E-1257 POSTER A Precipitation and Spring Discharge Model in Sinking Stream Basin: R Zhang, L Shu, J Zhu, L Liu
H23E-1258 POSTER An investigation into variable recharge behaviors among eight alluvial observation wells in Pajaro River, Alamos, New Mexico: S R Schmeer

H23E-1259 POSTER River Induced Wellbore Flow Dynamics in Long-Screen Wells and their Impact on Aqueous Sampling Results: V Vermeul, J P McKinley, D Newcomer, B G Fritz, R Mackley, J M Zachara

H23E-1260 POSTER Hydrogeologic Framework of the Salt Basin, New Mexico and Texas: A B Ritchie, F M Phillips

H23E-1261 POSTER Macroscopic Thermal Energy Balance on Montane Valley Aquifers and Groundwater Recharge Source Identification: J C Trask, G E Fogg

H23E-1262 POSTER A Quasi-3D transport model for simulation of non-point source contamination in large domains: G Kourakos, F Klein, T Harter

H23E-1263 POSTER Aquifer-Scale Proportion as a Measure of Regional-Scale Groundwater Quality: K Belitz, B Jurgens, M K Landon, M S Fram, T Johnson

H23E-1264 POSTER Hydrogeological factors affecting the multiple plumes of chlorinated contaminants in an industrial complex, Wonju, Korea: J Yang, D Kaown, H Lee, K Lee

H23E-1265 POSTER Effects of hydrogeological characteristics on the attenuation of TCE-contaminated groundwater plume in Wonju, Korea: H Lee, J Yang, K Lee

H23E-1266 POSTER Aquifer contaminant diffusion resulting from DNAPL source zone dissolution: G H Brown, B Michael

H23E-1267 WITHDRAWN

H23E-1268 POSTER Semi-analytical Solution of One-dimensional Multispecies Reactive Transport in a Permeable Reactive Barrier-aquifer System: J M Mielke, H Zhan

H23E-1269 POSTER Hydrological Tracer Studies at a DOE IFRC Site in Rifle, Colorado: M Gupta, K H Williams, E S Berman, M E Conrad

H23E-1270 POSTER Monitoring electron donor metabolism under variable electron acceptor conditions using 13C-labeled lactate: M Bill, M E Conrad, I Yang, H R Beller, E L Brodie

H23E-1271 POSTER Modeling Perchlorate Contamination In Coastal Aquifer of Israel: A Yakirevich, M Kuznetsov, E Adar, R Nativ

H23E-1272 POSTER Degassing of groundwater with elevated dissolved methane from monitoring wells in Alberta, Canada: J W Roy, C Ryan, K Long


H23F Moscone South: Poster Hall Tuesday 1340h Remote Sensing of Hydrology and Its Applications I Posters (joint with G)

Presiding: M H Cosh, USDA-ARS-HRSL; D Ryu, The University of Melbourne; A K Sahoo, Center for Research on Environment and Water; J D Bolten, NASA GSFC

H23F-1274 POSTER Early results of the SMAP In Situ Sensor Testbed: M H Cosh, T Ochsner, L McKe, S R Evett

H23F-1275 POSTER A strategy for downscaling SMOS-based soil moisture: M Pan, A K Sahoo, E F Wood

H23F-1276 POSTER Importance of Vertical Coupling in Agricultural Models on Assimilation of Satellite-derived Soil Moisture: I E Mladenova, W T Crow, W L Teng, P Doraiswamy

H23F-1277 POSTER Spatial Variability of Soil Moisture and the Validation of Remote Sensing Products in a Unique Beach Environment: J Rogers, A A Berg

H23F-1278 POSTER Using GPS Interferometric Reflectometry to estimate soil moisture and vegetation water content fluctuations: C C Chew, E E Small, K M Larson, J J Braun, C M Shreve

H23F-1279 POSTER Temporal variations in soil moisture content and its influence on biomass estimates, observed by UAVSAR, ALOS PALSAR, and in-situ field data: A I Calderhead, M Simard, M Lavalle

H23F-1280 POSTER Multispectral and Microwave Satellite Remote Sensing for Flood monitoring in ungaged basins: S I Khan, Y Hong, H J Vergara, J J Gourley, R F Adler, F Policelli

H23F-1281 POSTER USE OF SAR DATA, OPTIMAL IMAGES, AND TOPOGRAPHY DATA FOR COASTAL FLOOD MAPPING IN THE NORTHERN GULF OF MEXICO: J J Angelo, S C Hagen, N Chauou, M Temimi, S C Medeiros, J C Feyen, Y Funaksohi, R Khanbilvardi, J Weishampel, F Aikman, P J Restrepo, D Reed

H23F-1282 POSTER Monitoring of water level changes In Anzali Mordab wetland, North Iran, Using SAR Interferometry: N Pesian, M Mortagh, M Sharifi, S Alipour

H23F-1283 POSTER Congo Basin Streamflow characterization using multi-source satellite-derived data: Preliminary Results: Y Munzumi, M C Hansen, K O Asante

H23F-1284 POSTER CHARACTERIZING TERRESTRIAL RUNOFF PATTERNS FROM THE WESTERN U.S: Y Wei, R E Beigle, R L Ray, H Lee, D E Alsford, C Shum, Title of Team: Spatial-Hydro Research Team

H23F-1285 WITHDRAWN

H23F-1286 POSTER Remote sensing of climate and management driven groundwater storage changes and land subsidence in the Central Valley, CA: K J Anderson, M Lo, J S Famiglietti, S C Swenson

H23F-1287 POSTER Spatial and temporal variations of Terrestrial Water Storage in five major Africa river basins: T Beyene, P Kabat, D P Lettenmaier, F Ludwig


H23F-1290 POSTER Satellite Observations of the Drought Factor and Their Applications to Bushfire Risk Assessment: D Ryu, K A McColl

H23F-1291 POSTER Online Remote-Sensing Tool for Calculating Evapotranspiration: J Wang, T W Sammis

H23F-1292 POSTER Estimating Evapotranspiration Based on MODIS and Meteorology Data over the Colorado River Basin: W Nie, Y Yuan, M Jackson, J T Lin, W G Kepner

H23F-1293 POSTER Estimation of shortwave radiation using MODIS products under all sky conditions: K Jang, S Kang

H23F-1294 POSTER Turkish Cloud-Radiation Database (CRD) and Its Application with CDR Bayesian Probability Algorithm: A Oztopal, A Mugnai, D Casella, M Formenton, P Sano, I Sonmez, Z Sen, Title of Team: HSAF Team

H23F-1295 WITHDRAWN
1410h  H23J-03 A Semi-Analytical Model for Heat and Mass Transfer in Geothermal Reservoirs to Estimate Fracture Surface-Area-to-Volume Ratios and Thermal Breakthrough using Thermally-Decaying and Diffusing Tracers: P W Reimus

1425h  H23J-04 The Suitability of Conductive and Convective Geothermal Resources in New Mexico for EGS Systems: M A Person, L Owens, J Hubbling, S Kelley, J C Witcher, S Lucero

1440h  H23J-05 Application of Microearthquake(MEQ)Monitoring for Characterizing the Performance of Enhanced Geothermal Systems: E Majer

1455h  H23J-06 Carbon-dioxide plume geothermal (CPG) systems, an alternative engineered geothermal system (EGS) that does not require hydrofracturing: Comparison with traditional EGS regarding geologic reservoir heat energy extraction and potential for inducing seismicity: J B Randolph, M O Saar


---

H23J Moscone West: 3014 Tuesday 1340h Evapotranspiration II: Remote Sensing Applications From Water Management to the Global Water Cycle (joint with PA, A, B)

Presiding: E F Wood, Princeton University; M C Anderson, USDA-ARS

1340h  H23J-01 Use of multi-platform and frequency remote sensing data for mapping latent and sensible heat flux over the Gourma Region in West Africa: L Farhadi, D Entekhabi, G Salvucci, J Sun

1355h  H23J-02 Estimation of land surface fluxes using MOIDS and weather satellites: Q Tang, D P Lettenmaier

1410h  H23J-03 Assessing regional evapotranspiration across a montane gradient by combining a mobile measurement platform with satellite observations: R G Anderson, M L Goulden, Y Jin

1425h  H23J-04 Description of the Improvements on MODIS Global Terrestrial Evapotranspiration: Q Mu, M Zhao, S W Running

1440h  H23J-05 An evaluation of SEBAL algorithm using high resolution aircraft data acquired during BEAREX07: G Paul, P H Gowda, V P Prasad, T A Howell, S Staggenborg


1510h  H23J-07 Retrieving latent heat flux from MODIS Aqua and its comparison with ARM CLASIC 2007 observations, LDAS and recent reanalysis products over US Southern Great Plains: K Mallick, A Jarvis, D Niyogi, S Fall, U Charusambot, B Bhattacharya

1525h  H23J-08 GROWING SEASON EVAPOTRANSPIRATION WITH SATELLITE REMOTE SENSING PROCEDURE: A Irmak, I Ratcliffe, P Ranade, B Kamble, D Mutubiwa, O Z Akasheh, Title of Team: Hydrologic Information System Team

---

H23K Moscone West: 3018 Tuesday 1340h Hydroclimatic Extremes: Monitoring, Diagnosis, and Prediction II (joint with A, NG)

Presiding: A AghaKouchak, University of California Irvine; U Lall, Columbia Univ; K Hsu, UC Irvine

1340h  H23K-01 High resolution diagnosis and monitoring of extreme precipitation events using multi-sensor multi-platform remotely sensed data: H H Aumann, S G Desouza-Machado, A Behrangi

1355h  H23K-02 Trends in Heavy Rainfalls in the Observed Record in Selected Areas of the U.S. (Invited): G M Bonnin


1430h  H23K-04 Modeling the Spatiotemporal Distribution of Dam-Break Inundation in a Developed Area: Topographic and Hydrodynamic Controls: B F Sanders, J E Schubert, H A Gallegos

1450h  H23K-05 The Middle East and North Africa Land Data Assimilation System: First Results (Invited): J D Bolten, M Rodell, B F Zaitchik, M Ozdogan, D L Toll, E T Engman, S Habib

1510h  H23K-06 Is precipitation in northern New England becoming more extreme?: E Douglass

1525h  H23K-07 Estimating the design flood for ungauged catchments in a nonstationary world: A Sharma, S Westra, R Mehrrotra

---

H23L Moscone West: 3022 Tuesday 1340h Hydrogeophysical Data Fusion and Integrated Site Investigation Methods II (joint with NS)

Presiding: A Binley, Lancaster University; O A Cirpka, University of Tübingen

1340h  H23L-01 Non-uniqueness in relationships between geophysical and hydrologic parameters: Existence, implications, and improving methods of data integration (Invited): M A Cardiff, W Barrash, B Dafflon, B Malama

1355h  H23L-02 Enhanced Subsurface Fluid Characterization Using Joint Hydrological and Geophysical Imaging: M Commer, M B Kowalsky, S Finsterle, G A Newman

1410h  H23L-03 Stochastic fusion of dynamic hydrological and geophysical data for estimating hydraulic conductivities: insights and observations (Invited): J D Irving, K Singha

1425h  H23L-04 COUPLED HYDROGEOPHYSICAL PARAMETER ESTIMATION USING A PARTICLE FILTER WITH FULL-PATH MONTE CARLO RESAMPLING: J A Huisman, J Rings, J A Vrugt, H Vereeken

1440h  H23L-05 Modeling water storage at the field scale using temporal gravity observations as calibration constraint: B Creutzfeldt, A Günther, H Wziontek, B Merz

1455h  H23L-06 Using geostatistical constraints in electrical imaging for improved reservoir characterization: R Martin, A Kemna, T Hermans, F H Nguyen, A Vandenbohede, L Lebbe

1510h  H23L-07 Hydrogeophysical inversion of salt-tracer experiments monitored by ERT in a physical aquifer model (Invited): D Pollock, O A Cirpka

1525h  H23L-08 Developing Data Analysis Infrastructure to Support Regional and Global Scale Synthesis: D Agarwal, C van Ingen, M Humphrey, M Goode, J Li, Y Ryu, A Shoshani, B Faybishenko, A Romosan, J R Hunt, T Moran
Earth and Space Science Informatics

IN23A  Moscone South: Poster Hall  Tuesday 1340h
Advances in Cyberinfrastructure for the Earth and Environmental Sciences II Posters (joint with GC, NG)

Presiding: C E Tweedie, Univ Texas at El Paso; A A Velasco; G R Keller, University of Oklahoma; J A Gamon, University of Alberta

1340h  IN23A-1348 POSTER Grass Roots Design for the Ocean Science of Tomorrow: S Jul, C L Peach, D L Killb, O Schofield, C Fisher, C Quintana, C S Keen
1340h  IN23A-1349 POSTER A Framework for Integrating Oceanographic Data Repositories: E Rozell, A R Maffei, S E Beaulieu, P A Fox
1340h  IN23A-1350 POSTER Data-Driven Oceanographic Web Portal: T Huang, C Alarcon, A Bingham, M L Henderson, M Kessling, A Takagi, C K Thompson, Title of Team: Physical Oceanography Distributed Active Archive Center
1340h  IN23A-1351 POSTER GlyphSea: Interactive Exploration of Seismic Wave Fields Using Shaded Glyphs: E McQuinn, A Chourasia, J H Minster, J Schulze
1340h  IN23A-1352 POSTER On Optimizing Joint Inversion of Constrained Geophysical Data Sets: U A Sosa Aguirre, I Velazquez, M Argaez, A A Velasco, R Romero
1340h  IN23A-1353 POSTER Model Fusion: Results and Challenges: O Ochoa, V Kreinovich, A A Velasco
1340h  IN23A-1354 POSTER WebViz:A Web-based Collaborative Interactive Visualization System for large-Scale Data Sets: D A Yuen, E McArthur, R M Weiss, J Zhou, B Yao
Nonlinear Geophysics

NG23A Moscone South: Poster Hall Tuesday 1340h
Multiphase Flow: An Interdisciplinary Challenge II Posters
(joint with V, H)

Presiding: J Suckale, MIT; I L Belien, University of Oregon; K V Cashman, University of Oregon; R Juanes, Massachusetts Institute of Technology


1340h NG23A-1364 POSTER Compaction and Crystallisation in Magma Chambers: Towards a Model of the Skærgaard Intrusion: D P McKenzie

1340h NG23A-1365 POSTER Reactive multiphase flow at the pore-scale: the melting of a crystalline framework during the injection of buoyant hot volatiles: P Andrea, C Huber, O Bachmann, B Chopard

1340h NG23A-1366 POSTER Potential Causes for the Non-Newtonian Rheology of Crystal-bearing Magmas: Y Deubelbeiss, B J Kaus, J Connolly, L Caricchi

1340h NG23A-1367 POSTER A Mechanism for Shear-Thinning Rheology of Suspensions of Solid Particles: E W Llewelin, S Mueller, B J Kaus, H M Mader


1340h NG23A-1369 POSTER Experimental particle acceleration by water evaporation induced by shock waves: T Scolamacchia, M Alatorre-Ibargüengoitia, B Scheu, D B Dingwell, C Cimarelli

1340h NG23A-1370 POSTER Ash aggregation in explosive volcanic eruptions: J W Telling, J Dufek

1340h NG23A-1371 POSTER Two-Phase Flow Characteristics of the Ejection of Experimentally Generated Pyroclasts: M A Alatorre-Ibargüengoitia, D B Dingwell, B Scheu

1340h NG23A-1372 POSTER Gas expansion and migration through a viscous liquid: I L Belien, A Rust, L Farrell

1340h NG23A-1373 POSTER Insights from comparison of bubbles in gas-liquid and fluidized gas-solid particle flows: M Gilbertson, A Rust, A Nye

1340h NG23A-1374 POSTER Direct numerical simulations of magmatic differentiation at the microscopic scale: J Sethian, J Suckale, L T Elkins-Tanton

1340h NG23A-1375 POSTER Simulation of Nonisothermal Multiphase Flows of Binary Mixtures in a Porous Media: A A Afanasiev

1340h NG23A-1376 POSTER Possible high sonic velocity due to the inclusion of gas bubbles in water: T Banno, H Mikada, T Goto, J Takekawa

1340h NG23A-1377 POSTER Impact of methane flow through deformable lake sediments on atmospheric release: B Scandella, R Juanes

1340h NG23A-1378 POSTER Simulation of Natural CO2 Leak at Mammoth Mountain, California: E Ogretim, D Crandall, D D Gray, G Bromhal, J L Lewicki

1340h NG23A-1379 POSTER Experimental Simulations of Methane Gas Migration through Water-Saturated Sediment Cores: J Choi, Y Seol, E J Rosenbaum

1340h NG23A-1380 POSTER Modeling of Fluid Pressure and Overburden Response Caused by Activation of a Dormant Fracture in Caprock: G S Bromhal, H Siriwardane, R Gondle

1340h NG23A-1381 POSTER Fluid flow and damage in two-phase media: theory and application to carbon sequestration: Z Cai, D Bercovici

1340h NG23A-1382 POSTER Application of computational software to model the geochemical and geomechanical interactions in geologic carbon sequestration sites: C M Augustin, P K Swart, T H Dixon, D D Riemer

1340h NG23A-1383 POSTER Evaluating the impacts of caprock and reservoir properties on potential risk of CO2 leakage after injection: Z Hou, C J Murray, M L Rockhold

1340h NG23A-1384 POSTER Evaluation of CO2 Substitution for CH4 as a Mechanism for Concurrent Gas Production and CO2 Sequestration in Hydrate-Bearing Geologic Media: G J Moridis, M T Reagan, S Silpnagarmert

NG23B Moscone South: Poster Hall Tuesday 1340h
Nonlinear Geophysics in Seismic and Tectonic Processes Posters (joint with EP)

Presiding: U C Herzfeld, Univ Colorado Boulder

1340h NG23B-1385 POSTER A Fuse Model for Fracture and Damage: J Kazemian, K F Tiampo

1340h NG23B-1386 POSTER Availability of Fresnel volume migration to one-component seismic reflection data using tau-P transforms: T Kawabayashi, J Takekawa, T Goto, H Mikada, K Onishi

1340h NG23B-1387 POSTER Application of a particle method to elastic wave propagation and failure phenomenon: J Takekawa, H Mikada, T Goto

1340h NG23B-1388 POSTER A new paradigm in modeling pulseline ruptures: The pulse energy equation: A E Elbanna, T H Heaton

1340h NG23B-1389 WITHDRAWN

NG23C Moscone South: 308 Tuesday 1340h
Non-Gaussian and Nonlinear Aspects of Data Assimilation and Predictability in the Geosciences I (joint with A, H)

Presiding: S J Fletcher, Cooperative Institute for Research in the Atmosphere; B Ancell, Texas Tech University

1340h NG23C-01 POSTER On the use of Markov chain Monte Carlo algorithms for model uncertainty estimation and evaluation of assimilation algorithms (Invited): D J Posselt

1410h NG23C-02 Observation impacts on California Current transport during 4D-Var using ROMS (Invited): A M Moore, H G Arango, G Broquet, C A Edwards, M Veneziani, B Powell

NG23D Moscone South: 308 Tuesday 1440h
Predictive Modeling and Uncertainty Quantification for Systematic Evaluation of Climate Models and Data-Guided Enhancements of Regional Climate Projections I (joint with A, GC, H)

Presiding: A R Ganguly, Oak Ridge National Laboratory; D N Williams, Lawrence Livermore National Laboratory; C Doutriaux, H Najm, Sandia National Laboratories

Natural Hazards

**NH23A Moscone South: Poster Hall Tuesday 1430h**


_Presiding: N Lu, Colorado School of Mines; H Higgins, Kile, K Darmenova_

1340h **NH23A-1421 POSTER** A multi-parameter remote system to monitoring active landslides by using middle-low cost sensors: _J Londono_, C A Vega, L M Maya

1340h **NH23A-1422 POSTER** Regional reconnaissance of seasonal landslide activity in the Eel River catchment, northern California, using InSAR and airborne LiDAR: _A L Handweurger_, D A Schmidt, JJ Roering

1340h **NH23A-1423 POSTER** InSAR imaging of movement along the Bull Lake Creek Slide, Wind River Mountains, Wyoming: _B Held_, F G Gomez

1340h **NH23A-1424 POSTER** C-band and L-band InSAR for recognition and monitoring of landslides in Taleghan, Central Iran: _N Khavaninzhadeh_, M Motaghi, M Sharifi, S Alipour

1340h **NH23A-1425 POSTER** The application of InSAR technique for investigating mass movement in Semirom, Southeast Iran: _B Gozalpour_, M Motaghi, M Momeni

1340h **NH23A-1426 POSTER** Trial to Measure the Ground Surface Areal Displacement of Landslide Using Three-dimensional Laser Scanner: _K Ishida_, K Fujisawa, T Uto, H Homma, _H Shimomura_, K Mishima, H Komatsuzaki, A Noda, S Ishizaka, K Higuchi, Y Ootsuka, H Saito, M Yabe, M Murasaki, S Nishiyama, T Kitahara, Y Kodama, Y Inagaki, S Kaniyama


1340h **NH23A-1429 POSTER** Shear strength characteristics and activation of the Asato landslide, Okinawa, Japan: _S Nakamura_, S Kimura

1340h **NH23A-1430 POSTER** Modelling of Rainfall Induced Landslides in Puerto Rico: _C Lepore_, E Arnone, G Gisvandian, L V Noto, R L Bras

1340h **NH23A-1431 POSTER** Landslides in Uzbekistan, caused by simultaneous influence of precipitation and remote, deep earthquakes in Hindu-kush: _R Nyazov_, _B S Nurtaev_

1340h **NH23A-1432 POSTER** Deep-seated submarine landslides and frictional properties of accretionary prism from the hanging wall of the frontal thrust region, offshore the Kii Peninsula: _A Tsukui_, A Tsutsuki, H Fukuoka

1340h **NH23A-1433 POSTER** The destruction of mountain's roads caused by typhoon-induced landslides: _C Huang_, S Yang, T Shih, C Shen, P Wang, C Lee, C Chen

1340h **NH23A-1434 POSTER** Using SWAT model to evaluate the sediment load in Fetsui Reservoir watershed under severe rainfall and land-cover change conditions: _C Chang_, Y Huang, C Liu

1340h **NH23A-1435 WITHDRAWN**

1340h **NH23A-1436 POSTER** TDR PROCEDURES FOR SLOPE STABILITY AND HYDRAULIC REGIME CONDITION MONITORING: _D Ceccio_, A Marino, A Teramo

1340h **NH23A-1437 POSTER** TERRITORIAL DIAGNOSTICS GEOPHYSICAL SURVEYS FOR THE EVALUATION OF DAMAGE SUSCEPTIBILITY OF HISTORICAL CENTRES: _M Gorgone_, D De Domenico, A Marino, G Puglisi, D Termini, A Teramo

1340h **NH23A-1438 POSTER** Evaluation used underground water drain pipes of experimental studies: _T Abe_, J Ohara, K Fujisawa, R Nakano, Y Tabara

1340h **NH23B Moscone West: 3010 Tuesday 1430h**

Strategies for Earthquakes and Natural Hazards Mitigation I (joint with PA, S)

_Presiding: J H Venus, School of Earth and Environmen; W Meng, China University of Geosciences_

1340h **NH23B-01 POSTER** Making the Handoff from Earthquake Hazard Assessments to Effective Mitigation Measures (Invited): _D Applegate_

1340h **NH23B-02 POSTER** System development over the monitoring for the purpose of early warning of population from the threat of landslides. (Invited): _D V Zakhidova_, A Kadyrhodjaev, Title of Team: Scientific Team of HYDROENGE Institute on Natural Hazards

1417h **NH23B-03 POSTER** Disaster Risk Reduction through Innovative Uses of Crowd Sourcing (Invited): _J Berger_, M Greene

1434h **NH23B-04 POSTER** GEOPHYSICAL SURVEYS FOR THE CHARACTERIZATION OF SEISMIC AND SYSTEMIC DAMAGE SCENARIOS OF HISTORICAL AND ENVIRONMENTAL VALUE SMALL CITIES: _F Muscolino_, A Marino, D De Domenico, D Campo, D Termimi, A Teramo

1451h **NH23B-05 POSTER** Parameter sensitivity of ground motion simulations based on hybrid broadband calculations. A case study for Izmir, Turkey: _L W Bjurum_, M B Sorensen, K Atakan

1508h **NH23B-06 POSTER** A Procedure for Rapid Localized Earthquake Hazard Analysis: _J R Holliday_, J B Rundle

1525h **Jo Venus & Wang Meng Panel Questions**

Near Surface Geophysics

**NS23A Moscone South: Poster Hall Tuesday 1430h**

Near-Surface Geophysics General Contributions II Posters (joint with GP, H, NG, S)

_Presiding: X Zhou, Montana Tech of The University of Montana_

1340h **NS23A-1439 POSTER** Detecting abandoned and unknown mineshafts using microgravity survey on South Korea: _H Rim_, Y Park, M Lim, Y Shin

1340h \textbf{NS23A-1441} \textit{POSTER} Review of magnetic functions for geophysical prospecting: \textit{S Fleury}, M Munschy

1340h \textbf{NS23A-1442} \textit{POSTER} Electrical resistivity survey in eastern Jeju Island: \textit{H Jung}

1340h \textbf{NS23A-1443} \textit{POSTER} 3-D resistivity imaging of buried concrete infrastructure with application to unknown bridge foundation depth determination: M E Everett, \textit{R Arjwech}, J Briaud, S Hurlebaus, Z Medina-Cetina, S Tucker, N Yousefpour

1340h \textbf{NS23A-1444} \textit{POSTER} Exploration of a Buried Building Foundation and a Septic Tank Plume Dispersion Using a Laboratory-fabricated Resistivity Apparatus: \textit{A Lachhab}, N Stepianik, A Bootebaugh

1340h \textbf{NS23A-1445} \textit{POSTER} The peobing depth of Transient Electromagnetic Method with the large-loop source: \textit{N Zhou}, G Xue, S Yan


1340h \textbf{NS23A-1447} \textit{POSTER} Study on Tunnel-ground Controlled Source Electromagnetic Method: \textit{J Jing}, S Jin, W Wei, M Deng, G Ye

1340h \textbf{NS23A-1448} \textit{POSTER} EC and EM surveys of a levee of the Tuolumne River, Stanislaus County, California: \textit{I Murillo}, H D Ferriz

1340h \textbf{NS23A-1449} \textit{POSTER} Compression on Width of Pseudo-seismic Waveform in the Transient Electromagnetic Imaging: \textit{G Xue}, X Li, N Zhou, Z Qi

1340h \textbf{NS23A-1450} \textit{POSTER} GPR SURVEYS FOR BUILDING FOUNDATION DETECTION: \textit{D Termini}, D Campo, D De Domenico, A Teramo

1340h \textbf{NS23A-1451} \textit{POSTER} Properties of Frozen Peat Determined Using Waveguide Dispersion Analysis of Ground-Penetrating Radar (GPR) Data: \textit{A Parsekian}, J Van Der Kruk, L D Slater

1340h \textbf{NS23A-1452} \textit{POSTER} Estimates of Arctic Wetland Extent Using Ground Penetrating Radar: \textit{S Schultheiss}, C E Geiss, P Camill, M Edlund, C E Umbhanower

1340h \textbf{NS23A-1453} \textit{POSTER} Fractional diffusion analysis of the electromagnetic fields generated by a transient straight current source over a porous geological media: \textit{J Ge}, M E Everett, C J Weiss

1340h \textbf{NS23A-1454} \textit{POSTER} Maxwell Wagner Relaxation in Common Minerals and a Desert Soil at Low Water Contents: \textit{S A Arcone}


1340h \textbf{NS23A-1456} \textit{POSTER} Acidity-Facilitated Mobilization of Surface Clay Colloid from Natural Sand Medium: \textit{Y Huang}, C Wang, B P Mohanty

1340h \textbf{NS23A-1457} \textit{POSTER} Self-Potential Measurements of a Pore-Water Modification Technique to Reduce Earthquake-Induced Liquefaction Susceptibility: \textit{D Graham}, L W Wolf, D Elton

1340h \textbf{NS23A-1458} \textit{POSTER} Elucidating the Significance of the “Nano-Effect” in Determining the Mobility of C\textsubscript{60} Nanoparticles in Saturated Porous Media: \textit{Q Jia}, J Brant

1340h \textbf{NS23A-1459} \textit{POSTER} The Complex Resistivity Spectrum Characteristics About Stratabound Sulfide Deposits: \textit{P Dong}, B Sun, L Wang, Z Chen, Z Dong, Y Wu

1340h \textbf{NS23A-1460} \textit{POSTER} CLASSIFICATION OF UXO BY PRINCIPAL DIPOLE POLARIZABILITY: \textit{K N Kappler}


1340h \textbf{NS23A-1462} \textit{POSTER} Geophysical survey applied to underwater archaeology: a 19th century town submerged in Tequesquitengo Lake, Morelos, Mexico: \textit{R E Galindo Dominguez}, W L Bandy

1340h \textbf{NS23A-1463} \textit{POSTER} Comparison Study of Reflection Seismic Surveys on Paved Site According to Sources and Receivers: \textit{H Kim}, Y Keehm, J Jin

1340h \textbf{NS23A-1464} \textit{POSTER} A new instrumentation to measure seismic waves attenuation: \textit{N Tsato}, C Madonna, S Bouteraud, J Burg


1340h \textbf{NS23A-1466} \textit{POSTER} Enhanced NH\textsubscript{3} emission from swine liquid waste: \textit{S Lee}, W P Robarge, J T Walker

1340h \textbf{NS23A-1467} \textit{POSTER} Finisher hog production in the Southeastern United States: Ancillary measurements derived from the National Air Emissions Monitoring Study (NAEMS): \textit{W P Robarge}, S Lee, J T Walker

\textbf{Ocean Sciences}

\textbf{OS23A Moscone South: Poster Hall Tuesday 1340h Eastern Boundary Ocean Margin Carbon Cycles I Posters (joint with B, H)}

\textit{Presiding:} \textit{B R Hales}, COAS; \textit{F Chavez}, MBARI; \textit{M A Goni}, Oregon State University; \textit{S A Siedlecki}, University of Chicago

1340h \textbf{OS23A-1567} \textit{POSTER} High silicate:nitrate ratios in eastern boundary upwelling waters may produce greater carbon drawdown than predicted from Redfield C:N ratios: \textit{R C Dugdale}, J R Fuller, A Marchi, A E Parker, F P Wilkerson

1340h \textbf{OS23A-1568} \textit{POSTER} Continuous Time-Series of Carbonate System Dynamics in the Coastal Oregon Upwelling System: \textit{K E Harris}, M D DeGrandpre, B R Hales

1340h \textbf{OS23A-1569} \textit{POSTER} Biogeochemical Connections Between Inner Shelf Bottom Boundary Layer and Surface Waters: \textit{B R Hales}, M Segura-Noguera, R K Shearman


1340h \textbf{OS23A-1571} \textit{POSTER} Enhanced Biological Processes at a Frontal Zone in the Southern California Current System: A Model and Data Synthesis: \textit{Q P Li}, P J Franks, M D Ohman, M R Landry

1340h \textbf{OS23A-1572} \textit{POSTER} Vertical diffusivity in the benthic boundary layer of the Oregon shelf from a deliberate tracer release experiment: \textit{S Ferrón}, D T Ho, B R Hales

1340h \textbf{OS23A-1573} \textit{POSTER} Distribution and Composition of Particulate Organic carbon along Oregon’s Upwelling Zone: \textit{M A Goni}, R R Holser, B R Hales, Title of Team: SUCCES Team

1340h \textbf{OS23A-1574} \textit{POSTER} Changes in the chemical composition of the bottom boundary layer during an upwelling event at the Oregon Coast: \textit{M Segura-Noguera}, S Ferrón, S A Siedlecki, B R Hales, D T Ho
Planetary Sciences

P23A Moscone South: Poster Hall Tuesday 1340h

Planetary Radar Investigations: Observations, Theory, Lab Measurements, Field Analogues, and Future Opportunities I

Posters (joint with C, NS)

Presiding: S M Clifford, LPI/USRA; V Ciarletti, LATMOS; E Heggy, Jet Propulsion Laboratory

1340h P23A-1606 POSTER Modeling Lunar Radar Scatter from Icy Regoliths: T W Thompson, E Heggy, E A Ustinov

1340h P23A-1607 POSTER Insights from a Geophysical and Geomorphological Mars Analog Field Study at the Great Kobuk Sand Dunes, Northwestern Alaska: R N McGinnis, C L Dinwiddie, D Stillman, K Bjella, D M Hooper, R E Grimm

1340h P23A-1608 POSTER Regolith thickness of the lunar nearside: Preliminary results from Earth-based 70 cm radar observations: W Fa, M A Wieczorek

P23B Moscone South: Poster Hall Tuesday 1340h

Planetary Rings: Theory and Observation I

Posters

Presiding: L W Esposito, L J Spilker, JPL

1340h P23B-1627 POSTER Comparison of F Ring Features Observed in Cassini UVIS Occultations with Other Observations: B K Meinke, L W Esposito, N Albers, M Sremcevic

1340h P23B-1628 POSTER Boom and Bust Cycles in Saturn’s Rings: L W Esposito, B K Meinke, M Sremcevic, N Albers


1340h P23B-1631 POSTER Speed Distribution Characteristics of Supersonic Dust Particles in Dusty Plasmas: W L Theisen

1340h P23B-1632 POSTER Experimental investigations on the collisional properties of ice particles in Saturn’s rings: D Heiselmann, J Blum, F Spahn


1340h P23B-1634 POSTER Saturn Ring Observer Mission Concept: Closer Than We Thought: T R Spilker, P Nicholson, M S Tiscareno, L J Spilker, Title of Team: SRO Study Team

1340h P23B-1635 POSTER Earth: A Ringed Planet?: L O Hancock, H Povenmire

P23C Moscone South: 306 Tuesday 1340h

Eyes on Enceladus I (joint with B)

Presiding: C Porco, CICLOPS/SSI; C McKay, Ames Research Center

1340h P23C-01 The interior and evolution of Enceladus: Current knowledge and future prospects (Invited): F Nimmo

1405h  **P23C-03** Thermal stability of internal liquid water reservoir at Enceladus’ South pole: **G Tobie**, M Behounkova, J Besserer, O Cadek, G Choblet

1415h  **P23C-04** Leading-Side Terrains on Enceladus: Clues to Early Volcanism and Tectonics from Cassini ISS: **P Helfenstein**, B Giese, J E Perry, T Roatsch, J Veverka, P C Thomas, T Denk, G Neukum, C Porco

1425h  **P23C-05** Tectonized Terrains of Enceladus: The Same but Different: **R T Pappalardo**, E Crow-Willard

1435h  **P23C-06** Physico-chemical processes in the icy plumes of Enceladus: **D C Boice**, R Goldstein, S E Martinez

1445h  **P23C-07** Saturnian Stream Particles as a Probe of Enceladus’ Interior: **H Hsu**, F Postberg, S Kempf, M Trieloff

1544h  **P23C-08** Can Surface Induced Dissociation (SID) help untangle the issues associated with the Cassini INMS measurement of organic molecules in Enceladus’ plume?: **J H Waite**, B A Magee, T Brockwell

1550h  **P23C-09** The Composition and Structure of Enceladus’ Plume from a Cassini UVIS Observation of a Solar Occultation: **CJ Hansen**, D E Shemansky, L W Esposito, I Stewart, A R Hendrix

1515h  **P23C-10** An approach to numerical simulation of the gas distribution in the atmosphere of Enceladus: **V Tenishev**, M R Combi, J H Waite

1525h  **P23C-11** The Jets of Enceladus: Locations, Correlations with Thermal Hot Spots, and Jet Particle Vertical Velocities: **C Porco**, A P Ingersoll, D DiNino, P Helfenstein, T Roatsch, C J Mitchell, S P Ewald

**Paleocceanography and Paleoclimatology**

**PP23A Moscone South: Poster Hall Tuesday 1340h Cenozoic Evolution of Ocean and Climate Systems: New Results From Ocean Drilling II Posters** *(joint with B, GP, GC, OS)*

**Presiding:** H Pälike, University of Southampton; H Pälike, University of Southampton; M W Lyle, Texas A&M University; M W Lyle, Texas A&M University; A C Ravelo, University of California, Santa Cruz; A C Ravelo, University of California, Santa Cruz; H Brinkhuis; H Brinkhuis

1340h  **PP23A-1714** **POSTER** The equatorial Pacific pelagic sedimentary system: **N C Mitchell**, M Tominaga, N Dubois, M W Lyle

1340h  **PP23A-1715** **POSTER** Reconstructing ocean carbonate compensation depth variability in the Oligocene and early Miocene: **K M Edgar**, H Pälike, P A Wilson, Title of Team: IODP Expedition 320/321 scientists

1340h  **PP23A-1716** **POSTER** Orbitally-paced Carbonate Dissolution During the Paleocene: **D J Thomas**, S C Woodard, U Roehl, T Westerhold

1340h  **PP23A-1717** **POSTER** Late Eocene–early Oligocene carbonate accumulation in the subantarctic South Atlantic: evidence for orbitally-paced fluctuations in regional lysocline depth: **S M Bohaty**, H Pälike


1340h  **PP23A-1719** **POSTER** Paleoenvironmental Interpretation of Quartz Surface Textures, from the Middle Eocene Central Arctic IRD Record: **K K St John**, S Passchier, L Kears


1340h  **PP23A-1723** **POSTER** Faunal change of benthic foraminifera in CAE-3 (middle Eocene) in the eastern Equatorial Pacific (IODP Exp 320): **H Takata**, B Khim, R Nomura, A Tsujimoto, Title of Team: IODP Expedition 320/321 Scientists

1340h  **PP23A-1724** **POSTER** New records of the Eocene/Oligocene transition from the IODP Pacific Equatorial Age Transect (PEAT): **PA Wilson**, H Pälike, K M Edgar, T Westerhold, B H Murphy, J C Zachos, T Dunkley Jones, Title of Team: PEAT Shipboard Scientific Party, IODP Expedition 320/321

1340h  **PP23A-1725** **POSTER** Tropical sea surface temperature variability near the Oligocene - Miocene boundary: **Y Zhang**, M Pagani


1340h  **PP23A-1727** **POSTER** Glacial Erosion of Antarctica Evidenced by a Rapid Nd Isotope Excursion Associated with the Eocene-Oligocene Transition: **A E Pusz**, H D Scher, R Thunell


1340h  **PP23A-1729** **POSTER** Equatorial Pacific climatic variations during the Miocene - Pliocene at IODP Site U-1338: **G Rousselle**, C Beltran, M Sicre, M de Rafélis, I Raffi, J Backman, Title of Team: IODP Expeditions 320/321 Shipboard Scientific Party

1340h  **PP23A-1730** **POSTER** A high resolution, one million year record of extraterrestrial He from the Shatsky Rise (site 1209) following the K/T impact: **A Bhattacharya**, S Mukhopadhyay, P M Hull, R D Norris

1340h  **PP23A-1731** **POSTER** Early Pleistocene short-term intermediate water mass variability influences Carbonate Mound development in the NE Atlantic (IODP Site 1317): **J Raddatz**, A Rüggeberg, S Margreth, V Liebetrau, V Lüder, A Eisenhauer, Title of Team: IODP Expedition 307 Scientific Party

1340h  **PP23A-1732** **POSTER** The Geochemical Signature of Antarctic Glaciation: **G Munn**, H D Scher, S M Bohaty, A E Pusz, R Thunell, M L Delaney

1340h  **PP23A-1733** **POSTER** Is optically simulated luminescence dating useful in our IODP sediment cores? - an interim report from IODP Exp.323 and 318: **S Sugisaki**, T Sakamoto, K Oguri, J Buylaert, A Murray
PP23B Moscone South: Poster Hall Tuesday 1340h
Reconciling Models of Hyperthermal Events in Earth History II Posters (joint with B, GC)

Presiding: T Dunkley Jones, Imperial College London; T Dunkley Jones, Imperial College London; C O Chun, Goethe University Frankfurt; C O Chun, Goethe University Frankfurt; R E Zeebe, University of Hawaii; R E Zeebe, University of Hawaii; A S Cohen, The Open University; A S Cohen, The Open University

1340h PP23B-1734 POSTER A marine Mo-isotope record across OAE1a: G J Ison, A S Cohen, A L Coe

1340h PP23B-1735 POSTER An improved correlation of the multi-event APTian/Alian OAE 1b: J Trabuco Alexandre, R I van Gilst, J P Rodriguez-López, P L De Boer

1340h PP23B-1736 POSTER Combined oxygen- and carbon-isotope records through the Early Jurassic: multiple global events and two modes of carbon-cycle/temperature coupling: S P Hesselbo, C Korte

1340h PP23B-1737 POSTER A Multi-proxy Examination of the Toarcian Oceanic Anoxic Event in Argentina: A H Al-Sawaiidi, F Baudin, S E Damborenea, S P Hesselbo, H C Jenkyns, M O Mancheño, R D Pancost, A C Riccardi, C Siebert

1340h PP23B-1738 POSTER Pacific and Tethyan Os-isotope data for OAE 1a: The link between volcanism and marine anoxia: A S Cohen, C Bottini, A L Coe, E Erba, H C Jenkyns

1340h PP23B-1739 POSTER Cumulative inputs of carbon into the Early Toarcian ocean-atmosphere system: from volcanism to an Oceanic Anoxic Event: M Hermoso, R E Rickaby, C Bjerrum, F Baudin, F Minoletti, S P Hesselbo, H C Jenkyns

1340h PP23B-1740 POSTER Pacing of middle Eocene climate during the Middle Eocene Climate Optimum and the Chron C19r event – new results from the expanded ODP Site 1260 in the tropical western Atlantic: T Westerhold, U Roehl

1340h PP23B-1741 POSTER Testing sources and size of carbon release during the PETM: C O Chun, A J Ridgwell, R Marsh


1340h PP23B-1743 POSTER Molybdenum and Osmium isotope evidence for palaeoceanographic changes in the Arctic Ocean over the Paleocene-Eocene Thermal Maximum (PETM): A J Dickson, A S Cohen, A L Coe

1340h PP23B-1744 POSTER Changes in seasonality and productivity recorded at low latitudes in Tanzania during the PETM: A O’Halloran, C J Nicholas, R Goodhue

1340h PP23B-1745 POSTER Calcareous nannoplankton changes during the middle Eocene in the Agost section (Spain): evidence for hyperthermal events: S Monechi, F Tori

1340h PP23B-1746 POSTER Methane and environmental change during the Paleocene-Eocene thermal maximum (PETM): Modeling the PETM as a multistage event: D A Carozza, L A Mysak

1340h PP23B-1747 POSTER Carbon addition during the Paleocene-Eocene Thermal Maximum: Model inversion of a new, high-resolution carbon isotope record from Svalbard: Y Cui, L Kump, A Ridgwell, C Junium, A F Diefendorf, K H Freeman, N Urban

1340h PP23B-1748 POSTER Ocean Stagnation and Anoxia at the Paleocene-Eocene Boundary – Implications for the Benthic Extinction: A M Winguth, C Winguth

1340h PP23B-1749 POSTER Constraining carbon input for early-middle Eocene ‘hyperthermals’: S E Kirtland, P F Sexton, A Ridgwell, R D Norris

1340h PP23B-1750 POSTER A depth transect comparison of extraterrestrial 3He-based timescales for the Paleocene-Eocene thermal maximum (PETM) from ODP Leg 208: B H Murphy, K A Farley, J C Zachos

1340h PP23B-1752 POSTER Large amplitude variations in global carbon cycling and terrestrial weathering from the late Paleocene through the early Eocene: carbon isotope and terrigenous accumulation records at Mead Stream, New Zealand: B S Slotnick, G R Dickens, M Nicolo, C J Hollis, J S Crampton, J C Zachos

1340h PP23B-1753 POSTER Mammalian faunal response to the Early Eocene Climatic Optimum (~53.5-48.5 mya) and a new terrestrial record of the associated carbon isotope excursion from Raven Ridge in the Uinta Basin, Colorado-Utah: A R Dutchak

1340h PP23B-1754 POSTER Using n-alkane records to constrain carbon cycle – hydrological cycle coupling: Case study from the Northern Hemisphere mid-latitudes during the PETM: S Krishnan, M Pagani, B J Til Phill

1340h PP23B-1755 POSTER New Insights into Early Cenozoic Carbon Cycling: Continental Ecosystem Response to Orbital Forcing in the Lacustrine Green River Formation (Western US) at the Conclusion of the Early Eocene Climatic Optimum: D Musher, D S Grogan, J H Whiteside

1340h PP23B-1756 POSTER B/Ca evidence for surface water pH changes over the PETM: D E Penman, J C Zachos, R E Zeebe

1340h PP23B-1757 POSTER Calcareous Nannoplankton and Rapid Climate Change: Was High Climate Variability Responsible for Nannofloral Turnover during the PETM and Plio-Pleistocene?: J Schueh, T J Bralower

PP23C Moscone West: 2005 Tuesday 1340h
Miocene to Present Evolution of Western Arctic and Sub-Arctic Environments II

Presiding: A C Ravelo, University of California, Santa Cruz; J Brigham-Grette, University of Massachusetts; M A O’Regan, Carduff University; L V Polyak, Ohio State University

1340h PP23C-01 What Causes Arctic Amplification? (Invited): M M Holland, C M Bitz, J E Kay

1355h PP23C-02 Diatom Surface Sediment Assemblages from the Bering Sea Shelf: a Tossed Salad or Faithful Recorder of 50 Years of Environmental Change?: B Caissie, J Brigham-Grette, K Kanamur-Shinn

1410h PP23C-03 Extended Quaternary Record of Sea-Ice Conditions and Glacierization in the Western Arctic Ocean: L V Polyak, K Crawford, R Gray, K Best, E A Council, J D Ortiz, C Xuan, J E Channell, D S Kaufman, B Haley


1425h PP23C-05 Using n-alkane records to constrain terrestrial record of the associated carbon isotope excursion from Lake Elgygytgyn, Chukotka (joint with B, GC): R E Zeebe, A S Cohen, M Maceño, R D Pancost, A C Riccardi, C Siebert

1425h PP23C-06 Neogene arctic forests: deep-time analogs of a mild ice-free Arctic (Invited): C Williams

1455h PP23C-07 Initial Results on the Pliocene and Quaternary Evolution of the Western Arctic from the Deep Drilling in 2008/09 at Lake Elgygytgyn, Chukotka (Invited): M Melles, J Brigham-Grette, P Minyuk, C Koeberl, Title of Team: El’gygytgyn Scientific Party
2010 Fall Meeting

SPA-Aeronomy

SA23A Moscone South: Poster Hall Tuesday 1340h

Dynamics and Coupling in the Lower Thermosphere II Posters

(Invited with A)

Presiding: Q Zhou, Miami University; H Liu, National Center for Atmospheric Research; M J Nicolls, SRI International; S England, UC Berkeley

1340h SA23A-1769 POSTER Properties of the quasi-three day wave in the equatorial lower thermosphere during January 2010 from both ground and space-based observations: S England, G Liu, Q Zhou, T Iimmel

1340h SA23A-1770 POSTER Response of the low and mid-latitude ionosphere to the forcing by the quasi-three day wave in the equatorial thermosphere during January 2010 from both ground and space-based observations: G Liu, S England, T Iimmel, Q Zhou

1340h SA23A-1771 POSTER Nonlinear Interaction Between the Migrating Diurnal Tide and the Quasi-Two Day Wave: L C Chang, S E Palo, H Liu

1340h SA23A-1772 POSTER Diagnosing Interactions of the Diurnal Tide with the MLT Background Atmosphere Using Data from the TIDI and SABER Instruments: D M Riggan, D A Orland, R S Lieberman

1340h SA23A-1773 POSTER An Analysis of tidal and planetary waves at Arecibo during January 2010: Y Gong, Q Zhou, N Aponte, M P Sulzer, S A Gonzalez

1340h SA23A-1774 POSTER Long-term measurements of lower thermospheric neutral winds over Poker Flat, Alaska: C J Heinseelman, M J Nicolls

1340h SA23A-1775 POSTER Modeling Waves in the Thermosphere: L C Gardner, R W Schunk


1340h SA23A-1777 POSTER The relation between the E-regions gravity waves and the F-region plasma depletions observed with an all-sky imager at Arecibo: I Seker, S F Fung, J D Mathews

1340h SA23A-1778 POSTER Structures in the Na airglow images after a bright meteor fireball: H Suzuki, T Nakamura, S L Vadas, M Tsutsui, M Taguchi, Y Fujiwara

1340h SA23A-1779 POSTER Acoustic and Atmospheric Gravity Waves Excited by a Fireball Meteor: T Nakamura, S L Vadas, H Suzuki

1340h SA23A-1780 POSTER Gravity wave compressible dissipation polarization relations, and their relation to Fabry Perot and PFISR observations in January 2010: S L Vadas, M J Nicolls, J W Meriwether

1340h SA23A-1781 POSTER Nonlinear airglow signatures of ducted gravity waves in the mesosphere and lower thermosphere: J B Snively, M P Hickey, M J Taylor

1340h SA23A-1782 POSTER Predicting the Global Average Temperature of the Thermosphere From an Empirical Model of the Polar Poynting Flux: D R Weimer, E K Sutton, W Tobiska

1340h SA23A-1783 POSTER The Role of Spatial and Temporal Variability in Determining the Magnitude and Structure of Thermospheric Vertical Winds: E Yigit, A J Ridley

1340h SA23A-1784 POSTER Examining the contributions to the longitudinal variation of the low latitude upward ExB drift as simulated by TIME-GCM: A Maute, A D Richmond, M E Hagan, R G Roble

1340h SA23A-1785 POSTER Ionospheric and field-aligned currents caused by the lower atmospheric disturbances: T Iyemori, Y Tanaka, K Taiga, E Choque, D Rosales, M Matsumura, K Nakanishi, S Yamanaka, J Ishitsuka, Title of Team: Geomagnetic, barometric and HF-Doppler observation team

1340h SA23A-1786 POSTER Medium-Scale Traveling Structure in the Ionosphere-Thermosphere System: E S Miller, E R Talaat

1340h SA23A-1787 POSTER Seasonal Dependence of Equatorial Electrodynamic Effects During Stratospheric Warming Periods: M E Olson, B G Fejer, C Stolle, H Luhr

1340h SA23A-1788 POSTER The electrodynamics of the low-latitude ionosphere during and after the prereversal enhancement of the vertical plasma drift: J V Eccles

1340h SA23A-1789 POSTER Incoherent scatter radar measurement of E-region electric field at Arecibo: Q Zhou, Y Morton, C Huang, N Aponte, M P Sulzer, S A Gonzalez

SA23B Moscone South: 301 Tuesday 1340h

Heliosphere-Atmosphere Coupling and Climate I

(Invited with A, GC, SM, SH)

Presiding: C E Randall, University of Colorado; X Fang, University of Colorado

1340h SA23B-01 Detection of Long-Term Temperature Changes in the Stratosphere and Mesosphere: J Yee, W H Swartz, M G Mlynczak, J M Russell

1352h SA23B-02 11-year Solar Cycle Influences on the Earth’s Climate (Invited): L J Gray, M Lockwood, T J Woolings


1434h SA23B-05 Mesospheric Hydroxyl Response to Electron Precipitation From the Radiation Belts: P T Verronen, C J Rodger, M Clilverd, S Wang

1446h SA23B-06 Recent observations and modeling of the coupling between middle and upper atmospheric odd nitrogen (Invited): D E Siskind

1501h SA23B-07 Mean circulation and transport of trace species in the polar winter middle atmosphere (Invited): A K Smith, R R Garcia, D R Marsh

1516h SA23B-08 Mesospheric Transport in WACCM: V Harvey, C E Randall, H Liu, D R Marsh, E D Peck, S M Bailey

1528h SA23B-09 The vertical propagation and extent of stratospheric temperature and wind anomalies related to enhanced geomagnetic activity: A M Seppälä, A J Baumgaertner, P Jöckel, M Clilverd
All information is current as of November 12, 2010
1340h  **SH23B-1861** POSTER Reconstructing CMEs with Coordinated Imaging and In Situ Observations: Global Structure, Kinematics, and Implications for Space Weather Forecasting: Y Liu, A F Thernisien, J G Luhmann, A Pouridas, J A Davies, R P Lin, S Bale

1340h  **SH23B-1862** POSTER Space Profile of the Interplanetary Coronal Mass Ejection Acceleration: A Amezcua, A Borgazzi, P Subramanian

1340h  **SH23B-1863** POSTER Kinematic, Morphological Evolution and Dynamics of Coronal Mass Ejections in the Interplanetary Space: W Poonvisses, J Zhang

1340h  **SH23B-1864** POSTER Study of waves in the regions upstream and downstream of interplanetary shocks: P Kajdic, X Blanco-Cano, E Aguilar-Rodriguez, C T Russell, L Jian, J G Luhmann

---

**SH23C Moscone South: Poster Hall** Tuesday 1340h Solar Dynamics Observatory Data Access and Analysis Tools II Posters (joint with IN)

**Presiding:** N E Hurlburt, Lockheed Martin ATC


1340h  **SH23C-1866** POSTER Accessing SDO Data Through the VSO IDL Client (updated): J B Gurman, J A Hourcule, A Amezcua, A R Davey, V K Hughitt, F I Suarez Sola, A Somani, J Spencer, Title of Team: The VSO Team

1340h  **SH23C-1867** POSTER Access to Solar Dynamics Observatory HMI and AIA Data via the Joint Science Operations Center (JSOC): P H Scherrer, A Amezcua, R S Bogart

1340h  **SH23C-1868** POSTER Helioviewer: Simplifying Your Access to SDO Data: V K Hughitt, J Ireland, D Mueller, J Beck, D Lyon, A Dau, H Dietert, M Nuhn, G Dimitoglou, B Fleck

1340h  **SH23C-1869** POSTER Accessing SDO data in a pipeline environment using the VSO WSDL/SOAP interface: F I Suarez Sola, J A Hourcule, A Amezcua, R Bogart, A R Davey, J B Gurman, F Hill, V K Hughitt, P C Martens, J Spencer, Title of Team: VSO Team

1340h  **SH23C-1870** POSTER SDO Data Access And Analysis: A Somani, N E Hurlburt, C J Schrijver, C Cheung, S L Freeland, G L Slater, R Seguin, R Timmons, S Green, L Chang, A Kobashi, A Jaffey

1340h  **SH23C-1871** POSTER Calibration of AIA/SDO: Accessing and implementing the response functions: P Boerner, R Souflis, W Podgorski, C J Wolfson

1340h  **SH23C-1872** POSTER Flat Fielding and Image Alignments for AIA/SDO Data Images: R A Shine, R W Nightingale, P Boerner, T D Tarbell, C J Wolfson

1340h  **SH23C-1873** POSTER Automated Coronal Seismology: Curvelet Characterization of Probability Maps of Image Data with Oscillatory Signal: C Young, J Ireland

1340h  **SH23C-1874** POSTER What is the origin of current sheets observed in the solar wind?: G Li, Y Yan, B Miao

1340h  **SH23C-1875** POSTER Initial Analysis of the Solar Dynamics Observatory Radiation Environment: A D Vafai, S Close, A G Kosovichev, R A Stern

1340h  **SH23C-1876** POSTER The UCLan SDO Data Hub: S Dalla, R W Walsh, S A Chapman, M Marsh, S Regnier, D Bewsher, D S Brown, J Kelly, T Laitinen, C Alexander

1340h  **SH23C-1877** POSTER SDO in PULKOVO OBSERVATORY: E E Benevolenskaya, V Efremov, V Ivanov, N Makarenko, E Miletsky, O Okunev, Y Nagovitsin, L Parfenenko, A Soloviev, A Stepanov, A Tlatov

---

**SH23D Moscone South: 309 Tuesday 1340h** Changing the Paradigm of the Global Heliosphere Through Remote and In Situ Measurements by IBEX and Voyager II

**Presiding:** M Opher, Physics and Astronomy; J D Richardson, M.I.T.; N A Schwadron, University of New Hampshire; P Wurz, University of Bern

1340h  **SH23D-01** The highly variable magnetic field of the inner heliosheath (Invited): L F Burlaga, N F Ness

1357h  **SH23D-02** Low-energy Charged Particles at Voyagers 1 and 2 10-20 AU into the Heliosheath (Invited): R B Decker, S M Krimigis, E C Roelof, M E Hill

1414h  **SH23D-03** Plasma observations in the heliosheath through 2010: J D Richardson

1427h  **SH23D-04** Is the Magnetic Field in the Heliosheath Sector Region and in the Outer Heliosheath Laminar?: M Opher, J F Drake, M M Swisdak, G Toth

1440h  **SH23D-05** Recent IBEX Observations and the Evolving Interstellar Interaction (Invited): D J McComas

1457h  **SH23D-06** Cassini ENA (E > 5 keV) Heliosphere Belt and overlapping in-situ Voyager measurements: Pressure and ISMF implications: S M Krimigis, D G Mitchell, E C Roelof, R B Decker

1510h  **SH23D-07** Short timescale variation in the heliospheric ENA flux: IBEX observations and correlations with solar wind observations: P H Janzen, D B Reisenfeld, T Abel, F Allegri, M Bzowski, G B Crew, R Demajistre, P C Frisch, H O Funsten, S A Fuselier, M A Kubiak, H Kucharek, D J McComas, E C Roelof, N A Schwadron

1523h  **SH23D-08** Two Years of Interstellar Flow Observations with the Interstellar Boundary Explorer (IBEX) - Implications on the LIC Parameters and the Boundary (Invited): E Moebius, P A Bochsler, M Bzowski, H O Funsten, S A Fuselier, D Heirtzler, M A Kubiak, H Kucharek, M A Lee, T Leonard, D J McComas, L Petersen, L A Saul, N A Schwadron, M Witte, X Wu, P Wurz

---

**SPA-Magnetospheric Physics**

**SM23A Moscone South: Poster Hall** Tuesday 1340h Dynamics in the Saturnian Magnetosphere I Posters (joint with P)

**Presiding:** D G Mitchell, JHU/APL

1340h  **SM23A-1901** POSTER Updated Background Subtraction Procedures for Electrons measured by LEMMS on Cassini/MIMI: H Gramling, D G Mitchell, E C Roelof, R B Decker

1340h  **SM23A-1902** POSTER Energetic Electron Fluxes at Saturn from Cassini Observations: R Tang, D Summers

1340h  **SM23A-1903** POSTER LARGE SCALE STRUCTURES OF ELECTRONS IN THE INNER MAGNETOSPHERE OF SATURN, FROM THE QUASI-THERMAL NOISE OBSERVED WITH CASSINI/RPWS ANTENNAS: M Moncuquet, N Meyer-Vernet


**SM23B**  Moscone South: 305  **Tuesday 1340h**  

**Magnetospheric Response to Transient Solar Wind Features III**

**Presiding:** Q Zong, UML CAR; H Zhang, NASA Goddard Space Flight Center

1340h  **SM23B-01** Density Holes Upstream of Earth’s Bow Shock  *(Invited):* G K Parks, E Lee, N Lin, A F TESTE, M Wilber, I S Dandouras, H Reme, J Cao, S Fu, P Canu

1355h  **SM23B-02** Hot Flow Anomalies: Explosions at the Earth’s Bow Shock:  D G Sibeck, Q Zong, S P Gary, J P McFadden, D E Larson, K Glassmeier, V Angelopoulos

1410h  **SM23B-03** Concerning the Motion of FTEs and Attendant Signatures:  D G Sibeck, N Omidi


1440h  **SM23B-05** Can the Plasmaspheric Plume Significantly Contribute to Magnetosheath Densities?:  D L Gallagher, J Goldstein, D G Sibeck

1455h  **SM23B-06** Understanding the geo-effective properties of rapid changes in the solar wind and interplanetary magnetic field *(Invited):* A J Ridley, Y Yu, M W Liemohn, A M Dodger

1510h  **SM23B-07** Effect of solar wind dynamic pressure enhancements on dayside and nightside ionospheric convection and the polar cap boundary location:  A Boudouridis, L R Lyons, E Zesta, J M Weygand, J M Ruohoniemi, D Lumerzheim, P C Anderson


**SM23C**  Moscone South: 307  **Tuesday 1340h**  

**Radiation Belt Physics: Mysteries and Solutions I**

**Presiding:** A Y Ukhorskiy, JHU/APL; N J Fox, Johns Hopkins University/Applied Phy

1340h  **SM23C-01** Outstanding Scientific Problems on the Earth’s Radiation Belts  *(Invited):* R B Horne

1400h  **SM23C-02** Radial transport in the Earth’s radiation belts  *(Invited):* B T Kress, A Y Ukhorskiy, M K Hudson

1420h  **SM23C-03** Anomalous radial diffusion by pitch-angle scattering on split drift shells: Calculations:  T P O’Brien, Y Shprits, J L Roeder, J Fennell, S G Claudepierre, R H Friedel

1433h  **SM23C-04** Localized Wave-particle Interactions: Acceleration and Loss Across the Outer Radiation Belt  *(Invited):* R M Millan, L A Woodger

1453h  **SM23C-05** Extremely Large Amplitude Whistler Waves in the Earth’s Inner Radiation Belt:  A W Breneman, C A Catlett, J R Wygant, K Kersten, L B Wilson, P J Kellogg, K Goetz

1506h  **SM23C-06** Wave-particle interactions in planetary magnetospheres  *(Invited):* R M Thorne

1526h  **SM23C-07** Implication for O+ nonadiabatic acceleration in the inner magnetosphere:  K Keika, P C Brandt, S Ohtani, D G Mitchell, K Min, M Nose, T Obara, H Koshiishi, H Matsumoto

**Study of Earth’s Deep Interior**

**DI23A**  Moscone South: Poster Hall  **Tuesday 1340h**  

**Imaging and Understanding the Electrical Conductivity of Earth’s Mantle: Lab Measurements, Regional and Global Studies, and Physical Interpretations I Posters  *(joint with GP, MR, SM, T, S)*

**Presiding:** A Kelbert, Oregon State University; J A Tyburczy, Arizona State University

1340h  **DI23A-1963** POSTER 3-D inversion of synthetic marine magnetotelluric data: resolution and sensitivity:  N Tada, K Baba, W Siripunvaraporn, M Uyeshima, H Utada

1340h  **DI23A-1964** POSTER 27-day modulation of the electromagnetic impedance tensor at mid-latitude:  J Lemperger, M Menvielle, V Wesztergom, L Szarka, A Kis, J Szendroi

1340h  **DI23A-1965** POSTER A upper mantle electrical conductivity profile beneath the Australian continent and a comparison with a laboratory-based model:  M Ichiki, K Fujita, L Wang, A P Hitchman


1340h  **DI23A-1967** POSTER Study of the geo-electrical anisotropy in the Cape Fold Belt (RSA) using magnetotelluric:  X Chen, U Weckmann

1340h  **DI23A-1968** POSTER Properties of the magmatic system that feeds Yellowstone inferred from 3-D electrical conductivity model:  A Kelbert, G D Egbert, C D deGroot-Hedlin, N Meqbel


1340h  **DI23A-1970** POSTER Electrical conductivity of fluid-bearing quartzite at high pressure and high temperature:  A Shimojuku, T Yoshino, D Yamazaki

1340h  **DI23A-1971** POSTER Electrical Conductivity of Al+-doped MgO:  H C Watson, J A Van Orman, K L Crispin, J J Roberts

1340h  **DI23A-1972** POSTER Electrical conductivity anisotropy of natural deformed talc rocks and serpentinite at 3 GPa:  X Guo, T Yoshino, D Yamazaki, I Katayama

**DI23B**  Moscone South: Poster Hall  **Tuesday 1340h**  

**Time Variability of the Geomagnetic Field II Posters  *(joint with GP)*

**Presiding:** J E Mound, University of Leeds; P W Livermore, University of Leeds, UK; M Dumberry, Department of Physics

1340h  **DI23B-1973** POSTER Air temperature and man-made forcing: Insights from the solid Earth:  J O Dickey, S L Marcus, O de Viron

1340h  **DI23B-1974** POSTER Geomagnetic variation and its relation to micro-earthquakes in the seismically inactive Korean Peninsula:  S Oh, M Noh, Y Ji, T Ahn, J Lim

1340h  **DI23B-1975** POSTER Decadal Variations in Geomagnetic Observatory Data from Empirical Mode Decomposition:  J E Mound, L P Jackson

1340h  **DI23B-1976** POSTER Forecasting changes in the Earth’s magnetic field using core-surface flows and torsional oscillations:  V Soukhovitskaya, J Bloxham

1340h  **DI23B-1977** POSTER Geomagnetic field intensity: How high can it get? How fast can it change? Constraints from Iron Age copper-slag:  R Shaar, E Ben-Yosef, L Tauxe, H Ron, A Agnon, R Kessel
1340h DI23B-1978 POSTER CALS10k-I: A geomagnetic field model spanning 10 kyr: C Constable, M C Korte, F Donadini

1340h DI23B-1979 POSTER On the Duration of Mantle Control of the Magnetic Flux Pattern at the CMB: K A Hoffman

1340h DI23B-1980 POSTER From Superchrons to Secular Variation: A Broadband Dynamo Frequency Spectrum for the Geomagnetic Dipole Moment: P Olson, U R Christensen, P E Driscoll

1340h DI23B-1981 POSTER Ensemble statistics of core dynamical state from geomagnetic data assimilation: A Tangborn, W Kuang, Z Wei

1340h DI23B-1982 POSTER Effect of cross-correlation in geomagnetic data assimilation: W Kuang, A Tangborn, Z Wei

1340h DI23B-1983 POSTER Multivariate statistics from numerical geodynamo models: synthetic experiments with geomagnetic data assimilation: J Aubert, A Fournier

1340h DI23B-1984 POSTER Multivariate statistics from numerical geodynamo models: estimating core surface flows from geomagnetic field models: A Fournier, J Aubert, E Thebault

1340h DI23B-1985 POSTER Towards millenial-timescale geodynamo models with zero viscosity: P W Livermore, A Jackson, G Ierley

---

**DI23C Moscone West: 3024**

**Tuesday 1340h**

The Transition Zone: Improved Scrutiny, Greater Complexity I (joint with S, MR, V)

**Presiding:** B Tauxin, Utrecht University; Y J Gu, University of Alberta; Q Williams, UC Santa Cruz; J F Lawrence, Stanford University

1340h DI23C-01 Transition from slab stagnation to penetration beneath the northwestern Pacific and South America (Invited): Y Fukao, M Obayashi

1355h DI23C-02 Complex plume dynamics in the transition zone underneath the Hawaii hotspot: seismic imaging results: Q Cao, R D van der Hilst, M V De Hoop, S Shim

1410h DI23C-03 The Efficacy of Using P′P′ Precursors to Study Upper Mantle Discontinuities: P Lin, E J Garnero, S Rost

1425h DI23C-04 Apparent topography on the 660km seismic discontinuity: Implications for chemical heterogeneity at the base of the mantle transition zone: A Day, A F Deuss

1440h DI23C-05 Ferric iron and water incorporation in wadsleyite: 410-km depth: N Bolfan-Casanova, A Ferot, M Munoz, S Pascarelli, C A McCammon

1455h DI23C-06 The Transition Zone low-velocity zone: insights from Northwestern Canada (Invited): A J Schaefe

1510h DI23C-07 Phase Relations and Densities of Crustal Material Deeply Buried into the Mantle: H Massonne, T Fockenberg, M Janitschke

1525h DI23C-08 Seismicity triggered by the olivine-spinel transition: New insights from combined XRD and acoustic emission monitoring during deformation experiments in Mg2GeO4: A J Schubnel, N Hilairet, J Gasc, E Hérépré, F Brunet, Y Wang

---

**Mineral and Rock Physics**

**MR23A Moscone South: Poster Hall Tuesday 1340h**

Physical State of Planetary Cores II Posters (joint with DI, V)

**Presiding:** G Steinle-Neumann, Bayerisches Geoinstitut


1340h MR23A-2003 POSTER Melting properties of iron alloys at high pressure determined by in situ X-ray diffraction: G Morard, D Andrault, N Guignot, D Antonangeli, J Siebert, G Garbarino

1340h MR23A-2004 POSTER Partitioning of siderophile elements between metallic liquids and silicate liquids under high-pressure and temperature: A Nakatsuka, S Urakawa

1340h MR23A-2005 POSTER Melting relationships of the Ni-NiS system up to 10 GPa and the stability of the Ni3S: S Urakawa, R Matsubara, T Katsura, T Watanabe, T Kikegawa

1340h MR23A-2006 POSTER Light elements in the Earth’s core: Fe3X compounds: A V Calderon, R Caracas, A H Romero

1340h MR23A-2007 POSTER Temperature profile of the outer core based on X-ray diffraction of Fe-FeS (Fe,Fe)Ni3(S,Fe3S): S Kamada, E Ohtani, H Terasaki, T Sakai, Y Ohishi, N Hiraoka, N Sata

1340h MR23A-2008 POSTER Hydrogenation of iron coexisting with hydrous ringwoodite: In-situ X-ray experiments with single crystal diamond capsule: T Imai, E Takahashi, N Tsujino, U Masashi, Y Higo, K Funakoshi


1340h MR23A-2012 POSTER Electrical conductivity measurement of iron at high static pressure: H Gomi, K Ohka, K Hirose

1340h MR23A-2013 POSTER Elasticity ofhcp-Fe in the Earth’s Inner Core: Z Mao, J Lin, A Alatas, H Yavas, J Zhao, L S Dubrovinsky

---

**Seismology**

**S23A Moscone South: Poster Hall Tuesday 1340h**

Toward Elucidating the Physics of Fault Tremor and Slow Slip IV Posters (joint with G, H, MR, T)

**Presiding:** A Wech, University of Washington; H Houston, University of Washington

1340h S23A-2080 POSTER Split from slip: Crustal Anisotropy Beneath Northern Cascadia from Non-volcanic Tremor: M G Bostock, N I Christensen


1340h S23A-2082 POSTER Strainmeter observations of the 2010 slow slip event in Cascadia: A critical look at noise, artifacts, and tectonic signals: R Krogstad, D A Schmidt

1340h S23A-2083 POSTER Constraining the relation between tremor and slow slip using tremor distributions and PBO strainmeter data: B Delbridge, H Houston
S23A-2084 POSTER Space-time evolution of tremor and slip during the August 2009 ETS event in central Cascadia: N M Bartlow, S Miyazaki, P Segall, A Wech

S23A-2085 POSTER A continuum of stress, strength and slip in the Cascadia transition zone: A Wech, K C Creager

S23A-2086 POSTER Slow slip along the Cascadia margin: Offset updip from tremor, more heterogeneous along strike than tremor, and caused by a separate peak in inter-ETS plate coupling: S G Holtkamp, M R Brudzinski, D C Boyarko

S23A-2087 POSTER Empirical relationships among slow earthquake source parameters from tremor and slip across Cascadia: D C Boyarko, M R Brudzinski

S23A-2088 POSTER Episodic tremor and slip along the Rivera and Cocos subduction zones of southern Mexico: K M Schlanser, M R Brudzinski, N J Kelly, S P Grand, E Cabral-Cano, C DeMets, Title of Team: Kristen Schlanser, Mike Brudzinski, Nicholas Kelly, Steve Grand, Enrique Cabral-Cano, Alajendra Arciniega-Caballos, Oscar Diaz-Molina, Charles DeMets

S23A-2089 POSTER Quantifying NVT in southern Mexico and its apparent lack of correlation with slow slip: S M Sit, M R Brudzinski

S23A-2090 POSTER Low-Frequency Earthquakes in Cascadia: Results from Array of Arrays: J R Sweet, K C Creager, A Ghosh, J E Vidale


S23A-2092 POSTER Non-volcanic tremor during several transient slip episodes in Alaska: M Schwed, M R Brudzinski, D H Christensen, J T Freymueller


S23A-2095 POSTER Precise Monitoring of Non-volcanic Low-Frequency Tremors using Vertical Seismic Array: The case of Tokai Area, Southwest Japan: N Takeda, K Imanishi, N Koizumi

S23A-2096 POSTER Seismic Moments for Episodic Tremor near Cholame Estimated from Spectra of Ground Motion at UPSAR: J B Fletcher, A McGarr

S23A-2097 POSTER Cascadia Tremor Spectra from Beamforming Fall Off as Frequency Squared: P Gerstoft, J Zhang, P M Shearer, H Yao, J E Vidale, A Ghosh


S23A-2100 POSTER Gravity change observed during 2004-2009 in the Tokai slow slip area and the possibility of detecting high-pressure-fluid flow: Y Tanaka, A Kato, T Sugano, G Fu, X Zhang, M Furuya, W Sun, S Okubo, S Matsumoto, M Honda, Y Sugawara, I Ueda, M Kusaka, M Ishihara


S23A-2102 POSTER Observation of very low frequency earthquakes near the Nankai Trough by using broadband ocean bottom seismometers: K Nakahigashi, Y Machida, T Isse, T Yamada, K Mochizuki, M Shinozuka, H Shiobara, T Kanazawa, K Uehira


S23A-2104 POSTER Detection of near-source ground motions associated with VLF (very low frequency) earthquakes beneath the forearc slope of the Nankai trough by broadband ocean bottom seismometers: H Sugioika, A Ito, T Okamoto, T Nakamura, Y Ishihara, K Obana, Y Fukao, E Araki, S Kodaia, D Suetugu, M Kinoshita


S23A-2106 POSTER Deep Tremor Activities beneath the Central Range in Taiwan and Their Relationship to Local, Regional, and Teleseismic Earthquakes: K Chao, Z Peng, C Tang, C Lin, C Chen

S23A-2107 POSTER Complex Non-volcanic Tremor in Guerrero Mexico Triggered by the 2010 Mw 8.8 Chilean Earthquake: D Zigone, M Campillo, A L Husker, V Kostoglodov, J S Payero, W Frank, N M Shapiro, C Voisin, G Cougoulot, N Cotte

S23A-2108 POSTER Ambient Tremor, But No Triggered Tremor at the Northern Costa Rica Subduction Zone: Z Swiecki, S Y Schwartz

S23A-2109 POSTER Triggered Non-Volcanic Tremor in the Hikurangi Subduction Zone, New Zealand: B Fry, K Chao, S C Bannister, Z Peng

S23A-2110 POSTER Low Frequency Earthquake (LFE) Families within Tectonic Tremor near the Southern Bay Area in California, Triggered by the 2002 Mw=7.9 Denali Earthquake: A C Aguiar, J R Brown, G C Beroza

S23A-2111 POSTER Study of triggered non-volcanic tremor and local earthquakes near the Anza segment of the San Jacinto fault, southern California: T Wang, E S Cochran

S23A-2112 POSTER Identification, Location and Stress Modeling of Tremor Dynamically Triggered in Subduction Zones: H Gonzalez-Huizar, A A Velasco

S23A-2113 POSTER Initial results from new Northern Cascadia tide gauge network: P Vincent, R J Weldon, D Livelybrooks, D A Schmidt, S Alba, T Maciel, J Bug, B Croes

S23A-2114 POSTER Tidal Modulation of Simulated Slow Slip Events in a Rate and State Model with a Velocity-Weakening to Strengthening Transition: J C Hawthorne, A M Rubin


S23A-2116 POSTER Modeling of features of slow earthquakes in a dynamical framework: T Yamashita

S23A-2117 POSTER Models of Slow Slip Events Using a Strain Wave Formulation in a Lithosphere Perturbed by Fluid Filled Shear Fractures: L Logan, L L Lavier, R A Bennett

S23A-2118 POSTER Rupture propagation patterns of deep low-frequency earthquakes depending on source structure and frictional property: numerical analysis based on dynamic model: R Nakata, R Ando, T Hori, S Ide
1340h S23A-2119 POSTER Numerical model of episodic tremor and slow slip in the seismic cycle of megathrust earthquakes: T Matsuzawa, B Shibasaki, H Hirose, K Obara

1340h S23A-2120 POSTER Simulations of slow slip events: Interactions with a zone of continuous creep: H V Colella, J H Dieterich, K B Richards-Dinger

1340h S23A-2121 POSTER The dynamics of tectonic tremor throughout the seismic cycle: E G Daub, D R Shelly, R A Guyer, P A Johnson

1340h S23A-2122 POSTER Automatic tremor detection and waveform component analysis using a neural network approach: T Horstmann, R M Harrington, E S Cochran, T Wang, C E Potier

1340h S23A-2123 POSTER Exploring the Geographic Distribution of Tremor: B C Bagley, J Revenaugh

---

**All information is current as of November 12, 2010**
1340h T23A-2235 POSTER Stopping & Screen Formation In The Wooley Creek Batholith And Andalshatten Pluton: Complex Pluton - Host Rock Interactions During Magma Emplacement: A S Yoshinobu, B Hargrove

1340h T23A-2236 POSTER The interplay of mid-crustal tectonics and magmatism in the central Sierra Nevada arc: V Memeti, S R Paterson

1340h T23A-2237 POSTER Multiple Use of Magma Pathways: Mechanism for Hybridization: P Hasalova, R F Weinberg, H Reichardt

1340h T23A-2238 POSTER The Karakoram Shear Zone dike swarm: syn-kinematic magma transfer linking source to batholith: H Reichardt, R F Weinberg

1340h T23A-2239 POSTER High-temperature flow and dynamics of an anatectic migmatite dome: example from Naxos, Greece: S C Kruckenberg, E C Ferre, O Vanderhaeghe, C Teysssier, D L Whitney

1340h T23A-2240 POSTER Temporal constraints on partial melting and deformation in the Himalayan mid-crust, Leo Pargil Dome, NW India: G W Lederer, J M Cottle, M J Jessup, J Langille, T Ahmad

1340h T23A-2241 POSTER Melting in migmatites associated with sub-grain boundaries in quartz: J Levine, S Mosher

1340h T23A-2242 POSTER Melt microstructures and U-Pb SHRIMP zircon ages of tonalitic migmatites, Daejak Island, South Korea: A contrast in melt distribution during the Triassic anatexis: Y Lee, M Cho, Y Kim

1340h T23A-2243 POSTER Microstructural and U-Pb Zircon Constraints on the Relationship between Partial Melting and Ductile Shear in the East Gobi Fault Zone, Southern Mongolia: M Stypula, L E Webb

1340h T23A-2244 POSTER Continental magmatism by shear heating at geometric complexities on fault systems: M Deves, S Tait, G C King, R Grindin, P Tapponnier

1340h T23A-2245 POSTER Surface Melt Produced on Faults During Laboratory Stick-slip Experiments: D A Lockner, D E Moore, N M Beeler, B D Kilgore

T23B Moscone South: Poster Hall Tuesday 1340h SinoProbe: Deep Exploration in China III Posters (joint with DI, S)

Presiding: M Liu, University of Missouri

1340h T23B-2246 POSTER Crustal structure of the Paleozoic Kunlun orogeny from an active-source seismic profile between Moba and Guide in East Tibet, China: Z Zhang, S L Klempeter, Z Bai, Y Chen, J Teng

1340h T23B-2247 POSTER Crust structure revealed from the deep seismic reflection profile across Solonker suture zone in North China: a preliminary interpretation: S Zhang, R Gao, H Li, Q Li, H Hou, C Li, W Li, J Zhang, Q Cao, G Keller, M Liu

1340h T23B-2248 POSTER Teleseismic tomography beneath the mid-lower Yangtze region in China: G Jiang, G Zhang, Q Lu, D Shi

1340h T23B-2249 POSTER Seismic Refraction & Wide-angle Reflection Experiment on the Northern Margin of North China Craton -Data Acquisition and Preliminary Processing Result: W Li, R Gao, G R Keller, H Hou, Q Li, C M Cox, J C Chang, J Zhang, Y Guan


1340h T23B-2251 POSTER Seismic Velocity and Attenuation Tomography of Southwestern China: H Zhang

1340h T23B-2252 POSTER The Lithospheric Structure beneath the West and the South Ordos Block, China, from S Wave Receiver Functions: H Li, L Wang, M Xu, C Li, P Wang, N Mi, D Yu

1340h T23B-2253 WITHDRAWN

1340h T23B-2254 POSTER The Crustal Structure beneath the South Margin of Ordos Block, China from P Wave Receiver Functions: M Xu, L Wang, N Mi, H Li, D Yu, P Wang

1340h T23B-2255 POSTER The differ respon of China continental to the collision between Eurasian and Philippine Sea plate: Q Li, R Gao, C He, Y Guan, W Li

1340h T23B-2256 POSTER Lithospheric electrical structure beneath Ordos region, North China — The study of standard lithospheric electrical model beneath Chinese continent (SinoProbe-01): W Wei, S Jin, G Ye, M Deng, J Jing, L Zhang, H Dong, F Zhang, C Xie

1340h T23B-2257 POSTER Long magnetotelluric sounding profile for the study of crust and upper mantle beneath chinese continent: S Jin, G Ye, W Wei, H Dong, L Zhang, W Ren, J Jing

1340h T23B-2258 POSTER The Design of High Sensitivity Induction Magnetometer for the Magnetotellurics: W Zhu, G Fang

1340h T23B-2259 POSTER Processing and interpretation for Gravity and Magnetic Anomalies in the Daba Mountain and Periphery Areas: J Zhang, R Gao, Q Li, S Zhang, Y Guan, H Wang

1340h T23B-2260 POSTER Understanding the Geological Structures of North China By Analyzing Regional Gravity and Magnetic Data: L Shi, L Guo, X Meng, C Yao

1340h T23B-2261 POSTER Satellite Gravity Anomalies Separation in the South China Sea and its Regional Tectonic Significance: X Meng, C Yao, S Li, L Guo, Z Chen, L Shi, X Zheng, Title of Team: Key Laboratory of Geo-detection, Ministry of Education

1340h T23B-2262 POSTER The correspondence analysis of the satellite gravity anomalies with the deep lithosphere structure of the East China Sea: C Yao, X Meng, W Guo, Y Zheng, D Gao, H Li, H He

1340h T23B-2263 POSTER Crust structure, geodynamic and metallogenesis of major metallogenic belts in East China: an introduction to SinoProbe-03 (Invited): Q Lu, Y Chang

1340h T23B-2264 POSTER Data Acquisition and Analyses of Magnetotelluric sounding in Lujiang-Zongyang Ore Concentrated Area: J Tang, X Xiao, C Zhou, Q Lu

1340h T23B-2265 POSTER Continental ultra-deep drilling locating research status and progress in the Jinchuan Ni-Cu ore-concentrated area,Western China: H Yan, Z Tang, J Yang

1340h T23B-2266 POSTER 3D-FEM numerical analysis of thermal lithospheric structure in the China continent and its adjacent regions: Y Sun, H Zhang, Y Shi

1340h T23B-2267 POSTER Inhomogeneous Media 3D EM Modeling with Integral Equation Method: Q Di, R Wang, Z An, C Fu, C Xu

1340h T23B-2268 POSTER Upper mantle flow and lithospheric dynamics beneath the Eurasian region: G Zhang, G Jiang, Z Jia, R Gao, R Fu

1340h T23B-2269 POSTER The dynamic implication of focal mechanism solutions of Wenchuan earthquake sequence: X Hu, X Cui, L Chen

1340h T23B-2270 POSTER Stress Accumulation on Longmenshan Fault and Recurrence Interval of Wenchuan Earthquake Based on Visco-elasticity: C Liu, B Zhu, Y Shi

1340h T23B-2271 POSTER Study of Geochemistry, Geochronology and Petrogenesis of the Early Paleozoic Granitic Plutons in South China: Y Zhang, L Shu
1340h  T23B-2272 POSTER Comparison of Results Analyzed by China and European Laboratories for the FOREGS Geochemical Baselines Mapping Samples: W Yao, X Wang, L Nie

1340h  T23B-2273 POSTER SinoProbe Data Center-Supporting the Next Generation of Chinese Deep Exploration Research: Y Guan, S Dong

1340h  T23B-2274 POSTER Design and study of geosciences data share platform :platform framework, data interoperability, share approach: H Lu, D Yi

1340h  T23B-2275 POSTER SinoProbe-09 Exploration Measurement Development and Combination Strategies: P Yu, D Huang, C Liu

1340h  T23B-2276 POSTER A Three-component Magnetic Compensation Approach in Airborne Magnetic Survey: Z Guo, B Zhang, Title of Team: SinoProbe-09-03

T23C  Moscone South: Poster Hall  Tuesday 1340h  The Formation and Deformation of the Mediterranean Basins, Continental Margins, and Arcs III Posters (joint with GP, MR, NH, S, V, G)

Presiding: X A Garcia, Unitat de Tecnologia Marina, CSIC; W P Schellart, Monash University; J Van Hunen, Durham University; A Levander, Rice University

1340h  T23C-2277 POSTER Seismic Structure of the Eastern Alboran Sea, Western Mediterranean: W Leuchters, I Greveemyer, C R Ranero, G Booth-Rea, J Gallart

1340h  T23C-2278 POSTER Evidence of a North-trending lithospheric detachment beneath the Betic Cordillera revealed by magnetotelluric data: O Rosell, A Marti, A Marcuello, J Ledo, P Queralt, E Roca, J Campanya

1340h  T23C-2279 POSTER The origin and nature of the rapid Late Tertiary filling of the Levant Basin: J Steinberg, Z Gvirtzman, Y Fokiman, Z Garfunkel

1340h  T23C-2280 POSTER Forecasting database for the tsunami warning regional center for the western Mediterranean Sea: A Gailler, H Hebert, A Loevenbruck, B Hernandez

1340h  T23C-2281 POSTER Crustal and lithospheric imaging of the Atlas Mountains of Morocco inferred from magnetotelluric data: D Kiyam, A G Jones, J Fullia, C Hogg, J Ledo, A Sinischalchi, J Campanya, Title of Team: PICASSO Phase II Team

1340h  T23C-2282 POSTER CRUSTAL SCALE MAGNETOTELLURIC IMAGING OF THE CENTRAL ATLAS IN MOOCCO: J Ledo, A G Jones, A Sinischalchi, M Rouais, J Campanya, D Kiyam, P Moretti, P Piña, C Hogg, G Romano, Title of Team: PICASSO Team

1340h  T23C-2283 POSTER FACTORS CONTROLLING THE EVOLUTION OF ANATOLIA: CLUES FROM TELESEISMIC FINITE-FREQUENCY TOMOGRAPHY: C B Biryol, S L Beck, G Zandt, A A Ozacar

1340h  T23C-2284 POSTER Magnetotelluric Measurements in the Alboran Sea: R L Evans, M D Jegen, X A Garcia, T Matsuno, J Eisenbeck, T W Worzowski

1340h  T23C-2285 POSTER Tectonic uplift at the Gibraltar Arc and the desiccation of the Mediterranean. Towards a mechanistic model for the Messinian Salinity Crisis: D Garcia-Castellanos

1340h  T23C-2286 POSTER Architecture of Deposits Formed in a Tectonically Generated Tidal Strait, Eocene Ager Basin, South Central Pyrenees, Spain: A E Bens, C Olariu, R J Steel

1340h  T23C-2287 POSTER Geodetic constraints on kinematics of Africa-Iberia plate boundary from GPS data: A Kouali Idrissi, D Ouazar, P Vernant, A Tahayt, A Fadil, T Mourabiti, J M Davila, N Amraoui, R W King, R E Reilinger, S McClusky

1340h  T23C-2288 POSTER Deep structure of crust and mantle beneath Iberian Peninsula and surrounding regions from P and S receiver functions: I Morais, L P Vinnik, M M Silveira, S Kiselev, L M Matias

1340h  T23C-2289 POSTER Crustal structure of Tolfia domes complex (northern Latium – Italy) inferred from receiver functions analysis: an interplay between tectonics and magmatism: M Buttinelli, I Bianchi, M Anselmi, C Chiarabba, D De Rita, F Quattrocchi

1340h  T23C-2290 POSTER Wrench faulting initiated by continent-continent collision between the Eratosthenes Seamount and Cyprus: A Ehhardt, M Schnabel, V Damm, C P Huebscher

1340h  T23C-2291 WITHDRAWN

1340h  T23C-2292 POSTER Neotectonic Studies of the Lake Ohrid Basin (FYROM/Albania): H Nadine, A Liemann, U A Glasmacher, K R Reicherter

1340h  T23C-2293 POSTER Syn-rift and post-rift structures of the north-eastern Tyrrenhian margin: G Pezzati, N Zitellini, P Vannucchi


1340h  T23C-2295 POSTER A new look at intermediate depth earthquakes in the Greater Caucasus: R J Mellors, G Yetirmishli, S C Myers, R Gok

1340h  T23C-2296 POSTER Possible cause of the Miocene uplift and volcanoism in the central Anatolian plateau: J Bartol, R M Govers, M J Wortel

1340h  T23C-2297 POSTER The shape of the Aegean MCC’s, Insights from 3D numerical modelling: L Le Pourhiet, Y Denêle, B Huet, L Jollivet

1340h  T23C-2298 POSTER Crustal Thickness and Oceanic Lithosphere Distribution in the Eastern Mediterranean from Satellite Gravity Anomaly Inversion: L Cowie, N J Kuszniir


1340h  T23C-2300 POSTER The modes of propagation of the North Anatolian Fault and the mechanical nature of the Aegean lithosphere: B Huet, L Le Pourhiet, L Jollivet

1340h  T23C-2301 POSTER Exhumation of HP-LT metamorphic rocks in the Cyclades: constraints from Pressure-Temperature-time-strain: L Labrousse, B Huet, P Monié, L Jollivet

1340h  T23C-2302 POSTER The Tyrrenhian Basin: A natural laboratory to study the processes of extension of continental lithosphere and rifted margin formation: C R Ranero, V Sallaes, N Zitellini, I Greveemyer, Title of Team: MEDOC experiment scientific team

1340h  T23C-2303 POSTER LIMITED EXTENT OF FAST SEISMIC ANOMALY BENEATH NORTHERN APENNINES FAVORS A LITHOSPHERIC DELAMINATION SCENARIO: V L Levin, M H Benoit, M Torpey, J J Park

1340h  T23C-2304 POSTER Slab stress field in the Hellenic subduction zone as inferred from intermediate depth earthquakes: S Rontogianni, K Konstantinou, N S Melis, C Evangelidis
1340h  **T23C-2305 POSTER** A Wide-Angle Seismic Reflection Transect across the Moroccan Atlas (SIMA): R Carbonell, M Harnafi, A Teixell, J Gallart, A Levander, P Ayarza, A Khikchak, M Amhrar, M Charroud
1340h  **T23C-2306 POSTER** The role of the Variscan eastern Gondwana-Laurussia/Laurasia boundary in the evolution of the central Mediterranean area: M Padovano, F M Elter, E Pandeli
1340h  **T23C-2307 POSTER** First paleomagnetic results from the Kyrenia Range terrane of northern Cyprus and their implication for the regional plate tectonic evolution of the eastern Mediterranean: A Morris, M Anderson, E Hodgson, A Robertson
1340h  **T23C-2308 POSTER** Neogene Topography And Precipitation Patterns Of The Central Anatolian Plateau: A Mulch, T Mikes, F Schemmel, B Rojay
1340h  **T23C-2309 POSTER** The Ionian Abyssal Plain – closure of a remnant Mesozoic oceanic domain: subbottom structures, deep deformation and the Calabrian subduction zone: F Gallais, M Gutsche, D Graindorge, D klaeschen
1340h  **T23C-2310 POSTER** Along-strike slab segmentation under Greece from a 500 km long teleseismic receiver-function swath profile: control on large earthquakes, upper plate motion, and surface morphology: M Sachpazi, M Laigle, J Diaz, A Gesret, M Charalampakis, E H Kissling, A Hirn
1340h  **T23C-2311 POSTER** ESTIMATES OF SEISMOGENIC STRENGTH FOR DEFORMING FAULT ZONES IN TURKEY: S M Ozener, E C Klein

**T23D Moscone West: 2011**

**Tuesday 1340h**

**Earthquake Geology and Active Tectonics in South and East Asia IV (joint with S)**

**Presiding:** J H Shyu, National Taiwan University; J Lee, Academia Sinica

1340h  **T23D-01** Chronological constraints of active thrusting from cosmic ray exposure modeling: A case study of the Changhua Fault in Western Foothills of Taiwan (Invited): L Siame, R Chen, F Derriex, J Lee, D L Bourles, R Braucher, K Chang
1355h  **T23D-02** Application of in situ-produced cosmogenic nuclides to decipher activity of the deformation front in western Taiwan: R Chen, F Derriex, D Lee, L L Siame, K Chang, R Braucher, J Lee, D L Bourles
1410h  **T23D-03** Geologic Setting of the 2010 Jiasian earthquake, southern Taiwan: C Huang, T B Byrne, D Mirakian
1425h  **T23D-04** Characterization of transient deformation near surface fault zone during an earthquake: A case study of the Chihshang fault in eastern Taiwan: J Lee, K Ching, J Angelier, H Chu, J Hu, H Chen
1440h  **T23D-05** Existing large-scale landslides assessment by means of LiDAR data: Example from Tatun volcanic area, northern Taiwan: K Chang, Y Chan, R Chen, H Hsieh
1455h  **T23D-06** Decadal Erosion Rates Derived From An Earthquake-Induced Landslide Region, Central Taiwan: Y Chan, C Lu, K Chang, R Chen
1510h  **T23D-07** Spatial Distribution of Groundwater-Level Changes Induced by Earthquakes: Y Chia, C Liu, P Chuang
1525h  **T23D-08** Tectonic Morphology of the Hustai Fault (Northern Mongolia): Implications for Regional Geodynamics: A Schlupp, M A Ferry, U Munkhhuu, M Munschys, S Fleury

**T23E Moscone West: 2018**

**Tuesday 1340h**

**From Sediment Inputs to Seismogenesis at Subduction Zones III (joint with S, V, G, NH)**

**Presiding:** S Saito, JAMSTEC; L C McNeill, University of Southampton

1340h  **T23E-01** Seismic Reflection Images of the 1946 Nankai Megasplay Fault off Kii Peninsula, southwest Japan (Invited): J Park, S Kodaira
1355h  **T23E-02** Seismic anisotropy from walk-around VSP data in the Kumano basin south of Kii Peninsula (IODP Site C0009A): T Tsuji, R Hino, Y Sanada, J Park, T No, E Araki, M Kinoshita, N L Bangs, R von Huene, G M Moore
1410h  **T23E-03** Space-time evolution of the seismic-tnamogenic splay fault in the Nankai Trough: G Kimura, M Strasser, G M Moore, E Screaton, D Curewitz, C M Streiff, H Tobin
1425h  **T23E-04** Heat flow estimated from BSR distribution and thermal conductivity in IODP NanTroSEIZE boreholes in the Nankai Trough forearc slope region off Kumano: M Kinoshita, G M Moore, Y N Kido
1440h  **T23E-05** Tectono-stratigraphy, seismic character and the future position of the seismogenic zone, NanTroSEIZE Expedition 322 results (Invited): K T Pickering, M Underwood, S Saito, H Naruse, J Park, G F Moore, S Kuterolf, R P Scudder, Y Yamamoto, Y Kurita, Y Kubo, E Scientists
1455h  **T23E-06** Composition of Sedimentary Strata Entering the Nankai Trough Subduction Zone: Implications for Diagenetic Transitions into the Seismogenic Zone: M Underwood, J Guo, S Kutterolf, H Wua, S Saito, Y Kubo, E Scientists, Title of Team: Scientific Team of IODP Expedition 322
1510h  **T23E-07** Flow Zone Isolation in Sedimentary Inputs to the Nankai Trough Subduction Zone, IODP Expedition 322 (Invited): B Dugan, M E Torres, C Destrigneville, V Heuer, M B Underwood, S Saito, Title of Team: IODP Expedition 322 Shipboard Scientific Party
1525h  **T23E-08** The Impact of Subducting Basement Topography on Piggyback Slope Basins within the Outer Wedge of the Nankai Trough Accretionary Prism, Southwest Japanankai Trough accretionary Prism, Southwest Japan.: J D Kington, H J Tobin

**T23F Moscone West: 2016**

**Tuesday 1340h**

**Structure, Dynamics, and Evolution of the African-Arabian Rift Systems I (joint with S, V)**

**Presiding:** D Keir, University of Leeds; I D Bastow, University of Bristol; C Tiberi, CNRS; C Doubre, EOST-IPGS

1340h  **T23F-01** Geochronological evidence of mantle reservoir evolution during progressive rifting: T O Rooney, P Mohr, L Dosso, C M Hall
1355h  **T23F-02** Connecting the African Superplume to the Anomalous Upper Mantle beneath East Africa and Western Arabia: Results from Adaptively Parameterized P-wave Tomography: S E Hansen, A Nyblade, M H Benoist, S A Burdick, R D van der Hilst
1410h  **T23F-03** High-resolution modelling and error analysis of late-Cenozoic African topography driven by mantle convection: R Moucha, A M Forte, D B Rowley, J Mitrovica, N A Simmons, S P Grand, G Lissivich
1425h  **T23F-04** Uplift, rifting and related geomorphological evolution of the Ethiopian volcanic province: what do we really know? (Invited): R Pik, D Ayalew, G Yirgu
1445h  **T23F-05** Multi Plumes and Their Flows beneath Arabia and East Africa: S Chang, S van der Lee
Volcanology, Geochemistry, and Petrology

**V23A Moscone South: Poster Hall Tuesday 1340h**

**Lakes in Volcanic Environments: Geochemical, Limnological, Biological, and Geophysical Aspects**

**Presiding:** D Rouzet, Istan. di Geofis. e Vulcan.; F Tassi, University of Florence; S Hurwitz, U.S. Geological Survey; L A Morgan, US Geological Survey


1340h V23A-2384 POSTER Modeling CO2 air dispersion from gas driven lake eruptions. (Invited): G Chiodini, A Costa, D Rouzet, F Tassi


1340h V23A-2386 POSTER Volcanic Lake System at Aso Volcano, Japan: Fluctuations in the Supply of Volcanic Fluid from the Hydrothermal System beneath the Crater Lake. (Invited): A Terada, T Hashimoto, T Kagiyma

1340h V23A-2387 POSTER Degassing of Aso Volcano, Japan through an Acid Crater Lake: Differentiation of Volcanic Gas-Hydrothermal Fluids Deduced from Volcanic Plume Chemistry. H Shinohara, S Yoshikawa, Y Miyabuchi


1340h V23A-2389 POSTER Acid fluids from Copahue Volcano, Argentina, and their environmental effects. J C Varekamp, T Kading

1340h V23A-2390 POSTER Yellowstone Lake: A Large Volcanic Lake Influenced by the Yellowstone Magmatic System. W C Shanks, L A Morgan

1340h V23A-2391 POSTER Is the risk of a CO2 gas burst real at the Kabuno sub-basin of the Lake Kivu (Democratic Republic of the Congo)? A geochronal and isotopic point of view. O Vaselli, F Tassi, D Tedesco, R J Poreda

1340h V23A-2392 POSTER Hydrogeochemical model of the Irazu and Turrialba “twin volcanoes” (Costa Rica): D Rouzet, R Mora-Amador, C Ramirez-Umaña, G González

1340h V23A-2393 POSTER Catalog of crater lakes from Costa Rica: C J Ramirez, R Mora-Amador, G González

1340h V23A-2394 POSTER Isotope hydrology of El Chichón volcano-hydrothermal system; a coupled system of crater lake and hot springs: L Peiffer, Y Tarun, D Rouzet

1340h V23A-2395 POSTER A Bathymetric Survey of Lake Atitlan, Guatemala: C A Chesner, S P Halsor

1340h V23A-2396 POSTER Quantifying the Impact of Freshwater Diatom Productivity on Silicon Isotopes and Silicon Fluxes: Lake Myvatn, Iceland: C Siebert, S Opfergelt, K Burton, A Einarsson, E S Eiriksdottir, S R Gislason, A Halliday


**V23B Moscone South: Poster Hall Tuesday 1340h**

**VGP General Contributions II Posters**

**Presiding:** A Grunder, Oregon State University; M J Kohn, Boise State University

1340h V23B-2398 POSTER Field-mapping and petrographic analysis of volcanoes surrounding the Lake Natron Homo sapiens footprint site, northern Tanzania: S M Hewitt, B Zimmer, C Liutkus, S K Carmichael, K McGinnis

1340h V23B-2399 POSTER Distribution of REE between clinopyroxene and basaltic melt along a mantle adiabat: Effects of major element composition, water, and temperature: C Sun, Y Liang

1340h V23B-2400 POSTER Effects of Juan de Fuca Ridge Convergence on the Composition of Cobb Hotspot Lavas, 33 Ma to Present: D J Chadwick, R A Keller, G D Kamemov

1340h V23B-2401 POSTER Archean orthogneiss lithologies of Northern Yellowstone National Park and their geochemical contribution to the younger rhyolites: K Tarbert, P B Larson

1340h V23B-2402 POSTER Widespread silicic volcanism from the Yellowstone hotspot: implications for eruptive centres: B S Ellis, J A Wolff, D Mark, I N Bindeman

1340h V23B-2403 POSTER Isotopic modeling and the formation of the post-caldera eastern Upper Basin Member rhyolites, Yellowstone, WY: C J Pritchard, P B Larson

1340h V23B-2404 POSTER Paleomagnetic correlation of the surface and subsurface stratigraphy in the southern part of the Idaho National Laboratory, eastern Snake River Plain, Idaho: M K Hodges, L C Davis, D E Champion

1340h V23B-2405 POSTER Eruptive history and petrogenesis of the mid-Miocene McDermitt tuff, northern NV and southern OR: W A Starkel, C D Henry, B S Ellis, J A Wolff

1340h V23B-2406 POSTER Composition of glass from high-temperature rhyolite of the Snake River Plain Yellowstone hotspot track: implications for crustal melting: B P Nash, H E Cathey, C M Allen, I H Campbell

1340h V23B-2407 POSTER The ‘Strawberry Volcanic Field’ of Northeastern Oregon: Another Piece of the CRB Puzzle?: A R Steiner, M J Streck

1340h V23B-2408 POSTER Structure, stratigraphy, and eruption chronology of the Hanauma Bay Tuff Ring, Oahu, Hawaii: K M Rottas, B F Houghton

1340h V23B-2409 POSTER Depth and Pressures of Crystallization of Magma Chambers beneath Hawaiian Volcanoes: J Ditkof

1340h V23B-2410 POSTER Excesses of Seawater-Derived 234U in Volcanic Glasses from Loihi Seamount due to Crustal Contamination: A J Pietruszka, E H Hauri, R W Carlson, M O Garcia

1340h V23B-2411 POSTER Temporal-spatial-geochemical characteristics of the Tarim Permian large igneous province: evidence for mantle plume and lithospheric mantle interaction: Z Li, S Yang, H Chen, Y Li, C H Langmuir, Z Chen, X Yu, Y Xu

1340h V23B-2412 POSTER Hot Spot Induced Cenozoic Volcanism in the Upper Rajang Valley, Sarawak – Is Borneo Rifting?: N Taib

1340h V23B-2413 POSTER Multiple metasomatic events recorded in Kilbourne Hole peridotite xenoliths: the relative contribution of host basalt interaction vs. silicate metasomatic glass: S J Hammond, M Yoshikawa, J Harvey, K W Burton

All information is current as of November 12, 2010
1340h V23B-2414 POSTER Highly Siderophile Elements as Tracers for the Subcontinental Mantle Evolution Beneath the Southwestern USA: The San Carlos and Kilbourne Hole Peridotite Xenoliths Revisited: D van Acken, A D Brandon, A H Peslier, C Lee

1340h V23B-2415 POSTER He and Ne isotope ratios along the Terceira Rift: implications for the Azores mantle source: P Madureira, M A Moreira, J Nunes, N Lourenco, M Carvalho, J Mata, M Pinto de Abreu

1340h V23B-2416 POSTER New Insights into the Kimberlites and Lamproites of Southern India via Ar/Ar dating and Nd isotope analysis: I Osborne, S Sherlock, M Anand, T Argles

1340h V23B-2417 POSTER Lead isotope evolution of Archean continental crust, Northern Tanzania: J J Bellucci, W F McDonough, R L Rudnick, R J Walker

1340h V23B-2418 POSTER Hydrogen and Oxygen Isotope Composition of Archean Oceans Preserved in the ~3.8 Ga Isua Supracrustal Belt: C E Pope, M Rosing, D K Bird


1340h V23B-2420 POSTER Sr-Nd-Pb Isotopic Compositions of Volcanic Rocks Associated to the Apan-Tlaco Fault System, Trans-Mexican Volcanic Belt, Mexico: G Solis-Pichardo, R Martinez-Serrano, G Garcia, J Correa, Y Nuñez, P E Schaal

1340h V23B-2421 POSTER Assessment of island arc contribution to global oceanic osmium budget: T S Blazina, J Landis, M Sharma

1340h V23B-2422 POSTER The silicon isotopic composition of I- and S-type granites: P S Savage, R B Gehman, H M Williams, K W Burton, A Halliday, B W CHAPPELL

1340h V23B-2423 POSTER Slab melting as an origin of EMs reservoirs: G Shimoda

1340h V23B-2424 POSTER Petrogenesis of Mt. Baker basalts (Cascade arc): Constraints from thermobarometry, phase equilibria, trace elements and isotopes: E K Mullen, I S McCallum

1340h V23B-2425 POSTER Paleozoic and Palaeoproterozoic Zircon in Igeonous Xenoliths Assimilated at Redoubt Volcano, Alaska: C R Bacon, J A Vazquez, J L Wooden

1340h V23B-2426 POSTER Morphology and growth of the 2009 Redoubt Volcano lava dome: K F Bull, S W Anderson, A K Diefenbach, R L Wessels


1340h V23B-2428 POSTER Ichuobong tuff cone, Jeju Island, Korea, revisited: A country monogenic xenolith involving multiple magma batches, shifting vents, and discrete eruptive phases: Y Sohn, M Brenna, I E Smith, K Nemeth, J D White, R Murtagh, J Yeon, C Kwon, S J Cronin

1340h V23B-2429 POSTER A newly recognized 7.5 ka dome-forming eruption of Towada volcano, Northeast Japan Arc: T Kudo

1340h V23B-2430 POSTER Compositions of melt inclusions hosted in olivine phenocrysts from four Quaternary volcanoes in Kyushu, Southwest Japan arc: T Tamura, T Hasenaka, P J Wallace, A Yasuda, Y Mori

1340h V23B-2431 POSTER Sequential change in intensity and magma supply of the Hoei eruption, Fuji Volcano, Japan (AD 1707): K Mannen, M Naomichi

1340h V23B-2432 POSTER Source characteristics inferred from variations in trace element compositions and Sr, Nd, and Hf isotope ratios of Lutao lavas from the North Luzon arc (NLA): H Yang, Y Hung, Y Hsu, Y Liu, C You

1340h V23B-2433 POSTER Magma evolutions in the northern Luzon Arc: Y Lai, S Song, C Lo

1340h V23B-2434 POSTER Marapi an active West-Central Sumatra Volcano: a geological and petrological study: M del Marmol, A Budianto, J Fournelle, P Jacobs, M A Elburg

1340h V23B-2435 POSTER Preliminary Holocene Eruptive History of Ambang Volcano, North Sulawesi, Indonesia: C Harpel, K Hendratno, P Ruskanda Bina, J S Pallister, J Griswold

1340h V23B-2436 POSTER The submarine South Sandwich arc: structure, instability and sediment wave formation: P T Leat, A J Tate, T J Deen, S J Day, M Owen


1340h V23B-2438 POSTER Hafnium Isotopic Output and Input Along and Across the Central American Subduction Zone: R C Anderson, J A Walker, M J Carr, D W Peate, C Lundstrom, J M Thompson

1340h V23B-2439 POSTER Multiple voluminous sector collapses at Volcán Barú, Panama: J A Herrick, W I Rose

1340h V23B-2440 POSTER Young Rhyolitic and Alkaline Volcanism of the Ecuadorian Arc – A Result of the Carnegie Ridge Subduction?: M J Hall, P A Mothes

1340h V23B-2441 POSTER Cerro Uturuncu SW Bolivia: Preliminary Observations from Field work, Geochemistry and Petrology: G Michelfelder, T Feeley

1340h V23B-2442 POSTER Pre-eruption pressure, temperature and volatile content of rhyolite magma from the 1650 AD eruption of Kolumbo submarine volcano, Greece: K Cantner, S Carey, H Sigurdsson, G Vougioukalakis, P Nomikou, C Roman, K L Bell, M Alexandre

1340h V23B-2443 POSTER Eruptive history of western and central Aeolian Islands volcanoes (South Trrhenian Sea, Italy): temporal evolution of magmatism and of morphological structures: E Leocat, P Gillot, A Pecceirillo

1340h V23B-2444 POSTER Evidence of partial melting in xenoliths from the Wooley Creek batholith, Klamath Mountains, California: implications for assimilation processes: N Coint, C G Barnes, A S Yoshinobu, M A Barnes

1340h V23B-2445 POSTER Geochronology and Geochemistry of a Late Cretaceous Granitoid Suite, Santa Rosa Range, Nevada: Linking Arc Magmatism in Northwestern Nevada to the Sierra Nevada Batholith: K Brown, R Stuck, W K Hart

1340h V23B-2446 POSTER Mineral Chemistry of the Tuolumne Intrusive Suite: Evidence for Disequilibrium and Implications for Estimated Magmatic Intensive Variables: W Gray, R K Smith

1340h V23B-2447 POSTER Petroetectonic interpretation of the Yates unit of the Poorman Formation (DUSEL bedrock) in the context of other northern Black Hills meta-basalts: B T Jordan, M P Terry

1340h V23B-2448 POSTER Subvolcanic mafic to intermediate dike-systems: constraints on post-plutonic activity (S-Adamello, N-Italy): N Hurllmann, O Muntener, P Ulmer

1340h V23B-2449 POSTER PGE and geochemistry of Wajilitat ultramafic cryptotephra brecciated rocks from Tarim basin: implications for petrogenesis: Y Li, Z Li, Y Sun, H Chen, S Yang, X Yu

1340h V23B-2450 POSTER Tetrads-like RHE geochemistry in the Eocene rhyolitic sub-volcanic rocks from the Qiaga, Tethyan Himalaya, Southern Tibet: G Hu, L Zeng, L Gao, K Xie
1340h V23B-2451 POSTER Statistic study on developing condition of horizontal columnar joints in Jeongia and Eupchon beach areas, SE Korea: K Jin, Y Kim, Title of Team: Geologic Structure and Geohazard Research Group

1340h V23B-2452 POSTER The Geomunoreum Lava Tube System in the northeastern Jeju Island, Korea: S Yun, U Ahn, S Hwang, M Lee

1340h V23B-2453 POSTER Assessing the effusion rate of lava flows from their thermal radiated energy: theoretical study and lab-scale experiments: F Gare, E Kaminski, S Tair, A Limare

1340h V23B-2454 POSTER A comparative study of melt-rock reactions in the mantle: laboratory dissolution experiments and geological field observations: E Tursack, Y Liang

1340h V23B-2455 POSTER Effect of Iron on Rheological Properties of HPG8: M O Chevrei, K Hess, D B Dingwell

1340h V23B-2456 POSTER Exchange of Mg-Fe?: Between Olivine and Melts: Revisited: V E McCann, M Barton

1340h V23B-2457 POSTER The effect of dopants on phase equilibria: Implications for tests of Henry’s Law behavior: J L Cunningham, R L Nielsen

V23C Moscone West: 2020 Tuesday 1340h EARTHTIME Geochronology I (joint with B, EP, GP, OS, T)

Presiding: P R Renne, Berkeley Geochronology Ctr; S A Bowring, MIT; L E Morgan, Vrije Universiteit Amsterdam; J Hiess, British Geological Survey


1335h V23C-02 Inter-monitor standard calibration and tests for Ar-Ar biases: S R Hemming, B D Turrin, C C Swisher, S E Cox, G T Mesko, S Chang

1410h V23C-03 First-principles calibration of 40Ar/39Ar mineral standards and complete extraction of 40Ar* from sanidine: L E Morgan, K Kuiper, D Mark, O Postma, I M Villa, R J Wijbrans

1425h V23C-04 ”Smoking From The Same Pipe”: Development of an 40Ar/39Ar Dating Intercalibration Pipette System (Invited): B D Turrin, C C Swisher, A Deino, S R Hemming, K Hodges, P R Renne


1510h V23C-07 U-Pb* and 207Pb*/206Pb* Fractionations During Leaching of Un-annealed Zircon Revisited: J M Mattinson

1525h V23C-08 Application of U-Pb ID-TIMS dating to the end-Triassic global crisis: testing the limits on precision and accuracy in a multidisciplinary whodunnit (Invited): B Schoene, U Schaltegger, J Guey, A Bartolini

V23D Moscone West: 2008 Tuesday 1340h Innovative Geothermal Exploration Methods II (joint with T)

Presiding: D F Stockli, The University of Kansas; B Martini, Ormat Technologies

1340h V23D-01 The Advancement of Geothermal Energy Production through Improved Exploration Methods: H Thorsteinsson, K Klein

1355h V23D-02 Application of the MultiGAS Sensor to Geothermal Exploration and Monitoring: Comparison of Plume and Fumarole Gas Compositions at Kawah Ijen Volcano, Indonesia: G Williams-Jones, N Vigouroux-Caillibot, V van Hinsberg, A Williams-Jones

1410h V23D-03 Application of high-resolution thermal infrared sensors for geothermal exploration at the Salton Sea, California: K A Reath, M Ramsey, D M Tratt

1425h V23D-04 Helium Isotopes in Geothermal Exploration: B M Kennedy, B W Christenson, M C Van Soest

1440h V23D-05 Apatite (U-Th)/He Thermochronometry as an innovative Geothermal Exploration Tool - A case study from the Wassuk Range, Hawthorne, Nevada: K E Gorynski, D F Stockli, J D Walker

1455h V23D-06 Ground Penetrating Radar Successful In Imaging Hot Spring Deposits: A New Geothermal Exploration Tool: B Lynne, A Dougherty

1510h V23D-07 Geoscientific Data Types Used to Support Geothermal Exploration at Akutan, Alaska: An Analysis of Relative Effectiveness in Thermal Gradient Well Targeting: P L Stelling, A Kolker, W B Cumming

1525h V23D-08 Models based experimentation: numerical modelling of 3D basin scale architecture heat & fluid flow: S M Quenette, L N Moresi

V23E Moscone West: 2022 Tuesday 1340h Volatiles in Magmas: Breath of the Deep Earth I (joint with MR, DI)

Presiding: S Demouchy, Geosciences Montpellier -CNRS; P Ruprecht, Lamont-Doherty Earth Observatory

1340h V23E-01 He-Ne-Ar isotope studies of mafic volcanic rocks and mantle xenoliths from the East African Rift System – contrasting isotope signals in different rift branches: S Halldorssson, D R Hilton, P Scarsi, T Abebe, K M Massi, P H Barry, T P Fischer, J de Moor, R L Rudnick

1355h V23E-02 Experimental Constraints on He, Ne, Ar Behavior at Mantle Conditions: C Jackson, S P Kelley, S W Parman, R F Cooper

1410h V23E-03 Water concentrations in mantle peridotite minerals: J M Warren, E H Hauri

1425h V23E-04 Water contents and OH speciation in pyroxenes: K Bégaud, Y Morizet, J Mercier

1440h V23E-05 Experimentally determined water storage capacity in the Earth’s upper mantle: A Ferot, N Bolfan-Casanova

Atmospheric Sciences

A24A Moscone West: 3002 Tuesday 1600h

Attribute of the Change in CO2, CH4, and N2O to Anthropogenic Sources (joint with P, GC)

Presiding: M J Prather, UC Irvine; J Fuglestvedt, CICERO


1615h A24A-02 From Human Activities to Climate Change: Uncertainties in the Causal Chain (Invited): J E Penner, Title of Team: The MATCH Team (Modeling and assessment of contributions to climate change)


1645h A24A-04 Understanding the Recent Methane Budget: L Bruhwiler, E J Dlugokencky, K Masarie

1700h A24A-05 Analysis of methane and ozone changes between 1850 and 2100 in CMIP5 simulations. (Invited): J Lamarque


1730h A24A-07 Relevance of Preindustrial Land Cover Change and Emissions for Attribution of Excess Atmospheric Carbon Dioxide: J Pongratz, K Caldeira

1745h A24A-08 Attributing the increase of atmospheric CO2 to emitters and absorbers: T Gasser, P Ciais, J PARIS, K Caldeira, M R Raupach, J Canadell, A Patwardhan, P Friedlingstein, S Piao, V Gitz

A24B Moscone West: 3004 Tuesday 1600h

Biomass Burning: New Findings and Analyses From Multiple Perspectives IV (joint with B, PA)

Presiding: J Redemann, BAERI / NASA Ames Research Center; S G Howell, Univ. Hawaii

1600h A24B-01 New perspectives on quantitative characterization of biomass burning (Invited): C M Ichoku

1630h A24B-02 Sub-Pixel Fractional Area of Wildfires from MODIS Observations: Retrieval, Validation, and Potential Applications: D A Peterson, J Wang, C M Ichoku, E J Hyer

1645h A24B-03 A Validation of Automated and Quality Controlled Satellite Based Fire Detection: M G Rumininski, J Hanna

1700h A24B-04 Horizontal variability of aerosol optical properties observed during the ARCTAS airborne experiment: Y Shinozuka, J Redemann, P B Russell, J M Livingston, A D Clarke, J R Podolske

1715h A24B-05 Retrieval of aerosol properties, surface albedo, and radiative forcing from SSFR, AATS-14 and HSRL measurements during CalNex and ARCTAS: S E LeBlanc, S Schmidt, P Pilewskie, J Redemann, P B Russell, C A Hostetler, R A Ferrare

1730h A24B-06 Using OMI observations to measure aerosol absorption of biomass burning aerosols above clouds: T Yamaguchi, H T Jetha, P K Bhartia

1745h A24B-07 Improving satellite retrievals of NO2 in biomass burning regions: N Bousserez, R V Martin, L N Lamsal, J Mao, R C Cohen, B E Anderson

A24C Moscone West: 3006 Tuesday 1600h

Entrainment and Mixing in Clouds II

Presiding: S K Krueger, University of Utah; Z Kuang, Harvard University; H E Gerber, Gerber Scientific, Inc.


1612h A24C-02 A transilient matrix for steady-state convection (Invited): D M Romps, Z Kuang

1624h A24C-03 Entrainment in a High-resolution Simulation of a Cumulus Cloud: R L Thompson, M Colini, F Robinson

1636h A24C-04 A revised conceptual model of cumulus clouds as thermal vortices: S C Sherwood, M Colini, F Robinson

1648h A24C-05 Mammutus Clouds: an Example of Radiatively Driven Mixing Processes at the Cloud/Clear-Sky Boundary: C T Schmidt, T J Garrett, S Kihlgren, C Cornet

1700h A24C-06 SMALL SCALE STRUCTURE OF ENTRAINMENT EVENTS AT THE TOP OF MARINE STRATOCUMULUS (Invited): S P Malinowski, K E Haman, M K Kopec

1712h A24C-07 Analysis and Numerical Simulation of a Laboratory Analog of Radiatively Induced Cloud-Top Entrainment (Invited): A R Kerstein, H Schmidt, R Nedelec, S Wunsch, B J Sayler

1724h A24C-08 Entrainment Rates in POST Stratocumulus: H E Gerber, G Frick

1736h A24C-09 The EUCLIPSE/GCSS model intercomparison study of a stratuscumulus to cumulus cloud transition as observed during ASTEX: S R de Roode, J J van der Dussen

1748h A24C-10 Tracking parcels that are entrained across cloud tops: T Yamaguchi, D A Randall

A24D Moscone West: 3008 Tuesday 1600h

Regional Climate Modeling III (joint with GC, H)

Presiding: R W Arritt, Iowa State University; L Leung, Pacific Northwest National Laboratory

1600h A24D-01 Atmospheric results from a regional Arctic climate model: Comparison of coupled and uncoupled simulations: J J Cassano, M Higgins

1615h A24D-02 Influence of Regional Climate Model spatial resolution on wind climates: S C Pryor, R J Barthelmie, G Nikulin, C Jones


1645h A24D-04 The Role of Complex Terrain in Precipitation Variability in a Dynamically Downscaled Simulation over Asia: S E LeBlanc, C Zhao, Y Qian

1700h A24D-05 Modeling the Hydroclimatology of the Midwestern United States: Predicting Soil Moisture Under a Warmer Climate: J M Winter, E A Eltahir
Atmospheric and Space Electricity

AE24A Moscone West: 3007 Tuesday 1600h Sensing Lightning From Space: From Mission Concept to Applications II (joint with A)

Presiding: E Defer, CNRS-Observatoire de Paris; S J Goodman, NOAA; J Grandell, EUMETSAT

1600h AE24A-01 Lightning Sensing from Space: Early Observations to the Geostationary Lightning Mapper (Invited): H Christian

1620h AE24A-02 Geostationary Lightning Imager for FY-4 Meteorological Satellite (Invited): P Huang

1640h AE24A-03 The Lightning Imager (LI) on MTG - Scientific studies and developments (Invited): U Finke, J Grandell, E Defer, H Hoeller


1715h AE24A-05 Monitoring lightning from space with TARANIS: T Fargets, E Blanc, J Pinçon

1730h AE24A-06 Gradual approach to realize lightning monitoring from space by means of VHF observations: T Morimoto, H Kikuchi, T Ushio, Z Kawasaki


Biogeosciences

B24A Moscone West: 2002 Tuesday 1600h Assessing Carbon Storage and Greenhouse Gas Emissions in Coastal and Inland Aquatic Systems II (joint with H, OS)

Presiding: B A Bergamaschi, USGS; K D Kroeger, USGS; G L Chmura; A F Rahman, Indiana University

1600h B24A-01 Carbon Burial in Inland Waters: J A Downing, R G Striegl

1615h B24A-02 Spatially and temporally distributed re-evaluation of global CO2 outgassing from inland waters: The tropics dominate global fluxes: A K Auendenkampe, E Mayorga, S R Alin, P Raymond, J M Melack, S C Doney

1630h B24A-03 Stream Carbon Dioxide Dynamics and Evasion in Temperate Forest Catchments at Hubbard Brook: S F Werner, C T Driscoll, J J Cole


1715h B24A-06 Organic Carbon Burial in Brazilian Mangrove Sediments (Invited): C Sanders, J M Smoak, L Sanders, S Patchinellam

1730h B24A-07 Spatial and Temporal Patterns of Soil Organic Carbon in Mangrove Forest Ecosystems (Invited): K L Mc Kee

1745h B24A-08 Sediment Nitrous Oxide Fluxes from Shore to Shelf: R W Fulweiler, E M Heiss, E J Morgan

B24B Moscone West: 2004 Tuesday 1600h Biophysical Pulses in Variable Environments II (joint with H)

Presiding: C A Williams, Clark University; G D Jenerette, University of California Riverside; R L Scott, USDA ARS

1600h B24B-01 Extracting Information on Rain-Induced Pulses of Ecosystem Respiration across Scales Spanning the Plot, Canopy and Planetary Boundary Layer (Invited): D D Baldocchi, S Ma, J Hatala, B Gioli

1615h B24B-02 Quantifying Ecological Memory of Plant and Ecosystem Processes in Variable Environments: K Ogle, G A Barron-Gafford, L Bentley, J Cable, R Lucas, T E Huxman, M E Loik, S D Smith, D Tissue

1630h B24B-03 Grassland ecosystem responses to short- and long-term experimental manipulations of precipitation regime (Invited): A Knapp, M D Smith, J M Blair, S L Collins

1645h B24B-04 A dynamical system view of rainfall-pulse propagation through biogeochemical cycles (Invited): A M Porporato, S Manzoni, A Austin, J Schimel

1700h B24B-05 Separating Root and Microbial Respiration Responses to Moisture and Moisture Pulses: M S Carbone, R Vargas, A Ambrose, T E Dawson, C J Still

1715h B24B-06 Dynamic Response of Forest Litter and Mineral Soil to Pulsed Water Additions: C M Boot, S M Schaeffer, M S Carbone, C J Still, J Schimel

1730h B24B-07 Investigating the Pulse Dynamics paradigm at the ecosystem scale in both disturbed and undisturbed biomes across an elevation gradient in the semiarid Southwest (Invited): M E Litvak, A M Fox, R Sinsabaugh

1745h B24B-08 Spatial pulses of water inputs in deciduous and hemlock forest stands: A J Gursa, M Mussehl, A Pecht, C Spence

B24C Moscone West: 2006 Tuesday 1600h Climate and the Nitrogen Cycle I (joint with A)

Presiding: C L Goodale, Cornell University; P G Hess, cornell

1600h B24C-01 Climate System Impacts of the Changing Nitrogen Cycle (Invited): E A Holland

1615h B24C-02 Impacts of Land Use Change, Nitrogen Deposition and Nitrogen Fertilizers on Carbon and Nitrogen Stocks of Plants and Soils: A K Jain, X Yang, M Liang, R Barman, P Meyiappan

1630h B24C-03 TThe role of nitrogen availability in land-atmosphere interactions: a systematic evaluation of carbon-nitrogen coupling in a global land surface model using plot-level nitrogen fertilization experiments: R C Thomas, C L Goodale, G B Bonan, N M Mahowald, D M Ricciuto, P E Thornton

1645h B24C-04 Consequences of anthropogenic Nr addition on global terrestrial biogeochemistry, 1700-2005 (Invited): S Zaehle, P Friedlingstein, A D Friend

1700h B24C-05 Quantifying nitrogen fluxes and their influence on the greenhouse gas balance – recent findings of the NitroEurope Integrated Project: S Reis, M A Sutton, E Nemitz, C Beier, K Butterbach-Bahl, P Cellier, W de Vries, J Erisman, S Zechmeister-Boltenstern, A Bleeker, Title of Team: NitroEurope IP consortium

1715h B24C-06 Climate, nitrogen limitation, and nitrate losses from tropical rainforests: J Brookshire, S Gerber, D Menge
Cryosphere

**C24A  Moscone West: 3011** Tuesday 1600h

**Ice Cores, Climate, and Ice Sheets: New Frontiers III** (joint with A, PP)

**Presiding:** J W White, University of Colorado; D Dahl-Jensen, University of Copenhagen

1600h **C24A-01** Isotopic ($\delta^{18}O$, $\delta^D$ and deuterium excess) records from the TALDICE ice core (East Antarctica) (Invited): B Stenni, D Buiron, V Masson-Delmotte, M Bonazza, M Braida, J Chappellaz, M Frezzotti, S Falourd, B Minster, E Selmo

1622h **C24A-02** Sources of Sea Salts to Coastal Antarctica: M A Curran, T D van Ommen, A D Moy, T Vance, G J Wong, I D Goodwin, B Domensino

1637h **C24A-03** Seasonal climate information preserved within West Antarctic ice cores and its relation to large-scale atmospheric circulation and regional sea ice variations: M Küttel, E J Steig, Q Ding, D S Battisti

1652h **C24A-04** Evidence of Recent Warming in Polar Latitudes from Borehole Temperature: A J Orsi, J P Severinghaus

1707h **C24A-05** Persistent and Pervasive Basal Freeze-on: Implications for the Preservation of the Oldest Ice: R E Bell, F Ferraccioli, D A Braaten, H F Corr, T T Creys, I Das, N Fearing, T A Jordan, M Studinger, M Wolovick

1722h **C24A-06** The Eemian ice from the new Greenland ice core at NEEM: D Dahl-Jensen

1737h **C24A-07** Present-day land ice contribution to sea level (Invited): A A Cazenave, W LLOVEL

1759h **Last Statements Conclusion on session by convenors**

Education and Human Resources

**ED24A  Moscone South: 102** Tuesday 1600h

**National and International Programs in Geosciences and Space Sciences Education II** (joint with A, B, OS)

**Presiding:** J W Farrington, WHOI; M Feder, National Research Council; C Michalopoulous, NOAA; S A Stockman, NASA

1600h **ED24A-01** NOAA Education Program: Review and Critique, and Relevance to Education Programs of Other Federal Agencies: J W Farrington, M Feder

1615h **ED24A-02** The Role of Federal Agencies in Education, Inter-Agency Coordination, and Impact Assessment: M Feder

1630h **ED24A-03** NOAA Education: Adventures in Strategic Planning, External Review, and Evaluation: C Michalopoulous

1645h **ED24A-04** Advancing Earth System Science Literacy and Preparing the Future Geoscience Workforce Through Strategic Investments at the National Science Foundation (Invited): J L Karsten, L C Patino, E L Rom, C S Weiler


1715h **ED24A-06** Outreaches on Space Sciences in Taiwan: I Lee, J Y Liu, T Liu

1730h **ED24A-07** NASA y Tú (NASA and You) - NASA’s partnership with UNIVISION to promote Science, Technology, Engineering, and Math (STEM) careers among Hispanic youth: M Colon-Robles, I Gilman, S Verstynen, R Jaramillo, S Bednar, T Shortridge, J Bravo, S Bowers

1745h **ED24A-08** Evaluation and Strategic Planning for the GLOBE Program: E E Geary, V L Williams

Earth and Planetary Surface Processes

**EP24A  Moscone South: 310** Tuesday 1600h

**Geomorphological and Ecological Processes in Tidal Flats and Wetlands I** (joint with B, OS)

**Presiding:** S Fagherazzi, Boston University; A S Ogston, University of Washington; C M Palinkas, University of Maryland Center for Environmental Science; K Engelhardt, University of Maryland Center for Environmentmental Science

1600h **EP24A-01** Morphology and hydrodynamics of wave-cut gullies: A M Priestas

1615h **EP24A-02** EXPERIMENTAL OBSERVATIONS OF THE MORPHODYNAMIC EVOLUTION OF A TIDAL CHANNEL FLANKED LATERALLY BY TIDAL FLATS: C De Capitani di Vimercate, N Tamborini, G Seminara

1630h **EP24A-03** Effects of Intertidal Creek 2D and 3D Structure on Sediment Accretion (Invited): R Torres, J M Bell

1645h **EP24A-04** Enhanced decomposition offsets enhanced productivity and soil carbon accumulation in coastal wetlands responding to climate change (Invited): M L Kirwan, L K Blum


1715h **EP24A-06** Analysis of the erosion of marsh boundaries produced by wind-wave impact in a shallow tidal basin: S Lanzi, M Santalucia, A D’Alpaos, M Marani


1745h **EP24A-08** Ecosystem Resilience of Coastal Marshes Following a Massive Oiling Event: A S Kolker, A D Ameen, T S Bianchi, R L Cook, N Green, P Kolic, Y Zhang

1700h **EP24B  Moscone South: 308** Tuesday 1600h

**The Morphodynamics of Big Rivers: What Do and Don’t We Know! I** (joint with H)

**Presiding:** P J Ashworth, University of Brighton; J Best, University of Illinois; D R Parsons, University of Leeds


1615h **EP24B-02** Downstream change in the patterns of sediment deposition and erosion in the lower Mississippi River associated with varying water discharge: J A Nittouer, J B Shaw, M P Lamb, D C Mohrig
1630h  EP24B-03 Imaging beneath the skin of large tropical rivers: Clay controls on system morphodynamics revealed by novel CHIRP sub-surface sonar and deep coring along the Fly and Strickland Rivers, Papua New Guinea (Invited): R E Aalto, M Grenfell, J W Lauer

1645h  EP24B-04 Similarities and differences between a large meandering river and an anabranching river: the Ucayali and Amazon River cases: J D Abad, J R Paredes, H Montoro

1700h  EP24B-05 The paradox of large alluvial rivers (Invited): E M Latrubesse


1730h  EP24B-07 Avulsion threshold in a large Himalayan river: the case of the Kosi, India and Nepal: R Sinha, S Kommula

1745h  EP24B-08 Preservation of distributive vs. tributive and other fluvial system deposits in the rock record (Invited): C R Fielding

Geodesy

G24A  Moscone South: 103 Tuesday 1600h Bowie Lecture (Webcast)

Presiding: D T Sandwell, SIO

1600h  David Sandwell Introduction


Global Environmental Change

GC24A  Moscone West: 3001 Tuesday 1600h Promising Paths of Research in Geological Storage of Anthropogenic CO2 (joint with A, H, NS, V)

Presiding: A Bonneville, Pacific Northwest National Laboratory; D Goldberg

1600h  GC24A-01 Microbial monitoring during CO2 storage in deep subsurface saline aquifers in Ketzin, Germany: H Wuerdemann, M Wandrey, S Fischer, K Zemke, D Let, M Zettlitzer, D Morozova


1630h  GC24A-03 A reactive transport model of CO2-water-rock interaction in a push-pull test in basaltic rocks: J J Hidalgo, C de Dieuleveult, P Agrinier, V Lagneau

1645h  GC24A-04 Sensitivity of geochemical monitoring for CO2 sequestration in basalt: N V Zakharova, D Goldberg, M Herron, J Grau

1700h  GC24A-05 Active CO2 Reservoir Management: A Strategy for Controlling Pressure, CO2 and Brine Migration in Saline-Formation CCS: T A Buscheck, Y Sun, Y Hao, B Court, M A Celia, T Wolery, A F Tompson, R D Aines, J Friedmann


1730h  GC24A-07 Regional migration pathways and associated well risk for the IEAGHG Weyburn-Midale CO2 Project: A Cavanagh, B J Rostron

1745h  GC24A-08 Using large Aquifer Storage and Recovery (ASR) Sites as Analogs to Study the Mechanical Behavior of Large CO2 Storage Sites: A Bonneville, E C Sullivan, E Heggy, J Dermond, M Sweeney

GC24B  Moscone West: 3005 Tuesday 1600h Stable Isotopes in Modern and Ancient Boreal Forest Systems: Indicators of Past Environmental Change II (joint with B, PP, H)

Presiding: A Z Csank, University of Arizona; T J Porter, Carleton University; S W Leavitt, Univ Arizona


1612h  GC24B-02 Increasing Ambient CO2 Concentrations are Reflected in the Stable C and O Isotopes from Tree Rings along a Siberian North South Transect in the Last 150 Years: R T Siegel, O V Sidorova, M Saurer, A Knorre, A Kirdyanov

1624h  GC24B-03 Stable carbon isotopes and drought signal in the tree-rings of northern white-cedar trees from boreal central Canada. (Invited): J C Tardif, R Au

1636h  GC24B-04 Interpreting Tree-Ring Stable Isotopes in the Peace-Athabasca Delta, Canada (Invited): D M Meko, S W Leavitt

1648h  GC24B-05 Summer temperatures reconstructed from tree-ring δ18O at boreal treeline, Mackenzie Delta, northwestern Canada: T J Porter, M F Piscar, S V Kokej


1712h  GC24B-07 Using Water Isotope Tracers to Investigate Past and Present Water Balance Conditions in the Old Crow Flats, Yukon Territory: K Turner, B B Wolfe, T W Edwards


1736h  GC24B-09 Effects of climatic change on carbon cycling in the Boreal forest during the Holocene: Insights from stable carbon isotopes in lake sediment organic matter: B P Finney

1748h  GC24B-10 Potential of tree-ring δ18O records to reconstruct winter and mean annual temperatures in Northeastern Siberia: implications for climate reconstructions in a Pliocene boreal forest: A Z Csank, S W Leavitt, M K Hughes

Geomagnetism and Paleomagnetism

GP24A  Moscone West: 2003 Tuesday 1600h Frames of Reference for Plate Motion I (joint with D, T, V, G)

Presiding: R G Gordon, Rice University; L Tauxe, Scripps Inst. Oceanography


1630h  GP24A-03 A Global Moving Hotspot Reference Frame: How well it fits?: P V Doubrovine, B Steinberger, T H Torvik
### Hydrology

**H24A Moscone West: 3020 Tuesday 1600h Advances in Hydrologic Data Assimilation and Uncertainty Analysis III**

**Presiding:** M T Durand, The Ohio State University; S C Steele-Dunne, TU Delft

- **1600h H24A-01** Correcting the Mathematical Structure of a Hydrological Model via Bayesian Data Assimilation (Invited): H V Gupta, N Bulygina
- **1615h H24A-02** Different Evolution Adaptive Metropolis with Sampling From Past States: J A Vrugt, E Laloy, C ter Braak
- **1630h H24A-03** A state-space approach to predict stream temperatures and quantify model error: Application on the Sacramento River, California: A Pike, E Danner, S Lindley, F S Melton, R N Nemani, H Hashimoto
- **1645h H24A-04** Multiple objective function simulator algorithm for hydraulic parameters estimation by surface soil moisture and evapotranspiration: J A Pollacco, B P Mohanty
- **1715h H24A-06** Modeling Spatial Variability as Measurement Uncertainty: J L Mead, M M Gribb, J P McNamara
- **1730h H24A-07** Comparing precipitation datasets from different sources: implications for uncertainty characterization: E Polyakova, J L Dungan, A Michaelis
- **1745h H24A-08** Impact of Temporal Data Resolution on Parameter Inference and Model Identification in Conceptual Hydrological Modeling: Insights from an Experimental Catchment: F Fenicia, D Kavetski, M Clark

**H24B Moscone West: 3014 Tuesday 1600h Evapotranspiration III: Modeling Fundamentals and Applications (joint with PA, A, B)**

**Presiding:** M B Parlange, EPFL - Lausanne; E F Wood, Princeton University; E Bou-Zeid, Princeton University; M Chamecki, Pennsylvania State University

- **1600h H24B-01** An MEP Model for Remote Sensing of Evapotranspiration (Invited): R L Bras, J Wang
- **1615h H24B-02** Modelling of evapotranspiration and soil moisture patterns based on simulation of actual radiation and wind fields: M Liu, A Bárdossy, J Li

**H24C Moscone West: 2009 Tuesday 1600h Groundwater/Surface Water Interactions: Linking Physical and Biogeochemical Processes in Modeling and Management Frameworks II (joint with B)**

**Presiding:** A S Mayer, Michigan Technological University; A S Ward, Pennsylvania State University; A H Sawyer, University of Texas-Austin; H W Reeves, U.S. Geological Survey; W M Wollheim, Institute for the Study of Earth Ocean and Space; D M McKnight, Univ Colorado

- **1600h H24C-01** Should the Clean Water Act Follow Stream Water Underground? Managing Beyond the Stream Banks: M N Taptich, M N Goosef
- **1615h H24C-02** The Timing, Spatial Extent and Magnitude of Fishery Benefits Obtained From Re-watering Interconnected Stream-Aquifer Systems Depicted by Historical Diversions and Pumping – A Case Study in the Washita Valley, CA: J M Van Grinsven, A S Mayer, C Huckins
- **1630h H24C-03** Estimation of Vertical Groundwater Flows into a Streambed through Continuous Temperature Profile Monitoring and the Relationship of Groundwater Flows to Coaster Brook Trout Spawning Habitat: M J Van Grinsven, A S Mayer, C Huckins
- **1700h H24C-05** WITHDRAWN
- **1715h H24C-06** Determining the potential contribution of hyporheic flow to nitrogen and phosphorus retention in streams in a northern California watershed: C H Orr, J D Schade, S A Thomas
- **1730h H24C-07** The effects of transient storage on carbon uptake in a sub-arctic stream in interior Alaska: A Rinehart, J B Jones
- **1745h H24C-08** Use of rhodamine WT to quantify stream transport and hyporheic exchange: Is there a price to pay for the easy way out? (Invited): R L Runkel

**H24D Moscone West: 3018 Tuesday 1600h Hydroclimatic Extremes: Monitoring, Diagnosis, and Prediction III (joint with A, NG)**

**Presiding:** A AghaKouchak, University of California Irvine; U Lall, Columbia University; B F Sanders; K Hsu, UC Irvine

- **1600h H24D-01** Monitoring Tropical Cyclone Impacts on the Coastal Vegetation of the Southeastern USA in the First Decade of the 21st Century: J Brun, A P Barros

1630h H24D-03 A Bayesian Hierarchical Approach to Regional Frequency Analysis of Extremes: B Renard

1645h H24D-04 Statistical Model for Converting Precipitation to Rainfall Frequency Estimates: P Yan, T Zhao, S Perica

1700h H24D-05 Improving Satellite-based Instantaneous Precipitation Estimate by using Integration of Ground Radar and Satellite Dataset: Z Feng, X Dong, B Xi, P Minnis, M Khaier, A AghaKouchak

1715h H24D-06 Bayesian Non-Stationary Frequency Estimation at Ungauged Basins Using Climate Information and a Scaling Model: C H Lima, U Lall

1730h H24D-07 Study of Changes in the Frequencies of Unusual Climatic Events, from Regional to Continental Scale: Y Yulizar, S Singh, A Bárdoossy

1745h H24D-08 Drought assessment of six UK catchments using two stochastic rainfall generators: K P Chun, H S Wheater, C Onof

---

H24E Moscone West: 3022 Tuesday 1600h Hydrogeophysical Data Fusion and Integrated Site Investigation Methods III (joint with NS)

**Presiding:** J Luo, Georgia Institute of Technology; J A Huisman, Forschungszentrum Juelich

1600h H24E-01 Integration of High-resolution GPR and Direct-Push Methods: Subsurface Imaging of the Highly Heterogeneous MADE Site (Invited): D W Hyndman, M DOGAN, G Bohling, R L Van Dam, G Liu, J J Butler

1615h H24E-02 Three-Dimensional Bayesian Geostatistical Aquifer Characterization at the Hanford 300 Area using Tracer Test Data: X Chen, H Murakami, M S Hahn, G E Hammond, M L Rockhold, Y Rubin

1630h H24E-03 Aspects on the use of high resolution Direct Push based slug testing for acquiring hydraulic conductivity distributions: C Leven

1645h H24E-04 Integrated Site Investigation Methods and Modeling: Recent Developments at the BHRS (Invited): W Barrash, J H Bradford, M A Cardiff, B Dafflon, B A Johnson, B Malama, M J Thoma

1700h H24E-05 The Value of Natural Tracers for Parameter Estimation in a Creek-Wetland Complex: M N Fienen, R J Hunt, J F Walker

1715h H24E-06 Near-Real-Time Geophysical and Biological Monitoring of Bioremediation Methods at a Uranium Mill Tailings Site in Rifle, Colorado: A N Tarrell, A Haas, A Revil, L A Fiqueroa, D Rodriguez, Title of Team: SmartGeo

1730h H24E-07 Organic Chemical Sorption Heterogeneity in a Sedimentary Framework: I K Kalinovich, R M Allen-King, S S George, D F Dominic, R W Ritz, G S Weissmann

1745h H24E-08 The Value of the Groundwater Age Observation in Characterization of Regional Groundwater Systems: An Inverse Model Study Performed in San Joaquin Valley, California: H Haeri, L Foglia, T R Ginn

---

H24F Moscone West: 3016 Tuesday 1600h Water Resources Science and Strategies for Adaptation to Climate Variability and Change III (joint with A, B, GC, PA)

**Presiding:** M J Friedel, US Geological Survey; J J Gurdak, San Francisco State University; S McNeely, National Center for Atmospheric Research; J A Tindall, US DOI - USGS; B R Lintner, Rutgers

1600h H24F-01 Absolute Humidity and the Seasonality of Influenza (Invited): J L Shaman, V Pitzer, C Viboud, B Grenfell, E Goldstein, M Lipsitch

1615h H24F-02 Integrated Scenarios Analysis for the California Water Plan Update: B A Joyce, D Yates, D Groves, A Draper, R Juricich, D Purkey

1630h H24F-03 A Comparison of the Vulnerability of Groundwater to Climate Change in Two High Elevation Catchments of the Sierra Nevada: J E Moran, M J Singleton, G Shaw, M H Conkin

1645h H24F-04 Water Management Adaptations for Aquatic Ecosystem Services Under a Changing Climate. Analytical Framework and Case Study for Chinook Salmon in California: M Escobar, C M Mosser, L C Thompson, D Purkey, P B Moyle

1700h H24F-05 Vulnerability of a municipal water supply system in Central Chile to climate change impacts: S Vicuna, F J Meza, M Jelinek, E Bustos, S Bonelli

1715h H24F-06 Examining the Vulnerability of Hydropower Production in Meso-Scale Snowmelt-Runoff Basins Under Different Climate Change Scenarios: P Furey, S K Kampf, J Lanini, A Dozier

1730h H24F-07 USING DAMAGE FUNCTIONS AND TOTAL RISK TO QUANTIFY THE IMPACTS OF CLIMATE CHANGE ON EXTREME PRECIPITATION: Z Schuster, K W Potter

1745h H24F-08 Development of Spatiotemporal Bias-Correction Techniques for Downscaling GCM Predictions: S Hwang, W D Graham, J Geurink, A Adams, C J Martinez

---

Earth and Space Science Informatics

IN24A Moscone South: 302 Tuesday 1600h Uncertainty, Error, and Quality of Observational Data II (joint with A, NG, GC, OS, P)

**Presiding:** R G Raskin, Jet Propulsion Laboratory; A J Braverman, Jet Propulsion Laboratory; S R Sain, NCAR

1600h IN24A-01 Uncertainty, Error and Quality of Earth Observing Data (Invited): M E Maiden, S W Berrick

1615h IN24A-02 Components of uncertainty in spatial statistical modeling of geophysical processes (Invited): H M Nguyen, A J Braverman

1630h IN24A-03 Validating MISR and MODIS Aerosol Products: Assessing the Strengths & Limitations of the Way We Assess Strengths & Limitations (Invited): R A Kahn, A J Braverman, R C Levy

1645h IN24A-04 Climate Observations and Their Uncertainty: From Paleo Proxy Records to Satellite Data Streams (Invited): A Kaplan

1700h IN24A-05 Comprehensive Error Estimates for Geophysical Retrievals from Microwave Radiometers: F J Wentz, C A Mears, K A Hilburn, D K Smith

1715h IN24A-06 Ambiguity of Data Quality in Remote Sensing Data: C Lynnes, G G Leptoukh

1730h IN24A-07 Managing Uncertainty in Data and Models: UncertWeb: S Nativi, D Cornfield, E J Pesbesma

---

All information is current as of November 12, 2010
1745h  IN24A-08  Total Uncertainty in Measurements Record for Climate: Strategies from the CLARREO Mission: J A Dykema, J Anderson

Natural Hazards

NH24A  Moscone West: 3010  Tuesday  1600h  Multidisciplinary Research for Validation of Earthquake Precursors: Case Studies and Statistics I (joint with A, NH, S, SM, T, G)

Presiding: D P Ouzounov, NASA/GSFC; S A Pulinites, Institute of Applied Geophysics; M Parrot, LPC2E/CNRS; J G Liu, National Central University; K Hattori, Chiba University

1600h  NH24A-01  Study of Geomagnetic Anomalies Related to Earthquakes at Pisco Peru 2007 (M=8.0) and at Taiwan 2009 (M=6.4) (Invited): K Yumoto, E Takla, J Ishitsuka, D Rosales, S L Dutra, J G Liu, Y Kakinami, T Uozumi, S Abe

1615h  NH24A-02  Current progress in using multiple electromagnetic indicators to determine location, time, and magnitude of earthquakes in California and Peru (Invited): T E Bleier, C Dunson, S Roth, J Haurada, F T Freund, R Dahlgren, N Bryant, R Bambery, A Lira

1630h  NH24A-03  Physical Model of Earthquake Ionospheric Precursors (Invited): A A Namgaladze

1645h  NH24A-04  LAIC MODEL DEVELOPMENT AND VALIDATION BY NATURAL PROCESSES CONNECTED WITH IONIZATION: S A Pulinites, D P Ouzounov

1700h  NH24A-05  Ionospheric variations at the time of the M8.8 Chile earthquake and statistical analysis of plasma parameters recorded by DEMETER: M Parrot

1715h  NH24A-06  On the correlation between ionospheric perturbations as detected by subionospheric VLF/LF signals and earthquakes as defined by seismic intensity: M Hayakawa, Y Kasahara, T Nakamura, Y Hobarra, A Rozhnov, M Solovieva, O Molchanov

1730h  NH24A-07  IMPROVING AND INTEGRATING GROUND AND SATELLITE BASED OBSERVATIONAL TECHNOLOGIES FOR EARTHQUAKE PRECURSOR STUDIES: THE CASE OF ABRUZZO EARTHQUAKE (APRIL 6, 2009; ML ~5.8) (Invited): V Tramutoli, R Corrado, C Filizzola, N Genzano, M Lisi, N Pergola


Ocean Sciences

OS24A  Moscone West: 3009  Tuesday  1600h  Integrated Studies at Oceanic Spreading Centers: Linking Spreading Center Processes Across Disciplinary Boundaries IV (joint with B, T, V)

Presiding: M Cormier, University of Missouri; L B Hebert, University of Maryland

1600h  OS24A-01  Eruption-related changes in magma chamber structure at 9° 50’ N on the EPR from coincident reflection images, 1985 and 2008: J C Mutter, H D Carton, M Marjanovic, S M Carbotte, J Canales, M R Nedimovic

1615h  OS24A-02  Contrasting Crucial Production and Rapid Mantle Transitions Beneath the Eastern Lau Spreading Center: R Dunn, F Martinez

1630h  OS24A-03  Mantle Flow Beneath the Juan de Fuca and East Pacific Rise Spreading Centers and Adjacent Plates: D R Toomey, E E Hoof, W S Wilcock

1645h  OS24A-04  Crustal thickness variations at oceanic ridge segment and transform faults: implications for three-dimensional melt extraction pathways: L B Hebert, L G Montesi

1700h  OS24A-05  Two-layer Models Of Hydrothermal And Magmatic Processes Interactions At Mid-Ocean Ridge Axes: F J Fontaine, M Cannat, J Escartin, M Rabinowicz

1715h  OS24A-06  Laboratory quantification of permeability-porosity relationships for seafloor vent deposits: anisotropy in flange, slab, and crust samples: J L Grinbin, W Zhu, M K Tivey

1730h  OS24A-07  Sulfide Oxidation across Diffuse Flow Zones of Hydrothermal Vents: A Gartman, M Yucel, A Madison, C Janzen, S Ma, G W Luther

1745h  OS24A-08  Transfer and partitioning of energy and mass through seafloor hydrothermal systems: comparative studies at the Ridge2000 Integrated Study Sites (ISS) (Invited): M K Tivey

Planetary Sciences

P24A  Moscone South: 306  Tuesday  1600h  Icy Ocean Worlds I (joint with OS, C)

Presiding: R T Pappalardo, Jet Propulsion Laboratory; S Vance, Jet Propulsion Laboratory / Caltech

1600h  P24A-01  THE DIVERSITY OF Icy OCEAN WORLDS (Invited): H Hussmann

1615h  P24A-02  Compositions of Oceans on Icy Solar System Bodies (Invited): M Y Zolotov

1630h  P24A-03  Modeling Vertical Structure and Heat Transport within the Oceans of Ice-covered Worlds (Invited): J C Goodman


1657h  P24A-05  Organized Chaos at Europa?: B E Schmidt, D D Blankenship

1709h  P24A-06  Titan’s internal ocean: evolution, exchange processes and geophysical signatures. (Invited): G Tobie, O GRASSET

1724h  P24A-07  The role of methanol on the crystallization of Titan’s primordial ocean: O Mousis, F Deschamps, C Sanchez-Valle, J I Lunine

1736h  P24A-08  Testing Candidate Driving Forces for Faulting on Dione: Implications for Nonsynchronous Rotation and a Freezing Ocean: G C Collins

1748h  P24A-09  Thermal evolution of Pluto and implications for despinning and sub-surface oceans: G Robuchon, F Nimmo

Paleoceanography and Paleoclimatology

PP24A  Moscone West: 2007  Tuesday  1600h  Glacial Inception and Termination: Reconciling Observations, Theories, and Models II (joint with B)

Presiding: M jochum, ncar; B L Otto-Bliesner, NCAR

1600h  PP24A-01  Isotopic constraints on the relative timing between ice cores and deep-sea cores ?: J Jouzel, G Hoffmann, A Landais, B Stenni, G B Dreyfus, V Masson-Delmotte, C Waebroek

1612h  PP24A-02  The Timing of Events of the Last Termination as Inferred Through Sediment Core Records: G Gebbie

1636h PP24A-04 The role of the winds in past climate change and CO2 (Invited): R F Anderson

1648h PP24A-05 Anatomy of the Last Glacial Termination (Invited): A Timmermann, L Menviel

1700h PP24A-06 Glacial Inception and Carbon Cycle in CCSM4: M jochum, D A Bailey, J Fasullo, J E Kay, S Levis, K T Lindsay, J K Moore, B L Otto-Bliesner, S Peacock

1712h PP24A-07 Biological consequences of a cold, stratified, high latitude, glacial ocean: J D Hays

1724h PP24A-08 What is the main driver of atmospheric CO2 dynamic: ocean or permafrost?: A S Zimov, N Zimov

1736h PP24A-09 Southern Ocean intermediate water pH information provided by modern and fossil scleraxonian deep-sea corals: M Gutjahr, D Vance, G L Foster, C Hilgenbrand, G Kuhn

1748h PP24A-10 Quasi-100 ky glacial-interglacial cycles triggered by subglacial burial carbon release: N Zeng

PP24B Moscone West: 2005 Tuesday 1600h

Molecules Modern to Ancient II (joint with B, OS)

Presiding: P J Polissar, Lamont-Doherty Earth Institute; P J Polissar, Lamont-Doherty Earth Institute; S J Feakins, University of Southern California; J Fasullo, University of Southern California

1600h PP24B-01 Does transpiration matter to the hydrogen isotope ratios of leaf wax n-alkanes? (Invited): F A McInerney, B R Helliker, K H Freeman

1615h PP24B-02 Leaf wax lipid D/H ratios of a single species along an environmental gradient on the Big Island of Hawai`i – lessons for the paleorecord (Invited): D Sachse, S K Arndt, H Wilkes, A Kahmen


1645h PP24B-04 Cenozoic climate, topography and ecologic change in the Sierra Nevada and Basin and Range: Coupled organic molecular and inorganic isotopic records of environmental change: M T Hren, C P Chamberlain, A Mulch, M Pagani

1700h PP24B-05 Temporal Insights on Biomarker-Based Climate Records (Invited): N Drenzek, R H Stanley, G M Santos, J R Souton, E R Druffel, D Montlucon, K A Hughes, T I Eglinton


1730h PP24B-07 Lipid D/H Ratios from Multiple Sources and Deposits Indicate Drier Little Ice Age at Washington Island (4°43’ N, 160°25’ W), Central Pacific: I Muegler, D Sachse, J P Sachs

1745h PP24B-08 Biomarker and molecular isoalte approaches to deconvolve the terrestrial carbon isotope record: modern and Eocene calibrations: A F Diefendorf, K H Freeman, S Wing, E D Currano

SPA-Acronymy

SA24A Moscone South: 301 Tuesday 1600h

Response of the Atmosphere and Ionosphere to Solar Extreme Ultraviolet Variability (joint with SH)

Presiding: L Qian, National Center for Atmospheric Research; P G Richards, George Mason university


1620h SA24A-02 Is There Enough Solar EUV to Maintain the Global Mean Thermospheric Temperature? Revisiting a 37-year-old Problem (Invited): S C Solomon


1700h SA24A-04 LWS FST: Determine and Quantify the Responses of Atmospheric/Ionospheric Composition and Temperature to Solar XUV Spectral Variability: E R Talaat, T J Fuller-Rowell, L Qian, P G Richards, A J Ridley

1715h SA24A-05 Impacts on the Thermosphere of the Short Term Variability of the Solar EUV and XUV Spectral Irradiance Measured by SDO-EVE: P G Eparchier, T J Fuller-Rowell, S M Bailey, Title of Team: EVE Team

1730h SA24A-06 Flare Rising Time and Duration: Modeling the Thermosphere and Ionosphere Response: L Qian, A G Burns, P C Chamberlin, S C Solomon

1745h SA24A-07 On the heating of the thermosphere neutral gases by auroral electrons: P G Richards, T J Fuller-Rowell

SPA-Solar and Heliospheric Physics

SH24A Moscone South: 309 Tuesday 1600h

From the Termination Shock to the Interstellar Medium: Dynamics and Physical Processes II

Presiding: J Heerikhuisen, University of Alabama in Huntsville; H Kucharek, University of New Hampshire

1600h SH24A-01 The Heliosheath and Interstellar Medium: What the Voyagers Can Tell Us (Invited): E C Stone


1630h SH24A-03 What Do We Know About the Local Interstellar Medium? (Invited): J D Slavin

1645h SH24A-04 Microphysical processes at shocks and in the inner and outer heliosheaths (Invited): G P Zank

1700h SH24A-05 Microstructure of the heliospheric termination shock: Full particle electromagnetic simulations: M Scholer, S Matsukiyo

1715h SH24A-06 New Hybrid Simulations of the Acceleration of Pickup Ions to High Energies at the Termination Shock: J Giacalone

SPA-Magnetospheric Physics

SM24A Moscone South: 307 Tuesday 1600h
Inner Magnetospheric Response to High-Speed Streams II
(joint with SA, SH)

Presiding: M W Liemohn, V Peroomian, UCLA

1600h SM24A-01 Corotating High-Speed Streams and Interplanetary Coronal Mass Ejections: An Overview of Interplanetary Observations, Geomagnetic Effects and Energetic Particles (Invited): I G Richardson

1615h SM24A-02 Energetic Coupling of the Solar Wind-Magnetosphere-Ionosphere System During High-Speed Streams (Invited): G Lu


1715h SM24A-06 Responses of the electron radiation belt to high speed streams (Invited): S Morley, R H Friedel, G D Reeves, E L Spanswick

1730h SM24A-07 Modeling the Rapid Rebuilding of the Radiation Belts During High Speed Streams: A Glocer, M H Fok, T Nagai, G Toth

1745h SM24A-08 Dayside Outer Zone Chorus Properties During the Declining Phase of the Solar Cycle: Solar: B Tsurutani, B J Falkowski, O P Verkhoglyadova, J S Pickett, O Santolik, G S Lakhina

SM24B Moscone South: 305 Tuesday 1600h
Multiscale Wave/Plasma Interactions Between the Magnetosphere and Ionosphere at High Latitudes I (joint with NG, SA)

Presiding: A V Streltsov, Dartmouth College; J L Semeter, Boston University

1600h SM24B-01 Magnetospheres of Planets and Moons: Links to Their Ionospheres. (Invited): M G Kivelson

1615h SM24B-02 Phase Mixing, Density Cavities And Ion Outflow On Auroral Field Lines (Invited): R L Lysak, Y Song

1630h SM24B-03 On the Relative Importance of Waves and Electron Precipitation in Driving Ionospheric Outflows (Invited): R J Strangeway

1645h SM24B-04 The orientation of auroral arcs in general and in the late growth phase (Invited): S E Donovan

1700h SM24B-05 Ionospheric heating, upwelling, and depletions in auroral current systems: M D Zettergren, J L Semeter

1715h SM24B-06 Ionosphere-Magnetosphere Waves: A J Russell, A N Wright, A V Streltsov, A W Hood

1730h SM24B-07 Dispersive Alfven Waves Radiated by the Reconnection Diffusion Region Dispersive Alfven Waves Radiated by the Reconnection Diffusion Region: N Singh

1745h SM24B-08 Magnetosphere-Ionosphere Coupling: Effects of E-Region Plasma Turbulence on Ionospheric Conductances: Y S Dimant, M M Oppenheim

Mineral and Rock Physics

MR24A Moscone West: 3024 Tuesday 1600h
Deep Mantle Properties II (joint with DI, S, T)

Presiding: R M Wentzcovitch, Univ Minnesota; K Hirose, Tokyo Tech


1615h MR24A-02 Experimental determinations of the wave velocities and density of candidate lowermost mantle materials (Invited): J M Jackson

1630h MR24A-03 Iron spin transitions and elastic properties of (Mg,Fe)(Si,Al)O, perovskite using a newly developed synchrotron Mössbauer source and nuclear inelastic scattering: C A McCammon, V Potapkin, A I Chumakov, J P Celse, R Rüffer, G Smirnov, S L Popov, K Glazyrin, A Kantor, I Kantor, I Sergueev, T Boiffa Ballaran, L S Dubrovinsky


1700h MR24A-05 Density profile of pyrolitic lower mantle: R Sinmyo, K Hirose, Y Ohishi


1745h MR24A-08 Lower mantle dynamics and the role of pressure-dependent thermodynamic and transport properties: N Tosi, D A Yuen, O Cadek

Scisomology

S24A Moscone South: 103 Tuesday 1700h
Gutenberg Lecture (Webcast)

Presiding: P M Shearer, U.C. San Diego

1700h Presentation of Aki Award and Gutenberg Lecture Introduction (Peter Shearer, UCSD)

1705h S24A-01 The Fate of Water in the Cascadia Forearc (Invited): M G Bostock
Tectonophysics

T24A Moscone West: 2010 Tuesday 1600h
From Sediment Inputs to Seismogenesis at Subduction Zones IV (joint with S, V, G, NH)

Presiding: T B Byrne, University of Connecticut; Y Hashimoto, Kochi University

1600h T24A-01 A new brittle to plastic constitutive law and its implications for subduction-zone seismicity: T Shimamato, H Noda

1615h T24A-02 Three-dimensional stress orientation in the basement basalt at the subduction input site, Nankai Subduction Zone, using anelastic strain recovery (ASR) data, IODP NanTroSEIZE Site C0012: Y Yamamoto, W Lin, H Oda, T B Byrne, Y Yamamoto, M Underwood, S Saito, Y Kubo, Title of Team: the IODP Expedition 322 Shipboard Scientific Party

1630h T24A-03 Experimental Investigations Of Failure Mechanisms Associated With Slow Slip Events: W Zhu, T Tamarkin

1645h T24A-04 High-velocity frictional properties and microstructures of clay-rich fault gouge in megasplay fault zone, Nankai subduction zone: K Ujiie, A Tsutsumi

1700h T24A-05 Large-Strain Frictional Behavior of Megasplay Fault Zone Materials and Accretionary Wedge Sediments Recovered from NanTroSEIZE Expedition 361 Drilling: D Goldsby, O Fabbrt

1715h T24A-06 Mechanical and hydraulic properties of subducted sediments, Nankai Trough accretionary prism: Effect of stress path: H Kitajima, F M Chester, G Biscontin


1745h T24A-08 Paleod-stress estimation of elastic rebounded fault rock based on calcite twin: A Sakaguchi, D Nishiura, H Sakaguchi

Lithospheric Structure of East Asia II (joint with S)

T24B Moscone West: 2011 Tuesday 1600h

Presiding: M I Begnaud, Los Alamos National Laboratory; Y Liu, Woods Hole Oceanographic Institution

1600h T24B-01 Deformation along the Taiwan-Luzon plate boundary from GPS velocity, stress inversion, and gravity data (Invited): Y Hsu, S Yu

1615h T24B-02 Mapping Pn Amplitude Spreading and Attenuation in Asia (Invited): X Yang, W S Phillips, R J Stead

1630h T24B-03 Spatial Correlation between Crustal Strength and Relocated Seismicity in the Taiwan Region Inferred from 3-D Vp and Vs Images and Gravity Data (Invited): J Chiu, K Kim, Y Horng-Yuan, J Pujol, S C Chiu, K Chen, B Huang, Y Yeh

1645h T24B-04 Revised South China Sea Seafloor Spreading Anomalies: U Barckhausen, M Engels, D Franke

1700h T24B-05 Surface wave tomography of China from ambient noise and earthquake data: Z Xu, X Song, S Zheng

1715h T24B-06 WITHDRAWN

1730h T24B-07 3D gravity imaging of deep geological structure of Huangling Anticline in Three Gorges area, China: Y Zhang, C Chen

1745h T24B-08 An attempt to detect temporal variations of crustal structure in the source area of the 2006 Wen-An earthquake in North China: J Lei, D Zhao, F Xie, J Liu

Volcanology, Geochemistry, and Petrology

T24C Moscone West: 2016 Tuesday 1600h
Structure, Dynamics, and Evolution of the African-Arabian Rift Systems II (joint with S, V)

Presiding: D Keir, University of Leeds; I D Bastow, University of Bristol; C Tiberi, CNRS; C Doubrue, EOST-IPGS

1600h T24C-01 Volcanic architecture of the Afar Rift: C Vye, K Smith, L Bateson, C Jordan

1615h T24C-02 The role of magmatic processes in strain localization from rift onset to rupture in East Africa and the Red Sea (Invited): C J Ebinger, N Lindsey, D M Cote, D Keir, A Ayele, C Tiberi

1635h T24C-03 Dyke intrusion dynamics during the ongoing rifting episode in Afar: E Jacques, R Grandin, A Nercessian, A Ayele, D Keir, C Doubrue, A Socquet, A Lemarchand

1650h T24C-04 Origin of silicic crust by rifting and bimodal plume volcanism in the Afar Depression: A Ghatak, A R Basu, C J Ebinger


1725h T24C-06 GPS Velocity Field at the Western Tip of the Aden Ridge: Implications for Rifting and the Arabia-Somalia-Nubia Triple Junction Dynamics: C Doubrue, A Socquet, F Masson, C Cressot, K Mohamed, C Vigny, J Ruegg

1740h T24C-07 Two-dimensional surface velocity field across the Asal Rift (Afar Depression) from 11 years of InSAR data: J Tomic, G Peltzer, C Doubrue

Supervolcanoes: Modeling of Eruption Scenarios and Their Regional and Global Impacts II

V24A Moscone West: 2008 Tuesday 1600h

Presiding: M R Rampino, New York University; F Dobran, Hofstra University

1600h Introduction

1650h V24A-01 Explosive Super-eruptions: Problems and Prejudices: S Self

1623h V24A-02 The largest volcanic eruptions on Earth: I Ukstins Peate, S E Bryan, D W Peate, S Self, M Mawby, D A Jerram, J Marsh

1641h V24A-03 Limited climate impact of the Young Toba Tuff eruption: C Timmreck, D Zanchettin, H Graf, S Lorenz, U Niemeier, D Matei, J H Jungclaus, T J Crowley

1659h V24A-04 Brief Lifespans and Rapid Recurrence of Large Igminrite-Caldera Cycles (Super-Eruptions) in the Mid-Tertiary Southern Rocky Mountain Volcanic Field, Colorado-New Mexico: P W Lipman, W C McIntosh, M J Zimmerer

1717h V24A-05 Coupled evolution of magma chambers and flow in conduits during large volcanic eruptions: L Karlstrom, M Manga, M L Rudolph

1735h V24A-06 Eruption column modeling of supervolcanoes: F Dobran

1753h Open Discussion and Conclusions

All information is current as of November 12, 2010
Presiding: L Dobrzynetskaya, University of California at Riverside; R Wirth, GFZ Potsdam; J Zhang, Faculty of Earth Sciences

1600h V24B-01 An extensional piggyback model for large apparent displacements along major "thrusts": examples from nappes of the Norwegian Caledonides (Invited): H K Brueckner

1615h V24B-02 Diamond in ocean-derived UHP rocks from the Western Alps: a first record and some consequences: M Frezzotti, J Selverstone, R Compagnoni, Z D Sharp


1645h V24B-04 POLYCRYSTALLINE DIAMONDS FROM THE ERZGEBIRGE ULTRA-HIGH-PRESSURE METAMORPHIC TERRANE, GERMANY: L Dobrzynetskaya, R Wirth, H W Green

1700h V24B-05 Fluid inclusions in carbonado diamond: Implication to the crystal growth environment: H Kagi, H Ishibashi, H Sakurai, H Ohfuji

1715h V24B-06 Diamond and coesite discovered in Saxony-type granulite: solution to the Variscan garnet peridotite enigma?: P J O’Brien, J Kotkova, M A Ziemann


1745h V24B-08 Coesite-Diamond Assemblage in Ultrahigh Pressure Crustal and Mantle rocks: Evidence for Carbon Recycling: N V Sobolev

V24C Moscone West: 2020 Tuesday 1600h

Presiding: S Demouchy, Geosciences Montpellier -CNRS-; P Ruprecht, Lamont-Doherty Earth Observatory; T Plank, Columbia University

1600h V24C-01 Solution behavior of C-O-H volatiles in silicate melts under upper mantle pressures and temperatures as a function of redox conditions: K Kumamoto, B Myssen, G D Cody

1615h V24C-02 Water content in olivine-hosted melt inclusions measured by Raman spectroscopy and possible effect of water reequilibration during magma ascent and eruption: Y Chen, A Provost, P Schiano, N Cluzel

1630h V24C-03 The melting, differentiation and H2O condition of low alkali tholeiite from Izu-Bonin arc: I Ogitsu, O Ishizuka, Y Kawanabe, N Geshi, T Tuzino, R N Taylor, K Sano, T Yamamoto

1645h V24C-04 Volatile Loss from Melt Inclusions in Clasts of Differing Sizes: A S Lloyd, T Plank, P Ruprecht, E H Hauri, W I Rose

1700h V24C-05 Water and carbon heterogeneity in MORB mantle sources (Invited): E H Hauri, A E Saal

1720h V24C-06 Modeling the dehydrogenation of mantle olivine with implications for the water content of the Earth’s upper mantle, and ascent rates of kimberlite and alkali basaltic magmas (Invited): F Costa Rodriguez, R Dohmen, S Demouchy

1740h V24C-07 Polybaric degassing of island arc low-K tholeiitic basalt recorded in OH concentrations of Ca-rich plagioclase: M Hamada, T Kawamoto, E Takahashi, T Fuji}

Wednesday A.M.

Union

U31A Moscone South: 104 Wednesday 0800h
Earth’s First Few Hundred Million Years I

Presiding: J Badro, Institut de Physique du Globe de Paris; M J Walter, University of Bristol

0800h U31A-01 The geochemical constraints on Earth’s accretion and core formation (Invited): J F Rudge, T Kleine, B Bourdon

0820h U31A-02 Constraints from metal-silicate partitioning on accretion, core formation and volatile addition to the growing earth (Invited): B J Wood

0840h U31A-03 Fifty Years of Pb Core Pumping: The History of Core Segregation and Terrestrial Volatiles (Invited): F Albarede

0900h U31A-04 Earth Formation and Initial Differentiation (Invited): R W Carlson, J O’Neil, M M Boyet, M Jackson

0920h U31A-05 Onset, Persistence and Structure of the Magnetic Field in the Early Earth (Invited): B A Buffett

0940h U31A-06 Mantle differentiation and chemical cycling in the Archean (Invited): C Lee

Atmospheric Sciences

A31A Moscone South: Poster Hall Wednesday 0800h
Aerosol Observability and Predictability: From Research to Operations for Chemical Weather Forecasting I Posters

Presiding: P R Colarco, NASA GSFC; J S Reid, Naval Research Laboratory; G R Carmichael, University of Iowa

0800h A31A-0015 POSTER Modelling cloud processing of gases and particles in urban-industrial plumes: Comparison of several meso-scale aerosol forecasting models: W Gong, J Zhang, S Kim, M Leriche, G J Frost, G A Grell, C Mari, S A McKeen, J Pinty, T Pierre, A Macdonald, W R Leaitch

0800h A31A-0016 POSTER Adjoint sensitivity analyses for three Asian dust events affected the Korean Peninsula: S Kim, H Kim, Title of Team: atmospheric predictability and data assimilation laboratory

0800h A31A-0017 POSTER Dust Aerosol Analysis and Prediction with Lidar Observations and Ensemble Kalman Filter: T T Sekiyama, T Y Tanaka, A Shimizu, T Miyoshi

0800h A31A-0018 POSTER Aerosol Optical Depth Retrieval over Boreal Forests using AATSR - Case Studies: L Sogacheva, P Kolomonon, A Sundstrøm, G De Leeu

0800h A31A-0019 POSTER Development of global aerosol forecasting system at NCEP: S Lu, H Huang, Y Hou, A da Silva, M Chin, S Moorth, J Wang, H H Jiang, M Iredell, J McQueen, T L Diehl


0800h A31A-0021 POSTER Satellite Lidar Data Assimilation For Improved Global Aerosol Forecasting: Lessons Learned From CALIOP, With an Eye Toward EarthCARE: J R Campbell, J S Reid, J L Tackett, D L Westphal, D M Winker, J Zhang

0800h A31A-0022 POSTER AERONET Version 1.5 for near real-time data analysis: B N Holben, T F Eck, A Smirnov, J S Reid

0800h A31A-0023 POSTER Daytime variations of aerosol optical properties from AERONET in Americas: Y Zhang
0800h  A31A-0024 POSTER Overview of the data assimilation quality satellite aerosol products (Invited): J Zheng, E Hyer, J Campbell, Y Shi, J S Reid, D L Westphal

0800h  A31A-0025 POSTER Evaluation of the MODIS Deep Blue aerosol product over the North Africa Regions for aerosol forecasts related applications: Y Shi, J Zhang, J S Reid, C Hsu

0800h  A31A-0026 POSTER Prediction of particle formation and number concentration over the United States with WRF-Chem + APM model: G Luo, F Yu

0800h  A31A-0027 POSTER Thick absorbing aerosol layer observed in the monsoon season over India: S N Tripathi, S Dey, J Jaidevi, B N Singh, M Michael, T Gupta

0800h  A31A-0028 POSTER First Direct Evidence of Strong Absorption Associated with Coarse Mode Particles Over CTZC Region from Aircraft Experiment 2009: J Jaidevi, P Choudhry, M Michael, S N Tripathi, T Gupta

0800h  A31A-0029 POSTER The Development Of NCEP Global Aerosol Modeling System: Fire Emissions: H Huang, A da Silva, X Zhang, S Kondragunta, Y Tang, S Lu, M Tsidulko, C Tassone, J Huang, J McQueen, B Lapenta, S Lord, M Chin, T Diehl

0800h  A31A-0030 POSTER A Multi-Scale Three-Dimensional Data Assimilation Scheme for Improving Regional PM Air Quality Prediction: Z Zang, Z Li, Y Chao, Q Li, D CHEN, K Liou

0800h  A31A-0031 POSTER Recent Updates to FNMOC Operational Aerosol Modeling and Products: C Skupniewicz, D L Westphal

0800h  A31B Moscone South: Poster Hall Wednesday 0800h Gulf of Mexico Air Quality and Climate Impacts: Urban and Regional Pollution Including the 2010 Oil Spill I Posters (joint with PA)

Presiding: B L Lefer, University of Houston; E P Olaguer, Houston Advanced Research Center

0800h  A31B-0032 POSTER Considerations for Planning a Monitoring Campaign at Petrochemical Complexes: Lessons Learned: A Cuculis


0800h  A31B-0034 POSTER Investigation of VOC radical sources in the Houston Area by the Solar Occultation Flux (SOF) method and Mobile DOAS: J Melqvist, J Johansson, J Samuelsson, B Offerle, B Rappenglueck


0800h  A31B-0036 POSTER Atmospheric ammonia measurements in Houston, TX using an external cavity-quantum cascade laser-based sensor: I Gong, R Lewicki, R J Griffin, J H Flynn, B L Lefer, F K Tittel

0800h  A31B-0037 POSTER Measurements of Reactive Nitrogen Compounds (NO, NO2, NO3) During the Study of Houston Atmospheric Radicals Program (SHARP): W T Luke, P Kelley, B L Lefer, J H Flynn

0800h  A31B-0038 POSTER Coupled Variations in HNO3, and Soluble Gas Phase Chloride in the Houston Region: J E Dibb, C A Corr, B L Lefer, J H Flynn

0800h  A31B-0039 POSTER Ambient measurements of NOx during SHARP using cavity ring-down spectroscopy: J N Geidtsoch, K Perkins, S W North

0800h  A31B-0040 POSTER Nitrous Acid Vertical Gradients during SHARP 2009 in Houston, TX: K Wong, J Tsai, O Pikelny, J Stutz

0800h  A31B-0041 POSTER Formaldehyde Source Attribution in Houston during TexAQS II and TRAMP: B Guven, E P Olaguer

0800h  A31B-0042 POSTER Beyond SHARP—Primary Formaldehyde from Oil and Gas Exploration and Production in the Gulf of Mexico Region: E P Olaguer

0800h  A31B-0043 POSTER Hydrogen peroxide and methylhydroperoxide variations in Houston urban air during May 2009: J Golovko, B Rappenglueck, B T Jobson

0800h  A31B-0044 POSTER Radical Budget and Ozone Production in Houston, TX during SHARP 2009: X Ren, D van Duin, M Cazorla, S Chen, W H Brune, J H Flynn, B L Lefer, J E Dibb, K Wong, C Tsai, J Stutz

0800h  A31B-0045 POSTER OH and H2O2 Measurements in Houston TX, during SHARP 2009: D van Duin, W H Brune, X Ren

0800h  A31B-0046 POSTER Ozone production and emission precursors during SHARP 2009: M Cazorla, W H Brune, X Ren, B T Jobson, B L Lefer


0800h  A31B-0048 POSTER Ozone and secondary aerosol formation—Analysis of particle observations in the 2009 SHARP campaign: J Cowin, X Yu, N Laulainen, M Iedema, B L Lefer, D Anderson, D Pernia, J H Flynn

0800h  A31B-0049 POSTER Solubility of Particulate Mercury in Coastal Waters of the Central U.S. Gulf Coast: M Engle, D P Krabbenhoft, T G Sabin, N J Gebo, A Kolker

0800h  A31B-0050 POSTER Evidence of Entrainment Impacting Surface Ozone and Sulfur Dioxide in Houston, TX: C Haman, B L Lefer, G A Morris, J H Flynn

0800h  A31B-0051 POSTER Improved Specification of Transboundary Air Pollution over the Gulf of Mexico Using Satellite Observations: A Pour Biazar, M N Khan, Y H Park, R T McNider, B Cameron

0800h  A31B-0052 POSTER Meteorological and Wave Measurements for Improving Meteorological and Air Quality Modeling: J Hare, C McDonald, A Ray, C W Fairall, S Pezoa, B Gibson, C H Huang

0800h  A31B-0053 POSTER Stratosphere-Troposphere Exchange Over Houston: M E Taylor, B Rappenglueck, A M Thompson, G A Morris, B L Lefer, C Haman, J H Flynn, C Kich

0800h  A31B-0054 POSTER Characterization of Volatile Organic Compounds measured in the lower troposphere around the Deep Water Horizon oil spill site (Gulf of Mexico): B Barletta, S Meinardi, N J Blake, I Leifer, F S Rowland, D R Blake

0800h  A31B-0055 POSTER Influence of the Deep Water Horizon Oil Spill on Atmospheric Hydrocarbon Levels over the Gulf of Mexico: N J Blake, B Barletta, S Meinardi, I Leifer, F S Rowland, D R Blake

0800h  A31B-0056 POSTER Source Attribution of Ozone in Southeast Texas Before and After the Deepwater Horizon Accident Using Satellite, Sonde, Surface Monitor, and Air Mass Trajectory Data: G A Morris, B L Lefer, B Rappenglueck, C L Haman, M Taylor, M R Schoeberl

0800h  A31B-0057 POSTER POLARIMETRIC RETRIEVALS OF SURFACE AND AEROSOL PROPERTIES IN THE REGION AFFECTED BY THE DEEPWATER HORIZON OIL SPILL: M Ottaviani, B Cairns, J Chowdhary, K D Knobelspiesse, R A Ferrare, C A Hostetler, J W Hair, R Rogers, M D Oblad, P Zhai, Y Hu
A31C Moscone South: Poster Hall Wednesday 0800h Interactions Between Tropospheric Chemistry and Climate I Posters (joint with GC)

Presiding: L J Mickley, Harvard University; A M Fiore, NOAA GFDL

0800h A31C-0058 POSTER GEM-MACH15 Operational Air Quality Forecast Model: An Evaluation of the First Year’s Performance: R Pavlovic, S Menard, M D Moran, P Beaulieu, S Gilbert, J Chen, P Makar, G Morneau

0800h A31C-0059 POSTER Influence of global changes on modeled ozone response to changes in local emissions and the policy implications for ozone abatement strategies in the US: J C Avise, R Gonzalez Abraham, S H Chung, B K Lamb, E P Salathe, Y Zhang, D G Streets, C G Nolte, D Loughlin, A B Guenther, C Wiedinmyer, T Duhl, J Chen

0800h A31C-0060 WITHDRAWN

0800h A31C-0061 POSTER Defining the common spatio-temporal patterns of aerosols in Europe for the XXI century under different IPCC SRES scenarios: P Jimenez-Guerrero, J J Gomez-Navarro, S Jerez, R Lorente-Plazas, J P Montavez

0800h A31C-0062 POSTER Warmer and wetter climate: More soluble pollutants: Y Yang, A M Fiore, L W Horowitz

0800h A31C-0063 POSTER Impact of climate change on summer cyclones and air pollution: C Lang, D Waugh


0800h A31C-0065 POSTER Multi-model prediction of climate-induced changes in ozone and reactive nitrogen fluxes into the troposphere: M J Hegglin, T G Shepherd, Title of Team: CCMVal modelling team

0800h A31C-0066 POSTER Ozone column and solar zenith angle effects on ozone photolysis: S R Hall, K Ullmann, S Madronich, B E Anderson, J W Hair

0800h A31C-0067 POSTER Leveling-off of atmospheric methane caused by coupling of climate change and tropospheric chemistry: K Sudo, P K Patra, A Ito

0800h A31C-0068 POSTER Sea of Scenarios: Reducing Uncertainties in Methane Projections: E Matthews, E Baum

0800h A31C-0069 POSTER Implications of Climate Policies for Future Aerosol: Health and Economic Impacts: N E Selin, C Wang, A P Sokolov, S Palsetv, M D Webster, J M Reilly

0800h A31C-0070 POSTER The Impact of Subsonic Aircraft Emission on Upper Troposphere/Lower Stratosphere Composition and Radiative Forcing: An Update: J M Rodriguez, M R Damon, M Natarajan, T D Fairlie, J E Nielsen, S L Baughcum, G S Wojcik, T Clune

0800h A31C-0071 POSTER Liquid Cloud Responses to Soot: D M Koch

0800h A31C-0072 POSTER Radiative effects due to tropospheric ozone and carbonaceous aerosol enhancements caused by Asian wildfires during Spring, 2008: M Natarajan, R Pierce, T Schaack, A Lenzsen, J A Al-Saadi, A J Soja, T P Charlock, F G Rose

0800h A31C-0073 POSTER A modeling study of ammonium-sulfate-nitrate aerosols in terms of radiative forcings: D Goto, T Nakajima, T Takemura

0800h A31C-0074 POSTER Humidity Dependent Extinction of Clay Aerosols: M E Greenslade, A R Artwood

0800h A31C-0075 POSTER Production and physicochemical evolution of size-resolved marine aerosol in the NCAR Community Atmosphere Model: Implications for oxidation processes, radiative transfer, and climate: M S Long, W C Keene, D J Erickson, X Liu, S J Ghan, R C Easter

0800h A31C-0076 POSTER High-Resolution WRF-Chem Simulations of Particulate Matter Emitted By Different Agriculture Tillage under Different Weather Conditions Using: K Moore, M Wojcik, J Jin, J Hatfield

A31D Moscone South: Poster Hall Wednesday 0800h Understanding Drought Variability, Forcing, and Feedbacks I Posters (joint with PA)

Presiding: B I Cook, NASA-GISS; R Seager, Lamont Doherty Earth Obs; R Touchan, The University of Arizona; D M Meko, University of Arizona

0800h A31D-0077 POSTER Increase of SO2 emissions detected from space due to the severe 2006 summer-drought in the southwest of China: L Zhu, Y Song

0800h A31D-0078 POSTER A 500-year reconstruction of streamflow variability in Spring Valley, Nevada, USA, and a look at the future of watershed-scale dendrohydrology: S D Strachan, F Biondi, J F Leising

0800h A31D-0079 POSTER A High-Resolution Record of Hydroclimate Changes in the Last Three Millennia from a Stalagmite at DeSoto Caverns (Alabama, USA): R Dhungana, P Abhar

0800h A31D-0080 POSTER The Role of Soil Moisture Transition Zones in Predicting Climate in North America: R Saitiku, J S Pal, E A Eltahir

0800h A31D-0081 POSTER Meteorological analysis and historical perspective of the 1999-2005 Canadian Prairie drought: J R Gyakum, L Hryciw

0800h A31D-0082 POSTER Interactions between large-scale modes of climate and their relationship with Australian climate and hydrology: K R Whan, J A Lindesay, B Timbal, M R Raupach, E Williams

0800h A31D-0083 POSTER Attribution of Global Precipitation Change over the Past 1000 Years: J Liu, B Wang, S Yim

0800h A31D-0084 POSTER Forced and unforced variability of twentieth century North American droughts and pluvials: B I Cook, E Cook, K J Anchukaitis, R Seager, R L Miller

0800h A31D-0085 POSTER Centennial-to-millennial climate variability over the Great Plains in transient simulations of the Holocene with a coupled GCM: S Wagner, A Schwab, E Zorita

0800h A31D-0086 POSTER Developing paleoclimate, historical and GCM based future scenarios of moisture indices for upper subbasins in the Canadian Rockies: D Sauchyn, S L Lapp, J St. Jacques, J R Vanstone, R J MacDonald, J M Byrne

0800h A31D-0087 POSTER A tree-ring reconstruction of monsoon precipitation for the southwestern United States: D Griffin, C A Woodhouse, D M Meko, R Touchan, S W Leavitt, C L Castro


0800h A31D-0089 POSTER Drought in the Nile Basin: characterizing variability, quantifying uncertainty, and studying processes with the Nile Land Data Assimilation System: C A Alo, B F Zaitchik, S Habib, M C Anderson, M Ozdogan
A31E Moscone West: 3002 Wednesday 0800h Atmospheric Circulations and Climate Change I (joint with GC)

Presiding: P A O’Gorman, MIT; T M Merlis, Caltech

0800h A31E-01 Climate Feedbacks and the Increase of Poleward Energy Transport in AR4 Simulations (Invited): D L Hartmann, M D Zelinka

0815h A31E-02 Changing storm track diffusivity and the upper limit to poleward latent heat transport: R Caballero

0830h A31E-03 Title: Energetics of PCMDI/CMIP3 Climate Models: Net Energy Balance and Meridional Enthalpy Transport: F Ragone, V Lucarini

0845h A31E-04 Storm Tracks in a Warmer Climate (Invited): K Hodges

0900h A31E-05 STATISTICS OF ATMOSPHERIC CIRCULATIONS FROM CUMULANT EXPANSIONS: B Marston, F Sabou

0915h A31E-06 Downstream self-destruction of storm tracks: Y Kaspi, T Schneider

0930h A31E-07 The dynamics of a poleward shift of the westerlies in a hierarchy of GCMs: J Kidston, G K Vallis

0945h A31E-08 Abrupt circulation responses of the stratosphere-troposphere coupled system to climate change-like forcing in a relatively simple AGCM: S Wang, E P Gerber, L M Polvani

A31F Moscone West: 3006 Wednesday 0800h Atmospheric Sciences General Contributions:Tropospheric and Stratospheric Ozone I

Presiding: S Madronich, NCAR

0800h A31F-01 The Ozone Hole - from today’s observations to long-term predictions: M von Hobe, Title of Team: The RECONCILE Science Team

0815h A31F-02 Polar Ozone Loss in a Changing Climate: M Brakebusch, C E Randall, D E Kinnison, S Tilmes, M L Santee

0830h A31F-03 Rate coefficient measurements for the ClO radical self-reaction as a function of pressure and temperature: J B Burkholder, K Feierabend

0845h A31F-04 Improved simulation of preindustrial surface ozone in a model with bromine chemistry: J P Parrella, M J Evans, D J Jacob, L J Mickley, B Miller, Q Liang

0900h A31F-05 Variations in ozone depletion potentials of very short-lived substances with season and emission region: J Brioude, R W Portmann, J S Daniel, O R Cooper, G J Frost, K H Rosenlof, C Granier, A R Ravishankara, S A Montzka, A Stohl

0915h A31F-06 Blowing snow-sourced bromine and its implications for polar tropospheric ozone: X Yang, J A Pyle, R A Cox, N Theys, M Van Roozendael


0945h A31F-08 Global patterns in halogen-induced changes in vertically resolved stratospheric ozone: B Hassler, G E Bodeker, M Dameris, D E Kinnison, S Solomon

A31G Moscone West: 3004 Wednesday 0800h Biomass Burning: New Findings and Analyses From Multiple Perspectives V (joint with B, PA)

Presiding: S M Kreidenweis, Colorado State Univ; A P Sullivan, Colorado State University

0800h A31G-01 Detection, transport and chemistry of biomass burning plumes with IASI: L Clarisse, P Coheur, Y R’Honi, D Hurtmans, C Clerbaux, A Razavi

0815h A31G-02 Recent progress in biomass burning research: a perspective from analyses of satellite data and model studies. (Invited): J A Logan

0845h A31G-03 Investigating the environmental impact of the 2010 Russian fires with the NASA GEOS-5 modeling and data assimilation system: A S Darmenov, A da Silva, P R Colarco, R C Govindaraju

0900h A31G-04 Episodes of cross-polar transport in the Arctic troposphere during July 2008 as seen from models, satellite, and aircraft observations: A Stohl, H Sodemann, M Pommier, S R Arnold, S A Monks, K Stebel, J F Burkhart, J W Hair, G S Diskin, C Clerbaux, P Coheur, D Hurtmans, H Schlager, A Blechschmidt, J E Kristjansson


A31H Moscone West: 3008 Wednesday 0800h Local-Scale Atmospheric Monitoring and Modeling for Exposure Assessment I

Presiding: L D Lemke, Wayne State University; X Xu, University of Windsor; R Cook, US Environmental Protection Agency

0800h A31H-01 Using Mobile Monitoring to Assess Spatial Variability in Urban Air Pollution Levels: Opportunities and Challenges (Invited): T Larson
0820h **A311-H2** Evaluation of the Quick Urban and Industrial Complex (QUIC) Modeling System to Predict Ultrafine Particle Levels in an Urban Neighborhood near a Highway: A St. Vincent, C Milano, S Zhu, W Zamore, D Brugge, J Durant

0835h **A311-H3** Local-Scale Exposure Assessment of Air Pollutants in Source-Impacted Neighborhoods in Detroit, MI (Invited): A F Vette, S Berezicki, J Sobus, G Norris, R Williams, S Baterno, M Breen, V Isakov, S Perry, D Heist, Title of Team: Community Action Against Asthma Steering Committee

0855h **A311-H4** Assessing Local-Scale Air Quality Modeling for PM2.5 for Exposure Modeling Applications: K Wesson, K Baker, J Burke

0910h **A311-H5** Use of Cokriging to Improve Spatial Resolution of Ambient Airborne Contaminant Concentration Estimates in Detroit and Windsor: L D Lemke, S M Bobryk, X Xu

0925h **A311-H6** Local-Scale Air Quality Modeling in Support of Human Health and Exposure Research (Invited): V Isakov

0945h **A311-H7** A subgrid scale scheme accounting for concentration variability due to heterogeneous emissions in chemistry-transport models: M Valari, V Isakov

**Atmospheric and Space Electricity**

**AE31A Moscone West: 3007** Wednesday 0800h

**Volcano Lightning I (joint with V, A)**

*Presiding:* A A Few, Rice University; P R Krehbiel


0815h **AE31A-02** Electrical charging of explosive volcanic plumes (Invited): M R James, S J Lane, J S Gilbert

0830h **AE31A-03** Volcanic Lightning: Review of Global Observations and the Role of Water (Invited): S R McNutt, E Williams

0845h **AE31A-04** Global detection of explosive volcanic eruptions with the World Wide Lightning Location Network (WWLLN) and application to aviation safety (Invited): J W Ewert, R H Holzworth, A K Diefenbach

**AE31B Moscone West: 3007** Wednesday 0900h

**Electricity and Lightning in Thunderstorms II (joint with A)**

*Presiding:* M Stolzenburg, University of Mississippi; T Marshall, University of Mississippi; W P Winn, New Mexico Tech

0900h **AE31B-01** Remote Sensing of Electric Atmospheric Field Produced by Storm Cloud With an Instrumented Aircraft: P A Laroche, A Delannoy, P Blanchet, P Lalande

0915h **AE31B-02** Three-dimensional mapping of lightning currents using LINET VLF magnetic sensors: H D Betz, T Marshall, M Stolzenburg, G Wieczorek

0930h **AE31B-03** Lightning Observations with the Upgraded Lannguir Lab Lightning Mapping Array: W Rison, P R Krehbiel, S Hunyady, H E Edens, G D Aulich

0945h **AE31B-04** Lightning Mapping and Electric Field Change Observations of a Stationary New Mexico Storm: P R Krehbiel, W Rison, S J Hunyady, H E Edens, R G Sonnenfeld, G D Aulich

**Biogeosciences**

**B31A Moscone South: Poster Hall Wednesday 0800h**

**Climate and the Nitrogen Cycle I Posters (joint with A, V)**

*Presiding:* C L Goodale, Cornell University; P G Hess, cornell

0800h **B31A-0283** POSTER Modeling N2O emissions from Japanese tea fields with modified DNDC model: Y Kwack, K Kobayashi, C Li

0800h **B31A-0284** POSTER Subsoil Denitrification experiment at KBS MSU: I Skrberak, G P Robertson

0800h **B31A-0285** POSTER Global greenhouse gas balance induced by nitrogen addition: Modeling annual fluxes of CO2, CH4 and N2O from 1948 to 2008: C Lu, H Tian, X Xu, M Liu, W Ren

0800h **B31A-0286** POSTER Field observations and process-based model predictions of methane flux in a pine forest soil: E L Aronson, B R Helliker

0800h **B31A-0287** POSTER Bedrock Nitrogen Contributions to Increased Carbon Storage in Temperate Conifer Forests of Northern California, USA: S L Morford, B Z Houlton, R A Dahlgren

**B31B Moscone South: Poster Hall Wednesday 0800h**

**Determining the Controls of Terrestrial Net Ecosystem Exchange and Related Processes at Regional to Global Scales I Posters (joint with A)**

*Presiding:* C Yi, Queens College, CUNY; D M Ricciuto, Oak Ridge National Laboratory; B N Sulman, U. of Wisconsin-Madison

0800h **B31B-0288** POSTER Carbon Fluxes in a Managed Landscape: Assessing the Drivers of Temporal and Spatial Variability in Flux Tower, MODIS and Forest Inventory Data of the Pacific Northwest: S Wharton, K Bible, M Falk, K Paw U

0800h **B31B-0289** POSTER Bioclimatic limitations on global tree distributions: J A Greenberg, S Z Dobrowski, M Santoso, V C Vanderbilt, S Ustin

0800h **B31B-0290** POSTER Environmental Controls on Soil Respiration in Semiarid Ecosystems: The Role of the Vertical Distribution of Soil Moisture: A L Neal, S Kurc, P D Brooks

0800h **B31B-0291** POSTER Effects of climate change and plantation on carbon budget of coniferous forests in Poyang Lake Basin from 1981 to 2008: S Wang, Y Yan, H Nie, L Zhou, Y Zhang

0800h **B31B-0292** POSTER Carbon accumulation and allocation in a primary Bornean tropical rainforest: A Katayama, H Komatsu, T Kume, M Ohashi, M Nakagawa, K Otsuki, T Kumagai

0800h **B31B-0293** POSTER Light, Soil Temperature, and VPD as controls of flux-tower NEE partitioning into gross photosynthesis and respiration in grassland and agricultural ecosystems: T G Gilmanov

0800h **B31B-0294** POSTER Net ecosystem fluxes for the Iberian Peninsula: a bottom-up approach integrating eddy-covariance data and remote sensing-based diagnostic modeling: N Carvalhais, M Reichstein, G J Collatz, M D Mahecha, M Migliavacca, C S Neigh, E Tomelleri, A A Benali, D Papale, J Seixas

0800h **B31B-0295** POSTER Coupling WRF and the land surface model ACASA for Future Carbon Dioxide Simulation: L Xu, R D Pyles, K Paw U

0800h **B31B-0296** POSTER Impacts of inter-annual vegetation changes on climate simulation in HadGEM2: S Park, H Kang, Y Byun, J Lee, Title of Team: Climate Modeling Team

0800h **B31B-0297** POSTER Improved parameterization of managed grassland in a global process-based vegetation model using Bayesian statistics: S Rolinski, C Muller, H Lorze-Campen, A Bondeau
0800h  B31B-0298 POSTER Seasonal and spatial variations of carbon fluxes of arctic and boreal ecosystems in Alaska: M Ueyama, H Iwata, Y Harazono, E S Euskirchen, W C Oechel, D Zona, K Ichii
0800h  B31B-0299 POSTER Assessment of Ecosystem Respiration Dependence on the Soil Temperature: M Kondo, K Ichii
0800h  B31B-0300 POSTER Estimating Wetland Extent in Land Surface Models: P M Kraus, A Denning

0800h  B31B-0301 POSTER The Influence of Treefall Gap Size on Carbon and Nitrogen Biogeochemistry in Late-Successional Hardwood Forests of the Upper Great Lakes Region: S A Schliemann, J Bockheim
0800h  B31B-0302 POSTER Relationships between NEP and water table position in a western Canadian poor fen during a wet and a dry year: A Malhotra, R Wieder, D H Vitt, M A Vile, K Scott
0800h  B31B-0303 POSTER Interpretation of Variations in MODIS-Measured Greenness Levels of Amazon Forests During 2000 To 2009: A Samanta, S Ganguly, E F Vermote, R R Nemani, R B Myneni

0800h  B31B-0304 POSTER Strategies to design and place towers for long-term ecological observations at continental scale: H Luo, H W Loescher, E Ayres, R Clement
0800h  B31B-0305 POSTER Relating Plant Carbon Exchange with Reflectance Spectroscopy: S A Long, K F Huemmrich, L Corp
0800h  B31B-0306 POSTER Seasonal Dynamics of Boreal Forest Structure and Reflectance: M Rautiainen, J Heiskanen
0800h  B31B-0307 POSTER Canopy Structure and Spectral Leaf Albedo from Multiangular Imaging Spectroscopy: M Mottus, M Rautiainen, P Lukes
0800h  B31B-0308 POSTER Modeling high resolution space-time variations in energy demand/CO2 emissions of human inhabited landscapes in the United States under a changing climate: A V Godbole, K R Gurney

0800h  B31B-0309 POSTER Future CO2 Emissions and Climate Change from Existing Energy Infrastructure: S J Davis, K Caldeira, D Matthews
0800h  B31B-0310 POSTER Scaling up food production in the Upper Mississippi river basin: modeling impacts on water quality and nutrient cycling: E E Bowen, P A Martin, T J Schuble, E Yan, Y Demissie

B31C  Moscone South: Poster Hall Wednesday 0800h Linkages in Biogeochemical Cycles Between the Surface Ocean and Lower Atmosphere Over the Pacific Ocean I Posters (joint with A, GC, OS, V)

Presiding: M Uematsu, The University of Tokyo

0800h  B31C-0311 POSTER Analyses of the long-range transport of nitrogenous species through the atmosphere from the Asian continent using observational data at Cape Hedo, Okinawa, and CMAQ postanalyses: Y Sadanaga, H Bandow, I Uno, T Sera, A Yuba, N Takenaka, A Takami, J Kurokawa, S Hatakeyama
0800h  B31C-0312 POSTER The diurnal variation of total odd nitrogen oxides species, gaseous nitric acid and particulate nitrate in the southern remote island, Japan, facing the Asian Continent: A Yuba, Y Sadanaga, T Sera, A Takami, S Hatakeyama, N Takenaka, H Bandow
0800h  B31C-0313 POSTER Distribution of atmospheric particulate nitrogen and phosphorus over the North and South Pacific: J Jung, H Furutani, H Ogawa, M Uematsu
0800h  B31C-0314 POSTER Tracing atmospheric nitrate deposited onto western north Pacific ocean: D D Komatsu, U Tsunogai, S Daita, U Kommo, S Ohkubo, F Nakagawa

0800h  B31C-0315 POSTER A Year-round Observation of Size Distribution of Aerosol Particles at the Cape Ochiishi, Japan: K Miura, H Muki, S Hashimoto, M Uematsu
0800h  B31C-0316 POSTER Optimization of dynamic headspace extraction system for measurement of halogenated volatile organic compounds in liquid or viscous samples: G Tanai, H Oda, M Kurihara, S Hashimoto
0800h  B31C-0317 POSTER Production of volatile organic compounds in cultures of cryptophytes: Y Yamakoshi, M Kurihara, S Hashimoto

0800h  B31C-0318 POSTER Measurements of isoprene in surface seawater of the Indian and the Pacific Oceans: A Ooki, T Kodama, K Furuya, S Takeda, A Tsuda, Y Yokouchi
0800h  B31C-0319 POSTER Stratospheric halogens from the western Pacific ocean: B Quack, K Krueger, S Tegtmeier, E L Atlas, A Bracher, T Dinter, S Wache, D Wallace

0800h  B31C-0320 POSTER Effect of metal complex formation on the potential of organic aerosols as cloud condensation nuclei: T Furukawa, Y Takahashi

0800h  B31C-0321 POSTER Impact of Kilauea volcano eruption in 2008 for the volcanic sulfate distribution and cloud/radiation property changes over the central/western North Pacific region: K Eguchi, I Uno, K Yumimoto, T Takemura, M Toratani, H Fukushima, H Furutani, M Uematsu

0800h  B31C-0322 POSTER Numerical analysis of long-range trans-boundary pollution during the 2008 W-PASS field campaign at Cape Hedo, Okinawa: S Itahashi, I Uno, K Yamaji, A Takami, K Osada, H Furutani, M Uematsu

0800h  B31C-0323 POSTER Direct Measurement of Turbulent Particle and Gas Fluxes by Eddy Covariance Technique: F Kondo, F Griessbaum, O Tsukamoto, M Uematsu

0800h  B31C-0324 POSTER High-resolution measurement of DMS and volatile organic compounds dissolved in seawater using equilibrator inlet-proton transfer reaction-mass spectrometry (EI-PTR-MS): S Kameyama, H Tanimoto, S Inomata, U Tsunogai, A Ooki, Y Yokouchi, S Takeda, H Obata, A Tsuda, M Uematsu

0800h  B31C-0325 POSTER CO2 and DMS Flux measurement by the profiling buoy system: T Iwata, S Kameyama, H Tanimoto

0800h  B31C-0326 POSTER Determination of dissolved Fe(II) in seawater of the western North Pacific with luminol chemiluminescence method: H Obata, A Mase, T Gamo, J Nishioka, S Takeda

0800h  B31C-0327 POSTER Cycling of Dissolved Organic Phosphorus and Alkaline Phosphatase Activity in Euphotic Zone of the Western North Pacific: M Suzumura

0800h  B31C-0328 POSTER C:N RATIO AND BIODEGRADABILITY OF DISSOLVED ORGANIC MATTER IN SURFACE WATERS ALONG THE LONGITUDINAL SECTIONS ACROSS THE NORTH PACIFIC: H Ogawa, H Fukuda, I Koike

0800h  B31C-0329 POSTER Oxygen production/consumption rates in the upper layer of the northwestern subtropical North Pacific: K Tsubono, T Suga, C Sukigara, T Kobayashi, S Hosoda

0800h  B31C-0330 POSTER The estimate of the denitrification using nitrogen gas excess in the Sea of Okhotsk: M Ito, Y Watanabe, S S Tanaka, T Ono, J Nishioka, T Nakatsuka

0800h  B31C-0331 POSTER The annual cycle of surface iron and the source of iron supporting the spring diatom bloom in the Oyashio region, western subarctic Pacific: J Nishioka, T Ono, H Saito, K Sakaoka, T Yoshimura, S Matoba

0800h  B31C-0332 POSTER Primary production enhancement by typhoon in Western North Pacific over a decade from 1998 to 2007: M Toratani, K Suzuki, A Tsuda, S Saitoh
**2010 Fall Meeting**

**B31C-0333 POSTER** Secular Trend and Decadal Variability found in a New Global Gridded Phosphate Dataset: S Minobe, Y Hosoya, M Urasawa

---

**B31D Moscone South: Poster Hall Wednesday 0800h**

North American Carbon Program Synthesis Results and Similar Model-Data Comparisons I Posters (joint with GC)

**Presiding:** K M Schaef er, National Snow and Ice Data Center; S M Ogle, Colorado State University; D N Huntzinger, University of Michigan; L Goncalves, NASA and University of Maryland

0800h **B31D-0334 POSTER** Identifying the timescales of model error: NACP inter-comparison wavelet analysis: M C Dietze, R Vargas, P C Stoy, A D Richardson, Title of Team: NACP Site-Level Interim Synthesis Team

0800h **B31D-0335 POSTER** Sensitivity of modeled carbon pools and fluxes to biases in reanalysis meteorology forcing data: D M Ricciuto, P E Thornton, R B Cook, N Site Interim Synthesis Participants

0800h **B31D-0336 POSTER** EVALUATION OF SITE AND CONTINENTAL TERRESTRIAL CARBON CYCLE SIMULATIONS WITH NORTH AMERICAN FLUX TOWER OBSERVATIONS: B M Raczk a, K J Davis, N Regional-Interim Synthesis Participants, N Site Level Interim Synthesis, Title of Team: Regional/Continental Interim Synthesis Team

0800h **B31D-0337 POSTER** North American Carbon Program (NACP) Interim Synthesis Project: Regional Forward Model Intercomparison (Invited): M Post, D N Huntzinger, A M Michalak, Y Wei, A R Jacobson, R B Cook, N Regional-Interim Synthesis Participants, Title of Team: Regional/Continental-Interim-Synthesis Team

0800h **B31D-0338 POSTER** Regional-scale NEE estimates over 4 flux towers in the US: X Dang, C Lai, D Y Hollinger, J W Munger, K Paw U, C Owensby, S C Wofsy, A Schauer, J Ehleringer

0800h **B31D-0339 POSTER** Understanding the mechanisms behind observed biomass dynamics at 10 Amazonian field sites: a model-data intercomparison: N M Levine, D Galbraith, N Restrepo-Coupe, H A Imbuzeiro, B J Christoffersen, L Goncalves, S R Saleska, Y Malhi, M H Costa, P R Moorcroft


0800h **B31D-0341 POSTER** Land surface model parameterization strategies and North American regional CO2 flux interannual variability examined with a simple land surface model: T W Hilton, K J Davis, K Keller

0800h **B31D-0342 POSTER** A Contemporary Assessment of Lateral Fluxes of Organic Carbon in Inland Waters of the USA and Delivery to Coastal Waters: E W Boyer, R B Alexander, R A Smith, J Shih, G E Schwarz

---

**B31E Moscone South: Poster Hall Wednesday 0800h**

Regional Biosphere-Atmosphere Interactions in Complex Terrain: Processes and Feedbacks Among Nutrients, Water, and Climate I Posters (joint with H, A, GC)

**Presiding:** D Riveros-Iregui, University of Nebraska; J Hu, NCAR; A R Desai, University of Wisconsin - Madison

0800h **B31E-0343 POSTER** Spatial Variation of Surface Fluxes Measured in the Canopy Sublayer of a Mountainous Cryptomeria Forest: C Hsieh, S Cheng, Title of Team: Environmental Physics
B31F Moscone South: Poster Hall Wednesday 0800h
Regional Land and Ocean Carbon Budgets | Posters (joint with A, OS)

Presiding: J Canadell, CSIRO Marine & Atmospheric Res; A J Dolman, VU University Amsterdam; P Ciais, CEACNRS-UVSQ

0800h B31F-0360 POSTER CO2/CH4 flux inversion from cavity ring-down spectroscopy measurement at Zotino Tall Tower Observatory (ZOTTO) in Central Siberia: J Winderlich, C Gerbig, H Chen, C Roedenbeck, K Trusilova, A V Panov, M Heimann
0800h B31F-0361 POSTER Observationally based surface fluxes of CH4 and N2O, and fossil fuel-derived CO2 for a 300 x 100 km region (the Netherlands): S V Laan, U Karstens, R Neubert, I V Laan-Luijkx, H A Meijer
0800h B31F-0362 POSTER US Stream and River CO2 Evasion from the Bottom Up: D E Butman, P Raymond
0800h B31F-0363 POSTER Interannual variances of CO2 flux and primary production in the Southern Ocean: S Wang, J K Moore
0800h B31F-0364 POSTER Spatial and temporal variability of sea-air CO2 fluxes in the tropical Atlantic Ocean: X Wang, R G Murtugudde, E C Hackert, A J Busalacchi
0800h B31F-0365 POSTER Variations of the three-dimensional atmospheric CO2; implications for carbon budget from model simulations and aircraft measurements: Y Niwa, P K Patra, Y Sawa, T Machida, H Matsueda, D Belikov, M Ikegami, T Maki, S Maksyutov, T Oda, R Imamu, M Satoh
0800h B31F-0366 POSTER A Terrestrial Ecosystem Full Verified Carbon Accounting for Russian Land: Results and Uncertainty: A Shvidenko, D Schepaschenko, S Maksyutov
0800h B31F-0367 POSTER Evaluating the role of prior information in atmospheric inverse modeling frameworks through comparison with geostatistical inverse modeling techniques: M Goecckede, V Yadav, A M Michalak, B E Law
0800h B31F-0368 POSTER Climate Variability Impact on Regional Carbon Fluxes over Temperate and Boreal North America: X Zhang, K R Gurney
0800h B31F-0369 POSTER Constructing a carbon cycle analysis system with the local ensemble transform Kalman filter and online transport model: T Maki, T T Sekiyama, K Shibata, K Miyazaki, T Miyoshi, K Yamada, T Iwasaki
0800h B31F-0370 POSTER Optimizing Monthly Grid-based CO2 Fluxes with 4D-Var Data Assimilation Technique: R Saito, S Maksyutov
0800h B31F-0371 POSTER The Australian terrestrial carbon budget: preliminary results: J Canadell, V Haverd, M R Raupach, R Law, M Meyer, C Pickett-Heaps
0800h B31F-0372 POSTER Export Production in the Southern Ocean Estimated from Satellite Ocean Color Data and Seasonal Variations in Atmospheric Potential Oxygen: C D Nevison, R F Keeling, M Kahru, M Manizza, M A Charette, K Maiti
0800h B31F-0373 POSTER Recovering CO2 Fluxes with Different Observation Schemes: R S Lokupitiya, D F Baker, D Zupanski, A Denning, S R Kawa, I T Baker, K R Gurney, S C Doney, M Zupanski
0800h B31F-0374 POSTER Comparing Helicopter-based Eddy Flux Measurements with Highly Resolved Bottom-up Land Surface Model Predictions: S C Biraud, W J Riley, M S Torn, R Avisar, M A Bolch
0800h B31F-0375 POSTER Combined Effects of Wind and Rain on Air-Water Gas Exchange: S Eggleston, E Harrison, D T Ho, F Veron
0800h B31F-0376 POSTER Regional Eddy Covariance Measurements of CO2 Exchange from a Tall Tower near Boulder, Colorado: E B Graham, D E Wolfe, P Blanken

B31G Moscone West: 2005 Wednesday 0800h
Carbon Dynamics in Fire-Prone Forests | Posters (joint with GC)

Presiding: M Hurteau, Northern Arizona University; H Zald, Oregon State University

0800h B31G-01 Mitigation of emissions from wildfires in Australia: potential for use of managed prescribed fire in eucalypt dominated vegetation, present and future. (Invited: R Bradstock, O Price, D Williams, L Hutley
0820h B31G-02 Wildfire effects on carbon stocks and emissions in fuels treated forests (Invited: M North, M Hurteau
0900h B31G-04 Potential impact of forest management and increased area burned on the C balance of Canada’s managed forest in the 21st century. (Invited: J Metsaranta, W A Kurz, G Stinson, E Neilson, Title of Team: Canadian Forest Service Carbon Accounting Team
0920h B31G-05 Assessing Potential Future Carbon Dynamics with Climate Change and Fire Management in a Mountainous Landscape on the Olympic Peninsula, Washington, USA: R S Kennedy
0940h B31G-06 Greenhouse Gas and Criteria Air Pollutant Emission Reductions from Forest Fuel Treatment Projects in Placer County, California: D S Saah, M Moritz, D J Ganz, P A Stine, T Moody

B31H Moscone West: 2006 Wednesday 0800h
Foundations for Earth System Stewardship | Posters (joint with A, GC, OS, H)

Presiding: R B Jackson, Duke University; J W Harden, U.S.Geological Survey

0800h B31H-01 Planetary Biogeochemical Stewardship (Invited): W H Schlesinger
0820h B31H-02 The Role of Terrestrial Ecosystems in Earth-System Resilience and Thresholds (Invited): I Fung
0840h B31H-03 Implications of a changing climate for river systems (Invited): D P Lettenmaier
0900h Discussion 15 minute discussion
0915h B31H-04 The Other Inconvenient Truth: Feeding 9 Billion While Sustaining the Earth System: J A Foley
0930h B31H-05 Satellite Supported Estimates of Human Rate of NPP Carbon Use on Land: Challenges Ahead: M L Imhoff, L Bounoua, P Zhang, R E Wolfe
0945h B31H-06 SOCIAL-ECOLOGICAL CONTROLS OVER EARTH-SYSTEM STEWARDSHIP: A FRAMEWORK FOR SUSTAINABILITY IN A RAPIDLY CHANGING WORLD: F S Chapin, M E Power, S Pickett, R B Jackson, D Carter, J W Harden
Global Soil Change: Mechanisms of Carbon Stabilization and Response I (joint with GC, EP)

**Presiding:** K Lajtha, Oregon State University; N Cavallaro, USDA/CSREES

0800h B31I-01 Long-term carbon stabilization through sorption of dissolved aromatic acids to reactive particles (Invited): M G Kramer, J Sanderman, O Chadwick, J Chorover, P Vitousek


0830h B31I-03 Stabilization of labile organic C along a chronosequence of soil development: mineralogical vs. biological controls: J W McFarland, M P Waldrop, D Srawn, J W Harden


0900h B31I-05 Effects of land use and mineral characteristics on the organic carbon content, and the amount and composition of Na-pyrophosphate soluble organic matter in subsurface soils: R Ellerbrock, M Kaiser, K Walter, M Sommer

0915h B31I-06 The response of amino acid cycling to global change across multiple biomes: Feedbacks on soil nitrogen availability: E R Brzostek, A C Finzi

0930h B31I-07 Controls on the fate, structure and function of dissolved organic carbon and nitrogen in a California grassland, oak woodland and conifer ecosystem: S L Pittiglio, R Zasoski

0945h B31I-08 Quantifying Natural Organic Matter with Calorimetry – assessing system complexity to build a central view of C stability: G C Liles, J Bower, Y Henneberry, W R Horwath

How Does Landscape Affect Solute Movement to Aquatic Ecosystems? I (joint with H)

**Presiding:** D A Burns, U.S. Geological Survey; S D Sebestyen, USDA Forest Service; J B Shanley, U.S. Geological Survey

0800h B31J-01 Coupled ecosystem-geomorphic controls on the generation and transport of nitrogen through watersheds (Invited): L E Band, T Hwang, J M Duncan, C Tague

0815h B31J-02 LiDAR-derived spatial models of hydrological and biogeochemical source areas to improve estimates of terrestrial-aquatic mercury export in northern forested landscapes: M C Richardson, C P Mitchell, B A Branfireun, R K Kolka, M Fortin

0830h B31J-03 Searching for Similarity in Catchment Controls on Complex C, N, and P Export Patterns from Forests to Surface Waters across Continental Scale Gradients (Invited): I F Creed

0845h B31J-04 Climatic Variations And Ecosystem Disturbances As Drivers Of Chemical Mass Fluxes From Forested Ecosystems To Surface Waters: K N Eshleman, K M Kline, B E McNeil, P A Townsend

0900h B31J-05 Hydrological landscape analysis – quantifying topographic controls on riparian zone hydrology (Invited): J Seibert, T J Grabs, K H Bishop, H Laudon

0915h B31J-06 Connecting the terrestrial and aquatic system across scales: Towards improved tools to assess the vulnerability of surface waters: H Laudon

Landscape structure controls on watershed DOC export (Invited): B L McGlynn, V J Pacific, K G Jencso

Use of regression-based models to map sensitivity of aquatic resources to atmospheric deposition in Yosemite National Park, USA: D W Clow, L Nanus, B W Huggett

Cryosphere

The Legacy and Fate of Permafrost: Geochemical, Geophysical and Geomorphic Aspects I Posters (joint with EP, H, GC)

**Presiding:** S A Ewing, Montana State University; A K Liljedahl, University of Alaska, Fairbanks; J O’Donnell, UAF

0800h C31A-0489 POSTER Use of DC Resistivity Tomography to Investigate Thermokarst Features, Toolik Lake area, Alaska, USA: A G Lewkowicz, S Godsey, M N Goossef

0800h C31A-0490 POSTER Distribution and local hydrographic impact of rapid permafrost degradation by thermo-erosion and gullying of ice-wedge polygons in glacier valley C-79 on on Bylot Island, Nunavut, Canada: E Godin, D Fortier

0800h C31A-0491 POSTER Deployment of an Ecosystem Warming Prototype at the Fairbanks Permafrost Experiment Station: A M Wagner, J E Zufelt, S D Willscherle

0800h C31A-0492 POSTER Modeling of permafrost dynamics at two different biophysical settings near Dry Creek, Interior Alaska: S K Panda, S Marchenko, A Prakash, V E Romanovsky

0800h C31A-0493 POSTER Assessing differences in topographic form between arctic and temperate drainage basins: Possible implications for dominant erosion processes: J P Prancevic, J C Rowland, C J Wilson, P Marsh, H Wilson

0800h C31A-0494 POSTER Preliminary findings of the Government of Yukon Infrastructure Vulnerability to Permafrost Degradation Project: S C Laxton

0800h C31A-0495 POSTER Organic carbon and fine sediment production potential from decaying permafrost in a small watershed, Sheldrake River, Eastern coastal region of Hudson Bay: M Jolivel, M Allard

0800h C31A-0496 POSTER “What comes up ... must come down”: Peat carbon and mineral-interactions in Arctic Coastal tundra: T K Raab, D Lipson, N P Crook, K Miller, F Bozzolo

0800h C31A-0497 POSTER Periglacial Landscape Stabilization Following Rapid Permafrost Degradation by Thermo-erosion, Bylot Island, Nunavut, Canadian Arctic Archipelago: D Fortier, E Godin, N Perreault, E Levesque

0800h C31A-0498 POSTER Regional Permafrost Probability Modelling in the northwestern Cordillera, 59°N - 61°N, Canada: P P Bonnaveurent, A G Lewkowicz

0800h C31A-0499 POSTER Investigation of the energy-based theory of runoff in arctic regions with a hydrological model that couples the heat and water balance: W L Quinton, S Endrizzi, P Marsh

0800h C31A-0500 POSTER Holocene thermokarst lake formation and development in areas of ice, organic rich permafrost: L M Farquharson, K Walter Anthony, N H Bigelow, G Grosse, M E Edwards

0800h C31A-0501 POSTER Thermokarst Associations with Landscape Characteristics in Arctic Alaska: Implications for Future Permafrost Degradation at Landscape to Regional Scales: A Balser, J B Jones, T Jorgenson

0800h C31A-0502 POSTER Mapping Active-Layer Thickness in an Urban Area Using the Modified Berggren Solution: A Klene, F E Nelson
Education and Human Resources

ED31A  Moscone South: Poster Hall  Wednesday 0800h
Broader Impacts: Successful Models and Measuring Their Effectiveness I Posters (joint with OS, PA)

Presiding: L A Hotaling, Beacon Institute; S M Buhr, University of Colorado

0800h  ED31A-0605 POSTER Google Mercury: The Launch of a New Planet: B Hirshon, C R Chapman, J Edmonds, J Goldstein, K G Hallau, S C Solomon, H Vanhala, H M Weir, Title of Team: MESSENGER Education and Public Outreach (EPO) Team

0800h  ED31A-0606 POSTER How to use students to do the education & outreach you don’t have time for: S Renfrow, E L Wood, R Christofferson

0800h  ED31A-0607 POSTER Canopy In The Clouds: Achieving Broader Impacts in Graduate Student Research: G R Goldsmith, A D Fulton, C D Witherell, E E Dukeshire, T E Dawson

0800h  ED31A-0608 POSTER Integrating Scientists into Teacher Professional Development—Strategies for Success: S E Lynds, S M Buhr, L K Smith

0800h  ED31A-0609 POSTER The age of citizen science: Stimulating future environmental research: S N Burgess

0800h  ED31A-0610 POSTER How Bigelow Laboratory Measured Broader Impacts: The Case Study of the Evaluation of the Keller BLOOM Program (Invited): R A Fowler, J Repa

0800h  ED31A-0611 POSTER COSEE NOW: An online community for scientists and educators: C Ferraro, C S Lichtenwalner, S M Glenn, J D McDonnell

0800h  ED31A-0612 POSTER Better Broader Impacts through National Science Foundation Centers: K M Campbell

0800h  ED31A-0613 POSTER Hurricanes: Science and Society – An Online Resource Collaboratively Developed by Scientists, Education and Outreach Professionals, and Educators: G Scowcroft, I Ginis, C W Knowlton, R M Yablonsky, H Morin


0800h  ED31A-0615 WITHDRAWN

ED31B  Moscone West: 3011  Wednesday 0800h
Innovations in Observing and Modeling Components of the Cryosphere II (joint with EP, NG)

Presiding: J N Bassis, University of Michigan; U C Herzfeld, Univ Colorado Boulder; M R Anderson, University of Nebraska; D R MacAyeal, University of Chicago; H Mayer, University of Colorado; O V Sergienko, Princeton University

0800h  C31B-01 SeaRISE: Modelling the present-day state and future evolution of the Greenland Ice Sheet with the models SICOPOLIS and IcePol (Invited): R Greve, F Saito, A Abe-Ouchi

0815h  C31B-02 Large scale inversion of basin stress in Greenland, using higher order and full-Stokes models: E Y Larour, E J Rignot, M Mornighem, H Serosu

0830h  C31B-03 A Glacier Bed DEM for Jakobshavn Trough as Input for Dynamic Ice Sheet Models: B F Wallin, U C Herzfeld, C Leuschen

0845h  C31B-04 Required Bedrock Accuracy to Model Antarctic Ice Dynamics: G Durand, L Favier, O Gagliardini, T Zwinger, E le Meur

0900h  C31B-05 A multi-dataset approach to developing time series of Arctic and sub-Arctic snow extent and snow water equivalent (Invited): C Derksen, R Brown, L Wang

0915h  C31B-06 Development of a Climate-Data Record of the Surface Temperature of the Greenland Ice Sheet (Invited): D K Hall, J C Comiso, N E DiGirolamo, C A Shuman

0930h  C31B-07 Development of passive microwave cryospheric climate data records (Invited): W Meier, J A Maslanik, C Fowler, R E Duerr, J C Stroeve, Title of Team: NOAA Product Development Team for Snow and Ice Climate Data Records

0945h  C31B-08 Streamflow Response to Snowcover Variation in the Large Northern Rivers (Invited): D Yang, D A Robinson, R L Armstrong

C31B  Moscone West: 3011  Wednesday 0800h
Innovations in Observing and Modeling Components of the Cryosphere II (joint with EP, NG)

Presiding: J N Bassis, University of Michigan; U C Herzfeld, Univ Colorado Boulder; M R Anderson, University of Nebraska; D R MacAyeal, University of Chicago; H Mayer, University of Colorado; O V Sergienko, Princeton University

0800h  C31A-0503 POSTER Thermal-moisture dynamics in the active layer of central Qinghai-Tibetan plateau: Z Wen, T Zhang, W Ma, Q Wu, W Feng, C Zhou

0800h  C31A-0504 POSTER Soil responses to rapid warming events inside and outside of thermokarst features during the snow season in arctic Alaska: M N Goosef, S Godsey, A G Lewkowicz, K Lanan

0800h  C31A-0505 POSTER Predicting permafrost stability in northern peatlands with climate change and disturbance: C C Treat, D Wisser, S Marchenko, E R Humphreys, S E Froliking, K F Huemmrich


0800h  C31A-0507 POSTER ESA Data User Element PERMAFROST: a spaceborne permafrost monitoring and information system: A Bartsch, B Heim, J Boike, K Elger, S Muster, M Langer, S Westermann, J Slobiech

0800h  C31A-0508 POSTER Constructing a Temporal and Spatial Record of Lightning Strikes in Arctic Alaska: Discerning between increased strike frequency and increased detection capability: B T Crosby

0800h  C31A-0509 POSTER Geotechnical investigations of the ice-rich syngenetic permafrost in Interior Alaska: M Z Kanevskiy, Y Shur, B Connor, M R Dillon, S Masterman, J A O’Donnell, J Rowland, E Stephani

0800h  C31A-0510 POSTER Impacts of wildfire on the permafrost soil in tundra area, Seward Peninsula, Alaska: K Harada, K Narita, K Saito, Y Sawada, M Fukuda
0800h  ED31B-0620 POSTER Next Generation Lunar Scientists and Engineers Group: EPO for the NextGen: N E Petro, L Bleacher, J E Bleacher, D Santiago, S K Noble

0800h  ED31B-0621 POSTER Moon Zoo: Educating side-by-side with Doing Science (Invited): P L Gay, Title of Team: Moon Zoo Team

0800h  ED31B-0622 POSTER The Lunar Science Education Vision: Bringing the Moon to All of Us! (Invited): E A Cobabe-Ammann, S S Shipp

0800h  ED31B-0623 POSTER The NASA Lunar Science Institute Education and Public Outreach Program: D Daou

0800h  ED31B-0624 POSTER Lunar Quest in Second Life, Lunar Exploration Island, Phase II: F M Ireton, B H Day, B Mitchell, B C Hsu

0800h  ED31B-0625 POSTER Educating the Next Generation of Lunar Scientists: A J Shaner, S S Shipp, J S Allen, D A Kring

0800h  ED31B-0626 POSTER Examining the Motivation and Learning Strategies Use of Different Populations in Introductory Geosciences: K Van Der Hoeven Kraft, J A Stempien, A Bykerk-Kauffman, M H Jones, R K Matheney, D McConnell, D Perkins, M J Wilson, K R Wirth

0800h  ED31B-0627 POSTER Community-Based Science: A Response to UCSD’s Ongoing Racism Crisis: B werner, A Barraza, R Macgurn

0800h  ED31B-0628 POSTER Every Student Counts: Broadening Participation in the Geosciences through a Multiyear Internship Program: V Sloan

0800h  ED31B-0629 POSTER Outreach to Inspire Girls in Geology: A Recipe for Success (Invited): L Kekelis

0800h  ED31B-0630 WITHDRAWN

0800h  ED31B-0631 POSTER The Ocean Carbon and Biogeochemistry (OCB) Program: H M Benway

0800h  ED31B-0632 POSTER Learning About Energy Resources Through Student Created Video Documentaries in the University Science Classroom: P Wade, A Courtenay

0800h  ED31B-0633 POSTER Earthquake Precursors in Thermal Infrared Data: S S Alqassim, V C Vanderbilt

0800h  ED31B-0634 POSTER Korean Elementary School Students’ Perceptions of Earth Scientists: E Kim, H Lee, P Oh

0800h  ED31B-0635 POSTER Dual US-Europe Graduate Degrees in Volcanology: W I Rose, B Van Wyk deVries, E S Calder, A Tibaldi

0800h  ED31B-0636 POSTER Retention of Information as a Function of Lesson Design for Middle School Studies of Wetlands in New Jersey: A Parsekian, C Cimiluca, A E Gates, I Calderon

0800h  ED31B-0637 POSTER The Capitol College Space Operations Institute: A Partnership with NASA: M G Gibbs

0800h  ED31B-0638 POSTER Introducing Pre-Service Teachers to Google Earth, Internet-Accessible Data, and Photochemical Smog: M J Urban

0800h  ED31B-0639 POSTER Clouds, weather, climate, and modeling for K-12 and public audiences from the Center for Multi-scale Modeling of Atmospheric Processes: S Q Foster, R M Johnson, D A Randall, A Denning, R M Russell, L S Gardiner, B Hatheway, B Jones, M A Burt, J Genyuk

0800h  ED31B-0640 POSTER Importance of Technical Writing in Engineering Education: M Narayanan

0800h  ED31B-0641 POSTER Virtual Workshop Experiences for Faculty: Lessons Learned from On the Cutting Edge: J R McDanis, K B Kirk, D W Mogk, M Z Bruckner

0800h  ED31B-0642 POSTER Tuned in to the Earth from the classroom with ‘O3E’ european project: J BERENGUER, F Courboulex, A Tocheport, C Eva, G Ferretti, S Solarino, D Giardini, A Sornette, M Ponzone, R Cremonini, J Virieux

0800h  ED31B-0643 POSTER The C-MORE Scholars Program: Engaging minority students in STEM through undergraduate research: B A Gibson, B C Bruno

0800h  ED31B-0644 POSTER Reasoning About Nature: Graduate students and teachers integrating historic and modern science in high school math and science classes: J B Davis, C A Rigsby, C Muston, Z Robinson, A Morehead, E J Stellwag, J Shinpaugh, A Thompson, J Teller

0800h  ED31B-0645 POSTER Teaching Sustainability and Resource Management Using NOAA’s Voices Of The Bay Community Fisheries Education Curriculum: J E Hams, L Uttal, K Hunter-Thomson, S Nachbar

0800h  ED31B-0646 POSTER Sustainable Development of Research Capacity in West Africa: J R Liebe, A Rogmann, U Falk, B K Nyarko, B Amisigo, B Barry, P L Vlek

0800h  ED31B-0647 POSTER A Sense of Scale: Expanding Effective and Flexible Implementations of The Math You Need: J M Wenner, E M Baer, H Burn

0800h  ED31B-0648 POSTER How Global Science has yet to Bridge Global Differences – A Status Report of the IUGS Taskforce on Global Geoscience Workforce: C M Keane, L M Gonzales

0800h  ED31B-0649 POSTER The European Geoscience Union (EGU) Geoscience Information For Teachers (GIFT) Workshops: S A Macko, E M Arnold, F Barnikel, J BERENGUER, A Bokwa Bokwa, A Camerlenghi, F Cinelli, F Funicello, C Caj, A Schwarz, P Smith

0800h  ED31B-0650 POSTER Good Morning from Barrow, Alaska! Helping K-12 students understand the importance of research: M Shelton

0800h  ED31B-0651 POSTER Unlocking Resources: Self-Guided Student Explorations of Science Museum and Aquarium Exhibits: K C Kirkby, M Phipps, P Hamilton

0800h  ED31B-0652 POSTER Enhancing the Teaching of Digital Processing of Remote Sensing Image Course through Geospatial Web Processing Services: L Di, M Deng

0800h  ED31B-0653 POSTER An Initial Inquiry into Meteorological Data Assimilation and Numerical Modeling Skills Within the Federal Government: M R McCalla, M J Welshinger, F F Hauth

0800h  ED31B-0654 POSTER SedWorks: A 3-D visualisation software package to help students link surface processes with depositional product: M A Jones, A Edwards, P Boulton

0800h  ED31B-0655 POSTER The First Bachelor of Science Degree in Wind Energy in the US at Texas Tech University Authors: A. Ruiz Columbí, K. Rozsavolgyi, P. Hughes, D. Farris, A. Swift, R. Walker and M. Baker: A Ruiz-Columbí


0800h  ED31B-0657 POSTER Enhancing Environmental Higher Education in Eastern Europe: E Palmisano, E Caporali, J Valdiserri


0800h  ED31B-0659 POSTER GSA/ExxonMobil Bighorn Basin Field Award – getting students into the field each summer: J Nocerino
0800h **ED31B-0660 POSTER** Climate Change at the Poles: Research Immersion Experience at Bellingshausen, Antarctica: **V A Alexeev,** J A Repina, J L Baeseman, F Fernandez, S Bart

0800h **ED31B-0661 POSTER** Development of a ceramic membrane from a lithium spinel, Li1+xMyMn2-yO4 (M=trivalent or tetravalent cations) for a Li ion-selective electrode: **H Yoon,** N Venugopal, T’Rim, B Yang, K Chung, **T Ko**

0800h **ED31B-0662 POSTER** Open Course Ware, Distance Education, and 21st Century Geoscience Education: **M G Connors**

0800h **ED31B-0663 POSTER** An Inquiry-based Instruction Model Designed to Recruit and Retain 2-year and 4-year Early Underclassmen and Undeclared Students into Biogeoscience Majors: **S Hale,** B N Rock, L B Hayden, C Perry, L Barber

0800h **ED31B-0664 POSTER** Integrating Quantitative Reasoning into STEM Courses Using an Energy and Environment Context: **J D Myers,** M E Lyford, R L Mayes


0800h **ED31B-0666 POSTER** Changes in the Demographic Characteristics of the American Geophysical Union Membership, 2006-2010: **D D Rhodes**

0800h **ED31B-0667 POSTER** A Solid Earth educational module, cooperatively developed by scientists and high school teachers through the Scripps Classroom Connection GK12 Program: **L B Ziegler,** D Van Dusen, R Benedict, P R Chojnacki, C L Peach, H Staudigel, C Constable, G Laske

0800h **ED31B-0668 POSTER** Fostering Scientific Literacy: Establishing Social Relevance via the Grand Challenges: **M E Lyford,** J D Myers, A Buss

0800h **ED31B-0669 POSTER** Integration of Field Geophysics and Geology in an International Setting: Multidisciplinary Geoscience Field Experience at the University of Western Ontario: **A J Breunders,** N Banerjee, R G Pratt

0800h **ED31B-0670 POSTER** Science on a Sphere: Moon and Mercury Interactive Spherical Display using iclickers: **S B Sherman,** J J Gillis-Davis, E Pilger, C Au, N Platt

0800h **ED31B-0671 POSTER** D.E.E.P. Learning: Promoting Informal STEM Learning through Ocean Research Simulation Games: **E Simms,** D Rohrlick, C Layman, C L Peach, J A Orcutt, C S Keen, J Matthews, Title of Team: NSF OOI-CI Education and Public Engagement Team

0800h **ED31B-0672 POSTER** Building a physical “Earthquake Simulator” to explore the earthquake cycle in K12 outreach: **B Lipovsky,** M Rohrsen, M A Floyd, C Meyers, C Neighbors, J Lozos, K J Ryan, E S Cochran, G J Funning, M Droser

0800h **ED31B-0673 POSTER** Encouraging and Attracting Underrepresented Minorities to the Field of Geosciences-A Latin American Graduate Student Perspective: **R P Caballero Gill,** T Herbert

0800h **ED31B-0674 POSTER** Earth and Space Science in the new NRC “Conceptual Framework for New Science Education Standards”: **M E Wysession,** D A Duggan-Haas, S R Linneman, E Pyle, D Schatz

0800h **ED31B-0675 POSTER** Engaging secondary students in geoscience investigations through the use of low-cost instrumentation: **A L Dunn,** W Hansen, S Healy

0800h **ED31B-0676 POSTER** Space Grant Undergraduate Remote Sensing Research in Urban Growth near Mobile Bay, Alabama: **M J Abolins,** J Keen, P Wilcox, A Sheehan, S Dial
ED31D Moscone South: 102 Wednesday 0800h
The Imperative of Climate Literacy I (joint with A, C, IN, GC, PP, PA)

Presiding: S M Buhr, University of Colorado; T S Ledley, TERC

0800h ED31D-01 U.S. Federal Investments in Climate Change Education: They’re Warming Up! (Invited); J L Karsten, F Niepold, M Wei, Title of Team: USGCRP Education Interagency Working Group

0815h ED31D-02 The NASA Global Climate Education Project: An Integrated Effort to Improve the Teaching and Learning about Climate Change (Invited): L H Chambers, M R Pippin, S Welch, K Spruill, M J Matthews, C Person

0830h ED31D-03 Aquariums Inspiring Hope and Action Against Climate Change (Invited): C L Vernon

0845h ED31D-04 A Kaleidoscope of Understanding: Pre-service Elementary Teachers’ Knowledge of Climate Change Concepts and Impacts: D Hayhoe, S Bullock, K Hayhoe

0900h ED31D-05 Environmental literacy framework with a focus on climate change (ELF): a framework and resources for teaching climate change: L T Huffman, D Blythe, L E Dahlman, S Fischbein, K Johnson, Y Kontar, F R Rack, D K Kulhanek, J Pennycook, J Reed, B Youngman, M Reeves, R Thomas

0915h ED31D-06 Climate Change Education Roundtable: A Coherent National Strategy: M Storksdieck, M Feder, Title of Team: Climate Change Education Roundtable

0930h ED31D-07 Climate Information and Misinformation: Getting the Message Out: M Carr, M Rubinstein, K Brash, T E Hernandez, R F Anderson, M Fulton, B Kahn

0945h ED31D-08 Bring Hidden Hazards to the Public’s Attention, Understanding, and Informed Decision by Coordinating Federal Education Initiatives: F Niepold, J L Karsten, M Wei, J Jadin

Earth and Planetary Surface Processes

EP31A Moscone South: Poster Hall Wednesday 0800h
Earth and Planetary Surface Processes II: Sediment Transport and Flux Posters (joint with H, NH, GC)

Presiding: M P Lamb, Caltech; L S Sklar, San Francisco State University

0800h EP31A-0719 POSTER Field measurement of critical shear stress for erosion and deposition of fine muddy sediments: M Salehi, K B Strom, Title of Team: Field study

0800h EP31A-0720 POSTER Quantifying the influence of imbrication on forces required to initiate motion of coarse-grained sediment on natural river bars: S Sanguinito, J P Johnson

0800h EP31A-0721 POSTER Determining the turnover time of mercury-contaminated fine-grained sediment in the gravel bed of the South River, Virginia using Pb-210, Be-7 and Cs-137: S N Pomrading, J E Pizzuto, D Jurk

0800h EP31A-0722 POSTER The effects of cluster density and arrangement on flow resistance in gravel-bed streams: M L Hendershot, J G Venditti

0800h EP31A-0723 POSTER Rates of Gravel Dispersion: J K Haschenburger


0800h EP31A-0725 POSTER Micro-topography controls on incipient motion in very steep, ephemeral streams: J S Scheingross, E W Winchell, M P Lamb, W E Dietrich


0800h EP31A-0727 POSTER Transient Responses of Gravel Bars to Increases in Sediment Supply - Field & Flume: C Podolak

0800h EP31A-0728 POSTER Quantifying the coevolution of bedload transport rates and bed topography in mountain rivers: a field experiment in Reynolds Creek, ID: L Olinde, J Johnson, F B Pierson

0800h EP31A-0729 POSTER Sand bar beach stability under river stage fluctuations, full-scale laboratory experiments: L Alvarez, M Schmeeckle

0800h EP31A-0730 POSTER The effect of diffusive transport of bedload particles in selecting the wavelength of sand ripples during their initial growth: B P Kahn, D J Furbish

0800h EP31A-0731 POSTER Characterization of near-bed sediment transport in air and water by high-speed video: C S Martin, N T Hamm, B Cushman-Roisin, W B Dade


0800h EP31A-0733 POSTER What controls sediment flux in dryland channels?: K Michaelides, M B Singer

0800h EP31A-0734 POSTER Lateral bedrock erosion in an experimental channel: the influence of bed roughness on wear by bedload impacts: T K Fuller, L S Sklar, K Gran


EP31B Moscone South: Poster Hall Wednesday 0800h
Geomorphological and Ecological Processes in Tidal Flats and Wetlands II Posters (joint with B, OS)

Presiding: S Fagherazzi, Boston University; A S Ogston, University of Washington

0800h EP31B-0736 POSTER High-resolution scanning XRF as a tool for palaeoenvironmental analysis of intertidal sediment sequences: C Barrett-mold, H Burningham, J French


0800h EP31B-0740 POSTER Sensitivity analysis of the Wetland Accretion Rate Model for Ecosystem Resilience (WARMER): K Swanson, J Z Drexler, D H Schoellhamer, K Thorne, K Spragens, J Takekawa

0800h EP31B-0742 POSTER Prototype Application of NASA Missions to Identify Patterns of Wetland Vegetation Development within the South San Francisco Bay Salt Ponds: W Hsu, M E Newcomer, E Justice, L S Guild, J W Skiles

0800h EP31B-0743 POSTER Geodynamics of Venice tidal marshes observed by radar interferometry: L Tosi, P Tettani, T Strozzi

0800h EP31B-0744 POSTER Object-based analysis and change detection of the major wetland cover types during the low water period at Poyang Lake, PRC: I Dronova, L Wang, P Gong

0800h EP31B-0745 POSTER Sediment dynamics over multiple time scales in Dyke Marsh Preserve (Potomac River, VA): C M Palinkas, D Walters

0800h EP31B-0746 POSTER Groundwater-Mediated Feedbacks between Sea Level Rise and Marsh Productivity: A M Wilson, J T Morris


0800h EP31B-0748 POSTER Changes in Marsh Vegetation, Stability and Dissolved Organic Carbon in Barataria Bay Marshes Following the Deepwater Horizon Oil Spill: J M Holloway, G Aiken, R F Kokaly, D Heckman, K Butler, C T Mills, T M Hoefen, S Piazza

0800h EP31C Moscone South: Poster Hall Wednesday 0800h The Morphodynamics of Big Rivers: What Do and Don’t We Know? If Posters (joint with H)

Presiding: P J Ashworth, University of Brighton; J Best, University of Illinois; D R Parsons, University of Leeds

0800h EP31C-0749 POSTER Braided River Evolution and Bifurcation Dynamics During Floods and Low Flow in the Jamuna River: W A Marra, M G Kleinhans, E Addink

0800h EP31C-0750 POSTER Applying a Computational Fluid Dynamics model to understand flow structures in a large river: the Rio Paraná: S D Sandbach, R J Hardy, S N Lane, P J Ashworth, D R Parsons

0800h EP31C-0751 POSTER Large rivers in sedimentary basins: Morphology and form observed from satellite imagery: G S Weissmann, A J Hartley, L A Scuderi, G J Nichols, S K Davidson

0800h EP31C-0752 POSTER Pluviannual variability of sedimentation on mudflats in a macrotidal estuary: A Cuvilliez, R Lafite, J Deloffre, N Massei, E Langlois, I Sakho


0800h EP31C-0754 POSTER The morphodynamics of bifurcation-expansion units in a large multi-thread river: R Szupiany, D R Parsons, M Amsler, J Best, J Hernandez

0800h EP31C-0755 POSTER Development and Implementation of a Bayesian Model for Sediment Transport in Fluvial Systems: M L Schmelter, M Hooten


0800h EP31D Moscone South: 310 Wednesday 0800h Coastal Geomorphology and Morphodynamics: Bridging Event and Long-Term Processes III (joint with H, NH, OS)

Presiding: J E McNinch, Field Research Facility; C J Hapke, U.S. Geological Survey


0815h EP31D-02 Sub-weekly to interannual variability of a high-energy shoreline (Invited): J E Hansen, P Barnard

0830h EP31D-03 Coastal foredune evolution: evidence for physical control: P Ruggiero, P L Zarnetske, J Mull, S Hacker, E Seabloom


0900h EP31D-05 Spatial patterns of wave energy delivery to coastal cliffs: M E Dickson, R Pentney, M Alvarez, P Malin

0915h EP31D-06 Reconstructing Former Sea Cliff Chronologies using Cosmogenic $10Be$ Concentrations: J Barlow, N J Rossier, D N Petley, A Densmore, M Lim


0945h EP31D-08 WTTHDRAWN

0800h EP31E Moscone South: 308 Wednesday 0800h From Turbulence to Channel Pattern I (joint with H)

Presiding: M G Kleinhans, Universiteit Utrecht; F Schuurman, Universiteit Utrecht

0800h EP31E-01 Interactions between bedforms, turbulence and pore flow: G Blois, J Best, G Sambrook Smith, R J Hardy, J Lead

0815h EP31E-02 Coherent structure resolving simulation of turbulent flows in natural meander bends with pool-riffle sequences: S Kang, F Sotirooulos

0830h EP31E-03 Coriolis forces influence the secondary circulation of gravity currents flowing in large scale sinuous submarine channel systems: R Cossu, M G Wells

0845h EP31E-04 Biotic drivers of anastomosing channel pattern in headwater streams of the Colorado Rocky Mountains: E E Wohl

0900h EP31E-05 Meandering river patterns with spatial variations of channel width: revisiting bend stability: G Zolezzi, R Luchi, M Tubino

0915h EP31E-06 Self-formed meandering river created in the laboratory using an upstream migrating boundary: W M van Dijk, W I van de Lageweg, M G Kleinhans

0930h EP31E-07 Experimental Studies on Self-Formed 3D Fluvio-Deltaic Sand and Gravel Sorting Patterns: W I van de Lageweg, W M van Dijk, M G Kleinhans, G Postma

0945h EP31E-08 The Meandering-Braided River Pattern Transition Explained Empirically and with a 2D Morphodynamics Model: J H van den Berg, F Schuurman, M G Kleinhans, H Lentink
Geodesy

G31A Moscone South: Poster Hall Wednesday 0800h
The GOCE Gravity Field Mission: Status and Results From the First Year of Science Operations I Posters (joint with C, NS, OS)

Presiding: R Floberghagen, European Space Agency; T Gruber, Technical University Munich

0800h G31A-0787 POSTER GOCE: data quality analysis and scope for product evolution: R Floberghagen, M Fehringer, D Lamarre, D Muzi, B Frommknecht, M Meloni, A Bigazzi

0800h G31A-0788 POSTER GOCE PDGS L1b processing status and data access: B Frommknecht, R Floberghagen, P Gilles, A Bigazzi, M Meloni

0800h G31A-0789 POSTER In orbit performance of the accelerometer of the GOCE gravity mission: P Touboul, B Christophe, J Marque, B Foulon

0800h G31A-0790 POSTER Improved GOCE Gradiometer Processing – Wiener-Method for Angular Rate Determination: C Stummer, T Fecher, R Pail, R Rummel, R Gruber

0800h G31A-0791 POSTER GOCE SSTI performance: H Bock, A Jaeggi, U Meyer, P N Visser, J van den IJssel, T Van Helleputte, O Montenbruck

0800h G31A-0792 POSTER Monitoring and Validation of GOCE Gradiometer Calibration Parameters: C Siemes, R Haagmans, M Kern, G Plank, M R Drinkwater, R Floberghagen

0800h G31A-0793 POSTER GOCE Gravity Gradients in Local Frames: M Juchs, J Bouman

0800h G31A-0794 POSTER GOCE Level 2 Gravity Gradients: J Bouman, S Fiorot, M Fuchs, T Gruber, E J Schrama, C C Tscherning, M Veicherts, P N Visser

0800h G31A-0795 POSTER Assessment of GOCE gradiometer performance: W Yi, M Murbøck, R F Rummel

0800h G31A-0796 POSTER Validation of GOCE Gravity Field Models by Means of Geoid Comparisons and Orbit Fits: T Gruber, C Ackermann, M Hosse, P N Visser

0800h G31A-0797 POSTER A new combined global gravity field model including GOCE data from the collaboration of GFZ Potsdam and GRGS Toulouse: C Foerste, R Shako, F Flechtner, C Dahlé, O Abrikosov, H Neumayer, P Barthelmes, S L Bruinsma, J Marty, G Balmino, R Bancalé, Title of Team: The Eigen Team

0800h G31A-0798 POSTER Combining GRACE and GOCE for a new combined Eigen model: J Marty, S L Bruinsma, G Balmino, R Bancalé, C Foerste, F Flechtner, O Abrikosov, C Dahlé, H Neumayer, R Koenig, J Raimondo

0800h G31A-0799 POSTER Gravity field recovery from in-situ GOCE high-low SST and SGG data: B Zhong, Z Luo, J Ning, H Wang


0800h G31A-0801 POSTER EVALUATION OF GO_CONS_GCF_2_TIM AND GOCCO01S GEOPOTENTIAL MODELS IN VENEZUELA AND CARIBBEAN REGION: H Goiginger, A D Garcia, T Tabare, Title of Team: Scientific Team of Venezuelan and Caribbean crustal study from satellital data

0800h G31A-0802 POSTER Global Gravity Field Determination from terrestrial Data: T Fecher, R Pail, T Gruber

0800h G31A-0803 POSTER Gravity field modelling over France from GOCE and surface data: I PANET, J Van Santen, M Holschneider, M Diament

0800h G31A-0804 POSTER The fast analysis of gravity field recovery from the GOCE observations along 979/61 nearly repeated orbit based on the SA method: X Xu, J Li, Z Wang, X Zou, H Wu

0800h G31A-0805 POSTER Improving modeling of GOCE data using reduced point mass or multipole base functions: M Herceg, C C Tscherning, P Knudsen

0800h G31A-0806 POSTER Enhanced Mean Dynamic Topography and Ocean Circulation Estimation using GOCE Preliminary Models: P Knudsen, O B Andersen, R Bingham

0800h G31A-0807 POSTER Exploitation of the First Release of GOCE Data for Local Moho and Geoid Estimation: the Example of the Alpine Area: D Sampietro, M Reguzzoni

0800h G31A-0808 POSTER Combination of geodetic measurements by means of a multi-resolution representation: G Goebel, M G Schmidt, K Bürger, H List, W Bosch

0800h G31A-0809 POSTER Fine orbit tuning to increase the accuracy of the gravity-field modelling: A Bezdek, J Klokocnik, J Kostelecky, R Floberghagen, J Sebera

0800h G31A-0810 POSTER Precise Solar Radiation Pressure Modeling for GRACE with Atmospheric Refraction: R V Robertson, J Flury

G31B Moscone West: 2008 Wednesday 0800h
The Magnitude 8.8 Chilean Earthquake of 27 February 2010 II (joint with S, T, NH)

Presiding: S E Barrientos, Universidad de Chile; B A Brooks, University of Hawaii; K Wang, Geological Survey of Canada; D Melnick, University of Potsdam

0800h G31B-01 POSTER Real Time Teleseismic Source Inversion of the Maule Earthquake (Invited): G P Hayes, P S Earle, D J Wald, H Benz, C Ji, G Shao

0815h G31B-02 POSTER Seismic Moment and Slip Distribution of the 1960 and 2010 Chilean Earthquakes as Inferred from Tsunami Waveforms: K Satake, Y Fuji


0845h G31B-04 POSTER Regional Seismic Moment of the 2010 Chile Earthquake: E Kiser, M Ishii


0915h G31B-06 POSTER The M 8.8 2010 Maule, Chile, Earthquake: Geodetic Observations and Modeling: R V Robertson, M Lancieri, S Ruiz, R I Madariaga, E Buforn

0930h G31B-07 POSTER The M 8.8 2010 Maule, Chile, Earthquake: Seismicity and Crustal Deformation: M Lancieri, C Vigny, S Ruiz, R I Madariaga, E Buforn

**GC31C Moscone South: Poster Hall Wednesday 0800h** Promising Paths of Research in Geological Storage of Anthropogenic CO2 II Posters (joint with A, H, NS, V, PA)

*Presiding: J M Matter*, Lamont-Doherty Earth Observatory; **K M Rosso**, Pacific Northwest National Laboratory

0800h **GC31C-0889 POSTER** Basalt as a solid source of calcium and alkalinity for the sequestration of carbon dioxide in building materials: **N C Johnson**, I Westfield, P Lu, W L Bourcier, T Kendall, B R Constantz


0800h **GC31C-0891 POSTER** Reactivity of Forsterite, Lizardite, and Antigorite in Dry to Water-Saturated Supercritical CO2 - An In Situ Infrared Spectroscopic Investigation: **J S Loring**, C J Thompson, Z Wang, H T Schaef, A R Felmy, K M Rosso

0800h **GC31C-0892 POSTER** Characterization of Brucite and Portlandite Reactivity with Wet Supercritical CO2, by In Situ High Pressure XRD: **H T Schaef**, B P McGrail, K M Rosso

0800h **GC31C-0893 POSTER** Investigating the effect of potential additives and temperature on the dissolution kinetics of olivine (Mg, SiO3) in carbonation reactions: **O Sißmann**, D Daval, I Martinez, F Brunet, N Findling, F J Guyot

0800h **GC31C-0894 POSTER** Enabling the measurement of in-situ, atomic scale mineral transformation rates in supercritical CO2 through development of a high pressure AFM: **S Lea**, S R Higgins, K G Knauss, K M Rosso

0800h **GC31C-0895 POSTER** CO2 Percolation Experiment through Chlorite/Zeolite-Rich Sandstone (Pretty Hill Formation - Otway Basin - Australia): **P Gouze**, L Luquot, M Andreani


0800h **GC31C-0897 POSTER** Estimation of the reactive mineral surface area during CO2-rich fluid-rock interaction: the influence of neogenic phases: **A Scisielewski**, P Zuddas


0800h **GC31C-0899 POSTER** Laboratory experiments on CO2 dissolution in water for carbon sequestration: D Fernandez de la Reguera, M Stute, J M Matter

0800h **GC31C-0900 POSTER** Characterization of the deep microbial life in the Almark natural gas reservoir: **D Morozova**, M Alawi, A Vieth-Hillebrand, D Kock, M Krüger, H Wuerdemann

0800h **GC31C-0901 POSTER** Utility of Biofilms and Biologically-Induced Mineralization in Geologic Carbon Sequestration: **R Gerlach**, A C Mitchell, A B Cunningham, L Spangler

0800h **GC31C-0902 POSTER** Using a sharp interface to model the capillary fringe: a model comparison: **K Bandilla**, M A Celia, J M Nordbotten, B Court, T J Elliot

0800h **GC31C-0903 POSTER** Viscous and Capillary Effects on Immiscible Fluids Displacement: Pore-Scale Study in a Uniform Pore Network Micromodel: **C Zhang**, M Oostrom, T W Wietzma, J W Grate

0800h **GC31C-0904 POSTER** Injection of a reacting fluid into a fractured porous medium: **L Jasinski**, J Thovert, V Mourzenko, P M Adler

0800h **GC31C-0905 POSTER** Analytical and Numerical Models of Pressurization for CO2 Storage in Deep Saline Formations: **N Wildgust**, A Cavanagh

0800h **GC31C-0906 POSTER** Simulations of Pressure Monitoring above a Fractured Caprock at a Brine CO2 Sequestration Site: **K Gyovai**, E J Boyle, N Sams, S King, G Bromhal, D Crandall

0800h **GC31C-0907 POSTER** Brine production strategy modeling for active and integrated management of water resources in CCS: **B Court**, M A Celia, J M Nordbotten, T A Buscheck, T J Elliot, K Bandilla, M Dobosy

0800h **GC31C-0908 POSTER** Multi-spectral imaging of vegetation for CO2 leak detection: **J A Hogan**, J A Shaw, R L Lawrence, L Dobock, L Spangler

0800h **GC31C-0909 POSTER** Changes of spectral and radiometric properties of vegetation and soil electric properties in response to simulated surface CO2 leakage of geologically sequestered CO2: **X Zhou**, V R Lakkaraju, M E Apple, L Dobock, A B Cunningham, L Spangler

0800h **GC31C-0910 POSTER** Stomatal Conductance, Plant Species Distribution, and an Exploration of Rhizosphere Microbes and Mycorrhizae at a Deliberately Leaking Experimental Carbon Sequestration Field (ZERT): **B Sharma**, M E Apple, S Morales, X Zhou, B Holben, J Olson, J Prince, L Dobock, A B Cunningham, L Spangler

0800h **GC31C-0911 POSTER** The Ketzin Project, Germany – Status and Future of the First European on-shore CO2 Storage Site: M Kuehn, **S Martens**, F Moeller, S Lueth, A Liebscher, T Kempka, Title of Team: Ketzin Group

0800h **GC31C-0912 POSTER** Systematic Risk Reduction: Chances and Risks of Geological Storage of CO2: **E Kintisch**, H Wuerdemann

Hydrology

H31A Moscone South: Poster Hall Wednesday 0800h
Ecology and Groundwater-Dependent Ecosystems I Posters

Presiding: S P Loheide, Univ of Wisconsin - Madison; C Lowry, University at Buffalo

0800h H31A-0970 POSTER An Investigation on Soil Chemical Composition and Shallow Groundwater Condition in a Saline Area in Nakhon Panom Province, Thailand: U Seeboonruang

0800h H31A-0971 POSTER Water Tables, Flooding, and Water Use by Riparian Phreatophyte Communities: J R Thibault, J R Cleverly, C Dahm

0800h H31A-0972 POSTER Modeling Alpine Meadow Restoration Techniques and their Effects on Stream Stage Regimes: C E Moore, J D Lundquist, S P Loheide

0800h H31A-0973 POSTER Spatial and Temporal Variability of Piezometric Head in a Montane Peatland: W Christensen, G E Fogg

0800h H31A-0974 POSTER River water temperature and fish growth forecasting models: E Danner, A Pike, S Lindley, R Mendelsohn, L Dewitt, F S Melton, R R Nemani, H Hashimoto

0800h H31A-0975 POSTER Ecohydrology of Wetlands Occurring on Perched Seasonally Saturated Water Tables in the Central Valley of California: N F McCarten, T Harter

0800h H31A-0976 POSTER Crocodiles count on it: Regulation of discharge to Lake St Lucia Estuary by a South African peatland: J S Price, P Grundling, A Grootjans

0800h H31A-0977 POSTER Devils Hole: A Window into the Carbonate Aquifer of the Death Valley Regional Flow System: M Hausner, S W Tyler, K P Wilson, D B Gaines

0800h H31A-0978 WITHDRAWN

0800h H31A-0979 POSTER Identification and Classification of Wetlands using Physics based Distributed Hydrologic Model: R Mendelssohn, L Dewitt, F S Melton, R R Nemani, H Hashimoto

0800h H31A-0980 POSTER Hierarchical Modeling of Fen Hydrology across Multiple Scales: S Li, H Abbas, H Liao

Geomagnetism and Paleomagnetism

GP31A Moscone West: 2003 Wednesday 0800h
Planetary Magnetic Fields: Observations and Models II (joint with P, Dl)

Presiding: S Stanley, University of Toronto; J M Aurnou, UCLA

0800h GP31A-01 The mechanically forced Geodynamo (Invited): A Tilgner

0815h GP31A-02 An Early Nutation-Driven Lunar Dynamo: C A Dwyer, D J Stevenson, F Nimmo

0830h GP31A-03 Numerical Simulations of Core Convection with Boundary Topography (Invited): M A Calkins

0845h GP31A-04 Cause of dipole breakdown and reversals in geodynamo models: U R Christensen, J Wicht

0900h GP31A-05 Dynamo action with inhomogeneous magnetic diffusivity: G Verhille, N Plignon, M Bourgoin, P odier, J Pinton

0915h GP31A-06 The Phoenix inner core - potential geomagnetic implications of an asymmetric buoyancy flux (Invited): T Alboussiere, R Deguen, M Melzani

0930h GP31A-07 Spectral Properties of the Martian Crustal Magnetic Field: K W Lewis, F J Simons

0945h GP31A-08 Saturn Dynamo Model (Invited): G A Glatzmaier

All information is current as of November 12, 2010
0800h  H31B-0986 POSTER Characteristics of the complementary relationship-based evapotranspiration models: T Moroizumi, T Nakamichi, T Miura
0800h  H31B-0987 POSTER Fortuitous Evaporation Pan Observations on the Alaskan North Slope: J P Mumm, D L Kane
0800h  H31B-0988 POSTER Examining the sensitivity of modelled evapotranspiration to vegetation structural characteristics within boreal peatlands, riparian ecosystems and upland mixedwood forest: R M Petrone, L E Chasmer, S M Brown, C A Mendoza, J Diwu, W L Quinton, C Hopkinson, K J Devito
0800h  H31B-0989 POSTER High Resolution Mapping of Reference ET for the State of Wyoming: R W Rasmussen, G Park
0800h  H31B-0990 POSTER Wet canopy evaporation from a Puerto Rican lower montane rain forest: the importance of aerodynamic conductance: F Holwerda, F N Scatena, L A Bruijnzeel, H Vugts, A Meesters
0800h  H31B-0991 POSTER The Effect of Groundwater Availability and Quality on Water Consumption of Tamarisk: S Taghvaeian, C M Neale, J Osterberg, C A Costa dos Santos, D R Warrs, S J Sritharan
0800h  H31B-0992 POSTER Calibration of home-made heat dissipation probes for a full rotation of Eucalyptus grandis trees in Brazil: J S Delgado-Rojas, J Laclau, O Roupars, J Stape, J Ranger, J Bouillet, Y Nouvellon
0800h  H31B-0993 POSTER Quantifying Evapotranspiration (ET) for Wetlands in South Florida Ranchlands: A M Benitez, L Merriman, S Shukla, A C Guzha
0800h  H31B-0994 POSTER Downscaling of Aircraft-, Landsat-, and MODIS-based Land Surface Temperature Images with Support Vector Machines: W Ha, P H Gowda, T Oommen, T A Howell, J E Hernandez
0800h  H31B-0996 POSTER Vegetation Cover and Evapotranspiration in the Arid Northwest China and Their Relationship with Groundwater Depth: X Jin, Y Zhang
0800h  H31B-0997 POSTER IS A SIMPLE, LEAF AREA INDEX BASED WATER BALANCE A REASONABLE WAY TO PREDICT CATCHMENT DISCHARGE IN MONTANE REGIONS OF AUSTRALIA?: J D Henry, F van Ogten, R W Vervoort, M Garun
0800h  H31B-0998 POSTER Potential of the upcoming German EnMAP hyperspectral mission for the assimilation of agricultural remote sensing products into biophysical land surface models: T Hank, K Richter, T Frank, M Friese, H Bach, M Locher, W Mauser
0800h  H31B-0999 POSTER Integrating Landsat7 ETM+ and MODIS Products for Improved Spatial and Temporal Evapotranspiration Estimates: J Kim, T S Hogue
0800h  H31B-1000 POSTER Estimating large-scale evapotranspiration in arid and semi-arid systems: A multi-site study linking MODIS and Ameriflux data: D P Bunting, E P Glenn, S A Kurc, R L Scott, P L Nagler
0800h  H31B-1002 WITHDRAWN
0800h  H31B-1005 POSTER Evapotranspiration and Water Use Efficiency of Terrestrial Ecosystems in the Great Plains: R K Singh, S Liu, L L Tieszen
0800h  H31B-1006 POSTER Dynamic evapotranspiration in tree-resolving LES – The ED2RAFLES model: G Bohrer, D Medvgy
0800h  H31B-1007 POSTER Evaporation measurements by eddy covariance from an urban tropical water reservoir: E Velasco, M Roth
0800h  H31B-1008 POSTER Interpretation of scintillometry measurements over heterogeneous landcovers using LES modeling and a virtual scintillometer: J Pianezze, J COHARD, S Anquetin, Y Gagne
0800h  H31B-1009 POSTER Modeling the Impact of Irrigation on Precipitation over the Great Plains: K J Harding, P K Snyder
0800h  H31B-1010 POSTER Role of Residual Layer in Controlling Diurnal ABL Evolution: J Yin, J D Albertson
0800h  H31B-1011 POSTER Comparing Evapotranspiration Estimates from Eddy Covariance Method to Weather Data Methods in South Florida: L Zepeda, K Migliaccio
0800h  H31B-1012 WITHDRAWN
0800h  H31B-1013 WITHDRAWN
0800h  H31B-1014 POSTER Understanding the coupled surface energy flux-valley wind system using observations in an alpine valley: M H Daniels, E Pardyjak, W H Brutsaert, R Mage, M B Parlane
0800h  H31B-1015 POSTER Understanding the Climate Consequences of Evapotranspiration Changes: A Theoretical Perspective: G A Ban-Weiss, G Bala, L Cao, K Caldeira
0800h  H31B-1016 POSTER Scintillometer-based estimates of sensible heat flux over row oriented vineyard trees: J G Piqueras, H M Geli, C M Neale, C Balbontin, J Campos, A Calera

H31C Moscone South: Poster Hall Wednesday 0800h Groundwater Inputs to Rivers, Lakes, and Oceans I Posters (joint with NH, NS, OS)

Presiding: Y A Kontar, University of Illinois at Urbana-Champaign; W P Anderson, Appalachian State University

0800h  H31C-1017 POSTER Submarine groundwater discharge and associated nutrient fluxes into San Francisco Bay: K A Null, A Paytan, P W Swarzenski, N T Dimova, B Esser, M J Singleton
0800h  H31C-1018 POSTER Isotopic and Hydrogeochemical Studies on Abnormally High Ammonium of Natural Origin in A Coastal Aquifer-aquitard System: Y Wang, J Jiao, J Cherry
0800h  H31C-1019 POSTER Submarine groundwater discharge and the coastal ocean extreme bloom incubator Monterey Bay, CA: A Lecher, K A Null, N T Dimova, C M Schmidt, P W Swarzenski, J P Ryan
0800h  H31C-1020 POSTER Linking Glaciation and Groundwater on Greenland: Implications for Subsurface ForelFluid Chemistry and Sea-Level Rise: W Defoor, M A Person, H Larsen, D Lizarralde, D Cohen, B Dugan
0800h  H31C-1021 POSTER Lake salinity variations resulting from wind direction, Gobi Desert, China: D C Bradley, I Cartwright, M Currel
0800h  H31C-1022 POSTER Development of a process-oriented conceptual groundwater module for simulation of hydrological processes in meso-scale catchments with shallow aquifers: D Varga, M Fink, S Kralisch, P Krause, W Flügel
0800h  **H31F-1057 POSTER** Effect of Sampling Period on Flood Frequency Distributions in the Susquehanna Basin: *M Kargar, R E Beigley*

0800h  **H31F-1058 POSTER** Estimating Discharge using Multi-level Velocity Data from Acoustic Doppler Instruments: *J Bang Poulsen, K Romer Rasmussen, N Bering Olesen*

0800h  **H31F-1059 POSTER** TOWARD THE VALIDATION OF DEPTH-AVERAGED, THREE DIMENSIONAL, RANS STEADY-STATE SIMULATIONS OF FLUVIAL FLOWS AT NATURAL SCALE: *P A Mateo Villanueva, M Hradisky*

0800h  **H31F-1060 POSTER** Predicting River Discharge Rates in California Watersheds of the Russian River and Other North Coast River Basins: *J Shupe, C S Potter, P M Gross, V B Genovese, S A Klooster*

0800h  **H31F-1061 POSTER** The Cumberland River Flood of 2010 and Corps Reservoir Operations: *W Charley, F Hanbali, B Rohrbach*

0800h  **H31F-1062 POSTER** Streamflow simulation in a snow affected basin: a case study of the Susquehanna River Basin, USA: *R L Ray, R E Beigley*

0800h  **H31F-1063 POSTER** Testing a Simplified/Multiscale Representation of Dynamics of River Flow Across Scales Using the Statistical Structure of Peak Flows: *L Cundra, W F Krajewski, R Mantilla*

0800h  **H31F-1064 POSTER** Study on 3-D simulation of flow and turbidity in an oxbow lake in tidal compartment: *H Yokoyama, H Momono, S Hamamoto*

0800h  **H31F-1065 POSTER** Factors affecting infiltration rate in steep hillslope conifer plantation: *M Hiraoka, Y Onda*

0800h  **H31F-1066 POSTER** Levee Breach Experiment by Overflow at the Full Scale Experimental Channel: *T Shimada, H Yokoyama*

0800h  **H31F-1068 POSTER** Hydrological Evaluation of the LPX Dynamic Global Vegetation Model for Small River Catchments in the UK: *A M Ukkola, S J Murray*

0800h  **H31F-1069 POSTER** Statistical Downscaling Method for Climate Data to preserve Statistical Properties: *G Park, T Song*

0800h  **H31F-1070 POSTER** Climate Change Impact on the Streamflow of the Upper Green River Basin using a Weighted Multi-model Ensemble Approach: *T Song, G Park*

0800h  **H31F-1071 POSTER** Land Use and Climate Change Impacts on Streamflow and Sediment Transport in a Groundwater-Dominated Watershed: *S L Martin, A D Kendall, R L Van Dam, D W Hyndman*

0800h  **H31F-1072 WITHDRAWN**

0800h  **H31F-1073 POSTER** Effect of climate change on water resources of the Upper Indus River: *L C Bowling, B S Naz, M Ashfaq, N S Diffenbaugh*

0800h  **H31F-1074 POSTER** Past and Future Climatic Conditions in the Hudson Bay Lowland near Churchill, Manitoba and Implications for the Fate of Shallow Water Bodies: *M L Macrae, C R Duguay, L Brown, N A Svacina, J A Parrott*

0800h  **H31F-1075 POSTER** Water Balance of One Control and One Snow-Manipulated Arctic Lake: *G Myerchin, S Berezovskaya*

0800h  **H31F-1076 POSTER** The effect of in-stream structures on flood water attenuation in Western Carpathians of Slovakia: *M Majerova*

0800h  **H31F-1077 POSTER** Relationship of bed and bank resistance to total flow resistance in a high gradient stream, Fraser Experimental Forest, Colorado, USA: *G C David, E E Wohl, S E Yochum*

0800h  **H31F-1078 POSTER MODEL FOR PREDICTING PASSAGE OF INVASIVE FISH SPECIES THROUGH CULVERTS: V Neary**
H31H Moscone South: Poster Hall Wednesday 0800h

Understanding and Predicting Water and Energy Cycle Changes Using Multisensor Heterogeneous Data for Energy and Water Cycle Research I Posters (joint with IN)

Presiding: D R Belvedere, UMBC/GERT; S J Kempler, NASA/GSFC; D Cripe, Group on Earth Observations Secretariat; P Houser, George Mason University; J K Entin; K S Fontaine, NASA; W L Teng, NASA GES DISC (Wyle); M G Bosilovich, NASA GSFC

0800h H31H-1097 POSTER GEWEX Water Cycle Contributions to GEOSS (Invited): P J van Oevelen

0800h H31H-1098 POSTER Intercomparison of Water Vapor Transport Datasets: K A Hilburn, F J Wentz

0800h H31H-1099 POSTER Africa-wide water balance estimation using remote sensing and global weather datasets: G B Senay, B Pengra, S Bohms, A Singh, J P Verdin

0800h H31H-1100 POSTER New and Improved GLDAS and NLDAS data sets and data services at HDISC/NASA: H Rui, H K Beaudoin, D M Mocko, M Rodell, W L Teng, B Vollmer

0800h H31H-1101 POSTER Trends and Inter-annual variations in Surface Temperature, Water Vapor and Precipitation and the Impact of ENSO and volcanoes: R F Adler, G Gu

0800h H31H-1102 POSTER Lake level simulations using a land surface model and satellite altimetry data: H Liu, J S Famiglietti


0800h H31H-1104 POSTER Sensitivity of WRF-Simulated Water and Energy Budget to Land-Surface Parameterization over a Heterogeneous Landscape in the Northeastern U.S: J K Yeung, J A Smith, G Villarini, M L Baecx, E Bou-Zeid

0800h H31H-1105 POSTER Issues and Solutions for Bringing Heterogeneous Water Cycle Data Sets Together: J G Acker, S J Kempler, W L Teng, D R Belvedere, Z Liu, G G Leptoukh


0800h H31H-1107 POSTER NEWS: Improving Water and Energy Prediction through Integration: D R Belvedere, J Entin, P Houser, R A Schiffer

0800h H31H-1108 POSTER Comparing the ENSO and volcanic effects on the evolution of precipitation and temperature anomalies during the period of 1979-2008: G Gu, R F Adler


0800h H31H-1110 POSTER Impacts of Land Use and Land Cover Changes on Green and Blue Water Availability in a Karst Area of China: Z Wen, S Yang

0800h H31H-1111 POSTER Characterization of Long-term Atmospheric and Terrestrial Hydrological Cycle Change Using Multiple Data Sources: P J Yeh, M Yuan, H Kim, S Koirala, Y Pokhrel, T Oki

0800h H31H-1112 POSTER Improving the Estimation of Terrestrial Evapotranspiration by the Combination of Polar and Geostationary Satellite Observations: H Su, J Tian, S Chen, R Zhang, X Tang, X Sun, B Li, Y Rong


0800h H31H-1114 POSTER Atmospheric Diabatic Heating Distributions Derived from a Combination of Satellite Sensor Data: W S Olson, T S L’Ecuter, G Gu, M Grecu, M G Bosilovich

0800h H31H-1115 POSTER The NASA Energy and Water cycle Study: P R Houser, J K Entin, R A Schiffer, D R Belvedere

H31I Moscone West: 3018 Wednesday 0800h

Climate Change Impacts on Arid to Semiarid Mountain Ecosystems I (joint with B, GC)

Presiding: A White, New Mexico Institute of Mining and Technology; R G Allen, University of Idaho; L Saito, University of Nevada Reno

0800h H31I-01 The Nevada NSF EPSCoR infrastructure for climate change science, education, and outreach project: highlights and progress on investigations of ecological change and water resources along elevational gradients: L Saito, F Biondi, L F Fenstermaker, J Arnone, D Devitt, B Riddle, M Young

0815h H31I-02 Application of a long-term water balance of a semi-arid mountainous catchment to understand potential impacts of climate change (Invited): T E Link, G N Fl churner, G M Chauvin, D G Marks, A H Winstral, M S Seyfried, E Du

0830h H31I-03 An approach for reconstructing past streamflows using a water balance model and tree-ring records in the upper West Walker River basin, California: J C Vittori, L Saito, F Biondi

0845h H31I-04 Climate Change Impacts on Watershed Hydrology using an Integrated Hydrologic Model (Invited): J L Huntington, R G Niswonger

0900h H31I-05 Hydrological Alterations Due to Climate-Induced Regional Vegetation Change: A B White, E R Vivoni, E P Springer

0915h H31I-06 Diagnosing streamflow trends to understand ecohydrologic sensitivity and feedbacks to climate change in the mountain west: C Luce

0930h H31I-07 Snowpack Controls On Forest Greening During The Growing Season in the Western United States: C Luce, N P Molocho


H31J Moscone West: 3014 Wednesday 0800h

Groundwater/Surface Water Interactions: Dynamics and Patterns Across Spatial and Temporal Scales II

Presiding: C E Hatch, University of Nevada Reno; J H Fleckenstein, Helmholtz Center for Environmental Research (UFZ); D F Boutr, Univ of Massachusetts; S Ge, University of Colorado

0800h H31J-01 New insights from improved temporal resolution of groundwater-surface-water exchange (Invited): D O Rosenberry, D L Nafz, E A Kochevar


All information is current as of November 12, 2010


The role of hyporheic reactivity hotspots for natural attenuation at the aquifer-river interface – a groundwater perspective of transient storage in streambeds: S Krause, T Blume, C Tecklenburg, M Munz, A Binley, L Heathwaite, D Kaers

Effects of Flow Dynamics on Age Distributions: J D Gomez, J L Wilson

Radiogenic He as a tracer of regional groundwater discharge to the Fitzroy River, north Western Australia: P Gardner, G Harrington

Remote Sensing of Hydrology and Its Applications II (joint with G)

Evaluation of the Soil Moisture Active Passive Mission (SMAP) merged radar-radiometer soil moisture algorithm: N Das, D Entekhabi, E G Njoku

Calibration of soil moisture-monitoring networks for use as validation targets for passive microwave soil moisture products: A A Berg, J Belanger, B M Toth

Spatial and temporal stability of soil moisture fields within a satellite pixel during the Canadian Soil Moisture Experiment (CanEx) 2010: J Belanger, A A Berg, B M Toth, D Bilodeau

Evaluating soil moisture variability using synthetic aperture radar and terrain indices: K A Powell, A A Berg

Towards an Efficient and Global Downscaling Methodology Based on Multifractal Models for Satellite-Based Soil Moisture Estimates: G Mascaro, E R Vivoni, R Deidda

Land Surface Emissivity as a Surrogate of Soil Moisture: H Norouzi, M Temimi, R Khanbilvardi

Restricted use of ET as an indicator of soil moisture: Limitation of Observation Scale or Process Scale?: N Gaur, B P Mohanty

Using Data to Detect and Resolve Model Structural Errors I

Presiding: H V Gupta, University of Arizona; M Clark, National Center for Atmospheric Research; J A Vrugt, University of California, Irvine

Welcome to the Session

Understanding The Approaches Used by Different Communities To Model the Terrestrial Hydrosphere: H V Gupta, M Clark, J A Vrugt

Watersheds “marching to a different drummer”: Diagnostic analyses in search of appropriate model structures (Invited): M Sivapalan

Limits of acceptability: A framework for combining data errors and modelling uncertainty to benchmark our predictive capability: J E Freer, T Krueger, K Beven

Bayesian analysis of structural uncertainty in hydrologic modeling: G Schoups, J A Vrugt

The role of hyporheic reactivity hotspots for natural attenuation at the aquifer-river interface – a groundwater perspective of transient storage in streambeds: S Krause, T Blume, C Tecklenburg, M Munz, A Binley, L Heathwaite, D Kaers

Effects of Flow Dynamics on Age Distributions: J D Gomez, J L Wilson

Radiogenic He as a tracer of regional groundwater discharge to the Fitzroy River, north Western Australia: P Gardner, G Harrington

Remote Sensing of Hydrology and Its Applications II (joint with G)

Evaluation of the Soil Moisture Active Passive Mission (SMAP) merged radar-radiometer soil moisture algorithm: N Das, D Entekhabi, E G Njoku

Calibration of soil moisture-monitoring networks for use as validation targets for passive microwave soil moisture products: A A Berg, J Belanger, B M Toth

Spatial and temporal stability of soil moisture fields within a satellite pixel during the Canadian Soil Moisture Experiment (CanEx) 2010: J Belanger, A A Berg, B M Toth, D Bilodeau

Evaluating soil moisture variability using synthetic aperture radar and terrain indices: K A Powell, A A Berg

Towards an Efficient and Global Downscaling Methodology Based on Multifractal Models for Satellite-Based Soil Moisture Estimates: G Mascaro, E R Vivoni, R Deidda

Land Surface Emissivity as a Surrogate of Soil Moisture: H Norouzi, M Temimi, R Khanbilvardi

Restricted use of ET as an indicator of soil moisture: Limitation of Observation Scale or Process Scale?: N Gaur, B P Mohanty
IN31A-1260 POSTER The JPL GRIP Portal – Serving Near Real-time Observation and Model Forecast for Hurricane Study: P Li, S M Hristova-Veleva, F J Turk, Q Vu, B W Knosp, B Lambrightsen, W L Poulsen, T J Shen, S J Licata

IN31A-1261 POSTER DISCOVER Near Real-Time Ocean Data Products: Examples of Uses and Limitations: D K Smith, F J Wentz, C L Gentemann


IN31A-1263 POSTER Near-Real-Time Capabilities for Ozonesonde Monitoring Instrument (OMI): C Tilmel, P Durbin, B Duggan, B Das


IN31A-1265 POSTER Utilization of near-real-time satellite data in atmospheric transport and dispersion modeling applications: U S Nair, S A Christopher, W Yu, E Yang, K Keiser

IN31A-1266 POSTER Near Real-time Data Assimilation for the HYSPLIT Aerosol Dispersion Model: K Kalpakis, S Yang, Y Yesha

IN31A-1267 POSTER Rapid Assimilation Platform for Insight and Discovery (RAPID) with Application to Space Weather Research: I A Galkin, D Bilizta, B W Reinisch, G Grinstein, X Huang

IN31A-1268 WITHDRAWN

IN31A-1269 WITHDRAWN

IN31A-1270 POSTER Global, real-time ionosphere specification for end-user communication and navigation products: W Tobiska, H C Carlson, R W Schunk, D C Thompson, J J Sojka, L Scherliess, L Zhu, L C Gardner

IN31A-1271 POSTER The Future of Space Environment Monitoring in Low Earth Orbit: W F Denig, M Bonadonna, K D Scro, J C Green


IN31A-1273 POSTER NPOESS Preparatory Project (NPP) Environmental Products: K D Grant, R Hughes, N S Andreas

IN31A-1274 POSTER The Unidata LDM Data Distribution System: S Emmerson, T C Yoksas, W J Weber, M Schmidt

IN31A-1275 POSTER ASTER Expedited Data Services: K A Duda


IN31A-1277 POSTER Preparing for the Next Generation of Direct Broadcast: H Shin, K Friedman Dubey, E Baptiste, K Prasad, D Lawrence


IN31A-1279 POSTER The Waypoint Planning Tool: Real Time Flight Planning for Airborne Science: M He, H M Goodman, R Blakeslee, J M Hall

IN31B Moscone South: Poster Hall Wednesday 0800h

Sensor Networks: From Sensors to the Web I Posters (joint with NH, A, H, PP, V)

Presiding: J K Hart, University of Southampton; K Martinez, University of Southampton; K Moe, NASA

IN31B-1280 POSTER Web-based access to near real-time and archived high-density time-series data: cyber infrastructure challenges & developments in the open-source Waveform Server: J C Reyes, F L Vernon, R L Newman, J H Steidl


IN31B-1282 POSTER A configurable information display environment for airborne science: D P Van Gilst

IN31B-1283 POSTER Monitoring the Environment in a Lava Tube with a Wireless Sensor Network: Y Li, A M Jorgensen, J L Wilson, N M Rendon

IN31B-1284 POSTER Creating Actionable Data from an Optical Depth Measurement Network using RDF: J R Freemantle, N T O’Neill, L L Lumb, J Abboud, B Mcfarthur

IN31B-1285 POSTER NASA Airborne Science Network Communications Infrastructure for the Global Hawk UAS: C E Sorensen, D Sullivan, D P Van Gilst


IN31B-1287 POSTER Integration of sensor networks and linked data in a coastal flooding scenario: K Martinez, K Page, J Sadler, C Hutton, O Corcho, R Garcia, M Koubarakis, K Kyzirakos

IN31B-1288 POSTER WegenerNet climate station network region Feldbach/Austria: From local measurements to weather and climate data products at 1 km-scale resolution: T Kabas, A Leuprecht, C Bichler, G Kirchgang

IN31B-1289 POSTER Development of an integrated information system for Critical Zone Observatory data: T Whitenack, M W Williams, D G Tarboto, I Zaslavsky, M Durcik, R G Lucas, C Dow, X Meng, B Bills, M Leon, C Yang, M Arnold, A K Aufdenkampe, K Schreuders, O Alvarez

IN31B-1290 POSTER GeoCENS: Geospatial Cyberinfrastructure for Environment Sensing: S Liang, E A Johnson, C Valeo, J W Pomeroy, Title of Team: The GeoCENS Development Team

IN31B-1291 POSTER OGC standards for end-to-end sensor network integration: K L Headley, A Broering, T C O’Reilly, D Toma, J del Rio, L E Bermudez, J Zedlitz, G Johnson, D Edgington

IN31B-1292 POSTER Using Schema-less Database Technology to Develop a Web Application for Sea Ice Monitoring: P L Pulsifer, M Kaufman, D Young, J A Collins, H Eicken, S Gearheart

IN31C Moscone South: 302 Wednesday 0800h

Earth and Space Science Informatics General Contributions I

Presiding: P A Fox, Rensselaer Polytechnic Inst.; K Moe, NASA

IN31C-01 Overview of Recent Developments on EOSDIS: J Behnke, H K Ramapriyan, M E Maiden, D Lowe

IN31C-02 The GEOSS Clearinghouse based on the GeoNetwork opensource: K Liu, C Yang, H Wu, Q Huang

IN31C-03 The NPOESS to JPSS Transition and the NPOESS Preparatory Project: K St.Germain, G Davis, M Haas
0845h  **IN31C-04** Web-enabled Landsat Data (WELD): Demonstration of MODIS-Landsat Data Fusion to Provide a Consistent, Long-term, Large-area Data Record for the Terrestrial User Community: D. Roy, J. Ju, I. Kommedreidy

0900h **IN31C-05** Landsat-based monitoring of crop water demand in the San Joaquin Valley: L. Johnson, T. Trout, D. Wang, P. S. Melton

0915h **IN31C-06** OpenStereo: Open Source, Cross-Platform Software for Structural Geology Analysis: C. H. Grohmann, G. A. Campanha

0930h **IN31C-07** Visualisation of very high resolution Martian topographic data and its application on landing site selection and rover route navigation: J. Kim, S. Lin, J. Hong, D. Park, S. Yoon, Y. Kim

0945h **IN31C-08** Multigraph: Reusable Interactive Data Graphs: M. B. Phillips

---

**Nonlinear Geophysics**

**NG31A Moscone South: Poster Hall Wednesday 0800h** Non-Gaussian and Nonlinear Aspects of Data Assimilation and Predictability in the Geosciences II Posters (joint with A, H)

**Presiding:** S. J. Fletcher, Cooperative Institute for Research in the Atmosphere; B. Ancell, Texas Tech University

0800h  **NG31A-1315** POSTER An implicit particle filter for large dimensional data assimilation problems: M. Morzfeld, A. J. Chorin, X. Tu

0800h  **NG31A-1316** POSTER Ensemble Dynamics and Bred Vectors: J. M. Restrepo, N. Balci, G. R. Sell, A. Mazzucato

0800h  **NG31A-1317** POSTER Variational assimilation in the coastal ocean model off Oregon: the role of dynamics: A. L. Kurapov, G. D. Egbert, J. S. Allen, P. Yu

0800h  **NG31A-1318** POSTER Adjoint Observation Impact System for COAMPS/NAVDAS: C. M. Amerault

0800h  **NG31A-1319** POSTER Estimating Uncertainty in Atmospheric Models - Application and new Approaches of Lyapunov Vector Estimations: J. D. Keller, A. Hense, A. Rhodin

0800h  **NG31A-1320** WITHDRAWN

0800h  **NG31A-1321** POSTER Potential predictability associated with nonlinear regimes in an atmospheric model N. Schwartz, S. Kravtsov, and J. M. Peters: J. M. Peters, N. Schwartz, S. Kravtsov

0800h  **NG31A-1322** POSTER Sensitivity Analysis of Nonlinear Models for Small Ensembles of Model Outputs: L. Ivanov, C. A. Collins, R. T. Tokmakian

0800h  **NG31A-1323** POSTER Maximum likelihood estimation of error covariances in ensemble-based filters: G. Ueno

---

**NG31B Moscone South: Poster Hall Wednesday 0800h** Predictive Modeling and Uncertainty Quantification for Systematic Evaluation of Climate Models and Data-Guided Enhancements of Regional Climate Projections II Posters (joint with A, GC, H)

**Presiding:** A. Ganguly, Oak Ridge National Laboratory; D. N. Williams, Lawrence Livermore National Laboratory; C. Doutriaux; H. Najm, Sandia National Laboratories

0800h  **NG31B-1324** POSTER Advanced Methods for Uncertainty Quantification in Tail Regions of Climate Model Predictions: C. Saffa, K. Sargsyan, B. Debusschere, H. Najm

0800h  **NG31B-1325** POSTER Evaluating predictability in nonlinear climate systems using the Mount Pinatubo eruption: A. Gaddis, J. Drake, K. J. Evans, R. W. Gentry


0800h  **NG31B-1327** POSTER Statistical Methods for Evaluating Uncertainty Reduction Achieved by Increasing the Spatial Resolution of CCSM Simulations: M. D. Reno, J. D. Roach, T. S. Lowry

---

**Natural Hazards**

**NH31A Moscone South: Poster Hall Wednesday 0800h** Multidisciplinary Research for Validation of Earthquake Precursors: Case Studies and Statistics II Posters (joint with A, NH, S, SM, T, G)

**Presiding:** D. P. Ouzounov, NASA/GSFC; S. A. Pulinets, Institute of Applied Geophysics; M. Parrot, LPC2E/CNRS; J. G. Liu, National Central University; K. Hattori, Chiba University

0800h  **NH31A-1328** POSTER Localized Changes in Geomagnetic Total Intensity Values prior to the 1995 Hyogo-ken Nanbu(Kobe) Earthquake: K. Yamazaki, S. Sakakana

0800h  **NH31A-1329** POSTER Pulse Azimuth Clusters Preceding Earthquakes in California, 2005-2010: C. Dunson, T. E. Bleier

0800h  **NH31A-1330** POSTER Simultaneous observation of VHF radio wave transmission anomaly propagated beyond line of site prior to earthquakes in multiple sites: H. Yamashita, T. Mogi, T. Moriya, M. Takada, M. Morisada

0800h  **NH31A-1331** POSTER Statistical Analysis Of Mass Movements Triggered By Kashmir Earthquake 2005 And Their Run-Out Distance: M. Basharat, J. Rohn, M. R. Moser


0800h  **NH31A-1333** POSTER TEC variations over the near-epicentral region before the Haiti earthquake of Jan. 12, 2010: A. A. Namgaladze, O. Zolotov, B. E. Prokhorov

0800h  **NH31A-1334** POSTER Validation of Atmospheric Signals Associated with Major Seismicity: P. T. Taylor, D. P. Ouzounov, S. W. Fisher


0800h  **NH31A-1336** POSTER Earthquake Studies In Oaxaca Province, Mexico: I. Hrovic, M. Wilson, F. G. Lopez, G. Cifuentes-Nava, E. Hernandez, E. Cabral

0800h  **NH31A-1337** POSTER Effect of significant data loss on identifying Seismic Electric Signals by using detrended fluctuation analysis in natural time: N. V. Sarlis, E. S. Skordas, P. Varotsos


0800h  **NH31A-1339** POSTER Ionospheric disturbances possibly associated with M 6.0 Earthquakes in Japan area: Statistical analysis during 1998-2010 and recent case studies: K. Hattori, S. Kon, M. Nishihashi

0800h  **NH31A-1340** POSTER Study in the natural time domain of the entropy of dichotomic geoelectrical and chaotic time series: A. Ramirez-Rojas, L. Teleseca, F. Angulo-Brown

0800h  **NH31A-1341** WITHDRAWN
0800h  NH31A-1342 POSTER On the reported ionospheric precursor of the 1999 Hector Mine, CA earthquake: J N Thomas, J J Love, A Komjathy, O P Verkhoglyadova

0800h  NH31A-1343 POSTER Seismo-ionospheric GPS total electron content anomalies observed before the 12 January 2010 M7.0 Haiti Earthquake: J Y Liu, H Le, Y Chen

0800h  NH31A-1344 POSTER Development of a software for monitoring of seismic activity through the analysis of satellite images: C Soto-Pinto, A Poblete, A A Arellano-Baeza, G Sanchez

0800h  NH31A-1345 POSTER Cross-correlation analysis for geoelectric time series associated with a M7.4 earthquake occurred in Mexico by means of the mutual information theory: L E Flores-Marquez, A Ramirez-Rojas, R Luevano

NH31B Moscone South: Poster Hall Wednesday 0800h Strategies for Earthquakes and Natural Hazard Mitigation II Posters (joint with PA, S)

Presiding: J H Venus, School of Earth and Environmen; W Meng, China University of Geosciences

0800h  NH31B-1346 POSTER Strategies for 2nd Grade zonation on susceptibility to seismic-induced landslides in Southern Apennines, Italy: D Tarallo, A Rapolla, V Paolletti, S Di Nocera, F Matano

0800h  NH31B-1347 POSTER Searching for Buried Fault under Chengdu Plain Using Gravity Anomaly Survey: X Yang, S Tung, L Chan

0800h  NH31B-1348 POSTER Enhancing Public Outreach Using A Web-Based Expert System: M Greenway, D M Thomas, K Edwards, K Miyagi

0800h  NH31B-1349 POSTER The defectiveness of measurement data in the inclinometer measurement in the insertion-type aperture and an introduction about the correction: H Homma, K Fujisawa, S Chiba, Y Ootsuka, K Higuchi, T Suganuma

0800h  NH31B-1350 POSTER Use of Bedrock and Geomorphic Mapping Compilations in Assessing Geologic Hazards at Recreation Sites on National Forests in NW California: J A De La Fuente, A Bell, D Elder, R Mowery, R Mikulovsky, H Klingel, M Stevens

0800h  NH31B-1351 POSTER Assessing the Stability of Precariously Balanced Rocks and their Geomorphic Setting: D E Haddad, R Arrowsmith

0800h  NH31B-1352 POSTER Earthquake Model of the Middle East (EMME) Project: Active Fault Database for the Middle East Region: L Gülen, Title of Team: WP2 Team

0800h  NH31B-1353 POSTER Probabilistic Seismic Hazard Disaggregation Analysis for the South of Portugal: I Rodrigues, M Sousa, P Teves-Costa

0800h  NH31B-1354 WITHDRAWN

0800h  NH31B-1355 POSTER Physical Exposure to Seismic Hazards of Health Facilities in Mexico City, Mexico: S M Rodriguez, D Novelo Casanova

0800h  NH31B-1356 POSTER Surface Displacements Determined From Offset Features And Landform-Restoration Along Faults Associated With 14 APRIL, 2010 Yushu Earthquakes, Eastern Tibetan Plateau, Qinhai Province, China: M J Bartholomew, D Li, W Luo, C Feng

0800h  NH31B-1357 POSTER Magnitude determination using initial P waves for Cascadia Subduction Zone in Canada’s west cost: A Eshaghi, K F Tiampo

0800h  NH31B-1358 POSTER METHODOLOGIES FOR VS30 ESTIMATION – APPLICATION TO LISBON AND LOWER TAGUS VALLEY REGION: P Teves-Costa, I M Almeida, R Matildes, I Rodrigues

0800h  NH31B-1359 POSTER Testing the ability of a proposed geotechnical based method to evaluate the liquefaction potential analysis subjected to earthquake vibrations: A Abbaszadeh Shahri, K Behzadafshar, B Esfandiyari, R Rajabolu

0800h  NH31B-1360 POSTER Evaluation of maximum expected magnitude of induced seismic events resulting from CO2 injection for geologic carbon sequestration: A Mazzoldi, J Rutqvist

NH31C Moscone West: 3010 Wednesday 0800h Remote Sensing and Modeling of Landslides: Detection, Monitoring, and Risk Evaluation II (joint with NH, EP, PA)

Presiding: N Lu, Colorado School of Mines; D B Kirschbaum, NASA Goddard Space Flight Center


0830h  NH31C-03 POSTER Catches Scale Landslide Hazard Assessment In The Siwaliks Of Nepal: R K Dahal, P P Paudel, S Hasegawa, N P Bhardary, R Yatabe

0845h  NH31C-04 Development of community hazard map for landslide risk reduction at the village level in Java, Indonesia: D Karnawati

0900h  NH31C-05 Application of remote sensed precipitation for landslide hazard assessment models: D B Kirschbaum, C D Peters-Lidard, R F Adler, S Kumar, K Harrison

0915h  NH31C-06 Tertiary creep test by ring shear apparatus in predicting initiation time of rainfall-induced shallow landslide: A Dok, H Fukuoka

0930h  NH31C-07 Estimating the failure potential of a partially saturated slope from combined continuum and limit equilibrium modeling (Invited): R I Borja, J A White, X Liu, W Wu

0945h  NH31C-08 Mechanism of shallow disrupted slide induced by extreme rainfall: O Igwe, H Fukuoka

Near Surface Geophysics

NS31A Moscone South: Poster Hall Wednesday 0800h Airborne Geophysics for Geohazards and Environmental Problems I Posters (joint with G, CP, H, NH, S, V)

Presiding: S Okuma, Geological Survey Japan, AIST; M Deszcz-Pan, USGS

0800h  NS31A-1380 POSTER Nature and Geometry of tectonic elements associated with Bhuj Earthquake from High resolution Aeromagnetic data: M Rajaram, A S. Prasanna

0800h  NS31A-1381 POSTER Geophysical investigation of the fault architecture of the San Andreas – Calaveras Fault junction in central California: J T Watt, R C Jachens, R W Graymer, D A Ponce, R W Simpson

0800h  NS31A-1382 POSTER Aeromagnetic Constraints on the Subsurface Structure of Usu Volcano, Hokkaido Japan: T Nakatsuka, S Okuma, Y Ishizuka

0800h  NS31A-1383 POSTER Potential-field inversion from uneven tracks with application to the Brothers volcano AUV magnetic data (Kermadec Arc, New Zealand): F Caratori Tontini, B W Dary, C E De Ronde, R W Embley, M Tivey
2010 Fall Meeting

Ocean Sciences

**OS31A Moscone South: Poster Hall Wednesday 0800h**

**Carbon System Dynamics in Large River-Dominated Coastal Margins II Posters (joint with H, B)**

**Presiding:** S E Lohrenz, Univ Southern Mississippi; S E Lohrenz, Univ Southern Mississippi; W Cai, University of Georgia; W Cai, University of Georgia

0800h **OS31A-1404 Poster** Barium and Carbon fluxes in the Canadian Arctic Archipelago: H Thomas, E H Shadwick, W Roule Ebongue, B Lansard, J Navez, Y Gratton, F Prowe, A Mucci, M Chierici, A Fransson, T N Papakryiakou, E Sternberg, L A Miller

0800h **OS31A-1405 Poster** Terrestrial Carbon Inputs from the Colville River to Simpson Lagoon, Alaska: K M Schreiner, T S Bianchi, M A Allison

0800h **OS31A-1406 Poster** Biogeochemical controls on carbonate saturation and pH in coastal oceans influenced by large rivers: W Huang, X Hu, W Cai

0800h **OS31A-1407 Poster** A Novel Method For Predicting Carbon Monoxide Apparent Quantum Yield Spectra in Coastal Water Using Remote Sensing Reflectance Data: H E Reader, W L Miller

0800h **OS31A-1408 Poster** Phytoplankton community structure and dynamics in the river influenced margin of the Northern Gulf of Mexico: S Chakraborty, S E Lohrenz

0800h **OS31A-1409 Poster** Air-water CO2 Fluxes and Inorganic Carbon Dynamics in a Microtidal, Eutrophic Estuary: J Crosswell, B R Hales, H W Paerl

0800h **OS31A-1410 Poster** Oxygen Dynamics and Net Community Productivity During a Lagrangian Cruise in the Western Gulf of Maine: O De Meo, J Salisbury

0800h **OS31A-1411 Poster** Comparison of community respiration between summer and winter in the East China Sea: C Chen, G Gong

---

**NS31B Moscone South: Poster Hall Wednesday 0800h**


**Presiding:** L D Slater, Rutgers-Newark; E A Atekwana, Oklahoma State University

0800h **NS31B-1394 Poster** Responses of mcrA and pmoA Gene Copies and Methane Fluxes to Soil Temperature Changes in Rice Microcosms: A Sithole, G E Flores, A L Reysenbach, M J Shearer, C L Butenhoff, A M Khalil

0800h **NS31B-1395 Poster** Study of Large Scale Electromagnetic Field with “Earth-Ionosphere” Mode: L D Quan, Q Di, W M Yue, Title of Team: SEP

0800h **NS31B-1396 Poster** Mapping degrading organic contaminant plumes with spontaneous potential: Why does it not always work?: S Forté, L R Bentley

0800h **NS31B-1397 Poster** Investigation of biogeophysical signatures at a mature crude-oil contaminated site, Bemidji, Minnesota: L D Slater, E A Atekwana, A Revil, M Skold, D Ntarlagiannis, Y Gorby, F Mewafy, F D Day-Lewis, D D Werkema, J Trost, G N Delin, W N Herkelrath

0800h **NS31B-1398 Poster** Spectral induced polarization signatures of hydroxyl adsorption in porous media: C Zhang, T C Johnson, L D Slater, G D Redden

0800h **NS31B-1399 Poster** Spectral Induced Polarization (SIP) measurements for monitoring toluene contamination in clayey soils: A Ustra, L D Slater, D Ntarlagiannis

0800h **NS31B-1400 Poster** Spectral Induced Polarization (SIP) monitoring during Microbial Enhanced Oil Recovery (MEOR): J W Heenan, D Ntarlagiannis, L D Slater

0800h **NS31B-1401 Poster** Investigating the effect of electro-active ion concentration on spectral induced polarization signatures arising from biomineralization pathways: D Ntarlagiannis, L D Slater, K H Williams, S S Hubbard, Y Wu

0800h **NS31B-1402 Poster** Spectral induced polarization signatures from a crude-oil contaminated site undergoing biodegradation, Bemidji, MN: F Mewafy, A A Atekwana, D Ntarlagiannis, L D Slater, A Revil, M Skold, Y Gorby, D Werkema

0800h **NS31B-1403 Poster** A tank experiment with self-potential signals produced by a subsurface bioelectrochemical system: S D Fachin, S Vasconcelos, C Mendonça
0800h **OS31B-1413** POSTER Coastal Marsh Sediments from Bodega Harbor: Archives of Environmental Changes at the Terrestrial-Marine Interface: L K Rademacher, Y Rong, T M Hill, C Hiromoto, A Fisher

0800h **OS31B-1414** POSTER Substrate Variations and its Relationship and Impact on the Distribution of Eelgrass Beds in Griffin Bay, Washington: A Sopha, H Greene, S Wyllie-Echeverria, F J Harmans

0800h **OS31B-1416** POSTER Determining the Sediment Budget of the Lower Hudson River: R Prugue, F O Nitsche, T C Kenna

0800h **OS31B-1417** POSTER Shipboard magnetic field data trace magnetic sources in marine sediments: Geophysical studies of the Stongo and North Edisto Inlets near Charleston, South Carolina: A K Shah, S Harris

0800h **OS31B-1418** POSTER Shallow Sediment Trace Metal Concentrations and Short-Term Accumulation Rates in the Neponset River Estuary, Massachusetts, USA: J R Spencer, J Zhu, C R Olsen

0800h **OS31B-1419** POSTER Using gamma ray spectrometry for fingerprinting sources of estuarine and coastal sediment in Mukwa coast, Hokkaido, northern Japan: S Mizugaki, J Ohtsuka, Y Murakami, T Ishiya, S Hamamoto

0800h **OS31B-1421** POSTER Influence of Compositional Variations on Floc Size and Strength: H Yin, X Tan, A H Reed, Y Furukawa, G Zhang

0800h **OS31B-1422** POSTER ANTHROPOGENIC INFLUENCES ON ESTUARINE SEDIMENTATION IN SALEM SOUND, MA: E R Kristiansen, J B Hubeny, J Zhu, C R Olsen, B Warren

0800h **OS31B-1423** POSTER An Evaluation of Vessel Based LiDAR Surveying as a Tool for Monitoring Short Term Change in Coastal Wetlands: C Mueller

0800h **OS31B-1424** POSTER Long-Term Survival of Fecal Indicator Bacteria in Estuarine Sediment: A S Ferguson, A Layton, P J Culligan, T C Kenna, B J Mailloux

0800h **OS31B-1425** POSTER Flocculation of Clay and Organic Matter in Turbid Salt Water: A H Reed, H Yin, G Zhang, X Tan, Y Furukawa

0800h **OS31B-1426** POSTER A Bay/Estuary Model to Simulated Hydrodynamics and Biogeochemical Cycles: G Yeh


0800h **OS31B-1428** POSTER The Vinlyguaiacol/Indole or VGI (“Veggie”) Ratio: A Novel Molecular Parameter to Evaluate the Relative Contributions of Terrestrial and Aquatic Organic Matter to Sediments: M A Kruger, K K Olsen, J Slusarczyk, E Gomez

0800h **OS31C-1432** POSTER Seasonal sediment transfer and net accumulation on an accommodation-space-limited muddy tidal flat: Willapa Bay, Washington: K V Boldt, C A Nittrouer, A S Ogston

0800h **OS31C-1433** POSTER Modeling the formation and evolution of deposition system for accreting tidal flat composed of mud and sand: a case study of the central Jiangsu coast: X Liu, S Gao

0800h **OS31C-1434** POSTER Currents in a Small Channel on a Sandy Tidal Flat: S Elgar, B Raubenheimer

0800h **OS31C-1435** POSTER Analyzing the role of topography and sediment disturbances on the initial formation of sorted bedforms: T Van Oyen, H E De Swart, P Blondeaux

0800h **OS31C-1436** POSTER Quantifying Tidal Flat Areal Change of Yellow River (Huang He) Delta in China using SAR Intensity Data: A Tanaka

0800h **OS31C-1437** POSTER Impact of boat-generated waves on intertidal estuarine sediments: O Blanpain, J Deloffre, R Lafite, G Gomit, D Callaud, L David

0800h **OS31C-1438** POSTER Simulating 90 Days of Wind and Tidally Driven Hydrodynamics from the Deep Ocean into the South Atlantic Bight Estuaries: P Bacopoulos, S C Hagen

0800h **OS31C-1439** POSTER Modeling Sediment Deposition for Predicting Marsh Habitat Development: M E Newcomer, A M Kuss, T Kertron, A Remar, V Choski, K Grove, J W Skiles

0800h **OS31C-1440** POSTER Export and Retention of Fine-Grained Sediment on the Skagit Tidal Flats: Implications for the Fate of Fluvial Particulate Discharge: K M Lee, A S Ogston, C Nittrouer

0800h **OS31C-1441** POSTER A numerical investigation of fine sediment transport at intertidal flat: T Hsu, S Chen, A S Ogston

0800h **OS31C-1442** POSTER Seasonal and Interannual Variations in the Hydrodynamics of the Skagit River Tidal Flats: J A Lerczak, D K Ralston, G W Cowles

0800h **OS31C-1443** POSTER Use of thermal infrared pictures for retrieving intertidal DEM by the waterline method: advantages and limitations: D Gaudin, C Delacourt, P Allemand

0800h **OS31C-1444** WITHDRAWN

0800h **OS31C-1445** POSTER Seasonal Variations in Sediment Transport Potential in a Tidal Channel-Flat Complex in Willapa Bay, WA: P L Wiberg, B Law, R A Wheatcroft, T Milligan, P S Hill

0800h **OS31C-1446** POSTER Propagation of Shallow Freshwater Plumes Over Vertically-Sheared Currents: S M Henderson, J C Mullarney

0800h **OS31C-1447** POSTER A Coupled Wave-Current-Sediment model for Skagit Bay: G W Cowles, E M Holmes, D K Ralston

**OS31D Moscone South: Poster Hall Wednesday 0800h**


**Presiding:** H Bahliburg, Universitaet Muenster; R Weiss, Texas A&M University

0800h **OS31D-1448** POSTER Currents Produced by the February 27, 2010 Chilean Tsunami in Humboldt Bay California: A Admire, L A Dengler, G B Crawford, B U Uslu, J Montoya

0800h **OS31D-1449** POSTER Tsunami Inversion on 2010 Chile Earthquake with the Small Unit Tsunami Inverse Method: T Wu, D He

0800h **OS31D-1450** POSTER Boulder transport by the 2010 Chile tsunami (Bucalbu, Central Chile): A quasi-experimental setting in a natural environment: M Spiske, H Bahlburg

0800h **OS31D-1451** POSTER The preservation potential of tsunami and post-tsunami sedimentation – Chile 2010: E Watcham, I Shennan, S Woodroffe, E Garrett

All information is current as of November 12, 2010
### Planetary Sciences

**P31A Moscone South: Poster Hall Wednesday 0800h**

**Presiding:** L B Jaffel, Institut Astrophysique Paris; D L Huestis, SRI International

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800h</td>
<td>POSTER Trace Molecules in Giant Planet Atmospheres: D L Huestis, G P Smith</td>
<td></td>
</tr>
<tr>
<td>0800h</td>
<td>POSTER Helium Abundance in the Atmosphere of Jupiter and Saturn: L B Jaffel, F Herbert</td>
<td></td>
</tr>
<tr>
<td>0800h</td>
<td>POSTER Updated Saturn Interior Models: Implications for Its Rotation Period: R Hellet, T Guillot, Y Kaspi</td>
<td></td>
</tr>
<tr>
<td>0800h</td>
<td>POSTER Stability of the Ice-Hydrogen Interface at Giant Planet Core Boundary Conditions: H F Wilson, B Milizer</td>
<td></td>
</tr>
<tr>
<td>0800h</td>
<td>POSTER Scattering Properties of Jovian Tropospheric Cloud Particles Inferred from Cassini/ISS: Mie Scattering Phase Function and Particle Size in South Tropical Zone III: T Sato, T Satoh, Y Kasaba</td>
<td></td>
</tr>
<tr>
<td>0800h</td>
<td>POSTER The effect of precipitation on the cloud concentration at Jupiter: K Mihalka, S K Atreya</td>
<td></td>
</tr>
<tr>
<td>0800h</td>
<td>POSTER Tidal Torques and Long-Term Orbital Evolution of Planets in Locally Isothermal Disks: S H Lubow, G D’Angelo</td>
<td></td>
</tr>
<tr>
<td>0800h</td>
<td>POSTER A Possible Correlation Between the Mass of a Giant Planet and the Mass of its Host Star: G D’Angelo, J J Lissauer</td>
<td></td>
</tr>
<tr>
<td>0800h</td>
<td>POSTER Simplified Model of PV Mixing in Thick and Thin Shells: L A Allen, J M Aurnou, J Wicht</td>
<td></td>
</tr>
</tbody>
</table>

**P31B Moscone South: Poster Hall Wednesday 0800h**

**Presiding:** B J Buratti, JPL; C J Hansen, JPL; A R Hendrix, JPL/Caltech; K K Khurana, University of California at Los Angeles

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800h</td>
<td>POSTER The Amazing Nature, Origin, and Evolution of Outer Planet Satellites II Posters (joint with SM, C)</td>
<td></td>
</tr>
</tbody>
</table>

---

**OS31D-1455 POSTER Integrated Historical Tsunami Event and Deposit Database:** P K Dunbar, H L McCullough

**OS31D-1456 POSTER Description of extreme-wave deposits on the northern coast of Bonaire, Netherlands Antilles:** S G Watt, B E Jaffe, R A Morton, B M Richmond, G R Gelfenbaum, Title of Team: Coastal and Marine Geology Program

**OS31D-1457 POSTER Numerical Experiment of Sediment Transport and a Case Study of Sediment Transport Simulation of the 2004 Indian Ocean Tsunami in Lhoknga, Banda Aceh, Indonesia:** A R Gusman, Y Tanioka, T Takahashi

---

**OS31E Moscone West: 3009 Wednesday 0800h**

**Presiding:** A J Sutton, NOAA Pacific Marine Environmental Laboratory; L W Juranek, UW JISAO/NOAA; A D Russell, University of California, Davis; D K Gledhill, NOAA AOML

<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>0800h</td>
<td>POSTER Ocean Acidification: Observation and Prediction of Biogeochemical and Ecosystem-Scale Responses II (joint with B, GC)</td>
<td></td>
</tr>
</tbody>
</table>

---

**OS31E-01 POSTER Ocean Acidification of the North Pacific Ocean:** R A Feely, C L Sabine, R H Byrne, D Greeley

**OS31E-02 POSTER An assessment of continental shelf anaerobic processes on oceanic alkalinity budget:** X Hu, W Cai


**OS31E-04 POSTER Decay of terrestrial and marine organic matter in Siberian Shelf Seas: its impact on ocean acidification and carbon pump:** L G Anderson, S Jutterstrom, I Wohlstrom

**OS31E-05 POSTER Diurnal and seasonal variation of coastal carbonate system parameters in South Florida and the Caribbean:** K Yates, N A Smiley

**OS31E-06 The effect of CO2-induced ocean acidification on calcification rates and shell properties of two species of bimetallic marine calcifiers:** J B Ries

**OS31E-07 Inorganic carbon dynamics in the upwelling system off the Oregon coast and implications for commercial shellfish hatcheries:** J M Vance, B R Hales

**OS31E-08 Coral growth with thermal stress and ocean acidification: lessons from the eastern tropical Pacific (Invited): D Manzello**
**P31B-1526** POSTER LABORATORY MEASUREMENTS AND MODELING OF MOLECULAR PHOTOABSORPTION CROSS SECTIONS FOR PLANETARY APPLICATIONS: G Stark, P L Smith, B R Lewis, A Heays, D Blackie, J Pickering

**P31B-1527** POSTER New Horizons Alice Observations of Io’s UV Atmospheric Emissions: K D Retherford, A J Steffl, S A Sternt, J Parker, R Gladstone, M Versteeg, N Cunningham, D Slater, M Davis

**P31B-1528** POSTER Does Titan’s Slightly Oblate Shape suggest a Capture Origin?: A J Prentice

**P31B-1529** POSTER Mimas at Many Wavelengths and Many Angles: B J Buratti, R H Brown, R N Clark, J Mosher, D P Cruikshank, G Filacchiione, K H Gaines, P D Nicholson

**P31B-1530** POSTER A Satellite Formation Due to A Giant Impact: The Effect of the Protoplanet Mass and Its Composition on the Disk Gas Fraction: M Nakajima, H Genda, E I Ashugh, S Ida

**P31B-1531** POSTER Unexpected and Unexplained Surface Temperature Variations on Mimas: C Howett, J R Spencer, J C Pearl, T A Hurford, M Segura, Title of Team: The Cassini CIRS Team

**P31B-1532** POSTER Radiation Environment and Surface Radiolytic Interactions at Mimas: J F Cooper, E C Sittler, A S Lipatov, S J Stunner, C Paranicas, P D Cooper

**P31B-1533** POSTER The Surface Composition of Mimas: Ultraviolet Constraints: A R Hendrix, C J Hansen, T A Cassidy, G M Holsclaw

**P31B-1534** POSTER Why Can’t Mimas Be More Like Enceladus?: W B McKinnon

**P31B-1535** POSTER WISE Comets and the Outer Solar System: J M Bauer, A K Mainzer, T Graw, J R Masiero, R M Cutri, R S McMillan, R G Walker, E L Wright, Title of Team: The WISE Team

**P31B-1536** POSTER A High-Pressure Study of the NH3-H2 System: B Chidester, T A Strobel

**P31B-1537** POSTER New Operational Mode of Space-borne Quadrupole Mass Spectrometers: D J Gershman, B Block, M Rubin, P R Mahaffy, T Zurhoven

**P31B-1538** POSTER Upper Atmosphere of Titan from UVIS Stellar Occultations: J A Kammer, D E Shemansky, X Zhang, Y L Yung

**P31B-1539** POSTER The Saturnian Dust Streams: Sources, Sinks and Formation Conditions: A L Graps

**P31B-1540** POSTER 3D MODELING OF PLANETOIDS: G Machtoub

**P31B-1541** POSTER A laboratory study of the effects of roughness on the mid-infrared spectra of rock surfaces: M M Osterloo, V E Hamilton, F S Anderson

**P31C Moscone South: Poster Hall Wednesday 0800h**

**P31C-1542** POSTER Following cloud activity in Titan’s atmosphere around the equinox with VIMS/Cassini: S Rodriguez, C Sotin, P Rannou, S Le Mouélic, C A Griffith, J W Barnes, G Tobie, R H Brown, K H Baines, B J Buratti, R N Clark, P D Nicholson


**P31C-1544** POSTER Temporal and seasonal changes in Titan’s stratosphere over a Titanian year: A Coustenis, G Bampasidis, R K Acherterb, S Vinatier, D E Jennings, C A Nixon, R C Carlson, N A Tansby, F M Flasar, G L Bjoraker, P N Romani, X Moussas


**P31C-1546** POSTER Empirical Approaches To Reduce The Atmospheric Component In VIMS Surface Images Of Titan: S Le Mouélic, T Cornet, S Rodriguez, C Sotin, J W Barnes, R H Brown, K H Baines, B J Buratti, R N Clark, P D Nicholson


**P31C-1548** POSTER Titan’s methane cycle and its effect on surface geology: R M Lopes, R S Peckyno, A A Le Gall, L Wye, E R Stofan, J Radebaugh, A G Hayes, O Aharonson, S D Wall, M A Janssen, Title of Team: Cassini RADAR Team

**P31C-1549** POSTER Causes of Titan’s Lake and Cloud Distributions and Predictions of Future Changes: S Graves, T Schneider, E L Schaller, M E Brown

**P31C-1550** POSTER Chemistry in the Dunes of Titan: Tribochemical Reactions of Complex Organics and Water Ice: J L Beauchamp, D A Thomas

**P31C-1551** POSTER Prebiotic chemistry on Titan? The nature of Titan’s aerosols and their potential evolution at the satellite surface: P J Coll, O Poch, S I Ramirez, A Buch, C Brassé, F Raulin

**P31C-1552** POSTER Constraining Depths and Wave Heights for Titan’s lakes with Cassini RADAR Data: L Wye, H A Zebker, A G Hayes, R D Lorenz, C Notarnicola, B Ventura, D Casarano, Title of Team: Cassini RADAR Team


**P31C-1554** POSTER The influence of impurities in Titan ice bedrock on tensile strength and resistance to fluvial erosion: experimental results: K L Litwin, P Polito, B Zygiedbaum, L S Sklar, G C Collins

**P31C-1555** POSTER Influence of Titan’s climate-driven surface mass redistribution on spin pole precession: B G Bills, F Nimmo, O Aharonson

**P31D Moscone South: 306 Wednesday 0800h**


**P31D-02** POSTER “Ah . . . not so flat as we were led to believe.” Global and Regional Topography Characteristics of Europa (Invited): P Schenk
0830h  **P31D-03** Generating topography through tectonic deformation of ice lithospheres: Simulating the formation of Ganymede’s grooves: M J Bland, W B McKinnon


---

### PA31E Moscone South: 306 Wednesday 0900h

**Interiors of Terrestrial Planets and Super-Earth Exoplanets II**

**Presiding:** J H Roberts, Johns Hopkins University Applied Physics Laboratory; S Zhong, University of Colorado at Boulder

0900h  **P31E-01** Disequilibrium by Planetary Collision: E I Asphaug, M Hutzi

0915h  **P31E-02** Condensates from stellar protoplanetary nebulae: Implications for heavy element and volatile enrichment in extrasolar planets: T V Johnson, J L Jinunie, O Mousis

0930h  **P31E-03** Effects of initial conditions and impacts on the mantle dynamics and dynamo activity on early Mars: J H Roberts, J Arkani-Hamed

0945h  **P31E-04** Constraints on Lunar Heat Flow Rates from Diviner Lunar Radiometer Polar Observations: D A Paige, M A Siegler, A R Vasavada

---

### Public Affairs

**PA31E Moscone South: Poster Hall Wednesday 0800h Challenges of River Restoration Using Dam Removals and Other Tools Posters (joint with H)**

**Presiding:** J E Evans, Bowling Green State University; J V De Graff, USDA—Forest Service

0800h  **PA31E-1586** POSTER The Importance of Paleohydrologic Analysis to Guide River Restoration After Dam Removal, Ottawa River, NW Ohio: J E Evans, N Harris, L D Webb

0800h  **PA31E-1587** POSTER Geriatric infrastructure, BRAC, and ecosystem service markets? End-of-life decisions for dams, roads, and offshore platforms (Invited): M W Doyle

0800h  **PA31E-1588** POSTER What Should a Restored River Look Like? (Invited): J L Florsheim, A Chin

0800h  **PA31E-1589** POSTER Do post-glacial river valleys in northern New England store mill-dam legacy sediments?: S Strouse, N P Snyder

0800h  **PA31E-1590** POSTER Assessing Stream Restoration Potential of Recreational Enhancements on an Urban Stream, Springfield, OH: J B Ritter, A Eveslizor, K Minter, C Rigsby, K Shaw, K Shearer

0800h  **PA31E-1591** POSTER Removing Dams: Project-Level Policy and Scientific Research Needs (Invited): B Graber


0800h  **PA31E-1593** POSTER Multi-year Assessment of the Removal of the Munroe Falls Dam on the Middle Cuyahoga River, Ohio: J A Peck, N R Kasper

---

### Paleocenography and Paleoclimatology

**PP31A Moscone South: Poster Hall Wednesday 0800h Nitrogen Cycle in the Oceans, Past and Present I Posters (joint with B, OS, V)**

**Presiding:** A Schmittner, Oregon State University; R De Pol-Holz, University of California, Irvine; M Kienast, Dalhousie University

0800h  **PP31A-1608** POSTER NICOPP: Nitrogen Cycle in the Ocean, Past and Present: M Kienast, E D Galbraith, T Kiefer, A Schmittner, R De Pol-Holz, Title of Team: NICOPP working group members

0800h  **PP31A-1609** POSTER Reconstruction of the oceanic nitrate inventory in the Pliocene Caribbean Sea: Foraminifera-bound δ15N – A new approach: M Straub, G H Haug, D M Sigman, H Ren

0800h  **PP31A-1610** POSTER What can we learn by comparing bulk and diatom-bound nitrogen isotopes in downcore profiles?: M G Horn, R S Robinson, P Bedsole

0800h  **PP31A-1611** POSTER A holistic approach to understanding the N isotopic composition (δ15N) of deep-sea sediments: diatom-bound, foraminifera-bound, whole sediment and modern nitrate δ15N from the equatorial Pacific: P A Rafer, C D Charles, D M Sigman, G H Haug

0800h  **PP31A-1612** POSTER Enriched Nitrate and Depleted Nitrite Isotopic Signatures in the OMZ off Northern Chile: L A Bristow, M A Altabet, F Stewart, E DeLong, O Ulloa

0800h  **PP31A-1613** POSTER Eukaryotes dominate new production in the Sargasso Sea: S E Fawcett, M W Lomas, B B Ward, J R Casey, D M Sigman

0800h  **PP31A-1614** POSTER Dynamics of the marine N-cycle over glacial-deglacial transitions: O Eugster, N Gruber

0800h  **PP31A-1615** POSTER Nitrogen Cycling in the Black Sea on Glacial-Interglacial Time Scales: T M Quan, J D Wright, P G Falkowski

0800h  **PP31A-1616** POSTER Who stole my δ15N? Local vs. remote drivers of the South Pacific Oxygen Minimum Zone during the Holocene: C Chazen, T Herbert, M A Altabet

0800h  **PP31A-1617** POSTER Diverging Glacial-Interglacial Nutrient Regimes in the Eastern Tropical Pacific During the Last 150 kyr: N Dubois, M Kienast, S Kienast, S E Calvert

0800h  **PP31A-1618** POSTER The Role of Eolian Dust Fertilization in Biogeochemical Cycles in The sub-Arctic Northwest Pacific During the Late Pliocene Intensification of Northern Hemisphere Glaciation: I Bailey, Q Liu, G Swann, Z Jiang, Y Sun, X Zhao, A Roberts

0800h  **PP31A-1619** POSTER Linking Biogeochemical Cycles of Nitrogen and Oxygen in Euxinic Devonian Basins: M L Tuitt, S A Macko

---

**PP31B Moscone South: Poster Hall Wednesday 0800h Southern Connections: An Intrahemispheric Paleoclimate Comparison I Posters (joint with GC)**

**Presiding:** T Cohen, Macquarie University; J May, University of Wollongong

0800h  **PP31B-1620** POSTER 25,000-yr diatom-based precipitation record for lowland, southern hemisphere tropical South America: K A Fitzpatrick, P Mayle, B Whitney, S E Metcalfe

0800h  **PP31B-1621** POSTER Mid-Holocene variability of the East Asian monsoon based on bulk organic δ13C and C/N records from the Pearl River estuary, southern China: F Yu, J M Lloyd, Y Zong, M J Leng, A D Switzer, W W Yim, G Huang
Methane Time Series from the Vostok Ice Core: and Correlation of the 420-ka Temperature, Carbon Dioxide, and

R E Rickaby

Pleistocene climate: R Zech, how permafrost carbon dynamics controlled atmospheric CO2 and

0800h PP31B-1625 POSTER Vegetation and Climate Changes in Patagonia (46°S) during the Last 20 kyr cal. BP from South East Pacific MD 07 3088 Core: V Montade, N Combournieyte, G Siani, E Michel, M Carel, S Mulso

0800h PP31B-1626 POSTER Alluvial records of late Quaternary environmental change along the eastern Andes: J May, F Preusser, H Veit

0800h PP31B-1627 POSTER The Southern Ocean component of the “bipolar seasaw” 210Pa/230Th and 14Nd evidence from the Argentine Basin: B J Hickey, G M Henderson, A L Thomas, J Rae, P Carter, D Vance, C Chiessi, S Muliza

0800h PP31B-1628 POSTER How did atmospheric circulation in the Equatorial Pacific Ocean respond to rapid climate changes during the last glacial period? Preliminary results from a speleothem from Nuie: D J Sinclair, R M Sherrrell, J D Wright, J Hjellstrom


0800h PP31B-1630 POSTER New insights into deglacial climate variability in tropical South America from molecular fossil and isotopic indicators in Lake Tititaca: T M Shanahan, K A Hughes, K Fornace, P A Baker, S C Fritz

PP31C Moscone South: Poster Hall Wednesday 0800h Dynamics of Glacial Cycles I Posters

Presiding: S A Marcott, Oregon State University; J D Shakun, Oregon State University

0800h PP31C-1631 POSTER Sea surface temperature changes over the past 3 Terminations at the Southern Margin of the Western Pacific Warm Pool: S Chang, C Shen, L Lo, K Wei, M Lee, H Mii

0800h PP31C-1632 POSTER Tropical Pacific SST Patterns, Controls and Effects (past 1.5 Ma): K A Dyck, A C Ravelo, A C Mix

0800h PP31C-1633 POSTER Phytoplankton Productivity and Community Structure Changes in the Northern South China Sea during the Last 260 Ka: J He, M Zhao, L Li, P Wang

0800h PP31C-1634 POSTER The permafrost glacial hypothesis – how permafrost carbon dynamics controlled atmospheric CO2 and Pleistocene climate: R Zech, Y Huang, M Zech, R Tarozo

0800h PP31C-1635 POSTER The deep ocean carbonate over glacial CO2 cycles and the glacial-interglacial CCD seasaw: H Elderfield, R E Rickaby

0800h PP31C-1636 POSTER Wavelet Analysis of the Periodicity and Correlation of the 420-ka Temperature, Carbon Dioxide, and Methane Time Series from the Vostok Ice Core: J Zhang, S Huang

0800h PP31C-1637 WTTHDRAWN

0800h PP31C-1638 POSTER A Detection of Milankovitch Periodicity in Records of Global Arc Volcanism: M D Jegen, S Kutterolf, J X Mitrovica, T Kwasnitschka, A Freundt, P Huybers

0800h PP31C-1639 POSTER Carbon Cycle Dynamics through the Early Eocene Climatic Optimum: Orbital Couplings to Lacustrine Cycling: S Z Rosengard, D S Grogan, J H Whiteside, M Van Keuren, D Musker

0800h PP31C-1640 POSTER Monsoon Rectification of Orbital Forcing near Pangean Equator: R Y Anderson

0800h PP31C-1641 POSTER A Southern Ocean Diatom Record of the Mid-Pleistocene Transition from the Amundsen Sea, Antarctica: M A Konfirst, R P Scherer

0800h PP31C-1642 POSTER Constraining Ice Sheet Histories with the Devil’s Hole Isotopic Record: A Rhines, P Huybers

0800h PP31C-1643 POSTER Milankovitch-paced Termination II in a Nevada speleothem: J D Shakun, S J Burns, P U Clark, H Cheng, R Edwards

0800h PP31C-1644 POSTER A Phase-Space Model for Pleistocene Ice Volume: J Z Imbrie, A Imbrie-Moore, L E Lisiecki

0800h PP31C-1645 POSTER Does the climate jump between several attracting trajectories phase-locked onto the astronomical forcing?: B De Saedeleer, M Crucifix, S M Wieczorek

0800h PP31C-1646 POSTER Transient simulations of the last Glacial Cycle with an AOGCM: R S Smith, J M Gregory

0800h PP31C-1647 POSTER The Astronomical Forcing of Climate Change: Forcings and Feedbacks: M P Erb, A J Broccoli, A C Clement

PP31D Moscone West: 3005 Wednesday 0800h Reconstruction and Modeling of Global Climate Evolution of the Past 21,000 Years I

Presiding: B L Otto-Bliesner, NCA; Z Liu, University of Wisconsin-Madison

0800h PP31D-01 POSTER The Proxy Record of Global Surface Temperature Variations during the Last Deglaciation and Implications for Climate Change Mechanisms (Invited): A C Mix, J D Shakun, P U Clark

0815h PP31D-02 WTTHDRAWN

0830h PP31D-03 POSTER Northern Hemisphere Meltwater Discharge and the Last Ice-Age Termination (Invited): F He, Z Liu, B L Otto-Bliesner, P U Clark, A E Carlson, E C Brady, E Brook, J M Lynch-Stieglitz, J E Kutzbach, N A Rosenbloom

0845h PP31D-04 POSTER Arctic Freshwater Forcing of the Younger-Dryas Climate Reversal: W R Peltier, V Mariotti

0900h PP31D-05 POSTER New Insights into Antarctic Ice-Sheet Retreat During the Last Sea-Level Rise: M E Weber, G Kuhn, P U Clark, D Sperre


0930h PP31D-07 POSTER High-resolution deep Northeast Pacific radiocarbon record shows little change in ventilation rate during the last deglaciation: D C Lund, A C Mix

0945h PP31D-08 POSTER Modeling Northern Peatland dynamics and global land carbon inventories since the Last Glacial Maximum: R Spahn, M Steinacher, P Joos
SPA-Aeronomy

SA31A Moscone South: Poster Hall Wednesday 0800h Connections Between the Lower and Upper Atmosphere and Ionosphere II Posters (joint with A)

Presiding: R A Akmaev, NOAA SWPC; R S Lieberman, NorthWest Research Associates; L P Goncharenko, MIT

0800h SA31A-1701 POSTER Study of auroral-zone MSTIDs using 630nm airglow images at Tromsø, Norway and Arhabasca, Canada: M Mori, K Shiokawa, S Oyama, Y Otsuka, S Nozawa, M G Connors
0800h SA31A-1702 POSTER Statistical analysis of nighttime MSTIDs based on airglow imaging observations in the equatorial thermosphere: D Fukushima, K Shiokawa, Y Otsuka, T Ogawa
0800h SA31A-1703 POSTER VARIATIONS OF THE LEVELS OF THE VLF/LF RADIO SIGNALS ON THE MIDDLE-LATITUDE TRACES DURING THE DEEP SOLAR MINIMUM: J J Zetzer, A Lyakhov
0800h SA31A-1704 POSTER Propagation direction of the nighttime mesospheric gravity waves in the OH airglow images at Tromsø, Norway in winter 2009: S Oyama, K Shiokawa, S Suzuki, S Nozawa, Y Otsuka, M Tsutsumi, C M Hall, C Meek, A H Manson
0800h SA31A-1705 POSTER Wave Activity in the Thermosphere from Solar Maximum through Minimum: E K Sutton, F A Marcos, C S Lin
0800h SA31A-1706 POSTER Longitudinal and seasonal variations of the equatorial ionospheric density and drift velocities during solar minimum: S Mohapatra, G D Earle
0800h SA31A-1707 POSTER Seasonal, diurnal, and solar cycle variations of the longitudinal wave structure in the low-latitude thermosphere: Y Kwak, H Kil, W Lee, K Cho
0800h SA31A-1708 POSTER Global signatures and seasonal variations of 630.0 nm nightglow: J C Chang, T Chang, S W Tam, T Huang, C Lin, A B Chen, R Hsu
0800h SA31A-1709 POSTER Long-term Observations of Winds and Waves over Bear Lake Observatory: C S Fish, J J Sojka, N J Mitchell, M J Taylor, F T Berkey
0800h SA31A-1710 POSTER Thermospheric longitudinal structures simulated by the Whole Atmosphere Model (WAM): R A Akmaev, F Wu, T J Fuller-Rowell
0800h SA31A-1711 POSTER Generating QBO in WACCM using the parameterized inertial gravity waves: X Xue, H Liu
0800h SA31A-1713 POSTER Dynamics of atmospheric gravity waves and ripples in OH airglow images at Maui, HI: L J Gelinas, J H Hecht, R L Walterscheid
0800h SA31A-1714 POSTER Gravity waves and instabilities in the ionosphere imaged by the Optical Mesosphere Thermosphere Imagers (OMTI): K Shiokawa, M Mori, D Fukushima, Y Otsuka, S Oyama, S Nozawa, M G Connors
0800h SA31A-1715 POSTER Effects of convection driven gravity waves on equatorial electrojet plasma irregularities: E Shume, E R de Paula, J V Bageston, A Kherani, M M Saba
0800h SA31A-1716 POSTER Interannual Comparison of Mesospheric Responses to Stratospheric Sudden Warmings, as Seen in SABER Data, 2002-2010: R H Picard, P P Wintersteiner, J R Winick, M G Mlynczak, J Russell, T Marshall
0800h SA31A-1717 POSTER Investigation of major stratospheric warming effects on atmospheric coupling at high latitudes using the Canadian Middle Atmosphere Model: M G Shepherd, S R Beagley, Y Cho, V Fomichev, G G Shepherd
0800h SA31A-1718 WITHDRAWN
0800h SA31A-1719 POSTER The Tropospheric Influence on the Upper Thermospheric Zonal Wind as Observed by CHAMP: K Haesler, L Huhr, J Oberheide
0800h SA31A-1720 POSTER Upper Mesospheric Temperatures at Resolute (75 N) in the Context of the QBO, Solar Flux and the Polar Vortex: G G Shepherd, Y Cho
0800h SA31A-1721 POSTER Mid-latitude Ion Temperature during a Sudden Stratospheric Warming Event: V W Hsu, L P Goncharenko, S Zhang, A J Coster, J P Thayer
0800h SA31A-1722 POSTER Effects of January 2010 stratospheric sudden warming in the low-latitude ionosphere: L P Goncharenko, A J Coster, J L Chau, C E Valladares
0800h SA31A-1723 POSTER LONGITUDINAL SIGNATURES IN GLOBAL ELECTRON CONTENT ASSOCIATED WITH SUDDEN STRATOSPHERIC WARMING: A J Coster, L P Goncharenko, C E Valladares

SA31B Moscone South: Poster Hall Wednesday 0800h Heliosphere-A vs Atmosphere-Coupling and Climate II Posters (joint with A, GC, SM, SH)

Presiding: X Fang, University of Colorado

0800h SA31B-1724 POSTER Joint Investigation of Mesospheric Gravity Wave Characteristics and Dynamics over South Pole Station (90°S) during the Austral Winter 2010: P Pautet, M J Taylor, B P Williams, S E Palo
0800h SA31B-1725 POSTER Comparative study of stratosphere at the South Pole and Rothera: B Tan, X Chu, H Liu, C Yamashita, V Harvey, C S Gardner, J P Espy
0800h SA31B-1726 POSTER Gravity Wave Source Variations and Their Impacts during the 2009 Stratospheric Sudden Warming: C Yamashita, H Liu, X Chu
0800h SA31B-1727 POSTER Climatology of Upper Stratospheric Lower Mesospheric Disturbances in the Polar Winter: K Greer, J P Thayer, V Harvey
0800h SA31B-1728 POSTER Stratospheric Sudden Warmings & elevated stratopauses as generated in the Whole Atmosphere Community Climate model: A Chandran, R L Collins, R R Garcia, D R Marsh
0800h SA31B-1729 POSTER Effect of energetic particle precipitation on the atmosphere as simulated by WACCM: E D Peck, C E Randall, X Fang, D R Marsh, V Harvey, M J Mills, C H Jackman
0800h SA31B-1732 POSTER Observation of the Descent of Mesospheric Air above the Arctic during the Northern Winter 2009/2010 using the tracer CO: C Hoffmann, U Raffalski, M Palm, S Golchert, G Hochschild, J Northolt
0800h SA31B-1733 POSTER The effect of precipitating particles on middle atmosphere night time ozone during enhanced geomagnetic activity: M Daae, P J Espy, D Newnham, N Kleinhecht, M Clilverd
0800h SA31B-1734 POSTER Satellite and ground based observations of a large-scale electron precipitation event: R J Gamble, C J Rodger, M Clilverd, N R Thomson, T Ulich, M Parrot, J Sauvaud, J Berthelier

0800h SA31B-1735 POSTER Measurement of cosmogenic radionuclide 36S in sulfate aerosol in Antarctica: A Pandey, J P Savarino, M H Thiemens

0800h SA31B-1736 POSTER Sensitivity of magnetospheric energy input into the upper atmosphere from different models to the solar wind speed: Y Huang, Y Deng, J Lei, A J Ridley, R E Lopez

0800h SA31B-1737 POSTER Is the Stratospheric QBO affected by Solar Wind Dynamic Pressure via an Annual Cycle Modulation?: H Lu, M Jarvis

0800h SA31B-1738 POSTER Inter-annual variability of the middle atmospheric temperature observed by Rayleigh lidars and comparisons with ECMWF and TIMED/SABER results: T Li, T Leblanc, I S McDermid, P Keckhut, K Pérot, M G Mlynczak, J Russell

0800h SA31B-1739 POSTER Relaxation of vibrationally excited NO by collisions with O: R D Sharma, J Welsh


SA31C Moscone South: 301 Wednesday 0800h Ionospheric Modification Using High-Power Radio Waves and Atmospheric Processes Studied Using Space Shuttle and Rocket Exhaust I (joint with SM)

Presiding: M Golkowski, University of Colorado Denver; M H Stevens, Naval Research Laboratory; G Crowley, ASTRA; M P Sulzer, Areceo Observatory

0800h SA31C-01 Space Plasma Exploration by Active Radar (SPEAR induced modifications of the high latitude (78°N) ionosphere observed by both coherent and incoherent radars (Invited): L J Baddeley, I Haggstrom, D M Wright, B Isham, P Gallop


0830h SA31C-03 Artificial Ionospheric Layer Production at Higher Gyroharmonics (Invited): T R Pedersen, M McCarrick, J M Holmes

0845h SA31C-04 D-Region Modification at HAARP: An Overview of Recent Experimental Results Obtained by the University of Florida (Invited): R C Moore

0900h SA31C-05 Spatial Power Distribution of ELF Radiation Induced by HF Heating of the Ionosphere: D Piddidyachi, T F Bell, U S Iman, M Cohen, N G Lehtinen, M Parrot

0915h SA31C-06 L-Brand Ionosphere Scintillations Observed by A Spaced GPS Receiver Array during Recent Active Experiments at HAARP: Y Morton, W Peligrum, F van Graas, S Gunawarden, D Charney, S Peng, J Triplet, P Vikram, A Vemuru

0930h SA31C-07 First joint measurements of the overshoot effect of Polar Mesospheric Summer Echoes (PMSE) at 54 and 224 MHz excited by electron heating: C La Hoz, O Havnes, M Rietveld

0945h SA31C-08 EXPLORING THE BEHAVIOR OF THE O AND X-MODE ARTIFICIAL FIELD ALIGNED IRREGULARITIES AT THE E REGION UPPER HYBRID HEIGHT: E Nossa, D L Hysell

SPA-Solar and Heliospheric Physics

SH31A Moscone South: Poster Hall Wednesday 0800h Comparing MHD Models to Observations in the Sun: From the Interior to the Heliosphere I Posters

Presiding: P G Judge, NCAR

0800h SH31A-1781 POSTER Simulation of Flux Emergence in Solar Active Regions: F Fang, W B Manchester, W P Abbott, B van der Holst, C J Schrijver

0800h SH31A-1782 POSTER Realistic MHD Simulations of Formation of Sunspot-like Structures and Comparison with Observations: I N Kitiashvili, A G Kosovichev, N N Mansour, A A Wray

0800h SH31A-1783 POSTER Magnetic Field Measurements at the Photosphere and Coronal Base: P G Judge, R Centeno, A Tritschler, H Uitenbroek, S Jaeggl, H Lin

0800h SH31A-1784 POSTER Line profile asymmetries in the transition region: models and observations: J Martinez-Sykora, B De Pontieu, V H Hansteen, S W McIntosh

0800h SH31A-1785 POSTER Twistiness and Connectivity of Magnetic Field Line in the Solar Active Region NOAA 10930: S Inoue, K Kuwano, T Magara

0800h SH31A-1786 POSTER Creating synthetic coronal observational data from MHD models: the forward technique: L A Rachmeler, S E Gibson, J Dove, T A Kuera

0800h SH31A-1787 POSTER The 2009 Heliosphere Campaign: MESSENGER Data Analysis and Preliminary Results: E A Jensen, M M Bisi, A Breen, I V Chashei, M Tokumaru, F Vilas

0800h SH31A-1788 POSTER Ionization non-equilibrium plasma during magnetic reconnection in solar corona: S Imada, I Murakami, T Watanabe, H Hara, T Shimizu

0800h SH31A-1789 POSTER Testing the vector tomography method for 3D reconstruction of the coronal magnetic field for different coronal field models: M Kramar, H Lin, B Inhester

0800h SH31A-1790 WITHDRAWN

0800h SH31A-1791 POSTER On tether-cutting reconnection in sheared coronal arcades: B J Lynch, Y Li, S K Antiochos, C R DeVore, G H Fisher

0800h SH31A-1792 POSTER Modelling the coronal helium abundance with low helium heating rates: H Byhring, R Eser, O Lie-Svendsen

0800h SH31A-1793 POSTER Cross-helicity turbulence model: Application to MHD phenomena from solar convection zone to heliosphere: N YOKOI, I N Kitiashvili, A G Kosovichev

0800h SH31A-1794 POSTER Solar Moss Patterns: MHD Turbulence, Reconnection Heating in Coronal Loops, and Magnetic Connection to the Footpoints: R Kittinaradorn, D J Ruffolo, W H Matthaeus

0800h SH31A-1795 POSTER Self-Consistent Solar Wind Model Driven by a Turbulent Spectrum of Alfvén Waves: R Oran, I Sokolov, B van der Holst, T I Gombosi

SH31B Moscone South: Poster Hall Wednesday 0800h Global Solar Magnetic Data as Drivers of Coronal Models I Posters

Presiding: C J Henney, AFRL; C N Arge, Air Force Research Laboratory

0800h SH31B-1796 POSTER The Impact of Different Global Photospheric Magnetic Field Maps on Coronal Models: L Bertello, G J Petrie, T Tran
0800h SH31B-1797 POSTER Ensemble Solar Global Magnetic Field Modeling: C J Henney, C N Arge, J Koller, W A Toussaint, S L Young, J W Harvey
0800h SH31B-1798 POSTER Photospheric synoptic magnetograms, potential-field models and observed global coronal structure: G J Petrie, L Bertello, T Tran
0800h SH31B-1799 POSTER A Parametric Study to Constraining Empirically-based Models of the Ambient Solar Wind: P Riley, J A Linker, Z Mikic
0800h SH31B-1800 POSTER Testing the PFSS Model Using Coronal Streamer Locations Derived From LASCO, STEREO, EIT, and AIA Imagery: G L Slater, N V Nitta
0800h SH31B-1801 POSTER Comparative Analyses of Productive and Non-productive Active Regions based on SDO/HMI Observations using a Three-dimensional Magnetohydrodynamic Data-driven Active Region Evolution Model (DDAREM): A Wang, S Wu, Y Liu

SH31C Moscone South: Poster Hall Wednesday 0800h Multispacecraft Observations of Coronal Heating During the Rise of Solar Cycle 24 I Posters
0800h SH31C-1802 POSTER A Unified Model for Chromospheric and Coronal Heating Driven by Small-Scale Random Footpoint Motions: A Van Ballegooijen, S R Cranmer, M Asgari-Targhi, E E DeLuca
0800h SH31C-1803 POSTER Center-to-Limb Variation in the Solar HeI 30.4 nm Emission Line from STEREO EUVI: L E Floyd, D R McMillin, F Auchere
0800h SH31C-1804 POSTER Testing Nonuniform Heating RTV-Type Models of Coronal Loops with 3D Differential Emission Measure Tomography: Z Huang, R A Frazin, W B Manchester
0800h SH31C-1805 POSTER An Investigation of Solar Coronal Bright Points Based on EUV Spectra Obtained with EUNIS-07: R Schaefer, J W Brosius, F Bruhwiler, D M Rabin, R Thomas, T Wang
0800h SH31C-1806 POSTER SIZE AND LIFE TIME DISTRIBUTIONS OF BRIGHT POINTS IN THE QUIET SUN PHOTOSPHERE: V Abramenko, V Yurchyshyn, P R Goode
0800h SH31C-1807 POSTER PHOTOSPHERE-CHROMOSPHERE CONNECTION AS DERIVED FROM NST OBSERVATIONS: V Yurchyshyn, V Abramenko, P R Goode
0800h SH31C-1808 POSTER Heating of the solar atmosphere by strong damping of Alfvén waves: P Song, V M Vasylunhas
0800h SH31C-1809 POSTER High-Lundquist Number Scaling Analysis on the Parker’s Model of Solar Coronal Heating due to Random Photospheric Footpoint Motion: C Ng, L Lin, A Bhattacharjee
0800h SH31C-1810 POSTER Generation of electric currents in the chromosphere via neutral-ion drag: V Krasnoselskikh, G Vekstein, H S Hudson, S Bale, W A Abbott
0800h SH31C-1811 POSTER Thermal Nonequilibrium Revisited: a Heating Model for Coronal Loops: R Lionello, A R Winebarger, J A Linker, Z Mikic, Y Mok

SH31D Moscone South: 309 Wednesday 0800h Initiation, Evolution, and Interaction of Coronal Mass Ejections, Corotating Interaction Regions, and Interplanetary Shocks From the Sun to 1 AU II (joint with SM)
Presiding: S P Plunkett, Naval Research Laboratory; S Wu, Univ Alabama Huntsville
0800h SH31D-01 Hinode, STEREO and SOHO observations of a CME event: E Landi, J C Raymond, M P Miralles, H Harra
0814h SH31D-02 On the Causes of Plasmoid Acceleration and the Change of Magnetic Reconnection Rate in a Resistive MHD Simulation: H Yu, L Lyu, S Wu
0846h SH31D-04 Inferring Magnetic Field Structure of Flux Rope CMEs from STEREO Imaging and In Situ Observations: B E Wood, R A Howard, D G Socker
0909h SH31D-05 Solar Mass Ejection Imagery (SMEI) 3-D Reconstructions of CMEs, CIRs and Interplanetary Shocks, and Comparison with In-situ Data: B V Jackson, J M Clover, P P Hick, A Buffington, M M Bisi
0914h SH31D-06 The Orientation of Coronal Mass Ejections (Invited): R A Howard
0924h SH31D-07 EXPLORING WITH MULTIPLE SPACECRAFT THE SCENE OF THE TRAVELING STRONG SHOCK AND ITS DRIVER: D B Berdichevsky, C Wu, D V Reames, R J MacDowall, C J Farrugia
0946h SH31D-08 STEREO observations of waves associated to interplanetary shocks driven by stream interactions: X Blanco-Cano, E Aguilar-Rodriguez, J Ramirez Velez, C T Russell, L Jian, J G Luhmann

SPA-Magnetospheric Physics
SM31A Moscone South: Poster Hall Wednesday 0800h Heliophysics Data Environment: Success Stories and Lessons Learned I Posters (joint with SH, SA)
Presiding: T A King, UCLA; J R Thieman, NASA
0800h SM31A-1848 POSTER Geotail EPIC – The New Data Services and Future Plan: S W Hsieh, A Lui, S R Nyuld, J D Vandegriff, S P Christon
0800h SM31A-1849 POSTER Multi-Spacecraft Analysis with Generic Visualization Tools: J Mukherjee, L Vela, C Gonzalez, S Jeffers
0800h SM31A-1850 POSTER Uniform Access to Heliophysics Time Series Data: J D Vandegriff, L E Brown, M Johnson, D De Zeeuw
0800h SM31A-1852 POSTER RST: The software framework behind the SuperDARN, SuperMAG and AMPERE data centers: M Potter, R J Barnes, E R Talaat, E S Miller

All information is current as of November 12, 2010
0800h SM31A-1854 POSTER Inter-university Upper atmosphere Global Observation NETwork (IUGONET): H Hayashi, Y Tanaka, T Hori, Y Koyama, M Kagitan, A Shinboshi, S Abe, T Kouno, D Yoshida, S UeNo, N Kaneda, Title of Team: IUGONET project team


0800h SM31A-1856 POSTER RESTful Access to NOAA's Space Weather Data and Metadata: E A Kihn, P R Elepsuru, M Zhizhin


0800h SM31A-1858 POSTER The Virtual Model Repository: Data/Model Visualization Benefits of Collaboration: D De Zeeuw, A J Ridley, L Rastaetter, J D Vandegriff, R S Weigel

0800h SM31A-1859 POSTER Searching Across Multiple Datasets with the Virtual ITM Observatory: D Morrison, M Weiss, E A Immer, D Patronne, M Potter, R J Barnes, C Colclough, R Holder, R E McGuire, R M Candey, D Bilizita, B Harris


0800h SM31A-1861 POSTER Successful Approaches for Data Discovery: Illustrated with the Virtual Magnetospheric Observatory: T A King, R J Walker, J Merka, L F Bargatze, J M Weygand

0800h SM31A-1862 POSTER SPASE 2010 – Providing Access to the Heliophysics Data Environment: J R Thieman, T A King, D Roberts, Title of Team: SPASE Consortium

0800h SM31A-1863 POSTER The VHO, VMO, and VEPO: What do we offer and how are we being used?: M A Alaimo, T W Narock, J Merka, A Szabo, R J Walker, T A King, J F Cooper

0800h SM31A-1864 POSTER Using Autoplot in the Heliophysics Data Environment: J B Faden, R S Weigel, R H Friedel

0800h SM31A-1865 POSTER The Virtual Radiation Belt Observatory: R S Weigel, T P O'Brien, R H Friedel, J C Green, M Zhizhin, D Y Mishin

SM31B Moscone South: Poster Hall  Wednesday  0800h Progress in Modeling Kinetic-Global Coupling in Space Weather I Posters (joint with SH)

Presiding: P H Yoon, University of Maryland

0800h SM31B-1866 POSTER Analyses of the Recent Space Weather Events Using a Suite of Models and Observations: Y Zheng, A Pulkkinen, A Taktakhishvili, M Hesse, M M Kuznetsova, L Rastaetter, Q Zheng, M H Fok

0800h SM31B-1867 POSTER The role of small-scale features in the magnetotail in substorm development: E M Harnett, M D Cash, R Wingle

0800h SM31B-1868 POSTER Multi-Scale Modeling of Global Magnetosphere Structure and Dynamics: M M Kuznetsova, M Hesse, L Rastaetter, G Toth, D De Zeeuw, T I Gombosi

0800h SM31B-1869 POSTER OpenGGCM-CRCM simulation results of the 22 July 2009 storm compared with TWINS and THEMIS observations: A Vapirev, J Raeder, M H Fok, J Goldstein, V Angelopoulos, A Glover, D J McComas, J A Redfern

0800h SM31B-1870 POSTER A statistical model of magnetic islands in a large current layer: validation from Hall MHD simulations and Cluster FTE observations: R L Fermo, J F Drake, M M Swisdak, K Hwang, Y Wang

0800h SM31B-1871 POSTER The effect of the magnetic field stretching on the development of the ring current: R Ilie, G Toth, M W Liemohn, R M Skoug

0800h SM31B-1872 POSTER Hall Magnetohydrodynamics Simulations of Separator Collapse: J Dorelli

0800h SM31B-1873 POSTER Multiscale Modeling of Solar Coronal Magnetic Reconnection: S K Antiochos, J T Karpen, C R DeVore

0800h SM31B-1874 POSTER Coupling global and kinetic scales with the implicit Particle-in-Cell methods: S Markidis, G Lapenta

0800h SM31B-1875 POSTER High-Resolution Numerical Simulations of Breakout Coronal Mass Ejections: C R DeVore, J T Karpen, S K Antiochos

0800h SM31B-1876 POSTER Ion foreshock and magnetosheath properties in global hybrid simulations: D Hercik, P M Travnichek, D Schriver, P Hellinger

0800h SM31B-1877 POSTER Low-Dimensional Dynamical Model of the Solar Wind Driven Magnetopause: C E Correa, M L Mays, W Horton, S Patra

0800h SM31B-1878 POSTER Multi-Scale Observations of Magnetic Reconnection at the Subsolar Magnetopause: A Retino, A Vaivads, Y V Kholyaintsev, R Nakamura, F Sahraoui, W Baumjohann, M Fujimoto

0800h SM31B-1879 POSTER Dynamics of particle entries within the cusp boundary deformed during the IMF rotation from Northward to Dawn-Dusk: 3-D PIC large scale simulation: D Cai, B Lemege, K Nishikawa, A Esmaeili

SM31C Moscone South: 307 Wednesday  0800h Dynamics in the Saturnian Magnetosphere II (joint with P)

Presiding: J S Leisner, University of Iowa; A Masters, Mullard Space Science Laboratory

0800h SM31C-01 Global MHD simulations of the interaction between Saturn's magnetosphere and the solar wind (Invited): X Jia, K C Hansen, T I Gombosi, M G Kivelson, G Toth, D De Zeeuw, A J Ridley

0821h SM31C-02 Three Dimensional Bow Shock Structure and Dynamics: M K Dougherty, D R Went, G B Hospodarsky, K C Hansen, A Masters

0836h SM31C-03 Comparisons of the Suprathermal He+ Spectrum in Saturn's Magnetosphere with the Pickup He+ Spectrum Upstream of Saturn's Bow Shock: D C Hamilton, R D DiFabio, S P Chrston, S M Krimigis, D G Mitchell

0851h SM31C-04 Periodicities in Saturn's Magnetosphere: A Riddle Wrapped in a Mystery, Inside an Enigma (Invited): M G Kivelson


0942h SM31C-07 Intrinsic wave properties of Saturn Kilometric Radiation and Evolution with Propagation: L Lamy, B Cecconi, P M Zarka, Title of Team: and Cassini/RPWS, MAG and CAPS teams
SM31D Moscone South: 305 Wednesday 0800h Magnetospheric and Auroral Acceleration: Cause and Effect II

Presiding: C Watt, University of Alberta; R Rankin, University of Alberta; D J Knudsen, University of Calgary

0800h SM31D-01 Auroral Acceleration, Solar Wind Driving, and Substorm Triggering (Invited): P T Newell, K Liou
0820h SM31D-02 Identification of Quasi-Static Potential Structure (Inverted-V) and Alfvénic Auroral Acceleration and the Ambiguity of “Broadband Acceleration” (Invited): J P Dombek, C A Cattell, J R Wygant, J P McFadden, R J Strangeway
0840h SM31D-03 Necessary Conditions For Establishing Quasi-Stable Double Layers in Earth’s Auroral Upward Current Region: D S Main, D Newman, R E Ergun
0906h SM31D-05 The Evolution of Auroral Forms and Vorticity on Small-Scales (Invited): C C Chaston, K Seki, T Sakanoi, K Asamura, M Hirahara
0926h SM31D-06 Observational Tests of Auroral Theories: D J Knudsen, E F Donovan, E L Spanswik, R Kabirzadeh
0939h SM31D-07 Diffuse Shock-Aurora: the Characteristics, Evolution and Cause (Invited): X Zhou

Study of Earth’s Deep Interior

DI31A Moscone South: Poster Hall Wednesday 0800h Observations and Dynamics of Subducted Slabs I Posters (joint with S, T, MR)

Presiding: D R Stegman, UC San Diego; E M Syracuse, University of Wisconsin-Madison

0800h DI31A-1930 POSTER On the Cause of Shallow Subducting Slabs: S Skinner, R W Clayton
0800h DI31A-1931 POSTER Effects of trench migration on fall of stagnant slabs into the lower mantle: S Yoshioka, A Naganoda
0800h DI31A-1932 POSTER 2D numerical modelling of intra-oceanic arc extension and trench migration: B Baitsch Ghirardello, T Gerya
0800h DI31A-1933 POSTER Distribution of hydrous minerals in the Cocos oceanic crust inferred from receiver function analysis: Y Kim, R W Clayton, J M Jackson
0800h DI31A-1934 POSTER Thermomechanical models for dynamics and magma generation in the Mariana subduction system: S Lin, B Kuo, S Chung
0800h DI31A-1935 POSTER The effect of a realistic thermal diffusivity on numerical model of a subducting slab: P Maierova, G Steinle-Neumann, O Cadek
0800h DI31A-1936 POSTER Development of common conversion point stacking of receiver functions for detecting subducted slabs: Y Abe, T Ohkura, K Hirahara, T Shibutani
0800h DI31A-1937 POSTER Influence of the thermal state of the overriding plate on subduction dynamics and slab geometry: J Rodriguez-Gonzalez, A M Negredo, M I Billen
0800h DI31A-1938 POSTER Sensitivity of the short-to-intermediate wavelength geoid to rheologic structure in subduction zones: J M Hines, M I Billen
0800h DI31A-1939 POSTER Modelling lithospheric ageing during subduction: Implications for the Izu-Bonin-Mariana trench migration: E Di Giuseppe, C Faccenna, F Funiciello, J Van Hunen, S Lallemand
0800h DI31A-1940 POSTER Preliminary models of normal fault development in subduction zones: lithospheric strength and outer rise deformation: J B Naliboff, M I Billen
0800h DI31A-1941 POSTER Decoupling of Pacific subduction zone guided waves: T Garth, A Rietbrock
0800h DI31A-1942 POSTER Dynamics of retreating subduction: insights from numerical models: V Magni, J Van Hunen, F Funiciello, C Faccenna
0800h DI31A-1943 POSTER Three-dimensional attenuation and velocity structure of the Cocos subduction zone in Mexico: T Chen, R W Clayton
0800h DI31A-1944 POSTER Improving Slab 1.0 Subduction Zone Models Using Regional Constraints from the Eastern Pacific: F A Martinez-Torres, G P Hayes
0800h DI31A-1945 POSTER Testing the Trench Parallel Flow Hypothesis with 3D Dynamic Calculations: T Maiti, S D King
0800h DI31A-1946 POSTER A dominant shear zone and other modes of deformation in the deep Tonga slab: R Gesserman, D A Wiens
0800h DI31A-1947 POSTER Deformation and Geometry of Subducted Lithosphere from an Analysis of Global Centroid Moment Tensor Data: L A Alpert, I W Bailey, T W Becker
0800h DI31A-1948 POSTER Non-elastic Plate Weakening at Tonga, Costa Rica and Japanese Subduction Zones: K Arredondo, M I Billen
0800h DI31A-1949 POSTER The Slab Induced Waveform Effects as Revealed by the TAIGER Seismic Array: P Chen, H Kuo-Chen, C Wang, B Huang, C Chen, W Liang
0800h DI31A-1950 POSTER Receiver function images beneath Kii Peninsula, southwest Japan with an improved procedure: Y Nakagawa, T Shibutani, Y Abe, H Kawakata, I Doi
0800h DI31A-1952 POSTER SUBDUCTING SLABS: JELLYFISHES IN THE EARTH’S MANTEL: C Loisellet, J Braun, L Husson, C Le Carlier de Veslud, C Thieulot, P Yamato, D Grujic
0800h DI31A-1953 POSTER Imaging subducted slabs using seismic arrays in the Western Pacific: H L Bentham, S Rost
0800h DI31A-1954 POSTER Modeling the migration of fluids in subduction zones: M Spiegelman, C R Wilson, P E Van Keken, B R Hacker
0800h DI31A-1956 POSTER A slab tear between the Hellenic and Cyprus arcs: toward a better understanding of the contribution of mantle flow to regional surface dynamics: G Salau, A Paul, H Pedersen, H Karabulut, A K Mutlu, Title of Team: SIMBAAD team
0800h DI31A-1957 POSTER A Comparison of Regional 3-D Subduction Models in the Western Pacific to Subduction Models from Slab1.0: A Lopez, G P Hayes
0800h DI31A-1958 POSTER Fine-scale structure along the transition from flat to normal subduction in central Mexico: S L Dougherty, R W Clayton, D V Helmberger, V M Andrews
**DI31B Moscone West: 3022**  **Wednesday 0800h**

*Imaging and understanding the Electrical Conductivity of Earth's Mantle: Lab Measurements, Regional and Global Studies, and Physical Interpretations II* (joint with GP, MR, SM, T, S)

**Presiding:** A Kelbert, Oregon State University; J A Tybursky, Arizona State University

0800h  **DI31B-01** Water Distribution Around the Mantle Transition Zone Constrained by Electrical Conductivity Observations and Its Implications for the Global Material Circulation (Invited): S Karato

0815h  **DI31B-02** Deep dehydration and physical and chemical nature of the mantle above the stagnant slab (Invited): E Ohtani, D Zhao, T Kuritani, F C Tajima

0830h  **DI31B-03** Hydrous Silicate Melts in the Earth’s Asthenosphere: Evidence from Electrical Conductivity Measurements: H Ni, H Keppler, H Behrens

0845h  **DI31B-04** Laboratory-based conductivity structure in the mantle transition zone: T Yoshino, T Katsura, A Shimojuku

0900h  **DI31B-05** WITHDRAWN

0915h  **DI31B-06** Electrical conductivity at around 400 km depth in the western Pacific subduction region (Invited): K Baba, H Utada, H Shimizu

0930h  **DI31B-07** Effects of Composition, Melt, and Fluids on Electrical Resistivity With Application to Magnetotelluric Investigations: D P Hasterok, P A Bedrosian, S Constable, P E Wannamaker

0945h  **DI31B-08** Comparative study on water content in the asthenosphere and the transition zone beneath the Northwest Pacific Ocean: H Toh, Y Hamano

---

**MR31A Moscone South: Poster Hall Wednesday 0800h**

*Stability, Elasticity, and Rheology of Hydrous Phases: Geodynamical Implications III Posters* (joint with S, DI, T, V)

**Presiding:** B Reynard, CNRS

0800h  **MR31A-1974** POSTER Elasticity of Single-Crystal Quartz to 10 GPa: J Wang, Z Mao, F Jiang, T S Duffy

0800h  **MR31A-1975** POSTER Compressibility of vitreous silica by high pressure X-ray microtomography: A N Clark, C E Lesher, S Sen, S J Gaudio, Y Wang

0800h  **MR31A-1976** POSTER Equation of State of Antigorite at High Pressure and Temperature: T Watanabe, S Urakawa, T Kikegawa

0800h  **MR31A-1977** POSTER Permeability anisotropy of serpentinite and fluid migration in subduction zones: S Kawano, I Katayama, K Okazaki

0800h  **MR31A-1978** POSTER Deformation experiments of serpentinite under high pore pressure and hydrothermal conditions: K Okazaki, I Katayama, M Takahashi, K Masuda


0800h  **MR31A-1980** POSTER Interaction of CO₂ and brines with montmorillonite to 400 bars and 45°C: A F Koster van Groos, P A Giesting, S Guggenheim, A Busch


0800h  **MR31A-1982** POSTER Thermal conductivity of serpentinite in subducting slabs: Measurements at high pressure and temperature: M Mookherjee, G M Manthilake, N de Koker, D J Frost

0800h  **MR31A-1983** POSTER High pressure synchrotron x-ray powder diffraction and infrared spectroscopy study on brucite: M Ma, W Liu, Z Chen, Z Liu, B Li

0800h  **MR31A-1984** POSTER Crystallographic preferred orientation (CPO) of antigorite from the Motagua fault zone, Guatemala: Implications for subduction zone seismic anisotropy: S J Brownlee, G Seward, B R Hacker, G E Harlow

0800h  **MR31A-1985** POSTER In situ observation of the pressure-induced phase transitions of portlandite and influential factors on the pressure response: R Iizuka, K Komatsu, H Kagi, S Nakano

0800h  **MR31A-1986** POSTER Hydrometer in the mantle: dln(Vs)/dln(Vp): L Li, D J Weidner


0800h  **MR31A-1988** POSTER Effect of water on high pressure and high temperature deformation of olivine single crystal [110]c and [011]c and quantification of activation volumes: J GIRARD, J Chen, P C Raterron, C W Holyoke

0800h  **MR31A-1989** POSTER Dehydration softening of serpentine and its roles in the intermediate-depth earthquakes: I Shimizu, Y Watanabe, K Michibayashi

---

**MR31B Moscone West: 3024**  **Wednesday 0800h**

*Planetary Ices: From Deep Interiors to Astrobiology II* (joint with P)

**Presiding:** I Daniel, Universite de Lyon; B Militzer, Univ of CA-Berkeley; R M Mastrapa, SETI Institute/NASA Ames

0800h  **MR31B-01** Phase behavior and thermodynamic modeling of ices – implications for the geophysics of icy satellites. (Invited): M Choukroun

0815h  **MR31B-02** Simultaneous Measurements of Sound Velocity and X-ray Diffraction of Ice VII to 19 GPa and 873 K: L Sang, D Farber, C Aracne, J D Bass

0830h  **MR31B-03** Ab Initio Simulations of Water Ice at Megabar Pressures: B Militzer, H F Wilson

0845h  **MR31B-04** Reactivity of Xe with ice at extreme P-T conditions: C Sanloup, M Hochlaf, H Maynard-Casely, E Gregoryanz, M Mezouar

0900h  **MR31B-05** Molecular H₂O in Microporous Silicates: Thermodynamically Ice-Like?: C A Geiger, E Dachs, M Dalconi, G Artioli


0930h  **MR31B-07** Strain history effects on the plastic and anelastic properties of planetary ice: C McCarthy, J C Castillo, R F Cooper

0945h  **MR31B-08** Intragranular strain field in columnar ice during elasto-viscoplastic transient creep regime: F Grennerat, M Montagnat, O Castelnau, P Duval, P Vacher
Seismology

S31A  Moscone South: Poster Hall  Wednesday  0800h
Advances in Inverse Problems and Seismic Tomography I
Posters (joint with T, DI, NS, NG)

Presiding: A Pica, CGGVertitas

0800h  S31A-1998 POSTER  Hunting for plumes in the mantle using whole seismograms: F Rickers, A Fichtner, J Trampert

0800h  S31A-1999 POSTER  Measurements of translation, rotation and strain: New approaches to seismic processing and inversion: M Bernauer, A Fichtner, H Igel

0800h  S31A-2000 POSTER  Overcoming uneven ray coverage in crustal seismic tomography of the Three Gorges Reservoir, China: H Zhou, Z Zou

0800h  S31A-2001 POSTER  Toward a Joint Inversion for Global Mantle Shear Velocity and Discontinuity Topography by Incorporating SS Precursor Waveforms into NACT: Z Zheng, B A Romanowicz

0800h  S31A-2002 POSTER  Toward global waveform tomography of the whole mantle using SEM: Efficient simulation of the global wavefield using a homogenized crust: S W French, V Lekic, B A Romanowicz

0800h  S31A-2003 POSTER  RegSEM, a flexible regional Spectral Element code: application to continental scale problems: P Cupillard, H Yuan, B A Romanowicz, Y Capdeville, J Montagner, G Festa

0800h  S31A-2004 POSTER  Seismic Tomography of the South Carpathian System: G W Stuart, Y Ren, B D Dando, G Houseman, C Ionescu, E Hegedus, S Radovanovic, Title of Team: South Carpathian Project Working Group


0800h  S31A-2006 POSTER  P-wave Local Earthquake Tomography in the Central Alborz Mountains, Iran: A Mostafanejad, F Hesein Shomali


0800h  S31A-2009 POSTER  Seismic Velocity Structure of the San Jacinto Fault Zone from Double-Difference Tomography and Expected Distribution of Head Waves: A A Allam, Y Ben-Zion

0800h  S31A-2010 POSTER  Validation of 3D Southern California Velocity model CVM-H6.2 Based on Ambient Seismic Noise: Q Liu, C Tape, Y Luo, J Tromp, Y Yang

0800h  S31A-2011 POSTER  Adjoint tomography of Europe: H Zhu, E Bozdog, D B Peter, J Tromp

0800h  S31A-2012 POSTER  Towards Global Adjoint Tomography: E Bozdog, H Zhu, D B Peter, J Tromp

0800h  S31A-2013 POSTER  Tomographic data selection as wave-based optimization problem: T Nissen-Meyer, A Fournier

0800h  S31A-2014 POSTER  The scale dependence of finite-frequency effects in traveltimes and amplitudes: Y Zhou

0800h  S31A-2015 POSTER  Teleseismic Migration Velocity Analysis Using an Image Cross-Correlation Criterion: S A Burdick, M V de Hoop, R D van der Hilst

0800h  S31A-2016 POSTER  Imaging the slab beneath central Chile using the Spectral Elements Method and adjoint techniques: E D Mercercat, G Nolet, M Marot, P Deshayes, T Monfret

0800h  S31A-2017 POSTER  Evaluation of Tomographic Inverse Models Resolved from Various Travel- time Theories and Parameterizations: Y Chang, S Hang, L Chiao, H Yang

0800h  S31A-2018 POSTER  Crustal nature along the African–Anatolian collision Zone: M Kahraman, N Turkel, U M Teoman, S Sahin, E A Sandvol, R Gok

0800h  S31A-2019 POSTER  Ultrasonic survey and monitoring of the excavation damaged zone in callovo-oxfordian argillaceous rock: C Ballard, J Morel

0800h  S31A-2020 POSTER  Low-Q structure beneath The Geyser area in the northern California: M Matsubara

0800h  S31A-2021 POSTER  Sensitivities Kernels of Seismic Traveltimes and Amplitudes for Quality Factor and Boundary Topography: M Hsieh, L Zhao, K Ma

0800h  S31A-2022 POSTER  Radial Anisotropy from Regional Surface Wave Tomography with the Presence of MultiPathing Interference: A Li

0800h  S31A-2023 POSTER  MODELING THE EFFECTS OF CRUSTAL STRUCTURE ON SURFACE-WAVE PHASE DELAYS: K Liu, Y Zhou

0800h  S31A-2024 POSTER  Determination of Earth structure using waveform inversion and Spectral-Element Method: M Obayashi, S Tsuboi, Y Tono, D Suetsugu

0800h  S31A-2025 POSTER  Simultaneous Absolute and Relative Traveltime Inversion Technique to Combine Independent Arrays in southeastern Australia: E Vanacore, N Rawlinson, M Sambridge, H Tkalcic

0800h  S31A-2026 POSTER  Adaptively parameterized surface wave tomography: Methodology and a global model of the upper mantle: J Schaefer, L Boschi, E H Kissling

0800h  S31A-2027 POSTER  Source Size Seismic Tomography (3STomo): A novel method to image the subsurface structure beneath seismically active regions: T Yang, K Le

0800h  S31A-2028 POSTER  Seismic Tomographic Imaging of an Upper Mantle Anomaly beneath the Rio Grande Rift: C V Rockett, J Pulliam, S P Grand

0800h  S31A-2029 POSTER  Surface-Wave Tomography of Ireland: G Polat, S Lebedev, P W Readman, B M O’Reilly, F Hauser

0800h  S31A-2030 POSTER  Three dimensional Rayleigh wave velocity model using multimode surface wave tomography of Eastern Asia: S Pandey, X Yuan, E Debayle, K F Priestley, R Kind, X Li

0800h  S31A-2031 POSTER  Attenuation structure beneath the source area of the Columbia River Flood Basalts: A P Darold, E Humphreys

0800h  S31A-2032 POSTER  Regional difference in small-scale heterogeneities in the crust and upper mantle in Japan derived by the analysis of high-frequency P-wave: S Takemura, T Furumura

0800h  S31A-2033 POSTER  Revealing the architecture of the upper boundary of the Philippine Sea Plate beneath the northern tip of the Izu-Tanzawa Collision Zone, Central Japan, using later-phase of P waves: Y Shuri, N Tsumura

0800h  S31A-2034 POSTER  SURFACE WAVE TOMOGRAPHY OF THE REGION BETWEEN KOREA AND TAIWAN: K Cho, S Lee

0800h  S31A-2035 POSTER  Multi Scale Imaging of Seismic Structure beneath the Western Branch of the East-African Rift: A Jakovlev, G Rumpker, I Koulaev

All information is current as of November 12, 2010
S1A-2036 POSTER Lithospheric imaging from teleseismic data by frequency-domain elastic full-waveform tomography: D Pageot, Š Operto, M Vallée, R Brossier, J Virieux, Title of Team: SEISCOPE

S1A-2037 POSTER Simultaneous inversion for 3D crustal and lithospheric structure and regional hypocenters beneath Germany in the presence of an anisotropic upper mantle: M Koch, T Muñeh

S1A-2038 POSTER P-wave tomography of the Chile Triple Junction region: M R Miller, K F Priestley, F J Tilman, H Iwamori, K Bataille

S1A-2039 POSTER Crustal Structure Beneath Western Spitsbergen Inferred Through Joint Inversion of Teleseismic Receiver Functions and Regional Surface Wave Dispersion: W N Junek, J Roman-Nieves, M T Woods

S1A-2040 POSTER Investigation of surface wave amplitudes in 3-D velocity and 3-D Q models: Y Ruan, Y Zhou

S1A-2041 POSTER The characteristics of Pn wave velocity beneath the offshore of eastern Taiwan and the West Philippine Basin: Y Huang, B Huang, C Lee

S1A-2042 POSTER Intrinsic absorption structure of S-wave in the northeastern Japan and northern Izu-Bonin arcs: T Takahashi

S1A-2043 POSTER Application of 2.5D Finite Difference Tomographic Waveform Imaging to the Cascadia 1993 data set: S W Roecker, B B Baker

S1A-2044 POSTER P-wave attenuation tomography of Mount St. Helens: preliminary results from coda-normalized spectra: L De Siena, S Hicks, G P Waite, S C Moran

S1A-2045 POSTER Anisotropy effects on 3D waveform inversion: J Stekl, M Warner, A Umpleby

S1A-2046 POSTER 3D full waveform inversions of seismic data from the Blanco Transform Fault: G L Christeson, J V Morgan, M Warner

S1A-2047 POSTER Seismic imaging by double beamforming full waveform inversion: R Brossier, P Roux, E Tudisco, S Hall

S1A-2048 POSTER Waveform Tomography - a case study of the Messum intrusive complex in Namibia using synthetic and real data: M Paschke, K Bauer, R G Pratt, R Kamei, R B Trumbull, M H Weber

S1A-2049 POSTER Computational and methodological developments towards 3D full waveform inversion: V Etienne, J Virieux, G Hu, Y Jia, S Operto

S1A-2050 POSTER Transmission imaging in heterogeneous media: E L Bongajum, Y Meng, B Milkereit

S1A-2051 POSTER Low Cost Stochastic Estimation of Optimal Regularization Parameter and Model Resolution Matrix Diagonal in Large Geophysical Inverse Problems: B Borchers, J K MacCarthy, R C Aster

S1A-2052 POSTER Blind deconvolution of seismograms regularized via minimum support: A Royer, M G Bostock, E Haber

S1A-2053 POSTER WAVELET REGULARIZATION PER NULLSPACE SHUTTLE: J Charléty, G Nolet, K Sigloch, S Voronin, I Loris, F J Simons, I Daubechies, S Judd

ED31C-0690 POSTER CRUSTAL VELOCITY STRUCTURE OF EASTERN MARMARA REGION FROM LOCAL EARTHQUAKE TOMOGRAPHY: A Denli, C Gürbüz, E H Kissling
Tectonophysics

T31A Moscone South: Poster Hall Wednesday 0800h Evolution of the Amerasia Basin of the Arctic and Its Continental Margins Posters (joint with GP, OS, V)

Presiding: B Coakley, Geophysical Institute; D R Hutchinson, USGS; C Marcussen, Geologic Survey of Denmark and Greenland; D C Mosher, C Marcussen, Geologic Survey of Denmark and Greenland; E L Miller, Stanford University; V Pease, Stockholm University; R Stephenson, University of Aberdeen

0800h T31A-2120 POSTER NORTHERN BARENTS SEA EVOLUTION LINKED TO THE ARCTIC OCEAN: A Minakov, R Mjelde, J I Faleide, R S Huismans, A Dannowski, E R Flueh, V Glebovsky, H Keers, Y Y Podladchikov

0800h T31A-2121 POSTER The crustal structure of the Alpha Ridge, Arctic Ocean (Invited): T Funck, H R Jackson, J Shimeld

0800h T31A-2122 WITHDRAWN

0800h T31A-2123 POSTER Discussion of the East-Siberian margin, Podvodnikov and Makarov basins and the Mendeleev Ridge origin based on geophysical data. (Invited): N N Lebedeva-Ivanova

0800h T31A-2124 POSTER Gravity and magnetic anomalies of the western Arctic ocean and its margins provide an imperfect window to a complex, multi-stage tectonic history (Invited): R W Saltus, E L Miller, C Gaina

0800h T31A-2125 POSTER New aerogravity and aeromagnetic anomaly data over Lomonosov Ridge and adjacent areas for bathymetric and tectonic mapping: A Dossing, A V Olesen, R Forsberg

0800h T31A-2126 POSTER Sedimentation in Canada Basin, Western Arctic: D C Mosher, J Shimeld, R Jackson, D R Hutchinson, B Chapman, D Chian, R Childs, L A Mayer, B D Edwards, J Verhoeven

0800h T31A-2127 POSTER Evidence for an important teconostratigraphic seismic marker across Canada Basin and southern Alpha Ridge of the Arctic Ocean: J Shimeld, D Chian, R Jackson, D R Hutchinson, D C Mosher, J Wade, B Chapman


0800h T31A-2129 POSTER Lomonosov Ridge as a Natural Component of Continental Margin: V Poselov, V D Kaminsky, V V Butenko, G E Grikurov

0800h T31A-2130 POSTER Structural Geology and Microstructures of Wrangel Island, Arctic Russia: E L Miller, T A Dumitru, G Seward

0800h T31A-2131 POSTER Preliminary Apatite Fission Track Thermochronology of Wrangel Island, Arctic Russia: T A Dumitru, E L Miller

0800h T31A-2132 POSTER Mesozoic deformation, Taimyr & the development of the Amerasia Basin: V Pease, R A Scott, A Gubanov, E Axelson

0800h T31A-2133 POSTER STATISTICAL COMPARISON OF DETRITAL ZIRCON SUITES FROM THE ARCTIC AND THEIR BEARING ON PLATE RECONSTRUCTIONS: A V Soloviev, E L Miller


0800h T31A-2135 POSTER Tracing trends in erosion and exhumation during the Middle–Late Paleozoic tectonic evolution of the Farewell terrane, SW Alaska: B A Hampton, M A Malkowski, D C Bradley, K Fujita, P B O’Sullivan

0800h T31A-2136 POSTER Relative sea-level variations in the Amerasia Basin since the Lower Cretaceous (Invited): W Jokat, A Hegewald

0800h T31A-2137 POSTER Evidence of oceanic crust in the southern Baffin Bay from a seismic refraction experiment: K Gohl, S Sukcro, T Funck, A Ehrhardt, T Heyde, B Schreckenberger, V Damm

0800h T31A-2138 POSTER Crustal structures across Canada Basin and southern Alpha Ridge of the Arctic Ocean from P- and S-wave sonobuoy wide-angle studies: D Chian, J Shimeld, R Jackson, D R Hutchinson, D C Mosher

0800h T31A-2139 POSTER Cretaceous Arctic magmatism: Slab vs. plume? Or slab and plume?: E S Gottlieb, E L Miller, A V Andronikov, K Brumley, L A Mayer, S B Mukasa

0800h T31A-2140 POSTER Arctic Ocean gravity anomalies measured from the icebreaker USCGC Healy; Issues and Opportunities: B Coakley, S C Kenyon

0800h T31A-2141 POSTER We are in need of sampling the sedimentary cover and bedrock in the Amerasia Basin. (Suggested site locations in the Makarov Basin, the Mendeleev and Lomonosov ridges and adjacent areas.): N N Lebedeva-Ivanova

0800h T31A-2142 POSTER The Mesozoic and Cenozoic Motion of Greenland and its Importance for Understanding Arctic Plate Tectonics: J R Hopper, C Marcussen, T Funck, U Gregersen, P C Knutz

0800h T31A-2143 POSTER Cretaceous tectonic and magmatic evolution of the Kular gneiss dome, northeast Russia: D B Harris, J Toro, A Prokopiev, E L Miller

0800h T31A-2144 POSTER Petrography and U-Pb detrital zircon geochronology of metasedimentary strata dredged from the Chukchi Borderland, Amerasia Basin, Arctic Ocean: K Brumley, E L Miller, L A Mayer, A Andronikov, J L Wooden, T A Dumitru, B Elliott, G E Gehrels, S B Mukasa

0800h T31A-2145 POSTER Reconstructing conjugate margins of the Canada-Amerasia basin: New tectonic constraints from deep seismic data and gravity profiles: J Helwig, B Ady, N Kumar, J W Granath, M G Dinkelman, D E Bird, P A Emmet

0800h T31A-2146 POSTER Detrital Zircon U-Pb Age Populations in Time and Space in the Arctic Alaska Terrane: T E Moore

0800h T31A-2147 POSTER Opening of the Amerasia Basin: A model based on sea-floor morphology, magnetic anomalies and paleomagnetic data: D B Stone, K Brumley

0800h T31A-2148 POSTER New constraints on the crustal structure in the eastern part of northern Baffin Bay: C J Reichert, V Damm, T Altenbernd, K Berglar, M Block, A Ehrhardt, M Schnabel


0800h T31A-2150 POSTER ZIRCON U/PB GEOCHRONOLOGY OF THE PRECAMBRIAN BASEMENT, PEARYA TERRANE, NORTHERNMOST ELLESMERE ISLAND: S J Malone, W McClelland

All information is current as of November 12, 2010
0800h T31C-2185 POSTER Pn Tomography of Ethiopia: Implications for the Structure of the Southern Main Ethiopian Rift: S D Rouse, R A Brazier, A Nyblade

0800h T31C-2186 POSTER Characteristics of Pn and Sn wave propagation in the Afar region, Ethiopia: A Stork, J O Hammond, G W Stuart, A Ayele

0800h T31C-2187 POSTER Frequency dependent Lg-Wave Q in Northern Ethiopia: A J Jemberie

0800h T31C-2188 POSTER Crustal modeling in Africa; towards high resolution models using GOCE satellite gravity data: G E Tedla, M van der Meijde, A Nyblade

0800h T31C-2189 POSTER Northern Red Sea Crustal Thickness and Oceanic Lithosphere Distribution from Satellite Gravity Anomaly Inversion: T Y Aliyousuf, N J Kusznir

0830h T31C-2190 POSTER Emplacement of the middle Miocene Yatta lava flow, Kenya: implications for modeling long channelled lava flows: H Wichura, R Bousquet, R Oberhansi, M R Strecker

0830h T31C-2191 POSTER The crustal structure of East Africa: F Tugume, A Nyblade, J Julia, G Mulibo

0800h T31C-2192 POSTER Seismicity Patterns and Magmatic Processes in the Rwenzori Region, East-African Rift: M Lindendfeld, G Rumpker, H Schmeling, H Wallner

0800h T31C-2193 POSTER Petrological Constraints on Melt Generation Beneath the Asal Rift (Djibouti): P Pinzuti, E Humer, I Manighetti, Y Gaudemer, A Bézos

0800h T31C-2194 POSTER Initiation and evolution processes of submarine instabilities and canyons: Insights from the Northern margin of the Gulf of Aden: B Céline, G Christian, S Leroy, L Francis, B François, K I Al-Toubi

0800h T31C-2195 POSTER Geometry of the Arabia-Somalia Plate Boundary into Afar: Preliminary Results from the Seismic Profile Across the Asal Rift (Djibouti): J Vergne, C Double, K Mohamed, C Tiberi, S Leroy, A Maggi

0800h T31C-2196 WITHDRAWN


0800h T31C-2199 POSTER Localised and distributed deformation in the lithosphere: the example of the Dead Sea valleys: G C King, M Deves, A Agnon, Y Klinger

0800h T31C-2200 POSTER Crustal structure of the Dead Sea Basin (DSB) from a receiver function analysis: A Mohsen, G Asch, J Mechey, R Hofstetter, R Kind, M H Weber, M Stiller, K Abu-Ayyash

0830h T31D-03 Strain localization within a fluid-saturated fault gouge layer during seismic shear: J D Platt, J R Rice, J W Rudnicki

0845h T31D-04 EXPERIMENTAL INVESTIGATION OF FLASH WAKEENING IN LIMESTONES: G Di Toro, N Tisato, M Quaresimin, N De Rossi

0900h T31D-05 Fault Wear During Earthquake-Like Slip-Events in Laboratory Experiments: Z Reches, J C Chang, Y Boneh, D A Lockner

0915h T31D-06 Nucleation and Arrest of Dynamic Fault Rupture on a Pressurized Fault: D Garagash, L N Germanovich

0930h T31D-07 Dynamics of pseudotachylytes in volcanic structures: Y Lavallee, T M Mitchell, M J Heap, T Hirose, B Dingwell

0945h T31D-08 Nanometric Gouge in High-Speed Shearing Experiments: Superplasticity?: H W Green, D A Lockner, K N Bozhilov, A Maddon, N M Beeler, Z Reches

T31E Moscone West: 2018 Wednesday 0800h New Advances in Studies of the Tibetan Plateau and the Himalayas I (joint with V, S)

Presiding: X Mo, China University of Geosciences, Beijing; J F Ni, New Mexico State University

0800h T31E-01 State of the Tibetan upper mantle: K F Priestley, J A Barron, D P McKenzie, E Debye, C Acron

0815h T31E-02 Crustal and lithospheric studies of INDEPTH IV using S receiver functions and P multiples: R Kind, P Kumar, J Mechey, R Meissner, W Zhao, Z Wu, D Shi, H Su, M Karplus, F Tilmann

0830h T31E-03 The thermal structure of Tibetan crust and upper mantle (Invited): D P McKenzie, K F Priestley

0845h T31E-04 Structure of crust and uppermost mantle at northern margin of Tibetan Plateau: J Zhao, W D Mooney, S Pei, H Liu, H Cheng, Q Xu, W Wang, H Zhang

0900h T31E-05 S-N profile of Receive function image across Qiangtang, Northern Tibet: R He, R Gao, G Deng, W Li, H Hou, Z Lu, X Xiong

0915h T31E-06 3D structures of crust and uppermost mantle and azimuthal anisotropy in Tibet and surrounding regions from ambient noise tomography: Y Yang, Y Zheng, M H Ritzwoller


0945h T31E-08 Blocks or Continuous Deformation in Large-Scale Continental Geodynamics: Ptolemy Versus Copernicus, Kepler, and Newton (Invited): P H Molnar

T31F Moscone West: 2016 Wednesday 0800h What Lies Beneath “Stable” Eastern North America I (joint with DI, S)

Presiding: F A Darbyshire, GEOTOP UQAM-McGill; A M Forte, Univ Quebec Montreal; V L Levin, Rutgers University

0800h T31F-01 Accretion, modification and erosion of Archean lithosphere: evidence from the Superior Province and adjacent regions (Invited): A W Frederiksen, M Olaleye, D A Toni, F A Darbyshire, D W Eaton

0815h T31F-02 The lithosphere-asthenosphere boundary and cratonic lithospheric layering beneath stable North America (Invited): K M Fischer, H A Ford, D Abt, H Yuan, B Romanowicz
Volcanology, Geochemistry, and Petrology

**V31A Moscone South: Poster Hall  Wednesday 0800h EARTHTIME Geochronology II Posters (joint with B, EP, GR, OS, T)**

**Presiding:** P R Renne, Berkeley Geochronology Ctr; S A Bowring, MIT; L E Morgan, Vrije Universiteit Amsterdam; J Hiess, British Geological Survey

0800h **V31A-2296** POSTER Chronological Precision vs Petrological Accuracy - the B4M “Age Standard”: I M Villa, A R Hero

0800h **V31A-2297** POSTER GTSnext and Earthtime-EU a progress report: J R Wijbrans, H Pälike, K Kuiper, F Hilgen, Title of Team: GTSnext and Earthtime-EU

0800h **V31A-2298** POSTER New gas standard for calibration of Nu-instruments Noblesse multi-collector mass spectrometers for argon-isotope measurements: M A Coble, M Grove, A T Calvert

0800h **V31A-2299** POSTER The UW-Madison 5-collector mass spectrometer for high-precision 40Ar/39Ar geochronology: B Jicha, P Sobol, B S Singer

0800h **V31A-2300** POSTER A Deuterium-Deuteron Neutron Generator for 40Ar/36Ar Geochronology: P R Renne, K Leung, T Becker, W S Cassata, A X Chen, G Jones

0800h **V31A-2301** POSTER Nonlinearity of Argon Isotope Measurements for Samples of Different Sizes: S E Cox, S R Hemming, B D Turri, C C Swisher

0800h **V31A-2302** POSTER Reducing Error Bars through the Intercalibration of Radiotopic and Astrochronologic Time Scales for the Cenomanian/Turonian Boundary Interval, Western Interior Basin, USA: S R Meyers, S E Siewert, B S Singer, B B Sageman, D J Condon, J D Obradovich, B Jicha, D A Sawyer

0800h **V31A-2303** POSTER Reconciling astrochronological and 40Ar/39Ar ages for the Matuyama-Brunhes boundary and late Matuyama Chron: J E Channell, D A Hodell, B S Singer, C Xuan

0800h **V31A-2304** POSTER Supporting Evidence for the Astronomically Calibrated Age of Fish Canyon Sanidine: T A Rivera, M Storey, C Zeeden, K Kuiper, F Hilgen

0800h **V31A-2305** POSTER 40Ar/39Ar dating of the Honghuaiqiao Formation in SE China: S Chang, H Zhang, S R Hemming, G T Mesko, Y Fang

0800h **V31A-2306** POSTER Toward a high-resolution 40Ar/39Ar geochronology of the Tatun Volcano Group, Taiwan: G T Mesko, S Song, S Chang, S R Hemming, B D Turri

0800h **V31A-2307** POSTER Precision and Accuracy of Garnet Sm-Nd Geochronology: E F Baxter, J D Ingles

0800h **V31A-2308** POSTER Lu-Hf and Re-Os systematics of peridotite xenoliths from Spitsbergen, western Svalbard: Implications for mantle-crest coupling: S Choi, K Suzuki, S B Mukasa, J Lee, H Jung

0800h **V31A-2309** POSTER Baddeleyite-Zircon Relationships in Cumulates of the Archean Stillwater Complex: Evidence from U-Pb Geochronology and Hf Isotope Systematics: C J Wall, J S Scoates, R M Friedman, D A Weis, W Meurer

0800h **V31A-2310** POSTER The resolving power of U-Pb zircon geochronology in magmatic systems: an example from the Southern Adamello Batholith, N. Italy: C A Broderick, U Schaltegger, D Guenther, P Brack

0800h **V31A-2311** POSTER Evolution Of An Upper Crustal Plutonic-Volcanic Plumbing System: Insights From High Precision U-Pb Zircon Geochronology Of Intracaldera Tuff And Intrusions In Silver Creek Caldera, Arizona, USA: T ZHANG, R Mundil, C F Miller, J S Miller, S R Parerson

0800h **V31A-2312** POSTER Deriving accurate eruption ages from complex zircon populations: insights from zircon trace element chemistry and intercalibration with astronomical time: J Wotzlaw, U Schaltegger, K Kuiper, D Guenther

0800h **V31A-2313** POSTER Depositional history of the Late Triassic Chine fluvial system at the Petroit Forest National Park: U-Pb geochronology, regional correlation and insights into early dinosuar evolution: J Ramezani, D E Fastovsky, S A Bowring, G D Hoke

0800h **V31A-2314** POSTER U-series constraints on the Holocene human presence in the Cuatro Cinegas basin, Mexico: S R Noble, N Felstead, S Gonzalez, M J Leng, S E Metcalfe, P J Patchett

0800h **V31A-2315** POSTER Reaching Part-Per-Quadrillion: Detect Ar-39 in Atmospheric Samples Using ATTA: Z Lu, K Bailey, A M Davis, S Hu, W Jiang, P Mueller, T P O’Connor, R Purnschert, N C Struchio, Y R Sun, W Williams

**V31B Moscone South: Poster Hall  Wednesday 0800h Mass Independent Isotope Fractionations: Empirical, Experimental, and Theoretical Perspectives Posters (joint with A, B, P, MR)**

**Presiding:** J Eiler, Caltech; P Cartigny, IGP-Paris; E Schauble, UCLA

0800h **V31B-2316** POSTER The Oxygen Isotopic Composition of the Sun: K D McKeegan, A Kallio, V S Heber, G Jarzebinski, P Mao, C Coath, T Kunihiro, R C Wiens, A Judith, D S Burnett

0800h **V31B-2317** POSTER A Heterogeneous Chemical Origin for the Mass-Independent Distribution of Oxygen Isotopes in the Solar System?: G Dominguez, S Chakraborty, T L Jackson, M H Thiemens

0800h **V31B-2318** POSTER Gas-phase photoysis as a source of mass-independent fractionation: J R Lyons, G Stark, D Blackie, J Pickering

0800h **V31B-2319** POSTER The non-mass-dependent oxygen isotopic composition of CO₂ in the stratosphere and laboratory: Evidence for another anomalous kinetic isotope effect beyond ozone formation?: A A Wiegel, K J Hoag, A S Cole, E L Atlas, S Schaufler, K A Boering

0800h **V31B-2320** POSTER Non-Mass Dependent Isotope Fractionations of Rarefied Gases (O₂, SF₆) Under a Thermal Gradient: T Sun, H Bao, Title of Team: Oxy-Anion Stable Isotope Consortium
8000h  **V31B-2321 POSTER** An experimental investigation of multiple sulfur isotope fractionations during heterogeneous reactions between SO₂ and activated carbon: H Hamasaki, Y Watanabe, H Ohmoto

8000h  **V31B-2322 POSTER** Mass dependent isotope fractionation during impacts induced the Archaean mass-independent fractionation of sulphur: Evidence against Great Oxidation Event: H Huang

8000h  **V31B-2323 POSTER ISOTOPIC VARIATIONS OF MERCURY Emitted by Coal Fired Power Plant Gases:**

8000h  **S N Khawaja, L Odom, W Landing**

8000h  **V31B-2324 POSTER** The exploration of mechanisms of mass-independent fractionation of mercury (Invited): B A Bergquist, S Ghosh, C H Rose, J D Blum

8000h  **V31B-2325 POSTER** Mass-independent fractionation of mercury isotopes in compact fluorescent light bulbs: C Mead, A D Anbar, J R Lyons, T M Johnson

8000h  **V31B-2326 POSTER** Can the evaporation process alone produce isotopically mass-independent fractionations?: J Zhang, Y Liu

8000h  **V31B-2327 POSTER** ON THE MASS INDEPENDENT FRACTIONATIONS of O, Hg, Si, Mg AND Cd during OPEN-SYSTEM EVAPORATION OR THERMAL DECOMPOSITION: P Cartigny, J Eiler, P Agrinier, N Assayag

8000h  **V31B-2328 POSTER** Understanding the triple-isotopic mass dependence of equilibrium oxygen solvation: LY Yeung, E A Schauble, J Fleming, M G Prokopenko, W Berelson, E D Young

8000h  **V31B-2329 POSTER** Theoretical estimation of mass-dependent fractionation line positions of oxygen isotope and the implication to water evaporation and precipitation processes: X Cao, Y Liu

8000h  **V31B-2330 POSTER** Fractionation of ²³⁸U/²³⁵U in rivers and hydrothermal systems: Constraints for the oceanic U isotope cycle: J Noordman, S Weyer, M Sharma, R Georg, S Rausch, W Bach

8000h  **V31B-2331 POSTER** Mechanisms and geologic distribution of mass independent ²³⁸U/²³⁵U fractionation: CJ Placzek, B S Linhoff, L R Ricpitu, J M Heikoop

8000h  **V31B-2335 POSTER** The Effect of Redox Mechanisms on the Fractionation of Uranium 'Stable' Isotopes: A Kaltenbach

8000h  **V31C-2332 POSTER Retrograde P-T Path for Triassic very low-grade metametate from Hongcan Deep Well in Songpan-Abra area:**

8000h  **Y Tang**

8000h  **V31C-2333 POSTER** Flux rates for water and carbon during greenstein facies metamorphism: implications for the role of orogenic belts as a source/sink for atmospheric CO₂: A Skelton

8000h  **V31C-2334 POSTER** Constraining P-T-t-D Histories with the TiatiQ Thermobarometer: Preliminary Findings from the Strafford Dome, Vermont: K T Ashley, L E Webb, F S Spear, J B Thomas

8000h  **V31C-2335 POSTER** Alteration minerals on the Santiaguito lava dome complex, Santa Maria volcano, Guatemala: J L Ball, E S Calder, R Giese

8000h  **V31C-2336 POSTER** Pressure-Induced Change in the Orientation of Carbonate Ions in Apatite: M E Fleet, X Liu, X Liu

8000h  **V31C-2337 POSTER** Geochemistry and Mineralogy of Wine: C Oze, T W Horton, M Beaman

8000h  **V31C-2338 POSTER** Electrospray Charging of Minerals: Surface Chemistry and Applications to High-Velocity Microparticle Impacts: T Daly, S Call, D E Austin

8000h  **V31C-2339 POSTER** Nature and Origin of Volcanogenic Salts Deposits around the Crater of Erebun volcano, Antarctica: M M Kammerer, P R Kyle, N W Dunbar

---

**V31D Moscone West: 2020 Wednesday 0800h Metamorphic Perspectives of Subduction Zone Evolution I (joint with DI, T, MR)**

**Presiding:** B R Hacker, University of California; G E Bebout, Lehigh University

8000h  **V31D-01 POSTER** Microfabrics and deformation mechanisms in a jadeite-blueschist from the Franciscan melange, California: S Wassmann, A Krohe, B Stoeckhert, C Trepman

0815h  **V31D-02 POSTER** Serpentinite channel and the role of buoyancy in exhumation: the case-study of the HP-Voltri Massif (Western Alps, Italy): C Malatesta, T Gerya, L Quesada, R De Rosa, L CRISPINI, G Capponi

0830h  **V31D-03 POSTER** The metamorphic and kinematic history of a subduction channel analogue - the subgreenschist Chrysalis Beach Complex, New Zealand - and effects of metamorphic fluid pressure generation on dominant deformation style: A Fagereng

0845h  **V31D-04 POSTER** Pulse-like channelled long-distance fluid flow in subducting slabs (Invited): T John, N Gussone, A Beinlich, R Halama, G E Bebout, Y Y Podladchikov, T Magna

0900h  **V31D-05 POSTER** Experimental Deformation of Dehydrating Antigorite: Challenging Models of Dehydration Embrittlement: L J Chernak, G Hirth

0915h  **V31D-06 POSTER** Trace element mobility during rutile precipitation by titanite: Open vs. closed system examples from the Franciscan Complex, CA: A M Cruz-Uribe, T Zack, M D Feineman, M G Barth

0930h  **V31D-07 POSTER** Water release and rock volume change associated with smectite dehydration in the < 30 km depth seismicity of subduction zones: O Vidal, D Dubaëq

0945h  **V31D-08 POSTER** Experimental Neutron Diffraction Analysis of Dehydrating Antigorite (Invited): J Nakajima, P E Van Keken

---

**V31E Moscone South: Poster Hall Wednesday 0800h Tracking Magma Through the Crust to Eruption II (joint with G, S)**

**Presiding:** T Arnadottir, Inst. of Earth Sciences; O Sigmarsson, CNRS

0800h  **V31E-01 POSTER** A cinder cone perspective on magma ascent and eruption (Invited): K V Cashman, D Ruscitto, D McKay, P J Wallace, E R Johnson

0815h  **V31E-02 POSTER** MULTI-YEAR PERIODICITY OF SOUFRIERE HILLS VOLCANO, MONTSEerrat, REPPLICATED BY CONDUIT PLUG FORMATION AND FLOW DYNAMICS (Invited): R Foroozan, D Ewers, B Voight, G S Mattioli

0830h  **V31E-03 POSTER** Multiparameter Observations of Cyclic Eruptive Activity on Montserrat, 2009-2010: H M OdberT, C C Stewart, V Bass, P D Cole, A J Stinton, T E Christopher, M Ripepe

0845h  **V31E-04 POSTER** Dynamic map of an evolving plumbing system: Combining geochemical modeling and volcano monitoring at Mt. Etna, Sicily: M Kahler, S Chakraborty, J Labet, M Pompilio

0900h  **V31E-05 POSTER** The Role of Magma Buoyancy in Determining the Amount of Volatile-Saturated Silicic Magma that is Eruptible from a Crustal Reservoir: S Tait, J E Gardner
0915h V31E-06 Investigating the pre- and post-eruptive stress regime at Redoubt volcano, Alaska, from 2008-2010 using seismic anisotropy and stress-tensor inversions: M Gardine, D C Roman

0930h V31E-07 Experimental constraints on the P/T conditions of high silica andesite storage preceding the 2006 eruption of Augustine Volcano, Alaska: S Hentton, J F Larsen, N’Traxler

0945h V31E-08 Time-dependent Imaging of Dike Propagation From Deformation and Seismicity Data: Application to the 2007 Kilauea Intrusion: A L Llenos, P Segall, C H Thurber, E M Syracuse

Union

U32A Moscone South: 104 Wednesday 1020h Earth Sheds Her Archean Coat: 200 Million Years of Rapid Transition in Earth Systems I

Presiding: K C Condie, New Mexico Tech; L Kump, Pennsylvania State Univ

1020h U32A-01 How Widespread is 2.4-2.2 Ga Continental Crust?: K C Condie, E Belousova

1035h U32A-02 Stopping the Palaeoproterozoic plate tectonic machine: effects on melt production from 3D mantle convection simulations (Invited): C O’Neill, A Lenardic

1054h U32A-03 When continents were flat and flooded: N Coltice, P F Fey, N Flament


1127h U32A-05 The early Palaeoproterozoic rock record: links between tectonics, glaciation and the rise of oxygen (Invited): M E Barley

1145h U32A-06 Fixing the correlation among Palaeoproterozoic glaciations and their relationship with the rise of atmospheric oxygen (Invited): A Bekker, B Rasmussen, I R Fletcher

1203h U32A-07 Oxygen Overshoot and Recovery during the Palaeoproterozoic: H D Holland, A Bekker

Atmospheric Sciences

A32A Moscone West: 3002 Wednesday 1020h Atmospheric Circulations and Climate Change II (joint with GC)

Presiding: S M Davis, NOAA Earth System Research Laboratory (ESRL), Chemical Sciences Division/Cooperative Institute for Research in Environmental Sciences (Cires), University of Colorado at Boulder; K H Rosenlof, NOAA ESRL CSD

1020h A32A-01 Recent widening of the tropical belt: Overview of observational evidence and model simulations (Invited): D J Seidel

1035h A32A-02 Hadley Cell Widening: Model Simulations versus Observations (Invited): Q Fu, C Johanson

1050h A32A-03 Observed Latitudinal Shift in Storm Track Cloudiness During Recent Decades: J R Norris, A T Evans

1105h A32A-04 Differentiate the causes for the widening of the Hadley circulation through the regime change and seasonal cycle of mean circulation (Invited): J Lu, C Deser, G Chen, D M Frierson, T Reichler

1120h A32A-05 POLAR STRATOSPHERIC OZONE: A MAJOR DRIVER OF CIRCULATION CHANGES IN THE SOUTHERN HEMISPHERE (Invited): L M Polvani

1135h A32A-06 Connections between Antarctic Ozone Depletion and tropospheric Rossby wave breaking and cut-off lows: D W Waugh, T Ndarana, L M Polvani, G J Correa, E P Gerber

1150h A32A-07 The Hadley Circulation under Climate Change in a Hierarchy of Idealized Models: X J Levine, T Schneider

1205h A32A-08 Descriptions of the sensitivity of zonal jets and Hadley circulations in Aqua Planet Experiments Project: W Ohfuchi, Y Yamada, Y O Takahashi, T Sampe, M K Yoshioka, K Nakajima, M Iishiwatari, Y Hayashi

A32B Moscone West: 3006 Wednesday 1020h Atmospheric Sciences General Contributions: Dynamics I

Presiding: N G Andronova, University of Michigan; W A Robinson, North Carolina State University

1020h A32B-01 Existence and importance of the edge region of the Antarctic stratospheric vortex: E Shuchkoff, H K Roscoe, M Trainic, W Feng, M Chipperfield

1035h A32B-02 Cluster Analysis of Southern Hemisphere Tropical Cyclone Tracks: H A Ramsay, S J Camargo


1105h A32B-04 Predictability of stratospheric warming events: more from the troposphere or the stratosphere?: W A Robinson, L Sun, G Chen

1200h A32B-05 North American Monsoon Onset In California As Indicated by GPS Precipitable Water: J D Means


1150h A32B-07 On the occurrence, the characterization and the dynamical processes associated with FrIAC’s (Frozen In Anticyclones) events: R Thiéblemont, N Huret, Y Orsolini, A Hauchecorne, M Drouin

1205h A32B-08 Phase Delays in the Seasonal Cycle: J G Dwyer, S Berthou, M Biasutti, A H Sobel

A32C Moscone West: 3008 Wednesday 1020h Black Carbon’s Role in Global to Local Air Quality and Climate Change I (joint with GC, PA)

Presiding: D L Mauzerall, Princeton Univ; M Kopacz, Princeton University; D M Koch, Columbia University

1020h A32C-01 Black Carbon : Impacts on Local, Regional and Global Environment and Climate (Invited): V Ramanathan

1040h A32C-02 A reflection on the nature of combustion and the search for short-lived climate warmers (Invited): T C Bond, D M Koch, P Forster, D W Fahey, S J Doherty, M G Flanner

1100h A32C-03 On the black carbon problem and its solutions: M Z Jacobson

1115h A32C-04 Assessing the Climatic Benefits of Black Carbon Mitigation: D L Mauzerall, R E Kopp

1130h A32C-05 Source Attribution of Light-absorbing Aerosols in Arctic Snow (Invited): D Hegg, S G Warren, T C Grenfell, S J Doherty, T V Larson, A D Clarke

1150h A32C-06 Pole-to-Pole Observations of Long-Range Transport of Black Carbon Aerosol: J R Spackman, J P Schwarz, R Gao, A Perring, L Watts, D W Fahey, S C Wofsy

All information is current as of November 12, 2010
A32D Moscone West: 3004 Wednesday 1020h
Nucleation and Growth of Atmospheric Aerosols I

Presiding: J N Smith, NCAR; L Wang, Texas A&M University

1020h A32D-01 Evidence for the role of organics in aerosol particle formation under atmospheric conditions (Invited): U Baltensperger, Title of Team: The PSI-UHELI-UFrankfurt nucleation consortium

1035h A32D-02 Contributions of Organic Vapours to Atmospheric Nanoparticle Growth: L Wang, W Xu, A F Khalilzov, R Zhang

1047h A32D-03 Aerosol nucleation measurements from the CLOUD experiment at CERN: J Curtius, J Kirkby, Title of Team: CLOUD Cooperation

1059h A32D-04 Atmospheric Measurements of Neutral Nucleating Clusters (Invited): J Zhao, F L Eisele, J N Smith, M Chen, J Jiang, C Kuang, P H McMurry

1114h A32D-05 Mass Spectrometry of Atmospheric Aerosol: 1 nanometer to 1 micron: D R Worsnop, M Ehn, H Junnininen, M T Kulmala


1141h A32D-07 The Impact of Nucleation on Global Aerosol and Climate (Invited): K Carslaw, D V Spracklen, J Merikanto, M T Kulmala

1156h A32D-08 Model-measurement Comparison of New Particle Formation Events in a Global Aerosol Microphysics Model: D M Westervelt, I Riipinen, J R Pierce, W Trivitayanurak, P J Adams

1208h A32D-09 Nucleation and growth of atmospheric particles: Contribution of ion-mediated nucleation and role of low volatile organics condensation: F Yu, G Luo

Biogeoosciences

B32A Moscone West: 2006 Wednesday 1020h
Detecting Thresholds of Ecosystem Resilience in a Changing Climate II (joint with GC, H)

Presiding: A White, New Mexico Institute of Mining and Technology; L Dong, New Mexico University; R Heinse, University of Idaho; C M Steele, New Mexico State University

1020h B32A-01 Ecosystem thresholds: Interrelated tipping points in broad-scale tree mortality, fire regimes, and ecological dynamics (Invited): C Allen

1050h B32A-02 Patterns of abrupt ecosystem change through the Holocene: C Morrill, R W Katz, D E Atkinson

1105h B32A-03 Has the Alaskan climate crossed a threshold? Satellite and tree-ring data indicate biome shift: P S Beck, G P Juday, S J Goetz, C Alis, V A Barber, S E Winslow, E E Sousa, P Heiser, J D Herriges


1150h B32A-05 Quantifying ecological thresholds in a complex world: H E Lintz, B McCune, A N Gray, K A McCulloh

1205h B32A-06 Macroecological patterns as indicators of when ecosystems are dynamically balanced or are close to rapid change: G Rowlands, S C Chapman, A Clarke, E J Murphy, N W Watkins

B32B Moscone West: 2004 Wednesday 1020h
Global Soil Change: Mechanisms of Carbon Stabilization and Response II (joint with GC, EP)

Presiding: K Lajtha, Oregon State University; N Cavallaro, USDA/CSREES

1020h B32B-01 Nitrogen deposition and soil carbon sequestration: enzymes, experiments, and model estimates (Invited): C L Goodale, M Weiss, C Tonitto, M Stone

1035h B32B-02 Biologically Driven Differences in Decomposition Dynamics Under Changing Ecosystems (Invited): S Grandy

1050h B32B-03 Soil Carbon Change During Fifty Years of Old-FIELD Forest Development: M L Mobley, P R Heine, S A Billings, K Lajtha, M G Kramer, D D Richter


1120h B32B-05 Mechanisms Controlling Carbon Turnover from Diverse Microbial Groups in Temperate and Tropical Forest Soils: H Throckmorton, L Dane, J A Bird, M K Firestone, W R Horwath

1135h B32B-06 INCOMPLETE RECOVERY OF MINERAL-BOUND LIGNIN-DERIVED PHENOLS BY CUO OXIDATION: P J Herness, K Kaiser, R Y Dyda, C Cerl

1150h B32B-07 Stability of soil organic matter is a non-linear function of soil age: B Sullivan, S Hart

1205h B32B-08 Root-Soil Interactions as Input-Driven Feedbacks in Regulating Soil Carbon Cycle: W Cheng

B32C Moscone West: 2002 Wednesday 1020h
Linking Dissolved Organic Matter Quality With Biogeochemical Cycles II (joint with V, H)

Presiding: E R Hotchkiss, University of Wyoming; K J Goodman, NEON, Inc.; W H McDowell, University of New Hampshire; J B Fellman, University of Western Australia

1020h B32C-01 Character, quality and bioavailability of Dissolved Organic Carbon (DOC) in a boreal stream network (Invited): H Laudon, M Berggren, A Agren, M Jansson


1050h B32C-03 Dissolved Organic Matter (DOM) Bioavailability among Aquatic Ecosystems in Russia’s Kolyma River Watershed During Summer BaseFlow (Invited): W V Sobczak, A Crowley, Title of Team: Polaris Project Research Team


1135h B32C-06 The Relationship Between Dissolved Organic Matter Composition and Organic Matter Optical Properties in Freshwaters: G Aiken, R G Spencer, K Butler
1020h  **B32C-07** Optical properties of DOM and their relationships with dissolved trace metals in shallow lakes of southern Ontario, Canada: **A M Morales,** P C Frost

1205h  **B32C-08** Organic carbon input from atmospheric deposition: a potential driver of nitrogen export from barren alpine ecosystems (Invited): **N Mladenov,** M W Williams, S K Schmidt

---

**Cryosphere**

**C32A Moscone West: 301 I** Wednesday 1020h Innovations in Observing and Modeling Components of the Cryosphere III (joint with EP, NG)

*Presiding:* **J N Bassis,** University of Michigan; **M R Anderson,** University of Nebraska; **D R MacAyeal,** University of Chicago; **O V Sergienko,** Princeton University

1020h  **C32A-01** Initialization of ice-sheet forecasts viewed as an inverse Robin problem: **R Arthern,** G H Gudmundsson

1035h  **C32A-02** Glacier melting in a stratified ocean: Observations from outlet glaciers in Greenland (Invited): **F Straneo,** D A Sutherland, G S Hamilton, C Cenedese, L A Stearns

1050h  **C32A-03** Capturing the effects of subglacial flooding and seasonal transitions in a flowband model of ice dynamics (Invited): **G E Flowers,** S Pimentel

1105h  **C32A-04** Modelling a coupled distributed-channelized drainage system: the spacing of channels: **I Hewitt**

1120h  **C32A-05** Stick-slip Motion of Whillans Ice Stream: Experimental Constraints on Till Frictional Behavior (Invited): **N R Iverson**

1135h  **C32A-06** Improving degree-day melt modeling of the Greenland ice sheet in the Parallel Ice Sheet Model (PISM): **R M Hock,** A Aschwanden, J Ettema, E Bueler, C Khroulev, M R van den Broeke

1150h  **C32A-07** A numerically optimized, computationally efficient method to couple Full-Stokes and simpler models of ice sheet flow: **H L Seroussi,** E J Rignot, M Morlighem, E Y Larour, H Ben Dhia, D Aubry

1205h  **C32A-08** The Response Time of Surface Elevation of Polar Ice Sheets to Fluctuations of the Accumulation Rates: **J Li,** H J Zwally

---

**Earth and Planetary Surface Processes**

**EP32A Moscone South: 308** Wednesday 1020h Advances in the Systematics of Terrestrial Cosmogenic Nuclides I (joint with V, C, B, GC)

*Presiding:* **F M Phillips,** New Mexico Inst Mining & Tech; **M Caffee,** Purdue University


1105h  **EP32A-03** Potential resolution of discrepancies between scaling models for in situ cosmogenic nuclide production rates: **N A Lifton**


1150h  **EP32A-06** Cosmogenic Chlorine-36 Global Production Rate Parameter Calibration: **S Marrero,** B Borcherks, F M Phillips, R Aumer, J Stone


1205h  **EP32A-08** Inter-comparison of cosmogenic in-situ 1He, 21Ne and 36Cl at low altitude along an altitude transect on the SE slope of the Kilimanjaro volcano (3°S, Tanzania): **I Schimmelpfennig,** A Williams, R Pik, P Burnard, S Niedermann, R C Finkel, L Benedetti, B Schneider

---

**Education and Human Resources**

**ED32A Moscone South: 102** Wednesday 1020h The Imperative of Climate Literacy II (joint with A, C, IN, GC, PP, PA)

*Presiding:* **L T Huffman,** University of Nebraska-Lincoln; **J L Baeseman,** Association of Polar Early Career Scientists

1020h  **ED32A-01** Science Communication during the International Polar Year 2007-2008: Successes and Recommendations (Invited): **D J Carlson,** Title of Team: IPY Education, Outreach and Communication Committee


1050h  **ED32A-03** Where do we go from here?: Science Communications Post-IPY Lessons Learned from Canada (Invited): **J Bellman**

1105h  **ED32A-04** “POLAR-PALOOZA” and “International POLAR-PALOOZA”: Taking Researchers on the Road to Engage Public Audiences across America, and Around the World: **G Haines-stiles,** E Akuginow

1120h  **ED32A-05** Multimedia storytelling: **C A Linder,** M Wilbert, R M Holmes

1135h  **ED32A-06** Girls on Ice: Using Immersion to Teach Fluency in Science: **E C Pettit,** C Mortenson, K Stiles, M Coryell-Martin, L Long

1150h  **ED32A-07** Extending IPY Data to a Wider Audience: **M Turrin,** R E Bell, S L Pfriman

1205h  **ED32A-08** THE CLIMATE LITERACY AND ENERGY AWARENESS NETWORK (CLEAN) PATHWAY: INTEGRATING SCIENCE AND SOLUTIONS: **T S Ledley,** M S McCaffrey, S Buhr, C A Manduca, S Fox, F Niepold, A U Gold

---

All information is current as of November 12, 2010
1035h  EP32B-02 The consequences of the 1999 Chi-Chi earthquake on bedrock river processes in central Taiwan *(Invited)*: B J Yanites, G E Tucker, K J Mueller, Y Chen

1050h  EP32B-03 Landslides, Erosion and Landscape Evolution along the Eastern Margin of the Tibetan Plateau. *(Invited)*: W B Ouimet, K X Whipple

1105h  EP32B-04 Effects of the 2008 Wenchuan Earthquake on the Min River, Sichuan, China: A West, Z Jin, R Hetzel, A Densmore, F Zhang, R G Hilton


1135h  EP32B-06 The effects of fire-flood events on the sediment yield of a coastal California watershed: J A Warrick, J A Hatten, A B Gray, E B Watson, G B Pasternak, M A Goni, R A Wheatcroft

1150h  EP32B-07 Vegetation Dynamics in the Watershed of Salt Pond, Falmouth, Massachusetts in the Aftermath of a Large Paleostorm and Subsequent Wildfire Inferred from Lignin Oxidation Products: M L Gomes, N E Blair, J P Donnelly, A D Hawkes, J Coderberg

1205h  EP32B-08 Harvesting organic carbon by landslides in mountain forest: Establishing decadal rates of carbon transfer and the role of extreme events *(Invited)*: R G Hilton, P Meunier, N Hovius, P Bellingham, A Galy

Geodesy

**G32A**  Moscone West: 2008  Wednesday  1020h

The Magnitude 8.8 Chilean Earthquake of 27 February 2010

*Presiding:* S E Barrientos, Universidad de Chile; B A Brooks, University of Hawaii; K Wang, Geological Survey of Canada; D Melnick, University of Potsdam

1020h  G32A-01 Slip distribution of the February 27, 2010 Mw=8.8 Maule Earthquake, central Chile, from static and high-rate GPS, InSAR, and broadband teleseismic data: B Delouis, J Nocquet, M Valleé

1035h  G32A-02 Coseismic slip distribution of the February 27, 2010 Mw 8.9 Maule, Chile earthquake: F F Pollitz, B A Brooks, X Tong, M G Bevis, R Smalley, J H Foster, M Blanco, S Cimbaro, H Parra, J Baez, R Burgmann

1050h  G32A-03 On the similarity between pre-seismic locking and coseismic slip during the 2010 Maule earthquake *(Invited)*: M Moreno, M Rosenau, D Melnick, O Oncken, M Keiding, J C Baez, M G Bevis, J Chen, A Tassara, M Motagh, A Socquet, M Cisternas, K Bataille, H Hase

1105h  G32A-04 Anatomy of the central Chile forearc and influence on megathrust seismogenic behavior *(Invited)*: A Tassara, R I Hackney, D Legrand, A Echaurren, M Moreno, E Contreras Reyes, C F Braitenberg, D Lange

1120h  G32A-05 Geological Evidence of Predecessors to the 2010 Earthquake and Tsunami in South-Central Chile: L L Ely, M Cisternas, R L Wesson, M Lagos

1135h  G32A-06 REPEATED SURVEYS AND HISTORICAL NAUTICAL CHARTS SUPPORT ELASTIC REBOUND MODEL ON MEGATHRUST AT SANTA MARÍA ISLAND, CHILE, (37°S) THROUGH ONE AND ONE-HALF SEISMIC CYCLES: R L Wesson, D Melnick, M Cisternas, L L Ely, M Moreno


**Global Environmental Change**

**G32A**  Moscone South: 103  Wednesday  1020h

Bestsellers by AGU Authors on Global Environmental Change

*Presiding:* S A Lloyd, NASA Goddard Space Flight Ctr; D J Wuebbles, Univ Illinois

1020h  GC32A-01 The Great Ocean Conveyor *(Invited)*: W S Broecker

1040h  GC32A-02 The Great Warming Brian Fagan: B M Fagan

1100h  GC32A-03 Seeing Through Smoke: Sorting through the Science and Politics in the Making of the 1956 British Clean Air Act *(Invited)*: D A Kenny

1120h  GC32A-04 Storms of My Grandchildren: The Truth about the Coming Climate Catastrophe and Our Last Chance to Save Humanity *(Invited)*: J E Hansen

1140h  GC32A-05 The Weather of the Future: Heat Waves, Extreme Storms, and Other Scenes from a Climate-Changed Planet: H M Cullen

1200h  GC32A-06 What’s the Worst that Could Happen: A Veteran of the Climate Change Culture Wars Explains Why America Isn’t Listening, and What to Do About It: G A Craven

**G32B**  Moscone West: 2005  Wednesday  1020h

Tropical Cyclones in the Global Climate System I *(joint with A, B, H, OS, PA)*

*Presiding:* C M Brierley, Yale University; R L Sriver, Penn State University

1020h  GC32B-01 Tropical cyclone activity and western North Atlantic stratification over the last millennia and potential connections *(Invited)*: J D Woodruff, R L Sriver, D C Lund

1035h  GC32B-02 Development and applications of a new Genesis Potential Index: M K Tippett, A H Sobel, S J Camargo, G A Vecchi, M Zhao

1045h  GC32B-03 Increased SST and Frequent Occurrence of Rough Sea Events in the Bay of Bengal: Implications for livelihoods of Coastal Population in Bangladesh *(Invited)*: A U Ahmed

1100h  GC32B-04 On the role of tropical cyclones in ocean heat transport *(Invited)*: M F Jansen, R M Ferrari

1115h  GC32B-05 Global impacts of intermittent mixing induced by tropical cyclones: G E Manucharyan, C M Brierley, A V Fedorov

1125h  GC32B-06 Tropical cyclogenesis indices: a focus in the South Pacific Convergence Zone: C Menkes, M Lengainge, F Chauvin, J Royer, P Marchesiello, N C Jourdain, E M Vincent, J Lefevre, Title of Team: The equipe cyclone team

1135h  GC32B-07 Evaluating the favorability of present and future climates for tropical cyclogenesis using the point-downscaling technique: D S Nolan, E Rappin, M McGauty

1145h  GC32B-08 An analysis of the effect of global warming on the intensity of Atlantic hurricanes using a GCM with statistical refinement *(Invited)*: M Zhao, I Held

1200h  GC32B-09 Dynamical simulation of tropical cyclones in high-resolution GCMs *(Invited)*: J Strachan, P Vidale, K Hodges, M Roberts
Geomagnetism and Palaeomagnetism

GP32A Moscone West: 2003 Wednesday 1020h
Geomagnetic Secular Variation Determined From Palaeomagnetic Observations I (joint with DI)

Presiding: C G Harrison, University of Miami; C L Johnson, University of British Columbia, Vancouver

1020h Christopher Harrison Session Introduction

1026h GP32A-01 Paleosecular variation from the standpoints of palaeomagnetism and numerical geodynamo modelling. (Invited): J Aubert

1040h GP32A-02 Paleomagnetics of Sao Tome Lavas and Paleosecular Variation at the Equator (Invited): N D Opdyke, D V Kent, D A Foster

1054h GP32A-03 Equatorial Paleosecular Variation of the Geomagnetic Field From 0-3 Ma Lavas From the Galapagos Islands: D V Kent, H Wang, P Rochette


1122h GP32A-05 Unbiased mean direction of paleomagnetic data and better estimate of paleolatitude: T Hatakeyama, H Shibuya

1136h GP32A-06 0-2 Ma Paleofield Behavior From Lava Flow Data Sets: C L Johnson, C Constable, L Tauxe, G Cromwell

1150h GP32A-07 The Relationship between Secular Variation and Reversal Frequency in the Phanerozoic (Invited): A J Biggin, C G Langereis, M Haldan

1204h GP32A-08 Onset of inner core growth before 2.2 billion years ago: Insight from secular variation and paleointensity analyses: A V Smirnov, J A Tarduno, D A Evans

Hydrology

H32A Moscone West: 3020 Wednesday 1020h
Applying River and Watershed Research to Facilitate Management and Guide Policy I (joint with PA)

Presiding: A C Johnson, USDA Forest Service/Portland State University; S M Reaney, Durham University; P Jordan, Teagasc; J A Yeakley, Portland State University

1020h Session Introduction Sim Reaney & Phil Jordan


1040h H32A-02 Evaluating mitigation measures for diffuse pollution across time and space (Invited): J Quinton, C Deasy

1100h H32A-03 Catchment-scale evaluation of environmental regulations in the agricultural sector in Ireland (Invited): A R Melland, P Jordan, P Mellander, D J Wall, C Buckley, S Mehan, G Shortle


1135h H32A-05 Belford proactive flood solutions: scientific evidence to influence local and national policy by multi-purpose runoff management: M Wilkinson, P F Quinn, J Jonczyk

1150h H32A-06 Linking large scale landscape change to water quality and quantity response in the lower Athabasca River, Canada: toward Cumulative Effects Assessment: N E Seitz, C J Westbrook, M Dubé, A Squires

1205h H32A-07 The Emergence Of Urban Hydrologic Outcomes From Inter-Related Social And Physical Dynamics: F A Montalto, A Waldman, K Travale

H32B Moscone West: 3018 Wednesday 1020h
Changing Dynamics of Complex Ecol hydrological Systems I (joint with B, EP)

Presiding: J Zhu, Desert Research Institute; R S Teegavarama, Florida Atlantic University; D S Mackay, State University of New York - Buffalo; D Sun, University of Houston, Clear Lake; M Young

1020h H32B-01 Environmental Energy and Mass Transfer: Key to Understanding Catchment Evolution (Invited): P A Troch, C Rasmussen, P D Broxton, I Heidbuchel

1035h H32B-02 Climatic and landscape controls on inter-annual variability of water balance and vegetation water use: a stochastic approach: S Zanardo, C J Harman, P A Troch, P C Rao, M Sivapalan, A Rinaldo

1050h H32B-03 Does vegetation buffer hydrological response? (Invited): V Y Ivanov, S Fatichi, E Caporali

1105h H32B-04 Using observed climate-landscape-vegetation patterns across a regional gradient to predict potential response to climate change: V B Smith, B Cardenas, C H David

1120h H32B-05 Vegetation optimality during drought in a Mediterranean catchment in Spain (Invited): C Van der Tol, L Reyes, A Pascall, M Lubczynski

1135h H32B-06 Land use alterations, hydrology and climate alterations analysis approach for water supply guarantee: V Pereira, M T Walter, J Teixeira Filho

1150h H32B-07 Tree-grass co-existence in savanna: Interactions of rain and fire: F Accatino, C De Michele, R Vezzoli, D Donzelli, R J Scholes

1205h H32B-08 Ecolhydrological Consequences of Grasses Invading Shrublands: A Comparison of Cold and Warm Deserts: B P Wilcox, L Turnbull, M Young, C J Williams, S Ravi, M S Seyfried, D R Bowling, R L Scott, T G Caldwell, J Wainwright, M J Germino

H32C Moscone West: 3014 Wednesday 1020h
Groundwater/Surface Water Interactions: Dynamics and Patterns Across Spatial and Temporal Scales III

Presiding: C E Hatch, University of Nevada Reno; J H Fleckenstein, Helmholtz Center for Environmental Research (UFZ); S Ge, University of Colorado

1020h H32C-01 Assessing the Roles of Karst Conduit Versus Matrix Flow in the Santa Fe River Basin: S B Meyerhoff, R M Maxwell, W D Graham

1035h H32C-02 Implications of Stream Gains and Losses for Hydrologic Turnover and Solute Retention/Transport at the Stream Network Scale: T P Covino, B L McGlynn, J Mallard

1050h H32C-03 Spatial and temporal variations of evapotranspiration signals in Long Meadow, Sequoia National Park, California: M H Conklin, R G Lucas

1105h H32C-04 Spatial heterogeneity in isotopic signatures of baseflow in small watersheds: implications for understanding watershed hydrology: A J Jefferson

1120h H32C-05 Recharge Along a Steep Hillslope: R Salve, W E Dietrich, D M Rempe, J Oshun, I Fung

All information is current as of November 12, 2010
1135h IN32C-06 Groundwater-surface water interaction along the Upper Biebrza River, Poland: a spatial-temporal approach with temperature, head and seepage measurements: C Anibas, O Batelaan, B Verbeiren, K Buis, J Chormanski, L De Doncker
1150h IN32C-07 Using Measurements of Heat and Pressure to Characterize Hyporheic Exchange through a Riffle-Pool Sequence in the Truckee River, NV: R C Naranjo, R G Niswonger, M Stone, C Davis, W A McKay
1205h IN32C-08 Distributed Temperature Sensing of hyporheic flux patterns in varied space and time around beaver dams: M Briggs, L K Lautz, J M McKenzie

H32D Moscone West: 3016 Wednesday 1020h New and Emerging Satellite Missions for Remote Sensing Hydrology I

Presiding: D E Alsdorf, Ohio State University; C Rudiger, The University of Melbourne


1035h H32D-02 Using high-resolution satellite rainfall products to nowcast major flash-flood inducing storms (Invited): E N Anagnostou, E I Nikolopoulos, A Papadopoulos, A C Bagtzoglou

1050h H32D-03 First in flight results from the SMOS 2-D interferometer (Invited): Y H Kerr, M Drusch, J Wigneron, S Mecklenburg, A Mahmoodi


1120h H32D-05 On the implications of the Surface Water and Ocean Topography (SWOT) mission for hydrologic science and applications (Invited): D P Lettenmaier


1150h H32D-07 Increased Spatial and Temporal Resolution in Recovering Hydrology Using Two Pairs of GRACE-like Satellites: D N Wiese, R Nerem

1205h H32D-08 Water consumption information and other hydrologic retrievals from the proposed NASA HyspIRI mission: R G Allen, M C Anderson, S J Hook

Earth and Space Science Informatics

IN32A Moscone South: 302 Wednesday 1020h GISScience I (joint with H, ED)

Presiding: P A Fox, Rensselaer Polytechnic Inst.; O Wilhelmi, NCAR; B D Branch, Elizabeth City State University

1020h IN32A-01 Review of GI Science Trends and Grand Challenges (Invited): M Gould, Title of Team: Esri Education team

1035h IN32A-02 Advancing GIS for Geospatial Dynamics (Invited): M Yuan

1050h IN32A-03 Increasing the availability and usability of terrestrial ecology data through geospatial Web services and visualization tools (Invited): S Santhana Vannan, R B Cook, B E Wilson, Y Wei

1105h IN32A-04 Environmental Model Interoperability Enabled by Open Geospatial Standards - Results of a Feasibility Study (Invited): K K Benedict, C Yang, Q Huang

1120h IN32A-05 A Scalable Infrastructure for Lidar Topography Data Distribution, Processing, and Discovery: C J Crosby, V Nandigam, S Krishnan, M Phan, C A Cowart, R Arrowsmith, C Baru

1135h IN32A-06 THE WEATHER AND CLIMATE TOOLKIT: S Ansari, S Del Greco, B Hankins

1150h IN32A-07 Documentation of Cultural Heritages Using a GIS Based Information and Management System; Case Study of Safranbolu: D Z Seker, M Alkan, S S Kutoglu, H Akcin

1205h IN32A-08 Collaborative Planetary GIS with JMARS: S Dickenshied, P R Christensen, C S Edwards, L C Prashad, S Anwar, E Engle, D Noss, Title of Team: JMARS Development Team

Nonlinear Geophysics

NG32A Moscone West: 3001 Wednesday 1020h Nonlinear Geophysics: Horizons

Presiding: A S Sharma, University of Maryland; U C Herfeld, Univ Colorado Boulder; Y Wang

1020h Turcotte Award Presentation

1030h NG32A-01 Long-term Memory in Climate Records and the Detection Problem (Invited): S Lennartz

1050h NG32A-02 Singularity, generalized self-similarity and self-organized criticality of Geochemical Landscapes from Mineral Districts (Invited): Q Cheng

1105h NG32A-03 Singular measures versus nondifferentiability: from the solid earth to the atmosphere and their interface (Invited): S Lovejoy, D J Schertzer

1120h NG32A-04 Pattern formation in an early diagenetic system: Liesegang pyrite bands in sapropels (Invited): I L’Heureux, R Rektursunova

1135h NG32A-05 Spatio-Temporal Self-Organization in Mudstones (Invited): T A Dewers

NG32B Moscone West: 3001 Wednesday 1150h Statistical Structure of the Atmosphere in the Horizontal and Vertical: Theory and Observation I (joint with A)

Presiding: A Tuck, Imperial College London; S Lovejoy, McGill University

1150h NG32B-01 Signatures of upscale and downscale energy cascades in QuikSCAT winds over the equatorial Pacific (Invited): G P King

1205h NG32B-02 Temperature and velocity structure functions in the upper troposphere and lower stratosphere from aircraft measurements (Invited): D E Wroblewski, J Werne, O Cote, J Hacker, R Dobosy
Natural Hazards

**OS32A Moscone West: 3010**  **Wednesday 1020h**


**Presiding:** H Fukuoka, Kyoto University; D B Kirschbaum, NASA Goddard Space Flight Center

1020h  **NI32A-01** Semi-automatic mapping of rainfall-induced landslides exploiting VHR optical images: the Messina, Sicily, I October 2009 landslide event *(Invited):** P Reichenbach, A Mondini, F Ardizzone, M Cardinali, F Fiorucci, F Guzzetti, M Rossi

1035h  **NI32A-02** Landslide Monitoring with Multi-Temporal Airborne LiDAR: N F Glenn, L Spaete, R Shrestha, P O'Leary, G Thackray, D J Chadwick

1050h  **NI32A-03** InSAR applications for the detection and monitoring of landslides *(Invited):** F Catani, N Casagli

1105h  **NI32A-04** Investigation of a slowly deforming, glacially debuttressed rock slope in the Alaska Range using InSAR, LiDAR and two-dimensional numerical modeling: S D Newman, J J Clague, R Babus, D H Shugar

1120h  **NI32A-05** A multi-modal geological investigation framework for subsurface modeling and kinematic monitoring of a slow-moving landslide complex in Colorado, United States: B W Lowry, W Zhou, Title of Team: SmartGeo

1135h  **NI32A-06** Establishing Near-Real-Time Monitoring of Landslides and Mud/Debris Flows (LMDF) for West Canada: H Kao, A Rosengerger

1150h  **NI32A-07** The seismic signature of rockslides: a review of events in the Central Alps: F Dammeyer, J R Moore, F Haslinger, S Loew

1205h  **NI32A-08** Slopes instabilities in Dolomieu crater, la Réunion Island, from seismological observations and numerical modeling: C Hibert, A Mangeney, G Grandjean, N M Shapiro

Ocean Sciences

**OS32A Moscone West: 3007**  **Wednesday 1020h**

**“Organic Geotraces”: Toward an Understanding of the Distribution of Organic Matter in the Oceans I** *(joint with B)*

**Presiding:** T Eglinton, Woods Hole Oceanographic Institution; E B Kujawinski, WHOI; C A Carlson, University of California Santa Barbara

1020h  **OS32A-01** GEOTRACES: An international program studying micronutrient cycles, contaminants and paleoproxy calibration *(Invited):** R F Anderson, G M Henderson

1035h  **OS32A-02** Isotopic analysis of bulk, LMW, and HMW DON d15N indicates recycled nitrogen release from marine DON: A N Knapp, D M Sigman, F Lipschutz, A Kustka, D G Capone

1050h  **OS32A-03** A Global Radiocarbon Mixing Line For Marine Dissolved Organic Carbon (DOC): S R Beaupre, E R Druffel


1120h  **OS32A-05** Predictable variability in the neutral sugar composition of DOM in the North Atlantic and South Pacific Ocean: S J Goldberg, C A Carlson, M A Brzezinski, N B Nelson, D A Siegel

1135h  **OS32A-06** Understanding the Biogeochemical Significance of Hopanoids in the Marine Geologic Record Through a Study of Their Distribution in the Modern Oceans: J P Saenz, R E Simmons, T I Eglinton, S G Wakeham


1205h  **OS32A-08** Challenges and opportunities for organic GEOTRACES *(Invited):** A Pearson, D Repeta

Planetary Sciences

**P32A Moscone South: 306**  **Wednesday 1020h**

**Interiors of Terrestrial Planets and Super-Earth Exoplanets III** *(joint with DI)*

**Presiding:** S Shim, Massachusetts Inst Tech; S Stanley, University of Toronto

1020h  **P32A-01** A Review of Super-Earth Exoplanets Observations *(Invited):** B Demory

1035h  **P32A-02** Stability of Post-Perovskite in MgSiO3 analog: NaMgF, and its Implication for the Mantle Dynamics of Super-Earths: B Grocholski, S Shim, V Prakapenka

1050h  **P32A-03** A Novel Dense Phase of Silica Initiating Silicates Breakdown in Giant Terrestrial Planets *(Invited):** T Tsuchiya, J Tsuchiya

1105h  **P32A-04** Some Mineral Physics Observations Pertinent to the Rheological Properties of Super-Earths: S Karato
1135h  P32A-06 On the Modes of Mantle Convection in Super-Earths (Invited): D Bercovici
1150h  P32A-07 Convective Structure and Tectonic Setting for Synchronously Rotating Super-Earth Exoplanets: J van Summeren, C P Conrad, E Gaidos
1205h  P32A-08 Thermal Structure and Lithospheric Mobility of Super-Earths: U Hansen, C Stein, J P Lowman

Paleoceanography and Paleoclimatology

PP32A  Moscone West: 3005 Wednesday 1020h Reconstruction and Modeling of Global Climate Evolution of the Past 21,000 Years II
Presiding: P U Clark, Oregon State Univ.; P J Bartlein, University of Oregon
1020h  PP32A-01 Model and proxy isotopic insights on the evolution of southern tropical African hydrology from 21 ka to present (Invited): J E Tierney, S C Lewis, B I Cook, A N LeGrande, G A Schmidt
1050h  PP32A-03 Evolution of tropical Atlantic Sea Surface Temperature Gradients since the LGM and associated shifts of the marine Atlantic Intertropical Convergence Zone: J A Arbuzszewski, P B DeMenocal, C Cleroux, L I Bradtmiller, A C Mix
1105h  PP32A-04 Contrasting Modes of El Niño dynamics in the Holocene and Last Glacial Maximum: A Koutavas
1120h  PP32A-05 Chinese stalagmites: proxies for the Indian Summer Monsoon response to an archetypal abrupt climate change: F Pausata, D S Battisti, K H Nisancioglu
1135h  PP32A-06 Absolute-dated lake and cave records of the glacial highstand and deeglacial regression of Lake Bonneville, Utah, USA: D McGee, R Edwards, J Quade, W S Broecker
1150h  PP32A-07 Millennial-Scale Hydroclimate Variation in North America during the Late-Quaternary: Evidence from a Network of Lake-Level Reconstructions: B N Shuman
1205h  PP32A-08 Ice-Age Termination I from the northern Indian Ocean: R Sarawat, D W Lea, R Nigam, A Mackensen

SPA-Acronymy

SA32A  Moscone South: 301 Wednesday 1020h Ionosmophic Modification Using High-Power Radio Waves and Atmospheric Processes Studied Using Space Shuttle and Rocket Exhaust II (joint with SM)
Presiding: M Golombek, University of Colorado Denver; M H Stevens, Naval Research Laboratory; G Crowley, ASTRA; M P Sulzer, Arecibo Observatory
1032h  SA32A-02 Optimal Geophysical Conditions for ELF/VLF Generation in Modulated Heating Experiments: G Jin, M Spasojevic, M Cohen, N G Lehtinen, U S Inan
1044h  SA32A-03 CORRELATIVE OBSERVATIONS WITH SPACEBORNE DIRECT DOPPLER WIND INSTRUMENTS OF THE RAPID TRANSPORT OF SHUTTLE EXHAUST PLUMES (Invited): R Niciejewski, R R Meier, M H Stevens, W R Skinner, M Cooper, A Marshall, D A Orland, Q Wu
1059h  SA32A-04 Meridional transport in the lower thermosphere (Invited): H Liu
1114h  SA32A-05 Evidence for 2-D Turbulence in the Lower Thermosphere (Invited): M C Kelley, R H Varney, C E Seyler
1129h  SA32A-06 Dynamical Properties of Shuttle Plumes in the Lower Thermosphere: R R Meier, M H Stevens, J M Plane, J T Emmert, G Crowley, L J Paxton, A B Christensen, S I Azeem
1141h  SA32A-07 Direct observation of Space Shuttle water vapour exhaust plumes by Odin/SMR: S Lossow, J Urban, D P Murtagh, P Eriksson
1153h  SA32A-08 Effects of the Shuttle Plumes on the Chemistry and Energetics of the Lower Thermosphere (Invited): S I Azeem, G Crowley, M H Stevens, R R Meier
1208h  SA32A-09 Anchoring Atmospheric Density Models Using Observed Shuttle Plume Emissions: W L Dimpfl, L S Bernstein

SPA-Solar and Heliospheric Physics

SH32A  Moscone South: 309 Wednesday 1020h Initiation, Evolution, and Interaction of Coronal Mass Ejections, Corotating Interaction Regions, and Interplanetary Shocks From the Sun to 1 AU III (joint with SM)
Presiding: S Wu, Univ Alabama Huntsville; N U Crooker, Boston University; R A Howard, Naval Research Lab
1035h  SH32A-02 Numerical Simulation of Earth Directed CMEs with an Advanced Two-Temperature Coronal Model (Invited): W B Manchester, B van der Holst, R A Frazin, A M Vasquez, G Toth, T I Gombosi
1105h  SH32A-04 Three-Dimensional Global Simulation of Coronal Mass Ejections with Flux-Rope Structures: C Wu, A Wang, S Wu, C D Fry, S P Plunkett, K Liou
1135h  SH32A-06 Three-Dimensional CME Reconstruction Using Geometric and Polarimetric Localization: C A de Koning, V J Pizzo
1150h  SH32A-07 Radio-Loud Coronal Mass Ejections without Shocks near Earth: S Akiyama, N Gopalswamy, H Xie, S Yashiro, P A Makela, O C St Cyr, R J MacDowall, M L Kaiser
1205h  SH32A-08 The First Results of Solar Wind Background Study by 3D SIP-AMR-CESE MHD Model (Invited): X Feng, L Yang, C Jiang, S Wu, Title of Team: Solar-Interplanetary-Geomagnetic Weather Group (SIGMA Weather Group)
SPA-Magnetospheric Physics

SM32A  Moscone South: 307  Wednesday  1020h
Dynamics in the Saturnian Magnetosphere III (joint with P)

Presiding: A Masters, Mullard Space Science Laboratory; G B Hospodarsky, University of Iowa

1020h  SM32A-01 Saturn’s neutral clouds: A current perspective on structure and dynamics (Invited): H T Smith, R E Johnson, D G Mitchell
1041h  SM32A-02 Models of Electron Energetics in the Enceladus Torus: T E Cravens, N Ozak, M S Richard, I P Robertson, M E Perry, M E Campbell
1056h  SM32A-03 Radial plasma transport in Saturn’s magnetosphere (Invited): T W Schunk
1117h  SM32A-04 Saturn’s Ionospheric Clock(s): A Concept for Generating and Maintaining Saturn’s Observed Magnetospheric Periodicities: D G Mitchell, P C Brandt, A Y Ukhorskiy
1132h  SM32A-05 Location of Saturn’s Northern Infrared Aurora Determined from Cassini VIMS Images: S V Badman, N A Achilleos, K H Baines, R H Brown, E J Bunce, M K Dougherty, H Melin, J D Nichols, T Stalrall
1147h  SM32A-06 Saturn aurora movies in visible and near-IR observed by Cassini ISS: U Dyudina, D Wellington, S P Ewald, A P Ingersoll, C Porco

SM32B  Moscone South: 305  Wednesday  1020h
Origins of Near-Earth Plasma I (joint with SA)

Presiding: L M Kistler, University of New Hampshire; R J Strangeway, UCLA

1020h  SM32B-01 Thermosphere-Ionosphere-Magnetosphere Coupling and Mass Outflow – the Thermosphere/Ionosphere Perspective (Invited): R W Schunk
1035h  SM32B-02 I-T influences on ionospheric outflow during magnetic storms. (Invited): T J Immel, A J Ridley, M W Liemohn, A J Mannucci
1050h  SM32B-03 The occurrence and characteristics of high-latitude ion outflows observed with the EISCAT incoherent scatter radars and the FAST spacecraft: D M Wright, J A Davies, R J Strangeway, S V Badman, I McCrea, P Gallop
1105h  SM32B-04 Thermosphere-Ionosphere-Magnetosphere Coupling and Mass Outflow – the Magnetosphere/Ionosphere Perspective (Invited): M J Wilkberger
1120h  SM32B-05 Access of ionospheric oxygen to the near-Earth plasmasheet during geomagnetically-quiet conditions: S R Elkington, W K Peterson, J P McColloough
1135h  SM32B-06 How do heavy ions affect plasma entry and transport processes? S A Lazerson, J Johnson, P A Delamere, A Otto, Y Lin, S Wing, E Kim
1150h  SM32B-07 Exploring the influence of ionospheric O+ outflow on magnetospheric dynamics: Y Yu, A J Ridley
1205h  SM32B-08 Understanding Meso- and Micro-scale Coupling of Near Earth Plasmas (Invited): T E Moore, G V Khazanov

Study of Earth’s Deep Interior

DI32A  Moscone West: 3022  Wednesday  1020h
New Views on the Lithosphere-Asthenosphere Boundary II (joint with MR, S, T, V)

Presiding: M M Hirschmann, University of Minnesota; H Kawakatsu, Earthquake Research Institute; C A Rychert, University of Bristol; J B Gaherty, Columbia University

1020h  DI32A-01 Imaging the Lithosphere-Asthenosphere Boundary beneath the Pacific using SS Waveform Modeling: CA Rychert, P M Shearer
1035h  DI32A-02 Electrical conductivity of oceanic lithosphere and asthenosphere: constraints from modern seafloor magnetotelluric data: K Baba, H Utada
1050h  DI32A-03 Accumulation of melt and volatiles at the base of the lithosphere: Implications for the origin of the EMORB geochemical reservoir and seismic G-discontinuity: G Hirth, E Parmentier, A E Saal
1105h  DI32A-04 Small-scale convection and the seismic structure of the base of the lithosphere (Invited): N H Sleep
1120h  DI32A-05 How is the seismic LAB observed? (Invited): R Kind, P Kumar, B Heit, Y Yuan
1135h  DI32A-06 The lithosphere-asthenosphere boundary beneath North America and Australia (Invited): K M Fischer, H A Ford, V Lekic, D L Ahtb
1205h  DI32A-07 Imaging continental lithospheric structure from S receiver functions: evidence of arc accretion for formation of cratonic keels: M S Miller, D W Eaton, Y Rong

Mineral and Rock Physics

MR32A  Moscone West: 3024  Wednesday  1020h
The Post-Perovskite Transition and the D” Layer II (joint with S, DI, V)

Presiding: R Caracas, Ecole Normale Superieure; H Liu, Harbin Institute of Technology

1020h  MR32A-01 High-pressure polymorphs of iron-rich (Mg, Fe)SiO3 and FeGeO3 perovskite and post-perovskite. Takamitsu Yamanaka1, Wendy L. Mao2, P. Ganesh1, Luke Shulenburger1, Yamanaka1, Wendy L. Mao2, P. Ganesh1, Luke Shulenburger1, Ho-kwang Mao1 and Russell J. Hemley1 1Geophysical Laboratory, USA (joint with MR, S, T, V)
1035h  MR32A-02 Chemical Exchange Between Metals and Oxides at the Conditions of the Core-Mantle Boundary (Invited): M S Miller, D W Eaton, Y Rong
1050h  MR32A-03 Laboratory measurements of electrical conductivity up to the lowermost mantle conditions (Invited): K Hirose, K Ohta
1135h  MR32A-06 Depth and Thickness of the Post-Perovskite Boundary in a MORB Composition: K Cataldi, S Shim, V Prakapenka
Seismology

**S32A**  Moscone West: 2009 Wednesday 1020h

**Ambient Noise Imaging in Seismology and Helioseismology II (joint with OS, SH)**

*Presiding:* A G Kosovichev, Stanford University; J F Claerbout; T L Duvall, NASA Goddard Space Flight Center

1150h **MR32A-07** Polymorphism in silicate-postperovskite reviewed (Invited): O D Tshauner

1205h **MR32A-08** Depth and Thickness of the Post-Perovskite Boundary in Pyrolic and San Carlos Olivine Compositions: S Shim, B Grocholski, V Prakapenka

---

Tectonophysics

**T32A**  Moscone West: 2011 Wednesday 1020h

**Lithological Controls on the Mechanics and Evolution of Lithospheric Deformation II: Mechanics of Fluids and Faulting (joint with MR, S)**

*Presiding:* V G Toy, University of Otago; T M Mitchell, Ruhr-University Bochum; D J Prior, University of Liverpool

1135h **S32C-02** New Insights Into Decratonization Beneath Northeastern China From the Joint Inversion of Body and Surface Waves (Invited): F Zhang, M J Obrebski, J Pan, Q Wu, R M Allen

1150h **S32C-03** Crustal structure in the eastern Tibetan Plateau from telesismic receiver functions: C Wang, L Zhu, B Huang, H Lou, Z Yao, X Luo

1205h **S32C-04** Variations of shear wave splitting in the 2010 Yushu Ms7.1 earthquake region: L Chang, Z Ding, C Wang
All information is current as of November 12, 2010
Wednesday P.M.

U33A Moscone South: Poster Hall  Wednesday 1340h
Earth Sheds Her Archean Coat: 200 Million Years of Rapid Transition in Earth Systems II Posters

Presiding: P Eriksson, University of Pretoria; T W Lyons, University of California Riverside

1340h  U33A-0001 POSTER Paleomagnetic Constraints on the Plate Tectonics Regimes in Early Paleoproterozoic: S A Pisarevsky


1340h  U33A-0003 POSTER The Large Igneous Province (LIP) Record during the Archean-Proterozoic Transition Between 2.5 Ga and 2.0 Ga: R E Ernst, W. Bleeker

1340h  U33A-0004 WITHDRAWN

1340h  U33A-0005 POSTER Was the Archean mantle thermal regime special? Constraints from residual peridotites: G. Pearson, S W Parman

1340h  U33A-0006 POSTER Early Paleoproterozoic (2.5-2.0 Ga) A-type granite associations: O T Ramo

1340h  U33A-0007 POSTER The Hf isotope ratios of new continental crust and Hf model ages: C J Hawkesworth, B. Dhuime, A. Petranik, P. Cawood

1340h  U33A-0008 POSTER The evolution of oceanic ”$^{87}$Sr/$^{86}$Sr does not rule out early continental growth: N Flament, N Colicle, P F Rey

1340h  U33A-0009 POSTER Secular Changes in Lithospheric Diamonds from the Archean to the Proterozoic: S B Shirley, S H Richardson, S Aulbach, G Pearson

1340h  U33A-0010 POSTER Constraining the termination of the Lomagundi-Jatuli positive isotope excursion in the Imandra-Vazrug segment (Kola Peninsula, Russia) of the North Transfennoscandian Greenstone Belt by high-precision ID-TIMS: A P Martin, D J Condon, A R Prave, V Melezhik, A E Fallick

1340h  U33A-0011 WITHDRAWN

1340h  U33A-0012 POSTER Paleoproterozoic pyrobitumen: Re-Os geochemistry reveals the fate of giant carbon accumulations in Russian Karelia: J L Hannah, H J Stein, G Yang, A Zimmerman

1340h  U33A-0013 POSTER Evolution of Early Paleoproterozoic Ocean Chemistry as Recorded by Black Shales: C Scott, A Bekker, T W Lyons, N J Planavsky, B A Wing

1340h  U33A-0014 WITHDRAWN

U33B Moscone South: 104  Wednesday 1340h
Regional Biosphere-Atmosphere Interactions in Complex Terrain: Processes and Feedbacks Among Nutrients, Water, and Climate II (joint with H, GC, A)

Presiding: J Hu, NCAR; D Riverso-Iregui, University of Nebraska; A R Desai, University of Wisconsin - Madison

1340h  U33B-01 Atmospheric Carbon Dioxide Transport over Mountain Terrain (Invited): J Sun

1400h  U33B-02 Terrestrial ecosystem dynamics over complex terrain: challenges for measurements and models (Invited): G C Hurtt, R Dubayah, J Fisk, R Q Thomas, K A Dolan, H H Shugart

1420h  U33B-03 Does complex terrain matter for global terrestrial ecosystem models? Forest ecosystem dynamics in the White Mountains, NH. (Invited): M C Dietze, A D Richardson, P R Moorcroft

1340h  U33B-04 WITHDRAWN


1500h  U33B-05 Transpiration and Evaporation measurements in a Mountain Ecosystem using Real-Time Field-Based Water Vapor Isotopes (Invited): V Dominguez, D J Gochis, P C Harley, A Turnipseed, J Hu

1520h  U33B-06 Landscape structure controls on biogeochemical fluxes in complex terrain (Invited): B L McGlynn, D Riverso-Iregui, R E Emanuel, V J Pacific, H E Epstein, D L Welsch

Atmospheric Sciences

A33A Moscone South: Poster Hall  Wednesday 1340h
Atmospheric Circulations and Climate Change IV Posters (joint with GC)

Presiding: P A O’Gorman, MIT; T M Merlis, Caltech

1340h  A33A-0093 POSTER Recent Changes in the Summer Precipitation Pattern in East China and the Background Circulation: Y Zhu, H Wang, W Zhou, J Ma

1340h  A33A-0094 POSTER Interannual variations in seasonal march of polar frontal zone around Japan: N Takahashi

1340h  A33A-0095 POSTER Further insight into the summertime temperature variations in the middle and lower reaches of Yangtze River on inter-annual timescale: J Cai, Z Guan

1340h  A33A-0096 POSTER Interannual Variability of the Baiu Season Estimated from the Equivalent Potential Temperature: T Tomita, T Yamaura, T Hashimoto

1340h  A33A-0097 POSTER Bimodal Variability of East Asian Summer Monsoon Viewed as Atmospheric Hydrological Cycle: J Chen, Title of Team: Center for Monsoon System Research, Institute of Atmospheric Physics

1340h  A33A-0098 POSTER The Response of Extratropical Westerlies to Climate Change (31.9-11.3 ka) Revealed by a Speleothem from DeSoto Caverns, Alabama (USA): W J Lambert, P Aharon, J Hellstrom

1340h  A33A-0099 POSTER Climate Change in the Eastern Himalayas: Observed Trends and Model Projections: L P Devkota, F Zhang

1340h  A33A-0100 WITHDRAWN

1340h  A33A-0101 POSTER The influence of regional SSTs on interdecadal shift of East Asian summer monsoon: S Li, J Fu, J Bian

1340h  A33A-0102 WITHDRAWN

1340h  A33A-0103 POSTER Impact of East Asian Winter Monsoon on Rainfall over Southeastern China and its Dynamical Process: Z Lian-Tong, Title of Team: Center for Monsoon System Research, Institute of Atmospheric Physics, Chinese Academy of Sciences

1340h  A33A-0104 POSTER The sensitivity of MBL clouds to ENSO and global warming – A regional model study: A Lauer, K P Hamilton, Y Wang, V Phillips, R Bennartz
All information is current as of November 12, 2010.
1340h  A33A-0151 POSTER Temporal change of the sources of aeolian dust delivered to East Asia revealed by electron spin resonance signals in quartz: Y Yamamoto, S Toyoda, K Nagashima, Y Isozaki, Y Sun, R Tada, Y Igarashi
1340h  A33A-0152 POSTER Jerks as Guiding Influences on the Global Environment: Effects on the Solid Earth, Its Angular Momentum and Lithospheric Plate Motions, the Atmosphere, Weather, and Climate: J M Quinn, B A Leybourne
1340h  A33A-0153 POSTER Polar Vortices Temporal Evolution Represented by the Atmospheric Reanalysis Systems: N G Andronova, S Boland
1340h  A33A-0154 POSTER Downward influence from the stratospheric final warming: L Sun, W A Robinson, G Chen

A33B Moscone South: Poster Hall Wednesday 1340h Atmospheric Sciences General Contributions: Dynamics II Posters

Presiding: N G Andronova, University of Michigan; W A Robinson, North Carolina State University
1340h  A33B-0155 POSTER Multi Model Ensemble Forecasting using Neural Network: S Caikir, M Kadioglu
1340h  A33B-0156 POSTER The climatology of air stagnation conditions over U.S. as derived from the NARR data: R X Bian, J J Charney, W Heilman, A M Pollyea, J A Andresen, S Zhong
1340h  A33B-0157 POSTER Impact of data assimilation on Chukchi/Beaufort Seas mesoscale modeling: F Liu, J Krieger, J Zhang
1340h  A33B-0158 POSTER Some Studies in Large-Scale Surface Fluxes and Vertical Motions Associated with Land falling Hurricane Katrina over the Gulf of Mexico: S R Reddy
1340h  A33B-0159 POSTER Middle atmosphere responses in the southern hemisphere to ENSO for a multi-model ensemble for twentieth-century simulation to year 2000: K Shibata
1340h  A33B-0160 POSTER Moist Effects on Orogaphically Forced Stationary Waves: M Löfverström, H Körnich
1340h  A33B-0161 POSTER SIMULATION FOR THE SOUTH CHINA SEA MONSOON ONSET BASE ON GRAPES MODEL AND EXPERIMENT FOR THE MODEL INITIAL FIELDS: H Zhou
1340h  A33B-0162 POSTER Simulation of the trajectory of microwaves during passage of Meso-scale Convective System over Southern Brazil: F L Diniz, G B Munchow, D L Herdies, P R Foster
1340h  A33B-0163 WITHDRAWN
1340h  A33B-0164 POSTER The Surface Drag and the Vertical Momentum Fluxes Produced by Mountain Waves in Flows with Directional Shear: M Teixeira, P M Miranda, J P Martins
1340h  A33B-0165 POSTER The meso-scale characteristics of Typhoon Morakot(2009) revealed from polarimetric radar analyses: T C Wang, Y Tang, Title of Team: Radar Meteorology Lab.
1340h  A33B-0166 POSTER Lorenz energy cycle of the global atmosphere based on reanalysis Datasets and GDAPS: M Kim, Y Kim, W Lee, S Kim, K Kim
1340h  A33B-0167 POSTER A study on the uncertainty based on Meteorological fields on Source-receptor Relationships for Total Nitrate in the Northeast Asia: Y Sunwoo, J Park, S Kim, Y Ma, I Chang

A33C Moscone South: Poster Hall Wednesday 1340h Atmospheric Sciences General Contributions:Tropospheric and Stratospheric Ozone II Posters
1340h  A33C-0168 POSTER A Comparison of SBUV and TOMS Version 8.6 Total Column Ozone Data with Data from Groundstations: G J Labow, D Haffner, R D McPeters, P K Bhartia, S Taylor
1340h  A33C-0169 POSTER Stratospheric ClO at Scott Base, Antarctica, March-November 2009: B J Connor, T Mooney, J W Barrett, A Parrish, J S Boyd, G E Nedoluha, M L Santee
1340h  A33C-0170 POSTER Preliminary Results from the Measurement of Ozone(O3) and Carbon monoxide(CO) at Gosan, Jeju, South Korea for understanding emissions in Northeast Asia: K Ahn, J Kim, M Park, S Li, K Kim
1340h  A33C-0171 POSTER Measurements of Diurnal Variations of Upper Stratospheric ClO with a Ground-based Millimeter-wave Radiometer at Atacama, Chile: T Kuwahara, A Mizuno, T Nagahama, H Maewa, N Toriyama, Y Kojima
1340h  A33C-0172 POSTER Balloon-borne observations of HOx in the lower stratosphere: Comparison with photochemical model: R A Stachnik, G C Toon, J Margitan, J Blavier, G Krysztofiak, R Thébulemont, C Robert
1340h  A33C-0173 POSTER Preliminary results from SPIRALE balloon-borne in situ stratospheric measurements during 2009 polar summer: V Catoire, N Huret, G Berthet, G Krysztofiak, J Blavier, G Krysztofiak, R Thébulemont, C Robert
1340h  A33C-0174 POSTER Summertime ozone and airborne particle concentrations measured on the Juneau Icefield (58°N): J Fry, J D Katz, K Redell, T Dittrich
1340h  A33C-0175 POSTER Cross-evaluation of OMI Ozone Profiles and GMI Chemical Transport Model Simulations: X Liu, B N Duncan, K Yang, K Chance, P K Bhartia
1340h  A33C-0176 POSTER Polar ClO Photochemistry: The Impact of Recent Laboratory Measurements: T P Canty, R J Salawitch, M L Santee, R M Stimpfle, D M Wilmouth, J Anderson

A33D Moscone South: Poster Hall Wednesday 1340h Black Carbon's Role in Global to Local Air Quality and Climate Change III Posters (joint with GC, PA)

Presiding: D L Mauzerall, Princeton Univ; M Kopacz, Princeton University; D M Koch, Columbia University
1340h  A33D-0177 POSTER Evaluation of Factors Controlling Long-Range Transport of Black Carbon to the Arctic: J Liu, S Fan, L W Horowitz, H Levy
1340h  A33D-0178 POSTER Modern biofuels life-cycle effects on black carbon emissions and impacts: J Campbell, S Spak, M Mena-Carrasco, G R Carmichael, Y Chen, C Tsao
1340h  A33D-0179 POSTER Impact of California’s Air Pollution Laws on Black Carbon and their Implications for Direct Radiative Forcing: R Bahadur, Y Feng, L M Russell, V Ramanathan
1340h  A33D-0180 POSTER Aircraft Measurements of Upward Transport of Black Carbon Over East Asia in Spring 2009: N Oshima, Y Kondo, N Moteki, N Takegawa, M Koike, K Kita
1340h  A33D-0181 POSTER Measurements of black carbon aerosol in a rural temperate forest in northern Michigan: P Santos, M P Fraser, J A Bird
1340h  A33D-0182 POSTER Coatings of black carbon in Tijuana, Mexico, during the CalMex Campaign: S Takahama, L M Russell, R Duran, R Subramanian, G Kok

1340h  **A33D-0184** POSTER Direct Measurement of the Absorption Cross-Section of Uncoated and Coated Soot by Photoacoustic Spectroscopy: **M R Zachariah, P A Bueno, D K Havey, J T Hodges, K Gillis, G Mulholland, R R Dickerson**

1340h  **A33D-0185** POSTER Dependency of black-carbon-induced atmospheric warming on the concentration of sulphate and organic aerosols: **S Kim, S Yoon, C In-Jin, V Ramanathan, M Ramana**

1340h  **A33D-0186** POSTER Effect of aerosol mixing state on BC scavenging — Insights based on particle-resolved aerosol model simulations: **J Ching, N Riemer, M West, R A Zaveri, R C Easter**

1340h  **A33D-0187** POSTER Modeling Aerosol Microphysical and Radiative Effects on Clouds and Implications for the Effects of Black and Brown Carbon on Clouds: **J E Ten Hoeve, M Z Jacobson**

1340h  **A33D-0188** POSTER Light absorption-related optical properties of aerosol observed during episodic periods at Conghua, Guangdong Province, China during the 2008 PRD Campaign: **M G Cayetano, J Jung, D Mueller, Y J Kim, Y Zhang, X Liu**

1340h  **A33D-0189** POSTER Role of Black Carbon and Absorbing Organic Carbon Aerosols in Surface Dimming Trends: **Y Feng, V Ramanathan, V R Kotharathi**

1340h  **A33D-0190** POSTER The effects of hygroscopicity of fossil fuel BC on mixed-phase and cirrus ice clouds: **Y Yun, J E Penner**

1340h  **A33D-0191** POSTER New snow albedo scheme with the influence of black carbon and dust in the NASA catchment-based land surface model: **T J Yasunari, R D Koster, W K Lau, T Aoki, Y Suda, T Yamazaki, H Motoyoshi, Y Kodama**

1340h  **A33D-0192** POSTER Aerosol Mixture State Simulated with a Physically-based Three-moment Multi-modal Aerosol Parameterization Scheme: **J Chen, I Tsai**

1340h  **A33D-0193** POSTER Transformation from hydrophobic to hygroscopic diesel soot particles by photochemical aging: **T Tritscher, Z Juranyi, M Martin, R Chirico, M Heringa, M Gyse, B Sierau, P F DeCarlo, J Dommen, A S Prevot, E Weingartner, U Baltensperger**

1340h  **A33D-0194** POSTER The “Micro” Aethalometer – an enabling technology for new applications in the measurement of Aerosol Black Carbon: **A D Hansen, G Moénch**

1340h  **A33D-0195** POSTER A Novel Algorithm Applied to Common Thermal-Optical Transmission Data for Determining Mass Absorption Cross Sections of Atmospheric Black Carbon: Applications to the Indian Outflow: **A Andersson, R J Sheesley, E Kirillova, O Gustafsson**

1340h  **A33D-0196** POSTER Using Thermal-Optical Analysis to Examine the OC-EC Split that Characterizes Ambient and Source Emissions Aerosols: **B Khan, M D Hays, C Geron, J Jetter**


1340h  **A33D-0198** POSTER Annual trends in source contribution of black carbon at a European regional background site using radiocarbon source apportionment: **R J Sheesley, E Kirillova, A Andersson, O Gustafsson**

1340h  **A33D-0199** POSTER Black carbon and its correlation with trace gases at a rural site in Beijing: Implications for Regional Emissions: **Y Wang, X Wang, Y Kondo, M Kajino, J Hao**

1340h  **A33D-0200** POSTER Exhaust Fine Particle and Nitrogen Oxide Emissions from Individual Heavy-Duty Trucks at the Port of Oakland: **T R Dallmann, R A Harley, T Kirchstetter**

1340h  **A33D-0201** POSTER Vis-NIR characterization of particulate matter in urban and industrial sites in the Mediterranean area: **R Salzano, M Montagnoli, R Salvatori, C Perrino**

1340h  **A33D-0202** POSTER An observation-based estimate of global black carbon and brown carbon AODs and radiative forcings: **C F. Chung, V Ramanathan**

1340h  **A33D-0203** POSTER Measurements and Analysis of Black Carbon Aerosols in the Eastern Mediterranean Megacity: **A Unal, H Ozdemir, T Kindap, G Demir, M Karaca, M N Khan**

1340h  **A33D-0204** POSTER Exploring the sensitivity of black carbon aging time scales with particle-resolved aerosol model simulation: **L M Fierce, N Riemer, T C Bond**

1340h  **A33D-0205** POSTER Addressing inconsistencies in black carbon literature: **S B Shonkoff, Z Chafe, K R Smith**

1340h  **A33D-0206** POSTER TWO WAY INTERACTIONS BETWEEN CRITERIA AIR POLLUTANTS AND METEOROLOGY OVER DELHI: **P Marrapu, Y Cheng, G R Carmichael, G Beig, S Spak, S K Sahu, M Decker, M G Schultz**

1340h  **A33D-0207** POSTER Public Health Hotspots Of Exposure To Air Pollution From Biomass Burning In Southeast Asia: **M E Marlier, R S DeFries, P S Kasibhatla, D T Shindell, A Voulgarakis, P L Kinney, J T Randerson**

1340h  **A33D-0208** POSTER Understanding Black Carbon Transport to the Arctic from Locations of Controlled Burning in the United States: **J L DeWinter, N K Larkin, T Strand, S M Raffuse, S G Brown, K J Craig, D Pryden**

1340h  **A33D-0209** POSTER Black Carbon Radiative Effects on the Cryosphere: Snow-Albedo Reduction and Transport through a Melting Snowpack: **O L Hadley, T Kirchstetter**

1340h  **A33D-0210** POSTER Effect of Carbonaceous Aerosols on Clouds and Precipitation in Asia: **V V, H Wang, D Ganguly, W Minghuai, P J Rasch**

---

**A33E Moscone South: Poster Hall**

**Wednesday 1340h Local-Scale Atmospheric Monitoring and Modeling for Exposure Assessment II Posters**

*Presiding: L D Lemke, Wayne State University; X Xu, University of Windsor; R Cook, US Environmental Protection Agency*

1340h  **A33E-0211** POSTER Characterization of Highway Traffic Plumes in New York City with a High-Resolution Time-of-Flight Aerosol Mass Spectrometer: **Y Sun, Q Zhang, J J Schwab, K Demerjian, W Chen, M Bae, Y Lin, H Hung, N L Ng, J Jayne, L R Williams, P Massoli, E Fortner, A Trimborn, D R Worsnop, O Hogrefe, B Frank**

1340h  **A33E-0212** POSTER Characterization of offshore/onshore Lake Michigan air quality at shoreline in southeastern Wisconsin: **P A Cleary, L Schultz**

1340h  **A33E-0213** POSTER Assessment of Pollutant Outflow by Beach Front Measurements and Modeling of Nonmethane Hydrocarbons: **W Liu, J Wang**

1340h  **A33E-0214** POSTER Method optimization for non-equilibrium solid phase microextraction sampling of HAPs for GC/MS analysis: **M A Zawadowsicz, L A Del Negro**

1340h  **A33E-0215** POSTER Characterizing the air quality in the vicinity of a fast-growing Asian airport: **C Wang, J Juang**

---
1340h  **A33E-0216** POSTER Monitoring of Emissions from Natural Gas Production Facilities in Barnett Shale Area for Population Exposure Assessment: B Zielsinska, E Fujita, D Campbell, V Samburova, E Hendler, C S Beskid


1340h  **A33E-0218** POSTER PM2.5 Indoor Air Quality at Two Sites in London Ontario – A Case Study: A V Mates, X Xu, J Gilliland, M J Maltby

1340h  **A33E-0219** POSTER Development and evaluation of a high-resolution aerosol optical depth product for the southern California region during the October 2007 wildfires: M C McCarthy, S M Raffuse, J J Tatarko, A R Garcia

1340h  **A33E-0220** POSTER Modelling PM2.5, ozone and precursors in New England. Comparison with inferred data retrieved from satellite AOD and surface observations: R Ramaroson, A Chudnovsky, C Kang, C Wiedinmyer, L Zhang, P Koutrakis, D J Jacob

1340h  **A33E-0221** POSTER Comparison of the Simulated Aerosol Vertical Profiles by GEOS-Chem and CMAQ in the United States: Y Liu, X Hu, S Li

1340h  **A33E-0222** POSTER Impact on surface ozone by fugitive emissions of ethylene and propylene from a petrochemical plant cluster: H Hsieh, J Chang, S Chen, J Wang

1340h  **A33E-0223** POSTER Simulating Emission Control Impacts on Summertime Ozone and PM in California: P L Livingstone, K Gurer, N Motallebi, D Luo, R Propper

1340h  **A33E-0224** POSTER Numerical Study on the Impact of SST Initialization on Regional Circulation and Air Pollution at Southern Korean Peninsula: W Jeon, H Lee, S Lee

1340h  **A33E-0225** POSTER Estimating Ground Level PM2.5 Concentrations in Atlanta Metro Area using Geographically Weighted Regression: X Hu, L Waller, Y Liu

1340h  **A33E-0226** POSTER Using GIS and NOAA HYPLIT trajectories to create meaningful airsheds in Pennsylvania: J A Snow, J Livingston, P S Weiss-Penzias

1340h  **A33E-0227** POSTER Street Canyon Atmospheric Composition: Coupling Dynamics and Chemistry: V Bright, W J Bloss, X Cai

1340h  **A33E-0228** POSTER The prominent role of urban confluences in the local and regional transport of atmospheric pollutants in the Valley of Mexico: A D Jazcilevich, E N Díaz, J Tatarko, A R Garcia

---

**A33F** Moscone South: Poster Hall  Wednesday  1340h Nucleation and Growth of Atmospheric Aerosols II Posters

**Presiding:** J N Smith, NCAR; L Wang, Texas A&M University; F Yu, SUNY Albany

1340h  **A33F-0229** POSTER Intramolecular and intermolecular hydrogen bonding in molecular complexes formed from dicarboxylic acid and common aerosol nucleation precursors: W Xu, L Wang, R Zhang

1340h  **A33F-0230** POSTER Molecular Dynamics of Hydrated Clusters as Atmospheric Aerosol Formation Precursors: A Kawano, Y Kawamura, K Kusano

1340h  **A33F-0231** POSTER Observation of different core water cluster ions Y(H2O)n+ (Y = O3, HCN, HO–, NO–, CO–) and magic number in atmospheric pressure negative corona discharge mass spectrometry: K Sekimoto, M Takayama

1340h  **A33F-0232** POSTER Aerosol nucleation induced by a high energy particle beam: M B Enghoff, J O Pedersen, U I Uggerhøj, S Paling, H Svensmark

1340h  **A33F-0233** POSTER Nucleation in an Ultra Low Ionization Environment: J O Pedersen, M B Enghoff, S Paling, H Svensmark

1340h  **A33F-0234** WITHDRAWN

1340h  **A33F-0235** POSTER New Particle Formation from Methanesulfonic Acid in Air: M Dawson, V M PERRAUD, M J Ezell, L M Wingen, B J Finlayson-Pitts

1340h  **A33F-0236** POSTER AmPMS: Detection of Ammonia and Amines in Particle Formation and Growth Experiments: D R Hanson, P H McMurry, J Jiang, L G Huey, D Tanner

1340h  **A33F-0237** POSTER Chemical Nucleation of Sulfuric Acid and Reduced Organic Species: M E Titcombe, M Chen, J Zhao, D R Hanson, P H McMurry

1340h  **A33F-0238** POSTER The chemical composition of nanoparticles formed from the oxidation of real plant emissions: P M Winkler, J Ortega, K C Barsanti, H R Friedli, J N Smith

1340h  **A33F-0239** POSTER New Particle Formation Events at Duke Forest, North Carolina: Relation to Meteorological and Chemical Conditions: P R Pillai, H N Yoo, J T Walker, A Khlystov, V P Aneja

1340h  **A33F-0240** POSTER Sulfate formation in atmospheric ultrafine particles at inland and coastal rural environments in Canada: L Zhang, Y Yao

1340h  **A33F-0241** WITHDRAWN

1340h  **A33F-0242** POSTER Investigation of the vertical extension of nucleation events: J Boulon, K Sellegri, H Venzac, V Giraud, M Hervo, P Laj

1340h  **A33F-0243** POSTER Observations of ultrafine particles at Owens (dry) Lake: E Fitzgerald, M J Moore, K A Prather

1340h  **A33F-0244** POSTER Evaluation of the UHMA model during the NIFTy experiment: P Crippa, R J Barthelmie, T T Peddjd, S C Pryor

1340h  **A33F-0245** POSTER Introduction of a new cloud droplet nucleation scheme in a convective cloud model with bin microphysics: H Lee, S S Yum

1340h  **A33F-0246** POSTER Laboratory Studies of the Role of Organic Coatings in Affecting the Reactivity of Gas-Phase Ozone with Particle-Borne PAHs: S Zhou, A Lee, R D McWhinney, J Abbott

1340h  **A33F-0247** POSTER Comparison of ambient aerosol extinction coefficients obtained from in-situ, MAX-DOAS and LIDAR measurements at a continental site (Cubawu): P Zieger, E Weingartner, B Henzing, M Moerman, G De Leeuw, J Mikkilä, P R Pillai, E Fujita, D Campbell, LIDAR measurements at a continental site (Cabauw):

1340h  **A33F-0248** POSTER Using stable water isotopes to distinguish aerosol chemistry from transport: A Raudzins Bailey, D C Noone, D W Toohey

1340h  **A33F-0249** POSTER Inter-annual Comparison of New Particle Formation Chemistry and Cloud Condensation Nuclei Measurements at a Remote Rural Mountain Site: J Creamean, A P Ault, E Fitzgerald, D B Collins, G C Roberts, K A Prather
A33G Moscone West: 3004 Wednesday 1340h
Aerosol Observability and Predictability: From Research to Operations for Chemical Weather Forecasting II

Presiding: P R Colarco, NASA GSFC; J S Reid, Naval Research Laboratory; G R Carmichael, University of Iowa

1340h A33G-01 Outcomes of an International Coordination Workshop to Understand Aerosol Observability Capabilities and Requirements for the Next Decade: J S Reid, A Benedetti, P R Colarco, G R Carmichael, Title of Team: ICAP Team

1355h A33G-02 Fulfilling Operational Requirements for Operational Aerosol Data Assimilation (Invited): D L Westphal, J Campbell, J S Reid, E Hyer, J Zhang, D M Winker

1410h A33G-03 Re-analyses, analyses and forecasts of European Air Quality: building operational GMES services within the MACC project (Invited): V Peuch, L Roulil, H Elbern, Title of Team: The Regional Air Quality teams of MACC

1425h A33G-04 Lagrangian Displacement Ensembles for Aerosol Data Assimilation (Invited): A da Silva, P R Colarco, R C Govindaraju

1440h A33G-05 Using Testbeds to Evaluate Aerosol Simulations over Multiple Spatial Scales (Invited): J D Fast, W I Gustafson, B Singh, R C Easter, P J Rasch

1455h A33G-06 Performance of the MACC/ECMWF aerosol assimilation and forecasting system: general overview and interesting case studies: A Benedetti, J Morcrette, L Jones, J Kaiser, J Thepaut


1525h A33G-08 The GAW Aerosol Lidar Observation Network (Galion) as a source of near-real time aerosol profile data for model evaluation and assimilation: R M Hoff, G Pappalardo

A33H Moscone West: 3002 Wednesday 1340h
Atmospheric Circulations and Climate Change III (joint with GC)

Presiding: P A O’Gorman, MIT; T M Merlis, Caltech

1340h A33H-01 Projected future changes in tropical summer climate: A H Sobel, S J Camargo

1355h A33H-02 The Attribution of Tropical Precipitation Change in the 20th Century: S Kang, D M Frierson, Y Hwang

1410h A33H-03 Response of tropical precipitation to global warming: D M Romps

1425h A33H-04 The response of the hydrological cycle to climate change: C J Muller, P A O’Gorman, L E Back

1440h A33H-05 Atmospheric Stability and weakening of tropical circulation: C Chou, C Chen, T Wu

1455h A33H-06 The Matsuno-Gill Model and Equatorial Superrotation: A P Showman, L M Polvani

1510h A33H-07 Evolution of environmental factors affecting tropical cyclones from the LGM through the Holocene: R Korty

1525h A33H-08 Variations in North American Summer Precipitation Driven by the Atlantic Multidecadal Oscillation: Q S Hu, S Feng, R J Oglesby

A33I Moscone West: 3008 Wednesday 1340h
Black Carbon’s Role in Global to Local Air Quality and Climate Change II (joint with GC, PA)

Presiding: D L Mauzerall, Princeton Univ; M Kopacz, Princeton University; D M Koch, Columbia University

1340h A33I-01 Biomass burning aerosol effects on clouds and precipitation: a numerical study in the dry season of South America: L Wu, H Su, J H Jiang

1355h A33I-02 Soot effects on clouds and solar absorption: Understanding the differences in recently published soot mitigation experiments. (Invited): S E Bauer, S Menon

1415h A33I-03 Atmospheric absorption: Can observations constrain the direct and indirect effect of organic and BC aerosols on climate: J E Penner, L Xu, C Liousse, E Assamoi, M G Flanner, R Edwards, J McConnell

1430h A33I-04 Linking BC direct radiative forcing to source regions and sectors as a constraint on future emissions mitigation strategies: D K Henze, F Akhtar, R W Pinder, D Loughlin, R Spurr


1458h A33I-06 Origin and radiative forcing of black carbon transported to the Himalayas and Tibetan Plateau: M Kopacz, D L Mauzerall, J Wang, E M Leibensperger, D K Henze, K Singh

1512h A33I-07 Impacts of Tibetan Plateau snowpack pollution on the Asian hydrological cycle and monsoon climate: Y Qian, M G Flanner, L Leung, W Wang

1526h A33I-08 WITHDRAWN

A33J Moscone West: 3006 Wednesday 1340h
Understanding Drought Variability, Forcing, and Feedbacks II (joint with PA)

Presiding: B I Cook, NASA-GISS; R Seager, Lamont Doherty Earth Obs; R Touchan, The University of Arizona; D M Meko, University of Arizona

1340h A33J-01 The Paleoclimatological Power of Biodiversity: 500 yrs of New York City Watershed Drought: N Pederson, E Cook, K Vranes

1355h A33J-02 Expansion of the world’s deserts due to vegetation-albedo feedback under global warming: J Yoon, N Zeng

1410h A33J-03 North American Drought: Red, White, or Blue?: T R Ault, G T Pederson, J E Cole, J T Overpeck, D M Meko

1425h A33J-04 Atlantic and Pacific Influences on Mesoamerican Climate Over the Past Millennium (Invited): D W Stahle, D J Burnette, J Villanueva, M K Cleveland

1440h A33J-05 Drought History from tree rings in the Mediterranean Region: R Touchan, K J Anchukaitis, D M Meko


1510h A33J-07 Role of Atlantic sea surface temperatures on persistent drought in North America—A synthesis: S Feng, Q S Hu, R J Oglesby

1525h A33J-08 A mechanisms based approach for distinguishing between naturally-occurring extratropical drought and anthropogenic-driven subtropical drying and expansion: R Seager, N H Naik
Atmospheric and Space Electricity

AE33A  Moscone South: Poster Hall  Wednesday  1340h

Electricity and lightning in Thunderstorms III Posters (joint with A)

Presiding: T Marshall, University of Mississippi; W P Winn, New Mexico Tech; M Stolzenburg, University of Mississippi

1340h  AE33A-0251 PAPER Electric Field Measurements during the Genesis and Rapid Intensification Processes (GRIP) Field Program: M G Bateman, R Blakeslee, D M Mach
1340h  AE33A-0254 PAPER On Planning and Exploiting Schumann Resonance Measurements for Monitoring the Electrical Productivity of Global Lightning Activity: V C Mushtak, E Williams
1340h  AE33A-0255 PAPER Initial Performance Estimates of the GLD360 Lightning Detection Network: R Said, M J Murphy, N Demetriades
1340h  AE33A-0256 PAPER LONG-RANGE LIGHTNING PRODUCTS FOR SHORT TERM FORECASTING OF TROPICAL CYCLOGENESIS: S Businger, A Pessi, T Robinson, D Stolz
1340h  AE33A-0257 PAPER A comparison study of convective and microphysical parameterization schemes associated with lightning occurrence in southeastern Brazil using the WRF model: G D Zepka, O Pinto
1340h  AE33A-0258 PAPER LIGHTNING ACTIVITY IN THE CITY OF SÃO PAULO IN THE LAST 50 YEARS: A CASE STUDY FOR THE RELATION BETWEEN LIGHTNING AND GLOBAL WARMING: I R Pinto
1340h  AE33A-0259 PAPER Land-ocean contrast on electrical characteristics of lightning discharge derived from satellite optical measurements: T Adachi, R Said, S A Cummer, J Li, Y Takahashi, R Hsu, H Su, A B Chen, S B Mendes, H U Frey
1340h  AE33A-0260 PAPER INTRA CLOUD FLASH ANOMALY OVER LARGE URBAN AREAS: K Naccarato, O Pinto, I R Pinto, D R Campos
1340h  AE33A-0261 PAPER ON THE SPATIAL AND TEMPORAL VARIATIONS OF URBAN HEAT ISLANDS AND THEIR EFFECT ON THUNDERSTORM FORMATION: V Bourscheidt, K L Cummins, O Pinto, K Naccarato
1340h  AE33A-0262 PAPER NBE, CG, and IC climatology: S Heckman, E Novakovskaya
1340h  AE33A-0263 PAPER Total Lightning Characteristics in Mesoscale Convective Systems in Oklahoma: J A Makowski, D R MacGorman
1340h  AE33A-0264 PAPER Comparison of VHF Source Characteristics for a Single-Stroke, Negative CG Flash with Continuing Current to Those of Nearby IC and CG Flashes: S A Weiss, W H Beasley, D M Jordan
1340h  AE33A-0267 PAPER Measurement of the electric field intensity and space charge density with height prior to triggered lightning: C J Biagi, J Gopalakrishnan, M A Uman, J D Hill, D M Jordan
1340h  AE33A-0268 PAPER An Analysis of the Distance Dependence of Measured Peak Electric Fields from Cloud-to-Ground Lightning Return Strokes: J C Burchfield, P M Bitzer, V Franklin, H Christian
1340h  AE33A-0269 PAPER Lightning Location Using Electric Field Change Meters: P M Bitzer, H Christian, J Burchfield
1340h  AE33A-0270 PAPER Locating Initial Breakdown Pulses of Lightning Flashes: S Karunarathne, T Marshall, M Stolzenburg, H Betz, G Wieczorek
1340h  AE33A-0272 PAPER Further characterization of the luminous variation events that occurred during the initial stage of upward positive leaders: D Wang, T Watanabe, N Takagi
1340h  AE33A-0274 PAPER Development of a High Speed Camera Network to Monitor and Study Lightning (Project RAMMER): A V Saraiva, O Pinto, H H Santos, M M Saba
1340h  AE33A-0275 PAPER Lightning Leader Stepping: W P Winn
1340h  AE33A-0276 PAPER Preliminary Observations of Lightning-Generated Microwave Radiation: D Petersen, W H Beasley
1340h  AE33A-0277 PAPER Possible Catalytic Effects of Ice Particles on the Production of NOx by Lightning Discharges: H S Peterson, W H Beasley

AE33B  Moscone South: Poster Hall  Wednesday  1340h

Volcano Lightning II Posters (joint with V, A)

Presiding: A A Few, Rice University

1340h  AE33B-0278 PAPER Charge mechanism of volcanic lightning revealed during the Eyjafjallajökull 2010 eruption: P Arason, A J Bennett
1340h  AE33B-0279 PAPER Photographic and Lightning Mapping Observations of the 2010 Eruption of Eyjafjallajökull: R J Thomas, H E Edens, S A Behnke, P R Krehbiel, W Rison
1340h  AE33B-0280 PAPER Contact Electrification and Charge Separation in Volcanic Plumes: M E Lindle, J Dufek
1340h  AE33B-0281 PAPER The life cycle of Redoubt’s volcanic lightning storms: S A Behnke, R J Thomas, P R Krehbiel, W Rison, H E Edens, S R McNutt
1340h  AE33B-0282 PAPER Ice in Volcanic Clouds: A A Few
Biogeosciences

B33A  Moscone South: Poster Hall  Wednesday 1340h
Active Remote Sensing Measurements of Vegetation 3-D Structure and Biomass: Assessing Accuracy and Sources of Uncertainty I Posters (joint with G)

Presiding: M Simard, Jet Propulsion Laboratory; B D Cook, NASA Goddard Space Flight Center

1340h  B33A-0380 POSTER Estimation of the vertical distribution of tree biomass using last significant return laser altimetry returns from Eucalypt trees in New South Wales, Australia: I J Davenport, J Walker, R J Gurney

1340h  B33A-0381 POSTER Sensitivity of LiDAR Canopy Height Estimate to Geolocation Error: H Tang, R Dubayah

1340h  B33A-0382 POSTER Vegetation structure estimation from SRTM coherence data: correction of systematic artifacts: B D Chapman, R N Treuhaft, S Hensley

1340h  B33A-0383 POSTER Forest Biomass Mapping Using Lidar-derived Canopy Height Metrics at Maine in USA: W Huang, G Sun

1340h  B33A-0384 POSTER Estimating Vegetation Height and Bare-Earth Topography from SRTM Data using Fourier Spectral Decomposition: C Gangodagamage, D Liu, D Alsdorf

1340h  B33A-0385 POSTER Validating LiDAR Derived Estimates of Canopy Height, Structure and Fractional Cover in Riparian Areas: A Comparison of Leaf-on and Leaf-off LiDAR Data: L A Wasser, L E Chasmer, A Taylor, R Day

1340h  B33A-0386 POSTER Effect of Ground Surface Reflectance on LiDAR Waveforms, Height Metrics and Biomass Estimation: B D Cook, J Rosette, P R North, J Rubio, J Suárez

1340h  B33A-0387 POSTER Modelling Sensor and Target effects on LiDAR Waveforms: J Rosette, P R North, J Rubio, B D Cook, J Suárez

1340h  B33A-0388 POSTER Measuring Above Ground Biomass and Vegetation Structure in the South Florida Everglades Wetland Ecosystem with X-, C-, and L-band SAR data and Ground-based LiDAR: E A Feliciano, S Wdowinski, M Potts, S Chin, D A Phillips

1340h  B33A-0389 POSTER Forest Biomass Retrieval from Digital Beamforming SAR (DBSAR): R Rincon, T E Fatoyinbo, G Sun, J Ranson

1340h  B33A-0390 POSTER Estimating semiarid vegetation height from GLAS Data: L P Spaete, N F Glenn, R Shrestha, J Mitchell

1340h  B33A-0391 POSTER Radiometric Calibration of High Resolution UAVSAR Data Using Low Resolution SRTM DEMs: B V Riel, M Simard

1340h  B33A-0392 POSTER Applying the Moment Distance Framework to LiDAR Waveforms: E L Salas, N Aguilar-Amuchastegui, G M Henebry

1340h  B33A-0393 POSTER Reducing Uncertainty In Ecosystem Structure Inventories From Spaceborne Lidar Using Alternate Spatial Sampling Approaches: M A Lefsky, T Ramond, C S Weimer

1340h  B33A-0394 POSTER Two-color, Polarimetric Laser Altimeter Measurements of Forest Canopy Structure and Composition: P Dabney, A W Yu, D J Harding, S R Valett, E Hicks, C A Shuman, A A Vasilyev

1340h  B33A-0395 POSTER Estimating Above Ground Biomass using LiDAR in the Northcoast Redwood Forests: M Rao, E Stewart

1340h  B33A-0396 POSTER Revising vegetation scattering theories: Adding a rotated dihedral double bounce scattering to explain cross-polarimetric SAR observations over wetlands: S Hong, S Wdowinski

B33B  Moscone South: Poster Hall  Wednesday 1340h
Eolian Processes: Biophysical Drivers and Biogeochemical Implications II Posters (joint with EP, H)

Presiding: S Ravi, University of Arizona; J Li, UCLA; T M Zobeck, USDA, Agricultural Research Service

1340h  B33B-0398 POSTER Microtopography-Induced Lag Formation on Bedforms and Biogenic Structures in Aeolian Settings: I V Buynevich

1340h  B33B-0399 POSTER Beach-dune dynamics: Spatio-temporal patterns of aeolian sediment transport under complex offshore airflow: K Lynch, D Jackson, I Delgado-Fernandez, J A Cooper, A C Baas, M Beyers


1340h  B33B-0401 POSTER The vertical structure of airflow turbulence characteristics within a boundary layer during wind blown sand transport over a beach: Z S Lee, A C Baas, D Jackson, J A Cooper, K Lynch, I Delgado-Fernandez, M Beyers

1340h  B33B-0402 POSTER Surface Shear Stress Around a Single Flexible Live Plant and a Rigid Cylinder: B A Walter, C Gromke, K C Leonard, A Clifton, M Lehnung

1340h  B33B-0403 POSTER Characterizing effects of wind erosion on soil microtopography in a semiarid grassland using terrestrial laser scanning: J Li, R A Washington-Allen, G S Okin

1340h  B33B-0404 WITHDRAWN

1340h  B33B-0405 POSTER Impact of atmospheric deposition on algal growth in Lake Tahoe, CA: A Paytan, K R Mackey, Y Jiang, A Liston, B Allen, S G Schladow

1340h  B33B-0406 POSTER Soil-litter Mixing Accelerates Decomposition and May Promote Soil Aggregate Formation in the Chihuahuan Desert: D B Hewins, H L Throop, S R Archer, G S Okin

1340h  B33B-0407 POSTER Rates of soil-litter mixing beneath and between shrub canopies in a semiarid shrubland: Combined effects of aeolian/fluvial redistribution: R Power, T H Melhem, J P Field, D D Breshears, S R Archer

1340h  B33B-0408 POSTER Responses of wind erosion to disturbance in a desert scrub grassland: grass vs. bush cover, and a snapshot into recovery: M Baddock, T M Zobeck, P D’Odorico, S Van Pelt, S Ravi, T M Over, A Bhattachan

1340h  B33B-0409 POSTER Effect of vegetation type on post-fire enhancement of wind erosion in semi-arid landscapes: S Ravi, T M Zobeck, P D’Odorico, M Baddock

1340h  B33B-0410 WITHDRAWN

1340h  B33B-0411 POSTER The effects of simulated fire events on the creation and destruction of soil water repellency using vegetation and soil samples from a desert shrub grassland: T M Over, S Pratte, B Frost, J Blitz

B33C  Moscone South: Poster Hall  Wednesday 1340h
Applications of Remote Sensing and GIS for Agricultural Mapping, Monitoring, and Data Visualization Posters

Presiding: J L McCarty; R Mueller, USDA NASS Spatial Analysis Research Section

1340h  B33C-0412 POSTER Exploring U.S Cropland – A Web Service based Cropland Data Layer Visualization, Dissemination and Querying System (Invited): Z Yang, W Han, L Di
1340h B33C-0413 POSTER A 5-year analysis of crop phenologies from the United States Heartland (Invited): D M Johnson

1340h B33C-0414 POSTER Improving Crop Classification Techniques Using Optical Remote Sensing Imagery, High-Resolution Agriculture Resource Inventory Shapefiles and Decision Trees: A L Melnychuk, A Berg, S Sweeney

1340h B33C-0415 POSTER An Assessment of Agriculture Land Classification in the Platte River Basin, USA: D M Howard, B K Wylie, Z Tan

1340h B33C-0416 POSTER A Remote Sensing-based Global Agricultural Drought Monitoring and Forecasting System for Supporting GEOSS (Invited): L Di, G Yu, W Han, M Deng

1340h B33C-0417 POSTER Retrospective Analog Year Analyses Using NASA Satellite Precipitation and Soil Moisture Data to Improve USDA’s World Agricultural Supply and Demand Estimates: W L Teng, H Shannon

1340h B33C-0418 POSTER Detection of irrigation timing using MODIS and SAR: Effect of land cover heterogeneity: J Seungtaek, J Keunchang, H Lee, H Seokyeong, S Kang


1340h B33C-0421 POSTER Using Multispectral Analysis in GIS to Model the Potential for Urban Agriculture in Philadelphia: J E Dmochowski, W P Cooper

1340h B33C-0422 POSTER Aglite: A 3-wavelength lidar system for Assessment of Agricultural Air Quality, Whole Facility Emission Rates and Fluxes: M Wojcik, J Hatfield, J Preuger, R Pfeiffer, K Moore, R Martin

1340h B33C-0423 POSTER ASSESSMENT OF VEGETATION PHOTOSYNTHESIS MODEL (VPD) IN A TEMPERATE CLIMATE CONDITION USING MODIS DATA: S Ramu, J Jin

B33D Moscone South: Poster Hall Wednesday 1340h Biogeodynamics and Earth System Sciences I Posters

Presiding: M Marani, University of Padova; J D Albertson, Duke University; D Rothman, MIT

1340h B33D-0424 POSTER In Search of the Factors Driving the Relationship Between Canopy Nitrogen and Shortwave Surface Albedo: F B Sullivan, S V Ollinger, M M Martin, L Lepine

1340h B33D-0425 POSTER Mesoscale modeling of the effect of woody plant encroachment on vegetation-atmosphere interactions in drylands: Y He, S De Wekker, P D’Odorico

1340h B33D-0426 POSTER Exotic Earthworm Influence on Nitrogen Cycling in FACE Forest Soils: S M Top, T R Filley

1340h B33D-0427 POSTER Toward a model framework for sedimentary delta growth that accounts for biological processes: J Lorenzo-Trueba, V R Voller, C Paola

B33E Moscone South: Poster Hall Wednesday 1340h Carbon Dynamics in Fire-Prone Forests II Posters (joint with GC)

Presiding: M Hurteau, Northern Arizona University; H Zald, Oregon State University


1340h B33E-0429 POSTER Forest-climate feedbacks mediated through fire in the Eastern boreal forests of Canada: P Y Bernier, M P Girardin, R L Desjardins, S Gauthier, Y Karimi-Zindashy, D Worth, A Beaudoin, Y Luo, S Wang

1340h B33E-0430 POSTER Changes in microbial communities and soil carbon dynamics across a fire chronosequence in an Alaskan boreal forest: S R Dooley, K K Treseder

1340h B33E-0431 WITHDRAWN

1340h B33E-0432 POSTER Multiyear analysis of the effects of wildfire and thinning on ecosystem carbon fluxes of ponderosa pine forests: S Dore, T E Kolb, M C Montes-Helu

1340h B33E-0433 POSTER Drivers of Vulnerability of Carbon Stocks to Variations in the Fire Regime In Alaskan Boreal Forests: E Hoy, E S Kasischke, M R Turetsky, E S Kane, K M Barrett, A D McGuire


1340h B33E-0435 POSTER Modeled Climate and Disturbance Impacts to Carbon Sequestration of Recent Interior Boreal Alaska Ecosystem Productivity Declines: C S Neigh, N Carvalhais, G J Collatz, C J Tucker

1340h B33E-0436 POSTER Parameterizing fire effects on the carbon balance of western United States (U.S.) forests: Accounting for variation across forest types, fire severity, and carbon pools: B Ghimire, C A Williams, G J Collatz

B33F Moscone South: Poster Hall Wednesday 1340h Ecological Migration and Dispersal From a Geophysical Perspective II Posters

Presiding: J M Ramirez, Universidad Nacional Colombia; M E Power, Univ. California Berkeley; E C Waymire, Oregon State University; J A Jones, Oregon State University

1340h B33F-0437 POSTER Conceptual approach for examining effects of network structure on dispersal and migration in aquatic communities and insights gained from mathematical modeling: J A Jones, J M Ramirez, S Moore

1340h B33F-0438 WITHDRAWN

1340h B33F-0439 POSTER The influence of population dynamics and environmental conditions on salmon re-colonization after large-scale disturbance: G R Pess, R Hilborn, K Kloehn, T Quinn

1340h B33F-0440 POSTER Optimum Pathways of Fish Spawning Migrations in Rivers: B J McElroy, R B Jacobson, A DeLonay

1340h B33F-0441 POSTER Drivers and Controls of the Zebra Mussel Invasion of the Mississippi-Missouri River System: R Casagrandi, L Mari, E Bertuzzo, M Gatto, S A Levin, I Rodriguez-Iiturbe, A Rinaldo

1340h B33F-0442 POSTER A Model for Population Persistence of Certain Insects in Stream Networks: T Johnson

1340h B33F-0443 POSTER Interfacial Effects In Fragmented Domains: An Example from Breakthrough Curves: T Appuhamillage, V A Bokil, E Thomann, E C Waymire, B D Wood

1340h B33F-0444 POSTER A Spatial Model of Barley Yellow Dwarf Virus in Competing Plant Species with Seasonality and Age Structure: C A Manore, S Moore, V A Bokil, E Borer, P Hosseini

1340h B33F-0445 POSTER A Stream Morphology Classification for Eco-hydraulic Purposes Based on Geospatial Data: a Solute Transport Application Case: M A Jiménez Jaramillo, L A Camacho Botero, J I Vélez Upegui
1340th B33F-0446 POSTER Noah, Joseph and Convex Hulls: N W Watkins, Y Chau, S C Chapman
1340th B33F-0447 POSTER Coupled solar-magnetic orientation during leatherback turtle (Dermochelys coriacea), great white shark (Carcharodon carcharias), arctic tern (Sterna paradisaea), and humpback whale (Megaptera novaeangliae) long-distance migration: T W Horton, R N Holdaway, A Zerbini, A Andriolo, P J Clapham
1340th B33F-0448 POSTER Reconstructing Indian Ocean Paleo-bathymetry in search of biogeographic connections: J M Whittaker, A Gibbons, M Seton, D Müller
1340th B33F-0449 POSTER Mechanistic models of plant seed dispersal by wind in heterogeneous landscapes: A Trakhtenbrot, G G Katul, R Nathan
1340th B33F-0450 POSTER Phylogeography, cave invasion and diversification of the Philippine Sundathelphusa (Decapoda: Brachyura: Parathelphusidae): D Husana, T Haga, T Kase, M Yamamuro
1340th B33F-0451 POSTER World-Wide and Regional Examination of Substrates Facilitating Timberline Expansion: A C Johnson, J A Velekay
1340th B33F-0452 POSTER Electrical conductivity sensors as a means to quantify hydrologic connectivity of desert riverscapes: K I Jaeger, J D Olden


Presiding: R Dubayah, University of Maryland; S J Goetz, Woods Hole Research Center

1340th B33G-0454 POSTER Conterminous U.S. Forest Disturbance Dynamics Evaluated from Landsat Time Series Stacks: N Thomas, S N Goward, R E Kennedy, C Huang, K Schleeweis, J G Masek, W B Cohen, G Moisen
1340th B33G-0456 POSTER Monitoring Forest Carbon Dynamics for REDD: A Landsat-Lidar Fusion Approach: C Huang, R Dubayah, G C Hurtt, S N Goward, J G Masek, Z Zhu
1340th B33G-0457 POSTER Achieving improved understanding of global forest distribution: a synthesis of global and regional land cover products: X Song, C Huang, M Feng, R Narasimhan, J O Sexton, J R Townsend
1340th B33G-0459 POSTER Building capacity for national level carbon measurement, reporting, and verification (MRV) systems for a “Reduction of Emissions from Deforestation and Degradation” (REDD): N Laporte, S J Goetz, A Baccini, W S Walker, P Ndunya, P Mekui, J M Kellndorfer, D Knight
1340th B33G-0460 POSTER Analysis And Assessment Of Forest Cover Change For The State Of Wisconsin: C H Perry, M D Nelson, K Stueve, D Gormanson
1340th B33G-0461 POSTER Mapping aboveground biomass for interior Alaska using Landsat data and field measurements: L Ji, B K Wyde, D Nosov, B Peterson, M P Waldrop, T N Hollingworth, J A Rover
1340th B33G-0462 WITHDRAWN
1340th B33G-0463 POSTER Tropical Forest Backscatter Anomaly Evident in SeaWinds Scatterometer Morning Overpass Data During 2005 Drought in Amazonia: S E Froliking, T Milliman, M W Palace, D Wisser, R B Lammers, M A Fahnstock
1340th B33G-0464 POSTER Woodland Composition Inertia Affected by Disturbance and Climate Assessed by Dimensional Analysis of Historical Landcover Change Data: M Sides, J D White, D B Murray

B33H Moscone South: Poster Hall Wednesday 1340th Ecological Significance of Forest Structure From Remote Sensing, Modeling, and Field Measurements I Posters (joint with GC)

Presiding: R N Treuhaft, Jet Propulsion Laboratory, California Institute of Technology; P Dubois-Fernandez, ONERA; S Baidya Roy, University of Illinois

1340th B33H-0465 POSTER Tropical Forest Biomass Estimation from Vertical Fourier Transforms of Lidar and InSAR Profiles: R N Treuhaft, F Goncalves, J Drake, S Hensley, B D Chapman, T Michel, J R dos Santos, L Dutra, P A Graca
1340th B33H-0466 POSTER Forest height estimation in a tropical forest context from PolInSAR measurements: Illustration from the TropiSAR campaign in French Guyana: P Dubois-Fernandez, T Le Toan, J Chave, L Blanc, S Daniel, M Davidson
1340th B33H-0468 POSTER Vertical forest structure estimation for global biomass mapping by means of multi-baseline pol-insar techniques: K Papathanassiou, F Kugler, S Lee, A Torano Caicoya, I Hajnsek
1340th B33H-0469 POSTER Constructing seasonal LAI trajectory by data-model fusion for global evergreen needle-leaf forests: R Wang, J Chen, G Mo
1340th B33H-0471 POSTER DEsDynI Lidar Measurements of Forest Structure: J Ranson, B D Cook, B Blair, R Dubayah
1340th B33H-0472 WITHDRAWN
1340th B33H-0473 POSTER Boreal Forest Biomass Estimation using Radar Derived Vertical and Morphological Forest Structure Indicators: M Neumann, S S Saatchi
1340th B33H-0474 POSTER Producing Science-Ready radar datasets for the retrieval of forest 3D structure: Correcting for terrain topography and temporal changes: M Simard, M Lavalle, B V Riel, N Pinto, R Dubayah, S Hensley, A I Calderhead
1340th B33H-0475 POSTER Retrieval of vegetation structural parameters and 3-D reconstruction of forest canopies using ground-based echidna® lidar: A H Strahler, T Yao, F Zhao, X Yang, C Schaar, C E Woodcock, D L Jupp, D Culvenor, G Newnham, J Lovell
1340th B33H-0476 POSTER Modeling Recollision and Escape Probabilities Using the Stochastic Radiative Transfer Equation: L Xu, M A Schull, A Samanta, R B Myneni, Y Knyazikhin

All information is current as of November 12, 2010
1340h  **B33I-0477 POSTER** Regional estimation of litterfall in a subtropical forest: H Wang, C Huang

1340h  **B33I-0478 POSTER** Scaling Issues and Spatio-Temporal Variability in Ecohydrological Modeling on Mountain Topography: Methods and Future of the VELMA Model: K Peterson, B J Bond, R Mekane, A G Abdelnour, M Stieglitz

1340h  **B33H-0479 POSTER** Investigating tree mortality at multiple spatial and temporal scales in the Bishop pine forest on Santa Cruz Island, California: S A Baguskas, B Bookhagen, S H Peterson, G P Asner

1340h  **B33I-0480 POSTER** The Electronically Steerable Flash Lidar Adaptability for Characterizing Forest Structure: T Ramond, C S Weimer, M A Lefsky, L Ruppert, B Donley, T Delker, J Applegate

1340h  **B33H-0481 POSTER** Photosynthetic recovery of foliage after wind disturbance activates ecosystem CO$_2$ uptake in cool-temperate forests in northern Japan: M Toda, P Kolari, T Nakai, T Hara

1340h  **B33I-0482 POSTER** Effect of different spatial resolution of satellite image to observe the forest condition using satellite image and National Forest Inventory data: T Kajisa, N Mizoue, S Yoshida

1340h  **B33H-0483 WITHDRAWN**

1340h  **B33H-0484 POSTER** The effects of deforestation on local temperature change based on MODIS satellite observations: A K Jones, A Montenegro, H Beltrami

1340h  **B33H-0485 POSTER** Woodland Patch Dynamics Affected by Oak Growth: Fire, Climate, and Human Influences: D B Murray, J D White

1340h  **B33H-0486 WITHDRAWN**

1340h  **B33H-0487 POSTER** Impacts of land use change on atmospheric circulation and ecosystem dynamics in the Amazon from a coupled atmosphere-ecosystem model: M Longo, N M Levine, R G Knox, R I Albrecht, M N Hayek, Y Kim, D Medvigy, M A Silva Dias, S C Wofsy, R L Bras, P R Moorcroft

1340h  **B33H-0488 POSTER** Fire risk due to convective drying at forest edges in Rondonia: S Baidya Roy, D Rastogi

**B33I Moscone West: 2004 Wednesday 1340h**

**Global Soil Change: New Frontiers for the Biogeosciences I**

**Presiding:** M G Kramer, University of California, Santa Cruz; D D Richter, Duke University

1340h  **B33I-01 POSTER** The fate of carbon in a thawing world (Invited): J W Harden, T Jorgenson, C C Fuller, K P Wickland, J A O'Donnell, S A Ewing, M Kanevskiy, Q Zhuang

1400h  **B33I-02 POSTER** The Effects of Elevated CO2 on Soil Respiration, Cation Exchange, and Mineral Dissolution (Invited): N Oh, D D Richter

1420h  **B33I-03 POSTER** US stream CO2 evasion: What spatial and temporal patterns can tell us about soil processes. (Invited): P Raymond, D E Butman

1440h  **B33I-04 POSTER** National-Scale Changes in Soil Profile C and N in New Zealand Pastures are Determined by Land Use: L A Schipper, R Parfitt, C Ross, W T Baisden, J Clayton, S Fraser

1455h  **B33I-05 POSTER** On the sensitivity of the terrestrial biosphere to human-induced soil degradation over the Holocene, with implications for earth system modeling: J O Kaplan, P M Collins, K M Krumhardt

1510h  **B33I-06 POSTER** Big Data for Big Questions: Global Soil Change and the National Soil Carbon Network: L E Nave, C Swanston

1525h  **B33I-07 POSTER** Probing soil C metabolism in response to temperature: results from experiments and modeling: P Dijkstra, J Dalder, J Blankinship, P C Selman, E Schwartz, G W Koch, S Hart, B A Hungate

**B33J Moscone West: 2006 Wednesday 1340h**

**Linkages in Biogeochemical Cycles Between the Surface Ocean and Lower Atmosphere Over the Pacific Ocean II (joint with A, GC, OS, V)**

**Presiding:** M Levasseur, W L Miller, University of Georgia

1340h  **B33J-01 POSTER** Western Pacific Air-Sea Interaction Study (W-PASS), Introduction and Highlights (Invited): A Tsuda

1355h  **B33J-02 POSTER** Asian dust transportation and fertilizing the coastal and open ocean in the Northern Pacific (Invited): H Gao, Title of Team: Xiaohong Yao, Jinhui Shi, Jianhua Qi

1410h  **B33J-03 POSTER** The Marine Biogeochemical Exchange of Sulfur (Invited): B J Huebert

1425h  **B33J-04 POSTER** Observation of natural phytoplankton blooms in the western subarctic North Pacific: Is there relation to atmospheric iron supply?: S Takeda, A Okubo, I Tanita, H Obata, T Kodama, K Suzuki

1440h  **B33J-05 POSTER** Subsurface new production in the northwestern subtropical North Pacific fueled by nutrients from the Subtropical Mode Water: T Suga, C Sukigara, T Saino, K Toyama, D Yanagimoto, K Hanawa, N Shikama, K Tsubono, T Kobayashi, S Hosoda, T Hibiya, N Furutichi

1455h  **B33J-06 POSTER** Molecular compositions and decadal trends of dicarboxylic acids, ketoacids, α-dicarbonyls in the marine aerosols from Chichi-Jima Island in the western North Pacific: K Kawamura, E Tachibana

1510h  **B33J-07 POSTER** Physical and chemical characterization of marine atmospheric aerosols over the North and South Pacific Oceans using single particle mass spectrometry: H Furutani, J Jung, K Miura, M Uematsu

1525h  **B33J-08 POSTER** Microbial Carbon Pump — A New Mechanism for Long-Term Carbon Storage in the Global Ocean (Invited): N Jiao, F Azam, Title of Team: MCP working group (on behalf of SCOR WG134)

**B33K Moscone West: 2002 Wednesday 1340h**

**Phosphorus: From Geochemistry to Genomes to Global Sustainability II (joint with GC, OS, PP, V)**

**Presiding:** A Poret-Peterson, Arizona State University; J R Corman, Arizona State University; J J Elser, Arizona State University


1355h  **B33K-02 POSTER** Ocean’s 16: Optimal protein:RNA ratio has near Redfield nitrogen:phosphorus ratio: J J Elser, I Loladze

1410h  **B33K-03 POSTER** The role of food, sex and travel in the diversity of our planet. (Invited): V Souza, L E Egliarte, J J Elser, M Travisono

1425h  **B33K-04 POSTER** α-dicarbonyls in the marine aerosols from Chichi-Jima Island in the western North Pacific: Is there relation to atmospheric iron supply?: S Takeda, A Okubo, I Tanita, H Obata, T Kodama, K Suzuki

1440h  **B33K-05 POSTER** Nitrogen Inputs Stimulate Phosphorus Mineralizing Enzymes across a Wide Variety of Terrestrial Ecosystems: A Marklein, B Z Houlton

1455h  **B33K-06 POSTER** Influence of Hydrologic Regime and Biogeochemistry on Sediment Phosphorus Retention and Release Processes in Shallow Freshwater Ecosystems: L E Kinsman, J O’Brien, S Robbins, S K Hamilton

1510h  **B33K-07 POSTER** Phosphorus forms and pools in high-elevation soils of the Sierra Nevada: Sensitivity to climate change: J O Sickman, P M Homyak, J M Melack
1340h C33C-0523 POSTER Arctic and Antarctic Diurnal and Seasonal Variations of Snow Albedo from Multi-year BSRN Measurements: X Wang, C S Zender

1340h C33C-0524 POSTER Continuous alpine snow depth mapping by laser rangefinder through a winter season: E D Gutmann

1340h C33C-0525 POSTER Early snow melt anomalies: their influence on peak discharge timing and use as an indicator of climate change in high latitude freshwater systems: K A Semmens, J M Ramage

1340h C33C-0526 POSTER Assessing Solid-State SWE Sensors in windy Arctic Conditions: C A Hiemstra, A Gelvin, M Sturm, S Berezovskaya, S Saari

1340h C33C-0527 POSTER Quantifying Snow Transport Using Snow Fences and Sonic Sensors: M Sturm, S Berezovskaya, C Hiemstra, A Gelvin

1340h C33C-0528 POSTER USING SNOW FENCES TO AUGMENT FRESH WATER SUPPLIES IN THE ARCTIC LAKES: S Berezovskaya, J Bailey

1340h C33C-0529 POSTER Winter Evaluation of the Canadian Land Surface Scheme in the Canadian Regional Climate Model over a Western Canada Domain: E Chan, Q Teng, M Mackay

1340h C33C-0531 POSTER Factors controlling the spatial variability in end of winter snowcover and spring melt at an arctic tundra site: P Marsh, S Endrizzi, C Derksen, M Russell, C Onclin, H Wilson, J W Pomeroy, C Marsh

1340h C33C-0532 POSTER Modelling the impact of climate and landscape changes on snow distribution and melt in regions with limited data: L E Comeau, R Essery, A Dugmore

1340h C33C-0533 POSTER Determination of Anisotropic Thermal Conductivity with Thermal Needle Probe Measurements: J F Holbrook, R Peterson, J Johnson

1340h C33C-0534 POSTER Variation of Energy Balance Terms within and between Different Coniferous Forests in Southern Boreal Finland: S S Rasmus, D Gustafsson, R Lundell, T Saarinen

1340h C33C-0535 POSTER The influences of modeled snow cover heterogeneity on the timing and intensity of melt water generation within an alpine catchment. (Invited): M Bernhardt, K Schulz, G E Liston

1340h C33C-0536 POSTER Implementing an exposed vegetation parameterisation to investigate the effect of shrub-tundra expansion on snowmelt energetics (Invited): C Menard, R Essery, D Clark, J W Pomeroy

1340h C33C-0537 POSTER Estimating Basin Snow Volume Using Aerial LiDAR and Binary Regression Trees (Invited): A T Shallowcross, J P McNamara, A N Flores, H Marshall, D G Marks, N F Glenn

1340h C33C-0538 POSTER Comparison of image derived, measured and modeled SWE in relation to snow-melt runoff for the Senator Beck basin, CO during the spring of 2010: S Frankensteen, E J Deeb, G G Koenig

1340h C33C-0539 POSTER Performance of the Snowmelt Runoff Model when remotely-sensed estimates of snow covered area are not available: C M Steele, A Rango

1340h C33C-0540 POSTER One-dimensional land surface model coupled with a blowing snow model and its application to the snowy region: K Sugiiura, T Yamazaki, Y Kodama, T Aoki, L D Hinzman

1340h C33C-0541 POSTER Subgrid variability of snow water equivalent at operational snow stations in the western United States: L Meromy, N P Molotch, T E Link, S R Fassnacht, E Herchmer, S Roberts, R Rice

1340h  C33C-0543 POSTER Developing Hourly Radiation, Wind and Precipitation Surfaces for Hydrologic Modeling in Mountain Basins: D G Marks, A H Winstrol, M L Reba, M Kumar

1340h  C33C-0544 POSTER Climate change effects on snow melt and discharge of a partly glacierized watershed in Central Switzerland (Invited): T Jonas, J Magnusson, F Kobielska, D Farinotti, M Zappa, M Bavay

1340h  C33C-0545 POSTER What is the role of wind pumping on heat and mass transfer rates at the air-snow interface?: W Helgason, J W Pomeroy

1340h  C33C-0546 POSTER Experiments for testing the success of simulating snow and soil processes with GEOTop in the Swiss Alps: S Endrizzi, S Gruber, S Gubler

1340h  C33C-0547 POSTER Quantification of snowpack mass and energy dynamics in across a canopy discontinuity: T E Link, D Carson, D G Marks

1340h  C33C-0548 POSTER Trends and sensitivities in late-season snowpack in the Pacific Northwest: G S Mauger, N J Mantua

1340h  C33C-0549 POSTER Use of Fiber Optic, Distributed Temperature Sensing to Describe Snow Cover Dynamics in Complex Terrain: M S Seyfried, C Mendoza, T E Link

1340h  C33C-0550 POSTER Global snow cover: comparison of modeling results with satellite-derived snow cover maps: E Bartolini, J C Adam, P Claps


1340h  C33C-0552 POSTER High frequency baseflow sampling of stream and snowmelt isotopic composition: Bridging the plot to catchment scale divide: T R Roth, M Gupta, E Berman, J J McDonnell


1340h  C33C-0554 POSTER Characterizing bare-earth elevations from airborne LiDAR data in a shrub-dominated mountain environment (Invited): R Shrestha, N F Glenn, A T Hudak, L Spaete

1340h  C33C-0555 POSTER Spatial Assessment of Snow Volume Using Lidar and Field Measurements: W T Tinhamk, A M Smith, T E Link, A T Hudak, M J Falkowski, D G Marks

1340h  C33C-0556 POSTER Analysis of land and lake surface temperature patterns during the open water and ice growth seasons in the Great Slave Lake region, Canada, from MODIS (2002-2009): H Kheyrollah Pour, C R Duguay

1340h  C33C-0557 POSTER Developing a snow modeling approach for flood forecasting at the Iowa Flood Center: K J Franz, J HAN

1340h  C33C-0558 POSTER Comparison of CICE/CCSM simulated snow cover overlying the Arctic sea ice to in situ measurements: B Blazey, E C Hunke, J A Maslanik

1340h  C33D Moscone South: Poster Hall Wednesday 1340h Polar Snow and Firn and Innovative Data Acquisition Methods for Snow Science II Posters

Presiding: R L Hawley, Dartmouth College; Z Courville, CRREL; J F Burkhart, Norwegian Institute for Air Research; M S Seyfried, USDA-ARS

1340h  C33D-0559 POSTER Enhanced Snow Sublimation by Wind-induced Pressure Changes: A W Nolin, H Huwald, C W Higgins, S Drake, M B Parlange

1340h  C33D-0560 POSTER Turbulence-induced pressure fluctuations in snow and their effect on heat and moisture transport: H Huwald, C W Higgins, S Drake, A W Nolin, M B Parlange

1340h  C33D-0561 POSTER A Field Comparison of Laser Hygrometers Over Snow: S Drake, H Huwald, C W Higgins, A W Nolin, M B Parlange

1340h  C33D-0562 POSTER A comparison of Ground-Based LiDAR, contact spectroscopy, FMWC radar, and manual snow pit profiles of a mountain snowpack: J S Deems, D C Finnegan, J E Deeb, H Marshall, A C Bryant, S Skiles, C Landry, T H Painter

1340h  C33D-0563 POSTER Observation and simulation of the vertical profile of specific surface area throughout the snow season 2009-2010 in a French alpine site: S Morin, C M Carmagnola, F Domine, Y Lejeune, B Lesaffre, A Dufour, J Willemet, A Hasan


1340h  C33D-0565 POSTER Microtomography of macroscopic snow samples: M Matzl, M Schneebeli, D Steinfeld, S Steiner, M Heggl

1340h  C33D-0566 POSTER Microtomography-based Discrete Element Modeling to Simulate Snow Microstructure Deformation: A Hasan, B Chareyre, J Kozicki, F Flin, F Darve, J Meyssonnier

1340h  C33D-0567 POSTER Thin blade penetration resistance as a proxy for the strength and elastic modulus of snow: C P Borstad, D M McClung

1340h  C33D-0568 POSTER Remotely Measuring Snow Depth in Inaccessible Terrain: D Dixon, S Boon

1340h  C33D-0569 POSTER Comparison between the Structural Evolution of Dry Snow under Quasi-isothermal Conditions and in a Temperature Gradient: I Baker, S Chen


1340h  C33D-0571 POSTER Firn characteristics of megadune accumulation areas and impact on radar return: Z Courville, M A Fahnemstock, M R Albert

1340h  C33D-0572 POSTER A Model of Grain Growth and Crystal Fabric in Polar Snow and Firn: R Carns, E D Waddington, E C Pettit, S G Warren

1340h  C33D-0573 POSTER A New Data-Based Grain Growth Model for Microwave Remote Sensing Applications: S Linow, M Hörhold, W Dierking

1340h  C33D-0574 POSTER The relationship between melt, refreezing and runoff across a transect on the Greenland ice sheet: R M Morris, D Mair, V Parry, P W Nienow

1340h  C33D-0575 POSTER Artificially induced melt in firn at Summit, Greenland: G J Wong, E C Osterberg, R L Hawley, Z Courville

1340h  C33D-0576 POSTER Photochemical Production of HOOH from Frozen Solutions of Model Compounds and Authentic Polar Snow: T Hullar, K Patten, C Anastasio

1340h  C33D-0577 POSTER NO emission from snowpack at the WAIS-Divide site and its impact on local tropospheric photochemistry: S Masclini, M M Frey, W F Rogge, R C Bales

1340h  C33D-0578 POSTER Singlet molecular oxygen on natural snow and ice: J P Bower, C Anastasio

1340h  C33D-0579 POSTER Bromine and heavy halide chemistry at the air/water and air/ice interfaces: a computational approach: I Gladich, P B Shepson, I Szleifer, M Carignano
1340h C33D-0580 POSTER Elemental concentrations and Sr-Nd isotopic ratio of surface snow near Dome Fuji, Antarctica: M Hirabayashi, T Kuramoto, H Motoyama, S Nakai, A Tanaka

C33E Moscone South: Poster Hall Wednesday 1340h
Quantifying and Modeling Spatial Variability and Wind Redistribution of Snow II Posters (joint with B, H, NH)

Presiding: H Marshall, Boise State University; S J Dery, UNBC; M Lehning, SLF Davos; J S Deems, National Snow and Ice Data Center

1340h C33E-0581 POSTER Including snowdrift in a regional climate model of Antarctica: preliminary results: J Lenaerts, M R van den Broeke, E van Meijgaard, W van de Berg, S J Dery

1340h C33E-0582 POSTER Modeling Intense Blowing Snow Events in the Cariboo Mountains of British Columbia, Canada: S J Dery, A Bainslie, P L Jackson

1340h C33E-0583 POSTER Development of an Automatic Blowing Snow station: K Nishimura

1340h C33E-0584 POSTER Large Eddy Simulation and Snow Transport over three-dimensional topography: M Diebold, C W Higgins, M Lehning, M B Parlange

1340h C33E-0585 POSTER An electrostatic charge measurement of blowing snow particles focusing on collision frequency to the snow surface: S Omiya, A Sato

1340h C33E-0586 POSTER Narrowing uncertainty of model estimates for drifting snow sublimation (Invited): M Lehning, C Grooth-Zwaaftrink, H Loewe, M Bayv

1340h C33E-0587 POSTER The Influence of Spring Snowmelt on the Radiation Balance of Central Eurasia: M Mioduszewski, A K Rennermalm, D A Robinson

1340h C33E-0588 POSTER Scale Effects in a Physically Based Distributed Snow Model: A H Winstral, D G Marks, R J Gurney

1340h C33E-0589 POSTER A Comparison of the Fractional MODIS and LANDSAT Thematic Mapper with Ground-Based Snow Surveys in the Sierra Nevada: R Rice, R C Bales, P B Kirchner, P C Saksa, K E Ritter, T H Painter, J Dozier

1340h C33E-0590 POSTER Simulating plot-scale variability of snowpack states in conifer forests using hemispherical photography and a process based one-dimensional snow model: K N Musselman, N P Molotch, S A Margulis, M Lehning, P B Kirchner, R C Bales


1340h C33E-0592 POSTER Spatial distribution of snow water equivalent across the central and southern Sierra Nevada: R C Bales, R Rice, X Meng

1340h C33E-0593 POSTER Spatiotemporal Distribution of Snow in Eastern Tibet and The Response to Climate Change: J Gao, M W Williams, X Fu, G Wang, T Gong, H Wang

1340h C33E-0594 POSTER Estimating under-canopy ablation in a subalpine red-fir forest, southern Sierra Nevada, California: P B Kirchner, R C Bales, R Rice, K N Musselman, N P Molotch

C33F Moscone South: Poster Hall Wednesday 1340h
Seasonal Snow Cover in a Changing Climate: Implications for Hydrological, Biogeochemical, and Ecological Processes II Posters (joint with B, GC, H)

Presiding: T E Link, University of Idaho; G Greenwood, University of Bern

1340h C33F-0595 POSTER Interannual Variability of Snowpack and Spring Season Hydroclimatology in the Southwestern United States: S Keller, D S Gutzler

1340h C33F-0596 POSTER Impact of climate change on snow distribution in Japan estimated using data from the remote weather stations (AMeDAS) and Spot VGT: Y Kominami, Y Asaoka, I Tsuyama, N Tanaka

1340h C33F-0597 POSTER Relationship between MODIS-Derived Snow Cover and Snowmelt Timing in the Wind River Range, Wyoming, 2000 to 2010: D K Hall, J L Foster, N E DiGirolamo, G A Riggs

1340h C33F-0598 POSTER Interannual Variability in Radiative Forcing and Snowmelt Rates by Desert Dust in Snowcover in the Colorado River Basin: S Skiles, T H Painter, A P Barrett, C Landry, J S Deems, A H Winstral

1340h C33F-0599 POSTER Modeling snowmelt runoff response to forest disturbance in the Okanagan basin, British Columbia, Canada: R Davis, S Boon, R Winkler, J W Pomeroy, Title of Team: Mountain Hydrology Lab

1340h C33F-0600 POSTER Variability in snowpack accumulation and ablation associated with mountain pine beetle infestation in western forests: J A Biederman, A A Harpold, D J Gochis, D Reed, P D Brooks

1340h C33F-0601 POSTER The Effects of the Mountain Pine Beetle on Snow Accumulation and Melt Timing in the Headwaters of the Colorado River: E T Pugh, E E Small

1340h C33F-0602 POSTER Modeling the effects of the mountain pine beetle on snowmelt rates in a subalpine forest: D O Perrot, N P Molotch, K N Musselman, E T Pugh

1340h C33F-0603 POSTER The Effect of Soil Freezing on Nitrogen and Carbon in Soil Leachate during Snowmelt: J L Campbell, P H Templor, A Reinmann

1340h C33F-0604 POSTER Continuous monitoring of surface CO₂ flux and soil gas concentrations in an agricultural soil under the snow cover manipulation experiment in Hokkaido, northern Japan: S Ohkubo, Y Yanai, O Nagata, Y Iwata, T Hirota

C33G Moscone West: 301I Wednesday 1340h
Assessing Past and Future Mass Changes of Earth’s Mountain Glaciers and Ice Caps II (joint with EP, GC, NH, H)

Presiding: R M Hock, University of Alaska; J M Hagen, Department of Geosciences; S O’Neel, USGS

1340h C33G-01 POSTER Recent mass balance of Arctic glaciers derived from repeat-track ICESat altimetry (Invited): G Moholdt, C Nuth, J M Hagen, G J Wolken, A Gardner

1355h C33G-02 Conceptual melt models: the past or valuable tools for future scenarios? (Invited): F Pellicciotti, M Konz, M Carenzo

1410h C33G-03 Simplistic models of a tidewater glacier, with application to Columbia Glacier, Alaska: R W McNabb, R M Hock

1425h C33G-04 Assesment of dynamic and surface-forced mass losses at Columbia Glacier Alaska USA: S O’Neel, W T Pfeffer, Y Ahn, I M Howat, H Conway, B E Smith, K Matsuoaka

1440h C33G-05 Can we derive ice flow from surface mass balance and surface elevation change?: M H Kuhn, M Olefs

All information is current as of November 12, 2010
Education and Human Resources

ED33A  Moscone South: Poster Hall  Wednesday  1340h
The Imperative of Climate Literacy III Posters (joint with A, C, IN, GC, PP, PA)

Presiding: L T Huffman, University of Nebraska-Lincoln; M S McCaffrey, University of Colorado at Boulder; J L Baeseman, Association of Polar Early Career Scientists; S M Buhr, University of Colorado; S A Ackerman, University of Wisconsin - Madison; T S Ledley, TERC

1340h ED33A-0693 POSTER Improving Climate Literacy of NOAA Staff and Users: M M Timofeyeva, A Bair, M Staudenmaier, J C Meyers, B Mayes, J Zdrojewski
1340h ED33A-0694 POSTER Climate Literacy Ambassadors: M E Mooney, S A Ackerman
1340h ED33A-0695 POSTER Lessons learned from a rigorous peer-review process for building the Climate Literacy and Energy Awareness (CLEAN) collection of high-quality digital teaching materials: A U Gold, T S Ledley, M S McCaffrey, S M Buhr, C A Manduca, F Niepold, S Fox, D C Howell, S E Lynds
1340h ED33A-0696 POSTER EDUCATIONAL AND COMMUNITY OUTREACH EFFORTS BY THE UNITED STATES POLAR ROCK REPOSITORY DURING THE INTERNATIONAL POLAR YEAR: A Grunow, J E Codispoti
1340h ED33A-0697 POSTER Climate Literacy Initiatives as part of the TXESS (TxXas Earth and Space Science) Revolution Program: H C Olson, K K Ellins, E Snow, S L Bryant, J E Olson, C A Castillo Comer, M Willis, M Odell, E Stocks
1340h ED33A-0698 POSTER Teaching About CO2 as a Climate Regulator During the Phanerozoic and Today: K K Sr John, L A Krissek, M H Jones, R M Leckie, K S Pound
1340h ED33A-0699 POSTER Inspiring climate change literacy through popular culture: The Green Ninja: E C Cordero, B Sarrafan, B Dallas, D Chai
1340h ED33A-0700 POSTER Climate literacy, paving the road to a listening ear: R W Vachon
1340h ED33A-0701 POSTER Literacy in Action: A Carbon-Neutral Field Program at Cornell University: A Moore, L Derry
1340h ED33A-0702 POSTER A Thematic Approach to Increasing Climate Literacy: R J Myers, T G Schwerin, M R Witw
1340h ED33A-0704 POSTER ‘Our Changing Climate’ – A new interactive game about weather, climate, the Earth’s energy budget and the impacts caused by climate change: M Colon-Robles, K Lorentz, K Ruhlman, I Gilman, L H Chambers
1340h ED33A-0705 POSTER Impact of unseen assumptions on communication of atmospheric carbon mitigation options: T R Elliot, M A Celia, B Court

ED33B  Moscone South: 102  Wednesday  1340h
Traditional Knowledge and Geoscience Research and Education II

Presiding: P A Cooper, University of Hawai‘i at Manoa; A Cooper-Smith, University of Hawai‘i Maui College; R Barnhardt, University of Alaska Fairbanks

1340h ED33B-01 POSTER Getting Traditional Practitioner Informants to Cooperate with Researchers: C Kaaiai, S M Spalding
1352h ED33B-02 NASA and the Navajo Nation: A Collaborative Partnership Bringing Science and Cultural Knowledge Together: A Carron, D Scalici
1404h ED33B-03 Indigenous Knowledge and Sea Ice Science: What Can We Learn from Indigenous Ice Users?: H Eicken
1416h ED33B-04 Indigenous Contributions to Sustainability: R Barnhardt

1428h ED33B-05 Native Geosciences: Pathways to Traditional Knowledge in Modern Research and Education: J R Bolman
1440h ED33B-06 Integrating Native knowledge and community perspectives in geoscience research and education: E B Sparrow, S Stephens, W Schneider
1452h ED33B-07 Developing a Literacy Guide to Perpetuate Traditional Knowledge: S M Spalding, C Kaaiai
**Earth and Planetary Surface Processes**

**EP33A Moscone South: Poster Hall Wednesday 1340h** Advances in the Systematics of Terrestrial Cosmogenic Nuclides II Posters (joint with V, C, B, GC)

*Presiding: F M Phillips,* New Mexico Inst Mining & Tech; *M Caffee,* Purdue University


1340h EP33A-0758 POSTER Estimating the soil erosion on hill slopes in Korea using radionuclide 137Cs: *O Aleksandr,* K Kashiwaya, Y Kim

1340h EP33A-0759 POSTER Quantifying Site Specific Holocene Soil Erosion Events Using Depth-Profiles of Cosmogenic In-Situ C-14 and Be-10: *R H Fulop,* P Bishop, D Fabel, G T Cook, P Naysmith, C Schnabel, S Xu, J Everest

1340h EP33A-0760 POSTER Utilizing Monte-Carlo radiation transport and spallation cross sections to estimate nuclide dependent scaling with altitude: *D Argento,* R C Reedy, J Stone

**EP33B Moscone South: Poster Hall Wednesday 1340h** Coastal Geomorphology and Morphodynamics: Bridging Event and Long-Term Processes IV Posters (joint with H, NH, OS)

*Presiding: J E McNinch,* Field Research Facility; *C J Hapke,* U.S. Geological Survey


1340h EP33B-0763 POSTER Observations of inner shelf convergence processes at Diamond Shoals, NC: *A Sanchez,* J C Warner, J H List, G Voulgaris

1340h EP33B-0764 POSTER Observations of near-bed sediment convergence processes at Diamond Shoals, NC: *J C Warner,* J H List, G Voulgaris, A Sanchez

1340h EP33B-0765 POSTER Sensitivity Analysis of Dune Height Measurements Along Cross-shore Profiles Using a Novel Method for Dune Ridge Extraction: *E Hardin,* H Mitsosava, M Overton


1340h EP33B-0767 POSTER A large-scale laboratory evaluation of dune erosion models: *M L Palmsten,* R A Holman

1340h EP33B-0768 POSTER Using Ground Penetrating Radar (GPR) to Investigate Beach-Dune Interaction at North Padre Island, Texas: *B A Weymer,* J R Giardino, C Houser, T M Dellepenna

1340h EP33B-0769 POSTER Historical Bathymetry and Bathymetric Change: Mississippi-Alabama Coastal Region 1847-2009: *N A Boster,* R A Morton

1340h EP33B-0770 POSTER Quantifying overwash flux in barrier systems: An example from Martha’s Vineyard, MA: *E A Carruthers,* J P Donnelly, A D Ashton, R L Evans

1340h EP33B-0771 POSTER The influence of the “maintainer” feedback on overwash persistence in the Virginia Coast Reserve: *C V Wolner,* L J Moore, D R Young, S T Brantley, S N Bissett

1340h EP33B-0772 POSTER A Temporal Assessment of Barrier Island Vulnerability to Extreme Wave Events, Virginia Coast Reserve: *D J Oster,* L J Moore, K J Doran, H F Stockdon

1340h EP33B-0773 POSTER The Impacts of Back-Beach Barriers on Sandy Beach Morphology Along the California Coast and Implications for Coastal Change with Future Sea-Level Rise: *E L Harden*


1340h EP33B-0776 POSTER Variations in barrier-island evolution at millennial and decadal time scales related to underlying geology, Onslow Beach, NC USA: *W Yu,* D Hood, R Browne, A B Rodriguez

1340h EP33B-0777 POSTER Advection and diffusion in shoreline change prediction: *T R Anderson,* L N Frazer

1340h EP33B-0778 POSTER Model Improvement by Assimilating Observations of Storm-Induced Coastal Change: *J W Long,* N G Plant, K Sopkin

1340h EP33B-0779 POSTER Patterns and Rates of Historical Shoreline Change along the New England and Mid-Atlantic Coasts: *M G Kratzmann,* C J Hapke, E A Himmelstoss, J H List, E R Thieler

1340h EP33B-0780 POSTER Shoreline Change in the Hawaiian Islands: *B M Romine,* C H Fletcher, M Barbee, L Frazer, T R Anderson

**EP33C Moscone South: Poster Hall Wednesday 1340h** Physical and Chemical Consequences of Extreme Events at the Earth Surface II Posters (joint with A, H, NH, S, T)

*Presiding: A West,* University of Southern California; *C P Stark,* Columbia University

1340h EP33C-0781 POSTER Freeze-Thaw Cycle Test on Basalt, Diorite and Tuff Specimens with the Simulated Ground Temperature of Antarctica: *J Park,* C Hyun, H Cho, H Park

1340h EP33C-0782 POSTER Spatial and Temporal Frequency of Shallow Landsliding Across a Steep Precipitation Gradient in the Hanalei River Basin: *K L Huppert,* K Ferrier, T Perron

1340h EP33C-0783 POSTER Estimating the impact of extreme climatic events on riverine sediment transport: new tools and methods: *E Lajeunesse,* C Delacourt, P Allemand, A Limare, C Dessert, J Ammann, P Grandjean

1340h EP33C-0784 POSTER The Influence of Climate Change and Fire on Sediment Transport and Aquatic Habitat: a Case Study of the South Fork of Salmon River Basin, Idaho: *S Neupane,* E M Yager
1340h  
**G33A-0785** POSTER The role of episodic fire-related debris flows on long-term (10^1-10^3) sediment yields in the Middle Fork Salmon River Watershed, in central Idaho:  
K E Riley, J L Pierce, A Hopkins

1340h  
**G33C-0786** POSTER Determining controls on sediment storage volumes and residence times on valley bottoms in steepland: debris flow and fluvial evacuation of tributaries and their respective confinement deposits:  
W T Frueh, S T Lancaster

---

**EP33D Moscone South: 310 Wednesday 1340h**

**Quantifying Present and Ancient Rates of Earth Surface Processes II (joint with H, PP, V)**

**Presiding:** A Dosseto, University of Wollongong; E J Rhodes, UCLA; A M Heimssath, Arizona State University

1340h  
**EP33D-01** Using OSL dating to quantify rates of Earth surface processes: E J Rhodes, T M Rittenour

1355h  
**EP33D-02** Towards OSL-thermochronology, a new thermochrometer of very low closure temperature (Invited): F Herman, B Guralnik, E J Rhodes, M Jaiswal

1410h  
**EP33D-03** ASSESSING PAST SURFACE PROCESSES RATES USING FELDSPAR LUMINESCENCE: M Lamothe

1425h  
**EP33D-04** Soil Production from Above and Below: Implications for Cosmogenic Nuclide Denudation Rate Estimates: J Willenbring

1440h  
**EP33D-05** Dual 10Be isotope systems constrain the source of sediment and rate of erosion for the tropical Barron River catchment, Queensland, Australia:  
K K Nichols, P R Bierman, L J Reusser, E Portenga, A Matmon, D H Rood

1455h  
**EP33D-06** Basin scale denudation rates in the active mountain belt of Taiwan: The in situ produced 10Be cosmogenic point of view:  
L L Siamé, F Derrieux, D L Bourles, R Braucher, R Chen

1510h  
**EP33D-07** Eroding and Inflating the Atacama Desert, Chile: Insights Through Cosmogenic 10Be, 26Al and 21Ne:  
A M Heimsath, M C Jungers, R Amundson, G Balco, D H Rood

1525h  
**EP33D-08** Paleo-erosion rates from an isochron cosmogenic nuclide method: A 4 Myr erosion chronosequence from South Africa (Invited): D E Granger, E Erlanger, R J Gibbon

---

**Geodesy**

**G33A Moscone South: Poster Hall Wednesday 1340h**

**The Magnitude 8.8 Chilean Earthquake of 27 February 2010**

**IV Posters (joint with S, TH)**

**Presiding:** S E Barrientos, Universidad de Chile; B A Brooks, University of Hawaii; K Wang, Geological Survey of Canada; D Melnick, University of Potsdam

1340h  
**G33A-0811** POSTER IRIS Community Response to the Great Chile Earthquake of 2010:  
A Melzer, S L Beck, S Roecker, R M Russo, D W Simpson, S E Barrientos, D Comte, M H Pardo, J Ruiz, K Aranda, G Slad, B Guralnik, N M Shapiro

1340h  
**G33A-0812** POSTER Results from the Quake-Catcher Network Rapid Aftershock Mobilization Program (QCN-RAMP) Following the M8.8 Maule, Chile Earthquake:  
A I Chung, C Neighbors, A Belmonte-Pool, M R Miller, H H Sepulveda, C M Christensen, E Liao, E S Cochran, J F Lawrence

1340h  
**G33A-0813** POSTER Velocity Structure and Seismotectonics prior to the 2010 Chile Earthquake (Mw 8.8) in the Maule Region from an Amphibious Seismological Network:  
I G Arroyo, I Greveymeyer, E R Flueh, H A Kraft, D Comte, M M Thorwart, Y Dzierma, M R Lefeldt, W Rabbel

1340h  
**G33A-0814** POSTER Imaging the rupture of the 27 February 2010 Chile (Mw 8.8) earthquake via backprojection of P, PP, and PKP waves:  

1340h  
**G33A-0815** POSTER Crustal thickness estimation in the Maule Region (Chile) from P-wave receiver function analysis:  
A Dannowski, I Greveymeyer, M M Thorwart, W Rabbel, E R Flueh

1340h  
**G33A-0816** POSTER Crustal Normal Faulting Triggered by the Mw=8.8 Maule Megathrust Subduction Earthquake in Central Chile:  
D Comte, M Farias, S Roecker, D Carrizo, M H Pardo

1340h  
**G33A-0817** POSTER Rupture imaging of the 27 February 2010 Mw 8.8 Chilean earthquake from back projection of teleseismic body waves:  
C Satriano, J Vilotte, P Bernard, N M Shapiro

1340h  
**G33A-0818** POSTER Source process of the 2010 Chilean earthquake using strong-motion and geodetic data:  
Peyrat, A Socquet, C Vigny, S Ruiz, C Aranda

1340h  
**G33A-0819** POSTER Aftershock Seismicity of the Mw 8.8 Maule Earthquake of 27 February 2010 Using a 2D Velocity Model:  

1340h  
**G33A-0820** POSTER Near Field data analysis of the Maule event by comparison between tide gauges, long base tiltmeters and broad band seismometers:  
I M Radaviga, E Boudin, S Allgeyer, H Hebert, M Olcay, P Bernard, E R Flueh

1340h  
**G33A-0821** POSTER Postseismic investigation of the February 2010 Chile earthquake: relaxation processes and the relationship of seismic and aseismic activity:  
I M Ryder, A Rietbrock, M G Bevis, J Baez, S E Barrientos, K Bataille, H Parra, B A Brooks

1340h  
**G33A-0822** POSTER Investigation of the 27 February 2010 Mw 8.8 Chilean earthquake integrating afershock analysis, back-projection imaging and cGPS results:  
E Clévédé, C Satriano, B Bukchin, M Lancieri, A Fuenzalida, J Vilotte, H Lyon-Caen, C Vigny, A Socquet, C Aranda, J A Campos, Title of Team: Scientific Team of the LIA Montessus de Ballore (CNRS-INSU, U. Chile)

1340h  
**G33A-0823** POSTER Wave Gradiometry Applied to Phase Match Filtered 1Hz GPS time series for the February 27, 2010, Maule Mw=8.8 Earthquake:  
J P Davis, R Smalley, S Cimbaro

1340h  
**G33A-0824** POSTER Source Process of the 2010 Great Chile Earthquake (Mw8.8) Estimated Using Observed Tsunami Waveforms:  
Y Tanioka, A R Gusman

1340h  
**G33A-0825** POSTER Modeling the 27 February 2010 Chilean Tsunami Using Sources Inferred from Different Data:  
E Gica, M C Spillane, V V Titov

1340h  
**G33A-0826** POSTER Source process of 2010 Chilean earthquake inferred from waveform modeling using the Earth Simulator:  
S Tsuibo, T Nakamura

1340h  
**G33A-0827** POSTER Tsunami records due to the 2010 Chile Earthquake observed by GPS buoys established along the Pacific coast of Japan:  
T Kato, Y Terada, T Nagai, S Koshimura

1340h  
**G33A-0828** POSTER Deep-ocean Assessment and Reporting of Tsunami (DART) Data available from the 27 February 2010 Chilean Earthquake:  
G Mungov, K J Stroker

1340h  
**G33A-0829** POSTER Assessing the source of the 2010 Chilean tsunami using DART data:  
C W Moore, C Sen, B Aydin, L Tang, V V Titov, U Kanoglu
1340h G33A-0830 POSTER Modeling influence of tide stages on forecasts of the 2010 Chilean tsunami: B U Uslu, C Chamberlin, D Walsh, M C Eble
1340h G33A-0831 POSTER Forecasting the Chilean Tsunami, February 27 2010: K Sterling, W Knight, P Whitmore
1340h G33A-0832 POSTER Comparison of Tsunami height Distributions of the 1960 and the 2010 Chilean Earthquakes on the Coasts of the Japanese Islands: Y Tsuji, T Takahashi, K Imai
1340h G33A-0833 POSTER Tsunami forecasting and warning in the Australian region for the Magnitude 8.8 Chilean Earthquake of 27 February 2010: S C Allen, A Simanjuntak, D J Greenslade
1340h G33A-0834 POSTER Field survey, modeling and free oscillations of the 2010 Chilean tsunami in the Marquesas Islands, French Polynesia: S Allgeyer, D Reymond, O Hyvernaud, A Jamelot, E Okal, H Hebert, R I Madariaga
1340h G33A-0835 POSTER Tsunami focusing: M C Spillane, V V Tiow, C W Moore, B Aydin, U Kanoglu, C E Synolakis
1340h G33A-0836 POSTER Investigation of tsunami signal isolation techniques: M C Eble, D Walsh, D W Denbo, G Mungov, K J Stroker
1340h G33A-0837 POSTER Rapid GNSS and Data Communication System Deployments In Chile and Argentina Following the M8.8 Maule Earthquake: F Blume, C M Meertens, B A Brooks, M G Bevis, R Smalley, H Parra, J Baez
1340h G33A-0840 POSTER Estimates of stress drop from the 27 February 2010 Chile earthquake and tectonic stress in the crust: Implications for fault strength: K M Luttrell, X Tong, D T Sandwell, B A Brooks
1340h G33A-0841 POSTER Did 2010 Mw 8.8 Chile earthquake fill the seismic gap? Insight by tsunami and InSAR data: S Lorito, F Romano, S Arzori, X Tong, M Cocco, E Boschi, A Piatanesi
1340h G33A-0842 POSTER Interseismic and Coseismic Deformation and the role of the Upper Plate in the Maule Segment: R W Allmendinger, G Gonzalez, G A Yanez, J M Cembrano
1340h G33A-0843 POSTER Splay fault surface rupture triggered by the 2010 Chile earthquake: D Melnick, M Moreno, M Motagh, M Cisternas
1340h G33A-0845 POSTER Seismicity at Uturuncu Volcano, Bolivia: Volcano-Tectonic Earthquake Swarms Triggered by the 2010 Maule, Chile Earthquake and Non-Triggered Background Activity: D H Christensen, Z A Chartrand, J J Jay, M E Pritchard, M E West, S R McNutt
1340h G33A-0846 POSTER Coseismic gravity changes of the 2010 earthquake in Central Chile from satellite gravimetry: K Heki, K Matsuo
1340h G33A-0847 POSTER Regional gravity decrease after the 2010 Chile earthquake indicates large-scale internal mass re-distribution: S Han, J M Sauber, S B Luthcke
1340h G33A-0850 POSTER EARTHQUAKE COSEISMIC DEFORMATION FROM SPACEBORNE GRAVIMETRY: L Wang, C Shum, C Dai, K Erkan, F J Simons, A Tassara
1340h G33A-0851 POSTER An examination of “before” and “after” bathymetry for uplift of the sea floor following the Feb. 27, 2010 Maule, Chile Earthquake: C D Chadwell, P Lonsdale, J W Kluessner, A D Sweeney, W Weinrebe, J H Behrmann, J L Diaz-Naveas, E Contreras Reyes
1340h G33A-0852 POSTER High-Resolution Seafloor Bathymetry of the Rupture Area “Before” and “After” the Magnitude 8.8 Chilean Earthquake of 2010: W Weinrebe, J H Behrmann, C D Chadwell, P Lonsdale, A D Sweeney, J L Diaz-Naveas, E Contreras Reyes
1340h G33A-0853 POSTER Sediment signatures of the 2010 Chile Mw 8.8 earthquake: S Woodroffe, E Watcham, I Shennan, E Garrett

G33B Moscone West: 2008 Wednesday 1340h The GOCE Gravity Field Mission: Status and Results From the First Year of Science Operations II (joint with C, NS, OS)

Presiding: R Floberghagen, European Space Agency; T Gruber, Technical University Munich

1340h G33B-01 GOCE Satellite and Mission Performance: M Fehringer, R Floberghagen, D Muzi, C Steiger, J Pineiro
1355h G33B-02 A gravity field model inferred from 6 months of GOCE data using the direct numerical method (Invited): S L Bruinsma, J Marty, G Baldino, R Biancale, C Foerster, O Abriskovos, H Neumayer, F Flechtner
1410h G33B-03 Global gravity field models from GOCE applying the time-wise method (Invited): R Pail, H Goiginger, W Schuh, E Höck, J M Brockmann, R Mayrhofer, T Fecher, I Krabasutter
1425h G33B-04 The Space-wise Approach for the Computation of a GOCE-only Gravity Field Solution (Invited): M Reguzzoni, A Gatti, F Migliaccio, M Veicherts
1440h G33B-05 GOCE Science Orbits and their Application to Gravity Field Recovery: A Jaeggi, H Bock, U Meyer, G Beutler, P N Vissers, J van den IJssel, T Van Helleputte, M Heinze
1455h G33B-06 GOCE Products for Earth Science Community: R F Rummel, T Gruber, Title of Team: European GOCE Gravity Consortium
1510h G33B-07 Assessments of GOCE satellite tracking and gravity gradiometry data: S V Bettadpur, Z Kang, J C Ries, P B Nagel, B D Tapley
1525h G33B-08 Using GOCE to estimate the mean North Atlantic circulation (Invited): R J Bingham, P Knudsen, O B Andersen, R Pail
Global Environmental Change

**GC33A Moscone South: Poster Hall Wednesday 1340h** 
**Bringing Together Environmental, Socioeconomic, and Climatic Change Studies in Northern Eurasia I Posters (joint with A, B, C, H, NH, PP, PA)**

**Presiding:** I N Sokolik, Georgia Inst Tech; S J Goetz, Woods Hole Research Center

- **1340h GC33A-0914 POSTER** Statistical peculiarities of climatic characteristics behavior of Siberia in the second half of 20th century: Reanalysis and in-situ data: T M Shulgina, E P Gordov, E Y Genina
- **1340h GC33A-0916 POSTER** Regional atmospheric and surface layer data as a result of use of WRF and WRF-FDDA based on ERA-40 reanalysis and observation data: V Y Bogomolov, E P Gordov, V Krupchatnikoff, R Zaripov
- **1340h GC33A-0917 POSTER** 21st century climate change projections for Northern Eurasia: A P Sokolov
- **1340h GC33A-0918 POSTER** Relationships between recent snow cover extent and hydroclimatic changes over the pan-Arctic: X Shi, P Y Groisman, S J Dery, D P Lettenmaier
- **1340h GC33A-0919 POSTER** Evaluating CEP model performance with the observational data from Tongyu reference site, semi-arid region of China: W Guo, Y Yao
- **1340h GC33A-0920 POSTER** Estimation of Surface Air Temperature from MODIS High Resolution Land Surface Temperature over Northern China: S Shen, G G Leptoukh, I V Gerasimov
- **1340h GC33A-0921 POSTER** Automatic chamber observations of methane and carbon dioxide fluxes at West Siberian wetland: O Krasnov, S Maksyutov, K Shimoyama, H Suto, A Nadeev, V Shelevoi, M Glagolev, N Kosykh, T Machida, G Inoue
- **1340h GC33A-0922 POSTER** Post-Soviet farmland abandonment, forest recovery, and carbon storage potential in Ukraine: P Olofsson, T Kuemmeler, M Baumann, V C Radeloff, C E Woodcock, P Hostert
- **1340h GC33A-0923 POSTER** Land Change in Russia since 2000: K de Beurs, G Joffe, T Nefedova
- **1340h GC33A-0924 POSTER** Regional changes of precipitation and runoff in Eastern Europe: J Palamarchuk, S Ivanov, P Y Groisman, G Ivus
- **1340h GC33A-0925 POSTER** Northern Eurasia Earth Science Partnership Initiative (NEESPI): Focus on Dry Lands: P Y Groisman, S Ivanov, S Matyas, A Meshchershka, V Razuvaev
- **1340h GC33A-0926 POSTER** Extreme Heat Wave over European Russia in Summer 2010: Anomaly or a Manifestation of Climatic Trend?: V Razuvaev, P Y Groisman, O Bulygina, I Borzenkova
- **1340h GC33A-0927 POSTER** Assessing Hydroclimatological Sensitivity to Climate Change Across Northern Eurasia: L E Penwell, R B Lammers, A I Shikhilmanov
- **1340h GC33A-0928 POSTER** Very High Spatial Resolution Permafrost Dynamics Modeling in the European Russian North: S S Marchenko, V E Romanovsky, M Stendel, J H Christensen, P Kuhry
- **1340h GC33A-0929 POSTER** Evaluation of GCM-based climatic projections for Northern-Eurasia permafrost regions: implication for predictive impact modeling: V A Kokorev, O A Anisimov

**GC33B Moscone West: 3001 Wednesday 1340h** 
**Climate Modeling in Support of Policy Decision Making: Needs and Limitations III**

**Presiding:** I T Foster, University of Chicago and Argonne National Laboratory; E J Moyer, University of Chicago; L A Smith, London School of Economics; A H Sanstad, Lawrence Berkeley National Laboratory

- **1340h GC33B-01 POSTER** Revisiting the generation and interpretation of climate models experiments for adaptation decision-making (Invited): N Ranger, A Millner, F Niehoerster
- **1400h GC33B-02 POSTER** Uncertainty Assessment in Climate Science and Impacts (Invited): M G Morgan
- **1420h GC33B-03 POSTER** Physical processes and adaptation practices: how a better understanding of the sources of uncertainty in climate projections can help decision makers: C Buontempo
- **1435h GC33B-04 POSTER** Uncertainty quantification in downscaling procedures for effective decisions in energy systems: E M Constantinescu

- **1450h GC33B-05 POSTER** Climate Projections: From Useful to Usability: R B Redd, M Lemos, D E Anderson Jr.
- **1505h GC33B-06 POSTER** The Challenges of Producing Societally-useful Projections of Future Changes in Extreme Precipitation Events: K Kunkel, K T Redmond, T R Karl, D R Easterling, X Liang
- **1520h** Discussion, Moderated by Nicola Ranger
1340h GP33A-0940 POSTER Paleo movement of continents, mantle dynamics and large wander of the rotational pole: M Greff-Lefftz, J Besse

1340h GP33A-0941 POSTER Reconciling Meso-Cenozoic deformation of Eurasia and reference APWP’s from Europe and East Asia: J Cogné, J Besse, F Hankard, Y Chen

1340h GP33A-0942 POSTER Supercontinent Succession and the Calculation of Absolute Paleolongitude: R N Mitchell, T Kilian, D A Evans

1340h GP33A-0943 POSTER Toward Quantifying the Spreading-Rate Dependence of Anomalous Skewness of Marine Magnetic Anomalies due to Seafloor Spreading: S M Boswell, L Zheng, R G Gordon, J Djymt

GC33B Moscone South: Poster Hall Wednesday 1340h Geomagnetic Secular Variation Determined From Paleomagnetic Observations II Posters (joint with DI)

Presiding: C G Harrison, University of Miami

1340h GP33B-0944 POSTER Geomagnetic Field Intensity Behavior in South America Between 400 AD and 1800 AD: C Greco, A Goguitchaichiri

1340h GP33B-0945 POSTER Archeointensity variations in India from 1400 BC to 1200 AD: R Mitra, L Tauxe, V Tripathy, E Ben-Yosef

1340h GP33B-0946 POSTER Geomagnetic Secular Variation Determined From Paleomagnetic Observations In Late Quaternary (8-16,000 YBP) Carbonates From The South Pacific Ocean: E S Platzman, S Lund, G Camoin, N Thouveny, Title of Team: Scientific Team IODP Expedition 310

1340h GP33B-0947 POSTER Holocene Paleomagnetic Secular Variation from the Gulf of Alaska: M H Davies, J S Stoner, A C Mix, J M Jaeger, G P Rosen, J E Channell, J R Southon

1340h GP33B-0948 POSTER A New High-Resolution Record of the Blake Geomagnetic Excursion from ODP Site 1062: M D Bourne, C Mac Niocaill, G M Henderson, A L Thomas, M Faurouch Knudsen

1340h GP33B-0949 POSTER The geodynamo at ~200 Ma: paleosecular variation and paleointensity recorded by Central Atlantic Magmatic Province mafic rocks of Mauritania: Y Usui, J A Tarduno, K Ló, R A Duncan, S N Mason, R D Cottrell, J Voronov

1340h GP33B-0950 POSTER Variation of paleosecular variation: calculating a S-value from the geomagnetic equator: J M Linder, S A Gilder

GC33C Moscone South: Poster Hall Wednesday 1340h Geomagnetism and Paleomagnetism General Contributions II Posters (joint with T, DI)

Presiding: E Herrera-Bervera, University of Hawaii at Manoa

1340h GP33C-0951 POSTER Proterozoic GAD Hypothesis: Reliability Test Using Dyke Swarms: J E Panzik, D A Evans

1340h GP33C-0952 POSTER Paleomagnetic investigation of sedimentary units from Jack Hills, Western Australia, containing Archean-Hadean minerals: J M Nelson, J A Tarduno, R D Cottrell, J W Valley

1340h GP33C-0953 POSTER Dating of Mesoproterozoic metamorphism in the Mount Isa and George Fisher Zn-Pb-Cu-Ag deposits, Australia, by paleomagnetism: K Kawasaki, D T Symons

1340h GP33C-0954 POSTER Paleomagnetism of the Wyoming Craton: A Pre-Laurentian Puzzle: T Kilian, K Chamberlain, R N Mitchell, D A Evans, W Bleecker, A N Lecheminant
1340h  **GP33C-0955**  POSTER Paleomagnetism of Proterozoic Mafic Dikes of the South Pass Area, Southern Wind River Mountains, Wyoming:  **S S Harlan, J W Geissman, L W Sneek**

1340h  **GP33C-0956**  POSTER The puzzling late Precambrian paleoposition of Laurentia: new insights from paleomagnetic paleontology of the Sainte-Sophie diabase dyke swarm, Quebec:  **F Hankard, M Higgins, R Van Der Voo, C Verdel**

1340h  **GP33C-0957**  POSTER Does the Permo-Triassic Geomagnetic Dipole Low Exist?:  **D Blanco, V A Kravchinsky, J M V. Malet**

1340h  **GP33C-0958**  POSTER Tectonic implications of a paleomagnetic study of mesozoic magmatic arcs in northwest Antarctic Peninsula:  **N J Cosentino, A A Tassone, J F Vilas**

1340h  **GP33C-0959**  POSTER Oman’s low latitude “Snowball Earth” pole revisited: Late Cretaceous remagnetisation of Late Neoproterozoic carbonates in Northern Oman:  **C J Rowan, J Tait**

1340h  **GP33C-0960**  POSTER Paleomagnetic dating of the Cu-Zn-Pb Kupferschiefer deposit at Sangerhausen, Germany:  **D T Symons, K Kawaski, S Walther, G Borg**

1340h  **GP33C-0961**  POSTER An oceanic core complex (OCC) in the Albanian Dinarides? Preliminary paleomagnetic and structural results from the Mirdita Ophiolite (northern Albania):  **M Maffione, A Morris, M Anderson**

1340h  **GP33C-0962**  POSTER Paleomagnetism and rock magnetism of remagnetized carbonate rocks from the Helena Salient, western Montana:  **B Baugh, B A House, R F Burmester**

1340h  **GP33C-0963**  POSTER PALEOMAGNETISM OF GABBROIC SILLS FORMING THE FLOOR OF THE EARLY JURASSIC KAROO LARGE IGNEOUS PROVINCE, SOUTH AFRICA:  **J W Geissman, E C Ferre, S M Maes, M Marsh**

1340h  **GP33C-0964**  POSTER Updated Paleomagnetic Pole from Cretaceous Plutonic Rocks of the Sierra Nevada, California:  **J W Hillhouse, C S Gromme**

1340h  **GP33C-0965**  POSTER Inclination Correction for the Møenave Formation and Wingate Sandstone: Implications for North America’s Apparent Polar Wander Path and Colorado Plateau Rotation:  **A M McCall, K P Kodama**

1340h  **GP33C-0966**  POSTER Paleoposition of the Seychelles microcontinent in relation to the Deccan Traps and the Plume Generation Zone in Late Cretaceous-Early Palaeogene time:  **M Ganerod, T H Torsvik, D J Van Hinsbergen, C Gaina, S Werner, T Owen-Smith, L D Ashwal, S J Webb, B W Hendriks**

1340h  **GP33C-0967**  POSTER Paleomagnetic data from Oligocene ash-flow tuffs of the eastern San Juan Volcanic field and the Ash Fork Member, Coconino County, Arizona:  **N M Schad, J J Horsfield, A J G. Jones**

1340h  **GP33C-0968**  POSTER Paleomagnetic Analysis of the Auberry Formation, California, to determine the source and age:  **J F Muniz, C J Puhlar, N Masutsubo, R E Holcomb, W Nick, J Lessel, J L Jackson, B A Jackson**

1340h  **GP33C-0969**  POSTER North Pole, South Pole: the quest to understand the mystery of Earth’s magnetism:  **G M Turner**

---

**Hydrology**

**H33A Moscone South: Poster Hall Wednesday 1340h Applying River and Watershed Research to Facilitate Management and Guide Policy II Posters (joint with PA)**

**Presiding:** A C Johnson, USDA Forest Service/ Portland State University; S M Reaney, Durham University; P Jordan, Teagasc; L H MacDonald, Colorado State University; J A Yeakley, Portland State University

1340h  **H33A-1116**  POSTER A global review of large-scale experimental manipulations of streamflow:  **C P Konrad, J D Olden**

1340h  **H33A-1117**  POSTER Can hydrologic models change water-related risk perceptions? Results of a participatory modeling workshop in the Sonora River Basin, Mexico:  **K E Halvorsen, A Robles-Morua, A S Mayer, M M Ballard, K A Watson, E R Vivoni**

1340h  **H33A-1118**  POSTER Modeling the Impact of Landscape Variability on Nutrient and Pesticide Dynamics in CEAP Watersheds:  **S M Saia, T S Steenhuis, Z M Easton, J Boll, E S Brooks**

1340h  **H33A-1119**  POSTER Two-dimensional hydrodynamic modeling to quantify effects of peak-flow management on channel morphology and salmon-spawning habitat in the Cedar River, Washington:  **C R Barnas, J A Czuba, A S Gendaszek, C S Magirl**

1340h  **H33A-1120**  POSTER Water Balance Change in Xia Ying River Basin, Qinghai Province, China:  **L Cuo, B Zhou, J Li**

1340h  **H33A-1121**  POSTER Pollutant Flushing Characterizations from Urban Storm Runoff at Rapid Urbanizing Area:  **Y Huang, L Wang, G Wang, H Qing**

1340h  **H33A-1122**  POSTER Evaluating River Restoration Objectives As Research Hypotheses: A Case Study Of Engineered Log Jams:  **T P Hanrahan, C R Vernon**

1340h  **H33A-1123**  POSTER Synthetic Streams Constructed for Multi-policy Framework, Marin County, CA, Reveal Right-lateral Offset Drainages 5.5 km Offshore of San Andreas Fault:  **B B Quinn, Title of Team: Marin Map - Matrix Team (data development)**
1340h  H33A-1124  POSTER A pilot Virtual Observatory (pVO) for integrated catchment science – Demonstration of national scale modelling of hydrology and biogeochemistry (Invited): J E Freer, J P Bloomfield, P J Johnes, C Macleod, S Reaney

1340h  H33A-1125  POSTER Interdisciplinary approach to the ecological status assessment of Rio Quequén Grande watershed in Argentina: L B Teruggi, E Caporali, S Sala, M J Kristensen

1340h  H33A-1126  WITHDRAWN

1340h  H33A-1127  POSTER CREATING A FOREST-WIDE CONTEXT FOR ADAPTIVE MANAGEMENT AT JACKSON DEMONSTRATION STATE FOREST: M Liquori, J Helms, D Porter

H33B  Moscone South: Poster Hall  Wednesday  1340h

Changing Dynamics of Complex Ecolhydrolgical Systems II Posters (joint with B, EP)

Presiding: T Hwang, University of North Carolina at Chapel Hill; L E Band, University of North Carolina; L Orsme, University of Kentucky; F Chang, National Taiwan University; K Hsu, UC Irvine; W Chu, University of California, Irvine

1340h  H33B-1128  POSTER Role of vegetation and edaphic factors in controlling diversity and use of different carbon sources in semiarid ecosystems: K A Lohse, J E McLain, C J Harman, M Sivapalan, P A Troch

1340h  H33B-1129  POSTER Physiographic position modulates the influence of temperature and precipitation as controls over leaf and ecosystem level CO2, flux in shrubland ecosystems: A A Barron-Gafford, R L Scott, G D Jenerette, E P Hamerlyntck, T E Huxman

1340h  H33B-1130  WITHDRAWN

1340h  H33B-1131  POSTER Development of Groundwater Management Model for Sustainable Groundwater Use in the Agricultural Region: D Park, G Bae, K Lee

1340h  H33B-1132  POSTER Micrometeorological and Physiological Controls of Stomatal Conductance and Transpiration of Ongoing Seedlings with Varying Shade Tolerance: C M Siegert, D F Levia

1340h  H33B-1133  POSTER An investigation on the estimation of evaporation by combining artificial neural network and dynamic factor analysis: W Sun, Y Chiang, F Chang

1340h  H33B-1134  POSTER Batch-mode Reinforcement Learning for improved hydro-environmental systems management: A Castelletti, S Galelli, M Restelli, R Soncini-Sessa

1340h  H33B-1135  POSTER Estimating Riparian Zone Evapotranspiration from Groundwater Level Fluctuations: Implication of River Stage: J Zhu, M Young, J M Healey, R L Jasoni, J Osterberg

1340h  H33B-1136  POSTER Comparison of different climate change scenario effects in climatological variables and water availability in the city of Lima, Peru: A Chamorro, A Bardossy, J Seidel

1340h  H33B-1137  POSTER A New Evolutionary Search Strategy for Global Optimization of High-Dimensional Problems: W Chu, X Gao, S Sorooshian

1340h  H33B-1138  POSTER Variation of Retention Curves in the Past 70 years in the Tatsunokuchi-yama Forested Experimental Watershed: I Hosoda

1340h  H33B-1139  POSTER Interactions of evapotranspiration between two parallel columns: D Sun, J Zhu

1340h  H33B-1140  POSTER Multiple-try differential evolution adaptive Metropolis for efficient solution of highly parameterized models: L Eric, J A Vrugt

1340h  H33B-1141  POSTER Severe Storm Nowcasting Using Cloud Advection Field: K Hsu, A Zahraei, S Sorooshian

1340h  H33B-1142  POSTER Hydrological Response to Climate Change over the Blue Nile Basin Distributed hydrological modeling based on surrogate climate change scenarios: F G Berhane, R O Anyah

H33C  Moscone South: Poster Hall  Wednesday  1340h

Climate Change Impacts on Arid to Semi-arid Mountain Ecolubiology II Posters (joint with B, GC)

Presiding: A White, New Mexico Institute of Mining and Technology; R G Allen, University of Idaho; L Saito, University of Nevada Reno

1340h  H33C-1143  POSTER Can Landscape Heterogeneity Buffer or Exacerbate Changes in Mountain Hydrology under Different Climatic Conditions?: P D Broxton, P A Troch, P D Brooks

1340h  H33C-1144  POSTER Deriving the relationship between landcover types and surface exchange coefficients for effective land-atmosphere coupling: V R Sridhar, K Nuss, T Jaksa, W Zhao, M J Germino, R G Allen

1340h  H33C-1145  POSTER Assessing the effects of changing climate on the transformation and vulnerability of coupled hydrologic, ecologic, and human systems using an interdisciplinary spatiotemporal methodology: P Z Klos, K B Kemp, J J Blades, T E Link, P Morgan, P E Higuera, T E Hall, Title of Team: Northern Rockies Team, University of Idaho Integrative Graduate Education and Research Traineeship (IGERT) Program


1340h  H33C-1147  POSTER Nevada Monitoring System to Assess Climate Variability and Change: D A Devitt, J Arnone, F Biondi, L F Fenstermaker, L Saito, M Young, B Riddle, S D Strachan, B Bird, G McCarthy, B F Lyles

1340h  H33C-1148  POSTER Forecasting of Annual Streamflow Using Data-Driven Modeling Approach: A Kalra, W P Miller, S Ahmad, K W Lamb

1340h  H33C-1149  POSTER How Important is Vegetation Drought Stress Response when Predicting Streamflow within the Semi-Arid Santa Fe Municipal Watershed?: A L Dugger, C Tague, C D Allen, T Ringer

1340h  H33C-1150  POSTER Changes in Eastern Sierra Nevada precipitation related to climate change: H E Voepel, R Schumer, D P Boyle, A Knust, J Ashby, H Klieforth

1340h  H33C-1151  POSTER Modeling Impacts of Climate Change on Stream Temperature: T K Tesfa, M S Wigmosta, A M Coleman, M C Richmond, W A Perkins

1340h  H33C-1152  POSTER How will a warmer climate affect water quality in the Sierra Nevada, California?: D L Flickin, I T Stewart-Frey, E P Maurer

1340h  H33C-1153  POSTER Evaluating Effects of Climate Change and Variability on Snowmelt Runoff Timing and Magnitude in Northern New Mexico: K A Hafich, L R Sherson, L J Crossey, C Dahm

1340h  H33C-1154  POSTER Investigating the impact of temporal and spatial variation in spring snow melt on summer soil respiration: G P John, S A Papuga, C L Wright, K Nelson, G A Barron-Gafford

1340h  H33C-1155  POSTER Assessment of Climate Change Impacts on Water Resources in the Semi-arid Eastern Mediterranean, Turkey: C Donmez, E Thomas, D Pedreros, G J Husak, P Krause, A Kunz, S Berberoglu, J Helmschrot

1340h  H33C-1156  POSTER System Dynamics to Climate-Driven Water Budget Analysis in the Eastern Snake Plains Aquifer: J Ryu, B Contor, A Wylie, G Johnson, R G Allen
1340h **H33C-1157** POSTER Integrated Modeling Analysis on Surface-Subsurface Water Interaction and Impact on Riparian Vegetation under Climate Change Scenarios: **M P Bhattacharai,** K Acharya, L Chen

1340h **H33C-1158** WITHDRAWN

**H33D** Moscone South: Poster Hall Wednesday 1340h

**Enhanced Geothermal Systems: Characterization, Integration, Stimulation, and Induced Seismicity II Posters (joint with NG, S, V, NS)**

**Presiding:** S M Ezzedine, LLNL; G A Ferguson, St. Francis Xavier University; P Blum

1340h **H33D-1159** POSTER Depth- and Pressure dependent Permeability in the Upper Continental Crust - data from the Urach 3 geothermal well: **J Stober**

1340h **H33D-1160** POSTER Estimation of EGS reservoir structure at Cooper Basin, Australia by integrated analysis of microseismic multiplet and source parameter: **H Asanuma,** Y Kawamura, H Niitsuma, D Wyborn

1340h **H33D-1161** POSTER A Numerical Analysis on Pneumatic Fracturing for in-situ Remediation: **M Gwon,** E Park, C Lee

1340h **H33D-1162** POSTER Modeling geothermal systems: A systematic investigation of permeability reduction under hydrothermal conditions: **J Palguta,** C Williams, S Ingebritsen, S Hickman, E L Sonnenthal

1340h **H33D-1163** POSTER Micro-seismicity, fault structure, and hydrologic compartmentalization within the Coso Geothermal Field, California, from 1996 until present: **J Oaven,** S Hickman, N C Davatzes

1340h **H33D-1164** POSTER Outstanding Issues in the Assessment of Enhanced Geothermal Systems Resources: **C Williams,** J DeAngelo

1340h **H33D-1165** POSTER Micromechanical modeling of the normal deformation of rough-walled fractures: The influence of local damage events on macroscopic properties: **P Ameli,** R L Detwiler


1340h **H33D-1168** POSTER Source Characteristics of Small Earthquakes at the Northwest Geysers Geothermal Field, California: **G Viegas,** L J Hutchings

1340h **H33D-1169** POSTER Microseismic Activity in Low-Hazard Geothermal Settings in Southern Germany: **T Megies,** J M Wassermann

1340h **H33D-1170** POSTER Guided Geothermal Exploration in Hot Sedimentary Aquifers: **J Wellmann,** F G Horowitz, L Ricard, K Regenauer-Lieb


1340h **H33D-1172** POSTER Geophysical Delineation of Geothermal Resources in Southern Utah using High-Precision Gravity: **C Hardwick,** P Gettings, D S Chapman

1340h **H33D-1173** POSTER AN ASSESSMENT OF THE TECTONIC CONTROL IN DEFINING THE GEOTHERMAL SYSTEM(S) OF THE SOUTHERN CHILEAN ANDES: **P Sánchez,** M Alam, M Parada, A Lahsen

1340h **H33D-1174** POSTER Analysis of microseismicity using fuzzy logic and fractals for fracture network characterization: **F Aminzadeh,** T Ayatollahy Tafiti, D Maity, K Boyle, M Sahimi, C G Sammis

1340h **H33D-1175** POSTER NEW TECHNIQUES FOR HEAT FLOW CALCULATIONS AND MAPPING TEMPERATURE-AT-DEPTH: **Z Frone,** D D Blackwell, J Batur, J Park, M Richards

1340h **H33D-1176** POSTER Conceptual models for the hydrothermal environment of Seokmu Island geothermal field, Korea: **J Shin,** Y LEE, K Kim, Y Hyun, K Lee, T Lee

1340h **H33D-1177** POSTER Accuracy and Resolution in Micro-earthquake Tomographic Inversion Studies: **I J Hutchings,** J Ryan

1340h **H33D-1178** POSTER A Comprehensive Flow, Heat and Mass Transport Uncertainty Quantification in Discrete Fracture Network Systems: **S M Ezzedine**

**H33E** Moscone South: Poster Hall Wednesday 1340h

**Environmental Vadose Zone Hydrology Posters**

**Presiding:** R W Fedors, U.S. NRC; R L Detwiler, University of California, Irvine

1340h **H33E-1179** POSTER Unified Measurement System with Suction Control for Gas Transport Parameters in Porous Media: **K Kawamoto,** M A Rouf, S Hamamoto, T Sakaki, T Komatsu, P Moldrup

1340h **H33E-1180** POSTER Soil Moisture Measurement by TDR Coil Probe in the Surface Thin Soil Layer in the Cold Steppe of Mongolia: **I Kaitohsu,** P Moldrup, H H Nissen, T Yamanaka

1340h **H33E-1181** POSTER Evaluation of Robust Heat Pulse Probes for Water Content Measurement: **T Kamai,** A Ngo, G J Kluitenberg, J W Hopmans

1340h **H33E-1182** POSTER Water flow and retention in coarse soil pockets in the shallow subsurface: **T Sakaki,** A Limsuwat, T H Illangasekare

1340h **H33E-1183** POSTER Influence of pedogenic carbonate hydrological properties of semi-arid soils: **V Nenuji,** B Harrison, P Mozley

1340h **H33E-1184** POSTER In-Situ Hydraulic Conductivities of Soils and Anomalies at a Future Biofuel Production Site: **M F Williamson,** C R Jackson, J C Hale, H R Sletten

1340h **H33E-1185** POSTER Optimal sampling of soil depth variability for the prediction of hydrological response: **S M Reaney,** L Hopp

1340h **H33E-1186** POSTER Tomographic Characterization of Residual NAPL in Porous Media Systems: **C Gordon,** R I Al-Raoush

1340h **H33E-1187** POSTER Evaluating Recovery of Hydrologic Function Following Road Restoration Treatments: **R Lloyd,** K A Lohse, T A Ferre

1340h **H33E-1188** POSTER Characterizing Water Flux at Till/Bedrock Interfaces in the Glaciated Northeastern US: **L B Bevan,** D F Boutte, S B Mabee

1340h **H33E-1189** POSTER Water Infiltration into Arid Soils – First Results from a Lysimeter Study: **K Chief,** M Young, M Berli

1340h **H33E-1190** POSTER Controls on preferential flow in the vadose zone: **C B Graham,** H Lin
1340h  H33E-1191  POSTER  Vegetation controls on soil hydraulic properties and implications for the hydrologic variability of soils: observations and modeling: C J Harman, K A Lohse, P A Troch, M Swapalanan
1340h  H33E-1192  POSTER  Numerical Modeling of Water Fluxes in the Root Zone of Irrigated Pecan: M K Shukla, S Deb
1340h  H33E-1193  POSTER  Wildfire Impacts on Infiltration and Hillslope-Scale Hydrologic Response: B A Ebel, D A Martin, J A Moody
1340h  H33E-1194  WITHDRAWN
1340h  H33E-1195  POSTER  Evaporation from porous media in the presence of a water table: N Shokri, G Salucci
1340h  H33E-1196  POSTER  Saline Evaporation from Porous Media: Characteristics of Salt Precipitation and Its Effect on Evaporation: U Nachshon, N Weisbrod, M I Dragila, A S Grader
1340h  H33E-1197  POSTER  Does thermal convection occur in mammalian burrows during the night?: Y Ganot, N Weisbrod, M I Dragila, U Nachshon
1340h  H33E-1198  POSTER  EVAPORATION FROM SOILS UNDER THERMAL BOUNDARY CONDITIONS: EXPERIMENTAL AND MODELING INVESTIGATION TO COMPARE EQUILIBRIUM AND NON-EQUILIBRIUM BASED APPROACHES: K M Smits, A Cihan, T Sakaki, T H Illangasekare
1340h  H33E-1199  POSTER  Analysis of Models for Induced Gas Flow in the Unsatuated Zone: K You, H Zhan, J Li
1340h  H33E-1201  POSTER  Air Flow Path Dynamics In The Vadose Zone Under Various Land Surface Climate Boundary Conditions: T H Illangasekare, T Sakaki, P E Schulte, A Cihan, J Christ
1340h  H33E-1202  POSTER  Monitoring and Modeling CO2 Dynamics in the Vadose Zone near an Abandoned Historic Oil Well: Implications for Detecting CO2 Leakage at Geological CO2 Sequestration Sites: C Yang, K Romanak, S Hovorka, R C Reedy, R Trevino, B R Scanlon
1340h  H33E-1203  POSTER  Consolidation of an unsaturated porous medium with different pore fluid mixtures: Y Huang, W Lo, C Chen
1340h  H33E-1204  POSTER  Unsatuated-Zone Dynamics in a Volcanogen Co2 Emission Zone: D A Stonestrom, C D Farrar
1340h  H33E-1205  POSTER  A Combined Power-Averaging and Tensorial Connectivity-Tortuosity Approach for Simulating Field-Scale Moisture Flow: G V Last, Z F Zhang, R Khaleel
1340h  H33E-1206  POSTER  A hydrologic analysis for the infiltration basins planned on Jeju Island, Korea: S Lee, T Kang, J Lee, S Kang
1340h  H33E-1207  POSTER  Water Flow and Solute Transport Processes in Deep Sandy Vadose Zone: Y Rimon, O Dahan
1340h  H33E-1208  POSTER  Numerical Model for Predicting Two Dimensional Infiltrations and Solute Travel Time in Heterogeneous Layered Soil: Y S Song, G Kachanoski, M F Dyck
1340h  H33E-1209  POSTER  Modeling Hydrologic and Geochemical Aspects of Rapid Infiltration Basins: M Akhavan, P T Imhoff, S Andres, S Finsterle, C Gu, F Maggi
1340h  H33E-1210  POSTER  Modeling the fate of radionuclides in the unsaturated zone at the Nevada Test Site: Examples from Yucca Flat and Rainier Mesa: E M Kwckilis, Z V Dash, H S Viswanathan, D G Levitt, Z Lu, Z Dai, G Zvoloski, C W Gable, T A Miller
1340h  H33E-1211  POSTER  Solute breakthrough during repeated ponded infiltration into columns of repacked sand and heterogeneous soil: M Sobottkova, M Snehota, M Cislerova
1340h  H33E-1212  POSTER  Establishing a Geochemical Heterogeneity Model for a Contaminated Vadose Zone-Aquifer System: C J Murray, J M Zachara, J P McKinley, Y Bott
1340h  H33E-1213  POSTER  Alternative Methods for Assessing Contaminant Transport from the Vadose Zone to Indoor Air: K J Baylor, A Lee, P Reddy, M Plate
1340h  H33E-1214  POSTER  Importance of unsaturated zone parameters for contaminant transport: G Eggen, H K French, E Bloem
1340h  H33E-1215  POSTER  Dissolution of Unfired and Fired Propellants and Transport of Released Nitroglycerine, 2,4-Dinitrotoluene, and Nitroguanidine in Soils: K Dontsova, E Hunt, D L Gosch, S Taylor, J Simuneck, J Chorover, T E Huxman
1340h  H33E-1216  POSTER  Determining fate and transport parameters for nitroglycerine, 2,4-dinitrotoluene, and nitroguanidine in soils: D L Gosch, K Dontsova, J Chorover, T Ferré, S Taylor

H33F  Moscone South: Poster Hall  Wednesday  1340h  New and Emerging Satellite Missions for Remote Sensing Hydrology II Posters

Presiding: D E Alsdorf, Ohio State University; C Rudiger, The University of Melbourne
1340h  H33F-1217  POSTER  Evaluation of temporal and spatial patterns of SMOS soil moisture retrievals using in situ soil observations over the central United States: T W Collow, A Robock
1340h  H33F-1218  POSTER  Comparison of SMOS and AMSR-E retrieved soil moisture with the field measured soil moisture data in South India: S K Tomer, A A Bitar, M Sekhar, Y H Kerr, O Merlin, S Bandypadhyay, S Mohan
1340h  H33F-1219  POSTER  The Soil Moisture Active/Passive (SMAP) Freeze/Thaw Product: Providing a Crucial Linkage between Earth’s Water and Carbon Cycles: K C McDonald, J S Kimball, Y Kim
1340h  H33F-1220  POSTER  Overview and first results from the Canadian Experiment for Soil Moisture 2010 (CanEx-SM10): A E Walker, R Magagi, A A Berg, S Belair, B M Toth, T J Jackson
1340h  H33F-1221  POSTER  Can SMAP radar observations be used to determine vegetation moisture status and root zone soil moisture?: S C Steele-Dunne, J Friesen, N Van De Giesen
1340h  H33F-1222  POSTER  SMOS ground validation in Australia: results from summer and winter campaigns: C Rudiger, J P Walker, Y H Kerr, E J Kim
1340h  H33F-1223  WITHDRAWN
1340h  H33F-1224  POSTER  DOMEX-2 GROUND-BASED ANTARCTIC L-BAND EMISSION MEASUREMENTS: A CONTRIBUTION TO SMOS CALIBRATION: M R Drinkwater, G Macelloni, M Brogioni, S Pettinato
1340h  H33F-1225  POSTER  Sun Glitter Measurements for Monitoring Global Surface Waters: A T Apperson, V C Vanderbilt
1340h  H33F-1226  POSTER  Monitoring river water levels in the Amazon Basin using ICESat GLAS: A T Apperson, V C Vanderbilt
1340h  H33F-1227  POSTER  Understanding the Value of Satellite Altimetry for Monitoring Water Level Dynamics of Large Rivers in Bangladesh Delta: F Hossain, S Akbor, Title of Team: Sustainability, Satellites, Water and Environment (SASEW) Research Group
1340h  H33F-1228  POSTER  Estimating River BaseFlow Depth from Swath Altimetry: Initial Results: M K Merson, M T Durand, K Andreadis, L C Smith
1340h  H33F-1229  POSTER  Stream Gauges and Satellite Measurements: D E Alsdorf
1340h  **H33F-1230 POSTER** Simulation of SWOT measurements over the Amazon delta: **C Lion**, F Lyard, S Calmant, J Crétaux, Y Le Bars, R Fjortoft

1340h  **H33F-1231 POSTER** Advanced Component Development to Enable Low-Mass, Low-Power High-Frequency Microwave Radiometers for Coastal Wet-Tropospheric Correction on SWOT: **S C Reising**, S Brown, P Kangashlhti, D Hoppe, D Dawson, A Lee, D Albers, O Montes, T Gaier, B Khayatian

1340h  **H33F-1232 POSTER** Constraining hydrological parameters using GRACE “water-mass observations” over large river basins of Southern Africa: P E Krogh, **O B Andersen**, D D Rowlands, S B Luthcke, P Bauer-Gottwein, C Milzow

1340h  **H33F-1233 POSTER** A Multi-Satellite GRACE-like Mission Using Small Satellites: **M Stephens**, P L Bender, R Nerem, R Pierce, D N Wiese

1340h  **H33F-1234 POSTER** Validation of GOES-R Rainfall Rate Algorithm through TRMM PR and NIMROD radars: **Y Li**, R J Kuligowski

1340h  **H33F-1235 POSTER** Coupling Tritium Release Data with Remotely Sensed Precipitation Data to Assess Model Uncertainties: **B K Avant**, A R Ignatius, T C Rasmussen, A Grundstein, T L Mote, J M Shepherd

1340h  **H33F-1236 POSTER** Utilizing Satellite-based and Reanalysis Precipitation Data in Hydrological Modeling: **A R Ignatius**, A Grundstein, T C Rasmussen, T L Mote, J M Shepherd

1340h  **H33F-1237 POSTER** Vegetation Fraction Mapping with High Resolution Multispectral Data in the Texas High Plains: S A O'Shaughnessy, **P H Gowda**, S Basu, P D Colaizzi, T A Howell, U Schultess

**H33G Moscone South: Poster Hall Wednesday 1340h Using Data to Detect and Resolve Model Structural Errors II Posters**

**Presiding:** H V Gupta, University of Arizona; **M Clark**, National Center for Atmospheric Research, Boulder, Colorado; **C Lowry**, University at Buffalo

1340h  **H33G-1238 POSTER** Resolving the Individual Contributors to Total Modeling Error in Conceptual Water Balance: **D Kavetski**, B Renard, M Clark, A Thyer, G A Kuczera

1340h  **H33G-1239 POSTER** An Improved Hybrid Information Measure Based on Decomposition of Mean Square Error: **W Gong**, D Yang, H V Gupta

1340h  **H33G-1240 WITHDRAWN**


1340h  **H33G-1242 POSTER** Use of data depth function for diagnosis of hydrological model: **S Singh**, A Bárdossy, R A Woods

1340h  **H33G-1243 POSTER** A Hypothesis-based Approach to Hydrological Model Development: The Case for Flexible Model Structures: **M P Clark**, D Kavetski, F Fenicia


1340h  **H33G-1246 POSTER** Optimized Numerical Modeling to Estimate Runoff and Infiltration in Ephemeral Stream Channels, Southeast Arizona: **A M Stewart**, H V Gupta, D C Goodrich, J B Callegary, E Montenegro

1340h  **H33G-1247 POSTER** Hydrological Model Output Space and Prediction Uncertainty: **L A Bastidas**, S PANDE, G Schoups, N Van De Giesen


1340h  **H33G-1249 POSTER** Grid-based disaggregation algorithm with a new simulation-optimization scheme for remotely sensed soil moisture: **Y Shin**, B P Mohanty

1340h  **H33G-1250 POSTER** Bayesian Model Averaging Using Ensemble Particle Filtering: **J Rings**, J A Vrugt, J A Huisman, G Schoups, H Vereecken

**H33H Moscone West: 3018 Wednesday 1340h Ecohydrology of Groundwater-Dependent Ecosystems II**

**Presiding:** S P Loheide, Univ of Wisconsin - Madison; **C Lowry**, University at Buffalo

1340h  **H33H-01 POSTER** Groundwater dependent ecohydrology in a semi-arid oak savanna (*Invited*): **G R Miller**, Y Rubin, D D Baldocchi, X Chen, S Ma

1355h  **H33H-02 POSTER** Precipitation and groundwater evapotranspiration as hydraulic drivers of nutrient and ion accumulation in Everglades’ tree islands, Florida: **P L Sullivan**, R M Price, F R Miralles-Wilhelm, M S Ross, L J Scinto, E Cline, T W Dreschel, F H Sklar

1410h  **H33H-03 POSTER** Shallow groundwater subsidies to terrestrial ecosystems (*Invited*): **R B Jackson**, D Jayawickreme, M Nosetto, E G Jobbaga

1425h  **H33H-04 POSTER** Groundwater Subsidy: Quantifying the additional water available for root water uptake: **C Lowry**, S P Loheide

1440h  **H33H-05 POSTER** Ecohydrology of Groundwater Dependent Ecosystems: A Critical Determinant for Water Availability: **R J Hunt**, R A Sheets

1455h  **H33H-06 POSTER** Climate change hampers endangered species through intensified moisture-related plant stresses (*Invited*): **R Bartholomeus**, J Witte, P van Bodegom, J V Dam, R Aerts

1510h  **H33H-07 POSTER** Ecohydrological Characterization of a Floodplain Mire by Hyperspectral Remote Sensing: **O Batelaan**, B Verbeeiren, L Q Hung

1525h  **H33H-08 POSTER** From leaf to basin: evaluating the impacts of introduced plant species on evapotranspiration fluxes from riparian ecosystems in the southwestern U.S: **K R Hultine**, S Bush, P L Nagler, K morino, K Burche, P E Dennison, E P Glenn, J Ehleringer

**H33I Moscone West: 3020 Wednesday 1340h Groundwater Inputs to Rivers, Lakes, and Oceans II (joint with NH, NS, OS)**

**Presiding:** Y A Kontar, University of Illinois at Urbana-Champaign; **W P Anderson**, Appalachian State University

1340h  **H33I-01 POSTER** Groundwater contaminants in the deep benthic zone of urban streams in Canada (*Invited*): **J W Roy**, G Bickerton

1355h  **H33I-02 POSTER** Urbanization Effects on Low-Order Riparian Groundwater in the Coastal Plain of North Carolina (*Invited*): **M A O’Driscoll**, J DeLoatch, M Brinson

1410h  **H33I-03 POSTER** Heat and geochemical tracing of contaminated groundwater discharge to streams at various spatial and temporal scales (*Invited*): **L K Lautz**, M Briggs, R E Ribaudo
Detection and characterization of local to regional groundwater inputs to rivers, lakes and oceans with electrical imaging (Invited): M B Cardenas, K M Befus, M Markowski, J Ong, P B Zamora, F P Siringan, V A Zaslavsky

Exchange processes across sandy beach barriers: Examples from Malibu and Younger Lagoons, California: P W Swarzenski, N T Dimova, J A Izbicki

NITRATE DISCHARGE TO COASTAL WATERS IN RESPONSE TO VARIABLE-DENSITY GROUNDWATER FLOW: D Murgulet, G R Tick

Investigation of Carbon, Nutrients, and Groundwater Inputs in Coastal Florida Using Colored Dissolved Organic Matter: A R Arellano, P G Coble, R N Conny, Title of Team: Marine Spectrochemistry Group

Application of multivariate statistics and ionic ratio to evaluate seawater and freshwater interaction in small coral island aquifer: P Banerjee, V S Singh, Title of Team: Yes

Moscone West: 3014  Wednesday 1340h Groundwater/Surface Water Interactions: Dynamics and Patterns Across Spatial and Temporal Scales IV

Presiding: C E Hatch, University of Nevada Reno; J H Fleckenstein, Helmholtz Center for Environmental Research (UFZ); J D Gomez, New Mexico Tech; D F Boutt, Univ of Massachusetts; S Ge, University of Colorado


WITHDRAWN

Quantifying hyporheic zones formed by large woody debris: Synthesis of numerical, laboratory flume, and field experiments: A H Sawyer, M B Cardenas, J L Bulte

From pore-scale flow measurements towards a Computational Fluid Dynamics prediction of momentum exchange across river bed interface: G Sambrok Smith, R J Hardy, J Best, G Blois, J Lead

Diel Discharge Cycles as Indicators of Evapotranspiration Rates, with Implications for Groundwater Dynamics: D D Cadol, S K Kampf, E E Wohl

Heat Transport upon River-Water Infiltration investigated by Fiber-Optic High-Resolution Temperature Profiling: T Vogt, M Schirmer, O A Cirpka

Spatial and temporal dynamics of infiltration and hydraulic conductivity during managed aquifer recharge: A J Race, A T Fisher, C M Schmidt, B S Lockwood, M Los Huertos

Dynamics of groundwater-surface water interactions in urban streams: A Musolff, C Schmidt, J H Fleckenstein

Moscone West: 3016  Wednesday 1340h Remote Sensing of Hydrology and Its Applications III (joint with G)

Presiding: M H Cosh, USDA-ARS-HRSL; D Ryu, The University of Melbourne; A K Sahoo, Center for Research on Environment and Water; J D Bolten, NASA GSFC

Hydrologic Science and Satellite Measurements of Surface Water (Invited): D E Alsadler, N M Mognard, D P Lettenmaier


Hydrogeomorphic Flood Classification and Hydrodynamic Modeling of the Congo Interfluvial Wetlands: H Jung, D E Alsadler, H Lee, M Trig, T Fewtrell


Use of Airborne LiDAR and Satellite Remote Sensing Data to Parameterize Surface Roughness for Hydrodynamic Modeling: S C Medeiros, J J Angelo, S C Hagen, J Weishampel

Backscattering Enhanced Microwave Canopy Scattering Model Based On MIMICS: X Shen, Y Hong, Q Qin, S Chen, T Grout

Developing fracture density models using terrestrial laser scan data: R Pollyea, J P Fairley, R K Podgorny, T L McLing

Remote sensing analysis of foliar water and nutrient content in subtropical wetland tree islands: X Wang, D O Fuller, L O Sternberg, F R Miralles-Wilhelm

Moscone South: Poster Hall  Wednesday 1340h GScience II Posters (joint with H, ED)

Presiding: P A Fox, Rensselaer Polytechnic Inst.; B D Branch, Elizabeth City State University


POSTER A national environmental monitoring system to support the Moroccan sustainable development strategy: A Mourhir, T Rachidi

POSTER Building a GIS database in the Eastern Tennessee Seismic Zone: M O Akinpelu, G Vlahovic, P Arroucau, R Malhotra, C A Powell

POSTER Development of GIS Database for New Madrid Seismic Zone: Y T Birhanemeskel, G Vlahovic, P Arroucau, R Malhotra, C A Powell

POSTER Spatiotemporal analysis of Quaternary normal faults in the Northern Rocky Mountains, USA: A Davarpanah, H A Babaie, P Reed

POSTER EVALUATION OF THE 3D URBAN MODELLING CAPABILITIES IN GEOGRAPHICAL INFORMATION SYSTEMS: A O Dogru, D Z Seker

POSTER Adapting JMARS for Earth: Blogging brings a new user community from the CAP LTER urban ecology research project: J Webber, L C Prashad, S Dickenshied, A Guha, E Burgess, G Metson, P R Christensen

POSTER Adapting the CUAHSI Hydrologic Information System to OGC standards: D W Valentine, T Whitenack, I Zaslavsky

Adapting Artificial Neural Networks (ANNs) for the evaluation of gold potential in the Zaamar, Mongolia, using GIS: J Choi, L Moung Jin, J Won, N C Woo, C Shim

Using Python Scripting and Web Frameworks to Access Spatial and Temporal Data via KML: T A Erickson, B W Koziol

AGU 2010 Fall Meeting 307

All information is current as of November 12, 2010

2010 Fall Meeting
IN33B Moscone South: Poster Hall  Wednesday  1340h
Photography as Data: Applications to the Earth Sciences
Posters (joint with A, OS, NH, PA, ED, V, C, EP, P, B)

Presiding: E Welty, University of Colorado; Y Ahn, The Ohio State University

1340h  IN33B-1303 POSTER Collecting field data from Mars Exploration Rover Spirit and Opportunity Images: Development of 3-D Visualization and Data-Mining Software: M C Eppe, A Willis, B Zhou
1340h  IN33B-1304 POSTER Enhancing Natural Hazards Data with Photographs: H L McCullough, J D Varner, R J Redmon
1340h  IN33B-1305 POSTER Determining the rheology of active lava flows from photogrammetric image sequence processing: M R James, S Robson, H Pinkerton

1340h  IN33B-1306 POSTER Unravelling complex processes during effusive volcanic eruptions using high resolution time-lapse imagery: H Pinkerton, M R James, L J Applegarth

1340h  IN33B-1307 POSTER Collecting Inexpensive High Resolution Aerial and Stereo Images of Small- to Mid-Scale Geomorphic and Tectonic Features: R J Wheelwright, W S White, J B Willis

1340h  IN33B-1308 POSTER Monitoring surface geothermal features using time series of aerial and ground-based photographs: C Bromley, S M van Manen, D Graham

1340h  IN33B-1309 POSTER Oblique Time-lapse Photography in the Study of Oceanic Stratified Flows. (Invited): R A Pawlowicz

1340h  IN33B-1310 POSTER Change Detection using 75-year Aerial Photo and Satellite Data Sets, Inexpensive Means to Obtain 6 cm Resolution Data, and Developing Opportunities for Community-oriented Remote Sensing through Photography: A Rango, A Laliberte, C Winters, C M Steele, D M Browning

1340h  IN33B-1311 POSTER Of Images, Archives, and Anonymity: Glacier Photographs from Louise Arner Boyd’s East Greenland Expeditions, 1933, 1937, and 1938: F E Nelson, S M Peschel, D K Hall


1340h  IN33B-1313 POSTER Time-lapse photography yields new insights into Greenland outlet glacier dynamics (Invited): G S Hamilton, K M Schild, L A Stearns, J de Juan, P Elosegui, M Nettles

1340h  IN33B-1314 POSTER Something for Everyone: Quantifying Evolving (Glacial) Landscapes with Your Camera: E Welty, W T Pfeffer, Y Ahn

IN33C Moscone South: 302  Wednesday  1340h
Current Capabilities and Future Needs of Near-Real-Time Data: Perspectives From Users and Producers II (joint with A, B, C, NH, OS)

Presiding: K J Murphy, NASA/GSFC; H M Goodman, NASA Marshall Space Flight Ctr; J T Morisette, USGS

1340h  IN33C-01 Real-Time data for Societal Benefits (Invited): P Coronado

1355h  IN33C-02 The Generation of Near-Real Time Data Products for MODIS: M Teague, J E Schmalzl, S Ilavajhala, G Ye, E Masuoka, K J Murphy, K Michael

1410h  IN33C-03 Monitoring Albedo and Vegetation Phenology with the MODIS Daily Direct Broadcast Reflectance Anisotropy Algorithm: C Schaaf, Y Shuai, Z Wang, A H Strahler, X Zhang, D P Roy, R E Wolfe, K Strabala, L Gumley

1425h  IN33C-04 The Group for High Resolution SST: Perspectives from Users and Producers on a Globally-Distributed Near-Real Time Data Production and Distribution System (Invited): K S Casey, E M Armstrong

1440h  IN33C-05 Near-real Time Monitoring of Global Biomass Burning Emissions from Multiple Geostationary Instruments: X Zhang, S Kondragunta, J Ram, C C Schmidt

1455h  IN33C-06 Volcanic eruptions, hazardous ash clouds and visualization tools for accessing real-time infrared remote sensing data: P Webley, J Dehn, K G Dean, S MacFarlane

1510h  IN33C-07 Real-Time Data Use for Operational Space Weather Products: S Quigley, T E Nobis


Nonlinear Geophysics

NG33A Moscone South: 308  Wednesday  1340h
Scaling Functions and Forecasting Extremes in Natural Hazards, Meteorology, and Space Physics I (joint with NH, S)

Presiding: C C Barton, Wright State Univ; A Bund, Univ. of Giessen; S Lennartz, Univ. of Giessen; S F Tebbens, Wright State University

1340h  NG33A-01 A Composite Model for the Simulation of Seismicity (Invited): D L Turcotte, M B Yikilmaz, J B Rundle, E Heien, L H Kellogg

1355h  NG33A-02 Stationary Evaluation in a Multifractal Generator for Hydrometeorological Events in Mexico City (Invited): A A Carsteanu

1410h  NG33A-03 Universal Scaling Features in Precipitation and River Flows: A Bund, M Bogachev, S Lennartz

1425h  NG33A-04 Power Law and Scaling in the Energy of Tropical Cyclones (Invited): A Corral, A Osso, J L Lebot

1440h  NG33A-05 Forecasting Shoreline Position: A Method Based on Nonlinear Shoreline Dynamics: C C Barton, S F Tebbens

NG33B Moscone South: 308  Wednesday  1455h
Multiplicity of Scales, Dynamics, and Extremes in Geophysics: Theory, Validation, and Applications I (joint with NH, S)

Presiding: V G Kossoykov, Intl Inst Earthquake Prediction Theory & Math Geoph, RAS; D P Ozounov, NASA/GSFC; M Parrot, LPC2E/CNRS; J G Liu, National Central University; I G Main, University of Edinburgh

1455h  NG33B-01 Multiplicative Cascade Processes and Asymmetry of Multifractal Singularity Spectra (Invited): Q Cheng

1510h  NG33B-02 Multiple-Time Scaling and deviation from universality of the Earthquake Interevent Time Distribution: E Lippiello, C Godano, L de Arcangelis, M Bottriglieri

1525h  NG33B-03 Extreme events in total ozone on global scale: F Holawe, H E Rieder, L Frossard, M Ribate, S Di Rocco, J A Maeder, J Staehelin, T Peter, A C Davison, P Weihs

All information is current as of November 12, 2010
Natural Hazards


Presiding: S C Perry, U.S. Geological Survey; T Owen, NOAA/NCDAC

1340h NH33A-1361 POSTER Utilizing climate research to inform the insurance industry: Can we use dynamically simulated storms for risk assessment?: J Strachan, P Vidale, K Hodges, R Vitolo, D B Stephenson

1340h NH33A-1362 POSTER The Role of Federal Government for Climate Adaptation in the Urban Context: Results of a workshop (Invited): J Buizer, N Chhetri, M Roy

1340h NH33A-1363 POSTER Information Needs While A Disaster Is Occurring: S C Perry

1340h NH33A-1364 POSTER Disseminating Landslide Hazard Information for California Local Government: C J Will

1340h NH33A-1365 POSTER The Determining and Communicating the Role of Urban Fuels in Structure Loss During Large California Fire Events: C J Fotheringham, J E Keeley, T J Brennan

1340h NH33A-1366 POSTER Moving beyond traditional fire management practices to better minimize community vulnerability to wildfire in southern California: A D Syphard, J E Keeley, R M Allen, H Brown, D Given, E S Cochran

1340h NH33A-1368 POSTER CISN ShakeAlert: Progress Toward Using Early Warnings for Earthquakes in California: M Hellweg, R M Allen, H Brown, D S Neuhauser, O Khainovsky, Title of Team: CISN Earthquake Early Warning Team

1340h NH33A-1369 POSTER CISN ShakeAlert: Development of a Prototype User Display for Providing Earthquake Alerts to End Users: M Böse, K Solanki, R M Allen, H Brown, G B Cua, D Given, E Hauksson, T H Heaton, Title of Team: The CISN Earthquake Early Warning Project Team

1340h NH33A-1370 POSTER CISN ShakeAlert: The Decision Module for Earthquake Alerts: D S Neuhauser, O Khainovsky, M Böse, K Solanki, G B Cua, T H Heaton, R M Allen, Title of Team: CISN Earthquake Early Warning Team

1340h NH33A-1371 POSTER CISN ShakeAlert: Faster Warning Information Through Multiple Threshold Event Detection in the Virtual Seismologist (VS) Early Warning Algorithm: G B Cua, M Fischer, M Caprio, T H Heaton, Title of Team: The CISN Earthquake Early Warning Project Team

1340h NH33A-1372 POSTER CISN Earthquake Early Warnings: ShakeAlert Hybrid Branch: H Brown, I Lim, R M Allen, M Böse, G B Cua, T H Heaton, Title of Team: The CISN Earthquake Early Warning Project Team

1340h NH33A-1373 POSTER Earthquake Early Warning: Tools for System Assessment: I Lim, R M Allen, H Brown, M Hellweg, D S Neuhauser, O Khainovsky

1340h NH33A-1374 POSTER Assessing Lay Understanding of Common Presentations of Earthquake Hazard Information: K J Thompson, D H Krantz

1340h NH33A-1375 POSTER Transient Aseismic Slip in the Cascadia Subduction Zone: From Monitoring to Useful Real-time Hazards Information: E A Roeloffs, N M Beeler

1340h NH33A-1376 POSTER USGS Multi-hazard Demonstration Project tsunami scenario: Selecting a scientifically defensible Aleutian megathrust earthquake source: H F Ryan, R J Blakely, S H Kirby, D W Scholl, R von Huene

1340h NH33A-1377 POSTER Geographic Variation in Tsunami Warning Center Response Time: Identifying Areas of Greatest Concern: N C Becker, V Sardinha, R K Cessaro, G J Fryer, S Weinstein

1340h NH33A-1378 POSTER Improving tsunami warning with a rapid linear model: G J Fryer, N D Holschuh, D Wang, N C Becker

1340h NH33A-1379 POSTER Public Perceptions of Tsunamis and the NOAA TsunamiReady Program in Los Angeles: A Rosati

NH33B Moscone West: 3010  Wednesday 1340h Wildfires on Landscapes: Theory, Models, and Management I (joint with GC, PA) 

Presiding: D McKenzie, US Forest Service; P F Hessburg, USDA-Forest Service; R E Keane, USDA Forest Service Rocky Mountain Research Station

1340h NH33B-01 Scaling laws and dominant controls of low-severity fire regimes: M C Kennedy, D McKenzie

1355h NH33B-02 A forest-fire model with natural fire resistance: M R Yoder, D L Turcotte, J B Rundle, M T Glasscoe, A Donnellan

1410h NH33B-03 Fire, Land Use and Climate Change in Central Mongolia: A E Hessl, P M Brown, B Nachin, R S Maxwell, N Pederson

1425h NH33B-04 Bottom-up factors influential on fire regime in northeastern Mexico: L Yocom, P Z Fule, D A Falk, E Cornejo-Oviedo

1440h NH33B-05 Future climate and wildfire: ecosystem projections of area burned in the western US: J S Littell, P Duffy, D S Battisti, D McKenzie, D L Peterson

1455h NH33B-06 Understanding the role of wildland fire, insects, and disease in predicting climate change effects on whitebark pine: Simulating vegetation, disturbance, and climate dynamics in a northern Rocky Mountain landscape: R E Keane, R Loehman

1510h NH33B-07 The Effects of Climate-Driven Changes in Fire Regimes on Carbon Dynamics of Forests Ecosystems: C L Raymond, D McKenzie

1525h NH33B-08 Fire, Vegetation, Climate Interactions in the Greater Yellowstone Ecosystem: Tipping Points and Landscape Vulnerability: E A Smithwick, A L Westerling, M G Turner, W H Romme, M G Ryan

Near Surface Geophysics


Presiding: L D Slater, Rutgers-Newark; E A Atekwana, Oklahoma State University


1400h NS33A-02 Evidence for Hydrothermal Vents as “Bisoeobatteries” (Invited): M E Nielsen, P R Girguis

1420h NS33A-03 In situ imaging of biofilm within opaque porous media (Invited): G Itis, Y Davit, B D Wood, D Wildenschild
Ocean Sciences

**OS33A Moscone South: Poster Hall Wednesday 1340h**

**“Organic Geotracers”: Toward an Understanding of the Distribution of Organic Matter in the Oceans II Posters** (joint with B)

*Presiding: T I Eglinton,* Woods Hole Oceanographic Institution; E B Kujawinski, WHOI; C A Carlson, University of California Santa Barbara

1340h **OS33A-1463 POSTER** Radiocarbon Signature and Cycling of Dissolved Organic Carbon in the South Pacific: *E R Druffel,* S Griffin


1340h **OS33A-1466 POSTER** Spatial variability in the abundance and composition of organic matter in surficial sediments of the East China Sea: *Y Wu,* T I Eglinton, Y L Yang, B Deng, D Montluçon, J Zhang

1340h **OS33A-1467 POSTER** LIPID BIOMARKERS IN PARTICULATES FROM THE SOUTH CHINA SEA: PRODUCTIVITY AND COMMUNITY STRUCTURE INDICATORS: *M Zhao,* Y Li, L Ding, M Dai, H Zhang, H Yang

1340h **OS33A-1468 POSTER** Multiyear Survey of the Distribution and Fate of Biomarkers in the Atlantic Arctic Ocean: *S Fiertz,* A Rosell Mele, G Rueda, A Martinez Garcia, B Hambach, N Viladrich, A Barrera Sansón, S Rossi, P Ziveri

1340h **OS33A-1469 POSTER** Black Carbon in Sedimentary Organic Carbon in the Northeast Pacific using the Benzene Polycarboxylic Acid Method: *A I Coppola,* L A Ziolkowski, E R Druffel

1340h **OS33A-1470 POSTER** Inorganics in Organics: Tracking down the Intrinsic Equilibriums between Organic Molecules and Trace Elements in Oceanic Waters: *O J Lechtenfeld,* B P Koch, G Kattner

**OS33B Moscone South: Poster Hall Wednesday 1340h**

**Lessons Learned From the Deepwater Horizon Oil Spill: Biological and Chemical Oceanography III Posters** (joint with B, PA)

*Presiding: R C Highsmith,* University of Mississippi; S B Joye, University of Georgia

1340h **OS33B-1471 POSTER** Optical Characterization of Crude Oils and Dispersant Used in the Northern Gulf of Mexico by Fluorescence EEM Techniques: *L Guo,* Z Zhuo, A M Shiller, S E Lohnrenz

1340h **OS33B-1472 POSTER** On the Use of Excitation-Emission Matrix Spectroscopy (EEMs) to Detect Dissolved/Dispersed Oil in the Nearshore and Offshore Waters of the Louisiana Coast: *E J D’Sa,* E Overton, A M Freeman

1340h **OS33B-1473 POSTER** Mass Spectral Analysis of Water Column Samples from a Single Depth Profile Near the Deepwater Horizon Oil Spill: *A K Boysen,* E Kujawinski

1340h **OS33B-1474 POSTER** Biodegradation of Deep-Sea Oil Spill at the Gulf of Mexico: an Estimate of Half Life Time: *J Vilcaez,* L Li, S S Hubbard, T Hazen

1340h **OS33B-1475 POSTER** Effects of COREXIT EC9500A on bacterial communities influenced by the Deepwater Horizon oil spill: *P A Fulmer,* L J Hamdan

1340h **OS33B-1476 POSTER** Microbial Consumption of Natural Gases Released from the BP Deepwater Horizon Oil Spill: *S D Mendes,* D L Valentine, C Farwell

1340h **OS33B-1477 POSTER** Tracking responses to the 2010 Deepwater Horizon oil spill using trace elements in molluscan shells and tissues: *P D Roopnarine,* L Anderson, D Roopnarine, D P Gillikin, D Goodwin

**OS33C Moscone South: Poster Hall Wednesday 1340h**

**Lessons Learned From the Deepwater Horizon Oil Spill: Physical Oceanography I Posters** (joint with B, NH, SH, PA)

*Presiding: Y Liu,* University of South Florida; A MacFadyen, NOAA

1340h **OS33C-1478 POSTER** Ocean modelling aspects for drift applications: *L Stephane,* D Pierre, D Pierre

1340h **OS33C-1479 POSTER** Multiscale plume modeling of the Deepwater Horizon oil-well blowout for environmental impact assessment and mitigation: *S A Socolofsky,* M Rezvani

1340h **OS33C-1480 POSTER** Trajectory Forecasts Based on Numerical Ocean Circulation Models and Satellite Observations: A Rapid Response to Deepwater Horizon Oil Spill: *Y Liu,* R H Weisberg, C Hu, L Zheng

1340h **OS33C-1481 POSTER** Mississippi River and sea surface height drive migration of surface oil slick: *F Falcini,* D J Jerolmack

1340h **OS33C-1482 POSTER** Absolute Thermal SST Measurements over the Deepwater Horizon Oil Spill: *W S Good,* R Warden, P F Kaptchen, T Finch, W J Emery

1340h **OS33C-1483 POSTER** Subsurface Trapping of Multiphase Plumes in Stratification: Laboratory Investigations: *B L White,* R Camassa, R McLaughlin

1340h **OS33C-1484 POSTER** OIL SPILL DISASTERS DETECTION AND MONITORING BY RST ANALYSIS OF OPTICAL SATELLITE RADIANCES: THE CASE OF DEEPWATER HORIZON PLATFORM IN THE GULF OF MEXICO: *N Pergola,* S C Grimaldi, I Covello, M Faruolo, T Lacava, V Tramutoli

1340h **OS33C-1485 POSTER** Surface Drift Predictions of the Deepwater Horizon Spill: The Lagrangian Perspective: *H S Huntley,* B L Lipphardt, A D Kirwan, P J Hogan
OS33D Moscone South: Poster Hall  Wednesday  1340h
Ocean Sciences General Contributions: Chemical
Oceanography Posters

Presiding: E A Canuel, Virginia Inst Marine Sciences
1340h OS33D-1487 POSTER A comparison of particulate organic carbon (POC) from in situ and satellite ocean color data off the coast of Antarctica: A Hyde, A Mannino
1340h OS33D-1488 POSTER The spatial and temporal variability of particulate organic carbon in the tropical Pacific: a data-model synthesis study: J Wang, X Wang, D Yuan, T Westberry
1340h OS33D-1489 POSTER Sections of Intact Polar Dicyglycerolipids in the South Atlantic Reflect Dissolved Phosphorus and Nitrogen Distributions: P Martin, C Moore, S Torres-Valdes, G Rocap, R D Pancost, M Hernandez Sanchez, B Van Mooy
1340h OS33D-1490 POSTER Biogeochemistry and lower trophic level trends in Lake Superior: A modeling study: K Matsumoto, B A White
1340h OS33D-1491 POSTER Distribution and Characterizations of Short-chain Organic Acids in the Seawater of the Jiaozhou Bay, China: H Ding, Z Liu, M Wu, B He, G Yang
1340h OS33D-1492 POSTER How big is the Ocean Dead Zone off the Coast of California?: A F Hofmann, E T Peltzer, P M Walz, P G Brewer
1340h OS33D-1493 POSTER Continuous measurements of dissolved oxygen isotopes in the California coastal ocean: L E Rafelski, R F Keeling, B Paplawsky, A C Cox
1340h OS33D-1494 POSTER Overestimation of O2 in Natural Water in Winkler’s method: H2O2 Effect and Oceanographic Implications: G T Wong
1340h OS33D-1495 POSTER Brominated VSLSs in and over the East Pacific During the Halocarbon Air-Sea Transect – Pacific Cruise (HalocAST-P): Y Liu, S A Yvon-Lewis, L Hu, R W Smith, L Shen, T S Bianchi, L Campbell
1340h OS33D-1496 POSTER Quality Control and Application of Oxygen Data from Profiling Floats: Y Takeshita, T R Martz, K S Johnson, J Plant, S Riser, D Gilbert
1340h OS33D-1497 POSTER Co-Precipitation of Double Carbonates of Yttrium and the Rare Earth Elements, Na2M2(CO3)3, from Seawater-Like Electrolyte Solutions: J Schijff, R H Byrne
1340h OS33D-1498 POSTER Isotopic Composition of Cadmium across the Subtropical Convergence in the Southern Ocean: M Gautel-Ringold, C H Stirling, R Frew, K A Hunter
1340h OS33D-1499 POSTER High sensitivity measurement of osmium based on UV Induced Advanced Oxidation Process by ICP-TOF-MS: Z Zhu
1340h OS33D-1500 POSTER Distribution and isotopic signature of Thorium and REE-bearing phases in marine particles and sediments: S Marchandise, M Roy-Barman, S Ayraut, C C Colin
1340h OS33D-1501 POSTER Iodine-129 time series records from the Pacific Ocean as recorded in modern corals: C Chang, G S Burr, A T Jull, D L Biddulph
1340h OS33D-1502 POSTER Tracing Cd, Zn and Pb pollution sources in bivalves using isotopes: A E Shiel, D A Weis, K J Orians
1340h OS33D-1503 POSTER Dissolved and Colloidal Trace Elements in the Mississippi River Delta Outflow after Hurricanes Katrina and Rita: M Shim, P W Swarzszczi, A M Shiller
1340h OS33D-1504 WITHDRAWN
1340h OS33D-1505 POSTER Dissolved Trace metal distribution in the water column of the shelf sea of the northern South China Sea: C Chien, R Chen, T Ho
1340h OS33D-1506 WITHDRAWN
1340h OS33D-1507 POSTER Cadmium and barium distributions in Baffin Bay and Nares Strait summer 2003: D J Janssen, J Lee, E A Boyle, P Yeats, K K Falkner
1340h OS33D-1508 POSTER Stability of the Cadmium Complex with the Bacterial Trihydroxamate Siderophore Desferrioxamine B at Seawater Ionic Strength: E A Christenson, J Schijff

OS33E Moscone South: Poster Hall  Wednesday  1340h
Trace Metals in Sulfidic Environments Posters (joint with B, V)

Presiding: A Chappaz, Univ. of California Riverside; T W Lyons, University of California Riverside; B Kendall, Arizona State University
1340h OS33E-1509 POSTER An examination of the factors controlling mercury methylation in sulfidic coastal marine sediments: R P Mason, T A Hollweg, A Schartup, C C Gilmour
1340h OS33E-1510 POSTER Tracking Zn bioavailability through time: New insights from sulfidic black shales: N Planavsky, C Scott, B C Gill, A Bekker, T W Lyons
1340h OS33E-1511 POSTER Mo enrichment in black shale and reduction of molybdate by sulfate-reducing bacteria (SRB) (Invited): H Xu, L L Barton
1340h OS33E-1512 POSTER General Model of Mo Scavenging in Euxinic Waters Based on Seasonal Observations in Rogoznica Lake: G B Helz, N Mikac, E Bura-Nakic, I Ciglenecki
1340h OS33E-1513 POSTER Molybdenum Isotope Constraints on the Extent of Late Paleoproterozoic Ocean Euxinia: B Kendall, G W Gordon, S Poulton, A D Anbar

OS33F Moscone West: 3007  Wednesday  1340h

Presiding: R Pedersen, University of Bergen; D S Kelley, University of Washington; T M Shank, Woods Hole Oceanographic Institution
1340h OS33F-01 Generation of Volatiles at Erupting Arc Volcanoes: NW Rota (Marianas) and NE Mata (NE Lau) (Invited): M D Lilley, E J Olson, J E Lupton, D A Butterfield
1355h OS33F-02 Loki’s Castle: Discovery and geology of a black smoker vent field at the Arctic Mid-Ocean Ridge: R Pedersen, I H Thorseth, M D Lilley, F J Barriga, G Früh-Green, K Nakamura
1410h OS33F-03 Investigations of a novel fauna from hydrothermal vents along the Arctic Mid-Ocean Ridge (AMOR) (Invited): H Rapp, C Schander, K M Halanych, L A Levin, A Sweetman, J Tverberg, S Hoem, I Steen, I H Thorseth, R Pedersen
1440h OS33F-05 Hydrothermal Vents at 5000m on the Mid-Cayman Rise: The Deepest and Hottest Hydrothermal Systems Yet Discovered!: B J Murton, D P Connolly, J T Copley, K L Stansfield, P A Tyler, Title of Team: Cruise JC044 Scientific Party

All information is current as of November 12, 2010
1455h  **OS33F-06** Macrofaunal communities at newly discovered hydrothermal fields in Central Indian Ridge: J Miyazaki, K Takai, K Nakamura, H Watanabe, T Noguchi, T Matsuzaki, T Watsui, S Nemoto, S Kawagucci, T Shibuya, K Okamura, M Mochizuki, Y Orihashi, D Marie, M Koonjul, M Singh, G Beedessee, M Bhikajee, K Tamaki

1510h  **OS33F-07** Two hydrothermal active vents were found at 13.2°S and 14°S of South Mid-Atlantic Ridge: C Tao, H Li, Y Yang, J Ni, R Cui, Y J Chen, J Li, Y He, W Huang, Y Gai, Y Wang, Y Su, Z Cheng, Y Lu, Z Wu, J Ri, R Zhang, L He, S Chen, D Zhang, J Lei, Y Wang, Title of Team: DY115-21 Leg 4 Scientific Party

1525h  **OS33F-08** Diffuse versus discrete venting at the Tour Eiffel vent site, Lucky Strike hydrothermal field: E L Mittelstaedt, J Escartin, N Gracias, J L Olive, T Barreyre, A B Davaille, M Cannat

---

**OS33G Moscone West: 3009**  **Wednesday 1340h**  **Estuarine Sediment Dynamics and Fate of Particles, Contaminants, and Carbon at the Land-Ocean Interface II** (joint with H, EP)

**Presiding:** J Zhu, Univ. of Massachusetts Boston; C M Palinkas, University Maryland of Center for Environmental Science

1340h  **OS33G-01** Spatial variation of sediment deposition in the Hudson River – a detailed inventory and potential causes (Invited): F O Nitsche, T C Kenna

1355h  **OS33G-02** Sediment Dynamics and Fate of Heavy Metals, Carbon, and Inorganic Matter in the Hudson Estuary, New York: S Sritrairat, T C Kenna, D M Peteet, K Nguyen, M Perez, Z Huang, A Miller

1410h  **OS33G-03** Strata Development and Morphologic Evolution of the Waipaoa River Margin: Insights from Sedimentological, Radiochemical and Geophysical Data: D R Corbett, J P Walsh, A R Orpin, J Kiker

1425h  **OS33G-04** Trace Element Signatures of Particles in the Fraser River Estuary: A M Snauffer, O Menard, B Kieffer, R H Francois, D A Weis, Title of Team: PCIGR

1440h  **OS33G-05** A characterization of the lability of particulate organic matter in the lower Mississippi-Atchafalaya River System: An application of a programmed temperature pyrolysis/combustion system: K M Roe, B E Rosenberg, B J Roberts, A S Kolker, M A Allison

1455h  **OS33G-06** Wave variance on sediment transport in the Yellow River mouth: H Zong, P Ding, F Shi

1510h  **OS33G-07** A numerical investigation of the dynamics of hyperpycnal river plume on a sloping continental shelf: S Chen, W R Geyer, T Hsu

1525h  **OS33G-08** SANDS - Sediment Analysis Network for Decision Support: D M Hardin, L Hawkins, M He, S Ebersole

---

**Planetary Sciences**

**P33A Moscone South: Poster Hall**  **Wednesday 1340h**  **Eyes on Enceladus II Posters (joint with B)**

**Presiding:** C McKay, Ames Research Center; C Porco, CICLOPS/SSI; C McKay, Ames Research Center; C Porco, CICLOPS/SSI

1340h  **P33A-1557** POSTER The Relationship Between Fracture Sets and the South-Polar Terrain Dichotomy on Enceladus: D A Patthoff, S A Kattenhorn

1340h  **P33A-1558** POSTER Spectrophotometric Modeling of Enceladus Surface Properties and Composition from Vims Data: M Ciarniello, F Capaccioni, G Filacchione, R N Clark, D P Cruikshank, P Cerroni, A Coradini, R H Brown, J B Buratti, F Tosi, K Stephann

1340h  **P33A-1559** POSTER Morphology of Enceladus’s craters by photometric studies with ISS/Cassini: K Degiorgio, S Rodriguez, C C Ferrari, A Brahic

1340h  **P33A-1560** POSTER Ice Chemistry and Sea Floor Dynamics on the Earth: Possibilities for a Comparative Planetology Study of Enceladus: C C Walker, M W Liemohn, C D Parkinson

1340h  **P33A-1561** POSTER ON LOW ENERGY ELECTRON SPIKES ASSOCIATED WITH SATURN’S MOON ENCELADUS: S J Kanani, G H Jones, G R Lewis, D T Young, C S Arridge, A J Coates, A N Fazakerley

1340h  **P33A-1562** POSTER Enceladus Dust Production - New Insights from Cassini: S Kempf, J Schmidt, R Srama, F Postberg, F Spahn, M Horanyi

1340h  **P33A-1563** POSTER Chemical Disequilibria and Sources of Gibbs Free Energy Inside Enceladus: M Y Zolotov

1340h  **P33A-1564** POSTER Neutral H2O density and the jet features in the Enceladus plume: Y Dong, T W Hill, B D Teolis

1340h  **P33A-1565** POSTER Composition profile of the Enceladian ice plume from in situ measurements: J Schmidt, F Postberg, S Kempf, J Hillier, R Srama

1340h  **P33A-1566** POSTER The mass-transporting from Enceladus’ plume: H Wei, C T Russell, M Cowee, J S Leisner, Y Jia, M K Dougherty

1340h  **P33A-1567** POSTER Ion Composition Measurements in the Enceladus Plumes: R Goldstein, D C Boice, H T Smith, F J Crary, D T Young

1340h  **P33A-1568** POSTER The Nature of the Enceladus Plasma Cloud From the Cassini Plume Radio Occultation: A J Kliore, A F Nagy, E A Marouf

1340h  **P33A-1569** POSTER Suprathermal Minor Heavy Ions In Saturn’s Magnetosphere: S P Christon, R D DiFabio, D C Hamilton, S M Krimigis, D G Mitchell

1340h  **P33A-1570** POSTER JET: a Journey to Enceladus and Titan: C Cotin, K Allwegg, R H Brown, K Hand, J M Soderblom, P Tortora

---

**P33B Moscone South: Poster Hall**  **Wednesday 1340h**  **Icy Ocean Worlds II Posters (joint with OS, C)**

**Presiding:** S Vance, Jet Propulsion Laboratory / Caltech

1340h  **P33B-1571** POSTER To determine ice layer thickness of Europa by high energy neutrino: D Shoji, K Kurita, H K Tanaka

1340h  **P33B-1572** POSTER CUMULATIVE OCEAN VOLUME ESTIMATES OF THE SOLAR SYSTEM: S J Mojsis

1340h  **P33B-1573** POSTER Putting the Biology Back in Astrobiology: Defining Key Habitat Parameters with EJSM: J S Bowman, B E Schmidt

1340h  **P33B-1574** POSTER Tidal Response of Europa’s Subsurface Ocean: O Karatekin, R Comben, E Deleersnijder, V M Dehant

1340h  **P33B-1575** POSTER Comparison of numerical and analytical models of obliquity-driven flows in icy satellite oceans: E M Chen, G A Glazmaier, F Nimmo

1340h  **P33B-1576** POSTER Shell tectonics: A mechanical model for strike-slip displacement on Europa: A Rhoden, G Wurman, M Manga, T A Hurford

1340h  **P33B-1577** POSTER Origin of Europa’s Ridges by Incremental Ice-Wedging: L Han, H J Melosh
1340h  P33B-1578 POSTER Tidally driven Coulomb failure of faults on Enceladus and Europa: J G Olgin, B R Smith-Kontor, R T Pappalardo, Title of Team: icy Moons Tectonics team

P33C Moscone South: Poster Hall Wednesday 1340h Missions and Instruments Posters

Presiding: S Hosseini, University of California; A J Shu, University of Colorado, Boulder

1340h  P33C-1579 POSTER Dust Telescopes and Active Dust Collectors: Linking Dust to Their Sources: K J Drake, Z Sterrnovsky, E Gruen, R Srama, S Auer, M Horanyi, S Kempf, H Krueger, F Postberg

1340h  P33C-1580 POSTER The Electrostatic Lunar Dust Analyzer (ELDA) for the detection and trajectory measurement of slow dust particles: J Xie, N A Duncan, Z Sterrnovsky, E Gruen, S Auer, M Horanyi, K Drake

1340h  P33C-1581 POSTER The Dust Accelerator Facility at CCLDAS: A J Shu, A Collette, K Drake, E Gruen, M Horanyi, S LeBlanc, T Munsat, P Northway, S H Robertson, R Srama, Z Sterrnovsky, E Thomas, M Wagner, Title of Team: Colorado Center for Lunar Dust and Atmospheric Studies

1340h  P33C-1582 POSTER Development of tunable spatial heterodyne spectroscopy (TSHS) for interferometry of extended targets: S Hosseini, W Harris

1340h  P33C-1583 POSTER Multivariate Methods for Predicting Geologic Sample Composition with Laser-Induced Breakdown Spectroscopy: R B Anderson, R V Morris, S M Clegg, J F Bell

1340h  P33C-1584 POSTER New generation of micro-scale sample-processing instruments for future exploration of Mars andNear Earth Objects (NEO): X Amashukeli, G Chattopadhyay, A Fisher, J Frank, R Lin, A Peralta, P Siegel

1340h  P33C-1585 POSTER The DSSL Langmuir Probe experiment on-board Proba 2: first in-flight operations and future outlook: R Pavelka, P M Travnicke, S Severak, D Hercik, P Hellinger, J Lebreton, K Zdenek, J Brinek

P33D Moscone South: 306 Wednesday 1340h Planetary Rings: Theory and Observation II

Presiding: L W Esposito, J L Spilker, JPL

1340h  P33D-01 The changing orbits of “propeller” moons in Saturn’s rings (Invited): M S Tiscareno

1355h  P33D-02 Theoretical Evidence for Free Unstable Modes and Massive Bodies in Saturn’s Outer B Ring (Invited) J N Spittle, C Porco

1410h  P33D-03 Evidence of Accretion in Saturn’s F Ring (Invited): C B Agnor, K Buerle, C D Murray, M W Evans, N J Cooper, G W Williams

1425h  P33D-04 Albedo, thermal inertia and rotation of ring particles (Invited): R Morishima, J L Spilker, K Ohitsuki, Title of Team: The Cassini CIRS ring team

P33E Moscone South: 306 Wednesday 1440h Planetary Radar Investigations: Observations, Theory, Lab Measurements, Field Analogues, and Future Opportunities II (joint with C, NS)

Presiding: S M Clifford, LPI/USRA; V Ciarletti, LATMOS; E Heggy, Jet Propulsion Laboratory

1440h  P33E-01 Radargrammetry on three planets: Mapping the Solar System’s hidden corners: R L Kirk, E Howington-Kraus

1455h  P33E-02 Visualization of planetary subsurface radar sounder data in three dimensions using stereoscopy: A Frigeri, C Federico, C Pauselli, M Ercoli, A Coradini, R Orosei

1510h  P33E-03 Global mapping of Titan at 2-cm wavelength: M A Janssen, A A Le Gall, S Chaudhuri


Public Affairs

PA33A Moscone South: Poster Hall Wednesday 1340h Geosciences, Risks, Economics, and Public Interest I Posters (joint with A, GC, H, NH, OS, ED)

Presiding: L Rowan; J Trapani, Bipartisan Policy Center;

M L Zoback, RMS

1340h  PA33A-1594 POSTER Update of the volcanic risk map of Colima volcano, Mexico: C Suarez-Plascencia, F J Nuñez Cornu, B Marquez-Azu


1340h  PA33A-1597 POSTER Tsunami preparedness at the resort facilities along the coast of the Ryukyu Islands – their actions against the 27 February 2010 Okinawan and Chilean tsunami warning: T Matsumoto

1340h  PA33A-1598 POSTER Communicating landslide hazard and risk through global catalogs and a forecasting framework: D B Kirschbaum, D Adler, R F Adler

1340h  PA33A-1599 WITHDRAWN

1340h  PA33A-1600 POSTER Future Oil Spills and Possibilities for Intervention: A Model for the Coupled Human-Environmental Resource Extraction System: C M Shughrue, B Werner, P T Nugnug

1340h  PA33A-1601 POSTER An observational urban heat island study: A primary step in heat event mitigation planning in Detroit, MI: E Oswald, R B Rood, M O’Neill, K Zhang


1340h  PA33A-1603 POSTER Some Good Practices for Integration and Outreach and their Implementation in the Community Integrated Assessment System (CIAS) and its associated web portal CLIMASCOPE: R F Warren, J T Price, S Goswami

1340h  PA33A-1604 POSTER Post-Detonation Nuclear Forensics: What will we do “… when the explosions come …”: A J Fahey

1340h  PA33A-1605 POSTER Volcanic Risk Perception in Five Communities Located near the Chichon Volcano, Northern Chiapas, Mexico: F Rodriguez, D A Novelo-Casanoa

1340h  PA33A-1606 POSTER Precious metal (Pt, Pd and Au) abundances in Fengshan porphyry Cu-Mo deposits of Hubei Province in China: M Wang
Paleoceanography and Palaeoclimatology

**PP33A** Moscone South: Poster Hall  Wednesday 1340h Advances in the Use of Biomarkers I Posters (joint with B, OS)

Presiding: N Dubois, Dalhousie University; S A Macko, Univ Virginia; M Kienast, Dalhousie University

1340h **PP33A-1648** POSTER A High-Resolution Porphyryn Nitrogen Isotope Record of an Oceanic Anoxic Event: A Pearson, M B Higgins, R S Robinson, S J Carter

1340h **PP33A-1649** POSTER Compound-specific nitrogen isotope analysis of amino acids: a possible new tool for reconstruction of paleo-nitrogen sources and cycling: F C Batista, A C Ravelo, M D McCarthy

1340h **PP33A-1650** POSTER The Importance of Zostera marina to a Local Food Web Based on the Analysis of Compound Specific Isotopes in Maquoir Bay, Gulf of Maine: H A Doolittle, B J Johnson, W G Ambrose, W Locke, C M Harris

1340h **PP33A-1651** POSTER Pushing open-ocean environmental proxies to the margin: Narragansett Bay, RI: J M Salacup, T Herbert, W L Prell

1340h **PP33A-1652** POSTER Exploring the provenance of vegetation and environmental signatures encoded in vascular plant biomarkers carried by the Ganges-Brahmaputra rivers: V Galy, T I Eglington, C France-Lanord, S Sylva

1340h **PP33A-1653** POSTER Biomarker evidence for river discharge and vegetation feedbacks as a direct result of monsoon intensity changes in East Asia: D Strong, R Flecker, R D Pancost, P J Valdes, I P Wilkinson, J Rees

1340h **PP33A-1654** POSTER BIOMARKER RECORDS OF PHYTOPLANKTON COMMUNITY STRUCTURE CHANGES IN THE YELLOW SEA AND EAST CHINA SEA DURING THE HOLOCENE: L Xing, R Zhang, H Zhang, Z Yang, X Deng, M Zhao


1340h **PP33A-1656** POSTER Alkenone paleothermometry: New insights from culture studies and eastern tropical Pacific surface sediments: C D Normandeau, G MacIntyre, A Hill, N Dubois, M Kienast


1340h **PP33A-1658** POSTER A lithology effect on the TEX13, palaeotemperature proxy: K Littler, S A Robinson, P R Bown

1340h **PP33A-1659** POSTER Chemostratigraphic Constraints on Late Jurassic Paleoeceanography of the East Texas Basin, Southern Margin of North America: P Mainali, H D Rowe


**PP33B** Moscone South: Poster Hall  Wednesday 1340h Reconstruction and Modeling of Global Climate Evolution of the Past 21,000 Years III Posters

Presiding: Z Liu, University of Wisconsin-Madison; B L Otto-Bleisner, NCAR; P U Clark, Oregon State Univ; P J Bartlein, University of Oregon

1340h **PP33B-1661** POSTER Paleoclimate of the Neoglacial and Roman Warm Period reconstructed from oxygen isotope ratios of limpet shells (Patella vulgata), Northwest Scotland: T Wang, D M Surge, S Mithen

1340h **PP33B-1662** POSTER Late-glacial to Holocene climate variability and drought in the mid-Hudson Valley region of New York state: K M Menking, D M Petet, R Y Anderson

1340h **PP33B-1663** POSTER Reconstruction of ocean circulation from sparse data using the adjoint method: LGM and the present: T Kurahashi-Nakamura, M J Losch, A Paul, S Mulitza, M Schulz

1340h **PP33B-1664** WITHDRAWN

1340h **PP33B-1665** POSTER Abrupt nonlinear shifts in Arctic Climate since the Holocene Thermal Maximum Recorded in Otter Lake, South-Central Alaska: C J Bochicchio, Z Yu

1340h **PP33B-1666** POSTER Isotopic and geochemical signatures of Late Quaternary sediments in the Fram Strait area: J Macalli, C Hillaire-Marcel, J Carignan, L C Reisberg

1340h **PP33B-1667** POSTER Abrupt Climate Change & Paleoenvironmental Changes in western Colorado from 17-9 ka yr BP: C L Whitlock, C Briles, D J Meltzer

1340h **PP33B-1668** POSTER Initial deglaciation of the Laurentide ice sheet based on Gulf of Mexico Sediments: E A Brown, B P Flower, C Williams

1340h **PP33B-1669** POSTER Constraining the vertical movement of OMZ waters in Santa Barbara Basin for the past 15 ky: S Myhre, T M Hill, J Kennett, R J Behl, K Ohkushi

1340h **PP33B-1670** POSTER Abrupt Changes in Seawater Nd Isotopic Composition in the South China Sea since the Last Glacial Maximum: C You, K Huang, C Chung

1340h **PP33B-1671** POSTER Extracting paleo-climate signals from sediment laminae: A new, automated image processing method: S Q Gan, C A Scholz

1340h **PP33B-1672** POSTER The Last Deglaciation of Ireland: J Clark, M McCabe, D Q Bowen, P U Clark

1340h **PP33B-1673** POSTER Sources of Sea-Level Rise and Freshwater Discharge during the Last Deglaciation: P U Clark, A E Carlson

1340h **PP33B-1674** POSTER Late Pleistocene and Holocene hydrological change in central Indonesia from Lake Towuti, Sulawesi: J M Russell, S Bijaksana, N J Wartrus, A J Noren, B Konecky, S A Wicaksono

1340h **PP33B-1675** POSTER Initial Results from a New Lake Elsinore Sediment Core: Revealing Evidence for Hydrologic Change During the Late-Glacial/Holocene Transition: J M Fantozzi, M E Kirby, S Lund, C Hiner

1340h **PP33B-1676** POSTER Sea surface and subsurface temperature changes in the Okhotsk Sea and adjacent North Pacific during the Last Glacial Maximum and deglaciation: N Harada, M Sato, H Seki, A Timmermann, H Moessn, J A Bendle, Y Nakamura, K Kimoto, Y Okazaki, K Nagashima, S A Gorbarenko, A Ijiri, T Nakatsuka, L Menviel, M O Chikamoto, A Abe-Ouchi, S Schouten
1340h PP33B-1677 POSTER A Multi-proxy Approach to Deglacial Paleo-Salinity Reconstructions Based on Gulf of Mexico Sediments: C Williams, B P Flower, D W Hastings, A M Shiller, E A Goddard

1340h PP33B-1678 POSTER The Effects of the 8.2 ka Event on the ITZC in the Tropical Atlantic: M A Burger, A J Wagner, C Morrill, B L Otto-Bliesner

1340h PP33B-1679 POSTER Did the Lake Agassiz flood cause the 8.2 ka event? Evidence from CCSM3 model simulations and paleo-proxy records: A J Wagner, C Morrill, B L Otto-Bliesner, N A Rosenbloom

1340h PP33B-1680 POSTER Resolving the cause of large differences between deglacial benthic foraminifera radiocarbon measurements in Santa Barbara Basin: A L Magana, J R Southon, J Kennett, E Roark, M Sarnthein, L D Stott

1340h PP33B-1681 POSTER Deep ocean carbonate ion and loss of carbon from the deep sea since the last glacial maximum: J Yu, W S Broecker, H Elderfield, Z Jin, J F McManus, F Zhang

1340h PP33B-1682 POSTER Hydrological control of the Atlantic overturning circulation and associated climate changes during the last 21,000 years: R Marsh, J D Stanford, E J Rohling

1340h PP33B-1683 POSTER The natural carbon cycle for the Holocene according to the Uvic ESCM 2.9 : the role of Southern Ocean ventilation: C T Simmons, L A Mysak, D Matthews

1340h PP33B-1684 POSTER Deglacial Subsurface Temperature Change in the Tropical North Atlantic Linked to Atlantic Meridional Overturning Circulation Variability: M W Schmidt, P Chang, B L Otto-Bliesner

1340h PP33B-1685 POSTER Biomarker reconstructions of marine and terrestrial climate signals from marginal marine environments: new results from high-resolution archives: J A Bendle, H Moosren, R Jamieson, S K Das, U Quillmann, A E Jennings, J T Andrews, J Howe, A Cage, W E Austin

1340h PP33B-1686 POSTER Paleoclimatic implications of fossil shoreline deposits in the southern basin and range province during the Pleistocene-Holocene transition: A L Kowler

1340h PP33B-1687 POSTER No evidence for a deglacial intermediate water Δ14C anomaly in the SW Atlantic: R N Sortor, D C Lund

1340h PP33B-1688 POSTER Speleothem δ18O and δ13C records from Fengyu Cave in south Guilin of China: Climate and environmental changes during the past 65 Ka: H Li, M Bar-Matthews, N Wan, Y Dao-xian, H Cheng, A Ayalon, M Zhang

1340h PP33B-1689 POSTER East Asian monsoon evolution and reconciliation of climate records from Japan and Greenland during the last deglaciation: C Shen, A Kano, M Hori, K lin, T Chiu, G S Burr

1340h PP33B-1690 POSTER Modelling the impacts of abrupt AMOC changes on terrestrial methane emissions: P O Hopcroft, P J Valdes, D J Beerling

1340h PP33B-1691 POSTER The role of winter temperatures and polar amplification during peak Interglacial warming: B A Davis, A Mauri, J O Kaplan, S Brewer, K J Gajewski, A E Viatu, H Wu

1340h PP33B-1692 POSTER Dynamic and thermodynamic controls on the hydrological cycle of the Last Glacial Maximum: W R Boos

1340h PP33B-1693 POSTER Centennial scale climate variations since Deglaciation in the southern New England: L Gao, Y Huang, B N Shuman, W Oswald, D Foster

1340h PP33B-1694 POSTER Tree rings and environmental change during deglaciation in the N. American Great Lakes area: S W Leavitt, I P Panyushkina

1340h PP33B-1695 POSTER A Complete Holocene High-resolution Multiproxy Climate Record from the Northern Great Plains: E C Grimm, J J Donovon, K J Brown


1340h PP33B-1697 POSTER Mid-Holocene ENSO Variability Revisited: A J Broccoli, M P Erb, A T Wittenberg, D Oppo, M Khodri


1340h PP33B-1699 POSTER Laurentide Ice Sheet meltwater and the Atlantic meridional overturning circulation since the last glacial maximum: A view from the Gulf of Mexico: B P Flower, C Williams, E A Brown, D W Hastings, J Hendricks, E A Goddard

1340h PP33B-1700 POSTER Role of Biomass Burning in the Atmospheric Methane Concentration Increase at the end of the Younger Dryas: J R Melton, H Schaefer, M J Whiticar

SPA-Acronymy

SA33A Moscone South: Poster Hall Wednesday 1340h Ionospheric Modification Using High-Power Radio Waves and Atmospheric Processes Studied Using Space Shuttle and Rocket Exhaust III Posters (joint with SM)

Presiding: M Golkowski, University of Colorado Denver; M H Stevens, Naval Research Laboratory; G Crowley, ASTRA; M P Sulzer, Arecibo Observatory

1340h SA33A-1741 POSTER Fast meridional transport in the lower thermosphere by planetary-scale waves: J Yue, H Liu

1340h SA33A-1742 POSTER Potential Atmospheric Impact Generated by Space Launches Worldwide: B B Brady, J D DeSain, T J Curtiss

1340h SA33A-1743 POSTER Significant Climate Changes Caused by Soot Emitted From Rockets in the Stratosphere: M J Mills, M Ross, D W Tooehy

1340h SA33A-1744 POSTER Satellite Observations of Space Shuttle Main Engine Exhaust: Vertical Diffusion and Meridional Transport: M H Stevens, R R Meier, J M Plane, J T Emmert, J Russell


1340h SA33A-1746 POSTER Comparison of incoherent scatter radar observations of SIMPLEX electron density depletion with SAM12 and SAM13 model results: A Bhatt, J D Huba, P A Bernhardt, P J Erickson

1340h SA33A-1747 POSTER Theory and Observations of Plasma Waves Excited Space Shuttle OMS Burns in the Ionosphere: P A Bernhardt, R F Pfaff, P W Schuck, D E Hunton, M R Hairson

1340h SA33A-1748 POSTER Direct Radiative Effects of Particulate Aerosols Emitted by the Space Transport Sector: M Ross, P Zittel, D W Tooehy, M J Mills

1340h SA33A-1749 POSTER Electron transport across magnetic field in ExB radio blackout communication system: V I Sotnikov, M Keidar, S Mudalier

1340h SA33A-1750 POSTER Determination of the excitation threshold for Magnetized Stimulated Brillouin Scatter (MSBS) using HAARP facilities: A Mahmoudian, P A Bernhardt, W A Scales, C Selcher, S J Briczinski, G San Antonio
1340h  **SA33A-1751** POSTER Heater Beam Angle Effect on Simulated Brillouin Scatter in Magnetized Ionospheric Plasma: **H Fu**, P A Bernhardt, W A Scales, S J Brizicinski, G San Antonio, C A Selcher


1340h  **SA33A-1754** POSTER Damping of Whistler Waves through Mode Conversion to Lower Hybrid Wave in the Ionosphere: **B Eliasson**, X Shao, A S Sharma, G M Milikh, K Papadopoulos

1340h  **SA33A-1755** POSTER Weddel Sea Anomaly Observed by SESMs/Tatiana2 and DEMET: **F Chang**


1340h  **SA33A-1757** POSTER VLF Transmitter Signal Power Loss to Quasi-Electrostatic Whistler Mode Waves in Regions Containing Plasma Density Irregularities: **T F Bell**, F Fouust, U S Inan, N G Lehtinen

1340h  **SA33A-1758** POSTER DEMETER Observations of Ionospheric Heating by Powerful VLF Transmitters: **K L Graf**, T F Bell, D Piddyachy, U S Inan, M Parrot

1340h  **SA33A-1759** POSTER Artificial Ducts and Ion Outflows in the Topside Ionosphere at HAARP: **A Vartanyan**, G M Milikh, E V Mishin, K Papadopoulos, M Parrot


1340h  **SA33A-1761** POSTER Time-of-Arrival Analysis Applied to ELF/VLF Wave Generation Experiments at HAARP: **S Fujimaru**, R C Moore

1340h  **SA33A-1762** POSTER Dual–Beam ELF/VLF Wave Generation at HAARP: **D Agrawal**, R C Moore

1340h  **SA33A-1763** POSTER On the effective altitude of the HAARP induced ionospheric ELF/VLF current modulation and multi-beam vertical ELF/VLF interference: **M Golkowski**, M Cohen, R C Moore, U S Inan

1340h  **SA33A-1764** POSTER Analysis of D-Region Absorption via HF Cross-Modulation Experiments at HAARP: **E M Braun**, R C Moore

1340h  **SA33B-1767** POSTER Using FUV remote-sensing methods to investigate solar EUV variability with the aid of TIMED/GUVI observations: **J Correia**, D J Strickland, J S Evans, H K Knight


1340h  **SA33B-1769** WITHDRAWN

1340h  **SA33B-1770** POSTER Ionospheric Currents Flowing along the Terminator during Solar Flares: **Y Yamazaki**, K Yumoto, T Uozumi, S Abe, Title of Team: The CPMN Group

1340h  **SA33B-1771** POSTER Exospheric temperature variability and the solar EUV control: **S Zhang**, J M Holt, P J Erickson, T N Woods

1340h  **SA33B-1772** POSTER A new proton auroral extrapolation method applied in the estimation of FUV emission yields: **H K Knight**, D J Strickland, J Correia, J S Evans, J H Hecht

1340h  **SA33B-1773** POSTER Characteristics of the global ionospheric electron density during the extreme solar minimum condition: **G Jee**

1340h  **SA33B-1774** POSTER Correlation between solar activity and Earth’s ionospheric electron content during the 23rd solar cycle: **N Bergeot**, J Legrand, R Burston, C Bruyninx, P Defraigne, J Chevalier, F Clette, C Marque, L Lefevre

1340h  **SA33B-1775** WITHDRAWN

1340h  **SA33B-1776** POSTER Total Electron Content Variation during Low Solar Activity Periods in Brazil: **F Becker-Guedes**, E R de Paula, P M de Siqueira, L F Rezende, C M Candido, A P Dutra

1340h  **SA33B-1777** POSTER Solar and season variability of the nighttime transition height over Arecibo based on Incoherent Scatter Radar data and EUV-UV fluxes: **C G Brum**, D G Alcantara, J Vargas, S A Gonzalez

1340h  **SA33B-1778** POSTER Determining the Most Appropriate Solar Inputs for Upper Atmospheric Density Models: **S I Bruinsma**, T Dudok de Wit

1340h  **SA33B-1779** POSTER Spatial and temporal variation of total electron content as revealed by principal component analysis: **X Zhu**, E R Talaat

1340h  **SA33B-1780** POSTER Spread-Spectrum VLF Observations at Arrival Heights, Antarctica During Solar X-Ray Flares: **T Wang**, R C Moore, A F Masser-Smith

---

**SA33C  Moscone South: Poster Hall  Wednesday 1340h Advances in Understanding Magnetosphere-Ionosphere Dynamics and Coupling I (joint with SM)**

**Presiding:** J F Spann, NASA MSFC; D L Gallagher, NASA Marshall Space Flight Center

1340h  **SA33C-01** Modeling Ionospheric Outflows In Global Models (Invited): **A Glocer**, G Thoth, M H Fok, T I Gombosi, D T Welling

1358h  **SA33C-02** Low-Altitude Emission of Energetic Neutral Atoms: A New Diagnostic of the Energetics of Ion Precipitation: **E C Roelof**, H Nair

1410h  **SA33C-03** Causes of variability in plasmasphere rotation rate: IMAGE EUV observations (Invited): **D A Galvan**, M Moldwin, B R Sandel, G Crowley

1428h  **SA33C-04** SAID: A turbulent plasmaspheric boundary layer (Invited): **E V Mishin**

1446h  **SA33C-05** Electric field variability and Joule heating (Invited): **R B Cosgrove**

1504h  **SA33C-06** On the Ionospheric Application of Poynting’s Theorem: **A D Richmond**
1340h  SH31A-1828 POSTER  itch angle distributions and temporal variations of 0.3-300 keV solar impulsive electron events: L Wang, R P Lin, S Krucker

1340h  SH31A-1829 POSTER  Implementing the Second-Order Fermi Process in a Kinetic Monte-Carlo Simulation: E J Summerlin

1340h  SH31A-1830 POSTER  Solar Energetic Particles in Ground Level Events: Correlation of Fe/O with CME Speed: T T von Rosenvinge, I G Richardson, H V Cane

1340h  SH31A-1831 POSTER  Characteristics of Hot Spots for Solar Activity: T A Bai

1340h  SH31A-1832 POSTER  Energetic protons accelerated by a model Coronal Mass Ejection and associated shock in the solar corona: K A Kozarev, R M Evans, M A Dayeh, N A Schwadron, M Opfer, K E Korreck, T I Gombosi

1516h  SA33C-07 Penetration of the convection and overshielding electric fields to low latitude ionosphere during the main phase of geomagnetic storms: T Kikuchi, K Hashimoto, Y Ebihara, T Nagatsuma

1528h  SA33C-08 Understanding the Global Response of Large-Scale Ionospheric Convection to Storms and Substorms: R A Greenwald, J M Ruohoniemi, G J Sofko, M Lest}

**SPA-Solar and Heliospheric Physics**

**SH33A  Moscone South: Poster Hall  Wednesday  1340h  Acceleration and Transport of Solar Energetic Particles I Posters (joint with SM)**

**Presiding:** G Qin, State Key Labotary of Space Weather, Center for Space Science and Applied Research, Chinese Academy of Sciences

1340h  SH33A-1812 POSTER  Electron Acceleration by Multi-Island Coalescence: M Oka, T Phan, S Krucker, M Fujimoto, I Shinohara

1340h  SH33A-1813 POSTER  Particle acceleration during low-β, multi-island reconnection: J F Drake, M M Swisdak

1340h  SH33A-1814 POSTER  On the Particle Acceleration at Parallel Shocks: F Guo, J Giacalone

1340h  SH33A-1815 POSTER  An analytical method to Determine Solar Energetic Particles’ Mean Free Path: H He, G Qin

1340h  SH33A-1816 POSTER  Study of CME-driven shock acceleration of solar energetic particles with numerical simulations and data analysis: Y Wang, G Qin

1340h  SH33A-1817 POSTER  Drift of Charged Particles in a solar wind background magnetic field: G Qin, G Li


1340h  SH33A-1819 POSTER  Magnetic moment conservation and particles acceleration in turbulence: S Dalena, A Greco, W H Matthaeus

1340h  SH33A-1820 POSTER  Non-Linear Guiding Theory and particle acceleration at a quasi-perpendicular shock: L Zhao, G Li

1340h  SH33A-1821 POSTER  Universal power-law index of energy spectrum in downstream region of quasi-perpendicular shocks: T Sugiyama

1340h  SH33A-1822 POSTER  Separation of Charged Particles from Magnetic Field Lines in Two-Component Magnetic Turbulence: P Chuychai, D J Ruffolo, W H Matthaeus

1340h  SH33A-1823 POSTER  Heating of ions by low-frequency Alfvén waves in partially ionized chromosphere: C Dong, C S Paty

1340h  SH33A-1824 POSTER  0.5 – 165 MeV proton and 102 – 312 keV electron injections during the 2006 December 13 SEP event: A Aran, N Agueda, C Jacobs, D Lario, B Sanahuja, S Poedts, R G Marsden

1340h  SH33A-1825 POSTER  THE EFFECTS OF ELECTRIC FIELD INDUCED BY BEAM ELECTRONS ON HARD X-RAY AND MICROWAVE EMISSION AND PARTICLE NUMBER PROBLEM IN FLARES: V V Zharkova

1340h  SH33A-1826 POSTER  Measurements of the 2005 January 20 GLE with the Milagro Water Čerenkov Detector: J M Ryan, T Morgan, C Lopate

1340h  SH33A-1827 POSTER  The Connection between Small Gamma-ray Flares and SEPs with COMPTEL/CGRO: G A de Nolfo, C Young

All information is current as of November 12, 2010
1340h SH33B-1847 POSTER Large-scale coronal disturbances and angular spread of SEP events: N V Nitta, G M Mason, D K Haggerty, C M Cohen, M E Wiedenbeck, R Gómez-Herrero

SH33C Moscone South: 309 Wednesday 1340h Solar and Heliospheric Physics General Contributions II: Solar Wind

Presiding: M Maksimovic, LESIA & CNRS; M A Coplan, University of Maryland

1340h SH33C-01 Oxygen Flux in the Solar Wind: Ulysses Observations: R von Steiger, T Zurbuchen, D J McComas

1355h SH33C-02 A Torsional Alfvén Wave Embedded Within a Small Magnetic Flux Rope in the Solar Wind: J T Gosling, W Téh, S Eriksson

1410h SH33C-03 The Role of Reconnection in Controlling Interplanetary Magnetic Flux Depletion in Forming the Heliospheric Solar Cycle: D Connick, C W Smith, N A Schwadron

1425h SH33C-04 Variability in the slow solar wind at solar minimum: A Breen, R Fallows, G Dorrian, M M Bisi, D Jackie, M Owens


1455h SH33C-06 Kinetic processes in the CIR evolution with magnetic decreases: Hybrid simulations: K Tsubouchi, Y Kubo

1510h SH33C-07 Temporal evolution and spatial variation of the solar wind from multi-spacecraft measurements: A Opitz, P Wurz, A Fedorov, J Sauvaud, J G Luhmann, P Riley, K Szego, C T' Russell, A B Galvin, A P Rouillard, A Vorlidas, I van Driel - Gesztelyi

1525h SH33C-08 Understanding heliospheric origins with Solar Probe Plus: M M Velli

SPA-Magnetospheric Physics

SM33A Moscone South: Poster Hall Wednesday 1340h Multiscale Wave/Plasma Interactions Between the Magnetosphere and Ionosphere at High Latitudes II Posters (joint with NG, SA)

Presiding: A V Streltsov, Dartmouth College; J L Semeter, Boston University

1340h SM33A-1880 POSTER Effect of heavy ions on nonlinear coupling between the magnetosphere and the ionosphere in the auroral zone: A V Streltsov

1340h SM33A-1881 POSTER Ionospheric feedback instability inside density cavities: N Jia, A V Streltsov

1340h SM33A-1882 POSTER Two-dimensional Model of the Ionospheric Alfvén Resonator With Active Ionosphere: D Sydorenko, R Rankin

1340h SM33A-1883 POSTER Correlation Between Pi1B pulsations and Poleward Boundary Instabilities: M Lessard, C Weaver, Y Ge, M J Engebretson

1340h SM33A-1884 WITHDRAWN

1340h SM33A-1885 POSTER Coordinated observations of Pc5 pulsations in a field line; ground, SuperDARN, and a satellite: K Sakaguchi, T Nagatsuma, T Obara, O A Troshichev


1340h SM33A-1887 POSTER Effect of ionospheric depth on the ionospheric feedback instability:Cutoff and subsequent E_\parallel [parallel] modes: R B Cosgrove, R A Doe

1340h SM33A-1888 POSTER Satellite observations of banded VLF emissions in conjunction with energy-banded ions during very large geomagnetic storms: C A Golpits, C A Cattell, J U Koszyra, M Parrot


1340h SM33A-1890 POSTER Polarization of Pc1/EMIC waves and related proton auroras observed at Athabasca: R Nomura, K Shiokawa, K Sakaguchi, Y Otuka, M G Connors

1340h SM33A-1891 POSTER Dispersive Alfvén waves and Ion-acoustic Turbulence: M-I coupling at the Smallest Scales: J L Semeter, M D Zettergren, M Diaz, A Stromme, M J Nicolls, C J Heinselman


SM33B Moscone South: Poster Hall Wednesday 1340h Origins of Near-Earth Plasma II Posters (joint with SA)

Presiding: L M Kistler, University of New Hampshire; RJ Strangeway, UCLA

1340h SM33B-1893 POSTER Does a Planetary-Scale Magnetic Field Enhance or Inhibit Ionospheric Plasma Outflows?: R J Strangeway, C T Russell, J G Luhmann, T E Moore, J C Foster, S V Barabash, H Nilsson

1340h SM33B-1894 POSTER A global view of O+ upwelling and outflow rates between DMSP and POLAR: R J Redmon, W K Peterson, L Andersson, E A Kihn, W F Denig

1340h SM33B-1895 POSTER Solar zenith angle dependence of the plasma density and temperature in the polar ionosphere and magnetosphere during geomagnetically quiet periods at solar maximum: N Kitamura, N Terada, Y Ogawa, T Ono, Y Nishimura, A Shinbori, A Kumamoto

1340h SM33B-1896 POSTER Influence of Ionospheric Plasma on Substorm Activity: M D Cash, R Winglee, E M Barnett

1340h SM33B-1897 POSTER Acceleration of O+ from the cusp to the lobe: J Liao, L M Kistler, C Mouikis, B Klecker, I S Dandouras

1340h SM33B-1898 POSTER The Ion Composition of the Plasma Sheet at 15-19 Re as a function of the IMF and the Solar Wind conditions: C Mouikis, L M Kistler, Y Liu, B Klecker, A Korth, I S Dandouras

1340h SM33B-1899 POSTER Mapping of the O+/H+ density ratio in the magnetospheric equatorial plane using Cluster data: R Maggiolo, L M Kistler


1340h SM33B-1901 POSTER Lobe Reconnection as a Source for the Cold Dense Plasma Sheet, Results from FAST and Cluster: M Wilber, J P McFadden, A J Hull, K Brown, A F TESTE

1340h SM33B-1902 POSTER DAYSIDE MAGNETIC RECONNECTION AND PRECIPITATING CUSP IONS DURING A SOUTHWARD INTERPLANETARY MAGNETIC FIELD (IMF) AND FINITE IMF BY COMPONENT: B Tan, Y Lin, J D Perez, X Wang
1340h  SM33B-1903 POSTER Detection of the oxygen torus in the inner magnetosphere using toroidal Alfvén waves: M Nose, K Takahashi, R R Anderson, H J Singer

1340h  SM33B-1904 POSTER Plasmaspheric outflows contribution to the magnetospheric populations: J S Dandouras


SM33C  Moscone South: Poster Hall  Wednesday  1340h

Radiation Belt Physics: Mysteries and Solutions II Posters

Presiding: A Y Ukhorskiy, JHU/APL; N J Fox, Johns Hopkins University/Applied Phy

1340h  SM33C-1907 POSTER Nonlinear Wave-Particle Interactions in Radiation Belt Physics: D Summers, R Tang, Y Omura, Y Miyashita

1340h  SM33C-1908 POSTER An Abrupt Ending of Long Dormant Outer Radiation Belt Electrons: The External and Internal Conditions That Made This Possible: X Li, J T Gosling

1340h  SM33C-1909 POSTER Stormtime Energetic Electron Responses for L4: J Fennell, S G Kanekal, J L Roeder

1340h  SM33C-1910 POSTER Observation of relativistic electron microbursts in conjunction with intense radiation belt whistlers: K Kersten, C A Cattell, A W Breneman, K Goetz, P J Kellogg, L B Wilson, J R Wygant, J Blake, M D Looper, I Roth

1340h  SM33C-1911 POSTER Implications of the Drift Orbit Bifurcations to Variability of the Outer Electron Belt: A Y Ukhorskiy, M I Sitnov, R M Millan, B T Kress

1340h  SM33C-1912 POSTER Using the RBSP Science Data Portal to unlock Mysteries in the Radiation Belts: M Weiss, N J Fox, R J Barnes, B H Mauk

1340h  SM33C-1913 POSTER Evidence for Duskside Relativistic Electron Precipitation in the SAMPEX data set in the bounce loss cone: M D Comess, D M Smith, J G Sample, R M Millan, R S Selesnick

1340h  SM33C-1914 POSTER A role of magnetopause shadowing on relativistic electron loss of the outer radiation belt: C Matsumura, Y Miyoshi, K Seki, S Saito, V Angelopoulos, J McFadden, D E Larson

1340h  SM33C-1915 POSTER Probing the microburst source region using low energy electron measurements made in low-Earth orbit: A B Crew, J J Cleemons, H E Spence


1340h  SM33C-1917 POSTER Multi-Satellite Observations of Transient Proton Belts Near L = 3: S G Claudepierre, J L Roeder, J B Blake, J Fennell

1340h  SM33C-1918 POSTER Reanalysis of Radiation Belt Electron Phase Space Density using the UCLA 1-D VERB code and Kalman filtering: Correlation between the inner edge of the outer radiation belt phase space density and the plasmapause location: P J Espy, M Daae, Y Shprits

1340h  SM33C-1919 POSTER Bounce-averaged diffusion coefficients in a realistic field model for oblique chorus waves: K Orlova, Y Shprits, B N

1340h  SM33C-1920 POSTER On the Role of Transition Region in Controlling the Outer Radiation Belt Dynamics: A Survey of in-situ Observations: Y Chen, G D Reeves, R H Friedel

1340h  SM33C-1921 POSTER Empirical Cross-satellite Calibration of THEMIS SST Measurements Based on Electron Phase Space Density Conjunctions: B Ni, Y Shprits, M Hartinger, V Angelopoulos, D Larson

1340h  SM33C-1922 POSTER The GEMIS-3-Magnetosphere project: New models of the inner magnetosphere to investigate high-energy particle variation and the ERG science center: K Seki, Y Miyoshi, T Amano, S Saito, Y Miyashita, Y Matsumoto, T Umeda, Y Ebihara


1340h  SM33C-1925 POSTER Characterization of radiation belt electron energy spectra from CRRES observations: W R Johnston, C D Lindstrom, G P Ginet

1340h  SM33C-1926 POSTER Response of the POES MEPED telescope instruments to relativistic electron precipitation: K B Yando, R M Millan, J C Green

1340h  SM33C-1927 POSTER Inner Radiation Belt Data Assimilation: T B Guild, T P O'Brien, J E Mazur

1340h  SM33C-1928 POSTER Planetary Space Radiation Environments: H B Garrett, M Kokorowski, R W Evans

1340h  SM33C-1929 POSTER Comparisons between the diverse electron radiation belts of the solar system; Implications for radiation belt studies at Earth: B H Mauk, N J Fox

SM33D  Moscone South: 307  Wednesday  1340h

Momentum and Energy Transfer and Atmospheric Escape in Weakly Magnetized Objects I (joint with P)

Presiding: C Bertucci, Institute for Astronomy and Space Physics; R Modolo, UVSQ / LATMOS-IPSL/CNRS-INSU

1340h  SM33D-01 Hall MHD Study of the Solar wind Interaction with Venus: A F Nagy, Y Ma, C T Russell, T Zhang, H Wei, R J Strangeway, G Toth


1410h  SM33D-03 Comparison of Hybrid Particle Code Simulations Of Venus and Mars: S H Brecht, S A Ledvina

1425h  SM33D-04 Processes of the momentum transfer and solar wind induced escape on Mars and Venus. Mutual lessons from different space missions (Invited): E Dubinin

1440h  SM33D-05 Boundary layer processes in the Martian magnetosphere: J S Halekas, D A Brain, J P Eastwood


1510h  SM33D-07 Hybrid Simulations of Ion Pickup and Ion Cyclotron Wave Generation at Mars and Titan (Invited): M Cowee, H Wei, S P Gary
<table>
<thead>
<tr>
<th>Time</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1340h</td>
<td><strong>SM33E Moscone South: 305 Wednesday 1340h Progress in Modeling Kinetic-Global Coupling in Space Weather II (joint with SH)</strong></td>
<td>Presiding: S K Antiochos, NASA/GSFC; J Johnson, Princeton Univ</td>
</tr>
<tr>
<td>1358h</td>
<td>SM33E-02 Incorporating Kinetic Effects into Global Models of the Solar Wind (Invited: S R Crooker)</td>
<td>Presiding: S R Crooker, NASA/GSFC</td>
</tr>
<tr>
<td>1446h</td>
<td>SM33E-03 Three-Dimensional Hybrid Simulation of Mode Conversion at the Magnetopause: Y Lin, J Johnson, X Wang</td>
<td>Presiding: Y Lin, J Johnson, X Wang</td>
</tr>
<tr>
<td>1428h</td>
<td>SM33E-04 Hybrid MHD-kinetic electron simulations of global standing modes (Invited: P A Damiano)</td>
<td>Presiding: P A Damiano, J Johnson, E Kim</td>
</tr>
<tr>
<td>1516h</td>
<td>SM33E-07 Comparison of High Lundquist Number Scaling of Dayside Magnetospheric Reconnection in BATSUS and OpenGGM with the Hall term: B P Sullivan, A Bhattacharjee, J Dorelli, K Germa, F Cusumano, J Kuznetsova</td>
<td>Presiding: B P Sullivan, A Bhattacharjee, J Dorelli, K Germa, F Cusumano, J Kuznetsova</td>
</tr>
<tr>
<td>1340h</td>
<td><strong>SM33D-08 Plasma structure over dayside lunar magnetic anomalies: Y Saito, M N Nishino, T Yamamoto, K Uemura, S Yokota, K Asamura, H Tsunakawa, Title of Team: KAGUYA MAP Team</strong></td>
<td>Presiding: Y Saito, M N Nishino, T Yamamoto, K Uemura, S Yokota, K Asamura, H Tsunakawa, KAGUYA MAP Team</td>
</tr>
<tr>
<td>1340h</td>
<td><strong>DI33A Moscone South: Poster Hall Wednesday 1340h Earth's Lower Mantle: New Insights From Geophysics, Mineral Physics, Geodynamics, and Geochemistry II Posters (joint with MR, S, GP)</strong></td>
<td>Presiding: M Murakami, Tohoku University; S D King, Virginia Tech; C J Weiss, Virginia Tech</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1961 POSTER Silicon diffusion in MgSiO3 perovskite under lower mantle conditions: J Xu, D Yamazaki, T Katsura, X Wu, P Remmert, H Yu, S Chakraborty</td>
<td>Presiding: J Xu, D Yamazaki, T Katsura, X Wu, P Remmert, H Yu, S Chakraborty</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1963 POSTER Travel time and amplitude measurements of core diffracted body waves: the first step to high-resolution tomography of the lowermost mantle: L Schardong, R F Garcia, S Chevrot, M Calvet</td>
<td>Presiding: L Schardong, R F Garcia, S Chevrot, M Calvet</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1964 POSTER Thermochemical piles or a hot mantle? Constraints from global electromagnetic sounding: C J Weiss, S D King</td>
<td>Presiding: C J Weiss, S D King</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1965 POSTER Direct Observations of Lateral Variation at the Core-Mantle Boundary: D Sun, D V Helmerger, J M Jackson</td>
<td>Presiding: D Sun, D V Helmerger, J M Jackson</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1966 POSTER Investigating the nature of the lowermost mantle through analysis of the frequency decay of P and S-waves diffracted at Earth's core mantle boundary: J S Woo, E J Garner, P Lin</td>
<td>Presiding: J S Woo, E J Garner, P Lin</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1967 POSTER Velocity Structure of the Lowermost Mantle Beneath the Northeast Pacific From Core-Diffracted P and S Waves: M E Wysession, G G Euler</td>
<td>Presiding: M E Wysession, G G Euler</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1968 POSTER The different velocity structure of mid-mantle beneath Izu-Bonin and Tonga: Y Zhou, Y Sui</td>
<td>Presiding: Y Zhou, Y Sui</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1969 POSTER Imaging the Lowermost Mantle in Large Scale Beneath East Asia With Se9 and SKKS Data: X Shang, P Wang, R D van der Hilst, M V de Hoop, S Shim</td>
<td>Presiding: X Shang, P Wang, R D van der Hilst, M V de Hoop, S Shim</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1972 POSTER Observation of a mid-mantle discontinuity beneath northeast China from S to P converted waves recorded by the USArray stations: F Niu</td>
<td>Presiding: F Niu</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33A-1973 POSTER Temperature-Dependence Cansels the Effects of Depth-Dependence of Thermal Expansion in Mantle Convection: G T Jarvis, S R Ghas, J P Lowman</td>
<td>Presiding: G T Jarvis, S R Ghas, J P Lowman</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33B-01: Interior of Mercury and the Moon: Current Status and Anticipated Progress (Invited: M T Zuber)</td>
<td>Presiding: M T Zuber</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33B-02 Lunar Internal Structure Estimated From Local Admittance Between Gravity and Topography (Invited: N Namiki)</td>
<td>Presiding: N Namiki</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33B-03 Seismic detection of the layers of the lunar core (Invited: R C Weber, P Lin, E J Garner, Q Williams, P Lognonne)</td>
<td>Presiding: R C Weber, P Lin, E J Garner, Q Williams, P Lognonne</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33B-04 The lunar core revealed by reflected seismic waves: constraints on the deep Moon seismic structure: R F Garcia, J Gagnepain-Beyneix, S Chevrot, P Lognonne</td>
<td>Presiding: R F Garcia, J Gagnepain-Beyneix, S Chevrot, P Lognonne</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33B-05 The Importance of Mantle Composition in Controlling Magma Production Rates on Mars and Venus: W S Kiefer, Q Li, J Filiberto, C Sandu</td>
<td>Presiding: W S Kiefer, Q Li, J Filiberto, C Sandu</td>
</tr>
<tr>
<td>1446h</td>
<td>DI33B-06 Thermo-chemical Evolution and Global Contraction of Mercury: M Grott, D Breuer, M Laneuville</td>
<td>Presiding: M Grott, D Breuer, M Laneuville</td>
</tr>
<tr>
<td>1512h</td>
<td>DI33B-08 A lunar core dynamo at 3.7 Ga?: E K Shea, B P Weiss, S M Tiko, J Gattaceca, D L Shuster, T L Grove, M Fuller</td>
<td>Presiding: E K Shea, B P Weiss, S M Tiko, J Gattaceca, D L Shuster, T L Grove, M Fuller</td>
</tr>
<tr>
<td>1340h</td>
<td><strong>DI33C Moscone West: 3024 Wednesday 1340h Seismic Anisotropy in the Mantle: Progress, Prospects, and Pitfalls II (joint with MR, S)</strong></td>
<td>Presiding: C Beghein, UCLA; S Merkel, CNRS - Universite Lille; T W Becker, USC</td>
</tr>
<tr>
<td>1340h</td>
<td>DI33C-01 Deformation and Anisotropy in 4D: the Lithosphere-Asthenosphere System (Invited: S Lebedev)</td>
<td>Presiding: S Lebedev</td>
</tr>
</tbody>
</table>
1335h DI33C-02 The stratification of seismic azimuthal anisotropy in the western US: M H Ritzwoller, F Lin, Y Yang, M P Moschetti, M J Fouch
1410h DI33C-03 Constraining Poiseuille Flow in the Asthenosphere Using the Depth-Dependence of Azimuthal Seismic Anisotropy: S Natarov, C P Conrad
1425h DI33C-04 High pressure and temperature fabric transitions in olivine and variations in upper mantle seismic anisotropy: T Ohuchi, T Kawazoe, Y Nishihara, N Nishiyama, T Irfune
1440h DI33C-05 Serpentinite preferred orientation and variation in subduction zone anisotropy: I Katayama, K Hirauchi, K Michibayashi, J Ando
1455h DI33C-06 Seismic properties of the sub-arc mantle: V Soustelle, A Tommassi, S Demouchy
1510h DI33C-07 Mid-mantle Anisotropy Near Regions of Subduction: J Wookey, A Pemberton, A J Nowacki, K Michibayashi, J Ando
1525h DI33C-08 On the origin of seismic anisotropy at the base of the mantle (Invited): S Cottaar, A K McNamara, B A Romanowicz, H Wenk

Mineral and Rock Physics

MR33A Moscone South: Poster Hall Wednesday 1340h Superhard Materials: Synthesis and Systematics II Posters (joint with DI)
Presiding: K K Lee, Yale University
1340h MR33A-1990 POSTER Modifications to the Paterson triaxial rock deformation apparatus to allow combined stress testing: S May, J Mecklenburgh, W F Xiao, S J Covey-crump, E H Rutter
1340h MR33A-1991 POSTER High-pressure and high temperature deformation studies of polycrystalline diamond: X Yu, J Zhang, D Yu, L Wang, Y Zhao
1340h MR33A-1992 POSTER Strength of diamond at high pressure from shock wave experiments: R S McWilliams, D K Spaulding, J Eggert, D Hicks, R Jahnolz, G Collins, P Celliers
1340h MR33A-1993 POSTER Mechanical strength of zirconia and hafnia phases: Y Al-Khatatbeh, K K Lee, B Kiefer
1340h MR33A-1995 POSTER Synthesis of Dense BC3 Phases under High-Pressure and High-Temperature: P Zinin, L Ming, T Acosta, R Jia, E Hellebrand, H Ishii
1340h MR33A-1996 POSTER Tuning the structure and properties of glasses using pressure quenching routes: L Huang, J B Thomas, Q Zhao, F Yuan
1340h MR33A-1997 POSTER Synthesis and mechanical properties of nano-polycrystalline diamond: H Couvy, J Chen

Seismology

S33A Moscone South: Poster Hall Wednesday 1340h Ambient Noise Imaging in Seismology and Helioseismology III Posters (joint with OS, SH)
Presiding: A G Kosovichev, Stanford University; J F Claerbout
1340h S33A-2054 POSTER Crustal and lithosphere structure of the Northwestern U.S. with ambient noise tomography: Terrane accretion and Cascade arc development: H Gao, E Humphreys, H Yao, R D van der Hilst
1340h S33A-2055 POSTER Crustal and uppermost mantle velocity structure beneath northwestern China revealed by ambient noise tomography: H Li, S Li, X Song, M Gong, X Li, J Jia
1340h S33A-2056 POSTER A Synthesis of Local, Teleseismic, and Ambient Noise Data for High-Resolution Models of Seismic Structure in Western and Southeast Australia: M K Young, H Tkalcic, N Rawlinson, P Arroucau, A M Reading
1340h S33A-2057 POSTER Radial anisotropy in the crust of SE Tibet and SW China from ambient noise interferometry: H Huang, Y Li, H Yao, R D van der Hilst, Q Liu, J Chen
1340h S33A-2058 POSTER Distinct differences in crustal structure and radial anisotropy along two seismic profiles in the North China Craton by ambient noise analysis: C Cheng, L Chen, H Yao
1340h S33A-2059 POSTER The ambient noise and earthquake surface wave tomography of the North China Craton: J Pan, M J Obrebski, Q Wu, Y Li
1340h S33A-2060 POSTER Ambient Noise and Teleseismic Signals Recorded by Ocean-Bottom Seismometers Offshore Eastern Taiwan: C Lin, B Kow, L Wang, Y Huang, J A Collins, C Wang
1340h S33A-2061 POSTER Detecting Subsurface Reflectors in the Shikoku District, Southwestern Japan, Using Ambient Seismic Noise: S Ohmi, K Hirahara
1340h S33A-2062 POSTER Crustal structure of the Pannonian-Carpathian region, Central Europe, from ambient noise tomography: Y Ren, G W Stuart, G A Houseman, Title of Team: Carpathian Basins Project Working Group
1340h S33A-2063 POSTER Short-Period Rayleigh Wave Dispersion Measurements across the Cape Verde Archipelago using Ambient Noise: M M Silveira, L M Matias, J Nunes, P Teves-Costa
1340h S33A-2064 POSTER Pseudo-3D shear velocity structure of the central North Island, New Zealand, determined from ambient noise analysis of temporary and permanent seismograph data: Y Behr, J Townsend, M K Savage, S C Bannister
1340h S33A-2065 POSTER Ambient Noise Tomography of central Europe: J Verbeke, L Boschi, E H Kissling, A Michelini, B Fry
1340h S33A-2066 POSTER Crust and upper-mantle imaging with noise: E N Ruigrok, X Campman, C A Wepenaar
1340h S33A-2067 POSTER Using simultaneously curvelet filters and SEM simulation of seismic ambient noise: a possible way to improve ambient noise tomography: L Stehly, P Cupillard, B Romanowicz
1340h S33A-2068 POSTER High-resolution linear Radon transform and its applications in surface waves from ambient seismic noise data: Y Luo, Y Xu, Y Yang
1340h S33A-2069 POSTER Ambient noise cross-correlations applied to reservoir scale OBS-recordings: C Weemstra, A Goertz, B Artman, L Boschi
1340h S33A-2070 POSTER Origin of microseisms in equatorial and southern Africa from analysis of broadband arrays: G G Euler, D A Wiens, A Nyblade
1340h S33A-2071 POSTER Retrieval of Earth’s reflection response from ambient seismic noise - a Nevada experiment: I M Tibuleac, S Pullammanappillai, D H von Seggern, A Pancha, J N Louie
1340h S33A-2072 POSTER Seismic Emission Tomography (SET): numerical modeling study: P Shkarin, I G Dricker, S B Hellman, P A Friberg
1340h S33A-2073 POSTER QUAKE DETECTION USING MDI AND GONG DATA: S Zharkov, V V Zharkova, S A Matthews
1340h S33A-2074 POSTER Some Connections Between the Solar Wind, Barometric Pressure, Geomagnetism, and Seismic Background Noise: J A Eakins, F L Vernon, D J Thomson

All information is current as of November 12, 2010
S33B Moscone South: Poster Hall Wednesday 1340h Developments in Statistical Seismology: Research and Education I Posters (joint with ED, T)

Presiding: A J Michael, USGS; M J Werner, Princeton University; J Woessner, ETH Zurich

1340h S33B-2075 POSTER Estimation of the maximum magnitude in the framework of a doubly-truncated Gutenberg-Richter model: Limits of statistical inference from earthquake catalogs: G Zoeller, M Holschneider, S Hainzl

1340h S33B-2076 POSTER Estimating Variance of Seismicity Rate by Data Resampling: M Kato

1340h S33B-2077 POSTER SEISMIC HAZARD ASSESSMENT: AN ARTIFICIAL NEURAL NETWORK ESTIMATION: C S Herrera Oliva, F A Nava Pichardo

1340h S33B-2078 POSTER Magnitude Problems in Historical Earthquake Catalogs and Their Impact on Seismic Hazard Assessment: Y Rong, M Mahdyiar, B Shen-Tu, K Shabestari, J Guin

1340h S33B-2079 WITHDRAWN

1340h S33B-2080 POSTER A Preliminary Seismic Hazard Study in Northern Arizona: Another Look at the b-Value: D S Brumbaugh, D A Evanzia

1340h S33B-2081 POSTER Accounting for Uncertainties in Earthquake Time Dependent probabilities: Case Studies from Japan and Turkey: M Mahdyiar, B Shen-Tu, Y Rong

1340h S33B-2082 POSTER Except in Highly Idealized Cases, Repeating Earthquakes and Laboratory Earthquakes are Neither Time- nor Slip-Predictable: J L Rubinstein, W L Ellsworth, N M Beeler, K H Chen, D A Lockner, N Uchida

1340h S33B-2083 POSTER Spatial and temporal evolution of b-values before recent M≥6 earthquakes in Taiwan: C Chan, Y Wu, T Lin, C Chen

1340h S33B-2084 POSTER Seismicity activation before the mega-earthquake of 26 December 2004 based on Epidemic type aftershock sequence (ETAS) model: A Bansal, Y Ogata

1340h S33B-2085 POSTER Evidence of solar induced cycles of high seismic activity: G Duma

1340h S33B-2086 POSTER Application of an analytical testing method to improving the RI model: S Yokoi, K Nanjo, H Tsuruoka, N Hirata

1340h S33B-2087 POSTER Retrospective Evaluation of the Long-Term CSEP-Italy Earthquake Forecasts: M J Werner, J D Zechar, W Marzocchi, S Wiemer

1340h S33B-2088 POSTER Operational foreshock forecasting: Fifteen years after: Y Ogata

1340h S33B-2089 POSTER Purposes and methods of scoring earthquake forecasts: J Zhuang

1340h S33B-2090 POSTER Retrospective Tests of an Earthquake Forecasting Model in Japan Based on P-Wave Velocity Anomalies: M Imoto, M Matsubara, N Yamamoto

1340h S33B-2091 POSTER Is the rate of global tsunami occurrence increasing?: E L Geist, T Parsons


1340h S33B-2093 POSTER On the c-values of the off-fault aftershocks triggered by the 1995 Kobe earthquake, Japan: K Sugaya, Y Hiramatsu, M Furumoto, H Katao, Y Ogata

1340h S33B-2094 POSTER Delay and Migration of the 2008 Iwate-Miyagi Early Aftershocks, Observed Using High-Resolution Waveform Data: B Enescu, Z Peng, K Obara, T Takeda

1340h S33B-2095 POSTER An application of rate- and state-friction model to observed aftershock sequences with logarithmic stress evolution in time: T Iwata

1340h S33B-2096 POSTER A Case Study of Multifractal Omori Law on the Earthquake Catalog of Taiwan: C Tsai, G Ouillon, D Sornette

1340h S33B-2097 POSTER Investigation of Large Event Clusters and Aftershock Statistics in Simulated Catalogs: J J Gilchrist, J H Dieterich, K B Richards-Dinger

1340h S33B-2098 POSTER Searching for earthquake swarms and aseismic deformation in the Western U.S: E Richardson, M Newton, E Rubio, J J McGuire

1340h S33B-2099 POSTER Scaling Relations Between Mainshock Source Parameters and Aftershock Distributions for Use in Aftershock Forecasting: J Donovan, T H Jordan

1340h S33B-2100 POSTER EARTHQUAKE CLUSTERS – SLOW DECAY WHEN HOT AND SLIPPERY AT DEPTH?: J Woessner, S A Miller

1340h S33B-2101 POSTER Earthquake source parameters and swarm migration behavior in the Salton Trough: X Chen, P M Shearer

1340h S33B-2102 POSTER Background and triggered microseismicity in the Alpine Fault zone, central Southern Alps, New Zealand: C M Boose, T A Stern, E G Smith, J Townsend, M Henderson

1340h S33B-2103 POSTER Dynamic triggering of microearthquakes in the Long Valley Caldera and Coso Geothermal Field: C Aiken, Z Peng, C Wu

1340h S33B-2104 POSTER Dynamic Triggering of Earthquakes in the Salton Sea Region of Southern California from Large Regional and Teleseismic Earthquakes: A Doran, X Meng, Z Peng, C Wu, D L Kilb

1340h S33B-2105 POSTER A Strong Stress Shadow Effect of the 2004 M=9.2 Sumatra-Andaman Earthquake on the Andaman Sea Transform-Rift System 250 km Away: V Sevilgen, R S Stein

1340h S33B-2106 POSTER A Strong Stress Shadow Effect from the 1992 M=7.3 Landers, California, Earthquake: S Toda, R S Stein, G C Beroza

1340h S33B-2107 POSTER Coulomb static stress interactions between simulated M>7 earthquakes and major faults in Southern California: J C Rollins, G P Ely, T H Jordan

1340h S33B-2108 POSTER Stress Evolution on the Sunda Megathrust since 1797: S S Nabban, J McCloskey

1340h S33B-2109 POSTER Stress Relaxation due to Slip on Geometrically Complex Faults: Fault Earthquake Simulations and Off-Fault Moment Release: D E Smith, J H Dieterich
1340h  **S33C-2113** POSTER Mantle transition zone beneath eastern China and its tectonic implication *(Invited)*: X Wang, F Niu

1340h  **S33C-2114** POSTER Remote Triggering in Continental China: C Wu, Z Peng, W Wang, Q Chen, L Chen

1340h  **S33C-2115** POSTER Lithosphere structure beneath the North China craton from Rayleigh wave tomography with a 2-D seismic array: M Jiang, Y Ai

1340h  **S33C-2116** POSTER Surface wave dispersion across Tibet: Direct evidence for radial anisotropy in the crust: F Duret, N M Shapiro, Z Cao, V L Levin, P H Molnar, S Roecker

1340h  **S33C-2117** POSTER Application of Stacking Technique in ANA: Method and Practice with PKU Seismological Array: J Liu, Y Tang, J Ning, Y J Chen

1340h  **S33C-2118** POSTER Mantle transition zone structure around Hainan by receiver function analysis: C Wang, J Huang

1340h  **S33C-2119** POSTER Coulomb stress variation produced by reservoir loading and seepage: a case study: J Chen, K TAO, J Ning

**S33D Moscone West: 2009 Collaboration Among Science, Engineering, and Social Science: Earthquake Risk Mitigation in Urban Areas I** *(joint with NH, PA, T)*

**Presiding: N Hirata,** University of Tokyo; **M C Gerstenberger,** GNS Science; **K Nanjo,** Earthquake Research Institute; **M W Stirling,** GNS Science

1340h  **Introduction Naoshi Hirata**

1342h  **S33D-01** Operational Earthquake Forecasting: Proposed Guidelines for Implementation *(Invited)*: T H Jordan

1357h  **S33D-02** RiskScape: a new tool for comparing risk from natural hazards *(Invited)*: M W Stirling, A King

1412h  **S33D-03** Earthquake Monitoring and Early Warning Systems in Taiwan *(Invited)*: Y Wu

1427h  **S33D-04** Building the European Seismological Research Infrastructure: results from 4 years NERIES EC project: T Van Eck, D Giardini


1457h  **S33D-06** Earthquake Risk Mitigation in the Tokyo Metropolitan area: N Hirata, S Sakai, K Kasahara, S Nakagawa, K Nanjo, Y Panayotopoulos, H Tsuruoka

1510h  **S33D-07** The quest for better quality-of-life – learning from large-scale shaking table tests: M Nakashima, E Sato, T Nagae, F Kunio, J Takahito

1525h  **S33D-08** Tokyo Metropolitan Earthquake Preparedness Project - A Progress Report: H Hayashi

**S33E Moscone West: 2007 Earthquake Source Studies II**

**Presiding: J E Elkhoury,** California Institute of Technology; **O Zielke,** School of Earth and Space Exploration

1340h  **S33E-01** Experimental Investigation of Thrust Faults in Homalite: V Gabuchian, A Rosakis, N Lapusta, D D Oglesby

1355h  **S33E-02** Evidence for Coseismic Rupture Beyond the Base of the Seismogenic Layer: O Zielke, S Wesnousky

1410h  **S33E-03** Nucleation by Dynamic Triggering on a Multi-Segment Fault: Q Liu, R J Archuleta, R B Smith

1425h  **S33E-04** Transition Of Dynamic Rupture Modes And Macroscopic Source Properties In Elastic And Plastic Media: A A Gabriel, J P Ampuero, P M Mai, L A Dalguer Gudiel

1440h  **S33E-05** Dynamic rupture on faults with heterogeneous strength due to non-uniform normal stress: The effect of stress redistribution by prior events: J Jiang, N Lapusta

1455h  **S33E-06** Energy Change due to Off-Fault Damage Evolution associated with Dynamic Fault Tip Growth: T Suzuki

1510h  **S33E-07** Up scaling of Fracture Energy in Heterogeneous Media: O Lengline, J E Elkhoury, J Schmittbuhl, J P Ampuero

1525h  **S33E-08** Dependence of earthquake stress drop on critical slip-weakening distance: N Kato

**Tectonophysics**

**T33A Moscone South: Poster Hall Wednesday 1340h**

**Exploring the Temporal and Spatial Variability in Fault Slip Rates I Posters** *(joint with G, NS, S)*

**Presiding: R J Phillips,** University of Leeds; **N Houlie,** School of Earth and Environment; **T J Wright,** University of Leeds

1340h  **T33A-2201** POSTER Slip variability along the Karakoram Fault during last 110kyr: N Houlie, R J Phillips

1340h  **T33A-2202** POSTER Quaternary Slip on the Southern Segment of the Karakoram Fault and Pulu Graben, Western Tibet: M Chevalier, P tapponnier, J van der Woerd, F J Ryerson, R C Finkel, H Li


1340h  **T33A-2204** POSTER Late Quaternary slip rates of two active thrust faults at the front of the Andean Precordillera, Mendoza, Argentina: R Hetzel, S Schmidt, V A Ramos, F Mingorance

1340h  **T33A-2205** POSTER Extensional faulting in the Taupo Volcanic Zone, New Zealand: stress/strain cycling and deformation partitioning from numerical models: D E Dempsey, S M Ellis, R Archer, J V Rowland

1340h  **T33A-2206** POSTER Discrepancy between GPS (5 yrs) and archaeoseismic (3 kyr) slip rate across the Ateret site (Dead Sea fault): Secular variations versus distributed slip: A Agnon, S Marco, A Sagy, R Ellenblum

1340h  **T33A-2207** POSTER Intraplate Deformation of the Anatolian Micro Plate on the Amasya Branch Fault in Central Anatolia, Turkey: K Okumura

1340h  **T33A-2208** POSTER The North Anatolian Fault in the Sea of Marmara: Constraints on the Age, Offset and Geometry of Faulting: G Ucarkus, Z Cakir, R Armijo


1340h  **T33A-2210** POSTER Towards an understanding of the constancy of fault slip rate at multiple time scales along the central Garlock fault: P Ganey, J F Dolan, S F McGill, K L Frankel

1340h  **T33A-2211** POSTER Temporal variations in extension rate on the Lone Mountain fault and strain distribution in the eastern California shear zone-Walker Lane: J S Hoefl, K L Frankel
1340h  **T33B-2243 POSTER** Roughness of fault surface: evidence of self-affine morphology from the submillimetric scale to large earthquake surface rupture: **F Renard**, T Candela, Y Klinger, M P Bouchon, J Schmittbuhl, K Mair, E E Brodsky

1340h  **T33B-2244 POSTER** Effects of time-dependent fluid pressure, off-fault damage, and compliant fault zones on dynamics of parallel strike-slip faults: **L Ziu**, B Duan

1340h  **T33B-2245 POSTER** Complex earthquake cycle simulations using a two-degree-of-freedom spring-block model: **E Bonatti**, N Kato

1340h  **T33B-2246 POSTER** Granular controls on periodicity of stick-slip events: kinematics and force-chains in an experimental fault: **K E Daniels**, N W Hayman, L Ducloque, K L Foco

1340h  **T33B-2247 POSTER** Frictional Behavior of Oceanic Transform Faults and Influence on Earthquake Characteristics: **Y Liu**, M D Behn, J J McGuire

1340h  **T33B-2248 POSTER** Modeling shallow slip deficit in large strike-slip earthquakes using simulations of spontaneous earthquake sequences in elastico-plastic media: **Y Kaneko**, Y Fialko

1340h  **T33B-2249 POSTER** Numerical Simulations of Lithospheric Shear Zones Associated with Strike-Slip Faults: **C S Takeuchi**, Y Fialko, J G Scelar

1340h  **T33B-2250 POSTER** Depth Extent of Low-Velocity Fault Zones: **H Yang**, L Zhu

1340h  **T33B-2251 POSTER** Subsurface sedimentary record around the Nobi fault system, central Japan, by seismic reflection survey using artificial sources: **K Omura**, Y Asano, T Takeda, K Obara, N Komada, N Tsumura, T Ito, S Kojima, S Mizohata, S Kikuchi, S Abe, S Suda, A Takahashi

1340h  **T33B-2252 POSTER** Seismic Constraints on Fault-Zone Rheology from Repeating Earthquakes at Parkfield, California: **T Taira**, R M Nadeau, D S Dregg

1340h  **T33B-2253 POSTER** The May 29 2008 earthquake aftershock sequence within the South Iceland Seismic Zone: Fault locations and source parameters of aftershocks: **B Brandsdottir**, M Parsons, R S White, O Gudmundsson, J Drew

1340h  **T33B-2254 POSTER** The May 26, 2006 Yogyakarta Earthquake Fault Model Based on Aftershocks and InSAR Data: **A Anggraini**, M Shrizaei, M Sobiesiak, T R Walter, B G Luehr

1340h  **T33B-2255 POSTER** Interaction of small repeating earthquakes in a rate and state fault model: N Lapusta, **T Chen**

1340h  **T33B-2256 POSTER** Micro-earthquake observation around the 1891 Nobi earthquake fault system to evaluate simultaneous rupture: **Y Aoyagi**, M Kuriyama, K Ueta, T Sasaki, H Sato, S Higashi, S Abe

1340h  **T33B-2257 POSTER** Migrating Seismicity in South Iceland: K Feigl, T Ali, H F Wang, C H Thurber, T Arnadottir, K S Vogfjord, F Sigmundsson

1340h  **T33B-2258 POSTER** 3-D cell model simulation of the inland earthquake generation pattern in Southwestern Japan during the Nankai earthquake cycles in a layered viscoelastic medium: **Y Shikakura**, Y Fukahata, N Mitsui, K Hirahara

1340h  **T33C-2259 POSTER** A new plate motions model for the central Atlantic region: **L Tassi**, A Schettino

1340h  **T33C-2260 POSTER** Tectonic Implications of the Coupled Motions of India and Africa in the Late Cretaceous and Early Cenozoic: **S C Cande**, D R Stegman

1340h  **T33C-2261 POSTER** Insights on the deep structure of the Central Atlantic Ocean conjugate margins: **C Labails**, M Bromer, L Gernigon

1340h  **T33C-2262 POSTER** Tectonic evolution at rift zones: Geodynamics and Numerical Modeling: **M Cuffaro**, E Miglio, C Doglioni

1340h  **T33C-2263 POSTER** Reconstructing the Strat History of the Northern Gulf of California-Salton Trough Oblique Rift: **S E Bennett**, M E Oskin, R J Dorsey, L A Skinner, P J Umhoefer, M H Darin

1340h  **T33C-2264 POSTER** Reconstructing the Strat History of the Southern Gulf of California Oblique Rift: **P J Umhoefer**, L A Skinner, M E Oskin, R J Dorsey, S E Bennett

1340h  **T33C-2265 POSTER** Routeing of terrigenous clastics to oceanic basins in the southern Gulf of California, inherited from features of the pre-spreading protogulf: **P Lonsdale**, J W Kluesner

1340h  **T33C-2266 POSTER** Influence of Sediment Input and Plate-Motion Obliquity on Basin Development in the Gulf of California and Salton Trough: **R J Dorsey**, P J Umhoefer

1340h  **T33C-2267 POSTER** Lithosphere and asthenosphere structure beneath the Gulf of California from SSCOBA and NARS-Baja surface wave data: **N Carriero**, D W Forsyth, J B Gaherty, Y Wang

1340h  **T33C-2268 POSTER** The Mechanisms of Earthquakes and Faulting within the Southern Gulf of California: **D F Sumy**, J B Gaherty, T Diehl, W Kim, F Waldhauser, J A Collins

1340h  **T33C-2269 POSTER** Heat flow in the Gulf of California: effects of recent magmatism and hydrothermal circulation: **J G Scelar**, D P Hasterok, J Kluesner, P Lonsdale

1340h  **T33C-2270 POSTER** Along-strike variations in extension from the Woodlark spreading center to mainland Papua New Guinea: New constraints from offshore seismic reflection and well data: **G G Fitz**, P Mann, B K Horton

1340h  **T33C-2271 POSTER** Calculating lithosphere thickness from the subsidence record of an extensional sedimentary basin, Western Australia: **K Czarnota**, N White

1340h  **T33C-2272 POSTER** Evolution of Rift Fault Populations in 2- and 3-Dimensions: **E Choi**, W R Buck

1340h  **T33C-2273 POSTER** Full crustal 40 km PSDM seismic profiling (“BightSPAN™”) of the Ceduna subbasin, Great Australian Bight margin of South Australia: **J W Granath**, J M Christ, M G Dinkelmann, P A Emmett, D E Bird

1340h  **T33C-2274 POSTER** Crustal Configuration of the Terrace off Trivandum, Southwestern Continental Margin of India: **J Kurian**, Y Vadakkeyakath, G C Bhattacharya, R Sivaramakrishnan, Title of Team: SK221 Scientific Team*

1340h  **T33C-2275 POSTER** A tectonic model for sequential faulting, crustal thinning, and the development of asymmetric rifted margins: **M Perez-Gussinye**, C R Ranero

1340h  **T33C-2276 POSTER** Crustal structure of the inner mid-Norwegian continental margin - Trondelag Platform, from wide-angle seismic and potential field data: **A J Breivik**, R Mjelde, T Raum, J J Faleide, Y Murai, E R Flueh

1340h  **T33C-2277 POSTER** Salt as a 3D element in structural modelling - example from the Central European Basin System: **Y P Maystrenko**, M Scheck-Wenderoth, U Bayer
T33D Moscone South: Poster Hall Wednesday 1340h What Lies Beneath “Stable” Eastern North America II Posters (joint with DI, S)

**Presiding:** F A Darbyshire, GEOTOP UQAM-McGill; A M Forte, Univ Quebec Montreal; V L Levin, Rutgers University

1340h **T33D-2278 POSTER** Investigations into early rift development and geothermal resources in the Pyramid Lake fault zone, Western Nevada: A K Eisses, A M Kell, G Kent, N W Driscoll, R E Karlin, R L Baskin, J N Louie, S Pullman-Mannapallil

1340h **T33D-2279 POSTER** Genetic types and exploration significance of slope break belt in Paleogene in Qikou sag, Huanghua depression, Bohai Bay Basin, Eastern China: H Chuanyan, W Hua

1340h **T33D-2280 POSTER** Pb-isotope evidence for crustal interactions with primitive magmas during the rift-to-drift transition at the Voring Plateau, N.E. Atlantic: R Meyer, R Pedersen, J Hertogen

1340h **T33D-2281 POSTER** Modelling continental deformation within global plate tectonic reconstructions: S Williams, J Whittaker, C Heine, P Muller

1340h **T33C-2282 POSTER** Lithospheric delamination during rifting: J C Epps, J W van Wijk, J Van Hunen

1340h **T33D-2283 POSTER** How does the continental crust thin during rifting in magma-poor rifted margins: evidence from the Bernina/Campo/Grosina units in the Central Alps (SE-Switzerland and N-Italy): G Mohn, G Manatschal, E Masini, M Beltrando, O Muntener, N J Kusznir

1340h **T33D-2284 POSTER** Mantle Provinces under Eastern North America: K Sigloch

1340h **T33D-2285 POSTER** Upper mantle anisotropy and transition zone thickness beneath southeastern North America and implications for mantle dynamics: M H Benoit, M D Long, S D King, M C Chapman

1340h **T33D-2286 POSTER** Mantle provinces under Eastern North America: T Hobbs, F A Darbyshire

1340h **T33D-2287 POSTER** Differing effects of water fugacity deformation of quartzites and milky quartz single crystals: C W Holyoke, A K Kronenberg

1340h **T33D-2288 POSTER** Rheology of Impure Quartzite under Geologic Conditions: S B Kidder, J Avouac, Y Chan, C Chen


**Presiding:** S Grigull, Ruhr-Universität Bochum; V G Toy, University of Otago; D J Prior, University of Liverpool

1340h **T33E-01 POSTER** Deformation of Marble, Quartzite, and Metabasalt during Subduction and its Aftermath (Invited): D L Whitney, C Teyssier, N C Seaton, E Toraman

1355h **T33E-02 POSTER** Metamorphic Controls on relative Strength of Mafic and Felsic Rocks: D J Prior, M A Pearce, J Wheeler

1425h **T33E-03 POSTER** Evidence for a strong felsic lower crust during melt-assisted deformation (Invited): L Menegon, P Napisuri, H Stüntitz, H Behrens, E J Ravna

1440h **T33E-05 POSTER** Viscous shear heating instabilities in a 1-D viscoelastic shear zone: J M Homburg, E T Coon, M Spiegelman, P B Kelemen, G Hirth

1510h **T33E-06 POSTER** Influence of water content on the strength of gabbroic rocks and insights into using empirical flow laws for determining lower crustal rheology: E T Goergen, G Hirth

1525h **T33E-07 POSTER** Differing effects of water fugacity deformation of quartzites and milky quartz single crystals: C W Holyoke, A K Kronenberg

1340h **T33F Moscone West: 2018 Wednesday 1340h New Advances in Studies of the Tibetan Plateau and the Himalayas III (joint with V, S)

**Presiding:** Y Niu, Durham University; T M Hearn, New Mexico State University

1340h **T33F-01 POSTER** Tectonics of the India / Asia Collision: Z Xu, J Yang, H Li, Z Zhang, Y Liu, S Ji

1355h **T33F-02 POSTER** Comparative analysis of the collision-driven tectonic evolution of the Tibetan and Turkish-Iranian Plateaus: Y Dilek, Z Zhao, D Zhu

1410h **T33F-03 POSTER** Consensus on the Eocene Latitude of Lhasa and the Age of the Tethyan Himalaya-Asia Collision?: P C Lippert, D J Van Hinsbergen, G Dupont-Nivet, P A Kapp

1425h **T33F-04 POSTER** Monsoon speed up Indian plate motion: G Iaffaldano, L Husson, H Bunge

1440h **T33F-05 POSTER** Long-term landscape stability in southern Tibet inferred from the preservation of a large-scale bedload peneplain: M Strobi, R Hetzel, L Ding, L Zhang

1455h **T33F-06 POSTER** The Large Scale Tectonic Framework of SE Asia and the Deformation of the lithosphere Beneath Tibet and SW China (Invited): R D van der Hilst, H Huang, H Yao

1510h **T33F-07 POSTER** Using geotectonic, geologic, and seismic data to constrain asthenospheric flow beneath Tibet and SE Asia: L M Flesch, W E Holt
1340h V33A-2340 POSTER PT Evolution of Contemporary High-T Ecolite and High-P Omphacite Granulite from the Breaksea Orthogonite, Fiordland, New Zealand: M C De Paoli, G L Clarke
1340h V33A-2341 POSTER Phase Equilibrium and Raman Spectroscopic Constraints on the P-T Evolution of Lawsonite Eclipses from the Southern Matagau Fault Zone, Guatemala: S Endo, S Wallis, M Tsuibo, R Torres De Leon, L Solari
1340h V33A-2342 WITHDRAWN
1340h V33A-2343 POSTER Pressure-Temperature paths in the metapelite of the Tsel metamorphic terrane, SW Mongolia: U Burenjargal, A Okamoto, N Tsuchiya, Title of Team: Geothermal & Energy Lab
1340h V33A-2344 POSTER EBSD analysis of eclogitized rocks form the Marun-Keu complex, Polar Urals, Russia: P Hossenei, M L Leech
1340h V33A-2345 POSTER Fluid Overpressure and Connections to Seismicity, Cascadia Tertiary Accretionary Prism, Olympic Peninsula: H Rotman, C G Mattinson
1340h V33A-2347 POSTER Lawsonite Pseudomorphs: a strain-free gauge in exhuming blueschists: P Melody, F Gueydan, J Brun
1340h V33A-2348 POSTER Subduction-zone cycling of nitrogen in serpentinitized mantle rocks: R Halama, G E Bebout, T John, M Scambelluri
1340h V33A-2349 POSTER Quartz Solubility and Thermodynamics Above the Upper Critical End Point: J D Hunt, C E Manning
1340h V33A-2350 POSTER Quantitative analysis of material transfer during the ascent of garnet-amphibolite mass in the Sambagawa metamorphic belt, Japan: M Uno, M Toriumi
1340h V33A-2351 POSTER Metamorphic veining and mass transfer in a chemically-closed system: a case study in Alpine metabauxites (Western Vanoise): A Verlaguet, B Goffe, F Brunet, C Poinssot, O Vidal, N Findling, D Menut
1340h V33A-2352 POSTER Chlorine Stable Isotope Composition of Altered Oceanic Crust: Empirical and Experimental Results: J Barnes, J E Gardner
1340h V33A-2353 POSTER Carbonate dissolution through the subduction gauntlet and its impact on the marine Sr isotope composition: M Sharma, C Oze
1340h V33A-2354 POSTER Intermediate-depth Earthquakes and Mantle Re-gassing Induced by Fluid Trapping During Slab Unbending: M Facenda, T Gerya, N Mancktelow, L N Moresi
1340h V33A-2355 POSTER A close link between serpentinitization and seismogenesis in the Philippine Sea slab beneath Kanto, Japan: J Nakajima, A Hasegawa, N Umino, T Demachi
1340h V33A-2356 POSTER Physico-Chemical Transport And Differentiation Processes In Subduction Zones: Mixing At The Slab-Mantle Interface And Melting Of Mélangé Rocks In Mantle-Wedge Plumes?: J C Schmacher, H R Marschall

V33B Moscone South: Poster Hall Wednesday 1340h
The Subduction Filter: Effects on the Mantle, Arcs, and Continents Y Posters (joint with DI)

Presiding: C Chauvel, University of Grenoble; T Plank, Columbia University

1340h V33B-2357 POSTER In situ Raman Spectroscopy Investigation of Siderite Dissolution in Aqueous Fluids up to 400°C: M Marocchi, H Bureau, G Fiquet, F J Guyot
1340h V33B-2358 POSTER ANOMALOUS GOLD DEPOSIT ALONG SE EUROPE TETHYSIAN MARGIN: A SIGNATURE OF RETURN-INDUCED UPPER MANTLE FLOW AROUND HELLENIC SLAB EDGES: G Bertrand, C Loiselet, L Guillou-Frottier, M Billa, E Pelletier, F Maldan, D Cassard
1340h V33B-2359 POSTER Olivine-bearing Websterite Melt formed by recycled continental lithosphere: Mineralogical and Oxygen isotope evidence from Early Cretaceous Feixian basalts in the Eastern North China Craton: W Xu, Q Zhou
1340h V33B-2360 POSTER Geochemical systematics of Arc – Back-arc basalt association in NeoArchean (? ) Gwdal greenstone belt, eastern Dharwar craton, India: T Khanna, G M Yogodzinski, M Bizimis, M Chakravadhanula, B Vysetti, R Kanaparthi, P Kanakdande
1340h V33B-2361 WITHDRAWN
1340h V33B-2362 POSTER Origin of the Vanda Dike Swarm, Dry Valleys, Antarctica: B Bray, K S Harpp, D Geist, M O Garcia, G J Swarr
1340h V33B-2363 POSTER Refertilization of deep continental arc lithosphere: constraints from major element and trace element systematics in mantle xenoliths from the Sierra Nevada, California: E J Chin, C Lee, P I Luffi
1340h V33B-2364 POSTER What do Nd and Hf isotopes tell us about the sediment input into the Northern Cascades Arc system?: M Carpentier, D A Weis, C Chauvel
1340h V33B-2365 POSTER Geochemical characteristics of off-axis lavas from the Chile Rise: S Park, K W Sims, P J Michael, Y Orihashi, T Plank, N Abe
1340h V33B-2366 POSTER Spatial and Temporal Geochemical Variation in Basalt from the northern Andean Southern Volcanic Zone: D Drew, A E Saal, F A Frey, J Blusztajn, S R Hart
1340h V33B-2367 POSTER Evidence for a deep crustal hot zone beneath the Diamante Caldera-Maipo volcanic complex, Southern Volcanic Zone: D Drew, T Murray, P Srugsa, M D Feineman
1340h V33B-2368 POSTER A review of petrological characteristics of mantle xenoliths from Japan arcs: Implications for the structure of the sub-arc lherzolite mantle: N Abe, S Arai
1340h V33B-2369 POSTER Nature of the basaltic material subducting in the Nankai Trough, results from IODP expedition 322: C Chauvel, S Labanieh, A Fourny, Title of Team: Scientific Team of IODP Drilling Expedition 322
1340h V33B-2370 POSTER Middle Crustal Rocks from the Southern Mariana Trench - Relationship to Boninite and Tholeiitic Magma: J A Johnson, R Hickey-Vargas, P Fryer
1340h V33B-2371 WITHDRAWN

All information is current as of November 12, 2010
1340h V33B-2372 POSTER Composition and spatial evolution of mantle and fluids released beneath the active Southeast Mariana Forearc Rift: do they have arc or backarc basin signatures?

1340h V33B-2373 POSTER The Same Variably Enriched Mantle Wedge in the SW Pacific from Arc Birth to Death: E Todd, J B Gill


1340h V33B-2375 POSTER Fijiian Tonalites: Enriched mantle to continental crust in an oceanic arc setting: E Drewes, J B Gill

1340h V33B-2376 POSTER Steady-state behavior of the Soufrière Hills volcano, Montserrat: C P Mann, J Stix

1340h V33B-2377 POSTER Kinematic setting and structural control of arc volcanism: V Acocella, F Fucicciolo

1340h V33B-2378 POSTER Contrasting lithium and magnesium isotope fractionation during continental weathering: F Teng, W Li, R L Rudnick, R L Gardner

1340h V33B-2379 POSTER Magnesium isotopic composition of continental basalts: W Yang, F Teng, H Zhang

1340h V33B-2380 POSTER Magma genesis of the acidic volcanism in the intra-arc rift zone of the Izu volcanic arc, Japan: S Haraguchi, H Tokuyama, T Ishii

1340h V33B-2381 POSTER Sub-arc Mantle Reservoirs Through Time in Cascadia: S Bromley, A Grunder, R W Carlson, D G Pyle

1340h V33B-2382 POSTER Petrogenesis of primitive basalts formed at an early stage of subduction zone evolution: Geochemical characteristics and the origin of high-Mg basalts from the Hahajima Island Group, the Ogasawara (Bonin) Islands: K Kanayama, S Umino, O Ishizuka

---

V33C Moscone South: Poster Hall Wednesday 1340h Tracking Magma Through the Crust to Eruption IV Posters (joint with G, S)

Presiding: K S Vogfjord, Icelandic Meteorological Office; C J Bean, University College Dublin

1340h V33C-2383 POSTER Constraints on the Geometries and Compositions of Subvolcanic Conduits from Intrusions of the San Rafael Swell, Utah: P H Wetmore, C Connor, J Wilson

1340h V33C-2384 POSTER Stopping and restarting eruptions - Controls on Periodicity Revealed through Geodetic Imaging (Invited): R Foroozan, D Elsworth, R Foroozan, G S Martioli

1340h V33C-2385 POSTER Assessing the relevance of rock model complexity on ground deformation inversion: M Vassalli, G S O'Brien, C J Bean

1340h V33C-2386 POSTER Numerical simulation of magma plumbing system associated with the eruption at the Showa crater of Sakurajima inferred from ground deformation: S Minami, M Iguchi, H Mikada, T Goto, J Takekawa

1340h V33C-2387 POSTER Estimated magma intrusion model in Mayon volcano,Philippines by GPS measurements in 2004-2006: Y Matsumura, F Kimata, T Bacolcol, A Pelicano, E Laguerta, R U Solidum

1340h V33C-2388 POSTER POST-ERUPTIVE INSAR DISPLACEMENT ASSOCIATED WITH THE APRIL 2007 PITON DE LA FOURNAISE ERUPTION, REUNION ISLAND: A Augier, V Cayol, J Froger, T Staudacher, T Souriot

1340h V33C-2389 POSTER Recent results from the UnderVolc project: from the detection of long-term volcanic unrest processes to the imaging of dike propagation: F Brenguier, E Rivemale, D S Clarke, B Taisne, N M Shapiro, J Battaglia, J Got, V Ferrazzini, S Tait

1340h V33C-2390 POSTER Testing a New Method for Imaging Crustal Magma Bodies: A Pilot Study at Newberry Volcano, Central OR: M W Beachly, E E Hoots, D R Toomey, G P Waite, D T Durant

1340h V33C-2391 POSTER Mechanical Evolution of the 2004-2008 Mount St Helens Lava Dome Mechanics with Time and Temperature: P Sammonds, R Smith, H Tufken, P G Meredith

1340h V33C-2392 POSTER Testing the sensitivity of precursory changes in multiplets to surficial phenomenon at Mount St. Helens (2004-2008): W A Thelen

1340h V33C-2393 POSTER The Magmaic Origin and Evolution of the Oxnadalur Volcanic Complex in Northern Iceland: J F Kaiser, S J Seaman

1340h V33C-2394 POSTER Volatiles characterisation of Eyjafjallajökull volcano (Iceland): from the magmatic source at depth to the surface: S Moune, O Sigmarsson, T Thoradson

1340h V33C-2395 POSTER Pressure and temperature estimates of the 2010 Eyjafjallajökull eruption, Iceland: J K Keiding, O Sigmarsson

1340h V33C-2396 POSTER Tracking Magma Movements Within Eyjafjallajökull from Spatial and Temporal Variations in GPS Time Series: T Arnadottir, S Hreinsdottir, A J Hooper, M J Roberts, H Geirsson, F Sigmundsson

1340h V33C-2397 POSTER Tracking the seismicity preceding and during the March 2010 Fimmvörðuháls fissure eruption and April 2010 summit eruption of Eyjafjallajökull, Iceland: J Tarasewicz, B Brandsdottir, M Hensch, S R White

1340h V33C-2398 POSTER Monitoring the structure of Hekla Volcano, Iceland, with a temporary seismic network: A P Nies, M M Haney, T Masterlark, S K Needy, R Pedersen

1340h V33C-2399 POSTER Volcanic inflation of Axial Seamount since the 1998 eruption: S L Nooner, W Chadwick

1340h V33C-2400 POSTER Modeling magma flow in the plume source beneath Hawai’i: H M Gonnermann, J H Foster, B A Brooks, M P Poland, C J Wolfe

1340h V33C-2401 POSTER Analysis of Micro-Seismic Signals and Source Parameters of Eruptions Generated by Rapid Decompression of Volcanic Rocks: A Arciniega-Ceballos, M A Alatorre-Ibarguengoitia, B Scheu, D B Dingwell, H Delgado Granados

1340h V33C-2402 POSTER Locating sources of explosion quakes and long-period events at Yasur volcano, Vanuatu: L Perrier, J Metaxian, J Battaglia, E Garaebiti

1340h V33C-2403 POSTER San Miguel Volcanic Seismic and Structure in Central America: Insight into the Physical Processes of Volcanoes: E Patlan, A Velasco, J G Kontor

1340h V33C-2404 POSTER Velocity Structure and 2008 Eruptive Seismicity at Okmok Volcano, Alaska: S J Ohlendorf, C H Thurber, S G Prejean

1340h V33C-2405 POSTER Improved tremor and LP event locations using station-corrected waveforms: applications to data recorded with a small aperture array at Fuego volcano, Guatemala: G P Waite, J Lyons

1340h V33C-2406 POSTER Seismic damage before eruptions as a tool to map pre-eruptive mechanics: worldwide average patterns: A Schmid, J R Grasso
Presiding: P E Izzbekov, Geophysical Institute; J T Freymueller, University of Alaska Fairbanks; E I Gordeev, Institute of Volcanology and Seismology; J S Pallister, USGS

1340h Introduction By John Eichelberger, Volcano Hazards Program, USGS


1410h V33D-02 A seismic perspective on eruptions at Bezymianny Volcano (Invited): M E West, S Senyukov, W A Thelen, O George

1425h V33D-03 Rebuilding Kamchatka Volcanoes: A Decade Of Ground, Air And Spaceborne Observations Of Lava Dome Growth: A J Carter, M S Ramsey

1440h V33D-04 The December 2009 and May 2010 eruptions of Bezymianny volcano, Kamchatka: Interpretation of the GPS Record: R Grapenthin, J T Freymueller, S Serovetnikov

1455h V33D-05 Petrological constrains of magma feeding system of Bezymyanny volcano (Kamchatka): P Plechov, V D Shcherbakov, P E Izzbekov

1510h V21B-2328 Relating the composition and mass flux of volcanic gas emissions with eruptive activity at Bezymianny volcano from 2007 - 2010: T M Lopez, S Ushakov, P E Izzbekov, Title of Team: PIRE Science Team

1525h V33D-07 Modelling of an Eruption Dynamics of a Silicic Volcano. (Invited): O E Melnik, A A Barmin, R S Sparks

Presiding: A Moeller, University of Kansas; N M Kelly, Colorado School of Mines

1340h V33E-01 Radiogenic argon loss in experimentally deformed muscovite and biotite determined by in situ ultralow laser ablation 40Ar/39Ar geochronology (Invited): M A Cosca, H Stünitz, A Bourgeix

1355h V33E-02 Xenocrysts and antecrysts and their effect on the precision of 40Ar/39Ar dates of explosive volcanic eruption: V Smith, D Mark, S Blockley, A Weh

1410h V33E-03 Determining the rates of geological processes in a large-scale metamorphic complex: a multi-method approach: D Gasser, E Bruand, K Stuewe, D Rubarto, U S Klotzli, D A Foster

1425h V33E-04 Reconstructing the protracted P-t-t-d path of a giant ultrahigh-pressure terrane: Linking in-situ techniques with multiple methods of conventional geochronology (Invited): A R Kylander-Clark, B R Hacker

1440h V33E-05 Dating sub-20 micron zircons in granulite-facies mafic dikes from SW Montana: a new approach using automated mineralogy and SIMS U-Pb geochronology: A K Ault, K H Mahan, R M Flowers, K Chamberlain, S K Appleby, A K Schmitt

1455h V33E-06 GROWTH, TRANSPORT, AND/OR BREAKDOWN OF ACCESSORY MINERALS IN MIGMATITES FROM THE LARSEMANN HILLS, EAST ANTARCTICA: A K Matthews, N M Kelly

1510h V33E-07 Dating metasomatism: U/Pb ages of titanite overgrowth on rutile from the Catalina Schist migmatites, Catalina Island: T Zack, A Cruz-Uribe, M G Barth

1525h V33E-08 Dating Shearing and Exhumation in the Eastern Adirondack Mountains: Integrating Monazite into Microstructural and Petrologic Studies: M L Williams, M J Jercinovic, J M McLelland, M Wong

Presiding: P Ruprecht, Lamont-Doherty Earth Observatory; S Demouchy, Geosciences Montpellier -CNRS-

1340h V33F-01 Experimental investigation on H2O, CO2, S and Cl degassing at Stromboli: from the magma chamber towards the surface. (Invited): P Lesne, S Kohn, J Blundy, F Witham, R E Botcharnikov, H Behrens

1400h V33F-02 Influence of speciation of C-O-H-N volatiles in silicate melts and coexisting fluids on C and N isotope fractionation between melt and coexisting fluid to upper mantle pressure and temperature as a function of redox conditions: B O Mysen, M Fogel, S Yamashita, G D Cody

1415h V33F-03 Silicic magma accumulation beneath Mount Mazama, Oregon, 71 ka to 24 ka constrained by SHRIMP measurements of dissolved volatile concentrations in melt inclusions: H M Wright, C R Bacon, J A Vazquez, T W Sisson

1430h V33F-04 The evolution of water concentration during the March 28-29 1875 eruption of Askja volcano, Iceland: H A Clark, S J Seaman

1445h V33F-05 Rheology of Halogen-Rich Magmas: S L Webb

1500h V33F-06 Seismic Tremors and Magma Wagging During Explosive Volcanism: M Jellinek, D Bercovici

1515h V33F-07 Coupled effects of vertical and lateral gas escapes on conduit flow dynamics and chemistry of volcanic gas during lava dome eruptions: T Kozono, T Koyaguchi

Presiding: B E Schutz, University of Texas at Austin; T Neumann, NASA Goddard Space Flight Ctr.; T J Urban, University of Texas at Austin

1600h Overview of ICESat Mission Bob Schutz

1610h U34A-01 Overview of Ice-Sheet Mass Balance and Dynamics from ICESat Measurements (Invited): H J Zwally

1630h U34A-02 ICESat's contribution to advancing our understanding of ice sheet processes (Invited): H A Fricker

1650h U34A-03 Atmospheric Applications of ICESat (Invited): S P Palm, J Spinhirne, D L Hlavka, W Hart

1710h U34A-04 Progress In Vegetation Mapping and Monitoring With ICESat Data (Invited): M A Lefsky

1730h U34A-05 The Arctic Ocean from ICESat altimetry: Sea ice freeboard, thickness, and ocean dynamic topography (Invited): R Kwok, J H Morison

Atmospheric Sciences

A34A Moscone West: 3002 Wednesday 1600h
Atmospheric Sciences New Fellows Highlights (joint with AE, GC)

Presiding: A M Thompson, Penn State Univ; N G Andronova, University of Michigan; S Madronich, NCAR

1600h Natasha Andronova Introduction

1603h A34A-01 The Search for Dark Ice on Snowball Earth: P F Hofman

1616h A34A-02 INVERSION TECHNIQUES FOR RETREIVING DETAILED AEROSOL PROPERTIES FROM REMOTE SENSING OBSERVATIONS: ACHIEVEMENTS AND PERSPECTIVES: O Dubovik

1629h A34A-03 Sources of Cloud Condensation Nuclei in the Remote Marine Boundary Layer: A View Beyond the CLAW Hypothesis: P Quinn

1642h A34A-04 Changes in Intense Precipitation over the Conterminous U.S: N Stroumova, P Y Groisman, R W Knight, T R Karl

1655h A34A-05 A Paleo Perspective on Climate Change Commitment and the Future of the Oceans: K Caldeira

1708h A34A-06 Decadal Climate Prediction: Challenges and Opportunities: J W Hurrell

1721h A34A-07 The role of atmospheric dynamics in ozone-climate coupling: T G Shepherd

1734h A34A-08 What would have happened to the ozone layer if chlorofluorocarbons (CFCs) had not been regulated?: L Oman, P A Newman, A R Douglass, E L Fleming, S M Frith, M Hurwitz, S R Kawa, C H Jackman, N A Krotkov, E R Nash, J E Nielsen, S Pawson, R S Stolarski, G J Velders

1747h A34A-09 World-avoided simulation using a fully coupled climate-chemistry model: R R Garcia

A34B Moscone West: 3006 Wednesday 1600h
Extratropical and High-Latitude Storms, Teleconnections, and Changing Climate II (joint with C, GC, H, NH, OS, PA)

Presiding: X Zhang, University of Alaska Fairbanks; J E Walsh, University of Alaska Fairbanks; V A Alexeev, International Arctic Research Center

1600h A34B-01 Can Arctic sea-ice melt be explained by atmospheric meridional transports? (Invited): M K Tjernstrom, R G Graversen

1615h A34B-02 Does poleward heat transport affect Arctic amplification?: J E Kay, E Blanchard-Wrigglesworth, M M Holland, D A Bailey, C M Bitz

1630h A34B-03 Mobility of the North Atlantic Oscillation Since the 1820s: K Moore, I Renfrew, R S Pickart

1645h A34B-04 Circulation response to North American versus Eurasian anomalous snow scenarios in the Northern Hemisphere with an AGCM coupled to a slab ocean model: G R Henderson, D J Leathers, B Hanson

1700h A34B-05 Response of Winter-Spring North American Storm Activities to Elevated Tropical Pacific Sea Surface Temperature: S Basu, X Zhang

1715h A34B-06 Structure of a polar low over the Pacific Arctic observed by a shipboard Doppler radar (Invited): J Inoue, M E Horii, Y Tachibana, T Kikuchi

1730h A34B-07 Evaluation of an air pressure based proxy for storm activity: O Krueger, H von Storch

1745h A34B-08 The seasonal cycle of boreal Rossby wave breaking processes: D H Peters, A Schneiderert, A Gabriel

A34C Moscone West: 3008 Wednesday 1600h
Gulf of Mexico Air Quality and Climate Impacts: Urban and Regional Pollution Including the 2010 Oil Spill II (joint with PA)

Presiding: E P Olaguer, Houston Advanced Research Center; J A De Gouw, NOAA Earth System Research Laboratory


1630h A34C-03 Regional-scale modeling of secondary organic aerosol formation downwind from the DWH oil spill: R Ahmadov, S A McKeen, R Bahreini, J Brioude, J A De Gouw, A M Middlebrook, D M Murphy, I B Pollack, A L Robinson, T B Ryerson, M Trainer, C Warneke

1645h A34C-04 CCN Activity, Hygroscopicity, and Droplet Activation Kinetics of Secondary Organic Aerosol Resulting from the 2010 Gulf Oil Spill: R Moore, T L Latham, K Cerulley, R Bahreini, C A Brock, J M Langridge, A M Middlebrook, A Nenes, Title of Team: CALNEX science team


1730h A34C-07 Quantifying HCHO, NO2 and SO2 Emissions from Industrial Point Sources with Imaging DOAS: O Pikelnaya, J Stutz, J Tsai, D Fu, J H Flynn, B L Lefer

1745h A34C-08 Atmospheric oxidation and air pollution in Houston: Lessons from the SHARP 2009 field campaign (Invited): W H Brune, D van Duin, M Cazorla, S Chen, X Ren, J Mao

A34D Moscone West: 3004 Wednesday 1600h
Interactions Between Tropospheric Chemistry and Climate II (joint with GC)

Presiding: L J Mickley, Harvard University; A M Fiore, NOAA GFDL

1600h A34D-01 Developing metrics to account for climate change impacts on ozone air quality (Invited): D Winner, B Bloomer

1615h A34D-02 Observed suppression of ozone formation at extremely high temperatures (Invited): A L Steiner, A J Davis, S Sillman, R C Owen, A M Michalak, A M Fiore
1630h A34D-03 Impact of the Decadal-Scale Weakening of the Asian Summer Monsoon on Aerosol Concentrations in Eastern China: J Zhu, H Liao, J Li

1645h A34D-04 Sensitivity of the Global Distribution of Cirrus Ice Crystal Concentration to Heterogeneous Freezing (Invited): A Nenes, D Barahona, J M Rodriguez

1700h A34D-05 Ensemble projections of wildfire activity and carbonaceous aerosol concentrations over the western United States in the mid-21st century: X Yue, L J Mickley, J A Logan

1715h A34D-06 Evaluating Sources, Climate and Chemistry Changes From the Isotopes of Nitrate in Ice Cores (Invited): M G Hastings

1730h A34D-07 The Influence of Climate on Wetland Methane Emissions: E L Hodson, B Poulter, J O Kaplan, N Zimmermann

1745h A34D-08 Coupling of Nitrous Oxide and Methane by Global Atmospheric Chemistry: M J Prather, J C Hsu

Biogeosciences

B34A Moscone West: 2002 Wednesday 1600h

Geochimcal Signals of Early Diagenesis I (joint with H, OS, PP, V)

Presiding: M Roy, Oregon State University; B Haley, Oregon State University

1600h B34A-01 Sources and Biogeochemical Cycling of Iron Isotopes in Coastal Environments (Invited): O Rouxel

1615h B34A-02 TRACKING THE EVOLUTION OF FE-,TI-OXIDE PHASE CHANGES IN MICROBIAL FOSILIZATION EXPERIMENTS: UNDERSTANDING THE ROLE OF MICROBES IN DIAGENESIS: D M Bower, A Steele

1628h B34A-03 Magnetic Signatures Associated with Early Diagenesis (Invited): A P Roberts

1643h B34A-04 Determining Carbonate Concretion Formation Temperatures and Pore Water δ18O Values Using the Clumped Isotope Approach: S J Loyd, F A Corsetti, A K Tripati

1656h Break Break between

1704h B34A-05 Coupled organic and inorganic carbon diagenesis in the deeply buried sediment of the northeastern Bering Sea Slope (IODP Exp. 323): L M Wehrmann, N Risgaard-Petersen, H N Schrum, E A Walsh, T G Ferdelman, S L D’Hondt, Y Huh, M Ikehara, A C Ravelo, K Takahashi, C A Alvarez Zarikian, Title of Team: IODP Exp. 323 Scientific Party

1717h B34A-06 Reaction hotspots at micro- and macroscales: Challenges in early diagenetic modeling (Invited): C D Meile

1732h B34A-07 The Geologic Signature of Anaerobic Oxidation of Methane (Invited): W Ussler, C K Paull

1747h B34A-08 Carbonate diagenesis in the methane-rich sediments of the Beringian margin, IODP 323 Expedition: C Pierre, M Blanc Valleron, C Maerz, A Ravelo, K Takahashi, C A Alvarez Zarikian, Title of Team: Scientific Party of IODP Expedition 323

B34B Moscone West: 2004 Wednesday 1600h

Integrating Recent Knowledge of Soil Carbon to Help Develop Process-Based Soil Carbon Models I (joint with A, GC, EP)

Presiding: M Khomik, Max Planck Institute for Biogeochemistry; D Gaumont-guay, Vancouver Island University; F M Hopkins, University of California, Irvine; F E Moyano, BIOEOMCO

1600h B34B-01 Soil organic matter quality: Definition, quantification and implications for modeling (Invited): A F Plante

1615h B34B-02 Above-ground litter decomposition experiments: moving beyond mass loss (Invited): F M Cotrufo

1630h B34B-03 Controls on soil organic carbon and nitrogen in Inner Mongolia, China: a cross-continental comparison of temperate grasslands: S E Evana, I C Burke, W Lauenroth

1642h B34B-04 Shifts in microbial biomass indicators track changes in carbon and nitrogen cycles during tree plantation development to 20 years: A D Munson, E Maillard, D Paré

1654h B34B-05 Modeling in situ soil enzyme activity using continuous field soil moisture and temperature data: J M Steinweg, M D Wallenstein

1706h B34B-06 Temperature sensitivity of respiration scales with organic matter recalitrance: J M Craine, N Fierer, K K McLaughlan

1718h B34B-07 Soil carbon accumulation and loss in Alaska’s boreal forest: exploring the interactive effects wildfire and permafrost thaw: J A O’Donnell, J W Harden, A D McGuire, V E Romanovsky, M Z Kanewsky, T Jorgenson

1730h B34B-08 Mountain Pine beetle disturbance and climate effects on subalpine forest carbon cycling: N A Trahan, D J Moore, D R Bowling, R K Monson

1742h B34B-09 New opportunities for integrating mechanisms into soil carbon models for global simulations (Invited): M S Torn, W J Riley, Title of Team: Contributions from: The Lake Constance think tank on global change and feedback from organic carbon dynamics - an ESF workshop

B34C Moscone West: 2006 Wednesday 1600h

Regional Land and Ocean Carbon Budgets II (joint with A, OS)

Presiding: J Canadell, CSIRO Marine & Atmospheric Res; A J Dolman, VU University Amsterdam; P Ciais, CEA-CNRS-UVSQ

1600h Introduction Pep Canadell

1605h B34C-01 Towards the establishment of the Southeast Asia carbon budget (Invited): P K Patra, J Canadell, Title of Team: RECCAP Southeast Asia team (Guido van der Werf, Richard Houghton, Shilong Piao, Stephen Sitch, Akihiko Ito, Herwint Simbolon, Al Hooijer)

1617h B34C-02 The terrestrial carbon budget of Russia: integrating inventory based, eddy covariance and inversion methods: A J Dolman, M van der Molen, Title of Team: RECCAP Russia team

1629h B34C-03 The Carbon Sink of the World’s Forests: Trends and Causes of Change in Boreal, Temperate, and Tropical Regions from Forest Inventories: R Birdsey, Y Pan, J Fang, P Kauppi, W A Kurz, O Phillips, S Piao, A Z Shvidenko, J Canadell, P Ciais, R A Houghton, R R Jackson, S Pacala


1653h B34C-05 Anthropogenic carbon dioxide and trends in the western South Atlantic: A F Rios, A Velo, M Hoppema, F F Pérez

1705h B34C-06 REGIONAL CARBON BUDGETS FROM INVERSIONS OF ATMOSPHERIC CO2 OBSERVATIONS: P Peylin, K R Gurney, R Law, X Zhang, Z Poussi

1717h B34C-07 Estimation of monthly CO2 fluxes by a joint inversion of atmospheric and oceanic carbon observations: K Steinkamp, N Gruber

1729h B34C-08 Uncertainty analysis in RECCAP: I G Enting

1741h General Discussion
Cryosphere

C34A Moscone West: 3011 Wednesday 1600h
Assessing Past and Future Mass Changes of Earth's Mountain Glaciers and Ice Caps III (joint with EP, GC, NH, H)

Presiding: R M Hock, University of Alaska; J M Hagen, Department of Geosciences; S O’Neel, USGS

1600h C34A-01 A 60-year (1948-2007) global estimation of glacier mass changes by a global glacier model HYOGA: Y Hirabayashi, P M Doll, S Kanae

1615h C34A-02 Determining the maximum contribution of glacier ice to streamflow: A deCharon, N Voisin, D P Lettenmaier

1630h C34A-03 Global Evaluations of Mountain Glacier and Ice Cap Mass Balance (Invited): W T Pfeffer

1645h C34A-04 Widespread disappearance of small glaciers in the 21st century (Invited): V Radic, R M Hock

1700h C34A-05 The past and future deglaciation of western Canada: years 1900 to 2100: F S Anslow, A H Jarosch, G K Clarke, V Radic


1730h C34A-07 A decade time series of melt season duration on pan-Arctic land ice: G J Wolken, M J Sharp

1745h C34A-08 Internal Accumulation as a Bias at Large Spatial Scales: T Clerac, J G Cogley

Education and Human Resources

ED34A Moscone South: 102 Wednesday 1600h
Broader Impacts: Successful Models and Measuring Their Effectiveness II (joint with OS, PA)

Presiding: G Scowcroft, University of Rhode Island; L E Duguay, University of Southern California

1600h ED34A-01 Responsive, Flexible and Scalable Broader Impacts (Invited): A deCharon, C Companion, M Steinman

1615h ED34A-02 Assisting Scientists With Their Broader Impacts: Examples and Outcomes of Scientist Participation In The Centers For Ocean Science Education Excellence – Pacific Partnerships: J Hodder, G W Boehlert, S Rowe, K Morgan, C Gehrke, I Cheung

1630h ED34A-03 Use of Video Podcasts to Communicate Scientific Findings to Non-Scientists—Examples from the U.S. Geological Survey National Water-Quality Assessment Program: D A Harned, G McMahon, K Capelli


1700h ED34A-05 Engaging High School Students and Scientists in a Café Scientifique Program: M A Mayhew, M K Hall, S Foutz

1715h ED34A-06 Collaborative Research and Education in the Ross Sea: A broader impact evaluation report: C Parsons, J T Kohut, C S Lichtenwalner, H Clark

1730h ED34A-07 Capitalizing on Education and Outreach (E/O) Expertise to Broaden Impacts (Invited): P R Girguis, C Herren, A deCharon

1745h ED34A-08 Viewpoints on Education and Outreach: COSEE Scientists Share Their Work (Invited): B M McCann, J Kastler, C Cramer, L Taylor, S H Walker

Earth and Planetary Surface Processes

EP34A Moscone South: 310 Wednesday 1600h
The Influence of Rock Material Properties on Landscape Morphodynamics I (joint with H, MR, P, T)

Presiding: L S Sklar, San Francisco State University; N J Finnegam, UC Santa Cruz


1630h EP34A-03 ROCK BREAKAGE ENERGY AND LARGE-SCALE, LOW-FRICTION GEODYNAMIC PHENOMENA: T R Davies, M J McSaveney

1645h EP34A-04 Quantifying Bedrock Fracture Densities and their Influence on Hillslope Stability: D W Burbank, B A Clarke

1700h EP34A-05 Controls on the weathering front depth on hillslopes underlain by mudstones and sandstones: D M Rempe, J Oshun, W E Dietrich, R Salve, I Fung

1715h EP34A-06 Scaling the Teflon Peaks: Granite, Glaciers, and the Highest Relief in North America: D Ward, R S Anderson, P J Haeussler

1730h EP34A-07 Tectonics and Unroofing of the Santa Cruz Mountains, California, from Low-Temperature Thermochronology and Catchment-Averaged 26Be-Derived Denudation Rates (Invited): G E Hilley, R Burgmann, T A Duditui, Y Ebert, J C Fosdick, K Le, N M Levine, A Wilson, M H Gudmundsdottir

1745h EP34A-08 Landscape Attributes in the Santa Cruz Mountains Reflect Underlying Bedrock Lithology Rather Than Tectonic Rates: M H Gudmundsdottir, N M Levine, G E Hilley

Geodesy

G34A Moscone West: 2008 Wednesday 1600h
Recent Advances in Observation and Modeling of Glacial Isostatic Adjustment I (joint with C, PP)

Presiding: M Simpson, statens kartverk; E R Ivins, JPL/Caltech; S A Khan, Danish National Institute

1600h G34A-01 Earth’s Elastic Response to Seasonal Cycles in Surface Loading in Greenland and Antarctica: E C Kendrick, M G Bevis, A K Brown, F Madsen, S A Khan, M J Willis, T van Dam, R Forsberg, J E Box, T J Wilson, D Caccamise II, S A Konfal, B Johns

1615h G34A-02 Accelerations in GPS horizontal coordinates due to increased ice loss in Greenland (Invited): T M van Dam, S A Khan, J M Wahr, L Liu, M R van den Broeke

1630h G34A-03 Geodetically-Constrained Glacial Isostatic Adjustment models of Antarctica: Implications for the Mass Balance of the West Antarctic Ice Sheet: M J Willis, T J Wilson, T S James, S Mazzotti, M G Bevis, E C Kendrick, A K Brown

1645h G34A-04 A Newly Reanalyzed Dataset of GPS-determined Antarctic Vertical Rates: I Thomas, M King, P J Clarke, N T Penna, D A Lavallee, P Whitehouse


1715h G34A-06 Glacio-isostatic adjustment around Vatnajökull icecap, Iceland, revealed by satellite radar interferometry: A Auric, K Spaans, C Bernard, P Sigmundsson, A J Hooper
Global Environmental Change

**GC34A** Moscone West: 3005 **Wednesday 1600h**
**Improving the Simulation of Climate-Agriculture Interactions and Global Land Processes II (joint with A, B, IN, H)**

*Presiding: J M Winter*, NASA Goddard Institute for Space Studies; A C Ruane, NASA Goddard Institute for Space Studies; C A Schlesser, MIT; R G Prinn, MIT

1600h **GC34A-01** The Agriculture Model Intercomparison and Improvement Project (AgMIP) (*Invited: C Rosenzweig*
1615h **GC34A-02** New Tools to Assess Global Land Use, Agriculture, Food Security and Environment (*Invited: J A Foley*
1630h **GC34A-03** Towards accurate models of global crop-climate interactions (*Invited: D B Lobell*
1645h **GC34A-04** Climate Models, Spatial Scale, and Impacts of Climate Change on Agriculture (*Invited: L O Mears*
1700h **GC34A-05** Land Surface Biophysical-Climate Impacts of Tropical Deforestation with Time-dependence: Sensitivity to Deforestation Rates (*Invited: C G Castillo*, K R Gurney
1715h **GC34A-06** Regional-scale yield simulations using crop and climate models: assessing uncertainties, sensitivity to temperature and adaptation options (*Invited: A J Challinor*
1730h **GC34A-07** Estimating Indirect Emissions from Land Use Change Due to Biofuels (*Invited: J M Reilly*
1745h **GC34A-08** Modeling feedbacks and interactions between the land, climate, and human systems in the Community Land Model (CLM4): Successes and further research needs (*Invited: G B Bonan, P Lawrence, S Levis, K W Oleson

Hydrology

**H34A** Moscone West: 3014 **Wednesday 1600h**
**Groundwater/Surface Water Interactions: Stream Tracers and Techniques II (joint with B)**

*Presiding: B T Neilson*, Utah State University; R Haggerty, Oregon State University; S Krause, Keele University

1600h **H34A-01** Groundwater-surface water interactions at Plynlimon, Wales, inferred from environmental tracers spanning the periodic table (*Invited: J W Kirchner, C Neal
1618h **H34A-02** Pilot study of real-time groundwater monitoring coupled to USGS streamgaging stations: J E Constantz, C Eddy-Miller, R Caldwell, J Wheeler, J Barlow
1633h **H34A-03** Examination of groundwater-surface water interaction at the Hanford 300 Area using time-lapse resistivity imaging and distributed temperature sensing (*Invited: L D Slater, F D Day-Lewis, D Ntarlagiannis, K E Mwakanyamale, T C Johnson, M H Alwasif, A L Ward, R Versteeg, A Binley, J Lane
1651h **H34A-04** Limitations of the Stream Tracer Approach for Hyporheic Investigations: S M Wondzell
1706h **H34A-05** Shape-Free Inference of Hyporheic Travel-Time Distributions from Tracer Experiments in Streams: Z Liao, O A Cirpka
1721h **H34A-06** What do you mean my stream is clogged? How geology, heat and streambed chemistry define surface water - ground water interactions in a Great Basin mountain stream. (*Invited: C E Hatch, D E Prudic, T Jackson, K E Dotson, S W Tyler
1739h **H34A-07** Multi-scale interactions affecting transport, storage, and processing of solutes and sediments in stream corridors (*Invited: J W Harvey, A I Packman

All information is current as of November 12, 2010
H34B Moscone West: 3018 Wednesday 1600h
Quantifying the Ecological Footprint of Dam Removal II
(joint with PA)

**Presiding:** E M Douglas, University of Massachusetts Boston; B Lambert, Commonwealth of Massachusetts

1600h **H34B-01** Processing of sediment pulses following the removal of three small, gravel-filled barriers (Invited: D D Tullos, M M Cox, C Walter, K Kibler

1620h **H34B-02** Geomorphic response of the Souhegan River to the removal of the Merrimack Village Dam (Invited: A J Pearson, N P Snyder, M J Collins

1640h **H34B-03** What have we restored, and by what ecological processes? NOAA's program to improve implementation and effectiveness monitoring at dam removal sites (Invited: M J Collins

1700h **H34B-04** Geomorphic and Salmon Habitat Response to Dam Removal with Minimal Constraints to Channel Evolution, Wa'atch Creek, Western Washington, U.S.A: A C Ritchie, J G Shellberg

1720h **H34B-05** Homestead Dam Removal: a Natural Scale Experiment in Sandy and Coarse-grained Channels: J Gartner, F J Magilligan, C E Renshaw, W B Dade

1740h **H34B-06** Geomorphic and Ecological Issues in Removal of Sediment-Filled Dams in the California Coast Ranges (Invited: G M Kondolf, C O Reilly

H34C Moscone West: 3016 Wednesday 1600h
Remote Sensing of Hydrology and Its Applications IV (joint with G)

**Presiding:** M H Cosh, USDA-ARS-HSRL; A K Sahoo, Center for Research on Environment and Water; J D Bolten, NASA GSFC

1600h **H34C-01** Integration of GRACE data, with inferences from traditional datasets for a better understanding of the time-dependent water storage variability in African watersheds: M E Ahmed, M Sultan, J M Wahr, E Yan, A Milewski, W Sauck, R Becker, B Welton, P J Marsala

1615h **H34C-02** Characterization of Terrestrial Water Dynamics in the Congo Basin using GRACE and Satellite Radar Altimetry: H Lee, D E Aldorf, H Jung, C Shum, J Duan, J Guo, K Andreadis

1630h **H34C-03** Using GRACE Total Water Storage Changes to constrain River Routing Models in the Amazon River basin: C de Linage, M Lo, J F Famiglietti, R L Ray, B E Beighley

1645h **H34C-04** Realizing the potential of the GRACE Data Assimilation System (Invited: B F Zaitchik, M Rodell, R H Reichle, B Li, R Houborg, J D Bolten

1700h **H34C-05** The Contribution of Soil Moisture Information to Forecast Skill: Two Studies: R D Koster, S P Mahanama, B Livneh

1715h **H34C-06** INTEGRATING TERRESTRIAL WATER BALANCE IN THE AMAZON BASIN USING REMOTE SENSING DATA: M Azarberaksh, W B Rossow, F Papa

1730h **H34C-07** Constraints on the Hydrologic Settings and Recharge of the Freshwater Lenses in Kuwait: A Milewski, M Sultan, A Al-Dousari

1745h **H34C-08** Combining hydrological modeling and remote sensing observations to enable data-driven decision making for Devils Lake flood mitigation in a changing climate: X Zhang, Y H Lim, W L Teng, A Kirilenko

H34D Moscone West: 3020 Wednesday 1600h
Understanding and Predicting Water and Energy Cycle Changes Using Multisensor Heterogeneous Data for Energy and Water Cycle Research II (joint with IN)

**Presiding:** K S Fontaine, NASA; P Houser, George Mason University; D Cripe, Group on Earth Observations Secretariat; J K Entin; H Plag, S J Kempler, NASA/GSFC; W L Teng, NASA NES DISC (Wyle); M G Bosilovich, NASA GSFC

1600h **H34D-01** Development of an Integrated Water Resources Management System: T Koike, M Rasmay, L Wang, O C Saavedra

1615h **H34D-02** Requirements for Expanding the Role of Science and Technology through the Group on Earth Observations (GEO) to meet the Information Needs of Water Managers (Invited: R G Lawford

1630h **H34D-03** The NEWS Water and Energy Cycle Climatology Project (Invited: M Rodell, T S L'Ecuyer, H K Beaudoin, Title of Team: The NEWS Water and Energy Cycle Climatology Team

1645h **H34D-04** Indicators of Water Cycle Acceleration from GRACE and NASA NEWS Datasets (Invited: J S Famiglietti, D P Chambers, M Rodell, T H Syed, S C Swenson, I Velicogna, M J Wahr, R Narem, K A Hilburn, J K Willis

1700h **H34D-05** Investigation of the 2006 Drought and 2007 Flood Extremes at the Southern Great Plains Through an Integrative Analysis of Observations (Invited: X Dong, B Xi, A D Kennedy, Z Feng, J K Entin, P Houser, R A Schiffer, T L'Ecuyer, W S Olson, K Hsu, T W Liu, B Lin, Y Deng, T Jiang

1715h **H34D-06** Observing system variations effect on reanlyses: M G Bosilovich, J Chen, F R Robertson, A da Silva

1730h **H34D-07** Understanding climate with merged water vapor, temperature and cloud observations from the A-Train (Invited: E Fetzer, H T Dang, A Guillaume, Q Yue, C Liang, B H Kahn, B D Wilson, B Lambrigtsen, E Fishbein

1745h **H34D-08** Using NASA Products of the Water Cycle for Improved Water Resources Management: D L Toll, B Doorn, E T Engman, R G Lawford

Earth and Space Science Informatics

IN34A Moscone South: 302 Wednesday 1600h
Sensor Networks: From Sensors to the Web II (joint with NH, A, H, PP, V)

**Presiding:** J K Hart, University of Southampton; K Martinez, University of Southampton; K Moe, NASA

1600h **IN34A-01** Adaptive Observatory for Observing Moving Marine Organisms (Invited: J G Bellingham, C Scholin, Y Zhang, M A Godin, B Hobson, S Frolov

1615h **IN34A-02** Soil Moisture Sensing Controller and Optimal Estimator (SoilSCaPE): An in-situ Wireless Sensor Network for Validation of Spaceborne Soil Moisture Estimates (Invited: M Moghaddam, M Liu, X Wu, K Li, M Burgin, Y Goykhman, Q Wang, D Shuman, A Nayyar, D Teneketzis, D Entekhabi

1630h **IN34A-03** Online Data Streams: A Challenge and Paradigm Shift for the Observation of Environmental Phenomena: J Beutel, S Gruber, T Gsell, A Hasler, M Keller, M Yuecel, Title of Team: PermaSense

1645h **IN34A-04** Telesupervision of Environmental Water Science Sensor Robots: G Podnar, J Dolan, A Elfes

1700h **IN34A-05** Data Acquisition System for Russian Arctic Magnetometer Network: A Janzhura, O A Troschichev, K Takahashi
Nonlinear Geophysics

**NG34A** Moscone South: 308 Wednesday 1600h
Detection and Attribution of Trends, Correlations, and Cross Correlations in Climate and Geoscience I (joint with NH)

*Presiding: A Bunde*, Univ. of Giessen; C C Barton, Wright State Univ; S Lennartz, Univ. of Giessen; A A Carstea, ESFM-IPN

1600h **NG34A-01** Dyanmical system exploration of long-term memory in the climate system (Invited): **O J Mesa**, V K Gupta, P E O’Connell

1615h **NG34A-02** The case of polar lows (Invited): **H von Storch**, M Zahn

1630h **NG34A-03** Climate Surprises, Catastrophes and Fat Tails (Invited): **A Curry**


1700h **NG34A-05** Confidence bands for time series trends: **A Gluhovsky**

**NG34B** Moscone South: 308 Wednesday 1715h
Characterization of Geophysical Time Series I (joint with NH)

*Presiding: A Bunde*, Univ. of Giessen

1715h **NG34B-01** Acceleration to failure in geophysical signals prior to laboratory rock failure and volcanic eruptions (Invited): **I G Main**, A F Bell, J Greenhough, M J Heap, P G Meredith

1730h **NG34B-02** The Weather - Climate Transition, the Spectral Plateau and the Emergent Climate Regime (Invited): **S Lovejoy**, D J Schertzer

1745h **NG34B-03** Faithful deterministic encodings of precipitation series via a fractal-multifractal method: **C E Puente**, H Huang, A Cortis

Natural Hazards

**NH34A** Moscone West: 3010 Wednesday 1600h
Wildfires on Landscapes: Theory, Models, and Management II (joint with GC, PA)

*Presiding: J L Coen*, NCAR; C B Clements, San Jose State University

1600h **NH34A-01** A Conceptual Framework for Fire Ecology in a Changing Climate: **Z Gedalof**

1615h **NH34A-02** Remote Multispectral Imaging of Wildland Fires (Invited): **A Vodacek**, R Kremsen

1630h **NH34A-03** Stand-replacing patches within a ‘mixed severity’ fire regime: quantitative characterization using recent fires in a long-established natural fire area: **B Collins**, S Stephens

1645h **NH34A-04** Recent Extreme Forest Fire Activity in Western Russia: Fire Danger Conditions, Fire Behavior and Smoke Transport: **B J Stocks**, M Fromm, J Goldammer, R Carr, A I Sukhinin

1700h **NH34A-05** Toward a detailed physical modelling of wildfires: physical considerations and numerical results (Invited): **D Morvan**

1715h **NH34A-06** Analysis Of Wind And Fire Direction During The 2005’s Portuguese Fire Season: **A M Barros**, P M Miranda, J M Pereira

1600h **NH34A-07** WITHDRAWN

1730h **NH41A-1469** Predicting Forest Floor Consumption From Wildland Fire in Boreal forests of Alaska: **R D Ottmar**


Near Surface Geophysics

**NS34A** Moscone West: 3022 Wednesday 1600h
Airborne Geophysics for Geohazards and Environmental Problems II (joint with G, GP, H, NH, S, V)

*Presiding: S Okuma*, Geological Survey Japan, AIST; M Deszcz-Pan, USGS

1600h **NS34A-01** Airborne Gravity Measurements using a Helicopter with Special Emphases on Delineating Local Gravity Anomalies Mainly for Detecting Active Seismic Faults (Invited): **J Segawa**

1615h **NS34A-02** Geophysical Investigation of the Wooded Island earthquake swarm, Hanford Site, Washington (Invited): **R J Blakely**, C S Weaver, R E Wells, B L Sherrod, A Rohay, C W Wicks

1630h **NS34A-03** Using airborne magnetic data to map folding and faulting in sedimentary layers: implications for seismic hazard (Invited): **V E Langenheim**, R C Jachens, G A Phelps, R W Simpson

1645h **NS34A-04** Aeromagnetic and Resistive Evidence for a Concealed Depression Associated with a Past Flank Collapse of Fuji Volcano, Central Japan: **S Okuma**, T Nakatsuka, S Takakura, N Matsushima, S Nakano

1700h **NS34A-05** Airborne EM survey in volcanoes : Application to a volcanic hazards assessment: **T Mogi**

1715h **NS34A-06** Airborne TEM investigations of salinity distribution in coastal aquifers: The Ringkoebing lagoon case: **C L Kirkegaard**, E Auken, T O Sonnenborg, F Jorgensen

1730h **NS34A-07** Mapping of natural and man-made groundwater mineralization by helicopter-borne electromagnetics (Invited): **A Steuer**, B Siemon, U Meyer

1745h **NS34A-08** Three-dimensional inversion of entire airborne electromagnetic surveys for salinity mapping: **L H Cox**, G A Wilson, M S Zhidanov

Ocean Sciences

**OS34A** Moscone West: 3007 Wednesday 1600h

*Presiding: R Pedersen*, University of Bergen; D S Kelley, University of Washington; T M Shank, Woods Hole Oceanographic Institution

1600h **OS34A-01** Novel insights into methane cycling, lateral gene transfer, and the rare biosphere within carbonate chimneys of the Lost City Hydrothermal Field (Invited): **W J Brazelton**, K A Ludwig, M O Schrenk, D S Kelley, M L Sogin, J A Baross
OS34A-02 Investigating microbial colonization in actively forming hydrothermal deposits using thermocouple arrays: M K Tivey, A L Reyesnbach, M Hirsch, J Steinberg, G E Flores

OS34A-03 Microbial life associated with low-temperature hydrothermal venting and formation of barite chimneys at Loki’s Castle vent field: I H Thorseth, I Steen, I Roalvkhm, H Dahle, R Stoekke, H Rapp, R Pedersen

OS34A-04 Elaboration of a video processing platform to analyze the temporal dynamics of hydrothermal ecosystems: M Aron, J Sarrazin, P Sarradin, G Mercier

OS34A-05 Controls of surface topography on submarine and subaerial hydrothermal fluid flow and vent-site location: N Bani Hassan, L Rupke, K H Iyer, A Borgia


OS34A-07 Thermal legacy of near-ridge hydrothermal circulation reduces estimates of ridge flank advective heat loss: G A Spinelli, R N Harris

OS34A-08 Microearthquakes at the active Trans-Atlantic Geotraverse (TAG) hydrothermal mound, Mid-Atlantic Ridge, 26°08’N: C Pontbriand, R A Reves-Sohn

OS34B Moscone West: 3009 Wednesday 1600h Tidal Flats: Hydrodynamics and Sedimentary Processes II (joint with EP)

Presiding: D K Ralston, Woods Hole Oceanographic Institution; J M Thomson, University of Washington


OS34B-02 Gyung-Gi Bay Introduction: Barotropic Tidal Propagation and its Variable Variation of Residual Currents (Invited): S Woo, Y Song, B Yoon

OS34B-03 Hydromorphology of tidal flats: interactions between hydrodynamics, sediment transport, vegetation and morphodynamics (Invited): P Le Hir, R Verney, P Bassoullet, F Cayocca

OS34B-04 Wave attenuation and sediment transport over an intertidal sand flat on the Fraser River Delta (Invited): C Houser, P R Hill

OS34B-05 Analysis of Truncation, Stratification, and Nonlinear Tidal Processes as Sources of Velocity Asymmetry on Mesotidal Tidal Flats: N J Nidzieko, D K Ralston, W R Geyer

OS34B-06 Processes affecting the stratification-induced potential energy anomaly on the Skagit Bay tidal flats: V Pavel, B Raubenheimer, S Elgar, D K Ralston

OS34B-07 Observations of ebb flows on tidal flats: Evidence of dewatering: J P Rinehimer, J M Thomson, C Chickadel

OS34B-08 Water-surface elevation controls on sediment-transport dynamics in channel-flat environments of intertidal flats: D J Nowacki, A S Ogston

Planetary Sciences

PP34A Moscone West: 2011 Wednesday 1600h Nitrogen Cycle in the Oceans, Past and Present II (joint with B, OS, V)

Presiding: A Schmittner, Oregon State University; R De Pol-Holz, University of California, Irvine; M Kienast, Dalhousie University

PP34A-01 Does N2 Fixation in the Oligotrophic SE Pacific Influence N Isotopic Signals in the Peru-Chile OMZ?: M A Altabet, E Ryabenko, D Wallace

PP34A-02 Nitrous oxide concentrations and stable isotopes in water column and sediment profiles along the southern California and northwestern Mexican margin: A Townsend-Small, M G Prokopenko, W Berelson, L Chong

PP34A-03 Regional gradients in surface sediment nitrogen isotopes as a reflection of nutrient cycling and oxygen deficiency in upwelling areas off Peru and Namibia (Invited): R R Schneider, E Mollier-Vogel, P Martinez

PP34A-04 Nitrogen isotopic composition of planktonic foraminifera from the modern ocean and recent sediments: H Ren, R Thunell, D M Sigman, M G Prokopenko
1700h PP34A-05 Nitrification-coupled denitrification in sediment of the eastern Bering Sea shelf leads to 15N-enrichment of fixed N in shelf waters: J Granger, M G Prokopenko, C W Mordy, D M Sigman

1715h PP34A-06 Constraining the Biological Pump using Stable Nitrogen and Carbon Isotopes in the Glacial Ocean: CJ Somes, A Schmittner

1730h PP34A-07 Actual oxygen and suboxia representation: comparison of different ocean general circulation models: O Dutail, A Oschlies

1745h PP34A-08 Nitrate isotope fractionations during biological nitrate reduction: Insights from first principles theoretical modeling: W Guo, J Granger, D M Sigman

PP34B Moscone West: 2003 Wednesday 1600h

Southern Connections: An Intrahemispheric Paleoclimate Comparison II (joint with GC)

Presiding: T Cohen, Macquarie University; J May, University of Wollongong

1600h PP34B-01 Regional Hydroclimatology of the Peruvian Atacama Desert and Its Relation to the El Niño-Southern Oscillation: F J Magilligan, G Fisher, III, P Goldstein, B C Bostick

1615h PP34B-02 Holocene and Late Pleistocene Climate Change in the Peruvian Altiplano: L Kanner, S J Burns, H Cheng, R Edwards

1630h PP34B-03 Pleistocene large-lake episodes in the central Andes (Invited): CJ Placzek, J Quade, P J Patchett, R Seager

1645h PP34B-04 What controls the variability of the South American summer monsoon on paleoclimate timescales? (Invited): P A Baker, S C Fritz, C A Rigby

1700h PP34B-05 Climate of Australia over the past 100 ka inferred from stable isotopes in avian eggshells (Invited): G H Miller, M Fogel, J W Magee, M K Gagan, S D Newsome

1715h PP34B-06 The Medieval Climate Anomaly – A View From Down Under: I D Goodwin, T Cohen, P A Mayewski, A M Lorrey, S A Browning, M A Curran, T D van Ommen, J A Renwick

1730h PP34B-07 What do Westerly Wind Reconstructions from Fiordland, New Zealand, say about Southern Hemisphere Paleoclimatic Mechanisms?: K P Knudzon, I L Hendy, H Neil

1745h PP34B-08 Comparing Holocene vs. Late Pleistocene dynamics of sediment deposition in Laguna Potrok Aike, Argentina: C Ohlendorf, C Gebhardt, A Hahn, P Kliem, B Zolitschka, P Science Team

PP34C Moscone West: 2005 Wednesday 1600h

Dynamics of Glacial Cycles II

Presiding: S A Marcott, Oregon State University; J D Shakun, Oregon State University

1600h PP34C-01 Pacing, Forcing, or Chance? Milankovitch Plays Dice and Scores Ice Ages. (Invited): A C Mix

1615h PP34C-02 Links between Orbital Eccentricity and the 100,000-year Glacial Cycle: L E Lisiecki

1630h PP34C-03 Combined obliquity and precession pacing of glacial cycles (Invited): P Huybers

1645h PP34C-04 Bifurcation structure and noise-assisted transitions in the Pleistocene glacial cycles: P Ditlevsen

1700h PP34C-05 Reorganization of Ice Sheet Flow Patterns in Arctic Canada Prior to the Mid-Pleistocene Transition: K A Refsnider, G H Miller

1715h PP34C-06 Forced response of a global ice-sheet model to climatic changes during the last 130,000 years: O Elison Timm, A Timmernann, T Friedrich, A Abe-Ouchi

1730h PP34C-07 The highs and lows of Quaternary sea-level reconstruction (Invited): J A Dorale, B P Onac

1745h PP34C-08 Role of Atmospheric CO2 in the Ice Ages (Invited): J R Toggweiler

SPAs-Acrony

SA34A Moscone South: 301 Wednesday 1600h

The Active Inner Magnetosphere and Its Coupling With the Midlatitude Ionosphere I (joint with SM)

Presiding: A J Coster, MIT Haystack Observatory; J M Ruohoniemi, Virginia Tech; J B Baker, Virginia Tech

1600h SA34A-01: Magnetosphere-Ionosphere Coupling at Subauroral Latitudes (Invited): S Sazykin, R W Spiro, R A Wolf, Y Song, P Toffoletto

1615h SA34A-02: Statistical models of perpendicular Ion currents and pressure in the Inner magnetosphere: SCATHA, CRRES and Polar data: J L Roeder, J Fennell

1630h SA34A-03: Understanding the dynamic ionospheric signature of the plasmapause (Invited): M Moldwin, P Sibanda, S Zou, E Yizengaw

1645h SA34A-04: Remote sensing of the plasmasphere mass density using conjugate magnetometer chains SAMBA, MEASURE, and McMAC: E Zesta, A Boudouridis, M Moldwin, P J Chi, A M Jorgensen, N M McCarthy

1700h SA34A-05: Oscillation of SAPS/SAID structures with various temporal scales observed by the SuperDARN Hokkaido radar: N Nishitani, T Ogawa, T Kikuchi, Y Eibihara, T Hori, Y Zou, K Hosokawa, R Kataoka, Title of Team: SuperDARN Hokkaido Radar Team

1715h SA34A-06: Density Structure in the Plasmaspheric Boundary Layer (PBL) As Seen By IMAGE (Invited): J Goldstein, B R Sandel, C R Chappell, R E Denton

1730h SA34A-07: Mid-Latitude Ionospheric Redistribution and Horizontal Flux In The Coupled Geospace System (Invited): P J Erickson, M Z Miskin, F Beroz, J C Foster

1745h SA34A-08: Mid-Latitude Dayside Ionospheric Response to Storm-Time Electric Fields: M David, J J Sojka, R W Schunk, M W Liemohn

SPAs-Solar and Heliospheric Physics

SH34A Moscone South: 309 Wednesday 1600h

Solar and Heliospheric Physics General Contributions III: Solar Wind

Presiding: M M Velli, JPL; J T Steinberg, Los Alamos Nat’L Lab

1600h SH34A-01: Solar Wind Electrons Properties: HELIOS Observations and Extrapolations back to the SOLAR PROBE PLUS Perihelion: M Maksimovic, S Stervák, I Zouganelis

1615h SH34A-02: Solar Wind Suprathermal Electron Strahl Width from 1.3 to 5.4 AU: K A Goodrich, R M Skoug, J T Steinberg, D J McComas


SPA-Magnetospheric Physics

SM34A Moscone South: 305 Wednesday 1600h
Heliophysics Data Environment: Success Stories and Lessons Learned II (joint with SH, SA)

Presiding: R S Weigel, George Mason University; R E McGuire, NASA Goddard

1600h Introduction

1602h SM34A-01 SuperMAG: The Road to 115,000 Plots Viewed in a Month: J R Barnes, J W Gjerloev

1614h SM34A-02 Cluster Active Archive: lessons learnt: H E Laakso, C H Perry, M G Taylor, C P Escoubet, A Masson


1638h SM34A-04 Statistical characteristics of transient flows in the magnetosphere revealed by the Virtual Magnetospheric Observatory: J Merka, D G Sibeck, T W Narock

1650h Introduction to the Panel

1652h SM34A-05 Prospects in the NASA Heliophysics Data Environment. (Invited): J J Hayes

1700h SM34A-06 Heliophysics Data Environment: What’s next? (Invited): P Martens

1708h SM34A-07 The Space Physics “Data Problem” from the Perspectives of Different Stakeholders (Invited): E F Donovan

1716h SM34A-08 A Utopian View of Space Plasma Physics Data Analysis (Invited): D G Sibeck

1724h Panel Discussion What’s the major remaining problem TODAY in the Heliophysics Data Environment? And how can that problem best and realistically be addressed?

SM34B Moscone South: 307 Wednesday 1600h
Physical Processes in the Magnetotails of Intrinsic and Induced Magnetospheres II (joint with P)

Presiding: C S Arridge, University College London; N André, Centre d’Etude Spatiale des Rayonnements

1600h SM34B-01 The induced magnetotails of Mars and Venus: A tale of two tails (Invited): D A Brain, J S Halekas, J P Eastwood

1615h SM34B-02 Average pitch angle distributions in the terrestrial magnetotail: Cluster observations and implications for magnetotail structure (Invited): A P Walsh, C J Owen, A N Fazakerley, C Forsyth, M Engebretson, R E Denton, I Dandouras

1630h SM34B-03 Ion Heating in the Magnetotail During Quiet Magnetosphere Conditions: TWINS ENA Analysis: A M Keesee, K C Tallaksen, J McKee, E E Scime

1645h SM34B-04 Cluster observations of Shear-mode surface waves diverging from Geomagnetic Tail reconnection: L Dai, J R Wygant, J P Dombeck, C A Cattell, S A Thaller, C Moukis, A Balogh, H Reme

1700h SM34B-05 Mercury’s Dynamic Magnetic Tail (Invited): J A Slavin

1715h SM34B-06 Modeling of Mercury’s pick-up ion dynamics and its response to changes in IMF conditions: M Benna, J A Slavin, M Sarantos, W E McClintock, R M Killen, M H Burger, D N Baker, D Schriver, P M Traviniece, S C Solomon


1745h SM34B-08 Magnetic Reconnection in the Plasma Sheet for Southward Turning from Northward IMF: T Ogino

Study of Earth’s Deep Interior

DI34A Moscone West: 3024 Wednesday 1600h
Seismic Anisotropy in the Mantle: Progress, Prospects, and Pitfalls III (joint with MR, S)

Presiding: T W Becker, USc; C Beghein, UCLA; S Merkel, CNRS - Universite Lille 1

1600h DI34A-01 A Study of Short-Period Surface Wave Data, Geodynamic Models, and the Rheology and Dynamics of the Mantle Beneath the East Pacific Rise: G Ito, R Dunn, D W Forsyth

1615h DI34A-02 Modeling 3-D flow in the mantle wedge with complex slab geometries: Comparisons with seismic anisotropy: C R Kincaid, J G MacDougall, K A Druken, K M Fischer

1630h DI34A-03 New constraints on the plastic deformation of wadsleyite from atomic modeling: implications for the seismic anisotropy in the mantle transition zone (Invited): A Metsue, P CARREZ, P Cordier, D Mainprice, Y Usui, T Tsuchiya

1645h DI34A-04 Predicting seismic anisotropy in DS”S from global mantle flow models: A J Nowacki, A Walker, A M Forte, J W Wookey, J M Kendall

DI34B Moscone West: 3024 Wednesday 1700h
Advances in Computational Modeling in Geoscience I (joint with A, C, OS)

Presiding: J Brown, ETH Zurich; D May, ETH Zurich; L N Moresi, Monash University

1700h DI34B-01 Numerical Modelling of Plate-Tectonic and Planetary Processes with Finite Differences and Marker in Cell Techniques (Invited): T Gerya

1715h DI34B-02 Iterative inverse problem techniques: Ice sheet scale parameter identification (Invited): D A Maxwell

1730h DI34B-03 Parallel Multilevel Implicit Methods for Shallow Water Equations on Cubed-sphere (Invited): X Cai

1745h DI34B-04 Towards scalable full-waveform seismic inversion with quantified uncertainties (Invited): G Stadler, T Bui-Thanh, C Burstedde, O Ghattas, J Martin, L Wilcox
Seismology

S34A Moscone West: 2009 Wednesday 1600h Collaboration Among Science, Engineering, and Social Science: Earthquake Risk Mitigation in Urban Areas II (joint with NH, PA, T)

Presiding: N Hirata, University of Tokyo; M C Gerstenberger, GNS Science; K Nanjo, Earthquake Research Institute; M W Stirling, GNS Science

1600h S34A-01 Using Precariously Balanced Rocks, Historic Records And Paleoseismology To Constrain Rupture Patterns And Rupture Potential Of The San Andreas And San Jacinto Faults In The Los Angeles Region: L Grant Ludwig, J N Brune

1615h S34A-02 Peeling off of the uppermost crustal layer from the subducting plate at deep extensions of the subduction zone in Japan: H Kiumura, T Takeda, K Obara, K Kasahara

1630h S34A-03 Amplification and Attenuation in the Los Angeles and Kanto Sedimentary Basins using the Ambient Seismic Field: M Denolle, G Prieto, J F Lawrence, G C Beroza, N Hirata, S Nakagawa, H Miyake, K Kasahara, S Sakai, T Aketagawa, H Kiumura

1645h S34A-04 Dense Strong Motion Seismograph Networks in Canada: Opportunities and Applications. (Invited): J F Cassidy, A Rosenberger, G C Rogers, S Huffman

1700h S34A-05 Modelling Strong Ground Motions for Subduction Events in the Wellington Region, New Zealand: C Francois-Holden, J Zhao

1715h S34A-06 A Hybrid Seismic Loss Estimation Methodology based on Simulated Ground Motions in Urban Regions: A Askani, B Ugurhan, M A Erberik

1730h S34A-07 A Cloud Computing Approach to Personal Risk Management: The Open Hazards Group: W R Graves, J R Holliday, J B Rundle


Tectonophysics

T34A Moscone West: 2018 Wednesday 1600h New Advances in Studies of the Tibetan Plateau and the Himalayas IV (joint with V, S)

Presiding: X Mo, China University of Geosciences, Beijing

1600h T34A-01 Deformational and sedimentary responses to Late Miocene (13-8.5 Ma) left-lateral oblique movement along the northern foreland of the Red River-Ailao Shan shear zone, Yunnan, China: E Wang, J Yin, Z Su

1615h T34A-02 Dynamics of the deep lithosphere during evolved continental collision: Applications to crustal underthrusting in the Tibetan Plateau: R Gray, R N Psyklywec

1630h T34A-03 High Resolution of Crustal Seismic Wave Attenuation Tomography in Eastern Tibetan Plateau: X Bao, E A Sandvol, J F Ni, T M Hearn, Y J Chen, Y Shen

1645h T34A-04 3D Shear Wave Velocity Structure and Seismic Anisotropy beneath Northern Tibet: S Ceylan, J F Ni, Y J Chen, F Tilmann, Y Yang, M H Ritzwoller, E A Sandvol

Volcanology, Geochemistry, and Petrology

V34A Moscone West: 2016 Wednesday 1600h Geochemistry and Geochronology of Accessory Phases I (joint with T, MR)

Presiding: T Zack, Universitaet Mainz; D F Stockli, The University of Kansas

1600h V34A-01 Accessory mineral records of tectonic environments? (Invited): C Storey, H R Marschall, F Enea, J Taylor, E S Jennings

1615h V34A-02 Linking Trace Element Characteristics to U-Pb Ages of Accessory Minerals by In-Situ Analyses: Metamorphic Zircon Growth and Modification (Invited): A Moeller

1630h V34A-03 Mobilization of Pb in zircon during high-T metamorphism (Invited): N M Kelly, B Gorman, R W Hinton, S L Harley

1645h V34A-04 Zircon from East Antarctica: evidence for Archean intracrustal recycling in the Kaapvaal-Grunehogna Craton from O and Hf isotopes: H R Marschall, C J Hawkesworth, C Storey, P T Leat, B Dhuime

1700h V34A-05 In situ detrital zircon (U-Th)/He thermochronology: A Tripathy, B D Monteleone, M C Van Soest, K Hodges, J K Hourigan
1715h V34A-06 Quantifying alpha-protoner zonation in apatite with LA-ICP-MS depth profiles; implications for low-temperature thermochronology and standardization to NIST glass: S A Johnstone, J K Hourigan, C Gallagher

1730h V34A-07 An ion microprobe study of individual zircon phenocrysts from voluminous post-caldera rhyolites of the Yellowstone caldera: K E Watts, I N Bindeman, A K Schmitt

1745h V34A-08 Evolution of the Youngest Toba Tuff magma reservoir as recorded by Zircon Geochemistry and Crystallization Temperatures: T Gaither, M R Reid

---

**Thursday A.M.**

**Union**

U41A Moscone South: 104 Thursday 0800h Innovative Approaches to Planetary Seismology I

**Presiding:** C Sotin, Jet Propulsion Laboratory; M D Hofstadter, Jet Propulsion Laboratory


0820h U41A-02 Global oscillation detection and study of internal structure of gaseous planet by Doppler spectroscopy (Invited): F Schmider, Title of Team: EJSM/JGO Doppler Spectro Imagier (DSI) Team

0840h U41A-03 Venusian Earthquakes Detection by Ionospheric Sounding: G Occhipinti, P Lognonne, R F Garcia, T Gudkova

0855h U41A-04 Innovative Approaches for Seismic Studies of Mars (Invited): B Banerdt

0915h U41A-05 One-Station Seismology Without Traditional Seismic Sources (Invited): V C Tsai

0935h U41A-06 Ambient seismic noise applications for Titan: J M Jackson, Z Zhan, R W Clayton, D V Helmerger, V C Tsai

0945h U41A-07 Combining the LP and SP Apollo Seismic data to explore Broad Band Seismology on the Moon: T Kawamura, P Lognonne, M Boudet

---

**Atmospheric Sciences**

A41A Moscone South: Poster Hall Thursday 0800h Atmospheric Sciences General Contributions: Aerosols, Air Quality, and Atmospheric Chemistry I Posters

**Presiding:** D D Davis, Georgia Institute of Technology

0800h A41A-0020 POSTER Relationship Between Precipitation Chemistry and Meteorological Parameters at a Urban Site in the North of Queretaro State: R Garcia Martinez, G Hernandez, S Solis, M D Torres, H Padilla, A Baz

0800h A41A-0021 POSTER Heterogeneous Reaction of HO2 Radical with Dichromic Acid Particles: F Taketani, Y Kanaya

0800h A41A-0022 POSTER Uptake of Gas-Phase CO2 by Polycrystalline Ices or Aqueous Solutions: M Leu

0800h A41A-0023 POSTER The NIST Atmospheric Methane Gas Standard Scale: G Rhoderick, J Carney, E J Dlugokencky, D Kitiz

0800h A41A-0024 POSTER The Presence of Reactive Nitrogen in Fine and Coarse Aerosol: C S McCluskey, K B Beem, J L Collett

0800h A41A-0025 POSTER Evaluation of NOx and CH4 Emissions from Agricultural Land Using Geochemical Modeling: L Guo, D Luo, J Chen, M FitzGibbon
0800h  A41A-0026 POSTER The Retrieval and Comparison of Aerosol Mean and Effective Radii Measured by SAGE II and SAGE III: G K Yue

0800h  A41A-0027 POSTER Optical properties of urban aerosols, aircraft emissions, and heavy-duty diesel trucks using aerosol light extinction measurements by an Aerodyne Cavity Attenuated Phase Shift Particle Extinction Monitor (CAPS PMx): A Freedman, P Massoli, E C Wood, J D Allan, E Fortner, Z Yu, S C Herndon, R C Miake-Lye, T B Onasch

0800h  A41A-0028 POSTER Change of the Angstrom exponent in log-normal aerosol size distribution: C Jung, Y Kim

0800h  A41A-0029 POSTER Comparison of Contributions of Windblown and Anthropogenic Fugitive Dust Particles to Atmospheric Particulate Matter: S Park, S Gong

0800h  A41A-0030 POSTER Black cloud and transport of anthropogenic pollution across the Mediterranean Sea over Nile Delta region in Egypt during Fall season: H M El-Askary, A K Prasad, M Kafatos

0800h  A41A-0031 POSTER Photochemically consumed hydrocarbons and their relationship with ozone formation in two megacities of China: C Chang, J Wang, S Liu, M Shao, Y Zhang, T Zhu, C Shiu, C Lai

0800h  A41A-0032 POSTER Cycling of gaseous elemental mercury: Importance of water vapor: S Kim, R W Talbot, H Mao

0800h  A41A-0033 POSTER MUCES Supported Ozone Studies in Upstate New York and along the Texas Gulf Coast: A Hromis, M Balimuttajjo, A Johnson, J M Wright, A Idouw, D Vieyra, D Musselwhite, P A Morris

0800h  A41A-0034 POSTER Evaluation of biogenic emission flux and its importance on oxidants and inorganic aerosols in East Asia: K M Han, C H Song, R S Park, J Woo, H Kim

0800h  A41A-0035 POSTER Temporal and Spatial Variations in PM2.5 and PM10-2.5 in the Seoul Metropolitan Area between 2002 and 2008: Y Ghim, K Jung, M Kang

0800h  A41A-0036 POSTER Optical analysis of summer-time aerosol events over two southern Canadian sites using ground-based remote sensing techniques: M Karumudi, N T O’Neill, A Saha, D Daou, S Zidane, K B Strawbridge, B Firanski

0800h  A41A-0037 POSTER Assessment of Particulate Mercury Measured with the Tekran System: R W Talbot, H Mao, D Feddersen, M Smith, S Kim, B Sive, K Haase, J L Ambrose, Y Zhou, R S Russo

0800h  A41A-0038 POSTER Ozone Formation Potentials from Different Anthropogenic Emission Sources of Volatile Organic Compounds in California’s South Coast Air Basin: J Chen, D Luo, B Croes

0800h  A41A-0039 POSTER Inhomogeneity of NOx over Yokosuka, an urban site in Japan observed by MAX-DOAS: H Takashima, H Irie, Y Kanaya

0800h  A41A-0040 POSTER Estimate of Top-down NOx emissions over Seoul Metropolitan Area: S Lee, K M Han, C H Song

0800h  A41A-0041 POSTER Concentrations and changes of chemical elements in aerosol particulate matter as indicators of air quality in Riyadh City, Saudi Arabia: A I Rushdi, K F Al-Mutlaq, B R Simonet

0800h  A41A-0042 POSTER An estimation of ship-plume SOx lifetimes as a function of mixing ratios of hydroxyl radicals and pH of sea-salt particles: H Kim, Y Kim, C H Song

0800h  A41A-0043 POSTER Size Distribution of Atmospheric Particulate Mercury in Marine and Continental Atmospheres: D Feddersen, R W Talbot, H Mao, M A Smith, B C Sive

0800h  A41A-0044 POSTER Modeling The Effects of Heterogeneous Reactions On Atmospheric Chemistry And Aerosol Properties During INTEX-B Field Campaign: C Wei, G R Carmichael, B Adhikary, S Kulkarni


0800h  A41A-0046 POSTER Assessment of polarization effect on aerosol retrievals from MODIS: S Korkin, A Lyapustin

0800h  A41A-0047 POSTER Atmospheric mercury concentration measurements using cavity ring-down spectroscopy: A Pierce, X FAIN

0800h  A41A-0048 POSTER INORGANIC AND ORGANIC CHEMICAL COMPOSITION OF ATMOSPHERIC PARTICLES IN THE GUÁNICA’S DRY FOREST: W Marrero-Ortiz, O L Mayol-Bracero


0800h  A41A-0050 POSTER Quartz-Enhanced Photoacoustic Detection for Aerosol Optical Characterization: M Hollinger, N Black, C Mazzoleni

0800h  A41A-0051 POSTER On-road measurement of particulate matter emissions from vehicles: particle concentration, size distribution and morphology: N Salvadori, S China, J Cook, H D Kuhns, H Moosmuller, C Mazzoleni

0800h  A41A-0052 POSTER Characterization of Cooking-Related Aerosols: R F Niedziela, L E Blanc

0800h  A41A-0053 POSTER HaChi – Size- and time-resolved measurements of submicron winter and summer haze particles from the Beijing area: B Nekat, D van Pinxteren, Y Inuma, T Gnauk, K Müller, H Herrmann

0800h  A41A-0054 POSTER Low-Cost Sensor Units for Measuring Urban Air Quality: O A Popoola, M Mead, G Stewart, T Hodgson, M McLoed, J Baldovi, P Landshoff, M Hayes, M Calleja, R Jones

0800h  A41A-0055 POSTER Observations of ClNO2 and PANs in a mid-continental urban environment: A Furgeson, L Mielke, H D Osthoff

0800h  A41A-0056 POSTER Enhanced Turbulent Mixing on Highways: M Gordon, R M Staebler, J Liggio, P Makar, J Brook, J J Wentzell, G L, P Lee

0800h  A41A-0057 POSTER Formal blind intercomparison of HO2 measurements during the HOxComp campaign: H Fuchs, T Brauers, H Dorn, H D Harder, R Häselker, A Hofzumahaus, H Holland, Y Kanaya, Y J Kajii, D Kubistin, S Lou, M Martinez, K Miyamoto, S Nishida, M Rudolf, E Schlosser, A Wahner, A Yoshino, U Schurath

0800h  A41A-0058 POSTER Wet Deposition Concentrations and Fluxes of Mercury in Taiwan: G Sheu, N Lin


0800h  A41A-0060 POSTER Temporal and spatial variation of morphological descriptors for atmospheric aerosols collected in Mexico City: S China, C Mazzoleni, M K Dubey, R K Chakrabarty, H Moosmuller, T B Onasch, S C Herndon

0800h  A41A-0061 POSTER Characterization and Scaling of Black Carbon Aerosol Concentration with City Population Based on In-Situ Measurements and Analysis: G Paredes-Miranda, W P Arnott, H Moosmuller
A41B  Moscone South: Poster Hall  Thursday  0800h
Hurricane Prediction and Societal Impacts I Posters (joint with NH, OS, PA)

Presiding: J Bao, NOAA/ESRL; Z Pu, University of Utah

0800h  A41B-0067 POSTER The Evolution of Convective Structure in Tropical Cyclones Undergoing Rapid Intensification as Observed by Passive Microwave Sensors: D S Harnos, S W Nesbitt

0800h  A41B-0068 POSTER Adjoint sensitivity structures of typhoon DIANMU (2010) based on a global model: S Kim, H Kim, S Joo, H Shin, D Won

0800h  A41B-0069 POSTER Hydrometeor Trajectories and Distributions in a Simulation of TC Rapid Intensification (RI): Z Zhu, P Zhu

0800h  A41B-0070 POSTER Development of a tropical cyclone tracker and applications to tropical cyclones occurred in 2008 in North Western Pacific: J Kim, H Kim, Title of Team: atmospheric predictability and data assimilation laboratory

0800h  A41B-0071 POSTER An Observing System Simulation Experiment for the use of Unmanned Aircraft Systems in improving tropical cyclone forecasts: N Prive, Y Xie, S E Koch, R Atlas, S Majumdar, M Masutani, J Woollen, L Riishojgaard

0800h  A41B-0072 POSTER Estimation of turbulence characteristics of the low-level eyewall and outer-core regions in intense Hurricanes Allen (1980) and Hugo (1989): J A Zhang, F D Marks, M Montgomery, S Lorsolo

0800h  A41B-0073 POSTER Predictability of Tropical Cyclone Inter-annual Variability with 25-km High-resolution Global Model: J Chen, S Lin, T Marchok

0800h  A41B-0074 POSTER Aircraft Monitoring of Sea-Spray and Changes in Hurricane Intensity: J R Lawrence

0800h  A41B-0075 POSTER A New Paradigm Shift from Weather to Quantitative Impact Forecasts: S S Chen

0800h  A41B-0076 POSTER Contributions of Airborne GPS Radio Occultation Observations to Investigations of Moisture Evolution during the Development of Tropical Depressions and Storms: J S Haase, B Murphy, P Muradayn, A Johnson, C A Davis, S Chen, F Xie, J L Garrison, R D Torn

0800h  A41B-0077 POSTER Impacts of the STMAS cycling data assimilation system on improving hurricane prediction: H Yuan, Y Xie

0800h  A41B-0078 POSTER Numerical simulations of tropical cyclones with assimilation of satellite, radar and in-situ observations: lessons learned from recent field programs and real-time experimental forecasts: Z Pu, L Zhang

0800h  A41B-0079 POSTER NOAA HRD's HEDAS Data Assimilation System's performance for the 2010 Atlantic Hurricane Season: K Sellwood, A Aksoy, T Vukicevic, S Lorsolo

0800h  A41B-0080 POSTER Comparison of vertical wind shear impacts on hurricane structure deduced from a high-resolution numerical model and airborne Doppler radar: P D Reasor, S Gopalakrishnan, S Lorsolo, J Gamache, F D Marks

0800h  A41B-0081 POSTER Impact of upper ocean warm layer thickness on hurricane intensity change in a regional coupled model: H Seo, S Xie


0800h  A41B-0083 WITHDRAWN

0800h  A41B-0084 POSTER Analysis of forecast errors of high-resolution hurricane forecast using the ensemble data assimilation system: T Vukicevic, A Aksoy, K Sellwood, P D Reasor, S Gopalakrishnan, Lucci, S Aberson, F D Marks

0800h  A41B-0085 POSTER Advancements in Satellite Retrievals of Ocean Winds under Storm Conditions: The New WindSat All-Weather Dataset: T Meissner, L Ricciardulli, F J Wentz

0800h  A41B-0086 POSTER EVALUATING TROPICAL CYCLONE FORECASTS FROM HIGH-RESOLUTION REGIONAL MODELS AND LOWER RESOLUTION GLOBAL MODELS USING THE JPL GRIP/PREDICT/IFEX DATABASE OF SATELLITE AND AIRBORNE OBSERVATIONS DURING THE PERIOD AUGUST 15TH – SEPTEMBER 30TH 2010: S M Hristova-Veleva, F J Turk, P Li, B W Knosp, Q Vu, B Lambbrigsten, M Montgomery, M Boothe, C S Velden, S Gopalakrishnan, S L Durden, S Tanelli, T Quirino


0800h  A41B-0088 POSTER Progress in development of the Flow-following finite-volume Isosahedral Model (FIM) toward improving NCEP global ensemble forecasts and toward a chemistry-coupled global: T B Henderson, S Benjmin, R Bleck, J Brown, S Sun, J Bao, S Sahm, G A Harr, M Fiorino


0800h  A41B-0090 POSTER The Tropical Cyclone Modeling Team (TCMT): Evaluation of Experimental Models for Tropical Cyclone Forecasting in Support of the NOAA Hurricane Forecast Improvement Project (HFIP): P A Kucera, B Brown, L B Nance, K M Crosby, C Williams, T Jensen

A41C  Moscone South: Poster Hall  Thursday  0800h
Investigation of Atmospheric Processes Using Stable Isotopes I Posters (joint with B, GC, P)

Presiding: M G Hastings, Brown University; R Shaheen, Univ. of California San Diego

0800h  A41C-0091 POSTER Variation in Atmospheric Helium Isotopes: J C Mabry, B Marty, P Burnard, P Blard

0800h  A41C-0092 WITHDRAWN

0800h  A41C-0093 POSTER Determination of triple oxygen isotope ratios for tropospheric carbon dioxide: S Mahata, M Liang

0800h  A41C-0094 POSTER DEVELOPMENT AND DEPLOYMENT OF A FIELD-DEPLOYABLE AMBIENT METHANE CARBON ISOTOPE ANALYZER USING NEAR-IR LASER ABSORPTION SPECTROSCOPY: D S Baer, F Dong
0800h  **A41C-0095 POSTER** Effects of natural and anthropogenic CH$_4$ sources on variations of atmospheric CH$_4$, over western Siberia identified by its carbon and hydrogen stable isotopes: **T Umezawa**, T Machida, S Aoki, T Nakazawa

0800h  **A41C-0096 POSTER** Understanding the historical trend in atmospheric methane using its carbon isotopic composition 1978 to 1998: **D G Teama**, A L Rice

0800h  **A41C-0097 POSTER** Latitudinal and temporal patterns in terrestrial ecosystems recorded by the carbon isotopic composition of plant leaf wax aerosols: **M H Conte**, J C Weber

0800h  **A41C-0098 POSTER** Carbon isotope discrimination of coniferous forests in the Pacific Northwest, U.S.A: **C Lai**, J Ehleringer

0800h  **A41C-0099 POSTER** Tracking atmospheric sulphur pollution from the study of Racomitrium lanuginosum mosses in Iceland: A multi-isotope approach ($\delta^{34}$S, $^{206}$Pb/$^{208}$Pb, $\delta^{13}$C and $\delta^{14}$N): **E Proust**, D Widory, B Gautason, K Rogers, J Morrison

0800h  **A41C-0100 POSTER** Environmental controls on the 345/325S ratios of soil and vegetation: **S A Balan**, A Laleian, E Portier, R Amundson

0800h  **A41C-0101 POSTER** Isotope ratio mass spectrometry as a tool to determine aerosol yields in organic seed eukaryotes: **J Dommen**, P Barret, F Bianchi, L Pfaffenberger, P F DeCarlo, M Saurer, R T Siegwolf, A S Prevot, U Baltensperger

0800h  **A41C-0102 POSTER** Heterogeneous Chemical Transformation on Mineral Aerosol Surfaces during Long Range Transport and its Implications in Understanding Aeolian Dust Deposits in Antarctic Dry Valleys: **R Shaheen**, H Bao, M H Thiemens

0800h  **A41C-0104 POSTER** Triple oxygen isotope determination of oxygen exchange between sulfate and water preceding the aqueous oxidation of sulfite (pH=1-10): **J E Kohl**, H Bao

0800h  **A41C-0105 POSTER** Investigating atmospheric transport processes using cosmogenic 35S and oxygen isotopic anomaly (A17O) in sulfate: **J C Hill-falkenthal**, A Pandey, E Coupal, S D Kim, G Dominguez, M H Thiemens

0800h  **A41C-0106 POSTER** Sulfur Isotopes of SO$_2$ Aerosol sulphate during the onset of Arctic Winter: **A Seguin**, O T Rempillo, A L Norman

0800h  **A41C-0107 POSTER** The spring nitrate peak in snow and ice cores at Summit, Greenland: **L Geng**, J Cole-Dai, B Alexander

0800h  **A41C-0108 POSTER** A simple model to predict $\delta^{15}$O values of atmospheric nitrate: **G Michalski**, D Mase, V K Sehrawat

0800h  **A41C-0109 POSTER** Analysis of Atmospheric Nitrogen Inputs to the Forest Through Isotope Mass Spectrometry: **A J Wright**, B Alexander, G M Michalski, P B Shepson

0800h  **A41C-0110 WITHDRAWN**

0800h  **A41C-0111 POSTER** Quantifying the isotope fractionation factor for $^{18}$O/$^{16}$O, consumption during respiration in flowing waters: **E R Hotchkiss**, R O Hall

---

**POSTER Moscone South: Poster Hall Thursday 0800h**

**Mechanisms of High-Latitude Climate Change I Posters** (joint with C, GC, OS)

**Presiding:** M G Flanner, University of Michigan; I L Eisenman, Caltech & UW; J E Kay, NCAR

0800h  **A41D-0112 POSTER** Trends and variability in near-surface temperatures across West Antarctica: **S Hosking**, J Turner, A Orr, T Phillips, **H K Roscoe**

0800h  **A41D-0113 POSTER** Characteristics of Antarctic gravity waves in the lower atmosphere and their long-term variations at McMurdo and the South Pole: **Z Yu**, X Chu, A McDonald, C Yamashita, C S Gardner

0800h  **A41D-0114 POSTER** Starphotometry at two High Arctic stations: **K Baibakov**, N T O'Neill, A Herber, E Eloranta

0800h  **A41D-0115 POSTER** A dynamical mechanism for recent Southern Hemisphere climate change: **A Orr**, T Bracegirdle, S Hosking, T Jung, J Haigh, T Phillips, **H K Roscoe**

0800h  **A41D-0116 POSTER** Satellite derived 30-year trends in terrestrial frozen and non-frozen seasons and associated impacts to vegetation and atmospheric CO$_2$: **Y Kim**, J S Kimball, K C McDonald, J M Glassy


0800h  **A41D-0118 POSTER** The Effects of Continental-Scale Snow Albedo Anomalies on the Wintertime Arctic Oscillation: **R J Allen**, C S Zender

0800h  **A41D-0119 POSTER** Increasing Arctic sea ice export driven by stronger winds: **A Sorteberg**, L H Smedsrud, A Sirevaag, K Kloster

0800h  **A41D-0120 POSTER** Recent Changes in Tropospheric Water Vapour of the Arctic: **A Barrett**, M C Serreze, J C Stroeve

0800h  **A41D-0121 POSTER** Modeling the Response of Boreal Forest Expansion on the Summer Arctic Frontal Zone: **S Liess**, **P K Snyder**, K J Harding

0800h  **A41D-0122 POSTER** High-Latitude Inversion Layers from GPS Radio Occultation Observations: **C O Ao**, **F Xie**, Y Zhang, D J Seidel, J E Kay, C Deser

0800h  **A41D-0123 POSTER** Changes in the sea ice seasonal cycle in response to climate change: **I L Eisenman**, T Schneider, D S Battisti, C M Bitz

0800h  **A41D-0124 POSTER** A Framework for Thinking About Cloud Feedbacks and Arctic Sea Ice Tipping Points: **D S Abbott**, M Silber, R Pierrehubert

0800h  **A41D-0125 POSTER** Snow-air temperature coupling strength and its contribution to climate predictability: **L Xu**

0800h  **A41D-0126 POSTER** Recent West Antarctic warming caused by central tropical Pacific warming: **Q Ding**, E J Steig, D S Battisti, M Küttel

0800h  **A41D-0127 POSTER** Polar surface pressure responses to the global electric circuit: **L Hebert**, B A Tinsley

0800h  **A41D-0128 POSTER** The increase of Southern Ocean winds and SAM: is it caused by the ozone hole or by increased greenhouse gases?: **H K Roscoe**

0800h  **A41D-0129 POSTER** Role of Surface Temperature Inversions in Arctic Amplification: **G B Lesins**, T J Duck, J R Drummond

0800h  **A41D-0130 POSTER** Increasing October low-cloud cover in the Arctic as observed by MISR during 2000-2009: **D L Wu**, J N Lee

0800h  **A41D-0131 POSTER** Water vapour feedback amplifies high latitude warming: **R G Graversen**, P L Langen, T Mauritzen

0800h  **A41D-0132 POSTER** The role of changing synoptic circulation patterns on the climate of McCall Glacier, Alaska: **E Cassano**, J J Cassano, M Nolan

0800h  **A41D-0133 POSTER** Long-term changes in Arctic surface-based inversions: **Y Zhang**, D J Seidel, J Golaz, C Deser, R A Tomas

0800h  **A41D-0134 POSTER** Linkages between Transient Atmospheric Eddy Activities and the Retreat of Arctic Sea Ice in Different Circulation Patterns: **P Ma**, J N Lee

0800h  **A41D-0135 POSTER** Recent Changes in Tropospheric Water Vapour: **I E Kohl**, H Bao

0800h  **A41D-0136 POSTER** Increasing Arctic sea ice export driven by stronger winds: **A Sorteberg**, L H Smedsrud, A Sirevaag, K Kloster

0800h  **A41D-0137 POSTER** Recent Changes in Tropospheric Water Vapour of the Arctic: **A Barrett**, M C Serreze, J C Stroeve

0800h  **A41D-0138 POSTER** Modeling the Response of Boreal Forest Expansion on the Summer Arctic Frontal Zone: **S Liess**, **P K Snyder**, K J Harding
A41D-0136 POSTER The influence of initial conditions on predictability in the Arctic: E Blanchard-Wrigglesworth, C M Bitz, M M Holland

A41D-0137 POSTER Comparison of High Latitude MISR and CERES TOA Shortwave Irradiance Measurements: J Corbet, R Davies

A41D-0138 POSTER Is sea ice loss reversible?: K Armour, I L Eisenman, E Blanchard-Wrigglesworth, C M Bitz

A41D-0139 WITHDRAWN

A41D-0140 POSTER SEM/EDS Characterization of Ambient PM during Agricultural Burns: J Wagner, S Wall

A41D-0141 POSTER Measurements and model studies of ambient aerosol volatility in Riverside, CA: L Hatch, K A Pratt, K C Barsanti, K A Prather

A41D-0142 POSTER The Role of Aerosol Composition in Arctic Cloud Formation: S D Brooks, N Hiranuma, R Moffet, A Laskin, M K Gilles, A Glen


A41D-0144 POSTER A comparison of characteristics of fog droplet size distribution in a mountainous region of South Korea: J Jeong, K Chang, J cha, C Lee, Y Choi

A41D-0145 POSTER Importance of aerosol phase upon aerosol oxidation: F D Pope, P Achakulwisut, P Gallimore, M Kalberer

A41D-0146 POSTER Discontinuous hygroscopic growth of an aqueous surfactant/salt aerosol particle levitated in an electrodestatic balance: V Soonsin, U K Krieger, T Peter

A41D-0147 POSTER Brief (<1 sec) delays to particle activation, and their influence on deposition patterns in the respiratory system: C R Ruehl, M J Kleeman, P Y Chuang, A Nenes

A41D-0148 POSTER Depth resolved characterization of model and ambient atmospheric particles using high-resolution secondary ion mass spectrometry: S Ghosal

A41F-0153 POSTER Innovative Solutions for Pulsed Wind Lidar Accuracy in Complex Terrain: M Boquet

A41F-0154 POSTER Performance of a wind-profiling LIDAR in the region of wind turbine rotor disks: M Aitken, M E Rhodes, J K Lundquist

A41F-0155 POSTER Terrain forcing and thermal winds in a mountain pass: A Clifton, M H Daniels, M Lehning

A41F-0156 POSTER Experimental study of wind turbine wakes in a convective boundary layer: W Zhang, C D Markfort, F Porte-Agel

A41F-0157 POSTER The effects of varying meteorological conditions on power production at a central North American wind farm: B J Vanderwende, J K Lundquist

A41F-0158 POSTER Atmospheric stability effects on turbulent flow over a steep 2-D hill: F Porte-Agel, W Zhang

A41F-0159 POSTER Large Eddy Simulation study of fully developed thermal wind-turbine array boundary layers: M Calaf, C V Meneveau, M B Parlange


A41F-0161 POSTER An Approach for Quantitative Forecasting of Turbulent Flow over an Urban Area by Coupling Numerical Weather Prediction and Large-Eddy Simulation Models: T Takemi, H Nakayama

A41F-0162 POSTER Large-eddy simulation of flow over the Great Plains under stable atmospheric conditions: B Zhou, F K Chow

A41F-0163 POSTER Evaluation of sub-kilometer dynamical downscaling with MM5 and WRF mesoscale models: R Vellore, K Horvath, D Koracin, J Jiang, R Belu, T McCord

A41F-0164 POSTER Sensitivity evaluation of wind fields in surface layer by PBL and LSM parameterizations using WRF over the Korean Peninsula: B Seo, J Byon, Y Choi

A41F-0165 POSTER Wind field variability in high-resolution simulations for wind energy forecasts and resource assessment: N Marjanovic, F K Chow, S Wharton, J K Lundquist

A41F-0166 POSTER Short-term wind-speed forecasting system for wind power applications: J J Traiteur, S Baidya Roy


A41F-0168 POSTER WRF and Mass-Consistent Wind Model Applications for Wind Power Forecasting in California’s Coastal Complex Terrain: K T Clifford, C B Clements, M Voss

A41F-0169 POSTER Design of a WRF Ensemble for Improved Wind Forecasts at Turbine Height: W A Gallus, A J Deppe, E S Takle

A41F-0170 POSTER Assessment of a wind map over the Korean Peninsula based on WRF-FDDA: J Byon, Y Choi, B Seo

A41F-0171 POSTER Four-dimensional variational assimilation of multi-time wind profile observations: the impact and potential applications to wind power meteorology: X Liang, Z Pu, L Zhang

A41F-0172 POSTER Using initial and boundary condition perturbations in medium-range regional ensemble forecasting with two nested domains: J Jiang, D Koracin, R Vellore, M Xiao, J M Lewis

A41F-0173 POSTER Widespread land surface wind decline in the Northern Hemisphere partly attributed to land surface changes: J Thepaut, R Vautard, J Cattiaux, P Yiou, P Claix
A41F-0174 POSTER Wind energy forecast ensembles using a fully-coupled groundwater to atmosphere model: J L Williams, R M Maxwell

A41F-0175 POSTER The Wind EEnergy Data and Information (WENDI) Gateway: New Information and Analysis Tools for Wind Energy Stakeholders: D Kaiser, G Palanisamy, S Santha Vanann, Y Wei, T Smith, M Starke, M Wilking, V Pan, R Devarakonda, B E Wilson, Title of Team: Wind ENEergy Data and Information (WENDI) Gateway Team

A41F-0176 WITHDRAWN

A41F-0177 POSTER Wind Climatology for the Great Lakes Region as Derived from the North American Regional Reanalysis: S Zhong, X Li, R X Bian, W Hellman

A41F-0178 POSTER A U.S. Wind Climatology: new tools to monitor wind trends across the contiguous United States: J Crouch, T W Wallis, D Arndt

A41F-0179 POSTER Application of Satellite Data to Develop Wind Potential Model: A Case Study of Pakistan Coastal Belt: Z A Nayar, N A Zaigham


A41F-0181 POSTER An Analysis of Climate Change Impacts on Future Wind Energy Production in California: D M Rasmussen, T Holloway, G F Nemet

A41F-0182 POSTER Applications of the Renewable Energy Network Optimization Tool: R Alliss, R Link, D Apling, H Kiley, M Mason, K Darmenova

A41F-0183 POSTER Optimizing Aggregation Scenarios for Integrating Renewable Energy into the U.S. Electric Grid: B A Corcoran, M Z Jacobson

A41F-0184 POSTER Optimizing Baseload Power of Interconnected Wind Farms: B H Kobrin

A41F-0185 POSTER Southern California Wind Power Sensitivity to Turbine Hub Height, Rotor Radius and Rated Power: S B Capps, A D Hall, M R Hughes

A41F-0186 POSTER Application-dependent Probability Distributions for Offshore Wind Speeds: E C Morgan, M Lackner, R M Vogel, L G Baise

A41F-0187 POSTER Wind resource in Iceland: K Jonasson, H Bjornsson, T Birgisson, J Blondal

A41F-0188 POSTER Accuracy of Wind Prediction Methods in the California Sea Breeze: B D Sumers, M J Dvorak, J E Ten Hoeve, M Z Jacobson

A41F-0189 POSTER Using and testing WAsP over West Texas area: K Rozsavolgyi, A Ruiz-Columbie

A41G-06 Idealized Tropical Cyclone Simulations of Intermediate Complexity: A Test Case for Atmospheric GCMs: C Jablonowski, K A Reed


A41G-08 What is learned about amplitude and waveform from geometric acoustics?: P Blom, R Waxler

A41H-- Moscone West: 3004 Thursday 0800h

Marine Aerosols: Production Mechanisms, Chemical Composition, and Representation in Regional and Global Models I (joint with B, OS)

Presiding: N Meskhidze, North Carolina State university; M D Petters, Scripps Institution of Oceanography


A41H-02 Production Flux of Sea-Spray Aerosol: G De Leeuw, E L Andreas, M D Anguelova, C W Fairall, E R Lewis, C O'Dowd, M Schulz, S E Schwartz


A41H-04 Marine Boundary Layer Aerosol Profiling with a Camera Lidar: J E Barnes, N C Parikh Sharma, T Kaplan, A D Clarke

A41H-05 Effect of phytoplankton-released organic matter on the production and properties of the primary marine aerosol (Invited): E Fuentes, H Coe, D Green, G De Leeuw, G McFiggans

A41H-06 Isolating factors that determine the organic enrichment of sea spray: B Gantt, E Morris, M D Petters, N Meskhidze

A41H-07 Biogenic amines in submicron marine aerosol (Invited): M Facchini

A41H-08 Latitudinal distributions of organic nitrogen and organic carbon in marine biologically influenced aerosols over the western North Pacific in summer: Y Miyazaki, K Kawamura, J Jung, H Furutani, M Uematsu

A41H-09 Observational Constraints on Concentration and Production of Sea-Spray Aerosol: E R Lewis

A41H-10 Influences of the primary organic marine component on sea-spray composition and climate (Invited): K Tsigaridis, D M Koch, S Menon

A41I-- Moscone West: 3002 Thursday 0800h

Quantification of Emissions:Addressing Current and Future Challenges I (joint with B)

Presiding: G J Frost, NOAA; C Granier, LATMOS/IPSL and NOAA

A41I-01 Bringing Emissions Data into the 21st Century (Invited): S Smith

A41I-02 Global EDGAR v4.1 emissions of air pollutants: analysis of impacts of emissions abatement in industry and road transport on regional and global scale: G Janssens-Maenhout, J G Olivier, U M Doering, J van Aardenne, S Monni, V Pagliari, J A Peters

A41I-03 What is in the flask? Going beyond inventories: R J Andres, P K Patra, S Piper

All information is current as of November 12, 2010
0855h  **A41I-04**  Quantification of uncertainty associated with United States high resolution fossil fuel CO2 emissions: updates, challenges and future plans:  **K R Gurney**, V Chandrasekaran, D L Mendoza, S Geethakumar

0910h  **A41I-05**  Megacity and country emissions from combustion sources-Buenos Aires-Argentina:  **L Dawidowski**, D Gomez, M Matranga, A D'Angiola, G Oreggioni

0925h  **A41I-06**  Developing Shipping Emissions Assessments, Inventories and Scenarios (Invited):  **J J Corbett**

0800h  **A41I-07**  WITHDRAWN

0945h  **A43D-0256**  Analysis and comparison of trends in concentrations and emissions of VOC and CO and VOC:CO ratios in urban European cities:  **A D'Angiola**, E von Schneidemesser, C Granier, K Law, P S Monks

---

**A1J**  **Moscone West: 3008 Thursday 0800h**

**Troposphere Gaseous Composition in Regional and Global Perspective** (joint with B)

**Presiding:**  **O A Tarasova**, World Meteorological Organization;  **P C Novelli**, NOAA/ESRL

0800h  **Introduction Tarasova Oksana**

0805h  **A41J-01**  A Long-term Perspective on Recent Increases in Atmospheric Methane Abundance (Invited):  **E J Dlugokencky**, P Lang, K Masarie, A M Crotwell, L Bruhwiler

0825h  **A41J-02**  Combined analysis of the global methane and methyl chloroform budgets:  **M C Krol**, S A Montzka, E J Dlugokencky, S Houweling, J Lelieveld

0840h  **A41J-03**  Inverse modeling of the recent trend and inter-annual variation of CH4 emissions using situ measurements and SCIAMACHY:  **S Houweling**, P Bergamaschi, M Krol, C Frankenber, E J Dlugokencky, I Aben

0855h  **A41J-04**  Global high resolution atmospheric CO2 simulation with 1x1 km surface fluxes and coupled (Eulerian/Lagrangian) model:  **A Ganshin**, S Maksyutov, T Oda, M Saito, V Valsala, Y Koyama, A Ito, R J Andres, R Zhuravlev, A Lukyanov


0930h  **A41J-06**  North American isoprene influence on intercontinental ozone pollution:  **A M Fiore**, H Levy, D A Jaffe

0945h  **A41J-07**  Seasonal and Interannual Trends of Volatile Organic Compounds in a Subtropical Area close to the Gulf of Mexico in the Time Frame 2003-2010:  **B Rappengueck**

---

**Biogeosciences**

**B41A**  **Moscone South: Poster Hall Thursday 0800h**

**Carbon Sequestration in the Biosphere: Biogeochemistry and Biophysics I Posters** (joint with A, GC, H, OS)

**Presiding:**  **N Zeng**, University of Maryland;  **K Caldeira**, Carnegie Institution;  **S D Wullschleger**, Oak Ridge National Laboratory;  **V L Bailey**, Pacific Northwest National Laboratory;  **A Noormets**, North Carolina State University;  **D EPRON**, Universit Henri Poincar

0800h  **B41A-0279**  POSTER THE FUTURE OF CARBON STORAGE IN UPLAND BLANKET PEATLANDS– THE CASE OF THE ENGLISH PEAK DISTRICT: S Dixon,  **F Worrall**

0800h  **B41A-0280**  POSTER PARTITIONING CO2 FLUXES IN TRANSITIONAL BIOENERGY CROPS: EFFECT OF LAND USE CHANGE:  **T Zenone**, J Chen, S K Hamilton, G P Robertson


0800h  **B41A-0282**  POSTER Eroding forest carbon sinks following thinning for combined fire prevention and bioenergy production:  **T W Hudiburg**, B E Law, S Luysaert

0800h  **B41A-0283**  POSTER New Coupled Model Used Inversely for Reconstructing Past Terrestrial Carbon Storage from Pollen Data: Validation of Model Using Modern Data:  **H Wu**, J Guiot, C Peng, Z Guo


0800h  **B41A-0285**  POSTER Comparison of Chlorinated Ethenes DNAPL Reductive Dechlorination by Indigenous and Evantite culture with Surfactant Tween-80:  **S Kwon**, S Hong, R Kim, N Kim, H Ahn, S Lee, Y Kim

0800h  **B41A-0286**  POSTER Climatic and management influence on the carbon sequestration capacity of a deciduous oak coppice forest in Italy:  **L Belelli Marchesini**, A Rey Simó, D Papale, R Valentini

0800h  **B41A-0287**  POSTER Simulations of the terrestrial carbon cycle using DGVM under RCPs scenarios:  **T Hajima**, H SATO, T Ise

0800h  **B41A-0288**  POSTER How strong are biological soil crusts as sinks for atmospheric CO2?:  **R L Jasoni**, J D Larsen, L F Fenstermaker, J Arnone

0800h  **B41A-0289**  POSTER High rates of carbon storage in old deciduous forests: Emerging mechanisms from the Forest Accelerated Succession Experiment (FASET):  **C M Gough**, L E Nave, B S Hardiman, G Bohrer, A Halperin, K Maurer, J Le Moine, K Nadelhoffer, C S Vogel, P Curtis, Title of Team: University of Michigan Biological Station Forest Ecosystem Study (UMBS-FEST) Team

0800h  **B41A-0290**  POSTER Efficient transport of fossil organic carbon to the ocean by steep mountain rivers: Retaining carbon in the lithosphere:  **R G Hilton**, A Galy, N Hovius, M Horng, H Chen

0800h  **B41A-0291**  POSTER Coarse root structure in water-limited ecosystems: Results of large-scale tree and shrub excavations across a rainfall gradient in Southern Africa:  **F C O'Donnell**, K K Caylor, P D'Odorico, G S Okin, A Bhattachan, K Dinter

0800h  **B41A-0292**  POSTER Surface Properties of Bacterially- Influenced CaCO3 Mineralization:  **J A Cappuccio**, V D Pillar, C M Ajo-Franklin

0800h  **B41A-0293**  POSTER Influence of invasive earthworm activity on carbon dynamics in soils from the Aspen Free Air CO2 Enrichment Experiment:  **T R Filley**, S M Top, F M Hopkins

0800h  **B41A-0294**  POSTER Complementary soil water use is indicated in mixed native tree plantations, Panama:  **L Schwendenmann**, R Sánchez Bragado, N Kunert, D Hölscher

0800h  **B41A-0295**  POSTER Soil Microbial Activities in a Regenerating Jack Pine Forest – Implications for Long-term Soil Sustainability:  **K L Webster**, B Rathsack, R Fleming

0800h  **B41A-0296**  POSTER Using LiDAR and GIS to extrapolate data from a small watershed to watershed-scale to provide insight into patterns and relationships in an Oregon central-western Cascade forest:  **D J Quandt**, K Peterson, B J Bond, K V Olson, T Spies, C Halpern

0800h  **B41A-0297**  POSTER Comparisons of Nutrient Pools After Timber Harvests on the Oak Dominated Sandy Soils of Northwest Wisconsin:  **K Wilhelm**, B Rathsack, J Bockheim
All information is current as of November 12, 2010.
Hypoxia below the California Current System: J Tomasini, A Vossmeyer, G L Arnold, J Sawicka, T W Lyons, S Kasten

Dynamic sedimentary system: K M Bowles, K Allton, G Abbott, A Muhammad

A natural peatland gradient: biochemical characterization of soil organic matter alteration across shallow lakes: W Hobbs

Indicate past stable state transitions? Preliminary results from three of Mid-Cretaceous Codó Formation, NE Brazil: Understand Early Diagenetic Processes in Carbonate Microbialites M E Torres

Diagenesis on Foraminiferal Paleoproxies: (FT-TRA) as a Tool for Better Understanding the Effects of Early Cretaceous shallow water carbonate platform: was microbial activity through Time-Resolved Analyses of biogenic and inorganic seep processes in the Argentine Basin: M E Torres, A Vossmeyer, S Kasten

Production in Gas Hydrate-Bearing Sediments Offshore Southeast India: E A Solomon, A Spivack, M Kastner


New insights on methane cycling from analyses of carbonate samples from the Cascadia Margin: C Joseph, M E Torres, R Martin, K Rose, T Ryan, J Pohlman, G T Snyder

The response of methane and dissolved inorganic carbon biogeochemistry to sediment mass transport processes in the Argentine Basin: M Formolo, N Riedinger, S Henkel, J Tomasini, M Strasser, A Vossmeier, S Kasten

Post depositional alteration of foraminifer shells in cold seep settings: New insights from Flow-Through Time-Resolved Analyses of biogenic and inorganic seep carbonates: R Martin, M E Torres, G P Klinkhammer, E A Nesbitt

Early dolomitization of a Lower Cretaceous shallow water carbonate platform: was microbial activity a major controlling factor?: C N Sena, C M John, J W Cosgrove, V Vane digi nste

Flow-Through Time Resolved Analysis (FT-TRA) as a Tool for Better Understanding the Effects of Early Diagenesis on Foraminiferal Paleoproxies: G P Klinkhammer, M E Torres


Can we use redox sensitive elements to indicate past stable state transitions? Preliminary results from three shallow lakes: B C Cz eck, M L Deschamp, S Hagen, K M Theissen, W Hobbs


A mixing-model approach to quantifying sources of organic matter to salt marsh sediments: K M Bowles, C D Meile

Metal and sulfur cycling in a highly dynamic sedimentary system: N Riedinger, M Formolo, S Henkel, J Tomasini, A Vossmeier, G L Arnold, J Sawicka, T W Lyons, S Kasten

Response of Sedimentary Iron to Hypoxia below the California Current System: M Roy, J McManus, Z Chase, J M Muratli, M Megowan, R H Hastings, M A Goni, A C Mix

The benthic manganese cycle along the Oregon-California continental margin: J McManus, W Berelson, S Severmann, M Roy, Z Chase, J M Muratli, R H Hastings, M A Goni, A C Mix

Methane-Secs from Hydrate Ridge, Off Oregon: Signatures of Early Diagenesis in Pore Waters at Sulfate/Methane Transition Zone Recorded by RARE EARTH ELEMENTS: B Haley, M E Torres, G P Klinkhammer, G Bohrmann, G P Klinkhammer, E A Nesbitt


Soil Organic Carbon Storage and Stability in a Highly Eroding La Rogativa Watershed, Spain: E Nadeu, C Boix-Fayos, J de Vente, A A Berhe

Radioisotopes (137Cs, 40K, 210Pb) indicate that cryoturbation processes in Alaskan tussock tundra are accelerated under deeper winter snow: results from short and long-term winter snow depth experiments: E Blance-Betes, N C Sturchio, L Taneva, J M Welker, T P Guilderson, A Poghosyan, M A Gonzalez-Meler

A Comparison of Symmetric and Asymmetric Warming Regimes on the Soil Carbon and Nitrogen Dynamics of Grassland Ecosystems: J Wig, K Lajtha, J W Gregg

Soil charcoal from the plains to tundra: A Comparison of Symmetric and Asymmetric Warming Regimes on the Soil Carbon and Nitrogen Dynamics of Grassland Ecosystems: J Wig, K Lajtha, J W Gregg

POSTER Stability and vulnerability of organic carbon stored in Japanese forest soils: J Koarashi, M Atarashi-Andoh, S Ishizuka, A Kadono, K Moriya, T Nakanishi

POSTER Differences in the amount and stability of SOC under aspen and conifer forests in Northern Utah: H Van Miegroet, A R Jacobson, M Gruselle

POSTER Soil carbon and nitrogen turnover in a pine forest under elevated CO2: J Lichter, J Reblin, A Kaubris, R Austin, J Anderson, N Wong, S Wu

POSTER Carbon-Mineral Interactions along an Earthworm Invasion Gradient: A Lyttle, K Yoo, A K Aufdenkampe, C Hale, S D Sebestyen

Increased carbon recalcitrance with depletion of labile organic carbon under a long-term experimental warming in a tallgrass prairie: X Xu, Y Luo, R A Sherry, Y Yang, X Zhou, S Niu


POSTER Water Table Dynamics in a Tropical Peatland: A Cobb, L Gandois, K Abu Salim, C Harvey

POSTER Two pools of old carbon in a volcanic-ash soil revealed by sequential density fractionation: R Wagai, Y Shirato, M Uchida, S Hiradate

POSTER Self-assembly of hemic acid: influence of pH and chemical composition: G Chilom, Z Nagy, S Delp, G Huff, J A Rice

POSTER The Influence of Past Land Use and Current Invertebrate Processes on the Controls of Soil Organic Matter Stabilization in Eastern Deciduous Forests, USA: Y Ma, T R Filley, C T Johnson, K A Szlavecz, M McCormick, C Thayer, J Jourdain, A Johnson

POSTER Soil Organic Carbon Storage and Stability in a Highly Eroding La Rogativa Watershed, Spain: E Nadeu, C Boix-Fayos, J de Vente, A A Berhe

POSTER Radioisotopes (137Cs, 40K, 210Pb) indicate that cryoturbation processes in Alaskan tussock tundra are accelerated under deeper winter snow: results from short and long-term winter snow depth experiments: E Blance-Betes, N C Sturchio, L Taneva, J M Welker, T P Guilderson, A Poghosyan, M A Gonzalez-Meler

POSTER A Comparison of Symmetric and Asymmetric Warming Regimes on the Soil Carbon and Nitrogen Dynamics of Grassland Ecosystems: J Wig, K Lajtha, J W Gregg

POSTER Soil charcoal from the plains to tundra in the Colorado Front Range: R L Sanford, C Licata
B41G  Moscone South: Poster Hall Thursday 0800h

Improving Predictions of the Global Carbon Cycle and Climate: New Mechanisms, Feedback Loops, and Approaches for Model Evaluation I Posters (joint with GC, H, A)

Presiding: F M Hoffman, Oak Ridge National Laboratory; J T Randerson, University of California; A K Jain, University of Illinois; W M Post, Oak Ridge National Laboratory

0800h  B41G-0388 POSTER Modelling Methane Dynamics from Northern Wetlands with JSBACH: M A Tomasic, T Vesala, R Getzsch, M Raivonen, V Brovkin, T Hölttä

0800h  B41G-0389 POSTER Temperature sensitivity of CO₂, CH₄, CO, and H₂ emissions during photodegradation of plant material: H Lee, H L Throop, T Rahn

0800h  B41G-0390 POSTER Reversible and irreversible impacts of greenhouse gas emissions in multi-century projections with the N CAR global coupled carbon-cycle-temperature model: T L Froelicher, F Joos


0800h  B41G-0392 POSTER Transient response of the CO₂ airborne fraction to fluctuations in emissions: the role of climate-carbon feedbacks versus emissions growth rate: J P Landers, F Terenzi, S Khatiwala

0800h  B41G-0393 POSTER Processes influencing model-data mismatch in drought-stressed, fire-disturbed eddy flux sites: S R Mitchell, K Beven, J E Freer, B E Law

0800h  B41G-0394 POSTER Evaluation of a terrestrial carbon cycle submodel in an earth system model using networks of eddy covariance observations: K Ichii, T Suzuki

0800h  B41G-0395 WITHDRAWN

0800h  B41G-0396 POSTER Influence of Regional Climate Biases within General Circulation Models on the Location of Projected Terrestrial Carbon Sources and Sinks: S A McAfee, J L Russell, R S Webb

0800h  B41G-0397 POSTER Partitioning Ecosystem Respiration Using Carbon Isotopes in Tundra Undergoing Permafrost Thaw: C E Hicks, T Schuur

0800h  B41G-0398 POSTER Benchmarking of two terrestrial ecosystem models using a parsimonious set of tests for carbon processes and vegetation phenology: D Dalmonch, S Zechle

0800h  B41G-0399 POSTER Controls on the speed of spring: challenges for terrestrial carbon cycle models: L Gu, Y Fu

0800h  B41G-0400 POSTER Remote sensing evaluation of CLMCN GPP: J Mao, P E Thornton, X Shi, S Levis

0800h  B41G-0401 POSTER The impact of climate, CO2, nitrogen deposition and land use change on contemporary global river flow: X Shi, J Mao, P E Thornton, F M Hoffman

0800h  B41G-0402 POSTER Seasonal Covariance Between Baroclinicity and Ecosystem Metabolism: N Parazo, A Denning, J A Berry, D A Randall, S R Kawa, S Pawson, O M Pauluis


0800h  B41G-0404 POSTER Reduced Diurnal Temperature Range Does Not Change Warming Impacts on Grassland Carbon Balance: C L Phillips, J W Gregg

0800h  B41G-0405 POSTER Impact of Reduced Diurnal Temperature Range (DTR) on Grassland Mesocosms: J W Gregg, C Phillips, J Wilson

0800h  B41G-0406 POSTER Using ocean tracers to reduce uncertainties about ocean diapycnal mixing and model projections: M P Goes, N Urban, K Keller, A Schmittner, R Tonkonogovk, M Haran

0800h  B41G-0407 POSTER How coupled are ocean carbon and heat uptake?: J G John, J P Dunne

0800h  B41G-0408 POSTER Carbon cycle optimism hides climate risks and mitigation needs: P A Higgins

B41H  Moscone South: Poster Hall Thursday 0800h

Integrating Recent Knowledge of Soil Carbon to Help Develop Process-Based Soil Carbon Models II Posters (joint with A, GC, EP)

Presiding: M Khomik, Max Planck Institute for Biogeochemistry; D Gaumont-guay, Vancouver Island University; F M Hopkins, University of California, Irvine; F E Moyano, BIOEMCO


0800h  B41H-0410 POSTER Terrain Control on Soil Organic Carbon Distribution in Loess Soils with Varying Land Cover: B J Dalzell, C Fissore, E A Nater, K Yoo

0800h  B41H-0411 POSTER Influence of Soil Deflation on Soil Carbon in an Arctic Landscape, West Greenland: J I Bradley-Cook, R A Virginia

0800h  B41H-0412 POSTER Controls on Ecosystem and Root Respiration in an Alaskan Peatland: N A Mcconnel, A D McGuire, J W Harden, E S Kane, M R Turetsky

0800h  B41H-0413 POSTER Soil respiration under snowpack in a temperate forest in Massachusetts: steady state vs. transient state: J Tang

0800h  B41H-0414 WITHDRAWN

0800h  B41H-0415 POSTER Respiration dynamics of size-separated soil fractions: C A Creamer, T W Boutton, J B Kantola, T R Filley

0800h  B41H-0416 POSTER Integrating the impact of bioturbation to landscape-scale modeling of soil carbon dynamics: a case study of Chernozems in Central Saskatchewan: V Viaud, D Pennock

0800h  B41H-0417 WITHDRAWN

0800h  B41H-0418 POSTER Bayesian inference of decomposition rate of soil organic carbon using a turnover model and a hybrid method of particle filter and MH algorithm: G Sakurai, M Jomura, S Yonemura, T Iizumi, Y Shirato, M Yokozawa

0800h  B41H-0419 POSTER Constructing a Depth-Stratified Model for Soil Organic Carbon: Dynamics of Past, Current, and Future Accumulation and Decomposition: T Ise


0800h  B41H-0421 POSTER Environmental Controls on Cumulative and Yearly Litter Decay Rates Over Four Years in Forested and Harvested Sites Across Canada: J A Trofymow, E Thompson, A Cameron, D Pare, B D Amiro, M Lavigne, C Smyth, T A Black, A G Barr, H A Margolis

0800h  B41H-0423  POSTER  Input-decomposition balance of heterotrophic processes in a warm-temperate mixed forest in Japan:  M Jomura, Y Kominami, M Ataka, N Makita, M Dannoura, T Miyama, K Tamai, Y Goto, S Sakurai

0800h  B41H-0424  POSTER  On the Use of Trenched Plots to Quantify Sources of Soil Surface CO2 flux:  B P Bond-Lamberty, D R Bronson, E Bladyka, S T Gower

0800h  B41H-0425  POSTER  Partitioning of soil respiration components in a Mediterranean maquis ecosystems:  C Sirca, M Carta, A Arca, P Duce, D Spano

0800h  B41H-0426  POSTER  Isotope partitioning of soil respiration:  A panacea?:  E Pendall, Y Carrillo, F A Dijkstra, M D Wallenstein, J A Morgan, D G Williams

0800h  B41H-0427  POSTER  Effect on Autochamber Flux Measurements in an Ombrotrophic Peatland from Atmospheric Turbulence and Deployment Time:  D Lai, N T Roulet, M Dalva, E R Humphreys, T R Moore

B41I  Moscone South: Poster Hall  Thursday  0800h Remote Sensing of Terrestrial Carbon Fluxes I Posters (joint with EP)

Presiding:  K F Huemmrich, University of Maryland Baltimore County;  A F Rahman, Indiana University

0800h  B41L-0428  POSTER  Estimating impacts of snow cover on net ecosystem exchange near Daring Lake, NWT, Canada (65°N, 111°W):  K A Luus, R E Kelly, J C Lin, E R Humphreys, P Lafleur

0800h  B41L-0429  POSTER  Remote estimation of net CO2 emission from boreal ecosystems:  C A Rogers, J B Strachan

0800h  B41L-0430  POSTER  Seasonal patterns of foliar reflectance in relation to leaf nitrogen and photosynthetic properties in two tree species with a contrasting growth habit, Quercus rubra and Betula papyrifera:  S Y Dillen, N Phillips


0800h  B41L-0432  POSTER  Satellite-driven estimation of terrestrial carbon flux over Far East Asia with 30-second grid resolution:  T Sasai, N Saigusa, K N Nasahara, A Ito, H Hashimoto, R R Nemani, R Hirata, K Ichii, K Takaqi, T M Saitoh, T Ohto, K Murakami, T Oikawa, Y Yamaguchi

0800h  B41L-0433  WITHDRAWN


0800h  B41L-0435  POSTER  EFFECT OF FOREST FIRE ON REGIONAL CARBON DIOXIDE EXCHANGE OVER BOREAL FOREST IN INTERIOR ALASKA:  H Iwata, M Otsuki, Y Harazono, M Ueyama, T iwata

0800h  B41L-0436  POSTER  Quantifying soil CO2 respiration measurement error across instruments:  C A Creelman, N R Nickerson, D A Risk

0800h  B41L-0437  POSTER  Plant Light Stress Tolerance across the New Mexico Elevation Gradient: Scaling from Leaf to Tower:  D J Krofcheck, D Hanson, A M Fox, M E Litvak

0800h  B41L-0438  POSTER  A simple estimate of ecosystem respiration across biomes based on MODIS products:  J Jaegermeyer, P Hostert, W Lucht

0800h  B41L-0439  POSTER  Seasonal spectral dynamics and carbon fluxes at core EOS sites using EO-1 Hyperion images:  D Lagomasino, P Campbell, R M Price

0800h  B41L-0440  POSTER  Global remote sensing of chlorophyll fluorescence using high-resolution spectra recorded by the Japanese GOSAT satellite:  C Frankenberger, A Burz, J B Fisher, G C Toon, A kuze, T Yokota

0800h  B41L-0441  POSTER  Spatial and temporal patterns of solar-induced chlorophyll fluorescence from a Finnish boreal landscape: Comparisons from the ground up to space:  G Drolet, C J Nichol, T J Wade, A Porcar-Castell, E Nikinmaa, E Middleton, L Ong, T Vesala, J Levula, J B Moncrieff

0800h  B41L-0442  POSTER RETROSPECTIVE RETRIEVAL OF LONG-TERM GLOBAL LEAF AREA INDEX (1982-2010) BY FUSION OF AVHRR AND MODIS DATA:  Y Liu, R Liu, J M Chen

0800h  B41L-0443  POSTER  Drought-Induced Reduction in Global Terrestrial Net Primary Production from 2000 Through 2009:  M Zhao, S W Running

0800h  B54C-06  POSTER  Controls of Climate Anomalies on Terrestrial Carbon Assimilation in East Asia:  G Choi, S Kang

B41J  Moscone West: 2002  Thursday  0800h Biogeochernistry of Urban and Suburban Ecosystems I (joint with PA, V, H)

Presiding:  M Steele, Texas A&M University;  J A Aitkenhead-Peterson, Texas A&M University

0800h  B41J-01  Strengthening Carbon Sinks in Urban Soils to Mitigate and Adapt to Climate Change (Invited):  K Lorenz

0820h  B41J-02  Re-connecting Urban Ecohydrology to Improve Ecosystem Functioning: The Role of Local-scale Green Infrastructure:  M Pavao-Zuckerman

0835h  B41J-03  Tracking nonpoint nitrogen pollution from urbanizing watersheds (Invited):  S Kaushal, P M Groffman, L E Band, E M Elliott, C A Shields, C Kendall

0855h  B41J-04  Long-term (10 year) trends in the chemistry of urban streams:  P M Groffman, L E Band, K T Belt, S Kaushal, G T Fisher

0910h  B41J-05  Eutrophication in an Urban Estuary: Famosa Slough, California:  K McLaughlin, M Sutula, J E Cable, P Fong, L Green

0925h  B41J-06  Relation Between PAHs and Coal-Tar-Based Pavement Sealant in Urban Environments (Invited):  B J Mahler, P C Van Metre

0945h  B41J-07  SPECIES DIVERSITY AND FOLIAR CHEMISTRY ALONG AN URBAN-TO-RURAL GRADIENT:  P Rao, L Huttyra, S Raciti, A C Finzi
Yellowstone Geothermal Complex: Diversity, and Activity of Biological Nitrogen Fixation in the Nitrosocaldus yellowstonii from studies of the thermophilic ammonia-oxidizing archaeon

B A Hungate, B P Hedlund

B41L Moscone West: 2006 0800h

Geochemistry and Geobiology of Terrestrial Thermal Systems I (joint with V)

Presiding: H E Hartnett, Arizona State University; B P Hedlund, University of Nevada Las Vegas; C Zhang, University of Georgia

0800h B41L-01 Structure of Chemotrophic Energy Sources in Continental Hydrothermal Ecosystems (Invited): E Shock

0815h B41L-02 Thermophilic metabolisms from hot spring gas geochemistry: case studies from Uzon Caldera, Kamchatka, Russia, and Lassen Volcanic National Park, California: B He, F Robb, A S Colman

0830h B41L-03 Diversity and Ecological Functions of Crenarchaeota in Terrestrial Hot Springs of Tengchong, China: W Li, Z Song, J Chen, H Jiang, E Zhou, F Wang, X Xiao, C Zhang

0845h B41L-04 Quantification of Nitrogen Cycling Processes in Two Great Basin Geothermal Springs (Invited): J A Dodsworth, B A Hungate, B P Hedlund

0900h B41L-05 Insights into high-temperature nitrogen cycling from studies of the thermophilic ammonia-oxidizing archaeon Nitroscoldsalus yellowstonii. (Invited): J R de la Torre

0915h B41L-06 Environmental Constraints on the Distribution, Diversity, and Activity of Biological Nitrogen Fixation in the Yellowstone Geothermal Complex: E Boyd, T L Hamilton, J W Peters

0930h B41L-07 Variability in microbial community composition between geochemically distinct hydrothermal features at El Tatio geysier field: M A Franks, P Bennett


Cryosphere

C41A Moscone South: Poster Hall Thursday 0800h

Measuring Earth’s Third Dimension: ICESat, IceBridge, CryoSat, and Beyond I Posters (joint with G, EP, GC)

Presiding: T J Urban, University of Texas at Austin; D Wingham, UCL; T Markus, Cryospheric Sciences Branch; B E Schutz, University of Texas at Austin; L Koenig, NASA Goddard Space Flight Center; H J Zwally, NASA Goddard SFC

0800h C41A-0485 POSTER Release 33 Geoscience Laser Altimeter System (GLAS) Data Fields and Processing Enhancements from the Ice, Cloud, and land Elevation Satellite (ICESat-I) Mission: D Webster, D K Fowler, T M Haran, D Kern, T A Scambos

0800h C41A-0486 POSTER Laser Targeting Performance in the ICESat Mission: C E Webb, S Bae, B E Schutz

0800h C41A-0487 POSTER ICESat Calibration and Validation Experiments at White Sands, New Mexico, 2003-2010: B E Schutz, T J Urban

0800h C41A-0488 POSTER Estimation and Implication of ICESat Inter-campaign Elevation Biases Derived Over the Global Oceans: T J Urban

0800h C41A-0489 POSTER LASER ALTIMETER EXPERIENCES AT IBIZA ISLAND, CAPE OF BEGUR AND BARCELONA (SPAIN): J J Martinez-Benjamin, B E Schutz, T J Urban, M Ortiz

0800h C41A-0490 POSTER ICESat Detection of Storm-generated Long-period Ocean Waves: Confirmation from Sea Level Recorder and Seismometer Observations: J F Heinrichs

0800h C41A-0491 POSTER ICESat Elevation Change Bias Correction And Elevation Accuracy Assessments (2003-2009) At Large Subglacial Lake Sites, Antarctica: C A Shuman, D J Harding, H G Cornejo, V P Suchdeo

0800h C41A-0492 POSTER ICESat elevations in Antarctica along the 2007-09 Norway-USA Traverse: Validation with ground-based GPS: J Kohler, T Neumann, J W Robbins, G Molland, S Tronstad

0800h C41A-0493 POSTER Validation and comparison of SRTM and ASTER/GDEM in the Tibetan Plateau using ICESat/GLAS data: C Fan, H Xie, D Shen

0800h C41A-0494 POSTER DEVELOPMENT OF AN ICESat GEODETIC CONTROL DATABASE AND EVALUATION OF GLOBAL TOPOGRAPHIC ASSETS: C C Carabajal, D J Harding, V P Suchdeo, J J Danielson

0800h C41A-0495 POSTER Deriving Antarctic Postglacial Rebound rates from GRACE and altimetry: R Meister, D Wingham

0800h C41A-0496 POSTER Status And Update On Time-Variable Gravity Observations Of Ice Sheet Mass Balance With GRACE: Precision And Limitations: I Velicogna, J M Wahr

0800h C41A-0497 POSTER Satellite validation and support using the Cryowin UAV: W S Bogren, J F Burkhart, R Storvold, Title of Team: VAUUAV Science Team

0800h C41A-0498 WITHDRAWN

0800h C41A-0499 POSTER An Australian contribution to CryoSat-II cal/val in East Antarctica including the Totten glacier region: C S Watson, R J Burgette, P Tregoning, R Coleman, J Roberts, J L Lieser, H A Fricker, B Legresy

C41A-0500 POSTER Swath processing CryoSat-2 SIRAL interferometric mode data for determination of across-track surface-elevation profiles: R L Hawley, A Shepherd

C41A-0502 POSTER Near-surface density variations at the Larsen-C ice shelf derived from neutron scattering measurements: S J Palmer, A Shepherd, N Gourmelen, M Mcmillan, A Hill

C41A-0503 POSTER Using Surface Roughness Derived From ICESat, IceBridge and CASIE Data to Map Geophysical and Ice-Dynamic Provinces in Glaciers and Sea Ice: U C Herzfeld, B F Wallin, B W McDonald, S S Manizade, J A Maslanik, R I Crocker, M Fladeland

C41A-0504 POSTER Managing IceBridge Airborne Mission Data at the National Snow and Ice Data Center: M Brodzik, M L Kaminski, J S Deems, T A Scambos

C41A-0505 POSTER Cryosat-2 precision orbit determination with Doris and satellite laser ranging: P N Visser, E J Schrama, M Naeije

C41A-0506 POSTER A first comparison of CryoSat-2 and IceBridge altimetry from April 20, 2010 over Arctic Sea Ice: L N Connor, S Laxon, D M McAdoo, S L Farrell, A Ridout, R Cullen, R Francis, M Studinger, W B Krabill, J G Sonntag, Title of Team: The IceBridge Sea Ice Science Team

C41A-0507 POSTER Basic Radar Altimetry Toolbox: Tools and Tutorial To Use Radar Altimetry For Cryosphere: J J Benveniste, E Bronner, S Dinardo, B M Lucas, V Rosomurd, D Earth

C41A-0508 POSTER Characteristics of the ice surface over the Gamburtsev Mountains, Antarctica from airborne laser altimetry: J Das, R E Bell, M Studinger, M Wolovick, N Frearson

C41A-0509 POSTER ROLE OF CRYOSPHERE IN PRESENT-DAY SEA-LEVEL RISE: C Shum, J Duain, J Guo, I M Howat, K C Jezeck, H Lee, A Braun, J G Cogley, C Kuo, H Wang

C41A-0510 POSTER The effect of fluctuations in surface density, accumulation and compaction on elevation change rates along the EGIG line, Central Greenland: E Morris

C41A-0511 POSTER ICESat-2 Simulations and Analysis using Sigma Space MPL Measurements over Greenland: A C Brenner, K Barbieri, T Markus, T Neumann, M Sirota, C Field, H J Zwally

C41A-0512 POSTER ICESat-2 simulated data from airborne altimetry: K M Bruntn, T Neumann, T Markus, A C Brenner, K Barbieri, K C Field, M Sirota


C41A-0514 POSTER Three decades of change on Antarctica's major ice shelves from multi-mission satellite radar altimetry: F S Paolo, H A Fricker, L Padman

C41A-0515 POSTER CryoSat-2 commissioning phase results summary: R Cullen

C41A-0516 POSTER ICEPOD – Developing Ice Imaging Capabilities for the New York Air National Guard’s LC-130 Aircraft: J DeTemple, N Frearson, C J Zappa, M Turrin, R E Bell

C41A-0517 POSTER Observations of sea ice using the CryoSat-2 interferometric altimeter: N Galin, D Wingham, A Ridout

C41A-0518 POSTER AN ULTRA WIDE-BAND RADAR ALTIMETER FOR ICE SHEET SURFACE ELEVATION AND SNOW COVER OVER SEA ICE MEASUREMENT: A E Patel, P S Gogineni, C Leuschen, F Rodriguez-Morales, B Panzer

C41B Moscone West 3011 Thursday 0800h

Evolution and Stability of the Greenland Ice Sheet II (joint with EP, G, GC, NG, PP)

Presiding: J P Briner, University at Buffalo; S F Price, Los Alamos National Laboratory; C J Van der Veen

C41B-01 POSTER Ice Front Position, Thinning and Speed Variability of Jakobshavn Isbrae, Greenland (Invited): R J Goughin, B E Smith, I Howat, D Floricioiu, R B Alley, M Truffer, M A Fahnestock

0815h C41B-02 POSTER Changing seasonality of ice front position and calving in Jakobshavn Isbrae, West Greenland, in relation to drawdown history and character of fjord ice cover (Invited): M A Fahnestock, M Truffer, R J Motyka, J M Amundson, I R Joughin, R K Cassotto, D B Podrasky

0830h C41B-03 Evidence of Bedrock Geology and Sediment Lubrication as Controls on Jakobshavn Isbrae: A E Block, R E Bell, M Studinger, N Frearson

0845h C41B-04 Testing models of Jakobshavn ice stream mass changes during the last 800 years using relative sea-level data: A J Long, S Woodroffe, G A Milne, L M Wake, M Simpson

0900h C41B-05 POSTER Response of Jakobshavn Isbrae to early Holocene abrupt climate events: N E Young, J P Briner, D H Rood, R C Finkel

0915h C41B-06 Uncertainties in the Holocene evolution of the Greenland ice sheet: Implications for interpreting far-field sea-level records and present-day geodetic observations: M Simpson, G A Milne, A J Long, M E Tamisiea, P Huybrechts

0930h C41B-07 POSTER A comparison of late glacial to early Holocene fluctuations of Greenland Ice Sheet outlet glaciers with nearby mountain glaciers in central east Greenland: M A Kelly, T V Lowell, B L Hall, J M Schaefer

0945h C41B-08 The quest for the lost picture and surface detection change of the Greenland Ice Sheet (Invited): K H Kjaer, N Korsgaard, K Kjeldsen

C41C Moscone West 3010 Thursday 0800h

The Legacy and Fate of Permafrost: Geochemical, Geophysical, and Geomorphic Aspects II (joint with EP, G, H, GC)

Presiding: S A Ewing, Montana State University; A K Liljedahl, University of Alaska, Fairbanks; J O'Donnell, UAF

0800h C41C-01 POSTER The Role of Ice-Push Shoreline Features in the Orientation of Thaw Lakes: E A Lyons, Y Sheng, K M Hinkel, J Wang

0815h C41C-02 POSTER Experimental rejuvenation of ice-wedge cracking at Illisarvik, western Arctic coast, Canada (Invited): C Burn


0845h C41C-04 POSTER Effects of water-energy feedback processes on thawing of peat-covered, discontinuous permafrost: M Hayashi, A F McIlveen, B S Christensen, L R Bentley, W L Quinlon

0900h C41C-05 POSTER What can paleo studies tell us about permafrost and future warming? (Invited): D G Froese, A Reyes, F Calmels, B J Jensen

0915h C41C-06 POSTER Projections of near-surface permafrost degradation in the Community Climate System Model (CCSM4) (Invited): D M Lawrence, A G Slater, S C Swenson
0930h  C41C-07 The Topographic Evolution of Thermal Erosion Features: an investigation using an airborne LiDAR transect across a chronosequence of glacial deposits: K E Krieger, B T Crosby

0945h  C41C-08 Estimating Active Layer Thickness from Remotely Sensed Surface Deformation: L Liu, K M Schaefer, T Zhang, J M Wahr

Education and Human Resources

ED41A Moscone South: Poster Hall Thursday 0800h

**BRIGHT STaRS: Bright Students Training as Research Scientists Posters (joint with ED)**

**Presiding: P Asher, AGU; J Saltzman, Stanford University**

0800h ED41A-0605 POSTER A Comparison of Particulate Matter In and Around Two Freeways in Oakland, California: J Adams, A Negrete, K Gilliland, J Diaz, B Centeno, C Girton, D Fasil, D Romero, D Arroyo-Ruiz, D Spears, E Marbley Jr., G Mehari, J Armour, J Cheung, K Williams, L Tate, M Scott, M Burris, P Lei, R Ramirez

0800h ED41A-0606 POSTER Lead Concentration Levels In Public Water Sources in the Fruitvale District of Oakland, California: A Ahumada, M Edel, E Tril, R Crockett, K Moreno, C Telles, F Rodriguez, E Folgar, J Ramirez-Tril, J Torres, J Navarro, R Nguyen, S Moqadam

0800h ED41A-0607 POSTER Identifying Particulate Matter Concentrations Using A New Mobile Data Collection Method in West Oakland, California: M Alexander, T O’Guinn, G Haynes, T Bryant, N Lockett, O Evans, M McAroy, S Harris, Q Bui, D Lacy, Y Wong, T Marks-Block

0800h ED41A-0608 POSTER Determination of Pyrethroids through Liquid-Liquid Extraction and GC-ECD: B Ding

0800h ED41A-0609 POSTER Development of Activity Based Probes For The Study of Legumin In Cancer: A Ortega

0800h ED41A-0610 POSTER California Rare Endemics and Climate Change: M Espinoza

0800h ED41A-0611 POSTER Design and Test of an Electrometer Test Track: C Lui

0800h ED41A-0612 POSTER CONFIDENTIAL: LOCAL BAY AREA COMMUNITY COLLEGE HIDES POO BACTERIA ON COMPUTER MICE: R Pimienta

0800h ED41A-0613 POSTER A strontium isotope (87Sr/86Sr) record of paleo-groundwater discharge and regional climate change at Celestun Estuary, Yucatan Peninsula, Mexico: G Tang, J H Street, K Sylvan, J Herrera-Silveira, A Paytan

0800h ED41A-0614 POSTER 818O comparisons of coral cores in the western tropical Pacific, Palau: E Johnston, M C Osborne

0800h ED41A-0615 POSTER Changes in Maximum length of Foraminifera through the Phanerozoic Era: S Lo, R Garcia, N O’Keefe, A Jost, J Payne

0800h ED41A-0616 POSTER The effect of the variation of atmospheric oxygen levels throughout the Phanerozoic on the size of foraminifera tests: J Campbell, A Jost, J Payne, Title of Team: Jackson A. Campbell, Adam B. Jost, Jonathan L. Payne

0800h ED41A-0617 POSTER Volume to Surface Area Ratios of Foraminifera over the Phanerozoic: K Cheung, D Gomez, D Guo, A Jost, J Payne

0800h ED41A-0618 POSTER Size and Origination: Foraminifera: A Jin, S Smith, J Binn, A Jost, J Payne, Title of Team: Foraminifera: Origination

0800h ED41A-0619 POSTER Mapping the time-averaged distribution of combustion-derived air pollutants in the San Francisco Bay Area: C Yu, D A Zinniker, J Moldowan

0800h ED41A-0620 POSTER India Co2 Emissions: S Sharan, N S Diffenbaugh

0800h ED41A-0621 POSTER Mercury Removal with Activated Carbon in Coal-Fired Power Plants: J Rapperport, E Sasmaz, J Wilcox

0800h ED41A-0622 POSTER Extended X-Ray Absorption Fine Structure Analysis of Crystalline Germanium at High Pressure: K Mu, M Baldini, W L Mao

0800h ED41A-0623 POSTER Optimization of Heating Schedules for Measurement of Helium Diffusion in Monazite: C Day, M Grove, E Peterman

0800h ED41A-0624 POSTER Cathodoluminescence Depth Profiling of Zircons: E Chen, J L Wooden, J A Vazquez, R E Jones, M Grove

0800h ED41A-0625 POSTER Using Leaf Samples to Establish a Library of Tropical Leaf Fingerprints: P Ngo, R Nguyen, C Anderson, P Weiss

0800h ED41A-0626 POSTER A Mechanistic Description Of Strain Hardening And Softening In Quartz Sand: M Hernandez, L Cruz, G E Hilley, A Take

0800h ED41A-0627 POSTER Tracking the San Andreas Fault in northern California using Airborne Laser Swath Mapping Data: N Lin, V Kidd, S Moon, G E Hilley

0800h ED41A-0628 POSTER MODELING THE MECHANICAL BEHAVIOR AND SLIP DISTRIBUTION OF FAULTS INVOLVED IN THE 1992 LANDERS EARTHQUAKE IN SOUTHERN CALIFORNIA: J He, B H Madden

0800h ED41A-0629 POSTER Sustainable Seas Student Intertidal Monitoring Project at Duxbury Reef in Bolinas, CA: K Soave, A Dean, G Yang, E Solli, C Dattels, K Wallace, A Boesel, C Steiger, A Buie

0800h ED41A-0630 POSTER Emerita analoga recruit populations and correlations with sea surface temperature: J Pettway, H Quan, F Juarez, M Vicencio, N Ng, Title of Team: Careers in Science Intern Program

0800h ED41A-0631 POSTER Volume to Surface Area Ratios of Foraminifera over the Phanerozoic: K Cheung, A Jost, J Payne

ED41B Moscone South: Poster Hall Thursday 0800h

**New Resources, Approaches, and Technologies for Teaching About the Deep Earth and Plate Margins I Posters (joint with IN, T, V, G)**

**Presiding: V S Cronin, Baylor University; J G Ryan, University of South Florida**

0800h ED41B-0632 POSTER Educating the Public about Deep-Earth Science: V S Cronin

0800h ED41B-0633 POSTER Development of a Mantle Convection Physical Model to Assist with Teaching about Earth’s Interior Processes: G B Glesener, J M Aurnou

0800h ED41B-0634 POSTER Hot Spots and Mantle Plumes: A Window Into the Deep Earth and a Lesson on How Science Really Works: J Caplan-Auerbach

0800h ED41B-0635 POSTER Discovering and measuring a layered Earth: A foundational laboratory for developing students’ understanding of Earth’s interior structure: M Hubenthal, L W Braile, S E Olds, J Taber
0800h ED41B-0636 POSTER Virtual Synchrotron Experiments for Deep Earth Studies: J M Jackson, E Alp, A Alatas, J Zhao, W Sturhaln

0800h ED41B-0637 POSTER Simulating Earthquake Early Warning Systems in the Classroom as a New Approach to Teaching Earthquakes: M A d’Alesio

0800h ED41B-0638 POSTER Earthquakes, Cities, and Lifelines: lessons integrating tectonics, society, and engineering in middle school Earth Science: N Toke, A Johnson, K Nelson

0800h ED41B-0639 POSTER K-20 educator collaboration effective at conveying EarthScope science to middle school teachers: B Pratt-Sitaula, R F Butler, J M Whitman, F D Granshaw, R Groom, C Hedeen, B Magura, D Thompson, J A Johnson

0800h ED41B-0640 POSTER Jules Verne Voyager, J: An Interactive Map Tool for Teaching Plate Tectonics: M W Hamburger, C M Meertens

0800h ED41B-0641 POSTER Discovering plate boundaries: Laboratory and classroom exercises using geodetic data to develop students’ understanding of plate motion: S E Olds

0800h ED41B-0642 POSTER The Role of Serpentinates at Convergent Plate Boundaries: Using New Discoveries to Facilitate the Learning of Major Earth Processes: J G Ryan

0800h ED41B-0643 POSTER Learning to Characterize Submarine Lava Flow Morphology at Seamounts and Spreading Centers using High Definition Video and Photomosaics: A T Fundis, L R Sautter, D S Kelley, J R Delaney, M Kerr-Riess, A R Denny, M Elend

0800h ED41B-0644 POSTER Adiabat_1ph 3.0 and the MAGMA website: educational and research tools for studying the petrology and geochemistry of plate margins: P M Antoshechkina, P D Asimov

ED41C Moscone South: Poster Hall Thursday 0800h Visualization of Geophysical Processes for Science, Education, and Outreach I Posters (joint with IN)

Presiding: J M Byrne, University of Lethbridge; P A Fox, Rensselaer Polytechnic Inst.; J R Graham, University of Lethbridge

0800h ED41C-0645 POSTER Self-Discovery of Structural Geology Concepts using Interactive 3D Visualization: M I Billen, J Saunders

0800h ED41C-0646 POSTER The Geology Robot: A Collaborative Effort for Improving Outcrop Visualization and Analysis: K C Fredrick, M P Valoski, A F Rodi

0800h ED41C-0647 POSTER Visualization of geomagnetic field for education and outreach: T Hatakeyama

0800h ED41C-0648 POSTER 3D Online Visualization and Synergy of NASA A-Tain Data using Google Earth: A Chen, S J Kempler, G G Lepontoukh, P M Smith

0800h ED41C-0649 POSTER Color changing large climate sensors as communication and outreach device: R Hut


0800h ED41C-0651 POSTER 4D Visualization of Experimental Procedures in Rock Physics: T Vanorio, C Di Bonito

0800h ED41C-0652 POSTER Creating Earth science educational computer animation (with Blender3D): O de Viron

0800h ED41C-0653 POSTER Three Dimensional Spherical Display Systems and McIDAS: Tools for Science, Education and Outreach: R Kohrs, M E Mooney

0800h ED41C-0654 POSTER Hear it, See it, Explore it: Visualizations and Sonifications of Seismic Signals: M Fisher, Z Peng, D W Simpson, D L Kilb

0800h ED41C-0655 POSTER Visualization of Asian Yellow Dust using Virtual Globes: J Choi, T Kim, Y Yang, S Oh

0800h ED41C-0656 POSTER Using McIDAS-V data analysis and visualization software as an educational tool for understanding the atmosphere: T H Achter, T Rink

0800h ED41C-0657 POSTER Development of educational programs using Dagik Earth, a four dimensional display of the Earth and planets: A Saito, Y Akiya, D Yoshida, Y Odashi, M Yoshikawa, T Tsuchiya, M Takahashi, Y Kumano, S Iwasaki

0800h ED41C-0658 POSTER Assessing the Effectiveness of the Cone of Probability as a Visual Means of Communicating Scientific Forecasts: B S Orlove, K Broad, R Meyer

0800h ED41C-0659 POSTER Challenges of Presenting Context and Interpretation of Global Datasets on Spherical Displays: K Ward, S Graham, R Simmon

0800h ED41C-0660 POSTER Leveraging an ESIP Data-Type Ontology to Support Visualization: N Del Rio, P Pinheiro da Silva


ED41D Moscone South: 102 Thursday 0800h Climate Change Adaptation: Education and Communication I (joint with A, B, C, GC, H, NH, PA)

Presiding: J M Byrne, University of Lethbridge; D B Fagre, U.S. Geological Survey; F Grifo, Union of Concerned Scientists; T F Pedersen

0800h ED41D-01 POSTER Weathering the Climate Communication Storm (Invited): M E Mann


0830h ED41D-03 POSTER First UCCRN Assessment Report on Climate Change and Cities (ARC3) (Invited): C Rosenzweig


0900h ED41D-05 POSTER Toilets and the Smart Grid: A role for history and art in communicating assessed science for Earth—The Operators’ Manual: R B Alley, G Haines-stiles, E Akuginow

0915h ED41D-06 POSTER The Psychology of Climate Change Communication - Insights from the Center for Research on Environmental Decisions (CRED) (Invited): S Marx

0930h ED41D-07 POSTER Social Issue Entertainment 2.0: How pop culture, behavioral science and impact evaluation can motivate social and environmental change (Invited): D Shome

0945h ED41D-08 POSTER Who speaks for the climate? Considering ‘expert’ and ‘authorized’ claims-makers in the media (Invited): M Boykoff

All information is current as of November 12, 2010
Earth and Planetary Surface Processes

EP41A Moscone South: Poster Hall Thursday 0800h
Alpine Hillslope Processes: From Grain-Scale Mechanics to Landscape Modeling Posters (joint with C, NH)

Presiding: J R Moore, ETH Zurich, J W Sanders, UC Berkeley

0800h EP41A-0681 POSTER Glacial impact on postglacial sediment flux in the Canadian Rocky Mountains: T Hoffmann, E A Johnson
0800h EP41A-0682 POSTER Denudation rates across a steep rainfall gradient on Kauai, constrained by cosmogenic nuclides and landslide mapping (Invited): K Ferrier, T Perron, S Mukhopadhyay, K L Huppert
0800h EP41A-0683 POSTER Strong glacial influence on postglacial rock fall rates and magnitudes in Yosemite Valley, California (Invited): G M Stock, R J Sas

0800h EP41A-0684 POSTER Air circulation in deep cracks and the temperature field of an alpine rock slope (Randa, VS): V Gischig, J R Moore, M Katterbach, S Loew
0800h EP41A-0685 POSTER Sediment Transport by Spring Avalanches in the Southern Swiss Alps: J M Egloff, M Hunziker, J R Moore, M Christen


EP41B Moscone South: Poster Hall Thursday 0800h
Earth and Planetary Surface Processes III: Hillslopes, Rivers, and Humans Posters (joint with H, NH, B)

Presiding: M P Lamb, Caltech; L S Sklar, San Francisco State University

0800h EP41B-0687 POSTER A particle based model for tracking the coupled geochemical and geomorphic evolution of hillslope soils: S M Mudd, K Yoo
0800h EP41B-0688 POSTER Predicting Sediment Flux from Hillslopes by Dry Ravel Following Wildfires in Steep Terrain: M Levina, M P Lamb
0800h EP41B-0689 POSTER Effects of moisture and grain size on the mechanisms of rainsplash transport: S R Taube, D J Furbish
0800h EP41B-0690 POSTER An overview of a landslide susceptibility methodology for identification of unstable slopes in volcanic terrains. A case-control study in Pico de Orizaba volcano, Mexico: G Legorreta Paulin, J Lugo Hubb
0800h EP41B-0691 POSTER FRACTURED BEDROCK STORM FLOW: A NEW PATHWAY FOR RUNOFF GENERATION: J Oshun, R Salve, D M Rempe, W E Dietrich, I Fung
0800h EP41B-0692 POSTER Landslide Force History inversion: Measuring the dynamics of catastrophic landslides using seismology and satellite remote-sensing: C P Stark, G Ekstrom
0800h EP41B-0693 POSTER How Does Decommissioning Forest Roads Effect Hydrologic and Geomorphic Risk?: T Black, C Luce, R M Cissel, N Nelson, B Staab
0800h EP41B-0694 POSTER Monte Carlo Simulation of River Meander Modelling: A J Posner, J G Duan
0800h EP41B-0695 POSTER Constraints on Lobate Debris Apron Evolution and Rheology from Numerical Modeling of Ice Flow: R Parsons, F Nimmer
0800h EP41B-0696 POSTER Evolution of the Kuzulmack river and its interaction with the North Anatolian Fault, Turkey: L Drab, A Hubert Ferrari, L Benedetti, J van der Woerd


0800h EP41B-0698 POSTER Discriminant Analysis of a Spatially Extensive Landsliding Inventory for the Haida Gwaii, British Columbia, Canada: D Sjogren, Y E Martin, J Jagelko

0800h EP41B-0699 POSTER Lithological strength but chemical weakness controls granitic tor formation: A P Stroeven, B W Goodfellow, A Skelton, K N Jansson, C Hättestrand

0800h EP41B-0700 POSTER Slow river incision and erosion strongly limit active uplift in southern Africa: E D Erlanger, D E Granger, R J Gibbon

0800h EP41B-0701 POSTER Effects of channel constriction on upstream steering of flow around Locke Island, Columbia River, Washington: G E Loy, D J Furbish, A Covey

0800h EP41B-0702 POSTER River channel sensitivity to change in the context of human activities and natural factors: an 80-year record of channel morphodynamics on the lower Santa Clara River, Ventura County, California: P W Downs, S R Dusterhoff, W A Sears

0800h EP41B-0703 POSTER Modeling the evolution of in situ cosmogenic nuclide concentrations in mobile and eroding boulders – applications to channel incision and flood frequency analysis: B H Mackey, M P Lamb

0800h EP41B-0704 POSTER Reexamining the late Cenozoic geologic evolution of the Amazon basin: C A Rigsby, E M Latrubesse, P A Baker, C G Silva

0800h EP41B-0705 POSTER Thrust-fold activity at the mountain front of the Northern Apennines (Italy) from quantitative landscape analysis: A Ponza, F J Pazzaglia, V Picotti


0800h EP41B-0707 POSTER Air-Photograph Based Estimates of Channel Widening within the Minnesota River Basin: C Echelring, J Conway, J Graves, J W Lauer

0800h EP41B-0708 POSTER An empirical model to predict the occurrence of cobble-boulder channel beds: E T Donaldson, L S Sklar

0800h EP41B-0709 POSTER Rapid 3-dimensional channel adjustments on the disequilibrium Rio Grande in the Big Bend region: D J Dean, J C Schmidt

EP41C Moscone South: Poster Hall Thursday 0800h
Quantifying Present and Ancient Rates of Earth Surface Processes III Posters (joint with H, PP, V)

Presiding: A Dosseto, University of Wollongong; A M Heimsath, Arizona State University; E J Rhodes, UCLA

0800h EP41C-0710 POSTER Link between climate and himalayan continental discharge for the last 800ka: A T Gourlan, C Chauvel, M Garçon, L Meynadier, C J Allegre

0800h EP41C-0711 POSTER 10Be, OSL/IRSL Luminescence and 14C Cross-Dating of a Series of Abandoned Alluvial Surfaces Laterally Offset by the Dead Sea Fault, Jordan: M Le Beon, M Jaiswal, M Al-Qaryouti, K Moumani, G S Burr, Y Chen, Y Klinger, M Abdelghafoor, J Suppe

0800h EP41C-0712 POSTER Climatically driven changes in erosion rates recorded in alluvial fan sediments, Providence Mountains, eastern Mojave Desert, California: A J Cyr, D M Miller, M C Reheis, S A Mahan, J D Stock, K M Schmidt
Geodesy

G41A  Moscone South: Poster Hall  Thursday  0800h  Combination of Geodetic Data Types to Address Current and Future Problems, Including Application to the Impending Loss of GRACE I Posters (joint with T, IN, H, DI, C, GC, NH)

Presiding: J L Davis, Harvard Smithsonian Center for Astrophysics; J Henton, Natural Resources Canada


0800h  G41A-0787 POSTER Time-variable gravity field from Swarm – first simulation results: X Wang, R F Rummel

0800h  G41A-0788 POSTER Using existing satellite constellations to complement current and future dedicated gravity field missions: B Gunter, J Encarnação, P Ditmar, R Klees

0800h  G41A-0789 POSTER Surface gravity observations define gravity field change over 30 years: D R Roman, D Wineston, J Saleh

0800h  G41A-0790 POSTER Estimating geoid changes and over North America: past, present and future: T Jacob, J Wahr, R S Gross, S C Swenson

0800h  G41A-0791 POSTER High Resolution Terrain Contributions to Geoid modeling Over Alaska: X Li, Y Wang, S A Holmes, D R Roman

0800h  G41A-0792 POSTER A proposal to use geoid slope validation lines to validate models of geoid change: D A Smith

0800h  G41A-0793 POSTER The Investigation of Downward Continuation Methods: A Case Study in Taiwan: C Huang, Y M Wang, J Saleh, Y Hsiao

0800h  G41A-0794 WITHDRAWN

0800h  G41A-0795 POSTER A regional-scale network for geoid monitoring and satellite gravimetry validation: D Wineston, D Pool, J Kennedy

0800h  G41A-0796 POSTER Integrating seismological and geodetic datasets: New insights into the seismic source: T B O’Toole, A P Valentine, A Gilligan, J H Woodhouse

0800h  G41A-0797 POSTER The Plate Boundary Observatory Borehole Network: Combining Geodetic, Seismic and Environmental Data to Understand Plate Boundary Deformation: K M Hodgkinson, D Mencin, D B Henderson, A A Borsa, W Johnson, M H Gortlieb, E Van Bosskirk, W Gallaher, O Fox, J Smith, M E Jackson

0800h  G41A-0798 POSTER Spatio-temporal evolution of the postseismic slip associated with the 2005 Miyagi-Oki earthquake (M7.2) estimated from geodetic and geological data: T Iinuma, S Miura, N Uchida, M Sato, H Saito, T Ishikawa, R Hino, T Matsuzawa

0800h  G41A-0799 POSTER Observation of seafloor crustal movement using the seafloor acoustic ranging on Kumano-nada: Y Osada, M Kido, H Fujimoto

0800h  G41A-0800 POSTER Seafloor movements after the 2005 Off Miyagi Prefecture Earthquake (M7.2) detected by GPS/acoustic geodetic observation: M Sato, H Saito, T Ishikawa, M Fujita, M Mochizuki, A Asada

0800h  G41A-0801 POSTER Temporal variation of oceanic sound speed structure affecting seafloor geodesy: M Kido, Y Osada, H Fujimoto

0800h  G41A-0802 POSTER Identifying Growth of Structures in the Zagros Fold and Thrust Belt: Initial Time Series Results and Evaluation of Precipitable Water Vapor Effects: W D Barnhart, R B Lohman

0800h  G41A-0803 POSTER BASIC RADAR ALTIMETRY TOOLBOX: TOOLS TO USE RADAR ALTIMETRY FOR GEODESY: V Rosomorduc, J J Benveniste, E Bronner, S Niejmeier

0800h  G41A-0804 POSTER Combining tide gauge and geological records of 200 years of British sea level change: N Barlow, A J Long, R W Gehrels, P L Woodworth, M H Saher

0800h  G41A-0805 POSTER Parameter Estimation of the monadic Unsymmetrical P-norm distribution: P Xiong

0800h  G41A-0806 POSTER Biases in GNSS-Data Processing: S C Schaer, R Dach, S Lutz, M Meindl, G Beutler

0800h  G41A-0807 POSTER Characterizing Land Surface Change in the Sacramento-San Joaquin Delta Using L-band UAVSAR Polarmetric and Differential Interferometric Radar Imagery: G W Bawden, C E Jones, S Hensley, J D Jeverel, J Dudas

358 2010 Fall Meeting  AGU

All information is current as of November 12, 2010
Global Environmental Change

GC41A  Moscone South: Poster Hall  Thursday  0800h
The Third Pole Environment (TPE) Under Global Changes II
Posters (joint with A, C, H, B)

Presiding: T Yao, Inst of Tibetan Plateau Res; L G Thompson, Ohio State University; V Mosbrugger, Senckenberg Research Center for Nature Study; Y Sheng, UCLA

0800h  GC41A-0845 POSTER Local weather conditions greatly affect mass balance of glaciers on the southern and northern slopes of Mount Nyaimentingangula, Tibetan Plateau: W Yu, T Yao, S Kang, J Pu

0800h  GC41A-0848 POSTER Monsoon signals in shells of the gastropod Rada: a new archive for lake history and palaeoclimatic studies on the Tibetan Plateau: L Taft, F Riedel, U Wiechert, M Weynell, H Zhang

0800h  GC41A-0849 POSTER Precipitation water stable isotopes in the south Tibetan Plateau: observations and modeling: J Gao

0800h  GC41A-0850 POSTER Grain size, concentrations, and fluxes of dust particles in ice cores from the Tibetan Plateau: G Wu, T Yao, L Tian, B Xu, C Zhang, X Zhang

0800h  GC41A-0851 POSTER Variability of source water signal in δD values of sedimentary n-alkanes of Lake Nam Co: F Gantenber, G Gleixner, B Xu, T Yao

0800h  GC41A-0852 POSTER Lake level changes on the Tibetan Plateau: G Zhang, H Xie, S Kang, F Ackley

0800h  GC41A-0853 POSTER Variation of the Thermal Features over the Tibetan Plateau in Winter and its Impacts: Y Liu, J Yu, L Li, G Wu

0800h  GC41A-0854 POSTER The role of microphysical processes on the mesoscale simulation over the complex terrain, the Himalayas: R K Shrestha, M W Gallagher, P Connolly

0800h  GC41A-0855 POSTER NOx emission from surface snow and ice over the Tibetan Plateau, China: J Wang, T Zhu, W Lin, F Wang

0800h  GC41A-0856 POSTER Monsoon variability for the past 4 ka derived from high-resolution analyses of sediments from lake Nam Co, central Tibetan Plateau: T Kasper, T Haberzettl, S Doberschütz, G Daut, R Mäusbacher, J Wang, L Zhu, V Wennrich

0800h  GC41A-0857 POSTER Comparisons of Soil Moisture Datasets Over Tibetan Plateau and Application to the Simulation of Asia Summer Monsoon Onset: Q Bao

0800h  GC41A-0858 POSTER The Changing Pattern of Glaciers During Last 40 Years in Tibetan Plateau, China: S Liu, W Guo, J Xu, J Li, J Wei, P Yu

0800h  GC41A-0859 POSTER Validation of Satellite Rainfall Estimates over Tibet Autonomous Region, China: C Duo

0800h  GC41A-0860 POSTER Late glacial and Holocene development of Lake Donggi Cona on the NE Tibetan Plateau: S Opitz, B Wünneke, E Dietke, K Hartmann, F Lehmkuhl, G Stach, J JUmler, B Diekmann

0800h  GC41A-0861 POSTER Wet deposition of precipitation chemistry at Nam Co Station, Central Tibetan Plateau: from 2005 to 2009: Y Zhang, S Kang, C Li, Z Cong, Q Zhang

0800h  GC41A-0862 POSTER A 200 year history of mercury pollution across the Tibet-Himalaya reconstructed using lake sediments: S Kang, Q Li, C M Sharma, Q Zhang, B Xu, S Sharma, J Guo, K Wang, J Huang

0800h  GC41A-0863 POSTER Late-Holocene climate change derived from a high-resolution pollen record from varved sediments at Sugan Lake in the Qaidam Basin, northeastern Tibetan Plateau: Y Zhao, K Zhang, Z Yu, A Zhou
0800h GC41A-0864 POSTER Evidence for water cycle changes during past 50 years in Tibetan Plateau: Review and synthesis: Y Zhang

0800h GC41A-0865 POSTER Use of a multi-temporal grid method to verify glacier coverage changes on the Tibetan Plateau using GIS techniques: Q YE

0800h GC41A-0866 POSTER Snow and glacier change in koshi Basin Himalaya and its response to global warming: Y Gao, X Yang, T Yao, D YuFeng

0800h GC41A-0867 POSTER LAND COVER CHANGE IN THE VICINITY OF MT. QOMOLANGMA (EVEREST), CENTRAL HIGH HIMALAYAS SINCE 1976: Y Zhang, Y Nie, L Liu, Z Wang, M Ding, J Zhang

0800h GC41A-0868 POSTER A New Comprehensive Dataset on Glacier Area Changes From 1960s to 2008 in Altai-Sayan, Tien Shan And Pamir Mountain Systems of Central Asia: A Surazakov, V B Aizen, E Aizen, S Nikitin

0800h GC41A-0869 POSTER Surface energy balance and ablation modeling during the summer season at Parlang No.4 Glacier in southeast Tibetan Plateau: W Yang

0800h GC41A-0870 POSTER Hydrologic simulations of the Upstream of Major Rivers in the Tibetan Plateau: F Su, L Zhang, K Tong, Z Hao

0800h GC41A-0871 POSTER Spatial distribution of soil trace elements along Qinghai-Tibet Railway: Z Wang, Y Zhang, H Zhang

0800h GC41A-0872 POSTER The Question of High MIS 3 Lakes in Northwestern China and the Implications for Global Climate Models: Z Lai, D Madsen, X Liu, Y Sun

0800h GC41A-0873 POSTER Glacier Surface Velocity Fields and their Seasonal Variation at West Kunlun, China, Detected by ALOS/PALSAR data: T Yasuda, M Furuya

0800h GC41A-0874 POSTER Different Behaviors between Indian Monsoon and East Asian Monsoon Revealed from δ18O in Precipitation: X Yang

0800h GC41A-0875 POSTER Influence of the atmospheric-oceanic oscillations on the 20th century warming recorded by δ18O in the Malan ice core: Y Yao

0800h GC41A-0876 POSTER Stable isotope variability in an ice core from the Tanggula Mountains, Central Tibetan Plateau: D Joswiak, T Yao, G Wu, B Xu, W Zheng

0800h GC41A-0877 POSTER Central Asia Climate Change: Altai, Tien Shan And Pamir Ice Cores Contemporary And Paleo- Reconstruction: E Aizen, V B Aizen, N Takeuchi, P A Mayewski, B O Grigholm, K Fujita, D Joswiak

0800h GC41A-0878 POSTER Reconstructing 2000 years of Indian summer monsoon variability from high-resolution Tibetan lake sediments, eastern Himalaya: B W Bird, L G Thompson, T Yao

0800h GC41A-0879 POSTER The Change of Solar Radiation and Its Causes in Lhasa City: Y Zhang, S Kang

0800h GC41A-0880 POSTER Lake System Response to Late Quaternary Monsoon Dynamics on the Tibetan Plateau: Microfossils as Indicators of Lake Level Changes: A Schwabl, P Frenzel, C Wrozyna, A Łódge, G Gleixner, G Daut, R Mäusbacher, L Zhu

0800h GC41A-0881 POSTER Oxygen und Hydrogen Isotope Patterns of Surface Waters on the Tibetan Plateau: Implications on Sources and Transport Paths: M Weynell, U Wiechert, F Riedel, L Taft, H Zhang

0800h GC41A-0882 POSTER Application of vegetation information on the Tibetan Plateau to improve East Asian summer monsoon prediction: L Wu, J Zhang

0800h GC41A-0883 POSTER Historical Snow Cover Variability Data Reconstructed from AVHRR and MODIS over High Asia: H ZHOU, E Aizen, V B Aizen

0800h GC41A-0884 POSTER Glacial Volume Loss in the Mt Everest Region in the Past Century: R G Bilham, D Breashears, U N Horodyskyj

0800h GC41A-0885 POSTER Asian Ice Core Array (AICA): Late Holocene Atmospheric Dust Reconstruction over Asia: B O Grigholm, P A Mayewski, V B Aizen, S Kang, E Aizen, K J Kreutz, S Kaspari, K Fujita, N Takeuchi, C P Wake, A Kurbatov

0800h GC41A-0886 POSTER Early Human Occupation on the Northeast Tibetan Plateau: D Rhode, D Madsen, P Brantingham, C Perrault

0800h GC41A-0887 POSTER Reconstruction of Late Glacial paleo-monsoon dynamics using lacustrine sediments of Lake Nam Co, Tibetan Plateau, China: S Doberschütz, G Daut, T Haberzettl, T Kasper, R Mäusbacher, J Wang, L Zhu

0800h GC41A-0888 POSTER Temperature variability in the westernmost Tibetan Plateau in the past 2000 years: J Hou

0800h GC41A-0889 POSTER Elemental composition of Tibetan Plateau top soils and its effect on evaluating atmospheric pollution transport: C Li, S Kang, Q Zhang

0800h GC41A-0890 POSTER Tibetan Plateau Soil moisture products Intercomparison and the field observations: Y Qi, L Lu, L Jiang, J Tao, J Du, J Shi
0800h GC41B-0900 POSTER Reproducibility by climate models of cloud radiative forcing associated with tropical convection: H Ichikawa, H Masunaga, Y Tsushima, H Kanzawa
0800h GC41B-0901 POSTER Evaluating the realism of climate model hydrological cycle via comparisons with the observed moisture mixing ratio distribution (Invited): E R Kursinski, A L Kursinski
0800h GC41B-0902 POSTER Detection of 20th Century Forcing and Feedback: J A Crook, P Forster
0800h GC41B-0903 POSTER Influence of Convective Parameterization on Model Simulated Diurnal Cycle: P C Taylor, N G Loeb
0800h GC41B-0904 POSTER Observational data preparation and availability for Integrated Earth System modeling: A Corrigan, K Kleese van Dam, K A Hibbard, D N Williams
0800h GC41B-0905 POSTER Testing and Improving ENSO Models by Process using Transfer Functions: E Tziperman, D G MacMynowski
0800h GC41B-0906 WITHDRAWN
0800h GC41B-0907 POSTER Understanding Uncertainties Surrounding Low-Cloud Climate Feedback in Transient Climate Change: X Qu, A D Hall, F Sun, J Boe, A Jousse
0800h GC41B-0908 POSTER Implied Nutrient Transport into the Southern Ocean in IPCC-AR4 Coupled Climate Models: S J Everatt, P J Goodman, J L Russell
0800h GC41B-0909 POSTER A Regional Climate Model Evaluation System based on Satellite and other Observations: P Lean, J Kim, D E Waliser, A D Hall, C A Mattmann, S L Granger, K Case, C Goodale, A Hart, P Zimdars, B Guan, N P Moltotch, S Kaki
0800h GC41B-0910 POSTER A comparison of physical climate feedbacks between reanalysis and model datasets: M M Flink, K M Shell
0800h GC41B-0911 POSTER Contrasting observed and CMIP3 simulated sea surface salinity in the tropical Pacific: T C Delcroix, G Alory, S Cravatte, M J McPhaden
0800h GC41B-0912 POSTER Evaluating Projected Changes in Mean Processes, Extreme Events, and their Spatio-Temporal Dependence Structures: A R Ganguly, K Steinhaeuser, E A Kodra, S Kao
0800h GC41B-0913 WITHDRAWN

GC41C Moscone South: Poster Hall Thursday 0800h Variability and Predictability of Weather and Climate Extremes I Posters (joint with A, H, NH, B, PA)

Presiding: Y Deng, Georgia Institute of Technology; M F Wehner, Lawrence Berkeley National Laboratory; A R Ganguly, Oak Ridge National Laboratory

0800h GC41C-0915 POSTER Atlantic Hurricanes During Intense ENSO Events: C Andronache
0800h GC41C-0916 POSTER Storminess in northwest Europe: an evaluation of correlations between the meteorological wind record and the North Atlantic Oscillation: H Cunningham, J French
0800h GC41C-0917 WITHDRAWN
0800h GC41C-0918 POSTER The Role of Changes in the Annual Cycle in Earlier Onset of Climatic Spring in Northern China: C Qian, C Fu, Z Wu, Z Yan
0800h GC41C-0919 POSTER The soil moisture condition for the extreme 2006 dry and 2007 wet years over Oklahoma: T Fan, B Lin
0800h GC41C-0920 POSTER Global Mass Circulation Variability associated with the Annular Mode: C Shin, M Cai
0800h GC41C-0921 POSTER Winter 2009/10: A case study of an extreme Arctic Oscillation event and a skillful climate prediction: J L Cohen, J L Foster, M A Barlow, K Saito, J Jones
0800h GC41C-0922 WITHDRAWN
0800h GC41C-0923 POSTER Global, High-Resolution Identification of Areas Most Vulnerable to Rain-vs-Snow Transitions under Imposed Warmings: M D Dettinger
0800h GC41C-0924 POSTER The complex dynamics of the seasonal component of USA surface temperature: V Capparelli, A Vecchio, V Carbone
0800h GC41C-0925 POSTER Evaluating climate model simulations of heavy precipitation over North America: A DeAngelis
0800h GC41C-0926 POSTER Projection of the future change in precipitation in the vicinity of Japan during the rainy season using a 5-km-mesh regional climate model: S Kanada, M Nakano, T Kato
0800h GC41C-0927 POSTER Comparisons of hurricane-induced storm surge models and their operational use: J Choi, P Gay, J P Rigney, M Doody
0800h GC41C-0928 POSTER The Eastern China land use/land cover change (LCLU) and its influence on weather and climate: J Jiang, L Lu, R A Pielke
0800h GC41C-0929 POSTER The possibility of persisting cold spells in a warming environment: E A Kodra, K Steinhaeuser, A R Ganguly
0800h GC41C-0930 POSTER Identification of Large Scale Circulation Patterns Associated With Temperature Extremes Over North America in Observations and Climate Model Simulations of the 20th Century: P Loikith, A J Broccoli
0800h GC41C-0931 POSTER Drivers of interannual variations in Australian extremes: A Gallant, L Alexander
0800h GC41C-0932 POSTER Cross-Pacific forcing of the boreal winter hydrological extremes over western North America: T Jiang, Y Deng
0800h GC41C-0933 POSTER GCM Projections of Precipitation Extremes in the Mediterranean: Changes and Low Frequency Characteristics: F Cioffi, U Lall, E Volodin, C Karamperidou, R Purini
0800h GC41C-0934 POSTER Climate-Induced Shifts in Extreme Precipitation Events Based on Resolved Atmospheric Changes: C A Schlosser, X Gao, M Weber, D Entekhabi
0800h GC41C-0935 POSTER Predictors for extreme summertime precipitation events over tropical South America: the importance of intraseasonal forcing: F E Hirata, C Hoyos, P J Webster
0800h GC41C-0936 POSTER The role of land-atmosphere coupling for climate variability and extremes over East Asia: J Zhang
0800h GC41C-0937 POSTER About the link between an earlier NAM retreat and a delayed SAMS onset during the recent decades: P A Arias, R Fu


Presiding: P Y Groisman, UCAR at NOAA NCDC; A J Soja, National Institute Aerospace

0800h Introduction The NEESPI status update.
0801h GC41D-01 Siberia Integrated Regional Study megaproject: approaches, first results and challenges: E P Gordov, E A Vaganov
0815h GC41D-02 Methane emissions from the West Siberian wetlands: S Maksyutov, M Glagolev, I Kleptsova, A Sabrekov, A Peregov, T Machida

0830h GC41D-03 Rebuilding of inundation and greenhouse gas emissions from Siberian wetlands over the last half-century: T J Bohn, R Schroeder, E Podest, N Pinto, K C McDonald, C Chiu, L C Bowling, D P Lettenmaier

0845h GC41D-04 Perspectives on Fire Research Collaboration in Siberia: What Have We Learned; Why Does It Matter; and Where Do We Go from Here?: S G Conard

0900h GC41D-05 Reconstructing Post-1979 Forest Fire Activity and Area Burned in Russia: NOAA AVHRR Analysis (Invited): B J Stocks, D R Cahoon

0915h GC41D-06 Changes of land use and land cover and biogeochemistry in northern Eurasia in response to climate change and the global economy: Q Zhuang, J M Melillo, D W Kicklighter, J M Reilly, S Paltsev, A P Sokolov, A Shvidenko, N Tchebakova, E Parfenova, A Peregov, A Sirin, S Maksyutov, G Zhou

0930h GC41D-07 Forest Cover Monitoring 2000-2005 for European Russia Using Landsat Data Composites: P Potapov, M C Hansen

0945h GC41D-08 Combined Analysis of Land Cover Change and NDVI Trends in the Northern Eurasian Grain Belt and the Aral Basin: C K Wright, G M Henery

GC41E Moscone South: 103 Thursday 0800h Global Environmental Change General Contributions II (joint with A, SA)

Presiding: S A Lloyd, NASA Goddard Space Flight Ctr; F Mekik, Grand Valley State University

0800h GC41E-01 Changes in Climate Variables: Contribution of Cloud Types to Global and Regional Cloud Patterns: J R Dim, H Murakami, T Y Nakajima

0815h GC41E-02 Climate Sensitivity and the Global Water Cycle: M Previdi, B G Liepert

0830h GC41E-03 The Sea Level Rise Challenge: W Abdalati, S C Moser, R W Schmitt

GC41F Moscone West: 3001 Thursday 0800h Monitoring and Mitigation of Methane Clathrate Destabilization to Avoid Accelerated Global Warming I (joint with A, C, MR, OS, B, NS)

Presiding: R K Vincent, Bowling Green State University; X Xiong, NOAA/NESIDS/STAR

0800h GC41F-01 Suggestions for Mitigation of Methane Clathrate Destabilization Along Continental Slopes Offshore and Discrimination Between Fossil and Recent Methane in the Atmosphere with Remote Sensing: R K Vincent, R A Vincent

0815h GC41F-02 The East Siberian Arctic Shelf: monitoring is necessary to assess actual scale of annual methane emissions from seabed deposits. (Invited): N E Shakhova


GC41G Moscone West: 2005 Thursday 0800h Toward a Global Greenhouse Gas Monitoring and Information System II (joint with A, B, OS, PA, IN)

Presiding: R M Duren, JPL; J H Butler, NOAA Earth System Research Laboratory; D Rotman, Lawrence Livermore National Laboratory; P Ciais, CEA-CNRS-UVSQ


0824h GC41G-03 Understanding Political Discourse on Climate Change in U.S. Congressional Hearings (Invited): D R Fisher


0856h GC41G-05 Research needs and current approaches for a global carbon monitoring system: Monitoring requirements, synthesis of existing data streams, and emissions verification (Invited): A M Michalak, R B Jackson, G Marland, C L Sabine, S M Gourdon, D Hammerling, K L Mueller, Y P Shiga, V Yadav

0912h GC41G-06 Verifying Greenhouse Gas Emissions: A M Linn, B Law

0924h GC41G-07 Greenhouse gas emissions derived from regional measurement networks and atmospheric inversions: Results from the MCI and INFLUX experiments: K J Davis, A E Andrews, M Cambaliza, A Denning, K R Gurney, T LAUVAUX, N E Shakhova, J T Price, R M Duren, J PL; J H Butler, NOAA Earth System Research Laboratory; D Rotman, Lawrence Livermore National Laboratory; P Ciais, CEA-CNRS-UVSQ

GC41H Moscone West: 2005 Thursday 0800h Using Downscaled Climate Data in Impact and Adaptation Studies I (joint with B, H, NH, A, IN, PA)

Presiding: P Duffy, Climate Central; L D Brekke, U.S. Bureau of Reclamation; B Thrasher, Climate Central

0800h GC41H-01 Recent Advances in Climate Impacts, Vulnerability, and Adaptation Studies in California: G Franco, D R Cayan, S C Moser, M Hanemann, S Pittiglio

0815h GC41H-02 MAKING SCIENTIFIC DATA AVAILABLE TO ADAPTATION PRACTITIONERS - THE WALLACE INITIATIVE: J T Price, R F Warren, J Vanderwal, L Shoo, J Ramirez, A Jarvis, S Goswami

0830h GC41H-03 Modeling Climate Change and Ecosystem Response—Developing Tools to Guide Resource Management in the Southeastern U.S: W B Hughes, M Dalton, S Jones

0845h GC41H-04 Assessing the future of crop yield variability in the United States with downscaled climate projections (Invited): D B Lobell, D Urban
Geomagnetism and Paleomagnetism

**GP41A Moscone South: Poster Hall Thursday 0800h Recent Progress in Magnetic Fabrics and Applications to Earth Sciences II Posters**

**Presiding: E C Ferre, SIUC**

0800h **GP41A-1025** POSTER Delineating Glacial Till Bed Kinematics using AMS and Pebble Fabrics: M J Gentooso, E Evenson, K P Kodama

0800h **GP41A-1026** POSTER ANISOTROPY CONSTANT WITHIN THE BASAL PLANE OF HEMATITE SINGLE CRYSTALS: HIGH FIELD EXPERIMENTS: F Martin Hernandez, S Guerrero Suarez

0800h **GP41A-1027** POSTER LOW-FIELD AMS AT INCREASING FIELD STRENGTHS IN HEMATITE SINGLE CRYSTALS: INFLUENCE OF THE RAYLEIGH REGION ON THE MAGNETIC FABRIC PARAMETERS: S Guerrero Suarez, F Martin Hernandez

0800h **GP41A-1028** POSTER Magnetic fabrics analysis of the Outokumpu serpentinite body in the upper crust of Eastern Finland: F Dietze, A M Kontny

0800h **GP41A-1029** POSTER MAGNETIC FABRICS AND THEIR RELATIONSHIP WITH THE EMLACEMENT OF THE PIRACAIA PLUTON, SE BRAZIL: M B Raposo, L P Pressi, V D Janasi

0800h **GP41A-1030** POSTER Structure, magnetic and crystallographic fabrics of columnar lava flows from the French Massif Central (France): T Boiron, J Bascou, P C Camps, E C Ferre, C Maurice, B Guy, M Gerbe

0800h **GP41A-1031** POSTER The effects of magnetic interactions and magnetic particle concentration on remanent magnetization and magnetic fabrics: M D Stillwagon, J L Till, B M Moskowitz, C L Waters-Tormey

0800h **GP41A-1032** POSTER Magnetic fabric of Pleistocene continental clays from the hanging-wall of a low-angle normal fault (Alto Tiberina Fault, Italy): S Pucci, M Maffione, L Sagnotti, F Speranza

0800h **GP41A-1033** POSTER Normal and anomalous AMS fabrics in gabbroic sills: examples from the Karoo Large Igneous Province: A Lehman, E C Ferre, S M Maes, J W Geissman, M C Marsh, L P Mare, J Marsh

0800h **GP41A-1034** POSTER A transtensional basin model for the Organyà basin (central southern Pyrenees) based on magnetic fabric and brittle structures: B Oliva-Urcia, A M Casas, R Soto, J Villalain, K Kodama

0800h **GP41A-1035** POSTER AMS STUDIES ON FLASER GNEISS, PISECO LAKE, ADIRONDACK MOUNTAINS: W D MacDonald, D A Wheeler

0800h **GP41A-1036** POSTER Image analysis using reflected light: an underutilized tool for interpreting magnetic fabrics: C L Waters-Tormey, T Liner, B Miller, P R Kelso

**GP41B Moscone West: 2003 Thursday 0800h Geomagnetic Field Modeling and Interpretation of Satellite, Observatory, Marine, and Aeromagnetic Data II (joint with OS, SA, SM, DI, T, P)**

**Presiding: M E Purucker**, Raytheon at Goddard Space Flight Center; J C Cain

0800h **GP41B-01** The CHAMP final mission phase - opportunities for high-resolution modelling (Invited): H Luhr

0815h **GP41B-02** Changes in the zonal core-surface flow acceleration associated with the 2003 geomagnetic jerk: L Silva, Title of Team: Institute for Geophysics and Techtonics

0830h **GP41B-03** The magnetic fields generated by the tsunami of February 27, 2010: M C NaIr, S Maus, S Neetu, A V Kuvshinov, A Chilliatt

0845h **GP41B-04** World Digital Magnetic Anomaly Map: a combination of continental, oceanic and satellite information (Invited): J V Korhonen

**GP41C Moscone West: 2003 Thursday 0900h Magnetism of Glassy Materials I (joint with MR, V)**

**Presiding: J A Bowles,** University of Minnesota; J M Feinberg, University of Minnesota

0900h **GP41C-01** BEYOND MAGNETISM: A SHORT HISTORY OF OBSIDIAN PROVENANCE STUDIES AND MAGNETIC PERSONALITIES (Invited): S Shackley

0915h **GP41C-02** Paleointensities of silicic volcanic glass: Influence of emplacement rotations and devitrivication (Invited): A Fork, R Leonhardt, F W von Aulock, K Hess, D B Dingwell, H Tuffen


0945h **GP41C-04** Magnetic Response and Redox Reaction Texture in Basaltic Glass, Interrelated (Invited): K Burgess, R F Cooper, J A Bowles, J S Gee, D J Cherniak

**Hydrology**

**H41A Moscone South: Poster Hall Thursday 0800h Behavior and Remediation of Deep Vadose Zone Contaminants I Posters (joint with B)**

**Presiding: J C Marble,** U.S. Dept. of Energy; D M Wellman, Pacific Northwest National Laboratory

0800h **H41A-1063** POSTER Foam, a promising vehicle to deliver nanoparticles for vadose zone remediation: X Li, X Shen, L Zhong, L Zhao, Y Ding

0800h **H41A-1064** POSTER Simulation of Microfoam Transport in Porous Media: Z F Zhang, M D White

0800h **H41A-1065** POSTER Characterization of DVZ Medium Heterogeneity Using a Markov Chain Model Coupled with Principal Component Analysis: An Application at the BC Cribs and Trenches Site of DOE Hanford Site: L Wang, M Ye, R Khaled, H Deng

0800h **H41A-1066** POSTER Assessing preferential fluxes in deep vadose zones using a source-responsive modeling approach: B B Mirus, K S Perkins, J R Nimmo
0800h  **H41A-1067** POSTER Gas Dispersion Coefficients in Varibly Saturated and Differently Textured Porous Media Muhammad Naveed (1), Shoichiro Hamamoto (1), Ken Kawamoto (1, 2), Toshihiro Sakaki (3), Per Moldrup (4), and Toshiko Komatsu (1, 2) (1) Graduate School of Science and Engineering, Saitama University, Saitama, Japan (2) Institute of Environmental Science and Technology, Saitama University, Saitama, Japan (3) Center for Experimental Study of Subsurface Environmental Processes, Colorado School of Mines, Golden, CO, USA (4) Department of Biotechnology, Chemistry and Environmental Engineering, Aalborg University, Aalborg, Denmark; **M Naveed**, K Kawamoto, S Hamamoto, T Sakaki, P Moldrup, T Komatsu

0800h  **H41A-1068** POSTER Gas-phase Partitioning Tracer Tests to Quantify Water Content in Relatively Dry and Desiccated Porous Media: M Truex, **M Oostrum**, G D Tartakovskiy, T W Wietzma

0800h  **H41A-1069** POSTER Use of Ammonia Gas for Uranium Remediation in Vadose Zone Sediments: **J Szecsody**, M Truex, L Zhong, N P Qafoku, M D Williams, J Bargar, D Faurie

0800h  **H41A-1070** POSTER Evaluating Soil Vapor Extraction Remediation Closure Criteria and Vadose Zone Source-Strength Distribution at the DOE Hanford 216-Z-9 Site: **K C Carroll**, M Truex, V J Rohay, M Brusseau, M Oostrum


0800h  **H41A-1072** POSTER Methane Rates in the Landfill Leachate Plume Of Wuhan Erfei Shan Landfill, China: **C Zhang**, Y Wang

0800h  **H41A-1073** POSTER Characterizing Organic-Liquid Sources in the Vadose Zone: **M L Brusseau**, M Truex, J Mainhagu, C Morrison, M Oostrum, K C Carroll, T Yeh

0800h  **H41A-1074** POSTER Influence of physical factors and geochemical conditions on groundwater acidification during enhanced reductive dechlorination: **A Brovelli**, D A Barry, C Robinson, J Gerhard


---

H41B  **Moscone South: Poster Hall Thursday 0800h**

Ecology of Arctic and Sub-Arctic Ecosystems: Patterns and Processes Across Spatial and Temporal Scales I Posters (joint with A, B, C, GC)

**Presiding:** Y Sheng, UCLA; X Chen, Chinese Academy of Sciences

0800h  **H41C-1091** POSTER The impact of climate and land use changes on water resources. The application of the integrated hydrological modelling system, IHMS (Invited): **R Ragab**, J Bromley, G Dörfinger, S Katsikides, D R D’Agostino, N Lamaddalena, G L Trisorio, S G Montenegro, A Montenegro

0800h  **H41C-1092** POSTER Mechanisms Controlling Variability of Lake Salinity in Dune Environments in a Semi-arid Climate: The Nebraska Sand Hills (Invited): **V A Zlotnik**, J T Ong, B J Swinehart, S C Fritz, J D Lenters, J U Schmieder, J W Lane, T Halihan

0800h  **H41C-1093** POSTER Remote Sensing of Endorheic Lakes and Analysis of their Aridity at Global Scale: **Y Sheng**, J Li

0800h  **H41C-1094** POSTER Lake isotope variability in the Tibetan Plateau: **F Yuan**, Y Sheng, T Yao, J Li

0800h  **H41C-1095** POSTER Lake Dynamics in Arid and Semi-Arid Regions of Central Asia and Their Responses to Climate Changes: **J Li**, Y Sheng, X Chen

0800h  **H41C-1096** POSTER Lake-desert evolution during Holocene in Ulan Buh Desert, China: **H Zhao**, G Li, F Chen, M Jin

0800h  **H41C-1097** POSTER Global Scale Remote Sensing Monitoring of Endorheic Lake Systems: **L Scuderi**

0800h  **H41C-1098** POSTER Managing the impact of climate change on the hydrology of the Galloancita Basin, NE-Spain: **N J Kuhn**

H41C-1100 POSTER Anthropogenic activities affecting Arreo Lake (N Spain) during the last 2500 years: J Corella, B L Valero-Garcés, I Stefanova, A El Amrani, M Morellón, E Rico, P González-Sampériz, A Moreno-Caballero, S Giralt, J Sigro

H41C-1101 POSTER Evaluating the Impact of Gilgel Gibe Dam on the Lake Turkana Water Levels: An Illustration from an Endorheic Lake in Africa: N VELPURLI, G B Senay

H41C-1102 POSTER Sedimentology and geomorphology of a relict lacustrine system in Tingri, Tibet, China: H Chiu, A D Switzer, J Itatison

H41C-1103 POSTER A geochemical approach for the evaluation of water availability and salinity in closed basins: the Draa Basin, Morocco: N Warner, Z Lgourna, S Boutaleb, T Tagma, D S Vinson, N Ettayfi, L Bouchaou, A Vengosh

H41C-1104 POSTER Hydrochemical and isotopic variability of groundwater-dominated lake systems in dune environments: Comparison of the Badan Jilin Desert (China) and the Nebraska Sand Hills (USA): J B Gates, V A Zlotnik

H41D Moscone South: Poster Hall Thursday 0800h Is Microscale Information Needed in Reactive Transport Models? I Posters (joint with GC, V)

Presiding: T Schaefer, Karlsruhe Institute of Technology (KIT); M Dentz, Institute of Environmental Assessment and Water Research (IDAEA-CSIC); P Gouze, Géosciences Montpellier

H41D-1105 POSTER Number of connecting path and tortuosity information of 3 dimensional pore networks in pressurized clastic sandstone: M TAKAHASHI, C Ahn, H Park, Title of Team: Experimental Geoscience Research Team

H41D-1106 POSTER Migration of salt bands through a porous medium: E M Gitelman, M I Dragila

H41D-1107 POSTER Colloid transport in model fracture filling materials: S Wold, S Garcia-Garcia, M Jonsson

H41D-1108 POSTER Sub-grain scale mineralogy of Hanford sand after reaction with caustic tank wastes: L E Crandell, C A Peters, W Um, W Lindquist

H41D-1109 POSTER MULTI-SCALE CHARACTERIZATION OF SELF-ORGANIZED DISSOLUTION PATTERNS DURING CO2 INJECTION IN LIMESTONES: D Laurent, L Luquot, P Gouze

H41D-1110 POSTER Biogeochemically-driven evolution of pore structures and flow paths: experimental studies and modeling: S Molins, J B Ajo Franklin, R T Armstrong, P S Nico, D Silin

H41D-1111 WITHDRAWN

H41D-1112 POSTER Breaking up the equivalence between buoyancy and pressure-driven flows in porous media: the effect of tortuosity: C Huber, A Parmigiani, J Dufek


H41D-1114 POSTER Microstructural investigation of MX-80 bentonite and Na/Ca-montmorillonite using basal spacing determination: M Holmboe, S Wold

H41D-1115 POSTER High resolution direct upscaling of flow and reactive transport: bridging the continuum gap: N B Engdahl, G E Fogg

H41D-1116 POSTER Matching of fluid flow observations in geological material (GeoPET, mm$^3$ resolution) with lattice Boltzmann simulations in µm resolved structures: J Kulenkampff, M Wolf, F Enzmann, M Gründig, M Richter, J Lippmann-Pipke

H41E Moscone South: Poster Hall Thursday 0800h Nutrient Sources and Cycling in Aquatic Systems I Posters (joint with B, GC)

Presiding: H K Pant, Lehman College of the City University of New York; C Kendall, USGS; R J Baker, U.S. Geological Survey

H41E-1117 POSTER Water Velocity and Bioturbation Alter Sediment Resuspension and Geochemistry in an Experimental Freshwater Mesocosm System: A Spivak, M J Vanni

H41E-1118 POSTER Transition of Benthic Nutrient Sources after Engineered Levee Breaches Adjacent to Upper Klamath and Agency Lakes, Oregon: J S Kuwabara, B R Topping, J L Carter, F Parchaso, J M Cameron, J R Asbill, R A Carlson, S V Fend, A C Engelstad


H41E-1120 POSTER Trends In Concentrations And Loads Of Nitrogen And Carbon In Streams And Rivers Of The Western United States, 1990-Present: M Miller, S M Wiele, A Brasher

H41E-1121 POSTER Probabilistic Water quality trading model conditioned on season-ahead nutrient load forecasts: S Arumugam, J Oh


H41E-1123 POSTER Effect of groundwater discharge and river topography on nutrient component of rivers in Southern Korea and Western Japan: S Onodera, Y Shimizu, Y Kato, M Saito, M Jige, J Hwang


H41E-1125 POSTER Isotopic mixing model for quantifying contributions of soil water and groundwater in subsurface ('tile') drainage: C D Kennedy, H Gall, C T Jafvert, G J Bowen

H41E-1126 POSTER Seasonal Variation in Hydrology Driving Shifts in Sources of Nitrate in an Agricultural Dominant Semi-arid Watershed: L G Moon Nielsen, C H Orr

H41E-1127 POSTER USING NITRATE N AND O ISOTOPE RATIOS TO IDENTIFY NITRATE SOURCES AND DOMINANT NITROGEN CYCLING PROCESSES IN A 12ha TILEDRAIN DRYLAND AGRICULTURAL FIELD IN THE PALOUSE BASIN OF EASTERN WASHINGTON STATE: C J Kelley, C K Keller, R D Evans, C H Orr, J L Smith

H41E-1128 POSTER Phosphorus Dynamic in Wetlands: H K Pant

H41E-1129 POSTER Assessment of Downstream Cycling of Point Source Ammonium Input to the Sacramento River, California Using Stable Isotopes: S R Silva, C Kendall, M B Young, A E Parker

All information is current as of November 12, 2010
**H41F** Moscone South: Poster Hall Thursday 0800h

**Physically Based Hydrologic Modeling: Advances and Challenges I Posters (joint with A, B)**

**Presiding:** V Y Ivanov, University of Michigan; B B Mirus, US Geological Survey; B A Ebel, US Geological Survey; E Caporali, University of Firenze; O Semenova, State Hydrological Institute; P J Restrepo, NOAA National Weather Service

0800h **H41F-1130 POSTER** Regional scale hydrologic simulation utilizing cluster-based parallel computing: D Su, Q Ran

0800h **H41F-1131 POSTER** Effects of soil parameterization on distributed hydrologic response: Testing a distributed hydrologic model using a hypothetical reality dataset: N C Cristea, S K Kampf, B B Mirus, K Loague, S J Burges

0800h **H41F-1132 POSTER** A parallel computational framework for integrated surface-subsurface flow and transport simulations: Y Park, H Hwang, E A Sudicky

0800h **H41F-1133 POSTER** Transition of spatial controls on distributed soil moisture and runoff simulations at multiple model resolutions: T H Mahmood, E R Vivoni

0800h **H41F-1134 POSTER** A physically-based Distributed Hydrologic Model for Tropical Catchments: N A Abebe, F L Ogden

0800h **H41F-1135 POSTER** Modeling the impacts of climate change and agricultural management practices on surface erosion in a dryland agricultural basin: E Ottenbreit, J C Adam, M E Barber

0800h **H41F-1136 POSTER** Development of the Next Generation Watershed Model, WASHL2D3 v2.5: D Shih, G Yeh

0800h **H41F-1137 POSTER** Exploring terrestrial and atmospheric constraints in land surface model validation: B Livneh, P J Restrepo, D P Lettenmaier

0800h **H41F-1138 POSTER** Considerations in regional integrated hydrologic modeling: grid resolution, topography, and overland flow processes: A Seck, C Welty, R M Maxwell

0800h **H41F-1139 WITHDRAWN**

0800h **H41F-1140 POSTER** Modelling the Water Dynamics at a Hillslope in the Bavarian Forest, Germany: A Heim, B Creutzfeldt, A Günther

0800h **H41F-1141 POSTER** Multivariate calibration of a water and energy balance model in the spectral domain: recommendations for efficient parameter estimation: V R Pauwels, G J De Lannoy

0800h **H41F-1142 POSTER** Spatial Streamflow Forecasting in a Large River Basin in Northwestern Mexico using a Fully-distributed Hydrologic Model: A Robles-Morua, E R Vivoni, A S Mayer

0800h **H41F-1143 POSTER** Parallelized Modelling of Soil-Coupled 3D Water Uptake of Multiple Root Systems with Automatic Adaptive Time Step Control: T Kalbacher, J Delfs, C Schneider, O Kolditz, Title of Team: UFZ - Environmental Informatics

0800h **H41F-1144 POSTER** Simulating the runoff regime of a data scarce glacierised Himalayan catchment: the information content of different calibration strategies and data sets: S Normand, M Koz, F Pellicciotti

0800h **H41F-1145 POSTER** Comparison of modeling approaches in assessing hydrologic processes in a high elevation, semi-arid Andean watershed: G Cortes, M Quezada, S Ragertti, F Pellicciotti, J P McPhee

0800h **H41F-1146 POSTER** Role of Hydraulic Geometry in Flood Wave Propagation: S Orlandini

0800h **H41F-1147 POSTER** Effect of stone coverage on soil erosion: S Jomaa, D A Barry, B P Heng, A Brovelli, G C Sander, J Parlange

0800h **H41F-1148 POSTER** A fast finite volume model for 2D shallow water flow: S Li, D Lohmann, C Duffy, S Eppert, F Yue


0800h **H41F-1150 POSTER** Multi-Watershed Assessment of WEPP in the Tahoe Basin: E S Brooks, W J Elliot, J Boll

0800h **H41F-1151 POSTER** The effect of high resolution topography information on complex terrain flash-flood response modeling: P Tarolli, E I Nikolopoulos, E N Anagnostou, M Borga, E R Vivoni, A Papadopoulos

0800h **H41F-1152 POSTER** Assessment of climate change impacts on forest growth via ecohydrological distributed modelling: M Rulli, V Rossini, R Rosso

0800h **H41F-1153 POSTER** Evaluating Influence of Groundwater-supplied Moisture Flux in Global Land Surface Hydrologic Simulations: S Koirala, P J Yeh, T Oki, S Kanae

0800h **H41F-1154 POSTER** Development of an integrated hydrological modeling system for near-real-time multi-objective reservoir operation in large river basins: L Wang, T Koike

0800h **H41F-1155 POSTER** Wind forcing of upland lake hydrodynamics: implementation and validation of a 3D numerical model: L Morales, J French, H Burningham, C Evans, R Battarbee

0800h **H41F-1156 POSTER** New concentrated flow hydraulics equations for physically-based rangelands hydrology and erosion models: O Z Al-Hamdan, F B Pierson, C J Williams, M A Nearing, J J Stone, C A Moffet, P R Kormos, J Boll, M A Welz

0800h **H41F-1157 POSTER** Comparison of Classical and Non-local Transport Theories in a “Perfectly” Sampled Sandstone Slab: E Major, D A Benson, A M Dean

0800h **H41F-1158 POSTER** Application and comparison of the SCS-CN-based rainfall–runoff model in meso-scale watershed and field scale: L Luo, Z Wang

0800h **H41F-1159 POSTER** Use of the time fractional advection dispersion equation for push-pull tests at the Macrodispersion Experiment (MADE) site: A M Dean, D A Benson, E Major

**H41G** Moscone South: Poster Hall Thursday 0800h

**Predicting Behavior of Freshwater Systems in a Changing Environment I Posters (joint with B)**

**Presiding:** M Sivapalan, Univ of Illinois at Urbana Champaign; A I Packman, Northwestern University; M A Hassan, Univ British Columbia; J Wilson, University of Illinois at Urbana-Champaign

0800h **H41G-1160 POSTER** Reach Scale Sediment Balance of Goodwin Creek Watershed, Mississippi: L Ran, T Garcia, S Ye, C J Harman, M A Hassan, A Simon

0800h **H41G-1161 POSTER** Environmental change in the Mississippi River Basin: X Xu, G Wynn, M A Hassan, S D Donner, M Sivapalan

0800h **H41G-1162 POSTER** The role of water chemistry and geomorphic control in the presence of Didymosphenia geminata in Quebec: C Gillis, R S Gabor, J D Cullis, L Ran, M A Hassan

0800h **H41G-1163 POSTER** The Effects of Solute Breakthrough Curve Tail Truncation on Residence Time Estimates and Mass Recovery: J D Drummond, T P Covino, A F Aubene, S Patil, D N Leong, L Ran, A I Packman, R Schmer

0800h **H41G-1164 POSTER** Sensitivity of stoichiometric ratios to temporal variability in streamflow: S D Donner, D N Leong, T P Covino, R S Gabor, J D Drummond, X Xu

0800h **H41G-1165 POSTER** Short time series analysis of Didymosphenia geminata blooming in the Oreti River, New Zealand: T Garcia, C Kilroy, S Larned, A I Packman, P Kumar

H41G-1167 POSTER A network model for simulating sediment dynamics within a small watershed (Invited): S Patil, S Ye, X Xu, C J Harman, M Sivapalan, M A Hassan


H41G-1169 POSTER Investigating the potential impacts of local climate change on the meltwater supply of a small snow-fed mountain river system: A case study of the Animas River, Colorado: C A Day


H41G-1171 POSTER A PROCESS BASED MODEL TO PREDICT HYPERHEIC FLOW INDUCED BY ALTERNATE BARS: A Marzadri, D Tonina, A Bellin, G Vignoli, M Tubino

H41G-1172 POSTER Altering Reservoir Withdrawal: a modeling approach to tail-water eutrophication on the South Fork Humboldt Reservoir, NV USA: D W Smith, J J Warwick, C H Fritsen, C Davis, J Memmott, E Wirthin

H41G-1173 POSTER Integrated uncertainty assessment of hydrological responses due to land cover change in a large river basin including feedback effects: R Kumar, L E Samaniego-Eguiiguren, M Coskun

H41G-1174 POSTER Effects of soil structural development on soil hydraulic properties and hydraulic processes in forested hillslopes: Y Hayashi, K Kosugi, T Mizuyama

H41G-1175 POSTER Design and testing of a plot scale rainfall simulator in Sardina, Italy for calibration of a distributed hydrological model: T G Wilson, C Cortis, A Idda, N Montaldo, J D Albertson

H41G-1176 POSTER Runoff production in a small agricultural catchment in Lao PDR: influence of slope, land-use and observation scale: J Patin, O Ribolzi, C Mugler, C Valentin, E Mouche

H41G-1177 POSTER Catchment Classification: Connecting Climate, Structure and Function: K A Sawicz, T Wagener, M Sivapalan, P A Troch, G A Carrillo

H41G-1178 POSTER Water Research within the SPRUCE Experiment, a Large-Scale Study of Climate Change Effects on a Northern Peatland: P J Mulholland, S D Sebestyen, P J Hanson, J Warren, R K Kolka

H41G-1179 POSTER Modeling the Variability of Blue and Green Water Flows in the Congo Basin: N R Aloysius, J E Saiers

H41G-1180 POSTER Preliminary Analysis of a Dynamic General Vegetation Model, MC1, for use in Forecasting Runoff Under a Changing Climate: B S Pits, R P Neilson, J R Wells, R J Drapk

H41G-1181 POSTER Impacts of variable agricultural expansion and contraction on regional scale hydrology: The case of the Upper Mississippi River and Ohio River Basins: C D Frans, F Munoz-Arriola, E Istanbulbulluglu, D P Lettenmaier

H41G-1182 POSTER Understanding Hydrological Trends with Budyko Hypothesis: Z CONG, D Yang

H41G-1183 POSTER Stream channel surface water – groundwater interactions in a fire impacted watershed: T A Russo, A T Fisher

H41G-1184 POSTER Explore Inter-annual Variability of Catchment Water-energy Balance Based on Remote Sensed ET Datasets: L Cheng, Z Xu, D Wang, X Cai

H41G-1185 POSTER Multiscale Monitoring and Analysis of the Impacts of Rural Land Use Changes on Downstream Flooding: J Geria, J Ewen, G O'Donnell, P E O'Connell


H41G-1188 POSTER Simulating Streamflow and Dissolved Organic Matter Export from small Forested Watersheds: N Xu, H Wilson, J E Saiers

H41G-1189 POSTER Proglacial hydrology in the Cordillera Blanca, Peru: M Baraer, J M McKenzie, B G Mark


H41H Moscone South: Poster Hall Thursday 0800h The Future of Arsenic: Emerging Threats and Scalable Solutions Posters (joint with B, V)

Presiding: B J Mailloux, Barnard College; M Polizotto, North Carolina State University

H41H-1190 POSTER Arsenic evolution in fractured bedrock wells in central Maine, USA: Q Yang, Y Zheng, C Culbertson, C Schalk, M G Nielsen, R Marvinney

H41H-1191 WITHDRAWN

H41H-1192 POSTER Evaluation of In-Situ Arsenic Mitigation with Fe(II) Using Push-Pull Tests in the Ogallah Aquifer: N A Sheffer, B R Scanlon, R C Reedy, J Nicot, C Yang, K G Stollenwerk


H41H-1194 POSTER Projecting groundwater arsenic levels to define water use options in South Asia (Invited): S Fendorf, B D Kocar, M Polizotto, J Stuckey, S G Benner


H41H-1196 POSTER Assessment of the physical and chemical sustainability of deep, low-arsenic groundwater in the Bengal Basin: Regional- and local-scale considerations (Invited): H A Michael, C I Voss, K A Radloff, Y Zheng

H41H-1197 POSTER Soil-Root Processes Responsible for Arsenic Uptake in Rice: A Route of Human Exposure: A Seyffert, S Fendorf

H41H-1198 POSTER Co-contamination of As and F in alluvial aquifer: S Kim, K Kim, B Kim, W Zhu, E Lee, K Ko

H41H-1199 POSTER Regional variation of As concentration in alluvial plain: An insight obtained from Mankyeong River plain, Korea: K Kim, S Kim, B Kim, W Zhu, E Lee, K Ko, K Lee


H41 I Moscone West: 3018 Thursday 0800h
Integrating Geomorphic, Hydrologic, and Ecologic Processes for Sustainable Management of River Corridors I (joint with B, PA)

Presiding: A Simon, USDA-ARS National Sedimentation Laboratory; D Tetzlaff, University of Aberdeen; L E Band, University of North Carolina; T J Beechie, NOAA Fisheries

0800h H41 I-01 Salmon as biogeomorphic agents in gravel-bed rivers (Invited): M A Hassan
0820h H41 I-02 Eastern Australian Examples of River Bank Soil Reinforcement by Tree Roots (Invited): T Hubble, I Rutherford, B Docker
0840h H41 I-03 Tidal river hydraulicities, morphology, and biogeochmetry: Implications for management and restoration of coastal ecosystems (Invited): M W Schmeeckle
0900h H41 I-04 How Will Climate Change Affect Channel Morphology and Salmonid Habitat in Mountain Basins? J M Buffington, J Goode
0915h H41 I-05 A lidar-derived evaluation of watershed-scale large woody debris sources and recruitment mechanisms: coastal Maine, USA: A Kasprak, F J Magilligan, K Nislow, N P Snyder
0930h H41 I-06 Hierarchical Geomorphic, Hydrologic, and Ecohydrologic Analysis of a Remote Mountainous Regulated River using Ginormous Datasets: G B Pasternak, A E Senter, D Garner, N De La Mora
0945h H41 I-07 Geomorphic response to agricultural land use in small fluvial systems – The role of landscape connectivity: R Poeppl, M Keiler, T Glade, Title of Team: ENGAGE - Geomorphological Systems and Risk Research

H41 J Moscone West: 3020 Thursday 0800h
Stochastic Transport and Emergent Scaling on the Earth’s Surface I (joint with EP, NG)

Presiding: E Foufoula-Georgiou, University of Minnesota; R Schumer, Desert Research Institute

0800h H41 J-01 WITHDRAWN
0815h H41 J-02 The branching instability in valley networks (Invited): T Perron, M Lapotre
0830h H41 J-03 Stochastic models for the transport of dissolved and suspended material in rivers: A I Packman, R Schumer, A F Aubeneau, J D Drummond
0845h H41 J-04 A probabilistic definition of the bed load sediment flux: Theory (Invited): D J Furbish, P K Haff, J C Roseberry, M W Schmeeckle
0900h H41 J-05 Large to small scale coupling and time irreversibility in gravel bedform dynamics: experimental evidence and implications for modeling: A Singh, J Rigby, E Foufoula-Georgiou
0915h H41 J-06 Stochastic predictions of bedload flux and sediment availability in steep channels: E M Yager, J M Turowski, D Rickenmann, B W Mc Ardell
0930h H41 J-07 Linking stochastic sediment transport to physical processes (Invited): D J Jerolmack, R Martin, C Paola, M D Reitz, R Schumer
0945h H41 J-08 Effect of Subsidence Styles and Fractional Diffusion Exponents on Depositional Fluvial Profiles: V R Voller, C Paola, L Hajek

H41 K Moscone West: 3014 Thursday 0800h

Presiding: M A Fonstad, Texas State University; T M Pavelsky, University of North Carolina-Chapel Hill; P Carbonne, Durham University; C J Legleiter, University of Wyoming

0800h H41 K-01 Towards remote sensing of river discharge from space (Invited): L C Smith, M T Durand, A Andrea, M K Mersel
0845h H41 K-03 Dynamic Channel Network Extraction from Satellite Imagery of the Jamuna River: E A Addink, W A Marra, M G Kleinmans
0900h H41 K-04 Current Measurements in Rivers by TerraSAR-X Along-Track InSAR: R Romeiser, S Suchandt, H Runge, H C Graber
0915h H41 K-05 Modeling rating curves using remotely-sensed LiDAR data: M Nathanson, S W Lyon, J W Kean, T J Grabs, J Seibert, H Laudon
0930h H41 K-06 Sensitivity analysis of simulated bathymetric LiDAR waveforms according to sensor and river parameters variability: J Bailly, H Abdallah, N Baghdadi, N Saint-Geours
0945h H41 K-07 Mapping the bathymetry of a turbid, sand-bed river using ground-based reflectance measurements and hyperspectral image data: C J Legleiter, P J Kinzel, J M Nelson

H41 L Moscone West: 3016 Thursday 0800h
Uncertainty in Model Parameter Estimates and Impacts on Risk and Decision Making in the Subsurface I

Presiding: D Bolster, UPC; S A McKenna, Sandia National Laboratories; W Nowak, University of Stuttgart; S Srinivasan, University of Texas Austin

0815h H41 L-02 The impacts of uncertainty and variability in groundwater-driven health risk assessment. (Invited): R M Maxwell
0830h H41 L-03 DATA-DRIVEN ROBUST DESIGN AND PROBABILISTIC RISK ASSESSMENT: APPLICATION TO UNDERGROUND CARBON DIOXIDE STORAGE: S Odalyshkin, H Class, R Helming, W Nowak
0845h H41 L-04 Probability Density Functions for Concentration Distributions in Random Velocity Fields: M Dentz, D M Tartakovsky
0900h H41 L-05 Divide and Conquer: A Valid Approach for Risk Assessment and Decision Making under Uncertainty for Groundwater-Related Diseases: X Sanchez-Vila, F de Barros, D Bolster, W Nowak
0915h H41 L-06 A Task-oriented Approach for Hydrogeological Site Characterization: Y Rubin, W Nowak, F de Barros
0930h H41 L-07 Posterior Predictive Modeling Using Multi-Scale Stochastic Inverse Parameter Estimates: S A McKenna, J Ray, B V BloemenWaanders, Y M Marzouk
0945h H41 L-08 A Controlled Experiment for Investigating Uncertainty Measures in Groundwater Flow Modeling: D Lu, M C Hill, M Ye
IN41A  Moscone South: Poster Hall Thursday 0800h
Large-Scale Geosciences Applications Using GPU and Multicore Architectures I Posters (joint with NG, P)

Presiding: D L Rosenberg, NCAR; C Ng, Geophysical Institute; D A Yuen, University of Minnesota

0800h  IN41A-1349 POSTER Accelerated Hall Magnetohydrodynamics: C Bard, J Dorelli

0800h  IN41A-1350 POSTER GPU Implementation of Stokes Equation with Strongly Variable Coefficients: L Zheng, T Gerya, D A Yuen, M G Knepley, H Zhang, Y Shi

0800h  IN41A-1351 POSTER Acceleration of Support Operator Rapture Dynamics: Y Zhou, T Dong, D A Yuen

0800h  IN41A-1352 POSTER Using GPU for Seismic Emission Tomography processing: I G Dricker, A J Cooke, P A Friberg, S B Hellman

0800h  IN41A-1353 POSTER Exploring the Potential of Large Scale Distributed Modeling of Snow Accumulation and Melt on GPUs: G Bisht, M Kumar

0800h  IN41A-1354 POSTER A GPU powered investigation of the relationship between observed and modeled storm responses of a Minnesota cave stream: J M Myre, M D Covington, S D Walsh, M O Saar, A J Luhmann, D Lilja

0800h  IN41A-1355 POSTER Discrete Element Modeling of Complex Granular Flows: N Movshovitz, E I Asphaug

0800h  IN41A-1356 POSTER A Hybrid MPI-OpenMP Scheme for Scalable Parallel Spectral Computations for Fluid Turbulence: D L Rosenberg, P D Mininni, R N Reddy, A Pouquet

0800h  IN41A-1357 POSTER Hybrid Broad Phase Contact Detection Method for Lunar/Mars Regolith Modeling Designed for Use on Heterogeneous Computer Systems: A V Kulchitsky, J B Johnson

0800h  IN41A-1358 POSTER A GEOSCIENCE ACCELERATOR LIBRARY - DESIGN AND APPLICATIONS: C Hill, A Richardson

0800h  IN41A-1359 POSTER A Spatially-Registered, Massively Parallelised Data Structure for Interacting with Large, Integrated Geodatasets: D H Irving, M Rasheed, N O'Doherty

0800h  IN41A-1360 POSTER Efficient Extraction of Regional Subsets from Massive Climate Datasets using Parallel IO: J Daily, K Schuchardt, B J Palmer

IN41B  Moscone South: Poster Hall Thursday 0800h
Scientific Workflows and Provenance: Strategies for Current and Emerging Issues I Posters (joint with A, ED, OS, H, SH)

Presiding: H Hua, NASA/JPL; D L McGuinness, Rensselaer Polytechnic Institute and McGuinness Associates; B D Wilson, Jet Propulsion Lab

0800h  IN41B-1361 POSTER A Provenance Model for Real-Time Water Information Systems: Q Liu, Q Bai, S Zednik, P Taylor, P A Fox, K Taylor, C Kloppers, C Peters, A Terhorst, P West, M Compton, Y Shu, Title of Team: The Provenance Management Team

0800h  IN41B-1362 POSTER Pegasus Workflow Management System: Helping Applications From Earth and Space: G Mehta, E Deelman, K Vahi, F Silva

0800h  IN41B-1363 POSTER Freeing data through The Polar Information Commons: T De Bruin, R S Chen, M A Parsons, D J Carlson, K Cass, K Finney, J Wilbanks, K Jochum

0800h  IN41B-1364 POSTER Applying the Karma Provenance tool to NASA’s AMSR-E Data Production Stream: R Ramachandran, H Conover, K Regner, S Movva, H M Goodman, B Pale, P Purohit, Y Sun

0800h  IN41B-1365 POSTER Rolling Deck to Repository (R2R): Organizing Datasets from Heterogeneous Shipboard Data into an Integrated Catalog: P D Clark, R A Arko, A Sweeney, D Fischman, S P Miller, K Stocks

0800h  IN41B-1366 POSTER Evolving LISIRD and the LASP Time Series Server to Support Data Identification, Citation, and Provenance: A Wilson, D M Lindholm, A Ware DeVolfe, T Smith, C K Pankratz, M Snow, T N Woods

IN41C  Moscone South: Poster Hall Thursday 0800h
Use of Ontologies in Earth Science Informatics I Posters (joint with A, B, C, H, GC, OS, V)

Presiding: M Piasceki, Drexel University; I Zaslavsky, University of California, San Diego; R G Raskin, Jet Propulsion Laboratory

0800h  IN41C-1367 POSTER Integration of hydrologic parameter ontology in CUAHSI HydroCatalog: I Zaslavsky, D W Valentine, T Whitenack, M Piasceki, R P Hooper, Y Choi, D R Maitland

0800h  IN41C-1368 POSTER Ontology Driven Development and Science Information System Interoperability: J S Hughes, D J Crichton, R S Joyner, E D Rye, Title of Team: PDS4 Data Standards Team Leads

0800h  IN41C-1369 POSTER Using Semantic Web Technologies with OPENDAP: D Holloway, M B Blumenthal, H Liu, N Potter

0800h  IN41C-1370 POSTER Developing an Ontology for Ocean Biogeochemistry Data: C L Chandler, M D Allison, R C Groman, P West, S Zednik, A R MaFei

0800h  IN41C-1371 POSTER Extending TOPS: Ontology-driven Anomaly Detection and Analysis System: P Votava, R R Nemani, A Michaelis


0800h  IN41C-1373 POSTER QuakeTables: A Federated Ontology-Based Database System for Geoscience: R Al-Ghanmi, D McLeod, L Grant Ludwig, A Donnellan, J W Parker, M Pierce

IN41D  Moscone South: 302 Thursday 0800h
Information Systems Advances for Earth Science Decadal Survey Era Missions I (joint with A, C, EP, GC, NH, OS, G)

Presiding: C D Norton, Jet Propulsion Laboratory; K Moe, NASA; M Moghaddam, University of Michigan

0800h  IN41D-01 Multiangle Spectropolarimetric Imager (MSPI) On-Board Processing Technology Development and In-Flight Validation for the ACE Decadel Survey Mission: T Werne, P Pingree, D Bekker

0815h  IN41D-02 SpaceCube On-board Science Data Processing Technology (Invited): T Flatey

0830h  IN41D-03 NPP/NPOESS Tools for Rapid Algorithm Updates: G Route, K D Grant, R Hughes

0845h  IN41D-04 Spatio-temporal Statistical Inference and Data Fusion and their Applications to Decadal Survey Missions (Invited): A J Braverman, H M Nguyen

0900h  IN41D-05 Uncertainty Analysis in the Decadal Survey Era: A Hydrologic Application using the Land Information System (LIS): K Harrison, S Kumar, C D Peters-Lidard, J A Santanello
Nonlinear Geophysics

**NG41A Moscone South: 308 Thursday 0800h Multiscaling in Hydrometeorology and Hydrology I (joint with A, H, NH, NS)**

*Presiding:* A P Barros, Prat School of Engineering; S Lovejoy, McGill University; D J Schertzer, U. Paris-Est, Ecole des Ponts ParisTech; A A Carsteanu, ESPM-IPN

0800h NG41A-01 A WRF-based ensemble data assimilation system for dynamic downscaling of satellite precipitation information *(Invited)*: S Q Zhang, A Y Hou, M Zupanski, S Cheung

0815h NG41A-02 Multi-scale predictability inferences from mesoscale models – how much can we trust them? *(Invited)*: J Hacker

0830h NG41A-03 Fine-scale structure of precipitation from optical and microwave link measurements *(Invited)*: R Uijlenhoet

0845h NG41A-04 A systematic approach for a multi-scale evaluation of dominant hydrological processes *(Invited)*: W F Krajewski, L Cunha, R Mantilla

**NG41B Moscone South: 308 Thursday 0900h Stochasticity, Memory Effects, and Multiplicity of Scales in Geophysics I**

*Presiding:* D J Schertzer, U. Paris-Est, Ecole des Ponts ParisTech; M D Chekroun, UCLA

0900h NG41B-01 Modeling complex systems with memory and without separation of scale *(Invited)*: A J Chorin

0915h NG41B-02 Weather noise and climate forecasting or, How to use the former and improve the latter? *(Invited)*: M Ghil, M D Chekroun, D A Kondrashov

0930h NG41B-03 Sub-sampling in Parametric Estimation of Stochastic Parameterizations: I Timofeyev, R Aizenstott, A Beri

0945h NG41B-04 Non-equilibrium statistical mechanics of geophysical flows: F Bouchet, E Simonnet

Natural Hazards

**NH41A Moscone South: Poster Hall Thursday 0800h Wildfires on Landscapes: Theory, Models, and Management III Posters (joint with GC, PA)**

*Presiding:* D McKenzie, US Forest Service; R E Keane, USDA Forest Service Rocky Mountain Research Station

0800h NH41A-08 POSTER The Fluid Dynamical Forces Involved in Grass Fire Propagation: M Jenkins, A Kochanski, S K Krueger, W Mell, R McDermott


0800h NH41A-1472 POSTER Process-based Intermediate Fire Parameterization in a Dynamic Global Vegetation Model: F Li, X Zeng, Q Zeng

0800h NH41A-1473 POSTER Global carbon budget: fire history matters: F Mouillot

0800h NH41A-1474 POSTER Factors affecting Holocene fire dynamics in boreal Europe: K J Brown, T Giesecke, M Ohlson

0800h NH41A-1475 POSTER Wildland fire simulation by WRF-Fire: J Mandel, J D Beezley, A Kochanski, V Y Kondratenko, B Sousedik


0800h NH41A-1477 POSTER A stochastic simulation model to predict future air quality in protected areas: E Stavros, D McKenzie, N Larkin, T Strand, B K Lamb

0800h NH41A-1478 POSTER Simulation of the Meadow Creek fire using WRF-Fire: J D Beezley, A Kochanski, V Y Kondratenko, J Mandel, B Sousedek

0800h NH41A-1479 POSTER Integrating MODIS-based products to improve post-fire recovery predictions for burned watersheds in Southern California: A M Kinoshita, T S Hogue

0800h NH41A-1480 POSTER Spatial and temporal controls on Southern California’s large fires: Y Jin, A D Hall, J T Randerson, M Goulden

0800h NH41A-1481 POSTER Hydrologic Vulnerability and Risk Assessment Associated With the Increased Role of Fire on Western Landscapes, Great Basin, USA: C J Williams, F P Pierson, P R Robichaud, K E Spaeth, S P Hardegree, P E Clark, C A Mof ter, O Z Al-Hamdan, J Boll

0800h NH41A-1482 POSTER Characterizing the Hydrological Properties of Wildfire Ash: S Woods, V Balfour

0800h NH41A-1483 POSTER The Grass Fires on Slopes Experiment: C B Clements, D Seto, W Heilman

0800h NH41A-1484 POSTER Long-term trends and interannual variability of fires in South America during 2001-2009: Y Chen, J T Randerson, D M Morton, Y Jin, L Giglio, G J Collatz, P S Kasibhatla, G van der Werf, R S DeFries

0800h NH41A-1485 POSTER The MISR Wildfire Smoke Plume Height Project: D L Nelson, M J Garay, D J Diner, R A Kahn

0800h NH41A-1486 POSTER Climatic and topographical influences on fire regime attributes in the northern Cascade Range, Washington, USA: C Cansler, D McKenzie

0800h NH41A-1487 POSTER Data-model comparison reveals unprecedented recent burning of Alaskan boreal forests since CE 1860: F Hu, R Kelly, M Olson, P E Higuera, S Rupp

0800h NH41A-1488 POSTER Quantifying the relative importance and potential interactive effects of multiple indices when predicting fire risk and severity in the Western US: A Keyser, A L Westerling

0800h NH41A-1489 POSTER Observations and Modeling of Fire-Induced Winds: D Seto, C B Clements, J L Coen

0800h NH41A-1490 POSTER Impacts of Climatic Change on Boreal-Forest Fire Regimes over the Past 2000 Years: P E Higuera, C Barrett, R Kelly, F Hu

0800h NH41A-1491 POSTER The Impact of a Vegetation Canopy Parameterization on Smoke Dispersion from Wildland Fires: M T Kiefer
Near Surface Geophysics

**NS41A Moscone South: Poster Hall Thursday 0800h Beyond the Case History: Novel Seismic Methods and Applications | Posters (joint with S)**

**Presiding:** S S Haines, USGS; A Lamb, Boise State University

0800h **NS41A-1500 POSTER** High-resolution seismic imaging applied to the characterization of very shallow highly contrasted structures: A Roques, R Brossier, J Virieux, J Mars

0800h **NS41A-1501 POSTER** 2-D High Resolution Seismic Imaging and Potential-Field Modeling of Small-Scale Intrabasin Faulting in Surprise Valley, California: N Athens, V C Fontiveros, S L Klemperer, A E Egger, J M Glen

0800h **NS41A-1502 POSTER** Omni-Directional Extension of the Refraction Microtremor Method: S E Hauksson, J N Louie, S Pullammanappillil

0800h **NS41A-1503 POSTER** Shear-wave Velocity Structure of Surabaya, Indonesia, Inferred from Microtremor Observation: X Deng, K Megawari, H Yamanaka

0800h **NS41A-1504 POSTER** CO2 Sequestration Crosswell Monitoring: C Morency, Y Luo, J Tromp

0800h **NS41A-1505 POSTER** Seismic characterization of a CO2 storage pilot plant in a Saline Aquifer (Hontomin, Spain): J Alcalde, R Carbonell, D Marti, A Calahorrano, I Palomeras, P Ayaza, A Perez-Estaín

0800h **NS41A-1506 POSTER** Comparison of the Seismic Effects of Soil Disturbance and Void Space Over Shallow Cut-and-Cover Tunnels: N D Bonal, R E Abbott, L A Preston

0800h **NS41A-1507 POSTER** A new impulsive seismic shear wave source for near-surface (0-30 m) seismic studies: J M Crane, J M Lorenzo

0800h **NS41A-1508 POSTER** Fast and Efficient Approach in Surface Wave Analysis: A I Kanli

Ocean Sciences

**OS41A Moscone South: Poster Hall Thursday 0800h Ocean Circulation Variability and Air-Sea Interactions in the Western Tropical Pacific | Posters**

**Presiding:** C Maes, IRD; B Qiu, Univ of Hawaii at Manoa; K Ando, Japan Agcy Mar Sci & Tech

0800h **OS41A-1523 POSTER** Water mass formation rate of the North Pacific and its interannual variation: A Iwasaki, T Suga, K Toyama

0800h **OS41A-1524 POSTER** An ENSO-timescale variation in the sea-surface heat flux in the North Pacific mid-latitude region: A Nagano, Y Kawai, H Tomita, M Konda, T Hasegawa

0800h **OS41A-1525 POSTER** REFLECTION OF KELVIN AND YANAI WAVES AT AN EASTERN BOUNDARY SUCH THAT THE BOUNDARY RESPONSE IS CONFINED TO ONE HEMISPHERE: D W Moore, S Schmidtko

0800h **OS41A-1526 WITHDRAWN

0800h **OS41A-1527 POSTER** Inter-comparison of the mean circulation in the Coral and Solomon Sea simulated by high resolution ocean models: C Maes, F Durand, F Gasparin, A Melet, A Ganachaud

0800h **OS41A-1528 POSTER** Quasi-decadal scale variability of upper ocean salinity in the western tropical Pacific: T Hasegawa, I Ueki, K Ando

0800h **OS41A-1529 POSTER** Observed Circulation in the Solomon Sea from SADCP data: S E CRAVATTE, A Ganachaud, G Eldin, W S Kessler, P Dutrieux

0800h **OS41A-1530 POSTER** Near-Surface Measurements of Temperature and Salinity in the Tropical Western Pacific from Profiling Floats: J E Anderson, S Riser


0800h OS41A-1533 POSTER Pathways of mesoscale sea level variability in the South China Sea: W. Zhuang, Y. Du, D. Wang, Q. Xie, X. Ren, S. Xie

0800h OS41A-1534 POSTER Contrasting ENSO Events in the Western Tropical Pacific Using Sea Surface Salinity Observations: A. Singh, T. Delcroix, S. E. C. CRATAVTE

0800h OS41A-1535 WITHDRAWN

0800h OS41A-1536 POSTER Impact of temperature and salinity time series data to zonal geostrophic current estimation in the western Tropical Pacific Ocean: K. Ando, I. Ueki, T. Hasegawa

0800h OS41A-1537 POSTER Summertime heat budget and tidal mixing around New-Caledonia: J. Lefevre, P. Marchesiello, C. Menkes

0800h OS41A-1538 POSTER The LLWBCs of the Solomon Sea depicted by altimetry and gliders: L. Gourdeau, A. Melet, J. A. Verron, W. S. Kessler, R. Dusserre, R. E. Davis

0800h OS41A-1539 POSTER NEAR-SURFACE CIRCULATION IN THE SOLOMON SEA DERIVED FROM LAGRANGIAN DRIFTER OBSERVATIONS: H. G. Hristova, W. S. Kessler

0800h OS41A-1540 POSTER The mean and time-variability of the shallow meridional overturning circulation in the tropical South Pacific Ocean: N. V. Zilberman, D. H. Roemmich, S. T. Gille

0800h OS41A-1541 POSTER SPICE: SOUTHWEST PACIFIC OCEAN CIRCULATION AND CLIMATE EXPERIMENT: A. S. Ganachaud, A. Melet, C. Maes

0800h OS41A-1542 POSTER Upper Ocean Response to Typhoon Morakot: C. Tu, C. Tsai, J. Liu, Y. Yang

0800h OS41A-1543 POSTER Asymmetry of Atmospheric Circulation Anomalies over the Western North Pacific between El Niño and La Niña: B. Wu

0800h OS41A-1544 POSTER How useful are satellite-based ocean color observations to detect the eastern edge of the equatorial Pacific warm pool?: J. Sudre, C. Maes, V. Garçon

0800h OS41A-1545 POSTER Simulations of the Indo-Pacific Warm Pool by IPCC Models: D. Sun, Y. Sun, L. Wu


0800h OS41A-1547 POSTER Wind-Evaporation-Sea Surface Temperature feedback in the western Pacific warm pool during mature phase of 1997-98 El Niño: I. Ueki

0800h OS41A-1548 POSTER Western Pacific Sea Surface Salinity, Air-Sea Interaction, Surface Advection and the Morphology of ENSO: H. Kao, G. S. Lagerloef

0800h OS41A-1549 POSTER Sensitivity of western boundary transport at NEC bifurcation latitude to wind forcing: X. Zhang, B. D. Cornuelle

0800h OS41A-1550 POSTER Exploratory Observations of Physical Processes in the upper Sulu Sea: J. P. Martin, A. L. Gordon

0800h OS41A-1551 POSTER Interannual variation of the Hawaiian Lee Countercurrent: H. Abe, K. Hanawa

0800h OS41A-1552 POSTER Imaging the Sub-Tropical Front off the southeast coast of New Zealand’s South Island using high-frequency seismic methods: A. R. Gorman, M. H. Bowman

0800h OS41A-1553 POSTER Impact of effective ocean optical properties on Pacific subtropical cell and its mechanism for interdecadal variability: G. Yamanaka, H. Ishizaki, H. Tsujino, M. Hirabara, H. Nakano

0800h OS41B-1541 POSTER Satellite Studies of Ocean-Atmosphere Coupling From Mesoscale to Basin Scale I Posters (joint with A)

Presiding: M. A. Bourassa, Florida State University; W. Liu, Jet Propulsion Laboratory

0800h OS41B-1554 POSTER Improved QuikSCAT Retrievals of High Winds: L. Ricciardulli, F. J. Wentz

0800h OS41B-1555 POSTER Quantifying equivalent neutral wind speed variance due to temporal and spatial difference between SeaWinds and in situ data: J. C. May, M. A. Bourassa

0800h OS41B-1556 POSTER Ocean Surface Carbon Dioxide Fugacity and Flux From Space: W. Liu, X. Xie

0800h OS41B-1557 POSTER Proposed Mission for Climate Quality Scatterometer Intercalibration and Measurement of Ocean Surface CO2 Fluxes: M. A. Bourassa, E. Rodriguez

0800h OS41B-1558 POSTER An Intercomparison of Numerically-Modeled Flux Data and Satellite-Derived SeaFlux Data for Warm-Core Seclusions: J. P. Scott, M. A. Bourassa, C. A. Claysen

0800h OS41B-1559 POSTER Ocean winds, the global water cycle, and salinity: L. Yu

0800h OS41B-1560 POSTER Intraseasonal variations of sea surface temperature east of Taiwan: L. Li, T. Zhou

0800h OS41B-1561 POSTER Impact of a fine scale SST over the Kuroshio Extension region to wintertime rainfall: S. Izuka

0800h OS41B-1562 POSTER On the role of along-shore wind anomalies in the development of Benguela Niños: I. Richter, S. K. Behera, Y. Masumoto, B. Taguchi, N. Komori, T. Yamagata

0800h OS41B-1563 POSTER Atmospheric Forcing for the Eastern Mediterranean Transient Event: J. Romanski, A. Romanou

0800h OS41B-1564 POSTER SPCZ variability in 30 years of high temporal and spatial resolution satellite data: C. M. Haffke, G. Magnusdottir

0800h OS41B-1565 POSTER A new diagnostics method for mechanisms of near surface wind response to SST: K. Takatama, M. Inatsu, R. J. Small

0800h OS41B-1566 POSTER Rectification of Atmospheric Intraseasonal Oscillations on Seasonal to Interannual Sea Surface Temperature in the Indian Ocean: B. Duncan, W. Han

0800h OS41B-1567 POSTER Numerical Simulations of the Wind Stress Effect in SAR Images of Natural and Artificial Features on the Sea Surface: A. Fujimura, A. Soloviev

0800h OS41B-1568 POSTER SAR-derived gap jet characteristics in the lee of the Philippine Archipelago: M. M. Gierach, H. C. Graber

0800h OS41C-1554 POSTER Water Masses, Circulation, and Variability of the North Atlantic Ocean From Observations and Models I Posters

Presiding: I. Yashayaev, H. L. Bryden, National Oceanography Centre

0800h OS41C-1559 POSTER A numerical study of the Nordic Sea circulation and outflows: J. Yang, L. J. Pratt

0800h  **OS41C-1571** POSTER Formation and variability of North Atlantic sea surface salinity maximum in a global OGCM: T Qu, S Gao, I Fukumori

0800h  **OS41C-1572** POSTER Eastern and Western Boundary Currents in the Labrador Sea, 1995-2008: M M Hall, D J Torres, I Yashayaev

0800h  **OS41C-1573** POSTER Currents and Hydrographic Variability in Orphan Basin, 2004-2010: J W Loder, Y Geshelin, I Yashayaev

0800h  **OS41C-1574** POSTER Model study of interannual variability in the North Atlantic Sub-Polar Ocean: E K Dimirov, I Yashayaev, J Zhu

0800h  **OS41C-1575** POSTER Interannual variability in the Atlantic meridional overturning circulation at 26°N: H L Bryden, S Cunningham, C P Atkinson

0800h  **OS41C-1576** POSTER Shelfbreak Frontal Structure and Gulf Stream Interaction north of Cape Hatteras: High resolution observations and regional modeling: G Gawarkiewicz, J H Churchill, R He, Y Gong

0800h  **OS41C-1577** POSTER Comparison between measured and calculated density salinity for standard seawaters and real seawater: H Uchida, A Murata, T Kawano, M Aoyama, S Nishino

**OS41D Moscone West: 3007 Thursday 0800h**

**Lessons Learned From the Deepwater Horizon Oil Spill: Physical Oceanography II (joint with B, NH, SH, PA)**

**Presiding:** Y Liu, University of South Florida; A MacFadyen, NOAA

0800h  **OS41D-01** Operational Satellite-based Surface Oil Analyses (Invited): D Street, C Warren

0815h  **OS41D-02** Rapid Response to Deepwater Horizon Oil Spill from University of South Florida: Numerical Models, Remote Sensing, and In-situ Observations (Invited): R H Weisberg, Y Liu, L Zheng, C Hu, L Embleke

0830h  **OS41D-03** Airborne Surveys of the Loop Current Complex From NOAA WP-3D Aircraft During the Deepwater Horizon Oil Spill: L K Shay, B Jaimes de la Cruz, J K Brewster, P Meyers, F D Marks, E Uhlhorn, G R Halliwel

0845h  **OS41D-04** Satellite Radar Observations of the DeepWater Horizon Oil Spill in the Gulf of Mexico: H C Graber, R E Turner, M J Caruso, P A Mallas, K Polk, R J Ramos, G Samuels

0900h  **OS41D-05** Quantifying the flow rate of the Deepwater Horizon Macondo Well oil spill: R Camilli, A Bowen, D R Yoerger, L L Whithcomb, A Tetchet, C M Reddy, S Syha, J Seewald, D D Iorio, Title of Team: WHOI Flow Rate Measurement Team

0915h  **OS41D-06** Initial Results from the UAVSAR Deepwater Horizon Oil Spill Campaign: C E Jones, B M Minchew, B Holt, S Hensley

0930h  **OS41D-07** High-resolution AUV mapping and sampling of a deep hydrocarbon plume in the Gulf of Mexico: J P Ryan, Y Zhang, H Thomas, E Rienecker, R Nelson, S Cummings


**OS41E Moscone West: 3009 Thursday 0800h**

**The Southern Ocean: Variability in Ocean, Ice, and Climate I (joint with C, G)**

**Presiding:** C Boening, Jet Propulsion Laboratory; M Schodlok, UCLA

0800h  **OS41E-01** Air-sea Fluxes and Mode Waters in an Eddy Resolving Ocean Data Assimilating Southern Ocean State Estimate (SOSE) (Invited): I Cerovecki, L D Talley, M R Mazloff

0815h  **OS41E-02** WITHDRAWN

0830h  **OS41E-03** A record-high ocean bottom pressure signal in the South Pacific observed by GRACE: C Boening, T Lee, V Zlotnicki

0845h  **OS41E-04** Meridional Atmospheric and Oceanic Circulation and its influence on the Biogeochemical Cycling of Carbon West of the Antarctic Peninsula: M G Hughes, A J Garric

0900h  **OS41E-05** Modeling the Effects of Tides on Sea Ice Around the Antarctic Peninsula: S R Springer, L Padman, M S Dinniman

0915h  **OS41E-06** PROFILING FLOAT OBSERVATIONS OF THE UPPER OCEAN UNDER SEA ICE OFF THE WILKES LAND COAST OF ANTARCTICA: A P Wong, S Riser

0930h  **OS41E-07** The Dependence of the Southern Ocean Residual MOC on Wind Strength: R P Abernathey, J Marshall, D Ferreira

0945h  **OS41E-08** An Observed Poleward Shift of the Polar Front in Drake Passage: J Sprintall

**Planetary Sciences**

**P41A Moscone South: 306 Thursday 0800h**

**Rethinking the Lunar Paradigm: New Observations and Implications I (joint with V)**

**Presiding:** H Nekvasil, Stony Brook University; F M McCubbin, Institute of Meteoritics

0800h  **P41A-01** Juvenile water in the Moon’s interior: new constraints from Apollo 15 lunar volcanic glasses: E H Hauri, A E Saal, J A Van Orman, M J Rutherford

0815h  **P41A-02** Shades of Damp: Certainties and Uncertainties in Lunar Hydration Models (Invited): J W Boyce, E Hauri

0830h  **P41A-03** The Cl Isotope Composition of the Moon as evidence for an Anhydrous Mantle (Invited): Z D Sharp, C Shearer, Jr., K D McKeegan, J Barnes, Y Wang

0845h  **P41A-04** Water in the Lunar Interior and the Apparent KREEP-Mare Dichotomy: F M McCubbin, H Nekvasil

0900h  **P41A-05** Using Apatite to Assess Volatile Contents of Primary Lunar Magmas: Potential Pitfalls: H Nekvasil, F McCubbin, G K Ustunisik

0915h  **P41A-06** Water in the Moon: Implications for Lunar Formation, Differentiation, and Early Bombardment (Invited): J Taylor

0930h  **P41A-07** The Delivery of Water to the Lunar Mantle by Late Planetesimal Accretion (Invited): W F Bottke, R J Walker, J Day, D Nesvorny, L T Elkins-Tanton

0945h  **P41A-08** Experimental Degassing of Cl, F, OH, and S Bearing Lunar Magmas: G K Ustunisik, H Nekvasil, D H Lindsley

All information is current as of November 12, 2010
Public Affairs

PA41A Moscone West: 3005 Thursday 0800h
America's Climate Choices I (joint with GC, ED, A, B, C, NH)

Presiding: S Bougan Petroy, Ball Aerospace; J Kraucunas, National Academy of Sciences

0800h Introduction Ian Kraucunas

0804h PA41A-01 America’s Climate Choices: Advancing the Science of Climate Change (Invited): P A Matson, T Dietz, I Kraucunas

0815h PA41A-02 America’s Climate Choices: Limiting the Magnitude of Future Climate Change (Invited): A Carlson, R Fri, M Brown, L Geller

0826h PA41A-03 America’s Climate Choices: Adapting to the Impacts of Climate Change (Invited): T Wilbanks, G Yohe, C Mengelt, J Casola

0837h PA41A-04 America’s Climate Choices: Informing an Effective Response to Climate Change (Invited): D M Liverman, M C McConnell, P Raven

0848h PA41A-05 America’s Climate Choices: Cross-Cutting Research Themes to Support Effective Responses to Climate Change: S C Moser, Title of Team: America’s Climate Choices Science Panel

0900h PA41A-06 Climate Legislation in the 111th Congress: The Role of Climate Science and the ACC Reports: K J Rennert

0912h PA41A-07 NOAA and the NRC America’s Climate Choices Study: C Kobinsky

0924h PA41A-08 MASSACHUSETTS DIVISION OF FISHERIES AND WILDLIFE ADAPTATION PLANNING USING AN EXPERT PANEL BASED HABITAT VULNERABILITY ASSESSMENT John O’Leary, MA Div. of Fisheries and Wildlife and Hector Galbraith, Ph d. Climate Change Initiative, Manomet Center for Conservation Sciences: J A O’Leary, H Galbraith

0936h PA41A-09 On the role of scientists and scientific organizations: A question of leadership: BJ Lynch, S Driver

0948h PA41A-10 Off the Shelf and Fueling the Public Discourse on America’s Climate Choices: B Ekwurzel, J Sideris, P Frumhoff, C Chung

Paleoceanography and Palaeoclimatology

PP41A Moscone South: Poster Hall Thursday 0800h
Breakthroughs in Continental Paleothermometry: Applications of Terrestrial Proxies I Posters (joint with OS, V)

Presiding: J L Toney, Brown University; S E Loomis, Brown University


0800h PP41A-1609 POSTER Spatial and temporal variability of Crenarchaeota in Lake Superior and implications for the application of the TEX86 temperature proxy: M L Wottering, J P Werne, R E Hicks, J L Kish, S Schouten, J S Sinninghe Damste

0800h PP41A-1610 POSTER A high-resolution Holocene Asian Monsoon record from a Tibetan lake-Peiku Co: M Du, R D Ricketts, S Colman, J P Werne

0800h PP41A-1611 POSTER Temperature and Aridity in Tropical East Africa Over the Past 200,000 Years: Reconstructions from the Lake Malawi Drill Core: A N Abbott, T C Johnson, M A Berke, J P Werne, S Schouten, J S Sinninghe Damste, E T Brown

0800h PP41A-1612 POSTER Glycerol dialkyl glycerol tetraethers preserved in stalagmites: a new continental palaeothermometer: A J Blyth, S Schouten


0800h PP41A-1614 POSTER Synchronized High-Resolution Lacustrine Records in Iceland show Non-Linear Response to Holocene Insolation: A Geirsdottir, G H Miller, D J Larsen, T Thordarson, S Olafsdottir, J S Stoner


0800h PP41A-1616 POSTER Bahamian speleothems reveal Atlantic climate variability during Heinrich Events: M M Arienzo, P K Swart, K Broad, A C Clement, A Eisenhauer, B Sakuk

0800h PP41A-1617 POSTER Climatic change record during the past 1 Ma of the Lake Biwa sediments, Japan: K Takemura, A Hayashida, T Danhara

PP41B Moscone South: Poster Hall Thursday 0800h
Interglacial Climate Variability I Posters (joint with B, C)

Presiding: A H Voelker, Laboratorio Nacional de Energia e Geologia (LNEG); S Desprat, EPHE, University Bordeaux 1; J F McManus, Lamont-Doherty Earth Observatory of Columbia University; Q Yin, Université catholique de Louvain


0800h PP41B-1619 POSTER Stalagmite evidence for a highly dynamic Pleistocene hydrological history of the Black Sea: S Badertscher, D Fleitmann, H Cheng, R Edwards, O M Göktürk, A Zumbühl, O Tüysüz


0800h PP41B-1621 POSTER A High-Resolution Study of a Late Pleistocene Interglacial-Glacial Transition and its Variability in Owens Lake, California Core OL-92: C Meyers, M J Kennedy

0800h PP41B-1622 POSTER Thermal history of the Western Equatorial Warm Pool over the Past 400 k years: K Tachikawa, L Vidal, C Sonzogni


0800h PP41B-1624 POSTER Interglacial Climatic Variability in Southern Europe During the Last 425,000 Years From NW Iberian Marine Pollen Records: S Desprat, M Sanchez Goni, B Malaize, F Naughton
All information is current as of November 12, 2010

PP41B-1625 POSTER The End of the Last Interglacial in the Iberian Peninsula: The Villarquecomedo Sequence (Iberian Range, Spain): B L Valero-Garcés, A Moreno-Caballud, P González-Sampériz, M Mata-Campo, G Gil-Romera, M Morellón

0800h

PP41B-1626 WITHDRAWN

0800h

PP41B-1627 POSTER Late-Quaternary Speleothem Records from the Balkan Peninsula – Potential, Objectives and First Results: I John, W D McCoy, S Markovic, W Endlicher

0800h

PP41B-1628 POSTER New OSL dates of Sangamon Episode biozones from Raymond Basin, Illinois, USA: B Curry, H Wang

0800h

PP41B-1629 POSTER A Tale of Two Interglacials: A Stalagmite Stable Isotope Record of Climate in Yucatán, Mexico Since 128,000 YBP: A E Frappier, L D Brenner

0800h

PP41B-1630 POSTER Heinrich-like events in the Southeast Pacific: Abrupt climate change during the last interglacial: A W Jacobel, Z Mokkedem, J F McManus

0800h

PP41B-1631 POSTER Paired microfossil evidence for a delayed development of fully marine surface water conditions in the Nordic seas during the Last interglacial (MIS 5e): N Van Nieuwenhove, H A Bauch, E S Kandiano

0800h

PP41B-1632 POSTER Reconstructing Holocene Laurentide Ice Sheet discharge and ocean temperature in the western Labrador Sea: J S Hoffman, A E Carlson, G P Klinkhammer, B Haley, J Strasser

0800h

PP41B-1633 POSTER THE HOLOCENE PALEOLIMNOLOGY OF LAKE SUPERIOR: A Hyodo, F J Longstaffe

0800h

PP41B-1634 POSTER Evidence for Deglacial, Younger Dryas and Early Holocene Climate Variability, Chesapeake Bay: D A Willard, C E Bernhardt, T M Cronin, J R Farmer, W Newell, J P Halka

0800h

PP41B-1635 POSTER Vegetation changes during the last deglaciation and early Holocene: a record from Little Salt Spring Florida: C E Bernhardt, D A Willard, B Landacre, J Gifford

0800h

PP41B-1636 POSTER Recognizing Synchronous Responses to Holocene North Atlantic Bond Cycles in the Southwestern Tropical Atlantic: A Sifeddine, H Evangelista, M Gurgen, N Rigozo, A Albuquerque

0800h

PP41B-1637 POSTER NW Pacific mid-depth ventilation changes during the Holocene: S Reill, M Uchida

0800h

PP41B-1638 POSTER Reconstructing thermocline hydrography using planktonic foraminiferal Mg/Ca: Implications for paleo-ENSO during the Holocene: A O Parker, T M Marchitto

0800h

PP41B-1639 POSTER LA-ICP-MS core-top Mg/Ca-temperature calibration for G. bullesiodes and a high resolution record of the last deglaciation in the Southwest Pacific Ocean: J Marr, J Baker, L Carter, G B Dunbar, H C Bostock

0800h

PP41B-1640 POSTER The Holocene Asian Monsoon discrepancies between Southwest China and Northern Vietnam: Y Lin, Y Chen, C Shen, D Lam

0800h

PP41B-1641 POSTER Holocene land cover change on the Tibetan Plateau: A Dallmeyer, M Claussen

0800h

PP41B-1642 POSTER High-Resolution Late Holocene Climatic Records From Kucukskekece Lagoon and Uludag Glacial, Yenicaga, Bafà Lakes in Western Turkey: Some Preliminary Results: S Akcer On, M Cagatay, M Sakinc

0800h

PP41B-1643 POSTER Reconstructing socially relevant Holocene climate using proxy records and a climate model: K Haberkorn, C Lemmen, R Blender, F Lunkeit, K Fraedrich

PP41C Moscone South: 103 Thursday 0845h

Emiliani Lecture (Webcast)

Presiding: J Brigham-Grette, University of Massachusetts; F Mekik, Grand Valley State University; B Hoenisch, Lamont-Doherty Earth Observatory

0845h Welcome and Introduction

0900h PP41C-01 Abrupt climate change during the Last Ice Age from the perspective of 17°N, 90°W (Invited): D A Hodell

SPA-Acronym

SA41A Moscone South: Poster Hall Thursday 0800h

Advances in Understanding Magnetosphere-Ionosphere Dynamics and Coupling II Posters (joint with SM)

Presiding: J U Kozyra, University of Michigan

0800h

SA41A-1704 POSTER Magnetic Flux Circulation During Dawn-Dusk Oriented Interplanetary Magnetic Field: E J Mitchell, R E Lopez, M H Fok, Y Deng, M J Wiltberger, J Lyon

0800h


0800h

SA41A-1706 POSTER Quantifying the azimuthal plasmaspheric density structure and dynamics inferred from IMAGE EUV: P Sibanda, M Moldwin, D A Galvan, B R Sandel, T Forrester

0800h

SA41A-1707 POSTER Seasonal dependence of magnetic field variations from subauroral latitude to the magnetic equator during geomagnetic sudden commencements: A Shimbori, Y Tsuji, T Kikuchi, T Araki, A Ikeda, T Uozumi, S I Solovyev, B Shvetsov, R S Otadoy, H Utada, T Nagatusa, H Hayashi, T Tsuda, K Yumoto, Title of Team: UGONET project team

0800h

SA41A-1708 POSTER Dayside field-aligned current source regions: S Wing, S Ohtani, P T Newell, J Johnson, T Higuchi, G Ueno, J M Weygand

0800h


0800h

SA41A-1710 POSTER Contribution of Joule heating and soft particle precipitation to the cusp neutral density enhancement: Y Deng, T J Fuller-Rowell, D J Knipp, A J Ridley

0800h

SA41A-1711 POSTER External ionospheric and thermospheric forcing during solar minimum: O P Verkhoglyadova, B Tsurutani, A J Mannucci, A Komjathy, M G Mlynczak, L Clausen

0800h

SA41A-1712 POSTER Sub-auroral flow shear observed by King Salmon HF radar and RapidMAG: T Thor, T Kikuchi, Y Tsuji, A Shimbori, T Ohtaka, M Kunitake, S Watari, T Nagatusa, O A Trosichнев

0800h


0800h

SA41A-1714 POSTER Magnetosphere-ionosphere convection and the upper thermosphere wind: Comparison of CHAMP observations with UAM modelling: M Foerster, A A Nagamaladze, B E Prokhorov, M Holtschneider

0800h

SA41A-1715 POSTER A Collection of Synthetic TEC Comparisons with Data: J A Feldt, M Moldwin
0800h  **SA41A-1716 POSTER** Night-side mid-latitude 135.6 nm intensity enhancements: TIMED/GUVI observations: **Y Zhang**, L J Paxton, E R Talaat, H Kil

0800h  **SA41A-1717 POSTER** Coordinated investigations of daytime redline optical emissions and incoherent scatter radar measurements from Sondrestromfjord, Greenland: **E S Douglas**, D Pallamraju, S Chakrabarti


---

**SA41B Moscone South: Poster Hall Thursday 0800h**

**The Active Inner Magnetosphere and Its Coupling With the Midlatitude Ionosphere II Posters (joint with SM)**

**Presiding:** A J Coster, MIT Haystack Observatory; J M Ruohoniemi, Virginia Tech; J B Baker, Virginia Tech

0800h  **SA41B-1720 POSTER** Two Way Coupling RAM-SCB to the Space Weather Modeling Framework: **D T Welling**, V K Jordanova, S G Zaharia, G Toth

0800h  **SA41B-1721 POSTER** Comparing a Coupled Ionosphere-Plasmasphere Model to Observations with IMAGE/EUV: **A M Dodger**, A J Ridley

0800h  **SA41B-1722 POSTER** Empirical Model of Plasmaspheric Densities Derived from the IMAGE RPI Observations: **P Ozhogin**, J Tu, P Song, B W Reinsich

0800h  **SA41B-1723 POSTER** Investigation of Plasmaspheric Plumes Measured by Cluster: **H Matsui**, F Darrouzet, P A Puhl-Quinn, K M Sigbee, R B Torbert

0800h  **SA41B-1724 POSTER** Large electric fields observed at the nightside plasmapause: **K Kim**, F Mozer, D Lee, H Jin

0800h  **SA41B-1725 POSTER** Ionospheric mid-latitude trough observed by FORMOSAT-3/COSMIC during solar minimum: **I Lee**, W Wang, J Y Liu, C Chen, C Lin


0800h  **SA41B-1727 POSTER** ROCSAT Observations of Large Wave Flow Motions at the Topside Ionosphere: **S Su**, C Chao, C Liu


0800h  **SA41B-1730 POSTER** Improved hodograph method applied to ground magnetometer data to determine and error-estimate the field-line eigen-frequency: **H Kawano**, V Pilipenko, S Saita, K Yumoto, J R Mann

0800h  **SA41B-1731 POSTER** Temporal and spatial developments of global ionospheric current associated with storm-time overshielding: **Y Tsuji**, A Shinbori, Y Nishimura, T Kikuchi, T Nagatsuma, S Watari

0800h  **SA41B-1732 POSTER** Transient Convection in the Nightside Subauroral Ionosphere: Occurrence Statistics and Driving Influences: **J B Baker**, L Clausen, J M Ruohoniemi, A Ribeiro, E G Thomas, N A Frissell

---

**SA41C Moscone South: Poster Hall Thursday 0800h**

**Forecasting the Ionosphere and Thermosphere at Low Latitudes I**

**Presiding:** O de la Beaujardiere, Air Force Research Laboratory; D N Anderson, Univ of Colorado

0800h  **SA41C-01 POSTER** Seasonal Variations in Equatorial Ion Drifts measured by C/NOFS (Invited): **R Stoneback**, R A Heelis

0815h  **SA41C-02 POSTER** Latitude and Local Time Variations of Topside Magnetic Field-Aligned Ion Flows at Solar Minimum: **A G Burrell**, R A Heelis

0828h  **SA41C-03 POSTER** Persistent Longitudinal Variations of Plasma Density and DC Electric Fields in the Low Latitude Ionosphere Observed with Probes on the C/NOFS Satellite: **R F Pfaff**, H Freudenreich, J H Klenzinger, D E Rowland, M C Liebrecht, K R Bromund, P A Roddy

0841h  **SA41C-04 POSTER** Magnetic Field Measurements on the C/NOFS Satellite: Geomagnetic Storm Effects in the Low Latitude Ionosphere: **G Le**, R F Pfaff, E L Kepko, D E Rowland, K R Bromund, H Freudenreich, S C Martin, M C Liebrecht, S Maus

0854h  **SA41C-05 POSTER** Large scale impacts of lower atmospheric waves on the ionosphere (Invited): **H Liu**

0909h  **SA41C-06 POSTER** Determining the Daytime, Equatorial Ionospheric Electron Densities Associated with the Observed, 4-cell Longitude Patterns in Exb Drift Velocities: **E A Araujo-Pradere**, D N Anderson, M Fedrizzi, R Stoneback

0922h  **SA41C-07 POSTER** Tidal structures in the equatorial ionosphere: **C Y Huang**, S H Delay, P A Roddy, E K Sutton

0935h  **SA41C-08 POSTER** Dawn Sector Plasma Density Observations from DMSP: **L C Gentile**, W J Burke, P A Roddy, J M Retterer

0948h  **SA41C-09 POSTER** On Equatorial Spread F During the Solstices Under Solar Minimum Conditions: **R T Tsunoda**, L C Gentile, W J Burke

---

**SPA-Solar and Heliospheric Physics**

**SH41A Moscone South: Poster Hall Thursday 0800h**

**Heliospheric Imaging of Solar Wind Structure I Posters**

**Presiding:** S Dasso, Inst Astronomia Fisica Espacio (IAFE)


0800h  **SH41A-1772 POSTER** The automatic detection and tracking of interplanetary coronal mass ejections (CMEs) using heliospheric imager data: **R N Thompson**, T A Howard, M Hampson, J Tappin

0800h  **SH41A-1773 POSTER** Fast Solar Wind Streams From the Sun to 1 AU During the Recent Solar Minimum: **M P Miralles**, K D Simunac, L Strachan, A B Galvin, E Landi, C O Lee, J G Luhmann, P S McIntosh

0800h  **SH41A-1774 POSTER** SATPLOT – A New Tool for Analysis of SECCHI Heliospheric Imager Data: **E M De Jong**, J R Hall, P C Liewer, R A Howard, W T Thompson

---

All information is current as of November 12, 2010

0800h SH41A-1776 POSTER Scientific Revelations on Coronal Mass Ejections Using Heliospheric Imagers and In-Situ Data: T A Howard, J Tappin


0800h SH41A-1779 POSTER A Microsatellite Heliospheric Imaging Network for Science and Space Weather: C E DeForest, T A Howard, C Kief, Title of Team: CHIME Mission Development Team

0800h SH41A-1780 POSTER A Heliospheric Imager for Deep Space: Lessons Learned from Helios, SWE, and MER: A Buffington, B V Jackson, P P Hick, J M Cloper, M M Bisi

SH41B Moscone South: Poster Hall Thursday 0800h

Solar Wind Turbulence: Theory, Observations, and Future Mission Concepts I Posters (joint with NG, SM)

Presiding: W H Matthaeus, University of Delaware

0800h SH41B-1781 POSTER Application of rank-ordered multifractal analysis (ROMA) to intermittent fluctuations in 3D turbulent flows, 2D MHD simulation and solar wind data: C Wu, T Chang

0800h SH41B-1782 POSTER Solar wind cross-helicity and residual energy during different solar cycles: S Perri, A Balogh

0800h SH41B-1783 POSTER Aging of solar wind magnetic and velocity fluctuations from observations in the inner heliosphere: M E Ruiz, S Dasso, W H Matthaeus, J M Weygand, E Marsch

0800h SH41B-1784 POSTER Magnetic Helicity of Alfvén Simple Waves: G M Webb, Q Hu, B Dasgupta, G P Zank, D Roberts

0800h SH41B-1785 POSTER Dual cascade of kinetic and magnetic energy in MHD turbulence: H Aluie

0800h SH41B-1786 POSTER Recent Successes of Wave/Turbulence Driven Models of Solar Wind Acceleration: S R Cranmer, J V Hollweg, B D Chandran, A A Van Ballegooijen

0800h SH41B-1787 POSTER Gyrokinetic Particle Simulation of Alfvén Turbulence: X Cheng, Z Lin

0800h SH41B-1788 POSTER Kinetic Alfvén wave and ion velocity distribution functions in the solar wind: X Li, Q Lu, Y CHEN, B Li, L Xia

0800h SH41B-1789 POSTER The effect of spectral anisotropy of fast magnetosonic turbulence on the plasma heating at the proton kinetic scales: S Markovskii, B J Vasquez

0800h SH41B-1790 POSTER Quantifying the spatio-temporal characteristics of magnetohydrodynamic turbulence seen in HINODE/SOT images of solar prominences: E Leonardis, S C Chapman, C Foulon

0800h SH41B-1791 POSTER Study of the relation between turbulent activity in the quasi-parallel foreshock and the ULF band pulsations of the geomagnetic field: P Kovacs, B Heilig, A Csontos, E W Worthington, G Vadász

0800h SH41B-1792 POSTER Dynamics of transitional region of the solar wind turbulence with heliocentric distance: V Galinsky, V I Shevchenko

SH41C Moscone South: 309 Thursday 0800h Acceleration and Transport of Solar Energetic Particles II (joint with SM)

Presiding: G Li, Univ Alabama Huntsville; J C Kasper, Smithsonian Astrophysical Obse; A Szabo, NASA GSFC

0800h SH41C-01 Critical Next Steps in Understanding Solar Energetic Particle Events (Invited): G M Mason

0815h SH41C-02 Observational Signatures of Ion Acceleration Near CME-Driven Interplanetary Shocks: M I Desai, M A Dayeh, M A Lee, C W Smith, G M Mason, J C Kasper

0830h SH41C-03 Particle Acceleration at the Sun (Invited): R P Lin

0845h SH41C-04 Properties of Accelerated Particles that Interact at the Sun: G H Share, R J Murphy

0900h SH41C-05 Particle acceleration and transport of solar energetic particles: theory, modeling, and observational constraints (Invited): G P Zank

0915h SH41C-06 Streaming Limit: New Observations and Model Results: C K Ng, D V Reames, A J Tylka

0930h SH41C-07 Theories of Charged-Particle Acceleration in the Heliosphere (Invited): J R Jokipii

All information is current as of November 12, 2010
0945h SH41C-08 Seed Particle Populations in the Solar Wind and Solar Corona: L A Fisk, G Gloeckler

SH41D Moscone South: 307 Thursday 0800h
Global Solar Magnetic Data as Drivers of Coronal Models II

Presiding: C J Henney, AFRL; C N Arge, Air Force Research Laboratory

0800h SH41D-01 Flux Transport and the Sun’s Global Magnetic Field (Invited): D H Hathaway

0818h SH41D-02 Synchronous Maps and Frames: J T Hoeksema, Y Liu, X Sun, X Zhao


0848h SH41D-04 Improving the Far-Side Seismic Maps: I Gonzalez Hernandez, F Hill, J Koller

SH41E Moscone South: 307 Thursday 0900h
Multispacecraft Observations of Coronal Heating During the Rise of Solar Cycle 24 II

Presiding: R A Frazin, University of Michigan; E Landi, University of Michigan


0915h SH41E-02 SDO/AIA Light Curves and Implications for Coronal Heating: Observations: N M Viall, J A Klimchuk

0930h SH41E-03 SDO/AIA Light Curves and Implications for Coronal Heating: Model Predictions: J A Klimchuk, N M Viall

0945h SH41E-04 Thermal study of active region plasma from Hinode and SDO observations: P Testa

SPA-Magnetospheric Physics

SM41A Moscone South: Poster Hall Thursday 0800h
Magnetotail Transients and Their Ionospheric Signatures I

Posters (joint with SA)

Presiding: A Runov, University of California Los Angeles; J Birn, Los Alamos Nat. Lab.


0800h SM41A-1827 POSTER Magnetospheric Sawtooth Oscillations Induced by Ionospheric Outflow: O J Brambles, W Lotko, B Zhang, J Lyon, M J Witterberger

0800h SM41A-1828 POSTER Substorms, poleward boundary activations, auroral streamers, omega bands, and geosynchronous particle injections during a sawtooth event: M G Henderson, E L Kepko, E Spanwick, E F Donovan

0800h SM41A-1829 POSTER Simulation of the longitudinal splitting of the nightside proton aura during a substorm seen by the IMAGE spacecraft: M L Gilson, J Raeder, E F Donovan, S B Mende, Y Ge

0800h SM41A-1830 WITHDRAWN

0800h SM41A-1831 POSTER Differences between N-S arc sequences that do and do not lead to substorm expansion onset: Y Nishimura, L R Lyons, S Zou, X Xing, V Angelopoulos, S B Mende, J W Bonnell, D E Larson, H Auster

0800h SM41A-1832 POSTER Ionospheric Flow Shear Associated with Poleward Boundary Intensification (PBI): Y Shi, E Zesta, L R Lyons, A Boudouridis, H Kim


0800h SM41A-1834 POSTER FUV Spectrum in the polar region: J Lee, K W Min

0800h SM41A-1835 POSTER The effect of variations of the solar wind energy input on the disturbance onsets in the magnetotail during substorms: N Lin, H U Frey, S B Mende, F S Mozer, R L Lysak, Y Song, V Angelopoulos

0800h SM41A-1836 POSTER Current sheet profile and structure before and during the thinning of the magnetotail: M H Saito, D H Fairfield, G Le, L Hau

0800h SM41A-1837 POSTER Looking for kinetic ‘bounce’ modes in the magnetotail: P Louarn, A Tur, G Fruit, C Jacquey, L Palin, V Genot

0800h SM41A-1838 POSTER Consequences of Violation of Frozen-in Flux at the end of a Substorm Growth Phase: F Toffoletto, J Yang, R A Wolf, B Hu

0800h SM41A-1839 POSTER MHD instability with dawn-dusk symmetry in near-Earth plasma sheet during substorm growth phase*: P Zhu, J Raeder, C Hegna, C Sovinee


0800h SM41A-1841 WITHDRAWN


0800h SM41A-1843 POSTER Specific Entropy During Substorms Observed With Themis: K Nyatoti, G M Erickson

0800h SM41A-1844 POSTER On the Cause of Magnetotail Transients and Their Ionospheric Signatures: Y Song, R L Lysak, N Lin

0800h SM41A-1845 POSTER Statistical properties of flows in association with dipolarizations in the near-Earth tail: H Kim, D Lee, B Ahn, S Ohtani, M Park

0800h SM41A-1846 POSTER Magnetic Field Disturbances Associated with Fast Flows in the Earth Plasmaheet: S Fu, Q Zong, Z Pu, H Zheng, X Bai, C Sheng

0800h SM41A-1847 POSTER Statistical analysis of bursty bulk flows, plasma bubbles, and their wakes using Cluster and Double Star: C Forsyth, R J Duthie, A Pickett, A N Fazakerley, M Lester, C J Owen, A P Walsh

0800h SM41A-1848 POSTER Particle energization in the course of plasma-sheet bubble injection: results of RCM-E simulations: J Yang, F Toffoletto, R A Wolf, S Zazykin

0800h SM41A-1849 POSTER Exploring the inertial effects of fast moving bubbles using the two-way coupled OpenGGCM and the Rice Convection Model: B Hu, F Toffoletto, R A Wolf, J Raeder
0800h **SM41A-1850** POSTER Nonlinear interaction between Super-Alfvén flow and dipolarized magnetic field in the earth’s magnetotail: **M Zhou**, Y Pang, X Deng, S Huang

0800h **SM41A-1851** POSTER Observational test of the interchange stability associated with near-tail dipolarizations: **D Lee**, K Kim, S Ohtani, M Park

0800h **SM41A-1852** POSTER Statistical Study of Magnetic Fluctuation Features Associated with Near-tail Dipolarizations Observed by the THEMIS Spacecraft: **M Park**, D Lee, S Ohtani, K Kim

0800h **SM41A-1853** POSTER Ion Dynamics Associated with Substorm Dipolarization Fronts: **S Fu**, M Ashour-Abdalla, X Deng, M El-Alaoui, M Zhou, R L Richard, R J Walker

0800h **SM41A-1854** POSTER Statistical analysis of dipolarisations using spacecraft closely separated along Z: **L Palin**, C Jacquey, J Sauvaud, B Lavraud, O LeContel, V Angelopoulos, H Auster, J P McFadden

0800h **SM41A-1855** POSTER Transient decrease of the north-south magnetic field component preceding strong dipolarization: **K Kondoh**, M Ugai

0800h **SM41A-1856** POSTER Propagation of BBFs and Dipolarization Fronts in the Global MHD simulation of February 27, 2009 Substorm: **Y Ge**, J Raeder, V Angelopoulos, M L Gilson, A Runov

0800h **SM41A-1857** POSTER Dipolarization fronts in the magnetotail and their shaping by the reconnection onset features: **B W Thompson**, M I Sirovich, M M Swisdak

0800h **SM41A-1858** POSTER Inward Propagating Dipolarization Fronts in the Near-Earth Plasma Sheet: THEMIS multi-case studies: **A Runov**, V Angelopoulos, X Zhou, X Zhang, S Li, Title of Team: THEMIS team

0800h **SM41A-1859** POSTER Accelerated ions ahead of Earthward-propagating dipolarization fronts: **X Zhou**, V Angelopoulos, V A Sergeev, A Runov

0800h **SM41A-1860** WITHDRAWN

0800h **SM41A-1861** POSTER Observations and Simulations of Electron Dynamics Near an Active Neutral Line: M L Goldstein, K Hwang, M Ashour-Abdalla, M El-Alaoui, D Schrimer, R L Richard, M Zhou, R J Walker

0800h **SM41A-1862** POSTER Inflow Density Influence on Magnetotail Reconnection: **P Wu**, M A Shay, T Phan, M Oieroset, M Oka

0800h **SM41A-1863** POSTER Flux closure during magnetotail reconnection: **K Snekvik**, E I Tanskanen, N Ostgaard

0800h **SM41B-1867** POSTER Pick-Up Oxygen Ion Loss at Mars: **S Curry**, M W Liemohn, X Fang, Y Ma

0800h **SM41B-1868** POSTER Total Electron Content in the Mars Ionosphere: temporal studies and dependence on solar inputs and crustal magnetic fields: **R Jolitz**, D A Brain, R J Lillis, M O Fillingim, P Whithers, S England, A Safaeinili

0800h **SM41B-1869** POSTER Detection of Field-Aligned Current Signatures in Martian Auroral Regions: **S R Fischer**, D Ulusen, D A Brain, J S Halekas, D M Hurley

0800h **SM41B-1870** POSTER Hot Hydrogen/Proton Precipitation in Planetary Ionospheres: **CD Parkinson**, D A Brain, M W Liemohn, R J Lillis, S W Bouger

0800h **SM41B-1871** POSTER Titan’s induced magnetosphere from plasma wave and magnetometer observations: **R Modolo**, C Bertucci, P Canu, R Piberne, N J Edberg, L Rosenqvist, W S Kurth, D A Garnett, M K Dougherty

0800h **SM41B-1872** POSTER Magnetospheric ion deposition on Titan’s ionosphere in hybrid model: **I Sillanpaa**, R E Johnson, F J Cray, D T Young, E J Kallio, R Jarvinen

0800h **SM41B-1873** POSTER A Global Average Titan Dayside Ionosphere Model: Comparisons with Cassini Data: **M S Richard**, T E Cravens, C Wylie, J H Westlake, K Mandt, I P Robertson

0800h **SM41B-1874** POSTER Coupling of ion and neutral fluids near Titan’s exobase: **D S Snowden**, R Wingille

0800h **SM41B-1875** POSTER A 2D Numerical Study of the Kelvin-Helmholtz Instability at Boundary Layers around Unmagnetized Planets: **M Zellinger**, U V Amesterfor, H K Biernat

0800h **SM41B-1876** POSTER The Influence of the Total Pressure on the Evolution of the Kelvin-Helmholtz Instability around Unmagnetized Planets: **U V Amesterfor**, M Zellinger, N V Erkaev, H K Biernat

0800h **SM41B-1877** POSTER Evidence of plasma vortices in the Venus plasma wake: **H A Perez De Tejada**, D S Intriligator, R Lundin, M Reyes-Ruiz

0800h **SM41B-1878** POSTER Formation of plasma vortices in the near wake of Venus due to the viscous-like interaction with the solar wind: **M Reyes-Ruiz**, H A Perez De Tejada

---

SM41C Moscone South: Poster Hall Thursday 0800h

**The Dungey Cycle and Its Role in Auroral and Inner Magnetospheric Dynamics I Posters (joint with SA)**

**Presiding:** J W Gjerloev, JHU-APL; L R Lyons, UCLA; B J Anderson, JHU/APL

0800h **SM41C-1879** POSTER In-situ evidence for the IMF-induced tail twisting in association with interhemispheric displacement of conjugate auroras: **T Motoba**, K Hosokawa, Y Ogawa, N Sato, A Kadokura, S C Buchert, H Reme

0800h **SM41C-1880** POSTER Magnetospheric convection strength inferred from inner edge of the electron plasma sheet and its relation to the polar cap potential drop: **F Jiang**, M G Kivelson, R J Walker, K K Khurana, V Angelopoulos

0800h **SM41C-1881** POSTER 3-D Plasma Sheet Models Based on the Time from Substorm Onset and on Average Solar-Wind/Magnetosphere Coupling Functions: **R L Kaufmann**

0800h **SM41C-1882** POSTER Investigating the Roles of Magnetic and Electric Self-consistency with Plasma Transport in Understanding the Dynamics of the Storm-time Ring Current: **C Lemon**, M W Chen, T B Guild
SM41D Moscone South: 305  Thursday  0800h
Turbulent Magnetic Reconnection in Space, Laboratory, and Astrophysical Systems I (joint with SH)

Presiding: G Lapenta, KU Leuven; T Intrator, Los Alamos Natl Laboratory; A Lazarian, University of Wisconsin; J Sears, Los Alamos National Laboratory

Lapenta, Lazarian, Intrator Introduction

SM41D-01 0810h  Spontaneous and chaotic fast reconnection in three dimensional current-sheets (Invited): L Bettarini, G Lapenta

SM41D-02 0840h  What Breaks Magnetic Field Lines in 3D Simulations of Low β Plasmas?: M Swisdak, H Che, J F Drake

SM41D-03 0900h  Magnetic reconnection as the cause of cosmic ray excess from the heliospheric tail: P Desiati, A Lazarian

SM41D-04 0920h  Does Wave Turbulence Remove the Flux Pileup at the Magnetopause?: H Karimabadi, W S Daughton, J Dorelli, V Roytershtein, J Raeder, D J Larson

SM41D-05 0940h  Is Guide Field Reconnection Inherently Turbulent?: W S Daughton, V Roytershtein, H Karimabadi, K B Quest, L Yin, B J Albright, K J Bowers

Study of Earth’s Deep Interior

DI41A  Moscone South: Poster Hall  Thursday  0800h
Structure and Dynamics of Earth’s Core III Posters (joint with MR, S, T, V)

Presiding: H Tkalcic, The Australian National University; Y Kuwayama, Ehime University; F Niu, Rice University

DI41A-1911 0800h  Seismic attenuation structure of the top half of the inner core beneath the northeastern Pacific: R Iritani, N Takeuchi, H Kawakatsu

DI41A-1912 0800h  New constraints on inner core anisotropy structure from data recorded at newly deployed seismic stations in Antarctica: X Sun, D A Wiens, A D Huerta, R C Aster, A Nyblade, S Anandakrishnan

DI41A-1913 0800h  Velocity heterogeneities in Earth’s inner core: J Irving, A F Deuss

DI41A-1914 0800h  Reconciling Earth’s inner core hemispherical structure with its super-rotation: L Waszek, A F Deuss

DI41A-1915 0800h  On the Differential Rotation of the Earth’s Inner Core From Testing the Nature of Differences in Repetitive Seismic Waveforms: S Ngo, H Tkalcic

DI41A-1916 0800h  Regional variation of P-wave velocity in the inner core: T Yee, J Rhie

DI41A-1917 0800h  The velocity structure of the outer core constrained by differential slowness measurements of PKP(BC)-PKP(DF): J Rhie, T Yee, S Kim

DI41A-1918 0800h  A Comparison of Long-Period SKS Datasets And What They Reveal About 1D Outer Core Structure: C T Houser, J E Ritsema, S Grand

DI41A-1919 0800h  The Outer Core F-region : A Seismic Mystery: J Attanayake, V F Cormier

DI41A-1920 0800h  Origin of the F-Layer by `Snowfall" in the Earth’s Core: J W Hernlund, L Waszek, A S Triana, D Zimmerman, D P Lathrop

DI41A-1921 0800h  Precessional States in a Laboratory Model of the Earth’s Core: S A Triana, D Zimmerman, D P Lathrop

DI41A-1922 0800h  Can strong differential flows be maintained in the Earth’s core prior to the formation of the solid inner core?: M Evonuk

DI41A-1923 0800h  Dynamical coupling of lower mantle and inner core: P E Driscoll, R Deguen

DI41A-1924 0800h  A hypothesis for the evolution of the structure of Earth’s inner core: D M Reaman, G S Daehn, W R Panero

DI41A-1925 0800h  Viscosity of the Earth’s inner core: constraints from nutation observations: L Koot, M Dumberry
**Mineral and Rock Physics**

**MR41A** Moscone South: Poster Hall  **Thursday 0800h**

**Elasticity, Plasticity, and Mechanical Properties of Mantle Minerals Posters (joint with DI, V, T, S)**

**Presiding:** R Caracas, Ecole Normale Superieure

0800h  **MR41A-1962** POSTER Deformation of Natural Pyrope at Mantle Conditions: H Long, D J Weidner, L Li, L Wang

0800h  **MR41A-1963** POSTER Lattice Preferred Orientation of Enstatite and Implications for Seismic Anisotropy: H Jung, M Park, S Jung, J Lee

0800h  **MR41A-1964** POSTER Ultrasonic P-wave and S-wave attenuation in partially frozen porous material saturated with brine: J Matsushima, M Suzuki, Y Kato, S Rokugawa

0800h  **MR41A-1965** POSTER A unified asperity-deformation model for cracked rocks: K Gao, R L Gibson, J Ge

0800h  **MR41A-1966** POSTER Influence of pore-spaces on the elastic properties of crustal rocks: M Ishikawa, S Saito, M Arima, Y Tatsumi

0800h  **MR41A-1967** POSTER Using combined stress tests to explore the effect of loading geometry on the flow properties of geological materials: S J Covey-crump, W F Xiao, J Mecklenburgh

0800h  **MR41A-1968** POSTER Using neutron diffraction to investigate mechanical twinning in calcite: P F Schofield, S J Covey-crump

0800h  **MR41A-1969** POSTER In-situ high-pressure transmission electron microscopy of minerals: J Wu, P R Buseck


0800h  **MR41A-1971** POSTER Inversion of Seismic Velocities to obtain the Crack and Pore Aspect Ratio Distribution: R W Zimmerman, E C David

0800h  **MR41A-1972** POSTER Fuzzy Reasoning Method for Prediction of Sinkhole Occurrence in Abandoned Mine Area: S O Choi, S Lee, D Lee, J Min, B Lee

0800h  **MR41A-1973** POSTER Damping of Elastic Waves during Low to High Quartz Transition: M M Beck, F R Schilling

0800h  **MR41A-1974** POSTER Thermoelastic properties of spinels.
- Is there a soft mode phase transition at 15 GPa in Garneth?: M Wehber, C Lathe, H J Reichmann, S Speziale, F R Schilling

0800h  **MR41A-1975** POSTER Plastic deformation of quartz at room temperature by SEM in situ micropillar compression: X Maeder, R Ghisleni, J Michler

0800h  **MR41A-1976** POSTER Interactional Principle between Plastic Volume and Shear Strain of Soft Rock and Soil: Q Ren, H Tang, J Wang. Title of Team: scientific team of geological engineering of CUG

0800h  **MR41A-1977** POSTER Fractional order viscoelasticity and theoretical progress in rheological constitutive law for rocks: Y Kawada, T Yajima, H Nagahama

0800h  **MR41A-1978** POSTER Effect of aluminum on the elastic properties of orthopyroxene at high pressure: implications for the X-discontinuity: J Wang, C Sanchez-Valle, R Stalder

0800h  **MR41A-1979** POSTER Experimental study on ultrasonic inspection of grouting soil: R Wang, J Zhang, D Wu

0800h  **MR41A-1980** POSTER Frequency dependence of elastic wave speed: H Kawakata, I Doi, N Yoshimitsu

0800h  **MR41A-1981** POSTER Velocity anisotropy in Basin and Range lower crust from EBSD: M Erdman, B R Hacker, G Seward, G Zandt

**Di141B** Moscone West: 3022  **Thursday 0800h**

Observations and Dynamics of Subducted Slabs II (joint with S, T, MR)

**Presiding:** D R Stegman, UC San Diego; E M Syracuse, University of Wisconsin-Madison

0800h  **Di141B-01** Three-dimensional thermal structure and seismogenesis in the Toboku and Hokkaido subduction system: P E Van Keken, S Kita, J Nakajima, A K Bengtson, B R Hacker, G A Abers

0815h  **Di141B-02** Slab width control on current global plate and trench velocities, and on Cenozoic western North America tectonics: D R Stegman, W P Schellart, R J Farrington, J C Freeman, L N Moresi

0830h  **Di141B-03** Scaling of Free Subduction in Two and Three Dimensions: N M Ribe, Z Li

0845h  **Di141B-04** Slab Stress and Strain Rate as Constraints on Global Mantle Flow (Invited): L Alisic, M Gurnis, G Stadler, C Burstedde, L Wilcox, O Ghattas

0900h  **Di141B-05** Identifying slab fragments in the lower mantle by comparing seismic and plate reconstruction models: S Duval, E Stutzmann, J Besse, R D van der Hilst

0915h  **Di141B-06** The Initiation of Subduction Models: S Buiter, S M Ellis

0930h  **Di141B-07** 3-D Dynamics of Slab Detachment Due to Ridge-Trench Collision (Invited): E R Burket, M J Billen

0945h  **Di141B-08** Influence of plateau buoyancy, geometry and rheology on oceanic plateau subduction: P Arrial, M I Billen

All information is current as of November 12, 2010

**MR41B Moscone West: 3024 Thursday 0800h Deep Mantle Properties III (joint with DI, S, T)**

**Presiding:** R M Wentzcovitch, Univ Minnesota; D A Yuen, University of Minnesota

0800h  **MR41B-01** Crystal chemistry of Fe(III)-bearing magnesium silicate perovskite: D R Hummer, Y Fei
0815h  **MR41B-02** Spin-state crossover of ferric iron in magnesium silicate perovskite under pressure: H Hsu, M Cococcioni, R M Wentzcovitch
0830h  **MR41B-03** Influence of iron on the strength of silicate perovskite at high pressure: J Chen, J Girard, H Couvy, D J Weidner, Y Wang
0845h  **MR41B-04** Rheology of fine-grained forsterite aggregate under deep upper mantle conditions: Y Nishihara, T Ohuchi, T Kawazoe, D Spengler, M Tasaka, T Hiraga, T Kikegawa, A Suzuki, E Ohtani
0900h  **MR41B-05** Properties of the Deep-Mantle Ferropericlase Across the Spin Crossover (Invited): J Lin
0915h  **MR41B-06** Post-stishovite transition in AlOOH-incorporated SiO2: K Kawamura, K Umemoto, R M Wentzcovitch, K Hirose
0930h  **MR41B-07** Sound velocity measurements of CaSiO3 perovskite under lower mantle pressures: Y Kudo, K Hirose
0945h  **MR41B-08** Implications of Thermal Diffusity being Inversely Proportional to Temperature Times Thermal Expansivity on Lower Mantle Heat Transport: A Hofmeister

**Seismology**

**S41A Moscone South: Poster Hall Thursday 0800h Collaboration Among Science, Engineering, and Social Science: Earthquake Risk Mitigation in Urban Areas III Posters (joint with NH, PA, T)**

**Presiding:** N Hirata, University of Tokyo; M C Gerstenberger, GNS Science; K Nanjo, Earthquake Research Institute

0800h  **S41A-1986** POSTER Determination of Paleoseismic Ground Motions from Inversion of Block Failures in Masonry Structures: G Yagoda - Biran, Y H Hatzor
0800h  **S41A-1987** POSTER Classification of magnitude 7 earthquakes which occurred 1885 in Tokyo Metropolitan area: T Ishibe, K Satake, K Shimazaki, A Nishiyama
0800h  **S41A-1988** POSTER Toward Unifying Available Earthquake Catalogs for Contributing to Earthquake Disaster Mitigation in the Tokyo Metropolitan Area: Data Quality Characterization for Individual Catalogs: K Nanjo, H Tsuruoka, K Kasahara, S Sakai, N Hirata, K Obara

0800h  **S41A-1989** POSTER Improved seismic velocity structure in southwestern Japan using pronounced sP phase: T Hayashida, F C Tajima, J J Mori
0800h  **S41A-1990** POSTER Seismic Basement Structure beneath the Tokyo Metropolitan Area Inferred from Seismic Interferometry: K Yoshimoto, N Hirata, K Kasahara, K Obara, H Sato, S Sakai, H Tsuruoka, S Nakagawa, H Kimura, T Tanada, T Aketagawa, H Nakahara, S Kinoshita
0800h  **S41A-1991** POSTER Seismic velocity discontinuities in the crust and uppermost mantle beneath the Tokyo metropolitan area inferred from receiver function analysis: T Igarashi, S Sakai, N Hirata
0800h  **S41A-1992** POSTER Relationship between dominant periods of H/V of coda waves observed by MeSO-net and underground velocity structures in the Tokyo metropolitan area: S Tsuno, H Yamanaka, S Sakai, N Hirata, K Kasahara, H Kimura, T Aketagawa
0800h  **S41A-1993** POSTER A study on the seismic fortification level of offshore platform in Bohai Sea of China: Y Lu
0800h  **S41A-1994** POSTER Nankai-Tokai subduction hazard for catastrophe risk modeling: D D Spurr
0800h  **S41A-1995** POSTER WAVE PROPAGATION IN DOWNTOWN ISTANBUL DEDUCED FROM EARTHQUAKE RECORDINGS: E Cakti, E Harmandar, E Safak
0800h  **S41A-1997** POSTER Evaluation of Dynamic Property of a Base-Isolated Building Based on Microtremor Measurement During its Construction: F Nagashima, T Maeno, S Matsushima, H Kawase
0800h  **S41A-1998** POSTER peeqMap: A software for producing emergency earthquake maps: A Sadeghi Bagherabadi, H Sadeghi, S K Hosseini, P Babaei
0800h  **S41A-1999** POSTER Benefits of multidisciplinary collaboration for earthquake casualty estimation models: recent case studies: E So
0800h  **S41A-2000** POSTER One of the proposals to estimation of the active fault with the flexure structure: N Kitada, K Takemura
0800h  **S41A-2001** POSTER Characteristics of V/H response spectral ratio with recent Korean Peninsula events: J Kim
0800h  **S41A-2002** POSTER Relationship between earthquake source faults and 3D density structures derived by gravity anomaly inversion based on velocity structure in Japan: N Inoue, N Kitada, K Takemura
0800h  **S41A-2003** POSTER Validation of Characterized Source Model of Intraslab Earthquakes for Strong Motion Prediction: T Iwata, K Asano
0800h  **S41A-2004** POSTER Heterogeneous Structure and Seismicity beneath the Tokyo Metropolitan Area: S Nakagawa, A Kato, S Sakai, K Nanjo, Y Panayotopoulos, E Kurashimo, K Obara, K Kasahara, T Aketagawa, H Kimura, N Hirata
0800h  **S41A-2005** POSTER P wave attenuation structure below the Tokyo Metropolitan area: Y Panayotopoulos, S Sakai, S Nakagawa, K Kasahara, N Hirata, T Aketagawa, H Kimura, C Lee
0800h  **S41A-2006** POSTER Potential-Field and Seismic Reflection/Refraction Studies of the Eagle Rock and Raymond Faults in Arroyo Seco, Los Angeles County, California: D Scheirer, M J Rymer, R D Catchings, M Goldman, G S Fuis

0800h  **S41A-2008 POSTER** Seismic Disaster Mitigation in Urban Area by using Building Vibration Observation of Weak Earthquake Ground Motion: an Approach of the IT Kyoshin Seismometer for Buildings: K Takanou, T Ito

0800h  **S41A-2009 POSTER** SCEC VShaker Project: Visualization of Steel Building Response To Ground Motion Time Histories: P J Maechling, S Kumar, S Krishnan, Y Cui, K B Olsen, A Chourasia, G P Ely, T H Jordan

---

**S41B Moscone South: Poster Hall Thursday 0800h** Engaging Citizens in the Collection of Earthquake Observations Using the Internet I Posters (*joint with NH*)

**Presiding:** R Bossu, EMSC; R W Clayton, Caltech

0800h  **S41B-2010 POSTER** ShakeMapple: Tapping Embedded Motion Sensors to Map the Felt Extents of an Earthquake: L Kamb, G McGilvary, J Van Hemert, R Bossu

0800h  **S41B-2011 POSTER** RICHTER: A Smartphone Application for Rapid Collection of Geo-Tagged Pictures of Earthquake Damage: H Skinnmemoen, R Bossu, K Furuheim, E Bjorgo

0800h  **S41B-2012 POSTER** Raising Seismic Awareness on- and off-campus with class-built seismometers: K J Ferguson, K Van Wijk, T Channel, R Nuxoll

0800h  **S41B-2013 POSTER** Community Seismic Network (CSN): R W Clayton, T H Heaton, M D Kohler, M Chandy, A Krause

0800h  **S41B-2014 POSTER** The Quake-Catcher Network: Improving Earthquake Strong Motion Observations Through Community Engagement: E S Cochran, J F Lawrence, C M Christensen, A I Chung, C Neighbors, J Saltzman

---

**S41C Moscone West: 2007 Thursday 0800h** Advances in Inverse Problems and Seismic Tomography II (*joint with T, DI, NS, NG*)

**Presiding:** C Tape, Harvard University; A Fichtner, Utrecht University

0800h  **S41C-01** The Three Stages of Uncertainty in Geophysical Models (*Invited*): J Trampert

0815h  **S41C-02** Quantifying uncertainties in travel time tomography using the null plane shuttle: R W de Wit, J Trampert, R D van der Hilst

0830h  **S41C-03** Uncertainty Estimation of Shear-wave Velocity Structure from Bayesian Inversion of Microtremor Array Dispersion Data: S E Dooso, S Molnar, J Cassidy

0845h  **S41C-04** FAST, NONLINEAR, FULLY PROBABILISTIC INVERSION OF LARGE GEOPHYSICAL PROBLEMS: A Curtis, M Shahrabani, J Trampert, U Meier, G Cho

0900h  **S41C-05** Large scale geophysical inversion by fast annealed importance sampling: P L Stoffa, M K Sen

0915h  **S41C-06** Solving or resolving global tomographic models with spherical waves, and the scale and sparsity of seismic heterogeneity: I Loris, F J Simons, I Daubechies, G Nollet, M Fornasier, P Vetter, S Judd, S Voronin, C Vonesh, J Charlery

0930h  **S41C-07** A Maximum-Likelihood Approach to the Characterization of the Elastic Lithosphere from Gravity and Topography Data: F J Simons, S C Olhede

0945h  **S41C-08** Inversion of First-Arrival Seismic Traveltimes on 3D Unstructured Grids Without Ray Tracing: P G Lelièvre, C G Farquharson, C A Hurich

---

**S41D Moscone West: 2009 Thursday 0800h** Source Inversion Validation (SIV): Quantifying Uncertainties in Earthquake Source Studies I

**Presiding:** P M Mai, Division of Physical Science and Engineering; M T Page, USGS Pasadena; D Scholemmer, USC

0800h  **S41D-01** Resolution and Trade-offs in Finite Fault Inversions for Large Earthquakes Using Teleseismic Signals (*Invited*): T Lay, C J Ammon

0815h  **S41D-02** Trade-offs among Dynamic Parameters Inferred from 2D Dynamic Source Inversion Results (*Invited*): H Goto, S Sawada

0830h  **S41D-03** Source Inversion Validation: Quantifying Uncertainties in Earthquake Source Inversions: P M Mai, M T Page, D Scholemmer


0900h  **S41D-05** Trade-offs in Analysis of Earthquake Source Parameters from Linear Problem Inversion: T E Yano, R J Archuleta, C Ji, Title of Team: UCSB Seismology Group

0915h  **S41D-06** Assessing the quality of earthquake source models using 3-D forward modelling of long-period seismic data: A M Ferreira, M Vallée, K Lentas

0930h  **S41D-07** Joint Inversion of InSAR and Seismic Waveform Data for the Finite-fault Solution of the Wells, Nevada Earthquake: D S Dreger, S R Ford

0945h  **S41D-08** Obtaining Slip-Rate Function Using Near-Field Motions of Earthquakes: A O Konca, M P Bouchon

---

**T41A Moscone South: Poster Hall Thursday 0800h** Latest Results From EarthScope's San Andreas Fault Observatory at Depth I Posters (*joint with S, MR*)

**Presiding:** M D Zoback, Stanford University; M E Jackson, UNAVCO

0800h  **T41A-2084 POSTER** Joint Inversion of Vp, Vs, and Resistivity at SAFOD: N L Bennington, H Zhang, C H Thruber, P A Bedrosian

0800h  **T41A-2085 POSTER** High-Resolution Imaging of the San Andreas Fault Damage Zone from SAFOD Main-Hole and Surface Seismic Records: Y Li, P Malin, E S Cochran, P Chen

0800h  **T41A-2086 POSTER** Magnetotelluric 3D inversion models from the San Andreas Fault near Parkfield, California: K Tietze, O Ritter, M Becken

0800h  **T41A-2087 POSTER** San Andreas Structural Interpretation: Merging Geophysical and Geological Data at SAFOD and Vicinity: R E Wood, J P Evans, P Malin

0800h  **T41A-2088 POSTER** Shear wave splitting in the Parkfield pilot hole from cross-correlation of seismic noise: M A Lewis, P Gerstoft

0800h  **T41A-2089 POSTER** Breakdown (?) of the Gutenberg-Richter Frequency-Magnitude Relation for Earthquakes in the SAFOD Target Zone: W L Ellsworth, K Imanishi
A Boullier

B C Blumberg

D E Moore

J A Blum

M A Zumberge

S Ali

Y K Kharaka

J M Logan

C J Marone

D A Lockner

K Bradbury

M B Enderlin

T41A-2090 POSTER How Reliable are our Earthquake Source Parameter Measurements? R E Abercrombie, R Gok, L Malagnini, K M Mayeda, W R Walter

T41A-2091 POSTER The SAFOD Optical Fiber Strainmeter: M A Zumberge, J A Blum

T41A-2092 POSTER Frictional and hydrologic behavior of the San Andreas Fault: Insights from laboratory experiments on SAFOD cuttings and core: B M Carpenter, C Marone, D M Saffer

T41A-2093 POSTER Inter-Lab Strength and Friction Correlations on SAFOD Samples: J M Logan, C J Marone, D A Lockner

T41A-2094 POSTER Index of Unconfined Compressive Strength of SAFOD Core by Means of Point-Load Penetrometer Tests: M B Enderlin, B Weymer, P S D’Onfro, R Ramos, K Morgan

T41A-2095 POSTER Permeability of the San Andreas Fault Zone at Depth: A P Rathbun, J Song, D Saffer

T41A-2096 POSTER Absence of high pore pressure in the San Andreas fault?: C Wang

T41A-2097 POSTER Rapid episodic fluid flow within the San Andreas Fault—based on drill core samples recovered during the San Andreas Fault Observatory at Depth (SAFOD) drilling project: S Ali, M Stute, T Torgerson, S R Hemming, G Winckler

T41A-2098 POSTER Geochemistry of formation fluids from the SAFOD wells, Parkfield, California: J J Thorsden, W C Evans, Y K Kharkara

T41A-2099 POSTER Rock Properties and Internal Structure of the San Andreas Fault near ~ 3 km Depth in the SAFOD Borehole Based on Meso- to Micro-scale Analyses of Phase III whole rock core: K Bradbury, J P Evans

T41A-2100 POSTER Implications of Microstructural Studies of the SAFOD Gouge for the Strength and Deformation Mechanisms in the Creeping Segment of the San Andreas Fault: J Hadizadeh, J L Gratier, S Mittempergher, F Renard, J Richard, G Di Toro, H A Babaie

T41A-2101 POSTER Representation and Management of the Knowledge of Brittle Deformation in Shear Zones Using Microstructural Data From the SAFOD Core Samples: H A Babaie, C M Broda, A Kamar, J Hadizadeh

T41A-2102 POSTER Evidence for Cyclic Brittle-Ductile Deformation from San Andreas Fault Observatory at Depth (SAFOD) Phase 3 Cores: J C White, L Kennedy

T41A-2103 POSTER How clays affect fault strength and slip behavior: Lessons from SAFOD: B A van der Pluijm, A M Schleicher, L Warr


T41A-2105 POSTER Metasomatic Origin of Fault Gouge Comprising the Two Actively Creeping Strands at SAFOD: D E Moore, M J Rymer

T41A-2106 POSTER Pressure solution creep as a mechanism of aseismic sliding in active faults: evidence from the San Andreas Fault Observatory at Depth (SAFOD): J Richard, J L Gratier, F Renard, S Mittempergher, M Doan, G Di Toro, J Hadizadeh, A Boullier

T41A-2107 POSTER Evidence of transient increases of fluid pressure in SAFOD phase III cores: S Mittempergher, G Di Toro, J Gratier, J Hadizadeh, S A Smith, R Spiess

T41A-2108 POSTER Luminescence Studies of Age and Thermometric Properties in an Active Earthquake Zone: SAFOD Phase III Core Samples and Resetting Experiments: J Q Spencer, J Hadizadeh, J L Gratier, M Doan

T41B Moscone South: Poster Hall Thursday 0800h

Lithological Controls on the Mechanics and Evolution of Lithospheric Deformation IV Posters (joint with MR, S)

Presiding: V G Toy, University of Otago; T M Mitchell, Ruhr-University Bochum; S Grigull, Ruhr-Universität Bochum; D J Prior, University of Liverpool

0800h T41B-2109 POSTER Pulverized Fault Zone Rocks along the San Andreas Fault: Investigating the damage pattern by seismic field measurements, laboratory experiments and quantitative microstructure analysis: M Rempe, T M Mitchell, J Renner, S Nippress, Y Ben-Zion, D A Okaya, T K Rockwell, A A Allah, Y Ozakin, S Xu

0800h T41B-2110 POSTER Anatomy of a Plate Boundary at Shallow Crustal Levels: a Composite Section from the Alpine Fault, New Zealand: N C Barth, V G Toy, C J Boulton, B M Carpenter

0800h T41B-2111 POSTER The shallow velocity structure of the Carboneras fault zone from high-resolution seismic investigations: C Jones, S Nippress, A Rietbrock, D R Faulkner, E H Rutter, C A Aberland, T Teixido

0800h T41B-2112 POSTER Experimental Measurements of Permeability Evolution along Faults during Progressive Slip: M Strutz, T M Mitchell, J Renner

0800h T41B-2113 POSTER Experimental Fault Reactivation on Favourably and Unfavourably Oriented Faults: T M Mitchell, R H Sibson, J Renner, V G Toy, G Di Toro, S A Smith

0800h T41B-2114 POSTER Principal Slip Zones in Limestone: Natural and Experimental Examples of ‘Clast-Cortex Grains’ and Implications for the Seismic Cycle: S A Smith, A Billi, G Di Toro, A R Niemeijer

0800h T41B-2115 POSTER Sliding behavior of calcite and dolomite marbles at seismic deformation conditions: E Spagnuolo, S A Smith, A R Niemeijer, G Di Toro, S Nielsen

0800h T41B-2116 POSTER Effect of Hydrothermally Produced Fracture-related diagenesis in the carbonate carapace of a salt dome, Jebel Madar, Oman: J Lahr, C M John, W Cosgrove, V Vandeginste, C N Sena, A Jourdan

0800h T41B-2117 POSTER Fault-Wear Under Constant Slip-Velocity: Experimental Observations: Y Boneh, J C Chang, D A Lockner, Z Reches

0800h T41B-2118 POSTER Effect of water on long-term weakening preceding rupture of crustal faults: K Masuda, T Arai, K Fujimoto, M Takahashi, N Shigematsu

0800h T41B-2119 POSTER Mechanisms of fault gouge evolution and physical properties: N C Davatzes, M Swyer, D A Lockner, J G Solum, N Anyamele

0800h T41B-2120 POSTER Insights on frictional processes in sheared clastic marine sediments using ultrasonic nondestructive testing: M W Knuth, H J Tobin, C Marone, M Ikari

0800h T41B-2121 POSTER Mapping the brittle-ductile transition in shales: M Scuderi, B M Carpenter, C Marone, D Elsworth, D M Saffer

0800h T41B-2122 POSTER The development of echelon vein arrays in the McKim Limestone: Raplee and Comb Monoclines, eastern Monument Upwarp, Utah: S Seyun, D D Pollard

0800h T41B-2123 POSTER Fracture-related diagenesis in the carbonate carapace of a salt dome, Jebel Madar, Oman: J Lahr, C M John, W Cosgrove, V Vandeginste, C N Sena, A Jourdan
0800h T41B-2124 POSTER Does Mt Etna creep in a brittle manner? 
P G Meredith, M J Heap, P Baud, S Vinciguerra, A F Bell, I G Main

0800h T41B-2125 POSTER The physical and chemical properties of tuffs from Campi Flegrei (Italy): the influence of thermal and stress-induced microcracking: M J Heap, A Laumann, K Hess, Y Lavallee, D B Dingwell, P G Meredith, G Orsi

0800h T41B-2126 POSTER Deformation Bands in Subglacially Erupted Hyaloclastite Ridges, Reykjanes Peninsula, Iceland: J Barnes, S A Kattenhorn

0800h T41B-2127 POSTER Petrophysical Properties of Sandstones Containing Deformation Bands Versus Those With Fractures: the Importance of Grain Contact Strength to Fault-Zone Structure: J R Schneider, H J Tobin, L B Goodwin

0800h T41B-2128 POSTER Evidencing the transition from Mode I cracking to dilation banding: Results from physical experiments with fractographic observations: S Nguyen, A Chemenda, J Petit, J Ambre, Title of Team: Geo-FracNet - Géozaur

0800h T41B-2129 POSTER Formation of different types of compaction bands: Theoretical analysis and numerical models: A I Chemenda

0800h T41B-2130 POSTER Growth of deformation bands in a multilayer sequence: C Klimeczak, R Soliva, R A Schultz, J chery, I Summerson

0800h T41B-2131 POSTER Lithological Controls on Downdip Segmentation of Strike-Slip Faults in Mechanically Layered Sequences: E S Nemser, D S Cowan

0800h T41B-2132 POSTER Triggerability varies inversely with seismicity rate: N van der Elst, E E Brodsky, H M Savage

0800h T41B-2133 POSTER Probing Fault Strength Variations Across the Continent with Remote Earthquake Triggering: H M Savage, E E Brodsky, N van der Elst

0800h T41B-2134 POSTER Earthquake depth distributions in central Asia, and their relations with lithosphere thickness, shortening and extension: R Sloan, J A Jackson, D P McKenzie, K F Priestley

0800h T41B-2135 POSTER Thermal Stabilization Temperature of the Archean Cratons: M Thakur, D D Blackwell

0800h T41B-2136 POSTER Thermal localization as a potential mechanism to rift cratons: G Lv, B J Kaus, L Zhao

0800h T41B-2137 POSTER The Weakening of Lithospheric Fault Zones: F Gueydan

0800h T41B-2138 POSTER Along-Strike Variation in Dip-Slip Rate on the Alpine Fault is a Consequence of Lithologic Variation?: V G Toy, Z Reid Lindroos, R J Norris, A F Cooper

0800h T41B-2139 POSTER Mechanical and Microstructural Evolution of Ductile Shear Zones: Implications for the Deep Structure of Lithospheric Faults: J P Platt, W M Behr

0800h T41B-2140 POSTER Naturally constrained stress profiles through the middle crust during extension: W M Behr, J P Platt

0800h T41B-2141 POSTER Relating titanium distribution and stable isotope thermometry to quartz microstructure in an extensional detachment system, Shuswap metamorphic core complex, British Columbia: W O Nachlas, N C Seaton, D L Whitney, C Teyssier, A Mulch, M Grove

0800h T41B-2142 POSTER Paleostress analyses in the uppermost footwall of the Whipple detachment and the West Salton detachment faults, southern California: A L Luther, G J Axen, J Silverstone, K J Michelsen

0800h T41B-2143 POSTER Dauphine Twinning in Quartz: An Indicator of Deformation Conditions: P M Kaercher, H Wenk, S Vogel

0800h T41B-2144 POSTER Dynamic constraints on crustal-scale rheology from the Zagros Mountains: B J Kaus, P Yamato, F Mouthereau, S Castelltort

0800h T41B-2145 POSTER The Ref/ϕ and Fry methods applied to synthetic calcite ‘conglomerates’ deformed under grain size-insensitive and grain size-sensitive regimes: A Edwards, S J Covey-crump, E H Rutter

0800h T41B-2146 POSTER Geologic and Experimental Investigation of Strain Localization in Lower Crust Amphibolites: A Getsinger, G Hirsh, H Stunitz, E T Goergen

0800h T41B-2147 POSTER Kick & cook experiments on natural dunite: simulating episodic creep below the seismogenic zone during the seismic cycle: A Druiventak, C Trempmann, A K Matysiak, J Renner

0800h T41B-2148 POSTER Non-steady state deformation at decaying stresses indicated by microfractures in peridotites from the Balmuccia complex in the Western Alps: A K Matysiak, C Trempmann

0800h T41B-2149 POSTER Pseudotachylite Bearing Cretaceous Fault in the Saddlebag Lake Pendant, Central Sierra Nevada, CA: A S Whitesides, W Cao, S R Paterson

0800h T41B-2150 POSTER Raman spectral analysis of carbonaceous material to detect shear heating on a large fault—example from the Median Tectonic Line, Southwest Japan: H Mori, S Wallis, K Fujimoto, N Shigematsu

0800h T41B-2151 POSTER Geochronology and Structural Studies in the Northern Ritter Range: Implications for the Tectonic History of Mesozoic Sierra Nevada Arc: C J Black, A S Whitesides, J L Anderson, K N Culbert, M Vandeeve, I V Cox, J Cardamone, G Torrez, M Quirk, V Memeti, W Cao, S R Paterson

0800h T41B-2152 POSTER The relationship between microstructure and hydrogen isotopes in the Wildhorse detachment, Pioneer Mountains, Idaho: R R Mcfadden, A Mulch, C Teyssier, N C Seaton, L Tokle

0800h T41B-2153 POSTER EBSD and kinematic analyses of high-pressure rocks, Sivrihisar massif, Turkey: N C Seaton, D L Whitney, C Teyssier, E Toraman


Presiding: K M Scharer, Appalachian State University; T K Rockwell, San Diego State University; H Kondo, AIST

0800h T41C-01 Variable earthquake recurrence on the Northern San Andreas fault over the past 3,000 years at the Vedanta marsh site, Oleta, CA (Invited): T M Niemi


0830h T41C-03 Ruptures of the San Andreas fault system in San Gorgonio Pass: D Yule, K E Sieh

0845h T41C-04 The Non-Regularity of Earthquake Recurrence in California: Lessons From Long Paleoseismic Records in Simple vs Complex Fault Regions (Invited): T K Rockwell

0900h T41C-05 Long-term and Short-term Earthquake Behavior Along The Dead Sea Fault (Jordan) From Geomorphology, Paleoseismology And Archeoseismology: M A Ferry, M Meghraoui, N Abou Karaki, M M Al-Taj

0915h T41C-06 Resolution limits and completeness in earthquake archives: Lessons from the Dead Sea fault (Invited): A Agnon, S Marco, R Ellenblum, Title of Team: Tel Ateret “Vadum Jacob” Team

All information is current as of November 12, 2010
All information is current as of November 12, 2010

**T41D Moscone West: 2018 Thursday 0800h**

**Raising a Plateau From Earthquakes, Basins, and Fold-Thrust Belts I (joint with S, G)**

**Presiding:** J Liu, Inst. of Tibetan Plateau Res.; A M Forte, University of California, Davis; M E Oskin, University of California, Davis; E Cowgill, University of California, Davis

0800h T41D-01 Tectonics of northern Himalaya in China since early Oligocene (Invited): J Zhang

0815h T41D-02 Evidence for mechanical coupling and strong Indian lower crust beneath southern Tibet (Invited): A Copley, J Avouac

0830h T41D-03 How Rapidly is the Tibetan Plateau Rising, and What Fraction of that is Tectonic? (Invited): J T Freymueller, Y Fu, Q Wang, S Yang, C Xu, G Chen

0845h T41D-04 Extension in Central-South Tibet, insight from cosmogenic nuclide dating: E Kali, J van der Woerd, P H Leloup, G Maheo, N O Arnaud, J Liu, M Chevalier, L Robin, P Tapponnier, R Thuizat

0900h T41D-05 Broken foreland basins in the India-Eurasia collision zone and in the central Andes: tectonic, geomorphic and sedimentologic similarities (Invited): M R Streeker, B Bookhagen, G E Hilley, E Kirby, E R Sobel

0915h T41D-06 Spatial-temporal evolution of sedimentary basin segmentation in NE Tibet: Implications for outward growth of the plateau margin (Invited): C N Garzione, B G Hough, W Zhicai

0930h T41D-07 Chronostratigraphy of upper Miocene - lower Pliocene sedimentary records of Carpathian and Caucasus Foredeep (Invited): I Vasiliev, W Krijgsman, M Stoica, C G van Baak, C G Langereis, A Iosifidy

0945h T41D-08 Differential exhumation across the eastern Greater Caucasus from low-temperature thermochronology: Implications for plate boundary reorganization and foreland basin deformation: N A Niemi, B Avdeev

**T41E Moscone West: 2011 Thursday 0800h**

**Understanding Continental Evolution From Innovative Analysis of EarthScope Data I (joint with G, S)**

**Presiding:** H J Gilbert, Purdue University; L Astiz, Scripps Institution of Oceanography

0800h T41E-01 Multi-scale seismic heterogeneity and convection in the western U.S. upper mantle (Invited): B Schmandt, E Humphreys

0815h T41E-02 Tracking the Progress of EarthScope/USArray: The crust and upper mantle beneath the transition region between tectonic western US and cratonic eastern US: W Shen, F Lin, M H Ritzwoller

0830h T41E-03 A comparison of telesismic and regional seismic tomography west and east of the Rocky Mountains: X Lou, S van der Lee

0845h T41E-04 Mixing Tomography with Waveform Modeling; Subduction vs. Destabilization (Invited): D V Helmberger, R Chu, D Sun

0900h T41E-05 Imaging Lithospheric Cascadia Structure with Ambient Noise Tomography: R W Porritt, R M Allen, M R Brudzinski, D C Boyarko, L O’Driscoll, Y Zhai, A Levander, E Humphreys, F F Pollitz

0915h T41E-06 Models of Seismic Velocity and Anisotropy For the Great Basin, Nevada: C Beghein

0930h T41E-07 CRUSTAL STRUCTURE OF THE HIGH LAVA PLAINS OF THE PACIFIC NORTHWEST CONTROLLED- SOURCE SEISMIC AND GRAVITY MODELING: C Cox, G R Keller

0945h T41E-08 What is the Geometry of the Juan de Fuca/Farallon Slab? New constraints from a Synthesis of Wavefield Imaging, Tomography, and Tectonic Reconstructions: G L Pavlis, X Liu

---

**Volcanology, Geochemistry, and Petrology**

**V41A Moscone South: Poster Hall Thursday 0800h**

**175 Years of Geological Research in the Galapagos I Posters (joint with G, T, D1)**

**Presiding:** D Geist, University of Idaho; K S Harpp, Colgate University; E L Mittelstaedt, Laboratoire FAST; C W Sinton, University of Redlands

0800h V41A-2250 POSTER SeaFloor Volcanic and Structural Features Adjacent to the 90deg 50’N Transform – Galapagos Spreading Center: Clues for Understanding Plate Boundary Kinematics and Lithospheric Melting Processes (Invited): D J Fornari, S Soule, K S Harpp, E L Mittelstaedt, D Geist, M D Kurz, Title of Team: R/V Melville MV1007 Cruise Scientific Party

0800h V41A-2251 POSTER GRUVEE Broad Impacts—How to make the most of a Teacher At Sea Experience: B J Cushman-Patz, J M Sinton, S M White, Title of Team: Science Party of AT-193 (GRUVEE cruise)


0800h V41A-2253 POSTER The Geochemistry of Pinta, Marchena, and Genovesa Islands and the Surrounding Seaﬂoor in the Galapagos Archipelago: W Schlitzer, K S Harpp, M D Kurz, D Geist, E L Mittelstaedt, D J Fornari, Title of Team: The R/V Melville MV1007 FLAMINGO Cruise Scientific Party

0800h V41A-2254 POSTER Variation in melting conditions beneath a hotspot influenced mid-ocean ridge revealed by rare earth elements in melt inclusions from the western Galapagos Spreading Center: C J Russo, D W Graham, A Kent, J M Sinton

0800h V41A-2255 POSTER Morphology, Size, and Spatial Distribution of Seamounts in the Northern Galápagos: C T Mckee, K S Harpp, D Geist, E L Mittelstaedt, D J Fornari, S Soule, Title of Team: The R/V Melville MV1007 FLAMINGO Cruise Scientific Party

0800h V41A-2256 POSTER Seamount Lineaments of the Northern Galápagos and Plume-ridge Interaction: W Cushman, K S Harpp, M D Kurz, D Geist, E L Mittelstaedt, D J Fornari, S Soule, Title of Team: The R/V Melville MV1007 FLAMINGO Scientific Team

0800h V41A-2257 POSTER R/V SONNE 208 PLUMEFLUX Cruise: Extent of the influence of the Galapagos Plume on the surrounding upper mantle and variations in plume-ridge interaction through time: R Werner, K Hoernle, A Herbrich, D Maicher, S F Hauff, S M White, W Borchert

---

386 2010 Fall Meeting AGU

V41A-2259 POSTER New Geochemical and Isotope data for recent Galapagos volcanic rocks: K Berlo, H K Handley, C Beier, S Turner

V41A-2260 POSTER Lithospheric Evolution of Magmas from the Northern Galapagos Province: M Miller, D Geist, K S Harpp, E L Mittelstaedt


V41A-2262 POSTER Volcanic Eruptions along the Galápagos Spreading Center Revealed by Geologic Mapping Using Alvin, Sentry and TowCam and Geochemical and Magnetic Paleointensity Studies: A Colman, J M Sinton, S M White, J A Bowles, K H Rubin, Title of Team: GRUVEE Science Team

V41A-2263 POSTER Mapping lava morphology of the Galapagos Spreading Center at 92°W: fuzzy logic provides a classification of high-resolution bathymetry and backscatter: J T McClinton, S M White, J M Sinton, K H Rubin, J A Bowles

V41A-2264 POSTER Do Periodic Plate Reorganisations Control Late-stage Volcanism across a Broad Galápagos Hotspot?: J M O’Connor, K Hoernle, J R Wijbrans, R Werner, S P Hauff, P Stoffers


V41A-2266 POSTER Gas geochemistry of Sierra Negra volcano, Galápagos hot spot: Y Taran, B Christenson, H Sumino, B Kennedy

V41A-2267 POSTER The May 2005 eruption of Fernandina volcano, Galápagos: The first GPS and InSAR observations of a circumferential dike intrusion: B Chadwick, S Jonsson, D Geist, M P Poland, D J Johnson, S Batt, K S Harpp, A Ruiz

V41A-2268 POSTER The Galápagos Islands seen from space: the contribution of Synthetic Aperture Radar Interferometry (InSAR) to volcano monitoring: B Osmanoglu, S Baker, M Bagnardi, F Ampelung

V41A-2269 POSTER New Permanent Seismic Network at the Galápagos Islands: M C Ruiz, H A Yepes, P Ramon, A G Ruiz Paspuel, M Vaca, W L Enriquez, C Ramos, V Acaceres

V41A-2270 POSTER Testing Magma Migration and Storage Models at Sierra Negra Volcano, Galápagos: D M Cote, C J Ebinge, M C Ruiz, M Bagnardi, D Geist, F Ampelung

V41A-2271 POSTER Crustal structure beneath the Galápagos Archipelago from ambient noise tomography and its implications for plume–lithosphere interactions (Invited): D R Villagomez, D R Toomey, E E Hooft, S C Solomon

V41B Moscone South: Poster Hall Thursday 0800h

Geochemistry and Geochronology of Accessory Phases II Posters (joint with T, MR)

Presiding: T Zack, Universitaet Mainz; D F Stockli, The University of Kansas

V41B-2272 POSTER Contrasting protracted and punctuated zircon growth in two syn-erupted rhyolite magmas from Tarawera volcano: insights to the heterogeneity of crystal mush: S Storm, P A Shane, A K Schmitt, J Lindsay

V41B-2273 POSTER Zircon U-Pb geochronology and whole-rock geochemistry of Chimei Igneous Complex, Central Coastal Range, eastern Taiwan: W Shao, W Chen, S Chung


V41B-2275 POSTER Trace element and oxygen isotope composition of Hawaiian hotspot zircon: J A Vazquez, I N Bindeman, P J Shamberger, J E Hammer

V41B-2276 POSTER Cooling rates and depth of detachment faulting of the Atlantis Massif and Kane oceanic core complexes at the slow-spreading Mid-Atlantic Ridge: N Schoolmeesters, M J Cheadle, B E John, C B Grimes, P W Reiners

V41B-2277 POSTER U-series in zircon and ⁴⁰Ar/³⁹Ar geochronology reveal the most recent stage of a supervolcanic cycle in the Altiplano-Puna Volcanic Complex, Central Andes: C Tierney, S L de Silva, A K Schmitt, B Jicha, B S Singer


V41B-2279 POSTER Zircon U-Pb Dating Analyses of Lava Domes in the Sutter Buttes Volcano, California: A M Hansen, B Hausback, A K Schmitt

V41B-2280 POSTER Developments in U-Th-Pb geochronology of allanite by LA-ICPMS: J Darling, M Engi, B Cenkitok, B Dhuime, C Storey

V41B-2281 POSTER Sub-micrometer Age and Compositional Mapping of Monazite Through Positive Metal (Cs⁺, Ga⁺⁺) Ion Sputtering: A K Schmitt, F Korhonen, M Grove

V41B-2282 POSTER Empirical test of an illite/muscovite ⁴⁰Ar/³⁹Ar thermochronometer: C Verdel, B A van der Pluijm, A N Niemi, C M Hall

V41B-2283 POSTER A new, simplified procedure, for separating Lu, Hf, Sm, and Nd, in preparation for coupled geochronology by ICP-MS: S J Arauza, A R Kylander-Clark, B R Hacker

V41B-2284 POSTER Magma, Magma, Quite Contaminated, How Does Your Garnet Grow?: J Lackey, G A Romero, J W Valley

V41B-2285 POSTER Neoproterozoic palaeogeography of the West Africa Craton constrained by detrital zircon provenance: G B Straathof, G Nicoll, J Tait, K Ló, M Dahmada, N Ousmane, J Berndt, R M Key


V41B-2287 POSTER Importance of LA-ICP-MS Zircon Geochronology and Geochronology in Determining the History of Magmatic Systems: Insights from the Graciosa A-type Province, Southern Brazil: S Braun, G A Gualda, B R Bream, S R Vlach

V41B-2288 POSTER Quantifying Continental Margin Deformation North and South of the Opening of the Gulf of California—Evidence for Subduction Erosion?: E M Peterman, M Grove, D L Kimbrough

V41B-2289 POSTER Experimental measurement of trace-element partitioning between zircon and hydrothermal fluids at High Pressure (1.5 GPa) metamorphic conditions: J C Peters, J C Ayers

V41B-2290 POSTER Melt structure effect on Thorium and Uranium partitioning between monazite and Na2O-Al2O3-SiO2 melts: L Xing, D Trail, E B Watson
0800h V41B-2291 POSTER Partitioning of trace elements during exsolution in ilmenite-hematite series minerals by LA-ICP-MS: C Morisset, J S Scoates, A D Weis

0800h V41B-2292 POSTER Rhenium - osmium heterogeneity of enriched mantle basalts explained by composition and behaviour of mantle-derived sulfides: J Harvey, C W Dale, A Gannoun, K W Burton


0800h V41B-2294 POSTER U-Th zircon dating of the great Millennium eruption of Changbaishan volcano: Evidence for rapid development of a catastrophic eruption: H Zou, Q Fan, H Zhang

V41C Moscone South: Poster Hall Thursday 0800h Looking Backward and Forward: Volcanology in 2010 and 2020 I Posters

Presiding: J C Eichelberger, US Geological Survey

0800h V41C-2295 POSTER False Positive: an Apt Term and Concept for Volcanologists: R Wunderman

0800h V41C-2296 POSTER False Positive,” an Apt Term and Concept for Volcanologists: R Wunderman

0800h V41C-2297 POSTER WOVoDat: Data Population and Current Development: A R Radomopurbo, C Widiwijayanti, A Baguer, C Lyu, C G Newhall

0800h V41C-2298 POSTER Borehole Strain Measurements on Volcanoes: Insights from Montserrat and Helka: A T Linde, S I Sacks

V41D Moscone South: Poster Hall Thursday 0800h Texture-Controlled Geochronology: Linking Petrography, Mineral Zoning, and Dating II Posters (joint with MR)

Presiding: A Moeller, University of Kansas; N M Kelly, Colorado School of Mines

0800h V41D-2299 POSTER Spatial evaluation of Ar-systematics in rocks from the British Channel Islands: a UV laserprobe Ar/Ar study of excess 40Ar: S P Schnitzer, S Sherlock, P S Kelley

0800h V41D-2300 POSTER Chronologic constraints on the tectonic evolution of the Wilson Lake terrane of the Grenville Province, Canada: B L Reno, F J Korhonen, J H Stout, T Waught

0800h V41D-2301 POSTER Experimental high-grade alteration of zircon using alkali- and Ca-bearing solutions: resetting the zircon geochronometer during metasomatism: D E Harlov, D Dunkley

0800h V41D-2302 POSTER Linking Lu-Hf geochronology and garnet chemistry in eclogites of the Sulu UHP terrane, China: Implications for punctuated garnet growth events and interpretation of element zoning patterns regarding geochronology: A Schmidt, K Mezger, P J O’Brien

0800h V41D-2303 POSTER New approach for decoding P-T-t history based on Al distribution in orthopyroxene: Application to garnet pyroxenite/peridotite from the Bestiac mass, French Pyrenees: K Ozawa, J Bodiner, C J Garrido, H Nagahara

0800h V41D-2304 POSTER Thickening and growth of lower crust during continental collision: constraints from geochronology of the Pamir: J C Vrijmoed, B R Hacker, L Ratschbacher, J L McGraw, A R Kylander-Clark, J M Cotte

0800h V41D-2305 POSTER Relating Major Silicates and Monazite Growth in Metamorphic Rocks: Application to the Upper Granite Gorge (Grand Canyon, USA): J Allaz, M L Williams, M J Jercinovic

0800h V41D-2306 POSTER Single or Multiphase Metamorphic History of the Nordfjord Ultrahigh-Pressure Province, Western Norway?: D J Young, A R Kylander-Clark, G E Gehrels, B R Hacker

0800h V41D-2307 POSTER Cretaceous exhumation history of Cordillera Darwin, southern Patagonia, from patchily recrystallized garnet and U-Th-Pb monazite dating: K T Maloney, G L Clarke, K A Klepeis, C M Fanning, W Wang

V41E Moscone South: Poster Hall Thursday 0800h The 2010 Eruption of Eyjafallajökull: A Landmark Event for Volcanic Cloud Hazards I Posters (joint with A, NH)

Presiding: S A Carn, Michigan Technological University; F Prata, NILU; S Karlsdottir, Icelandic Meteorological Office

0800h V41E-2308 POSTER Detection of Pre- and Post-Eruptive Deformation of Eyjafallajökull and Katla volcano in 2010 from Interferometric Analysis of ALOS/PALSAR data: H Michinaka, Y Hirama

0800h V41E-2309 POSTER Ground deformation preceding the April 2010 eruption of Eyjafallajökull, Iceland: Y Aoki

0800h V41E-2310 POSTER Measurements of volcanic gas emissions during the first phase of 2010 eruptive activity of Eyjafallajökull: M R Burton, G G Salerno, A La Spina, A Stefansson, H S Kaasalainen

0800h V41E-2311 POSTER Monitoring the Eyjafjallajökull ash eruption with a near-source Infrasonic Array: M Ripepe, G Lacanna, D Delle Donne, R Genco, E Marchetti, G Ulivieri, A Hoskulsdsson, R Cioni

0800h V41E-2312 POSTER Long-range infrasound observations of eruptions April-May 2010 Eyjafjallajökull, Iceland and June 2009 Sarychev Peak, Kuril Islands: R S Mataza, A LE PICHON, J Vergoz, P Ferry, J Lalande, L Ceranna, D N Green, L G Evers, E Marchetti, M Ripepe, P Campus, L J Lissza, T Kvaerna, H Lee, I Che, A Rybin

0800h V41E-2313 POSTER Near-field tephra dispersal monitoring by satellites: I Jonsdottir, G Larsen, T Thordarson, A Hoskulsdsson, F Hoskulsdsson, A G Davies

0800h V41E-2314 POSTER Settling dynamics of ash aggregates from the Eyjafjallajökull (Iceland) eruption plume illuminated by high-speed video analysis: P Scarlato, J Taddeucci, C Montanaro, E Del Bello, C Timarelli, C Freda, D Andronico

0800h V41E-2315 POSTER The Last Days of the 2010 Eruption at Eyjafjallajökull Volcano: D Andronico, P Scarlato, C Timarelli, E Del Bello, C Freda, J Taddeucci

0800h V41E-2316 POSTER Observing the 2010 Eyjafjallajökull, Iceland, Eruptions with NASA’s Earth Observing-1 Spacecraft – Improving Data Flow In a Volcanic Crisis Through Use of Autonomy: S Chien, A G Davies, J Doubleday, D Q Tran, M T Gudmundsson, I Jonsdottir, A Hoskulsdsson, T Thordarson, S Jakobsson, A Stefansson, R Wright

0800h V41E-2317 POSTER Visualizing the Evolution of Eyjafjallajökull Ash Clouds: V’J Realmuto, F Prata

0800h V41E-2318 POSTER The 2010 Eyj eruption evolution by using IR satellite sensors measurements: retrieval comparison and insights into explosive volcanic processes: A Piscini, S Corradini, L Merucci, S Scollo

0800h V41E-2319 POSTER NEAR REAL TIME DETECTION AND TRACKING OF THE EYJAFJOLL (ICELAND) ASH CLOUD BY THE RST (ROBUST SATELLITE TECHNIQUE) APPROACH: V Tramutoli, C Filizzola, F Marchese, R Paciello, BY THE RST (ROBUST SATELLITE TECHNIQUE) APPROACH: N Pergola, F Sannazzaro

0800h V41E-2320 POSTER Analysis of the Eyjafjallajökull Eruption using the WRF-Chem Model compared to Satellite-Based Ash Retrieval Algorithms: T S Steensen, M Stuefer, P Webley, G A Grell, S R de Freitas

All information is current as of November 12, 2010
0800h  V41E-2321 POSTER Eyjafjallajökull Eruptions: direct SO2 plume height estimation and enhanced ash detection with OMI: K Yang, X Liu, N A Krotkov, P K Bhartia, S A Carn, A J Krueger
0800h  V41E-2322 POSTER Separation of volcanic ash and sulfur dioxide from the Eyjafjallajökull eruption, April-May 2010: H E Thomas, F Prata, S A Carn, L Clarisse, M I Watson
0800h  V41E-2323 POSTER Which observations are necessary to estimate ash injection in the atmosphere by volcanic plumes? The case of the Eyjafjöll 2010 eruption: E Kaminski, S Tait, F Ferrucci
0800h  V41E-2325 POSTER Science in Support of Aviation-Risk Management since the April 2010 Eruption of Eyjafjallajökull, Iceland: M Guffanti, L G Mastin, D J Schneider, A Tupper
0800h  V41E-2326 POSTER Regional model studies of the atmospheric dispersion of fine volcanic ash after the eruption of Eyjafjallajökull: B Langmann, M K Hort
0800h  V41E-2327 POSTER Constraints on the Longevity of the 2010 Eyjafjöll Eruption Cloud From Analog Experiments and Modeling: G Carazzo, M Jellinek
0800h  V41E-2328 POSTER Coupling gravity current and advection-diffusion models in tephra sedimentation analysis: A C Volentik, T Koyaguchi, Y J Suzuki, B F Houghton
0800h  V41E-2329 POSTER Bringing the world to a standstill: an investigation into the effects of a Novarupta scale volcanic eruption on today's aviation industry: R A Welchman
0800h  V41E-2330 POSTER The 10th century Skerien ridge on northwest Eyjafjallajökull, south Iceland - Volcanic architecture and bimodal magma composition: B V Oskarsson, M T Gudmundsson, T Thorarson

V41F Moscone West: 3001 Thursday 0900h Daly Lecture (Webcast)
Presiding: R S Sparks, Bristol University
0900h  V41F-01 Daly Lecture: Geochemical Insights into Mantle Geodynamics and Plume Structure (Invited): D A Weis

Union

U42A Moscone South: 104 Thursday 1020h Frontiers in Scientific Ocean Drilling: Recent Discoveries and Future Opportunities
Presiding: S E Humphris, Woods Hole Oceanographic Institution; P B DeMenocal, Lamont-Doherty Earth Obs
1020h  U42A-01 Coherent Tropical Ocean Response to Plio-Pleistocene Ice Age Cycles (Invited): T Herbert, K T Lawrence, Z Liu, L C Peterson
1035h  U42A-02 Overpressure, Flow Focusing, Compaction and Slope Stability on the continental slope: Insights from IODP Expedition 308: B B Flemings
1050h  U42A-03 Tectonics, Fluids, and the Seismogenic Zone: Four Decades of Drilling at Convergent Margins (Invited): J C Moore, Title of Team: All DSDP, ODP, and IODP Convergent Margin Scientific Parties
1120h  U42A-05 S-wave velocity structure in the accretional prism beneath the Kumano Basin, Nankai Trough, Japan, revealed by vertical seismic profiling: R Hino, N L Bangs, Y Sanada, J Park, R von Huene, G F Moore, T Tsuji, E Araki, M Kinoshita
1135h  U42A-06 The leading edge of basement logging science: The detailed in situ volcanic architecture, crustal construction processes, vacancy for water, minerals, and microbes, and beyond: M Tominaga
1150h  U42A-07 Evolution Of Oceanic Crust Alteration From Deep Ocean Drilling (Invited): J Alt
1205h  U42A-08 Heterogeneity, anisotropy, and compartmentalization of fluid, heat, and solute transport in the upper ocean crust on ridge flanks (Invited): A T Fisher, K Becker, C G Wheat

Atmospheric Sciences

A42A Moscone South: 103 Thursday 1020h Bjerknes Lecture (Webcast) (joint with GC, PA)
Presiding: A Robock, Rutgers University; N G Andronova, University of Michigan; P J Webster, School of Earth and Atmospheric sciences
1020h  Introduction by Alan Robock
1025h  Introduction by Peter Webster

A42B Moscone West: 3002 Thursday 1020h Quantification of Emissions: Addressing Current and Future Challenges II (joint with B)
Presiding: C Lioussse, CNRS; G Petron, NOAA
1020h  A42B-01 Working Toward Policy-Relevant Air Quality Emissions Scenarios: T Holloway
1050h  A42B-03 Top-down estimate of anthropogenic emission inventories in Houston using a 4D-VAR mesoscale inverse modeling technique: M Trainer, J Broude, S Kim, G J Frost, W M Angevine, R Ahmadov, S Lee, S A McKeen, J R Holloway, T B Ryerson, J Peischl, C Warneke, J A De Gouw, D D Parrish, F C Fehsenfeld, K R Gurney
1120h  A42B-05 Observational constraints on U.S. emissions of climate-active and ozone-depleting trace gases from a tall-tower and aircraft sampling network: S A Montzka, B R Miller, C Sisco, C Sweeney, A E Andrews, A Karion, D Neff, M L Fischer, J R Gurney
1135h  A42B-06 Estimates of methane emissions from India using CH4,CO-C2H6 relationships from CARIBIC observations in monsoon convective outflow: A K Baker, A Rauthe-Schöch, T J Schuck, P F van Velthoven, F Slemr, C A Brenninkmeijer
1150h  A42B-07 Quantifying the Magnitude and Uncertainty of Wetland CH4 Emissions Through the 21st Century Using Satellite Data and Climate Model Analyses: A A Bloom, P I Palmer, D Reay, A C Fraser, C Frankenberg

All information is current as of November 12, 2010.
**Biogeosciences**

**B42A Moscone West: 3006 Thursday 1020h**

**Biogeodynamics and Earth System Sciences II**

**Presiding: J D Albertson**, Duke University

1020h **B42A-01** Evolution of modern eukaryotes in the context of Cryogenian geochemical, tectonic and climatic changes (Invited): T Bosak, F A Macdonald, S B Pruss, D Lahr

1035h **B42A-02** Dust emissions and dust mobilization in the southern Kalahari: possible effects on biotic-abiotic interactions in the Earth system (Invited): P D’Odorico, A Bhattachatan, T M Zobeck, M Baddock, K Dintwe, G S Okin

1050h **B42A-03** The role of biotic and abiotic processes in determining equilibrium states and transient dynamics in tidaal biogeomorphic systems: C Da Lio, A D’Alpaos, M Marani

1105h **B42A-04** Seagrass dynamics in shallow coastal lagoons: Interactions with fluid dynamics, sediment resuspension and light conditions: J A Carr, P D’Odorico, K McGlathery, P L Wiberg

1120h **B42A-05** Combined effect of fire and water scarcity on vegetation patterns in arid lands: N Ursino, M Rulli

1135h **B42A-06** Predicting the effect of changing vegetation conditions on aeolian dune landscapes: M D Reitz, D J Jerolmack, R C Ewing, R L Martin

1150h **B42A-07** Groundwater Controls on Vegetation Composition and Patterning in Mountain Meadows: S P Lohiide, C Lowry, C E Moore, J D Lundquist

1205h **B42A-08** Soil- and plant- water uptake in saline environments and their consequences to plant adaptation in fluctuating climates: V Volpe, J D Albertson, G G Katul, M Marani

**B42B Moscone West: 3004 Thursday 1020h**

**Determining the Controls of Terrestrial Net Ecosystem Exchange and Related Processes at Regional to Global Scales III (joint with A)**

**Presiding: C Yi**, Queens College, CUNY; D M Ricciuto, Oak Ridge National Laboratory; B N Sulman, U. of Wisconsin-Madison

1020h **B42B-01** Relationships between net primary productivity and forest stand age derived from Forest Inventory and Analysis data and remote sensing imagery: L H E, J M Chen, Y Pan, R Birdsey


1050h **B42B-03** Climatic Effects on the Inter-Annual Variability of Carbon Fluxes for North America and Europe: E Tomelleri, N Carvalhais, M Migliaiavacca, M Reichstein, Title of Team: FLUXNET LaThuille synthesis team (cf. www.fluxdata.org)

1105h **B42B-04** Hydroclimatic variability, land cover change, and the terrestrial carbon cycle: Recent patterns and trends diagnosed with FLUXNET: C Schwalm, C A Williams, K M Schafer

1120h **B42B-05** The impact of bark beetle outbreaks on carbon cycling in the western US from 1997 to 2009: S L Edburg, J A Hicke, D M Lawrence, P E Thornton, A J Meddens

1135h **B42B-06** Sensitivity of regional forest carbon budgets to continuous and stochastic climate change pressures: B N Sulman, A R Desai, R M Scheller

1150h **B42B-07** Carbon, Water, and Heat Flux Responses to Experimental Burning and Drought in a Tallgrass Prairie: M L Fischer, M S Torn, D P Billesbach, G L Doyle, B Northup, S C Biraud

---

1205h **A42B-08** Global fire emissions and the contribution of deforestation, savanna, forest, agricultural, and peat fires (1997–2009): G van der Werf, J T Randerson, L Giglio, G J Collatz, M Mu, P S Kasibhatla, D C Morton, R S DeFries, Y Jin, T T Van Leeuwen

---

**A42C Moscone West: 3008 Thursday 1020h**

**Tropospheric Gaseous Composition in Regional and Global Perspective II (joint with B)**

**Presiding:** O A Tarasova, World Meteorological Organization; P C Novelli, NOAA/ESRL

1020h **A42C-01** Continuous Greenhouse Gas Monitoring on South Atlantic Islands: D Lowry, R E Fisher, M Lanoisite, E G Nisbet, E J Drudonencky, A C Manning


1055h **A42C-03** OVERVIEW OF O3 AND CO INTERANNUAL VARIABILITIES AND TRENDS BASED ON THE MOZAIC DATA: V Thouret, J Cammas, N Elguindi, R Zbinden, G Athier, P Nedelec, J Cousin, F Karcher

1105h **A42C-04** Effect of sampling frequency on ozone trends: Lessons from MOZAIC: M Saunois, L K Emmons, J Lamarque, S Tilmes, V Thouret

1115h **A42C-05** Composition of the spring Siberian troposphere during YAK-AEROSIB 2010: Influence of biomass burning, stratospheric intrusion and the Eyjafjöll eruption: J PARIS, A Berchet, M Arshinov, P Nedelec, A Stohl, G ANCELLET, K Law, B D Belan, M Ramonet, P Ciais

1130h **A42C-06** Analysis of ozone and nitric acid for the ARCTAS field campaign using aircraft, satellite observations and MOZART-4 model simulations: source attribution and variability of Arctic pollution: C Wespes, L K Emmons, D P Edwards, D Hurttmans, P Coheur, C Clerbaux, J W Hannigan, R Lindenmaier, R Batchelor, K Strong


---

**A42D Moscone South: 103 Thursday 1120h**

**Charney Lecture (Webcast)**

**Presiding:** P J Webster, School of Earth and Atmospheric sciences; A Robock, Rutgers University

1120h **Peter J. Webster** Introduction

1125h **A42D-01** Past and Contemporary Climate Change: Evidence From Earth’s Ice Cover (Invited): E S Mosley-Thompson

---

All information is current as of November 12, 2010
1020h  **B42C-01** Applications of in situ optical measurements in ecological and biogeochemical studies – a framework for a user-driven national network: B A Bergamaschi, B A Pellerin, B D Downing, J Saraceno, G Aiken, P Stumpnner

1035h  **B42C-02** Continuous Ecosystem Stoichiometry (C:N:P) in a Large Spring-fed River Reveals Decoupled N and P Assimilatory Dynamics: M J Cohen, R L Douglass, J B Martin, R G Thomas, J B Heffernan, C R Foster

1050h  **B42C-03** Modification of suburban carbon and nitrogen fluxes by a coupled channel/floodplain system assessed using in situ sensors: W M Wollheim, B A Pellerin, J Saraceno, C Hopkinson, A Hope, N Morse

1105h  **B42C-04** Headwater and basin scale forest harvesting effects on sediment yield using near-continuous turbidity measurements and sediment yield modeling: N Zegre, A E Skaugset

1120h  **B42C-05** Inference of biogeochemical processes in lotic ecosystems from diel variation in nutrient concentrations **(Invited):** J B Heffernan, M J Cohen, C R Foster, R G Thomas

1140h  **B42C-06** Recent developments in the use of hydroacoustics for monitoring suspended-sediment transport in rivers **(Invited):** S A Wright, D J Topping, C A Williams, M S Wood, M N Landers, T D Straub

1200h  **B42C-07** A Study of High Frequency Water Quality Observations in the Little Bear River Utah, USA **(Invited):** J S Horsburgh, A Stackman Jones, D K Stevens, D G Tarboton, N O Mesner

1020h  **B42D-01** Introduction to the Application of Remote Sensing in Terrestrial Carbon Monitoring, Modeling and Management: R Dubayah, S J Goetz

1035h  **B42D-02** National scale disturbance mapping in support of REDD monitoring systems **(Invited):** M C Hansen, P Potapov, M Broich, S Tsurubanova, B Adusei

1055h  **B42D-03** FAO UN-REDD- INPE Joint Programme on Forest Monitoring Systems based on RS and GIS techniques: I G Jonckheere, Title of Team: FAO UN-REDD MRV Team, FAO HQ, Rome, Italy

1115h  **B42D-04** Toward global baselines and monitoring of forest cover for REDD: the Global Forest Cover Change project: J O Sexton, C Huang, J G Masek, M Feng, R Narasimhan, E F Vermote, M C Hansen, R E Wolfe, S Channan, J R Townshend


1020h  **B42E-01** Regulatory Drivers of Multimedia Reactive Nitrogen Research **(Invited):** S L Shaw, E Knipping, N Kumar

1035h  **B42E-02** Mobilization and Metabolism of Deposited N in High Montane Forests of the Colorado Front Range, U.S. **E S Hinckley,** R T Barnes, M W Williams, S P Anderson

1050h  **B42E-03** Nitrogen Flux in Watersheds: The Role of Soil Distributions in Nitrogen Flux to the Coastal Ecosystems: W J Showers, W Gurley, J W O’Conner


1120h  **B42E-05** Global Seabird Ammonia Emissions: S N Riddick, T D Blackall, U Dragosits, F H Daunt, C F Braban, Y S Tang, P Trathan, S Wanless, M A Sutton

1135h  **B42E-06** Apportionment of reactive N emissions using stable isotopes: Demonstrating proof of concept across spatial scales **(Invited):** J Felix, E M Elliott

1150h  **B42E-07** Emission and deposition of Nitrogen compounds in West Africa: C Delon, C Galy-Lacaux, M Adon, C Liouesse

1205h  **B42E-08** Space based constraints on biogenic soil nitric oxide emissions: influence on global ozone and fertilization effect of anthropogenic N-deposition **(Invited):** R C Hudman, N E Moore, R V Martin, A R Russell, R C Cohen

---

**Cryosphere**

1020h  **C42A-01** Surface processes of the Greenland Ice Sheet under a warming climate: K Steffen, D McGrath, W Colgan

1035h  **C42A-02** Seasonal acceleration of the Greenland Ice Sheet in contrasting melt-seasons: A Sole, P W Nienow, I D Bartholomew, D Mair, T Cowton, M King, M Burke

1050h  **C42A-03** Integrating Borehole Measurements with Modeling of Englacial and Basal Conditions, Western Greenland **(Invited):** J T Harper, N F Humphrey, J V Johnson, T W Meierbachtol, D J Brinkerhoff, C M Landowski

1105h  **C42A-04** The role of seasonal and short term melt variability in ice speedup **(Invited):** C Schoof

1120h  **C42A-05** Modelling meltwater delivery to the ice-bed interface through full thickness fractures on outlier glaciers of the western Greenland Ice Sheet: C Clason, D Mair, P W Nienow

1135h  **C42A-06** Observational and modeling constraints of changes along the margin of the Greenland ice sheet **(Invited):** M Helsen, R Van de Wal, P M Nick
Earth and Planetary Surface Processes


**Presiding:** C S Riebe, University of Wyoming; H L Buss, U.S. Geological Survey

1020h EP42A-01 The Earth on the Other Side of Life (Invited): R Amundson, S A Ewing, J J Owen

1035h EP42A-02 Climate and landscape controls on chemical weathering - regional to pedon-scale analysis (Invited): C Rasmussen, R Lybrand, A B Jardine, I Heidbuechel, P A Troch, J Chorover

1050h EP42A-03 Coevolution of topography, hydrology, soil development, and vegetation in sky islands of the southwestern United States: J D Pelletier, C Rasmussen, D D Breshears, P D Brooks, J Chorover, T E Huxman, K A Lohse, T Meixner, J C McIntosh, S A Kure, M G Schiap, T Swetnam, P A Troch, Title of Team: University of Arizona CZO


1135h EP42A-06 Determination of Nutrient Laden Preferential Flow Contributing to Hot Spots/Moments in the Soil on a Small Scale: C Woodward, D W Johnson

1150h EP42A-07 Soil production is faster on south-facing slopes in the Susquehanna/Shale Hills Critical Zone Observatory due to periglacial, vegetative, and climate factors (Invited): L Jin, D Eissenstat, H Lin, F J Chabaux, L Ma, S L Brantley


Global Environmental Change

**GC42A Moscone West: 2020 Thursday 1020h Advances in Downscaling Methods and Models I (joint with A, B, IN, H, NH, PA)**

**Presiding:** B Thrasher, Climate Central; E P Maurer, Santa Clara University; T Das, Scripps Institution of Oceanography, University of California, San Diego; D W Werth, Savannah River National Laboratory

1020h GC42A-01 Statistical downscaling for data sparse regions (Invited): R Wilby

1040h GC42A-02 Simulations of Extreme Events Using WRF Driven by Two GCMs (Invited): L Leung, J Correia, Y Qian

1100h GC42A-03 Precipitation downscaling for hydrological applications using regional climate model outputs (Invited): A Bardossy, G G Pegram

1120h GC42A-04 Statistical Downscaling for Hydroclimate Applications (Invited): E P Salathe

1140h GC42A-05 Regional climate model ensemble techniques: Towards higher spatial resolution probabilistic climate scenarios. (Invited): M A Snyder, T A O'Brien

1200h GC42A-06 The Coordinated Regional Downscaling Experiment (CORDEX): A Framework for Mitigation and Adaptation Information (Invited): W J Gutowski, Title of Team: WCRP Task Force on Regional Climate Downscaling

Geodesy

**GC42B Moscone West: 2022 Thursday 1020h Bringing Together Environmental, Socioeconomic, and Climatic Change Studies in Northern Eurasia III (joint with A, C, NH, H, B, PA)**

**Presiding:** V E Romanovsky, University of Alaska Fairbanks; D Yang, Univ Alaska Fairbanks

1020h GC42B-01 BALTEX – A science broker for the Baltic Sea Region: M Reckermann, H von Storch, J Langner, A T Omstedt

1035h GC42B-02 Climate change and response of geosystems of the Russian North (Invited): D S Drozdov, Y V Korostelev, G V Malkova, V P Melnikov, P T Orekhov, N G Ukraintseva

1050h GC42B-03 Snow Cover and Hydrology Changes over Large Siberian Watersheds (Invited): D Yang, A I Shiklomanov, S Berezovskaya

1105h GC42B-04 Contemporary Variability and Projected Changes in the North Eurasian Water Cycle: A I Shiklomanov, R B Lammers, I A Shiklomanov, A A Proussevitch
**GP42A** Moscone West: 2003 Thursday 1020h

**Unanswered Climates of Earth I (joint with A, B, H, NG, PP)**

- **Presiding:** M Huber, Purdue University; S C Sherwood, University of New South Wales

1020h **GP42C-01** The Jormungand Global Climate State and Implications for the Neoproterozoic Snowball Paradox (Invited): D S Abbot, A Voigt, D Koll, R T Pierrehumbert

1035h **GP42C-02** How do we solve the Faint Young Sun Paradox? Examining diverse proposed atmospheres for Early Earth: C Goldblatt

1050h **GP42C-03** Multiple climate and sea ice states on a coupled Aquaplanet: B Rose, D Ferreira, J Marshall

1105h **GP42C-04** Paleoclimate Data-Model Comparisons for Early Paleogene New Zealand: C J Hollis, K W Taylor, L Handley, R D Pancost, J Creech, J Baker, S Schouten, E Kennedy, E M Crouch, M Huber, Dackerley

1120h **GP42C-05** Eocene precipitation: How wet were greenhouse climates? (Invited): D R Greenwood, R Y Smith

1135h **GP42C-06** If the Eocene was hot, what does this tell us about the future?: M Huber

1150h **GP42C-07** A spontaneous transition to superrotation in warm climates (Invited): R Caballero, M Huber

1205h **GP42C-08** Limitation of Outgoing Longwave Radiation in a Grey Plane-Parallel Atmosphere and the Consequences for a Runaway Greenhouse: M Popp, H Schmidt, J Marotzke

**Geomagnetism and Paleomagnetism**

**GP42A** Moscone West: 2003 Thursday 1020h

**Planetary and Meteorite Paleomagnetism and Rock Magnetism I (joint with P)**

- **Presiding:** J Gattacceca, CEREGE (CNRS); B P Weiss, Massachusetts Institute of Technology

1020h **GP42A-01** Dynamo generation in asteroids and planetesimals (Invited): S Stanley, R Vilim, B P Weiss, L T Elkins-Tanton

1035h **GP42A-02** A new and improved description of the Martian magnetic crustal field using both MGS-MAG and MGS-ER measurements: B Langlais, M E Purucker, R J Lilis

1050h **GP42A-03** Near Surface Magnetic Field Mapping over the Swirls in the SPA Region on the Moon Using Kaguya LMAG Low Altitude Data: H Shibuya, H Tsunakawa, F Takahashi, H Shimizu, M Matsushima

1105h **GP42A-04** Lunar Paleomagnetism: The Case for an Ancient Lunar Dynamo. (Invited): M Fuller, B P Weiss, J Gattacceca

1120h **GP42A-05** Recent Lunar Magnetism: J Buz, B P Weiss, I Garrick-Bethell

1135h **GP42A-06** Magnetic study of meteorites recovered in the Atacama desert (Chile): implications for meteorite paleomagnetism and the stability of hot desert surfaces (Invited): M Uchara, J Gattacceca, M Valenzuela, F Demory, P Rochette

1150h **GP42A-07** Low Temperature Magnetic Transition in Meteoritic Troilites – Simple Mmarker for Highly Stoichiometric Iron(II) Sulphide Systems?: T Kohout, J Cuda, J Tucek, R Zboril, J Haloda, J Filip

1205h **GP42A-08** A pressure-induced, magnetic transition in pyrrhotite: Implications for the formation of pressure meteorites and diamonds: S A Gilder, R Egli, R Hochleitner, S C Roud, M Volk, M Le Goff, M De Wit

**Hydrology**

**H42A** Moscone West: 3018 Thursday 1020h

**Coastal Hydrogeology: Physical, Chemical, and Biological Characterization of Variable-Density Systems I (joint with A, B, EP, GC, NH, OS)**

- **Presiding:** J N King, U.S. Geological Survey; E D Swain, U.S. Geological Survey; E Abarca, MIT; J Luo, Georgia Institute of Technology; M Dentz, Institute of Environmental Assessment and Water Research (IDAEA-CSIC)

1020h **H42A-01** Control of Submarine Groundwater Flow and Chemistry by Onshore and Offshore Buried Peat Along a Developed Long Island Shoreline: J F Bratton, K D Kroeger, J Crusius, C Schubert, R Paulsen, A C Green, J Wanlass, S Baldwin, J Abbene, C Young

1035h **H42A-02** Flux and attenuation of nitorgen, fecal indicator bacteria and virus at a coastal septic system in California (Invited): N R de Sieyes, T L Russell, C McClain, N P Crook, A B Boehm

1050h **H42A-03** Integrating turbulent flow, biogeochemical, and poromechanical processes in rippled coastal sediment (Invited): M B Cardenas, P L Cook, H Jiang, P Traykovski

1105h **H42A-04** Salinization may attack you from behind: upcomming and related long-term downstream salinization in the Amsterdam Water Supply Dunes (Invited): T Olsthoorn

1120h **H42A-05** A correction to Ghyben-Herzberg approximation of the freshwater-saltwater interface in coastal aquifers. (Invited): J Carrera, M Pool Ramirez

1135h **H42A-06** Challenges in Projecting Sea Level Rise impacts on the Coastal Environment of South Florida (Invited): J Obeysekera, J Park, M M Irizarry-Ortiz, J A Barnes, P Trimble, W Said

1150h **H42A-08** WITHDRAWN

**H42B** Moscone West: 3014 Thursday 1020h


- **Presiding:** P Carbonneau, Durham University; M A Fonstad, Texas State University; T M Pavelsky, University of North Carolina-Chapel Hill; C J Legleiter, University of Wyoming

1020h **H42B-01** Multi-scale classification of riverine floodplain physical habitats for estimating potential salmon production: D White, J S Kimball, T Bansak, D DeWiere, M S Lorang, B Ellis, J Stanford

1035h **H42B-02** Detection of salmonid thermal refugia from airborne thermal infrared (TIR) imagery: S J Dugdale, N Bergeron, B Ellis, M Rousseau

1050h **H42B-03** Processing and evaluation of riverine waveforms acquired by an experimental bathymetric LiDAR: P J Kinzel, C J Legleiter, J M Nelson
1105h H42B-04 Modeling of Block-Scale Effective Macrodispersion Tensors as Space Random Functions: F de Barros, Y Rubin
1105h H42B-02 Probabilistic Risk Assessment in Subsurface Modeling (Invited): D M Tartakovsky
1105h H42B-03 Assessment of Parametric Uncertainty using Markov Chain Monte Carlo Methods for Surface Complexation Models in Groundwater Reactive Transport Modeling: G L Miller, D Lu, M Ye, G P Curtis, B S Mendes, D Draper
1120h H42D-05 Uncertainty in Model parameter Estimates and Impacts on Risk and Decision Making in the Subsurface: R Enzenhöfer, R Helmig, W Nowak, P J Binning
1135h H42D-06 Context-Specific Measures of Uncertainty in Groundwater Remediation: X Liu, J Lee, P Kitanidis, J Parker, U Kim
1150h H42D-07 Probabilistic Risk Analysis and Fault Trees as Tools in Improving the Delineation of Wellhead Protection Areas: An Initial Discussion: C M Rodak, S E Silliman
1205h H42D-08 Effects of Multidimensional Description of the Spatial Structure of Hydraulic Conductivity on Solute Transport: C P Haslauer, M Rau, A Bárdossy, E A Sudicky

Earth and Space Science Informatics

IN42A Moscone South: 302 Thursday 1020h Future Directions for Earth Science Data Access Technologies I (joint with A, B, C, GC, OS)


1135h IN42A-02 A Distributed, Cross-Agency Software Architecture for Sharing Climate Models and Observational Data Sets (Invited): D J Crichton, C A Mattmann, A J Braverman, L Cinquini
1150h IN42A-03 NOAA ENTERPRISE ARCHIVE ACCESS TOOL: R H Rank, S McCormick, C Cremidis
1150h IN42A-04 Data Access Services that Make Remote Sensing Data Easier to Use (Invited): C Lynnes
1215h IN42A-05 Geo-enabling Science through Web Services (Invited): C E White
1135h IN42A-06 Data Collection, Access and Presentation Technologies in the National Ecological Observatory (NEON) Design (Invited): S M Aulenbach, S J Berukoff
1150h IN42A-08 Development of a database of quick-look plots for the earth and space science data: A Saito, T Tsugawa, D Yoshida, Y Akiya

Nonlinear Geophysics

NG42A Moscone South: 308 Thursday 1020h Complex Networks in Geosciences I (joint with A, H, NH, S, SM, V)

Presiding: J Davidsen, University of Calgary; I Zaliapin, University of Nevada

1020h NG42A-01 Boolean delay equations on networks: An application to economic damage propagation: B Coluzzi, M Ghil, S Hallegatte, G Weisbuch
1035h NG42A-02 The Magnetosphere as a Multiscale Complex Network: A S Sharma, S J Waecher

394 2010 Fall Meeting

All information is current as of November 12, 2010
1050h  NG42A-03 Is there a Climate Network – A Backbone of the Climate System? (Invited): J Kurths

1105h  NG42A-04 Randomness and Self-similarity in the Topology of River Networks and its Implications for predicting scaling in floods (Invited): V K Gupta, R Mantilla, B M Troutman

NG42B  Moscone South: 308

1120h  Pattern Formation in Earth System Sciences I (joint with B, EP, H)

Presiding: A D’Alpaos, University of Padova; M Marani, University of Padova

1120h  NG42B-01 Shallow Seabed ‘Sortodynamics’: Bedforms Driven by a Sediment-Sorting Instability—Robust Emergent Properties, and Depositional Patterns (Invited): A B Murray, E Goldstein, G Coco, M Green

1135h  NG42B-02 Defect dynamics in wave ripples (Invited): T Perron, P Myrow, J B Southard, K L Huppert, M Szulczewski

1150h  NG42B-03 Diatom-sedimentation feedback generates a self-organized geomorphic landscape on intertidal mudflats (Invited): J Van de Koppel, E Weerman, P Herman

1205h  NG42B-04 Crossover from fingering to fracturing in deformable disordered media: R Holtzman, R Juanes

Ocean Sciences

OS42A  Moscone West: 3007

1020h  Lessons Learned From the Deepwater Horizon Oil Spill: Physical Oceanography III (joint with B, NH, SH, PA)

Presiding: Y Liu, University of South Florida; A MacFadyen, NOAA

1020h  OS42A-01 Oil Spill Risk Analysis Model and Its Application to Deepwater Horizon Oil Spill (Invited): Z Ji, W R Johnson, Z Li

1035h  OS42A-02 A Statistical Model of the Deepwater Horizon Oil Spill (Invited): C H Barker

1050h  OS42A-03 Tactical modeling of oil transport and fate in support of the Deepwater Horizon Spill Response: A MacFadyen, D Payton, G Watabayashi, C H Barker, C Beegle-Krause

1105h  OS42A-04 Hindcasting of the Gulf of Mexico Circulation and Age and Distribution of the Oil Plume Arising from the Deepwater Horizon Spill: R He, W Zhang, K Hyun, K Chen, H Qian

1120h  OS42A-05 Modeling possible spreadings of a buoyant surface plume with lagrangian and eulerian approaches at different resolutions using flow syntheses from 1992-2007 - a Gulf of Mexico study: R Tulloch, C N Hill, O Jahn

1135h  OS42A-06 DWH MC 252: Subsurface Oil Transport: C J Beegle-Krause, T Boyer, D Murray

1150h  OS42A-07 Simulating the three dimensional dispersal of aging oil with a Lagrangian approach: E W North, Z Schlag, E Adams, R He, K Hyun, C R Sherwood, R P Signell, S D Peckham

1205h  OS42A-08 On the possible long-term fate of oil released in the Deepwater Horizon incident, estimated by ensembles of dye release simulations: M E Maltrud, M Visbeck, S Peacock

OS42B  Moscone West: 3009

1020h  Tsunami and Storm Deposits Onshore and Offshore: Processes and Products II (joint with NH)

Presiding: H Bahlburg, Universitaet Muenster; R Weiss, Texas A&M University


1035h  OS42B-02 Muddy tempestites: Flume analogs vs. ancient and modern examples: J Schieber, J Southard

1050h  OS42B-03 Modeling of tsunamis and hurricanes as causes of the catastrophic overwash of Anegada, British Virgin Islands, between 1650 and 1800: Y Wei, U S Ten Brink, B F Arbauer

1105h  OS42B-04 Distinguishing between storm and tsunami in the geological record; progress, perturbations and potential: A D Switzer

1120h  OS42B-05 Tsunami Flow Speed Estimates Using Inverse Modeling Of Normally-Graded Sandy Deposits Formed During The 29 September 2009 Tsunami Near Satitoa, East Upolu, Samoa: B E Jaffe, M L Buckley, B M Richmond, L C Strotz, S Etienne, K Clark, G R Gelfenbaum

1135h  OS42B-06 The February 27, 2010 Chile Tsunami – Sedimentology of runup and backflow deposits at Isla Mocha: H Bahlburg, M Spiske

1150h  OS42B-07 Estimated velocities and inferred cause of overwash that emplaced inland fields of cobbles and boulders at Anegada, British Virgin Islands: M L Buckley, Y Wei, B E Jaffe, S G Watt

1205h  OS42B-08 A Microfossil-Based Approach to Estimate Hurricane Intensity: A D Hawkes, J P Donnelly, P Lane

Planetary Sciences

P42A  Moscone South: 306

1020h  Rethinking the Lunar Paradigm: New Observations and Implications II (joint with V)

Presiding: H Nekvasil, Stony Brook University; F M McCubbin, Institute of Meteoritics

1020h  P42A-01 Support of the lunar fossil figure by the elastic lithosphere: I Matsuyama

1035h  P42A-02 Impact melts on the Moon: How far will they go?: M S Robinson, P C Thomas, H Hiesinger, C van der Bogert, E Bowman-Cisneros, B Denevi, Title of Team: LROC Team

1050h  P42A-03 Crater shape and size-frequency distribution in determining the topographic power spectrum of a cratered surface: M A Rosenburg, O Aharonson, D E Smith, M T Zuber, X Zhang

1105h  P42A-04 The Neutral Lunar Exosphere as a Source for Pickup Ions: R M Killen, M Sarantos, J S Halekas, R E Hartle, D M Hurley, Title of Team: DREAM

P42B  Moscone South: 306

1120h  Mars and Mercury Geophysics I

Presiding: T N Harrison, Malin Space Science Systems; D Atri, University of Kansas

1120h  P42B-01 Modeling the terrestrial radiation dose on planetary surfaces: A constraint on the habitability of Earth-like terrestrial planets: D Atri, A L Melott

All information is current as of November 12, 2010
Public Affairs

PA42A Moscone West: 3010 Thursday 1020h
Geosciences, Risks, Economics, and Public Interest II (joint with A, GC, H, NH, OS, ED)

Presiding: L Rowan, J Trapani, Bipartisan Policy Center;
M L Zoback, RMS


1050h PA42A-03 Incorporating human-triggered earthquake risks into energy and water policies: C D Klose, L Seber, K H Jacob

1105h PA42A-04 Risk communication at the science-policy interface: Reflections on the effectiveness of the geosciences community in communicating with policymakers on disposition of nuclear waste (Invited): D Knopman

1120h PA42A-05 THE NAVY'S TASK FOR CLIMATE CHANGE: APPLYING SCIENCE TO ASSESS CLIMATE SECURITY RISK: T C Gallauder, D Titley

1135h PA42A-06 Devils Lake Climate, Weather, and Water Decision Support System: F M Horsfall, D R Kluck, M Brewer, M M Timofeyeva, J Symonds, S Dummer, M Frazier, M Shulski, A Akyuz

1150h PA42A-07 How would a more resilient Galveston Island look?: E Barraza, J C Gibeaut

1205h PA42A-08 Geologic hazards and Alaska's communities in a changing climate: G J Wolken

PA42B Moscone West: 3001 Thursday 1020h
Institutional Support for Science and Scientists in an Age of Public Scrutiny II (joint with GC, H, B, NH, ED)

Presiding: F Grifo, Union of Concerned Scientists; J M Gulledge, Pew Center on Global Climate Change; A H Teich, American Association for the Advancement of Science; K S White, AAAS

1020h Introduction

1025h PA42B-01 Communication as a Strategic Activity (Invited): B Fischhoff

1035h PA42B-02 Communicating Science: G J Holland, M S McCaffrey, J T Kiebl, C Schmidt

1045h PA42B-03 Scientific Publishing and the Data Deluge (Invited): B Hanson

1055h PA42B-04 Policy Issues in Accessibility and Interoperability of Scientific Data: Experiences from the Carbon Modeling Field: P Kishor, S D Peckham, S T Gower, S Batzli

Paleoceanography and Paleoclimatology

PP42A Moscone West: 2005 Thursday 1020h
Advances in the Use of Biomarkers II (joint with B, OS)

Presiding: N Dubois, Dalhousie University; S A Macko, Univ Virginia; M Kienast, Dalhousie University

1020h PP42A-01 Biomarkers as Paleoenvironmental Proxies: S C Brassell

1035h PP42A-02 The role of the Black Sea in the final desiccation of the Mediterranean during the Messinian Salinity Crisis: I Vasiliev, G Reichart, W Krijgsman

1050h PP42A-03 Links between climate and the transmission times of biomarker signals to aquatic sediments: Implications for interpretation of the sedimentary record (Invited): T I Eglinton

1105h PP42A-04 Branched GDGTs as palaeoclimate proxies in lakes: the good, the bad, and the ugly (Invited): J E Tierney, S Schouten, A Pitcher, E Hopmans, J S Sinninghe Damsté

1120h PP42A-05 Lipid biomarkers in ooids from different locations and ages provide evidence for a common bacterial flora (Invited): R E Summons, L R Bird, A L Gillespie, S B Pruss, A L Sessions

1135h PP42A-06 Western Arctic Sea Ice Algal Productivity during the Holocene: Estimation from Bulk and Compound Specific Stable Isotopes: S A Macko, D J Morris, R Harvey

SPA-Acronyms

SA42A Moscone South: 301 Thursday 1020h
Forecasting the Ionosphere and Thermosphere at Low Latitudes II

Presiding: Y Su, Air Force Research Laboratory; C Y Huang, AFRL

1020h SA42A-01 How well reflects IRI the electron density during the recent solar minimum? Comparison with CHAMP and GRACE (Invited): H Luhr, C Xiong

1035h SA42A-02 Low Latitude Ionospheric Dynamics: Specifications Using a Physics-Based Data Assimilation Model (Invited): L Scherliess, D C Thompson, R W Schunk

All information is current as of November 12, 2010
SPA-Solar and Heliospheric Physics

**SH42A Moscone South: 307 Thursday 1020h Comparing MHD Models to Observations in the Sun: From the Interior to the Heliosphere II**

**Presiding:** R A Frazier, University of Michigan; I N Kitiashvili, Stanford University; N N Mansour, NASA Ames Research Center; M Opher, Physics and Astronomy

1020h **SH42A-01** Solar Dynamo: Comparing Models with Observations. (Invited): A A Pevtsov

1035h **SH42A-02** Formation of Solar Active Regions (Invited): M Rempel

1050h **SH42A-03** The Rise of Active Region Flux Tubes in the Turbulent Solar Convective Envelope: M A Weber, Y Fan, M Miesch

1100h **SH42A-04** Optimal Pre-Initial Conditions for Data-Driven MHD Simulations of Solar Active Regions: Q Hu, A Wang, S Wu, G A Gary

1125h **SH42A-05** Multispacecraft Validation of a Global Two-Temperature Corona and Inner Heliosphere Model (Invited): B van der Holst, M Jin, W B Manchester, R A Frazier, A M Vasquez, P L Lamy, A Llebaria, T I Gombosi

1125h **SH42A-06** Using MHD modeling to specify inner heliosphere conditions during the three MESSENGER Mercury flybys: N L Farr, D Baker, D Odstrcil, B J Anderson, M Benna, G Gloeckler, H Korth, L R Mayer, J M Raines, D Schriver, J A Slavin, S C Solomon, P L Travnicek, T Zurbuchen

1135h **SH42A-07** Coronal Heating by Surface Alfvén Wave Damping: Implementation in MHD Modeling and Connection to Observations: R M Evans, M Opher, R Oran, B van der Holst, I Sokolov, R A Frazier, T I Gombosi

1145h **SH42A-08** Testing Coronal and Solar Wind MHD Models with UV Spectroscopic and Visible Light Coronagraph Data: L Strachan, A Pánaszyk, J L Kohl, L Woolsey, P L Lamy

1155h **SH42A-09** Comparing an MHD Model of the Corona During the July 11, 2010 Total Solar Eclipse with Observations (Invited): Z Mikic, J A Linker, R Lionello, P Riley, V S Titov

1205h **SH42A-10** An MHD Model of the Major Solar Flare on 2006 December 13: K Kusano, S Inoue, D Shiota, T T Yamamoto

SPA-Magnetospheric Physics

**SM42A Moscone South: 305 Thursday 1020h Turbulent Magnetic Reconnection in Space, Laboratory, and Astrophysical Systems II (joint with SH)**

**Presiding:** G Lapenta, KU Leuven; T Intrator, Los Alamos Natl Laboratory; A Lazarian, University of Wisconsin

1020h **SM42A-01** Three-Dimensional Magnetic Field Line Reconnection involving Magnetic Flux Ropes (Invited): W N Gekelman, B Van Compernolle, E Lawrence, S T Vincenca

1050h **SM42A-02** Statistics of magnetic reconnection in two-dimensional magnetohydrodynamic turbulence: S Servidio, W H Matthaeus, P Dmitruk, M A Shay, P Cassak, M Wan

1105h **SM42A-03** Conceptual Explorations of A Next Generation Experiment to Study Magnetic Reconnection in Large Sized Plasmas at High Lundquist Numbers for Space and Astrophysical Relevances: H Ji, M Yamada, S Prager, W S Daughton, V Roytershteyn

1120h **SM42A-04** Experimental Investigation of the Trigger Problem in Magnetic Reconnection: N K Katz, J Egedal, W Fox, A Le, A Vrublevskis, J Bonde, Title of Team: The Versatile Toroidal Facility

1135h **SM42A-05** A Simple Model of Fast Magnetic Reconnection: W B Lyatsky, M L Goldstein
Study of Earth’s Deep Interior

DI42A Moscone West: 3022 Thursday 1020h Observations and Dynamics of Subducted Slabs III (joint with S, T, MR)

Presiding: D R Stegman, UC San Diego; E M Syracuse, University of Wisconsin-Madison

1020h DI42A-01 Seismic constraints on water flux into the deep Earth through subduction: B Savage

1035h DI42A-02 Intermediate-Depth Earthquakes in South America: L M Warren

1050h DI42A-03 Structure of the deep Nazca slab from joint inversion of regional S wave trains and teleseismic S arrival times: S M Lloyd, C van der Lee, M Assumpcao, M P Rocha, J C VanDecar

1105h DI42A-04 Subduction in Central and Southern Mexico (invited): R W Clayton

1120h DI42A-05 AZIMUTHAL ANISOTROPY IN MEXICO FROM RAYLEIGH WAVE PHASE VELOCITY MAPS AND SHEAR-WAVE SPLITTING: I Stubailo, C Beghein, P M Davis

1135h DI42A-06 Flat-Slab Dynamics: Deformation in the Central Andean Subducting Slab: M L Anderson, L Linkimer, K Olsen, S L Beck, P M Alvarado, H J Gilbert

1150h DI42A-07 Seismic Evidence for the Influence of Subduction and Slab Fragmentation on Flood Volcanism in the Central Andes: M J Fouch, R W Carlson, J B Roth

1205h DI42A-08 Upper Mantle Flow Beneath Pacific Plate Lithosphere Subducted along the Aleutian Islands: R M Russo

Mineral and Rock Physics

MR42A Moscone West: 3024 Thursday 1020h Computational Advances and Applications in Mineral Physics I

Presiding: B B Karki, Louisiana State University; L P Stixrude, University College London; B Winkler

1020h MR42A-01 Beyond Band Theory for Minerals at High Pressures (invited): R E Cohen

1035h MR42A-02 Unambiguously identifying spin states of transition-metal ions in the Earth (invited): H Hsu

1050h MR42A-03 Structural and vibrational properties of transition-metal oxides from first-principles calculations: M Cococci, A Floris, B Himmetoglu

1105h MR42A-04 Theoretical prediction of new mineral phases in Earth’s mantle and core (invited): A R Oganov

1120h MR42A-05 The pressure impact on the structure, the electron density distribution of $\text{CaSi}_2\text{O}_5\text{;} \ Y \ G \ Yu$, N Ross, G V Gibbs


1150h MR42A-07 Calculating Diffusivities and Viscosity of Silicate Melts from First Principles Molecular Dynamics: B B Karki, D B Ghosh, L P Stixrude

1205h MR42A-08 Synergies and conflicts between experiment and theory in high-pressure mineral physics (invited): T S Duffy, A Kubo, R Smith

Seismology

S42A Moscone West: 2007 Thursday 1020h Advances in Inverse Problems and Seismic Tomography III (joint with T, DI, NS, NG)

Presiding: J V Morgan, Imperial College London; A J Calvert, Simon Fraser University


1035h S42A-02 Three-dimensional full-wavefield seismic tomography on field data (invited): M Warner, A Umpleby, I Stekl, L Guasch

1050h S42A-03 3D Elastic Wavefield Tomography: L Guasch, M Warner, I Stekl, A Umpleby, N Shah

1105h S42A-04 Estimation of the Anelastic Parameters of Subsurface Structures From Their Seismic AVF and AVA Signatures: K A Innanen

1120h S42A-05 High-Fidelity Imaging with illumination Compensation in 3-Dimensional Angle-Domain: R Wu, J Mao

1135h S42A-06 Application of full waveform tomography to active-source surface-seismic data – Two case studies: F Bleibinhaus

1150h S42A-07 Frequency Domain Full-Waveform Inversion in Imaging Thrust Related Features: P Jaiswal, C A Zelt

1205h S42A-08 Seismic structure of the Vancouver Island continental shelf using tomographic & waveform inversion of multichannel seismic refraction data: S Yelisetti, H Spence

S42B Moscone West: 2009 Thursday 1020h Developments in Statistical Seismology: Research and Education II (joint with ED, T)

Presiding: A J Michael, USGS; M J Werner, Princeton University; J Woessner, ETH Zurich

1020h S42B-01 High frequencies are a critical component of aftershock triggering at <100-150 km (invited): K R Felzer

1035h S42B-02 Distribution of Earthquake Cluster Sizes in the Western United States and in Japan: G Anderson, K Nanjo

1050h S42B-03 Factors Controlling Aftershock Activity after M 5+ Earthquakes in California: J Ebel, J Martin

1105h S42B-04 Short-term earthquake forecasting using early aftershock statistics: P Shebalin, C Narteau, M Holschneider, D Scholemmer

1120h S42B-05 Bayesian analysis of aftershock decay rates: M Holschneider, C Narteau, P Shebalin, D Scholemmer

1135h S42B-06 Uncertainties of Parameter Estimates in Earthquake Clustering Models: Q Wang, D D Jackson, R Schoenberg, J Zhuang

1150h S42B-07 Aftershock modeling based on Coulomb stress triggering and ground shaking (invited): S Hainzl, C Bach, G B Brietzke, G Zoeller

1205h S42B-08 Long-time Persistence of Changes in Seismicity Style Induced by Stress Changes of Great Earthquakes: R Dmowska, Z zarifi
Tectonophysics


Presiding: K Clark, GNS Science; R J Weldon, University of Oregon; K R Berryman, GNS Science

1020h T42A-01 The Fault Slip Record from Corals Above the Sumatra Trench Subduction Zone and Implications for Fault Rupture Processes (Invited); B Philibosian, A J Metzner, K E Sieh, D H Naravidjaya, H Chiang, C Shen, B W Suwargadi, M Daryono, D Prayudi, I Suprihanto, J Aouac

1035h T42A-02 Long Paleoseismic Records at Plate Boundaries: Clustering, Segmentation, Supercycles and More (Invited); C Goldfinger

1050h T42A-03 A New Correlation of Large Earthquakes Along the Southern San Andreas Fault: K M Scharer, R J Weldon, P Biasi

1105h T42A-04 Recurrence Time Variability vs. Slip Invariability Documented from a Long Paleoeaearthquake Record along the Wellington Fault, Upper Hutt, New Zealand: R Van Dissen, R M Langridge, T Little, D Ninis

1120h T42A-05 HOLOCENE PALEOEARTHQUAKE CLUSTERING ALONG A SIERRAS PAMPEANAS (ARGENTINA) BOUNDING FAULT?: C H Costa, W Ricci, L A Owen, W J Johnson, A Halperin, E A Ahumada

1135h T42A-06 Summary of the Paleoseismic Data from the Carrizo Plain, California: when the Past Contradicts the Present: S O Akciz, L Grant Ludwig, R Arrowsmith, O Zielke

1150h T42A-07 Flexible slip near the largest step-over along the North Anatolian fault system, Turkey: H Kondo, A Kurcer, S Özlalp, O Emre

1205h T42A-08 The Bogd and Bulnay Faults of Mongolia: Slip Rate and Earthquake Recurrence Along Two Intracontinental Strike-Slip Faults (Invited); C S Prentice, M Rizza, J R Ritz

T42B  Moscone West: 2018 Thursday 1020h Lithospheric Structure and Cenozoic Tectonics in East Asia: From Tibetan Plateau to the Marginal Seas I (joint with G, S)

Presiding: Y J Chen, Peking University; J Xu, Department of Petroleum Geology

1020h T42B-01 From mountain building in the Tibetan Plateau to crustal extension in North China: The role of sublithospheric mantle flow: M Liu, E A Sandvol, Y Yang, S Ceylan, J Y Chen, L Wang, Q Wang, D Cui

1035h T42B-02 Two Dynamic Systems: The Indian/Eurasia Intracontinental Convergent and the West Pacific Subduction Systems Controlled the Evolution of the Tibetan Plateau and the Development of Basins within Eastern Asia and Adjacent Offshore During Cenozoic Time: B C Burchfiel, R D van der Hilst, L Royden

1050h T42B-03 Tectonic Evolution of Tibet: Space-time Patterns, Lithospheric Structures and Formation Mechanisms of the Plateau (Invited): A Yin

1105h T42B-04 Seismic Velocity and Anisotropy Structure of the Northeastern Edge of the Tibetan Plateau (Invited): E A Sandvol, Y J Chen, J F Ni, M Liu

1120h T42B-05 Tectonic affiliation of the North China Block with supercontinents since 1.8 Ga (Invited): S Zhang

1135h T42B-06 Marginal Basins of the Western Pacific: An Overview (Invited): S D Lewis

1150h T42B-07 Correlation between development of the marginal basin system of the NW Pacific and uplift of the Tibet Plateau: J Xu, T K Kelty, Z Ben-Avraham

1205h T42B-08 SinoProbe – A Multidisciplinary Research Program of Earth Sciences in China (Invited): S Dong, T Li

T42C  Moscone West: 2011 Thursday 1020h Understanding Continental Evolution From Innovative Analysis of EarthScope Data II (joint with G, S)

Presiding: B A van der Pluijm, Univ of Michigan; B Tikoff, University of Wisconsin; G R Keller, University of Oklahoma

1020h T42C-01 Present-Day Crustal Deformation in the Intermountain West Measured by GPS (Invited): C W Kreemer, G Blewitt, R A Bennett

1035h T42C-02 Melts at the Lithosphere-Asthenosphere Boundary beneath the Basin and Range, US (Invited): T Plank, E Gazel, C Bendersky, D W Forsyth, C J Rau, C Lee

1050h T42C-03 GPS and InSAR Observations of Active Mountain Growth Across the Sierra Nevada/Great Basin Transition: W C Hammond, G Blewitt, Z Li, C W Kreemer, H Plag

1105h T42C-04 U-Pb thermochronology of the lower crust: producing a long-term record of craton thermal evolution: T Blackburn, S A Bowring, K H Mahan, T Perron, B Schoene, F O Dudas

1120h T42C-05 Perspectives on Precambrian basement architecture in the northern US Rocky Mountains from inherited zircons in the Idaho batholith: R M Gaschnig, J D Vervoort, R Lewis, B Tikoff

1135h T42C-06 Montana: Filling A Gap In The GeoSwath: B Jensen, G R Keller


1205h T42C-08 Genesis of Basement-Cored Foreland Arches: Insights from the EarthScope Bighorn Project: K C Miller, E Erslev, A F Sheehan, M L Anderson, C S Siddoway, S H Harder, L L Worthington, W L Yeck, V Schulte-Pelkum, K Aydinian

Thursday P.M.

U43A  Moscone South: Poster Hall Thursday 1340h Frontiers in Scientific Ocean Drilling: Recent Discoveries and Future Opportunities II Posters

Presiding: R von Huene, UC Davis; E A Solomon, University of Washington

1340h U43A-0001 POSTER Fluid and chemical fluxes along a buried-basement ridge in the eastern Juan de Fuca Ridge flank: S Hulme, C G Wheat

1340h U43A-0002 POSTERIODP Packer Experiments in Young Juan de Fuca Crust Suggest Lateral Continuity of Hydrological Structure on Ridge-parallel Scale of ~1 km: K Becker, A Fisher, T Tsuji, S Mrozewski, D Winslow, Title of Team: Expedition 327 Scientists
**U43A-0003 POSTER** Window into Sediment-Buried Basement Biosphere: Fluid Sampling from CORK Observatory Seafloor Platforms, Juan de Fuca Ridge Flanks: J P Cowen, H Lin, M Rappe, S Jungbluth, B T Glazer, M Matzinger, J P Amend, J Boetger

1340h **U43A-0004 POSTER** Organic chemistry of fluids from sediment-buried young basement: discrete sampling from ODP borehole 1301A & 1025C: H Lin, J P Cowen, J P Amend, D B Albert, B T Glazer, M Rappe, S Jungbluth, M Matzinger

1340h **U43A-0005 POSTER** An integrated optical/acoustic communication system for seafloor observatories: A field test of high data rate communications at CORK 857D: M Tivey, N Farr, J Ware, C Pontbriand

1340h **U43A-0006 POSTER** Highlights of Recent CORK Hydrologic Borehole Observatory Results: Applications to Oceanography, Seismology, and Geodynamics: E E Davis, M L Heesemann

1340h **U43A-0007 POSTER** Long-Term Hydrogeochemical Records from Ocean Drilling Program Borehole Observatories in the Costa Rica Subduction Zone: M Kastner, E A Solomon, C G Wheat, H W Jannasch


1340h **U43A-0009 POSTER** Quantification of subsurface pore pressure through IODP drilling: D M Saffer, P B Flemings

1340h **U43A-0010 WITHDRAWN**

1340h **U43A-0011 POSTER** Comparing slip behavior and hydromechanical properties of fault systems in the Nankai subduction zone: M Ikari, D M Saffer, C Marone, M W Knuth

1340h **U43A-0012 POSTER** Application of an iterative analytical model for determining formation permeability from temperature data in subseafoor boreholes: D M Winslow, A T Fisher, K Becker

1340h **U43A-0013 POSTER** A Snapshot of Climate Variability at Tahiti 9.5 ka using a Fossil Coral from IODP Expedition 310: K L Delong, T M Quinn, C Shen, K Lin

1340h **U43A-0014 POSTER** Tuffaceous sandstones at Site C0011B, Nankai Trough: Sources and emplacement processes: S Kutterolf, R P Scudder, A Freundt, S Labanieh, H Naruse, K T Pickering, M Underwood, H Wu, S Saito, Y Kubo, Title of Team: IODP Expedition 322 Scientists

1340h **U43A-0015 POSTER** Pliocene to Quaternary Central American tephrostratigraphy based on marine Tephas from ODP and DSDP sites – first comprehensive study: K Strehlow, S Kutterolf, A Freundt, T Kwasnitschka

1340h **U43A-0016 POSTER** Very Rapid Reversals Recorded By Middle Jurassic Ocean Crust: M B Steiner

1340h **U43A-0017 POSTER** Toward a Theory of Geomagnetic Change: An Opportunity Through Ocean Drilling: J S Stoner, G St-Onge, C Xuan

1340h **U43A-0018 POSTER** The MoHole: A Crustal Journey and Mantle Quest: B Ildefonse, N Abe, Y Isozaki, D K Blackman, J Canales, S Kodaira, G Myers, K Nakamura, M R Nedimovic, N Seama, D A Teagle, S Umino, D S Wilson, M Yamo

1340h **U43A-0019 POSTER** Drilling at the northern Hikurangi subduction margin, New Zealand: The key to unlock the secrets of slow slip events: D H Barker, L M Wallace, R E Bell, S A Henrys, Title of Team: Hikurangi Margin Working Group

1340h **U43B Moscone South: 104 Thursday 1340h Dynamic Earth: Plates, Plumes, and Mantle Convection I**

**Presiding:** M A Richards, University of California, Berkeley; W F McDonough, University of Maryland

1340h **U43B-01 POSTER** The emergence of whole mantle convection as a guiding paradigm in earth science: M Gurnis, L Alisic

1355h **U43B-02 POSTER** Constraints on the Nature and Scale of Mantle Convection From Global Seismic Tomography and Transition Zone Imaging: (Invited): R D van der Hilst

1400h **U43B-03 POSTER** Upper Mantle Structure and Properties from Combined Seismological and Experimental Models (Invited): U Faul, I Jackson, C A Dalton

1425h **U43B-04** Continents, Super-Continents, Mantle Thermal Mixing, and Mantle Thermal Isolation: A Lenardic, M Jellinek, C O’Neill, Z M Cooper, L Moresi, C Lee

1440h **U43B-05 POSTER** Insights into Earth’s Accretion and Mantle Structure from Neon and Xenon in Icelandic Basalt (Invited): S Mukhopadhyay

1455h **U43B-06 POSTER** Deep Water Cycle: its Role in Earth’s Thermal Evolution and Plate Tectonics: T W Becker, J W Crowley, M Géraud, T Höink, A Schaeffer, P H Barry, J Frost, J Giraud, M Nunez-Valdez, M Hirschmann, S Hier-Majumder, R J O’Connell

1510h **U43B-07** Models of Thermal Evolution of the Earth with Layered Viscosity and Plates: R J O’Connell, J W Crowley

1525h **U43B-08 POSTER** Noble Gases in a Heterogeneous, Dynamic Mantle: G F Davies

**Atmospheric Sciences**

**A43A Moscone South: Poster Hall Thursday 1340h Atmospheric Sciences General Contributions: Numerical Methods II Posters**

**Presiding:** S Madronich, NCAR; S J Solomon, Environment Canada

1340h **A43A-0190 POSTER** A General Three-Dimensional Transformed Eulerian Mean Formulation and Application: A Noda, Y Kawatani


1340h **A43A-0192 WITHDRAWN**

1340h **A43A-0193 POSTER** Fuzzy-Probabilistic Risk Analysis of Weather Impact on Duration of Highway Construction: I Abrisohlami, M Khazandi, S Afandizadeh

1340h **A43A-0194 POSTER** A control-volume model of the compressible Euler equations with vertical Lagrangian Coordinate: X Chen, B Van Leer, N G Andronova, S Lin, J Penner

1340h **A43B Moscone South: Poster Hall Thursday 1340h Climate Processes and Other Research Applications Enabled by Satellite Sounders, Imagers, and Profilers I Posters (joint with H)**

**Presiding:** B H Kahn, Jet Propulsion Laboratory; B Tian, Jet Propulsion Lab
A43B-0197 POSTER Comparison of Measured and MODIS Albedo - Big Cypress National Preserve, Florida USA: D M Sumner, Q Wu, C S Pathak

A43B-0198 POSTER Properties of tropical convective regimes identified through cluster analysis of satellite observations: M A Rogers, G L Stephens

A43B-0199 POSTER Partitioning CloudSat Ice Water Content for Comparison with Upper-Tropospheric Ice in Global Atmospheric Models: W A Chen, C P Woods, J F Li, D E Waliser, J Chern, W Tao, J H Jiang, A M Tompkins

A43B-0200 POSTER Multi-Sensor Analysis of Cloud-Top Height in Sc - Cu Transition Regions: E Ludewig, A Horvath

A43B-0201 POSTER Tracking Water Vapor in the Winter High Arctic using the Microwave Humidity Sounder: T J Duck, G B Lesins, J R Drummond

A43B-0202 POSTER AIRS Water Vapor and Cloud Products Validate and Explain Recent Negative Global and Tropical OLR Trends Observed by CERES: J Susskind, G I Molnar, L F Iredell, Title of Team: Sounder Research Team


A43B-0205 POSTER Validating a semi analytical cloud optical thickness retrieval technique by studying the effect of scaled cloud optical thickness on surface UV radiation and photolysis frequencies for NO2, using Tropospheric Ultraviolet and Visible radiation model: P Pandey, K De Ridder, N van Lipzig

A43B-0206 POSTER Spectra Handling from AIRS and IRIS for Climate Change Research: Y Jiang, M Lau, H H Aumann, Y L Yung

A43B-0207 POSTER IASI Products Processing System at the NOAA/NESDIS: A K Sharma

A43B-0208 POSTER The Development of AMSU-A Fundamental CDR’s: W Yang, H Meng, R Ferraro


A43B-0210 POSTER The Information of PSC and PMC from GOES FTs: G Kadosaki, T Ichimaru, N Hisasawa, T Yamanouchi

A43B-0211 POSTER SABER OH Mesospheric Airglow Emissions: D J Baker, B Svedin, G Ware, Title of Team: SABER Science Team

A43B-0212 POSTER Lightning Impact on Tropospheric Ozone over the Tropical Southern Indian Ocean: L Zhang, Q Li, J Jin, N J Livesey

A43B-0213 POSTER Eight Year Climatology from observational (AIRS) and model (MERRA) data: T J Hearty, A K Savchenko, Y Won, M Theobald, B Vollmer, E Manning, P M Smith, D Ostrenga, G G Leptoukh

A43B-0214 POSTER Toward Global Soundings and Atmospheric Measurements for Climate and NWP Using GNSS Radio Occultation Systems: S A Mango, D Ector, P Wilczynski, R A Fulton, D Whitely, L Cucurull, V Chu, W S Schreiner, C Rocken, R A Anthes, Y Kuo, K Cook

1340h A43B-0215 POSTER Observations of Changing Cloud Properties due to the Great Lakes: S A Ackerman, B C Maddux, R E Holz, S E Platnick, W Menzel

1340h A43B-0216 POSTER Results from the first inter-comparison study of overlapping data from the GERB 1 and GERB 2 instruments: R Bantges, J Russell, J E Harries

1340h A43B-0217 POSTER Combined SSM/I and MERIS Water Vapour Products from the ESA GloVapour project: R Lindstrot, M Stengel, M Schröder, N Schneider, R Preusker, J Fischer

1340h A43B-0218 POSTER Are Convective Storms Initiated from Surface Processes? - A View from Satellites: C Liu, J Li, S A Ackerman

1340h A43B-0219 POSTER Cloud Top Properties of AIRS V6: H T Dang, B H Kahn, M M Schreier, E Fetzer

1340h A43B-0220 POSTER Validation of AIRS Version 6 Retrievals: E Fetzer, F W Irion, H T Dang, K Yau

1340h A43B-0221 WITHDRAWN


1340h A43B-0223 POSTER Documenting the distribution of cloud layers within ISCCP cloud types using CloudSat and CALIPSO data: F J Wrenn

1340h A43B-0224 POSTER Exploring the Chemical Reach of the Madden-Julian Oscillation using the A-Train data: B Tian, K Li, D E Waliser, Y L Yung, E Fetzer, J Worden, M J Schwarz

1340h A43B-0225 POSTER Variability of AIRS Infrared Spectra in the Presence of Clouds Observed by MODIS: M M Schreier, B H Kahn, S L Nasiri, K Li, J Karlsson, Q Yue, S Ou

1340h A43B-0226 POSTER Blackbody Cavity Design and Absorptance Metrology for CLARREO On-board Calibrator Support: S Mekhontsev, L M Hanssen, E L Shirley

1340h A43B-0227 POSTER The Vertical and Horizontal Distribution of Clouds and Uncertainty from MODIS: B C Maddux, S A Ackerman, S E Platnick, W Menzel

1340h A43B-0228 POSTER Optical Property Characterization of Far IR Materials Critical for CLARREO Mission Support: L M Hanssen, B Wilthan, S Mekhontsev, C Monte, J Hollandt, P McKenna, M Szczesniak

1340h A43B-0229 POSTER Statistics of Cloud properties over four oceanic stratocumulus regions as a function of cloud fraction, cloud type and sea surface temperature: Large-scale signatures of turbulent cloud mixing: M de la Torre Juarez, J Teixeira, E Fetzer, A B Davis

1340h A43B-0230 POSTER Interpretation of multi-wavelength-retrieved cloud droplet effective radii in terms of cloud vertical inhomogeneity using a spectral-bin microphysics cloud model and the radiative transfer: T N Matsui, K Suzuki, T Y Nakajima

1340h A43B-0231 POSTER Comparing Information Content of Mid and Far Infrared Spectra for Clear-Sky Atmospheric Profile Retrievals: A J Merrelli, D Turner

1340h A43B-0232 POSTER Using MODIS data to detect the presence of ice crystals in and above super-cooled liquid water clouds over the Arctic: D Spangenberg, P Minnis, R Palikonda, F Chang, M Shupe

1340h A43B-0233 POSTER Comparing Water Vapor Estimates From AIRS and a Preliminary NVAP Reprocessed Data Set: T P Barnett, D W Pierce, E Fetzer

1340h A43B-0234 POSTER Impact of various features of CRTM in GEOS-5: E Liu, R Todling, R Gelaro
A43C  Moscone South: Poster Hall  Thursday  1340h
Marine Aerosols: Production Mechanisms, Chemical Composition, and Representation in Regional and Global Models II Posters (joint with B, OS)

Presiding: N Meskhidze, North Carolina State University; M D Petters, North Carolina State University; L M Russell, Scripps Institution of Oceanography

1340h  A43C-0235 POSTER Adaptive method of lines for multi-component aerosol condensational growth and cloud droplet activation: S Arabas, H Pawlowska

1340h  A43C-0236 POSTER Molecular Characterization of Marine Organic Aerosols Collected during a Round-the-World Cruise: P Fu, K Kawamura, K Miura

1340h  A43C-0237 POSTER Investigating aerosol loading in the remote marine environment using multi-platform observations and GEOCHEM: K Lapina, C L Heald, D V Spracklen, S R Arnold, T S Bates, J D Allan, H Coe, G McFiggans, S R Zorn, A Smirnov, F Drewnick

1340h  A43C-0238 POSTER Deriving a relationship between wind speed and marine aerosol optical depth using CALIPSO and AMSR-E data: V Kiliyanpilakkil, N Meskhidze

1340h  A43C-0239 POSTER New insights into modeling an organic mass fraction of sea spray aerosol: N Meskhidze, B Gannt

1340h  A43C-0240 POSTER Quantifying Marine Emissions of Biogenic Volatile Organic Compounds Using Laboratory Measurements of Plankton Monocultures and Field Samples: A W Sabolis, N Meskhidze, D Kamykowski, R E Reed

1340h  A43C-0241 POSTER The effect of organic matter on CCN properties of particles produced in laboratory simulations of bubble bursting: S King, T Rosenoern, D Nilsson, M Bilde

1340h  A43C-0242 POSTER Global distribution of sea salt aerosols: New constraints from in situ and remote sensing observations: L Jaegle, P Quinn, T S Bates

1340h  A43C-0243 POSTER Modeling the production and Regional Impacts of Freshwater "Marine" Particles in the Great Lakes Region: S H Chung, B Basarab, T M VanReken

1340h  A43C-0244 POSTER Comparison of the cloud activation potential of open ocean and coastal aerosol in the Pacific Ocean: G Vidaurre, S D Brooks, D C Thornton

1340h  A43C-0245 POSTER Continental-scale transport of sea salt aerosol: W H White, B P Perley, R L Poiroit, T F Dann, E Dabek-Zlotorynska

1340h  A43C-0246 POSTER Atmospheric DMS and its oxidation products in relation to aerosol growth and formation in the Canadian Arctic: O T Rempillo, A Seguin, A L Norman

A43D  Moscone South: Poster Hall  Thursday  1340h
Quantification of Emissions: Addressing Current and Future Challenges III Posters (joint with B)

Presiding: G J Frost, NOAA; C Granier, LATMOS/IPS and NOAA

1340h  A43D-0247 POSTER The Global Emissions Inventory Activity (GEIA): P Middleton, A B Guenther, C Granier, A Mievile

1340h  A43D-0248 POSTER ECCAD: Emission of Atmospheric Compounds & Compilation of Ancillary Data: S Darras, C Granier, V Pignot, R Bodichon, C Boone, C Liouasse, M Paulin


1340h  A43D-0252 POSTER Global EDGAR greenhouse gas emissions and national emissions reporting under the UN Climate Convention: availability, structure, definitions and role of uncertainties: J G Olivier, S Monni, J van Aardenne, U M Doering, G Janssens-Maenhout, J A Peters, V Pagliari

1340h  A43D-0253 POSTER U.S. regional greenhouse gas emissions analysis comparing highly resolved vehicle miles traveled and CO2 emissions: mitigation implications and their effect on atmospheric measurements: D L Mendoza, K R Gurney

1340h  A43D-0254 POSTER Developing an Improved Wildland Fire Emissions Inventory: S Larkin, S M Rafuse, T Strand, S Drury, R C Solomon, N Wheeler

1340h  A43D-0255 POSTER Modelling African aerosol using updated fossil fuel and biofuel emission inventories for 2005 and 2030: C Liouasse, J E Pennet, E Assaoui, L Xu, P Criqui, S Mima, B Guillame, R Rosset

1340h  A43D-0257 POSTER How do emission patterns in megacities affect regional air pollution?: A Heil, C Richter, S Schroeder, M G Schultz

1340h  A43D-0258 POSTER A probabilistic approach to emissions from transportation sector in the coming decades: F Yan, E Winjukul, T C Bond, D G Streets

1340h  A43D-0259 POSTER Could Expanded Freight Rail Reduce Air Pollution from Trucks?: E E Bickford, T Holloway, M Johnston

1340h  A43D-0260 POSTER Ozone sensitivity to industrial ethene emissions events in regulatory air quality modeling simulations for Houston, Texas: E Couzo, A O Olatosi, W Vizuete

1340h  A43D-0261 POSTER Quantifying Air Quality Co-Benefits from Lower-Carbon Electricity Production: S D Plachinski, T Holloway, P Meier, J Oberman


1340h  A43D-0263 POSTER Net Greenhouse Gas Emissions at the Eastmain 1 Reservoir, Quebec, Canada: I B Strachan, A Tremblay, J Bastien, M Bonneville, P del Georgio, M Demarty, M Garneau, J Helie, L Pelletier, Y Prairie, N T Roulet, C R Teodoru


1340h  A43D-0265 POSTER Quantifying the isotopic composition of NOx emission sources: An analysis of collection methods: D L Fibiger, M G Hastings

1340h  **A43D-0267 POSTER** Tracking Indium Emissions to the Atmosphere in the Northwestern United States: **S O White**, H Hemond

1340h  **A43D-0268 POSTER** Improving the lightning NOx source using satellite observations: a 4D-var analysis approach: **R V Martin**, N Bousserez, K W Bowman, D K Henze, M Kopacz, K Singh, C Shim

1340h  **A43D-0269 POSTER** Evaluating mobile emissions sources with satellite NOx and CO observations: **J Oberman**, T Holloway, E E Bickford, M Luedke, C C Moberg, S D Plachinski


1340h  **A43D-0271 POSTER** Gas Flaring Volume Estimates with Multiple Satellite Observations: **D C Ziskin**, C Elvidge, K Baugh, T Ghosh, F C Hsu


1340h  **A43D-0273 POSTER** Quantifying the Australian methane budget: the importance of wetlands emissions highlighted by surface and train-borne Fourier transform spectrometers: **A C Fraser**, C Chan Miller, P I Palmer, A A Bloom, N M Deutscher, L Feng, D W Griffith, N B Jones

1340h  **A43D-0274 POSTER** Emissions by Uncontrolled Coal Fires: **A F Terschure**, M Engle, E Heffern, J Hower, A Kolker, A Prakash, L Radke


1340h  **A43D-0276 POSTER** Top-down Validation of Global and East Asian Emissions of Tetrafluoromethane and Hexafluororothane: **J Kim**, J Muhle, P J Fraser, S Li, T Arnold, C M Harth, P Salameh, P Steele, P B Krummel, M Leist, A Stoil, M Park, R F Weiss, K Kim

1340h  **A43D-0277 POSTER** Verification of national halogenated hydrocarbon (SOA) particles: **P Massoli**, A Lambe, A Ahern, L R Williams, M Ehn, J Mikkala, M Canagaratna, W H Brune, T B Onasch, J Jayne, T T Petjdj, M T Kulmala, A Laaksonen, C E Kolb, P Davidovits, D R Worsnop

1410h  **A43E-02 POSTER** Relationship between aerosol oxidation level and hygroscopic properties of laboratory generated secondary organic aerosol (SOA) particles: **P Massoli**, A Lambe, A Ahern, L R Williams, M Ehn, J Mikkala, M Canagaratna, W H Brune, T B Onasch, J Jayne, T T Petjdj, M T Kulmala, A Laaksonen, C E Kolb, P Davidovits, D R Worsnop

1425h  **A43E-03 POSTER** Photochemical Degradation of Persistent Organic Pollutants: A Study of Ice Photochemistry Mediated by Dissolved Organic Matter: **B Pierce**, A M Grannas

1440h  **A43E-04 POSTER** Transport of Cs-137 from Boreal Biomass Burning in Summer of 2010: **S A Strode**, L E Ott, J E Nielsen, S Pawson

1440h  **A43E-05 POSTER** Computational fluid dynamics (CFD) simulations with photochemistry of reactive pollutants in an urban street canyon: **M Kim**, R Park, J Kim

1510h  **A43E-06 POSTER** Turbulent Dispersion of Traffic Emissions: **R M Staebler**, M Gordon, J Liggio, P Makar, C Mihele, J Brook, J J Wentzell, S Gong, G Lu, P Lee

1510h  **A43E-07 POSTER** Yearly Trends in South Pole Atmospheric Sulfur and Nitrogen Species and Their Potential Use in Ice Core Interpretations: **D D Davis**, Y Wang, T Zeng, P Wine, K Brady, R Weber, J M Nicovich, A Beyersdorf, R Arimoto, W D Neff, Title of Team: ANTCI

1525h  **A43E-08 POSTER** Ozone Production Potential of Volatile Organic Compounds: **T Butler**, M G Lawrence, J Jelieveld

---

**A43F Moscone West: 3002 Thursday 1340h**

**Hurricane Prediction and Societal Impacts II**

**Presiding:** S S Chen, University of Miami; T Vukicevic, AOML/NOAA

1340h  **A43F-01 POSTER** Observation, Analysis and Prediction of Atlantic tropical Cyclone Formation (Invited): **C A Davis**, R D Torn

1355h  **A43F-02 POSTER** Applying ultra-high resolution Global weather-climate models for hurricane predictions: past progresses and future directions (Invited): **S Lin**

1410h  **A43F-03 POSTER** High Resolution Hurricane Storm Surge and Inundation Modeling (Invited): **R Luetitch**, J J Westerink

1425h  **A43F-04 POSTER** Hurricane Warnings and Society - it's not as easy as you think! (Invited): **B Read**

1440h  **A43F-05 POSTER** Improved Goddard Microphysics for simulating Typhoon Morakot 2009: **W Tung**, J J Shi, P Lin

1455h  **A43F-06 POSTER** A new transitioning wind field model based on high resolution reanalyses: **V P Daniel**

1504h  **A43F-07 POSTER** Dynamic Hurricane Season Prediction with the NCEP T382 CFS CGCM: **J E Schemm**, L Long

1516h  **A43F-08 POSTER** Observing System Simulation Experiments for Hurricanes: Early results and plans for the future: **R M Atlas**, Z Pao, J J Shi, P Lin

1528h  **A43F-09 POSTER** Hurricane and Severe Storm Sentinel (HS3): **S A Braun**, P A Newman, M Vasques

---

**A43G Moscone West: 3008 Thursday 1340h**

**Troposphere Gaseous Composition in Regional and Global Perspective II**

**Presiding:** O A Tarasova, World Meteorological Organization; P C Novelli, NOAA/ESRL

1355h  **A43G-02** Seasonal Variability of Trans-Pacific Transport of Carbon Monoxide in the Upper Troposphere: Observations and simulations: J Jin, N J Livesey, J H Jiang, A Lupu, J W Kaminski, J C McConnell

1410h  **A43G-03** Trend and Variability Analysis of Tropospheric Carbon Monoxide data Records from AIRS and Ground Measurements: JX Warner, Z Wei

1425h  **A43G-04** Atmospheric Mercury Transport and Chemistry in Western Canada and the Arctic: Results from the IPY Project INCATPA: A S Cole, A Steffen, H Hung

1440h  **A43G-05** Analysis of air quality trace gas spatio-temporal variability over the USA using the WRF-chem regional model: A Boynard, D P Edwards, G Pfister

1455h  **A43G-06** Improving Atmospheric SF6 Measurements: Towards a Better Understanding of Emissions: B D Hall, G S Dutton, J D Mondeel, A M Crotwell, J W Elkins

1510h  **A43G-07** Global emissions of the hydrofluorocarbons (HFCs) HFC-365mfc, HFC-245fa, HFC-227ea, and HFC-236fa based on atmospheric observations: M K Vollmer, B R Miller, M L Rigby, S Reimann, J Muhle, Title of Team: AGAGE, SOGE, SNU members, KOPRI members

1525h  **A43G-08** The atmospheric trend of methyl chloride and other chlorocarbons in the northern hemisphere obtained from other chlorocarbons in the northern hemisphere: J K Lundquist, A S Cole, J M Willens, M Saunois, S Solomon, A Steffen, H Hung

**Biogeosciences**

**B43A** Moscone South: Poster Hall  **Thursday**  **1340h**

**Biogeochemistry of Urban and Suburban Ecosystems II Posters (joint with PA, V, H)**

**Presiding:** M Steele, Texas A&M University; J A Aitkenhead-Peterson, Texas A&M University

1340h  **B43A-0444** POSTER The effect of nutrient ratios on *E. coli* re-growth in urban streams: J A Aitkenhead-Peterson, K McCarry, T J Gentry, C L Harclerode

1340h  **B43A-0445** POSTER Controls on Bacterial Concentrations in Sediment Grab Samples from the Hudson River Estuary: J Batta, B J Mailloux, F O Nitsche, T C Kenna, A S Ferguson, J Cheung, A Layton

1340h  **B43A-0446** POSTER Seasonal nutrient dynamics in the Anacostia River (D.C., USA): geochemistry and hydrocarbon biomarkers: S Sarraino, D E Frantz, S E MacAvoy

1340h  **B43A-0447** POSTER Long-term Sodium and Chloride Surface Water Exports from a Humid Subtropical Urban Gradient: M Steele, J A Aitkenhead-Peterson

1340h  **B43A-0448** POSTER Nitrogen transformation and removal in low-order restored urban streams: A K Tuttle, S K McMillan, S Clinton


1340h  **B43A-0450** POSTER Elevated soil lead concentrations in residential yards in Appleton, WI, a small Midwestern city: J J Clark, A C Knudsen

1340h  **B43A-0451** POSTER Contributions of Paint and Soil to Pb in Household Dust Wipes: An XAS Study: N E Pingitore, J W Clogue, M A Amaya

1340h  **B43A-0452** POSTER The Physical Speciation and Exchange of Metals in a Treatment Marsh: R Lee, D J Janssen, M P Hurst

1340h  **B43A-0453** POSTER Diffusion Study on Dissolved Hydrogen toward Effective Bioremediation of Chlorinated Ethenes in Aquitards: M Yoshikawa, M Zhang, M Takeuchi, T Komai

1340h  **B43A-0454** POSTER Comparison of Reductive Dechlorination of Chlorinated Ethylene in Batch and Continuous-Flow Reactor: S Park, L Jonghwan, U Hong, N Kim, H Ahn, S Lee, Y Kim

1340h  B43B-0461 POSTER Pattern formation during water infiltration in soil increases the resilience of water-stressed ecosystems; L Cueto-Felgueroso, R Juannes
1340h  B43B-0462 WITHDRAWN
1340h  B43B-0463 POSTER From Field to Fork: Mapping Agricultural Land Use in Terms of Calories Delivered to Humans; E S Cassidy, J S Gerber, J A Foley
1340h  B43B-0465 POSTER Tools for and barriers to terrestrial ecosystem stewardship; C Tonitto
1340h  B43B-0466 POSTER Fate of the wolverine under climate change in the contiguous United States; S Peacock

B43C  Moscone South: Poster Hall Thursday 1340h How Does Landscape Affect Solute Movement to Aquatic Ecosystems? II Posters (joint with H)


1340h  B43C-0467 POSTER Hydrologic Profiling for Greenhouse Gases from Prairie Potholes in Western Canada; I F Creed, D A Aldred, R A Bourbonniere
1340h  B43C-0468 POSTER Prairie stream water quality in sub-basins characterized by differing degrees of wetland drainage; N N Brunet, C J Westbrook
1340h  B43C-0469 POSTER Determining surface water sources using spatial and temporal variation in stream chemistry in a headwater catchment; M A Zimmer, S W Bailey, K J McGuire, T D Bullen
1340h  B43C-0470 WITHDRAWN
1340h  B43C-0471 POSTER Hydrological controls on denitrification in riparian zone of forested headwater catchment: Soil physical properties make difference in reduced environment; N Ohle, Y Watanabe, T Oda, K Osaka
1340h  B43C-0472 POSTER Impacts of Surrounding Land Cover on Headwater Wetland Edaphic Habitat Types and Their Associated Microbial Communities; J B Moon, D H Wardrop, E A Smithwick
1340h  B43C-0473 POSTER Quantifying topographic and saturation frequency controls on magnitude and duration of hot moments in contrasting biogeochemical hotspots; J M Duncan, L E Band
1340h  B43C-0474 POSTER Landscape controls on dissolved nutrients, organic matter and major ions in a suburbanizing watershed; M L Daley, W H McDowell
1340h  B43C-0475 POSTER Mapping Critical Loads of Atmospheric Nitrogen Deposition in the Rocky Mountains, USA; L Nanus, D W Clow, V C Stephens, J E Saros

B43D  Moscone South: Poster Hall Thursday 1340h Novel Applications of Continuous Measurements in Freshwater Ecosystems II Posters (joint with H)

Presiding: B A Pellerin, US Geological Survey; M J Cohen, University of Florida

1340h  B43D-0476 POSTER In-Situ Ion Analysis of Fresh Waters via an ISE Multiprobe and Artificial Neural Networks; A V Mueller, H Hemond
1340h  B43D-0477 POSTER Understanding Biogeochemical and Hydrological Processes in a Reservoir, Kentucky Lake (USA), Using Long-term Monitoring and Real-time Sensors; S P Hendricks, D White, M Williamson, R Hooks
1340h  B43D-0478 POSTER An investigation of carbon dynamics in Beaver Creek, Alaska, using in-situ sensors; M Dornblaser, R G Striegel
1340h  B43D-0479 POSTER In situ CDOM fluorescence measurements: A continuous proxy for dissolved organic carbon concentration in rivers and streams; B A Pellerin, B A Bergamaschi, B D Downing, J Saraceno, J A Fleck, T E Kraus, J B Shanley, G Aiken
1340h  B43D-0480 POSTER Laser Particle Diffraction: A Novel Approach to Quantify In-Situ Suspended Sediment Particle Size Class Concentrations; G W Freeman, J A Hubbart, P Chinnasamy, E A Bulliner, J Schulz
1340h  B43D-0481 POSTER The application of fDOM sensors in freshwater systems: Limitations, knowledge gaps and recommendations for future enhancement and novel development; B D Downing, B A Bergamaschi, B A Pellerin, J Saraceno, T E Kraus
1340h  B43D-0483 POSTER Dissolved organic carbon interferences in UV nitrate measurements and possible mitigation methods; R G Thomas, C R Foster, M J Cohen, J B Martin, J J Delfino
1340h  B43D-0484 POSTER Spatio-Temporal Variation of Stream Metabolism in a Managed River System; S R Villamizar, H Pai, C A Butler, P A Barnes, T C Harman


Presiding: F M Hoffman, Oak Ridge National Laboratory; J T Randerson, University of California

1340h  B43E-01 POSTER Carbon-Water Feedbacks in Climate Models (Invited); I Fung
1355h  B43E-02 POSTER Investigating the interactions between biogeochemical and biogeochemical processes in the northern high latitudes using a land surface model; feedbacks and climatic impacts; R Barman, A Jain, M Liang, A D McGuire
1410h  B43E-03 POSTER The response of frozen soil respiration to warming controls the 21st century high-latitude CO2 and CH4 balance; C D Koven, B Ringeval, P Friedlingstein, P Ciais, P Cadule, D Khvorostyanov, G Kinner, C Tarnocai
1425h  B43E-04 POSTER Biogeochemical feedbacks on ocean carbon uptake and sensitivity to climate change in an earth system model; J P Dunne, J G John
1440h  B43E-05 POSTER Global carbon-water cycles patterns inferred from FLUXNET observations – useful for model evaluation? (Invited); M Reichstein, M Jung, C Beer, D D Baldocchi, E Tomelleri, D Papale, Title of Team: FLUXNET LaThuille synthesis team (cf. www.fluxdata.org)
1455h  B43E-06 POSTER The Distribution of Soil Phosphorus in Terrestrial Ecosystems; X Yang, W M Post, P E Thornton, A K Jain
1510h  B43E-07 POSTER Land cover uncertainty magnifies the climate sensitivity of regional water and carbon fluxes; B Poulter, P Ciais, E L Hodson, H Lischke, F Maignan, S Plummer, N Zimmermann
1525h B43E-08 Divergent trajectories in tropical rainforest carbon-climate relationships: results from a new tropical forest carbon inventory database: P Taylor, W Wieder, A Townsend, G P Asner, C Cleveland, S Loarie

B43F Moscone West: 2002 Thursday 1340h
Integrating Advances in Molecular Studies of Denitrification With Biogeochemistry at Larger Scales I (joint with A, GC, OS, H)

Presiding: M K Firestone, University of California, Berkeley; M A Voytek, USGS; D D Myrold, Oregon State University; E A Davidson, Woods Hole Research Ctr

1340h B43F-01 Molecular approaches to understand the regulation of N\textsubscript{2}O emission from denitrifying bacteria – model strains and soil communities (Invited): A Frostegard, L R Bakken

1400h B43F-02 Anaerobic Ammonium Oxidation (ANAMMOX) and Denitrification in Marine Environments (Invited): JJ Rich

1420h B43F-03 Mapping spatial patterns of denitrifiers at large scales (Invited): L Philippot, A Ramette, N Saby, D Bru, S Dequiedt, L Ranjard, C Jolivet, D Arrouays

1440h B43F-04 Using T-RFLP data on denitrifier community composition to inform understanding of denitrification in stream sediments (Invited): S Wang, K Somers, E Sudduth, B Hassett, E S Bernhardt, D L Urban

1455h B43F-05 Combining qPCR and functional gene microarrays to directly link changes in the expression of the nir\textsubscript{S} gene to denitrification rates in aquatic sediment mesocosms: J L Bowen, A R Babbin, B B Ward

1510h B43F-06 Quantitative molecular biology and gas flux measurements demonstrate soil treatment and depth affects on the distribution and activity of denitrifiers: M M Barrett, M Jahangir, L Cardenas, M Khalil, K R Richards, V O’Flaherty

1525h B43F-07 Nitric oxide in denitrification – an elusive signal molecule emitted from soil: L R Bakken, A Frostegard

B43G Moscone West: 2006 Thursday 1340h
Metal Sorption on Organic and Inorganic Surfaces: From Laboratory to Model to Field I (joint with H, EP, V)

Presiding: J Schijf, UCIMES; K H Johannesson, Tulane University

1340h B43G-01 Predicting Adsorption in Natural Systems: Are We There Yet? (Invited): C M Koretsky

1400h B43G-02 The Microbial Biology of Metal Sorption onto Bacterial Surfaces (Invited): N Yee

1420h B43G-03 Organic and inorganic molecules as probes of mineral surfaces (Invited): D A Sverjensky

1440h B43G-04 Neptunium(V) Adsorption to Bacteria at Low and High Ionic Strength: D Ams, J S Swanson, D T Reed


1510h B43G-06 Investigation of REE adsorption to aquifer sand under different CO2 partial pressures and in the presence or absence of humic substances: Experimental results and surface complexation modeling: J Tang, K H Johannesson

1525h B43G-07 In-Situ ATR-FTIR and Surface Complexation Modeling Study of the Adsorption of Dimethylarsenic Acid and p-Arsanic Acid on Iron Oxides: S R Goldberg, H Al-Abadleh, W Mitchell

Cryosphere

C43A Moscone South: Poster Hall Thursday 1340h
Advances in Glacier Seismology I Posters (joint with S, GC, EP)

Presiding: J M Amundson, University of Chicago; F T Walter, Scripps Institution of Oceanography; S O’Neel, USGS; R C Aster, New Mexico Institute of Mining and Technology

1340h C43A-0519 POSTER Spatial and Temporal Aspects of Alpine Icequakes During Three Seasons of Glacier-Dammed Lake Drainages: Gornergletscher Switzerland: D L Kilb, F T Walter, P F Roux, N Deichmann, M Funk

1340h C43A-0520 POSTER Dynamics of iceberg detachment and meltage motion during the August 21, 2009, calving event at Jakobshavn Isbrae: F T Walter, J M Amundson, J N Bassis, J F Clinton, M A Fahnstock, H Fricker, M P Luethi, S O’Neel, M Truffer

1340h C43A-0521 POSTER Seismic observations of long-period wave trains generated by calving icebergs, Jakobshavn Isbrae, Greenland: J M Amundson, M Truffer, M A Fahnstock, D M Holland, M P Luethi, R J Motyka, J F Clinton, D R MacAyeal

1340h C43A-0522 POSTER Capturing fracture propagation in a glacier using passive seismology: K L Smith, T D Mikesell, K Van Wijk, F T Walter, J H Bradford

1340h C43A-0523 POSTER Relocations of recent events and trends in glacier-earthquake locations in Greenland: S A Veitch, M Nettles

1340h C43A-0524 POSTER Supporting Ice Seismology: T Parker, B C Beaudoin, J C Fowler


1340h C43A-0526 POSTER The Swiss Seismological Service in Greenland: Network Building and Research Initiatives: S Husen, J F Clinton, M Olivieri, D Giardini

1340h C43A-0527 POSTER Glacier Seismicity and Basal Sliding: Field Experiments at Engabreen, Norway: P L Moore, K A Christianson, N R Iverson, J Winberry, D Cohen, S Anandakrishnan, M Mathison, M Jackson

1340h C43A-0528 POSTER What can seismic anisotropy tell us about ice deformation?: G E Lloyd, G W Stuart, B Al-Rumaith, R W Obbard, J M Kendall, A Smith


1340h C43A-0530 POSTER A preliminary analysis of icequakes at the Ruiz volcano glacier – Colombia: L C Garcia Cano, C M Lopez, A Smith, D A Sverjensky


1340h C43A-0532 POSTER Western Greenland Subglacial Hydrologic Modeling and Observables: Seismicity and GPS: J D Carmichael, J R Joughin

1340h C43A-0533 POSTER Ice/till coupling estimated from broadband seismology and continuous GPS: J I Walter, S M Tulaczyk, E Brodsky, S Y Schwartz
1340h C43C-0564 POSTER New evidence on past ice flow and iceberg activity on the southern Yermak Plateau: R. Noormets, J A Dowdeswell, M Jakobsson, C O’Cofaigh
1340h C43C-0565 WITHDRAWN
1340h C43C-0566 POSTER 3D seismic characterization of the Norwegian Channel Ice Stream - bedrock controls on ice streaming behaviour and spatio-temporal evolution of erosion and infill of a major cross-slope trough through multiple glaciations: J Grant, M Huuse


Presiding: W Maslowski, Naval Postgraduate School

1340h C43D-0567 POSTER The Arctic System Reanalysis for 2007 and 2008: K M Hines, D H Bromwich, L Bai
1340h C43D-0568 POSTER A survey of foraging and albedo sensitivity of the Arctic Ocean ice cover: C Stranne, G M Bjyrk
1340h C43D-0569 POSTER Influence of winter and summer surface wind anomalies on Summer Arctic sea ice extent: M Ogi, K Yamazaki, J M Wallace
1340h C43D-0570 POSTER Coupling and feedback between Pacific sea ice and the Western Pacific pattern: N J Matthewman, G Magnusdottir
1340h C43D-0571 WITHDRAWN
1340h C43D-0572 POSTER Understanding the Importance of Oceanic Forcing on Arctic Sea Ice Variability: J E Haynes, W Maslowski, R Oinski, J Clement Kinney, W J Shaw
1340h C43D-0573 POSTER Sea ice as a tracer for circulation features associated with the Barrow area Bowhead whale feeding hotspot: S R Okknen, C J Ashjian, R G Campbell
1340h C43D-0574 POSTER Sea ice characteristics and ice seal behavior: new results from unmanned aircraft data: E C Weatherhead, Title of Team: NOAA’s National Marine Mammal Laboratory, Arctic Office, Global Systems Division
1340h C43D-0575 POSTER Brine-Wetted Snow on the Surface of Sea Ice: A Potentially Vast and Overlooked Microbial Habitat: J W Deming, M Ewert, J S Bowman, J Colangelo-lillis, S D Carpenter
1340h C43D-0576 POSTER Vertical and Lateral Structure of Arctic Subarctic Ocean Exchange via Nares Strait to the West of Greenland 2003 to 2009: A Muenchow
1340h C43D-0577 POSTER Sea Ice and Hydrographic Variability in the Northwest North Atlantic: I G Fenty, P Heimbach, C I Wunsch
1340h C43D-0578 POSTER Reduced Sea Ice and its link to frequent intraseasonal cold air outbreak during the 2009-2010 abnormal winter in Japan and East Asia: M E Hori, J Inoue, T Kikuchi, Y Tachibana
1340h C43D-0581 POSTER Retrieval of aerosol and marine parameters in coastal areas in the Arctic: Y Fan, N Chen, W Li, T Tanikawa, J J Stamnes, K H Stamnes
1340h C43D-0582 POSTER A Surface-to-Environment Synoptic Typing Approach to Classify Cyclone Forcing of Ocean-Sea Ice-Atmosphere Coupling within the Cape Bathurst Flaw Lead: M G Asplin, D G Barber, L M Candlish, R Raddatz

C43E Moscone South: Poster Hall Thursday 1340h The Sea Ice Ocean System I Posters (joint with GC, OS, B)

Presiding: M Jin, University of Alaska Fairbanks; S L Pfriman, Barnard College; J K Hutchings, University of Alaska Fairbanks; M M Holland, NCAR
1340h C43E-0583 POSTER Variability of Sea Ice Melwater Content and Mean Residence Times of the Freshwater Lens in the ‘Arctic Switchyard’ Region: R Chan, P Schlosser, R Friedrich, W M Smethie, R Newton
1340h C43E-0584 POSTER Creating future fit between ice and society: The institutionalization of a refuge in the Arctic to preserve sea ice system services in a changing North: A L Lovecraft, C L Meek
1340h C43E-0585 POSTER Optical properties of ocean waters beneath melt-season first-year sea ice in the Chukchi Sea: K E Frey, C Wood, L D Truel, W L Cooper, J M Grebmeier
1340h C43E-0586 POSTER Carbon Dioxide Transfer Through Sea Ice: Modelling Flux in Brine Channels: L Edwards, G Mitchelson-Jacob, N Hardman-Mountford
1340h C43E-0587 POSTER A Changing Arctic Sea Ice Cover and the Partitioning of Solar Radiation: D K Perovich, B Light, C Polashenski, S V Nghiem
1340h C43E-0588 POSTER Brine-ecosystem interactions in sea ice: M Vancoppenolle, C M Bitz, T Fichefer, H Gosses, C Lancelot, J Tison
1340h C43E-0589 POSTER Changing Sea Ice Conditions in the Northwest Passage: A C Tivy, S Howell, T Agnew, C Derksen
1340h C43E-0590 POSTER The ringed seal’s last refuge and the importance of snow cover: B P Kelly, C M Bitz
1340h C43E-0591 WITHDRAWN
1340h C43E-0592 POSTER The Last Arctic Sea Ice Refuge: S L Pfriman, B Tremblay, R Newton, C Fowler
1340h C43E-0593 WITHDRAWN
1340h C43E-0594 POSTER Nutrient - Productivity Interactions under Reduced Summer Ice Conditions in the Arctic Ocean: R Sambrotto, R Newton, P Schlosser
1340h C43E-0595 WITHDRAWN
1340h C43E-0596 POSTER Potential Arctic sea ice refuge for sustaining a remnant polar bear population (Invited): G M Durner, S C Amstrup, D C Douglas, D L Gauthier
1340h C43E-0597 WITHDRAWN
1340h C43E-0598 POSTER Sea ice-ocean interactions and their effect on mixing at very high resolution in a fully coupled climate model (Invited): C M Bitz, H Singh
1340h C43E-0599 POSTER Factors Controlling Light Transmission through Thin First-Year Arctic Sea Ice: Observations and Modeling: S R Hudson, B Hamre, M A Granskog, J J Stamnes, S Gerland, M Nicolaus, R Lei
1340h C43E-0600 POSTER Dynamic and Thermodynamic Causes of Recent Changes in the Barents Sea Ice Cover: O Pavlova, S Gerland, P Pavlov
1340h C43E-0601 POSTER Sea Ice response to an extreme negative phase of the Arctic Oscillation during winter 2009/2010: J C Stroeve, J A Maslanik, M C Serreze, I G Rigor, W Meier
1340h C43E-0602 POSTER Sea Ice Drift in the Arctic Ocean. Seasonal Variability and Long-Term Changes: V Pavlov, O Pavlova

All information is current as of November 12, 2010
Education and Human Resources

ED43A Moscone South: Poster Hall Thursday 1340h Climate Change Adaptation: Education and Communication II Posters (joint with A, B, C, GC, H, NH, PA)

Presiding: J M Byrne, University of Lethbridge; D B Fagre, U.S. Geological Survey; F Grifo, Union of Concerned Scientists; T F Pedersen

1340h ED43A-0662 POSTER Joint Projections of North Pacific Sea Surface Temperature from Different Global Climate Models: F M Beltran

1340h ED43A-0663 POSTER Climate Science Communications - Video Visualization Techniques: J P Reisman, M E Mann

1340h ED43A-0664 POSTER Extending Climate Change Education from the Scientific Community to Society: W B Bendel, E Russell, C McDougall

1340h ED43A-0665 POSTER Gigapixel panoramas of Glacier National Park create enhanced education experiences: D B Fagre, L A McKeon

1340h ED43A-0666 POSTER Can Skateboarding Save the Planet? A Curricular Unit on Global Climate Change Developed Through the NASA LIFT-OFF Program: L E Pruett, S Burrell, C Chidester, E P Metzger

1340h ED43A-0667 POSTER Delivering Global Environmental Change Science Through Documentary Film: K Dodgson, J M Byrne, J R Graham

1340h ED43A-0668 POSTER Science documentary video slides to enhance education and communication: J M Byrne, L J Little, K Dodgson

1340h ED43A-0669 POSTER Social Networking and Smart Technology: Viable Environmental Communication Tools?: J Montain, J M Byrne

1340h ED43A-0670 POSTER Identifying NASA resources for middle school teacher professional development in global climate education: R R Weihs, M A Bourassa, S R Smith, K Pearson, J V Carlson

1340h ED43A-0671 POSTER Inspiring Inquiry: Scientists, science teachers, and GK-12 students learning climate science together: C Stwertka, J Blouquist, D Feener

1340h ED43A-0672 POSTER Engaging Undergraduates in Methods of Communicating Global Climate Change: C Hall, M W Colgan, R R Humphreys

1340h ED43A-0673 POSTER Quantification of Linkages between Large-Scale Climate Patterns and Annual Precipitation for the Colorado River Basin: A Kalra, S Ahmad

1340h ED43A-0674 WITHDRAWN

1340h ED43A-0675 POSTER Program on Promoting Climate Change Adaptation Technologies Bridging Policy Making and Science Research in Taiwan: Y Chiang, W Chiang, C Sui, C Tung, H Ho, M Li, S Chan, Title of Team: Climate Change Adaptation Technologies Program, National Science Council, Taiwan

1340h ED43A-0676 POSTER The Pawsey Supercomputer geothermal cooling project: K Regenauer-Lieb, F Horowitz, T Western Australian Geothermal Centre of Excellence


1340h ED43A-0678 POSTER Hazard Risk to Near Sea-Level Populations due to Tropical Cyclone Intensification and Sea-Level Rise: J Montain, J M Byrne, J Elsner

1340h ED43A-0679 WITHDRAWN

Earth and Planetary Surface Processes


Presiding: C S Riebe, University of Wyoming; H L Buss, U.S. Geological Survey

1340h EP43A-0742 POSTER Correlation between thermal gradient and flexure-type deformation as a potential trigger for exfoliation-related rock falls (Invited): B D Collins, G M Stock

1340h EP43A-0743 POSTER Short-term and long-term degradation processes in marly sediment transport: C Le Bouteiller, F Naaim, N Mathys

1340h EP43A-0744 POSTER Weathering in the cold: Granite hillslips in Osborn Mountain, WY and Bodmin Moor, UK: S G Riggins, S P Anderson, R S Anderson


1340h EP43A-0747 POSTER Using meteoric 10Be to track soil erosion and transport within a forested watershed, Susquehanna Shale Hills Critical Zone Observatory, PA: N West, E Kirby, P R Bierman, D H Rood

1340h EP43A-0748 POSTER Geochemistry and Chemical Weathering in Soils along an Earthworm Invasion Gradient: K Resner, K Yoo, A K Aufdenkampe, C Hale, S D Sebestyen

1340h EP43A-0749 POSTER Extending the Interdisciplinary Interfaces of Geomorphology by Changing the Units of Key Variables: From Volumes to Masses to Areas: K Yoo, A K Aufdenkampe, B A Weinman, S M Mudd, C Chen

EP43B Moscone South: Poster Hall Thursday 1340h Does Size Matter? Does Local Count? The Role of Extrafluvial Events in River and Landscape Evolution Posters (joint with H, V)

Presiding: E B Safran, Lewis & Clark College; K V Cashman, University of Oregon; G E Grant, USDA Forest Service

1340h EP43B-0750 POSTER Analyzing Clues in River Evolution of the Bedrock-Controlled Colorado River using Hydraulic Modeling: C S Magirl


1340h EP43B-0752 POSTER Outburst floods, landslide erosion, and the development of threshold hillslips in the Tsangpo Gorge, eastern Himalaya: J J Larsen, D R Montgomery

1340h EP43B-0753 POSTER Natural Dams as Tipping Points in Himalayan Erosion (Invited): O Korup

1340h EP43B-0754 POSTER Reconstructing western Grand Canyon’s lava dams and their failure mechanisms: new insights from geochemical correlation and 40Ar/39Ar dating: R Crow, K E Karlsstrom, W C McIntosh, L Peters, N W Dunbar

1340h EP43B-0755 POSTER Lava flows vs. surface water: the geologic battle for the upper McKenzie valley, central Oregon Cascade: N I Deligne, R M Conrey, K V Cashman, G E Grant, W H Amidon

1340h EP43B-0756 POSTER Rapid bedrock channel incision and gorge formation in a Late Holocene lava flow, High Cascade Mountains, Oregon: K E Sweeney, J J Roering, G E Grant, K V Cashman, N I Deligne, N Deardorff

1340h EP43B-0757 POSTER Two decades of channel evolution following the eruption of Mount Pinatubo, Philippines: K B Gran

1340h EP43B-0758 POSTER Tectonics, fluvial transport, and long-term episodicity in landscape evolution. (Invited): D Garcia-Castellanos

EP43C Moscone South: Poster Hall Thursday 1340h Fluvial Morphology and Past Climate on Planet Mars Posters (joint with P)

Presiding: M G Kleinhans, Universiteit Utrecht

1340h EP43C-0759 POSTER MODELLING FLUVIAL FLOW WITH ANSYS FLUENT AND COMPARISON WITH MARTIAN ANALOGUE LAB-SCALE EXPERIMENTS AND MARTIAN GULLIES: M C Price, S J Conway, M C Towner

1340h EP43C-0760 POSTER Palaeoflow Reconstruction from Delta Morphology on Mars: G de Villiers, M G Kleinhans, E Hauber, G Postma

1340h EP43C-0761 POSTER Formation Timescales of the Martian Valley Networks: M T Hoke, B M Hynek

1340h EP43C-0762 POSTER Inevitability of low-latitude melting on Mars: implications for the sedimentary record: E S Kite, M Manga, I Haley

1340h EP43C-0763 POSTER Geomorphic record of Noahian, Hesperian and Amazonian materials and deposits preserved within Asimov Crater, Mars: A cross-sectional view of the role of volatiles through martian history: G A Morgan, J W Head, D R Marchant

1340h EP43C-0764 POSTER Applying comparative fractal analysis to infer origin and process in channels on Earth and Mars: A Balakrishnan, S Rice-Snow, B A Hampton

EP43D Moscone South: Poster Hall Thursday 1340h Vegetation and Flow in Fluvial and Wetland Environments II Posters (joint with B, H)

Presiding: K Skalak, U.S. Geological Survey; A Lightbody, University of New Hampshire

1340h EP43D-0765 POSTER Effect of Increasing Vegetated Area on Sediment Storage in a Supply-limited Reach of the Colorado River: B Ralston, J E Hazel, M A Kaplinski

1340h EP43D-0766 POSTER An experimental and numerical study into the effect of submerged vegetation on the generation of turbulent flow structures: T I Marjoribanks, R J Hardy, S N Lane, D R Parsons
1340h  EP43D-0767 POSTER Controls on vegetative flow resistance in wetlands and low-gradient floodplains: K Skalak, J W Harvey, L G Larsen, G B Noe, N Rybick, J Jones

1340h  EP43D-0768 POSTER Hydraulic Consequences of Hydrolla, an Invasive Submerged Aquatic Plant, in Freshwater Tidal Channels: B A Jenner, K L Prestegaard

1340h  EP43D-0769 POSTER The Geomorphic Effectiveness of a Woody Shrub: R Manners, J C Schmidt, J M Wheaton

1340h  EP43D-0770 POSTER Wind driven vertical transport in a vegetated, wetland water column with air-water gas exchange: C Poinexter, E A Variano

1340h  EP43D-0771 POSTER Turbulent flow within vegetated areas: interaction of spatial scales: A Ricardo, M J Franca, A Schleiss, R M Ferreira

1340h  EP43D-0772 POSTER Field Bending Tests of Three Riparian Species Common to the Central Platte River: Resistance, Rigidity and Plant Streamlining: R E Thomas, N L Bankhead, A Simon

1340h  EP43D-0773 POSTER A hydrological study of Waen y Griafofen blanket bog, North Wales: G Hall

1340h  EP43D-0774 POSTER Analytical solutions for contaminant transport in open channel flows and underlying slow zones: S Gurusamy, G Jayaraman


1340h  EP43D-0776 WITHDRAWN

1340h  EP43D-0777 POSTER Estimating boundary shear stress along vegetated streambanks with turbulent kinetic energy: L C Hopkinson, T Wynn

1340h  EP43D-0778 POSTER Vegetation control of gravel-bed channel morphology and adjustment: the case of Carex nudata: P F McDowell

1340h  EP43D-0779 POSTER SCALE DEPENDENCE IN THE EFFICIENCY OF GRASSED WATERWAYS WITHIN AN AGRICULTURAL WATERSHED: D C Dermisis, T Papanicolaou, B K Abban

1340h  EP43D-0780 WITHDRAWN

1340h  EP43D-0781 POSTER Spatial patterns of streamed morphology around woody debris: flume experiments and field observations on the effects of woody debris on streamed morphology: V Leung, D R Montgomery

1340h  EP43D-0782 POSTER Scaling Vegetation on Experimental Channel Patterns: D M van Breemen, W I van de Lageweg, W M van Dijk, M G Kleinmans

1340h  EP43D-0783 WITHDRAWN

1340h  EP43E Moscone South: 308 Thursday 1340h Landscape Evolution in Response to Active Faulting I (joint with T)

Presiding: N M Gasparini, Tulane University; N H Dawers, Tulane University

1340h  EP43E-01 Active tectonic of the Medlicott Wadia Thrust (Western Himalaya) inferred from morphotectonic analysis: V Vignon, J L Mugnier, A Replumaz, R Vassallo, R Ramakrishnan, P Srivastava, M M Malik, F Jouanne, J Carcailler

1355h  EP43E-02 EXPLORING EVIDENCE FOR POSSIBLE RECENT N-S EXTENSION ALONG THE HIMALAYAN CREST: J A McDermott, K Hodges, K W Whipple, M C Van Soest

1410h  EP43E-03 Temporal and spatial variation in slip along the central Karakoram Fault System, Ladakh Himalayas: W Bohon, R Arrowsmith, K Hodges

1425h  EP43E-04 Topographic and Geomorphic Response to Active Deformation Along the Dragon’s Back Pressure Ridge, central San Andreas Fault, California (Invited): G E Hilley, R Arrowsmith, M H Gudmundsdottir, E Shelef, M M Traer

1445h  EP43E-05 Hula basin pull apart inversion - geophysical evidences supported by analog clay model: B J Medvedev, M Politi, Z Reches, A Agnon

1500h  EP43E-06 First LiDAR images of the Alpine Fault, central South Island, New Zealand: R M Langridge, V G Toy, N Barth, G P De Pascale, R Sutherland, T Farrier

1515h  EP43E-07 Tectonic signals in glaciated landscapes: the importance of scale (Invited): S H Brocklehurst

EP43F Moscone South: 310 Thursday 1340h Morphogenesis, From Microscale Experiments to Landscape Dynamics I (joint with NG, H)

Presiding: C Narteau, Institut de Physique du Globe de Paris; E Lajeunesse; C Paola, University of Minnesota

1340h  EP43F-01 Don’t Upscale the Coastline: Scales of Cumulative Change Emerge: A B Murray, E Lazarus, A D Ashton, S F Tebbens, S M Burroughs

1355h  EP43F-02 Sediment Mixture Controls on Morphodynamics of Experimental Deltas: N R Cheshier, W I van de Lageweg, W M van Dijk, D C Hoyal, M G Kleinmans, G Postma

1410h  EP43F-03 Quantifying the fluvial autogenic processes: Tank Experiments: E J Powell, W Kim, T Muro


1440h  EP43F-05 Particle transport on rough hillslope surfaces: flume experiments and numerical modeling: E J Gabet, M Mendoza

1455h  EP43F-06 Influence of the sediment transport threshold on a river network (Invited): O Devauchelle, A Petroff, H F Seybold, D Rothman

1510h  EP43F-07 A unifying model of planform straightness of ripples and dunes in air and water: D M Rubin

1525h  EP43F-08 Formation of bedforms in a turbulent stream: a comprehensive analysis of dynamical mechanisms and scaling laws: B Andreotti, P Claudin, O Duran Vinent, Title of Team: The Morphodynamics Lab

Geodesy

G43A Moscone South: Poster Hall Thursday 1340h Plate Motion and Continental Deformation III Posters (joint with T, S, NH)

Presiding: D Argus, Jet Propulsion Laboratory; J T Freymueller, University of Alaska Fairbanks; R M Fernandes, UBL, CGUL, IDL

1340h  G43A-0818 POSTER Differential spreading along the northern North Atlantic ridge and resulting intraplate deformation of the adjacent continental margins: E Le Breton, P R Cobbold, P Porcher, O Dauteuil


1340h  G43A-0820 POSTER Measurement of Quasi-Steady Deformation in Niigata-Chuetsu region, Central Japan, Using Persistent Scatterer Interferometry: Y Fukushima, A J Hooper
1340h G43A-0821 POSTER Ocean contribution to co-seismic crustal deformation and geoid anomalies: application to the 2004 December 26 Sumatra-Andaman earthquake: B L Vermeersen, T Broeke

1340h G43A-0822 POSTER Seismic potential on the Sumatran fault using GPS observation: T Ito, E Gunawan, F Kimata, T Tabei, M Simons, I Meilano, A Agustan, D Sugiyanto

1340h G43A-0823 POSTER Andaman post-seismic deformation observations: An update: J Puchakayala, C Rajendra, A R Lowry

1340h G43A-0824 POSTER Fault geometry and slip distribution of the 1891 Nobi great earthquake (M = 8.0) with the oldest survey data sets in Japan: K Takano, F Kimata


1340h G43A-0826 POSTER Kinematics of deformation across the Philippine Archipelago as observed from GPS campaign data: T Bacolcol, R Solidum, Jr., S Yu, Title of Team: PHIVOLCS GPS Team


1340h G43A-0828 POSTER The unique Chilean earthquake of May 22, 1960 (Mw =9.5): M Raeesi, K Atakan, Z zarifi

1340h G43A-0829 POSTER A Study of Current Interseismic Deformation of San Andreas Fault, San Bernardino Mountain section, using Interferometric Synthetic Aperture Radar: P Nee, G J Funning

1340h G43A-0830 POSTER HTDP 3.1: Towards An Improved Model Of Crustal Deformation In The Western US: C Pearson, R A Sny

1340h G43A-0831 POSTER SeaFloor bathymetry and gravity from the ALBACORE marine seismic experiment offshore southern California: N Shinatuko, D S Weeraratne, M D Kohler

1340h G43A-0832 POSTER Diffuse plate boundary and microplate motion: is the Sierra Nevada an independent block?: R Malservisi, M Hackl, P C La Femina, J S Oldow, H Geirsson

1340h G43A-0833 POSTER Campaign GPS Measurements from 2000-2010 in the Sierrra Block South of Long Valley Caldera, CA, USA: P F Cervelli, J O Langbein, J P Perkins, J L Svarc, S E Owen

1340h G43A-0834 POSTER Testing the inference of creep on Rodgers Creek Fault: L Jin, G J Funning

1340h G43A-0835 POSTER Horizontal Strain Field for the Bohemian Massif, Central Europe: V Schenk, R Pichl, Z Schenkova, T Marek


1340h G43A-0837 POSTER Investigation of Crustal Deformation Along NAFZ Using GPS and InSAR: B Turgut, A Dogru, H Ozener, A Sabuncu

1340h G43A-0838 POSTER Interseismic strain accumulation across the North Anatolian Fault measured using InSAR: R J Walters, B E Parsons, T J Wright

1340h G43A-0839 POSTER GPS Measurements for Detecting Aseismic Creeping in the Ismetpasa Region of North Anatolian Fault Zone, Turkey: H Ozener, A Dogru, B Turgut, O Yilmaz, K Halicioglu, A Sabuncu

1340h G43A-0840 POSTER Determination of the Deformation along the Tuzla Fault, Izmir, Turkey by Geodetic Techniques: A Sabuncu, H Ozener

1340h G43A-0841 POSTER Estimating the Locking Depth of the North Anatolian Fault in Eastern Turkey form InSAR Observations: O Cavali, S Jonsson

1340h G43A-0842 POSTER Seasonal geotectonic displacements in the Himalaya induced by surface load variations and implications for shallow elastic structure of the Earth: K Chanand, J Avouac, T Ito, J F Genrich, J E Galatzka, M Flouzat, N Team

1340h G43A-0843 POSTER Nubia-Eurasia Plate Boundary in Iberia From GPS Data: R M Fernandes, J M Miranda, L M Matias, J I Soto, M S Bos, P G Almeida

1340h G43A-0844 POSTER Study on Seismogenic Tectonic based on InSAR Measurement of Long-term fault Deformation and Co-seismic Deformation in Danxiong, Tibet: Y Luo, J Zhang, B Liu, L Hu

1340h G43A-0845 POSTER Investigating the creeping section of the San Andreas Fault using ALOS PALSAR interferometry: P S Agram, C Wortham, H A Zebker

1340h G43A-0846 POSTER Using ALOS-InSAR to study the Caribbean Tectonic Activities: H Fattahi, F Amelung


Presiding: T M van Dam, University of Luxembourg; J Kusche, Universitat Bonn

1340h G43B-01 Improved Global Mascon Solutions from GRACE: F G Lemoine, T J Sabaka, D D Rowlands, S B Lurhke, J Boy

1355h G43B-02 J2: an evaluation of new estimates from GPS, GRACE and load models compared to SLR: D A Lavallee, P Moore, P J Clarke, E J Petrie, T vanDam, M King

1410h G43B-03 Contributions of reprocessed GPS observations to a joint inversion of surface displacements, ocean bottom pressure and GRACE global gravity models [Invited]: M Fritsche, R Dietrich, R Rietbroek, J Kusche, S Brunabend, J Schröter, C Dahlé, F Flechtner

1425h G43B-04 Insights from GRACE and GPS data on the seismic cycle and mantle rheology [Invited]: I PANET, V O Mikhailov, F F Pollitz, M Diament, O de Viron, K A Grijalba, P Banerjee

1440h G43B-05 Turning GRACE into a Tool for Water Management: L Longuevergne, B R Scanlon, C R Wilson

1455h G43B-06 Greenland Mass Loss Observed by GRACE: E J Schrama, B Wouters

1510h G43B-07 Dynamics of the Antarctic Circumpolar Current as seen by GRACE [Invited]: M Thomas, H Dobsch, I Bergmann

1525h G43B-08 Ongoing Glacial Isostatic Contribution to Observations of Sea Level Change [Invited]: M E Tamisiea

Global Environmental Change

G43A Moscone South: Poster Hall Thursday 1340h Biogeochemical Responses to a Changing Arctic I Posters (joint with B, C)

Presiding: A V Rocha, Marine Biological Lab; R R Muskett, University of Alaska Fairbanks; A L Kholodov, Geophysical Institute UAF

1340h GC43A-0938 POSTER The investigation of temperature trend in the Antarctic using GPS radio occultation technique: E Fu
1340h GC43A-0939 POSTER Satellite and Reanalysis Data for Modeling Active Layer Dynamics and the Thermal State of Permafrost - Perspectives and Challenges: S Westermann, M Langer, J Boike

1340h GC43A-0940 POSTER Using aerial and satellite-borne radar data and ground-based measurements to assess soil moisture characteristics in the Anaktuvuk River Fire, Alaska: B Zapata, K E Frey, K M Barrett, J Rogan


1340h GC43A-0942 POSTER Modeling of permafrost dynamics and hydrological processes under seasonal and long term temperature variations: S Ge, J M McKenzie, Q Wu, C I Voss, J J Cochrane

1340h GC43A-0943 POSTER Using speleothem growth periods to constrain Quaternary evolution of Siberian permafrost: A Vaks, O Gutareva, S Breitenbach, A Osinszey, G M Henderson

1340h GC43A-0944 POSTER INTERPRETING LINKAGES AMONG LANDSCAPE, WATER CHEMISTRY, AND DIATOM COMMUNITIES TO BETTER UNDERSTAND SUBARCTIC PALEOENVIRONMENTAL RECORDS: A Shinneman, W Hobbs, M Edlund, C E Umbanhowar, P Camill, C E Geiss

1340h GC43A-0945 POSTER DYNAMICS OF THE THERMAL STATE OF ACTIVE LAYER AT THE ALASKA NORTH SLOPE AND NORTHERN YAKUTIA: A L Khodolov, V E Romanovsky, S Marchenko, N I Shiklomianov, D Fedorov-Davydov


1340h GC43A-0947 POSTER Hydrological and Biogeochemical Responses to Fire and Thermokarst Formation in Arctic Alaska: S Godsey, M N Gooseff, C Johnson, A G Lewkowicz, K E Krieger, B T Crosby

1340h GC43A-0948 POSTER Impacts of thermokarst formation on soil carbon dynamics on the North Slope of Alaska: B W Abbott, J B Jones, T Harmon


1340h GC43A-0951 POSTER Nitrous oxide production and emission in high arctic soils of NW Greenland: A Stills, M Lupascu, C I Czmiczek, E D Sharp, J M Welker, S M Schaefer

1340h GC43A-0952 POSTER Seasonal Variations in CO2 Flux among Arctic Plant Communities in Northern Alaska: A Kade, M S Bret-Harte

1340h GC43A-0953 POSTER Growing season fluxes and sources of CO2 and CH4 in high arctic ecosystems, NW Greenland: M Lupascu, U Seibt, A K Stills, X Xu, D S Lindsey, J M Welker, C I Czmiczek


1340h GC43A-0955 POSTER Changing the seasonality of an Arctic tundra ecosystem: earlier snowmelt and warmer temperatures: H Steltzer, M N Weintraub, A Darrouzet-Nardi, C Melle, A Segal, P Sullivan, C Landry, M D Wallenstein

1340h GC43A-0956 POSTER Warmer summers combined with increases in rain lead to major changes in trace gas feedbacks from high arctic polar semi-deserts in NW Greenland to the atmosphere: E D Sharp, P Sullivan, C I Czmiczek, J M Welker

1340h GC43A-0957 POSTER Vegetation recovery in Alaskan tundra following an unusual fire: M S Bret-Harte, R R Jandr, D A Yoked, P M Ray, O A Miller, M C Mack, G R Shaver


1340h GC43A-0959 POSTER Distribution of Carbon and Carions across Aquatic and Terrestrial Ecosystems of the Western Hudson Bay Low Arctic, Manitoba, Canada: C E Umbanhowar, P Henneghen, K Passow, E Emmons, M Kubis, M Parker, P Camill, C E Geiss, M Edlund

1340h GC43A-0960 POSTER Major element concentrations in six Alaskan arctic rivers from melt to freeze-up: T A Douglas, A Barker, A D Jacobson, J W McClelland, M S Khosh, G O Lehn

1340h GC43A-0961 POSTER Seasonal variability of dissolved organic carbon and total dissolved nitrogen in Arctic streams and rivers: M S Khosh, J W McClelland, T A Douglas, A D Jacobson, G O Lehn, A Barker

1340h GC43A-0962 POSTER Late summer variability of dissolved organic matter in the Kolyma River observed using satellite imagery: C G Griffin, K E Frey, J Rogan, R M Holmes

1340h GC43A-0963 POSTER Seasonal changes in the major ion and δ13CDOC geochemistry of Arctic Alaskan rivers: G O Lehn, A D Jacobson, T A Douglas, J W McClelland, M S Khosh, A Barker

1340h GC43A-0964 WITHDRAWN


1340h GC43A-0966 POSTER High mid-summer pCO2 concentrations and evasion from headwater streams of the Kolyma River Basin, Siberia: T Drake, N Zimov, B A Denfeld, E C Seybold, J D Schade, E B Bulygina, R M Holmes, W V Sobczak

1340h GC43A-0967 POSTER Carbon processing in the Kolyma River Watershed and the role it plays in CO2 outgassing: B A Denfeld, K E Frey, E B Bulygina, T Drake, R M Holmes, J D Schade, W V Sobczak, N Zimov

1340h GC43A-0968 POSTER CO2 evasion from the Greenland ice sheet: J Ryu, A D Jacobson
1340h GC43B-0970 POSTER Benthic Macroinvertebrate in the NE Siberian Arctic and Their Role in Processing Particulate Carbon: E Ulrich, E Vaughan, S Chandra

1340h GC43B-0971 POSTER Conspicuous circumpolar greening in the end of growing season over the Arctic region: S Jeong, B Kim, C Ho, D Medvigy, S Feng, Y Kim, H Lee

1340h GC43B-0972 POSTER Evaluating observed and projected future climate changes in the Arctic region: An approach using the Köppen−rewartha climate classification: C Ho, S Feng, S Jeong

1340h GC43B-0973 POSTER Increased peak-growing season GPP in a Greenlandic high-Arctic fen 1992-2008: T Tagesson, M Matsepanov, M P Tamstorf, L Eklundh, P Schubert, A Ekberg, C Sigsgaard, T R Christensen, L Strom

1340h GC43B-0974 POSTER Increasing NDVI values in northern Alaska: studies that mix shrub density, spectral and CO2 exchange measurements: A Anderson-Smith, A Lewis, P Sullivan, J M Welker

1340h GC43B-0975 POSTER Willow Shrub Expansion Following Tundra Fires in Arctic Alaska: C Racine


1340h GC43B-0977 POSTER Spectral indices for remote sensing of phytomass and deciduous shrub changes in Alaskan arctic tundra: K Kushida, S Hobara, S Tsuyuzaki, M Watanabe, K Harada, Y Kim, G R Shaver, M Fukuda

1340h GC43B-0978 POSTER Water sources of evergreen and deciduous species depend upon season, ecosystem type and snowpack depth in arctic tundra near Toolik Lake, Alaska: L M Ebbs, P Sullivan, J M Welker

1340h GC43B-0979 POSTER Climate-induced shrubland greening in northern Quebec over the landsat era: K M McManus, D C Morton, J G Masek, D Wang, J O Sexton

1340h GC43B-0980 POSTER Herbivory and soil moisture drive long-term patterns of vegetation structure and function in Alaskan coastal tundra: results from resampling historic exclosures at Barrow: D R Johnson, M J Lara, G R Shaver, C Tweedie

1340h GC43B-0981 POSTER Characterizing patterns of historic shrub expansion in the North Slope of Alaska: A T Naito, D M Cairns

1340h GC43B-0982 POSTER Landscape- and decadal-scale changes in the composition and structure of plant communities in the northern foothills of the Brooks Range of Arctic Alaska: J A Mercado-Díaz, W A Gould

1340h GC43B-0983 POSTER Expansion of dwarf birch in subarctic Québec: linking radial growth to climate warming: P Ropars, S Boudreau


1340h GC43B-0985 POSTER Boreal forest anomalies in the Yukon River Basin: B K Wylie, J A Rover, K Murnahan, J Long, L L Tieszen, B Brisco

1340h GC43B-0986 POSTER Varying Northern Forest Response to Arctic Environmental Change at the Firth River, Alaska: L Andreu, R D’Arrigo, K J Anchukaitis, S J Goetz, P S Beck

Presiding: L O Mears, NCAR; J T Kiehl

1340h GC43C-0987 POSTER Ontological and Epistemological Issues Regarding Climate Models and Computer Experiments: M A Vezer

1340h GC43C-0988 POSTER Future surface temperature change estimation constrained by using the future-present correlated modes in variability of CMIP3 multi-model simulations: M Abe, H Shiogama, T Nozawa, S Emori

1340h GC43C-0989 WITHDRAWN

1340h GC43C-0990 POSTER Understanding and Interpreting Climate Model Ensembles: J D Annan, J C Hargreaves

1340h GC43C-0991 POSTER Reliability of multi-model and structurally different single-model ensembles: T Yokohata, J D Annan, J C Hargreaves, C S Jackson, M Tobis, M Collins

1340h GC43C-0992 POSTER Resolving the Effects of Complex Topography on Regional Climate and Climate Change: The Need for Very High Spatial Resolution: C M Rowe, K A Maasch, R J Oglesby, R Mawalagedera, B O Grigholm, D J Erickson

Presiding: R K Vincent, Bowling Green State University; X Xiong, NOAA/NESIDS/STAR

1340h GC43D-0993 POSTER Effects of Salinity and Sea Level Change on Permafrost-Hosted Methane Hydrate Reservoirs: M Elwood-Madden

1340h GC43D-0994 POSTER Atmospheric Impact of Large Methane Emissions and the Gulf Oil Spill: S Bhattacharyya, P J Cameron-Smith, D J Bergmann

1340h GC43D-0995 POSTER Space-borne Observation of CH4 using IASI and AIRS at NOAA: X Xiong, C Barnet, E S Maddy, A Gambacorta, T S King, J Wei

1340h GC43D-0996 POSTER Assessing change in the Arctic methane budget using the late summer “hump”: C Sweeney, L Bruhwiler, E J Dlugokencky, J B Miller, J W White

1340h GC43D-0997 POSTER Observation of methane in this decade by ground-based FTIR Spectrometer over Poker Flat, Alaska: Y Kasai, A Kagawa, N B Jones, Y Murayama

1340h GC43D-0998 POSTER Spatial distribution of methane seepage on the East Siberian Arctic Shelf: C Stubbs, L Leifer, N E Shakhova, I P Semiletov, B P Luyendyk

1340h GC43D-0999 POSTER Did the destruction of methane hydrates cause sudden increases in the atmospheric CO2 level during the Phanerozoic era?: J Brainard, H Ohmoto
Presiding: S A Brachfeld, Montclair State University; E C Pettit, University of Alaska Fairbanks

1340h GC43E-1000 WITHDRAWN
1340h GC43E-1001 WITHDRAWN
1340h GC43E-1002 POSTER An interdisciplinary approach to climate and coastal systems changes on King George Island: D Abele, M Braun, U Falk, G Kuhn, C H Hass, M Dominguez, P Monien, H Brumsack, A Wasilowska, A Tatur, I Schloss, M Hernando, M L Quattro, L Torre, R Sahade, E Philipp
1340h GC43E-1003 POSTER Onset of a small but significant regional climate change documented in high-resolution late Holocene sediment cores from the maritime western Antarctic Peninsula: A Barnard, J S Wellner, J B Anderson
1340h GC43E-1004 POSTER Marine Ecosystem Response to Rapid Climate Warming on the West Antarctic Peninsula (Invited): H Ducklow, K S Baker, S C Doney, B Fraser, D G Martinson, M P Meredith, M A Montes-Hugo, S Sailley, O Schofield, R M Sherrill, S E Stamerjohann, D K Steinberg
1340h GC43E-1005 POSTER Glacial-marine sediments record ice-sheet retreat during the late Holocene in Beacochea Bay on the western margin of the Antarctic Peninsula: L A Hardin, J S Wellner
1340h GC43E-1006 POSTER Evidence for more extensive ice shelves along the Western Antarctic Peninsula during the Little Ice Age: observations from the LARISSA project in Barilari Bay, Graham Land: A E Kirshner, A Christ, T Allinger, G Arbruster, A Crawford, N Elking, J Gao, M Gunter, D Kirievskaya, S Jeong, C Peers, P Povea de Castro, D Reardon, C Sanchez Cervera, M Talaia-Murray, W Verreydt, M Ward, Title of Team: LARISSA summer school
1340h GC43E-1007 POSTER Reconstructing Late Quaternary Sea Levels in the Antarctic Peninsula (Invited): A R Simms, R DeWitt, E R Ivins, P Kouremenos, L Miller
1340h GC43E-1009 POSTER Marine sedimentary record of the Greenpeace Trough, Larsen A embayment, Antarctic Peninsula: A Crawford, A Leventer, E W Domack, S A Brachfeld
1340h GC43E-1010 POSTER Stable isotopes recorded from Larsen-C Ice Shelf ice cores to constrain ice shelf growth models: B E Rosenheim, N Gourmelen, S J Palmer, A A Leeson, E K Williams, A Fernandez, A Shephered
1340h GC43E-1011 POSTER Climatological of the Larsen C Ice Shelf, Antarctic Peninsula (Invited): K Steffen, D McGrath
1340h GC43E-1012 POSTER Bruce Plateau, Antarctic Peninsula: Ice-Care Site Characterization: E C Pettit, T A Scambos, R J Bauer, E S Mosley-Thompson, M Truffer, B Blair

Presiding: L O Mearns, NCAR; W J Gutowski, Iowa State University

1340h GC43F-1013 POSTER Projecting Future Extreme Precipitation Pattern in Ohio: S Wu

1340h GC43F-1014 POSTER Extremes of Precipitation and Heat as simulated by NARCCAP Climate Models: S J Vavrus, R Behnke, K Holman
1340h GC43F-1015 POSTER Regional, Extreme Daily Precipitation in NARCCAP Simulations: W J Gutowski, S Kawazoe, Title of Team: NARCCAP Modeling Team
1340h GC43F-1016 POSTER Effects of Spatial Interpolation Algorithm Choice on Regional Climatic Data Analysis: S A McGinnis, L R McDaniel, L O Mearns
1340h GC43F-1017 POSTER Late 20th Century Temperature Trends in the NARCCAP Regional Model Simulations: M S Bukovsky, L O Mearns
1340h GC43F-1018 POSTER Projected changes in phenological indices for North America using NARCCAP data: M A Rawlins, R S Bradley, H F Diaz
1340h GC43F-1019 POSTER Validation of NARCCAP climate products for forest resource applications in the southeast United States: W Shen, T L Mote, J M Shepherd
1340h GC43F-1020 POSTER Assessment of Precipitation Projections and Derived Estimates of Evapotranspiration from NARCCAP models for Water Resources Applications in Florida: J Obeyesekera, M M Irizarry-Ortiz, W Abtew, J Park, J A Barnes, P Trimble
1340h GC43F-1021 POSTER Precipitation in the Intermountain Region simulated by the NARCCAP regional climate models: R R Gillies, S Wang, E S Takle, W J Gutowski
1340h GC43F-1022 POSTER Evaluation of Precipitation and Temperature in NARCCAP Regional Climate Models over the North and South Carolina in Southeast US: Y Kim, L E Band
1340h GC43F-1023 POSTER Climate Change Projections using Dynamical Downscaling for the Colorado River Basin: S Wi, M Dominguez, M Durcik, J B Valdes, H F Diaz
1340h GC43F-1024 POSTER Investigating Future Warming in the Colorado Rocky Mountains from High Resolution “NARCCAP” Models: I Rangwala, J Barsugli

Presiding: T Yao, Inst of Tibetan Plateau Res; L G Thompson, Ohio State University; V Mosbrugger, Senckenberg Research Center for Nature Study; Y Sheng, UCLA

1340h GC43G-01 POSTER Third Pole Environment Programme: A new base for the study of atmosphere-land interaction over heterogeneous landscape of the Tibetan Plateau and surrounding areas: Y Ma
1410h GC43G-02 POSTER Toward Quantitative Understanding of the Atmospheric Heating over the Tibetan Plateau (Invited): T Koike, T Tamura, M Rasm, R Seto
1440h GC43G-03 On the Climatology and Trend of the Atmospheric Heat Sources over the Tibetan Plateau: An Observation-supported Revisit: K Yang
1455h GC43G-04 Observation and modeling of land surface state and convective activity over the Qinghai – Tibet Plateau: M Menenti, J Coln, L Jia, Y Ma, T Foken, J Sobrino, J Wang, K Ueno
1510h GC43G-05 Land surface processes/land cover change (LCC) and the Tibetan Plateau climate: Y Xue, Q Li, F De Sales, R Vasic, G Song
1525h GC43G-06 The relative impacts of greenhouse gas and aerosol climate forcing on mountain glacier melt at the third pole: E M Wilcox

All information is current as of November 12, 2010
**Geomagnetism and Palaeomagnetism**

**GP43A** Moscone South: Poster Hall Thursday 1340h

*Magnetism of Glassy Materials II Posters (joint with MR, V)*

*Presiding:* R S Sternberg, Franklin & Marshall College

1340h **GP43A-1037** POSTER Magnetism of Cr-rich Spinel: Y Yu, B Tikoff

1340h **GP43A-1038** POSTER Cooling rate dependence of synthetic SD,PSD,MD magnetite: S Koch, A Ferri, K Hess, R Leonhardt

1340h **GP43A-1039** POSTER Aligned submicron grains in archeological potteries with high TRM anisotropy: K Fukuma, M Ooga, H Isobe

1340h **GP43A-1040** POSTER Anisotropy of Magnetic Susceptibility and Magnetic Properties of Obsidians: Volcanic Implications: E Cañón-Tapia, K Cárdenas

1340h **GP43A-1041** POSTER Magnetic Sourcing of Obsidian Artifacts: Successes and Limitations: A Hillis, J Feinberg, E Frahm, C Johnson

1340h **GP43A-1042** POSTER Magnetic Properties of Obsidians from the Southwestern U.S: R S Sternberg, S Gilder, P R Renne, S Shackley

1340h **GP43A-1043** POSTER Paleointensity results from the mid Jurassic: Submarine basaltic glasses of ODP Site 801C: L Tauxe, M B Steiner, H Staudigel, J S Gee

1340h **GP43A-1044** POSTER Comparative paleointensity study of volcanic glass and whole rock samples of the Aso pyroclastic flows: T Maruuchi, H Shibuya, N Mochizuki, Y Yamamoto


**GP43B** Moscone South: Poster Hall Thursday 1340h

*Planetary and Meteorite Paleomagnetism and Rock Magnetism II Posters (joint with P)*

*Presiding:* J Gattacceca, CEREGE (CNRS)

1340h **GP43B-1046** POSTER Analysis of the Allende chondritic meteorite’s remanence: A R Muxworthy, J Moore, P Bland

1340h **GP43B-1047** POSTER Paleomagnetism of the Brenham Pallasite: J Brock, J A Tarduno, R D Cottrell, F Nimmo

1340h **GP43B-1048** POSTER Magnetic Properties of LL6 Ordinary Chondrite St. Severin: S Doh, Y Yu, W Kim, K K Min

1340h **GP43B-1049** POSTER Fidelity of Mare Basalts as Magnetic Recorders and Implications for Lunar Paleomagnetism: S M Tikoo, B P Weiss, J Buz, M G Silva, T L Grove, J Gattacceca

1340h **GP43B-1050** POSTER What can we learn from the hysteresis properties of metal-bearing meteorites: J Gattacceca, P Rochette, C Suavet, M Uehara

1340h **GP43B-1051** POSTER Ferromagnetic minerals in peridotite xenoliths and possible implications for fO2 in the lithospheric mantle: S A Friedman, E C Ferre, F Martin Hernandez, D A Ionov, J L Till, J M Feinberg

1340h **GP43B-1052** POSTER Using the magnetic properties of Fe-serpentines for probing early alteration events in CM2 carbonaceous chondrites: A Elmaleh, G Rousse, B Devouard

1340h **GP43B-1053** POSTER Paleomagnetic record of the Earth’s magnetic field polarity by micrometeorites: C Suavet, J Gattacceca, P Rochette, L Folco

1340h **GP43B-1054** POSTER Further Investigations on the Magnetic Properties of Cosmic Spherules: P Rochette, C Suavet, D Dampfhofer, J Gattacceca, L Folco, C Sonzogni

1340h **GP43B-1055** POSTER Paleomagnetic tests for impact-generated fields at Lonar and other terrestrial craters: B P Weiss, S Pedersen, I Garrick-Bethell, S T Stewart, K L Louzada, M Fuller, A C Maloof, N Swanson-Hysell

1340h **GP43B-1056** POSTER Shock deformation and nucleation of magnetic minerals in suevites of the Chesapeake Bay impact crater, USA: C Mang, A M Kontny, D Harries, F Langenhorst, U Reimold

1340h **GP43B-1057** POSTER Testing the origin of high remanent magnetization in Vredefort impact structure: J M Salminen, L J Posenen, K Laiti, K Kannus

1340h **GP43B-1058** POSTER Shock-generated magnetite in the Vredefort impact crater basement rocks: L Carporzen, B P Weiss, S A Gilder, R J Hart

1340h **GP43B-1059** POSTER Impact demagnetization at the moon and Mars: new results from hydrocode simulations and multiple altitude magnetic field data: R J Lillis, S T Stewart, M Manga, I Rose, J S Halekas, K L Louzada, M E Purucker

1340h **GP43B-1060** POSTER Surface mapping of three components of the lunar magnetic anomaly field: Preliminary results: H Tsunakawa, F Takahashi, H Shimizu, H Shibuya, M Matsushima

1340h **GP43B-1061** POSTER Basic properties of transformation remanent magnetization due to the Verwey transition of magnetite: M Sato, N Mochizuki, H Tsunakawa

1340h **GP43B-1062** POSTER Rock Magnetic Properties of Rio Tinto Sediments: G McIntosh, F Martin Hernandez, D C Fernandez-Remolilar, P de la Presa

**GP43C** Moscone South: I03 Thursday 1440h

*Edward Bullard Lecture (Webcast)*

*Presiding:* R J Blakely, U.S Geological Survey; R G Gordon, Rice University

1440h **Richard Blakely** *Introduction of the 2010 Bullard Lecturer*

1445h **GP43C-01** Geomagnetic secular variation as a window on the dynamics of Earth’s core (Invited): A Jackson

1530h **Andrew Jackson** *Questions & Answers*

**Hydrology**

**H43A** Moscone South: Poster Hall Thursday 1340h

*Coastal Hydrogeology: Physical, Chemical, and Biological Characterization of Variable-Density Systems II Posters (joint with A, B, EP, GC, NH, OS)*

*Presiding:* E Abarca, MIT; J Luo, Georgia Institute of Technology; M Dentz, Institute of Environmental Assessment and Water Research (IDAEAS-CSIC); E D Swain, U.S. Geological Survey; J N King, U.S. Geological Survey

1340h **H43A-1202** POSTER Delineation of submarine groundwater discharge (SGD) in a large-scaled reclaimed land: B Lee, S Park, J Hwang, S Song, J Choi, K Nam

1340h **H43A-1203** POSTER Geophysical Conceptual Model for Benthic Flux and Submarine Groundwater Discharge: J N King

1340h **H43A-1204** POSTER Long-term transient groundwater dynamics in a tidally influenced coastal aquifer: E Abarca, H Karam, C Harvey

1340h **H43A-1205** WITHDRAWN

1340h **H43A-1206** POSTER Effects of aquifer stratification on freshwater-seawater mixing-zone development: C Lu, J Luo
1340h  **H43A-1207 POSTER** Evaluation of Seawater Intrusion Potential into a Coastal Underground Oil Storage Cavern in Korea: E Lee, J Lim, H Moon, K Lee

1340h  **H43A-1208 POSTER** Determination of Groundwater Flow Paths in a Coastal Southern California Aquifer: R Anders, K Futa


1340h  **H43A-1210 POSTER** Modeling and Electrical Imaging of Natural Free Convection Induced by Saline Recharge in a Coastal Sabkha: B P Eustice, D W Hyndman, R L Van Dam, W W Wood

1340h  **H43A-1211 POSTER** Model Simulation and Reduction of Variable-Density Flow and Salt Transport Using Proper Orthogonal Decomposition: X Li, B Hu, X Chen

1340h  **H43A-1212 POSTER** Fault-induced seawater circulation in the Seferihisar-Balgova Geothermal Basin, Western Anatolia, Turkey: F Magri, T Akar, U Gemici, A Pekdeger

1340h  **H43A-1213 POSTER** The fabric and compaction of mudstones in the Gulf of Mexico: R Day-Stirrat, P B Flemings, A C Aplin, A M Schleicher

1340h  **H43A-1214 POSTER** A new geological model to predict anthropogenic Venice uplift: G Gambolati, P Teatini, N Castelletto, M Ferronato, L Tosi

1340h  **H43A-1215 POSTER** Geochemical features of groundwater from deep wells in and around the Seto Inland Sea, Japan: T Sato, K Kazahaya, K Kitaoa, H A Takahashi, N Morikawa, M Yasuhara, M Takahashi, M Ohwada, A Inamura, Y Oyama

1340h  **H43A-1216 POSTER** Pore water dating by 129I: What do 36Cl/Cl ratio, dissolved 4He concentration, 83Cl/Cl and 129/127I ratio suggest in the Mobara Gas field, Japan?: Y Mahara, T Ohta, T Tokunaga

1340h  **H43A-1217 POSTER** Sources of chlorine in deep fluids beneath the Japanese island, inferred from the application of the long-lived radionuclide 36Cl: Y Tosaki, N Morikawa, K Kazahaya, M Ohwada, M Yasuhara, H A Takahashi, M Takahashi, A Inamura, Y Oyama

1340h  **H43A-1218 POSTER** Helium isotopes and 36Cl in saline groundwater from the Osaka Basin, Southwest Japan: Concurrent change in isotopic ratio during groundwater flow: N Morikawa, K Kazahaya, M Takahashi, Y Tosaki, M Ohwada, H A Takahashi, M Yasuhara, H Masuda

1340h  **H43A-1219 POSTER** Numerical Simulation of Borehole Flow in Deep Monitor Wells, Pearl Harbor Aquifer, Oahu, Hawaii: K Rotzoll, D S Oki, A I El-Kadi

1340h  **H43A-1220 POSTER** Rapid seawater circulation through animal burrows in mangrove forests – a significant source of saline groundwater to the tropical coastal ocean: J F Clark, T C Stiegltz, G J Hancock

1340h  **H43A-1221 POSTER** Lattice Boltzmann Hydrodynamic and Transport Modeling of Everglades Mangrove Estuaries: M C Sukop, V Engel

1340h  **H43A-1222 POSTER** Sea Level fluctuations and their hydrologic impacts in S. Florida: V Engel, C Karamperidou, E Stabenau, U Lall

1340h  **H43A-1223 POSTER** Using Field Measurements to Determine Appropriate Hydrodynamic Surface-Water Formulations: E D Swain, J D Decker, J D Hughes

1340h  **H43A-1224 POSTER** Biogeochemical and hydrological controls in mobilizing Se in a saline wetland environment: S Datta, G M Hettiarachchi, M Crawford, R Karna, N E Allmendinger, R Khatriwda

1340h  **H43A-1225 POSTER** A new analytical approach to estimate the hydraulic parameters of a coastal phreatic aquifer from tidally induced water table fluctuations and its application at the Niijima Island, Japan: M Aichi, M Shiokari, T Tokunaga

---

**H43B Moscone South: Poster Hall Thursday 1340h**

**Data, Information Systems, Interoperability, Cloud Computing, and Community Modeling in Hydrology I Posters (joint with IN)**

**Presiding:** J L Goodall, University of South Carolina; J E Freer, University of Bristol

1340h  **H43B-1226 POSTER** Creation of a Web-Based GIS Server and Custom Geoprocessing Tools for Enhanced Hydrologic Applications: B Welton, K Chouinard, M Sultan, D Becker, A Milewski, R Becker

1340h  **H43B-1227 POSTER** Detailed Soil Information for Hydrologic Modeling in the Conterminous United States: N B Bliss, S W Waltman, A C Neale

1340h  **H43B-1228 POSTER** Arc Hydro Tools for CUASHI WaterOneFlow Services: Z Ye

1340h  **H43B-1229 WITHDRAWN**

1340h  **H43B-1230 POSTER** Towards a virtual observatory for ecosystem services and poverty alleviation: W Buytaert, S Baez, F Cuesta, C Veliz Rosas

1340h  **H43B-1231 POSTER** A virtual observatory in a real world: building capacity for an uncertain future – the UK pVO: R J Gurney, D Terzlaft, J E Freer, B Emmert, A Mcdonald, G Rees, W Buytaert, G Blair, P Haygarth

1340h  **H43B-1232 POSTER** Implementation of a Hydrologic Information Data Server in the DFW Metroplex: J A McNerney, P W McKeel, G P Shelton

1340h  **H43B-1233 POSTER** Integrating water data, models and forecasts – the Australian Water Resources Information System (Invited): R Argent, P Sheahan, N Plummer

1340h  **H43B-1234 POSTER** Toward Federated Security and Data Access Control within a Services Oriented Architecture for Publishing Hydrologic Data: J S Horsburgh, D G Tarboton, K Schreuders, K S Patil

1340h  **H43B-1235 POSTER** Berkeley Sensor Database, an Implementation of CUASHI’s ODM for the Keck HydroWatch Wireless Sensor Network: G Ogle, C Bode, I Fung

1340h  **H43B-1236 POSTER** HydroDesktop: An Open Source GIS-Based Platform for Hydrologic Data Discovery, Visualization, and Analysis: D P Ames, R Argent, F Cuesta, C Veliz Rosas

1340h  **H43B-1237 POSTER** Development of a Hydrologic Modeling Platform Using a Workflow Engine: M Piasecki, B Lu

1340h  **H43B-1240 POSTER** Interactive Data Coupler for SWAT Using Open Source Components: M Muste, D Kim, N Arnold

1340h  **H43B-1241 POSTER** Real-time Hydro-NEXRAD II-derived Rainfall Data for the Upper Embarrass Watershed: S K Jha, A Rodriguez, S Singh, Y Liu, B S Minser, W F Krajewski
1340h  **H43B-1242 POSTER** A multi-language, regional water management model; linking a surface (WaterSim 4.0) and a groundwater flow model (MODFLOW): **D A Sampson**, V M Escobar, P Gober

1340h  **H43B-1243 POSTER** The Role of Ontologies for Model and Data Interoperability: **A Byrd**, D G Tarboton

1340h  **H43B-1244 POSTER** On the fall 2010 Enhancements of the Global Precipitation Climatology Centre’s Data Sets: **A W Becker**, U Schneider, A Meyer-Christoffler, M Ziese, P Finger, B Rudolf

1340h  **H43B-1245 POSTER** A continental scale daily gridded precipitation dataset for Asia based on a dense network of rain gauges - APHRODITE project: **A Hamada**, K Kamiguchi, O Arakawa, N Yasutomi, A I Yatagai

---

**H43C Moscone South: Poster Hall Thursday 1340h Detecting and Predicting Change in Coupled Human-Water Systems I Posters (joint with GC, PA, B)**

**Presiding:** J S Arrigo, East Carolina University; C M Hermans, City University of New York; A Parolari, Massachusetts Institute of Technology; B G Voigt, University of Vermont; M Huang, Pacific Northwest National Laboratory; A Munoz Hernandez, City University of New York; M S Wigmosta, Pacific Northwest National Laboratory

1340h  **H43C-1246 POSTER** Evaluating and improving CLM hydrologic processes for integrated earth system modeling at regional scales: **M Huang**, L Leung, M S Wigmosta, A M Coleman, Y Ke, T K Tesfa, H Li

1340h  **H43C-1247 POSTER** Application of Method of Variation to Analyze and Predict Human Induced Modifications of Water Resource Systems: **S B Desu**, A M Melesse, B Mahadev, M McClain

1340h  **H43C-1248 POSTER** Identifying the causes of water crises: A configurational frequency analysis of 22 basins world wide: **V Srinivasan**, S Gorelick, E Lambin, S Rozelle, B Thompson

1340h  **H43C-1249 POSTER** Water Diplomacy: A Synthesis of Water Information and Understanding to Create Actionable Knowledge: **Y Gao**, S Islam

1340h  **H43C-1250 POSTER** Will Climate Change Exacerbate or Mitigate Water Stress in Central Asia?: **T U Siegfried**, T Bernauer, R Guenier, S L Sellar, A W Robertson, J Mankin, P Bauer-Gottwein

1340h  **H43C-1251 POSTER** The Geography of Conflict in International River Basins: **L Beck**, T U Siegfried

1340h  **H43C-1252 POSTER** A Watershed-Scale Agent-Based Model Incorporating Agent Learning and Interaction of Farmers’ Decisions Subject to Carbon and Miscanthus Prices: **T Ng**, J Eheart, X Cai, J B Braden

1340h  **H43C-1253 POSTER** Assessing Uncertainties for Water Manager’s Planning: Understanding the Impacts of Policy and Climate Change for Informed Decision Making: **V M Escobar**, D A Sampson

1340h  **H43C-1254 POSTER** Determining the Spatial Influence of Imported and Local Water Sources to Municipal Tap Water Systems in the Southwestern United States Using Stable Isotopes of Oxygen and Hydrogen: **J C Stalker**, C D Kennedy, G J Bowen

1340h  **H43C-1255 POSTER** Analyzing long-term hydrological impacts of forest disturbance and growth: a case study from Homochitto Watershed (MS): **I Yeo**

1340h  **H43C-1256 POSTER** Modeling Temporal and Spatial Flows of Ecosystem Services in Chittenden County, VT: **B G Voigt**, K Bagstad, G Johnson, F Villa

1340h  **H43C-1257 POSTER** Effects of changes in seasonal precipitation in Catskill Mountain region on NYC water supply system management: **A H Matonse**, D C Pierson, A Frei, M Zion, R Mukundan

1340h  **H43C-1258 POSTER** Groundwater Response to Drought and Seasonal Precipitation Changes: **J Haucke**, K A Clancy, G Kraft

1340h  **H43C-1259 POSTER** Detection of changes in hydrologic system memory associated with urbanization in the Great Lakes region: **G Yang**, L C Bowling

1340h  **H43C-1260 POSTER** Examining 20th Century Seasonality Changes in River Hydrology: Attributing Natural and Anthropogenic Change in the Merrimack River: **J S Arrigo**

1340h  **H43C-1261 POSTER** Understanding the linkages and feedbacks in human-water systems: development of an integrated systems framework: **C M Hermans**, C J Vorosmarty, J S Arrigo, A Parolari, B Thomas

1340h  **H43C-1262 POSTER** Inventing Wastewater: The Social and Scientific Construction of Effluent in the Northeastern United States: **J M Brideau**, M Ng, J H Hoover, R L Hale, B Thomas, R M Vogel, Title of Team: Northeast Consortium for Hydrologic Synthesis Summer Institute, 2010 – Biogeochemistry

1340h  **H43C-1263 POSTER** An Examination of the Sensitivity of Runoff in the Northeastern US to 20th Century Development: **I N Mohammed**, D G Tarboton, R Cohen, U Lall


1340h  **H43C-1265 POSTER** Leveraging spatial statistics in the development of an historical narrative for water resources in the Northeast United States: **J H Hoover**, J M Brideau, B G Voigt, C J Vorosmarty

1340h  **H43C-1266 POSTER** Anthropogenic Nutrient Loading in the Northeastern US 1920-2000: **R L Hale**, M Ng, J M Brideau, J H Hoover, B Thomas

1340h  **H43C-1267 POSTER** Water Quality Loading: Trends in the Northeastern Corridor of US During the 20th Century: **M Ng**, R M Vogel, R L Hale, B Thomas, J H Hoover, J M Brideau

1340h  **H43C-1268 POSTER** The spatial and temporal variations of streamflow disruption as a result of dam building in the Northeast US: **B Pompeii**, C J Vorosmarty

1340h  **H43C-1269 POSTER** 20th Century Groundwater in the Northeast United States: A case study quantifying the impact of groundwater policies in New Jersey: **P S Kanwar**, J S Arrigo, B Thomas, R M Vogel, J H Hoover

1340h  **H43C-1270 POSTER** How can hydrology inform economic policymaking? An assessment of water stress at the county level for the Northeastern United States using two concepts of water availability: **C A Lopez-morales**, C Nicoletti, J H Hoover, B G Voigt, C Vorosmarty, B M Fekete

---

**H43D Moscone South: Poster Hall Thursday 1340h Integrating Geomorphic, Hydrologic, and Ecologic Processes for Sustainable Management of River Corridors II Posters (joint with B, PA)**

**Presiding:** D Tetzlaff, University of Aberdeen; E L Band, University of North Carolina; T J Beechie, NOAA Fisheries

1340h  **H43D-1271 POSTER** Comparison of Stream-Groundwater Interactions in Two Restoration Approaches: **S E Gregg**, M N Gooseff, T Wagener
H43F Moscone South: Poster Hall Thursday 1340h
Recent Advances in Process-Based/Physically Based Distributed Hydrologic Modeling I Posters (joint with B, EP, GC, A)

Presiding: M S Phanikumar, Michigan State University; C Shen, Michigan State University

1340h H43F-1311 POSTER Estimations of Water-Table Fluctuations Considering Delayed Drainage Effect of Unsaturated Zone: S Kim, E Park

1340h H43F-1312 POSTER A Process-Based, Distributed Hydrologic Model Based on a Large-Scale Method for Surface – Subsurface Coupling: M S Phanikumar, C Shen

1340h H43F-1313 POSTER Integrated hydrological SVAT model for climate change studies in Denmark: M Mollerup, J Refsgaard, T O Sonnenborg

1340h H43F-1314 POSTER Memory Estimation in the Simulated Moisture Storages and other Hydroclimatological Variables over a Drought-Prone Catchment: C Agboma, L Lye, S Yirdaw

1340h H43F-1315 POSTER Numerical investigation of the influence of watershed characteristics on pollutant transport in overland flow: Z He, G Tayfur, Q Ran

1340h H43F-1316 POSTER Effects of climate changes on groundwaters in various catchments of Korea: J Lee, N C Woo

1340h H43F-1317 POSTER A Physically-based Model for Surface and Subsurface Drainage from Porous Pavement Overlays: B J Eck, M Barrett, R J Charbeneau

1340h H43F-1318 POSTER Simulation of Climate Change Impacts on Himalayan Headwater Watershed Snowmelt Hydrology: Discharge, Sediment Load, and Nutrient Shifts: R P Neupane, J D White

1340h H43F-1319 POSTER Future Water Resource Scenarios for USA: Effects of Land Use/Cover Change, Climate Change and Human Disturbance: S Kumar, V Merwade, B C Pijanowski

1340h H43F-1320 POSTER Hydrologic Response to Climate Change in the Clinch River Watershed Using SWAT: S R Koirala, J Logan, R W Gentry

1340h H43F-1321 POSTER Upscaling topographic and hydraulic resistance data in a two-dimensional hydrodynamic model of the Everglades ridge and slough landscape: J D Hughes, J D Decker, J W Jawitz

1340h H43F-1322 POSTER Surface Storage Dynamics in Large Rivers: Comparing Three-Dimensional Particle Transport, 1D Fractional Derivative and Multi-Rate Transient Storage Models: E J Anderson, M S Phanikumar


1340h H43F-1324 POSTER Coupling of HECHMS and HEC-ResSim in Modeling the Fluctuation of Water Level in Devils Lake Using Heterogeneous Data: H S Munna, Y H Lim


1340h H43F-1326 POSTER Role of simulation time in grid based distributed hydrologic simulations: K Kang, V Merwade


1340h H43F-1328 POSTER Development and evaluation of a soil erosion module for the GEOTOP distributed hydrological model: T Zi, C Lewis, G Kiely, J D Albertson

1340h H43F-1329 POSTER Spatially-Distributed Stream Flow and Nutrient Dynamics Simulations Using the Component-Based AgroEcosystem-Watershed (AgEES-W) Model: J C Ascough, O David, G C Heathman, D R Smith, T R Green, P Krause, H Kipka, M Fink

1340h H43F-1330 POSTER Validating the Performance of the Post Wildfire Erosion Risk Management Tool (ERMiT): P R Robichaud, W J Elliot, J W Wagenbrenner

H43G Moscone South: Poster Hall Thursday 1340h

Presiding: M A Fonstad, Texas State University; T M Pavelsky, University of North Carolina-Chapel Hill; P Carbonneau, Durham University; C J Legleiter, University of Wyoming

1340h H43G-1331 POSTER Digital Photograph Analysis to Quantify Fine-grained Sediment Composition of Riverbed Surfaces: C R Vernon, T P Hanrahan

1340h H43G-1332 POSTER Georectification of historical aerial photos to track meander change in Wood River, Klamath County, Oregon: C Nash, M L Hughes

1340h H43G-1333 POSTER Assessing stream temperature variations in the Pacific Northwest using airborne thermal infrared remote sensing: J Tan, K A Cherkauer

1340h H43G-1334 POSTER Acquisition, calibration, and performance of airborne high-resolution ADS40 SH52 sensor data for monitoring the Colorado River below Glen Canyon Dam: P A Davis, L E Cagney, A K Kohl, T M Gushue, C Fritzeinger, G E Bennett, J F Hamill, T S Melis

1340h H43G-1335 POSTER Close-range Photogrammetry for High Resolution Modeling of River Bed Topography in Small Channels: S A Bird

1340h H43G-1336 POSTER Lighter-Than-Air Blimps As a Testbed For River Remote Sensing Techniques: M A Fonstad

1340h H43G-1337 WITHDRAWN

1340h H43G-1338 POSTER Quantifying Stream Habitat: Relative Effort Versus Quality of Competing Remote Sensing & Ground-Based Survey Techniques: S G Bangen, J M Wheaton, N Bouwes

1340h H43G-1339 WITHDRAWN

1340h H43G-1340 POSTER Terrestrial Laser Scanning for Quantifying Habitat and Hydraulic Complexity Measures: A Comparison with Traditional Surveying Techniques: J P Resop, J L Kozarek, W C Hestir

1340h H43G-1341 POSTER Geomorphic assessment of habitat suitability in large rivers from satellite remote sensing: a case study from the Ganga river system, India: C Mozumder, R Sinha, P Carbonneau

1340h  H43G-1343 POSTER How Can We Evaluate the Accuracy of Small Stream Maps? - Focusing on Sampling Method and Statistical Analysis - J Park

1340h  H43G-1344 POSTER An operational methodology for riparian land cover fine scale regional mapping for the study of landscape influence on river ecological status: T Tormos, P Kosuth, Y Souchon, B Villeneuve, S Durrieu, A Chandesris

1340h  H43G-1345 POSTER Seasonal water storage on the Amazon floodplain: a comparison between satellite measurement and model simulation: D Yamazaki, D E Alsdorf, S Han, T Okt


1340h  H43G-1347 POSTER AN OBJECT-BASED METHOD FOR ESTIMATION OF RIVER DISCHARGE FROM REMOTELY-SENSED IMAGERY: D A Burgett, L Blesius, J D Davis

1340h  H43G-1348 POSTER Implementation of a catchment-based river routing system with explicit representation of river depth and floodplain extent in North America: Z Liu, J S Famiglietti

H43H  Moscone West: 3018 Thursday 1340h

Ecohydrology of Arctic and Sub-Arctic Ecosystems: Patterns and Processes Across Spatial and Temporal Scales II (joint with A, B, C, GC)

Presiding: J Cable, University of Alaska; A K Liljedahl, University of Alaska, Fairbanks; J M Welker, Environment and Natural Resources Institute; T Jorgenson, Alaska Ecoscience

1340h  Introduction

1345h  H43H-01 Ecohydrology of permafrost-affected boreal forest ecosystems: sources of water utilized by plants and fluxed by ecosystems: J M Cable, K Ogle, B Cable, J M Welker

1400h  H43H-02 Effect of Speed and Intensity of Freezing on Microbial C and N Cycling in Two Arctic Tundra Soils: S M Schaeffer, C M Boot, J Schimel, S sistla, D Roux-Michollet

1415h  H43H-03 Ecohydrological monitoring blindness to Arctic ecosystem regime shifts: J Mard Karlsson, A Bring, G Destouni

1430h  H43H-04 The effect of shoreline retrogressive thaw slumping on chlorophyll a, nutrient and light relationships in small tundra lakes: M S Thompson, F J Wrona, T D Prowse

1445h  Break

1455h  H43H-05 Changes in snow cover and soil thermal dynamics in the terrestrial Arctic regions: H Park, Y Iijima, H Yabuki, Y Kodama, T Ohata

1510h  H43H-06 Permafrost - Surface water interactions in the Community Land Model: S C Swenson, D M Lawrence

1525h  H43H-07 Intensification of hydrological process in permafrost regions and correlation with ecological processes from multi-sensor satellite observations and in-situ measurements: J Tong, I Velicogna, T Zhang, J S Kimball, M A Rawlins, K C McDonald

H43I  Moscone West: 3016 Thursday 1340h

Physically Based Hydrologic Modeling: Advances and Challenges II (joint with A, B)

Presiding: V Y Ivanov, University of Michigan; E Caporali, University of Firenze; O Semenova, State Hydrological Institute; P J Restrepo, NOAA National Weather Service

1340h  H43I-01 The Challenge of Fully-Predictive Hydrologic Models Supported by Observations: Recent Experiences and Prospects in Semiarid Systems (Invited): E R Vivoni

1400h  H43I-02 LOCAL LAND-ATMOSPHERE COUPLING (Invited): M Ek, J A Santanello, C Jacobs, O Tuinenburg

1420h  H43I-03 Is deterministic physically-based hydrological modeling a feasible target? Incorporating physical knowledge in stochastic modeling of uncertain systems: A Montanari, D Koutsouyannis

1436h  H43I-04 Mechanistic ecohydrological modeling with Tethys-Chloris: an attempt to unravel complexity: S Fatichi, V Y Ivanov, E Caporali


1508h  H43I-06 Benchmarking Flow and Solute Transport in Coupled Surface-Soil Hydrologic Models: J Delfs, E A Sudicky, O Kolditz, Y Park, R McLaren, T Kalbacher

1524h  H43I-07 Understanding and Prediction: An Evolving Paradigm for Modeling Hydrologic Process Feedbacks at Multiple Scales: M Kumar, C Duffy, G Bhattacharyya

H43J  Moscone West: 3014 Thursday 1340h

Predicting Behavior of Freshwater Systems in a Changing Environment II (joint with B)

Presiding: M Sivapalan, Univ of Illinois at Urbana Champaign; A I Packman, Northwestern University; M A Hassan, Univ British Columbia; J Wilson, University of Illinois at Urbana-Champaign


1355h  H43J-02 Interannual rainfall variability, vegetation dynamics, and runoff controls in Mediterranean climates: J D Albertson, T G Wilson, N Montaldo

1410h  H43J-03 The Role of Water Subsidy on Vegetation Dynamics in a Semiarid Grassland Catchment: Comparison between Field Measurements and 3-D Ecohydrological Modeling: G Niu, P A Troch, C Paniconi, R L Scott, M Durcik, X Zeng, T E Huxman, D C Goodrich

1425h  H43J-04 Climate change effects on vegetation characteristics and groundwater recharge: R Bartholomeus, B Voortman, J Witte

1440h  H43J-05 Spatial variability in streamflow predictions across United States: Role of climate and topography in predictability at ungauged basins: M Stiegltz, S Patil

1455h  H43J-06 Effects of watershed management practice on short-term variation in stream discharge: L A Worman, G Lindstrom

1510h  H43J-07 Historic trends in the suspended sediment dynamics along the Missouri River: M A Hassan, J D Cullis, A Simon

1525h  H43J-08 WITHDRAWN

H43K  Moscone West: 3020 Thursday 1340h

Transport of Particles and Biocloids in Surfacedwaters and Groundwaters; From Sediment-Sized Particles to Nanoparticles, Emerging Contaminants, and Microorganisms II (joint with B)

Presiding: G S Bilotta, University of Brighton; P Owens, University of Northern British Columbia

Earth and Space Science Informatics

IN43A Moscone South: Poster Hall Thursday 1340h Future Directions for Earth Science Data Access Technologies II Posters (joint with A, B, C, GC, OS)


1340h IN43A-1374 POSTER A Prototype Web-based system for GOES-R Space Weather Data: A Sundaravel, D C Wilkinson

1340h IN43A-1375 POSTER Searching for and retrieving swath data using virtual tiles: M L Henderson

1340h IN43A-1376 POSTER Accessing Data via DAP in IDL: M D Galloy

1340h IN43A-1377 POSTER Datacasting: Integration of Earth Science Data and Information using RSS: S Mc Cleese, A Bingham, R Deen, T Stough, N Chung

1340h IN43A-1378 POSTER Key Features of the Deployed NPP/NPOESS Ground System: G Heckmann, K D Grant, J E Mulligan

1340h IN43A-1379 POSTER Management of Data Quality Information in NASA’s Earth Science Data Systems: S W Berrick, F Lindsay

1340h IN43A-1380 POSTER DATA RODS: MANAGING CRYOSPHERIC REMOTE SENSING DATA ENTIRELY WITHIN A PURE-OBJECT DATABASE: G Grant, D W Gallowher

1340h IN43A-1381 POSTER EOS Data Products Archive, Distribution and Utilization Patterns Derived from the ESDIS Metrics System (EMS): L Wanchoo, B M Krupp, H Chang, K J Murphy, Title of Team: ESDIS Metrics System


1340h IN43A-1383 POSTER Enabling Interoperability and Servicing Multiple User Segments Through Web Services, Standards, and Data Tools: G Palanisamy, B E Wilson, R B Cook, W Lenhardt, S Santhana Vannan, Y Pan, B F McMurry, R Devarakonda

1340h IN43A-1384 POSTER Easy Access of EOSDIS HDF data via OPeNDAP and Other Tools: H Lee, Z Li, J Gallagher, M J Folk, M Yang

1340h IN43A-1385 POSTER Immediate Download for Synthetic Aperture Data Products From the Alaska Satellite Facility: J Laurencelle

1340h IN43A-1386 POSTER BingEO: Enable Distributed Earth Observation Data for Environmental Research: H Wu, C Yang, Y Xu


1340h IN43A-1388 POSTER A Timeline Concept for Presenting Search Results from Heterogeneous Remote Sensing Data Collections: T Maiersperger, C J Doescher, J Werpy

1340h IN43A-1389 POSTER User Registration Systems for Distributed Systems: K J Murphy, M Cechini, D Pilone, A Mitchell

1340h IN43A-1390 POSTER MODIS Web Services Synchronous Post-processing Approach: R E Wolfe, Title of Team: MODIS Science Data Support Team

1340h IN43A-1391 POSTER From Phase to Fringe: How InSAR Might Work for You: G Bryson, B Buechler, R Gens, K Hogenson, M Shapran, G Short

1340h IN43A-1392 POSTER Accuracy VS Performance: Finding the Sweet Spot in the Geospatial Resolution of Satellite Metadata: W E Baskin, D C Mangosing, P L Rinsland

1340h IN43A-1393 POSTER Lightweight Advertising and Scalable Discovery of Services, Datasets, and Events Using Feedcasts: B D Wilson, R Ramachandran, S Movva

1340h IN43A-1394 POSTER STOQS: The Spatial Temporal Oceanographic Query System: M P McCann, R Schramm

1340h IN43A-1395 POSTER Auroral Resources: Dataset Access and Interactive Visualization: P Elespuru, J R Redmon, E A Kihn, M Zhizhin, D Medvedev

1340h IN42A-07 POSTER A Software Prototype For Accessing Large Climate Simulation Data Through Digital Globe Interface: A Chaudhuri, A Sorokine

IN43B Moscone South: Poster Hall Thursday 1340h Information Systems Advances for Earth Science Decadal Survey Era Missions II Posters (joint with A, C, EP, GC, NH, OS, G)

Presiding: C D Norton, Jet Propulsion Laboratory; K Moe, NASA; M Moghaddam, University of Michigan

1340h IN43B-1396 POSTER OSCAR: Online Service for Correcting Atmosphere in Radar: P A von Allmen, Z Xing, E J Fielding, E Fishbein, L Pan, Z Li

1340h IN43B-1397 POSTER InSAR Scientific Computing Environment: E M Gurrola, P A Rosen, G Sacco, H A Zebker, M Simons, D T Sandwell

1340h IN43B-1398 POSTER A Science Data System Approach for the DESDynI Mission: O Kwoun, D Cuddy, K Leung, D Freeborn

1340h IN43B-1399 POSTER Data Formats for SAR Archival and Distribution: K Cunningham

1340h IN43B-1400 POSTER Real-Time In-Situ Measurements for Earthquake Early Warning and Space-Borne Deformation Measurement Mission Support: S Kedar, Y Bock, F Webb, R W Clayton, S E Owen, A W Moore, E Yu, D Dong, P Fang, P Jamaica, M B Squibb, B W Crowell

1340h IN43B-1401 POSTER MODIS tools for land validation, field site characterization, data intensive science and classroom education: S Santhana Vannan, R B Cook, B E Wilson

1340h IN43B-1402 POSTER Efficient and Effective Implementation of New Data Sets into the Distributed Active Archive Center, a Land Processes Perspective: C J Doescher, T Sohre, J Behnke, A Hall, J Vermeer, J M Manus

All information is current as of November 12, 2010
1340h  IN43B-1403 POSTER Objectively Optimized Observation Direction System Providing Situational Awareness for a Sensor Web: O Aulov, D J Lary

1340h  IN43B-1404 POSTER NPOESS C3S Expandability: SafetyNet™ and McMurdo Improvements: M I Jamilkowski, J Paciaroni, F Pela

1340h  IN43B-1405 POSTER NPOESS McMurdo Multimission Communications System: J Paciaroni, C Higgins, M I Jamilkowski

IN43C Moscone South: Poster Hall Thursday 1340h

Scientific Workflows and Provenance: Strategies for Current and Emerging Issues II (joint with A, ED, OS, H, SH)

Presiding: H Hua, NASA/JPL; D L McGuinness, Rensselaer Polytechnic Institute and McGuinness Associates; C Lynnes, NASA/GSFC; B D Wilson, Jet Propulsion Lab

1340h  IN43C-01 The Symbiotic Relationship between Scientific Workflow and Provenance (Invited): E Stephan

1355h  IN43C-02 The Kiel data management infrastructure – arising from a generic data model: D Fleischer, H Mehrtens, C Schirnick, P Springer

1410h  IN43C-03 Long-term Science Data Curation Using a Digital Object Model and Open-Source Frameworks: J Pan, W Lenhardt, B E Wilson, G Palanisamy, R B Cook

1425h  IN43C-04 Widening the adoption of workflows to include human and machine-science processes: L Salayandia, P Pinheiro da Silva, A Q Gates

1440h  IN43C-05 Presenting Provenance Based on User Roles - Experiences from the ACOS System: P West, J Michaelis, P A Fox, S Zednik, D L McGuinness

1455h  IN43C-06 Experiences Developing A User-centric Presentation of A Domain-enhanced Provenance Data Model: C Chang, S Zednik, C Lynnes, P A Fox, D L McGuinness, G G Leptoukh, J Pan

1510h  IN43C-07 A Provenance Enabled Framework for Subjectivity and Context: T W Narock, Y Voon

1525h  IN43C-08 Extending eScience Provenance with User-Submitted Semantic Annotations: J Michaelis, S Zednik, P West, P A Fox, D L McGuinness

Nonlinear Geophysics

NG43A Moscone South: Poster Hall Thursday 1340h

Characterization of Geophysical Time Series II Posters (joint with NH)

Presiding: A Bunde, Univ. of Giessen

1340h  NG43A-1406 POSTER Estimation of the Scaling Exponent due to Fractal Behaviour of a Time Series: V P Dimri, R P Srivastava

1340h  NG43A-1407 WITHDRAWN

1340h  NG43A-1408 POSTER Discerning hidden scaling in mean-reverting multifractal processes: M Rybdal, K Rybdal

1340h  NG43A-1409 POSTER Creating Synthetic Water Level Time Series from the Scaling Exponents of Water Level Records from Atlantic, Gulf of Mexico, and Pacific Coastal Stations and the North American Great Lakes: J R Smigelski, S F Tebbens, C C Barton

1340h  NG43A-1410 POSTER A Non-Linear, Non-Stationary Look at Oceanic-Land-Air Temperature Surface Temperature Variations over the Past 150 and 350 Years: L J Pietrafesa

1340h  NG43A-1411 POSTER Monte Carlo Modelling Of Sea Ice Population Dynamics: D Godlovitch, G M Flato, A H Monahan

NG43B Moscone South: Poster Hall Thursday 1340h

Complex Networks in Geosciences II Posters (joint with A, H, NH, S, SM, V)

Presiding: J Davidsen, University of Calif; I Zaliapin, University of Nevada; U Lall, Columbia Univ

1340h  NG43B-1412 POSTER Statistical properties of aftershocks: C Gu, J Davidsen

1340h  NG43B-1413 POSTER Complex Networks Reveal Persistent Global / Regional Structure and Predictive Information Content in Climate Data: K Steinhaeuser, N V Chawla, A R Ganguly

1340h  NG43B-1414 POSTER Tokunaga self-similarity for symmetric homogeneous Markov chains: Y Kovchegov, I Zaliapin

1340h  NG43B-1415 POSTER Anomalous Physical Transport in Complex Networks: C Nicolaides, L Cuo-Felgerosso, R Juanes

1340h  NG43B-1416 POSTER Flows in mixed structures composed of interacting networks and continua: P M Adler, V V Mitrosev

1340h  NG43B-1417 POSTER Fluid Flow complexity in a Rough Fracture Using a Complex Aperture Network: H Ghaffari

1340h  NG43B-1418 POSTER A Dynamic Tree Approach to Environmental Transport on Hillslopes: P Passalacqua, I Zaliapin, E Foufoula-Georgiou, M Ghil, W E Dietrich

1340h  NG43B-1419 POSTER Scaling of Peak Flows with Constant Flow Velocity in Random Self-Similar Networks: R Mantilla, V K Gupta, B M Troutman

1340h  NG43B-1420 POSTER Dynamics of land use and common-resource pressures in terrestrial-aquatic environments: E Lazarus, K P Bell

1340h  NG43B-1421 POSTER Emergent Dynamics of Sustainability and Resource Equity in Coupled Human Coastline Systems: D McNamara, E Lazarus, A B Murray, M Smith, S Gopalakrishnan

1340h  NG43B-1422 POSTER Transient and asymptotic behavior in a regular network model for the ice-albedo feedback under thermal forcing: M Mueller-Stoffels, R Wackerbauer

NG43C Moscone South: Poster Hall Thursday 1340h

Detection and Attribution of Trends, Correlations, and Cross Correlations in Climate and Geoscience II Posters (joint with NH)

Presiding: S Lennartz, Univ. of Giessen; A Bunde, Univ. of Giessen; C C Barton, Wright State Univ


1340h  NG43C-1424 POSTER Long-term changes and trends in total ozone over the northern mid-latitudes: Influence of atmospheric dynamics and chemistry and contribution from extreme events: H E Rieder, K J Staelin, J A Maeder, M Ribetar, S Di Rocco, L Frossard, L M Janco, T Peter, A C Davison

1340h  NG43C-1425 POSTER Trend evaluation in records with long-term persistence: Application to climate data: S Lennartz, A Bunde

1340h  NG43C-1426 WITHDRAWN

1340h  NG43C-1427 POSTER Trends from Levy-walk statistics in solar activity – a link to multidecadal and secular trends in Earth climate?: K Rybdal, M Rybdal

1340h  NG43C-1428 POSTER New Analysis of the Paleoclimate Temperature Signal from Ice Cores: S H Bisoff, C C Barton, J R Smigelski
1340h  NG43C-1429 POSTER Atlantic Multidecadal Oscillation and Northern Hemisphere’s climate variability: S Kravtsov, M G Wyatt, A A Tsonis

NG43D Moscone South: Poster Hall Thursday 1340h Multiplicity of Scales, Dynamics, and Extremes in Geophysics: Theory, Validation, and Applications II Posters (joint with NH, S)

Presiding: V G Kossobokov, Int Inst Earthquake Prediction Theory & Math Geophys, RAS; D P Ouzounov, NASA/GSFC; M Parrot, LPC2E/CNRS; J G Liu, National Central University; I G Main, University of Edinburgh

1340h NG43D-1430 POSTER On the dynamics of the magnetosphere during geomagnetic storms and substorms: T Zivkovic, K Rypdal
1340h NG43D-1431 POSTER Earthquake forecasting based on NASA’s integrated systems engineering analysis: A Bogatko, G Temple, F T Freund

NG43E Moscone South: Poster Hall Thursday 1340h Multiscaling in Hydrodendrometeorology and Hydrology II Posters (joint with A, H, NH, NS)

Presiding: A P Barros, Prat School of Engineering; S Lovejoy, McGill University; D J Schertzer, U. Paris-Est, Ecole des Ponts ParisTech; A A Carsteaun, ESFM-IPN

1340h NG43E-1432 POSTER Parameterization of Storm Models for Extreme Rainfall Analysis: D Veneziano, E Armanag, C Lepore
1340h NG43E-1433 POSTER Analysis of high-resolution spatiotemporal structures of mesoscale rainfall fields based upon the theory of left-sided Multifractals: L Wang, C Onof, C Maksimovic
1340h NG43E-1434 POSTER Elucidating the Spatial Scaling Behavior of Cloud Embedded Convection and Rainfall Patterns in Complex Terrain Using Idealized WRF Simulations: M Nogueira, A P Barros, P M Miranda
1340h NG43E-1435 POSTER Atmospheric Pollution in Mexico City: Temporal Scaling and Interaction with Rainfall (Invited): A A Carsteaun, J J Castro, L G Escandon

NG43F Moscone South: Poster Hall Thursday 1340h Pattern Formation in Earth System Sciences II Posters (joint with B, EP, H)

Presiding: L Cueto-Felgueroso, MIT; J A Neufeld, Institute of Theoretical Geophysics

1340h NG43F-1436 POSTER Emergence of aeolian ripples: direct simulations, actual dynamical mechanisms and scaling laws: O Duran Vincent, B Andreotti, P Claudin
1340h NG43F-1437 POSTER Role of overland flow in the formation of spatial vegetation patterns: A G Konings, S E Thompson, G G Katul
1340h NG43F-1438 POSTER Modelling channel network formation: the effect of tidal range and initial bathymetry: G Coco, B van Maanen, K Bryan
1340h NG43F-1439 POSTER Patterns in salt-marsh ecosystems: the role of biotic and abiotic forcings: A D’Alpaos, M Marani
1340h NG43F-1440 POSTER Modeling the formation of a large sand bar system inside funnel-shaped, tidally-dominated Qiantangjiang estuary, China: Q Yu, Y Wang, S Gao, B W Fleming
1340h NG43F-1441 POSTER The Why of Waiting: How mathematical Best-Choice Models demonstrate optimality of a Refractory Period in Habitat Selection: M F Bruguier, E C Waymire, M G Betts
1340h NG43F-1442 POSTER Why is columnar jointing not perfectly hexagonal?: S Bosshard, G Hetenyi, B Taisne, F Garel, E Medard, H B Mattsson
1340h NG43F-1443 POSTER Surface moisture feedback in modelled aeolian rippled sand strip and dune field patterns: J M Nield
1340h NG43F-1444 POSTER Pattern formation at the ocean surface: The distribution of Sargassum and the role of the eddy field: Y Zhong, A Bracco, T Villarel
1340h NG43F-1445 POSTER Utilization of time series airborne LiDAR to quantify patterns of deposition and erosion across dune-dune interactions at White Sands Dune Field, New Mexico: R C Ewing, V B Smith, D C Mohrig, K Kocurek
1340h NG43F-1446 POSTER Bifurcating Particle Swarms in Smooth-Walled Fractures: L J Pyrak-Nolte, H Sun
1340h NG43F-1447 POSTER The absorption and transpiration of plants lead to a typical chaotic eco-hydrological process: M Lin, F Tian, H Hu, D Liu, Y Tang

NG43G Moscone South: Poster Hall Thursday 1340h Scaling Functions and Forecasting Extremes in Natural Hazards, Meteorology, and Space Physics II Posters (joint with NH, S)

Presiding: S F Tebbens, Wright State University; C C Barton, Wright State Univ; S Lennartz, Univ. of Giessen; A Bunde, Univ. of Giessen

1340h NG43G-1448 POSTER Does the non-extensivity parameter q capture the effect of long-range temporal correlations between the magnitudes of successive earthquakes?: P Varotsos, N V Sarlis, E S Skordas
1340h NG43G-1449 POSTER Examination of historical landslide time series: a test case from the Emilia-Romagna region, northern Italy: M Rossi, A Witt, B D Malamud, F Guzzetti, S Peruccacci
1340h NG43G-1450 POSTER Annual Shoreline Dynamics of the Outer Banks, North Carolina: S F Tebbens, R M Myers, C C Barton, S M Burroughs, A B Murray
1340h NG43G-1451 POSTER Fractal Analysis of the Polarity Reversal of the Earth’s Magnetic Field and the Rikitake Self-Reversing Dynamo Model: P S Craig, C C Barton
1340h NG43G-1452 POSTER Universality of rain event size distributions: A Corral, O Peters, A Deluca, J Neelin, C Holloway
1340h NG43G-1453 POSTER Sampling properties of precipitation quantiles in series affected by trend: A Cancelliere, B Bonaccurso, G Rossi
1340h NG43G-1454 POSTER Cross-correlations in the meteorological variables and different regions over China: T Feng, Z Fu
1340h NG43G-1455 POSTER Scale invariant avalanches: a critical confusion: O Ramos

NG43H Moscone South: Poster Hall Thursday 1340h Stochasticity, Memory Effects, and Multiplicity of Scales in Geophysics II Posters

Presiding: M D Chekroun, UCLA

1340h NG43H-1456 POSTER A Statistical Mechanical Approach for the Computation of the Climatic Response to General Forcings: V Lucarini, S Sarno
1340h NG43H-1457 POSTER Improved linear response for stochastically driven systems: RV Abramov
All information is current as of November 12, 2010
Near Surface Geophysics

**OS43A Moscone West: 3022 Thursday 1340h**

Joint Interpretation of Different Geophysical Data for Natural Resources Characterization II (joint with S)

**Presiding: T Seher**, Massachusetts Institute of Technology; **M Commer**, Lawrence Berkeley National Laboratory


1400h **OS43A-02** Joint Electromagnetic and Seismic Data Inversion Algorithm for Geophysical Applications (Invited): **A Abubakar**, G Gao, T Habashy, J Liu

1420h **OS43A-03** Joint Stochastic Inversion of Seismic Amplitude Versus Angles and Controlled Sources Electromagnetic Data for Gas Saturation Estimation (Invited): **J Chen**, M Hoversten

1440h **OS43A-04** Model resolution, clustering, and zonal properties of cross-gradient joint inversion models (Invited): **N Linde**, J A Doetsch

1500h **OS43A-05** Joint Inversion of Seismic Traveltime and Gravity Data on 3D Unstructured Grids for Mineral Exploration: **C G Farquharson**, P G Lelièvre, C A Hurich

1520h **OS43A-06** JOINT GEOPHYSICAL CHARACTERIZATION OF GEOTHERMAL SYSTEM IN MENEGAI, KENYA USING MAGNETOTELLURIC AND GRAVITY: **A M Wamalwa**, L F Serpa

Ocean Sciences

**OS43A Moscone South: Poster Hall Thursday 1340h**

Ocean Sciences General Contributions Posters

**Presiding: J Salisbury**, University of New Hampshire; **D Gilbert**

1340h **OS43A-1578** POSTER Canaries upwelling: More or Less?: **E D Barton**, C Roy

1340h **OS43A-1579** POSTER A methodology for constructing a weekly upwelling index at high spatial resolution from satellite sea surface temperature maps with application to West Iberia: **G P King**, J Dias

1340h **OS43A-1580** POSTER Water Column Sampling Capabilities of the NEPTUNE Canada Regional Cabled Observatory: **S F Mihaly**, Title of Team: and NEPTUNE Canada Science

1340h **OS43A-1581** POSTER Temporal Variability in Net Community Productivity on a Coastal Shelf Site as Determined by High-Rate Dissolved Oxygen and Nitrogen Data: **D C Vandemark**, K W Hanley, J Salisbury

1340h **OS43A-1582** POSTER Oxygen Trends In The Global Ocean: **D Gilbert**

1340h **OS43A-1583** POSTER On-line real time monitoring system of the water quality at the Nanwan Bay, southern Taiwan: **P Meng**, C Chen

1340h **OS43A-1584** POSTER Effects of turbulence parameterization on the modeling of mesoscale vortices in the Ligurian Sea: **E Casella**, A Parodi, F Siccardi

1340h **OS43A-1585** POSTER Trapping of gyrotactic organisms in an unstable shear layer: **M S Hoecker-Martinez**, W Smyth

1340h **OS43A-1586** POSTER On the correlation between microseisms and ocean waves: **L Lin**, W Liao, W Liang, M Liang

1340h **OS43A-1587** POSTER Hydrographic Variability off the Coast of Oman: **L Belabbassi**, S F Dimarco, A E Jochens, H Al Gheilani, Z Wang

1340h **OS43A-1588** POSTER Results from a geophysical investigation of Lake Superior’s ring structures: **N J Watrous**, D Gustafson

1340h **OS43A-1590** POSTER Seasonal Advective Influences on CDOM Distribution over the Louisiana-Texas Shelf Using Hydrodynamic Modeling and Ocean Color: **N Chaichi Tehrani**, E J D’Sa, D Ko

1340h **OS43A-1591** POSTER Quasi-Oscillatory Processes of Louisiana Bay Flushing under Normal and Extreme Weather Conditions and their Relationships with Coastal Stratification and Hypoxia: **C Li**, N N Rabalais, R E Turner, G Stone, E Weeks


1340h **OS43A-1593** POSTER Using LiDAR to as a Potential Method for Detection Plastics in Water: **G Lee**, A Neal, R Mielke, B Bookhagen

1340h **OS43A-1594** POSTER Correlations of Intertidal Variability of Winds, Sea Surface Temperature, and Sea Surface Height in Tropical Ocean from Satellite Multi-sensor Observations: **J Pan**, H Lin

1340h **OS43A-1595** WTTHDRAWN

1340h **OS43A-1596** POSTER Hindcasting circulation in the Pacific sector of the Arctic Ocean and the Bering Strait with a nested 4Dvar data assimilation system: **G Panteleev**, D Nechaev, M Yaremchuk, T Kikuchi

1340h **OS43A-1597** POSTER Multivariate Multi-data Assimilation System in Regional Model with High Resolution: **M Benkiran**, J Chanut, S Giraud St Albin, Y Drillet

1340h **OS43A-1598** POSTER The role of subsurface ocean dynamics in the memory of Central Pacific Warming Patterns: **L I Ceballos**, C Hoyos, E Di Lorenzo

1340h **OS43A-1599** POSTER Development of Vertical Cable Seismic System for Hydrothermal Deposit Survey (2) - Feasibility Study: **E Asakawa**, F Murakami, Y Sekino, T Okamoto, H Mikada, J Takekawa, T Shimura

1340h **OS43A-1600** POSTER R/V SIKULIAQ – A New Ice-capable Asset For The Future UNOLS Fleet: **T E Whitledge**, D K Oliver

1340h **OS43A-1601** POSTER Sea Ice SAR Signature Dependence on Thaw and Refreeze Event in the Snow Cover: **E J Hudier**, S Tolszczuk-Leclerc

1340h **OS43A-1602** POSTER Near-bed environmental conditions influencing cold-water coral growth on Viosca Knoll, Gulf of Mexico: **F Mienis**, G Duineveld, A J Davies, T V Weering, S Ross, M Roberts, H Seim

1340h **OS43A-1603** POSTER Depositional Environments of Late Danian Plant Localities: Chubut Province, Patagonia, Argentina: **E Comer**, R L Slingerland, P Wilf

1340h **OS43A-1604** POSTER Coastal Seafloor Observatory Of The East China Sea At Xiaoqushan And Its Primary Observations: **H Xu**, C Xu, R Qin, Y Zhang, H Chen

1340h **OS43A-1605** POSTER Investigation of mercury occurrence in the benthic environment of the continental shelf along the Eastern Gulf of Mexico: **D A Steffy**, A Nichols

1340h **OS43A-1606** POSTER Application of Several Techniques for Prohibiting Fouling in Li-Recovery Pilot Plant: **H Yoon**, D Kim, M Gong, B Kim, K Chung
Presiding: C Berndt, IFM-GEOMAR; S Planke, Volcanic Basin
Petroleum Rsch

1340h OS43B-01 The p in p-T is for pressure: Movement of the gas
hydrate stability field during glacial sealevel lowering and its possible
link to pockmark formation on the Chatham Rise, New Zealand

1355h OS43B-02 Subsurface plumbing and fluid expulsion from
sedimentary basins: evidence from the sedimentary record offshore
West Africa (Invited): M Huuse

1410h OS43B-03 Focused Fluid Flow and Gas Hydrate Distribution
in Heterogeneous Marine Sediments: S Chatterjee, G Gu,
G Bhatnagar, W G Chapman, G R Dickens, B Dugan, G J Hirasaki

1425h OS43B-04 Evidence for two discrete fluid-flow regimes
below Hydrate Ridge from 3D heat-flow modeling: M J Hornbach,
N L Bangs, C Berndt

1440h OS43B-05 Flow Focusing in Layered Ocean Sediments:
J M Frederick, B A Buffett

1455h OS43B-06 Simulating the response of ocean sediment
methane hydrates to climate change: P C McGuire, D E Archer,
B A Buffett, V H Magalhaes, E B O'Donnell

1510h OS43B-07 Groundwater Systematics in Hydrate Petroleum
System Analysis: M D Max, A H Johnson

1525h OS43B-08 Basin-Scale Assessment of Gas Hydrate
Dissociation in Response to Climate Change: M T Reagan,
G J Moridis, S M Elliott, M E Maltrud

OS43C Moscone West: 3007 Thursday 1340h
Nearshore Processes I (joint with EP)

Presiding: C Chickadel, University of Washington; J W Long, USGS;
H F Stockdon, U.S. Geological Survey; G R Pawlak, University of
Hawaii; D Foster, University of New Hampshire

1340h OS43C-01 Sediment Delivery to Diamond Shoals:
a Field Experiment at Cape Hatteras Point, North Carolina
(Invited): J H List, J C Warner, E R Thieler, K A Haas, G Voulgaris,
J E McNinch, K L Brodie

1355h OS43C-02 In-situ geotechnical investigation of sediment
dynamics over 'The Bar', Raglan, New Zealand: N Stark,
D Greer, D J Phillips, J C Borrello, S Harrison, A Kopf

1410h OS43C-03 Understanding the response of nearshore
circulation on the South Carolina coast due to atmospheric frontal
patterns using field measurements and 3-D numerical modeling:
N Kumar, G Voulgaris, J C Warner

1425h OS43C-04 Low-grazing angle laser scans of foreshore
topography, swash and inner surf-zone wave heights, and mean
water level: validation and storm response: K L Brodie,
J E McNinch, M Forte, R Slocum

1440h OS43C-05 The Statistics of Optical Radiance in the Surf
Zone: R A Holman, J Stanley

1455h OS43C-06 Models and observations of foam coverage and
bubble content in the surf zone: J T Kirby, F Shi, R A Holman

1510h OS43C-07 Dissipation from a Drifter: J M Thomson,
J Talbert

1525h OS43C-08 A new closure approximation for shallow-water
wave propagation: T T Janssen, T H Herbers

Planetary Sciences

PA43A Moscone South: 306 Thursday 1340h
South Pole-Aitken Basin: New Insights I (joint with EP)

Presiding: N E Petro, NASA/GSFC; E Mazarico, NASA GSFC / ORAU NPP; R L Klima, Johns Hopkins University Applied Physics Laboratory

1340h PA43A-01 MoonRise: Sampling South Pole-Aitken Basin as a
Recorder of Solar System Events (Invited): B L Jolliff, C Shearer,
Jr., L R Gaddis, C M Pieters, J W Head, J Haruyama, R Jaumann,
M Ohtake, G Osinski, D A Papastassioul, N E Petro, Title of Team:
MoonRise Science Team

1355h PA43A-02 Silicate Mineralogy of SPA: A New View from the
Diviner Lunar Radiometer: B T Greenhagen, N E Petro, P G Lucey,
M B Wyatt, K L Donaldson Hanna, C M Pieters, T D Glotch,
J Arnold, C Allen, N E Bowles, I R Thomas, D A Paige

1410h PA43A-03 Distribution and Composition of Prominent Low-
Ca Pyroxene Exposures in the South Pole-Aitken Basin as Observed
by the Moon Mineralogy Mapper (M3): R L Klima, N E Petro,
P Isaacson, J M Sunshine, C M Pieters, J W Head

1425h PA43A-04 Implications of the Distinctive Mafic Mound in
Central SPA (Invited): C M Pieters, M Ohtake, J Haruyama,
B L Jolliff, L R Gaddis, N E Petro, R L Klima, J W Head

1440h PA43A-05 The Structure and evolution of the Moon's South
Pole-Aitken Basin from the Lunar Orbiter Laser Altimeter (LOLA)
(Invited): M T Zuber, D E Smith, G A Neumann, E Mazarico,
M H Torrence, J W Head, O Aharonson, M M Sori, M J Talpe,
I Garrick-Bethell, F G Lemoine

1455h PA43A-06 Magnetic signature of the South Pole-Aitken (SPA)
basin: Character, origin, age, thickness and depth: M E Purucker,
J W Head

1510h PA43A-07 The fate of the South Pole-Aitken impactor:
constraints from orbital magnetic field data and impact simulations
(Invited): M A Wieczorek, B P Weiss, S T Stewart

1525h PA43A-08 The Mechanics of Impact Basin Formation:
Comparisons between Modeling and Geophysical Observations:
S T Stewart

Public Affairs

PA43A Moscone West: 3007 Thursday 1340h
Priorities and Pitfalls: Pathways for Effective Science
Communication II (joint with B, ED, GC, NH, H)

Presiding: R M Richardson, University of Arizona; M L La Grave;
J W Harden, U.S. Geological Survey

1340h PA43A-03 Fostering science communication via direct
outreach by scientists: M Viñas, P L Weiss, K O'Neil, R M Richardson

1355h PA43A-02 About errors, inaccuracies and stereotypes:
Mistakes in media coverage - and how to reduce them: D Scherzler

1410h PA43A-01 To engage or not to engage: Public discussion of
climate science in the age of the blogosphere: W Meier, J C Stroeve,
K Leitzell

1425h PA43A-04 Everything I Need to Know About Science
Communication, I Learned from Local Television News (Invited):
E Lorditch, C O'Riordan

1440h PA43A-05 Emphasizing history in communicating scientific
debates: S C Sherwood

1455h PA43A-06 Risk Communication on Earthquake Prediction
Studies - “No L'Aquila quake risk” experts probed in Italy in June
2010: S Oki, K Koketsu, E Kuwabara, J Tomari

All information is current as of November 12, 2010
Paleoceanography and Paleoclimatology

PP43A Moscone South: Poster Hall Thursday 1340h Studying Uncertainty in Paleoclimate Reconstruction I Posters (joint with A, B, GC, OS, V)

Presiding: C E Buck, University of Sheffield; W E Austin; M N Evans, University of Maryland; B WohlFärth, Stockholm University

1340h PP43A-1644 POSTER Do modeling experiments and proxy data provide the same MIS-13?: A L Berger, Q Yin

1340h PP43A-1645 POSTER Reliability of climate model ensembles at the Last Glacial Maximum: J C Hargreaves, A Paul, R Oghaïto, J D Annan

1340h PP43A-1646 POSTER Comparison of a regional paleoclimate simulation over Europe for the last 500 years with proxy-based reconstructions: J J Gomez-Navarro, J P Montavez, S Jerez, P Jimenez-Guerrero, R Lorente-Plazas, F J Gonzalez-Rouco, E Zorita

1340h PP43A-1647 POSTER The Effects of Topography on the Seasonality of Aridity and Humidity: A Case Study in the Andes from Observations and Modeling Results: J L Russell, S Dasher, P J Goodman

1340h PP43A-1648 POSTER Replication of Subdecadal Holocene δ18O Records from Borneo Speleothems: S S Hofmann, D C Lund, K Cobb, J F Adkins, R N Sorotor, R Franzblau, R Selz


1340h PP43A-1650 POSTER Derivation of acid fractionation factor for BaCO3: Implications for equilibrium oxygen isotope fractionations of the carbonic acid system: J Uchikawa, R E Zeeebe, T W Vennemann, H J Spero

1340h PP43A-1651 POSTER The impact of meter-scale oxygen gradients in the selective degradation of organic matter: implications for proxy interpretation: K Bogus, K A Zonneveld, D Fischer, S Kasten, G Versteegh

1340h PP43A-1652 POSTER The uncertainty of atmospheric CO2 estimates made using the paleosol carbonate CO2 barometer: D O Breecker

1340h PP43A-1653 POSTER A Taxonomic Reduced-Space Pollen Model for Paleoclimate Reconstruction: E R Wahl, C Schoedel

1340h PP43A-1654 POSTER Assessing Paleoceanographic Reconstruction Uncertainties caused by No-Analogs: a NE Pacific example: C Lopes, A C Mix

1340h PP43A-1655 WITHDRAWN


1340h PP43A-1657 POSTER Borehole Paleoceanography: In search of a minimum depth criterion for terrestrial borehole temperature profiles: H Beltrami, J E Smerdon, G Matharoo, N R Nickerson

1340h PP43A-1658 POSTER Uncertainties from the determination of the steady state in borehole climatology: G S Matharoo, H Beltrami, J E Smerdon

1340h PP43A-1659 POSTER A new method for separating the climatic and biological trend components from tree ring series, with implications for paleoclimate reconstructions: J Boulid

1340h PP43A-1660 POSTER Quantification of Environmental Proxy Precision: A Meibom, C Kopp

1340h PP43A-1661 POSTER Time-slice last millennium experiments with interactive gas-phase chemistry and aerosols: K Tsigridou, A N LeGrande, D M Koch

1340h PP43A-1662 POSTER How much do carbon isotope measurements constrain glacial ocean circulation?: A Schmittner, A C Mix

1340h PP43A-1663 POSTER Insight from a careful dissection of the Rayleigh Distillation Model: R W Vachon, J M Welker


1340h PP43A-1665 POSTER Climate field reconstruction uncertainty arising from the multivariate/nonlinear nature of realistic proxy systems: M N Evans, J E Smerdon, A Kaplan, S E Tolwinski-Ward, F J Gonzalez-Rouco

1340h PP43A-1666 POSTER Sensitivity Analysis for Proxy Reconstructions of the Past 2000 Years: S Hanhijärvi, A Korhola

1340h PP43A-1667 POSTER A pseudoproxy evaluation of the spectral fidelity of reconstructed temperature fields: J E Smerdon, A Kaplan, M N Evans


PP43B Moscone South: Poster Hall Thursday 1340h Climate of the Common Era I Posters (joint with A, GC)

Presiding: K J Anchukaitis, Columbia University; J Emile-Geay, Univ. of Southern California; J E Smerdon, Columbia University

1340h PP43B-1669 POSTER Variability of North Atlantic surface and subsurface temperatures during the last 2000 years: T Bouinot, E Cortijo, A Govin, C Cléroux, T Mulder, E Gonthier

1340h PP43B-1670 POSTER Marine sediments from southeastern Brazilian continental shelf: A 1200 Year record of upwelling productivity: A Albuquerque, D D Souto, D D Lessa, A Sifeddine, B Turcq, C F Barbosa, Title of Team: Ressurgence Project

1340h PP43B-1671 POSTER Interannual and decadal variability of East Asian winter monsoon and ENSO detected in a 120-year coral record from the eastern coast of the Philippines: A Fukushima, H Kawahata, A Suzuki, K Kojima, T Okai, T Ishimura, P P Siringan

1340h PP43B-1672 POSTER A 200 year coral paleoclimate record of West Pacific Warm Pool variability and ENSO behavior from the Republic of Palau: M C Osborne, R B Dunbar, D A Mucciarone, J Sanchez-Cabeza

1340h PP43B-1673 POSTER Sea surface temperatures in the subpolar North Atlantic over the last 230 years and their relation to the North Atlantic Oscillation and great salinity anomalies: A Miettinen, N Koc, F Godtliebsen, D Divine, I R Hall

1340h PP43B-1674 POSTER Extreme Drought Events Revealed in Amazon Tree Ring Records: H S Jenkins, P A Baker, T P Guilderson

1340h PP43B-1675 POSTER Calcareous sinter from ancient aqueducts as a source of data in paleoclimate, tectonics and hydrology: G Surmelihindi, C W Passeich

1340h PP43B-1676 POSTER A 1248-year reconstruction of May precipitation for the Mid-Atlantic Region using Juniperus virginiana tree rings: S Maxwell, A E Hessl, E Cook, B Buckley
1452h PP43C-07 Clumped Isotopes Kinetic Effects: Insight from Synthetic Carbonate and its Implication for Speleothems: H P Affek, S Zaarur, T Kluge, C P Saenger, P M Douglas

1504h PP43C-08 A New Method of Obtaining High-Resolution Paleoclimate Records from Speleothem Fluid Inclusions: A J Logan, T W Horton

1516h PP43C-09 Temperature calibration of lacustrine alkenones using in-situ sampling and growth cultures: Y Huang, J L Toney, R Andersen, S C Fritz, P A Baker, E C Grimm, S Theroux, L Amaral Zettler, P E Nyren

1528h PP43C-10 A 5,000 year alkenone-based temperature record from Lower Murray Lake reveals a distinct Medieval Warm Period in the Canadian High Arctic: W J D’Andrea, R S Bradley

PP43D Moscone West: 2005 Thursday 1340h Interglacial Climate Variability II (joint with B, C)

Presiding: J F McManus, Lamont-Doherty Earth Observatory of Columbia University; S Desprat, EPHE, University Bordeaux 1

1340h Introduction Jerry McManus

1343h PP43D-01 Insolation and CO2 Contribution to the interglacial climates of the past 80,000 years: Q Yin, A L Berger

1355h PP43D-02 Deep Ocean Temperature and Ice Volume since the mid Pleistocene Transition: A Southern Ocean perspective of interglacials (Invited): H Elderfield, M Greaves, P Ferretti, J N McCave, S Crowhurst

1410h PP43D-03 A high-resolution record of ocean chemistry, temperature and productivity in the Southwest Pacific Ocean during Marine Isotope Stage 31 from G. ruber and G. bulloides: A Bolton, J Baker, G B Dunbar, L Carter

1425h PP43D-04 Timing and duration of the last five interglacial periods from an accurate age model of the Dome Fuji Antarctic ice core: K Kawamura, S Aoki, T Nakazawa, A Abe-Ouchi, F Saito

1440h PP43D-05 Interglacial climate in the tropical West Pacific through the late Pleistocene: A N Meckler, M Clarkson, J F Adkins, J Eiler, K Cobl

1455h PP43D-06 The intensity of interglacial warmth in northwest Europe over the last 800,000 yrs: An absence of the MBE in Europe?: I Candy, J Rose, D Schrewe, J Lee

1510h PP43D-07 Carbon cycle dynamics during interglacials (Invited): V Brovkin, T Kleinen, A Ganopolski, G Munhoven, D E Archer

1525h PP43D-08 Comparing past interglacials to understand atmospheric CO2 and carbon cycle dynamics using Antarctic ice core Δ13C CO2 data: R Schneider, J Schmitt, F Joos, H Fischer

SPA-Acronomy

SA43A Moscone South: Poster Hall Thursday 1340h Chemistry and Temperatures in the Upper Mesosphere and Lower Thermosphere I Posters (joint with A)

Presiding: R L Bishop, The Aerospace Corporation; S A Budzien, Naval Research Laboratory; A W Stephan, Naval Research Laboratory; G Crowley, ASTRA

1340h SA43A-1735 POSTER Spatial Changes in the Global Distribution of Meteoric Metals: A C Akin, J Correira

1340h SA43A-1736 POSTER The FeO Nightglow: D V Saran, T G Slaughter

1340h SA43A-1737 POSTER Common-volume observations of sporadic Fe and Na layers and a potential overturning event by resonance lidars at Boulder (40.13N, 105.24W): X Chu, W Fong, Z Wang, W Huang, J A Smith, Z Yu


1340h SA43A-1739 POSTER Sodium Nightglow Measurements with the Faraday Filter-Based Spectrometer: An Instrument to Study Sodium and Oxygen Chemistry in the MLT Region: S Harrell, C She, T Yuan, D A Krueger, J M Plane, T G Slaughter

1340h SA43A-1740 POSTER A sodium lidar project at Tromsø, Norway: First report on test observations at Wako, Japan and current status: T T Tsuda, S Nozawa, T Kawahara, T Kawabata, T Yamasaki, S Oyama, R Fuji, Y Ogawa, N Saito, S Wada, A Brekke, C M Hall

1340h SA43A-1741 POSTER Initial Results of Na Density and Temperature Measurements by a STAR Na Lidar at Boulder: W Fong, I Dahlke, B Roberts, J A Smith, Z Yu, W Huang, X Chu

1340h SA43A-1742 POSTER Wave Induced Transport of Atmospheric Constituents and Its Effect on the Mesospheric Na Layer: A Z Liu, C S Gardner

1340h SA43A-1743 POSTER Global Mesospheric Atomic Oxygen Distribution Deduced From HRDI/UARS, SABER/TIMED and TIDI/TIMED Airglow Measurements: H Nair, J Lee, M G Mlynczak, J C Mast, J Russell

1340h SA43A-1744 POSTER Mesospheric temperatures estimated from the meteor decay times over King Sejong Station(62.2°S, 58.8°W), Antarctica: J Kim, Y Kim, G Lee

1340h SA43A-1745 POSTER Evidence for a QBO signature in polar summer mesopause temperatures over Antarctica: C von Savigny, H Bovensmann, J P Burrows, M T DeLand

1340h SA43A-1746 POSTER Spatial distribution of the airglow observed by the Reimei/MAC limb observations: Y Akiya, A Saito, T Sakano, A Yamazaki, M Hirohara


1340h SA43A-1748 POSTER Observations of Nitric Oxide by the Remote Atmospheric Ionospheric Detection System (RAIDS): J D Yonker, C Y Lin, S M Bailey, K R Minschwaner, S A Budzien, A W Stephan, R L Bishop, A B Christensen, J H Hecht

1340h SA43A-1749 POSTER Observations of N2 in the Lower Thermosphere by the RAIDS Experiment: R L Bishop, A W Stephan, S A Budzien, A B Christensen, P R Straus, J H Hecht

1340h SA43A-1750 POSTER The N2 and NI Emissions in the VUV Region: A Low Temperature Study: R C Wu, J I Lo, Y C Lin, T Yih, H S Fung, Y Y Lee, D L Judge

1340h SA43A-1751 POSTER Relaxation of O(\textit{X} \Sigma^+, v = 1) by Atmospherically Relevant Colliders: D A Pejakovic, D V Saran, R A Copeland

1340h SA43A-1752 POSTER Vibrational Relaxation of OH(\textit{v} = 7) with O, O_2, and H: J E Thiebaud, R A Copeland, K Kalogerakis

1340h  SA43B-1770 POSTER CASES: A Novel Low-Cost Ground-based Dual-Frequency GPS Software Receiver: B Haacke, G Crowley, A Reynolds, G S Bust, P M Kintner, M Psaki, T E Humphreys, S Powell, B O’Hanlon

1340h  SA43C Moscone South: 301 Thursday 1340h Unique Equatorial Ionospheric Electrodynamicst in the African Sector I (joint with SM)

Presiding: E Yizengaw, Institute of Scientific Research; K M Groves, Air Force Research Laboratory; T W Garner, ARL:UT

1340h  SA43C-01 Opportunities for Ionospheric Science as Part of the International Space Weather Initiative (ISWI) (Invited): J M Davila, N Gopalswamy, H Haubold

1355h  SA43C-02 Electrodynamicst and temporal characteristics of the East African ionosphere inferred from ground-based observations (Invited): B Damtie, M Negussie, S Radichella, B Nava, E Yizengaw, K M Groves

1410h  SA43C-03 Radio Scintillation over Africa (Invited): J M Retterer


1440h  SA43C-05 Study of a geomagnetic storm effect on the ionospheric scintillation and total electron content (TEC) over the SCINDA station in Abidjan: O K Obrou, J Jackah, Z K Zaka

1452h  SA43C-06 GPS Observations of Plasma Bubbles and Scintillations over Equatorial Africa: C S Carrano, C E Valladares, G G Semala, C T Bridgewood, J Adeniyi, L L Amaeshi, B Damtie, F D’Ujanga Mutonyi, J D Ndida, P Baki, O K Obrou, B Okere, G M Tsidu

1504h  SA43C-07 Observations of Wave-like Plasma Structures Near the Equatorial Fountain Peak in the African Sector: D C Munton, T Pitre, T W Garner, A Mahmoud


1528h  SA43C-09 The Longitudinal Variation of Equatorial Electrodynamicst Observations: E Yizengaw, E Zesta, M Moldwin, C E Valladares, B Damtie, A Mebrahtu, C M Bioeule, K Yumoto, R F Pfaff, R A Heelis

SPA-Solar and Heliospheric Physics

SH43A Moscone South: Poster Hall Thursday 1340h Extreme Space Weather Events in the Solar System I Posters (joint with P, SM, SA)

Presiding: D J Ruffolo, Mahidol Univ

1340h  SH43A-1807 POSTER An exploratory survey of the attenuation of radio signals by the ionosphere of Mars: P Withers

1340h  SH43A-1808 POSTER ICME interaction with the Martian ionosphere and atmosphere: Y Ma, X Fang, A F Nagy, C T Russell

1340h  SH43A-1809 POSTER Distribution and Clustering of Fast Coronal Mass Ejections: J Feynman, A Ruizmaikin, S Stoev
1340h SH43A-1810 POSTER CMEs at Earth and Mars: T V Falkenberg, S Vennerstrom, A Takatakiishi, A Pulkkinen, D A Brain, G T Delory, D Mitchell

1340h SH43A-1811 POSTER Mars Global Surveyor measurements of solar storms and their effects: D A Brain, G T Delory, R J Lillis, D Ulusen, D Mitchell, J G Luhmann, T V Falkenberg

1340h SH43A-1812 POSTER Magnetic Evolution for Recurrent Intense Flares and Extremely Fast CMEs: Y Li, B T Welsch, B J Lynch, G H Fisher, J G Luhmann

1340h SH43A-1813 POSTER Expansion rate of Magnetic Clouds beyond Earth: A M Gulisano, S Dasso, P Demoulin


SH43B Moscone South: Poster Hall Thursday 1340h Short-Term (Transitional) Precursors of Transient Solar Phenomena I Posters

Presiding: D F Webb, Boston College

1340h SH43B-1816 POSTER Properties of Solar Flares and Associated Segregated Chromospheric Brightenings: M S Kirk, K S Balasubramaniam, J Jackiewicz, B J McNamara

1340h SH43B-1817 POSTER Trend of photospheric magnetic helicity flux in active regions generating halo CMEs: F P Zuccarello, F Zuccarello, A Smyrl, P Romano, S Poedts

1340h SH43B-1818 POSTER Precursors of active region flaring probability using subsurface helicity measurements: A A Reinard, R Komm, F Hill

1340h SH43B-1819 POSTER Sunspot Proper Motion and Flare Onset Prediction: Y Suematsu, C Y Yatini

1340h SH43B-1820 POSTER Development of a Statistical Diagnostic Scheme for Flare Probability: K S Balasubramaniam, D C Norquist

1340h SH43B-1821 POSTER Nuclear Decay Variations: New Solar Observations and Possible New Flare Predictors: P A Sturrock, E Fischbach, J Jenkins

1340h SH43B-1822 POSTER Analysis of Solar Dynamics Observatory Data during Solar Eruptions: T Nasar, N Elham, G Tremberger, T K Cheung, L P Johnson, S A Austin, P Marchese


1340h SH43B-1824 POSTER Precursors of CMEs in coronal images: S L Freeland, G L Slater, N V Nitta

SH43C Moscone South: 307 Thursday 1340h Geoeffective Transients From the Sun to the Earth I (joint with SM)

Presiding: N Lugaz, Institute for Astronomy; C J Farrugia; A P Rouillard, CESR

1340h SH43C-01 Writhing and rotation of erupting prominences and CMEs: T Torok, B Kliem, W T Thompson, M A Berger

1355h SH43C-02 Deflected Propagation —— A Factor Deciding the Geoeffectiveness of A CME: Y Wang, C Shen, J Liu, B Gui, S Wang

1340h SH43C-03 Relationship Between Earth Directed Solar Eruptions and Magnetic Clouds at 1AU (Invited): V Yurchyshyn

1345h SH43C-04 Understanding the Evolution of Coronal Mass Ejections in the Interplanetary Space (Invited): J Zhang

1440h SH43C-05 Evolution of geoeffective ICMEs in the inner heliosphere (Invited): S Dasso, P Demoulin, A M Gulisano, M Nakwacki

1455h SH43C-06 Properties and processes that influence CME geoeffectiveness (Invited): B Lavraud


1525h SH43C-08 Geoeffectiveness of ICMEs during 1996-2009: J G Richardson, H V Cane


Presiding: J J Podesta, Los Alamos National Laboratory; G Li, Univ Alabama Huntsville

1340h SH43D-01 Parallel electric field fluctuations produced by Alfvénic turbulence: N Bian, E P Kontar

1355h SH43D-02 Observations of anisotropy in solar wind turbulence. (Invited): R T Wicks, T S Horbury, C H Chen, A Schekochihin

1410h SH43D-03 Perpendicular Ion Heating by Low-Frequency Alfvén-Wave Turbulence in the Solar Wind (Invited): B D Chandran

1425h SH43D-04 Kinetic Distributions of Coronal Hole Protons in the Solar Wind Generation Region: P A Isenberg, B J Vasquez

1440h SH43D-05 On the interactions of transverse ion-cyclotron waves with ions in solar wind plasma: S Bourouaine, E Marsch, F M Neubauer


1510h SH43D-07 Existence of Alfvén-cyclotron waves in solar wind turbulence as identified from the angular distribution of magnetic helicity: J He, E Marsch, C Tu, S Yao, H Tian

1525h SH43D-08 Three dimensional anisotropic k-spectra of turbulence at sub-proton scales in the solar wind: F Sahraoui, M L Goldstein, G Belmont, P Canu, L Rezeau

SPA-Magnetospheric Physics

SM43A Moscone South: Poster Hall Thursday 1340h Multipoint Perspective on the Auroral Acceleration Region and M-I Coupling I Posters

Presiding: A Masson, European Space Agency; J S Pickett, The University of Iowa


1340h SM43A-1898 WITHDRAWN

1340h  SM43A-1900 POSTER Cluster AAR Campaign Summary Plots: A N Fazakerley, A P Walsh, K J Garza, I Christopher, S Sadeghi, P Lindqvist, B Mihaljic, C Forsyth, J S Pickett, G T Marklund, E A Lukec, I S Dandouras

1340h  SM43A-1901 POSTER Comprehensive ground-based and in situ observations of substorm expansion phase onset: A P Walsh, J Rae, A N Fazakerley, R K Murphy, I R Mann, C E Watt, M Volwerk, C Forsyth, H J Singer, E F Donovan, T Zhang

1340h  SM43A-1902 POSTER Statistical relation of substorm onset to auroral onset, mid-latitude positive bay onset and geosynchronous dipolarization: X Chu, R L McPherron, T Hsu, J Kissinger

1340h  SM43A-1903 POSTER Precursor activation and substorm expansion associated with observations of a dipolarization front by Time History of Events and Macroscopic Interactions during Substorms (THEMIS): C Tang, V Angelopoulos, A Runov, C T Russell, H U Frey, K Glassmeier, K H Fornaçon, Y Z Li

1340h  SM43A-1904 POSTER Comparison of features of all-sky imager identified substorms associated with, and not associated with, IMF northward turnings: B J Gallardo-Lacourt, L R Lyons, T Nishimura

1340h  SM43A-1905 POSTER Azimuthal Pressure Gradient and Associated Auroral Development in the Near-Earth Plasma Sheet Soon Before Substorm Onset: X Xing, L R Lyons, Y Nishimura, V Angelopoulos, E F Donovan, D E Larson, C W Carlson, H Auster

1340h  SM43A-1906 POSTER A statistical study of the THEMIS satellite data for plasma sheet electrons carrying auroral upward field-aligned currents: S Lee, K Shiokawa, J P McFadden

1340h  SM43A-1907 POSTER Role of Parallel Electric Fields in the Dynamics of Discrete Auroral Arcs: T Bhattacharya, A Otto, D Lummerzheim, R J Stevens

1340h  SM43A-1908 POSTER Current Closure in the Ionosphere: Results from the ACES Sounding Rocket: S R Kaeppler, S R Bounds, C Kletzing, J W Gjerloev, B J Anderson, H Korth, J W Labelle, M P Dombrowski, M Lessard, S Jones, R F Pfaff, D E Rowland, C J Heinzelman, T Dudok de Wit

1340h  SM43A-1909 POSTER Various Aspect of the Field Line Resonance Phenomena Observed at the South Pole Station: Y Tanaka, Y Ebihara, A Yoshikawa, S Saita, A T Weatherwax

1340h  SM43A-1910 POSTER AUGO II: a comprehensive subauroral zone observatory: I S Schofield, M G Connors

1455h  SM43B-06 Flank Magnetopause Boundary Perturbations at Low Solar Wind Dynamic Pressure: S Chen, G Le, V Angelopoulos


1525h  SM43B-08 Differences in the structure of a planetary magnetopause boundary layer: A J Coates, A Masters, A P Walsh, A N Fazakerley, M K Dougherty

Study of Earth's Deep Interior


Presiding: P Lognonne, Inst Physique Globe Paris; W S Kiefer

1340h  DI43A-1937 POSTER Dawn mission to constrain interior structure and thermal evolution of protoplanet Vesta: C A Raymond, S W Asmar, A S Konopliv, H Y MCSween, T H Prettyman, C T Russell, D E Smith, M T Zuber

1340h  DI43A-1938 POSTER Geophysical Monitoring Station (GEMS): A Discovery-Class Mission to Explore the Interior of Mars: B Banerdt, Z N Cox, C Seybold, R Warwick, S Barry, T L Hudson, K J Hurst, B Kobie, E Sklyanskii


1340h  DI43A-1940 POSTER The International Lunar Network: science goals and landing site selection: M A Wieczorek, I Crawford, Title of Team: ILN site selection working group

1340h  DI43A-1941 POSTER Spatial Correlation of Deep Moonquakes and Mars Basalts and Implications for Lunar Present-day Mantle Structure, Magmatism and Thermal Evolution: A C Muirhead, S Zhong

1340h  DI43A-1942 POSTER The crustal structure of lunar impact basins: J C Andrews-Hanna, R A Krahnenbuhl

1340h  DI43A-1943 POSTER Impactor mass and source cutoff frequency estimations for three large impacts detected by the Apollo seismometers: T Gudkova, P Lognonné, J Gagnepain-Beyneix

1340h  DI43A-1944 POSTER Signal Strength and Bandwidth for Magnetotelluric sounding of the Interior of the Moon: M O Fillingim, G T Delory, J S Halesak, R E Grimm


1340h  DI43A-1946 POSTER Liberations and obliquity of Mercury from the BepiColombo laser altimetry, radio science and camera experiments: G Pfiffner, V Van Hoolst, V M Dehant

1340h  DI43A-1947 POSTER The effects of core-mantle gravitational coupling on the rotational dynamics of Mercury: M Veasey, M Dumbarry

1340h  DI43A-1948 POSTER Widespread evidence for a late veneer on the terrestrial planets and planetisimals: C W Dale, K Burton, G Pearson, R C Greenwood

1340h  DI43A-1949 POSTER Conditions of accretion and core formation in the inner solar system: J Wade, J Tuff, B J Wood
DI43A-1950 POSTER Phase relation of C-Mg-Fe-Si-O system under various oxygen fugacity conditions at high pressure and high temperature: S Takahashi, E Ohtani, H Terasaki, Y Ito, Y Shibazaki, M Ishii, K Funakoshi, Y Higo

1340h DI43A-1951 POSTER Study of Trailing Conduits in High Bond Number Metal-Silicate Plumes during Core Formation: C T Nguyen, D S Weeraratne, P Olson


1340h DI43A-1953 POSTER Chemical Evolution of the Martian Mantle and Implications for its Magmatic History: C Sandu, W S Kiefer


DI43B Moscone South: Poster Hall Thursday 1340h Spin Transition, Fe/Mg Partitioning, Viscosity, Seismic Structure: How Well Do We Know the Lower Mantle? II Posters (joint with MR, S, T)

Presiding: S Speziale, Deutsches GeoForschungsZentrum; J Badro, Institut de Physique du Globe de Paris; F Cammarano, ETH Zürich; T Tsuchiya, Ehime University

1340h DI43B-1955 POSTER Fe distribution between (post-) perovskite and ferropericlase: T Tsuchiya, Y Tange, J Tsuchiya

1340h DI43B-1956 POSTER Experimental evidence for iron enrichment in (Mg,Fe)SiO3 post-perovskite relative to perovskite: L Zhang, Y Meng, I Kantor, W L Mao

1340h DI43B-1957 POSTER Effects of Fe-Enrichment on the Equation of State and Stability of (Mg,Fe)SiO3, Perovskite and Post-Perovskite: S M Dorfman, C M Holl, Y Meng, V Prakapkena, T S Duffy

1340h DI43B-1958 POSTER Fe-bearing perovskite and post-perovskite: phase stability, spin transitions, and the consequences for the lower mantle: R Caracas, D Mainprice, C Thomas

1340h DI43B-1959 POSTER P-V-T equation of state of MgSiO3 perovskite up to 110 GPa and 2500 K: Primary reference for the mineralogy of the lower mantle: Y Tange, Y Kuwayama, T Irifune, K Funakoshi, Y Ozishi

1340h DI43B-1960 POSTER Spin transition of Fe2+ in (Fe0.83Fe0.17)O in the multi anvil apparatus equipped with sintered diamond anvils: E Ito, T Yoshino, D Yamazaki, A Shatsky, X Guo, S Shan, T Katsura, A Yoneda, Y Higo, K Funakoshi

1340h DI43B-1961 POSTER Ferrous Iron Diffusion in Periclase across the Spin Transition: M W Ammann, J P Brodholt, D P Dobson

DI43C Moscone West: 3024 Thursday 1340h Melts and Fluids in the Deep Mantle I (joint with MR, S, T, V)

Presiding: G C Richard, Ecole Normale Superieure de Lyon / Universite C. Bernard; T Yoshino, Inst Study Earth Interior

1340h DI43C-01 Shear-Induced Porosity Bands in Three Dimensions: S L Butler

1355h DI43C-02 Waves and channels for melt migration in an upwelling mantle: A R Schiemenz, Y Liang, M A Hesse, E Parmentier

1410h DI43C-03 Thermodynamic model for partial melting of peridotite by system energy minimization (Invited): H Iwamori, K Ueki

1425h DI43C-04 Comparison of Deep Upper-Mantle Melting in Varying Tectonic Environments: Insights from Seismic Observations (Invited): A M Courtier

1440h DI43C-05 Storage of water in (Mg,Fe)SiO3-perovskite: Synthesis from natural samples: W R Panero, D M Reaman, J S Pigott

1455h DI43C-06 Diffusion and Viscosity of Anorthite and Silica Liquids from First Principles Molecular Dynamics Simulations: B Bohara, B B Karki, L P Stixrude

1510h DI43C-07 Chemical Reaction at the Core-Mantle Boundary from Experimental Study with a Diamond-Anvil Cell (Invited): H Ozawa, K Hiose

1525h DI43C-08 Visualizing Earth’s Core-Mantle Interactions using Nanoscale X-ray Tomography: W L Mao, J Wang, W Yang, J Hayter, P Pianetta, L Zhang, Y Fei, H Mao, J W Hustoft, D L Kohlsstedt

Seismology

S43A Moscone South: Poster Hall Thursday 1340h Earthquake Source Processes: What Have We Learned From Recent Large Earthquakes? I Posters (joint with T)

Presiding: B Duan, Texas A&M University; B Aagaard, U.S. Geological Survey

1340h S43A-2015 POSTER Rupture Properties of the 2008 Mw=7.9 Wenchuan, China, Earthquake: Analysis from Inverse Kinematic and Forward Dynamic Modeling: Y Wen, D D Oglesby, K Ma, B Duan

1340h S43A-2016 POSTER The 2008 Wenchuan Earthquake: A case study for determining stress states and modeling rupture propagation through branch geometries: N DeDonnay, J Hubbard

1340h S43A-2017 POSTER Numerical models of coseismic slip and strain energy release along listric thrust faults: Application to the 2008 Ms 8.0 Wenchuan earthquake: W Tao, Z Shen, T Masterlark, C Hu, K Wang

1340h S43A-2018 POSTER The Characteristics of f_max in Wenchuan Earthquake of 12 May 2008: J Wen, X Chen

1340h S43A-2019 POSTER Heterogeneous Coupling on the Sumatran Megathrust and the Nature of Triggering of Seismicity in the Inter-seismic Period: M Nic Blioscu, J McCloskey, C J Bean


1340h S43A-2021 POSTER Coseismic Slip Distribution of the 2010 Mw 7.3 El Mayor-Cucapah Earthquake: X Zhao, G Shao, C Ji, K M Larson, K Hudnut, T Herrin

1340h S43A-2022 POSTER Differential Energy Radiation from Two Earthquakes with Similar Mw: The Baja California 2010 and Haiti 2010 Earthquakes: L Meng, B Shi

1340h S43A-2023 POSTER Earthquake source imaging by high-resolution array analysis at regional distances: the 2010 M7 Haiti earthquake as seen by the Venezuela National Seismic Network: L Meng, J P Ampuero, H Rendon

1340h S43A-2024 POSTER Complex Seismic Source Inversion Method with the Data Covariance Matrix: Application to the 2010 Haiti Earthquake: A Kasahara, Y Yagi

1340h S43A-2025 POSTER Applying the Back Projection Method to Image the Rupture Process of the 2010 Mw 8.8 Great Chile’s Earthquake: H Zhang, Z Ge

1340h S43A-2026 POSTER Coherent Variation in Stress Drop of Small Earthquakes to the Slip Distribution of the 2006 Kiholo Bay, Hawaii, Earthquake: T Yamada, P Okubo, C J Wolfe
1340h S43A-2027 POSTER Linear Inversion of GPS data of the 2009 L’Aquila Earthquake by means of a 3D Finite Element Approach: M Volpe, A Pieri, D Melini, E Casarotti


1340h S43A-2029 POSTER Determination of the Coseismic Fault Slip Distribution on a Complex Fault Geometry, the Case of the Taitung Earthquake (2006), Mw 6.1, South-east of Taiwan: L Mozzi &onaccini, B Delouis, N Béthoux, B Huang


1340h S43A-2031 POSTER The seismic velocity structure of a foreshock zone on an oceanic transform fault: Imaging a rupture barrier to the 2008 Mw 6.0 earthquake on the Gofar fault, EPR: E C Roland, J J McGuire, D Lizarralde, J A Collins

1340h S43A-2032 POSTER Dynamic rupture processes on two orthogonal but not conjugate fault segments: Y Kase, S Aoi

1340h S43A-2033 POSTER Anomalies of rupture velocity in deep earthquakes: M Suzuki, Y Yagi

1340h S43A-2034 POSTER Tsunami Waveform Inversion without Assuming Fault Models—Application to Recent Three Earthquakes around Japan: Y Namegaya, T Ueno, K Satake, Y Tanioka

1340h S43A-2035 POSTER Location and local magnitude of the Tocopilla earthquake sequence of Northern Chile: A Fuenzalida, M Lancieri, R I Madariaga, M Sobiieski

1340h S43A-2036 POSTER Did the November 17, 2009 Queen Charlotte Island (QCI) earthquake fill a predicted seismic gap?: K Vasudevan, D W Eaton, A Iverson

1340h S43A-2037 POSTER Searching for slow aftershocks of large earthquakes by normal-mode analysis: T Tanamoto, C Ji

1340h S43A-2038 POSTER To what extent the repeating earthquakes repeated?: Analyses of 1982 and 2008 Ibaraki-ken-oki M7 class earthquakes using strong motion records: M Takiguchi, K Asano, T Iwata

1340h S43A-2039 POSTER Postseismic viscoelastic stress changes following the 1960 M9.5 Chile earthquake: Implications for its relationship with the 2010 M8.8 Chile earthquake: M Ding, J Lin

1340h S43A-2040 POSTER The Source Processes of an Earthquake Sequence in Eastern Indonesia: S Yun, K Koketsu, H Miyake, Y Yokota, N Poiata

1340h S43A-2041 POSTER Interacting Earthquakes Along the Northern Vanuatu Subduction Zone: M Cleveland, C J Ammon, T Lay

1340h S43A-2042 POSTER Detailed Slip Distribution and Fault Geometry of the 2008 Iwate-Miyagi Nairiku, Northeast Japan (Mw 6.9) Earthquake Directly Obtained from Strong Motion Records: K Asano, T Iwata

1340h S43A-2043 POSTER Early determinations of earthquake duration and rupture directivity from variations in the rate of seismic energy release: J A Convers, A V Newman

1340h S43A-2044 POSTER FAST AND ROBUST INVERSION OF EARTHQUAKE SOURCE RUPTURE PROCESS WITH APPLICATIONS TO EARTHQUAKE EMERGENCY RESPONSE: Y Chen, Y Zhang

1340h S43A-2045 POSTER Investigation of Long-period Characteristics of Great Earthquakes through Multiple Point Source Analysis: X Li, C Ji

1340h S43A-2046 POSTER Magnitude estimation of large regional earthquakes using high-frequency energy radiation with KMA data: W Yun, S Park

1340h S43A-2047 POSTER Development of rupture process analysis method for great earthquakes using Direct Solution Method: M Yoshimoto, Y Yamanaka, N Takeuchi

1340h S43A-2048 POSTER High-order finite difference methods for earthquake rupture dynamics in complex geometries: O O’Reilly, J E Kozen, E M Dunham, J Nordstrom

1340h S43A-2049 POSTER Response Of Building Structures To Scaled Laboratory Earthquake Ruptures: M Mello, H Bhat, S Krishnan, Arosakis, H Kanamori

1340h S43A-2050 POSTER Fault Roughness and Background Stress Levels on Mature and Immature Faults: Z Fang, E M Dunham

1340h S43A-2051 POSTER Effects of heterogeneous frictional properties on spontaneous rupture propagation in the 1999 Hector Mine earthquake: J Kang, B Duan

1340h S43A-2052 POSTER The effects of D$_0$ on rupture propagation on geometrically-complex faults: J Lozos, J Dieterich, D D Oglesby

1340h S43A-2053 POSTER Supershear Mach-Waves Expose the Fault Breakdown Slip: V M Cruz-Atienza, K B Olsen

1340h S43A-2054 POSTER Dynamic Slip Pulses generated by a Damaged Fault Zone and by Fault Roughness: Y Huang, J P Ampuero

1340h S43A-2055 POSTER Supershear Rupture Transition on Fault Stepovers using Different Friction Parameterizations: K J Ryan, D D Oglesby

1340h S43A-2056 POSTER Constraining the Depth Dependence of Fault Constitutive Parameters in Spontaneous Rupture Models: B Aagaard

1340h S43A-2057 POSTER Dynamic rupture of megathrust earthquakes with branching on splay faults: S Somalla, J P Ampuero, N Lapusta

1340h S43A-2058 POSTER How Barriers Enable Multi-Fault Rupture in a Branched Fault System: J M Tarnowski, D D Oglesby, D D Bowman

S43B Moscone South: Poster Hall Thursday 1340h Seismic Structure Posters

Presiding: S Ghosh, IIT Kharagpur

1340h S43B-2059 POSTER Characterizing Seismic Properties of the Sacramento-San Joaquin River Delta, California: D M Eberhart-Phillips, C H Thurber, A Teel

1340h S43B-2060 POSTER A Study of the Spectral Stability of Microtremors in the Los Angeles Basin, California: L W Wolf, D Bose

1340h S43B-2061 POSTER Limitation and applicability of microtremor records for site-response estimation: G Song, T Kang, S Park

1340h S43B-2062 POSTER Attenuation Studies in the Upper Mississippi Embayment Using USGS Explosion Data: C S Obikili, J Chiu

1340h S43B-2063 POSTER Seismic Attenuation in the Parkfield area of the San Andreas Fault: C M Kelly, A Rietbrock, D R Faulkner

1340h S43B-2064 POSTER Proposed modification on attenuation relationships in central east of Iran with special respect to Kerman region: K Behzadafshar, A Abbaszadeh Shahri

1340h S43B-2065 POSTER Estimation of seismic wave attenuation using sonic logging data—Comparison of estimating methods: H Suzuki, J Matsushima

1340h S43B-2066 POSTER Estimation of velocity structure around a natural gas reservoir at Yufutsu, Japan, by microtremor survey: H Shiraishi, H Asanuma, K Tezuka
1340h S43B-2067 POSTER Envelope Synthesis in Layered Random Media with Background-Velocity Discontinuities Based on the Markov Approximation: K Emoto, H Sato, T Nishimura
1340h S43B-2068 POSTER The need of inhomogeneous models to explain the seismograms of 2 explosions: A Marcellini, A Tento, R Damineili
1340h S43B-2069 POSTER Bighorns Arch Seismic Experiment (BASE): Amplitude Response to Different Seismic Charge Configurations: S H Harder, K C Miller, L L Worthington, C M Snelson
1340h S43B-2070 POSTER Near-podal PPpdf precursor: asymmetrical scattering from rough free-surface: W Wu, S Ni
1340h S43B-2071 POSTER Nonstationary ray decomposition method and its application for estimating velocity boundaries in a layered structure: M Takagishi, S Kinoshita
1340h S43B-2072 POSTER Envelope broadening of S-waves from the shallow intraslab earthquakes observed in the northeastern Japan: S Koga, Y Ito, R Hino, M Shinohara, N Umino
1340h S43B-2073 POSTER Scattering and anelastic attenuation of seismic energy in Northeast India using the multiple lapse time window analysis: S Padhy
1340h S43B-2074 POSTER Stacking attributes from local slopes: S Ghosh, D Gajewski, S Dell, S K Nath, Title of Team: Wave Inversion Technology (WIT) Consortium
1340h S43B-2075 POSTER Characterization of scattered seismic wavefields simulated in heterogeneous media with topography: H Kumagai, T Saito, G S O’Brien, T Yamashina
1340h S43B-2076 POSTER An Integrated Simulation of Seismic and Tsunami Waves: T Maeda, T Furumura
1340h S43B-2077 POSTER Computer simulation of trench trapped Rayleigh wave: S Noguchi, T Maeda, T Furumura
1340h S43B-2078 POSTER MEMORY-EFFICIENT DISPLACEMENT-BASED INTERNAL FRICION FOR WAVE PROPAGATION SIMULATION: J Bielak, H Karaoglu, R Taborda
1340h S43B-2079 POSTER Validating 3D Seismic Velocity Models Using the Spectral Element Method: M Maceira, C A Rowe, R M Allen, M J Obrebski
1340h S43B-2080 POSTER The effect of a non-linear viscoelastic mantle on seismic wave propagation: I Calisto, K Bataille
1340h S43B-2081 POSTER Generating synthetic seismogram envelopes along the MASE array for a vertical dependent heterogeneous model: L A Dominguez Ramirez, P M Davis
1340h S43B-2083 POSTER 3-D Waveform Modeling of the 11 September 2001 World Trade Center Collapse Events in New York City: S Yoo, J Rhie, W Kim
1425h S43C-04 A Hierarchical Bayes Formulation of Inverse Problems. Application to Joint Inversion of Receiver Function and Surface wave Dispersion: T Bodin, M Sambridge, H Tkalcic, K Gallagher
1440h S43C-05 Towards the quantitative resolution analysis in full seismic waveform inversion: A Fichtner, J Trampert
1455h S43C-06 On the resolution of plumes by seismic tomography: Y Hwang, J E Ritsema, P E Van Keken, S D Goes
1510h S43C-07 Iterative FM&TI procedure for finding a realistic velocity distribution: I Koulakov, H Kopp, T Stupina
1525h S43C-08 Seismic velocity estimation by joint inversion of P & S receiver function, waveform fitting, and surface wave dispersion: M K Sen, U Dutta, J Pulliam, R Ghosh, R Gok, M E Pasyanos

S43D Moscone West: 2009 Thursday 1340h Developments in Statistical Seismology: Research and Education III (joint with ED, T)

Presiding: A J Michael, USGS; M J Werner, Princeton University; J Woessner, ETH Zurich
1355h S43D-02 Open Source Tools for Seismicity Analysis: P Powers
1410h S43D-03 Stress shadow effect found in recent seismic sequences associated with Japan’s large earthquakes: S Hirose, S Toda
1425h S43D-04 A closer look at foreshock-mainshock occurrences in Japan: C W Smyth, J Mori, M Yamada
1440h S43D-05 Foreshock statistics in Italy: W Marzocchi, J Zhuang
1455h S43D-06 An Improved Statistical Solution for Global Seismicity by the HIST-ETAS Approach: A Chu, Y Ogata, K Katsura
1510h S43D-07 Three-dimensional fluid mapping and earthquake probabilities for induced seismicity sequences: C E Bachmann, S Wiemer, J Woessner
1525h S43D-08 Detecting missing earthquakes on the Parkfield section of the San Andreas Fault following the 2003 Mw6.5 San Simeon earthquake: X Meng, Z Peng, J L Hardebeck

Tectonophysics

T43A Moscone South: Poster Hall Thursday 1340h Lithospheric Structure and Cenozoic Tectonics in East Asia: From Tibetan Plateau to the Marginal Seas II Posters (joint with G, S)

Presiding: M Liu, University of Missouri; R Gao, Chinese Academy of Geological Sciences
1340h T43A-2154 POSTER The Moho depth and variation character of the continent in China and its geodynamic implications: X Xiong, R Gao, Q Li, Y Guan, R He, H Wang, Z Lu, H Hou, W Li, G Deng
1340h T43A-2155 POSTER A 1000-km E-W Receiver Function Profile across the Ordos and the Taihang Orogeny of the Northern China: Y Tang, Y J Chen
1340h T43A-2156 POSTER Crust and upper mantle characteristic of Northern and Eastern Tibet from Ambient Noise Tomography results: W Fan, Y J Chen, Y Tang, E A Sandvol, T M Hearn, J F Ni
T43A-2157 POSTER 3D lithospheric structure beneath the eastern Tien-Shan and its geodynamic implication: Z Li, H Wang, G Huang, V L Levin, S W Roecker, Z Li

T43A-2158 POSTER Crust and upper mantle characteristic of northeast Tibet: receiver function results of Indepth-IV passive array: H Yue, Y J Chen, Y Tang, S S Wei, X Liang, E A Sandvol, T M Hearn, J F Ni, Title of Team: Indepth IV passive array research team

T43A-2159 POSTER The high-resolution tomographic structure of upper crust around Yushu Ms7.1 earthquake, Qinghai, China and its implications: S Pei, Y J Chen

T43A-2160 POSTER Crustal structure of the northeastern Tibetan Plateau, the Orodos Block and the Sichuan Basin from ambient noise tomography: Y Zheng, Y Yang, M H Ritzwoller, X Xiong, X Zheng


T43A-2162 POSTER Earthquake source parameters in the western Tarim basin and the Tien-Shan: G Huang, V L Levin, S W Roecker, Z Li, H Wang

T43A-2163 POSTER Focal Mechanisms of Wenchuan Aftershocks and Stress Field around Longmenshan Fault Zone: L Zhao, K Wan, S Ni

T43A-2164 POSTER Formation mechanism of the Qiongdongnan basin northwest of the South China Sea-dating the sinistral slip of the Red River Fault Zone: Z Sun, J Jiang, W Xie

T43A-2165 POSTER The early-middle Jurassic Gerze SSZ ophiolites and tectonic evolution of the Bangong suture, Tibet: Y Zhang

T43A-2166 POSTER Evolution of the Andaman Sea region: Dextral transtension as consequence of India-Asia collision: L Zhang, J Xu, Z Ben-Avraham, T K Kelty

T43A-2167 POSTER Flexural subsidence, structural style and sedimentation in the northeastern South China Sea near Taiwan (Invited): H Yu

T43A-2168 POSTER Lateral asthenospheric flow beneath South China craton: constraints from Cenozoic basalts and metamorphic rocks distribution in South China: J Gong, Y J Chen

T43A-2169 POSTER Coeval Tibetan uplift and shortening of SE Asia basins (Invited): M Pubellier, A Robert, J de Sigoyer, X Zuo, N R Chamot-Rooke, L S Chan

T43A-2170 POSTER The India-Eurasia collision and marginal basin evolution in the NW Pacific: S Zahirovic, P Muller, M Gurnis, M Seton, J Whittaker, N Flament

T43A-2171 POSTER Accumulation fluxes of clastic minerals in northern South China Sea and their response to tectonic since 32Ma: A Li, H Jiang

T43A-2172 POSTER The relationship between the opening of South China Sea and the formation of the Tibetan Plateau (Invited): X Mo

T43A-2173 POSTER Seismic structure of the crust and local seismicity in Western Tibet: A Shokoohi Razi, V L Levin, G Huang, S Roecker, Z Cao

T43A-2174 POSTER Petrogenesis and Tectonic Evolution of Granitic Rocks in The Northern Margin of North China Plate: X Xu, Q Zhao, C Zheng, W Liu, B Xu

T43A-2175 POSTER The Qiginae mafic-ultramafic complex: A newly identified ophiolitic suite in the southern Tianshan, China: L Zhao, J Encarnacion, Z Zhang, D Zhang, H Huang, S Dong

T43B Moscone South: Poster Hall Thursday 1340h New Advances in Studies of the Tibetan Plateau and the Himalayas IV Posters (joint with V, S)

Presiding: X Mo, China University of Geosciences, Beijing: J F Ni, New Mexico State University

T43B-2176 POSTER A new 1:500,000-scale geologic map of Bhutan: a detailed view of eastern Himalayan stratigraphy and structural geometry: S P Long, N McQuarrie, T Tobgay, D Grujic, L S Hollister

T43B-2177 POSTER Thickness of underthrust Indian crust in the Garhwal Himalaya: W B Caldwell, S S Rai, A Ashish, S L Klempeter, J J Lawrence

T43B-2178 POSTER The motion and rheology of the Indian plate, and their effects upon Tibetan tectonics: A Copley, J Avouac, J Hollingsworth, S Leprince

T43B-2179 POSTER Cretaceous to Paleogene speed-up and slow-down of India-Asia relative plate convergence: the roles of mantle plumes and continental collision: D J Van Hinsbergen, B M Steinberger, P V Doubrovine, R Gassmoller

T43B-2180 POSTER The Lhasa Terrane: Record of a microcontinent and its histories of drift and growth: D Zhu, Z Zhao, Y Niu, X Mo, S Chung, Z Hou, L Wang, F Wu

T43B-2181 POSTER Evaluating basal tractions as a mechanism of crustal rotation in the eastern syntaxis of the Tibetan plateau: J Chen, D A Schmidt

T43B-2182 POSTER Southeastward lower crustal channel flow beneath southern Tibet: geochemical evidences from Miocene adakitic rocks: J Xu, J Chen, W Zhao, Y Dong, B Wang, Z Kang, Title of Team: Tethyan Tectonic Evolution

T43B-2183 POSTER Jumbling, oozing, underplating, and delamination of Himalayan-Tibetan crust: X Song, Z Xu

T43B-2184 POSTER Constraining age and rate of the Main Central Thrust displacement in western Bhutan: T Tobgay, N McQuarrie, S P Long

T43B-2185 POSTER Onset of oblique extension in south-central Tibet by 15 Ma: implications for diachronous extension of the Tibetan Plateau: V Sanchez, M A Murphy, A C Robinson, T J Lapen, M T Heizler, M H Taylor

T43B-2186 POSTER The distribution of the Linzingoz sequences along the Indo-Asian collision belt: S Zhou, X Mo, Y Niu, R Qiu, Z Zhao, G Xie, K Sun

T43B-2187 POSTER Controls on Landscape Denudation Between Lhasa and Namche Barwa, Southeastern Tibet: N M Levine, P Blisniuk, B Bookhagen, M H Gudmundsdottir, Y Ebert, S Moon, C P Chamberlain, G E Hilly

T43B-2188 POSTER Postseismic Motion of the 1997 Manyi Earthquake Continuing to the Present: M A Bell, B E Parsons, J M Ryder

T43B-2189 POSTER Surface rupture faulting of the 1950 Assam Earthquake: Evidence from paleoseismological trench investigation across the Northeastern Himalayan Front, India: R Perumal, V C Thakur, B Choudhuri, A Dubey

T43B-2190 POSTER Structural and thermochronologic implications for the development of the Northern Qilian Shan; tracking the history of slip partitioning from the Alyn Tagh Fault into the Northern Tibetan Plateau: H J Gray, S A Johnstone, J K Hourigan, B J Darby, B D Ritts, G Zhuang, P C Lippert

T43B-2191 POSTER Post-Cretaceous Sinistral Transpression in Southwest Alxa: Structural and Paleomagnetic Insights into the Long-Term Slip History of the Alyn Tagh Fault: L Shumaker, P C Lippert, B J Darby, B D Ritts, R S Coe
1340h **T43B-2192 POSTER** New paleomagnetic results from Cretaceous rocks of the Gyaring Co fault region, central Tibet: **D Finn**, X Zhao, P C Lippert, A Yin, Y Li, C Wang, J Meng, S Zhang, H Li


1340h **T43B-2194 POSTER** Episodic early Miocene anatexis in the Ama Drime Massif, southern Tibet: **J Yu**, L Zeng, J Liu, L Gao, K Xie

1340h **T43B-2195 POSTER** The response of the Gangdese magmatism to the India-Asia convergence: **D Wen**, S Chung, S Gallet, T Lee, C Lee

1340h **T43B-2196 POSTER** Low-Temperature cooling history of a Modi Khola transect, central Nepalese Himalaya: **E S Nadin**, A J Martin

1340h **T43B-2197 POSTER** Exhumation of the High-Grade Crustal Domes of the Pamir: **J L McGraw**, B R Hacker, L Ratschbacher, K Stuber

1340h **T43B-2198 POSTER** TRACKING BURIAL, DISPLACEMENT AND EXHUMATION IN THE LESSER HIMALAYAS, EASTERN BHUTAN: **N McQuarrie**, S P Long, T Tobgay, P W Reiners, I Coutard

1340h **T43B-2199 POSTER** Eocene High-grade Metamorphism in the North Himalayan Gneiss Dome: **L Gao**, L Zeng, K Xie, G Hu

1340h **T43B-2200 POSTER** Isotopic analysis of northern Himalayan gneiss domes: **W C Hassett**

1340h **T43B-2201 POSTER** Late Eocene-Miocene tectono-magmatic response to the Indian- Eurasian plate collision: constraints from structural analysis, and Sr-Nd and HF geochemistry of leucocratic intrusions along the Ailaoshan Red-River shear zone, SE Tibet: **J Liu**, Y Tang, S Cao, Q Nguyen, Z Song, M Tran, Y Chen, M Ji, Z Zhang, Z Zhao

1340h **T43B-2202 POSTER** Late Miocene - Pliocene rifting in west-central Tibet: Evidence from (U-Th)/He thermochronology of the North Lunggar Rift: **K E Sundell**, M H Taylor, D F Stockli, P A Kapp, R H Styrion, D Liu, L Ding

1340h **T43B-2203 POSTER** Ca-Mg-Sr-Nd Isotopes in Granitic Rocks of the Lhasa Terrane, Southern Tibet: **B T Peterson**, J I Simon, D J Depaolo, J N Christensen, T M Harrison

1340h **T43B-2204 WITHDRAWN**

1340h **T43B-2205 POSTER** Isotopic constraints on the collarage from the Kohistan-Ladakh Arc crust: **P Bouillhol**, O E Jagoutz, J M Hanchar

1340h **T43B-2206 POSTER** Stable Isotopic Constraints of the Turpan Basin in Northwestern China: **A J Schaen**

1340h **T43B-2207 POSTER** Electromagnetic Studies of Lithospheric Mantle and Crust in the Central Tibetan Plateau from INDEPTH Magnetotelluric Profiles and Magnetovariational Data: **J Vozar**, A G Jones, **F Le Pape**, M J Unsworth, W Wei, Title of Team: INDEPTH MT Team

1340h **T43B-2208 POSTER** Northern Tibetan crustal and lithospheric mantle structures inferred from INDEPTH magnetotelluric data: **F Le Pape**, A G Jones, J Vozar, M J Unsworth, W Wei, Title of Team: INDEPTH MT Team

1340h **T43B-2209 POSTER** Upper mantle structure of the southern and eastern Tibetan Plateau from finite frequency body wave tomography: **X Liang**, E A Sandvol, J F Ni, Y J Chen, F J Tilmann, T M Hearn

1340h **T43B-2210 POSTER** Ambient noise tomography of the Kumaon Himalaya: **S S Rai**, K Borah, K Surya Prakasam, K F Priestley, V K Gaur

1340h **T43B-2211 POSTER** Pn tomography of eastern Tibet: **H Wang**, T M Hearn, Y J Chen, J F Ni, S Zhou, E A Sandvol, H Yue, S S Wei, F J Tilmann

1340h **T43B-2212 POSTER** Velocity and Attenuation Structure of the Tibetan Lithosphere using Seismic Attributes of P-waves from Regional Earthquakes Recorded by the Hi-CLIMB Array: **R L Nowack**, A C Bakir, J Griffin, W Chen, T Tseng

1340h **T43B-2213 POSTER** Shear velocity profiles in the crust and lithospheric mantle across Tibet: **M R Agius**, S L Klemperer, F J Tilmann, M Sankar, L Zhu, X Song

1340h **T43B-2214 POSTER** Shear-wave splitting study in northeastern Tibet: **C Chen**, A Li, D Shi, X Li, H Li, E A Sandvol, Y Shen

1340h **T43B-2215 POSTER** SinoProbe seismic experiment in Tibetan plateau (2008-2012): **R Gao**, Title of Team: SinoProbe-02 Tibetan team

1340h **T43B-2216 POSTER** SinoProbe-02: Deep Seismic Reflection Profiling of the Bangong Suture and Qiangtang terrane in central Tibet: **Z Lu**, C Chen, R Gao, L Brown, X Xiong, W Li, G Deng

1340h **T43B-2217 POSTER** Large contrast observed in crustal composition and structure between the Ordos plateau and the northeastern margin of the Tibetan Plateau: **S Pan**, F Niu

1340h **T43B-2218 POSTER** Crustal Structure Variation of the Tibetan Plateau From Teleseismic Receiver Function Studies: **Y Zhou**, L Zhu, X Song

1340h **T43B-2219 POSTER** Comparing INDEPTH IV wide-angle and p-wave receiver function profiles from the Songpan-Ganzi terrane to the Qaidam Basin: **M Karplus**, R Kind, J Mechse, X Yuan, S L Klemperer, F J Tilmann, W Zhao, P Kumar, H Su, Title of Team: INDEPTH IV Team

1340h **T43B-2220 POSTER** The Golmud Step: New details of the 15 km Moho offset between the Tibet Plateau and Qaidam Basin from INDEPTH IV Seismic Results: **C Chen**, L D Brown, M Karplus, S L Klemperer, Title of Team: INDEPTH IV Group

1340h **T43B-2221 POSTER** High-velocity, Aseismic Lower Crust Inboard of the High Himalaya: An Ecolgote Conundrum: **G Monsalve**, V Schulte-Pelkum, A F Sheehan, P M Shearer

1340h **T43B-2222 POSTER** Analysis of local seismicity, crustal and upper mantle structure in Central Asia using data recorded by a seismological network in the Pamir and Tien Shan: C Sippl, F Schneider, B Schurr, X Yuan, J Mechse, M Gadoev, I Oimahmadov, U Abdybakaev, S Negmatullaev, V Minaev

1340h **T43B-2223 POSTER** South-Central Tibetan Seismicity from HiCLIMB Seismic Array Data: **S Carpenter**, J Nabelek, J Braunmüller

1340h **T43B-2224 POSTER** Seismological observation of a crustal response to river erosion?: Z Zhang, Y Shen

1340h **T43B-2225 POSTER** Quasi-stable Slope-Failure Dams in High Asia: **JF Shroder**

1340h **T43B-2226 POSTER** U-Pb SHRIMP geochronology of leucogranites from the Greater Himalayan Sequence in Zanskar and from the Karakoram fault zone, NW India: **F Horton**, J Sommerfeld, W C Hassett, M L Leech

1340h **T43B-2227 POSTER** Cenozoic volcanic rocks from central Myanmar: Age, geochemical characteristics and geodynamic significance: **H Lee**, S Chung, H Yang, C Chu, C Lo, A Mitchell
**T43C  Moscone South: Poster Hall  Thursday 1340h**

**Western Tibet: M H Taylor,**

AND **DETRITAL AFT:** P Filleaudeau, F Mouthereau, 

**DETRITAL ZIRCONS DOUBLE DATING (U/PB AND (U-TH)/HE)**

**GROWTH: ASYMMETRY OF THE PYRENES REVEALED BY processes in northeastern Tibetan Plateau: sediments from Sikouzi basin and its implications for tectonic uplift**

**K Hedrick**

**L M Schoenbohm, L Wenqiao, Y Zhaode, Y Xiaodong, L A Owen,**

**Waqia Valley, Southeast Pamir:** M T Heizler, J Chen, L Wenqiao, X Yang, Z Yuan

**in the Southeast Pamir, China:** A M Forte

**shortening at the eastern end of Kura fold-thrust belt, Azerbaijan:** Structural Style:

**Intermontane Basin in NW China:** N A Niemi, B P Wernicke, L Ding

**[1340h T43C-2228 POSTER Transpression along the Altyn Tagh fault and terminations of large ruptures at the Aksay restraining bend: results from numerical modeling and the observed earthquake record:] A J Elliott, B Duan, M E Oskin, J Liu

**[1340h T43C-2229 POSTER Fault slip-rate estimate for the right-lateral Beng Co strike-slip fault, based on Quaternary dating of displaced paleo-lake shorelines:] J Hollingsworth, B P Wernicke, L Ding

**[1340h T43C-2230 POSTER Rupturing Styles of the Jiegu Segment of the Yushu April 14, 2010 Earthquake in Qinghai–Tibet Plateau, China:] L Chen, H Wang, Y Ran

**[1340h T43C-2231 POSTER Strain accumulation across the Longmen Shan before the 2008 Mw 7.9 Wenchuan earthquake:] J He, S Lu

**[1340h T43C-2232 POSTER High rate of uplift and erosion along the Beichuan fault associated with the 2008 Wenchuan earthquake: Implications for building the high-relief eastern margin of the Tibetan Plateau:] J Chen, T Li, J Liu, M Huang, Z Yuan, S Yu, H Yang, Title of Team: Neotectonics and Geochronology

**[1340h T43C-2233 POSTER Uplifting model of the Longmenshan mountain in the eastern margin of Tibetan plateau:] S Zhang, R Ding, C Mao

**[1340h T43C-2234 POSTER hunting for the Traces of Great Himalayan Earthquakes: Surface Break of the M = 8.1, 1934 Bihar Nepal event?: P tapponnier, S Sapkota, Y Klinger, L Bollinger, F Perrier, Y Gaudemer, T Tiwari, S Siwakoti

**[1340h T43C-2235 POSTER Deposition and Deformation of an Intermontane Basin in NW China:] J A Thompson, D W Burbank, J Chen, T Li

**[1340h T43C-2236 POSTER Basin Width Control of Faulting and Structural Style:] J K Goode, D W Burbank

**[1340h T43C-2237 POSTER Style, magnitude, and timing of shortening at the eastern end of Kura fold-thrust belt, Azerbaijan:] A M Forte, E Cowgill, I Murtuzayev

**[1340h T43C-2238 POSTER Miocene West Directed Back Thrusting in the Southeast Pamir, China:] A C Robinson, D B Imrecke, M T Heizer, J Chen, L Wenqiao, X Yang, Z Yuan


**[1340h T43C-2240 POSTER Tectonic and sedimentary evolution of the Ili Basin (northern Tien Shan, Kazakhstan): J Kley, T Voigt, N Seib, M Kober

**[1340h T43C-2241 POSTER Magnetostratigraphy of Cenozoic sediments from Sikouzi basin and its implications for tectonic uplift processes in northeastern Tibetan Plateau:] W Wang

**[1340h T43C-2242 POSTER EARLY STAGES OF OROGENIC GROWTH: ASYMMETRY OF THE PYRENEES REVEALED BY DETRITAL ZIRCONS DOUBLE DATING (U/PB AND (U-TH)/HE) AND DETRITAL AFT:] P Filleaudeau, F Mouthereau, R Pik, M Fellin

**[1340h T43C-2243 POSTER Preliminary Structural and Thermochronological Observations from the South Lungar Rift, Western Tibet:] M H Taylor, R H Styron, D F Stockli, K E Sundell, L Ding

**1340h T43C-2244 POSTER Incision and uplift patterns along the Yellow River from fluvial terrace dating in northeastern Tibet: implications for plateau building:] J van der Woerd, A Perrinueva, Y Gaudemer, J Liu, R Pik, P tapponnier, R Thuizat, R Zheng

**1340h T43C-2245 POSTER Timing and driving mechanism of uplift in the northern flanks of the Central Anatolian Plateau, Turkey:] C Yildirim, T F Schildgen, H Eckler, D Melnick, M R Strecker

**1340h T43C-2246 POSTER Dynamic topography of the southern Central Anatolian Plateau, Turkey, and geodynamic driving mechanisms:] T F Schildgen, D Cosentino, F O Dudas, S Niedermann, M R Strecker, H Eckler, C Yildirim

**1340h T43C-2247 POSTER Combined finite-discrete element modeling of the India-Asia collision zone:] M A Langstaff, B J Meade

**1340h T43C-2248 POSTER Crustal structure beneath the Indochina peninsula from teleseismic receiver functions:] L Bai, X Tian, J E Risemsa

**1340h T43C-2249 POSTER Crustal and lithospheric structure of the Alborz Mountains (Iran) and surrounding areas from integrated geophysical modeling:] S Motavallianbaran, H J Zeyen, M Brunet, V E Ardestani

---

**T43D  Moscone West: 2016  Thursday 1340h**


**Presiding:** T K Rockwell, San Diego State University; R J Weldon, University of Oregon; H Kondo, AIST

**1340h T43D-01 Co-seismic strike-slip surface rupture and displacement produced by the 2010 Mw 6.9 Yushu earthquake, China, and implications for Tibetan tectonics:] A Lin, G Rao, D Jia, X Wu, B Yan, Z Ren

**1355h T43D-02 The Road Less Traveled: Why the 2002 Denali Rupture Took the Totschunda Exit:] D P Schwartz, P J Haussler, G G Seitz, T E Dawson

**1410h T43D-03 Identification of Geomorphic Conditions Favoring Preservation of Multiple Individual Displacements Across Transform Faults:] P L Williams, D A Phillips, E Bowles-martinez, E Masana, P Stepancikova

**1425h T43D-04 New paleoseismic data from the northern San Jacinto Fault Zone, southern California:] N Onderdonk, S F McGill, G I Marliyani, T K Rockwell

**1440h T43D-05 Three time scales of earthquake clustering inferred from in-situ 40Ar/39Ar dating of the Velino-Magnola fault (Central Italy): A Schlagenhauf, I Manighetti, L Benedetti, Y Gaudemer, J Malavieille, R C Finkel, K Pou

**1455h T43D-06 Mid Holocene earthquake cluster along the central Altyn Tagh Fault, NW China resolved through integration of morphostratigraphic datasets:] R D Gold, E Cowgill, R Arrowsmith

**1510h T43D-07 continental strike–slip earthquake segmentation and thickness of the crust:] Y Klinger

**1525h T43D-08 Exploring Transient Fault Slip Behaviors and “Earthquake” Distributions Using Discrete Element Models:] V E Ardestani

**T43E  Moscone West: 2011  Thursday 1340h**

**What Controls Strong Versus Weak Coupling on Subduction Interfaces?] (joint with G, S)**

**Presiding:** L M Wallace, GNS Science; S Y Schwartz, Univ California Santa Cruz

**1340h T43E-01 Comparison of earthquake source parameters and interseismic plate coupling variations in global subduction zones (Invited): S L Bilek, P A Moyer, J Stankova-Pursley

---

All information is current as of November 12, 2010
Volcanology, Geochemistry, and Petrology

**V43A Moscone South: Poster Hall Thursday 1340h Chemical, Physical, and Petrographic Perspectives on Magmatic Differentiation I Posters (joint with MR)**

**Presiding:** A J Kent, Oregon State University; S Collins, Durham University; C J McLeod, Durham University

1340h V43A-2331 *POSTER* The physicochemical dynamics of fluid above asthenosphere beneath the Siberian Platform: V N Sharapov, A A Tomilenko, V V Perepechko, K V Chudnenko, M P Mazurov

1340h V43A-2332 *POSTER* The influence of oxygen fugacity on melt evolution: I atmosphere experiments on Aleutian basaltic andesites: J F Larsen, E L Rader

1340h V43A-2333 *POSTER* Variations in Fe oxidation state at arc volcanoes driven by degassing and crystallization: M N Brounce, K A Kelley, E Cottrell

1340h V43A-2334 *POSTER* Crystal Transfer at Chaos Crags during Magma Mingling: S Collins, J P Davidson, D A Jerram, E W Llewelin, D J Morgan

1340h V43A-2335 *POSTER* Investigating crustal contamination: a case study from the Bolivian Altiplano, Central Andes: C L McLeod, G Nowell

1340h V43A-2336 *POSTER* Fractionation and Assimilation Processes Dominate in the Generation of Silicic Magma from Four Kermadec Arc Volcanoes: S J Baker, C J Wilson, J Baker, R J Wysozczanski, M D Rotella, M Millet, I C Wright

1340h V43A-2337 *POSTER* Melt inclusion evidence for the relative timing of assimilation and crystallisation in high MgO lavas, Mull, Scotland: D W Peate, I Ukstins Peate, M C Rowe, J M Thompson, A C Kerr

1340h V43A-2338 *POSTER* Laser ICP-MS study of trace element partitioning between olivine, plagioclase, orthopyroxene and melt: M Laubier, T L Grove, C H Langmuir

1340h V43A-2339 *POSTER* Compositional and isotopic diversity in MORB crystal cargoes: the differing influence of crustal and mantle processes on separate phase populations: B Winpenny, J Maclellan

1340h V43A-2340 *POSTER* REE-SIO2 SYSTEMATICS IN MOR GABBROs AND ASSOCIATED PLAGIOGRANITES FROM THE FOURNIER OCEANIC FRAGMENT, NEW BRUNSWICK, CANADA: J G Brophy

1340h V43A-2341 *POSTER* Exploring the relationship between Assimilation and Fractional Crystallization of Basalts with the Magma Chamber Simulator (MCS): J B Creamer, W A Bohrson, F J Spera, M S Ghiorsow

1340h V43A-2342 *POSTER* Perspectives on Crystal Populations Versus Individual Crystals: Linking CSD, Diffusion Times, and Geochemistry to Determine Magma Histories: D J Morgan, J Day, D A Jerram

1340h V43A-2343 *POSTER* Insights from analog gelatin experiments on the effect of bedding dip on sill morphology and crystal load: R M Currier, B D Marsh, T Mittal

1340h V43A-2344 *POSTER* Examining the role and relative timing of magma mixing and fractionation in the formation of the Kuna Crest lobe of the Tuolomne batholith, Sierra Nevada, USA: J Krause, V Memeti, S R Paterson

1340h V43A-2345 *POSTER* New evolutionary insights into granite genesis preserved in the trace element compositions of apatite and zircon: A Miles, C Graham, M Gillespie, C J Hawkesworth, R W Hinton

1340h V43A-2346 *POSTER* A Geochemical Comparison of the Northern Peninsular Ranges Batholith in Southern California and the Coastal Batholith in Southern Peru: B L Claassen, A M Martinez Ardila, D M Morton

1340h V43A-2347 *POSTER* The Modulation of Crustal Magma Systems by Tectonic Forcing: O Karakas, J Dufek

1340h V43A-2348 WITHDRAWN

1340h V43A-2349 *POSTER* Re-melting of rhyolite crystal mush and priming for caldera-forming eruption revealed by trace element zoning patterns in phenocrysts of Okataina deposits: P A Shane, V Smith, I Nairn

1340h V43A-2350 *POSTER* The evolution of the Peach Spring Tuff magmatic system as revealed by accessory mineral textures and compositions: A S Pamukcu, G A Gualda, C F Miller, J L Wooden

1340h V43A-2351 *POSTER* Modeling the destabilization of large-volume silicic magmatic systems using rhyolite-MELTS and the Peach Spring Tuff: T L Carley, G A Gualda, M S Ghiorsow, C F Miller


1340h V43A-2353 *POSTER* P, T, X magma storage conditions of the dominantly silicic explosive eruptions from Santorini volcano ( Aegean Arc, Greece): A Cadoux, T H Druitt, E Deloule, B Scaillet

1340h V43A-2354 *POSTER* Differentiation conditions of a basaltic magma from Santorini and its bearing on anesitic/dacitic magma production: J Andújar, B Scaillet, M Pichavant, T H Druitt

1340h V43A-2355 *POSTER* Degassing-Induced Crystallization of Plagioclase in Hydrous Rhyolite Liquids: Evidence from Obsidian Samples from the Mexican and Cascades Volcanic Arcs: L Waters, R A Lange

1340h V43A-2356 *POSTER* A Critical Assessment of the Validity of Temperature and Pressure Estimates from Ti Concentrations in Quartz in Two Large Silicic Eruption Deposits: C Wilson, T Seward, B L Charlier, L Bello, A Allan

1340h V43A-2357 *POSTER* Geochemical and textural comparison of two different scoria erupted from Llaima volcano, Chile: D C Ruth, J A Cortes, E Cottrell, E S Calder, G A Valentine
V43B Moscone South: Poster Hall Thursday 1340h

MAGMATIC ARCHITECTURE DURING FLOW: CONSTRAINTS ON TIME SCALES AND DYNAMICS OF MAGMA ASCENT | POSTERS

Presiding: L Caricchi, University of Bristol; J M Castro, Monash University; Y Lavallee, LMU Munchen; H Tuffen, Lancaster University

1340h V43B-2360 POSTER The death of a Strombolian eruption: Evidence for dyke drainage from Red Crater, Tongariro volcano, New Zealand: F W B Wadsworth, F W von Aulock, B Kennedy, M Branney, C J Bardlesly

1340h V43B-2361 POSTER Calculating rheologic properties of magmas from field observations combined with experimental data: R Verberne, P Ulmer, O Muntener

1340h V43B-2362 POSTER SHRIMP Ti-in-zircon thermometry of the Empire quartz diorite, southern Sierra Nevada: implications for skarn formation in the mineral king pendant: M D’errico, B Surpless, J Lackey, S L Loewy, J L Wooden

1340h V43B-2363 POSTER The Influence of Magma Plumbing Complexity on Low-Volcano, Intraplate Volcanism: S J Cronin, M Brenna, K Nemeth, J E Smith, Y Sohn

1340h V43B-2364 POSTER INTERNAL FLOW STRUCTURES IN COLUMNAR JOINTED BASALT FROM HREPPOOLAR, ICELAND: H B Mattsson, S A Bosshard, G Hetenyi, B Almqvist, A M Hirt, L Caricchi, M Caddick

1340h V43B-2365 POSTER Controls on magma outgassing and their influence on the effusive-explosive transition of volcanic eruptions: W Degruyter, O Bachmann, A Burgisser, J Dufek

1340h V43B-2366 POSTER Reconstructing the Growth History of Bubbles in Magma from Preserved Volatile Concentrations in Glass: I M McIntosh, E W Llewellyn, M Humphreys, J F Larsen, J D Blower

1340h V43B-2367 POSTER Rheology of Arc Dacite Lavas: Experimental Determination at Low Strain Rates: G Averd, A G Whittington

1340h V43B-2368 POSTER Rates of Melt Migration Following Deglaciation-Induced Mantle Melting Revealed by Studies of Icelandic Table Mountains: D E Eason, J M Sinton, G Ito, K Gronvold, M D Kurz

1340h V43B-2369 POSTER Can tuffistine veins help dictate eruption styles?: S Kolzenburg, M J Heap, Y Lavallee, J K Russell, P G Meredith, D B Dingwell

1340h V43B-2370 POSTER Quartz Resorption as a Geospeedometer in Peralkaline Rhylites: M Janebo, L Caricchi, A Rust

1340h V43B-2371 POSTER Rheological effects of microlites on the Plinian eruption of basaltic magma: P Moitra, H M vonnermann, B F Houghton

1340h V43B-2372 POSTER Slug or Plug: A second look at the mechanism of normal Strombolian eruptions: J Suckale, K V Cashman, B H Hager, I L Belien

1340h V43B-2373 POSTER The Non-Newtonian Rheology of Real Magmas: insights into 3D microstructures: M Pistone, L Caricchi, P Ulmer, E Reusser, F Marone, L Burlini

1340h V43B-2374 POSTER Effects of gas exsolution and microlite crystallization on the complexity of conduit flow dynamics during lava dome eruptions: T Koyaguchi, T Kozo

1340h V43B-2376 POSTER Extrusion cycles of dome-forming eruptions: M de’ Michieli Vitturi, A B Clarke, A Neri, B Voight

1340h V43B-2377 POSTER Determining Magma Ascent Rates From Overprinted Amphibole Breakdown Textures: The Soufrière Hills 2003 Lava Dome: K D Genareau, A B Clarke

1340h V43B-2378 POSTER The growth history of the Lago Della Vacca (Southern Adamello Massive, Italy) intrusion from field observations, thermal and rheological modelling: A Rust, C Annen, J D Blundy, L Caricchi

1340h V43B-2380 POSTER Hydration of a Rhyolitic Magma by Spherulite Growth: F W von Aulock, A R Nichols, H Tuffen, F B Wadsworth, P Ashwell, B Kennedy

1340h V43B-2381 POSTER Analogue models of dikes: insights on emplacement mechanisms by Particle Image Velocimetry: M Cerca, B Barrientos, C Mares, M J Chavez Alvarez

1340h V43B-2382 POSTER Mapping the ductile-brittle transition of magma: J E Kendrick, Y Lavallee, D B Dingwell

V43C Moscone South: Poster Hall Thursday 1340h

QUANTIFYING MAGMA MIXING PROCESSES | POSTERS

Presiding: B J Andrews, UC Berkeley; B L Browne, Cal State Fullerton

1340h V43C-2383 POSTER Evidence for magma mingling at Newberry volcano, Oregon: J H Templeton

1340h V43C-2384 POSTER Magma Mixing and Crystallization at Chaos Crag, in the Lassen Volcanic Center: M J Farner, J L Jackson, K D Putirka, A Wood

1340h V43C-2385 POSTER Lengthscales and Timescales of Homogenization in a Large Continental Magma System: A Case Study of the Purico Complex, Northern Chile: M J Farner, J L Jackson, K D Putirka, A Wood

1340h V43C-2386 POSTER Mechanics and Timescales of Magma Mixing Inferred by Textures and Petrology of Basalt Inclusions and Host Andesite From the 2006 Eruption of Augustine Volcano, Alaska: M L Vitale, B L Browne

1340h V43C-2387 POSTER Conditions of magma mixing as recorded in amphiboles from Mount Hood, Oregon: A M Koleszar, A J Kent, K M Cooper, G R Eppich

1340h V43C-2388 POSTER 230Th/238U, 230Th/232Th, 232Ra disequilibria in plagioclase from recent mixed magmas at Mount Hood: constraints on crystal storage timescales and eruption triggering processes: G R Eppich, K M Cooper, A J Kent, A M Koleszar

1340h V43C-2389 POSTER Disequilibrium phenocryst textures in an Andean volcanic complex: mixing or rapid decompression?: M D Feineman, P Sruojo, D Drew, T Murray

1340h V43C-2390 POSTER Plagioclase Textures and Zoning Patterns in the Miocene Dowdy Ranch Andesite, Central California Coast Ranges: Implications for Open and Closed System Behavior in Magmaic Systems: D A Baviushi, E P Metzger, J S Miller

1340h V43C-2391 POSTER Post-eruptive magma mixing: recycling in volcanic vents: N Deardorff, K V Cashman

1340h V43C-2392 POSTER Mixing Experiments with Natural Shoshonitic and Trachytic Melts: C P De Campos, D Pertugini, S Kolzenburg, M Petrelli, A Dorfman, D B Dingwell
V43E Moscone West: 2020 Thursday 1340h

Looking Backward and Forward: Volcanology in 2010 and 2020 III

Presenting: J H Fink, Arizona State University; J Eichelberger, US Geological Survey

1340h V43E-01 Looking Backward and Forward: A Decadal View of Volcanology: J H Fink

1355h V43E-02 Punctuated Evolution of Volcanology: An Observatory Perspective: W C Burton, J Eichelberger

1410h V43E-03 Challenges to Integrating Geographically-Dispersed Data and Expertise at U.S. Volcano Observatories: T L Murray, J W Ewert

1425h V43E-04 The Future of Smithsonian’s Global Volcanism Program (Invited): E Cottrell, L Siebert, P Kimberly

V43F Moscone West: 2018 Thursday 1340h

Microanalysis in Geoscience: Advances and Challenges I (joint with MR, T)

Presenting: J Fournelle, University of Wisconsin; B Jicha, University of Wisconsin; H Lowers, USGS; A Koenig, USGS

1340h V43F-01 Application of Microbeam Techniques to Identifying and Assessing Comagmatic Mixing Between Summit and Rift Eruptions at Kiluaea Volcano (Invited): C R Thorner, M C Rowe, D T Adams, T R Orr


1410h V43F-03 New Capabilities and Challenges for Mineral Microanalysis using Large Area Silicon-Drift Detectors on Field Emission SEM’s and Electron Microprobes: J T Armstrong

1425h V43F-04 Combined SIMS, NanoSIMS, FTIR, and SEM Studies of OH in Nominally Anhydrous Minerals (NAMs): J L Mosenfelder, M Le Voyer, G R Rossman, Y Guan, D R Bell, P D Asimow, J Eiler

1440h V43F-05 Interphase Misorientation – A Technique for Identifying Mimetic Lattice Preferred Orientation: D D McNamara, J Wheeler, M A Pearce, D J Prior

1455h V43F-06 X-ray tomography as a non-destructive tool for evaluating the preservation of primary isotope signatures and mineralogy of Mesozoic fossils: J D Santillan, J W Boyle, R Eagle, T Martin, T Tuetken, J Eiler

1510h V43F-07 Atom Probe Tomography of Olivine: S W Parman, B Gorman, C Jackson, R F Cooper, D Jaeger

1525h V43F-08 Combining Focused Ion Beam and Electron Microscopy to Prepare and Analyze Starting and Recovered Materials of High Pressure and Temperature Diamond-Anvil Cell Experiments: S Speziale, H Marquardt, R Wirth, A Schreiber, K Marquardt, G Neuser, H J Reichmann
Atmospheric Sciences

A44A  Moscone South: 104  Thursday  1600h  Dynamic Earth: Plates, Plumes, and Mantle Convection II

**Presiding:** M Gurnis, California Institute of Technology; W F McDonough, University of Maryland

1600h  **A44A-01** Constraining temperature and heat flux at the core-mantle boundary with plumes as a probe (**Invited:** W Leng, S Zhong)

1615h  **A44A-02** Plate and Plume Flux: Constraints for paleomagnetic reference frames and interpretation of deep mantle seismic heterogeneity (**Invited:** H Bunge, B S Schuberth, G E Shephard, D Muller)

1630h  **A44A-03** Vestiges of the Kerguelen Plume in the Sylhet Traps, NE India: Reconstructing a 800km diameter plume head in the Bengal basin aligned with the Ninetyeast Ridge (**Invited:** A R Basu, A Ghatak)

1645h  **A44A-04** Deep Crustal Structure beneath Large Igneous Provinces and the Petrologic Evolution of Flood Basalts (**Joint with B, GC, P**)

**Invited:** A44A-05 New Tomographic Images of the Yellowstone Plume and its Interaction with the Farallon Plate From the Integrated Analysis of Body and Surface Waves (**Invited:** M J Obrebski, R M Allen, F F Pollitz, R W Porritt, S Hung)

1700h  **A44A-06** Rollback subduction: the great killer of mantle plumes (**Invited:** K A Druken, C R Kincaid, R W Griffiths)

1730h  **A44A-07** New Joint Geochemical-Geophysical Record of Time-Dependent Mantle Convection South of Iceland (**Invited:** S M Jones, B J Murton, J G Fitton, N J White, Title of Team: Scientific Team of RV Celtic Explorer Cruise CE0806)

1745h  **A44A-08** Is the ‘Fast Halo’ around Hawaii as imaged in the PLUME experiment direct evidence for buoyant plume-fed asthenosphere?: J P Morgan, C Shi, J Hasenclever

A44B  Moscone West: 3002  Thursday  1600h  Mechanisms of High-Latitude Climate Change II (joint with C, GC, OS)

**Presiding:** M G Flanner, University of Michigan; I L Eisenman, Caltech & UW; J E Kay, NCAR

1600h  **A44B-01** Atmospheric and Surface Forcings on Recent Arctic Temperature Anomalies (**Invited:** M C Serreze, A P Barrett, J J Cassano)

1615h  **A44B-02** Do climate models underestimate the sensitivity of Northern Hemisphere sea ice cover? (**Invited:** M Winton)

1630h  **A44B-03** Assessing the role of snow albedo feedback in climate change (**Invited:** C G Fletcher, P J Kushner, R Fernandes, H Zhao)

1645h  **A44B-04** Optimal convective brine drainage from sea ice and optimal brine channel spacing: A J Wells, J S Wettlaufer, S Orszag

1700h  **A44B-05** An Arctic and Antarctic perspective on interdecadal climate variability and global change: D P Schneider, D C Noone

1715h  **A44B-06** TRENDS IN THE SOUTHERN HEMISPHERE IN WACCM4 SIMULATIONS: N CalvoFernandez, R G Garcia, D R Marsh, D E Kinnison, J M Mills, A K Smith

1730h  **A44B-07** Arctic Sea-Ice Decline: A Paleoclimatic Perspective (**Invited:** L V Polyak)

1745h  **A44B-08** Arctic sea ice processes: a perspective (**Invited:** N Untersteiner, R Kwok

A44C  Moscone West: 3004  Thursday  1600h  Origin, Composition, and Physicochemical Transformation of Atmospheric Aerosols From Studies of Individual Particles II

**Presiding:** J M Conny, National Institute of Standards and Technology; R D Willis, US EPA

1600h  **A44C-01** The Effect of Organic Material on Heterogeneous Ice Nucleation – Insights from Microscopic Analysis of Field-Collected, Laboratory Generated, and Marine Biogenic Particles (**Invited:** D A Knopf)

1615h  **A44C-02** Hygroscopity of Chemically Aged, sub-micron Squalane Particles: On the Role of Size and Composition towards the Hygroscopicity Parameter k: C W Harmon, J D Smith, D L Che, S R Leone, K R Wilson

1630h  **A44C-03** Composition and Morphology of Individual Combustion, Biomass Burning, and Secondary Organic Particle Types Obtained Using ATOFMS and STXM-NEXAFS Measurements (**Invited:** I N Sokolik)


1700h  **A44C-05** Characterization of morphology of mineral dust particles for remote sensing applications and atmospheric transport models (**Invited:** I N Sokolik)

All information is current as of November 12, 2010.
1715h  **A44C-06** Mass size distributions and mixing state of individual black-carbon containing aerosol particles observed in situ from 65S to 85N: J P Schwarz, J R Spackman, A Perrings, L Watts, R Gao, S C Wofsy, D W Fahey

1730h  **A44C-07** Influence of water coating on the optical scattering properties of fractal aggregates: C Liu, R L Panetta, P Yang

1745h  **A44C-08** The Interior Analysis and 3-D Reconstruction of Internally-Mixed Light-Absorbing Atmospheric Particles: J M Connolly, S M Collins, I Anderson, A Herzing

---

**A44D Moscone West: 3006 Thursday 1600h Wind Power Meteorology III (joint with OS, PA)**

**Presiding:** J K Lundquist, U. of Colorado at Boulder; S Basu, North Carolina State University; J R McCaa, 3TIER

1600h  **A44D-01** Modeling flow over roughness changes and applications to wind energy for sites on the Great Lakes (Invited): P A Taylor, J Salmon, W Weng

1615h  **A44D-02** Modeling Fluctuating Winds by Blending Mesoscale Model Data with Computational Fluid Dynamics (Invited): S E Haupt, F J Zajaczkowski, K J Schmehl

1630h  **A44D-03** Using Dynamically Coupled Turbine/Wind Simulations to Investigate the Influence of Atmospheric Turbulence in Turbine Wake Recovery: R Linn, E Koo, N D Kelley, B Jonkman, J K Lundquist, J Canfield

1645h  **A44D-04** Investigation of flow transition problems at WRFs nested-domain interfaces: G Kirkil, J Mirocha


1715h  **A44D-06** The impact of wakes on power output at large offshore wind farms: R J Barthelmie, S Frandsen, K Hansen, G Schepers, K Rados, W Schleiz, D Cabezon, L Jensen, S Neckelmann

1730h  **A44D-07** Wind Tunnel Modeling Of Wind Flow Over Complex Terrain: D Banks, B Cochran

1745h  **A44D-08** Flow properties around a staggered wind farm. A wind tunnel study: L P Chamorro, R Arndt, P Sotiropoulos

**Biogeosciences**


**Presiding:** A K Jain, University of Illinois; W M Post, Oak Ridge National Laboratory

1600h  **B44A-01** Benchmark analysis of parameterization for terrestrial carbon cycle model (Invited): Y Luo, X Zhou, P Verburg, J Arnone

1615h  **B44A-02** The Impact of the Temperature Sensitivity of Ecosystem Respiration on the Climate-Carbon Cycle Feedback Strength: P M Hoffman, J T Randerson

1630h  **B44A-03** Characterizing uncertainties in recent trends of global terrestrial net primary production through ensemble modeling: W Wang, H Hashimoto, S Ganguly, P Voraza, R R Nemani, R B Myneni

1645h  **B44A-04** Dispersion of the future temperature rise caused by the physical and biogeochemical parametric uncertainties: K Tachiiri, J C Hargreaves, J D Annan, M Kawamiya, Title of Team: Japan Uncertainty Modelling Project

1700h  **B44A-05** Modeling past, present and future global fire carbon emissions (Invited): S Kloster, N M Mahowald, J T Randerson

1715h  **B44A-06** Desert dust and anthropogenic aerosol interactions in the Community Climate System Model coupled-carbon-climate model: N M Mahowald, K T Lindsay, D Rothenberg, S C Doney, J K Moore, P E Thornton, J T Randerson, C D Jones

1730h  **B44A-07** Evaluation of land surface model representation of phenology: an analysis of model runs submitted to the NACP Interim Site Synthesis: A D Richardson, Title of Team: NACP Interim Site Synthesis Participants

1745h  **B44A-08** Amazon old-growth forest wind disturbance and the regional carbon balance: J Q Chambers, R J Negron Juarez, D M Marra, D A Roberts, G C Hurtt, A Lima, N Higuchi

**B44B Moscone West: 2002 Thursday 1600h Paleoecology of Climate Change in Pre-Neogene Continental Environments I (joint with GC, PP, EP)**

**Presiding:** A Jahren, University of Hawaii at Honolulu; J H Whiteside, Brown University; R B Irmis, Utah Museum of Natural History; B Schubert, University of Hawaii

1600h  **B44B-01** Ice-house-like orbital forcing of a mid-Devonian Ecosystem (Orcadian Basin, Scotland): J H Whiteside, D S Grogan

1615h  **B44B-02** Tectonic Drift, Climate, and Paleoenvironment of Angola Since the Cretaceous: L L Jacobs, M J Poley, O Mateus, A Schulp, K Ferguson, C Scotese, B F Jacobs, C Strganac, D Vineyard, T S Myers, M L Morais

1630h  **B44B-03** Mammalian Biogeography and the Latitudinal Climatic Gradient in Western North America During the Paleocene Evolutionary Radiation of Mammals (Invited): D L Fox, P Rose

1645h  **B44B-04** Resilient terrestrial ecosystems at the Paleocene-Eocene Thermal Maximum (Invited): S Wing

1700h  **B44B-05** Ultra-high Resolution Carbon Isotope Records in Tree Rings: Indicators of Carbon Allocation and Growing Season Precipitation/Temperature (Invited): A Jahren, B Schubert

1715h  **B44B-06** WAS THE EOCENE ARCTIC A SOURCE AREA FOR EXOTIC PLANTS AND MAMMALS? (Invited): J J Eberle, G J Harrington, H C Fricke, J Humphrey, L Hackett, M Newbrey, J H Hutchison

1730h  **B44B-07** The Impact of Elevated Temperatures on Continental Carbon Cycling in the Paleogene: R D Pancost, L Handley, K W Taylor, M E Collinson, J Weijers, H M Talbot, C J Hollis, D S Grogan, J H Whiteside

1745h  **B44B-08** Early-Middle Cenozoic Andean mammal faunas: Integrated analyses of biochronology, geochronology, and paleoecology (Invited): J J Flynn

**B44C Moscone West: 2006 Thursday 1600h Ecological Significance of Forest Structure from Remote Sensing, Modeling, and Field Measurements II (joint with GC)**

**Presiding:** R N Treuhaft, Jet Propulsion Laboratory, California Institute of Technology; P Dubois-Fernandez, ONERA

1600h  **B44C-01** SAR and INSAR Possibilities for the Remote Sensing of Forest Structure (Invited): S Hennesey, K Papanathanassiou

1615h  **B44C-02** Three-Dimensional Vegetation Structure from Lidar Remote Sensing: An Overview (Invited): R Dubayah, A Swatantran, M A Hofton, B Blair, G C Hurtt
Cryosphere

**C44A Moscone West: 3011** Thursday 1600h

**Measuring Earth’s Third Dimension: ICESat, IceBridge, CryoSat, and Beyond III (joint with G, EP, GC)**

**Presiding:** T J Urban, University of Texas at Austin; D Wingham, UCL; T Markus, Cryospheric Sciences Branch; T Neumann, NASA Goddard Space Flight Ctr.; R Francis, ESA/ESTEC; B E Schutz, University of Texas at Austin; L Koenig, NASA Goddard Space Flight Center; H J Zwally, NASA Goddard SFC

1600h **C44A-01** NASA’s Operation IceBridge: using instrumented aircraft to bridge the observational gap between ICESat and ICESat-2 laser altimeter measurements (Invited): M Studinger, L Koenig, S Martin, J G Sonntag


1630h **C44A-03** CryoSat: Mission Status, Achievements and New Results: R Francis, D Wingham, R Cullen, T Parrinello

1645h **C44A-04** Initial Assessment of CryoSat-2 Performance over Continental Ice (Invited): A Shepherd, D Wingham, A Ridout, A Muir

1700h **C44A-05** Investigating snow accumulation and densification patterns across the Greenland Ice Sheet by means of radar altimetry: S de la Pena, P W Nienow, A Shepherd

1715h **C44A-06** Recent changes in the ice covered Arctic Ocean from ESA’s radar altimetry missions: K Giles, S Laxon, A Ridout

1730h **C44A-07** CryoSat Measurements of Arctic Sea Ice Thickness Trends (Invited): S Laxon, A Ridout, K Giles

1745h **C44A-08** The ICESat-2 Mission: Laser altimetry of ice, clouds and land elevation: T Neumann, T Markus, W Abdalati, H J Zwally

Education and Human Resources

**ED44A Moscone South: 102** Thursday 1600h

**New Resources, Approaches, and Technologies for Teaching About the Deep Earth and Plate Margins II (joint with IN, T, V, G)**

**Presiding:** J G Ryan, University of South Florida; V S Cronin, Baylor University; M L Williams, University of Massachusetts; D L Reed, San Jose State University

1600h **ED44A-01** Understanding the Deep Earth: Slabs, Drips, Plumes and More – An On the Cutting Edge Workshop: M L Williams, D W Mocke, J R McDaris

1615h **ED44A-02** Hot or Not? Using Seismic Observations of Mantle Discontinuities to Examine Thermal and Chemical Variability in the Earth (Invited): A M Courtier


1645h **ED44A-04** Using Google Earth to Visualize the Core, Mantle, and Crust in Four Dimensions (Invited): D G De Paor, M Dordevic, S C Wild, Title of Team: Scientific Team of DigitalPlanet.org

1700h **ED44A-05** Teaching the Mantle Plumes Debate: G R Foulger


1730h **ED44A-07** Virtual Research Expeditions along Plate Margins: Examples from an Online Oceanography Course: D L Reed, G F Moore, N L Bangs, H J Tobin

1745h **ED44A-08** Cooperative Institute for Dynamic Earth Research (CIDER): Contributions to Education (Invited): B A Romanowicz

Earth and Planetary Surface Processes

**EP44A Moscone South: 308** Thursday 1600h

**Landscape Evolution in Response to Active Faulting II (joint with T)**

**Presiding:** N M Gasparini, Tulane University; N H Dawers, Tulane University

1600h **EP44A-01** How fast do landscapes respond to active faulting? (Invited): A C Whittaker, S J Boulton, M Attal

1620h **EP44A-02** Long term landscape evolution within central Apennines (Italy): Marsica and Peligna region morphotectonics and surface processes: E Miccadaei, T Piacentini, C Berti

1635h **EP44A-03** Topographic Expression of Active Tectonics in the Absence of Physical Erosion in the External Dinarides of Croatia: G Casale, K Paulson, E Salamonsen, R A Bennett, M Surkovic

1650h **EP44A-04** Differential river incision across active normal faults in Grand Canyon: a response to mantle-driven uplift of the western Colorado Plateau: K E Karlstrom, R Crow

1705h **EP44A-05** Reconstructing temporal variations in fault slip from walltopography: An example from Saline Valley, California (Invited): E Kirby, C Regalla, W B Oiumet, P R Bierman

1725h **EP44A-06** Recently active contractile deformation in the forearc of southern Peru: S R Hall, D Farber, L Audin, R C Finkel
Hydrology

**H44A** Moscone West: 3018 Thursday 1600h

Is Microscale Information Needed in Reactive Transport Models? II (joint with GC, V)

**Presiding:** T Schaefer, Karlsruhe Institute of Technology (KIT);
M Ddentz, Institute of Environmental Assessment and Water Research (IDA EA-CSIC); P Gouze, Géosciences Montpellier

1600h **H44A-01** Can nuclear magnetic resonance provide useful microscale data for quantitative testing of reactive transport models? (Invited): J D Seymour, S L Codd

1615h **H44A-02** Response of Multiphase Flow to Micropetrography of Rock Fractures: M W Becker, C F Burke

1630h **H44A-03** Diffusion in Altered Tonalite Sample Using Time Domain Diffusion Simulations in Tomographic Images Combined with Lab-scale Diffusion Experiments: M Voutilainen, P Sardini, L Togneri, M Siitari-Kauppi, J Timonen

1645h **H44A-04** CFD modeling of fluid flow and solute transport in a μXCT scanned natural fracture: Impact of fracture geometry on solute transport: F M Huber, F Enzmann, A Wenka, M Dentz, T Schaefer

1700h **H44A-05** The Importance of Parameter Variances, Correlations Lengths, and Cross-Correlations in Reactive Transport Models: Key Considerations for Assessing the Need for Microscale Information (Invited): P W Reimus

1715h **H44A-06** A New Approach to Simulate the Kinetics of Metal Desorption from Mineral Surfaces: R M Tinnacher, B A Powell, A B Kersting, M Zavarin

1730h **H44A-07** When is Small Scale Information Important in Determining Large Scale Mineral Dissolution Rates? (Invited): L Li, F Salehikhoos, S L Brantley

1745h **H44A-08** Uranium transport experiments at the intermediate scale: Do more heterogeneous systems create more complex behaviors?: A W Miller, D Rodriguez, B Honeyman

**H44B** Moscone West: 3016 Thursday 1600h

Physically Based Hydrologic Modeling: Advances and Challenges III (joint with EP, A, B)

**Presiding:** B B Mirus, US Geological Survey; B A Ebel, US Geological Survey

1600h **H44B-01** Recent advances in modeling the coupled hydrologic cycle: Connecting atmospheric processes, land energy fluxes and hydrology (Invited): R M Maxwell, I M Ferguson, J K Lundquist, F K Chow, S J Kollet

1620h **H44B-02** Modelling root soil-water extraction of two different root systems in 3D: M Bouda, J E Saiers

1630h **H44B-03** Simulating Water Flow in Variously Saturated Soils - Exploring the Advantage of Three-dimensional Models: L Hopp, Y Y Ivanov

1652h **H44B-04** Perched Soil Zone (PSZ) Aquifer Package for MODFLOW-2005: W Henson, R G Niswonger

1708h **H44B-05** An Improved “Low-Dimensional” State-Space Model for Unsaturated Flow in Fractured Porous Catches: A M Ireson, A P Butler, H S Wheeler

1724h **H44B-06** Watershed reanalysis: data assimilation from strip charts to embedded sensor networks (Invited): C Duffy, M Kumar, G Bhart, L N Leonard, X Yu, Y Shi, K J Davis, G Holmes

1744h **H44B-07** Modeling the runoff regime of the glaciated upper Aconcagua River Basin using a physically-based distributed hydrological model: the value of short term glaciological observations: S Ragetti, F Pellicciotti, D Molnar, S Rimkus, J Helling, F Escobar, P Burlando

**H44C** Moscone West: 3014 Thursday 1600h

Predicting Behavior of Freshwater Systems in a Changing Environment III (joint with B)

**Presiding:** M Sivapalan, Univ of Illinois at Urbana Champaign; A I Packman, Northwestern University; M A Hassan, Univ British Columbia; J Wilson, University of Illinois at Urbana-Champaign

1600h **H44C-01** Modeling global scale sediment flux, a new component in the spatially distributed Framework for Aquatic Modeling of Earth System (FrAMES): S Cohen, A J Kettner, J P Syvitski

1615h **H44C-02** Are Human influences responsible for the existence and possible drowning of (parts of) the Ebro Delta, Spain?: A J Kettner, F Xing, A D Ashton

1630h **H44C-03** Anthropogenic Signatures in Nutrient Loads Exported from Managed Catchments: Emergence of Effective Biogeochemical Stationarity: N B Basu, G Destouni, J W Jawitz, S E Thompson, A Rinaldo, M Sivapalan, P C Rao

1645h **H44C-04** Dynamics of nitrogen saturation in river networks. (Invited): W M Wollheim, R J Stewart, M N Goosef, M Green

1700h **H44C-05** Catchment Hydro-biogeochemical Response to Climate Change and Future Land-use: A G Abdelnour, M Stieglitz, R Mckane, F Pan

1715h **H44C-06** Linking observed break-through curves from tracer injections into streams in experimental and environmental conditions: A F Aubeneau, J D Drummond, T P Covino, N B Basu, S S Rao, R Schumer, J Tank, A I Packman

1730h **H44C-07** Daily Water Temperature and River Discharge Modeling for Climate Change Impact Assessment in Large River Basins Globally: M T van Vliet, J R Yearsley, W H Franssen, F Ludwig, I Haddeland, D P Lettenmaier, P Kabat
Earth and Space Science Informatics

IN44A Moscone South: 309 Thursday 1600h

Large-Scale Geosciences Applications Using GPU and Multicore Architectures II (joint with NG, P)

Presiding: D A Yuen, University of Minnesota; D L Rosenberg, NCAR; C Ng, Geophysical Institute; G Erlebacher, Florida State University

1600h IN44A-01 Acceleration of low order finite element computation with GPUs (Invited): M G Knepley

1620h IN44A-02 Porting Fluid and kinetic plasma models for space plasma physics to heterogeneous architectures: Benefits and Challenges (Invited): K Germschewski, J Raeder, H Ruhl

1640h IN44A-03 Accelerating Simulation of Seismic Wave Propagation by Multi-GPUs (Invited): T Okamoto, H Takenaka, T Nakamura, T Aoki

1700h IN44A-04 Macro-scale lattice-Boltzmann fluid flow simulations in super-critical CO2/brine/rock systems using graphics processing units: S D Walsh, M O Saar, J B Randolph

1712h IN44A-05 Large-scale Reduced MHD Simulations of Coronal Heating via GPGPUs: L Lin, C Ng, A Bhattacharjee

Nonlinear Geophysics

NG44A Moscone South: 305 Thursday 1600h

Statistical Geophysics I (joint with A, B, H, OS, EP, NH, G, S)

Presiding: K F Tiao, University of Western Ontario; D L Turcotte, University of California, Davis; W Klein, Boston University

1600h NG44A-01 On the Generation of the Earth's low Frequency “Hum” Through non-Linear Interactions Between Atmosphere, Ocean and Solid Earth (Invited): B A Romanowicz, J Rhie, D Dolenc

1615h NG44A-02 The Critical Point Model for Large Earthquakes Revisited (Invited): C G Sammis

1630h NG44A-03 Steady-state statistical mechanics of model and real earthquakes (Invited): J G Main, M Naylor

1645h NG44A-04 Worldwide seismic clustering and correlations with regional physical properties: A Hicks, I Zaliapin, Y Ben-Zion

1700h NG44A-05 A unifying phase diagram for the dynamics of sheared solids and granular materials (Invited): Y Ben-Zion, K Dahmen

1715h NG44A-06 The Effect of Damage on Earthquake Scaling and Forecasting: W Klein, C Serino, K F Tiao, J B Rundle
Natural Hazards

**NH44A Moscone West: 3010 Thursday 1600h**


**Presiding:** L M Jones, U.S. Geological Survey; D Applegate, USGS

1600h **NH44A-01** Science for decision making: Transmitting hazard science using catastrophic scenarios: A Wein, K Broad, B S Orlove

1615h **NH44A-02** Ten Tips for Talking to Townies: Observations on Risk Communication from the Multihazards Demonstration Project: K A Porter, L M Jones

1630h **NH44A-03** Time Horizon and Social Scale in Communication: D H Krantz

1645h **NH44A-04** Studying and Improving Human Response to Natural Hazards: Lessons from the Virtual Hurricane Lab: R Meyer, K Broad, B S Orlove

1700h **NH44A-05** Lessons learned from an emergency release of a post-fire debris-flow hazard assessment for the 2009 Station Fire, San Gabriel Mountains, southern California: S H Cannon, S C Perry, D M Staley

1715h **NH44A-06** NOAA/National Weather Service Support in Response to the Threat of Debris Flows from the 2009 Station Fire in Los Angeles County: Lessons Learned in Hazard Communications and Public Response: M Jackson, J L Laber, E Boldt

1730h **NH44A-07** Reducing Community Vulnerability to Wildland Fires in Southern California: J E Keeley

1745h **NH44A-08** Anticipating and Communicating Plausible Environmental and Health Concerns Associated with Future Disasters: The ShakeOut and ARkStorm Scenarios as Examples: G S Plumlee, S A Morman, C N Alpers, T M Hoefen, G P Meeker

Near Surface Geophysics

**NS44A Moscone West: 3022 Thursday 1600h**

**Beyond the Case History: Novel Seismic Methods and Applications II** (joint with S)

**Presiding:** J M Lorenzo, Louisiana State University; T E Blum, Boise State University


1620h **NS44A-02** WITHDRAWN

1640h **NS44A-03** Simultaneous estimation of water saturation and porosity in the vadose zone by common parameterization of seismic p-wave and GPR velocities (Invited): J H Bradford

1700h **NS44A-04** Multi-level continuous active source seismic monitoring (ML-CASSM): Application to shallow hydrofracture monitoring: J B Ajo Franklin, T M Daley, B Butler-Veytia, J Peterson, E Gasperikova, S S Hubbard

Ocean Sciences

**OS44A Moscone West: 3009 Thursday 1600h**

**Fluid Flow and Gas Hydrates in Continental Margins II** (joint with GC, NH, PP, V)

**Presiding:** C Berndt, IFM-GEOMAR; S Planke, Volcanic Basin Petroleum Rsch

1600h **OS44A-01** Seismic Characterization of a Bottom Simulating Reflector (BSR) and Plumbing System of the Cameroon Margin, West Africa: A N Le, M Huuse, J Redfern, D H Irving

1615h **OS44A-02** Observed temporal hydrate-pingo alteration at pockmark G11, Nyegga, - an important climate-change signal?: M T Howland

1630h **OS44A-03** Controls on mound formation and effects of fluid ascent on the gas hydrate system of mound structures offshore Costa Rica: L Planert, D Klaeschen, C Berndt, C Hensen, W Brueckmann

1645h **OS44A-04** Constraints on Methane and Methane Hydrate Distribution at a Gulf of Mexico Seep Using Waveform Inversion of Seismic Data: W Wood, C C Knapp, J H Knapp

1700h **OS44A-05** Growth of gas hydrate mounds and gas chimneys of the eastern margin of Japan Sea as revealed by MBES, SSS and SBP of AUV: R Matsumoto, M Satoh, M Hiromatsu, H Tomaru, H Machiyama

1715h **OS44A-06** Seismic imaging of a cold seep site offshore southwestern Taiwan: C Liu, H Hsu, S Morita, S Tu, C KU, S Lin, H Machiyama, W Soh

1730h **OS44A-07** WITHDRAWN

1745h **OS44A-08** Seismic Evidence for Fluid Flow along Reactivated Backstop Interface During/After 2004 and 2007 Great Sumatran Earthquakes: A Chauhan, S C Singh, N D Hananto

**OS44B Moscone West: 3007 Thursday 1600h**

**Nearshore Processes II** (joint with EP)

**Presiding:** C Chickadel, University of Washington; J W Long, USGS; H F Stockdon, U.S. Geological Survey; D Foster, University of New Hampshire; G R Pawlak, University of Hawaii

1600h **OS44B-01** Investigating Coastal Processes and Hazards Along the Coastline of Ghana, West Africa (Invited): C J Hapke, A D Ashton, G Wiafe, K A Addo, S Ababio, K A Agyekum, T C Lippmann, J Roelvink

1615h **OS44B-02** Generation of Wind Waves in the Persian Gulf: A Numerical Investigation: Y Liao, J M Kiahhatu

1630h **OS44B-03** Southern California Beaches during the El Niño Winter of 2009/2010: A Doria, R T Guza, M L Yates, W O'Reilly

1645h **OS44B-04** Predicting Waves in the Pacific Northwest of the US: H T Oskan-Haller, J A Oskamp, G Garcia, S Kassem, J McNutt

1700h **OS44B-05** WITHDRAWN

1715h **OS44B-06** Ocean wave reconstruction from inland seismic records: A Balanche, F Ardhuin, E Stutzmann

1730h **OS44B-07** Shore-based Photogrammetry of Surface Oil Films: J Whitefield, N Record, A J Pershing
Planetary Sciences

**P44A Moscone South: 301 Thursday 1600h**

**Exploring Venus I** (joint with A, SA)

*Presiding:* J Helbert, DLR; S E Smrekar, Jet Propulsion Laboratory

1600h

P44A-01 AKATSUKI status after the Venus orbit insertion: M Nakamura, N Ishii, T Imamura, M Ueno, A Yamazaki, T Satoh, M Suzuki, N Iwagami, M Taguchi, S Watanabe, Y Takahashi, T Fukuhara, S Ohtsuki, Title of Team: PLANET-C Project Team

1615h

P44A-02 Optical properties of the upper Venus clouds and haze as inferred from the Venus Monitoring Camera data: W J Markiewicz, E Petrova, O Shalygina, N Ignatiev, D Titov

1630h

P44A-03 Periodical oscillation of zonal wind velocities at the cloud top of Venus: T Kouyama, T Imamura, M Nakamura, T Satoh, Y Futagana

1645h

P44A-04 Structure and Dynamics of the Upper Ionosphere of Venus: A Angsmann, M Fraenz, E Dubinin, J G Woch, N Krupp, S Barabash, M Paetzold, T Zhang, U M Motschmann

1700h

P44A-05 Venus Lightning: Statistical Properties from Venus Express Magnetic Field Observations: J Daniels, C T Russell, R J Strangeway, H Wei, T Zhang

1715h

P44A-06 Observing the surface of Venus after VIRTIS on VEX: J Helbert, N T Mueller, R Nadalini, A Maturilli, S E Smrekar

1730h


1745h

P44A-08 A Study of Venus Surface Elemental Composition From 14-MeV Neutron Induced Gamma Ray Spectroscopy: Activation Analysis: J Jun, W kim, M Smith, I Mitrofanov, M L Litvak

**P44B Moscone South: 306 Thursday 1600h**


*Presiding:* J R Michalski, Planetary Science Institute; P B Niles, NASA JSC; S P Wright, University of New Mexico

1600h

P44B-01 Melting of Permafrost on Mars in the Formation of Large Impact Craters (Invited): E Pierazzo, B A Ivanov

1615h

P44B-02 Evaluating the Historical Importance of Impact Induced Hydrothermal Systems on Mars using the Stable Isotopic Composition of Martian Water: P B Niles

1630h

P44B-03 Impact-generated hydrothermal systems on Noachian Mars: Clays, carbonates and more (Invited): S P Schwenzer, O Abramov

1645h

P44B-04 Deep crustal carbonate rocks exposed by meteor impact on Mars: J R Michalski, P B Niles

1700h


1715h


1730h

P44B-07 High-resolution morphologic and spectral characteristics of Crater-exposed Bedrock on Mars: Insights into the petrogenesis, stratigraphy and geologic history of the Martian crust: L L Tornabene, C M Caudill, A S McEwen, G Osinski, J J Wray, J F Mustard, J R Skok, G Marzo, J A Grant

1745h

P44B-08 Can Single Crystal (U-Th)/He Zircon Ages from Nördlinger Ries Suevite be Linked to Impact-Related Shock Effects?: M C Van Soest, F J Cooper, J Wartho, K Hodges, E Buchner, M Schmieder, C Koebler

**Paleoceanography and Paleoclimatology**

**PP44A Moscone West: 2005 Thursday 1600h**

**Interglacial Climate Variability III** (joint with B, C)

*Presiding:* A H Voelker, Laboratorio Nacional de Energia e Geologia (LNEG); Q Yin, Université catholique de Louvain

1600h

PP44A-01 Fluctuating sea levels during the Last Interglacial: termination, oscillation, and glacial inception: W G Thompson

1615h

PP44A-02 European warming linked to Greenland melting during the Last Interglacial North Atlantic climate optimum: M Sanchez Goni, E Michel, S Desprat, A E Carlson, F Naughton, W J Fletcher, L Rossignol

1630h

PP44A-03 Did Marine Isotope sub-Stage 5e warmth vary in 1,500-year cycles?: Z Mokeddem, J F McManus

1645h

PP44A-04 The Eemian Climate Controversy in the Polar North: H A Bauch, E S Kandiano, N Van Nieuwenhove

1700h

PP44A-05 The Last Interglacial represented in the glaciochemical record from Mount Moulton Blue Ice Area, West Antarctica: E Korotkih, P A Mayewski, M Handley, S B Sneed, D Introne, A Kurbatov

1715h

PP44A-06 WITHDRAWN

1730h

PP44A-07 Holocene precipitation changes in the deep tropics recorded by Speleothems (Invited): X Wang, A S Auler, R Edwards, X Kong, H Cheng, F W Cruz, Y Wang, W S Broecker

1745h

PP44A-08 Global Holocene Temperature Variations: S A Marcott, J D Shakun, P U Clark, A C Mix, N G Pisia

**PP44B Moscone West: 2003 Thursday 1600h**

**Paleoclimate Insights From Vegetation Proxies and Models I** (joint with GC, B)

*Presiding:* I S Castañeda, Royal Netherlands Institute for Sea Research; A Henderson, Pennsylvania State University; M A Berke, University of Minnesota

1600h

PP44B-01 Pollen-based reconstructions of bioclimatic variables for the mid-Holocene and LGM: issues and strategies in diagnosing and benchmarking paleoclimatic simulations (Invited): P J Bartlein, Title of Team: Late-Quaternary Quantitative Climate Reconstruction Working Group

1615h

PP44B-02 Three climate cycles of millennial-scale vegetation change in Africa (Invited): L M Dupont

1630h

PP44B-03 In the hot seat: Insolation and ENSO controls on vegetation productivity in tropical Africa inferred from NDVI: S Ivory, J L Russell, A S Cohen

1642h

PP44B-04 Links Between the Hydrological Cycle and Carbon Cycle Constrained with Stable Isotope Ratios of Leaf Waxes in an Alaskan Peatland: J E Nichols, D M Petee, P D Isles, B Tabanpour, C M Moy

1654h

PP44B-05 Paleovegetation and paleoclimates of NE Africa 12-1 Ma (Invited): S J Feakins, T I Eglington
1709h  PP44B-06 Climate controls on savanna C, and C\textsubscript{e} expansion in Southern Africa during the last 36 kyr BP: Y V Wang, T Larsen, N Andersen, T Blanz, R R Schneider

1721h  PP44B-07 High-latitude ecosystem changes enable late Paleozoic glacial-interglacial cycles: D E Horton, C J Poulsen

1733h  PP44B-08 Paleoshade: woody cover, stable isotopes, soil temperature, and soil organic matter in tropical ecosystems (Invited): T E Cerling, S Andanje, D Kimutai, N E Levin, W D Mace, A N Macharia, B H Passsey, C Remien, J G Wynn

1748h  PP44B-09 Three and half million year vegetation history of South West Africa and its implications for human evolution: M A Maslin, R D Pancost

SPA-Magnetospheric Physics

SM44A  Moscone South: 103 Thursday 1600h
Van Allen Lecture (Webcast) (joint with SH, SA)

Presiding: J J Sojka

1600h  Introduction

1605h  SM44A-01 Plasma and Field Boundaries in Space: B U Sonnerup

SM44B  Moscone South: 103 Thursday 1700h
SPA Decadal Survey (joint with SA, SH)

Presiding: J J Sojka; D N Baker, University of Colorado

Mineral and Rock Physics

MR44A  Moscone West: 3024 Thursday 1600h
Melt-Solid Density Inversions in the Earth and Planetary Interiors II (joint with DI)

Presiding: J W Hernlund, University of California, Berkeley; A Kavner, UCLA

1600h  MR44A-01 The composition of hydrous partial melt at 410 km: Geodynamic implications (Invited): M Mookherjee, D J Frost

1615h  MR44A-02 Advanced Elasticity and Density Measurements on Melts at Mantle Pressures Using Ultrasonic Interferometry and Synchrotron X-radiation: B Li, W Liu

1630h  MR44A-03 Experimental Compressibility of Molten Hedenbergite at High Pressure: C B Agee, R G Barnett, X Guo, R A Lange, C Waller, P D Asimov

1645h  MR44A-04 Melting of Peridotite to 140 GPa (Invited): G Fiquet, A Auzende, J Siebert, A Corgne, H Bureau, H Ozawa, G Garbarino

1700h  MR44A-05 Spin crossover and iron-rich silicate melt in the Earth's deep mantle (Invited): K Hirose, R Nomura, H Ozawa, S Tateno, J W Hernlund

1715h  MR44A-06 Equation of state of molten fayalite (Fe\textsubscript{2}SiO\textsubscript{4}): C Waller, Q Liu, C B Agee, P D Asimow, R A Lange

1730h  MR44A-07 Silicate liquids at the base of the mantle (Invited): L P Stixrude, B B Karki

1745h  MR44A-08 Universality in Melt-densification in Magmatic Reservoirs in Earth's Interior: Insights from Magnetic Resonance Spectroscopy: S Lee

Seismology

S44A  Moscone West: 2007 Thursday 1600h
Advances in Inverse Problems and Seismic Tomography V (joint with T, DI, NH, NS)

Presiding: A Fichtner, Utrecht University; J V Morgan, Imperial College London

1600h  S44A-01 Object-Based Probabilistic Full Waveform Tomography: Methodology and Application to the Australian Continental Lithosphere: P Käufli, A Fichtner, H Igel


1630h  S44A-03 Three and half million year vegetation history obtained from USArray regional phase data: J S Buehler, P M Shearer

1700h  S44A-04 Three and half million year vegetation history obtained from USArray regional phase data: J S Buehler, P M Shearer

S44B  Moscone West: 2009 Thursday 1600h
Developments in Statistical Seismology: Research and Education IV (joint with ED, T)

Presiding: A J Michael, USGS; M J Werner, Princeton University; J Woessner, ETH Zurich

1600h  S44B-01 Quasi-Periodic Recurrence of Large Earthquakes on the San Andreas Fault (Invited): K M Schaar, G P Biasi, R J Weldon, T Fumal

1615h  S44B-02 Periodic, chaotic, and doubled earthquake recurrence intervals on the deep San Andreas Fault: Implications for large earthquakes? (Invited): M R Shelly

1630h  S44B-03 Time-dependent global seismicity forecasts with a tectonic component: Retrospective tests: P Bird, Y Y Kagan, D D Jackson

1645h  S44B-04 Bayesian forecasting of the recurrent earthquakes and its predictive performance for a small sample size: S Nomura, Y Ogata

1700h  S44B-05 Solving for Earthquake Rupture Rates on a Complex Fault Network: M T Page, E H Field

1715h  S44B-06 SEISMICITY-BASED PATTERN RECOGNITION APPROACH OF FAULT PATTERN RECONSTRUCTION AND STATISTICS OF SEISMICITY AT THE FAULT SEGMENT SCALE: G Ouillon, D Sornette

1730h  S44B-07 Are earthquake magnitudes clustered?: A Green, J Davidsen

1745h  S44B-08 Bayesian Estimation of the Spatially Varying Completeness Magnitude of Earthquake Catalogs: A Mignan, M Werner, S Wiemer, C Chen, Y Wu

All information is current as of November 12, 2010
T44A  Moscone West: 2016  Thursday  1600h
Exploring the Temporal and Spatial Variability in Fault Slip Rates II (joint with G, NS, S)

Presiding: R J Phillips, University of Leeds; N Houlie, School of Earth and Environment; T J Wright, University of Leeds

1600h  T44A-01 From geodesy to geological, similar slip rates at different time scales: The Dead Sea Fault example (Invited): Y Klinger, M Le Beon, BJ Meade, E Hetland
1615h  T44A-02 Secular Variation in Slip (Invited): E Cowgill, R D Gold
1630h  T44A-03 Temporal patterns of slip rate on the Little Lake fault, eastern California shear zone, from terrestrial lidar, cosmogenic radionuclides, and InSAR analysis (Invited): C B Amos, R Burgmann, A S Jayko, G Fisher, III, D H Rood
1645h  T44A-04 Spatiotemporal Patterns of Fault Slip Rates Across the Central Sierra Nevada Frontal Fault Zone: D H Rood, D Burbank, R C Finkel
1700h  T44A-05 WITHDRAWN
1715h  T44A-06 Consistency and Inconsistency Between Geodetic and Geologic Fault Slip Rates in Central Japan: T Sagiya, K Ozawa, M Ohzono, T Nishimura, Y Hoso
1730h  T44A-07 Slip rate of the Húsavík-Flatey Fault, North Iceland, derived from GPS and InSAR Time Series: S Metzger, S Jonsson
1745h  T44A-08 EVALUATING HYPOTHESES FOR THE ORIGIN OF THE GEOLOGIC/GEODETIC RATE DISCREPANCY ALONG THE NORTH ANATOLIAN FAULT: J F Dolan, B J Meade

T44B  Moscone West: 2011  Thursday  1600h
What Controls Strong Versus Weak Coupling on Subduction Interface Faults? II (joint with G, S)

Presiding: R E Bell, Imperial College London; H Sato, Earthquake Research Institute

1600h  T44B-01 The “Weak Asperity” Alternative (Invited): K Wang
1615h  T44B-02 Simulations of Slip History on Faults with Heterogeneous Rate-Weakening and Rate-Strengthening Properties: J Avouac, S Barbot, N Lapusta
1630h  T44B-03 Along-Strike and Down-Dip Variations in Subduction Zone Slip Deficit: Persistent or Transient? (Invited): J T Freymueller
1645h  T44B-04 Variable coupling controls the seismic segmentation and transient creep on the central Chile subduction: M Metois, A Slocquet, C Vigny
1715h  T44B-06 Backthrust Earthquake Clusters Over Intermittently Coupled Portion of the Sunda Megathrust: K A Grijalva, P Banerjee, K E Sieh, R Burgmann, D H Natavidjaja
1730h  T44B-07 Seismic and aseismic slip on the “uncoupled” Tonga subduction megathrust: R J Beavan, X Wang, M G Bevis, R’ Kautoke
1745h  T44B-08 Strain Partitioning Between the Slab and the Upper Plate: Implications for the Deformational Efficiency of Subduction: K P Furlong

Volcanology, Geochemistry, and Petrology

T44A  Moscone West: 2018  Thursday  1600h
Diffusion in Minerals and Melts I (joint with MR)

Presiding: Y Zhang, Univ of Michigan; D J Cherniak, Rensselaer Polytechnic Inst

1600h  V44A-01 Controls on cation diffusion in periclase (Invited): J A Van Orman, K L Crispin, S Saha, D Morgan
1615h  V44A-02 Diffusion in the Muscovite 8K Decay System (Invited): T H Harrison
1630h  V44A-03 Diffusion of REEs and Other Trivalent Cations in Garnet: New Data on Rates and Mechanism: W D Carlson
1645h  V44A-04 A lattice-Boltzman model for noble gas diffusion: W S Cassata, C Huber, P R Renne
1700h  V44A-05 Theoretical insights on the mobility and diffusive fractionation of incompatible elements in mantle rocks: (Invited): R Dohmen
1715h  V44A-06 Kinetics of crystal-melt interaction in multicomponent partially molten silicates: Y Liang
1730h  V44A-07 Flux Decoupling and Chemical Diffusion in Redox Dynamics in Aluminosilicate Melts and Glasses (Invited): R F Cooper
1745h  V44A-08 A different approach to multicomponent diffusion: Y Zhang

V44B  Moscone West: 2022  Thursday  1600h
Earth’s First Few Hundred Million Years III (joint with GP, MR, DI, P, S, T)

Presiding: J Badro, Institut de Physique du Globe de Paris; J Badro, Institut de Physique du Globe de Paris; M J Walter, University of Bristol; M J Walter, University of Bristol

1600h  V44B-01 The Acasta Gneisses revisited: Evidence for an early depleted mantle: E E Scherer, P Sprung, W Bleeker, K Mezger
1612h  V44B-02 Isotopic Evidence for Internal Oxidation of the Earth’s Mantle During Accretion: H M Williams, B J Wood, J Wade, D J Frost, J Tuff
1624h  V44B-03 Constraints on Fe isotope fractionation between liquid metal and liquid silicate from experiments at 1 GPa and 1250-1300°C: R C Hin, M W Schmidt, J G Wiederhold, B Bourdon
1636h  V44B-04 Diamond anvil cell experiments applied to the geochemistry of Earth’s core formation (Invited): J Siebert, F J Ryerson, D Antonangeli, A Corgne, A Ricolleau, P K Weber, J Badro
1651h  V44B-05 WITHDRAWN
1703h  V44B-06 Remnants of Ultradense Silicate Melt From a Deep Terrestrial Magma Ocean: M Murakami, J D Bass
1715h  V44B-07 Turbulent particle cloud experiments - implications for metal-silicate mixing and chemical equilibration in a magma pool: R Deguen, P Olson
1727h  V44B-08 Fragmentation of metal diapirs in terrestrial magma oceans: H Samuel, D C Rubie, H J Melosh
1739h  V44B-09 Convective models in young terrestrial planets with semi permeable surface: F Dubuffet, Y R Ricard, S Labrosse, M Ulvrova
Friday A.M.

Union

U51A Moscone South: Poster Hall  Friday 0800h
Dynamic Earth: Plates, Plumes, and Mantle Convection III Posters

Presiding: W F McDonough, University of Maryland; M Gurnis, California Institute of Technology

0800h  U51A-0001 POSTER The Influence of Damage on Drip Instabilities in Continental Lithosphere: K A Paczkowski, D Bercovici, W Landuyt, M T Brandon
0800h  U51A-0002 POSTER Large Edge Continental Rifting due to Destabilization of Thick Depleted Lithosphere: L Fourel, L Milelli, C P Jaupart
0800h  U51A-0003 POSTER Onset and structure of small scale convection: W Landuyt, G Ierley
0800h  U51A-0004 POSTER Heat Flow Partitioning Between Continents and Oceans - from 2D to 3D: L N Moresi, C M Cooper, A Lenardic
0800h  U51A-0005 POSTER Fabric Development in Ductile Shear Zones as the Key to Plate Tectonics: L G Montesi
0800h  U51A-0006 POSTER Generation of Plate Tectonics via Grain-Damage: D Bercovici, Y R Ricard
0800h  U51A-0007 POSTER Subduction zone dynamics influenced by the mechanical buckling of spherical shell-like large-scale oceanic lithospheres into the mantle: T Eguchi
0800h  U51A-0008 POSTER Global Dynamic Numerical Simulations of Plate Tectonic Reorganizations: G Morra, L Quevedo, N Butterworth, K J Matthews, D Muller
0800h  U51A-0009 POSTER From GPates to BEM-Earth: Tectonic Reconstruction Data Mining and Geodynamic Simulations: L E Quevedo, G Morra, N Butterworth, K J Matthews, D Muller
0800h  U51A-0010 POSTER The subduction reference framework: M Seton, D Muller, M Gurnis, N Flament, J Whittaker

All information is current as of November 12, 2010
Investigation of the Interior of Mars with a Single Seismic Station: results for the BASiX Discovery Mission proposal: R F Garcia, P Lognonne, M Calvet, J Gagnepain-Beyneix, M Le Feuvre.

Application to a geophysical international lunar network: P Zweifel, D Mance, R Roll, M Bierwirth.


Innovative Approaches to Planetary Seismology II Posters

U51B Moscone South: Poster Hall Friday 0800h

Reconsideration of mantle plume head structure and the formation of large igneous provinces: W Leng, M Gurnis.


Numerical Study on plumes and thermochemical piles in plate-mode convection: C Stein, K Brannaschke, U Hansen.

Reservoirs of dense primitive material in the deep mantle as partial source of Ocean Island Basalt: F Deschamps, E Kaminski, P J Tackley.

Thermal evolution of Earth’s mantle and core: Influence of reference viscosity and concentration of radioactive elements in the mantle: T Nakagawa, P J Tackley.

An Analytic Parameterized Thermal Convection Model Predicting Multiple Convective Regimes and Transition Behavior: J W Crowley, R J O’Connell, T Höink.

Regional modeling studies on the diurnal and semi-diurnal cycles of boundary layer off the west coast of South America: F Sun, T Toniazzo, C R Mechoso, A D Hall.

Observations of the Diurnal Cycle of Marine Stratocumulus During the VOCALS Regional Experiment: CD Burleyson, S E Yuter.


Stratocumulus-topped marine boundary layer transition model derived from the surface energy budget: J Karlsson, J Teixeira.


Characterizing anthropogenic sources of pollution and their influence on regional air quality and meteorology during the VOCALS-REX experiment: M Mena-Carrasco, G R Carmichael, S Spak, L T Molina, P Saide.


All information is current as of November 12, 2010

0800h A51B-0098 POSTER MLS and ACE-FTS measurements of UTLS Trace Gases in the Presence of Multiple Tropopauses: M J Schwartz, G L Manney, W H Daffer, K A Walker, M I Hegglin

0800h A51B-0099 POSTER Model - Measurement Comparison of Coherent Variability in Tropospheric and Stratospheric Ozone: J L Neu, J Worden

0800h A51B-0100 POSTER Merging Satellite Ozone Datasets via High Resolution Atmospheric Chemistry Modeling in the Lower Stratosphere and Upper Troposphere Region: Q Tang, M J Prather

0800h A51B-0101 POSTER Correlation between subtropical jet and the Enhanced-Tropospheric Columnar Ozone (E-TCO) belt: A Nakatani, S Hayashida, T Nagashima, S Kondo, X Liu, K Sudo, I Hirotta

0800h A51B-0102 POSTER Validation and inter-comparison of EOS Ozone products against global ozone sondes: Z Wei, J X Warner

0800h A51B-0103 POSTER A study of modulation of polar stratospheric clouds by atmospheric waves in the Southern Hemisphere using CALIPSO lidar data: M Kohna, K Sato


0800h A51B-0105 POSTER Stratospheric Aerosol Layers in the High Canadian Arctic: K Olofson, R J Sica, K B Strawbridge, J R Drummond

A51C Moscone South: Poster Hall Friday 0800h Remote Sensing of CO2 Emissions and Atmospheric Transport I Posters (joint with GC)

Presiding: M T Chahine, JPL; A M Michalak, University of Michigan; C E Miller, California Institute of Technology

0800h A51C-0106 POSTER On orbit Calibration and Characterization of TANSO onboard GOSAT and Level 1 products: A kuze, H Suto, K Shiomi, M Nakajima

0800h A51C-0107 POSTER Correction of scan-speed instability of TANSO-FTS on GOSAT: H Suto, A kuze

0800h A51C-0108 POSTER GOSAT lunar calibration in one year operation: K Shiomi, T Hashiguchi, F Kataoka, R Higuchi, S Kawakami

0800h A51C-0109 POSTER Estimating Regional Sources and Sinks of CO2 Inversely from GOSAT Level 2 Column Concentration Data - the Preparation of GOSAT Level 4 Data Products - : H Takagi, Y Koyama, T Saeki, T Oda, R Saito, M Saito, V Valsala, D Belkov, Y Yoshida, M Inoue, I Morino, O Uchino, T Yokota, S Maksyutov

0800h A51C-0110 POSTER Rapid estimation of column averaged CO2 concentration using a correlation algorithm: I N Polonsky, D M O’Brien

0800h A51C-0111 POSTER PDF-based GOSAT data processing: S Oshchepkov, A Bril, I Morino, T Yokota

0800h A51C-0112 POSTER Coupled Interface Atmosphere – Ocean (CIAO) code to account for polarization effects in space-based observations of greenhouse gases: V P Budak, D A Klyuykov, S Oshchepkov

0800h A51C-0113 POSTER ACOS Glint-mode Total Column CO2 Retrievals from GOSAT: F W Irion, V Natraj, J McDuffie, C O’Dell

0800h A51C-0114 POSTER Remote sensing of CO2 from GOSAT: recent findings and preliminary validation: A Butz, O P Hasekamp, C Frankenberg, D Schepers, A Galli, I Aben

0800h A51C-0115 POSTER Improvement of a retrieval method of the column-averaged dry air mole fractions of carbon dioxide and methane from Greenhouse gases Observing SATellite (GOSAT) observation: Y Yoshida, N Eguchi, Y Ota, I Morino, O Uchino, H Waranabe, T Yokota

0800h A51C-0116 POSTER Seasonal cycles in total column CO2: Where does the model-observation mismatch come from?: S Basu, S Houweling

0800h A51C-0117 POSTER Sources/sinks analysis with satellite sensing for exploring global atmospheric CO2 distributions: C Shim, R Nassar, J Kim

0800h A51C-0118 POSTER The Measurement of Landfill Gas Emissions with the Orbiting Carbon Observatory and CarbonSAT Satellites: S A Vigil, R Hovemans

0800h A51C-0119 POSTER Observations of CO2 and CH4 enhancements over large point sources using GOSAT: T Oda, S Maksyutov, M Saito, V Valsala, A Ganshin, R J Andres, Y Yoshida, T Yokota

0800h A51C-0120 POSTER CO2 profiles in the middle and upper troposphere from GOSAT/TANSO-FTS TIR: N Saitoh, R Imasu

0800h A51C-0121 POSTER CO2 Vertical Profile Retrieval from TCCON Measurements: L Kuai, B J Connor, D Wunch, R Shia, C E Miller, G C Toon, P O Wennberg, Y L Yung

0800h A51C-0122 POSTER Improved carbon dioxide characterization and estimates from the Tropospheric Emission Spectrometer (TES): S S Kulawik, J Worden, R Nassar, D B Jones, S C Wofsy, L V Gatti, J B Miller, M L Fischer, S C Biraud, T Machida, H Matsueda, Y Sawa

0800h A51C-0123 POSTER New TES profile retrievals of Tropospheric Methane: J Worden, S S Kulawik, C Frankenberg, V Payne, D J Jacob, K W Bowman

0800h A51C-0124 POSTER Inverse modeling of CO2 sources and sinks using a combination of satellite and flask observations: R Nassar, D B Jones, S Kulawik, P Sutharalingam, J M Chen, R J Andres, T Conway, D E Worthy

0800h A51C-0125 POSTER A new look at spatial gradients in Xco2 from satellite and ground-based observations: G Keppel-Aleksovs, P O Wennberg, T Schneider, D Wunch, G C Toon, J Blavier, C M Roelh, B J Connor, V Sherlock, J Notholt, J Messerschmidt, C E Miller, C O’Dell

0800h A51C-0126 WITHDRAWN

0800h A51C-0127 POSTER Modeling Global Atmospheric CO2 Fluxes and Transport Using NASA MERRA Reanalysis Data: Y Liu, S R Kawa, G J Collatz

0800h A51C-0128 POSTER Regional Modeling Support for Planning Airborne Campaigns to Observe CO2 and Other Trace Gases: M Uliasz, A E Schulz, A Denning

0800h A51C-0129 POSTER Seasonal variations of CO2 and CH4 column abundances retrieved from SWIR of GOSAT TANSO-FTS: N Eguchi, Y Yoshida, I Morino, N Kikuchi, T Saeki, M Inoue, O Uchino, S Maksyutov, H Waranabe, T Yokota

0800h A51C-0130 POSTER Influence of Tropical Biennial Oscillation on Carbon Dioxide: J Wang, X Jiang, M T Chahine, E Olsen, L Chen, Y L Yung

0800h A51C-0131 POSTER GEOLAND2 global LAI, FAPAR Essential Climate Variables for terrestrial carbon modeling: principles and validation: F Baret, M Weiss, R Lacaze, F Camacho, B Smets, P Pacholczyk, H Makkhara
0800h AS1C-0132 POSTER Volcanic carbon dioxide emissions: observation strategies using GOOSAT FTS SWIR data: F M Schwandner, S A Carn, E M Head, C G Newhall

0800h AS1C-0133 POSTER Development of a Herriott Cell for CO2, 13CO2, and 18CO2 Flux Measurement In Situ from an Aircraft: J B Munster, D S Sayres, M F Witinski, C E Healy, J Anderson


A51D Moscone South: Poster Hall Friday 0800h Tropospheric Gaseous Composition in Regional and Global Perspective IV Poster (joint with B)

Presiding: O A Tarasova, World Meteorological Organization; P C Novelli, NOAA/ESRL

0800h A51D-0135 POSTER THE WMO GLOBAL ATMOSPHERE WATCH PROGRAMME: GLOBAL FRAMEWORK FOR ATMOSPHERIC COMPOSITION OBSERVATIONS AND ANALYSIS: O A Tarasova, L Jalkanen

0800h A51D-0136 POSTER Measuring Carbon Dioxide and Methane Concentrations in Railroad Valley, Nevada to Support GOOSAT Satellite Validation and Global Flux Research: K A Schiro, L T Iraci, M Loewenstein, E Yates, E Sheffner, Title of Team: NASA ARC Railroad Valley 2010 Research Team

0800h A51D-0137 POSTER Regional-scale atmospheric inversions of greenhouse gas fluxes in Europe: U Karstens, C Roedencent, K Trusilova, C Gerbig, M Heinmann

0800h A51D-0138 POSTER Regional Inversion of European CH4 and N2O Emissions Using Continuous High Precision Atmospheric Observations: T A Vermeulen, P Bergamaschi, R Rodinck, B Verheggen, R Neubert, J B Moncrieff, W Zahorowski, Title of Team: Data contributors

0800h A51D-0139 POSTER High-resolution WRF/Chem-VPRM simulations of CO2 in the Los Angeles Basin: C Park, Q Li, D Chen, D Fu, S P Sander

0800h A51D-0140 POSTER Using Boundary Layer Equilibrium to Reduce Uncertainties in CO2 Flux Inversions: I N Williams, W J Riley, M S Torn, J A Berry, S C Biraud

0800h A51D-0141 POSTER Trends of long-lived halocarbons, nitrous oxide and sulfur hexafluoride: G S Dutton, B D Hall, D Nance, J D Mondeel, J W Elkins

0800h A51D-0142 POSTER Atmospheric trend and emission estimates for HFC-43-10mee (1999 to 2010): T Arnold, D J Ivy, J Muhle, C M Hartmann, P Salameh, R F Weiss

0800h A51D-0143 POSTER Cyclo-octafluorobutane (PFC-318) in the global atmosphere: J Muhle, M K Vollmer, P J Fraser, T S Rhee, D J Ivy, T Arnold, C M Hartmann, P Salameh, S O’Doherty, D Young, P Steele, P B Krummel, M Leist, N Schmidbauer, C Lunder, J Kim, K Kim, S Reimann, P Simmonds, R G Prinn, R F Weiss

0800h A51D-0144 POSTER Saturation state of methyl bromide after phaseout: L Hu, S A Yvon-Lewis

0800h A51D-0145 POSTER Observations of inorganic bromine species (BrO, HBrO, Br2 and Br2Cl) at Barrow, AK in spring 2009: J Liao, L G Huey, J Neuman, D Tanner, F M Flocke, J J Orlando, S J Sjostedt, J B Nowak, S R Hall


0800h A51D-0147 POSTER Comparison of Ozone and Water Vapor Retrieved From Airbus In-Service Aircraft (MOZAIC) and AIRS data over Delhi: R P Singh, P S Bhattacharjee

0800h A51D-0148 POSTER Airborne in situ measurements of NO3 and N2O5 over Europe: O J Kennedy, B Ouyang, R Jones

0800h A51D-0149 POSTER An original approach combining aircraft observations and 1D modelling to quantify the role of deep convection on formaldehyde in tropical UT: A Borbon, M Ruiz, J Bechara, C Afif, H Huntrieser, G Mills, C Mari, C Reeves, H Schlager

0800h A51D-0150 POSTER Horizontal variability of trace gases over Houston, TX derived from airborne remote sensing, in situ aircraft measurements and regional chemical models: M B Follette-Cook, K E Pickering, S J Janz, J H Crawford, M G Kowalski

0800h A51D-0151 POSTER Trace gas distributions and relationships in the remote atmosphere: Results from the HIAPER Pole to Pole Observations (HIPPO) flights: K Smith, E L Atlas, X Zhu, L Pope, R Lueb, B R Miller, F L Moore, S A Montzka, J W Elkins, D Nance, C Sweeney, S C Wofsy, B C Daube, E A Kort, R Jimenez, J V Pittman, R Hendershot, P Romashkin


0800h A51D-0153 POSTER Vertical distribution and sources of tropospheric ozone over South China in spring 2004: Ozone sonde measurements and modeling analysis: Y Zhang, H Liu, J H Crawford, D B Considine, C Chan, Title of Team: Scientific Team of TAPTO

0800h A51D-0154 POSTER Lightning NOx influence on large scale NOy and O3 plumes observed over the northern mid-latitudes: B Sauvage, J Cammas, E Defer, A Volz-Thomas, J Vouzelaard, K Thomas, R L Holle, H M Smit

0800h A51D-0155 POSTER Northern Hemisphere trends in carbon monoxide: effects of changing anthropogenic emissions and biomass burning: P C Novelli, G Petron, K Masarie, P Lang, C Granier

0800h A51D-0156 POSTER Retrieval of Boundary Layer Carbon Monoxide with the Atmospheric Emitted Radiance Interferometer (AERI): R C Wilson, J X Warner, L Yurganov, Z Wei

0800h A51D-0157 POSTER 20th century ethane variability from polar firn air and implications for the methane budget: E S Saltzman, K R Verhulst, K M Aydin, M O Battle, S A Montzka, Q Tang, M J Prather


0800h A51D-0159 POSTER The measurement of Peroxyacetyl nitrate (PAN) in the regional background marine boundary air, Baengyeong Island, South Korea: G Lee, H Choi, T Lee, D Lee, J Park, S Jang

0800h A51D-0160 POSTER Peroxy acetyl nitrate (PAN) transport at Jungfraujoch from European planetary boundary layer: S Pandey, J Staelhelin, S Henne, U Weers, T Peter, M Steinbacher, C Zellweger

0800h A51D-0161 POSTER Long-Term Variation in Speciated Mercury at Marine, Coastal, and Inland Sites in New England: H Mao, R W Talbot, J D Hegarty

0800h A51D-0162 POSTER Nested-grid Modeling of Mercury Wet Deposition over the Southeast U.S: Y Zhang, L Jaegle, C Holmes, D J Jacob, A van Donkelaar, R V Martin

0800h A51D-0163 POSTER Characterizing the unique photochemical environment in China: Z Liu, Y Wang, D Gu, C Zhao, L G Huey, R Stickel, J Liao
0830h  **A51F-03** The impact of atmospheric rivers on the cold season hydrology in California: **J Kim**, D E Waliser, B Guan, N P Molotch, J Ryoo, E Fetzer, P J Neiman


0900h  **A51F-05** Tropical Links to Atmospheric Rivers making landfall along the west coast of North America **(Invited): G N Kiladis**

0915h  **A51F-06** Exploring oceanic source regions and moisture transport of extreme floods over large basins in the contiguous United States: **J Nakamura, U Lal**, Y Kushnir, A W Robertson


0945h  **A51F-08** Understanding and Forecasting Atmospheric Rivers **(Invited): D Reynolds**

**A51G**  Moscone West: **3002**  Friday  **0800h**

**Presiding:** A H Goldstein, University of California, Berkeley; P B Shepson, Purdue University

0800h  **A51G-01** Diurnal variability of isoprene and hydroxyl radical over tropical forests **(Invited): J Vila-Guerau Arellano**, E G Partron, T Karl, K vandenDries, M C Barth, J J Orlando, H Ouwensloot

0820h  **A51G-02** OH and HO2 Measurements in Blodgett Forest, CA during BEARPEX 2009: **W H Brune, D van Duin**, J Mao, X Ren


0928h  **A51G-06** Vertical Profiles of NOx, O3, and Volatile Organic Compounds in a Deciduous Forest Canopy: **B T Jobson, H W Wallace**, M H Erickson, S N Pressley, J L Rausch, K O’Donnell

0944h  **A51G-07** Analysis of coherent structures during the 2009 CABIEX field campaign: Implications for atmospheric chemistry: **S N Pressley, A L Steiner**, S H Chung, S L Edburg, E Jones, A Botros

**A51H**  Moscone West: **3008**  Friday  **0800h**

**Presiding:** D B Millet, University of Minnesota; D K Henze, University of Colorado Boulder

0800h  **A51H-01** Ten years of CO emissions as seen from MOPITT: **C Audrey**, F Chevallier, I Pison, P Bousquet, S Szopa, C Clerbaux, M N Deeter

0815h  **A51H-02** Tropospheric Composition Change observed from Space **(Invited): A Richter**, A Hilboll, J Leitao, M Vrekoussis, F Wittrock, J P Burrows

0835h  **A51H-03** 4D-Var inversion of atmospheric methane fluxes by assimilating SCIAMACHY and AIRS satellite retrievals: **J Tang, Q Zhuang**, X Xiong

0850h  **A51H-04** A new framework for the top-down estimate of aerosol emission: Integrated analysis with satellite (MODIS) reflectance and the adjoint of a chemistry transport model (GEOS-chem) **(Invited): J Wang**, X Xu, D K Henze


0930h  **A51H-06** Glyoxal Vertical Column Retrievals from the GOME-2/METOP-A European Spaceborne Sensor and Comparisons with the IMAGESv2 CT Model: **C Lerot**, T Stavrakou, I De Smedt, J J Muller, M Van Roozendael


**A51I**  Moscone West: **3004**  Friday  **0800h**

**Presiding:** J Chen, University of Maryland; M G Bosilovich, NASA GSFC; P A Arkin, University of Maryland; W Ebisuzaki, NOAA/NCEP

0800h  **Introduction Phil Arkin**

0808h  **A51I-01** The NCEP Climate Forecast System Reanalysis **(Invited): R Kistler**


0836h  **A51I-03** Status and plans for the ECMWF reanalysis activities: **P Poli, J Thepaut**, D Dee, P Berрисford, A Simmons


0904h  **A51I-05** Atmospheric moisture transports from ocean to land in reanalyses **(Invited): J Lasullo**, K E Trenberth

0918h  **A51I-06** A First Look at Surface Meteorology in the Arctic System Reanalysis: **A G Slater**, M C Serreze, A ASR-team

0932h  **A51I-07** Comparisons and Assessments of Upper Tropospheric Water Vapor Fields of Modern Reanalyses: **L Wang**, M Goldberg, X Liu, L Zhou

0946h  **A51I-08** Evaluation of the precipitation regime over South America through the new generation Reanalyses: **M L Quadro**, M A Silva Dias, D L Herdies, L Goncalves, E H Berbery

**Biogeoosciences**

**B51A**  Moscone South: **Poster Hall**  Friday  **0800h**

**Presiding:** H E Hartnett, Arizona State University; B P Hedlund, University of Nevada Las Vegas; C Zhang, University of Georgia

0800h  **B51A-0331** POSTER Microbial diversity in ten hot springs on the Tibetan Plateau, China: **Q Huang**, H Dong, H Jiang, C Zhang
BS1A-0332 POSTER Microbiological Monitoring in Geothermal Plants: M Alawi, S Lern, R Linder, A Vetter, A Viet-Hillebrand, R Miehling-Graff, A Seibt, M Wolfgamm, H Wuerdemann

BS1A-0333 POSTER Complex serpentinizing systems and the deep biosphere: metabolic opportunities depend on the geochemistry of mixing waters: D Cardace, D R Meyer-Dombard, T M Hoehler, N Uznunlar

BS1A-0334 POSTER Microbial Community Diversity in Fault-Associated and Ophiolite-Hosted Springs: D R Meyer-Dombard, D Cardace, N Uznunlar, Y Gulecna, E N Yargicoglu, J N Cardone

BS1A-0335 POSTER Diversity of Membrane-Bound Nitrate Reductase Genes in Geothermal Springs: A T Poret-peterson, R Schwegel, J J Elser, E Shock, A D Anbar

BS1A-0336 POSTER Enrichment of Thermophilic Ammonia-Oxidizing Archaea from an Alkaline Hot Spring in the Great Basin, USA: C Zhang, Z Huang, H Jiang, J Wiegel, W Li, H Dong

BS1A-0337 POSTER Factors affecting Archaeal Lipid Compositions of the Sulfolobus Species: L He, J Han, Y Wei, L Lin, Y Wei, C Zhang

BS1A-0338 POSTER Diversity of Cultured Thermophilic Anaerobes in Hot Springs of Yunnan Province, China: L Lin, Y Lu, X Dong, X Liu, Y Wei, J X, C Zhang

BS1A-0339 POSTER Detection and Isolation Techniques for Methanogens from Microbial Mats (in the El Tatio Geyser Field, Chile): E Z Pearson, A A Franks, P Bennett

BS1A-0340 POSTER Microbial lifestyles that enable survival in lithifying habitats: M Hirst, L N Dossing, P Tamez, S Ziegler, K Hanselmann, A A sessions, J R Spear, H Johnson, W Berelson, F A Corsetti, S Dawson, J R de la Torre, L USC Wrigley Institute

BS1A-0341 POSTER Carbon uptake in low dissolved inorganic carbon environments: the effect of limited carbon availability on photosynthetic organisms in thermal waters: K D Myers, C R Omelon, P Bennett

BS1A-0342 POSTER Free energy generation and transfers from Archaean hydrothermal vents to the first metabolism: E Simoncini, A Kleidon

BS1A-0343 POSTER Environmental consequences of geochemical change in hot spring ecosystems: J R Havig, E Shock

BS1A-0344 POSTER Geochemical dynamics in selected Yellowstone hydrothermal features: G Druschel, A Kamyshny, A Findlay, D Nuzzo

BS1A-0345 POSTER Strontium and oxygen isotopic profiles through 3 km of hydrothermally altered oceanic crust in the Reykjaness Geothermal System, Iceland: N E Marks, R A Zierenberg, P Schiffman

BS1B Moscone South: Poster Hall Friday 0800h Integrating Advances in Molecular Studies of Denitrification With Biogeochemistry at Larger Scales II Posters (joint with A, GC, OS, H)

BS1B Moscone South: Poster Hall Friday 0800h Metal and Radionuclide Transformation and Remediation in Biogeochemically Dynamic Subsurface Environments I Posters (joint with V)

BS1B Moscone South: Poster Hall Friday 0800h POSTER Are Isotopologue Signatures of N2O from Bacterial Denitrifiers Indicative of NOR Type?: R Well, G Braker, A Giesemann, H Flessa

BS1B Moscone South: Poster Hall Friday 0800h POSTER Linking potential denitrification rates to microbial gene abundances in multiple boreal ecosystems: D G Petersen, S Blazewicz, D J Hermon, M K Firestone, M P Waldrop

BS1B Moscone South: Poster Hall Friday 0800h POSTER Molecular and Stable Isotope Investigation of Nitrate Respiring Bacterial Communities Capable of Anaerobic Ammonium Oxidation (ANAMMOX) and Denitrifying Anaerobic Methane Oxidation (DAMO) in Nitrogen Contaminated Groundwater: B Song, M Hirsch, J Taylor, R L Smith, D Repert, C R Tobiens

BS1B Moscone South: Poster Hall Friday 0800h POSTER Quantifying Temporal Autocorrelations for the Expression of Geobacter species mRNA Gene Transcripts at Variable Ammonium Levels during in situ U(VI) Bioremediation: P J Mouser

BS1B Moscone South: Poster Hall Friday 0800h POSTER Transcription of denitrification genes and kinetics of NO, N2O and N2 by soil bacteria as affected by pH: B Liu, L R Bakken, A Frostegard

BS1B Moscone South: Poster Hall Friday 0800h POSTER Quantifying Nitrogen Loss From Flooded Hawaiian Taro Fields: J L Deenik, C R Penton, G L Brueland, B N Popp, P Engstrom, J A Mueller, J Tiedje

BS1B Moscone South: Poster Hall Friday 0800h POSTER Denitrification in the karstic Floridian Aquifer: M Fork, A R Albertson, J B Heffernan, B G Katz, M J Cohen

BS1B Moscone South: Poster Hall Friday 0800h POSTER Using Transcripts Abundance to Identify the Origin of Nitrous Oxide Emissions During Soil Wet-Up: S A Placella, D J Hemerson, M K Firestone

BS1B Moscone South: Poster Hall Friday 0800h POSTER Mapping the distribution of the denitrifier community at large scales (Invited): L Philippot, D Bru, A Ramette, S Dequiedt, L Ranjard, C Jolivet, D Arrouays

BS1B Moscone South: Poster Hall Friday 0800h POSTER Denitrification and denitrifier gene abundances at varying hydrogeological settings in Ireland: M M Jahangir, M Barnett, P Johnston, V O Fahery, M I Khalil, K Richards

BS1B Moscone South: Poster Hall Friday 0800h POSTER Comparing spatial and temporal dynamics of anammox and denitrifying communities at Cape Fear River Estuary and New River Estuary, North Carolina: J A Lisa, M D Hirsch, K A Duernberger, C R Tobias, B Song

BS1B Moscone South: Poster Hall Friday 0800h POSTER Use of Novel Whole Core Incubations to Measure the Fate of Fertilizer N in a Flooded Agricultural System: C R Penton, G L Brueland, B N Popp, P Engstrom, J Tiedje, G A Brown, J L Deenik

BS1B Moscone South: Poster Hall Friday 0800h POSTER Greater absolute rates of N2O production and consumption with soil warming dwarf variations in denitrification enzyme temperature sensitivities across seasons: L K Tiemann, S A Billings
POSTER Simulation of in situ uranium bioremediation with slow-release organic amendment injection: F Zhang, J Parker, M Ye, G Tang, W Wu, T Mehlhorn, T M Gihring, C Schadt, D B Watson, S C Brooks

POSTER Decision Framework for Applying Attenuation Processes to Metals and Radionuclides: J Nyman, D Goswami, C Spreng


POSTER Calcium-Citrate-Phosphate Solution Injection for In Situ Strontium-90 Immobilization: J S Fruchter, V Vermeul, J Szescody, M D Williams, B G Fritz

POSTER Microbial impacts on the geochemistry evolution in a nuclear waste repository - Laboratory experiment of microbially mediated redox changes: T Nagaoa

POSTER Assessing the utility of mixed organic materials for removal of metals in mine drainage impacted waters: H Song, C Neculita, G Lee, J Jeong, D Cho, S Chang

POSTER Biogeochemical dynamics of pollutants in In situ groundwater remediation systems: N Kumar, R Millor, J Rose, P Négre, F Batraglia-Brunnet, L Diels

POSTER Oxidative Dissolution of Uraninite in the Presence of MACKinawite (FeS) under Simulated Groundwater Conditions: Y Bi, S Hyun, K F Hayes

POSTER Enhanced Amendment Delivery to Subsurface Using Shear Thinning Fluid and Aqueous Foam for Metal, Radionuclide, and NAPL Remediation: L Zhong, J Szescody, X Li, M Oostrom, M Truex


POSTER Natural organic matter influences the dissolution and stability of reduced technetium (IV) and uranium (IV): B Gu, W Dong, L Liang, N Wall

POSTER Chromium Isotopic Fractionation During Biogeochemical Cr (IV) Reduction in Hanford Sediment Column Experiments with Native Aquifer Microbial Communities: L Qin, J N Christensen, S T Brown, L Yang, M E Conrad, J Schijf, S Molins, H R Beller, E L Brodie, C Steefel, P S Nico, R Han


POSTER Flow-through Column Experiments and Modeling of Microbially Mediated Cr(VI) Reduction at Hanford: L Yang, S Molins, H R Beller, E L Brodie, C Steefel, P S Nico, R Han

POSTER WITHDRAWN

Metal Sorption on Organic and Inorganic Surfaces: From Laboratory to Model to Field II Posters (joint with H, EP, V)

Presiding: J Schijf, UMCES; K H Johannesson, Tulane University

POSTER Effect of Transport and Aging Processes on Metal Speciation in Iron Oxidohydroxide Aggregates, Tar Creek Superfund Site, Oklahoma: E R Estes, L A Schaeider, J P Shine, D J Brabander

POSTER Sorption behavior of heavy metal oxanions on iron-oxihydroxysulfate minerals: E Jung, G Keum, Y Kim

POSTER Adsorption of Heavy Metals in Industrial Wastewater by Magnetic Nano-particles: Y Tu, C You

POSTER Zinc Leaching from Tire Curb Rubber: E P Rhodes, J Ren, D C Mays

POSTER Competitive adsorption of copper and zinc ions in two natural soils: E Bianchi Janetti, M Riva, A Guadagnini, I Dior, B Berkowitz

POSTER Cadmium sorption onto Natural Red Earth – An assessment using batch experiments and surface complexation modeling: K Mahantanta, O Minoru, Y Seike, M S Vithanage

POSTER Use of synchrotron radiation to characterize metals in plants: the case of Cd in the hyperaccumulator Arabidopsis halleri: M Isare, G Sarret, N Verbruggen

POSTER Changes in the Kinetics of Uranium (VI) Sorption Reactions to Mineral Surfaces in the Presence of Fulvic Acid: B D Honeyman, R M Tinnacher

POSTER Europium(III), Colloidal α-Al₂O₃, and Humic Acid Interactions: N Janor, M F Benedetti, P Reiller

POSTER YREE sorption on hydrous manganese oxide (MnO₂) in 0.5 M NaCl: K S Marshall, J Schijf

POSTER An Experimental Study of Germanium Sorption on Organic Matter and its Implications for Ge/Si Ratios in Natural Waters: R L Parsons, A Galy

POSTER Fractionation of stable Sr isotopes during carbonate precipitation and surface sorption process: H Liu, C You, K Huang, Y Tu, C Chung

Microbes and Organic Matter in Marine Environments Posters (joint with OS, V)

Presiding: J Bhaskar, Universidade do Algarve

POSTER Archaeal Diversity in Marine Sediments in the South China Sea: Y Wei, P Wang, Z Liu, M Zhao, C Zhang


POSTER Archaeal diversity in surface sediments of the South China Sea: P Wang, Y Wei, C Zhang
2010 Fall Meeting

All information is current as of November 12, 2010
0800h  **B51G-0433** POSTER Influences of Biogenic Gas Production on Lamina-Scale Microbial Microfabrics in Modern and Ancient Stromatolites: C L Harwood, K G Eilers, S A Mata, N J Stork, F A Corsetti, J R Spear, Title of Team: The International Geobiology Course 2010

0800h  **B51G-0434** POSTER Fossil evidence for life in post-Sturtian cap carbonates of the Rasthof Formation, northern Namibia: S B Pruss, T Bosak, L Dalton, L Dahr, F A Macdonald


0800h  **B51G-0437** POSTER Biomineralization by a Newly-Isolated Stalk-Forming Fe-oxidizing Bacterium: Towards Interpretation of Putative Fe Microfossils: S T Krepski, C S Chan

0800h  **B51G-0438** POSTER Facultative anoxygenic photosynthesis in cyanobacteria driven by arsenite and sulfide with evidence for the support of nitrogen fixation: F Wolfe-Simon, S E Hoefert, S M Baesman, R S Oremland

0800h  **B51G-0439** POSTER Investigating the Formation Mechanisms and Inorganic Precursors of Formate and Acetate in Lost City Hydrothermal Fluids: S Q Lang, S M Bernasconi, G Früh-Green

0800h  **B51G-0440** POSTER High-Resolution Magnetic Susceptibility Stratigraphy Spanning Late Devonian Global Change from a New Scientific Drillcore in Canning Basin, Northwest Australia: M R Diamond, T D Raub, J L Kirschvink, T E Playton, R M Hocking, P Haines, S Tulipani

0800h  **B51G-0441** POSTER Field calibration of stable isotopes ($\delta^{13}$O) in coccoliths: Toward an accurate carbonate record-based reconstruction of the photic zone temperature: Y Candelier, F Minoletti, M Hermoso, I Probert

0800h  **B51G-0442** POSTER RECONSTRUCTING AQUATIC ENVIRONMENT AND VOLCANIC CRATER LAKE EVOLUTION IN THE SIBERIAN TRAPS: K Frisstad, H Svensen, N Pedentchouk, S Planke, A G Polozov

0800h  **B51G-0443** POSTER Molecular analysis of benthic biofilms from acidic coal mine drainage, Pennsylvania, USA: D B Mills, D S Jones, W D Burgos, J L Macalady

0800h  **B51G-0444** POSTER Composition of Microbial Communities in Blount Springs, Alabama and Assessment of their Chemolithotrophic Capabilities: T Morrissey, P Aharon, J Olson

0800h  **B51H-0448** POSTER INPUTS OF NITROGEN TO BOGS OF ALBERTA, CANADA: THE IMPORTANCE OF BIOLOGICAL NITROGEN FIXATION VS. ATMOSPHERIC DEPOSITION FROM OIL SANDS MINING: T Prsa, M A Vile, R Wieder, D H Vitt

0800h  **B51H-0449** POSTER IMPACT OF OILS SANDS MINING ON NITROGEN-LIMITED PEATLAND ECOSYSTEMS IN ALBERTA CANADA: M A Vile, R Wieder, K Scott, T Prsa, J Quinn, D H Vitt

0800h  **B51H-0450** WITHDRAWN

0800h  **B51H-0451** POSTER A 115-year $\delta^{15}$N record of cumulative nitrogen pollution in California serpentine grasslands: D Vallano, E S Zavaleta

0800h  **B51H-0452** POSTER Variation in Foliar Nitrogen and Albedo in Response to Elevated Nitrogen and Carbon Dioxide: H F Wicklein, S V Ollinger, M M Martin, D Y Hollinger, M K Bartlett, A D Richardson

0800h  **B51H-0453** POSTER Low-rate nitrogen input can change the soil CH4 uptake in an alpine meadow ecosystem on Qinghai-Tibetan Plateau: H Fang, S Cheng, G Yu, T Zhu, J Zheng

0800h  **B51H-0454** POSTER Dual stable isotopic analysis of atmospheric and groundwater sources of sinks of atmospheric anthropogenic nitrate in the Colorado Desert: M D Bell, E B Allen, J O Sickman

0800h  **B51H-0455** POSTER Estimating ammonia volatilization and deposition from fertilized vegetation: M W Heuer, L Myles

0800h  **B51H-0456** POSTER Quantifying Ammonia Emissions from High Elevation Grassland and Forest Soils: E J Stratton, E J Levin, J M Ham, J L Collett, T Borch

0800h  **B51H-0457** POSTER Geochemical and Isotopic Composition of Aerosols in Tucson: K M Riha, G M Michalski, K A Lohse, E L Gallo, P D Brooks, T Meixner

0800h  **B51H-0458** POSTER Identifying organic nitrogen compounds in Rocky Mountain National Park aerosols: K B Beem, Y Desyaterik, M Z Ozel, J F Hamilton, J L Collett

0800h  **B51H-0459** POSTER Tracing the fate of atmospheric nitrate deposited onto an oolitic lake in eastern Asia: U Tsunogai, S Daita, D D Komatsu, F Nakagawa, A Tanaka

0800h  **B51H-0460** POSTER Characterization of Two Efficient Aerobic Denitrifying Strains Isolated from Shallow Aquifers in Suzhou City, China: X Ruan, X Zhu, H Sun, M Li

0800h  **B51H-0461** POSTER In situ Detection and Habitat Characteristics Analysis of Anammox Bacteria in Sediments from River-network Area, Yangtze River Delta: Y Zhang, X Ruan, J Ao, T Ma

---

**B511** Moscone South: Poster Hall  Friday  0800h  **The Ecosystem of Silicon-Utilizing Organisms**  **Posters**  (joint with A, H, OS)

**Presiding:** E M Elliott, University of Pittsburgh; M G Hastings, Brown University; K E Altieri, Princeton University

0800h  **B511H-0462** POSTER Ecosystem of silicon utilizing organisms in the lost world: S Das

0800h  **B511H-0463** POSTER Silicate Abundance and its Significance in the Hooghly-Matla Estuary, India (Invited): T Ghosh, A Akhand

0800h  **B511H-0464** POSTER Silica distribution in various bamboos species and its effects on plant growth: B Collin, J Meunier, C Keller, E Doelsch, F Panfili

0800h  **B511H-0465** POSTER Silicon Biomineralization on the Earth: D Mitra, S Das

0800h  **B511H-0466** POSTER A general classification of silicon utilizing organisms: P Das, S Das

---

All information is current as of November 12, 2010
BS11 J Moscone West: 2002 Friday 0800h
Active Remote Sensing Measurements of Vegetation 3-D Structure and Biomass: Assessing Accuracy and Sources of Uncertainty II (joint with G)

Presiding: M Simard, Jet Propulsion Laboratory; B D Cook, NASA Goddard Space Flight Center

0800h BS1J-01 From plot to province; scaling field mensuration to stand-level lidar to public GIS data in a hierarchical approach to map regional forest biomass: C Hopkinson, D Colville, D Bourdeau, S Monette, A Fox, R Maher

0815h BS1J-02 Mapping Canopy Height and Biomass Dynamics in the Sierra Nevada using Waveform Lidar: A Swatantran, R Dubayah, M A Hofton, B Blair

0830h BS1J-03 Predicted Canopy Height Retrieval Errors for the ICESat-2 mission (Invited): A L Neuenuschwander, B Peterson, R Nelson

0845h BS1J-04 Combining high fidelity simulations and real data for improved small-footprint waveform lidar assessment of vegetation structure (Invited): J A van Aardt, J Wu, G P Asner

0900h BS1J-05 A Bayesian functional data model for predicting forest variables using high-dimensional waveform LiDAR over large geographic domains: A O Finley, S Banerjee, B D Cook

0915h BS1J-06 Linking tree size distribution to active remote sensing parameters: consequences for observation strategies and impacts on biomass retrieval (Invited): N Pinto, M Simard, K D Behrmann, T H Keitt

0930h BS1J-07 Tropical Vegetation Height and Aboveground Biomass Derived from Field and Multi-Sensor Satellite Data (Invited): A Baccini, W S Walker, M Sun, C Stickler, N T Laporte, J M Kellndorfer, S J Goetz

0945h BS1J-08 Soil Moisture Differences Cause Variation in the Relationship Between L Band SAR Backscatter and Aboveground Biomass: E S Kasischke, M Tanase, L Bourgeau-Chavez, M Borr

BS1K Moscone West: 2006 Friday 0800h
Carbon Sequestration in the Biosphere: Biogeochemistry and Biophysics II (joint with A, GC, H, OS)

Presiding: N Zeng, University of Maryland; K Caldeira, Carnegie Institution; S D Wullschleger, Oak Ridge National Laboratory; V L Bailey, Pacitic Northwest National Laboratory

0800h BS1K-01 Carbon Sequestration in Forests and Agricultural Soils (Invited): W H Schlesinger

0815h BS1K-02 Carbon sequestration and atmospheric CO2 removal: climate consequence and long-term commitment: L Cao, K Caldeira

0830h BS1K-03 Carbon sequestration through wood burial and storage: practical potential and policy considerations (Invited): B F Zaitchik, A W King, N Zeng, S Hamburg, D Abbas, T West, G Marland, S D Wullschleger

0845h BS1K-04 Management effects on carbon fluxes in boreal forests (Invited): A Lindroth, M Mölder, F Lagergren, P Vestin, M Hellström, E Sundqvist, Title of Team: The Norunda BGS team

0900h BS1K-05 The contribution of harvest residue to ecosystem carbon balance over the production cycle of managed forests: A Noormets, S McNulty, J domec, M J Gavazzi, E Treasure, G Sun, J S King, J Chen

0915h BS1K-06 Whole-system carbon balance for a regional temperate forest in Northern Wisconsin, USA: S D Peckham, S T Gower

0930h BS1K-07 Changes in Carbon Pools 50 Years after Reversion of a Landscape Dominated by Agriculture to Managed Forests in the Upper Southeastern Atlantic Coastal Plain: Z Dai, C Trettin, B R Parresol, C Li

0945h BS1K-08 Assessment of large-scale afforestation as a climate change mitigation strategy: V Arora, A Montenegro

BS1L Moscone West: 2004 Friday 0800h
North American Carbon Program Synthesis Results and Similar Model-Data Comparisons II (joint with GC)

Presiding: K M Schaefer, National Snow and Ice Data Center; S M Ogle, Colorado State University; D N Huntzinger, University of Michigan; L Goncalves, NASA and University of Maryland

0800h BS1L-01 NACP Synthesis: Evaluating modeled carbon state and flux variables against multiple observational constraints (Invited): P E Thornton, Title of Team: NACP Site Synthesis Participants

0815h BS1L-02 Comparing Simulated and Observed Gross Primary Productivity: K M Schaefer, Title of Team: Site Synthesis Participants

0830h BS1L-03 North American Carbon Balance: Results from the Regional Synthesis Project of the North America Carbon Program (Invited): M Post, D N Huntzinger, K J Davis, B M Raczka, D J Hayes, A M Michalak, Y Wei, A R Jacobson, R B Cook, Title of Team: NACP Regional-Interim Synthesis Participants

0845h BS1L-04 The Influence of Surface Flux Distribution and Magnitude on the Atmospheric Concentration Signals at Towers within North America: D N Huntzinger, S M Gourdji, K L Mueller, A M Michalak

0900h BS1L-05 Top-down bottom-up comparisons of the Mid-Continental Intensive (MCI) Region. (Invited): A E Schuh, S M Ogle, K J Davis, A Denning, T LAUVAUX, N L Miles, S Richardson, A R Jacobson, A E Andrews, M Uliasz, L I Diaz Isaac, T O West, D S Cooley

0915h BS1L-06 Observed and modeled carbon and energy fluxes for agricultural sites under North American Carbon Program site-level interim synthesis: E Y Lokupitiya, A Denning

0930h BS1L-07 Results from the LBA Data-Model Intercomparison Project: L Goncalves, S R Saleska, N Restrepo-Coupe, I T Baker, B J Christoffersen, M N Muza, M H Costa, H da Rocha, D L Herdies, X Zeng, W J Shuttleworth, P A Arkin, Title of Team: The LBA-DMIP Scientific Team

0945h BS1L-08 Data filtering as a tool for model evaluation against uncertain flux data – application to LBA-DMIP model results (Invited): M H Costa, H A Imbuzeiro, V H Benezoli

Cryosphere

CS1 A Moscone South: Poster Hall Friday 0800h
Remote Sensing of the Cryosphere I Posters (joint with H, OS, G)

Presiding: T H Painter, Jet Propulsion Laboratory; T Neumann, NASA Goddard Space Flight Ctr.

0800h CS1A-0468 POSTER A POSSIBLE MECHANISM FOR INVERSE DEPENDENCE OF RADAR BACKSCATTER ON SNOW ACCUMULATION RATE: B S Yurchak, W Abdalati
All information is current as of November 12, 2010
**Education and Human Resources**

**ED51A** Moscone South: Poster Hall  Friday  0800h  Enhanced Geoscience Learning Through Community Interaction I Posters

*Presiding:* E P Laine, Bowdoin College; S O'Connell, Wesleyan University

0800h  **ED51A-0501** POSTER Teaching Service Learning in the Geosciences: An On the Cutting Edge Workshop Report:  
M Z Bruckner, E P Laine, D W Mogk, S O'Connell, K B Kirk

0800h  **ED51A-0502** POSTER Science in the Community: Pre-service Teachers Learning Science Through Service Learning:  
S M Maes, M Cosgrove, P Benzing, J A Smith, K Sturgess

0800h  **ED51A-0503** POSTER Engaging Non-Science Majors Through Citizen Science Projects In Inquiry-Based Introductory Geoscience Laboratory Courses:  
R R Humphreys, C Hall, M W Colgan, E Rhodes

0800h  **ED51A-0504** POSTER Radio Disaster: An Interdisciplinary Seminar Course on Natural Hazards and Practical Risk Communication Using Campus Radio and Podcasting:  
A E Frappier

0800h  **ED51A-0505** POSTER A Kinesthetic Learning Approach to Earth Science for 3rd and 4th Grade Students on the Pajarito Plateau, Los Alamos, NM:  
H N Wereshow, M Green, A Stocker, D Staires

0800h  **ED51A-0506** POSTER Making an Impact with Public Outreach Activities on Asteroids, Comets, and Meteorites:  
V White, S Gurton, M Berendsen, T D Slade-Redden

0800h  **ED51A-0507** POSTER Does the weather influence public opinion about climate change?:  
S D Donner, J McDaniel

0800h  **ED51A-0508** POSTER Designing and Implementing Service Learning Projects in an Introductory Oceanography Course Using the “8-Block Model”:  
E P Laine, C Field

**ED51B** Moscone South: 102  Friday  0800h  Teacher Professional Development Programs Promoting Authentic Scientific Research in the Classroom I (joint with A, B, C, IN, GP, GC, H, OS, P, S, SM, SH, T, V)

*Presiding:* C E Walker, National Optical Astronomy Observatory;  
G Scocewod, University of Rhode Island; S M Pompea, Natl Optical Astronomy Obs

0800h  **ED51B-01** Research in the Classroom with the WISE Mission (Invited):  
B J Mendez

0815h  **ED51B-02** Seismology in Schools an integrated approach to funding developing and implementing a coordinated programme for teachers and high school students:  
T A Blake, A G Jones, G Campbell

0830h  **ED51B-03** Research experience in Maine leads to teacher and student success in Texas:  
D Slade-Redden, L Ince, Title of Team:  
Census of Marine Life - Maine

0845h  **ED51B-04** Connecting Teachers and Students with Science Experts: NASA's Expedition Earth and Beyond Program:  
P V Graff, W L Stefanov, K J Willis, S Runco, T McCollum, M Baker, M Mailhot, C F Lindgren

0900h  **ED51B-05** Teacher Research Experience Programs = Increase in Student Achievement:  
J Dubner

0915h  **ED51B-06** A Physics MOSAIC: Scientific Skills and Explorations for Students:  
S May, C Clements, P J Erickson, A Rogers

0930h  **ED51B-07** Piles of Rocks Create Mountains of Understanding: The Fossil Finders Model for success in Earth Science Education:  
M A Pella-Donnelly, B Daley, B Crawford Ph.D

0945h  **ED51B-08** Teacher/Researcher Projects: The Perfect Merger:  
M Sutton, K Achilles

**Earth and Planetary Surface Processes**

**EP51A** Moscone South: Poster Hall  Friday  0800h  Algorithms, Methods, and Applications for Using Optical Imagery to Detect and Monitor Land Surface Processes Posters (joint with NH, G)

*Presiding:* M Necsoiu, Southwest Research Institute; S Leprince, California Institute of Technology

N T Bridges, S Leprince, J Avouac, M Necsoiu, L K Fenton, R L Kirk, C Colon

0800h  **EP51A-0532** POSTER A method for constructing time series of dune mobility by optical cross correlation, with application to the Bodelé Depression of northern Chad (Invited):  
P Vermesch

0800h  **EP51A-0533** POSTER Sensitivity of the Automatic Determination of Sand Transport Direction and Rate to Dune Morphology (Invited):  
P Scheidt, N Lancaster

0800h  **EP51A-0534** POSTER Integrating airborne LiDAR and historical aerial photographs to assess the kinematics and evolution of a large, slow-moving landslide (Invited):  
B H Mackey, J J Roering, J Hollingsworth, M P Lamb

0800h  **EP51A-0535** POSTER A remote sensing study of regional variation in sinkhole morphology-Florida karst vs. Minnesota karst:  
C L Ernst, J Hadizadeh, J L McCarty

0800h  **EP51A-0536** POSTER Multi-Temporal Land Cover Analysis in the Mid-Willamette Basin, Oregon: Assessment of Riparian Forest Canopy Using Landsat Thematic Mapper Data:  
R J Stanley, S B Taylor

0800h  **EP51A-0537** POSTER Mapping Arctic Ocean Coastline Change With Ladsat Archive Data And Object-Based Image Analysis:  
D Hulslander

0800h  **EP51A-0538** POSTER Monitoring Subarctic Permafrost Changes Using Optical and Multi-Polarization SAR Imagery:  
M Necsoiu, D M Hooper, N Longgép, G R Walter

0800h  **EP51A-0539** POSTER Change Detection and Displacement Analysis in Optical Imagery of Volcanic Deposits:  
D M Hooper, M Necsoiu

0800h  **EP51A-0540** POSTER Integration of Multi-sensor Data for Desertification Monitoring:  
S Lin, J Kim

**EP51B** Moscone South: Poster Hall  Friday  0800h  Earth and Planetary Surface Processes IV: Submarine, Coastal, Miscellaneous Posters (joint with B, H)

*Presiding:* M P Lamb, Caltech; L S Sklar, San Francisco State University

0800h  **EP51B-0541** POSTER Three Dimensional Geometries of Bank-attached Bar-forms in Sinuous Submarine Channels:  
A M Fernandes, D C Mohrig, S Henriksen, R J Steel, J L Buttles
EP51D Moscone South: Poster Hall  Friday  0800h
Lidar for Analysis of Earth-Surface Processes II Posters (joint with G)

Presiding: P Belmont, Utah State University; P Passalacqua, University of Minnesota

0800h EP51D-0574 POSTER Multi-temporal LiDAR change detection for terrain analysis using slope-based automatic co-registration (Invited): R Shrestha, N F Glenn, L Spate


0800h EP51D-0576 POSTER Fine-scale characterization of juniper expansion via lidar data and fusion with Landsat 5 TM: T T Sankey, N F Glenn, R Shrestha, S P Hardegree

0800h EP51D-0577 POSTER Plan View and Profile Relations: Measuring Correlation Between Channel Profile and Network Morphology: E Shlef, G E Hilley

0800h EP51D-0578 POSTER Evidence of spatial and temporal slip partitioning in the northern Central Nevada Seismic Belt from ground-based imaging of offset landforms: P O Gold, E Cowgill, O Kreylos

0800h EP51D-0579 POSTER Quantifying Differences in Beach Volume Change Between 2-D and 3-D Survey Methods: E J Theuerkauf, A B Rodriguez

0800h EP51D-0580 POSTER ASSESSING SURFACE TEXTURAL VARIATIONS ON THE PITON DE LA FOURNAISE VOLCANO USING L-BAND INSAR AND LIDAR FUSION STUDY: M Sedee, E Heggy, S Jacquemoud, F Bretar

0800h EP51D-0581 POSTER Leveraging LiDAR-derived Point Clouds for Topographic Characterization: C Velasquez, N F Glenn, D P Ames

0800h EP51D-0582 POSTER Evaluation of terrain datasets for LiDAR data thinning and DEM generation for watershed delineation applications: F Olivera, C Ferreira, D Djokic

EP51E Moscone South: Poster Hall  Friday  0800h
Morphogenesis, From Micro-scale Experiments to Landscape Dynamics III Posters (joint with NG, H)

Presiding: C Narteau, Institut de Physique du Globe de Paris; E Lajeunesse: C Paola, University of Minnesota

0800h EP51E-0583 POSTER Morphogenesis of star dunes: D Zhang, C Narteau, O Rozier

0800h EP51E-0584 POSTER Size independant Bedload Transport in Braided Rivers: F Metvier, Y Liu, C Narteau, E Lajeunesse, O Devauchelle, B Ye, M Tal, P Meunier

0800h EP51E-0585 POSTER Experimental investigation of the influence of the sediment size distribution on bedload transport: M Houssais, E Lajeunesse, P Allemand

0800h EP51E-0586 POSTER From grain-size distribution to sediment transport conditions in the past: G Laure, L Barrier, F Metvier, C Narteau, E Lajeunesse, Y Liu, B Ye

0800h EP51E-0587 POSTER Toward a Reduced Complexity Channel Resolving Model for Sedimentary Delta Formation: M Liang, V R Voller, D A Edmonds, C Paola

0800h EP51E-0588 POSTER Scale dependant compensational stacking of channelized sedimentary deposits: Y Wang, K M Straub, E A Hajek

0800h EP51E-0589 POSTER Delta-foreset bedding reflecting the development of cyclic steps on the alluvial topset surface: Flume experiments: T Muto, T Sekiguchi, M Yokokawa


0800h EP51E-0591 POSTER Tip-splitting and spiral branching in the growth of channel networks, cut by seepage: H F Seybold, A P Petroff, O Devauchelle, D Rothman

0800h EP51E-0592 POSTER Hydrodynamic and suspended sediment transport controls on river mouth morphology: A Guerin, F Falcini, D J Jerolmack, C Paola

0800h EP51E-0593 POSTER Liquid drop impact cratering on a granular layer: H Katsuragi

0800h EP51E-0594 POSTER The role of fractures in controlling the size of landslides; Insights from Discrete Element Method computer simulations: O Katz, J K Morgan

0800h EP51E-0595 POSTER Why ice-field penitentes can only form in the tropics: L M Cathles, D S Abbot, D R MacAyeal

EP51F Moscone South: 309  Friday  0800h
Advances in Monitoring Fluvial Morphodynamics I (joint with GC, H)

Presiding: J Brasington, Aberystwyth University; C D Rennie, University of Ottawa; D Vericat, Forest Technology Centre of Catalonina, Spain

0800h EP51F-01 POSTER Progress in measuring and monitoring morphodynamics in large rivers (Invited): D R Parsons, J Best

0815h EP51F-02 POSTER Temporal Variations in the Roughness of Eroding River Banks Revealed by High-Resolution Digital Photogrammetry and Terrestrial Laser Scanning: S E Darby, J Leyland, M Rinaldi, L Teruggi, D Ostuni

0830h EP51F-03 POSTER Quantifying the process-product relationship in the large sandy Rio Paraná: P J Ashworth, M Amsler, J Best, O Orfeo, D Parsons, A Reesink, G Sambrook Smith, R Szupiany


0900h EP51F-05 CALIBRATION OF AN ACOUSTIC SENSOR (GEOPHONE) FOR CONTINUOUS BEDLOAD MONITORING IN MOUNTAINOUS STREAMS: A G Tsakiris, T Papanicolaou

0915h EP51F-06 POSTER Spatial and Temporal Patterns of Bed Mobility Revealed Through the Use of Hydrodynamic Modeling and Motion-Sensing Radio Tagged Particles in a Large Gravel-Bed River: C L May, B Smith Pryor, T E Lisle, M M Lang

0930h EP51F-07 POSTER The Dynamics of Coarse Sediment Transfer in an Upland Bedrock River: J Warburton, R J Hardy, R I Ferguson, A Cray

0945h EP51F-08 Monitoring debris flow induced channel morphodynamics with terrestrial laser scanning, Chalk Cliffs, CO (Invited): T A Wasklewicz, D M Staley

EP51G Moscone South: 310  Friday  0800h
Transient Landscapes: Capturing Responses to Changing Boundary Conditions I (joint with T)

Presiding: D W Burbank, UCSB; J Chen, Institute of Geology, China Earthquake Administration (CEA); M E Oskin, University of California, Davis

0800h EP51G-01 POSTER The Influence of Climate, Lithology and Subsidence on the Transient Evolution of Hawaiian River Channels: N M Gasparini, J A Menking, J Han, J P Johnson

0815h EP51G-02 POSTER Transient Landscapes: Recorders of History and Engines of Discovery (Invited): K X Whipple
0800h  EPS1G-03 Uplift Histories From River Profiles: Examples From Africa and the Colorado Plateau (Invited): G G Roberts

0845h  EPS1G-04 Reaching erosion and topographic steady state in response to tectonic forcing (Invited): F Herman, J Champagnac

0900h  EPS1G-05 Erosion from topography: Using airborne lidar to infer denudation rates from hillslopes, hilltops, and valley networks in transient landscapes: J Roering, J D Stock

0915h  EPS1G-06 Feedbacks Between Channel Adjustment, Sediment Calibre and Landscape Dynamics in Tectonically Perturbed Landscapes (Invited): M Attal, P A Cowie, A C Whittaker, G E Tucker, S M Mudd, M D Hurst

0930h  EPS1G-07 Transient erosion rates predicted from topographic curvature of ridges ( Feather River, California): M D Hurst, S M Mudd, R Walcott, K Yoo, M Attal

0945h  EPS1G-08 Using topography to decipher the uplift history of the western San Gabriel Mountains, CA: R A DiBiase, K X Whipple, A M Heimsath

Geodesy


Presiding: A J Mannucci, Jet Propulsion Laboratory, California Institute of Technology; E Cardellach, Institut de Ciències de l'Espai/CSIC-IEEC

0800h  GS1A-0651 POSTER GPS interferometric reflectometry: Forward and inverse modeling of GPS signal strength data applied to remote sensing of snow: F G Nievinski, K M Larson, V Zavorotny, M W Williams, E D Gutmann

0800h  GS1A-0652 POSTER Centimeter-level group-delay altimetric precision using the new PARIS interferometric technique: E Cardellach, O Nogues-Correig, S Ribo, A Rius, A Camps, H van der Marel, M Martin-Neira

0800h  GS1A-0653 POSTER Reflected GPS L1/L2 Observations used for Sea Ice Remote Sensing and Altimetry: M Semmling, G Beyerle, R Stossius, J Wickert, F Fabra, E Cardellach, S Ribo, A Rius, A Helm, S Yudanov, S d'Addio

0800h  GS1A-0654 POSTER GPS snow-depth meter using geometry-free linear combination: Long-term comparison with conventional snow-depth meter: M Ozeki, K Heki

0800h  GS1A-0655 POSTER Characteristics of atmospheric boundary layer structures over subtropical stratuscumulus regions: F Xie, D L Wu, C O Ao, A J Mannucci, E R Kursinski

0800h  GS1A-0656 POSTER Empirical Error Analysis of GPS RO Atmospheric Profiles: B Scherllin-Pirscher, A K Steiner, U Foelsche, G Kirchengast, Y Kuo

0800h  GS1A-0657 WITHDRAWN

0800h  GS1A-0658 POSTER NEAR REAL TIME GPS-BASED IONOSPHERIC MODELS : APPLICATION TO BELGIUM: J Chevalier, L Benoit, N Bergeot, C Bruyninx, J Legrand, R Burston, P Defraigne, E Portieux, Q Baire

0800h  GS1A-0659 POSTER Spaced GPS Receiver Observations of Geomagnetic Storm-Induced Traveling Ionospheric Disturbances Manifested as Midlatitude TEC Variations: B O’Hanlon, P M Kintner

0800h  GS1A-0660 POSTER Ionospheric Effects of Underground Nuclear Explosions: J Park, R R von Frese, D A G-Brzezinska, Y Morton

0800h  GS1A-0661 POSTER Next Generation of Spaceborne GNSS Receiver for Radio Occultation Science and Precision Orbit Determination: J Y Tien, L Young, T Meehan, G Franklin, K J Hurst, S Esterhuizen, Title of Team: TriG GNSS Receiver Team

0800h  GS1A-0662 POSTER Modeling GNSS Radio Occultation coverage from various satellite constellation configurations: K J Hurst, C Heeg, A J Mannucci

0800h  GS1A-0663 POSTER Iridium NEXT: A Global access for your sensor needs: O P Gupta, C S Fish

GS1B Moscone South: Poster Hall  Friday  0800h Identification and Mitigation of Systematic Errors in Space Geodetic Results I Posters (joint with A, OS, SM, SA)

Presiding: P Willis, Institut Geographique National; S D Desai, Jet Propulsion Laboratory

0800h  GS1B-0664 POSTER Evaluation of P2-C2 bias estimation: M C Santos, R van der Bree, H van der Marel, S Verhagen, C A Garcia

0800h  GS1B-0665 POSTER In search of periodic signatures in IGS REPRO1 solution: J D Mtamakaya, M C Santos, M R Craymer

0800h  GS1B-0666 POSTER Evaluation of Improved Spacecraft Models for GLONASS Orbit Determination: J P Weiss, A Sibthorpe, N Harvey, Y Bar-Sever, D Kuang

0800h  GS1B-0667 POSTER Contribution of the new DORIS/DGGX instruments to the geodetic products: L Soudarin, H Capdeville, J Lemoine

0800h  GS1B-0668 POSTER Benchmarking ray-traced tropospheric delays: V Nafisi, D Wijaya, J Boehm, H Schuh, H Hobiger, R Ichikawa, L Urquhart, M C Santos, F G Nievinski, F Zuz, J Wickert, P Gegov, A A Ardalan

0800h  GS1B-0669 POSTER Which Reference Frame Should Be Chosen To Compute Ocean Tidal Loading, CE or CM?: Y Fu, J T Freymueller, T M van Dam

0800h  GS1B-0670 POSTER Strategies to mitigate aliasing of loading signals while estimating GPS frame parameters: X Colliieux, T M van Dam, J Ray, D Coulot, L Metivier, Z Altamimi

0800h  GS1B-0671 POSTER Earth rotation parameters determined over CONTO8 VLBI campaign by the GRGS from the combination of space geodetic techniques: J M Richard, D H Gamba, Title of Team: IERS EOP Center, Earth Rotation and Spatial Geodesy

0800h  GS1B-0672 POSTER The Puzzling 59-Day Altimeter Data Signal And Possible Causes: N P Zelensky, B D Beckley, F G Lemoine, R D Ray, S M Klosko, S A Holmes, D D Rowlands, S B Luthcke, D S Chinn, O Bordyugov


Presiding: T M van Dam, University of Luxembourg; J Kusche, Universität Bonn

0800h  GS1C-0673 POSTER Global, barotropic ocean bottom pressure modeling: Sensitivity to spatial resolution and boundary conditions: D Inazu, R Hino, H Fujimoto

0800h  GS1C-0674 POSTER Spatio-temporal Variability of El Niño Southern Oscillation from Geodetic Satellites and Model Data: H Y Wu, Y Li, B F Chao

0800h  GS1C-0675 POSTER THE GRAVITATIONAL EFFECT OF THE OCEAN DENSITY CONTRAST FOR A DEPTH-DEPENDENT SEAWATER DENSITY MODEL: P Novak, R Tenzer, V Gladkikh

0800h  GS1C-0676 POSTER Ocean mass transport estimates from GRACE, altimetry, and Argo: E W Leuliette, L Miller

All information is current as of November 12, 2010
Techniques: Service of the Earth's Surface Fluid Load Effects for Space Geodetic
J T Freymueller, S B Luthcke, R Grapenthin

0800h  G51C-0689 POSTER Dynamic and static equilibrium sea level effects of Greenland Ice Sheet melt: An assessment of partially-coupled idealized water hosing experiments (Invited): R E Kopp, J X Mitrovica, S M Griffies, J Yin, C C Hay, R J Stouffer
0815h  G51D-02 The relationship between steric and total sea level variability in the presence of topography: R J Bingham, C W Hughes
0830h  G51D-03 Experiments in Reconstructing Twentieth-Century Sea Levels: R D Ray, B C Douglas
0845h  G51D-04 Coherent decadal sea level variations across gyre boundaries in the North Atlantic: P R Thompson, G T Mitchum
0900h  G51D-05 Regional Sea Level Rise Projections on the Northeast Coast of the United States (Invited): J Yin, S M Griffies, M Schlesinger, R J Stouffer
0915h  G51D-06 Decadal-Scale Barotropic Sea Level Changes in the North Pacific: D P Chambers
0930h  G51D-07 A shift in Pacific sea level trends during the 1990s: M A Merrifield

POSTER

Global Environmental Change

0800h  G51C-0677 POSTER Mass and heat transport estimates by assimilation of geodetic dynamical ocean topography data: T J Janjic, J Schroeter, A Albertella, R Savcenko, W Bosch, R Rummel
0800h  G51C-0678 POSTER A new mode of high frequency variability in Arctic Ocean bottom pressure and its possible effects on GRACE solutions: A C Peralta Ferriz, J H Morison, J M Wallace, J Zhang, J Bonin, D P Chambers
0800h  G51C-0679 POSTER Precipitation anomaly patterns associated with Arctic Oscillation as seen from GRACE gravimetry: K Matsuo, K Heki
0800h  G51C-0680 POSTER Arctic Ocean Tides from GRACE Satellite Accelerations: B Killett, J M Wahr, S D Desai, D Yuan, M M Watkins
0800h  G51C-0681 POSTER Simulation Study for Regional Mass Changes in the Cryosphere Observed by the GRACE Gravity Mission: K Bentel, C Gerlach
0800h  G51C-0682 POSTER Use of background de-aliasing models and error correlations to improve the regularized gravity solutions from GRACE: H V Save, S V Betradpur, P B Nagel
0800h  G51C-0683 POSTER Signal separation: the quest for independent mass flux patterns in geodetic observations: J Kusche, R Rietbroek, E Forootan
0800h  G51C-0685 POSTER A study on the capabilities of the multi-channel singular spectrum method for extracting the main water mass anomaly information from GRACE and hydrology models: E V Rangelova, M G Sideris, J Kim
0800h  G51C-0686 POSTER Regional inversion of GRACE data for continental water mass time-variations. Comparison with global hydrology models, classical spherical harmonics and “mascons” solutions: L Seoane, G Ramillien, F Frappart, R Biancale, S Gratton, S Bourgogne
0800h  G51C-0687 POSTER Constrained regional recovery of continental water mass time-variations from GRACE: G Ramillien, L Seoane, R Biancale, S Gratton, X Vasseur, S Bourgogne
0800h  G51C-0688 POSTER An interpretation of the interannual mass trend change over the Indochina Peninsula observed by GRACE data: K Yamamoto, Y Fukuda, T Nakaegawa, T Hasegawa, M Taniguchi
0800h  G51C-0689 POSTER Comparison of lake mass variations from GRACE high resolution mascon solutions and altimetry: J Boy, C C Carabajal, D D Rowlands, S B Luthcke, T J Sabaka, F G Lemoine
0800h  G51C-0690 POSTER Analytic models of the displacements and stresses in a long basin due to varying hydrological loading, with application to hydrogeological geodesy: B Lipovsky, G J Funning, K B Richards-Dinger, A Ferretti
0800h  G51C-0691 POSTER Mechanics controls of terrestrial water budget changes over Siberian river basins from GRACE: F W Landerer, J O Dickey, A Guentner
0800h  G51C-0692 POSTER Seasonal geodetic signals observed by the Caltech-DASE-NGS cGPS network in Nepal: J F Genrich, K Chanard, J Avouac, T Ito, J E Galetzke, M Flouzat, N Team
0800h  G51C-0693 POSTER Modeling Elastic Uplift Associated with GRACE Hydrology Solutions for Southeast Alaska: A A Arendt, J T Freymueller, S B Luthcke, R Rapgenthin
0800h  G51C-0694 POSTER Development of the Estimation Service of the Earth's Surface Fluid Load Effects for Space Geodetic Techniques: H Takiguchi, T Gotoh, T Otsubo

0800h  G51C-0695 POSTER Determination of Atmospheric Pressure Loading at TU Vienna: M Schindelegger, H Schuh, J Boehm, D Wijaya, M Karbon
0800h  G51C-0696 POSTER Torques responsible for oscillations of the atmospheric equatorial angular momentum of the stratosphere and the entire atmosphere: M Fang, Y Zhou, D Salstein, B H Hager
0800h  G51C-0697 POSTER Validation of geophysical excitation functions by a rigorous combination with Earth orientation parameters and gravity field coefficients: A Heike, H Kutterer

POSTER

Observing and Interpreting Regional Sea Level Change I (joint with OS, PP, NH, PA)
Presiding: E W Leuliette, NOAA/Lab for Satellite Altimetry; M E Tamisiea, Proudman Oceanographic Lab.

0815h  G51D-02 The relationship between steric and total sea level variability in the presence of topography: R J Bingham, C W Hughes
0830h  G51D-03 Experiments in Reconstructing Twentieth-Century Sea Levels: R D Ray, B C Douglas
0845h  G51D-04 Coherent decadal sea level variations across gyre boundaries in the North Atlantic: P R Thompson, G T Mitchum
0900h  G51D-05 Regional Sea Level Rise Projections on the Northeast Coast of the United States (Invited): J Yin, S M Griffies, M Schlesinger, R J Stouffer
0915h  G51D-06 Decadal-Scale Barotropic Sea Level Changes in the North Pacific: D P Chambers
0930h  G51D-07 A shift in Pacific sea level trends during the 1990s: M A Merrifield

POSTER

Advances in Downscaling Methods and Models II Posters (joint with A, B, IN, H, NH)
Presiding: B Thrasher, Climate Central; E P Maurer, Santa Clara University; E Cassano, CIRES; C Page, CERFACS

0800h  G51A-0729 POSTER New Daily Downscaled Information at the “Bias-Corrected Downscaled WCRP CMIP3 Climate Projections” online archive: T Pruitt, B Thrasher, T Das, E P Maurer, P Duffy, J Long, L D Brekke
0800h  G51A-0730 POSTER Validation of the RegCM4-Subgrid module for the high resolution climate simulation over Korea: C Lee, E Im, K Chang, Y Choi
0800h  G51A-0731 POSTER Downscaling of snow depth and river discharge in Japan by the Pseudo-Global-Warming Method: F Kimura, X Ma, M Hara, Title of Team: Advanced Atmosphere-Ocean-Land Modeling Program
0800h  G51A-0732 POSTER Error Correction of Daily Temperature and Precipitation from Regional Climate Simulations in Europe and the Effects on Climate Change Signals: M J Themesl, A Gobiet, G Heinrich, Title of Team: Regional and Local Climate Modeling and Analysis Research Group
0800h  G51A-0733 WITHDRAWN
All information is current as of November 12, 2010
0800h GC51C-0767 POSTER Determination of atmospheric trace elements in Kilimanjaro ice to reconstruct regional African aerosol history: P Gabrielli, N M Kehrwald, G Cozzi, C Barbante, L G Thompson

0800h GC51C-0768 POSTER Diagnosing the causes of decadal-scale precipitation variability in northeastern sub-Saharan Africa: P Williams

0800h GC51C-0769 WITHDRAWN

GC51D Moscone South: Poster Hall Friday 0800h Ecosystem Responses to Fine-Scale Climate Variability in Mountainous Terrain I Posters (joint with B, H)

Presiding: J A Hicke, University of Idaho; C Tague, University of California, Santa Barbara; G Greenwood, University of Bern; C I Millar, USDA Forest Service

0800h GC51D-0770 POSTER 20th Century Climate Change in the Sierra Nevada from PRISM Data: D R Conklin, J D Osborne-gowey

0800h GC51D-0771 POSTER Complimentary And Dense Sensor Networks To Understand Climate Variability In Mountainous Terrain: D Isaak, Z Holden, C. Luce, B Roper

0800h GC51D-0772 POSTER Analyzing the Locations, Severity and Frequency of Cold Air Pools (CAP) in the Sierra Nevada, California: A Kunz, J Helmschrot, J D Lundquist

0800h GC51D-0773 POSTER Stream Temperature Sensitivity to Climate Warming in California's Sierra Nevada: S Null, J H Viers, M Deas, S Tanaka, J Mount

0800h GC51D-0774 POSTER Fire and Climate History of Mixed Conifer Woodlands in the Great Basin, USA: F Biondi, M Bradley, J Cheek, L Jamieson, M Kilpatrick, J Sibold, S D Strachan

0800h GC51D-0775 POSTER A Top-down soil moisture and sap flux sampling design to capture the effect of inter-annual climate variability on ecohydrology in mountain catchments: K Son, C Tague

0800h GC51D-0776 POSTER Dry season foliar fog uptake, reverse sapflow, and nighttime transpiration in the tropical montane cloud forests of Mexico: S G Gotsch, H Asbjornsen, F Holwerda, G R Goldsmith, T E Dawson

0800h GC51D-0777 POSTER Subsurface Thermal and Hydrological Changes Between Forest and Clear-cut Sites in the Oregon Cascades: M G Davis, R S Waschmann, R N Harris, D S Chapman

0800h GC51D-0778 POSTER Subalpine Conifer Seedling Demographics: Species Responses to Climate Manipluations Across an Elevational Gradient at Niwot Ridge, Colorado: C Castanha, M J Germino, M S Torn, S Ferrenberg, J Harte, L M Kueppers

0800h GC51D-0779 POSTER Sensitivity of limber pine (Pinus flexilis) seedling physiology to elevation, warming, and water availability across a timberline ecotone: A B Moyes, C Castanha, S Ferrenberg, M J Germino, L M Kueppers

0800h GC51D-0780 POSTER Geologic and geomorphic controls of altitudinal treeline in the Canadian Rocky Mountains: M Macias Fauria, E A Johnson

0800h GC51D-0781 POSTER Building Topographically Modified Tree-Ring Chronologies from High Elevation Bristlecone Pine in the White Mountains of California, USA: A G Bunn, M K Hughes, M W Salzer

0800h GC51D-0782 POSTER Mortality in Subalpine Forests of the Sierra Nevada, California, USA: Differential Response of Pines (Pinus albicaulis and P. flexilis) to Climate Variability: C J Millar, R D Westfall, D L Delaney

0800h GC51D-0783 POSTER Above treeline shrub-chronologies on the eastern Sierra Nevada crest, Mono Co., California, USA contain records of precipitation and large-scale ocean and atmospheric conditions: R S Franklin

0800h GC51D-0784 POSTER A subalpine forb’s response to natural and experimental climate variation: A M Panetta, J Harte, M Stanton

0800h GC51D-0785 POSTER Fine-scale Phenology and Nitrogen-Fixing Microbes at a GLORIA Site in Southwestern Montana, USA: M E Apple, J Prince, S Morales, C Apple, J Gallagher


0800h GC51D-0787 POSTER Assessing stream temperature response to environmental change: R J MacDonald, S Boon, J M Byrne

0800h GC51D-0788 POSTER Modeling the Response of Glaciers to Climate Change in the Upper North Saskatchewan River Basin: E Booth, J M Byrne, H Jiskoot, R J MacDonald

0800h GC51D-0789 POSTER Soil moisture dynamics and forest fire risk in the Upper North Saskatchewan Watershed, Alberta: S A Dalla Vicenza, J M Byrne, M G Letts


0800h GC51D-0791 POSTER Climate contributes to zonal forest mortality in Southern California’s San Jacinto Mountains: A Fellows, M Goulden

GC51E Moscone South: Poster Hall Friday 0800h Regional Intersects of the Coupled Human and Environmental Earth System Posters (joint with A, B, PA, H)

Presiding: K A Hibbard, NCAR; A C Janetos; L Leung, Pacific Northwest National Laboratory; A M Thomson, Pacific Northwest National Lab

0800h GC51E-0792 POSTER R-GCAM a New Regionally Disaggregated Integrated Assessment Model (Invited): J Edmonds

0800h GC51E-0793 POSTER Application Evaluation of Air-Sparging and Aerobic Bioremediation in PAM(Physical Aquifer Model) with Advanced and Integrated Module: U Hong, J Ko, S Park, Y Kim, S Kwon, J Ha, J Lim, K Han

0800h GC51E-0794 WITHDRAWN

0800h GC51E-0795 WITHDRAWN

GC51F Moscone South: Poster Hall Friday 0800h Remote Sensing and Geospatial Analysis of Ecosystem Services Posters (joint with PA, A, B, IN, ED)

Presiding: A N Pilant, US EPA R&D; D J Keith, Atlantic Ecology Division


0800h GC51F-0797 POSTER Integrated airborne lidar and multiple endmember spectral mixture analysis (MESMA) for plant species mapping across multiple functional groups: K Dahlin, G P Asner
0800h GC51F-0798 POSTER Multi-temporal land cover classification of the Konya Basin, south-central Turkey, based on a LANDSAT TM-derived NDVI/NDMI time series: satellite remote sensing in support of landscape-scale soil biogeochemistry research: M T Mayes, M Ozdogan, E Marin-Spiotta


0800h GC51F-0800 POSTER Mapping Urban Ecosystem Services Using High Resolution Aerial Photography: A N Pilant, A Neale, D Wilhelm

0800h GC51F-0801 POSTER A fast yet accurate algorithm for retrieval of aerosol and marine parameters in coastal waters: K H Stamnes, W Li, Y Fan, N Chen, T Tanikawa, B Hamre, J J Stamnes

0800h GC51F-0802 POSTER ECOSYSTEM FRAGMENTS MAPPING IN TROPICAL TERRAINS USING ASTER DATA: L E Vicente, C R Souza

0800h GC51F-0803 POSTER Tracking Pterymagites Australis Expansion in Bear River Migratory Bird Refuge using AggieAir Aircraft Data: B Zaman, M McKee

0800h GC51F-0804 POSTER A Multi-Index Integrated Change Detection Method for Updating the National Land Cover Database: S Jin, L Yang, G Z Xian, P Danielson, C Homer

0800h GC51F-0805 POSTER Challenges and Methodological Development for Comprehensive Assessment of Environmental Quality: application to military land management: G Wang, S Singer, H Howard, A Anderson

0800h GC51G-0806 POSTER Tropical Cyclones in the Global Climate System II Posters (joint with A, OS, PP, B)

Presiding: D Swain, University of California, Davis; R L Sriver, Penn State University; C M Brierley, Yale University

0800h GC51G-0807 POSTER The Effect of Tropical Cyclones on the Mixed-Layer Ocean Heat Content: J Wang, W Han

0800h GC51G-0808 POSTER Observational Evidence for Oceanic Controls on Hurricane Intensity: J D Lloyd, G A Vecchi

0800h GC51G-0809 POSTER Effects of Tropical Cyclones on Ocean Heat Transport as simulated by a High Resolution Coupled General Circulation Model: E Scocciarredo, S Guidali, A Bellucci, A Sanna, M Vichi, E Manzini, P Fogli, A Navarra, P Oddo

0800h GC51G-0810 POSTER Tropical Indian Ocean Influence on Northwest Pacific Tropical Cyclones Following Strong El Nino: Y DU, L Yang, S Xie

0800h GC51G-0811 POSTER Recent Advances in Understanding Tropical Cyclone-Climate Interactions Using Climate Models of Varying Complexity: R L Sriver, M P Goes, M E Mann, M Huber, K Keller

0800h GC51G-0812 POSTER Restratification of the upper ocean after the passage of a tropical cyclone: W Mei, C Pasquero

0800h GC51G-0813 POSTER A 320-year AMM+SOI Index Reconstruction from Historical Atlantic Tropical Cyclone Records: M Chenoweth, D Divine

0800h GC51G-0814 POSTER Tropical Cyclones at the Last Glacial Maximum: C M Brierley, K Emanuel, A V Fedorov

0800h GC51G-0815 POSTER Tropical Cyclones and the Carbon Cycle: N L Zimmerman, K Emanuel

0800h GC51G-0816 POSTER Effect of Barrier Layers on Sea-Surface Temperature Response to Tropical Cyclones: K Balaguru, R Saravanan, P Chang, J Hsieh

0800h GC51G-0817 POSTER TESTING COMPETING PROXIES FOR ASIAN MONSOON INTENSITY SINCE 14 KA IN THE SOUTH CHINA SEA: D Hu, P D Clift, C M Kohler, K Iijima, P Boning

0800h GC51G-0818 POSTER Modulation of the South Asian monsoon in early summer over last decades: T Tamura, T Kioke

0800h GC51G-0819 POSTER TROPICAL CYCLONE IMPACT ON OCEAN HEAT BUDGET IN THE SOUTHWEST PACIFIC OCEAN: S JULLIEN, C Menkes, P Marchesiello, N Jourdain, M Lengaigne, J Lefevre, E M Vincent, V Faure, A Koch-Larrouy

GC51H Moscone South: Poster Hall Friday 0800h Undiscovered Climates of Earth II Posters (joint with A, B, H, NG, PP)

Presiding: M Huber, Purdue University; S C Sherwood, University of New South Wales

0800h GC51H-0820 POSTER Reconstruction of the 500 year ground surface temperature history of northern Awaji Island, southwest Japan: S Goto, M Yamano

0800h GC51H-0821 POSTER Temperature Reconstruction and Biomarker Variation across the Cretaceous-Paleogene Boundary, Mid-Waipara River, New Zealand: K W Taylor, C J Hollis, R D Pancost

0800h GC51H-0822 POSTER The feedback causing the high climate sensitivity of a version of the HadSMJ climate model: undiscovered or just unrealistic?: M Joshi, M Webb, A Maycock, M Collins

0800h GC51H-0823 POSTER Initiation of a Marinoan Snowball Earth in a state-of-the-art atmosphere-ocean general circulation model: A Voigt, D S Abbot, R T Pierrehumbert, J Marotzke

0800h GC51H-0824 POSTER Is the Future State of North American Hydroclimatology Controlled by Tropical Cyclones and the Evolution of El Nino?: A P Goldner, M Huber, R L Sriver

0800h GC51H-0825 POSTER Is the Tibetan Plateau important for the Asian monsoon?: J R Buzan, A P Goldner, M Huber

0800h GC51H-0826 POSTER Abrupt transition to strong superrotation and hysteresis in an idealized GCM with MJO-like heat forcing: N Arnold, E Tziperman

0800h GC51H-0827 POSTER A Coupled Ice-Airtemperature-Dust Model for a Neoproterozoic “Mudball Earth”: J C Goodman, D Strom

GC511 Moscone South: Poster Hall Friday 0800h Using Downscaled Climate Data in Impact and Adaptation Studies II Posters (joint with B, H, NH, A, IN)

Presiding: P Duffy, Climate Central; L D Brekke, U.S. Bureau of Reclamation; B Thrasher, Climate Central

0800h GC511-0828 POSTER Micro climate Simulation in new Town ‘Hashtgerd’ using downscaled climate data: S Sodoudi

0800h GC511-0829 POSTER A Regional Approach to Climate Change Planning: The Joint Front Range Climate Change Vulnerability Study: L Kaatz, M Woodbury, D Yates, M L Baldo

**GC511-0831 POSTER** A Comprehensive Hydrologic Projections Resource to support Climate Change Vulnerability Assessments in the Western U.S: **L D Brekke**, T Pruitt, S. Gangopadhyay, D A Raff

**0800h**

**GC511-0832 POSTER** Downscaled Climate Projections for the landslide risk triggered by heavy rains: **P Schiano**, E Bucchiagnani, L Comega, E Damin, P Mercogliano, O Livares, L Picarelli

**0800h**

**GC511-0833 POSTER** Potential Impacts of Precipitation Change on Large-Scale Patterns of Tree Diversity: **M Konar**, R Muneepaerakul, S Azaele, E Bertuzzo, A Rinaldo, I Rodriguez-Iurube

**0800h**

**GC511-0834 POSTER** Hope for the Forests? Habitat Resiliency Illustrated in the Face of Climate Change Using Fine-Scale Modeling: **L E Flint**, A L Flint, S B Weiss, E R Micheli

**0800h**


**0800h**

**GC511-0836 POSTER** The relationship between stream flow, riparian buffers, and climate change in an agricultural landscape: **H Chien**, J Knouft

**0800h**

**GC511-0837 POSTER** Accounting for downscaling and model uncertainties in examining the impacts of climate change on hydrological systems: **M Franklin**, E Yan, Y Demissie

**0800h**

**GC511-0838 POSTER** Adaptation to climate changes on a multipurpose hydrosystem in South-Central Chile with explicit regard of model uncertainty: **ÁLVARO Ayala**, J P McPhee

**0800h**

**GC511-0839 POSTER** Retrieval of Hourly Records of Surface Hydrometeorological Variables using Satellite Remote Sensing Data: **S Moghim**, S Sarachi, J Wang, R L Bras

**0800h**

**GC511-0840 POSTER** Change of flood risk under climate change based on Discharge Probability Index in Japan: **T Nitta**, K Yoshimura, S Kanae, T Oki

**0800h**

**GC511-0841 POSTER** Impacts of Climate Change on Landscape Dynamics in the US Southeast: **J K Costanza**, L Earnhardt, A J Terando, J Hulcr, A McKerrow

**0800h**

**GC511-0842 POSTER** An ecological channel classification framework for understanding the effects of climate change at a regional scale, Apalachicola-Chattahoochee-Flint River system, part of the Southeast Regional Assessment Project (SERAP): **C Elliott**, R B Jacobson

**0800h**

**GC511-0843 POSTER** An integrated, multiscale approach to predicting the response of lotic biota to climate change in the Apalachicola, Chattahoochee, and Flint Basin: **J Peterson**, M C Freeman

**0800h**

**GC511-0844 POSTER** Application of a Nested Modeling Approach Using the Precipitation Runoff Modeling System in the Apalachicola-Chattahoochee-Flint River Basin in the Southeastern USA: **J LaFontaine**, L Hay, R Viger, S L Markstrom

**0800h**

**GC511-0845 POSTER** Enhancements to the Precipitation-Runoff Modeling System for simulating in-stream water temperature: **S L Markstrom**, L Hay

**0800h**

**GC511-0846 POSTER** Development of Apalachicola-Chattahoochee-Flint hydrology and habitat model parameters through biophysical remote sensing: **J Jones**

**0800h**


---

**GC51J Moscone West: 3001 Friday 0800h**

**Biogeochemical Responses to a Changing Arctic II (joint with B, C, H)**

**Presiding:** A V Rocha, Marine Biological Lab; J W McClelland, University of Texas at Austin; R R Musket, University of Alaska Fairbanks; A Balser, University of Alaska Fairbanks

**0800h**


**0815h**

**GC51J-02 Quantifying Future Changes in High-Latitude Methane Emissions and potential climate feedback Under Regional Climate Change Uncertainty:** **X Gao**, C A Schlosser, K Walter Anthony, A P Sokolov

**0830h**

**GC51J-03 Ice Cover Enhances Methane Consumption in Alaskan Thermokarst Lakes:** **M B Heintz**, J Pohlman, M J Wooller, M Elvert, C D Ruppel, D L Valentine

**0845h**

**GC51J-04 Relative Importance of Multiple Factors on Terrestrial Loading of DOC to Arctic River Networks:** **D W Kicklighter**, D J Hayes, J W McClelland, B J Peterson, A D McGuire, J M Melillo

**0900h**

**GC51J-05 Potential dissolved organic matter release from permafrost soils upon thaw:** **K P Wickland**, M P Waldrop, K Butler

**0915h**

**GC51J-06 The Blazing Arctic? Linkages of Tundra Fire Regimes to Climatic Change and Implications for Carbon Cycling (Invited):** **F Hu**, P E Higuera, J E Walsh, W Chapman, P Duffy, L Brubaker, M L Chipman

**0930h**

**GC51J-07 Impacts of wildfire on biogeochemistry and energy balance of the North Slope of Alaska:** **G R Shaver**, A V Rocha, G W Kling, M C Mack

**0945h**

**GC51J-08 Impacts of a Large and Intense Tundra Wildfire on the Hydrological Export of Carbon, Nitrogen and Phosphorus:** **W B Bowden**, C Maki, E Schuett, A R Allen, J R Larouche, G W Kling

---

**GC51K Moscone West: 3005 Friday 0800h**

**Variability and Predictability of Weather and Climate Extremes II (joint with A, H, NH, B, PA)**

**Presiding:** Y Deng, Georgia Institute of Technology; **X Huang**, University of Michigan

**0800h**

**GC51K-01 Response of precipitation extremes to global warming in an aqua-planet climate model: towards robust projection from regional to global scales:** **F Li**, W Collins, M F Wehner, D Williamson, J Olson

**0812h**

**GC51K-02 Characteristic of blocking events over Siberia for the present and future climate conditions, and the implications for the regional climate in South China:** **H Cheung**, W Zhou

**0824h**

**GC51K-03 Forecasting Extreme Flooding in South Asia (Invited):** **P J Webster**

**0839h**

**GC51K-04 Challenges in Estimating and Predicting Extreme Weather and Climate statistics (Invited):** **P D Sardeshmukh**, G P Compo

**0854h**

**GC51K-05 Extreme Heat and Human Health (Invited):** **R B Rood**, M O'Neill

**0909h**

**GC51K-06 Simulations of global hurricane climatology, interannual variability,and response to global warming using a 50km resolution GCM (Invited):** **M Zhao**, I Held, S Lin, G A Vecchi

**0924h**

**GC51K-07 Current Enhanced Atlantic Tropical Cyclone Frequency: A Climate-Change Impact?:** **G J Holland**, C Bruyere
H51B Moscone South: Poster Hall  Friday 0800h
Isotopic and Chemical Approaches in Watershed/Ecosystem Interactions I Poster (joint with B)

Presiding: J B Gates, University of Nebraska - Lincoln; C B Graham, Penn State University; K A Dressler, D Riveros-Iregui, University of Nebraska; C Duffy, Penn State University; L Wang, Princeton University

0800h H51B-0877 POSTER A tale of two rivers: studies in the San Joaquin and Sacramento Rivers using a multi-isotope and chemical approach to investigate linkages between hydrology, nutrients, and algae (Invited): C Kendall, M B Young, S R Silva

0800h H51B-0878 POSTER Lattice Boltzmann simulations of oxygen- and hydrogen-isotope fractionation between water and ice: G Lu, D J Depaolo

0800h H51B-0879 POSTER Decadal Variation in Stable Isotopes (-2H and -18O) of Water in the Yukon River System during an Extended Period of Warming Air Temperatures: J M Landwehr, T B Coplen, P F Schuster

0800h H51B-0880 POSTER Travel time distributions, soil moisture dynamics and the old water paradox: G Botter, E Bertuzzo, A Rinaldo

0800h H51B-0881 POSTER Agroecosystem Impacts on Water Quality: R C Reedy, B R Scanlon

0800h H51B-0882 POSTER Spatial and temporal variability of catchment transit times: M hrachowitz, C Soulsby, D Tetzlaff, I A Malcolm

0800h H51B-0883 POSTER Evidence of mobile/immobile flow at the Susquehanna Shale Hills Critical Zone Observatory using the stable isotope network: G Holmes, C Duffy, E W Boyer, L Jin, D Andrews

0800h H51B-0884 POSTER Biogeochemistry of a mesotrophic lake and its carbon isotope geochemistry: S Cheng, W Ehresman, S E Sadurski

0800h H51B-0885 POSTER The Influence of Plants on the Isotopic Composition in Runoff: M Weiler, K Gimbel

0800h H51B-0886 POSTER ADVANCES IN HIGH-FREQUENCY LIQUID WATER ISOTOPE ANALYZER FOR HYDROLOGICAL MEASUREMENTS IN THE FIELD: T G Owano, E S Berman, J Leen, D S Baer

0800h H51B-0887 POSTER Using chemical and isotopic tracers to conceptualize hydrological function in a larger scale catchment draining contrasting geomorphic provinces: R Capell, D Tetzlaff, C Soulsby, A J Hartley, I A Malcolm

0800h H51B-0888 WITHDRAWN

0800h H51B-0889 WITHDRAWN

0800h H51B-0890 WITHDRAWN

0800h H51B-0891 POSTER Multitracer Study of Flow to Tile Drains in Irrigated Macroporous Soil: J M Bishop, M V Callaghan, E Cey, L R Bentley

H51C Moscone South: Poster Hall  Friday 0800h
Mixing and Reactive Transport: From Pore to Field Scale I Poster (joint with A, OS)

Presiding: M Willmann, ETH Zurich; T Le Borgne, Geosciences Rennes, A Englert, Ruhr University Bochum; M Dentz, Institute of Environmental Assessment and Water Research (IDAEAS-CSIC)

0800h H51C-0892 POSTER Reactive transport modeling of carbon dioxide sequestration via bicarbonate brine injection in the Rose Run sandstone formation: A comparison with traditional CCS: P Lu, T Kendall, R Seeker, B R Constantz

0800h H51C-0893 POSTER Fluid mixing from viscous fingering: B Jha, L Cueto-Felgueroso, R Juanes

0800h H51C-0894 POSTER Influence of Transverse Mixing on Stable Isotope Fractionation: Flow-through Microcosms and Reactive Transport Modeling Study: M Rolle, G Chiogna, R Bauer, C Griebler, P Grathwohl

0800h H51C-0895 POSTER Flux-related and Critical Dilution Indices: Quantitative Indicators of Mixing and Mixing-controlled Reactions in Heterogeneous Porous Media: G Chiogna, O A Cirpka, P Grathwohl, M Rolle

0800h H51C-0896 POSTER One dimensional multispecies solute transport in a Permeable Reactive Barrier-Aquifer system: H Chen, E Park, S Kim, M Gwon

0800h H51C-0897 POSTER A Markovian model for reaction and diffusion: analytical study of the Master Equation through the van Kampen system-size expansion: P De Anna, T Le Borgne, M Dentz, D Bolster, P Davy

0800h H51C-0898 POSTER Comparison of Pore Water Chemical Extracted by Different Forces with In-situ Properties: N Ito, J Machida, A Marui, T Scheytt, K H Hebeg

0800h H51C-0899 POSTER Correlations Between Physical and Hydraulic Properties and Uranium Desorption in Contaminated, Intact Sediment Cores: M L Rockhold, M Oostrom, T W Wietsma, J M Zachara

0800h H51C-0900 POSTER Dynamic dissolution of halite rock during flow of diluted saline solutions: N Weisbrod, C Alon-Mordish, Y Yechiel

0800h H51C-0901 POSTER Effect of Grain Sizes on Uranium(VI) Adsorption/Desorption Kinetics and Rate Additivity: J Shang, C Liu, Z Wang, J M Zachara

0800h H51C-0902 POSTER Effect of Bacterial Molybdenum on Contaminant Mixing in Porous Media: R Singh, M S Olson, Title of Team: Bioremediation at Drexel

0800h H51C-0903 POSTER PDF Equations for Reactive Transport in Heterogeneous Porous Media: S V Brodyka, D M Tartakovsky

0800h H51C-0904 POSTER Definition of a mixing scale for transport in heterogeneous media: T Le Borgne, M Dentz, P Davy, D Bolster, J Carrera, J De Dreuzy, O Bour

0800h H51C-0905 POSTER Anomalous Mixing and Reaction induced by Superdiffusive Transport: D Bolster, D A Benson, M Dentz, T Le Borgne

0800h H51C-0906 POSTER Impact of Ethanol on Natural Attenuation of BTEX: Development of Models for Evaluating Field Experiments and Their Implications: E Rasa, D M Mackay, B A Bekins, K M Scow

0800h H51C-0907 POSTER A Single-well (“push-pull”) test for investigation of mass transfer properties of deep groundwater in a coastal basin: T Scheytt, K H Hebeg, N Ito, A Marui
0800h  
**H51C-0908**  
**POSTER**  
Transport upsampling of a fractured clay-rich sedimentary formation:  
M Willmann, W K Kinzelbach, F Stauffer

0800h  
**H51C-0909**  
**POSTER**  
Dynamics of Mineral Precipitation in Diffusion Controlled Mixing Zones:  
G D Redden, T Gebrehiwet, L Tu, D T Fox, H Huang, L Guo, J Henriksen

0800h  
**H51C-0910**  
**POSTER**  
Time-Dependent Calcite Dissolution in Laboratory Columns — The Impact of Grain Size Distribution:  
O Gharbi, Z Azimova, M J Blunt, B Bijelic

0800h  
**H51C-0911**  
**POSTER**  
Reactive Transport Modeling of Induced Calcite Precipitation Reaction Fronts in Porous Media Using A Parallel, Fully Coupled, Fully Implicit Approach:  
L Guo, H Huang, D Gaston, G D Redden, D T Fox, Y Fujita

0800h  
**H51C-0912**  
**POSTER**  
Influence of density contrasts on the solute transport through a horizontal fracture:  
J Bouquain, Y Meheust, P Davy

0800h  
**H51C-0913**  
**POSTER**  
U(VI) transport under the condition of water table fluctuations:  
J Yin, R Haggerty, M L Rockhold, D B Kent, J D Istok, J M Zachara

0800h  
**H51C-0914**  
**POSTER**  
A Theory for Mixing and Reactions in Porous Media:  
B D Wood, F J Valdes-Parada

0800h  
**H51C-0915**  
**POSTER**  
Lagrangian simulation of mixing-controlled chemical reactions:  
Y Zhang

0800h  
**H51C-0916**  
**POSTER**  
Urea hydrolysis and calcium carbonate reaction fronts:  
D T Fox, G D Redden, J Henriksen, Y Fujita, L Guo, H Huang

0800h  
**H51C-0917**  
**POSTER**  
ANALYSIS OF MULTI-SPECIES REACTIVE TRANSPORT IN HETEROGENEOUS MEDIA UNDER KINETIC REACTIONS:  
L D Donado-Garzon, E F Espitia-Sarmiento

0800h  
**H51C-0918**  
**POSTER**  
Calcium carbonate precipitation rate as a function of ion ratio in the presence & absence of Sr2+:  
T Gebrehiwet, M S Beig, Y Fujita, G D Redden, R W Smith

---

**H51D Moscone South: Poster Hall Friday 0800h**

**New Challenges for Ecohydrology and Water Quality Investigations at the Watershed Scale I Posters**  
*(joint with B)*

**Presiding:** E Daly, Monash University; M Rode, Helmholtz Centre for Environmental Research UFZ; M Wilkinson, Newcastle University; H Asbjornsen, Heidi Asbjornsen

0800h  
**H51D-0919**  
**POSTER**  
Scenario-based water resources planning for utilities in the Lake Victoria region:  
V K Mehta, O Aslam, L Dale, N Miller, D Purkey

0800h  
**H51D-0920**  
**POSTER**  
Modeling Linkages Between Effective Impervious Surface and Urban Vegetation Productivity in Semi-arid Environments:  
C A Shields, C Tague

0800h  
**H51D-0921**  
**POSTER**  
Air Permeability and Infiltration Differences Associated with Grass and Gravel Streambeds in an Urban Environment:  
B Witte, C Ferlin, E L Gallo, K A Lohse, T Meixner, P D Brooks, T A Ferre

0800h  
**H51D-0922**  
**POSTER**  
Quantifying the Role of Bottomland Hardwood Forest Flood Attenuation in the Central U.S.:  
J A Hubbart, E A Bulliner, G W Freeman, D P Scollan, J Romine, P Chinnasamy, D Huang, J Schulz

0800h  
**H51D-0923**  
**POSTER**  
Climatic influences on the spatial distribution of ecosystem services and costs in the Los Angeles urban forest:  
H R McCarthy, D E Pataki, L T Weller, G D Jenerette

0800h  
**H51D-0924**  
**POSTER**  
Understanding the socio-demographic and climate impacts on total and landscape water use in the City of Los Angeles:  
C Mini, T S Hogue, S Pinceot

---

**H51E Moscone South: Poster Hall Friday 0800h**

**Stochastic Transport and Emergent Scaling on the Earth's Surface II Posters**  
*(joint with EP, NG)*

**Presiding:** R Schumer, Desert Research Institute; E Foufoula-Georgiou, University of Minnesota

0800h  
**H51E-0940**  
**POSTER**  
A probabilistic definition of the bedload sediment flux: Experiments:  
J C Roseberry, M W Schmeeckle, D J Furbish, P K Haff

0800h  
**H51E-0941**  
**POSTER**  
Static and dynamic Tokunaga stream networks: Statistical properties:  
I Zaliapin, E Foufoula-Georgiou, M Ghi

0800h  
**H51E-0942**  
**POSTER**  
Diffusion-dominated subdiffusion in repacked sand: A combined study of stochastic models and laboratory experiments:  
W Atterberry, Y Zhang, C Papelis, M Young, M Berli

0800h  
**H51E-0943**  
**POSTER**  
Investigating the evolution of gravel bar at river confluence during flood events using a 2D many-fracture river morphodynamic model:  
Y Chen, F Wu, Title of Team:  
Ecohydraulics Lab.

All information is current as of November 12, 2010
0800h  **HS1E-0944 POSTER** Tracking Radio-Tagged Bedload in an Alpine Stream: D N Bradley, G E Tucker

0800h  **HS1E-0945 POSTER** Statistical characteristics of fluvial displacements of individual particles: P Cienciala, M A Hassan, L Fraccarollo, H E Voepel

0800h  **HS1E-0946 POSTER** Quantifying the effect of hydrologic variability on sediment transport in alluvial rivers: T M Engelder, J D Pelletier

0800h  **HS1E-0947 POSTER** Intra-stream variability in tracer breakthrough curves: Geomorphic controls on tailing behaviors: S Patil, T P Covino, J D Drummond, A I Packman, R Schumer, R A Payn, B L McGlynn

---

**H51F Moscone South: Poster Hall Friday 0800h**

Transport of Particles and Bio colloids in Surface waters and Groundwaters: From Sediment-Sized Particles to Nanoparticles, Emerging Contaminants, and Microorganisms

- **IV Posters** (joint with B)

**Presiding:**
- G S Bilotta, University of Brighton; J F Schijven, National Institute of Public Health and the Environment; W P Johnson, University of Utah; D M O’Carroll, University of Western Ontario; S A Bradford, USDA, ARS, Salinity Laboratory; P Owens, University of Northern British Columbia; P S Knappett, Helmholtz Center for Environmental Health Munich; C A Ramsburg, Tufts University

0800h  **HS1F-0949 POSTER** Contrasting Patterns of Fine Fluvial Sediment Delivery in Two Adjacent Upland Catchments: M Perkins, L Bracken, J Warburton

0800h  **HS1F-0950 POSTER** Metal content of road deposited sediment and fluvial channel-bed sediment in the City of Prince George, British Columbia, Canada: P N Owens, I G Droppo, K G Taylor, K Caley, S Campbell, M Rutherford

0800h  **HS1F-0951 POSTER** Developing Meaningful Measures and Guidelines for Particulates in Aquatic Ecosystems: G S Bilotta, C Harrison, C Joyce, C Peacock

0800h  **HS1F-0952 POSTER** Quantitative estimation of phosphorous and potassium originated from geology flowing inconstantly into marine areas: G Park, J Hwang, J Oh, M Jige, H Lee, J Kim

0800h  **HS1F-0953 POSTER** An Investigation into Heavy Metal Contamination and Mobilization in the Lower Rouge River, Michigan: M Shihadeh, J Forrester, J A Napieralski

0800h  **HS1F-0954 POSTER** GIS-based Mine Tailings Yield Mapping using RUSLE and Sediment Delivery Ratio: S Kim, Y Choi, H Park, H Kwon, S Yoon, W Go

0800h  **HS1F-0955 POSTER** Effects of the First Floods on Water Quality and Sediment Transport in the Sierra Nevada Foothill Streams, California: Z Wang, J Baca, Z He, S Blumenshine

0800h  **HS1F-0956 POSTER** Biocolloid transport in water saturated columns packed with sand: V I Syngouna, C Chrysikopoulos

0800h  **HS1F-0957 POSTER** Sorption of Pseudomonas putida onto differently structured kaolinite minerals: I A Vasiliadou, D Papoulis, C Chrysikopoulos, D Panagiotaras, E Karakosta, M Fardis, G Papavassiliou

0800h  **HS1F-0958 POSTER** Effects of cell surface characteristics and manure-application practices on Escherichia coli populations in the subsurface: A three-farm study: A E Salvucci, M Elton, J D Siler, W Zhang, B K Richards, L D Gehring, L D Warnick, A G Hay, T Steenhuis

0800h  **HS1F-0959 POSTER** Evaluating conceptual modeling frameworks for farm scale groundwater pathogen transport associated with animal farming and municipal wastewater recharge: S J Cook, X Li, N Watanabe, R Atwill, C E Puente, T Harter

---

0800h  **HS1F-0960 POSTER** Bacterial Chemotaxis Toward A NAPL Source Within A Pore-Scale Model Subject to A Range of Groundwater Flow Velocities: X Wang, R M Ford

0800h  **HS1F-0961 POSTER** Enumerating Pathogenic Microorganism Surrogates for Groundwater Experiments Using Solid-Phase Cytometry: M E Stevenson, A P Blaschke, A Kirchner

0800h  **HS1F-0962 POSTER** A study of colloids in deep groundwater using spectroscopic analysis: Y Yamamoto, D Aosai, T Mizuno, K Watanabe, T Kogure, Y Suzuki

0800h  **HS1F-0963 POSTER** A Mathematical Model for Simulating Remediation of Groundwater Contaminated by Heavy Metals using Bio-Carriers with Dead Bacillus sp. B1 and Polysulfone: H Suh, S Wang, M Lee

0800h  **HS1F-0964 POSTER** Effect of ionic strength on Cr⁶⁺ removal in aqueous solution: H Ahn, H Jo

0800h  **HS1F-0965 POSTER** Transport and Retention of Virus and Virus-sized Particle in a Variable-aperture Dolomite Rock Fracture under Unfavorable Attachment Conditions: P K Mondal, B E Sleep

0800h  **HS1F-0966 POSTER** Pore-Scale Simulations to Determine the Applied Hydrodynamic Torque and Colloid Immobilization: S A Bradford, S Torkzaban, A Wiegmans

0800h  **HS1F-0967 POSTER** Eliciting the effects of river fluctuation on microbial removal during riverbank filtration: J Derx, R Sommer, A H Farnleiter, A P Blaschke

0800h  **HS1F-0968 POSTER** Effect of heavy metals on bacterial transport: H Zhang, M S Olson

0800h  **HS1F-0969 POSTER** Colloid Retention in Porous Media in the Presence of Energy Barriers: Hemispheres-in-Cell Model with Heterogeneity: H Ma, E F Pazmino, W P Johnson

0800h  **HS1F-0970 POSTER** On the Transport of Viable but Non-Culturale (VBNC) E.coli O157:H7 in Soil and Groundwater: C R Kartz, G Kachanoski, M F Dyck

0800h  **HS1F-0971 POSTER** Effects of starvation on the transport of Escherichia coli K12 in saturated porous media are dependent on pH and ionic strength: S Xu, J J Walczak, L Wang, S L Bardy, J Li

0800h  **HS1F-0972 POSTER** Transport of Multi-walled Carbon Nanotubes in Unsaturated Porous Media: P Sharma, D M O’Carroll

0800h  **HS1F-0973 POSTER** Catalytic transformation of persistent contaminants using a new composite material based on nanosized zero-valent metal - field experiment results: J Dnorr, O Lemor Jacov, B Berkowitz

0800h  **HS1F-0974 POSTER** Colloid Mobilization by Displacement Fluid Fronts in Porous Media: Y Jin, D Or

0800h  **HS1F-0975 POSTER** Simulation of nZVI Transport at a Push-Pull Field Trial: D M O’Carroll, A J Oleniuk, C M Kocur, B E Sleep, Z Xiong, P Bennett

0800h  **HS1F-0976 POSTER** Impacts of Cation Type and Clay on Transport of Surface-modified Nanoparticles through Saturated Sand Columns: S Torkzaban, J Wan, T K Tokunaga

0800h  **HS1F-0977 POSTER** Fate of Nanomaterials in Subsurface under Various Conditions: Y Kim, E Lee, J Kim

0800h  **HS1F-0978 POSTER** Effects of Solution Chemistry on Quantum Dot Transport and Retention in Porous Media: J Englenthart, Y Wang, H Zhu, V L Colvin, K D Pennell

0800h  **HS1F-0979 POSTER** Modeling Quantum Dot Nanoparticle Fate and Transport in Saturated Porous Media under Varying Flow Conditions: M D Becker, Y Wang, J Englenthart, K D Pennell, L M Abriola

---

All information is current as of November 12, 2010
0800h  HS1F-0980 POSTER Hysteresis in the amount of colloids mobilized from intact cores of a fractured soil as a result of changes in the ionic strength of simulated rainfall: S Mohanty, J N Ryan, J E Sairns

0800h  HS1F-0981 POSTER Geochemical characterization of the Mahawelli River, Sri Lanka, based on basement rock, soil and sediment compositions: S M Young, H Ishiga, A Prawala

H51G  Moscone West: 3018  Friday 0800h
Agroecosystems and Water Resources I (joint with B, GC, PA)

Presiding: B R Scanlon, University of Texas at Austin; C T Green, US Geological Survey; T Harter, University of California Davis; A M Porporato, Duke University

0800h  HS1G-01 Model based quantification of global virtual water trade and the sources of water withdrawal for major crops and livestock products (Invited): Toki, N Hanasaki, T Inuzuka, S Kanae

0815h  HS1G-02 “How low can it go?” - Scenarios for the future of water tables and groundwater irrigated agriculture in India: V Modi, R Fishman

0827h  HS1G-03 Climate Change, Agriculture and Sustainable Groundwater Management: Groundwater Reserves as a Hedge Against Climate Change and Drought (Invited): R Langridge, A T Fisher

0842h  HS1G-04 Sustainability, productivity, and profitability of agroecosystems under variable rainfall: G Vico, A M Porporato

0854h  HS1G-05 Comparison of Groundwater Recharge under Irrigated Cropland versus Natural Land in Clayey Soils under Mediterranean Climate in Israel: D Kurtzman, B R Scanlon

0906h  HS1G-06 Hydrologic studies at the savanna-agriculture interface in Burkina Faso (Invited): M B Parlange, N C Ceperley, T Mande, A Repetti, S W Tyler, N Van De Giesen

0921h  HS1G-07 Climate Change Impact on the Hydrology and Water Quality of a Small Partially-Irrigated Agricultural Lowland Catchment: A Visser, J Kroeze, M T van Vliet, S Blenkinsop, S Broers

0933h  HS1G-08 Forecasting the effects of EU policy measures on the nitrate pollution of groundwater based on a coupled agroeconomic – hydro(geo)logic model (Invited): F Wendland

0948h  HS1G-09 Effects of the Biofuels Initiative on Water Quality and Quantity in the Mississippi Alluvial Plain: H L Welch, C T Green, R H Coupe

H51H  Moscone West: 3022  Friday 0800h
Behavior and Remediation of Deep Vadose Zone Contaminants II (joint with B)

Presiding: J C Marble, U.S. Dept. of Energy; D M Wellman, Pacific Northwest National Laboratory

0800h  HS1H-01 Tackling the Challenge of Deep Vadose Zone Remediation at the Hanford Site: J G Morse, D M Wellman, R Gephart

0820h  HS1H-02 Optimization of Remediation Conditions using Vadose Zone Monitoring Technology: O Dahan, R Mandelbaum, Z Ronen

0840h  HS1H-03 Deep Vadose Zone Flow and Transport Behavior at T-Tunnel Complex, Rainier Mesa, Nevada National Security Site: R Parashar, D M Reeves

0900h  HS1H-04 Impact of Mobile-Immobile Water on the Transport of Technetium (Tc-99) in Unsaturated Sediments: D P Jansik, D M Wellman, E Cordova, D Wildenschild

0920h  HS1H-05 Microbially Produced Organic Matter and Its Role in Facilitating Pu Transport in the Deep Vadose Zone: J C Fisher, R M Tinnacher, M Zavarin, A B Kersting, K Czerwinski, D P Moser

0940h  HS1H-06 Development of a Screening Assay for Microbial Community Profiling: A L Miracle, F Tilton, G T Bonheyo, J McDermott

H51I  Moscone West: 3014  Friday 0800h
Detecting and Predicting Change in Coupled Human-Water Systems II (joint with GC, PA, B)

Presiding: J S Arrigo, East Carolina University; C M Hermans, City University of New York; B G Voigt, University of Vermont; A Munoz Hernandez, City University of New York


0815h  HS1I-02 Relationships between Human Water Use, Groundwater Persistence and BaseFlow Contribution in New Jersey: B Thomas, R M Vogel, P Kanwar, J H Hoover, J S Arrigo

0830h  HS1I-03 Alternatives to Dam Building: Deindustrialization and the Redevelopment of Waterways in the Northeast During the Twentieth Century: J S Taber, B J Pompeii, C Nicoletti, C A Lopez-morales

0845h  HS1I-04 Tapping Water from the Atmosphere: The Bureau of Reclamation’s Project Skywater (Invited): K Harper

0900h  HS1I-05 Back-casting global water stress: Reconstruction of past water demand and climate variability: Y Wada, L P Van Beek, M F Bierkens

0915h  HS1I-06 Applied Budyko curve analysis for county level water resources management: Y E Yang, Y F Lin

0930h  HS1I-07 A Basin-Wide Integrated Analysis of Human Impacts on River Basins Using Horton-Strahler Stream Ordering: H Miyamoto, T Hashimoto, K Michioku

0945h  HS1I-08 On the cause of the shrinking of Lake Chad: H Gao, T J Bohn, E Podest, D P Lettenmaier

H51J  Moscone West: 3020  Friday 0800h

Presiding: V Y Ivanov, University of Michigan; S Fatichi, University of Firenze, Italy; E Istanbulluoglu, University of Washington

0800h  HS1J-01 Drivers of emergent vegetation pattern formation at hillside scales in a central Kenya dryland: K K Caylor, T E Franz, E King, D Robinson

0815h  HS1J-02 Precipitation controls on vegetation phenology in a temperate broadleaf forest estimated from MODIS vegetation index: T Hwang, C Song, P Bolstad, L E Band

0830h  HS1J-03 Modeling Water and Nutrient Transport through the Soil-Root-Canopy Continuum: Explicitly Linking the Below- and Above-Ground Processes: P Kumar, J C Quijano, D Drewry

0845h  HS1J-04 Modeling the integrated ecology, biogeochemistry, and hydrology of the global terrestrial biosphere in the Community Land Model (CLM4) (Invited): G B Bonan, P Lawrence, K W Oleson, S Levis

0900h  HS1J-05 Shallow bedrock storm-flow, rock moisture, and consequences for geomorphic, ecological and, possibly, climatic processes: W E Dietrich, J Oshun, D M Rempe, T E Dawson, K Simonin, R Salve, I Fung

0915h  HS1J-06 Assessing the effects of hydrodynamic stresses on photosynthesis with natural and modified canopy structures (Invited): G Bohrer, K Maurer, A Matheny, K Meyer, S R Garrity
H51J-07 0800h Ecosystem Investigations of Shallow Lateral Subsurface Flow in Tropical Soils using Time-Lapse Surface Electrical Resistivity Tomography: F L Ogden, A Mojica, N A Abebe, Title of Team: Smithsonian Tropical Research Institute, Panama Canal Watershed Experiment, Agua Salud Project

H51J-08 0945h The effect of surface sealing on soil moisture dynamics in a semiarid hillslope: S Sela, T Svoray, S Assouline

H51K Moscone West: 2016 Friday 0800h Flow and Transport in Complex Porous Media I

Presiding: N Shokri, Boston University; J H Prévost, Purdue University


0815h H51K-02 Imaging Multiphase Fluid Distribution in Three-dimensional Micro-models: W Watterson, Y Liu, L J Pyrak-Nolte


0845h H51K-04 Permeability in Damaged Porous Rocks: C F Arson, J Pereira

0900h H51K-05 Coupled multi-phase thermo-poro-mechanical effects. Case study: CO2 injection in In Salah, Algeria: M Preisig, J H Prévost

0915h H51K-06 Evaluation of Solitary Waves as a Mechanism for Oil Transport in Elastic Porous Media: Implications for the Eugene Island Field, Gulf of Mexico Basin: A Joshi, M S Appold, J A Nunn

0930h H51K-07 Heat driven optical fiber to measure soil moisture: F Ciocca, M B Parlange, N Van De Giesen, I Lunati

0945h H51K-08 Direct numerical simulation of inertial flows in porous media: S Apte, J Finn, B D Wood

Earth and Space Science Informatics

IN51A Moscone South: Poster Hall Friday 0800h Earth and Space Science Informatics General Contributions II Posters

Presiding: P A Fox, Rensselaer Polytechnic Inst.; K Moe, NASA

0800h IN51A-1135 POSTER Services for the Analysis of the Greenland Environment (SAGE): S Lewis, D W Gallagher, S S Khalsa, R E Duerr

0800h IN51A-1136 POSTER Automatic Temporal Tracking of Supraglacial Lakes: Y Liang, QLv, D W Gallagher, D Fanning

0800h IN51A-1137 POSTER Mineral Detector for Igneous Rocks: S T Ishikawa, S D Hart, V C Gulick

0800h IN51A-1138 POSTER New Space Weather and Space Environment Data Dissemination Tools from the Space Weather Laboratory and the Community Coordinated Modeling Center: D Berrios, R E Mullinix, M M Maddox, L Rastaetter, S Doria

0800h IN51A-1139 POSTER Exploring Various Monte Carlo Simulations for Geoscience Applications: R Blais

0800h IN51A-1140 POSTER Multi-Variate Time Series Modeling and Detection of Reconnection Exhausts in the Solar Wind: T Sipes, H Karimabadi, J T Gosling

0800h IN51A-1141 POSTER Evaluation of VIIRS Cloud And Aerosol Products For The NPOESS Preparatory Project: G P Cureton

0800h IN51A-1142 POSTER Data Systems for the CERES FM5 Instrument on board the NPOESS Preparatory Project: J L Gleason

0800h IN51A-1143 POSTER Best band selection of hyperspectral remote sensing image based on differential evolution algorithm: Z Cai, Z Li, A Jiang, X Chen

IN51B Moscone South: Poster Hall Friday 0800h Information Technology Infusion Success Strategies Posters (joint with A, B, EP, ED, GC, H, OS, P, V)

Presiding: K K Benedict, University of New Mexico; B D Wilson, Jet Propulsion Lab

0800h IN51B-1144 POSTER Community-oriented Implementation of Interoperability Standards (Invited): S R Falke

0800h IN51B-1145 POSTER Webification of Earth Science Data: Z Xing

0800h IN51B-1146 POSTER A Toolbox for Organization-wide Infusion of Data Systems Technologies: S W Olding, K Moe, J M Glassy

0800h IN51B-1147 POSTER Information Technology Infusion Case Study: Integrating Google Earth into the A-Train Data Depot: P M Smith, S J Kempter, G G Leptoukh, A Chen

0800h IN51B-1148 POSTER Towards Simpler Custom and OpenSearch Services for Voluminous NEWS Merged A-Train Data (Invited): H Hua, E Fetzer, A J Braverman, S Lewis, M L Henderson, A Guillaume, S Lee, M de la Torre Juarez, H T Dang

0800h IN51B-1149 POSTER Delivery of Forecasted Atmospheric Ozone and Dust for the New Mexico Environmental Public Health Tracking System – An Open Source Geospatial Solution: J W Hudspeth, R Sanchez-Silva, J A Cavner

0800h IN51B-1150 POSTER OpenSearch (ECHO-ESIP) & REST API for Earth Science Data Access: A Mitchell, M Cechini, D Pilone

0800h IN51B-1151 POSTER The Cascading Impacts of Technology Selection: Incorporating Ruby on Rails into ECHO: D Pilone, M Cechini

0800h IN51B-1152 POSTER Software Applications to Access Earth Science Data: Building an ECHO Client: A Cohen, M Cechini, D Pilone

Nonlinear Geophysics

NG51A Moscone South: Poster Hall Friday 0800h Statistical Geophysics II Posters (joint with A, B, H, OS, EP, NH, G, S)

Presiding: K F Tiampo, University of Western Ontario; D L Turcotte, University of California, Davis; W Klein, Boston University

0800h NG51A-1179 POSTER Stochastic modeling of soil salinity: S Suweis, A M Porporato, E Daly, S Van Der Zee, A Maritan, A Rinaldo

0800h NG51A-1180 POSTER Effects of Surface Moisture on Precipitable Water and Precipitation in Southern Taiwan: C Chiang, M Hsieh, J Liou


0800h NG51A-1182 POSTER Non-equilibrium statistical mechanics theory for the large scales of geophysical flows: S Eric, F Bouchet

0800h NG51A-1183 WITHDRAWN

0800h NG51A-1184 POSTER Relation between Coda-Q and stress loaded to an elastic body: -parameters of material conditions derived by stochastic measurement: K Okamoto, H Mikada, T Goto, J Takekawa
The micromechanics and the slip size distribution in a granular model for Seismic Fault: L de Arcangelis, C Godano, E Lippiello, M Pica Ciamarra

How large will be the next earthquake? A dynamical scaling approach to seismic occurrence: C Godano, E Lippiello, L de Arcangelis

Turbulence: L Primavera, S Servidio, A Donnellan

SST and Stiffness Coefficients for EA Potentials in Earthquake Fault Systems: A Tavakoli, K F Tiampo


Nucleation in models of damage mechanics: J D Gran, J B Rundle, W Klein, D L Turcotte

A damage model for the absence of significant precursor seismicity: Y Lee, D L Turcotte, J Rundle, C Chen

CHARACTERISTIC EARTHQUAKE CYCLE: Parkfield 1971 to 2009: D L Turcotte, M R Yoder, J B Rundle

A fault and seismicity based composite simulation in northern California: M B Yikilmaz, E Heien, D L Turcotte, J B Rundle, L H Kellogg

Precursory Seismic Migration Patterns Examined by Improved Pattern Informatics Method: Y Wu, C Chen, J B Rundle, J Wang

Unified spectral behavior of regional and single-fault seismicity in Taiwan: C Chen, L Telesca, K Ma, Y Lin

Declustering seismicity using the Thirumalai-Mountain metric: N Cho, K F Tiampo, P Bhattacharya, R Shcherbakov, C Chen, H Li, W Klein

Earthquake nucleation mechanisms and periodic loading: Models, Experiments, and Observations: K Dahmen, B Brinkman, G Tsakenis, Y Ben-Zion, J Uhl

Statistical analysis of planetary calderas and terrestrial volcanic eruptions: L Sanchez, K Scanlan, R Shcherbakov

Fluxes across double-diffusive interfaces: A Bracco, Georgia Tech

Turbulent-turbulent interaction: C Gonzalez, A Kerstein, D Lignell

Transitions in turbulent rotating Rayleigh-Benard convection: A Tilgner, S Schmitz

A quasigeostrophic model of zonal flow generation in the giant gans: D Laycock, M Dumbery

Investigation of boundary condition effects on the propagation of density current using direct numerical simulations: X Liu

Implementation of a combined compact difference scheme in problems of thermally driven convection and dynamo in rotating spherical shells: F Takahashi

High Spatial Resolution Measurements Of Atmospheric Turbulence Over The Altitude Range Of 0.5 To 23 Kilometers: D T Kyrazis, F Eaton

Local relaxation processes and maximum entropy states in two-dimensional hydrodynamic turbulence: L Primavera, S Servidio, M Wan, W H Matthaeus, V Carbone

Vorticity and helicity of coherent turbulent structures in Taylor-Green and ABC flows: J O McCaslin, M P Rast, P Mininni

Reynolds-number dependency in homogeneous, stationary two-dimensional turbulence: A Bracco, J C McWilliams

Wavelet decomposition of Taylor-Green forced-turbulence: sensitivity of the coherent component statistics to threshold value: J Lord, M P Rast, C Mckinlay, J Clyne, P D Mininni

WITHDRAWN

When can we expect statistical mechanics to help predict large scale atmospheric and oceanic features?: B T Nadiga, F Bouchet

Heat transport by turbulent rotating convection and magnetoconvection in liquid gallium: E M King, J M Aurnou

Generalized similarity in magnetohydrodynamic turbulence as seen in the solar corona and solar wind: S C Chapman, E Leonardis, R M Nicol, C Foullon

Reversals and the turbulent $\alpha$-effect in simulations of natural and experimental dynamos: A Giesecke, F Stefani, G Gerbeth

Differential rotation and magnetic field in a spherical Couette flow experiment: D Brito, T Alboussiere, P Cardin, D Jault, H Nataf, D Schmitt, J Masson, P La Rizza

Broken ergodicity in ideal, homogeneous, incompressible turbulence: L Morin, J V Shebalin, T Fu, P Nguyen, V Shum

Patchy correlations and suppression of nonlinearity in a variety of systems: Solar wind observations, MHD simulation and pure electron plasma experiments: T Aziz, M Wan, K Osman, D J Rodgers, S Servidio, T Mitchell, W H Matthaeus

AN OVER-DRIVEN AXIAL DIPOLE Magnetized Fluid Flow in an Earth-like Geometry: M Adams, D P Lathrop

The role of system-scale turbulence on MHD activity in a spherical dynamo experiment: K Rahbarnia, M Clark, E Kaplan, M Nornberg, A Rasmus, N Taylor, J Wallace, C Forest

Nonlinear Dynamics of Banded Iron Formation Precipitation: Y Wang, H Xu, E Merino
Natural Hazards

**NH51A Moscone South: Poster Hall Friday 0800h**

**Artificial Intelligence for Prediction and Identification of Natural Hazards Posters** (joint with AE, H, GC, IN, NG, OS)

**Presiding:** F Chang, National Taiwan University; L Chang, Tamkang University; L Chang, National Chiao Tung University

- **0800h** NH51A-1220 POSTER Comparison of empirical and data driven hydrometeorological hazard models on coastal cities of São Paulo, Brazil: A Koga-Vicente, M J Friedel
- **0800h** NH51A-1221 POSTER An enhanced two-step-ahead recurrent neural network for prediction of inflow in reservoir: P Chen, L Chang, F Chang
- **0800h** NH51A-1222 POSTER Estimation of evaporation at ungauged sites by combining ANFIS and Kriging methods: C Chung, Y Chang, F Chang
- **0800h** NH51A-1225 POSTER An investigation on the estimation of sediment concentration by artificial neural networks: A Chen, Y Chang, S Chang, F Chang
- **0800h** NH51A-1226 POSTER Building Flood Inundation Warning Systems by Using Serial-Propagated Neural Networks: L Chang, Z Zhuang, H SHEN, Y Wang, C Yang
- **0800h** NH51A-1227 POSTER Estimating Typhoon Rainfall over Sea from SSM/I Satellite Data Using an Improved Genetic Programming: K Yeh, H Wei, L Chen, G Liu
- **0800h** NH51A-1228 POSTER Fuzzy Cognitive Maps for Glacier Hazards Assessment: Application to Predicting the Potential for Glacier Lake Outbursts: R Furfaro, J S Kargel, W Fink, M P Bishop
- **0800h** NH51A-1229 POSTER Quantitative precipitation estimation by merging multiple precipitation products using artificial neural networks: Y Chiang, M Tsai, F Chang

**NH51B Moscone South: Poster Hall Friday 0800h**

**Climate Change, Impacts, and Hazards: System of Systems I Posters** (joint with A, GC, EP, C, OS)

**Presiding:** M Kafatos, Schmid College of Science, Chapman Univ.; G Asrar

- **0800h** NH51B-1230 POSTER An Analysis of Heavy Rain Events in the Middle and Lower Reaches of Yangtze River in China during the recent 50 years: B Jie
- **0800h** NH51B-1231 POSTER The influence of coastal wetlands on hurricane surge in Corpus Christi, TX: C Ferreira, J L Irish, F Olivera
- **0800h** NH51B-1232 POSTER EMS adaptation for climate change: C Pan, Y Chang, J Wen, M Tsai
- **0800h** NH51B-1233 POSTER NASA Ames Research Center Climate Change Adaptation Research: C Milesi, M Loewenstein, L T Iraci, N Burroughs, K Pitts, A C Gonzales
- **0800h** NH51B-1234 POSTER NASA Ames Research Center Climate Change Effects and Adaptation Research: Hind- and Forecasting Flood Risk of NASA Ames Research Center Using the BASINS Model: A C Gonzales, K Pitts, M Loewenstein, L T Iraci, C Milesi
- **0800h** NH51B-1235 WITHDRAWN
- **0800h** NH51B-1236 POSTER Greenhouse Gas Emissions Reporting through Integrated Business Solutions: D Smith

**Presiding:** C W Kreemer, University of Nevada, Reno; Y A Kontar, University of Illinois at Urbana-Champaign

- **0800h** NH51C-1237 POSTER Climatic and hydrologic aspects of the 2008 Midwest floods: D Budikova, J Coleman, S A Strope
- **0800h** NH51C-1238 POSTER Active Volcano Monitoring using a Space-based Hyperspectral Imager: J J Cipar, R Dunn, T Cooley
- **0800h** NH51C-1239 POSTER FLOW DIRECION DE DEBRIS AVALANCHE AT AGUILUCHO-APACHETA VOLCANIC COMPLEX (AAVC), CENTRAL ANDES: B E Godoy Neira, F Aguilera, S Ahumada, J Mercado
- **0800h** NH51C-1240 POSTER Debris flow probability and extent vary with infiltration rate and intensity-duration of rainfall: Mt. Mayon, Philippines: J C Maggio, W J Rose, C G Newhall
- **0800h** NH51C-1241 POSTER Ship-based GPS sensing of the 27 Feb 2010 tsunami in the open ocean: J H Foster, D Wang, B A Brooks, G S Carter, M A Merrifield
- **0800h** NH51C-1242 POSTER The November 1st, 1755 Tsunami in Morocco: Can Numerical Modeling Clarify the Uncertainties of Historical Reports?: R Omira, M Baptista, S Mellas, F Leone
- **0800h** NH51C-1243 POSTER Emergency Satellite Image Delivery through International Charter ‘Space and Major Disasters’: B K Jones, R M Lamb
- **0800h** NH51C-1244 POSTER Development of an Integrated Model for the Assessment of Climate Change Adaptation Methods Relating to the Preservation of Urban Coastal Cultural Heritage: B R Curran, M Routhier, G K Mulukutla, G Gopalakrishnan
- **0800h** NH51C-1245 POSTER Late 20th Century Deep-seated Vertical Motions in New Orleans and implications for Gulf Coast Subsidence: R K Dolkka
- **0800h** NH51C-1246 POSTER Water Induced Hazard Mapping in Nepal: A Case Study of East Rapti River Basin: N Neupane
- **0800h** NH51C-1247 POSTER Remote Sensing Based Flood Mapping for Disaster Management Applications: F Policelli, R Brakenridge, D P Ouzounov, J Sun, D A Slayback, L Fatoyinbo
- **0800h** NH51C-1248 POSTER Geomagnetic Effect Caused by 1908 Tunguska Event: T V Losseva, M Y Kuzmicheva
- **0800h** NH51C-1249 POSTER Multiple meteoroid impacts in Antarctica at 481,000ky: a possible cause for the mid-Brunhes Event/ MIS 11 Stage via the disruption of the West Antarctic Ice Sheet?: A R Rice, J G Weihaupt, F van der Hoeven
- **0800h** NH51C-1250 POSTER Surrogate Models and Uncertainty Quantification for Hazard Map Construction: A K Patra, K Dalbey, E Pitman, E R Stefanescu, M I Bursik, M F Sheridan, E S Calder, M D Jones

All information is current as of November 12, 2010
### Ocean Sciences

**OS51A Moscone South: Poster Hall**  
**Friday 0800h Biological, Chemical, and Physical Controls on the Gulf of Alaska Ecosystem I Posters**

**Presiding:** J Crusius, US Geological Survey; R W Campbell, Prince William Sound Science Center; Y Chao, Jet Propulsion Laboratory; F Chai, University of Maine

- **OS51A-1260 POSTER** Water Masses From Two NOAA/GFDL Coupled Climate Models (CM2G and CM2M) in the North Pacific: Y Park
- **OS51A-1261 POSTER** What Controls the Temporal Variability of Oxygen in the Gulf of Alaska?: Y Takano, T Ito, C A Deutsch
- **OS51A-1262 POSTER** Reactive Iron Delivery to the Central Gulf of Alaska via Two Mesoscale Eddies (Invited): S M Lippiarri, M T Brown, M C Lohan, K W Bruland
- **OS51A-1263 WITHDRAWN**
- **OS51A-1265 POSTER** Seasonal Changes in Productivity in the Copper River Plume and Coastal Gulf of Alaska: R W Campbell, A W Schrotz, J Crusius

**OS51B Moscone South: Poster Hall**  
**Friday 0800h Nearshore Processes III Posters (joint with EP)**

**Presiding:** C Chickadel, University of Washington; J W Long, USGS; H F Stockdon, U.S. Geological Survey

- **OS51B-1275 POSTER** A Numerical Study of Coupled Estuary-shelf Circulation Around the Pearl River Estuary: T Zu, J Gan, D Wang
- **OS51B-1276 POSTER** The use of autonomous unmanned vehicles for measuring the mean flow field in riverine environments: C Tuggle, J H MacMahan, J Brown, A J Reniers
- **OS51B-1277 POSTER** Quantifying Riverine Surface Velocities Using Thermal Infrared PIV: C M Sutkowski, J A Puleo, T E McKenna
- **OS51B-1278 POSTER** Ground-Based Thermal Imaging of Coastal and Riverine Sediments: T Sliwinskia, T E McKenna, J A Puleo, C L Meehan
- **OS51B-1279 POSTER** Modelling the fate of the Tijuana River discharge plume: M van Ormondt, E Terrill, L F Hibler, A R Van Dongeren
- **OS51B-1280 POSTER** NUMERICAL SIMULATION OF FLOW AND SEDIMENT TRANSPORT PATTERNS IN INDIAN RIVER INLET, DE, USA: M Keshtpoor, J A Puleo, N Kraus
- **OS51B-1281 POSTER** A General Formulation for Wave-Current Interaction in Strongly Sheared Flows: Z Dong, J T Kirby, D Thompson

---

All information is current as of November 12, 2010
0800h OS51B-1282 POSTER Concurrent remote and in situ wave and current observations at a tidal inlet: D A Honegger, M C Haller, J A Lerczak, P McEnaney

0800h OS51B-1283 POSTER An experimental investigation of hyperpycnal flow: T M Boland, T Hsu

0800h OS51B-1284 WITHDRAWN

0800h OS51B-1285 POSTER MODELLING INFRAGRAVITY WAVES AND CURRENTS ACROSS A FRINGING REEF: NINGALOO REEF, WESTERN AUSTRALIA: A R Van Dongeren, T Duong Minh, R Lowe, J Roelvink, R Ranasinghe, G Symonds

0800h OS51B-1286 POSTER MEASUREMENTS OF WAVE ATTENUATION THROUGH MODEL AND LIVE VEGETATION IN A WAVE TANK: Y Ozeren, D G Wren

0800h OS51B-1287 POSTER Wave damping across the Louisiana shelf: A Engelstad, T T Janssen, G van Vledder, T H Herbers, S Elgar, B Raubenheimer

0800h OS51B-1288 POSTER Resonant interactions between weakly nonlinear long surface and interfacial waves: N Tahvildari, J M Kahlaitu

0800h OS51B-1289 POSTER Wave-Induced Suspended Sand Transport Around Ripples in the Near Shore Zone: A Ahmari, H Oumeraci

0800h OS51B-1290 POSTER Ripple migration and its implication in sediment transport: two series of wave-flume experiments: N Yamaguchi, H Sekiguchi

0800h OS51B-1291 POSTER Development of “Smart Sediments” to Conduct In-Situ Measurements within Mobile Bed Layers: D P Frank, D Foster, P Chou

0800h OS51B-1292 POSTER Determination of bedform resolution necessary to accurately resolve the flow field by comparing numerical simulations with field data: G Margelowsky, D Foster, P Traykovski, J A Felzenberg

0800h OS51B-1293 POSTER High resolution field study of sediment dynamics on a strongly heterogeneous bed: P Bailly du Bois, O Blanpain, R Lafite, P Cugier, M Lunven

0800h OS51B-1294 POSTER Experimental Recreation of Large-Scale Coastal Bedforms and Hummocky Cross-Stratification in Sheet Flow Conditions: T Vermaas, M G Kleinhans, C Huisman, J L Schreiten, J J van der Werf, J S Ribberink, G Ruessink

0800h OS51B-1295 POSTER A comparison of measured and modeled suspended sediment concentration profiles during different types of meteorological events on the inner-shelf of Long Bay, South Carolina: P A Wren, Y Ma

0800h OS51B-1296 POSTER Coastal sediment dynamics in Spitsbergen: J Deloffre, R Lafite, A Baltzer, C Marlin, E Delangle, D Dethleff, F Petit

0800h OS51B-1297 POSTER Hydrodynamic and Sediment Transport Processes in Long Bay of the Carolinas: Y Ma, K Xu, R He, P A Wren, Y Gong, B Quigley, D Tarpley

0800h OS51B-1298 POSTER Observations of Longshore Currents at Cape Hatteras, NC: S M Smalegan, K A Haas, J C Warner, J H List

0800h OS51B-1299 POSTER Big-Ass Holes in the Surfzone: Waves, Currents, and Sediment Transport in a Seafloor Perurbation Experiment: M R Moulton, S Elgar, B Raubenheimer

0800h OS51B-1300 POSTER Waves and wave-driven currents over a barred beach during a sea-breeze cycle: J Gunson, G Symonds, S Contardo, N Mortimer

0800h OS51B-1301 POSTER Observations of wave-driven surfzone dynamics on a high-energy beach, Ocean Beach, San Francisco: I S Jones, T T Janssen, J E Hansen, P Barnard

0800h OS51B-1302 POSTER Impact of high-resolution tidal forcing on the Navy Coastal Ocean Model: S R Smith, P A Martin, G Dawson, E D Zaron

0800h OS51B-1303 POSTER A numerical study of nearshore circulation in a rip channel: R Jalalzai Farahani, R A Dalrymple

0800h OS51B-1304 POSTER Cross-shore Exchange on a Rip-channeled Beach Using Fluorescent Dye: J Brown, J H MacMahan, A J Reniers

0800h OS51B-1305 POSTER Alongshore Shear-Dispersion of Surfzone Drifters: The Effect of a Finite Lagrangian Time-Scale: M S Spydell, F Feddersen

0800h OS51B-1306 POSTER Boussinesq modeling of HB06 tracer releases Part 1: Wave and current model-data comparisons: F Feddersen, D B Clark, R T Guza

0800h OS51B-1307 POSTER Surfzone Tracer Transport and Dispersion during the IB09 Field Experiment: K Hally-Rosendahl, F Feddersen, D B Clark, R T Guza

0800h OS51B-1308 POSTER Effects of wave and tidal forcing on conservative contaminant transport in coastal aquifers: R Bakhytar, A Brovelli, D A Barry

0800h OS51B-1309 WITHDRAWN

0800h OS51B-1310 POSTER A Discretized Adjoint Model for SWAN: M Orzech, J Veearamony

0800h OS51B-1311 POSTER A unified spectral parameterization for wave breaking: from the deep ocean to the surf zone: J Filipot

0800h OS51B-1312 POSTER A High-Order Adaptive Time-Stepping TVD Solver for BOUSSINESQ Modeling of Breaking Waves and Coastal Inundation: F Shi, J T Kirby, B Tehranirad

0800h OS51B-1313 POSTER Dissipation in shoaling nonlinear waves: S Pak, T T Janssen

0800h OS51B-1314 POSTER Numerical study of large-scale turbulence and bubble entrainment under surfzone breaking waves: G Ma, J T Kirby, F Shi

0800h OS51B-1315 POSTER Determination of Nearshore Surface Slope Field and Wave Heights Using Optical Polarimetry: R D Russotto, R A Holman, J Stanley, M L PALMSTEN

0800h OS51B-1316 POSTER Pressure Gradients in the Inner Surf and Outer Swash Zone: A Kidwell, J A Puleo, A Torres-Freyermuth

0800h OS51B-1317 POSTER Spatially dense kinematic maps in the swash zone using a continuity-based imaging technique: T M Lanckriet, J A Puleo

0800h OS51B-1318 POSTER Swash-zone velocity profiles and bed stress on a natural beach: J A Puleo, T Lanckriet, P Wang

0800h OS51B-1319 POSTER Lidar observations of run-up (Invited): K M List, B Raubenheimer, S Elgar

0800h OS51B-1320 POSTER Interaction Between Transient Long Wave and Random Swell - Laboratory Investigations: H M El Safty, J M Kahlaitu

0800h OS51B-1321 POSTER Long Wave Inundation in Discontinuous Macro-Roughness with Application to Tsunamis in Forested Regions: Y Song, J L Irish, C Vitomne, M Barkdull, Title of Team: Long Wave hydrodynamics and Vegetation field Research Team

0800h OS51B-1322 POSTER Coastal Growth Patterns in Northern Sumatra as a Potential Tool in Seismic Hazard Assessment: K Monecke, W Finger, N Hood, B Houston, F Karmanocky, M Lavine, S Luthi, B G McAdoo, J Storms, S U Sudrajat

0800h OS51B-1323 POSTER Rapid Response Measurements of Hurricane Waves and Storm Surge: U gravois
Ocean Sciences General Contributions: Biological Oceanography Posters

**Presiding:** K Stocks, Univ. of California San Diego

- **0800h** OS51C-1326 POSTER Effect of light and substrate availability on the primary nitrite maximum in the Gulf of Aqaba, Red Sea: K R Mackey, L A Bristow, M A Altabet, A Post, A Paytan
- **0800h** OS51C-1327 POSTER Spatial variability of dissolved phosphorous concentrations and alkaline phosphatase activity in the East China Sea: H Liu, J Chang, T Ho, G Gong
- **0800h** OS51C-1328 POSTER Biological production and f-ratio in the equatorial Pacific: D Turk, D ANTOINE, C S Meinien, M R Lewis
- **0800h** OS51C-1329 POSTER Phytoplankton Community Growth Rates in the World Ocean: J K Moore, E Sherman
- **0800h** OS51C-1330 POSTER Spatiotemporal distribution of Chl a in the Gulf of Mexico based on MODIS geophysical products: S Chintalapudi, H Xie, H O Sharif
- **0800h** OS51C-1331 POSTER Simulations of Karenia Brevis on the West Florida Shelf: J M Lenes, B P Darrow, F R Chen, J J Walsh, D A Dieterle, R H Weisberg
- **0800h** OS51C-1332 POSTER From the Nearshore and Back Again: Biological Implications of Coastal Mixing: C S Harrison, G A Glatzmaier, D A Siegel, S Mitarai
- **0800h** OS51C-1333 POSTER Quest for the building blocks of ocean ecosystems: micro-scale fluorescence patchiness: H Yamazaki, M Doubell, H Li, H Homma, Y Sagara, A NMmO-Smith
- **0800h** OS51C-1334 POSTER Acquiring Peak Samples from Phytoplankton Thin Layers and Intermediate Nepheloid Layers by an Autonomous Underwater Vehicle with Adaptive Triggering: Y Zhang, R McEwen, J P Ryan, J G Bellingham, J Harvey, R Vrijenhoek
- **0800h** OS51C-1335 POSTER Adapting to life: simulating an ecosystem within an unstructured adaptive mesh ocean model: J Hill, M D Piggot, E E Popova, D A Ham, M A Srokosz
- **0800h** OS51C-1336 POSTER Hypoxia on the Oregon Shelf: a Modeling Study: A O Koch, Y H Spitz, H P Batchelder
- **0800h** OS51C-1337 WITHDRAWN
- **0800h** OS51C-1338 POSTER Investigating the contribution of mussel N regeneration to coastal primary production using stable isotope tracers: S Pather, M A Altabet, C A Pfister, D M Post
- **0800h** OS51C-1339 POSTER Advanced Whale Detection Methods to Improve Whale-Ship Collision Avoidance: P A McGillivary, B Tougher
- **0800h** OS51C-1340 POSTER The Census of Marine Life on Seamounts: results from a global science program: K Stocks, M Clark, A Rowden, M Consalvey

**Presiding:** C Berndt, IFM-GEOMAR; S Planke, Volcanic Basin Petroleum Resch

- **0800h** OS51D-01 Dynamic Controls of Fluid and Gas Flow at North Alex Mud Volcano, West Nile Delta: W Brueckmann, J Bialas, M D Jegen, M R Lefeldt, S Hoelz, T Feseker
- **0815h** OS51D-02 Sedimentological Control on Hydrate Saturation Distribution in Arctic Gas-Hydrate-Bearing Deposits: J Behseresht, Y Peng, S L Bryant
- **0830h** OS51D-03 FluSO – The Fluid Flow Seabed Observatory, a first demonstration mission in a seismically active region in Greece: V H Huehnerbach, C Berndt, D Masson, V Lykousis, G Papatheodorou, V Papadopoulos
- **0845h** OS51D-04 Development of the Methane Hydrate Burning Experimental Equipment: S Aoyama
- **0900h** OS51D-05 Experimental investigation of sediment control on the saturation level of gas hydrate in sediments: H Lu, T Ukiti, S Noguchi, I Moudrakovski, T SHIMADA, J Ripmeester, C Ratcliffe
- **0915h** OS51D-06 Characterization of Diffusion-Controlled Growth and Dissolution of Methane Hydrate in Aqueous Solution by Raman Spectroscopy: W Lu, Y Ye, I Chou, C Liu, R C Burruss, F Wang, M Wang
- **0930h** OS51D-07 WITHDRAWN
- **0945h** OS51D-08 Quantifying Long-term Methane Flux Change by Coupling Authigenic Mineral Distribution and Kinetic Modeling at Southern Hydrate Ridge, Oregon: W Hong, M E Torres, J E Johnson, E Pinero, K Rose

**Presiding:** C Maes, IRD; B Qiu, Univ of Hawaii at Manoa; K Ando, Japan Agcy Mar Sci & Tech

- **0800h** OS51E-01 Is the Pacific warm pool too big to care about the Indonesian Throughflow? (Invited): A L Gordon
- **0815h** OS51E-02 Seasonal variation of the Indonesian Throughflow: Role of western Pacific wind variation: T Shinoda, W Han, E Metzger, H E Hurlburt
- **0830h** OS51E-03 The life of tropical Hot Event in November 2006 (HE0611) observed by advanced satellite sensors and the TAO/ TRITON mooring array (Invited): H Kawamura, H Qin
- **0845h** OS51E-04 Argo measurements of Madden-Julian Oscillation mixed-layer variability: K Drushka, S Wijffels, J Sprintall, S T Gille
- **0900h** OS51E-05 Observations of the Mindanao Current and the North Equatorial Current (Invited): D L Rudnick
- **0915h** OS51E-06 Interannual-to-Decadal Variability in the Bifurcation of the North Equatorial Current off the Philippines: B Qiu, S Chen
- **0930h** OS51E-07 Variability of the surface and thermocline circulations in the Solomon Sea (Invited): A Melet, J A Verron, L Gourdeau, W S Kessler
- **0945h** OS51E-08 Observed features of the jets supplying the Coral Sea: F Gasparin, A S Ganachaud, C Maes
**OS51F Moscone West: 3010**

**Friday 0800h**

**Turbulence, Mixing, and Multiscale Interactions in Rivers and Estuaries I**

*Presiding:* A T Jessup, University of Washington; A R Horner-Devine, University of Washington; S G Monismith, Stanford University

0800h **OS51F-01** Hydraulic transitions, shear instability and mixing *(Invited): W R Geyer, M E Scully

0815h **OS51F-02** ANALYSIS OF SHEAR INSTABILITY IN THE FRASER RIVER ESTUARY: E W Tedford, J Carpenter, R A Pawlowicz, R Pieters, G A Lawrence

0830h **OS51F-03** WITHDRAWN

0845h **OS51F-04** Bathymetric Controls on Local Stratification through Lateral Exchange and Straining: E J MacVean, M T Stacey

0900h **OS51F-05** Flow structure and mixing at the confluence of unequal density rivers *(Invited): J Best, D R Parsons, M Amsler, R Kostaschuk, S N Lane, O Orfeo, R Szupiani, R J Hardy

0915h **OS51F-06** Surface Flow and Turbulence in an Estuarine River Channel *(Invited): C Chickadel, S A Talke, A R Horner-Devine, A T Jessup

0930h **OS51F-07** Coherent structures and near-surface turbulence in a tidal river: S A Talke, A R Horner-Devine, C Chickadel, A T Jessup

0945h **OS51F-08** High-resolution numerical simulation of surface salinity variability over an abrupt sill in a salt-wedge estuary *(Invited): O B Fringer, B Wang

**Planetary Sciences**

**PS1A Moscone South: Poster Hall**

**Friday 0800h**

**Mars and Mercury Geophysics II Posters**

0800h **PS1A-1409** POSTER Helles: A double-impact basin; J Arkani-Hamed

0800h **PS1A-1410** POSTER Testing a two-stage tectonic model for the formation of closed basins in the northern Valles Marineris, Mars: R A Lovdahl, A Yin

0800h **PS1A-1411** POSTER Experimental Constraints on the Composition and Depth of an Early Magma Ocean on Mars: K Hutchins, C B Agee, D S Draper

0800h **PS1A-1412** POSTER Measuring Neutrons and Gamma Rays on Mars - The Mars Science Laboratory Radiation Assessment Detector MSL/RAD: R F Wimmer-Schweingruber, C Martin, O Kortmann, E Boehm, A Kharytonov, B Ehrensmann, D M Hassler, C Zeitlin, Title of Team: and the RAD Team

0800h **PS1A-1413** POSTER Global Conductivity Distributions in the Martian Ionosphere: M Beharrell, J A Wild, M Lester, H J Oppenoothr

0800h **PS1A-1414** POSTER Self-consistent Model of Martian Dichotomy Formation and Tharsis Evolution? S Sramek, S Zhong

0800h **PS1A-1415** POSTER Spatial Analyses of Impact Craters Around Hellas Planitia, Mars: Implications for Fluvial and Lacustrine Environments: C B Condit, L F Bleamaster, D A Crown, S C Mest

0800h **PS1A-1416** POSTER Refining the Geologic History of Deuterolunis Mensae, Mars Using CTX-based Crater Size-Frequency Distributions: D C Berman, D A Crown, E C Joseph, F Chuang

0800h **PS1A-1417** POSTER Bouger anomalies over medium-size Martian impact basins: D Wenkeri, D C Nune

0800h **PS1A-1418** POSTER Solar Wind – Magnetosphere Coupling via Kelvin-Helmholtz Instability at Mercury: S Lai, Y Wang, W Ip

**PS1B Moscone South: Poster Hall**

**Friday 0800h**

**Mars Surface, Mineralogy, and Polar Processes Posters**

*Presiding:* I H Leubner, Rochester Institute for Fundamental Research; T C Orloff, University of California Santa Cruz

0800h **PS1B-1419** POSTER Quantification of Rock Clustering on Martian Patterned Ground Terrains: T C Orloff, M A Kreslavsky, E I Ashbaugh

0800h **PS1B-1420** WITHDRAWN

0800h **PS1B-1421** POSTER Contrasting Flow Events in Chryse and Acidalia Planitia, Mars, as Determined Through Landform Mapping and Spatial Analyses: J A Skinner, R L Ferguson

0800h **PS1B-1422** POSTER A Structural Origin for the Warrego Rise, Thaumasia Highlands, Mars, and Implications for the Origin of Warrego Valles: S M Som, D R Montgomery

0800h **PS1B-1423** POSTER Martian Pyroxenes in the Shergottite Meteorites; Zagami, SAU005, DAG476 and EETA79001: N Stephen, G K Benedix, P Bland, V E Hamilton

0800h **PS1B-1424** POSTER The Location and most Viable Magnetic Mineral of the Magnetic Layer of Mars Crust: D Boutin, J Arkani-Hamed

0800h **PS1B-1425** POSTER The Gas Chromatograph-Mass Spectrometer of the Sample Analysis at Mars experiment onboard the MSL 2011 rover for the search of organic molecules on Mars: C Szoopa, P J Coll, M Cabane, D Coscia, F Stalport, A Buch, A Noblet, P R Mahaffy, D Glavin, C Freissinet, C Philippon, Title of Team: The SAM GC team

0800h **PS1B-1426** POSTER Hypsometry of lobate debris aprons on the eastern rim of Hellas Basin, Mars: Implications for climate variations: A M Rutledge, P R Christensen

0800h **PS1B-1427** POSTER Investigating the Cause of Moving Albedo Boundaries in the Oxia Palus Region of Mars: P Mukherjee, P E Geissler

0800h **PS1B-1428** POSTER Recent Surface Changes on Mars: P E Geissler, P Mukherjee

0800h **PS1B-1429** POSTER Geologic Mapping of Mawrth Vallis and Nili Fossae, Mars: L F Bleamaster, F Chuang

0800h **PS1B-1430** POSTER Discrete Element Modeling of Landslides in Valles Marineris, Mars: K J Smart, D M Hooper, D W Sims

0800h **PS1B-1431** POSTER Comparison of CRISM Analysis Techniques to Understand ILD Formation on Mars: K S Hill, J Bridges, K Smith, D G Tragheim, R M Ambrosi, S J Davies

0800h **PS1B-1432** POSTER The Properties of Hrad Vallis are Consistent with Volcanic Origins: J Hopper, D W Leverington

0800h **PS1B-1433** POSTER Post-formation Modification of Sinuous Ridges in the Aeolis-Zephyria Planum Region, Mars: A Lefort, D M Burr, R A Beyer, A D Howard

0800h **PS1B-1434** POSTER Inconsistencies in Estimates of Near-Surface Water Abundance are Resolved by the Volcanic Origin of Martian Outflow Channels: D W Leverington

0800h **PS1B-1435** POSTER Retrieval and Interpretation of 0.4 to 4.0 μm Lambert Albedos over Aram Chaos from Mars Express OMEGA Data: Y Liu, R E Arvidson, M J Wolff, M T Mellon

0800h **PS1B-1436** POSTER Martian Surface Composition From Multiple Datasets, Part I: Statistical Analysis of Global Mineral Distributions From MGS-TES: D Rogers, V E Hamilton

0800h **PS1B-1437** POSTER Martian Surface Composition From Multiple Datasets, Part II: Chemical Analysis of Global Mineral Distributions from MGS-TES: V E Hamilton, D Rogers

All information is current as of November 12, 2010
Presiding: H Nekvasil, Stony Brook University; F M McCubbin, Institute of Meteoritics

0800h P51C-1444 POSTER Modeling Topography Effects on Lunar Surface Heat Flow and Subsurface Temperature: H Li, H Jing, Y Shi

0800h P51C-1445 POSTER Interpreting LRO Diviner surface temperatures: Modeling three-dimensional lunar regolith thermophysical properties: J Williams, D A Paige, A R Vasavada

0800h P51C-1446 POSTER Preliminary Mapping of Permanently Shadowed and Sunlit Regions Using the Lunar Reconnaissance Orbiter Camera (LROC): E Speyerer, S Koeber, M S Robinson

0800h P51C-1447 POSTER Lighting Conditions for the Moon’s Poles: Integrating Clementine, Kaguya, and Lunar Reconnaissance Orbiter Data Sets: D P Quinn, J Cahill, B Bussey, A McGovern, P Spudis, H Noda, Y Ishihara

0800h P51C-1448 POSTER The Transition from Complex Crater to Peak-Ring Basin on the Moon: New Observations from LOLA Global Topography and Constraints on Basin Formation Models: D M Baker, J W Head, C Fassett, S Kadhish

0800h P51C-1449 POSTER The Colorado Center for Lunar Dust and Atmospheric Studies: A Collette, E Grun, M Horanyi, T Munsat, A R Poppe, S H Robertson, R Srama, A J Shu, Z Sternovsky, X Wang, Title of Team: The CCLDAS Team

0800h P51C-1450 POSTER Radiative transfer modeling for quantifying lunar mineral abundance: S Li, L Li

0800h P51C-1451 POSTER Measurement of the disk-integrated polarization of the Moon in the ultraviolet: G M Holsclaw, M A Snow, A R Hendrix, W E McClintock

0800h P51C-1452 POSTER Comparison of Secondary Emission from Lunar Dust Simulants JSC, MLS, and LHT: J Pavlu, J Vaverka, M Beranek, I Richterova, Z Nemecek, J Safarkova

0800h P51C-1453 POSTER Dust transport and electric field distributions in planetary craters: X Wang, M Horanyi, S H Robertson, A R Poppe, A Lithkanski

0800h P51C-1454 POSTER 3D Particle-In-Cell (PIC) simulations of plasma sheath formation above lunar craters: A Lithkanski, A R Poppe, M Piquette, K Amyx, P Messmer, M Horanyi

0800h P51C-1455 POSTER AN ION ANALYZER FOR THE LUNAR SURFACE WITH E PARALLEL TO B: S H Robertson, A Collette, M Horanyi, T Munsat, Z Sterntovsky

0800h P51C-1456 POSTER Metallic species, oxygen and silicon in the lunar exosphere: constraints from Mercury and prospects for LADEE measurements: M Sarantos, R M Killen, D A Glenar, M Benna, T J Stubbs

0800h P51C-1457 POSTER Did Clementine Observe Lunar Horizon Glow?: D A Glenar, T J Stubbs, J Hahn, R R Vondrak

0800h P51C-1458 POSTER Does the Surface of the Moon Really Charge to Extreme Positive Potentials in the Magnetotail Lobes? A Re-analysis of Apollo/CPLEE observations: T J Stubbs, W M Farrell, M R Collier, R R Vondrak

0800h P51C-1459 POSTER Vertical Extent of the Circumlunar Plasma Estimated by Natural Plasma Wave Observations: Y Goto, Y Kasahara, T Fujimoto, A Kumamoto, T Ono

0800h P51C-1460 POSTER Experimental Investigations of the Lunar Photoelectron Sheath: A Dove, Z Sterntovsky, X Wang, S H Robertson, C LaPanse, M Horanyi, A Collette

0800h P51C-1461 POSTER Observation of the lunar ionosphere near the terminator by the dual-spacecraft radio occultation technique in SELENE: H Ando, T Imamura, T Iwata, Z Yamoto, N Morishita, M Ito, K Matsumoto, Y Liu, H Noda, H Hanada, Y Futaka, H Oya, N Kobayashi, T Sugihara, H Haruyama, C Honda

0800h P51C-1463 POSTER Tides, Seismicity and Regularities in Orbital Motion of the Earth-Moon Binary Planet System: L A Maslof, Y Avyusk

0800h P51C-1464 POSTER Why do We See the Man in the Moon?: O Aharonson, P Goldreich, R Sari

0800h P51C-1465 POSTER Precision Orbit Determination for the Lunar Reconnaissance Orbiter: orbit quality and gravity field estimation: E Mazarcio, D D Rowlands, G A Neumann, F G Lemoine, M H Torrence, D E Smith, M T Zuber, D Mao

0800h P51C-1466 WITHDRAWN

0800h P51C-1467 POSTER A Lunar Laser Retroreflector for the FOR the 21ST Century (LLRRA-21): Selenodyssey, Science and Status: D G Currie, G Delle Monache, S Dell’Agnello

Presiding: D A Senske, Jet Propulsion Laboratory, N Krupp, MPI for Sonnensystemforschung

0800h P51D-1468 POSTER New Results in Jovian Mode Observations: W Burr, D J Thomson

0800h P51D-1469 POSTER Average Hapke parameters of the surface traversed by the Opportunity rover at Meridiani Planum, Mars: A Shaw, R E Arvidson, M J Wolff, F P Sellsol, S M Wiseman, S Cull

0800h P51D-1470 POSTER Surface units of the Mars Exploration Rover landing sites analyzed with hyperspectral images: J Combe, W H Farrand, T B McCord

0800h P51D-1471 POSTER Climatic variation on Mars as seen from the polar region layered deposits: K Akisato, S Okano

0800h P51D-1472 POSTER Analysis of the Volatile Components of Cabeus: D M Hurley, Title of Team: The LAMP Team
0800h  
**P51D-1473** POSTER First results from ARTEMIS lunar wake crossing: observations and hybrid simulation: F Plaschke, S Wiehle, V Angelopoulos, H Auster, E Georgescu, K Glassmeier, U M Motschmann, D G Sibeck

0800h  
**P51D-1474** POSTER Dynamic Hybrid Simulation of the Lunar Wake During ARTEMIS Crossing: S Wiehle, F Plaschke, V Angelopoulos, H Auster, K Glassmeier, H Kriegel, U M Motschmann, J Mueller

0800h  
**P51D-1475** POSTER Lunar Ranging Experiment on Lunar Reconnaissance Orbiter: Clocks and Ranges: D Mao, D D Rowlands, J Megarry, M T Zuber, D E Smith, M H Torrence, G A Neumann, E Mazarico, X Sun, T W Zagwodzki, J F Cavanaugh, L Ramos-Izquierdo

0800h  
**P51D-1476** POSTER Photometric normalization of LROC WAC images: H Sato, B Denevi, M S Robinson, B W Hopke, A S McEwen, Title of Team: LROC Science Team

0800h  
**P51D-1477** POSTER Identifying the erosion regime present during formation of lunar sinuous rilles: D M Hurwitz, J W Head, H Hiesinger, L Wilson

0800h  
**P51D-1478** POSTER Lunar Topography Modeling Using Lunar Altimetry Data: G Wu, C Shum, H Fok, Y Yi, H Araki, S J Goossens, X Hu, H B Iz, K Matsumoto, G Neumann, J Ping, S Sasaki, J Wang

0800h  
**P51D-1479** POSTER Tracking of Mars Express and Venus Express spacecraft with VLBI radio telescopes: G Molera Calvés, S V Pogrebenco, J Wagner, G Cimó, L Gurvits, D Duev

---

**P51E Moscone South: 306**  
**Friday 0800h**

**The Atmosphere of Mars: New Findings From Modeling and Observations I (joint with A)**

**Presiding:** Y Moudden, Colorado University; E L Barth, Southwest Research Institute

0800h  
**P51E-01** Modeling the Seasonal Water Cycle on Mars: Implications for Sources and Sinks (Invited): R M Haberle, Title of Team: The NASA/Ames Mars General Circulation Modeling Group

0820h  
**P51E-02** The Key Influence of Mesoscale Gravity Waves in the Formation of Mesospheric CO2 Clouds on Mars: A Spiga, F Gonzalez-Galindo, F Forget, M A Lopez-Valverde, A Määttänen

0830h  
**P51E-03** Positive Radiative-Dynamic Feedback in Martian Dust Storms: S C Rafkin, A Rothchild, R A Plaschke, J F Manfrini

0840h  
**P51E-04** Electric Fields within Martian Dust Storms: E L Barth, S C Rafkin, W M Farrell

0850h  
**P51E-05** Seasonal variations of planetary waves simulated by MarsWRF: H Wang, A D Toigo, M I Richardson

0900h  
**P51E-06** Local Dynamics of Baroclinic Waves in the Martian Atmosphere: M J Kavulich, I Sznuyg, G Giarmani, R Wilson

0910h  
**P51E-07** Insights from Assimilation of Mars Climate Sounder retrievals into a Mars Global Circulation Model: S J Greybush, R Wilson, E Kallen, K Ide, T Miyoshi, R N Hoffman, J Eluszkiewicz, D Kass, A Kleinboehl

0920h  
**P51E-08** Data assimilation applied to Mars Climate Sounder observations: Y Moudden, J M Forbes

0930h  
**P51E-09** Forced and Traveling Waves in MRO MCS Atmospheric Temperature Retrievals: D J Banfield, R Wilson, D Kass, J T Schofield, A Kleinboehl

0940h  
**P51E-10** Water Ice Cloud Observations from Mars Climate Sounder: J Benson, N G Heavens, D Kass, Title of Team: MCS Science Team

0950h  
**P51E-11** Discoveries on the vertical distribution of water vapor in Mars' atmosphere as observed by the SPICAM-IR spectrometer: L Malraghiati, A Fedorov, F Montmessin, J Bertaux, O Koralev, A Reberac

---

**P51F Moscone South: 302**  
**Friday 0900h**

**Characterizing Soils and Their Development on Mars, the Moon, and Other Extraterrestrial Bodies I (joint with EP)**

**Presiding:** M A Velbel, Michigan State University; M B Madsen, University of Copenhagen; M H Hecht, Jet Propulsion Laboratory; W Goetz, MPI for Solar System Research

0900h  
**P51F-01** Nature and Composition of Planetary Surficial Deposits and Their Relationship to Planetary Crusts: S M McLennan

0915h  
**P51F-02** Characterizing Martian Soils: Correlating Orbital Observations with Chemistry and Mineralogy from Landed Missions: J L Bishop

0930h  
**P51F-03** Allophane on Mars: Evidence from IR spectroscopy and TES spectral models: E B Rampe, M D Kraft, T G Sharp, D C Golden, D W Ming, P R Christensen

0945h  
**P51F-04** Regional Lunar Surface Temperatures, Albedos, and Thermophysical Properties from LRO Diviner: A R Vasavada, D A Paige, J L Bandfield, B T Greenhagen, M A Siegler, J Williams, Title of Team: The LRO Diviner Team

---

**Paleoceanography and Paleoclimatology**

**PP51A Moscone South: Poster Hall**  
**Friday 0800h**

**Paleoclimate Insights From Vegetation Proxies and Models II Posters (joint with GC, B)**

**Presiding:** I S Castañeda, Royal Netherlands Institute for Sea Research; A Henderson, Pennsylvania State University; M A Berke, University of Minnesota

0800h  
**PP51A-1576** POSTER A new deposit with mumified plant material on Ellesmere Island, Canada: J D Barker, Y Chin, D H Elliot

0800h  
**PP51A-1577** POSTER Strontium isotopes in peat deposits of the Sacramento–San Joaquin Delta: Records of variable sediment sources and salinity over the past ~6,700 years: C N Alpers, J Z Drexler, J B Paces, L A Neymark, H E Taylor, L Windham-Myers, C C Fuller

0800h  

0800h  
**PP51A-1579** POSTER Calibration of δ¹³C of Sphagnum N-alkanes to Long Term Methane and CO₂ Flux Data in Three Microhabitats Within a Cool Temperate Ombrotrophic Bog: P D Isles, J E Nichols, D M Pettee, B Tabanpour

0800h  
**PP51A-1580** POSTER Temporal trends of deglacial and Holocene peatland initiation: a new look at old δ¹³C dates: A Reyes, C Cooke

0800h  
**PP51A-1581** POSTER Radiocarbon dating for paleoenvironmental peat archive: the case study using cellulose from peat core reached to 15ka in northern Japan: T Shinozaki, M Uchida, M Kondo, K Minoura, Y Shibata

0800h  
**PP51A-1582** POSTER Holocene Climate Variability in the Central North Pacific: An Organic Geochemical Record from Ka‘au Crater Swamp, O‘ahu, Hawai‘i: J H Street, D Beilmann, A Timmermann, E Gaidos, A Paytan

---

All information is current as of November 12, 2010
0800h  **SA51B-1641** POSTER Mapping the Ionosphere with Multiple Low-Cost Sensors: R I Balthazar, M G McHarg, L Enloe, A Clark, D Waite

**SA51C** Moscone South: Poster Hall  Friday  0800h

**Presiding:** J H Clemmons, The Aerospace Corporation; R F Pfaff, NASA/GSFC; G Crowley, ASTR; R A Heelis, University of Texas at Dallas

0800h  **SA51C-1642** POSTER Advancements in Understanding Auroral Ionosphere-Thermosphere Coupling from Infrared Remote Sensing: C J Mertens, X Xu, S Wellard, J Fernandez, M G Mlynyczak

0800h  **SA51C-1643** POSTER Uncertainty Associated with Modeling the Global Ionosphere: J V Jenniges, A O Acelab, R W Schunk, L C Gardner, L Scherliess, D C Thompson, L Zhu

0800h  **SA51C-1644** POSTER POLAR CAP PATCHES AS TRACERS OF THERMOSPHERIC O2 SCALE HEIGHT: R A Doc, E A Kendall

0800h  **SA51C-1645** POSTER Ion – Neutral Interactions in the Polar E-region: X Liu, J P Thayer, C J Heiselman

0800h  **SA51C-1646** POSTER Plasma-neutral coupling as revealed through analyses of CHAMP data: T Matsuo, G S Bust, T J Fuller-Rowell, N Maruyama

0800h  **SA51C-1647** POSTER Heating of the Lower Thermosphere during Auroral Activity: Measurements and Analysis from the Joule Sounding Rocket Missions: J H Clemmons, J H Hecht, R L Walterscheid, R L Bishop, P L Slocum, R F Pfaff, D E Rowland, M F Larsen

**SA51D** Moscone South: Poster Hall  Friday  0800h

**Unique Equatorial Ionospheric Electrodynamics in the African Sector II Posters (joint with SM)**

**Presiding:** E Yizengaw, Institute of Scientific Research; K M Groves, Air Force Research Laboratory; T W Garner, ARL-UT

0800h  **SA51D-1648** POSTER Observations of Ionospheric Features over the Anatolian Plateau: T W Garner, C M Slack, A Scholze, K Mehta, A Mahrous

0800h  **SA51D-1649** POSTER Digisonde Observation of April and August 2010 Magnetic Storm Effects over Iilorin, Nigeria: J Adeniyan, B W Reinsich, L H Krause, O A Oladipo, I A Adimula, A O Olawepo, M G McHarg, O Veliz

0800h  **SA51D-1650** POSTER Current Status of MAGDAS Deployment in Africa: G Maeda, K Yumoto, Y Kakinami, T Tokunaga, A Fujimoto, A Ikeda, Y Yamazaki, S Abe, M Sakai, N Eto, M Shinozaki, Title of Team: MAGDAS Project Team

0800h  **SA51D-1651** POSTER On the Responses of Geomagnetic Field at African and Asian Longitudes during the Storm of April 2010: E Falai, A Rabiu, K Yumoto, T Uozumi, M Magdas

0800h  **SA51D-1652** POSTER Spatial and Temporal Variations of Solar Quiet Daily Sg Variation and Equatorial Electrojet Over Africa: Results From International Heliophysical Year: A Rabiu, K Yumoto, O Bello

0800h  **SA51D-1653** POSTER Zonal plasma drift shear and low gravity effects on the S-m irregularities in the equatorial F region over Sào Luís, Brazil: E R de Paula, A Kherani, R Y Curve, L P de Camargo

0800h  **SA51D-1654** POSTER Day-to-day longitudinal variation of bubble occurrence over South America: R de la cruz curvea, C E Valladares, I S Barista, E R de Paula

0800h  **SA51D-1655** POSTER Electron Density and S4 Index observed by FORMOSAT-3/COSMIC: S Chen, J G Liu

0800h  **SA51D-1656** POSTER The Role of Ionosondes in Global Ionospheric Modeling: L F McNamara

0800h  **SA51D-1657** POSTER Observation and Modeling of Nighttime Ion Temperature in the Low-latitude Topside Ionosphere: C Chao, S Su

**SA51E** Moscone South: 301  Friday  0800h

**Remote Sensing of Ionospheric Disturbances II (joint with NH, OS, G)**

**Presiding:** J L Garrison, Purdue University; A Komjathy, Jet Propulsion Laboratory; G Occhipinti, Institut de Physique du Globe de Paris

0800h  **SA51E-01** GPS Remote sensing of seismic waves in the Ionosphere: interpretation and modeling with realistic seismic sources and Solid Earth/atmospheric/ionospheric models. (Invited): P Lognonne, L M ROLLAND, E Astafyeva, A Kherani, G Occhipinti, P Coisson

0815h  **SA51E-02** Tsunamigenic Gravity Waves in the Thermosphere-Ionosphere System: Challenges and Opportunities (Invited): M P Hickey

0830h  **SA51E-03** Monitoring tsunami propagation using OTH radar: P Coisson, G Occhipinti, P Lognonne, L M ROLLAND

0845h  **SA51E-04** Detection and modeling of the acoustic perturbation produced by the launch of the Space Shuttle using the Global Positioning System: T J Bowling, E Calais, T Dautermann

0900h  **SA51E-05** Observing the Ionospheric Signature of Ocean Tsunamis Using GPS Total Electron Content: D A Galvan, A Komjathy, M P Hickey, A J Mannucci

0915h  **SA51E-06** VHF Observations of Small-scale Ionosphere TEC Fluctuations with an Astronomical Interferometer: J Helmboldt, J Lazio, H Interna, K Dymond

0930h  **SA51E-07** Enhanced Specification of the Equatorial Ionospheric Scintillation Environment with Satellite Radio Beacons: R G Caton, K M Groves, M Verlinden

0945h  **SA51E-08** The sub-Brunt-Väisälä period oscillations in the ionospheric total electron content and the red 630.0 nm line intensity under the influence of short-period AGW: G G Didebulidze, A Taori, N Dashora, L N Lomidze, N B Gudadze

**SPA-Solar and Heliospheric Physics**

**SH51A** Moscone South: Poster Hall  Friday  0800h

**Coronal Prominence Cavities I Posters**

**Presiding:** T A Kucera, NASA/GSFC

0800h  **SH51A-1658** POSTER Stereoscopic Analysis of 31 August 2007 Erupting Prominence: P C Liewer, J R Hall, E M De Jong, S F Martin, O Panasenko

0800h  **SH51A-1659** POSTER Coronal Mass Ejections from Empty Filament Channels: A A Pevtsov, O Panasenko

0800h  **SH51A-1660** POSTER Critical Height for the Unstabilization of Prominences: K Liu, Y Wang, C Shen

0800h  **SH51A-1661** POSTER Simulations of Overexpanding CME Cavities: B Kliem, T Forbes, A Vourlidas, S Patsourakos

0800h  **SH51A-1662** WITHDRAWN

0800h  **SH51A-1663** POSTER Magnetic Structure of Twin Filaments Inside Pseudostreamers: O Panasenko, M M Velli

0800h  **SH51A-1664** POSTER Greenhouse effect in quiescent prominences: M Ryutova, T E Berger, A M Title
0800h SH51A-1665 POSTER A rising cool column associated with formation of prominence and coronal cavity: T J Okamoto, S Tsuneta, T E Berger


0800h SH51A-1669 POSTER Morphology of a hot coronal cavity core as observed by Hinode/XRT: K K Reeves, S E Gibson, T A Kucera, H S Hudson

**POSTER**

**SH51B Moscone South: Poster Hall Friday 0800h**

**Cosmic Rays During the Recent Unusual Solar Minimum I Posters**

**Presiding:** J R Jokipii, University of Arizona

0800h SH51B-1670 POSTER Heliospheric Modulation of Galactic Cosmic Rays Observed at the LI Lagrange Point in Solar Cycle 23: A Fludra

0800h SH51B-1671 POSTER First Cosmic Ray Proton Albedo Map of the Moon: J K Wilson, H Spence, J Kasper, M Golightly, J Blake, J E Mazur, L Townsend, A Case, M D Looper

0800h SH51B-1672 POSTER Ground-Level Neutron Rates during the Recent Solar Minimum: J W Bieber, S Oh, P A Evenson, J M Clem, Y Yi

0800h SH51B-1673 POSTER Latitudinal and Radial Gradients of Galactic Cosmic Ray Protons and Electrons in the Inner Heliosphere - Pamela and Ulysses Observations: J Gieseler, B Heber, M Boezio, M Casolino, N De Simone, V Di Felice, P Piccozza

0800h SH51B-1674 POSTER Voyager Studies of Cosmic Ray Transport in the Heliosheath: F B McDonald, W R Webber, A C Cummings, E C Stone, B Heikila, N Lal

0800h SH51B-1675 POSTER Particle Flux Variations at Solar Minimum: Comparisons of ACE/CRIS Data with Model Calculations: G M Erickson, P B Saganti, B Cudnik, A Scott-Turner

0800h SH51B-1676 POSTER The Highest Cosmic Ray Fluxes Ever Recorded: What Happened to the Earth’s Deflector Shield?: J Burkepile, S W McIntosh, J B Gurman, R J Leamon

0800h SH51B-1677 POSTER Galactic Cosmic Rays in the Outer Heliosphere: V A Florinski, H Washimi, N V Pogorelov, J H Adams, G P Zank

0800h SH51B-1678 POSTER Stochastic Simulation of Galactic Cosmic Ray Modulation with 3D Wavy Heliospheric Current Sheet Drifts at Solar Minimum: C Pei, J W Bieber, R A Burger, J M Clem

0800h SH51B-1679 POSTER Modeling of Galactic Cosmic Rays during the Last Solar Cycle: Modeling with Continuously Changing Heliospheric Current Sheet: J Kota

0800h SH51B-1680 POSTER Modulation of Galactic cosmic rays during the unusual solar minimum of cycle 24: Z Lingling, G Qin, M Zhang

0800h SH51B-1681 POSTER A Theory Exploring the Effect of Intermittent Slab Turbulence on Cosmic-ray Transport in Turbulence dominated by the 2D Component: J A le Roux, G M Webb

0800h SH51B-1682 POSTER Calculation of Drift and Diffusion Coefficients for Cosmic Rays inside the Heliospheric Termination Shock: R A Burger, E Engelbrecht, D J Visser

0800h SH51B-1683 POSTER Charged particles time-dependent transverse transport: F Fraschetti, J R Jokipii

**SH51C Moscone South: Poster Hall Friday 0800h**

**Geoeffective Transients From the Sun to the Earth II Posters (joint with SM)**

**Presiding:** C Moestl, Space Research Institute; I G Richardson, NASA Goddard Space Flight Cent

0800h SH51C-1684 POSTER Relationship between orientations of halo CMEs and the underlying filament / active regions: A Kilic, V Yurchyshyn, V Abramenko, P R Goode

0800h SH51C-1685 POSTER Partial Torus Instability in Initiating Coronal Mass Ejections: O A Olmedo, J Zhang

0800h SH51C-1686 POSTER Relation between CME Speed and Magnetic Helicity in Solar Source Regions: H Jung, N Gopalswamy, S Akiyama, S Yashiro, H Xie

0800h SH51C-1687 POSTER Structure and Dynamics of the Erupting Magnetic Flux in the May 12 1997 CME Event: V S Titov, Z Mikic, J A Linker, R Lionello

0800h SH51C-1688 POSTER Streamer belt control of near-ecliptic ICME rate during the solar cycle 23 minimum: E Kilpua, J G Luhmann, C O Lee, Y Li

0800h SH51C-1689 POSTER Multiple, Distant (40 deg) in situ Observations of a Magnetic Cloud and a Corotating Interaction Region Complex: C J Farrugia, D B Berdichevsky, C Moestl, A B Galvin, M Leitner, M Popelck, K D Simunac, A Opitz, B Lavraud, K Ogilvie, A Veronig, M Temmer, J G Luhmann, J Sauvaud

0800h SH51C-1690 POSTER Modeling of Coronal Mass Ejections That Caused Particularly Large Geomagnetic Storms Using ENLIL Heliosphere Cone Model: A Taktakishvili, A Pulkkinen, P J MacNeice, M M Kuznetsova, M Hesse, D Odstrcil

0800h SH51C-1691 POSTER Fast Method to Determine CMEs properties at 1 AU and Propositions for an Automated Detection of CME Fronts: J Hernandez Charpak, N Lugaz, C Perez Romanello, M Hernandez Hoyos, I I Roussev

0800h SH51C-1692 POSTER The properties of geo-effective CMEs and SIRs in STEREO and THEMIS: M L Mays, O C St Cyr, D G Sibeck

0800h SH51C-1693 POSTER Magnetic clouds observed by STEREO: E Romashets, M Vandas, T Howard

0800h SH51C-1694 POSTER The deflection of 2008 December 12 CME: C Shen, Y Wang, J Liu, P Ye, S Wang

0800h SH51C-1695 POSTER Importance of Heliospheric Evolution to Understand CME Geo-effectiveness: N Lugaz, I I Roussev, A Vourlidas, T I Gombosi

0800h SH51C-1696 POSTER Nature of the Magnetic Fields in Magnetic Clouds: Twist or Wirthe?: N A Al-haddad, I I Roussev, C Jacobs, C Moestl, N Lugaz


0800h SH51C-1698 POSTER On the Origin of Coronal Mass Ejections: How Does the Emergence of a Magnetic Flux Rope Reorganize the Solar Corona?: I I Roussev, K Galsgaard, N Lugaz, I Sokolov

0800h SH51C-1699 POSTER Dynamics of CMEs and Evolution of CME Magnetic Field From the Sun to 1 AU: J Chen, V Kunkel, R A Howard
Nonlinear Structures and Processes in the Solar Wind Plasma I Posters

**Presiding:** C W Smith, University of New Hampshire


0800h **HS1D-1701 POSTER** Size and Amplitude Distributions of Langmuir-Eigenmodes in the Solar Wind: D. Malaspina, S. Hess, R. E. Ergun

0800h **HS1D-1702 POSTER** Multio-point study of waves and nonlinear structures in the solar wind: O. A. Amariutei, A. P. Dimmock, M. A. Balikhin, T. Zhang, S. N. Walker

0800h **HS1D-1703 POSTER** Computational and Theoretical study of the acceleration and heating of ions in the Solar Wind: P. S. Moya, A. F. Vinas, V. Muñoz, J. A. Valdivia

0800h **HS1D-1704 POSTER** Dispersive Filamentation for Magnetosonic Structures as a Source of Trains of Solitons: M. Strumik, K. Stasiwicz

0800h **HS1D-1705 POSTER** Realistic Particle-in-Cell simulations of the two-component solar wind: L. Bettarini, S. Markidis, L. Abbo, G. Lapenta

0800h **HS1D-1706 POSTER** High Time Resolution Observations of Langmuir Waves Associated with Type III Radio Bursts and Implications for Beam Stabilization and Emission Mechanisms: T. Golla, R. J. MacDowall


0800h **HS1D-1708 POSTER** Dynamics of Ion Sound Waves in the Front of the Terrestrial Bow Shock: I. Giagkiozis, S. N. Walker, M. Balikhin, V. Krasnoselskikh

0800h **HS1D-1709 POSTER** Quasi-isotropic electron distribution via nonlinear beam-plasma interaction: J. Pavan, A. F. Vinas, P. H. Yoon, L. F. Ziebell, R. Gaezler


0800h **HS1D-1711 POSTER** Linear modes in the solar wind plasma: M. S. Janaki, D. Shaikh, B. Dasgupta

0800h **HS1D-1712 POSTER** Low Beta Inhomogeneous Whistler Turbulence: M. K. Verma, D. Shaikh

0800h **HS1D-1713 POSTER** Space-time statistics of isotropic MHD turbulence: the role of the sweeping effect: P. Dmitruk, S. Servidio, V. Carbone, W. H. Matthaeus

0800h **HS1D-1714 POSTER** The Radial Variation of the Solar Wind Temperature-Speed Relationship: H. A. Elliott, D. J. McComas

0800h **HS1D-1715 POSTER** Scaling properties of the reduced magnetic helicity in the near Earth’ space: V. Carbone, E. Yordanova, S. Perri

0800h **HS1D-1716 POSTER** Hot Flow Anomaly Structure Analysis: A. Shestakov, O. L. Vaisberg

0800h **HS1D-1717 POSTER** Third moments and the role of anisotropy from velocity shear in the solar wind: C. W. Smith, J. E. Stawarz, B. J. Vasquez, M. A. Forman

0800h **HS1D-1718 POSTER** Plasma-neutral coupling in the heliospheric plasma based on kappa distribution sources: S. Ghosh, D. Shaikh, B. Dasgupta

0800h **HS1D-1719 POSTER** Time-dependent evolution of nonlinear MHD disturbances in the solar wind: K. Kim, D. Lee, K. Kim, K. Kim

0800h **HS1D-1720 POSTER** Langmuir waves observed by S/WAVES in the solar wind: nonlinear effects of the inhomogeneous plasma: P. Guio, A. Zaslavsky

0800h **HS1D-1721 POSTER** Numerical simulation of the solar wind disturbances propagating to the distant heliosphere: E. A. Provornikova, M. Opfer, V. Izmodenov, G. Toth

0800h **HS1D-1722 POSTER** Attempts to Simulate Anisotropies of Solar Wind Fluctuations using MHD with a Turning Magnetic Field: S. Ghosh, D. Roberts

0800h **HS1D-1723 POSTER** An Accurate Solar Wind Electron Database From the 3DP Experiment Onboard the Wind Spacecraft: K. I. Horaites, C. S. Salem, M. Pulupa, S. Bale

0800h **HS1D-1724 POSTER** Results of a 3-D full particle simulation of quasi-perpendicular shock: I. Shinobara, M. Fujimoto


0800h **HS1D-1726 POSTER** Nonlinear Landau Damping and Formation of Magnetic Depressions: An IST Perspective: R. Hamilton, R. Meis, D. Sifuentes

**SH51E Moscone South: Poster Hall Friday 0800h**

**Presiding:** A. Posner, NASA Headquarters


0800h **HS1E-1728 POSTER** Galactic Cosmic Ray Variations at the Moon, as Measured by the CRAter Instrument: A. W. Case, H. E. Spence, J. C. Kasper, M. Golightly, J. B. Blake, J. Mazur, L. Townsend

0800h **HS1E-1729 POSTER** GCR Dose Rate Observed in Lunar Orbit During the Transition from Solar Cycle 23 to Cycle 24: M. J. Golightly, N. A. Schwadron, H. E. Spence, J. K. Wilson, A. Case, L. Townsend, J. C. Kasper, J. Blake, M. D. Looper, J. Mazur

0800h **HS1E-1730 POSTER** Simulation of Earth-Moon-Mars Environments for the Assessment of Organ Doses: M. Y. Kim, N. A. Schwadron, L. Townsend, F. A. Cucinotta

0800h **HS1E-1731 POSTER** Potential Use of NMDB for the real-time Observation and Specification of the near-Earth Radiation Environment: C. T. Steigies, Title of Team: NMDB team

0800h **HS1E-1732 POSTER** Evolution of Piled Up Compressions in Modeled CME Sheaths and the Resulting Sheath Structures: I. Das, M. Opfer, R. M. Evans, T. I. Gombosi


0800h **HS1E-1734 POSTER** Spacecraft Solar Particle Event (SPE) Shielding: Shielding Effectiveness as a Function of SPE Model as Determined with the FLUKA Radiation Transport Code: S. L. Koontz, W. A. Atwell, B. Reddell, K. Rojdev
0800h  SM51A-1763 POSTER An Ensemble Forecast for Geosynchronous Radiation Belt Fluxes: S G Nelson, S L Young, A Ling, K L Perry, X Li

0800h  SM51A-1764 POSTER Long Term Radiation Belt Simulations with VERB-3D Code, Comparison with Multisatellite Observations Reanalysis: D Subbotin, Y Shprits, B Ni


0800h  SM51A-1766 POSTER New Operational Algorithms for Particle Data from Low-Altitude Polar-Orbiting Satellites: J L Machol, J C Green, J V Rodriguez, T G Ossanger, W F Denig


0800h  SM51A-1768 POSTER Real-Time Delivery of Global Environmental Observation Data From Space-Based Sensors using the Inmarsat BGAN System: C C Mccormick, C Lenz, T Yunch


0800h  SM51A-1770 POSTER A Physics-Based Data Assimilation Model for the High-Latitude Ionosphere: Importance of Data Assimilation Technique in Determining the Model Drivers: L Zhu, R W Schunk, L Scherliess, V Eccles

0800h  SM51A-1771 POSTER Assessing Diurnal Contributions of Data Sets Assimilated by Global Ionospheric Models: G J Bishop, J Welsh, L F McNamara

0800h  SM51A-1772 POSTER Forecasting Ionospheric Conditions with 4DVAR Assimilation Model: C Wang, V Akopian, X Pi, A J Mannucci, Title of Team: The USC/JPL GAIM Team

0800h  SM51A-1773 POSTER Possibility and Demonstrations of 27 Day Ionospheric Forecasting: J J Sojka, R W Schunk, M Nicholls, C J Heinselman

SM51B Moscone South: Poster Hall Friday 0800h

SPa-Magnetospheric Physics Posters

Presiding: L P Goncharenko, MIT; A J Ridley, University of Michigan

0800h  SM51B-1774 POSTER Development of an APD With Large Area and Thick Depletion Layer for Energetic Electron Measurements in Space: S Kasahara, T Takahisa, K Asamura, T Mitani

0800h  SM51B-1775 POSTER Recovery of evolution of Grad-Shafranov equilibria from single-spacecraft data: Benchmarking and application to a flux transfer event: B U Sonnerup, H Hasegawa, T Nakamura

0800h  SM51B-1776 POSTER Flow vortices inside the magnetopause associated with FTEs moving along the magnetopause: observations and an MHD simulation: H Zhang, M G Kivelson, K K Khurana, R J Walker, V Angelopoulos, Y Jia, J P McFadden, H Auster

0800h  SM51B-1777 POSTER A Statistical Study of the Spatial Scales of the Terrestrial Bow Shock: S N Walker, M Balikhin, V Krasnoselskiik, A P Dimmock, Y Hobar, M Gedalin

0800h  SM51B-1778 POSTER Development of a low energy electron spectrometer for SCOPE: Y Tominaga, Y Saito, S Yokota

0800h  SM51B-1779 POSTER Pressure Conversion in the Solar Wind-Magnetosphere Interaction: J Shue

0800h  SM51B-1780 POSTER A Comprehensive Study of Relationship Between Subsolar Standoff Distance of the Magnetopause and Cone Angle of Interplanetary Magnetic Field: C Huang, J Shue, W Hsieh, B Lee

0800h  SM51B-1781 POSTER A statistical study of atypical wave modes in the Earth's foreshock region: W Hsieh, J Shue, B Lee

0800h  SM51B-1782 POSTER A simple explanation for cross-field diffusion process by kinetic Alfvén waves: T Izutsu, M Fujimoto, H Hasegawa, T Nakamura

0800h  SM51B-1783 POSTER Statistical Study of Magnetosheath Temperatures: A Sjogren, K Nykyri

0800h  SM51B-1784 POSTER A Model to study Jupiter's Magnetosphere and the Ionosphere-Magnetosphere Coupling: E Chane, J Saur, S Poedts

0800h  SM51B-1785 POSTER A Statistical Study of the Magnitude of Cross Shock Electrostatic Potential: A P Dimmock, S N Walker, Y Hobar, M A Balikhin, M Gedalin

0800h  SM51B-1786 POSTER The 22-Year Solar Cycle Effect on Substorms: T Hsu, R L McPherron, X Chu, J Kissinger

0800h  SM51B-1787 POSTER Magnetosheath Coordinates: M Schulz, M W Chen

0800h  SM51B-1788 POSTER Ion Density Holes observed by Cluster satellite: Electromagnetic PIC Simulation: J Hong, E Lee, K W Min, G K Parks

0800h  SM51B-1789 POSTER Evidence of ion Foreshock in Full-particle 2-D Simulations of a Supercritical Curved Collisionless Shock: J Stenler, P Savoini, B Lembege

0800h  SM51B-1790 POSTER Collision of two supercritical quasi-perpendicular nonstationary collisionless shocks: full particle simulations: B Lembege, Y Ma, X Deng

0800h  SM51B-1791 POSTER IMPACT OF SHOCK FRONT NONSTATIONARITY ON THE ACCELERATION OF HEAVY IONS BY PERPENDICULAR COLLISIONLESS SHOCKS: Z Yang, B Lembege, Q Lu

0800h  SM51B-1792 POSTER Nonstationarity of quasi-perpendicular shocks: magnetic structure, ion properties and micro-turbulence: C X Mazelle, B Lembege, A Morgensthaler, K Meziane

0800h  SM51B-1793 POSTER Investigation of Magnetospheric Conditions During Periodic Substorm Events with a Nonlinear Dynamical Model: E A Spencer, W Horton, S Patra, M L Mays

0800h  SM51B-1794 POSTER Energetic Electrons Near Jupiter’s Current Sheet: M Kokorowski, H B Garrett, K K Khurana, H Leinweber, R W Evans

0800h  SM51B-1795 POSTER A Paradigm for Magnetospheric Visualization and Global Measurement: A D Pembroke, F Toffoletto

0800h  SM51B-1796 POSTER 2-D and 3-D Hall MHD Reconnection: X Ma, A Otto, K Nykyri

0800h  SM51B-1797 POSTER A Unifying Model of Substorms: Evolving Magnetic Field Line Shape in the Magnetotail: G J Sofko

0800h  SM51B-1798 POSTER Transfer Entropy And Conditional Redundancy As Measures Of Causality For Internal And External Substorm Triggers: J Johnson, S Wing, K Liou

0800h  SM51B-1799 POSTER Effects of plasma kinetic parameters on turbulent layer formation by the Kelvin-Helmholtz instability: Y Matsumoto, K Seki

0800h  SM51B-1800 POSTER Evolution of an MHD-scale Kelvin-Helmholtz vortex accompanied by magnetic reconnection: Two-dimensional particle simulations: T Nakamura, H Hasegawa, J Shinohara, M Fujimoto

0800h  SM51B-1801 POSTER Observations of extended magnetic reconnection X-lines at small field shear angles (or large guide field) in the solar wind: M L Cartwright, T Phan, V Angelopoulos, J P McFadden, D E Larson, K Glassmeier
0800h  SM51B-1802 POSTER Particle Simulations of the Guard Electrode Effects on the Photoelectron Distribution around an Electric Field Sensor: Y Miyake, H Usui, H Kojima

0800h  SM51B-1803 POSTER Ultraviolet stimulated electron source for use with low energy plasma instrument calibration: K Henderson

0800h  SM51B-1804 POSTER Two Comments in Deep Dielectric Charging: S T Lai


0800h  SM51B-1806 POSTER Diffuse Ion Scattering in front of the Earth’s Quasi-Parallel Bow Shock: What Can We Learn from Cluster Simultaneous Multipoint Observations?: A Kis, M Scholer, B Klecker, E A Lucek, H Reme, I Lemperger, V Wesztergom

0800h  SM51B-1807 POSTER The role of kinetic effects and parallel electric fields in collisionless reconnection: J Egedal, W S Daughton, A Le

0800h  SM51B-1808 POSTER Kelvin Helmholtz driven vortices on the dayside magnetopause- single spacecraft detection using Double star 1: M G Taylor, B Larvaud, H Hasegawa, M Dunlop, Y V Bogdanova, A L Borg, M Volwerk, J Berchem, D O Constantinescu, C P Escoubet, A N Fazakerley, H U Frey, E V Panov, C Shen, J Shi, D G Sibeck, Z Pu, J Wang, J A Wild

0800h  SM51B-1809 POSTER Electron diffusion region phase space distribution for collisionless antiparallel reconnection: A Le, J Egedal, J Ng, W S Daughton

0800h  SM51B-1810 POSTER Electron diffusion region scalings in antiparallel magnetic reconnection: A V Divin, G Lapenta, S Markidis, V Semenov, D Korovin

0800h  SM51B-1811 POSTER Modeling of “Stripe” Wave Phenomena Seen by the CHARM II and ACES Sounding Rockets: M P Dombrowski, J W Labelle

0800h  SM51B-1812 POSTER Potential reconnection sites at Jupiter’s magnetopause: M J Desroche, F Bagenal, P A Delamere

0800h  SM51B-1813 POSTER A Two Fluid Code to Study Cross Scale Coupling in Collisionless Magnetic Reconnection: N Jain, A S Sharma

0800h  SM51B-1814 POSTER Measurement of Magnetotail Structures Using Multiple Spacecrafts and Nonlinear Dynamics Modeling: D L Holland, M E Presley, R F Martin, H Matsuoka

0800h  SM51B-1815 POSTER Determining the dynamic range of MCPs based on pore size and strip current: C Hunt, M L Adrian, F Herrero, P James, H H Jones, M Rodriguez, P Roman, M Shappirio

0800h  SM51B-1816 POSTER BATS-RUS with Anisotropic Ion Pressure: X Meng, G Toth, T I Gombosi

0800h  SM51B-1817 POSTER STEREO/IMPACT Observations of Foreshock Electrons from 10 eV-100 keV: M Pulupa, S Bale, R P Lin, D E Larson

0800h  SM51B-1818 POSTER Retrieval of ion distributions in RC from TWINS ENA images by CT technique: S Ma, W Yan, L Xu, J Goldstein, D J McComas

SM51C Moscone South: Poster Hall  Friday 0800h

Turbulent Magnetic Reconnection in Space, Laboratory, and Astrophysical Systems III Posters (joint with SH)

Presiding: G Lapenta, KU Leuven; T Intrator, Los Alamos Natl Laboratory; A Lazarian, University of Wisconsin; J Sears, Los Alamos National Laboratory

0800h  SM51C-1819 POSTER Observational Characteristics of a secondary magnetic island in an ion diffusion region: Q Lu, R Wang, C Huang, S Wang

0800h  SM51C-1820 POSTER Kinetic modeling of asymmetric magnetic reconnection: S Zenitani, M Hesse, A J Klimas, M M Kuznetsova

0800h  SM51C-1821 POSTER Magnetic Correlation Functions in the Solar Wind in the Eulerian Reference Frame: J M Weygand, M G Kivelson, W H Matthaeus, S Dasso, C W Smith

0800h  SM51C-1822 POSTER Magnetic Reconnection in a Turbulent Space Plasma: Cluster Multi-Spacecraft Observations in the Magnetosheath: M Andre, G Stenber, A Vaivads, Y V Khotyaintsev, A Retinò, E A Lucek

0800h  SM51C-1823 POSTER Influences of sub-Alfvénic shear flow on nonlinear evolution of magnetic reconnection: Z Ma

0800h  SM51C-1824 POSTER A Comparison of Fluid and Kinetic Models for Steady Magnetic Reconnection: J U Brackbill

0800h  SM51C-1825 POSTER Low Frequency Waves in the Reconnection Layer: X Lu, Y Lin, X Wang

0800h  SM51C-1826 POSTER Competing X-lines During Magnetic Reconnection: A K Young, N A Murphy

0800h  SM51C-1827 POSTER Three-dimensional MHD instability of spontaneous fast magnetic reconnection in geomagnetotail: T Shimizu, T Ogino, K Kondoh

0800h  SM51C-1828 POSTER Dynamics of secondary islands in collisional magnetic reconnection: T Miyoshi, K Kusano

0800h  SM51C-1829 POSTER The Effect of Shear Flow on the Scaling of 2D Magnetic Reconnection: P Cassak

0800h  SM51C-1830 POSTER The kinetic structure of collisionless slow shocks and reconnection exhausts- the effects of strong temperature anisotropy: Y Liu, J F Drake, M M Swisdak

0800h  SM51C-1831 POSTER The VASIMR® VF-200-1 ISS Experiment as a Laboratory for Astrophysics: T Glover, J P Squire, B W Longmier, M D Carter, A V Ilin, L D Cassady, C W Smith, J F Drake, M M Swisdak

0800h  SM51C-1832 POSTER Comparison of Secondary Islands in Collisional Reconnection to Hall Reconnection: L S Shepherd, P Cassak

0800h  SM51C-1833 POSTER MULTISCALE ANISOTROPY AND INSTABILITIES IN A THIN ELECTRON CURRENT SHEET: SIMULATION RESULTS AND MEASUREMENT RECOMMENDATIONS: T M Kuznetsova, M El-Alaoui, M M Kuznetsova, T Ogino, K Kondoh

0800h  SM51C-1834 POSTER Global Magnetohydrodynamic Simulations of Turbulence in the Plasma Sheet: M El-Alaoui, R L Richard, M Ashour-Abdalla, J L Goldstein, J M Weygand, R J Walker
All information is current as of November 12, 2010

0800h SM51C-1836 POSTER High-Lundquist Number Resistive MHD Simulations of Turbulent Magnetic Reconnection with Secondary Island Formation and Enhanced Reconnection Rate: S Ragunathan, C Ng

0800h SM51C-1837 POSTER Study of Lower Hybrid Frequency Turbulence in the Magnetic Reconnection Experiment (MRX): S E Dorfman, H Ji, V Roytershteyn, M Yamada, W S Daughton, J Yoo, E Oz, T Tharp, E E Lawrence, C Myers

0800h SM51C-1838 POSTER Gyrokinetic Electron and Fully Kinetic Ion Particle Simulation of Instabilities in a Harris Current Sheet: X Wang, Y Lin, L Chen, W Kong, X Lv, W Zhang, Z Lin

0800h SM51C-1839 POSTER Multiple Spacecraft Study of the Effect of Turbulence on Reconnection Rates: D E Wendel, M L Goldstein, A F Vinas, F Sahraoui, M L Adrian

0800h SM51C-1840 POSTER On the accuracy of simulation of magnetohydrodynamic turbulence and magnetic reconnection: M Wan, S Oughton, S Servidio, W H Matthaeus

0800h SM51C-1841 POSTER Super-Alfvénic propagation of reconnection energy flux: Kinetic PIC simulations compared to Satellite Observations: M A Shay, J F Drake, J P Eastwood, T Phan, M Oka

0800h SM51C-1842 POSTER Cluster observations of solitary waves near the center of the current sheet in association with magnetic reconnection: A Hupach, C A Catell, J R Wygant, S J Schwartz, C Mouikis

0800h SM51C-1843 POSTER Study of turbulent spectra of the geomagnetic field using the data of the THEMIS satellite mission and ground magnetometers: V A Pinto, M V Stepanova, J A Valdivia, E E Antonova

0800h SM51C-1844 POSTER Measurements of Line-tied Kink Eigenfunction in the Rotating Wall Machine and Comparison to Simulation: M Brookhart, C Paz-Soldan, D Hannum, A Cl Invoice, C Sovinec, C Forest

0800h SM51C-1845 POSTER Instabilities in the Reconnection Region from Simulations with Physical Mass Ratios: D L Newman, G Lapenta, M V Goldman, H Che, S Markidis

0800h SM51C-1846 POSTER Coronal Loops Dynamics and Photospheric Forcing Patterns: A F Rappazzo, M M Velli

0800h SM51C-1847 POSTER Laboratory Investigations of Impulsive Dynamics Of Flux Ropes In 3D: T Intrator, J Sears, T Weber, A Lazarian, X Sun, G Lapenta

0800h SM51C-1848 POSTER An Electron Diffusion Region Resolved with Multiple Plasma Diagnostics by Polar: J D Scudder, S L Rodriguez, R Holdaway, V Roytershteyn, W S Daughton, H Karimabadi, C T Russell

0800h SM51C-1849 POSTER Bursty Electromagnetic Waves Associated with Turbulent Magnetic Reconnection: M L Adrian, D E Wendel

0800h SM51C-1850 POSTER 3D fully kinetic simulations of magnetic reconnection in asymmetric, anti-parallel configuration: V Roytershteyn, W S Daughton, H Karimabadi

0800h SM51C-1851 POSTER Investigation of average electron properties during reconnection events in the Earth’s magnetotail: A L Borg, M G Taylor, J P Eastwood

0800h SM51D Moscone South: 305 Friday 0800h Multipoint Perspective on the Auroral Acceleration Region and M-I Coupling II

Presiding: A Masson, European Space Agency; J S Pickett, The University of Iowa

0800h SM51D-01 2-D Convection and Electrodynamic Features of Substorms Revealed by Multiple Radar Observations (Invited): S Zou

0815h SM51D-02 AURORAL ELECTROJETS AND SUBSTORM OCCURRENCE DURING SOLAR MINIMUM 2007-2009: K Kauristie, T 1 Pulkkinen, E I Tanskainen, A Viljanen, N J Partamies


0845h SM51D-04 Remote observations of the Auroral Acceleration Region (Invited): H U Frey


0930h SM51D-07 Cluster Multi-Spacecraft Observations of AKA in the Auroral Acceleration Region (Invited): I Christopher, R L Mutel, J S Pickett, A Masson, A N Fazakerley, E A Lucek

0945h SM51D-08 Ground-Level Detection of Auroral Kilometric Radiation: J W Labelle, R R Anderson

Study of Earth’s Deep Interior

DI51A Moscone South: Poster Hall Friday 0800h Advances in Computational Modeling in Geoscience II Posters (joint with A, C, OS)

Presiding: J Brown, ETH Zurich; D May, ETH Zurich; L N Moresi, Monash University

0800h DI51A-1852 POSTER Development of a robust Stokes flow solver: toward a global simulation of the plate-mantle system: M Furuichi, D May, P J Tackley

0800h DI51A-1853 POSTER Grid convergence study of the combined finite difference & Marker-In-Cell method for geodynamic applications: T Duretz, D May, T Gerya

0800h DI51A-1854 POSTER Scalable Algorithms for Tightly-Coupled Hydro-mechanical Modeling of Geologic CO$_2$ Sequestration: J A White, L. Chiararomante


0800h DI51A-1856 POSTER A new dynamic model of divergent plate boundary: C Yu

0800h DI51A-1857 POSTER Fluidity: a fully-unstructured adaptive mesh computational framework for geodynamics: S C Kramer, D Davies, C R Wilson

0800h DI51A-1858 POSTER Challenges performing multi-scale, three-dimensional simulations of landslide generated tsunamis on adaptive unstructured meshes: C R Wilson, S C Kramer, G S Collins
0800h DI51A-1859 POSTER Stabilising temporal instabilities in geodynamic models: D May, B J Kaus, H B Muhlhaus
0800h DI51A-1860 POSTER Modeling the advection of discontinuous quantities in Geophysical flows using Particle Level Sets: V Aleksandrov, H Samuel, M Evonuk
0800h DI51A-1861 POSTER Blankenbach 3 revisited: intricate time-dependent patterns in a simple model of mantle convection: Z Hu, P E Van Keken

**DI51B** Moscone South: Poster Hall Friday 0800h

**Melts and Fluids in the Deep Mantle II Posters** (joint with MR, S, T, V)

Presiding: S Hier-Majumder, University of Maryland; J Revenaugh, University of Minnesota

0800h DI51B-1862 POSTER Structure of jadeite-diopside melts at high pressure by in situ x-ray diffraction: T Sakamaki, Y Wang, T Yu, C Park, G Shen

0800h DI51B-1863 POSTER Carbonate melts in the Earth’s mantle: F Gygi, R Caracas, R E Cohen

0800h DI51B-1864 POSTER Effect of pressure and quench rate on V and Fe XANES spectra for synthetic basalt and andesite glasses: P Ardia, C N Gerbode, M M Hirschmann, M Newville

0800h DI51B-1865 POSTER Viscosity of Water at High Pressures and High Temperatures: J S Pigott, D M Reaman, W R Panero

0800h DI51B-1866 POSTER Fluids in the Earth’s Lower Mantle - Phase Relations in the System MgO-SiO2-H2O: J Frost, M J Walter, S Kohn, M S Clark

0800h DI51B-1867 POSTER Melting temperature of MgO at high pressures: Z Du, K K Lee

0800h DI51B-1868 POSTER Seismic Evidence for a Global Low Velocity Layer Within the Earth’s Upper Mantle: E Debayle, B Tauxin, G Wittlinger

0800h DI51B-1869 POSTER Constraining physical properties of ultra-low velocity zones using multiple seismic phases: K J Jensen, M S Thorne, S Rost, T Nissen-Meyer

0800h DI51B-1870 POSTER Relationship between ULVZ topography and mantle convection: J DeSha-Overcash, J Gaeman, S Hier-Majumder

0800h DI51B-1871 POSTER A Boundary Element Model of Three-Dimensional Melt Geometry: J T Wimert, S Hier-Majumder

0800h DI51B-1872 POSTER The Influence of Dihedral Angle and Deformation on Contiguity of Partially Molten Rocks: M E Abbott, S Hier-Majumder

0800h DI51B-1873 POSTER A Combined Study of the Influence of Melting, Temperature, and Chemical Composition on Seismic Wave Velocities: S Hier-Majumder, A M Courtier

**DI51C** Moscone South: Poster Hall Friday 0800h

**The Transition Zone: Improved Scrutiny, Greater Complexity II Posters** (joint with S, MR, V)

Presiding: B Tauxin, Utrecht University; Y J Gu, University of Alberta; Q Williams, UC Santa Cruz; J F Lawrence, Stanford University

0800h DI51C-1874 POSTER Topography of the 660-km discontinuity beneath subducting slabs in the Western Pacific: T Wang, J Revenaugh

0800h DI51C-1875 POSTER Tracing the Upper Mantle Discontinuities Beneath the Pacific-North America Plate Boundary, Mexico: X Pérez-Campos, R W Clayton

0800h DI51C-1876 POSTER An analysis of SS precursors using 3D specfem synthetics: J E Ritsema, L Bai, Y Zhang

0800h DI51C-1877 POSTER A study of upper mantle discontinuities beneath the Korean Peninsula using teleseismic receiver functions: S Lee, Y Park, K Kim, J Rhie

0800h DI51C-1878 POSTER P and SH wave velocity structures in the upper mantle transition zone beneath northwestern Tibet: R Zhang, Q Wu, Y Li, C Hao, L Sun

0800h DI51C-1879 POSTER Seismic Analysis of the Tonga Subduction Zone and Implications on the Thermo-Petrologic Evolution of Deep Subduction: P R Karel, M R Brudzinski, W Chen, H W Green, R Pillet

0800h DI51C-1880 POSTER Deep structure and origin of active volcanoes in China: D Zhao

0800h DI51C-1881 POSTER Mantle Transition Zone Vp/Vs Ratio and Low Velocity Layers Under West US From P-to-S Conversions and Multiple Reverberations: B Tauxin, J Trampert, R D van der Hilst

**Mineral and Rock Physics**

MR51A Moscone South: Poster Hall Friday 0800h

**Computational Advances and Applications in Mineral Physics II Posters** (joint with DI)

Presiding: B B Karki, Louisiana State University

0800h MR51A-1888 POSTER High-pressure phase relations in the composition of albite NaAlSi3O8 constrained by an ab initio and quasi-harmonic Debye model, and their implications: L Deng, X Liu, H Liu, J Dong


0800h MR51A-1890 POSTER Influence of iron on the elastic properties of wadsleyite and ringwoodite: M Nunez Valdez, R M Wentzcovitch, P da Silveira

0800h MR51A-1891 POSTER Microstructures and rheology of the Earth upper mantle inferred from a multiscale approach: O Castelaun, P Cordier, S Merkel, P C Raterron, R Lebensohn
0800h MR51A-1892 POSTER Elastic Properties of MgSiO3-Perovskite under Lower Mantle Conditions Revisited: Z Zhang, L P Stixrude, J P Brodholt

0800h MR51A-1893 POSTER Ab initio MD simulations of Mg2SiO4 liquid at high pressures and temperatures relevant to the Earth’s mantle: G B Martin, B Kirtman, P J Spera

0800h MR51A-1894 POSTER Does a Dielectric Double Layer Evolve in Partially Molten Rocks?: S Gurmani, S Jahn, H Brasse, F R Schilling

0800h MR51A-1895 POSTER Scheduling Optimization for Bag-of-Task (BoT) Applications in the VLabinfrastructure: P R da Silveira, R M Wentzcovitch

0800h MR51A-1896 POSTER First principles thermal elasticity of crystals: quasiharmonic theory in the limit of isotropic thermal pressure: Z Wu, R M Wentzcovitch

0800h MR51A-1897 POSTER A First-Principles Study of MgSiO3 Glass at High Pressure: D B Ghosh, B B Karki

0800h MR51A-1898 POSTER Cobalt spin states and hyperfine interactions in LaCoO3, investigated by LDA+U calculations: C Leighton, H Hsu, P Blaha, R M Wentzcovitch

0800h MR51A-1899 POSTER Multiscale modelling of MgO plasticity: P CARREZ, J Amodeo, B Devincare, P Cordier

0800h MR51A-1900 POSTER A first-principles investigation of hydrous defect and IR frequencies in forsterite: The case for Si vacancies: K Umemoto, R M Wentzcovitch, M M Hirschmann, D L Kohlstedt, A C Withers

0800h MR51A-1901 POSTER Elastic properties computation and fluid substitution simulation from X-ray CT scan images in Middle East carbonates samples: M S Jouini, D S Vega

0800h MR51A-1902 POSTER A DISCRETE ELEMENT MODEL FOR THE STUDY OF FRACTURE BEHAVIOUR AND PATTERNS: S Galindo-torres, D Pedroso, L Li, D J Williams

0945h MR51B-08 Effect of Second-phase Particles on Static Adjustment of Calcite Grain Boundaries in Carbonate Mylonites: J Ree, S Lee, H Jung

Seismology

S51A Moscone South: Poster Hall Friday 0800h Characterization and Simulation of Long-Period Earthquake Ground Motions | Posters (joint with NH, G)

Presiding: K Koketsu, University of Tokyo; R W Graves, US Geological Survey


0800h S51A-1904 POSTER Statistical Features of Short-Period and Long-Period Near-Source Ground Motions: M Yamada, A H Olsen, T H Heaton

0800h S51A-1905 POSTER Characterization of Long-Period Ground Motions in the Georgia Basin Region, British Columbia, Canada: S Molnar, J Cassidy, S E Dosso, K Olsen

0800h S51A-1906 POSTER Predicting Ground Motions In Seattle Using A New Shear Wave Velocity Model: A A Delorey, J E Vidale


0800h S51A-1908 POSTER Estimation of subsurface structure using microtremor H/V spectral ratio in the Shimabara peninsula: N Itoya, T Matsushima

0800h S51A-1909 POSTER THE SITE RESPONSE IN THE PERIOD RANGE OF 2 TO 4S IN THE KANTO BASIN: T Hayakawa, K Tsuda, K Koketsu

0800h S51A-1910 POSTER 3-D velocity structure model for long-period ground motion simulation of the hypothetical Nankai Earthquake: T Kagawa, A Petukhin, K Koketsu, H Miyake, S Murotani, M Tsurugi

0800h S51A-1911 POSTER Scaling Relations of Earthquakes on Inland Active Mega-Fault Systems: S Murotani, S Matsushima, T Azuma, K Irikura, S Kitagawa

0800h S51A-1912 POSTER Effect of Fault Segmentations on Simulation of Long-Period Earthquake Ground Motions and Seismic Load: A Bykovtsev, Title of Team: Research Team of Geotechnical and Structural Engineers

0800h S51A-1913 POSTER Long-Period Ground Motion due to Near-Shear Earthquake Ruptures: K Koketsu, Y Yokota, K Hikima

0800h S51A-1914 POSTER Frequency Dependence of Radiation Patterns and Directivity Effects in Ground Motion from Earthquakes on Rough Faults: H Cho, J HU, Y Klinger, E M Dunham


0800h S51A-1916 POSTER Investigation on the radiation of super-shear rupturing seismic source: J Xu, F Hu, X Shang, X Chen

0800h S51A-1917 POSTER Study on the Effect of the Oceanic Water Layer on the Long Period Ground Motion Simulation: A Petukhin, T Iwata, T Kagawa

0800h S51A-1918 POSTER Numerical representation of crustal structure for realistic synthetic seismograms: I Molinari, M Käser, A Morelli
0800h  **S51A-1919**  POSTER Long-Period Ground-Motion Simulations of the Mw 7.2 El Mayor-Cucapah Earthquake: R W Graves, B Aagaard

0800h  **S51A-1920**  POSTER Simulation of Long-Period Ground Motion in the Imperial Valley Area during the M<sub>7.2</sub> El Mayor-Cucapah Earthquake: D Roten, K B Olsen

0800h  **S51A-1921**  POSTER Earthquake simulations in the Salt Lake Basin for the validation of the Wasatch CVM: long period (T>1.0-s) seismic response: M P Moschetti, L Ramirez-Guzman

0800h  **S51A-1922**  POSTER Simulations of the strong ground motion for the Mw6.9 Yushu earthquake of 14 April 2010: Z Zhang, X Chen

0800h  **S51A-1923**  POSTER Three Dimensional Nonlinear Soil and Site-City Effects in Earthquake Simulations: R Taborda, J Bielak

0800h  **S51A-1924**  POSTER Effect Of Long-Period Earthquake Ground Motions On Nonlinear Vibration Of Shells With Variable Thickness: R Abdikarimov, A Bykovtsev, D Khodzhaev, Title of Team: Research Team of Geotechnical and Structural Engineers

0800h  **S51A-1925**  POSTER National Seismic Hazard Maps for Japan and Seismic Hazard Information Station, J-SHIS: H Fujiwara, Title of Team: J-map Project Team

0800h  **S51A-1926**  POSTER A CyberShake-Based System for Forecasting of Occurrence of Ground Motions: K Milner, T H Jordan, R W Graves, S Callaghan, P J Maechling, E H Field, P Small, Title of Team: CyberShake Working Group

**S51B Moscone South: Poster Hall Friday 0800h**

**Earthquake Strong Ground Motions I Posters**

**Presiding: K L Pankow, University of Utah**

0800h  **S51B-1927**  POSTER Estimation of high-frequency ground shaking from rapidly accessible parameters: K Kieling, S Hainzl, R Wang

0800h  **S51B-1928**  POSTER Spectral Decay Characteristics in High Frequency Range of Observed Records from Crustal Large Earthquakes: M Tsurugi, T Kagawa, K Irikura

0800h  **S51B-1929**  WITHDRAWN

0800h  **S51B-1930**  POSTER Displacement Patterns of Cemetery Monuments in Ferndale, CA, During the M<sub>6.5</sub> Offshore Northern California Earthquake of January 10, 2010: K S French, S M Cashman, Title of Team: Structural Geology Class Spring 2010

0800h  **S51B-1931**  POSTER Liquefaction in the 15 April 2010 Mw 4.5 Randolph, Utah, Earthquake: C B DuRoss, K L Pankow

0800h  **S51B-1932**  POSTER The Puerto Rico 5.8 M<sub>w</sub> Earthquake of May 16, 2010, and the Distribution of Peak Ground Motion in the Puerto Rico Island: C1 Huerta-Lopez, J A Martinez-Cruzado, L E Suarez, R R Lopez, J A Caro-Cortes, F M Upegui-Botero, G A Ramirez-Gaytan

0800h  **S51B-1933**  POSTER Do Strong Ground Motions in Subduction Zones Show Regional Dependence?: D Garcia, D J Wald

0800h  **S51B-1934**  POSTER Characterization of Earthquake-Induced Ground Motion from the L'Aquila Seismic Sequence of 2009, Italy: L Malagnini, A Akinci, K M Mayeda, I Munafo', R B Herrmann, A Mercuri

0800h  **S51B-1935**  POSTER Evidence of a complex site effect at FAGN, an on-fault seismological station near L'Aquila, central Italy: G Calderoni, A Rovelli, R Di Giovambattista

0800h  **S51B-1936**  POSTER Stochastic Strong Ground Motion Simulations on Eastern North Anatolian Fault Zone: A Sensitivity Study: B Ugurhan, A Askan

0800h  **S51B-1937**  POSTER Probabilistic Seismic Hazard assessment for Sultanate of Oman: I W El Hussein, A Deif, S El-Hady, M N Toksoz, K Al-Jabri, S Al-Hashmi, K I Al-Toubi, Y Al-Shijbi, M Al-Saifi

0800h  **S51B-1938**  POSTER Prediction of large peak ground acceleration with artificial neural network and support vector machine: S K Hosseini, H Sadeghi, A Nasrollahnejad

0800h  **S51B-1939**  POSTER Ground-Motion Simulations of the 2008 Ms8.0 Wenchuan, China, Earthquake Using Empirical Green's Function Method: W Zhang, Y Zhang, X Yao

0800h  **S51B-1940**  POSTER Spatial Distributed Seismicity Model of Seismic Hazard Mapping in the North-China Region: A Comparison with the GSHAP: Q Zhong, B Shi, L Meng

0800h  **S51B-1941**  POSTER Prediction of near-source ground motion in Korean peninsula: D Park, K Yun, C Baeg

0800h  **S51B-1942**  POSTER Soil Properties of Soft Ground Considering Geological Property and Assessment of Liquefaction Hazards using probability concept in Southern Korean Peninsula: J Oh, J Hwang, S Lee, G Park, J Kim

0800h  **S51B-1943**  POSTER Effects of DEM Resolutions for Site Classification in Southeastern Korea: S Kang, K Kim, B Suk

0800h  **S51B-1944**  POSTER Strong Ground Motion Simulation and Source Modeling of the April 1, 2006 Tai-Tung Earthquake Using Empirical Green's Function Method: H Huang, C Lin

0800h  **S51B-1945**  POSTER A Study of Site Effect on Strong Ground Motion Characteristics in Ilan, Taiwan: K Liu, Title of Team: Taiwan Earthquake Research Center

0800h  **S51B-1946**  POSTER GROUND MOTION ASSESSMENT BASED ON WEAK MOTION DATA IN TAIWAN Ground Motion Assessment Based on Weak Motion Data in Taiwan: A Akinci, S D’Amico, L Malagnini

0800h  **S51B-1947**  POSTER Strong Motion Simulation of the Niigata-ken Chuetsu-oki Earthquake (2007), Japan: Y Nitta, S Matsushima, H Kawase

0800h  **S51B-1948**  POSTER Study on the nonlinear site response based on the Green's functions of a near-surface layer estimated for weak motion: Y Tanaka, S Kinoshiba

0800h  **S51B-1949**  POSTER Non-linear vertical response characteristics of a near-surface layer recorded at the IWTH25 site for the 2008 Iwate-Miyagi Inland Earthquake: S Kinoshiba

**S51C Moscone West: 2007 Friday 0800h**

**Crust and Mantle Seismic Structure II**

**Presiding: N Rawlinson, Australian National University; S Kita, RCPEV, Tohoku University**

0800h  **S51C-01**  Structure of the southeast Australian lithosphere from a transportable seismic array experiment: N Rawlinson, H Tkalcic, S Pozgay, P Arroucau

0815h  **S51C-02**  Detailed seismic velocity structure beneath the Hokkaido corner, NE Japan: Collision process of the forearc sliver: S Kita, A Hasegawa, T Okada, J Nakajima, T Matsuzawa, K Katsumata

0830h  **S51C-03**  Detection of Seismic Bedrock at the Taipei Basin and the Chiayi Area, Taiwan Using the Receiver Function Method: C Wu, H Huang

0845h  **S51C-04**  Coda Q Attenuation and Source Parameters Analysis in North East India Using Local Earthquakes: A K Mohapatra, W K Mohanty, Title of Team: Earthquake Seismology
**SS1D** Moscone West: 2009  Friday  0800h

**Research and Development in Nuclear Explosion Monitoring I**

**Presiding:** E Blanc, CEA; S Tsuboi, Japan Agency for Marine Sci & Tech; K Suyehiro, Integrated Ocean Drilling Program Management International; J W Given, CTBTO

0800h  **SS1D-01** Studies of infrasound propagation using the USAArray seismic network *(Invited): M A Hedlin, C D deGroot-Hedlin, K T Walker*

0815h  **SS1D-02** Dispersion of infrasound signals excited by explosive eruptions of the Sakura-jima volcano *(Invited): N Arai, Y Imanishi, S Watada, T Oi, T Murayama, K Murata, M Iwakuni, M Nogami*

0830h  **SS1D-03** Czech Infrasonic Monitoring System – Measurements in an Earthquake Epicenter: *J Lastovicka, J Chum, T Sindelarova*

0845h  **SS1D-04** Towards an enhanced picture of the detection capability of the IMS infrasound network: *A LE PICHON, J Vergoz, L Ceranna*

0900h  **SS1D-05** The global radioxenon background and its impact on the detection capability of underground nuclear explosions *(Invited): A Ringbom*

0915h  **SS1D-06** Real-Time Cross-Correlation and Double-Difference Algorithms for Event Detection and Aftershock Screening *(Invited): F Waldhauser, D P Schaff*

0930h  **SS1D-07** The ISC Contribution to Monitoring Research: *D A Storchak, I Bondar, J Harris, O Gaspà Rebull*

0945h  **SS1D-08** Moment Magnitudes of Small to Moderate Size Regional Events from Coda in the Middle East: *R Gok, M E Pasyanos, E Matzel, K M Mayeda, W R Walter*

**SS1E** Moscone West: 2007  Friday  0900h

**Engaging Citizens in the Collection of Earthquake Observations Using the Internet II (joint with NH)**

**Presiding:** R Bossu, EMSC; P S Earle, USGS

0900h  **SS1E-01** The USGS "Did You Feel It?" Internet-based Macroseismic Intensity Maps: Lessons Learned from a Decade of Online Data Collection *(Invited): D J Wald, V R Quitoriano, M Hopper, S Mathias, J W Dewey*

0915h  **SS1E-02** iShake: Mobile Phones as Seismic Sensors *(Invited): S Dashiti, J Reilly, J D Bray, A M Bayen, S D Glaser, E Mari*

0930h  **SS1E-03** The NetQuakes Project – Research-quality Seismic Data Transmitted via the Internet from Citizen-hosted Instruments *(Invited): J H Luetgert, D H Oppenheimer, J Hamilton*

0945h  **SS1E-04** Flashsourcing or Real-Time Mapping of Earthquake Effects from Instantaneous Analysis of the EMSC Website Traffic: *R Bossu, S Gilles, F Roussel*

**Tectonophysics**

**T51A** Moscone South: Poster Hall  Friday  0800h

**Deformation Processes inCollisional Orogens I Posters (joint with G, S)**

**Presiding:** A G Webb, Louisiana State University; K Larson, University of Saskatchewan; G Hetenyi, Swiss Federal Institute of Technology Zurich

0800h  **T51A-1996** POSTER Active Arc-Continental Accretion in Timor-Leste: New Structural Mapping and Quantification of Continental Subduction: *G W Tate, N McQuarrie, R Bakker, D J Van Hinsbergen, R A Harris*

0800h  **T51A-1997** POSTER Strain variation from borehole strainmeter and GPS array in eastern Taiwan: *Y Chang, C Liu, Y Hsu, H Lee, A T Linde, S I Sacks, Y Chen*

0800h  **T51A-1998** POSTER 3D Vs and Vs Lithospheric Structures under the Taiwan Orogen: TAIGER project: *H Kuo-Chen, F T Wu, S W Roecker, D A Okaya, C Wang, B Huang, Y Nakamura, W Liang*

0800h  **T51A-1999** POSTER Investigation of the crustal structure of the Manilla subduction zone offshore southern Taiwan using multi-channel seismic reflection and wide-angle refraction data: *D H Eakin, K D McIntosh, H J Van Avendonk*

0800h  **T51A-2000** POSTER Strain Partitioning at the Huatung Ridge, Offshore Southeast Taiwan: Evidence from Seismoteconics: *J C Lewis, D O’Hara, R Rau, T B Byrne*

0800h  **T51A-2001** POSTER Results from an onshore/offshore seismic transect of southern Taiwan: *K D McIntosh, H J Van Avendonk, F T Wu, D A Okaya, C Wang*

0800h  **T51A-2002** POSTER THE CRITICAL ROLE OF A SUBDUCTED CONTINENTAL MARGIN FRACTURE ZONE IN THE TAIWAN ARC-CONTINENT COLLISION: *T B Byrne, C Huang, Y Chan, R Rau, Y Lee*

0800h  **T51A-2003** POSTER Geophysical potential field data interpretations to study continental construction processes of the Central Asia Orogenic Belt: *A Guy, J Schulmann, M Munsch, J Lehmann*


0800h  **T51A-2005** POSTER Collision and Rotation of the Yangtze block and Exhumation of HP/UHPM Rocks in the Daike Shan orogen, China: *X Guo, J P Encarnacion*

0800h  **T51A-2006** POSTER Magnetotelluric Data from the Tien Shan and Pamir Continental Collision Zones, Central Asia: *O Ritter, P Sass, A Rybin, G Munoz, V Batalev*

0800h  **T51A-2007** POSTER Quaternary deformation of the Mushu thrust-related fold, northeastern margin of the Pamir: *T Li, J Chen, D M Huang, J Thompson, P W Xiao, D Z Yuan, D W Burbank*

0800h  **T51A-2008** POSTER A REVIEW OF THE METHOD OF MOHO FOLD ESTIMATION: *Y Shin, M Lim, Y Park, H Rim*

0800h  **T51A-2009** POSTER Rivers, re-entrants, and 3D variations in orogenic wedge development: a case study of the NW Indian Himalaya: *A Webb, H Yu, Z Hendershott*

0800h  **T51A-2010** POSTER Lithological Controls on 3D Fold Geometry in Mechanically Layered Rocks: *M A Pearce, R R Jones, G Rock*

0800h  **T51A-2011** POSTER Cataclastic Zones within the Savcili Fault Zone, Central Turkey: *V ISIK, G Seyitoglu, A Caglayan, T Uysal, J Zhao, K Sozeri, K Esat*

0800h  **T51A-2012** POSTER A Tilted and Dissected Relict Landscape on the east flank of the Sila Massif, Calabria, Southern Italy: Asymmetric Uplift in the Late Quaternary?: *M A Reitz, L Seeber, J M Schafer, M Steckler*

0800h  **T51A-2013** POSTER Neogene stable isotope paleoaltimetry and paleoclimate records from the European Alps: *M Campani, A Mulch*

0800h  **T51A-2014** POSTER Statistical investigation of the geochemical consequences of mylonitization in an alpine mid-crustal shear zone: *C Ganino, J Schneider, Y Rolland, L Stehly, M Corsini, J Lardeaux*
0800h **T51A-2015** POSTER Thermal and exhumation histories of the footwall and hanging wall of the Gavarnie thrust, West-Central Pyrenees: Implications for thrusting: **P G Fitzgerald, J R Metcalf, S Baldwin, J Muñoz**

0800h **T51A-2016** POSTER THE MECHANICS, GEOMETRY AND DISTRIBUTION OF STRIKE SLIP FAULTS IN A FOLD AND THRUST BELT, COUNTY CLARE, IRELAND: **F A Nenna, A Aydin**

0800h **T51A-2017** POSTER The Tiddifield Formation: An Enigmatic Pan African Molasse of the Anti-Atlas Mountains, Morocco: **K P Heffernan, J D Inglis**


0800h **T51A-2019** POSTER The Role of Incision and Sedimentation in Continental Gravity Gliding – Insight from Numerical Modelling: **H Riad, G Messager, B Nivière**

0800h **T51A-2020** POSTER 3D Geomodeling of the Venezuelan Andes: **B Monod, D Dhon, Y Herrvout, G Backé, S Klarica, J E Choy**

0800h **T51A-2021** POSTER Retrodeformable cross sections for 3-dimensional structural analysis, Ouachita orogen, Arkansas: **H E Johnson, D V Wiltschko**

0800h **T51A-2022** POSTER Determining subsurface fault geometry from complex 3D fold patterns: formation of the Stillwell anticline, west Texas: **B Surpless, K Quiroz**

0800h **T51A-2023** POSTER The age and tectonic significance of differences in the succession of FIA trends from Central Colorado to Northern New Mexico: Accessing the history of deformation partitioning during orogenesis: **H Cao, C Fletcher**

0800h **T51A-2024** POSTER A Structural Analysis of the Lewiston Basin, Clarkson, WY: **M Alloway, A Watkinson, S P Reidel**

0800h **T51A-2025** POSTER Modern glacial outwash sand along the Denali Fault: Thermochronological constraints on strike-slip fault and glacier interaction: **J Benowitz, P W Layer, P B O'Sullivan, S VanLaningham, S J Herreid**

**T51B Moscone South: Poster Hall Friday 0800h**

**Great Earthquakes and Active Fault Scientific Drilling I Posters (joint with S, NH)**

**Presiding: Z Xu; Z Wu, Institute of Geophysics, CEA; S Song, National Taiwan University; J J Mori, Kyoto University**

0800h **T51B-2026** POSTER Performance of aftershock forecasts: problem and formulation: **C Jiang, Z Wu, L Li**

0800h **T51B-2027** POSTER WenChuan Earthquake: A Great Quake in the GPS Deformation GAP?: **L Li, C Yong**

0800h **T51B-2028** POSTER Deep Seismic Probing Across Longmen Mountain Orogenic Belts: **M Jiang, Y Wang, J Yang**

0800h **T51B-2029** POSTER Co-seismic Crustal Deformation Model of the Wenchuan Earthquake (May 12, 2008, M8.0): Reconstructed with Data from Tiltometers and Strainmeters: **G Fuwang, L Li**

0800h **T51B-2030** POSTER Characteristics of spatial distribution of seismicity parameters along the Longmenshan fault zone before the 2008 Wenchuan Ms 8.0 earthquake: **G Yi, X Wen, H Xin**

0800h **T51B-2031** POSTER Temperature measurement and Heat signature on the Longmen shan fault zone associated with the May 12 Wenchuan earthquake, 2008, Sichuan, China: **Z Li, H Peng, X Ma, J Jiang**

0800h **T51B-2032** POSTER Location for aftershocks of 2008 Wenchuan earthquake and the active faults in Longmenshan region: **Z Ding, P Lv, L Zhu**

0800h **T51B-2033** POSTER Field measurements along the 2010 Ms 7.1 Yushu earthquake rupture shows strike-slip and dip-slip activities, resulting in mountains uplift: **W Fuyao, H Li, J Pan, Z Xu, N Li, R Guo, W Zhang**

0800h **T51B-2034** POSTER Structural and Lithologic Characteristics of the Wenchuan Earthquake Fault Zone and its Relationship with Seismic Activity: **H Wang, H Li, J Pei, T Li, Y Huang, Z Zhao**

0800h **T51B-2035** POSTER Overview of the Wenchuan Earthquake Fault Scientific Drilling (WFSD) Project: **W Zhang, S Hu, T Liu, L Fan**

0800h **T51B-2036** POSTER Wenchuan Fault Scientific Drilling Borehole No.1—Geophysical Features: **C Yu, D Ma, H Li, W Yang, D Su**

0800h **T51B-2037** POSTER WFSD fault monitoring using active seismic source: **W Yang, H Ge, B Wang, S Yuan, L Song**

0800h **T51B-2038** POSTER Determination of three-dimensional stress orientations in the Wenchuan earthquake Fault Scientific Drilling (WFSD) hole-1: A preliminary result by anelastic strain recovery measurements of core samples: **J Cui, W Lin, L Wang, Z Tang, D Sun, L Gao, W Wang**

0800h **T51B-2039** POSTER Stress measurement in WFSD-1: **X Ma, H Peng, J Jiang, Z Li**

0800h **T51B-2040** POSTER Geochemistry of soil gas in the seismic fault zone produced by the Wenchuan Ms 8.0 earthquake, southwestern China: **X Zhou, J Du**

0800h **T51B-2041** POSTER High Magnetic Susceptibility in Fault Rocks (Gouge) of the Wenchuan Earthquake(Ms8.0): **J Pei, H Li, Z Sun, J Si, H Wang**

0800h **T51B-2042** POSTER PERMEABILITY & GRAIN SIZE DISTRIBUTION OF WENCHUAN EARTHQUAKE FAULT ROCKS: **X Yang, J Chen, S Ma**

0800h **T51B-2043** POSTER Characteristics of Microstructure and Clay Minerals of Fault Gouges From Surface Rupture of Wenchuan Ms8.0 Earthquake: **Y Zhou, J Dang, L Han, J Chen, S Ma, X Yang, C He**

0800h **T51B-2044** POSTER Clay Minerals Anomalies In WFSD Drilling Core And Surface Fault Rocks And Their Significances: **J Si, H Li, S Song, L Kuo, J Pei, H Wang**

0800h **T51B-2045** POSTER The Finest Pieces in the Sedimentary Environments and Fault Zone Rocks, and its implication: **P Chen, S Song, T Tsao**

0800h **T51B-2046** POSTER Pyrite alteration and neoformed magnetic minerals in the fault zone of Chi-Chi earthquake (Mw 7.6, 1999), Taiwan: **Y Chou, S Song, C Aubourg, Y Song, A Boullier, T Lee, E Yeh, Title of Team: Taiwan Chelungpu-fault Drilling Program TCDP**

0800h **T51B-2047** POSTER Grain size distribution and fracture energy of Chelungpu-fault gouge: **C Chen, K Ma, K Kawabata, Y Iizuka, H Tanaka**

0800h **T51B-2048** POSTER Microstructure and heterogeneity of the Chelungpu fault revealed by Taiwan Chelungpu fault Drilling project (TCDP) Hole C cores: **K Kawabata, C Chen, K Ma, A Boullier, Y Iizuka, H Tanaka**

0800h **T51B-2049** POSTER Fault Zone Q Structure discovered from the Taiwan Chelungpu fault borehole seismometers array (TCDPBHS): **Y Lin, Y Wang, K Ma**

0800h **T51B-2050** POSTER Preliminary geophysical, geohazard, and geomorphic mapping of the Alpine Fault Deep Fault Drilling Project (DFDP), Gaunt Creek, New Zealand: **G P De Pascale, T Davies, D C Nobes, M Quigley, R Sutherland, V G Toy, R J Norris, R M Langridge, T Stahl, A Klahn, J Townsend**
0800h T51C-2051 POSTER Anatomy of a Metamorphic Core Complex: Preliminary Results of Ruby Mountains Seismic Experiment, Northeastern Nevada: K K Schiltz, M Litherland, S L Klemperer

0800h T51C-2052 POSTER Seismic structure of the North American lithosphere and upper mantle imaged using Surface and S waveform tomography: A J Schaeffer, S Lebedev

0800h T51C-2053 POSTER Geometry and deformation history of the New Madrid seismic zone fault system, Central U.S. from high-resolution marine seismic reflection data, and implications for intraplate deformation: L Guo, M Magnani, K D McIntosh, B A Waldron, S Sausstrup, X J Fave

0800h T51C-2054 POSTER Testing the viability of 3-component active-source recording with single-component Ref-Tek 'Texans': R R Burr, K M Keranen, S L Klemperer, G R Keller

0800h T51C-2055 POSTER High-precision Measurement of Surface Wave Phase and Amplitude Across a Dense Seismic Array: G Jin, J B Gaherty

0800h T51C-2056 POSTER Azimuthal Anisotropy in the High Lava Plains of Oregon From Rayleigh Wave Analyses: H S Feng, C Beghein

0800h T51C-2057 POSTER Appraising the Reliability of Scattered Wave Imaging: Application to the 410 km and 660 km discontinuities: L Liu, G L Pavlis

0800h T51C-2058 POSTER Crust and Upper mantle heterogeneity in the Mendocino Triple Junction from teleseismic P-to-S scattered waves: Y Zhai, J M Mackenzie, A Levander, A Cao, R W Porritt, R M Allen

0800h T51C-2059 POSTER Imaging 2-D Structures With Receiver Functions Using Harmonic Stripping: V Schulte-Pelkum

0800h T51C-2060 POSTER Refining the cratonic upper mantle: modeling North American upper mantle and crustal structure using the Spectral Element method: H Yuan, P Cupillard, S W French, B A Romanowicz

0800h T51C-2061 POSTER Lithospheric disruption beneath the Columbia River Basalt province from Rayleigh wave seismic tomography: C R Bilyeu, D S Weerasee

0800h T51C-2062 POSTER Imaging the lithospheric structure of the High Lava Plains, Oregon with ambient noise tomography: S Hanson-Hedgcock, L S Wagner, M J Fouc

0800h T51C-2063 POSTER How Deeply Divided? - The depth extent of the division between actively deforming North America and the stable interior: M McMullen, H J Gilbert

0800h T51C-2064 POSTER Systematic mapping of the Moho beneath southern California: P Zhang, M S Miller, J F Dolan

0800h T51C-2065 POSTER Data Quality Analysis for the Bighorn Arch Seismic Array Experiment: N J Mancinelli, Z Yang, W L Yeck, A F Sheehan

0800h T51C-2066 POSTER An Integrated Approach to Estimating Crustal Thickness: B Wallet, B Jensen, G Keller

0800h T51C-2067 POSTER BASE Flexible Array Preliminary Receiver Function Analysis: W L Yeck, A F Sheehan, V Schulte-Pelkum, Z Yang, M L Anderson, E Erslav

0800h T51C-2068 POSTER Pervasive post-Eocene faulting and folding in unconsolidated sediments of the Mississippi River, Central U.S. as imaged by high-resolution CHIRP seismic data: X J Fave, M Magnani, B A Waldron, K D McIntosh, S Sausstrup, L Guo

0800h T51C-2069 POSTER High seismic velocity (7.x) lower crustal layers in cratonic North America: a view from xenoliths and EarthScope seismic data: K H Mahan, K R Barnhart, V Schulte-Pelkum, T Blackburn, S A Bowring, F O Dudas

0800h T51C-2070 POSTER Preliminary Results of the Active Source Portion of the Bighorns Array Seismic Experiment (BASE), North-Central Wyoming, USA: B R Terbush, L L Worthington, K C Miller, S H Harder, E Erslav, M L Anderson, C S Siddoway


0800h T51C-2072 POSTER Regional conductivity structures of the northwestern segment of the North American Plate derived from 3-D inversion of USArray magnetotelluric data: N M Meqbel, G D Egbert, A Kelbert

0800h T51C-2073 POSTER Persistent Seismicity and Energetics of the 2010 Earthquake Sequence of the Gros Ventre-Teton Area, Wyoming: J Farrell

0800h T51C-2074 POSTER Implementing Dense Arrays of Single-Channel Seismic Recorders to Detect Global Teleseism Events: CT O’rourke, A F Sheehan, Z Yang, S H Harder, K C Miller, L L Worthington

0800h T51C-2075 POSTER Looking beneath Snake River Plain using gravity and magnetic methods Murari Khatiwada and G. Randy Keller, ConocoPhillips School of Geology and Geophysics, University of Oklahoma, Norman, OK 73069: M Khatiwada, G Keller

T51D Moscone South: Poster Hall 0800h T51D-2076 POSTER Heterogeneous coupling along Makran subduction zone: Z zarifi, M Raeisi

0800h T51D-2077 POSTER Subduction of very rugged seafloor topography imposes stronger interplate coupling and elevated mean stress levels at the Western Solomon Islands forearc: F W Taylor, L L Lavier, M G Bevis, C A Frolich, S Grand, A K Papabat

0800h T51D-2078 POSTER The 2009-10 SAHKE Experiment: Acquisition and Preliminary Results Across the Interseismically Locked Southern Hikurangi Margin, New Zealand: S A Henrys, R Sutherland, A Seward, M Henderson, T A Stern, M K Savage, J Townsend, K Mochizuki, H Sato, T Iwasaki, D H Barker, D Bassett, R E Bell, Title of Team: SAHKE Field Deployment Team


0800h T51D-2080 POSTER Offshore seismic survey and observation using OBSs across the locked southern Hikurangi margin, New Zealand: K Mochizuki, T Yamada, M Shinozora, H Sato, T Iwasaki, S A Henrys, R Sutherland, Title of Team: SAHKE Field Team
0800h  **T51D-2081** POSTER The Effects of Material Heterogeneity and Topography on the Predicted Slip Distributions for Hikurangi Slow Slip Events: **C A Williams**, L M Wallace, R J Beavan, D M Eberhart-Phillips, M Reyers

0800h  **T51D-2082** POSTER Deciphering crustal inhomogeneities in the Hikurangi forearc using fluid geochemistry: **A G Reyes**

0800h  **T51D-2083** POSTER Along-strike changes in Plate-bending Seismicity in the Mariana Islands: Implications for Strength of Interplate Coupling and Hydration of the Subducting Pacific Slab: **E L Emry**, D A Wiens, P Shore

0800h  **T51D-2084** POSTER Analysis of Oblique Plate Convergence along the Manila Trench and the Philippine Trench: **M W Hamburger**, **G A Galgana**, T Bacolcol, R McCaffrey, S Yu

0800h  **T51D-2085** POSTER Interplate coupling along the central Ryukyu Trench inferred from GPS/acoustic seafloor geodetic observation: **M Nakamura**, K Tadokoro, T Okuda, M Ando, T Watanabe, S Sugimoto, K Miyata, T Matsumoto, M Furukawa


0800h  **T51D-2087** POSTER Lateral and downdip variations of interplate coupling inferred from a crustal anisotropy in the Kii Peninsula, SW Japan: **A Saiga**, A Kato, S Sakai, T Iwasaki, N Hirata

0800h  **T51D-2088** POSTER Subducted bathymetric features linked to variations in earthquake apparent stress along the northern Japan Trench: **P A Moyer**, S L Bilek, W S Phillips

0800h  **T51D-2089** POSTER Seismic velocity structure in the shallower part of the subducting Pacific lithosphere around the Japan Trench axial region: **R Azuma**, R Hino, Y Ito, Y Yamamoto, K Suzuki

0800h  **T51D-2090** POSTER Persistent Tremor and Coupling Within the Northern Costa Rica Seismogenic Zone: **S Y Schwartz**, J I Walter, M Protti, V M Gonzalez

0800h  **T51D-2091** POSTER Strong mechanical coupling along the central Andes: implications for trench curvature, shortening, and topography: **F Funiciello**, **G Iaffaldano**, E Di Giuseppe, F CORBI, C Facenna, H Bunge

0800h  **T51D-2092** POSTER A Bayesian Approach for Apparent Inter-plate Coupling in the Central Andes Subduction Zone: **F H Ortega Culaciati**, M Simons, J J Genrich, J Galezicka, D Comte, B Glass, C Leiva, G Gonzalez, E O Norabuena

0800h  **T51D-2093** POSTER The 2007 M7.7 Tocopilla northern Chile earthquake sequence - along and across strike rupture segmentation: **B Schurr**, G Asch, M Motagh, O Oncken, G Chong Diaz, S E Barrientos, J Vilotte

0800h  **T51D-2094** POSTER Seismic variability of subduction thrust faults: insights from laboratory models: **F CORBI**, F Funiciello, C Facenna, G Ranalli, A HEURET

0800h  **T51D-2095** POSTER Plate coupling strength inferred from aftershock area expansion patterns and associated plate age: **F C Tajima**

0800h  **T51D-2096** POSTER A mechanical analysis of the correlation between forearc morphology and frictional properties of megathrust: **N Cubas**, J Avouac, Y M LEROY, P Souloumiac

**T51E**  **Moscone West: 2011**  **Friday**  **0800h**

**Characterization of the 4 April 2010 El Mayor-Cucapah Earthquake and Implications for Earthquake Preparedness in Southern California and Baja California I (joint with G, NH, S)**

**Presiding:** J J Gonzalez-Garcia, CICSE; J M Fletcher; R Arrowsmith, Arizona State Univ; A J Barbour, Scripps Institution of Oceanography

0800h  **T51E-01** The Surface Rupture of the 2010 El Mayor-Cucapah Earthquake and its Interaction with the 1892 Laguna Salada Rupture - Complex Fault Interaction in an Oblique Rift System (Invited): **T K Rockwell**, J M Fletcher, O Teran, K J Mueller

0815h  **T51E-02** Earthquake Rupture Complexity Evidence from Field Observations (Invited): **K W Hudnut**, J M Fletcher, T K Rockwell, J J Gonzalez-Garcia, O Teran, S O Akciz

0830h  **T51E-03** The 2010 Mw7.2 El Mayor-Cucapah Earthquake Sequence, Baja California, Mexico and Southernmost California, USA: Active Seismotectonics Along the Mexican Pacific Margin: **E Hauksson**, J Stock, K Hutton, W Yang, A Vidal-Villegas, H Kanamori


0915h  **T51E-06** The Slow and Bilateral Rupture Process of the 2010 M 7.2 El Mayor-Cucapah Earthquake Inferred from Local and Teleseismic Data: **T Uchide**, P M Shearer


0945h  **T51E-08** Kinematic fault slip model from joint inversion of teleseismic, GPS, InSAR and subpixel-correlation measurements of the 2010 El Mayor-Cucapah earthquake and postseismic deformation (Invited): **E J Fielding**, S Wei, S Leprince, A Sladen, M Simons, J Avouac, R W Briggs, K W Hudnut, D V Helmerger, S Hensley, E Hauksson, J J Gonzalez-Garcia, T Herring, S O Akciz

**T51F**  **Moscone West: 2016**  **Friday**  **0800h**

**Linking Geodetic Observations to Mechanical Properties of the Lithosphere: New Methods and Models I (joint with G)**

**Presiding:** S Barbot, California Institute of Technology; R V Kanda, Caltech

0800h  **Introduction**  **Sylvain Barbot**

0805h  **T51F-01** The Variation of Viscosity with Depth as Seen From Geodetic Interseismic Deformation (Invited): **E A Hetland**, S B Moore

0820h  **T51F-02** The resolution of mantle viscosity using nine years of GPS measurements following the 1999 M=7.1 Hector Mine, CA, earthquake (Invited): **F F Pollitz**, W R Thatcher, E H Hearn

0835h  **T51F-03** Tomography of the Mojavean Lithosphere Viscosity from Space Geodetic data of the Landers and Hector Mine Earthquakes: **S Barbot**, Y Fialko
All information is current as of November 12, 2010

Volcanology, Geochemistry, and Petrology

**V51A Moscone South: Poster Hall  Friday  0800h**

**Diffusion in Minerals and Melts II Posters** \( \text{(joint with MR)} \)

**Presiding:** Y Zhang, Univ of Michigan; D J Cherniak, Rensselaer Polytechnic Inst

0800h **V51A-2155** POSTER **HIGH-RESOLUTION DIFFUSION CHRONOMETRY OF VOLCANIC PLAGIOCLASE CRYSTALS:** K Saunders, J Blundy, R Dohmen, M Killburn
0800h **V51A-2156** POSTER Equilibrium and Kinetic Isotopic Fractionation Processes Recorded in \( ^{3}Li \) Values of Highly Evolved Granitic Pegmatites: E M Barnes, D A Weis, L A Groat
0800h **V51A-2157** POSTER An experimental study of Li partitioning between olivine and diopside at mantle conditions: J J Yakob, M D Feinman, S C Penniston-Dorland, D H Eggler
0800h **V51A-2158** POSTER Peridote Li and Mg isotope heterogeneity: recycling or diffusion?: Y Lai, T Elliott, P Pogge von Strandmann, R Dohmen, E Takazawa, Title of Team: Bristol Isotope Group
0800h **V51A-2159** POSTER Olivine Crystallization and Re-equilibration as a Function of Cooling Rate: Observations from Kilauea Iki Lava Lake, Hawaii: R L Helz
0800h **V51A-2160** POSTER Element diffusion ability in metamagetic agents and its effect on chemical characterisitics of metamatized peridotites: J Yu, S Y O'Reilly
0800h **V51A-2161** POSTER An improved analysis of coupled multicomponent diffusion of divalent cations in aluminosilicate garnet: An experimental and numerical study: S A Borinski, S Chakrabor, U Hoppe
0800h **V51A-2162** POSTER Application of Diffusion Data in Carbonates to Estimate Timescales and Conditions of Texture Forming Processes: T Muller, E B Watson, D J Cherniak
0800h **V51A-2163** WITHDRAWN
0800h **V51A-2164** POSTER The parent magma of the second Chassignite NWA 2737: Constraint from trapped melt inclusions: Q He, L Xiao, R Gao
0800h **V51A-2165** POSTER Grain Boundary Diffusion in Synthetic Forsterite: the Effect of Impurities: M Sundberg, D L Kohlsstedt
0800h **V51A-2166** POSTER Role of Ferric Iron and Protons in Mg-Fe Interdiffusion in (Mg,Fe): O: K Otsuka, M Longo, C A McCammon, S Karato
0800h **V51A-2167** POSTER Diffusive Fe-Ti-O exchange at high temperature: A magnetic approach: M Charilaou, J F Löffler, A U Gehring

0800h **V51A-2168** POSTER Argon Diffusivity in 2x2 (hollandite), 2x3 (romanèchite), and 3x3 (todorokite) Tunnel Manganese Oxides: K Waltenberg, P M Vasconcelos, D Thiede
0800h **V51A-2169** POSTER Argon Diffusion in Shocked Pyroxene, Feldspar, and Olivine: J Weirich, C E Isachsen, J R Johnson, T Swindle
0800h **V51A-2170** POSTER THERMOCRONOLOGIC IMPLICATIONS OF LOW-TEMPERATURE (100-300°C) Ar DIFFUSION IN BASALTIC GLASS: M Grove, S Manganelli
0800h **V51A-2171** POSTER Solution of helium in SiO\(_2\) glass and its effect on the glass structure at high pressure: G Shen, Q Mei
0800h **V51A-2172** POSTER H diffusion in diopside and analbite glasses: S Fanara, H Becker, D Rogalla, S Chakrabor
0800h **V51A-2173** POSTER A Unified Theory of Soret Diffusion and Isotopic Fractionation of Elements in Silicate Melts: G A Wilkins, G Dominguez, M H Thiernens
0800h **V51A-2174** POSTER Diffusive isotope fractionation in silicate liquids: Dependence on liquid composition, cation bonding, and isotopic exchange: J M Watkins, D J Depaolo, F J Ryerson

**V51B Moscone South: Poster Hall  Friday  0800h**

**Innovations in Isotope Mass Spectrometry and Isotope Metrology in Geosciences I Posters**

**Presiding:** S Richter, IRMM-JRC-EU; C Shen, Natl Taiwan Univ; L E Borg, Lawrence Livermore National Laboratory

0800h **V51B-2175** POSTER Overview of Uranium Isotopic Reference Materials at IRMM: H Kuehn, S Richter, A Alonso-Munoz, Y Arege, R Eykens, A Verbruggen
0800h **V51B-2176** WITHDRAWN
0800h **V51B-2177** POSTER New Approaches for Increased Precision and Accuracy of ID-TIMS U-Pb Geochronology: N McLean, S A Bowring
0800h **V51B-2178** POSTER The preparation and calibration of calcium synthetic isotope mixtures: M Berglund, C Hennessy, S Richter, G Fortunato, S Wunderli
0800h **V51B-2179** POSTER Determination of U-isotope composition of silicate and carbonate reference materials for in-situ LA-ICPMS analysis by high precision MC-ICPMS: D Scholz, J Krause, K P Jochum, M O Andreae
0800h **V51B-2180** POSTER High precision Nd isotope measurements of nanogram to sub-nanogram size samples: initial results from magnetic microspheres from Younger Dryas Boundary: Y Wu, A West, M Sharma
0800h **V51B-2181** POSTER Mass dependent isotopic fractionation of Ce and Nd in carbonates: T Ohno, T Hirata
0800h **V51B-2182** POSTER Impact of matrix effects on Pb isotope ratio measurements by MC-ICP-MS: E Ponzevera, M Solliec
0800h **V51B-2183** POSTER Zinc Finger Takes on a Whole New Meaning: Reducing and Monitoring Zinc Blanks in the Isotope Lab: M E Wilkes, L E Wasylenki, A D Anbar
0800h **V51B-2184** POSTER Silver isotope variation in ore deposits by MC-ICP-MS: M Fukuyama, D Lee
0800h **V51B-2185** POSTER High-temperature fractionation of stable iron isotopes in terrestrial and extra-terrestrial samples determined by ultra-precise measurements with a \(^{56}Fe-^{54}Fe\) double spike and MC-ICPMS: M Millet, J Baker
0800h **V51B-2186** POSTER Fast Scanning Single Collector ICP-MS for Low Level Isotope Ratio Measurements: K Newman, B Georg
0800h **V51B-2187** POSTER Precise isotopic analysis of boron by P-TIMS with sample preheating: T Ishikawa, K Nagaishi, J Matsuoka
0800h V51B-2188 POSTER Developments in Noble Gas mass spectrometry: D Hamilton, J B Schwieters, N S Lloyd

0800h V51B-2189 POSTER Carbon isotope characterization of organic intermediaries in hydrothermal hydrocarbon synthesis by Pyrolysis-GC-MS-C-IRMS: R A Soocki, Q Fu, P B Niles

0800h V51B-2190 POSTER Application of the Generalised Power Law To Double-Spike Measurements by MC-ICP-MS: I J Parkinson, P Bonnard, C R Pearce, M Fehr

0800h V51B-2191 POSTER Experimental Study of Abiotic Organic Synthesis at High Temperature and Pressure Conditions: Carbon Isotope and Mineral Surface Characterizations: Q Fu, R A Soocki, P B Niles

0800h V51B-2192 POSTER SHRIMP Si- New Capabilities for in situ Stable Isotope Analysis: T R Ireland, S Clement, J Foster

0800h V51B-2193 POSTER Improving stable carbon and oxygen isotope geochemical measurements in dolomite: reference material and acid fractionation factor: V Vandeginste, C M John, A Jourdan, S Davis

0800h V51B-2194 POSTER Use of laser spectroscopy to measure the δ13C and δ18O compositions of carbonate minerals: S L Barker, G M Dipple, F Dong, D S Baer

0800h V51B-2195 POSTER Nickel isotopes as a new geochemical tracer: L Gall, H M Williams, C Siebert, A Halliday

0800h V51B-2196 POSTER Zn isotope fractionation in the komatiitic and tholeiitic lava flows of Fred’s flow and Theo’s flow (Ontario, Canada): N D Mattielli, P Haenecour, V Deballa

0800h V51B-2197 POSTER The influence of solution stoichiometry on surface-controlled Ca isotope fractionation during Ca carbonate precipitation from Mono Lake, California: L C Nielsen, D J Depaulo

0800h V51B-2198 POSTER Using Clumped Isotopes To Help Understand Isotopic Sector Zoning In Calcite: A Jourdan, C M John, A Inchenko, S Davis

0800h V51B-2199 POSTER Inter-mineral iron isotope fractionation in San Carlos mantle xenoliths: C A Macris, E D Young, C E Manning, E A Schauble

0800h V51B-2200 POSTER Simultaneous determination of stable isotopic compositions of nitrous oxide (δ15N and δ18O of N2O) and methane (δ13C of CH4) in nanomolar quantities from a single water sample: A Hirota, U Tsunogai, D D Komatsu, F Nakagawa

V51C Moscone South: Poster Hall Friday 0800h Microanalysis in Geoscience: Advances and Challenges II Posters (joint with MR, T)

Presiding: J Fournelle, University of Wisconsin; B Jicha, University of Wisconsin; H Lowers, USGS; A Koenig, USGS

0800h V51C-2201 WITHDRAWN

0800h V51C-2202 POSTER Submicron Quantitative Analysis by Field-emission Gun EPMA at low kV (Invited): E Hellebrand

0800h V51C-2203 POSTER Analysis of Fine-Scale Feldspar Zoning and Groundmass by FE-EMPA: An Example from the Jemez Mountains Volcanic Field, New Mexico: M C Rowe, J A Wolff, S Cornelius

0800h V51C-2204 POSTER Progress toward accurate high spatial resolution actinide analysis by EPMA: M J Jercinovic, J M Allaz, M L Williams

0800h V51C-2205 POSTER Improving Accuracy and Precision for Trace Elements in EPMA: J J Donovan


0800h V51C-2207 POSTER Electron Microprobe Analysis Techniques for Accurate Measurements of Apatite: B A Goldoff, J D Webster, D E Harlov

0800h V51C-2208 POSTER An Electron Microprobe Study of Synthetic Aluminosilicate Garnets: J Fournelle, C A Geiger

0800h V51C-2209 POSTER Determination of Fluorine in Fourteen Microanalytical Geologic Reference Materials using SIMS, EPMA, and Proton Induced Gamma Ray Emission (PIGE) Analysis: S N Guggino, R L Hervig

0800h V51C-2210 POSTER A Development Strategy for Creating a Suite of Reference Materials for the in-situ Microanalysis of Non-conventional Raw Materials: A D Renno, S Merchel, P P Michalak, F Munnik, M Wiedenbeck

0800h V51C-2211 POSTER Standard Materials for Microbeam Analysis of Lanthanides and Actinides: I Ellis, M Gorton, J C Rucklidge

0800h V51C-2212 WITHDRAWN

0800h V51C-2213 POSTER Improving Phyllosilicate Electron Backscatter Diffraction Data Using Ion Milling: D E Ward, S D Walck, K H Mahan, R Geiss

0800h V51C-2214 WITHDRAWN

0800h V51C-2215 POSTER The effect of SEM imaging on the Ar/Ar system in feldspars: S Flude, S Sherlock, M Lee, S P Kelley

0800h V51C-2216 POSTER Influence of femtosecond laser ablation system parameters on the characteristics of induced particles: implications for LA-ICP-MS analysis of natural monazite: F d’Abzac, A Seydoux-Guillaume, J Chmleff, L Datas, F Poirtrasson

0800h V51C-2217 POSTER Current Challenges for Laser Ablation ICP-MS: The Good, the Bad and the Ugly: A Koenig

0800h V51C-2218 POSTER The Relationship Between Atomic and Oxide Ion Formation From Sputtered Particles During SIMS and The Chemistry of The Substrate Material. (Invited): A J Fahey, C Zeissler, D Newbury, J Davis, R Lindstrom

0800h V51C-2219 POSTER Analysis of U-Pb, O, Hf, and trace elements of horizontally oriented outer and inner zircons from the Boulder batholith, Montana: J N Aleinikoff, K Lund, E A du Bray, J L Wooden, R Kozdon, N Kita, J W Valley, G D Kamenov, P A Mueller

0800h V51C-2220 POSTER Tracking the Mineralogical Fate of Arsenic in Weathered Sulfides from the Empire Mine Gold-Quartz Vein Deposit by using Microbeam Analytical Techniques: T Bural, C N Alpers, A L Foster, A Brown, L C Hammersley, E Petersen

0800h V51C-2221 POSTER In situ analysis of carbon isotopes in North American diamonds: A D Van Rythoven, E H Hauri, J Wang, T McCandless, S B Shirey, D J Schulze

V51D Moscone West/2022 Friday 0800h 175 Years of Geological Research in the Galapagos II (joint with G, T, DI)

Presiding: D Geist, University of Idaho; K S Harpp, Colgate University; E L Mittelstaedt, Laboratoire FAST; C W Sinton, University of Redlands

0800h Introduction Dennis Geist

0810h V51D-01 Measuring volcanic deformation of the Galapagos Islands with InSAR: S Baker, F Amelung, M Bagnardi

0825h V51D-02 Upper mantle structure beneath the Galápagos Archipelago from joint inversion of body and surface waves (Invited): D R Villagomez, D R Toomey, E E Hooft, S C Solomon

0840h V51D-03 Geochemical and Geophysical Estimates of Lithospheric Thickness Variation Beneath Galápagos: S A Gibson, D Geist
0855h V51D-04 Multistage Melting and Mantle Flow in the Galapagos Plume-Ridge Province: D Geist

0910h V51D-05 Sources of volatiles in basalts from the Galapagos Archipelago: deep and shallow evidence: M E Peterson, A E Saal, E H Hauri, R Werner, S F Hauff, M D Kurz, D Geist, K S Harpp

0925h V51D-06 Hydrogeology of the Galapagos Islands: N d'Ozouville, A Pryet, S Violette, G de Marsily, B Deffontaines, E Auker

0940h V51D-07 Tracing the Galapagos Volcanic Groundwater System Using Noble Gases and Stable Isotopes: R B Warrier, M C Castro, C M Hall, N d'Ozouville

0955h Discussion Karen Harpp

V51E Moscone West: 2018 Friday 0800h

Chemical, Physical, and Petrographic Perspectives on Magmatic Differentiation II (joint with MR)

Presiding: A J Kent, Oregon State University; S Collins, Durham University; C L McLeod, Durham University

0800h V51E-01 An evaluation of spatial and temporal scales of differentiation in the Tuolumne Batholith, Central Sierra Nevada (Invited): S R Paterson, V Memeti, J Krause

0830h V51E-02 Comparing batholith-source connections for the Cadiz Valley Batholith and a deeper sheared intrusive complex in the Mojave Desert, CA through whole rock and pre-magmatic zircon geochemistry: R C Economos, A P Barrh, J L Wooden, K A Howard, B A Wiegang

0845h V51E-03 Putting zircon surface geochronology and geochemistry in textural context using 3D Xray tomography: Probing the magmatic history of Mount St. Helens: L L Claiborne, J L Wooden, C F Miller, G A Gualda, M A Clynne, D M Flanagan

0900h V51E-04 Using crystal zoning to track crystal mush differentiation (Invited): M Humphreys

0930h V51E-05 Co-evolution of extracted liquid and complementary cumulate mush following mafic intrusions: the case of the zoned Ammonia Tanks ignimbrite: C D Deering, O Bachmann, T A Vogel

0945h V51E-06 Quartz Zoning and the Pre-eruptive Evolution of the ~340 ka Whakamaru Magma Systems, New Zealand: N E Matthews, D M Pyle, V Smith, C Huber, C J Wilson

V51F Moscone West: 2020 Friday 0800h

The Constraint of Magma and Gas Transport by Geophysical and Geochemical Data I (joint with NS)

Presiding: F Witham, University of Bristol; J Biggs, University of Bristol; T Menand, Université Blaise Pascal, Laboratoire Magmas & Volcans, IRD R 163, CNRS UMR 6524

0800h V51F-01 3D image of an active magma chamber beneath Montserrat, Lesser Antilles, from first-arrival travel-time tomography (Invited): M Paulatto, C Annen, T Henstock, E J Kiddle, T A Minshull, R S Sparks, R Foroozian

0815h V51F-02 WITHDRAWN

0830h V51F-03 A forward modeling approach to relate geophysical observables at active volcanoes to deep magma dynamics: C P Montagna, A Longo, P Papale, M Vassalli, G Saccorotti, A Cassioli

0845h V51F-04 Magma Expansion and Fragmentation in a Propagating Dike (Invited): C P Jaupart, B Taisne

0900h V51F-05 Imaging the dynamics of dike propagation using seismic swarms at Piton de la Fournaise volcano: B Taisne, F Brenguier, N M Shapiro, V Ferrazzini

0915h V51F-06 The shapes of dykes: evidence for the influence of cooling and inelastic deformation: K A Daniels, J L Kavanagh, T Menand, R S Sparks

0930h V51F-07 Dyke propagation and spatial distribution in dyke swarms: T Menand

0945h V51F-08 Interaction of ascending magma with pre-existing crustal structures: Insights from analogue modeling: N Le Corvec, T Menand, J V Rowland

Union

U52A Moscone South: 104 Friday 1020h

Climate Change Adaptation

Presiding: J M Byrne, University of Lethbridge; D B Fagre, U.S. Geological Survey; T F Pedersen; J A Tindall, US DOI - USGS

1020h U52A-01 State of Climate Change Science: Need for Adaptation and Mitigation (Invited): J E Hansen, P A Kharecha, M Sato

1050h U52A-02 Ice in the Hot Box—What Adaptation Challenges Might We Face? (Invited): R B Alley

1110h U52A-03 Adaptation to Impacts of Greenhouse Gases on the Ocean (Invited): K Caldeira

1130h U52A-04 Geoengineering and adaptation: A Robock

1150h U52A-05 Adaptation to heat health risk among vulnerable urban residents: a multi-city approach: O Wilhelmi, M Hayden, H Brenchert-Smith

1205h U52A-06 An Accelerated Path to Assisting At-Risk Communities Adapt to Climate Change: A Socci

Atmospheric Sciences

A52A Moscone West: 3020 Friday 1020h

Biosphere-Atmosphere Exchange of Reactive Trace Gases and Their Role in the Chemistry of Ozone and Aerosols II

Presiding: R C Cohen, UC Berkeley; P S Stevens, Indiana University


1040h A52A-02 Sources and trends of Tropospheric Formaldehyde (HCHO) derived from GOME-1 and -2: T Marbach, S Beirle, M J Penning de Vries, T Wagner


1112h A52A-04 Understanding the impact of isoprene nitrates on regional air quality using recent advances in isoprene photooxidation chemistry: Y Xie, F Paultor, R W Pinder, W P Carter, C G Nolte, D Luecken, W T Hutzell, P O Wennberg, R C Cohen

A52B Moscone West: 3004 Friday 1020h Climate Processes and Other Research Applications Enabled by Satellite Sounders, Imagers, and Profilers II (joint with H)

Presiding: B H Kahn, Jet Propulsion Laboratory; B Tian, Jet Propulsion Lab

1020h A52B-01 Regional differences in tropical congestus populations as viewed by AIRS/CloudSat coincident scans (Invited): S Casey, E Fetzer, Q Yue

1035h A52B-02 The Impact of Precipitating Ice and Snow on the Radiation Balance in Global Climate Models: D E Walliser, J F Li, T S L'Ecuyer

1050h A52B-03 Structure Function Analysis of Scaling in Water Vapor Observations from AIRS: K G Pressel, W Collins

1105h A52B-04 Analysis of the influence of Saharan air layer on tropical cyclone intensity using AIRS/Aqua data: S Shu, L Wu

1120h A52B-05 A Multi-Sensor Perspective on the Tropical Interannual Variability of Humidity and Clouds: C Liang, A Eldering, B Tian, S Wong, A Gettelman, E Fetzer, K Liu

1135h A52B-06 Variability of the Upper Troposphere and Lower Stratosphere observed with GPS Radio Occultation Temperatures: S Heise, T Schmidt, F Zuss, G Michalak, G Beyerle, J Wickert, A Haser

1150h A52B-07 Optically thin ice clouds in Arctic : Formation processes: C Jouan, E Girard, J Pelon, J Blanchet, W Wobrock, I Gultepe, J Gayet, J Delanoë, G Mioche, R Adam De Villiers

1205h A52B-08 A determination of the cloud feedback from climate variations over the last decade: A E Dessler

A52C Moscone West: 3008 Friday 1020h Measuring Earth-Air-Vesphere Fluxes and Tropospheric Composition From Space II (joint with B)

Presiding: D K Henze, University of Colorado Boulder; D B Millner, University of Minnesota

1020h A52C-01 Global isoprene emissions constrained by OMI formaldehyde column measurements: Y Wang, J Nam, K Chance, T P Kurosu, A B Guenther


1054h A52C-03 Episodes of dust and pollution aerosols exported from East Asia to the Arctic: Satellite observations and model simulations: M Di Pierro, L Jaegle, T L Anderson

1108h A52C-04 Interannual variability of CO and its relation to long-range transport and biomass burning as seen by SCIAMACHY: C Dijkstra, A Goudement, J de Laat, H Schrijver, G van der Werf, M Krol, I Aken

1122h A52C-05 Aerosol Single-Scattering Albedo Derived from MODIS Reflectances over a Bright Surface: K C Wells, J Martin, L A Remer, S M Kreidenweis, G L Stephens

1136h A52C-06 Observing the atmospheric composition with the IASI/MetOp satellite: emissions, composition and transport: C Clerbaux, P Coheur, M George, L Clarisse, D Hurtmans, J Hadji-Lazaro, A Razavi

A52C-07 ESTIMATING GLOBAL AEROSOL EMISSIONS BY ASSIMILATING SATELLITE OBSERVATIONS IN A FIXED-LAG ENSEMBLE KALMAN SMOOTHER: N Schutgens, M Nakata, T Takemura, T Nakajima

1206h A52C-08 Wind-dependency of NO2 Column Densities from Satellite: Estimating NOx Emissions and Lifetimes: S Beirle, T Wagner

Biogeosciences

B52A Moscone West: 2006 Friday 1020h Carbon Sequestration in the Biosphere: Biogeochemistry and Biophysics III (joint with A, GC, H, OS)

Presiding: A Noormets, North Carolina State University; N Zeng, University of Maryland

1020h B52A-01 Is planting forests bad for the climate?: P K Snyder, M Williams

1035h B52A-02 Trade-Offs Associated with Soil Carbon Sequestration in ecosystems as Climate Change Mitigation (Invited): J W Six, A Y Kong

1050h B52A-03 Accelerated Sequestration of Terrestrial Plant Biomass in the Deep Ocean: S E Strand

1105h B52A-04 Ecological and Historical Controls on Black Carbon Storage in Hawaiian Grassland Soils: D F Cusack, O Chadwick, T Ladefoged, P Vitousek

1120h B52A-05 Carbon allocation belowground in Pinus ponderosa using stable carbon isotope pulse labeling technique: M Dinnoura, A Buse, C Chipeaux, M Sartore, C Lambot, P Trichet, M Bakker, D Loustau, D EPRON

1135h B52A-06 Do differences in carbon allocation strategy account for large difference in productivity among four tropical Eucalyptus plantations?: D EPRON, Y Nouvellon, J Lalau, A Kinana, J Mazoumbou, J D Almeida, P Deleporte, J Gonzalez, J Boulle

1150h B52A-07 Productivity and carbon allocation in pure and mixed-species plantations of Eucalyptus grandis and Acacia mangium in Brazil: Y Novellon, J Lalau, D EPRON, G le Maire, J Gonzalez, J Boulle

1205h B52A-08 Reduced Deep Root Hydrological Redistribution Due to Climate Change Impacts Carbon and Water Cycling in Southern US Pine Plantations: J domec, A Noormets, J King, G Sun, S McNulty, M J Gavazzi, E Treasure, P Caldwell

B52B Moscone West: 2002 Friday 1020h Drilling Deep Time: Windows Into Earth’s Early Biosphere II

Presiding: A D Anbar, Arizona State University; L Kump, Pennsylvania State University; O Hohmoto, Penn State University; R E Summons, Massachusetts Institute of Technology

1020h B52B-01 Multiple sulfur isotope characteristics of 3.46-2.7 Ga sedimentary rocks from drill cores of the Archean Biosphere Drilling Project (Invited): Y Watanabe, H Ohmoto

1040h B52B-02 Biomarker evidence for Archean oxygen fluxes (Invited): C HALLMANN, J Waldbauer, L S Sherman, R E Summons

1100h B52B-03 Environmental changes recorded by syngenetic and early diagenetic iron minerals in the late Archean Mt. McRae Shale: R Raiswell, C Reinhard, A Derkowski, A D Anbar

1115h B52B-04 SEDIMENTARY ENVIRONMENT OF 3.2 GA DIXON ISALND AND CLEAVERVILLE FORMATIONS:DXCL-DRILLING, WEST PILBARA, AUSTRALIA: S Kiyokawa, T Ito, M Ikekura, J K Yamaguchi, H Naraoka, R Sakamoto, K Hoso, Y Suganuma
All information is current as of November 12, 2010

1130h  **B52B-05** Molybdenum Enrichment in the 3.2 Ga old Black Shales Recovered by Dixon Island-Cleaverville Drilling Project (DXCL-DP) in Northwestern Pilbara, Western Australia: **K E Yamaguchi**, S Kiyokawa, H Naraoka, M Ikehara, T Ito, Y Suganuma, R Sakamoto, K Hosoi

1145h  **B52B-06** Carbon and Nitrogen Cycling Pursuant to the Great Oxidation Event: Evidence from the Paleoproterozoic of Fennoscandia: **L Kump**, C K Junium, M A Arthur, A Brasier, A E Fallick, V Melezhik, A Lepland, A Crne, G Luo, Title of Team: FAR-DEEP Drilling Team

1200h  **B52B-07** Deep-Time drilling in the Australian Archean: the Agouron Institute geobiological drilling project. (Invited): **R Buick**

---

**B52C**  Moscone West: 2004  Friday 1020h

Environmental Sensing Technologies for Improved Land Surface Characterization II (joint with A, GC, H)

**Presiding:** O Sonnentag, UC Berkeley; Y Ryu, UC Berkeley; J A Gamon, University of Alberta

1020h  **B52C-01** Digital cameras as environmental sensors (Invited): **E A Graham**

1035h  **B52C-02** Use of a cable-based system for observing the heterogeneity of vegetation communities in arctic tundra: **H E Ahrends**, S F Oberbauer, C Tweedie, R D Hollister

1050h  **B52C-03** Comparing near-earth and satellite remote sensing based phenophase estimates: an analysis using multiple webcams and MODIS (Invited): **K Hufkens**, A D Richardson, M Migliavacca, S E Frolking, B H Brasswell, T Milliman, M A Friedl

1105h  **B52C-04** Network of Environmental Sensors in Tropical Rain Forests: **C Von Randow**, R D dos Santos, H da Rocha


1135h  **B52C-06** A generic algorithm for direct measurement of photosynthetic light-use efficiency from space (Invited): **T Hilker**, F G Hall, N C Coops, C J Nichol

1150h  **B52C-07** Using Temporally Frequent Surface NDVI Observations to Determine Light Use Efficiency of High Latitude Ecosystems: **K F Huemmrich**, Y Harazono, W C Oechel, P Lafleur, E R Humphreys, L B Flanagan, J H McCaughey, E Middleton

1205h  **B52C-08** PASTIS 57: Autonomous light sensors for PAI continuous monitoring. Principles, calibration and application to vegetation phenology: **R Lecerf**, F Baret, J Hanocq, O Marloie, M Rautiainen, M Mottus, J Heiskanen, P Stenberg

---

**C52B**  Moscone West: 3010  Friday 1020h

The Sea-Ice Ocean System II (joint with GC, OS, B)

**Presiding:** M Jin, University of Alaska Fairbanks; J K Hutchings, University of Alaska Fairbanks; M M Holland, NCAR

1020h  **C52B-01** How Vulnerable is Perennial Sea Ice? Insights from Earth’s Late Cenozoic Natural Experiments (Invited): **J Brigham-Grette**, L V Polyak, B Caissie, C J Sharko, S Petsch

1035h  **C52B-02** Assessing ocean mixing under sea ice and lead in climate models: **M Jin**, D Qu, J K Hutchings, Y Kawaguchi, T Kikuchi

1050h  **C52B-03** The Fresh Meltwater in the Sea Ice System: **C Polashenski**, D K Perovich, K Claffey, K E Frey, L D Trusel, C Wood

1105h  **C52B-04** Pan-Arctic Simulation of Coupled Nutrient-Sulfur Cycling due to Sea Ice Biology: **S M Elliott**, C Deal, G Humphries, E C Hunke, N Jeffery, M Jin, M Levassere, J Stefels

1120h  **C52B-05** Changes in the Timing of Phytoplankton Blooms Related to Diminished Ice Cover in the Arctic: **M Kahr**, V Brotas, M Manzano, B G Mitchell

1135h  **C52B-06** Modelling the community life strategies in ice-covered oceans: **L Tedesco**, M Vichi

1150h  **C52B-07** Large-Scale Modeling of Primary Production within Arctic Sea Ice: **C M Deal**, M Jin, S M Elliott, E C Hunke, M E Maltrud, N Jeffery

1205h  **C52B-08** First year sea ice desalinization throughout the entire column after the growth season: Observation and Modelling: **F P Jardon**, F Vivier, M Vancoppenolle, A Lourenco, P Bouruet-Aubertot, Y Cuypers

---

**C52A**  Moscone West: 3011  Friday 1020h

Advances in Glacier Seismology II (joint with S, GC, EP)

**Presiding:** J M Amundson, University of Chicago; F T Walter, Scripps Institution of Oceanography; S O’Neel, USGS; R C Aster, New Mexico Institute of Mining and Technology

1020h  **C52A-01** Passive seismic imaging of the subglacial environment beneath West Antarctic Ice Streams: **J Winberry**

1035h  **C52A-02** Quasi-Periodic Stick-Slip of Glaciers and Ice Streams (Invited): **S Anandakrishnan**, K A Christianson, L Zoet, J Winberry


1105h  **C52A-04** Seasonality of Shallow Icequakes at Mount Erebus Volcano, Antarctica: **H A Knox**, R C Aster, P R Kyle

1120h  **C52A-05** The many scales of glacier seismology (Invited): **M E West**, C F Larsen, S O’Neel, T C Bartholomauas

1135h  **C52A-06** Seismic and Acoustic Array Observations of Bering Glacier Calving (Invited): **J Richardson**, G P Waite

1150h  **C52A-07** Ice quake source mechanisms explored with paired imagery and seismograms: **T C Bartholomauas**, C F Larsen, S O’Neel, M E West

1205h  **C52A-08** Constraints on Microseism Generation and Sea Ice Mechanical Strength from Observations of Alaskan Microseism Variability: **V C Tsai**, D E McNamara
Education and Human Resources

ED52A  Moscone South: 102  Friday 1020h  
Teacher Professional Development Programs Promoting Authentic Scientific Research in the Classroom II

Presiding: C E Walker, National Optical Astronomy Observatory; G Scowcroft, University of Rhode Island; S M Pompea, Natl Optical Astronomy Obs


1035h  ED52A-02 Polar Science: From the Field to the Classroom (Invited): M O’Neill, K O’Brien

1050h  ED52A-03 Young Engineers and Scientists (YES) 2010 – Engaging Teachers in Space Research: D C Boice, P H Reiff

1105h  ED52A-04 STARRS in Yellowstone: Addressing Challenges Facing Student-Teacher-Scientist Partnerships: A Houseal, R Gallagher, B Fuhrmann, R Sanford

1120h  ED52A-05 Pacific CRYSTAL Teacher Professional Development Models: Lessons Learned: E Van der Flier-Keller, L Yore

1135h  ED52A-06 Using Participatory Exploration to Engage Classrooms in STEM Learning: A Case Study Using NASA’s Mars Student Imaging Project: S L Klug, P R Christensen, P Graff, M Viotti, C Bowman

1150h  ED52A-07 Bringing Students out of the Classroom and into Research Projects: An Undergraduate Team Research (UTR) Program at the University of Southern California: I V Cox, M Quirk, K N Culbert, A S Whitesides, H Sun, C J Black, W Cao, T Zhang, S R Paterson, V Memeti, L J Anderson

1205h  ED52A-08 Scaffolding Pre-Service Teachers’ Learning to Conduct Authentic Research with Real-Data: T F Slater, D J Lyons, S J Slater, Title of Team: Center for Astronomy & Physics Education Research CAPER Team

Earth and Planetary Surface Processes

EP52A  Moscone South: 310  Friday 1020h  
Transient Landscapes: Capturing Responses to Changing Boundary Conditions II

Presiding: J Chen, Institute of Geology, China Earthquake Administration (CEA); D W Burbank, UCSB; M E Oskin, University of California, Davis

1020h  EP52A-01 The importance of downstream bed surface coarsening in predicting the wave of incision in response to a sudden base level drop at the mouth of a river: the Holocene Le Sueur River, Minnesota, USA: N J Finnegan, K Gran, A Johnson, P Belmont, P Wilcock, W E Dietrich

1035h  EP52A-02 Quantifying glacial landscape processes with numerical modeling and thermochronology: B J Yanites, T A Ehlers, G J Woodward

1050h  EP52A-03 Glacier erosional response to transient climate: M N Koppes, B Hallet

1105h  EP52A-04 Shrinking and splitting of drainage basins along the Aconcagua Range (Argentina) from the migration of its main drainage divide: J Grimaud, S Bonnet, S Moyano

1120h  EP52A-05 PLACING ABSOLUTE TIMING ON BASIN INCISION ADJACENT TO THE COLORADO FRONT RANGE: RESULTS FROM METEORIC AND IN SITU ^BE DATING: M Duvalhorth, R S Anderson, D Ward


1150h  EP52A-07 Cenozoic migration of topography in the North American Cordillera: H T Mix, A Mulch, C P Chamberlain

1205h  EP52A-08 Transient response in longitudinal grain size to reduced gravel supply in a large river: M B Singer

Geodesy

G52A  Moscone West: 2008  Friday 1020h  
Remote Sensing of Atmospheric Water Vapor Using Geodetic Techniques I (joint with A)

Presiding: I Thomas, Newcastle University; J Wang, NCAR; J J Braun, UCAR

1020h  G52A-01 GPS Occultation Profiling of Low Latitude Free Tropospheric Water Vapor (Invited): E R Kursinski, A L Kursinski

1035h  G52A-02 Global distribution of water vapor observed by COSMIC GPS RO: Comparison with GPS radiosonde, NCEP and JRA-25 reanalysis data sets (Invited): K Panguar

1105h  G52A-03 The West African Monsoon water cycle investigated with a ground-based GPS network (Invited): O Bock, R Meynadier, F Guichard, M Nuret, A Boone, S Nahmani, M Bouin, E Doerflinger

1120h  G52A-04 Using space geodetic techniques to estimate climate trends (Invited): T Nilsson, J Boehm, G Elgered, T Ning, H Schuh

1130h  G52A-05 Precipitable water extremes from ground-based GPS measurements and relationship with precipitation extremes over U.S.A: J Wang

1135h  G52A-06 Retrieval of atmospheric water vapor by geodetic VLIB: R Heinkeleman, H Schuh, J Boehm, T Nilsson


1205h  G52A-08 Tropospheric correction of InSAR time-series with the weather research forecasting model: an application to volcanic deformation monitoring: W Gong, F Meyer, P Webley, Z Lu

Global Environmental Change

GC52A  Moscone West: 3001  Friday 1020h  
Biogeochemical Responses to a Changing Arctic III (joint with B, C)

Presiding: A V Rocha, Marine Biological Lab; A Balser, University of Alaska Fairbanks; A L Khodolod, Geophysical Institute UAF; R R Musket, University of Alaska Fairbanks

1020h  GC52A-01 Detecting the Lit Fuse of the Arctic’s Carbon Bomb: R M Holmes, E B Bulygina, J Vonk, S Davydov, A Davidova, P J Mann, R Spencer, N Zimov, S A Zimov

1035h  GC52A-02 Strength and Timing of the Permafrost Carbon Feedback: T Zhang, K M Schafer, L Brubacher, A P Barrett

1050h  GC52A-03 EFFECTS OF EXPERIMENTAL WARMING OF THE DEEP SOIL AND PERMAFROST ON ECOSYSTEM CARBON BALANCE IN ALASKAN TUNDRA (Invited): E A Schuur, S Natali, C Trucio, C E Hicks, K G Cummer, A F Baron Lopez

1105h  GC52A-04 The Impacts of Thermokarst Failures on Lakes: Rapid Attenuation of Major Impacts gives way to Potential Long-term Effects on Benthic Processes: G W Kline, C Johnson, A Balser, T Coolidge, W B Bowden, A Giblin

All information is current as of November 12, 2010
1120h GC52A-05 Nitrogen and phosphorus in Yedoma soils of Northeast Siberia: stocks, fluxes and the ecosystem consequences of nutrient release from permafrost thaw: M C Mack, J C Finlay, J DeMarco, F Chapin, E A Schuur, J C Neff, S A Zimov

1135h GC52A-06 Availability of Fe(III) for Anaerobic Respiration across an Age Gradient of Drained Thaw Lake Basins in the Arctic Coastal Plain: D Lipson, T K Raab, F Bozzolo, C Emerson, I Hale, M Mauritz, K Miller

1150h GC52A-07 Seasonal patterns in soil N availability in the arctic tundra in response to accelerated snowmelt and warming: A Darrouzet-Nardi, M D Wallensten, H Steltzer, P Sullivan, C Melle, A Segal, M N Weintrub

1205h GC52A-08 Pan-Arctic albedo variability among tundra vegetation types: implications for ecosystem carbon cycling (Invited): M M Loranty, Y Jin, P S Beck, S J Goetz

GC52B Moscone West: 2005 Friday 1020h The North American Regional Climate Change Assessment Program: Studies Based on NARCCAP Simulations II (joint with A, B, PA, H)

Presiding: L O Mears, NCAR; W J Gutowski, Iowa State University

1020h GC52B-01 The North American Regional Climate Change Assessment Program: Overview of Climate Change Results: L O Mears, Title of Team: NARCCAP Team

1035h GC52B-02 A statistical approach for process-orientated analysis of regional climate models (Invited): S R Sain

1050h GC52B-03 Analysis of the NARCCAP climate projection ensemble of Precipitation and 2m Temperature (Invited): S Biner

1105h GC52B-04 Investigating the Atlantic Warm Pool Impact on Precipitation Variability Over the Continental United States (Invited): A Nunes, E Yulaeva

1120h GC52B-05 Does Dynamical Downscaling Matter for Climate Change Adaptation on the Colorado River? (Invited): J J Bursaglio, L O Mears, I Rangwala, J Briggs

1135h GC52B-06 Using NARCCAP results to assess the climatological impacts of climate feedback mechanisms over the United States: A C Ruane, R M Horton, J M Winter, J W Jones, G A Baigorria, C Rosenzweig

1150h GC52B-07 WITHDRAWN

1205h GC52B-08 Trends and Variability in the Wind Power Resource in the NARCCAP simulations: D B Kirk-Davidoff, D Barrie

GC52C Moscone West: 3005 Friday 1020h Variability and Predictability of Weather and Climate Extremes III (joint with A, H, NH, B, PA)

Presiding: M F Wehner, Lawrence Berkeley National Laboratory; A R Ganguy, Oak Ridge National Laboratory

1020h GC52C-01 An Overview of the IPCC Special Report on Extremes (Invited): D R Easterling

1035h GC52C-02 Characterizing impact of local sea level rise through changes in extreme storm surges along the US coasts. (Invited): C Tebaldi, B Strauss, C Zervas

1050h GC52C-03 Intensification of hot extremes in the United States in the next three decades (Invited): N S Diffenbaugh, M Ashfaq

1105h GC52C-04 Spatial-temporal causal modeling: a data centric approach to climate change attribution (Invited): A C Lozano

1120h GC52C-05 Studying Weather and Climate Extremes in a Non-stationary Framework: Z Wu


1144h GC52C-07 A General Perspective of Extreme Events in Weather and Climate: P Sura

1156h GC52C-08 Impacts of Amazon deforestation on regional weather and climate extremes: D Medvigy, R L Walko, R Avissar

1208h GC52C-09 Environments that Produce “Extreme” Convective Storm Behavior: Results from a Large Numerical Modeling Study: C Kirkpatrick, E W McCall, Jr.

Hydrology

H52A Moscone West: 3014 Friday 1020h Detecting and Predicting Change in Coupled Human-Water Systems III (joint with GC, PA, B)

Presiding: M Huang, Pacific Northwest National Laboratory; C M Herrmans, City University of New York; H Gao, University of Washington; M S Wigmosta, Pacific Northwest National Laboratory

1020h H52A-01 Representing human-water interactions in an integrated regional earth system modeling framework: H Li, M Huang, M S Wigmosta, Y Ke, A M Coleman, L Leung

1035h H52A-02 Watershed Controls on the Proper Scale of Economic Markets for Pollution Reduction: J Rigby, M W Doyle, A Yates

1050h H52A-03 Bridging the Gap: The ‘Soft Path’ for Improving Resilience and Adaptability of Water Systems (Invited): P H Gleick

1105h Invited discussion with Dennis Lettenmaier: Predicting and managing the impacts of anthropogenic change on managed water systems

1120h H52A-04 DYNAMICS OF MEKONG RIVER RESERVOIR SIMULATION USING RESERVOIR-ROUTING MODEL FOR CURRENT AND FUTURE CLIMATE: J E Richey, T Beyene, D P Lettenmaier

1135h H52A-05 The Future of Land-Use in the United States: Downscaling SRES Emission Scenarios: B M Slette, T L Sohl

1150h H52A-06 Modeling Hydrological Services in Shade Grown Coffee Systems: Case Study of the Pico Duarte Region of the Dominican Republic: J D Erickson, L Gross, N Agosto Filion, K Bagstad, G Voigt, G Johnson

1205h H52A-07 A Conceptual Model for Coupled Human-Landscape Systems in Mountain Regions: M Keiler, R Poeppl


Presiding: B P Mohanty, Texas A&M University; H Lin, Penn State Univ; B Cardenas, University of Texas at Austin

1020h H52B-01 Opportunities from hydrology for stream microbial ecology and biogeochemistry: T J Battin

1035h H52B-02 Hydrological - pathological interactions: disease susceptibility, tree decline and ecohydrology: S E Thompson, S A Levin, I Rodriguez-Iturbe, C Gilligan

1050h H52B-03 Application of thermodynamics to quantify the energetics of pedogenesis and critical zone evolution (Invited): C Rasmussen, P A Troch, P D Brooks, J D Pelletier, J Chorover

1105h H52B-04 Use of the Entropy Method in Modeling Ecohydro-geomorphological Processes (Invited): J Wang, R L Bras, V Nieves

All information is current as of November 12, 2010

1135h H52B-06 Evidence of linked biogeochemical and hydrological processes in homogeneous and layered vadose zone systems: J T McGuire, D J Hansen, B P Mohanty

1150h H52B-07 Hydrological Perturbations Drive Biogeochemical Processes in Experimental Soil Columns from the Norman Landfill Site: B Arora, B P Mohanty, J T McGuire

1205h H52B-08 Effects of river-floodplain exchange on water quality and nutrient export in the dam-impacted Kafue River (Zambia): R Zurbrugg, J Wamulume, N Blank, I Nyambe, B Wehrli, D B Sen

H52C Moscone West: 3016 Friday 1020h

Presiding: N Shokri, Boston University; L J Pyrk-Nolte, Purdue University

1020h H52C-01 Multiphase flow, deformation and wave propagation in porous media: A Pazdniak, P M Adler

1035h H52C-02 Effective Permeability Revisited: The Role of the Geometric Mean: A P Veladurai, P A Veladurai

1050h H52C-03 Probability distribution of biofilm thickness and effect of biofilm on the permeability of porous media: S Ye, B E Sleep, C Chien


1135h H52C-06 The unsaturated hydraulic conductivity: measurement and non-equilibrium effects: U Wellers, H Vogel


1205h H52C-08 Modelling hysteretic flow through a slab of soil with a Prisach operator based on the van Genuchten equation: D Flynn

H52D Moscone West: 3018 Friday 1020h

Nutrient Sources and Cycling in Aquatic Systems II (joint with B, GC)

Presiding: H K Pant, Lehman College of the City University of New York; C Kendall, USGS; R J Baker, U.S. Geological Survey

1020h H52D-01 Ecosystem metabolism and nutrient cycling linkages in stream ecosystems: a synthesis from studies at multiple temporal and spatial scales: B J Roberts, P J Mulholland

1035h H52D-02 Nitrogen and Phosphorus Loads in an Agricultural Watershed Affected by Poultry Litter Application and Wastewater Effluent, Northeastern Oklahoma and Northwestern Arkansas, 2002-2009: R Esralew, R L Tortorelli

1050h H52D-03 Geologic sources of nutrients for aquatic ecosystems (Invited): R A Dahlgren, C Jeffres, A L Nichols, M Deas, A Willis, J Mount

1105h H52D-04 Sources and Quantities of Nitrogen Contributing to Eutrophication of Barnegat Bay-Little Egg Harbor Estuary, New Jersey: C M Wieben, R J Baker, R Nicholson


1135h H52D-06 Spatial and temporal variations in nitrogen sources and cycling in north San Francisco Bay: Combining multi-isotope and hydrologic modeling approaches: M B Young, C Kendall, S R Silva, M Guerin, T E Kraus

1150h H52D-07 One Year of Monthly N and O Isotope Measurements in Nitrate from 18 Streamwater Monitoring Stations Within the Predominantly Pastoral Upper Manawatu Catchment, New Zealand: W T Baisden, C Douence

1205h H52D-08 Medically-derived I-131: a potential tool for understanding the fate of wastewater nitrogen in aquatic systems: P S Rose, J P Smith, R C Aller, J K Cochran, R L Swanson, S N Murthy, R B Coffin

H52E Moscone West: 3022 Friday 1020h

Pore-Scale Interfacial Processes in the Subsurface I

Presiding: M Prodanovic, University of Texas; M L Porter, Oregon State University

1020h H52E-01 The Effect of Films on the Capillary Pressure Saturation Hysteresis in a Smooth-walled Wedge Channel: Y Liu, D Nolte, L J Pyrk-Nolte

1035h H52E-02 Extension of Kozeny-Carman Model for Estimating Unsaturated Hydraulic Conductivity: R Khaleel

1050h H52E-03 A Pore Network Model Evaluation of the Types of Fluid/Fluid Interfacial Area Measured by Static and Dynamic Water-Phase Tracer Methods: T C Kibbey, L Chen

1105h H52E-04 Lattice-Boltzmann modeling of experimental fluid displacement patterns, interfacial area and capillary trapped CO2: M L Porter, Q Kang, S Tarimala, A Abdel-Fattah, S Backhaus, J W Carey


1135h H52E-06 An adaptive finite volume approach to simulation of precipitation and dissolution at the pore scale: D Trebichot, S Molins, G H Miller, C Steefel

1150h H52E-07 Effects of Pore-Scale Heterogeneity and Solution Chemistry on Transverse Mixing Induced Calcium Carbonate Precipitation: K Dehoff, C Zhang, N Hess, M Oostrom, T W Wietzma

1205h H52E-08 RHIZOSPHERE COMPACTATION: MODELING A BED OF MULTIPLE AGGREGATES USING X-RAY MICRO-TOMOGRAPHY INFORMATION: J E Aravena, M Berli, S W Tyler

Earth and Space Science Informatics

IN52A Moscone South: 309 Friday 1020h

Collaborative Frameworks in Earth and Space Sciences I (joint with GC, NH, PA, ED)

Presiding: C Lynnes, NASA/GSFC; R Devarakonda, Oak Ridge Nat’l Lab-Env Scis.; R Ramachandran, University of Alabama in Huntsville

1020h Introduction Christopher Lynnes

1025h IN52A-01 Incentives to Encourage Scientific Web Contribution (Invited): A K Antunes

All information is current as of November 12, 2010
All information is current as of November 12, 2010
Planetary Sciences

PP52A  Moscone South: 306  Friday  1020h
The Atmosphere of Mars: New Findings From Modeling and Observations II (joint with A)

Presiding: R V Gough, University of Colorado

1020h  PP52A-01 Mapping Water Ice Clouds with MRO/MARCI: M J Wolff, R T Clancy, B A Cantor

1030h  PP52A-02 MARs Color Imager (MARCI) Daily Global Ozone Column Mapping From the Mars Reconnaissance Orbiter (MRO): A Survey of 2006-2010 Results: R T Clancy, M J Wolff, M C Malin, B A Cantor

1040h  PP52A-03 Can rapid loss and high variability of Martian methane be explained by surface H2O2?: R V Gough, J Turley, G Ferrell, K Cordova, S Wood, D O De Haan, C P McKay, O B Toon, M A Tolbert


1100h  PP52A-05 Water on Mars: global maps of H2O, HDO and D/H obtained with CRIRES at VLTI and NIRSPEC at Keck II: G L Villanueva, M J Mumma, R Novak, Y L Radeva, H Kauffli, A Smette, P Hartogh, T Encrenaz

1110h  PP52A-06 The Vertical Distribution of Dust in the Martian Atmosphere: The Haze in the Clear Season and the Haze After the Storm: N G Heavens, M I Richardson, A Kleinboehl, D Kass, D J McConnel, Title of Team: Mars Climate Sounder Science Team

1120h  PP52A-07 Exospheric Temperatures at Mars Derived from SPICAM Dayglow Measurements: S W Bouguer, C Simon, G Gronoff, O Wittaesse, F Leblanc, J Bertaux

1130h  PP52A-08 Ground to exobase modeling of the Martian atmosphere using M-GITM: D J Pawlowski, S W Bouguer

1140h  PP52A-09 Modeling Mars’ Ionosphere with Constraints from Same-Day Observations by Mars Global Surveyor and Mars Express: A Lollo, M Mendillo, P Withers, M Matta, M Paetzold, T Tellmann

1150h  PP52A-10 Magnetic fluctuations in the Martian ionosphere: J R Espley

Palaeocenography and Palaeoclimatology

PP52B  Moscone West: 303  Friday  1020h
Climate of the Common Era III: Statistical and Dynamical Models (joint with A, GC)

Presiding: J Emile-Geay, Univ. of Southern California; J E Smerdon, Columbia University

1020h  PP52B-01 The Role of Paleo-Drought Atlases in Climate Change Research Over the Common Era: E Cook

1035h  PP52B-02 Reading the bass line: How well do moisture-sensitive tree rings track decadal variability?: S St George, T R Ault

1050h  PP52B-03 Potential of treeline bristlecone pine as a late Holocene climate record: M W Salzer, M K Hughes, A G Bunn, K F Kipfmueller

1105h  PP52B-04 Bidecadal climate variability in the Northern Hemisphere winter associated to strong tropical volcanic eruptions during the Last Millennium: D Zanchettin, C Timmreck, S Lorenz, J H Jungclaus

1120h  PP52B-05 Simulation of climate and carbon cycle variability over the last millennium (Invited): V Brovkin, J H Jungclaus, S Lorenz, T R Ault, C Timmreck, C Reick, J Segschneider, K Six

1135h  PP52B-06 Influence of human and natural forcing on European seasonal temperatures over the past centuries (Invited): J Luterbacher, G C Hegerl, F J Gonzalez-Rouco, S F Tett, T J Crowley, E Xoplaki

1150h  PP52B-07 Piecing together the past: Statistical insights into paleoclimatic reconstructions: M P Tingley, P F Craigmyle, M Haran, B Li, E Mannshardt-Shamseldin, B Rajaratnam

1205h  PP52B-08 Reconstructions of paleoclimate: Beyond the hockey stick. (Invited): D W Nychka, B Li
All information is current as of November 12, 2010
1035h **D52A-02** The X Discontinuity: A Probe of Upper Mantle Heterogeneity: B M Kelly, N C Schmerr
1050h **D52A-03** Mantle metasomatism by alkali-rich Ca-carbonates generated from carbonated pelites at 8-22 GPa and the EM I and EM II flavors of the mantle: M W Schmidt, D Grassi, D Guenther
1105h **D52A-04** Global thermochemical models of the Upper Mantle (Invited): F Cammarano, P J Tackley, L Boschi, T Nakagawa
1120h **D52A-05** The upper and lower mantle under Yellowstone: Lots of slab, but where is the plume?: A Gassner, K Sigloch, R Esposito
1135h **D52A-06** Estimating mantle temperature from a global comparison of seismic models and the petrology of mid-ocean-ridge basalts: C A Dalton, A Gale, C H Langmuir
1205h **D52A-08** Radial and Lateral Variations in Mantle Heterogeneity from Scattered Seismic Waves (Invited): S Rost, M S Thorne

**Seismology**

**S52A Moscone West: 2009**

**Friday 1020h**

**Advances in Signal Processing Methods for Seismology I (joint with T)**

*Presiding:* P Chen, University of Wyoming; F J Simons, Princeton University

1020h **S52A-01** Shear wave imaging with seismic interferometry of traffic noise (Invited): R Snieder, N Nakata, T Tsuji, T Matsuoka
1035h **S52A-02** Scales and scattering strengths of lower mantle heterogeneities using PKP-ab, PKP-bc and PKIKP waves (Invited): Y Zheng, M C Fehler
1050h **S52A-03** Combining High Rate GPS and Strong Motion Data: A Kalman Filter Formulation for Real-Time Displacement Waveforms: D Melgar Mocetzuma, Y Bock, B W Crowell
1105h **S52A-04** Angle-domain imaging condition for elastic reverse time migration: R Yan, X Xie, R Wu
1120h **S52A-05** Array-conditioned deconvolution of multiple-component teleseismic recordings: C Chen, D E Miller, H Djkpesse, J B Haldorsen, S Rondenay
1135h **S52A-06** WITHDRAWN
1150h **S52A-07** Inversion Strategies in Adjoint Tomography (Invited): Y Luo, J Tromp
1205h **S52A-08** Principal Component Tomography in Anisotropic Media (Invited): J Trampert, A Sieminski, J Tromp

**S52B Moscone West: 2007**

**Friday 1020h**

**Earthquake Source Processes: What Have We Learned From Recent Large Earthquakes? II (joint with T)**

*Presiding:* B Duan, Texas A&M University; A V Newman, Georgia Institute of Technology

1020h **S52B-01** Stress interaction of strike-slip and thrust faults associated with the 2010 M=7.0 Haiti earthquake: J Lin, R S Stein, V Sevilgen, S Toda
1035h **S52B-02** The 2010 Qinghai, China earthquake: a moderate supershear earthquake: D Wang, J Mori
1050h **S52B-03** Constraints from Satellite Ocean Altimetry and Wave Dynamics on Splay Faulting in the 2004 Indian Ocean Earthquake: J R Rice, N DeDonnay

1105h **S52B-04** Slip History of the 2008 Mw 7.9 Wenchuan Earthquake Constrained by Jointly Inverting Seismic and Geodetic Observations: G Shao, C Ji, Z Lu, K Hudnut, J Liu, W Zhang, Q Wang
1120h **S52B-05** Investigation of Dynamic Interaction and Slip Partitioning Between the Beichuan and Pengguan Faults in the 2008 Wenchuan Earthquake Using Dynamic Source Models: B Duan
1135h **S52B-06** Shallow Megathrust Rupture Propagation of Some Large and Giant Earthquakes: Its Tsunami Potential and Identification from Spectral Energy Content: A V Newman, J A Conyers

1150h **S52B-07** Rupture initiation of the large subduction earthquakes: are the durations and moments of nucleation phases correlated with the final seismic moments? (Invited): C Ji, X Li, G Shao
1205h **S52B-08** Combining Seismic Arrays to Image Detailed Rupture Properties of Large Earthquakes: Evidence for Frequent Triggering of Multiple Faults: M Ishii, E Kiser

**Tectonophysics**

**T52A Moscone West: 2016**

**Friday 1020h**

**Advances in 2-D and 3-D Numerical and Analog Modeling of Mountain Building and Plate Deformation I (joint with G, S)**

*Presiding:* S S Hsiao, Purdue University; L Cruz, Stanford University; M L Cooke, University of Massachusetts

1020h **T52A-01** Benchmarking the Sandbox: Quantitative Comparisons of Numerical and Analogue Models of Brittle Wedge Dynamics (Invited): S Buiter, G Schreurs, Title of Team: The GeoMod2008 Team
1040h **T52A-02** Predicting triangular zones at the termination of fold-and-thrust belts: Y M Leroy, C Liu, M Pubelier
1055h **T52A-03** The Capabilities and Limitations of Linear Elastic Models to Simulate Inelastic Fault-Related Deformation: P J Lovely, D Pollard

1110h **T52A-04** Décollement and its formation in subduction zones: T Hori, H Sakaguchi
1125h **T52A-05** Faulting and its surrounding topographic undulations in analogue models revealed by optical measurements and image correlation techniques (Invited): Y Yamada, T Matsuoka
1145h **T52A-06** Normal fault growth in analog models and on Mars: D Y Wyrick, A P Morris, D A Ferrill
1200h **T52A-07** MODELING FOLD-AND-THRUST BELTS USING NUMERICAL SIMULATIONS AND PHYSICAL EXPERIMENTS: THE ACONCAGUA AND MEXICAN FOLD-AND-THRUST BELTS: L Cruz, G E Hilley, E Fitz, P J Hudleston, J Malinski, M Hernandez, A Take

**T52B Moscone West: 2011**

**Friday 1020h**

**Latest Results From EarthScope’s San Andreas Fault Observatory at Depth II (joint with S, MR)**


1020h **T52B-01** Crustal Structure and Seismicity Around SAFOD: A Ten-Year Perspective (Invited): C H Thurber, S W Roecker, H Zhang, N L Bennington, D Peterson
1035h **T52B-02** Source properties of microearthquakes revealed by near-source observation at SAFO (Invited): K Imanishi, W L Ellsworth
Volcanology, Geochemistry, and Petrology

**V52A Moscone West: 2022**

**175 Years of Geological Research in the Galapagos III** (joint with G, T, D)

**Presiding:**

- D Geist, University of Idaho; K S Harpp, Colgate University; E L Mittelstaedt, Laboratoire FAST; C W Sinton, University of Redlands

1020h **V52A-01** Galapagos Tectonics and Evolution (Invited): R N Hey

1035h **V52A-02** Seismic Constraints on the Formation of the Galapagos and Iceland Platforms: E E Hooft, B Brandsdottir, D R Toomey, R S Detrick, R Mjelde, S C Solomon, H Shimamura, Y Murai


1105h **V52A-04** Petrology and Geochemistry of the Northeast Seamounts of the Galapagos Platform: C W Sinton, K S Harpp, D M Christie

1130h **V52A-05** Noble gas tracers of mantle processes beneath the Galápagos archipelago (Invited): M D Kurz, K S Harpp, D Geist, D J Fornari, J Curtice, D E Lott, W J Jenkins

1135h **V52A-06** Volcanic Eruptions on the Western Galápagos Spreading Center: Connecting Magma Supply at Depth to Eruption Rate on the Surface: J M Sinton, S M White, A Colman, K H Rubin, J A Bowles


1205h **V52A-08** Seamounts South of the Galapagos Spreading Center Provide New Constraints on Plume-Ridge Interaction and Evidence for a Depleted Plume Component: K Hoernle, S F Hauff, B B Hanan, R Werner, D Christie, C Garbe-Schoenberg

---

**V52B Moscone West: 2018**

**Chemical, Physical, and Petrographic Perspectives on Magmatic Differentiation III (joint with MR)**

**Presiding:**

- A J Kent, Oregon State University; S Collins, Durham University; C L McLeod, Durham University; G W Bergantz, Univ. Washington

1020h **V52B-01** The Production and Detection of Magmatic Compositional Gaps: A Consideration of Nested Probabilities in Crustal Evolution (Invited): J Dufek, O Bachmann

1050h **V52B-02** The ‘Daly Gap’ and implications for magma differentiation in composite shield volcanoes: A case study from Akarora Volcano, New Zealand: E Hartung, B kennedy, C D Deering, A Trent, J Gane, R E Turnbull, S Brown

1105h **V52B-03** Evolution of silicic magmas in the Kos-Nisyros volcanic center: cycles associated with caldera collapse: J S Ruprecht, O Bachmann, C D Deering, C Huber, A Skopelitis, C Schnyder

1120h **V52B-04** Magmatic processes that generate chemically distinct silicic magmas in NW Costa Rica and the evolution of juvenile continental crust in oceanic arcs: T A Vogel, C D Deering, L C Patino, G E Alvarado, D W Szymanski

1135h **V52B-05** Processes and timescales of magma evolution prior to the 1815 eruption of Tambora volcano, Sumbawa, Indonesia: R Gertisser, S Self, L E Thomas, H K Handley, P W Van Calsteren, J A Wolff

1150h **V52B-06** Mush Development and Disaggregation in Basaltic Plumbing Systems: Evidence from Large Icelandic Fissure Eruptions: J Maclellan, E Passmore, J G Fitton, T Thordarson

1205h **V52B-07** Phase equilibrium constraints on the depth of crystallization beneath the rift zones of Iceland: An experimental study of the Borgarhraun lava: G A Gaetani, J Maclellan

---

**V52C Moscone West: 2020**

**The Constraint of Magma and Gas Transport by Geophysical and Geochemical Data II (joint with NS)**

**Presiding:**

- F Witham, University of Bristol; J biggs, University of Bristol; T Menand, Université Blaise Pascal, Laboratoire Magmas & Volcans, IRD R 163, CNRS UMR 6524; J O Hammond, University of Bristol

1020h **V52C-01** Geochemical and petrological observations of gas transport at arc volcanoes: M Edmonds, R A Herd, M Humphreys, A Aiuppa, G Giudice, R Guida, R Moretti, T E Christopher, H Lawson

1035h **V52C-02** Magma and volatile supply to post-collapse renewed volcanism and block resurgence in Siwi caldera (Tanna,Vanuatu arc): N Metrich, P Allard, A Aiuppa, P Bani, A Bertagnini, O Belhadj, A Di Muro, E Garaebiti, F Parello, H Shinohara

1050h **V52C-03** Magma degassing: novel experiments with multiple volatile species on H₂O, CO₂, S and Cl and development of a new thermodynamic model: P Lesne, F Witham, S Kohn, J Blundy, R E Bochcharnikov, H Behrens

1105h **V52C-04** Magma degassing: Melt Inclusion Trends and Permeable Gas Flow at Degassing Volcanoes: F Witham


1135h **V52C-06** The degassing fluctuation concerning sealing process before eruptions at Sakurajima volcano, Japan: R Kazahaya, T Mori, M Iguchi
Atmospheric Sciences

A53A  Moscone South: Poster Hall  Friday  1340h
Arctic Supercooled Clouds as Buffered Systems Posters

Presiding: J Y Harrington, Penn State University; H Morrison, NCAR; G Feingold, NOAA/ESRL; K J Sulia, Penn State University

1340h  A53A-0194 POSTER Boundary-layer and aerosol/cloud interaction in central Arctic summer observed during ASCOS (Invited): M K Tjernstrom, T Mauritsen, J Sedlar, Title of Team: ASCOS Science Team

1340h  A53A-0195 POSTER Cloud Super-Cooled Liquid Water Estimation from Satellite Data: J K Roskosvensky, M Ivey, W Porch, N Beavis, R Herrman


1340h  A53A-0198 POSTER The variation of the microphysical properties of arctic stratus clouds as a function of aerosol concentration: results from ISDAC: G M McFarquhar, R Jackson, P Liu, M E Earle, S D Brooks

1340h  A53A-0199 POSTER Dynamical Equilibrium States in Low Temperature Cirrus: D Barahona, A Nenes

1340h  A53A-0200 POSTER The Importance of Habit Evolution for Maintaining Supercooled Liquid in Arctic Clouds: K J Sulia, J Y Harrington

1340h  A53A-0201 POSTER Intercomparison of cloud model simulations of Arctic mixed-phase boundary layer stratus: Process interactions, self-maintenance, and rapid transition between states: H Morrison, P Zuidema, A S Ackerman, A Avramov, G de Boer, J Fan, A M Fridlind, J Y Harrington, T Hashino, Y Luo, M Ovchinnikov, B Shipway

1340h  A53A-0202 POSTER Dynamics of Arctic Mixed Phase Clouds: A focus on the effects of ice crystal habits and nucleation: M Komurcu, J Y Harrington

1340h  A53A-0203 POSTER Estimation of ice activation parameters within a particle tracking Lagrangian cloud model using the ensemble Kalman filter to match ISDAC golden case observations: J M Reisner, M K Dubey

A53B  Moscone South: Poster Hall  Friday  1340h
Atmospheric Rivers: A Grand Challenge for Hydrometeorology, Flood, and Water Sciences II Posters (joint with H)

Presiding: F M Ralph, NOAA/ESRL; M D Dettinger, US Geological Survey

1340h  A53B-0204 POSTER Evolution of Sierra Barrier Jets that occur simultaneously with atmospheric river events in a high resolution dynamical downscaling of the North American Regional Reanalysis: M R Hughes, P J Neiman, E Sukovich

1340h  A53B-0205 POSTER Diagnosis of Systematic Errors in Atmospheric River Forecasts Using Satellite Observations of Integrated Water Vapor: G A Wick, P J Neiman, F M Ralph

1340h  A53B-0206 POSTER The Impact of Atmospheric Rivers on Soil Moisture in California’s Russian River Basin: R J Zamora, F M Ralph, T Coleman, P J Neiman, M D Dettinger

1340h  A53B-0207 POSTER GFS water vapor forecast error evaluated over the 2009-2010 West Coast cool season using the MET/MODE object analyses package: W L Clark, E Sukovich, E I Tollerud, T Jensen, H Yuan, G A Wick, R Bullock, Title of Team: HMT-DTC Collaboration Project

1340h  A53B-0208 POSTER A study of storm tracks and the cold season precipitation characteristics in California using trajectory model: J Ryoo, J Kim, E Petzer, D E Waliser

1340h  A53B-0209 POSTER W-band spaceborne radar observations of atmospheric river events: S Y Matrosov

1340h  A53B-0210 POSTER Improved Characterization and Monitoring of Moisture Associated With Atmospheric Rivers: S I Gutman, S C Albers, J Forsythe, A S Jones, S Q Kidder, B Ward, A White, G A Wick, Title of Team: Hydrometeorological Testbed Program

1340h  A53B-0211 POSTER A climatology of Atmospheric Rivers based on NCEP reanalysis and variability associated with ENSO: J Nusbaumer, D C Noone

1340h  A53B-0212 POSTER Does the Madden-Julian Oscillation influence the frequency and precipitation of wintertime atmospheric rivers in California?: B Guan, D E Waliser, N P Molotch, E Petzer, P J Neiman

1340h  A53B-0213 POSTER Rapid Response to the Howard Hanson Dam Crisis: F M Ralph, G Carter, A White, P J Neiman, C King, I Jankov, B Colman, K Cook, T Buehner

1340h  A53B-0214 POSTER Diagnosing Time Scales of Atmospheric Moisture Transport: M Newman, G N Kiladis, F M Ralph

1340h  A53B-0215 POSTER Measurement of Turbulent Water Vapor Fluxes from Lightweight Unmanned Aircraft Systems: R M Thomas, V Ramanathan, H Nguyen, K Lehmann*

A53C  Moscone South: Poster Hall  Friday  1340h
Biosphere-Atmosphere Exchange of Reactive Trace Gases and Their Role in the Chemistry of Ozone and Aerosols III Posters

Presiding: P S Stevens, Indiana University; P B Shepson, Purdue University; A H Goldstein, University of California, Berkeley; R C Cohen, UC Berkeley

1340h  A53C-0216 POSTER GLOBal Organic Emissions NETwork (GLOBOENET) tools and strategies for quantifying canopy-scale biogenic volatile organic compound emissions (Invited): A B Guenther, T Duhl, T Karl, S Kim, S Shertz, A Turnipseed

1340h  A53C-0217 POSTER Scaling biogenic VOC emissions from canopy to region: One-dimensional canopy modeling and the influence of leaf temperature (Invited): A L Steiner, A M Bryan
1340h  **A53C-0218** WITHDRAWN

1340h  **A53C-0219** POSTER VOC Emission and Deposition Eddy Covariance Fluxes above Grassland using PTR-TOF: T M Ruuskianen, M Müller, R Schnitzhofer, T Karl, M Graus, I Bamberger, L Hörtnagl, F Brilli, G Wöhlfahrt, A Hansel

1340h  **A53C-0220** POSTER BVOC and tropospheric ozone fluxes from an orange orchard in the California Central Valley: S Fares, D R Gentner, J Park, R Weber, J F Karl, A H Goldstein

1340h  **A53C-0221** POSTER Isoprene Fluxes from a Tundra Ecosystem: M Potosnak, B Baker, S Disher, K Griffin, S Brette-Harte

1340h  **A53C-0222** POSTER VOC Emissions from the Potential Biofuel Crop, Switchgrass: M Graus, A S Eller, R Fall, J B Gilman, W C Kuster, J A De Gouw, Y Qian, K Sekimoto, R K Monson, C Warrneke

1340h  **A53C-0223** POSTER Evidence for significant C-5 alkene emissions from car traffic: G W Schade, C Park

1340h  **A53C-0224** POSTER Emissions of volatile organic compounds from hybrid poplar depend on CO₂ concentration and genotype: A S Eller, J A De Gouw, R K Monson

1340h  **A53C-0225** POSTER BVOC emission pattern from *Quercus robur* under field conditions: O Pokorska, J Dewulf, ÉVA Joó, M Šimpraga, K Steppe, C Amelynck, N Schoon, J J Muller, H Van Langenhove

1340h  **A53C-0226** POSTER Investigating the direct and indirect influences of light on short-term changes in methanol production and emission in Lycopersicon esculentum: P Oikawa, L Li, M Timko, J E Mak, M Lerdau

1340h  **A53C-0227** POSTER Seasonal biogenic volatile organic compound emission trends of four coniferous tree species: R W Daly, D Helmg, A B Guenther, R Baghi, C Baroch, C Borke

1340h  **A53C-0228** POSTER Individual Tree Variation of Biogenic Volatile Organic Compounds from Needles of White Pine (Pinus strobus) in Northern Michigan: S Toma, S B Bertman

1340h  **A53C-0229** POSTER Effects of Acute Ozone Exposure and Methyl Jasmonate Treatment on White Pine Monoterpene and Sesquiterpene Emission Rates: C L Faiola, D Wagner, E Allwine, P C Harley, T M VanReken

1340h  **A53C-0230** POSTER Soil moisture controls on inter-annual variability of biogenic isoprene emissions and ozone: A B Tawfik, A Shalaby, A L Steiner, A Zakey

1340h  **A53C-0231** POSTER Measurements of BVOC fluxes Above Mixed Hardwood Forest Canopy During the 2009 CABINEX Field Campaign: G D Edwards, D K Martins, T Starn, P B Shepson

1340h  **A53C-0232** POSTER Observations of BVOC (Biogenic Volatile Organic Compound) Fluxes and Vertical Gradients in a Ponderosa Pine Forest during BEARPEX 2009: J Park, S Fares, R Weber, A Goldstein

1340h  **A53C-0233** WITHDRAWN

1340h  **A53C-0234** POSTER Overview of CABINEX/PROPHET 2009: S B Bertman, M Carroll, P B Shepson, P S Stevens


1340h  **A53C-0238** POSTER Total Hydroxyl Radical Reactivity Above and Below a Forest Canopy During CABINEX 2009: R F Hansen, S Dusanter, S M Griffith, P S Stevens, M H Erickson, W Wallace, B T Jobson, M Carroll, P B Shepson, S B Bertman

1340h  **A53C-0239** POSTER Towards constraining sources of Unexplored VOC and their oxidation products in the forest environments: S Kim, A B Guenther, T Karl, J Greenberg, P C Harley

1340h  **A53C-0240** POSTER Ozone reactivity of biogenic volatile organic compounds emitted from the four dominant tree species at PROPHET - CABINEX: D Helmg, R Daly, S B Bertman

1340h  **A53C-0241** POSTER Chemical Ozone Fluxes: Sensitivity to Very Reactive Biogenic VOC Emissions and Implications for In-Canopy Radical Production: G M Wolfe, J A Thornton

1340h  **A53C-0242** POSTER Vertical profiles of HOx chemistry within a mixed hardwood forest during the 2009 CABINEX field campaign: Evaluations with a one-dimensional canopy-chemistry model: A M Bryan, A L Steiner, A B Guenther, J J Orlando, G S Tyndall, S H Chung, S B Bertman, M Carroll, S Dusanter, M H Erickson, M M Galloway, S M Griffith, R F Hansen, B T Jobson, F N Keutsch, S Kim, B L Lefer, A O’Brien, P B Shepson, P S Stevens, M E Thurlow, W Wallace, X Zhou

1340h  **A53C-0243** POSTER Utilization of satellite-derived canopy heights in dry deposition computations to improve surface O₃ simulations: Y Choi, D Byun, P Lee, R Saylor, H Kim, M Lefsky

1340h  **A53C-0244** POSTER Identifying the environmental factors that effect within canopy BVOC loss using a multilevel canopy model: W S Chan, J D Fuentes, M Lerdau

1340h  **A53C-0245** POSTER Radical Production from Alkene Ozonolysis: W J Bloss, M S Alam, M Camredon, T Carr, K Wyche, K E Hornsby, P S Monks, A R Rickard

1340h  **A53C-0246** POSTER Molecular characterization of monoterpene ozonolysis products using ultrahigh-resolution Fourier transform ion cyclotron resonance mass spectrometry: S Kundu, R Fissella, A Putman, T Rahn, L R Mazzoleni

1340h  **A53C-0247** POSTER Measurements of HONO Above and Within a Mixed Hardwood Forest Canopy During the 2009 CABINEX Field Campaign: X Zhou, J Hou, S B Bertman, B T Jobson, B L Lefer, P S Stevens, P B Shepson, M Carroll

1340h  **A53C-0248** POSTER Flux-gradient relationships of nitrogen oxides over a ponderosa pine plantation during BEARPEX-2009: K Min, B W LaFranchi, S E Pusede, E C Browne, P J Wooldridge, R C Cohen

1340h  **A53C-0249** POSTER Explaining a Consistent Morning NOx Maximum in the Clean Air Forest Boundary Layer: P B Shepson, M Alaghmand, S B Bertman, M Carroll, S L Edburg, B T Jobson, F N Keutsch, B K Lamb, T Starn, P S Stevens, W Wallace, X Zhou

1340h  **A53C-0250** POSTER What is causing morning nitric oxide “pulse” above the canopy at a forested site in northern Michigan?: B Seok, D Helmg, M W Williams, L Ganzeveld, C S Vogel

1340h  **A53C-0251** POSTER Significance of Nitric Acid Photolysis in low NOx troposphere: Model Simulations: H Gao, X Zhou, X Ren, K Civerolo

1340h  **A53C-0252** POSTER α-Pinene Nitrates: Synthesis, Identification and Yields: S Ma, P B Shepson, J Rindelaub, B Nault


1340h A53C-0255 POSTER Quantification of Glycolaldehyde and Hydroxyacetone using Tandem Chemical Ionization Mass Spectrometry: K M Spencer, M R Beaver, J M St Clair, J Crounse, F Paulot, P O Wennberg

1340h A53C-0256 POSTER Temperature dependence of the yields of methacrolein and methyl vinyl ketone from the OH-initiated oxidation of isoprene under NOx-free conditions: M A Navarro, S Dusanter, P S Stevens, R A Hites


1340h A53C-0258 POSTER Estimations of nitrogen deposition due to heterogeneous hydrolysis of N2OS at high latitudes: P L Joyce, W R Simpson, R von Glasow

1340h A53C-0259 POSTER Temporal variations of nitrogen wet deposition over Japan during 1989-2008: Y Morino, T Ohara, J Kurokawa, M Kuriyashi, I Uno, H Hara

1340h A53C-0260 POSTER Prevalence of ketonic carbonyl groups in submicron particles from a boreal forest in Hyytiälä, Finland during HUMPPA-COPEC 2010: A L Corrigan, L M Russell, J Auld, W Song, J Williams, T T Petdjov


1340h A53C-0262 POSTER Soil Terpene Emissions in a Subalpine Coniferous Forest: Tree Species, Soil Temperature and Moisture Effects: D Asensio, T Duhl, J Greenberg, A B Guenther, R K Monson

1340h A53C-0263 POSTER Continuous soil VOC measurements with automated flux chambers and micro-ECD gas chromatography coupled with the thermal desorption and cooled injection systems: M S Molodovskaya, T Svensson, A Pitts, J DeMonte, Z Nesic, G Oberg

A53D Moscone South: Poster Hall  Friday  1340h Measuring Earth-Atmosphere Fluxes and Tropospheric Composition From Space III Posters (joint with B)

Presiding: D B Millet, University of Minnesota; D K Henze, University of Colorado Boulder

1340h A53D-0264 POSTER Quantifying water vapor in the upper troposphere and lower stratosphere from volcanic and pyro-convective clouds using the Atmospheric Infrared Sounder: E B McCarthy, M Watson, D D Fromm

1340h A53D-0265 POSTER Comparisons of Aura TES V005 Water Vapor and Temperature Retrievals with Radiosonde Measurements: R L Herman, B Fisher, V Payne, K Cady-Pereira, S S Kulawik, A Eldering

1340h A53D-0266 POSTER Correction of NOAA-16 AMSU-A Channel-5: J Lee, H Meng


1340h A53D-0268 POSTER A feasibility study for the monitoring of diurnal variations of the tropospheric NO2 over Tokyo from a geostationary satellite: K Noguchi, H Irie, Y Morino, S Hayashida, A Richter, H Bovensmann, A Hibbott, J P Burrows

1340h A53D-0269 POSTER The geostationary environment measurement spectrometer (GEMS) mission in view of ozone detection: Possibility analysis and comparison with the geosynchronous orbit: S J Park, J H Kim

1340h A53D-0270 POSTER The observing requirements for the prediction of ozone: P D Hamer, K W Bowman, D K Henze

1340h A53D-0271 POSTER Constraints on urban VOC emissions from day of week measurements of column NO2: L C Valin, A R Russell, R C Cohen

1340h A53D-0272 POSTER Evaluation of an Improved Retrieval of OMI NO2 Column Using Within Boundary Layer Aircraft Observations: A R Russell, L C Valin, A E Perrin


1340h A53D-0274 POSTER Evaluation of satellite-derived NO2 and HCHO over East Asia using statistical methods: K Baek, J H Kim

1340h A53D-0275 POSTER Measurements and Models of SO2 over Central China: R R Dickerson, H He, N A Krotkov, Z Li

1340h A53D-0276 POSTER A performance evaluation of CMAQ using different satellite data: C Song, J Lee, S Lee, Y Hong, D Kim, K Moon, S Kim, S Hong, J Choi, H Lee, J Lee, W Choi

1340h A53D-0277 POSTER Characteristics of Aerosol indices distribution followed by Aerosol types: S Park, J Kim, J Lee, M KIM, S Lee, C Song


1340h A53D-0279 POSTER Comparison between model and satellite observations using GeoS-CHEM and TES carbon monoxide and ozone products: R Dupont, J Worden


1340h A53D-0281 POSTER Atmospheric methane observed from space over the Asian monsoon: implications for emission from Asian rice paddies: S Hayashida, S Yoshizaki, C Frankenberg, X Yan

1340h A53D-0282 POSTER Using GMD Data, AIRS Measurements, and the NASA Chemistry-Climate Model to Reveal Regional and Seasonal Variation of Methane: K J Steele, B N Duncan, J X Warner, J E Nielsen


1340h A53D-0284 POSTER Comparing surface and mid-troposphere CO2 concentration and fluxes from central U.S. grasslands: F V Cochran, N A Brunss, A T Quick

1340h A53D-0286 POSTER Methanol Measurements From TES: A Top-Down Constraint on Biogenic Emissions: D B Millet, K E Cady-Pereira, M Luo, J Worden


1340h A53D-0288 POSTER Airborne Detection of Ozone Oxide and Glyoxal in the Free Troposphere over the Remote Tropical Pacific Ocean: B K Dix, R Volkamer

1340h A53D-0289 POSTER Observation of global, seasonal cycle of regional-scale chlorophyll fluorescence from space using GOSAT: J Joiner, Y Yoshida, Y Yoshida, A P Vasilkov, L Corp, E Middleton, K F Huemmrich, Title of Team: GOSAT project

1340h A53D-0290 POSTER Observation of bromine monoxide during volcanic eruptions from space using the GOME-2 instrument: C Hoer mann, H Sihler, N Bobrowski, C Kern, M J Penning de Vries, L Vogel, U Platt, T Wagner

1340h A53D-0291 POSTER Global observations of BrO in the troposphere using GOME-2 satellite data: N Theys, M Van Roozendael, F Hendrick, Y Xin, D Isabelle, A Richter, B Mathias, E Quintin, P V Johnston, K Kreher, D Martine

A53E Moscone South: Poster Hall Friday 1340h Progress and Uncertainty in Reanalysis Data Sets II Posters (joint with GC, H, OS)

Presiding: J Chen, University of Maryland; P A Arkin, University of Maryland; W Ebisuzaki, NOAA/NCEP

1340h A53E-0292 POSTER Uncertainties in model derived mixed-layer heights over North America: M G Kim, J C Lin

1340h A53E-0293 POSTER Evaluation of Cloud Fraction and Radiative Fluxes in Recent Reanalyses over the Arctic using Surface and Satellite Observations: B Zib, X Dong, B Xi, A D Kennedy

1340h A53E-0294 POSTER The Sensitivity of Simulated Ocean Biogeochemistry to Forcing Fields Derived from NCEP and MERRA Reanalysis Products: W W Gregg


1340h A53E-0296 POSTER A Comparison of MERRA and NARR Reanalyses with the DOE ARM SGP Continuous Forcing data: A D Kennedy, X Dong, B Xi, S Xie, Y Zhang, J Chen

1340h A53E-0297 POSTER Evaluation of Reanalysis and TRMM Products Using a New Gauge-Based Analysis of Daily Precipitation over China: T Zhao, A I Yatagai, K Aili

1340h A53E-0298 POSTER A Comparison of the Climate Forecast System Reanalysis (CFSR) with the ERA-40, JRA-25, NCEP/NCAR, NCEP/DOE and MERRA Reanalyses: W Ebisuzaki, L Zhang

1340h A53E-0299 POSTER Ozone profiles retrieved from SCIMACHY Chappuis-Wulf limb scatter measurements using MART: S Chen

1340h A53E-0300 POSTER Statistical error estimation and optimal merging of MERRA and AMSR-E soil moisture and temperature datasets in preparation for SMAP: L A Jones, J S Kimball, R H Reichle, E F Wood


1340h A53E-0302 WITHDRAWN

1340h A53E-0303 POSTER Evaluation of Summer Rainfall Over Mainland China in Three Reanalysis Datasets: J Li


1340h A53E-0305 WITHDRAWN

1340h A53E-0306 WITHDRAWN

1340h A53E-0307 POSTER Assessment of water budgets from NWP model analyses and reanalyses over West Africa: O Bock, R Meynadier, F Guichard, J Redelberger, A Boone, M Nuret, P Roucou, A Agusti-Panareda, A Beljaars

1340h A53E-0308 POSTER A Reconstructed Historical MJO Index from 1871 to 2008: E C Oliver, K R Thompson

1340h A53E-0309 POSTER Hadley Cell Variability and Extremes in Reanalysis Data: Links to Tropical and Subtropical Precipitating Systems: J P Stachnik, C Schumacher

1340h A53E-0310 POSTER Uncertainties Evaluation of Temperature Trends from Multiple Radiosondes, Microwave Scattering Units and Reanalyses Products: A M Powell, J Xu

1340h A53E-0311 POSTER Temporal climate inhomogeneity in reanalyses and an ongoing effort on homogenization of MERRA reanalysis: J Chen, M G Bosilovich, E Kahny, Y Zhou, F R Robertson

1340h A53E-0312 POSTER Outgoing Longwave Radiation Spectrum simulations from ERA-Interim: C Belotti, R Bantges, H Brindley, J E Harries

1340h A53E-0313 POSTER Evaluating ERA-Interim Performance using recalibrated AMSU-A Observations: C Zou

1340h A53E-0314 POSTER Biases in Global Reanalysis Datasets Undermine Intrasessional Prediction Skill Xiouhua Fu1, Bin Wang, June-Yi Lee, Wanjun Wang, and Li Gao 1International Pacific Research Center (IPRC), SOEST, University of Hawaii at Manoa: J X Fu

1340h A53E-0315 POSTER The Effect of Satellite Observing System Changes on MERRA Water and Energy Fluxes: F R Robertson, M G Bosilovich, J Chen, T L Miller

1340h A53E-0316 POSTER A MERRA based analysis of the Climate Variability and Summer Temperature-Rainfall Relationships over India: S Fall, D Niyogi, C M Kishtawal, V Mishra, M G Bosilovich, J K Entin

1340h A53E-0317 POSTER Evaluation of NARR precipitation data in the South Saskatchewan River Basin: A Q Liu, C Mooney, M Mekonnen, B Davison, B M Toth, A Pietroniro

A53F Moscone South: Poster Hall Friday 1340h Short-Lived Climate Forcing Agents: Modeling, Observations, and Prediction Posters (joint with GC)

Presiding: K W Bowman, Jet Propulsion Laboratory; J Lamarque, NCAR

1340h A53F-0318 WITHDRAWN

1340h A53F-0319 POSTER Shortlived climate compounds: Their distribution and contribution to climate forcing (Invited): I S Isaksen

1340h A53F-0320 POSTER Changes in tropospheric aerosol and reactive gases burdens and concentrations under IPCC-AR5 emission scenarios for 1850-2100: S Szoja, Y Balkanski, A Cozic, D Cugnet, C Dandreis, J Dufresne, D Hauglustaine, M Foujols, J Lathiere, N de Noblet-Ducoudrè, M Schulz, N Yan

1340h A53F-0321 POSTER Impact of Reducing Short-Lived Air Pollutants on Atmospheric Composition and Climate: V Naik, L W Horowitz, A M Fiore, H Levy

A53F-0323 POSTER The influence of short-lived ozone precursor emissions on radiative climate forcing: M M Fry, V Naik, J J West, M D Schwarzkopf, A M Fiore, Title of Team: The Task Force on Hemispheric Transport of Air Pollution Modeling Team


A53F-0325 POSTER Earth System Modeling of Ozone, Methane, and DMS: P J Cameron-Smith, J Lamarque, S M Elliott, D J Bergmann, C Chuang, D J Erickson, M E Maltrud, A A Mirin, R L Jacob, J Titirigh

A53F-0326 POSTER Evidence that the efficiency of wet removal of Arctic aerosols is controlled by atmospheric temperature: K Tietze, T J Garrett, J Riedi, C Zhao, A Stohl

A53F-0327 POSTER Halogen-driven Ozone Radiative Forcing in the Tropical Marine Atmosphere: D E Kinnison, A Saiz-Lopez, J Lamarque, S Tilmes

A53F-0328 POSTER Long term measurements of condensation nuclei and cloud condensation nuclei in the megacity Lopez, J Lamarque, S Tilmes

A53F-0329 POSTER The General Situation of Sounding Data Drift Error in China: Z Chen, P Xie

A53F-0330 POSTER Characterizing the Hygroscopicity of Asian Continental Outflow Aerosols Measured During Four Field Campaigns at Island Coastal Sites in Korea: J Kim, S Shim, W Kim, S S Yum

A53G Moscone West: 3004 Friday 1340h

Climate Processes and Other Research Applications Enabled by Satellite Sounders, Imagers, and Profilers III (joint with H)

Presiding: B H Kahn, Jet Propulsion Laboratory; B Tian, Jet Propulsion Lab

A53G-01 Studying Earth’s Climate from Satellite Observations (Invited): W B Rossow

A53G-02 Impact of atmospheric composition on climate: perspective from the Tropospheric Emission Spectrometer (Invited): K W Bowman

A53G-03 Integrating past and present: Satellite observations and the NVAP-M global water vapor dataset: J L Bytheway, J M Forsythe, T H Vonder Haar

A53G-04 The ESA DUE GlobVapour Project: M Schröder, Title of Team: ESA DUE GlobVapour Project Team

A53G-05 Recalibration of Historical HIRS Level 1b data for Climate Studies: C Cao, R Chen, W P Menzel, L Shi

A53G-06 Multivariate Analysis of Hyperspectral Earth-reflected Solar Radiance: Y Roberts, P Pilewskie, B C Kindel, G Kopp

A53G-07 Observed Differences in Spectral Microphysical Retrievals from MODIS: S E Platnick, Z Zhang, B C Maddux, S A Ackerman

A53H Moscone West: 3008 Friday 1340h

Physics and Chemistry of the Upper Troposphere and Lower Stratosphere II (joint with GC)

Presiding: T Birner, J L Neu, JPL / Caltech


A53H-02 Simultaneous lidar observations of the water vapor and ozone signatures of a stratospheric intrusion during the MOHAVE-2009 campaign: T Leblanc, I S Mcdermid, K Pérot

A53H-03 Dynamical and Chemical Characteristics of Tropospheric Intrusions Observed during START08: C R Homeyer, K P Bowman, L Pan, E L Atlas, R Gao, T L Campos

A53H-04 Ice Supersaturated Regions Formed by the Inhomogenities of Water Vapor Field in the Upper Troposphere in START08 and HIPPO Global Campaigns: M Diao, M A Zondlo

A53H-05 Observational Characteristics of the Tropopause Inversion Layer derived from CHAMP/GRACE Radio Occultations and MOZAIC Aircraft Data: T Schmidt, J Cammas, S Heise, J Wickert, A Haser

A53H-06 DOUBLE TROPOPAUSE FORMATION IN IDEALIZED BAROCLINIC CYCLES: L M Polvani, S Wang

A53H-07 Aircraft observations of Asian pollution transported into the Arctic UTLS: A Roiger, H Schlager, F Arnold, A Schäfler, H Aufmhof, O R Cooper, M A Lazzara, A Stohl, H Sodemann, C Schiller, G Guenther


A53I Moscone West: 3006 Friday 1340h

Remote Sensing of CO2 Emissions and Atmospheric Transport II (joint with GC)

Presiding: M T Chaine, JPL; A M Michalak, University of Michigan; C E Miller, California Institute of Technology


A53I-02 Contributions to Gosat Data Analysis by the NASA Atmospheric Carbon Observations from Space (ACOS) Team (Invited): D Cripps, Title of Team: The Atmospheric Carbon Observations from Space (ACOS) Team

A53I-03 Validation of zonal averaged XCO2 and XCH4 derived from SWIR of GOSAT TANSO-FTS using ground-based high-resolution FTS and aircraft measurement data: M Inoue, I Morino, O Uchino, T Yokota, D Wunch, P O Wennberg, C M Roelh, G C Toon, T Warneke, J Notholt, J Messerschmidt, D W Griffith, N M Deutscher, V Sherlock, R Sussmann, T Machida, Y Sawa, H Matsueda, C Sweeney, P P Tans

1440h  **B53A-05** Challenges and opportunities of mercury remediation in East Fork Poplar Creek, Oak Ridge, Tennessee (Invited): **L Liang**, B Gu, S C Brooks, C L Miller, F He, D Elias, D B Watson, M J Peterson

1420h  **B53A-03** Evaluation of the removal of Strontium-90 from groundwater using a zeolite rich-rock permeable treatment wall: **S M Seneca**, A J Rabideau, K Bandila

1440h  **B53A-04** In Situ Remediation of 129I in a Multiple Contaminant Plume (Invited): **M Denham**, R Nichols, M Whiteside, C Bickmore, M Millings, G Blount, J Thibault


1520h  **B53A-06** Nano-scale mechanisms of metal rhizostabilization in mine tailings: **J Chorover**, R R Rushforth, S Hayes, R Root, R Maier

---

**Biogeosciences**

**B53C**  Moscone West: 2004  Friday  1340h  Remote Sensing of Terrestrial Carbon Fluxes II (joint with EP)

*Presiding: K F Huemmrich*, University of Maryland Baltimore County; **A F Rahman**, Indiana University

1340h  **B53C-01** Tower based Photochemical Reflectance Index (PRI) from a new automated spectrometer system for the estimation of seasonal canopy light use efficiency (LUE) in boreal Finland: **C J Nichol**, G Drolet, T Hilk, N C Coops, F G Hall, T J Wade, A Porcar-Castell, E Nikinmaa, T Vesala, P Kolari, J Levula

1355h  **B53C-02** Shifting Trends in Phenology of a Temperate Deciduous Forest in the US Midwest: **D Dragoni**, A F Rahman

---

All information is current as of November 12, 2010
1425h B53C-04 Estimates of ecosystem productions from coordinated flux measurements and satellite data: G Jia, H Wang, A Zhang

1440h B53C-05 Remote estimation of crop gross primary productivity: from close range to satellites: A A Gitelson, Y Peng, T Sakamoto, G P Keydan, D C Rundquist

1455h B53C-06 Linking Carbon Fluxes with Remotely-Sensed Vegetation Indicies for Leaf Area and Aboveground Biomass Through Footprint Climatology: C Wayson, K Clark, D Y Hollinger, N Skowronski, H E Schmid

1510h B53C-07 Five Years of Land Surface Phenology in a Large Scale Hydrological Manipulation Experiment in an Arctic Tundra Landscape: S Goswami, J A Gammon, C E Tweedie


Education and Human Resources

ED53A Moscone South: Poster Hall Friday 1340h Teacher Professional Development Programs Promoting Authentic Scientific Research in the Classroom III Posters (joint with A, B, C, IN, GP, GC, H, OS, P, S, SM, SH, T, V)

Presiding: C E Walker, National Optical Astronomy Observatory; G Scowcroft, University of Rhode Island; S M Pompea, Natl Optical Astronomy Obs

1340h ED53A-0509 POSTER Students As Researchers In An Inquiry Based Classroom: D L Quintero

1340h ED53A-0510 POSTER The ARMADA Project: Bringing Oceanography and the Arctic to the Midwest: J Pazol

1340h ED53A-0511 POSTER URI'S ARMADA Research Experience Leads to Inspiring Middle School Students to Become Ocean Stewards: M Barrett


1340h ED53A-0513 POSTER Deep ocean research meets the special education classroom: A Turner, M K Edwards, Title of Team: Scientific Team of IODP Expedition 327

1340h ED53A-0514 POSTER Trials at Sea: Successful Implementation of a Unique Two-Month Professional Development Program: L W Pear, B N Orcutt, A T Fisher, T Tsuji, K E Petronotis, Title of Team: IODP Expedition 327 Participants

1340h ED53A-0515 POSTER A Virtual ANDRILLian Experience for Your Classroom: M Sutton


1340h ED53A-0517 POSTER Making Accurate Topographic Maps of the Schoolyard Using Ideas and Techniques Learned and Adapted from Multi-beam Sonar Mapping of the Arctic Ocean: S I Fuerst, J D Roberts

1340h ED53A-0518 POSTER The Examining Your Environment through the Power of Data Project (EYE-POD) Project at NAU: Professional Development for Secondary Education Teachers Using Earth Sciences and GIS: J C Sample, L Ribuno-Hare, J Claesgens, K Fredrickson, M Manone, M White

1340h ED53A-0519 POSTER Starting with Teachers: Bringing GIS technology to the secondary classroom: J Claesgens, L Rubino-Hare, J C Sample, K Fredrickson, M Manone
Earth and Planetary Surface Processes

**EP53A Moscone South: Poster Hall**  Friday  1340h

Adances in Monitoring Fluvial Morphodynamics II Posters  

(joint with GC, H)

**Presiding:** J Brasington, Aberystwyth University; C D Rennie, University of Ottawa; D Vericat, Forest Technology Centre of Catalonia, Spain


1340h  **EP53A-0598 POSTER** Accounting for uncertainty when distinguishing geomorphic change in DoDs using historic contour maps: **J K Carley**, G B Pasternack


1340h  **EP53A-0600 POSTER** Cyclic Steps and Antidunes : Relating Their Features to a Suspension Index: **M Yokokawa**, Y Kishima, G Parker

1340h  **EP53A-0601 POSTER** The utility of Terrestrial Laser Scanning for monitoring and modelling braided river evolution at the reach- and multiple-event scales: **R D Williams**, J Jasringston, D Vericat, M Hicks

1340h  **EP53A-0602 POSTER** Computation of boundary shear stress distributions throughout river cross-sections: a comparison among four geometrical methods and dDcp measurements: **K El Kadi Abderrezak**, J Le Coz, S Moore


1340h  **EP53A-0604 POSTER** Bedload transport from spectral analysis of seismic noise near rivers: **L Hsu**, N J Finnegan, E E Brodsky

1340h  **EP53A-0605 POSTER** Closure of sediment budgets: tractable task or elusive goal?: **S O Erwin**, J M Wheaton, J C Schmidt


**EP53B Moscone South: Poster Hall**  Friday  1340h

Landscape Evolution in Response to Active Faulting III Posters  

(joint with T)

**Presiding:** N M Gasparini, Tulane University; N H Dawers, Tulane University

1340h  **EP53B-0608 POSTER** Exhumational and incisional response to active faulting in the Japanese forearc, northeast Honshu: **C Regalla**, E Kirby, D M Fisher, P R Bierman, D H Rood

1340h  **EP53B-0609 POSTER** Assessing average slip rates of strike-slip faults in Japanese mountains based on geomorphic analyses of lidar DEMs: **Z Lin**, H Kaneda, Y Matsuishi, T Maruyama

**ED53A-0520 POSTER** Geospatial Education: Working with the NASA Airborne Science Program: **C M Lockwood**, L Handley, N Handley

1340h  **ED53A-0521 POSTER** Inspired by Fieldwork: A Teacher Research Experience Energizes and Ignites a Group of Elementary Students: **C H Munroe**

1340h  **ED53A-0522 POSTER** Short-term data collection projects: A means to increase teacher content knowledge and bring authentic research experiences into the classroom: **M Gaboardi**, W Parker, D Rodriguez

1340h  **ED53A-0523 POSTER** Monitoring Anthropogenic Carbon, A Classroom Research Project: **D Reese**, K Wedel, T P Guilderson

1340h  **ED53A-0524 POSTER** Preparing K-8 Teachers to Conduct Inquiry Oriented Science Education: **N A Gross**, P Garik, M D Nolan, C Winrich, D DeRosa, A Duffy, M Jariwala, B Konjoian

1340h  **ED53A-0525 POSTER** Master of Science Teaching: Encouraging Teachers and their Students in Research: **P H Reiff**

1340h  **ED53A-0526 POSTER** Rescuing Middle School Astronomy: **L A Mayo**, D Janney


1340h  **ED53A-0528 POSTER** Using Telescopic Observations to Explore the Science of AGN with High School Students: **K M McLin**, L R Cominsky

1340h  **ED53A-0529 WITHDRAWN**

1340h  **ED53A-0530 POSTER** The Impact of Positive Role Models on the Success of Students Involved in Original Scientific Research: **J M Danch**

**ED53B Moscone South: 102**  Friday  1340h

Enhanced Geoscience Learning Through Community Interaction II

**Presiding:** S O’Connell, Wesleyan University; E P Laine, Bowdoin College

1340h  **Introduction** Ed Laine

1345h  **ED53B-01 POSTER** A Step Into Service Learning Is A Step Into Higher Order Thinking: **S O’Connell**

1400h  **ED53B-02 POSTER** “I Didn’t Realize that Science Could Be So Useful”: Integrating Service Learning and Student Research on Water-Quality Issues within an Undergraduate Geoscience Curriculum (Invited): **P D Lea**, J Urquhart

1415h  **ED53B-03 WITHDRAWN**

1430h  **ED53B-04 POSTER** Teaching Environmental Geochemistry as a Service-Learning Course (Invited): **T C Ku**

1445h  **ED53B-05 WITHDRAWN**

1500h  **ED53B-06 POSTER** Analysis of Student Service-Learning Reflections for the Assessment of Transferable-Skills Development: **D M Rizzo**, M Dewoolkar, N Hayden, L Oka, A R Pearce


1530h  **Discussion** Suzanne O’Connell
Activity and Related Seismic Hazards by Fusing Radar and Optical
P De Martini, D Pantosti, S Pierdominici, L Cucci, P Del Carlo,
for a better understanding of its seismic behavior:

B Amgalan, A West

Extensional Faulting and Multiple Local Base Levels: The Perachora
S H Brocklehurst

Drainage evolution on the eastern
B A Hampton, K Fujita, K G Mackey

The role of antecedent drainage
E Miccadei

The influence of interacting normal
T Piacentini

using remote sensing and GIS
to determine the tectonic significance of small-scale
K J Mueller

The influence of antecedent drainage networks and isolated normal fault propagation on basin stratigraphy:
E Finch

The influence of interacting normal faults on drainage network evolution and basin stratigraphy:
S H Brocklehurst

EP53C Moscone South: Poster Hall

Source to Sink Insights Into Integrated Sedimentary System
Presiding: J A Covault, USGS; A Fildani, R&D - Chevron

EP53D Moscone South: Poster Hall

Transient Landscapes: Capturing Responses to Changing
Presiding: D W Burbank, UCSB; J Chen, Institute of Geology,
China Earthquake Administration (CEA); M E Oskin, University of California, Davis

EP53B-0610 POSTER LiDAR and Field Observations of
Earthquake Slip Distribution for the central San Jacinto fault:
J B Salisbury, T K Rockwell, T Middleton, K W Hudnut

EP53B-0611 POSTER Structural and Geomorphic Control
on Landscape Evolution by the Kern Canyon Fault, Southern
Sierra Nevada, California: K I Kelson, C B Amos, D T Simpson,
J N Baldwin, R Rose, M Tici, J Kelson, E Salesky, J W Chipman

1340h
EP53B-0612 POSTER Late Pleistocene displacement and
slip rate for the Breckenridge fault, Walker Basin, southern Sierra
Nevada, California: C C Broussy, J N Baldwin, K I Kelson, D H Rood,
B Kozlovicz, D Simpson, M Tici, C B Amos, O Kozaci, A Lutz

1340h
EP53B-0613 POSTER A Record of Late Pleistocene and
Holocene Surface-rupturing Earthquakes Along the Lake Isabella
Section of the Kern Canyon Fault, California: A Lutz, O Kozaci,
K I Kelson, D Simpson, J N Baldwin, C B Amos, R Turner, R Rose

1340h
EP53B-0614 POSTER Tilted lake shorelines record the
onset of motion along the Hilton Creek fault adjacent to Long
Valley caldera, CA, USA; J P Perkins, N J Finnegan, P F Cervelli,
J O Langbein

1340h
EP53B-0615 POSTER Using remote sensing and GIS
techniques to determine the tectonic significance of small-scale
surface water runoff in Canyonslands National Park: M A Levoir,
K J Mueller

1340h
EP53B-0616 POSTER The role of antecedent drainage networks and isolated normal fault propagation on basin stratigraphy: E Finch, S H Brocklehurst, R Gawthorpe

1340h
EP53B-0617 POSTER The influence of interacting normal faults on drainage network evolution and basin stratigraphy: S H Brocklehurst, E Finch, R Gawthorpe

1340h
EP53B-0618 POSTER Landscape Response to Active
Extensional Faulting and Multiple Local Base Levels: The Perachora Peninsula, Eastern Gulf of Corinthis, Greece: O Bujanowski-Duffy, S H Brocklehurst, R L Gawthorpe, E Finch

1340h
EP53B-0619 POSTER Active Tectonics of the Chersky
Fold and Thrust Belt, NE Russia, From Fluvial Geomorphology:
B G Johnson, B A Hampton, K Fujita, K G Mackey

1340h
EP53B-0620 POSTER Range-front deformation on the
northern limb of the Manastash Anticline, Yakima Fold Belt, Washington: T C Ladinsky, H M Kelsey, B L Sherrod, T L Pratt

1340h
EP53B-0621 POSTER Ongoing lateral growth of the southern central Andes in Argentina: B Niviere, G Messager, S S Carretier

1340h
EP53B-0622 POSTER Hanging-wall topographic expression in oblique contractual orogens: K L Frankel, K W Wegmann

1340h
EP53B-0623 POSTER Quaternary estimates of average
slip-rates for active faults in the Mongolian Altay Mountains: the advantages and assumptions of multiple dating techniques: L C Gregory, R T Walker, A L Thomas, T Amgaa, G Bayasgalan, B Amgalan, A West

1340h
EP53B-0624 POSTER Drainage evolution on the eastern
 piedmont of Central Apennines (Italy): clues about local tectonics and regional uplift: T Piacentini, E Miccadei

1340h

1340h
EP53B-0626 POSTER Rapid Crustal Uplift at Birch Bay,
Washington: B L Sherrod, H M Kelsey, R J Blakely

1340h

1340h
EP53C-0628 POSTER Evidence of Wave-Induced Sediment-Gravity Flows on the Continental Shelf, East Coast New Zealand:
R P Hale, A S Ogston, J P Walsh, C A Nittrouer

1340h
EP53C-0629 POSTER Quantifying the transfer of sediment from terrestrial source to deep-sea sink over millennial timescales: B Romans, J A Covault, A Fildani, G E Hilley

1340h
EP53C-0630 POSTER The Influence of Sediment Supply & Caliber on Submarine Canyon Morphology and Turbidity-Flow Character: Z Jobe

1340h

1340h

1340h
EP53C-0633 POSTER Linking margin morphology to sedimentary processes along the US East Coast passive continental margin: D S Brothers, U S Ten Brink, B Andrews, D Twichell

1340h
EP53C-0634 POSTER Linking deltaic and submarine sedimentary processes: a preliminary bathymetric and sub-bottom survey of the Stehekin Delta, Lake Chelan, WA: B A Sheets, A Fricke

1340h
EP53C-0635 POSTER Tracing Organic Carbon from the Terrestrial to Marine Environment via Coupled Stable Carbon Isotope and Lignin Analyses: L B Childress, N E Blair, E L Leithold

1340h
EP53C-0636 POSTER PATTERNS OF SEDIMENT TRANSPORT AND DEPOSITION DURING A FLOOD EVENT IN A RIVER DOMINATED WETLAND: C R Esposito, J Y Giorgiou, A S Kolker

All information is current as of November 12, 2010
1340h  EPS53D-0643 POSTER Do Neogene foreland basin sediments of the Orán Group, northwestern Argentina record changing conditions in the Eastern Cordillera? K Staffo, J M Rahl, D J Harbor, C Galli, C Bovay


1340h  EPS53D-0646 POSTER Seepage erosion of Arctic coastal bluffs driven by thawing permafrost in Northwest Alaska: C B Phillips, D J Jerolmack, B T Crosby

1340h  EPS53D-0647 POSTER Rock uplift and transient landscape development in response to subduction of the Cocos Ridge, Central American Volcanic Arc: K D Morell, E Kirby, D M Fisher, M C Van Soest

1340h  EPS53D-0648 POSTER Post-Pleistocene relief production and isostatic compensation within the Xining-Guide-Xunhua Basins (NE Tibetan Plateau) and their significances to plateau uplift and landscape evolution: H Zhang, P Zhang, J Champagnac, S Liu


1340h  EPS53D-0650 POSTER The Enigmatic Transient Landscapes of Bhutan: B A Adams, K X Whipple, A M Heimsath, M C Van Soest, K Hodges

EP53E  Moscone South: 103 Friday 1340h  EPSP Robert P. Sharp Lecture (Webcast) (joint with B, C, H, GC, NH, NG)

Presiding: A D Howard, Univ of Virginia; D C Mohrig, C Paola, University of Minnesota

1340h  Introduction by Dan Mohrig, University of Texas

1345h  EPS53E-01 Noise is the new signal: Moving beyond zeroth-order geomorphology (Invited): D J Jerolmack

Geodesy

G53A  Moscone South: Poster Hall Friday 1340h  Observing and Interpreting Regional Sea Level Change II Posters (joint with OS, PP, NH, PA)

Presiding: E W Leuliette, NOAA/Lab for Satellite Altimetry; M E Tamisiea, Proudman Oceanographic Lab.

1340h  G53A-0698 POSTER Geophysical Causes Contributing to Present-Day Sea Level Rise: C Kuo, C Shum, J Guo

1340h  G53A-0699 POSTER Detecting the Sea-Level Fingerprint of Polar Ice Mass Changes: C Hay, J Mitrovica, R E Kopp, S M Griffies, J Yin, R J Stouffer

1340h  G53A-0700 POSTER Relative Sea-Level Change in Western Iceland during the Last Half-Millennium and its Relation to Global Sea Level Patterns: M H Saher, R W Gehrels, N Barlow, A J Long, W L Marshall


1340h  G53A-0702 POSTER Quantifying the respective contribution of different oceanic layers to steric sea level at global and basin scales, from the last decades to the recent years: W LLOVEL, B Meyssignac, A A Cazenave

1340h  G53A-0703 POSTER Geographic Variability of Global Sea Level Change: I Fukumori

1340h  G53A-0704 POSTER Regional variability in sea level trends since 1950: comparison between sea level hindcasts from the CNRM coupled climate model with different forcings, past sea level reconstructions and observed steric sea level: B Meyssignac, W LLOVEL, D Salas-y-melia, A A Cazenave

1340h  G53A-0705 POSTER Investigations at regional scales of reconstruct sea level variability over the past 50 years: M Becker, B Meyssignac, W LLOVEL, A A Cazenave, P Rogel

1340h  G53A-0706 POSTER SEA LEVEL TREND AND LOW-FREQUENCY VARIABILITY IN THE GULF OF MEXICO DERIVED FROM SATELLITE ALTIMETRY AND TIDE-GAUGES RECORDS: M Karpytchev, S Barbosa, C Letetrel, G Wöppelmann

1340h  G53A-0707 POSTER RATES OF VERTICAL LAND MOUVEMENT INFERRED FROM COASTAL ALTIMETRY, TIDE GAUGES AND GPS IN THE GULF OF MEXICO: C Letetrel, M Karpytchev, G Wöppelmann

1340h  G53A-0708 POSTER The Determination of Absolute Sea level Rise in New Zealand: J Hannah, P H Denys, R J Beavan

1340h  G53A-0709 POSTER A Study on Sea Level Variations of the Korean Peninsula and Surrounding Areas Based on Tide Gauge, GPS and Satellite Altimeter Measurements: K Kim, K Park, J Won

1340h  G53A-0710 POSTER Interdecadal variability and linear trend of sea level along the Japanese coast: T Yasuda, M Sueyoshi

1340h  G53A-0711 POSTER Observation of the Ocean Surface Height along the Drake (Antarctica) Passage with Four Onboarded 1Hz GPS Antennas: F Fund, F Perosanz, R Biancale, Title of Team: CNES

1340h  G53A-0712 POSTER Regional Sea level change in the Arctic Ocean from a combination of radar and laser altimetry, tide gauges and ocean models: O B Andersen, T BONO, Y Cheng


G53B  Moscone South: Poster Hall Friday 1340h  Remote Sensing of Atmospheric Water Vapor Using Geodetic Techniques II Posters (joint with A)

Presiding: I Thomas, Newcastle University; J Wang, NCAR; J J Braun, UCAR

1340h  G53B-0714 POSTER Meteorology and GNSS? What is the benefit?: P Drummond, S Grünig

1340h  G53B-0715 POSTER Near real-time estimation of tropospheric water vapor content from ground based GNSS data and its potential contribution to weather now-casting in Austria: A Karabatic, R Weber, T Haiden

1340h  G53B-0716 POSTER Determination of Precipitable Water Vapors by Combining Ground-based GPS Measurements and Automatic Weather Station Observations: D Kim, J Won, H Kim, K Kim, K Park

1340h  G53B-0717 WITHDRAWN

All information is current as of November 12, 2010
1340h  **G53B-0718 POSTER** 10 years ground-based GPS derived water vapour determination, towards real-time processing and 3-d modelling: **M Ramatschi**, M Bender, G Dick, M Ge, J Wickert

1340h  **G53B-0719 POSTER** Determining the Optimal Sampling of Atmospheric Water Vapor from GNSS Observations: **J J Braun**, T M Van Hove

1340h  **G53B-0720 POSTER** Correlating the Transport of Precipitable Water Vapor with Rainfall in a Complex Orographic Environment Before, During and After a Tropical Storm: Case Study of Typhoon Morakot: **V D Almanza**, J J Braun, Y Kuo, W S Schreiner

1340h  **G53B-0721 POSTER** Comparison of tropospheric delays from Raman lidar, radiosondes, GPS and DORIS during the MANITOU experiment: **P Boss**, O Bock, C Thom, J Pelon, P Willis, O Martin, S Nahmani, O Garrouste

1340h  **G53B-0722 POSTER** Climate monitoring using NCAR global, 2-hourly, GPS-derived atmospheric precipitable water dataset: Value and Challenge: **L Zhang**, J Wang, P Thorne, C A Mears

1340h  **G53B-0723 POSTER** Climatological signals from long term behaviors of atmospheric zenith delays and their gradients from the Japanese dense GPS array: **K Yoshida**, K Heki

1340h  **G53B-0724 POSTER** Concentrated Heavy Rain Detected by InSAR: a Case Study of the August 2008 Episode in Central Japan: **Y Kinoshita**, M Shimada, M Furuya, T Hobiger, R Ichikawa

1340h  **G53B-0725 POSTER** Evaluation of Tropospheric Zenith Delays Estimated from GPS Data and Derived from Weather Model Vapor Water Data, in the Context of InSAR Tropospheric Correction: **A W Moore**, S Kedar, F Webb, Z Liu, Y Bock, P Fang

1340h  **G53B-0726 POSTER** Kashima Ray-Tracing Service (KARATS) for high accurate GNSS positioning: **R Ichikawa**, T Hobiger, S Hasegawa, M Tsutsui, Y Koyama, T Kondo

1340h  **G53B-0727 POSTER** Validation of tropospheric parameters estimating from VLBI data analysis: **S Bolotin**, J M Gipson, D Gordon, K Le Bail, D MacMillan

1340h  **G53B-0728 POSTER** Impact of erroneous meteorological data on VLBI processing: **J M Gipson**, K Le Bail, S Bolotin, D Gordon, D MacMillan

**G53C Moscone West: 2008**  
**Friday 1340h**  

**Presiding:** A J Mannucci, Jet Propulsion Laboratory, California Institute of Technology; **E Cardellach**, Institut de Ciències de l’Espai/CSIC-IEEC


1355h  **G53C-02** Recent Results from GNSS-Reflections Remote Sensing (Invited): **S Lowe**

1410h  **G53C-03** Measurements of Ocean Surface Waves Using Airborne GNSS Multistatic Radar: **V Zavorotny**, D Akos, H Muntzing

1425h  **G53C-04** Towards Sea Ice Remote Sensing with Space Detected GPS Signals: Demonstration of Technical Feasibility and Initial Consistency Check Using Low Resolution Sea Ice Information: **S Gleason**

1440h  **G53C-05** Monitoring the depth of the atmospheric boundary layer by GPS radio occultation (Invited): **S V Sokolovskiy**, D H Lenschow, Z Zeng, C Rocken, W S Schreiner, D Hunt, Y Kuo, R A Anthes

1455h  **G53C-06** Characteristics of stratospheric gravity waves using GPS radio occultation data (Invited): **T Tsuda**

1510h  **G53C-07** Convective towers detection using GPS radio occultations: **R Biondi**, T Neubert, S Syndergaard, J Nielsen

1525h  **G53C-08** Characteristics of ionospheric scintillation measured using GPS receivers onboard the COSMIC satellites: **X Pi**, A J Mannucci

**Global Environmental Change**

**GC53A Moscone West: 3005**  
**Friday 1340h**  
**Ecosystem Responses to Fine-Scale Climate Variability in Mountainous Terrain II (joint with B, H)**

**Presiding:** C I Millar, USDA Forest Service; **J A Hicke**, University of Idaho; **G Greenwood**, University of Bern; **C Tague**, University of California, Santa Barbara

1340h  **GC53A-01** Mechanisms Controlling the Effects of Weather and Climate on California’s Ecosystems (Invited): **M Goulden**, A E Kelly, A Fellows, G Winston

1355h  **GC53A-02** Modeling plant species distributions under future climates: how fine-scale do climate models need to be? (Invited): **F W Davis**, J Franklin, M Iegami, A D Syphard, A L Flint, L Hannah

1410h  **GC53A-03** Climate and Floristic Variation in Great Basin Mountain Ranges (Invited): **D A Charlet**, P Leary

1425h  **GC53A-04** Sensitivity of subalpine tree seedlings and alpine plants to natural and manipulated climate variation: Initial results from an Alpine Treeline Warming Experiment (Invited): **I M Kueppers**

1440h  **GC53A-05** Do plant species interactions reflect small-scale abiotic gradients in the alpine zone? **S S Whitecloud**

1455h  **GC53A-06** Effects of overcast and foggy conditions on transpiration rates of Pinus patula trees along a chronosequence within the cloud belt of the Sierra Madre Oriental, central Veracruz, Mexico: **M S Alvarado-Barrientos**, F Holwerda, H Aibjornsen, T Sauer, T E Dawson, L A Brujinzeel

1510h  **GC53A-07** The upper mountain forest and tree response to climate change in south Siberian Mountains: **V Kharuk**, J Ranson

1525h  **GC53A-08** Forest responses to increasing aridity and warmth in the southwestern United States: **C J Still**, **P Williams**, C D Allen, C I Millar, T W Swetnam, J Michaelson, S W Leavitt

**GC53B Moscone West: 3001**  
**Friday 1340h**  
**Greening of the Arctic II (joint with B, A, C, H)**

**Presiding:** H E Epstein, University of Virginia; **I H Myers-smith**, University of Alberta


1355h  **GC53B-02** What is driving productivity changes at high northern latitudes? (Invited): **S J Goetz**

1404h  **GC53B-03** Decadal Time Scale change in terrestrial plant communities in North American arctic and alpine tundra: A contribution to the International Polar Year Back to the Future Project (Invited): **C E Tweedie**, D Ebert-May, R D Hollister, D R Johnson, M J Lara, S Villarreal, M Spasojevic, P Webber
All information is current as of November 12, 2010

Hydrology

**H53A  Moscone South: Poster Hall  Friday  1340h**

**Agroecosystems and Water Resources II Posters (joint with B, GC, PA)**

**Presiding:** B R Scanlon, University of Texas at Austin; C T Green, US Geological Survey; T Harter, University of California Davis; A M Porporato, Duke University

1340h  **H53A-0982 POSTER** An optimization model to design and manage subsurface drip irrigation system for alfalfa: M Kandelous, T Kamai, J A Vrugt, J Simunek, B Hanson, J W Hopmans

1340h  **H53A-0983 POSTER** EFFECTIVENESS OF PERENNIAL VEGETATION STRIPS IN REDUCING RUNOFF IN ANNUAL CROP PRODUCTION SYSTEMS: V Hernandez-santana, X Zhou, M Helmers, H Asbjornsen, R K Kolka

1340h  **H53A-0984 POSTER** Mitigating agricultural impacts on groundwater using distributed managed aquifer recharge ponds: C M Schmidt, T A Russo, A T Fisher, A J Racz, C G Wheat, M Los Huertos, B S Lockwood

1340h  **H53A-0985 POSTER** Designing hybrid grass genomes to control runoff generation: C Macleod, A Binley, M Humphreys, I P King, S O'Donovan, A Papadopoulos, L B Turner, C Watts, W R Whalley, P Haygarth

1340h  **H53A-0986 POSTER** A Distributed Water Circulation Model Incorporating Large Irrigation Schemes for Paddy Areas: T Yoshida, T Masumoto, R Kudo, N Horikawa

1340h  **H53A-0987 POSTER** Basin-wide Projection for Paddy Irrigation in Monsoon Asia Based on a Distributed Hydrological Model and Climate Change Scenarios: R Kudo, T Masumoto, T Yoshida, N Horikawa

1340h  **H53A-0988 POSTER** Evaporation over a Heterogeneous Mixed Savanna-Agricultural Catchment using a Distributed Wireless Sensor Network: N C Ceperley, T Mande, G Barrenetxea, M Vetterli, H Yacouba, A Repetti, M B Parlangue

1340h  **H53A-0989 POSTER** Current Agriculture Expansions and the Risk of Dryland Salinization in Central Argentina: D Jayawickreme, C S Santoni, M Nosetto, J H Kim, S Ballesteros, E G Jobbagy, R B Jackson

1340h  **H53A-0990 POSTER** Investigating the impact of global climatic and landuse changes on groundwater resources in hard rock areas of South India: S Ferrant, J Perrin, J Marechal, B Dewandel, S Aulong, S Ahmed

1340h  **H53A-0991 POSTER** Land use effects on green water fluxes from agricultural production in Mato Grosso, Brazil: M J Lathuiliere, M S Johnson, S D Donner

1340h  **H53A-0992 POSTER** Surface hydrology-climate interdependency in the Central Valley Agrosystem: F Munoz-Arriola, R T Hanson, Q Tang, M D Dettinger, T Das, D R Cayan

1340h  **H53A-0993 POSTER** Impact of Irrigated Agroecosystems on Groundwater Resources in the US High Plains and North China Plain: B R Scanlon, L Longuevergne, G Cao, Y Shen, J B Gates, R W Reedy, C Zheng

1340h  **H53A-0994 POSTER** Assessing the Influence of Human Activities on Global Water Resources Using an Advanced Land Surface Model: Y Pokhrel, N Hanasaki, S Koira, S Kanae, T Oki

1340h  **H53A-0995 POSTER** Human Impacts on the Hydrologic Cycle: Comparing Global Climate Change and Local Water Management: I M Ferguson, R M Maxwell

---

**GC53C  Moscone West: 2005 Friday  1340h**

**Use of Observations for Evaluating CMIP5/IPCC Simulations II (joint with A, IN)**

**Presiding:** J Teixeira, Jet Propulsion Laboratory

1340h  **GC53C-01** Facilitating the Use of Satellite Observations for Evaluating CMIP5/IPCC Simulations: J Teixeira, D E Waliser, R Ferraro, G L Potter, D J Crichton, D N Williams, P J Gleckler, A J Braverman, S Lee, K E Taylor

1355h  **GC53C-02** Uncertainty in Comparing Climate Model Predictions with Climate Observations (Invited): B A Wielicki, D F Young, Y Hu, Title of Team: The CLARREO Science Team

1410h  **GC53C-03** Interpreting relationships between present-day fidelity and climate change projections (Invited): R Pincus, D Klocke, J Quaas

1425h  **GC53C-04** Climate Change Time-to-Detection Simulations using IPCC Models for Shortwave Forcings and Feedbacks: W Collins, D Feldman, C Algieri, J Ong

1440h  **GC53C-05** Using the Radiative Kernel Technique to Evaluate Physical Climate Feedbacks in CMIP5 Models: K M Shell, A K Jonko, M M Flink

1455h  **GC53C-06** The Use of the Data Assimilation Research Testbed for Initializing and Evaluating IPCC Decadal Forecasts: K Raeder, J L Anderson, P H Lauritzen, T J Hoar, N Collins

1510h  **GC53C-07** Defining and weighting for model dependence in ensemble prediction: G Abramowitz, C H Bishop

1525h  **GC53C-08** Inter-Comparison of Temperature Variability from Multiple Radiosondes, Reanalyses Products and CMIP5/IPCC Climate Model Simulation: J Xu, A M Powell
H53B Moscone South: Poster Hall Friday

1340h H53B-0996 POSTER A coupled hydrologic and process-based crop dynamics model for studying climate change impacts on water resources and agricultural production: K Chinnayakanahalli, J C Adam, C O Stöckle, R L Nelson, M E Barber

1340h H53B-0997 WITHDRAWN

1340h H53B-0998 POSTER Ecohydrological feedbacks between soil salinity and vegetation dynamics as mediated by interactions with the water table: C Runyan, P D’Odorico

1340h H53B-0999 POSTER Determining Environmental Impacts of Large Scale Irrigation in Turkey: K Simpson, E M Douglas, J P Limbrunner, G Ozertan

1340h H53B-1000 POSTER Water Use Conservation Scenarios for the Mississippi Delta Using an Existing Regional Groundwater Flow Model: J R Barlow, B R Clark

1340h H53B-1001 POSTER Subsurface Drainage Contribution to Streamflow in Subsurface Drained Agricultural Watersheds: S Ale, L C Bowling

1340h H53B-1002 POSTER Spatial Variation Scales of Rainfall Characteristics and Bromide Leaching: O O Wendroth, V Vasquez, C Mateocha

1340h H53B-1003 POSTER The Fate and Transport of Glyphosate and AMPA into Surface Waters of Agricultural Watersheds: R Coupe, S Kalkhoff, P Capel, C Gregoire

1340h H53B-1004 POSTER Hydrogeologic controls on water quality at a university dairy farm: L D McKay, R W Hunter, J Lee

1340h H53B-1005 POSTER Distribution of reduction-oxidation conditions and relation to trends in nitrate in groundwater, Central-Eastside San Joaquin Valley, California: M K Landon, C T Green, K Belitz

1340h H53B-1006 POSTER Selection of Worst-Case Pesticide Leaching Scenarios for Pesticide Registration: H Vereecken, A Tiktak, J Boesten, J Vanderborght

1340h H53B-1007 POSTER Dissolved Phosphorus Concentrations in the Mississippi River Valley Alluvial Aquifer, Northwestern Mississippi: C E Rose, H L Welch

1340h H53B-1013 POSTER Effects of Terrain-modulated Radiation and Moisture Convergence on Grass Dynamics in a Semiarid Highly Seasonal Climate: Data Analysis and Numerical Model Experiments: J H Flores Cervantes, E Istanbulbulluoglu, R L Bras

1340h H53B-1014 POSTER Emerging Technologies for Ecohydrological Studies during the North American Monsoon in a Chihuahuan Desert Watershed: R C Templeton, E R Vivoni, L A Mendez-barrosso, A Rango, A Laliberte, S Saripalli

1340h H53B-1015 POSTER Measurement and Modeling of Surface Energy Fluxes of Rangeland Ecosystems: G N Flerchinger, D G Marks, M L Reba

1340h H53B-1016 POSTER Ecosystem Rain-Use Efficiency in the North American Monsoon Region: G Forzieri, F Catani, F Castelli, E R Vivoni

1340h H53B-1017 POSTER Effects of climate change and hydrological signals on streamflow characteristics: J Kim, A M Warnock, V Y Ivanov, N Katopodes, P Webb, S Fatchi

1340h H53B-1018 POSTER The relationship between rainfall characteristics and bedrock groundwater responses in Mt. Wanizuka, Miyazaki, Japan: an implication of the occurrence of deep-seated landslides: Y Onda, T Uchida, K Tanaka, S Takahashi, C Padilla

1340h H53B-1019 POSTER The Interplay Between Soil Moisture and Water Repellency as a Control on the Temporal Trends in Infiltration Properties of Burnt Forest Soils, south-east Australia: P Nyman, G J Sheridan, P N Lane

1340h H53B-1020 POSTER Hydrologic controls on the development of equilibrium soil depths: L Nicotina, D G Tarboton, T K Tesfa, A Rinaldo

1340h H53B-1021 POSTER The geomorphological origin of recession curves: B Biswal, M Marani

1340h H53B-1022 POSTER Geomorphology of the Trinity River floodplain in Dallas County, Texas: B D Haugen, C Roig-Silva, A R Manning, D W Harrelson, R S Olsen, J P Dunbar, M L Pearson

1340h H53B-1023 POSTER Ground cover variation effect on sediment transport mechanism over steep hillside; modeling of transport: A Ghahramani, Y Ishikawa, T Gomi

1340h H53B-1024 POSTER FLUVIAL EROSION MEASUREMENTS OF STREAMBANK USING PHOTO-ELECTRONIC EROSION PINS (PEEP): T Sutarto, T Papanicolaou, C G Wilson, F Bertrand

1340h H53B-1025 POSTER Entropy Flux Reflects Ecosystem Succession and Characteristics: H Lin, L Graboski

1340h H53B-1026 POSTER INTERPLAY BETWEEN MEP, HYDRAULIC REDISTRIBUTION AND RESOURCE USE EFFICIENCY IN DETERMINING THE STRUCTURE OF PLANT ROOTS: J C Quijano, P Kumar, D Drewry

1340h H53B-1027 WITHDRAWN

1340h H53B-1028 WITHDRAWN

1340h H53B-1029 POSTER Quantification of physical weathering rates using thermodynamics: F Gans, S Arens, S J Schymanski, A Kleidon

1340h H53B-1030 POSTER Spatio-temporal Variability of Nitrate Across Scales in Texas Aquifers: D Dwivedi, B P Mohanty

1340h H53B-1031 POSTER The Delivery Of Dissolved Organic Carbon From Forest Soils To A Head Water Stream: Y Mei, G M Hornberger, L Kaplan, J D Newbold, A K Aufdenkampe

1340h H53B-1032 POSTER Rates of BTEX Biodegradation under Nitrate Reducing Conditions in Wetland Sediments Impacted by Contaminated Groundwater: L K Olson, J T McGuire, I Cozzarelli, E W Smith, T Kneeshaw
HS3E  Moscone South: Poster Hall  Friday  1340h
Uncertainty in Model Parameter Estimates and Impacts on Risk and Decision Making in the Subsurface III Posters

Presiding: D Bolster, UPC; S A McKenna, Sandia National Laboratories; W Nowak, University of Stuttgurt; S Srinivasan, University of Texas Austin

1340h  HS3E-1070 POSTER A new Markovian velocity process model for tracer dispersion in highly heterogeneous porous media: D W Meyer, H A Tchelepi, P Jenny

1340h  HS3E-1071 POSTER Effective Transport in Lattice Fracture Networks with Uncorrelated and Correlated Velocity Field: P K Kang, M Dentsz, R Juanes

1340h  HS3E-1072 POSTER Uncertainty Quantification of Sequentially Reactive Transport Systems: Calibrating First-Order Reaction Rates: Y Sun

1340h  HS3E-1073 POSTER The effect of error models in the multiscale inversion of binary permeability fields: J Ray, B V BloemenWaanders, S A McKenna, Y M Marzouk

1340h  HS3E-1074 POSTER Effect of Porosity Correlations on Sensitivity of Contaminant Travel Time: K F Pohlmann, J Zhu, J B Chapman, C E Russell, D S Shafer, R W Carroll

1340h  HS3E-1075 POSTER On the Inclusion of Surface-Water Observations in the Groundwater Model Calibration Process: J White, J D Hughes

1340h  HS3E-1076 POSTER Estimating parameters and uncertainty for three-dimensional flow and transport in a highly heterogeneous sand box experiment: H Yoon, S A McKenna, D B Hart

1340h  HS3E-1077 POSTER A New Scaled Inverse Modeling Method to Estimate Hydraulic Parameter Variations in a Deep Vadose Zone: Z Fang, M G Schaap

1340h  HS3E-1078 POSTER A quantitative methodology to assess the risks to human health from CO2 leakage into groundwater: E Siirila, A Sitchler, R M Maxwell, J E McCray

1340h  HS3E-1079 WITHDRAWN

1340h  HS3E-1080 POSTER Hydrogeological characterization of a potential CO2 injection site in Ottawa County, Michigan: H Deng, C A Peters, J P Fitts, M Pollak, E Wilson

1340h  HS3E-1081 POSTER Comparison of Parameter Estimates and Uncertainty Calculated with Correlated Versus Uncorrelated Observation Errors: C R Tiedeman, C T Green

1340h  HS3E-1082 POSTER Multi-dimensional Likelihood Estimation Techniques in conjunction with the Method of Anchored Distributions (MAD): M W Over, H Murakami, M S Hahn, Y Yang, Y Rubin

1340h  HS3E-1083 POSTER A Bayesian Approach to Integrate Real-Time Data into Probabilistic Risk Analysis of Remediation Efforts in NAPL Sites: D Fernandez-Garcia, X Sanchez-Vila, D Bolster, D M Tartakovsky


1340h  HS3E-1085 POSTER Optimization of monitoring networks based on uncertainty quantification of model predictions of contaminant transport: V V Vesselinov, D Harp

1340h  HS3E-1086 POSTER Sensitivity analysis of tracer transport in variably saturated soils at USDA-ARS OPE3 field site: A Guber, F Pan, Y A Pacheksy, A Yakirevich, T Gish, T J Nicholson, R E Cady

1340h  HS3E-1087 WITHDRAWN


1340h  HS3E-1089 POSTER Capture zone delineation in hard-rock aquifers: Theoretical insights: E Bresciani, P Davy, J De Deuzy

1340h  HS3E-1090 POSTER Uncertainty Quantification for Uranium Migration at the Hanford 300 Area: G E Hammond, X Chen, P C Lichter

1340h  HS3E-1091 POSTER Deriving and Evaluating a Reduced Complexity Model for PRA of Groundwater Contamination: C Winter, D Mao, T J Yeh

1340h  HS3E-1092 POSTER Applications of a Complimentary Modeling Framework to Improve Regional-Scale Groundwater Prediction: A J Valocchi, Y Demissie

1340h  HS3E-1093 POSTER Parameter sensitivity to groundwater-surface water flow observations in an integrated land surface, groundwater and surface water simulation model: C F Brush, E C Dogrul, T Kadir, F Chuong

1340h  HS3E-1094 POSTER Reduced Order Models for Uncertainty Quantification and Parameter Estimation in Subsurface Flows: P Constantine, J E Kozdon, M G Gerritsen

HS3F  Moscone South: Poster Hall  Friday  1340h
Water Quality of Hydrologic Systems Posters

Presiding: T Meixner, University of Arizona; B T Neilson, Utah State University

1340h  HS3F-1095 POSTER Remote Sensing of Water Quality in a Tropical Freshwater Impoundment: G Campbell, S R Phinn, A G Dekker, V E Brando

1340h  HS3F-1096 POSTER Investigating water quality response to wind-driven upwelling events in the Salton Sea, CA using multi-temporal MODIS satellite imagery: V W Chu, L S Smith, J Hook

1340h  HS3F-1097 POSTER Major Ion Chemistry of Shark River Slough, Everglades National Park: N M Neira, F A Matthews, D Lagomasino, R M Price

1340h  HS3F-1098 POSTER 2002-2008 hydrological budget and phosphorus residence times for Shark River Slough, Everglades National Park: A K Saha, R M Price, H Fitz, V Engel

1340h  HS3F-1099 POSTER Perturbations in major ion chemistry of Taylor Slough, Everglades National Park, Florida, USA: E Sandoval, R M Price

1340h  HS3F-1100 POSTER MULTI-ISOTOPIC (O, H, Sr, Li) TRACING OF THE FLUXES INVOLVED IN THE WATER STATUS OF A PEATLAND (LA SAUVETAT, MASSIF CENTRAL, FRANCE): B Agnès, P J Negrel, R Milor, B Clotilde


1340h  HS3F-1102 POSTER Hydrologic and Chemical Controls of Water Quality in the Lower Missouri River: F Liu, J Yang

1340h  HS3F-1103 POSTER Intercomparison of SWAT models in simulating hydrology of Cannonsville Reservoir Watershed: S M Pradhanang, Z M Easton, E Schneiderman, M S Zion, T S Steenhuis

1340h  HS3F-1104 POSTER Changes in contaminant loading and hydro-chemical storm behavior after the Station Fire: M P Burke, T S Hogue, J Barco, C J Wessel

1340h  HS3F-1105 POSTER Nitrogen fate and Transport in Diverse Agricultural Watersheds: H Essaid, K A McCarthy, N T Baker
1340h  **H53F-1106 POSTER** Atmospheric deposition and corresponding variability of throughfall and stemflow chemistry across temporal scales in a mid-Atlantic broadleaf deciduous forest: D F Levia, J T Van Stan, C M Siegert, S P Inamdar, M J Mitchell, S M Magee, P McHale

1340h  **H53F-1107 POSTER** Geochemical Differences between two adjacent streams in the Tenaya Lake region of Yosemite National Park: R Antweiler, E D Andrews

1340h  **H53F-1108 POSTER** Suspended Sediment Transport Dynamics in the Esopus Creek Watershed, New York: R Mukundan, D C Pierson, E Schneiderman, D O’Donnell, A H Marotze, M S Zion

1340h  **H53F-1109 POSTER** Stable Isotope Fractionation during Chromium(III) Oxidation by δ-MnO₂: D T Wang, D C Fregoso, A S Ellis, T M Johnson, T D Bullen

1340h  **H53F-1110 POSTER** Theoretical Analysis of the Influence of Process Parameters on Pathogen Transport and Fate in a Recreational Beach: L Liu, X Fu

1340h  **H53F-1111 POSTER** Assessment of zinc loading in an acid rock drainage alpine catchment using a tracer-injection and synoptic-sampling study: C M Crouch, D M McKnight, A Todd

1340h  **H53F-1112 POSTER** Comparison of low cost materials to remove fluoride from drinking water in Sri Lanka; Response to health problems associated with contiguous hydrogeochemistry: M S Vithanage, S Randiligama

1340h  **H53F-1113 POSTER** Major Ion Geochemistry of Horseshoe Lake, Mammoth Lakes, California: Water Quality in a Region with Elevated CO₂ from Sub-Surface Leakage: R Santilena, D Szutu, A S Ellis, C S Khachikian

1340h  **H53F-1114 POSTER** Water Quality in an Elevated CO₂ Region: a Field Study at Mammoth Lakes, CA: C D Dwyer, A S Ellis, C Khachikian, Title of Team: Center for Energy and Sustainability

1340h  **H53F-1115 POSTER** Quantifying the net benefit impacts of the Troy Waste Water Treatment Plant on Steelhead Habitat in the West Fork Little Bear Creek drainage: R Sanchez-Murillo, E S Brooks, J Boll

1340h  **H53F-1116 POSTER** Lead and arsenic bioremoval by aquatic plants sampled up and downstream from a wastewater discharge: S P Sternberg, M Roberts

1340h  **H53F-1117 POSTER** Characteristics and applications of UV-controlled-release H₂O₂ for urban runoff treatment: S Sun, E Lee, F W Schwarz, Y Kim

1340h  **H53F-1118 POSTER** SIDESTREAM ELEVATED POOL AERATION, A TECHNOLOGY FOR IMPROVING WATER QUALITY IN URBAN RIVERS: D Motta, T Garcia, J D Abad, F A Bombardelli, A Waratuke, M H Garcia

1340h  **H53F-1119 POSTER** Laboratory Feasibility Evaluation of a New Modified Iron Product for Use as a Filter Material to Treat Agricultural Drainage Waters: B J Allred

1340h  **H53F-1120 POSTER** Laboratory investigation of the potential influence of CO₂ migration on trace element release from natural aquifer sediments: J LeBel, A Hakala, E H Keating, D E Allen

1340h  **H53F-1121 POSTER** The effect of sea-water intrusion due to the large scale construction in a coastal region: S Hynun, S Jin, N C Woo, J Lee, H Lee, Y Kim

1340h  **H53F-1122 POSTER** Groundwater Quality in the North San Francisco Bay Groundwater Basins, CA: J T Kulongoski, K Belitz

1340h  **H53F-1123 POSTER** Nitrous oxide production and consumption processes in a groundwater contaminated by nitrogen compounds in Kathmandu Valley, Nepal: a study using nitrogen and oxygen isotopes ratio of nitrous oxide and nitrate: K Osaka, T Nakamura, S Chapagain, K Nishida, K Koba, M Yoh, F Kazama, Title of Team: ICRE

1340h  **H53F-1124 POSTER** Presence of faecal indicator bacteria in groundwaters in Kathmandu Valley, Nepal: K Nishida, S Shrestha, Y Tanaka, E Haramoto, T Nakamura, K Osaka, S Chapagain

1340h  **H53F-1125 POSTER** Groundwater recharge and interaction between groundwater and river water in Kathmandu valley, Nepal: T Nakamura, K Osaka, K Nishida, S Chapagain, S Shrestha, F Kazama, Title of Team: ICRE

1340h  **H53F-1126 POSTER** Factors Controlling Nitrogen Fluxes in Groundwater in Agricultural Areas: L Liao, C T Green, B A Bekins, J K Bohlke

1340h  **H53F-1127 POSTER** Characterization of nitrate contamination in groundwater in Gosan, western part of Jeju Island: E Koh, D Kaown, B Kang, S Oh, H Moon, K Lee

1340h  **H53F-1128 POSTER** The assessment of groundwater nitrate contamination by using logistic regression model in a representative rural area: K Ko, B Cheong, D Koh

1340h  **H53F-1129 WITHDRAWN**

1340h  **H53F-1130 POSTER** Assessment of the groundwater chemistry of a complex aquifer system in the context of urbanization in Sub-Saharan Africa: case study in semi-arid southwest Niger: A Boubakar Hassane, G Favreau, C Leduc, B Ousmane, A Soumaïla

1340h  **H53F-1131 POSTER** Possible Causes of Decreasing Benzene Concentrations in an Oil-Contaminated Aquifer: D Brennan, B A Bekins, E Warren, M J Baedecker, R P Eganhouse

1340h  **H53F-1132 POSTER** Modeling Dioxane Transport in a Heterogeneous Glacial Aquifer System (Washtenaw County, Michigan) Using Publicly Available Models and Data: R Benjakul, J S Gierke

1340h  **H53F-1133 POSTER** Composition Dependent Evolution in Mass Flux from Binary Trichloroethene/Tetrachloroethene-DNAPL Source Zones: D I Walker, N L Cápiro, E K Granbery, K D Pennell


**H53G Moscone West 3014 Friday 1340h**

**Climate Forcing of Surface and Subsurface Hydrology and Biogeochemistry: Processes, Models, Management II (joint with A, B, EP, GC)**

*Presiding:* S Arumugam, NC State University; S Floegl, IFM-GEOMAR; B Peucker-Ehrenbrink, Woods Hole Oceanographic Institution; R M Holmes, Woods Hole Research Center, W A Robinson, North Carolina State University; T Wagner, Newcastle University; N A Chappell, Lancaster University; M T Coe, The Woods Hole Research Center; U Lail, Columbia Univ; G Parkin, Newcastle University; J Drake, University of Tennessee; M J Waterlo, VU University

1340h  **H53G-01** What do we know about large river input to the ocean and what should we do? (Invited): J Gaillardet, J Bouchez, C France-Lanord, C Hillaire-Marcel

1355h  **H53G-02** Global river nutrient export: scenario analysis of past and future trends (Invited): S Seitzinger, E Mayorga, L Bouwman, A Beusen, J Harrison, C Kroeze, E Dumont

1410h  **H53G-03** Submarine Groundwater Discharge of Trace Elements and Isotopes from Karst Systems (Invited): M A Charette, P B Henderson, M E Gonneea, C Breier, J Murray, J W Jenson, S Morales, J Herrera-Silveira

1425h  **H53G-04** Climate change impacts on water resources in tropical mountain regions: an Andean perspective (Invited): W Buytaert, M Vuille, A V Karmalkar, R Urrutia, R Celleri

All information is current as of November 12, 2010
H53H  Moscone West: 3018  Friday 1340h
Data, Information Systems, Interoperability, Cloud Computing, and Community Modeling in Hydrology II (joint with IN)

Presiding: D G Tarboton, Utah State University; M Piasecki, Drexel University; R P Hooper, CUAHSI

1340h  H53H-01 Hydro-Meteorology and Research and ICT at CIMA Foundation: DEWETRA and DRIHMS experiences. (Invited): A Parodi, G Boni, L Ferraris, R Rudari, F Siccardi


1425h  H53H-04 EML, VEGA, ODM, LTER, GLEON – considerations and technologies for building a buoy information system at an LTER site: C Gries, L Winslow, P Shin, P C Hanson, D Barseghian

1440h  H53H-05 NWS-CHPS, the Community Hydrologic Prediction System is operational (Invited): P Gijssbers, C Brunner, L Cajina, J Roe, E Welles

1455h  H53H-06 Challenges and Solutions in Implementing Hydrological Models within Scientific Workflow Software: J Perraud, P G Fitch, Q Bai


1525h  H53H-08 Data-intensive hydrologic modeling: A Cloud strategy for integrating PIHM, GIS, and Web-Services: L N Leonard, C Duffy, G Bhatt

H53J  Moscone West: 3020  Friday 1340h
New Challenges for Ecohydrology and Water Quality Investigations at the Watershed Scale II (joint with B)

Presiding: M Rode, Helmholtz Centre for Environmental Research UFZ; M Wilkinson, Newcastle University; H Asbjornsen, Heidi Asbjornsen; E Daly, Monash University

1340h  H53J-01 Evaluation of Physically and Empirically Based Models for the Estimation of Green Roof Evapotranspiration: K A DiGiovanni, F A Montalto, S Gaffin, C Rosenberg

1355h  H53J-02 Stomatal sensitivity of irrigated urban trees is constrained by xylem vulnerability to cavitation: E Litvak, H R McCarthy, D E Pataki


1425h  H53J-04 Multi-scale linkages between forest water use, catchment storage, and streamflow dynamics (Invited): C Hale, J J McDonnell

1440h  H53J-05 Integrated simulation of daily isotope variability at two spatial scales in a nested agricultural catchment: C Birkel, D Tetetzafl, S M Dunn, C Soulsby

1455h  H53J-06 Assessing Spatial and Temporal Variability of Ephemeral Streamflow in Southern Ontario: R Bhamjee, J B Lindsay

1510h  H53J-07 WITHDRAWN

1510h  H53J-08 Uncertainty in BMP optimization to improve watershed scale water quality: I Chaubey, C Maringanti

H53K  Moscone West: 3022  Friday 1340h
Recent Advances in Process-Based/Physically Based Distributed Hydrologic Modeling II (joint with B, EP, GC, A)

Presiding: M S Phanikumar, Michigan State University; C Shen, Michigan State University

1340h  H53K-01 Parameterizing a Large-scale Water Balance Model in Regions with Sparse Data: The Tigris-Euphrates River Basins as an Example: A L Flint, L E Flint

1356h  H53K-02 Simulating Hydrologic Interactions With a Model Formulation Based on DEM-Derived Surface Flow Paths and Boundary Condition-Resolved Exchange Fluxes (Invited): C Paniconi, M Camporese, C Dagès, S Orlandini, M Putti, M Sulis, S Weil


1426h  H53K-04 Beyond Passing Variables: Thinking Like a Coupled Surface-Atmosphere Model (Invited): B M Lofgren
Earth and Space Science Informatics

IN53A Moscone South: Poster Hall Friday 1340h Collaborative Frameworks in Earth and Space Sciences II Posters (joint with GC, NH, PA, ED)

Presiding: C Lynnes, NASA/GSFC; R Devarakonda, Oak Ridge Nat’l Lab-Env Scis.; R Ramachandran, University of Alabama in Huntsville

1340h IN53A-1153 WITHDRAWN

1340h IN53A-1154 POSTER The USA National Phenology Network’s Model for Collaborative Data Generation and Dissemination: A Rosemartin, A Linciome, E G Denny, L Marsh, B E Wilson


1340h IN53A-1156 POSTER The development of a new database of gas emissions in Italy: a collaborative web environment for collecting and publishing data on natural gas emissions: C Cardellini, A Frigeri, F Frondini, G Chioldini

1340h IN53A-1157 POSTER Application of the U.S. Geoscience Information Network to deploying a National Geospatial Data System: M L Allison, S M Richard, R J Clark, W Grunberg


1340h IN53A-1159 POSTER Scientist-Teacher-Student Interactions: Experiences around the Fall 2010 A-Train Symposium: L H Chambers, M A Rogers, D J Charlevoix, T Kennedy, D H Oostra

1340h IN53A-1160 POSTER Libre: A Framework for Sharing and Discovering Science Data: J Lacy, R E Duer


1340h IN53A-1163 POSTER A Modular Framework for Transforming Structured Data into HTML with Machine-Readable Annotations: E W Patton, P West, E Rozell, J Zheng

1340h IN53A-1164 POSTER A Drupal-Based Collaborative Framework for Science Workflows: P Pinheiro da Silva, A Gandara


IN53B Moscone South: Poster Hall Friday 1340h Experiences in Open Source and Software Reuse for Earth Science Remote Sensing and Environmental Mapping and Analysis Posters (joint with B, EP, ED, GC, G)

Presiding: A N Pilant, US EPA R&D; K K Benedict, University of New Mexico; R R Downs, Columbia University; C A Mattmann, NASA Jet Propulsion Laboratory & USC

1340h IN53B-1166 POSTER Enhancing interdisciplinary collaboration and decisionmaking with J-Earth: an open source data sharing, visualization and GIS analysis platform: L C Prashad, P R Christensen, J H Fink, S Anwar, S Dickenscheid, E Engle, D Noss

1340h IN53B-1167 POSTER Interactive Analysis of Hyperspectral Data under Linearity Constraints: A Schmidt, E Treguer, F Schmidt, S Moussasou, C Peloquin

1340h IN53B-1168 POSTER An Open Source Platform for Earth Science Research and Applications: S H Hiatt, S Ganguly, F S Melton, A Michaelis, C Milesi, R R Nemani, P Votava, W Wang, G Zhang, Title of Team: NASA Ecological Forecasting Lab

1340h IN53B-1169 POSTER Application of Unmanned Aerial Vehicle (UAV) for establishing a three-dimensional model in urban environment: F Liou, F Tseng, J Wen, K Chang

1340h IN53B-1170 POSTER Packaging Software Assets for Reuse: C A Mattmann, J J Marshall, R R Downs

1340h IN53B-1171 POSTER Earthworm - reusing a single (open source) software system to study the earth from its core to its magnetosphere: S Lisowski, S B Hellman, P A Friberg, I G Dricker, L D Dietz, M A Garces, J J Love, A T Weatherwax


1340h IN53B-1173 POSTER Software Reuse Through Libraries and Web Service in NSIDC Searchlight: B Billingsley, M Savoie, S Reed

1340h IN53B-1174 POSTER The EOSDIS Reference Architecture: E J Sofinowski, J Behnke

1340h IN53B-1175 POSTER Smartphones for Geological Data Collection- an Android Phone Application: F Sun, Y Weng, P Sun, J D Grigsby

1340h IN53B-1176 POSTER Experiences and Challenges in Earth Science Software Reuse: J Werpy

1340h IN53B-1177 POSTER Software Release and Distribution of the NASA Land Information System: Legacy and Lessons Learned: J Geiger, C D Peters-Lidard, S Kumar, Y Tian

1340h IN53B-1178 POSTER Recent Improvements in Writing and Using Gridded Data with the GRIDSPEC Conventions in the LibCF Library: E J Hartnett, D Kindig, A Pletzer
Natural Hazards

**NH53A Moscone South: Poster Hall** Friday 1340h Remote Sensing and Modeling of Dust Storms: Monitoring and Forecasting Posters (joint with A, GC)

**Presiding:** H M El-Askary, Chapman Univ; W A Sprigg, The University of Arizona; A K Prasad, Chapman University; M Kafatos, Schmid College of Science, Chapman Univ.

1340h **NH53A-1251 POSTER** Saharan dust, transport processes, and possible impacts on hurricane activities. *(Invited:)* W K Lau, K Kim

1340h **NH53A-1252 POSTER** Aerosol-radiation-cloud and precipitation processes during dust events *(Invited:)* G B Kallos, S Solomos, J Kushta, C Mitsakou, P Athanasiadis, C Spyrou, C Tremback

1340h **NH53A-1253 POSTER** Remote sensing of Saharan Dust: A Multi-sensor Perspective *(Invited:)* C M Ichoku, M Petrenko

1340h **NH53A-1254 POSTER** Mineral composition in arid soils: A global distribution *(Invited:)* S Nickovic, A Vukovic, M Vujadinovic, G Pejanovic, V Djurdjevic, M Dacic

1340h **NH53A-1255 POSTER** Similarities and differences between Asian and Saharan dust from models, satellite- and ground-based data: L Su, O B Toon

1340h **NH53A-1256 POSTER** Investigating playa surface textures: The impact of chemistry and environment on surface morphology and dust: H J Tollerud, M S Fandle

1340h **NH53A-1257 POSTER** Dust Long-Range Transport and the Dust-Radiation Effects on the Modification of the SAL Environment: S Chen, W Yang, M Waylonis, Title of Team: SC

1340h **NH53A-1258 POSTER** Adapting WRF-CHEM GOCART for Fine-Scale Dust Forecasting: S L Jones, G A Creighton, E L Kuchera, K D George, A J Elliott

1340h **NH53A-1259 POSTER** Case study of Asian dust optical and deposition properties over the Yellow Sea of China by shipboard and ground-based photometers, along with Satellite remote sensing: D Yang, Y Liu, W Chen

Ocean Sciences

**OS53A Moscone South: Poster Hall** Friday 1340h Fluid Flow and Gas Hydrates in Continental Margins V Posters (joint with GC, NH, PP, V)

**Presiding:** C Berndt, IFM-GEOMAR; S Planke, Volcanic Basin Petroleum Ressch


1340h **OS53A-1342 POSTER** Classification and Comparison of Fluid flow Systems in the SW Barents Sea: S Vadakkepiliyambatta, S Buenz, J Mienert, S Chand

1340h **OS53A-1343 POSTER** Zonation of North Alex Mud Volcano Highlighted by 3-D Active and Passive Seismic Data: J Bialas, M R Lefeldt, D Klueschen, C A Papenberg, W Brueckmann

1340h **OS53A-1344 POSTER** Crustal structure and fluid migration studies in the southwestern Taiwan convergent zone using seismic tomography: W Cheng, T K Wang, S Hsu, C Lee, C Liu

1340h **OS53A-1345 POSTER** Topographic features of gas hydrate mounds of shallow gas hydrate areas in Joetsu Basin, eastern margin of Japan Sea: M Hiromatsu, H Machiyama, R Matsumoto

1340h **OS53A-1346 POSTER** Measuring in situ dissolved methane concentrations in gas hydrate-rich systems, Part 1: Investigating the correlation between tectonics and methane release from sediments: L Lapham, R M Wilson, C K Paull, J Chanton, M Riedel

1340h **OS53A-1347 POSTER** Pore water geochemistry of active methane venting sites, Umitaka Spur and Joetsu Knoll, eastern margin of the Japan Sea: H Tomaru, H Muramatsu, H Anzai, G T Snyder, R Matsumoto

1340h **OS53A-1348 POSTER** Boron isotope geochemistry to reveal evolutionary process of the Wakamiko submarine hydrothermal systems, south Kyushu, Japan: S Hirao, J Ishibashi, T Oono, C You, S Wu, B Wang, T Yamanaka

1340h **OS53A-1349 POSTER** Occurrence and origin of gas hydrates of the eastern margin of Japan Sea as revealed by deep piston and gravity coring of R/V Marion Dufresne: M Tanahashi, R Matsumoto, Title of Team: MD179 Shipboard Scientists

1340h **OS53A-1350 POSTER** Authigenic carbonates from the Northern South China Sea: petrographic and geochemical characterization: S Wang, W Yan, V H Magalhães, Z Chen, L F Fuentefria De Menezes Pinheiro


1340h **OS53A-1352 POSTER** Possible migration front of gas-related fluid inferred from 3D seismic in the eastern Nankai Trough: H Otsuka, S Morita, M Tanahashi, J Ashi, S Nagakubo

1340h **OS53A-1353 POSTER** Can in situ methanogenesis explain a 3 m-thick gas hydrate-filled sand in Walker Ridge Block 313, Gulf of Mexico?: A Cook, A Malinverno


1340h **OS53A-1355 POSTER** Free gas in the regional hydrate stability zone: Implications for hydrate distribution and fracturing behavior: H Daigle, B Dugan

1340h **OS53A-1356 POSTER** Seismic characterisation of gas hydrates in the Pegasus sub-basin, Southern Hikurangi Margin, New Zealand: J Cooper, A R Gorman, I A Pecher, T Golding, S A Henrys

1340h **OS53A-1357 POSTER** Numerical Simulations of Dissociation Heat of Methane-Carbon Dioxide Hydrate Mixtures: C C Knapp, C C Knapp, T H Knapp

1340h **OS53A-1358 POSTER** Time Dependent Fluid Occurrence Offshore Taiwan: L Chen

1340h **OS53A-1359 POSTER** High-resolution seafloor features related to potential gas-hydrate formation off SW Taiwan: S Hsu, C Tais, S Chen, T Shih

1340h **OS53A-1360 POSTER** Understanding gas distribution beneath Hydrate Ridge, offshore Oregon: combining high-resolution 3D seismic data with various 2D seismic profiles acquired at different frequencies: G Crutchley, C A Papenberg, D Klueschen, C Berndt, N L Bangs, M Hornbach

1340h **OS53A-1361 POSTER** Comparison of effective medium models for marine gas hydrate templates: D A Terry, C C Knapp, J H Knapp

1340h **OS53A-1362 POSTER** Observations and coupled models of flow, salinity, and hydrate formation in deepwater Gulf of Mexico vents: A J Smith, P B Flemings, P M Fulton

1340h **OS53A-1363 POSTER** Dissociation Heat of Methane-Carbon Dioxide Hydrate Mixtures: T Kwon, T J Kneafsey, E V Rees
1340h OS53A-1364 PAPER Cyclic formation and dissociation of methane hydrate within partially water saturated sand: T J Kneafsey, S Nakagawa

1340h OS53A-1365 PAPER Tracking and Quantifying Methane Bubble Plumes on the North Cascadia Margin: T A Zyla, G Spence, M Riedel, M J Whiticar

1340h OS53A-1366 PAPER Synthesising Uniform Gas Hydrate in Natural Porous Media under Partially Saturated and Fully Water Saturated Conditions: E V Rees, T J Kneafsey, T Kwon

1340h OS53A-1367 PAPER Large-Scale Pockmarks on the West Margin of Baja California: J W Kluesner, P Lonsdale

1340h OS53A-1368 PAPER Resistivity and seismic structure at southern Hydrate Ridge: P K Kannberg, A M Trehu, K A Weitemeyer, S Constable, M A Arsenault


1340h OS53A-1370 PAPER Slope Failure Records in Gas Hydrate Bearing Regions of the Cascadia Margin: J E Johnson, M E Torres, W Hong, C Disenhof, E Miranda, K Rose


1340h OS53A-1372 PAPER New Isotopic Measurements of Carbonate Minerals from the Cascadia Accretionary Prism Confirm Indications of Past Warm Fluid Flow and Reveal Complex Spatial Variations in Fluid Isotopic Patterns: J C Sample, A K Tripati

1340h OS53A-1373 PAPER Sulfur Isotopic Inferences of the Controls on Porewater Sulfate Profiles in the Northern Cascadia Margin Gas Hydrate System: T Bui, J Pohlman, L Lapham, M Riedel, B A Wing

1340h OS53A-1374 PAPER Pervasive barite deposits at cold seeps from the northern Gulf of Mexico continental slope: Geochemical characteristics and formation mechanism: D Feng, H H Roberts

1340h OS53A-1375 PAPER Methane Hydrate inventory for a warm Paleogene Ocean: R Kahana, A J Ridgwell


1340h OS53B-1381 PAPER Seasonal Potential-Vorticity Anomaly Pigs Propagating in the Subantarctic Mode Water Python: S Schmidtke, G J Johnson

1340h OS53B-1382 PAPER Subtropical dipole mode in the Southern Hemisphere: F Wang

1340h OS53B-1383 PAPER Surface forcing of ocean heat content in Drake Passage: G R Stephenson, S T Gille, J Sprintall

1340h OS53B-1384 PAPER The Transient Response of the Southern Ocean Pycnocline to Changing Atmospheric Winds: D C Jones, T Ito, N S Lovenduski

1340h OS53B-1385 WITHDRAWN

1340h OS53B-1386 PAPER The model atmospheric response to the meso-scale SST variations along the Polar Front in Drake Passage: C Jiang, S T Gille, J Sprintall, K Yoshimura, M Kanamitsu

1340h OS53B-1387 PAPER The Step-Like Structure of Potential Vorticity in the Southern Ocean and its Stability: C Wilson, A F Thompson, C W Hughes

1340h OS53B-1388 PAPER Antarctic Circumpolar Current transport along the Campbell Plateau responds to South Pacific winds: M M Bowen

1340h OS53B-1389 PAPER The Influence of the Antarctic Ice Sheet on the Southern Hemisphere Westerly Winds and Ocean Circulation: T Silva, A Schmitner, K Fraedrich, E Kirk, F Lunkeit

1340h OS53B-1390 PAPER Changes in the CFC distributions between Tasmania and Antarctica over 1991-2008: MJ Warner, J L Bullister, S R Rintoul, R Sonnerup, A Reed

1340h OS53B-1391 WITHDRAWN


1340h OS53B-1393 PAPER Freshwater Flux from Sea Ice in the Southern Ocean: L Ren, K G Speer

1340h OS53C Moscone South: Poster Hall Friday 1340h Turbulence, Mixing, and Multiscale Interactions in Rivers and Estuaries II Posters

Presiding: A T Jessup, University of Washington; A R Horner-Devine, University of Washington; S G Monismith, Stanford University

1340h OS53C-1394 PAPER COHSTREX: The Coherent Structures in Rivers and Estuaries Experiments: A T Jessup

1340h OS53C-1395 PAPER Bathymetric Sensitivity/Inversion in a River Model: G Wilson, H T Ozkan-Haller

1340h OS53C-1396 PAPER The generation of coherent flow structures in a gravel bed river: R J Hardy, J Best, D Parsons, K Christensen


1340h OS53C-1398 PAPER Mechanisms of turbulence production and dissipation within an idealised permeable bed revealed using endoscopic PIV: J Lead, G Sambrook Smith, J Best, R J Hardy, G Blois

1340h OS53C-1399 PAPER Small-scale instability of a river plume front: A R Horner-Devine, C Chickadel

1340h OS53C-1400 PAPER Estimates of Turbulent Mixing in Strongly Stratified Yellow Sea in Summer: J Wang, H Wei, Y Lu

1340h OS53C-1402 PAPER On the erosion of cold intermediate layers: A case study in the Gulf of St. Lawrence: F Cyr, D Bourgault, P S Galbraith

All information is current as of November 12, 2010

1340h OS53C-1404 POSTER Nested-grid models for simulating saltwater intrusion in the Pearl River Estuary: W Zhou, D Wang

1340h OS53C-1405 POSTER Turbulence Statistics in the Coastal Ocean Bottom Boundary Layer: A R Nayak, E E Hackett, L Luzzi, J Katz, T R Osborn

1340h OS53C-1406 WITHDRAWN

1340h OS53C-1407 POSTER Modeling gas bubbles and dissolved gases in a turbulent ocean boundary layer: J Liang, J C McWilliams, P P Sullivan, B Baschek

1340h OS53C-1408 POSTER Integral Length and Time Scales of Velocity, Heat and Mass At and Near a Turbulent Free Surface: G M Curtis, C J Zappa, E A Variano

OS53D Moscone West: 3007

Friday 1340h Nearshore Processes IV (joint with EP)

Presiding: C Chickadel, University of Washington; J W Long, USGS; D Foster, University of New Hampshire; G R Pawlak, University of Hawaii


1355h OS53D-02 Transverse Mixing in a Natural River Channel: W A Swick, J H MacMahan, A J Reniers, E B Thornton, J Brown

1410h OS53D-03 Boussinesq modeling of HB06 tracer releases Part 2: Tracer plumes: D B Clark, F Feddersen, R T Guza

1425h OS53D-04 Modal analysis of rip current cell oscillations: J Geiman, J T Kirby, A J Reniers, J H MacMahan

1440h OS53D-05 A new 3D fully wave-current model MARS-WAVESWATCH: development, validation and application to the rip currents: A Bennis, F Ardhuin, F Dumas, P Bonneton

1455h OS53D-06 Coupled Wave-Current Numerical Simulation of Cohesive Sediment Transport in San Francisco Bay using SUTTANS: Y Chou, O B Fringer

1510h OS53D-07 Investigation of muddy seafloor response to energetic waves on the Louisiana Shelf: C Sahin, I Safak, A Sheremet, T Hsu, M A Allison

1525h OS53D-08 Laboratory study of spectral waves over a muddy bottom: E Maxeiner, R A Dalrymple

OS53E Moscone West: 3009

Friday 1340h Satellite Studies of Ocean-Atmosphere Coupling From Mesoscale to Basin Scale II (joint with A)

Presiding: M A Bourassa, Florida State University; W Liu, Jet Propulsion Laboratory

1340h OS53E-01 Climatological and interannual variability of high-wind occurrence over ocean (Invited): S Xie, X Cheng, T Sampe, H Tokinaga

1355h OS53E-02 Recent improvements in retrieving near-surface air temperature and humidity using microwave remote sensing (Invited): J B Roberts

1410h OS53E-03 Modulation of Environmental Factors on Abnormal Track and Intensity of Tropical Cyclone Nargis (2008): D Wang, C Wang, L Yang, W Li

1425h OS53E-04 Observations of Decadal-Scale Salinity Changes in the North Pacific Ocean (Invited): L Ren, S Riser

1440h OS53E-05 High-resolution satellite-derived ocean surface winds in the Nordic-Barents seas region: Implications for ocean modeling (Invited): D S Dukhovskoy, M A Bourassa, P J Hughes

1455h OS53E-06 Record warming in the South Pacific and western Antarctica associated with the 2009-10 El Niño: atmospheric and oceanic processes and coupling: T Lee

1510h OS53E-07 Atmospheric Wind Relaxations and the Oceanic Response in the California Current Large Marine Ecosystem: M R Fewings, C E Dorman, L Washburn, W Liu

1525h OS53E-08 Comparison of Radon-222 and satellite-wind-based estimates of gas exchange in the Eastern Tropical South Pacific ocean: W Berelson, L Y Yeung, D E Hammond, C I Wolfe, N Rollins, M G Prokopenko

**Planetary Sciences**

P53A Moscone South: Poster Hall

Friday 1340h Characterizing Soils and Their Development on Mars, the Moon, and Other Extraterrestrial Bodies III Posters (joint with EP, C, NS, V)

Presiding: M A Velbel, Michigan State University; M B Madsen, University of Copenhagen; M H Hecht, Jet Propulsion Laboratory; W Goetz, MPI for Solar System Research

1340h P53A-1480 POSTER The History of Dirt at the Phoenix Site: M H Hecht


1340h P53A-1483 POSTER Multispectral and Textural Properties and Diversity of Soils in Gusev Crater and Meridiani Planum from Mars Exploration Rover Pancam and MI Data: J F Bell, A A Fraeman, L Grossman, K E Herkenhoff, R J Sullivan, Title of Team: The MER/Athena Science Team

1340h P53A-1484 POSTER Local Chemistry and Mineralogy of Martian Soils Measured by In-Situ Instruments of the two Mars Exploration Rovers: Implications for Global Geochemistry: J Brueckner, I Fleischer, R Gellert, G Klingelhoefer, Title of Team: Athena Science Team

1340h P53A-1485 POSTER Sulfur, Chlorine, and Bromine Variations in the Soil Profile at Gusev Crater, Mars: S Karunatillake, Y Zhao, S M McLennan

1340h P53A-1486 POSTER Geochemical Modeling of Hot Spring Chemistries with Applications to Martian Silica Formation: G M Marion, D C Catling, J K Crowley, J S Kargel

1340h P53A-1487 POSTER Allophane on Mars: Significance for Chemical Weathering and Soil Development: M D Kraft, E B Rampe, T G Sharp, D W Ming, D C Golden, P R Christensen

1340h P53A-1488 POSTER Alteration Assemblages in Martian Meteorite MIL 03346: Terrestrial, Pre-terrestrial, and Inferences for Martian Surface Fluids: L Hallis, J Stopar, J Taylor, M A Velbel, E P Vicenzi

All information is current as of November 12, 2010
2010 Fall Meeting

All information is current as of November 12, 2010

1340h  **P53C-1525** POSTER An unusual circular depression in Samangan province, northern Afghanistan: impact crater, diatreme, salt diapirism or karst related?: B E Hubbard, J R Sanfilipo

1340h  **P53C-1526** POSTER Possible Impact Origin for the Late Ordovician Bear Swamp Structure in the Finger Lakes Region of New York: D Leiphart

1340h  **P53C-1527** WITHDRAWN

1340h  **P53C-1528** POSTER A New Experimental Approach for Investigating Ballistic Ejecta Emplacement: C M Ernst, O S Barnouin

1340h  **P53C-1529** POSTER Detailed Analysis of the Intra-Ejecta Dark Plains of Caloris Basin, Mercury: D Buczowski, K D Seelos

1340h  **P53C-1530** POSTER Geologic History of a Felsic and Hydrated Mineral Suite in Syrtis Major: M R Smith, J L Bandfield, A Gillespie

1340h  **P53C-1531** POSTER Mafic high inertia crater floors in the southern highlands: Implications for a widespread post-impact modification process on Mars: C S Edwards, J L Bandfield, D Rogers, P R Christensen

1340h  **P53C-1532** POSTER The Role of Impact Excavation in Distributing Clays Over Noachian Surfaces: C J Barnhart, F Nimmo

1340h  **P53C-1533** POSTER Pluvial shorelines in Nevada and Oregon as analogs for features in crater lakes on Mars: J R Zimbelman, W B Garry, R P Irwin, S P Scheidt

1340h  **P53C-1534** POSTER Numerical modeling of a desiccation mechanism for formation of Crater Floor Polygons on Mars: M Elmaarry, J Kodikara, W J Markiewicz, W Goetz, A Pack

1340h  **P53C-1535** POSTER Ejecta-Excavated Subsurface Clays Detected in SW Arabia Terra, Mars: M Wilhelm, C J Barnhart, J M Moore

1340h  **P53C-1536** POSTER Retention time of rays around small lunar craters: S Suzuki, C Honda, N Hirata, N Asada, H Demura, K Kitazato, Y Ogawa, J Terazono, T Moroda, M Ohtake, J Haruyama, T Matsunaga

1340h  **P53C-1537** POSTER Asymmetric impacting on the Moon and its dependence on debiased NEA models: T Ito, R Malhotra

1340h  **P53C-1538** POSTER Distributions of Superposed Impact Craters on Lunar Basins: M R Kirchoff, K M Sherman, C R Chapman

1340h  **P53C-1539** POSTER Nonuniform cratering of the Moon, porous lunar megagelolith and a revised crater chronology: M Le Feuvre, M A Wieczorek

1340h  **P53C-1540** POSTER Impact melt volume estimates in small-to-medium sized craters on the Moon from the Lunar Orbiter Laser Altimeter (LOLA) and Lunar Reconnaissance Orbiter Camera (LROC): O S Barnouin, K D Seelos, A McGovern, B W Denevi, M T Zuber, D E Smith, M S Robinson, G A Neumann, E Mazarico, M H Torrence

1340h  **P53C-1541** POSTER Whipple Crater at the lunar North Pole: A smaller version of Shackleton at the lunar South Pole?: D E Smith, M T Zuber, E Mazarico, G A Neumann, J W Head, M H Torrence, O S Barnouin, P G Lucey

1340h  **P53C-1542** POSTER The Thickness of Proximal Ejecta from the Orientale Basin as revealed by the Lunar Orbiter Laser Altimeter (LOLA): C Fasset, J W Head, D E Smith, M T Zuber, G A Neumann

1340h  **P53C-1543** POSTER Depths, Diameters, and Profiles of Small Lunar Craters From LROC NAC Stereo Images: J D Stopar, M Robinson, O S Barnouin, T Tran

1340h  **P53D** Moscone South: Poster Hall

**P53D-1544** POSTER Anorthosite distribution and its implication in the Lunar South Pole-Aitken basin based on data derived from SELENE Multiband Imager: K Uemoto, M Ohtake, J Haruyama, S Yamamoto, Y Yokota, T Matsunaga, R Nakamura, T Moroda, T Iwata

1340h  **P53D-1545** POSTER Compositional Survey of Central Peaks in the South Pole-Aitken basin from Moon Mineralogy Mapper (Mö) data: P Isaacson, J Nettles, J W Boardman, N E Petro, R L Klima, L A Taylor, C M Pieters, L Cheek, R N Clark, J W Head, J Whitten, S Tompkins, S Besse, D Dhingra, D Moriarty, Title of Team: Moon Mineralogy Mapper Team

1340h  **P53D-1546** POSTER Reconciling Differences in Global Iron Estimates Using Gamma-ray/Neutron and Reflectance Spectroscopy: J Caball, J J Hagerty, D J Lawrence

1340h  **P53D-1547** POSTER The GIS-based geologic investigation of the South Pole-Aitken basin region of the Moon using SELENE elemental information: K J Kim, J M Dohm, J Williams, J Ruiz, B Yu, T M Hare, N Hasebe, N Yamashita, Y Karouji, S Kobayashi, M Hareyama, E Shibamuru, M Kobayashi, C D’Uston, O Gasnault, 0 Forni, R C Reedy


1340h  **P53D-1549** POSTER High Resolution Mapping of the Lunar South Pole-Aitken Basin Interior: B A Archinal, L R Gaddis, T M Hare, M Rosiek, E Howington-Kraus, E Lee, L Weller, R L Kirk, K Edmundson, T Becker, B L Jolliff, T Tran, M Robinson, Title of Team: LROC Science Team

1340h  **P53D-1550** POSTER LRO Camera Imaging of Potential Landing Sites in the South Pole-Aitken Basin: B L Jolliff, S M Wiseman, K E Gibson, C Lauber, M Robinson, L R Gaddis, F Scholten, J Oberst, Title of Team: LROC Science and Operations Team

1340h  **P53D-1551** POSTER Detection and Extent of Ancient, Buried Mare Deposits in South Pole-Aitken Basin (SPA): Implications for Robotic Sampling: N E Petro, B L Jolliff, L R Gaddis,  C M Pieters

1340h  **P53D-1552** WITHDRAWN

1340h  **P53D-1553** POSTER What is the South Pole-Aitken basin hiding?: J Garrick-Bethell, F Nimmo, M A Wieczorek

1340h  **P53E** Moscone South: Poster Hall

**P53E-1554** POSTER Observations of Planetary and Tidal Waves as seen by the Mars Climate Sounder: S D Guzewich, E R Talaat, D W Waugh

1340h  **P53E-1555** POSTER CROSS-INSTRUMENT CALIBRATION OF ATMOSPHERIC TEMPERATURES OBSERVED BY MARS GLOBAL SURVEYOR: D P Hinson, M D Smith
1340h **P53E-1556** POSTER The influence of higher atmospheric pressure on the Martian surface and sub-surface radiation environment - implications for Martian habitability in the Noachian era: B Ehresmann, R F Wimmer-Schweingruber, G Reitz, E Boehm, S Burmeister, O Korntmann, C Martin

1340h **P53E-1557** POSTER 1½ Dimensional Model of the Martian Ionosphere: M Matta, P Witthers, A Lollo, L Mendillo

1340h **P53E-1558** POSTER Energy transfer in O collisions with He isotopes and helium escape from Mars: S Bovino, P Zhang, V Kharchenko, A Dalgarno

1340h **P53E-1559** POSTER Dust Accumulation and Cleaning of the MER Solar Arrays: J A Herman, M T Lemmon, P Stella, K B Chin, E G Wood

1340h **P53E-1560** POSTER MAPPING OF OZONE ON MARS AT INFRARED WAVELENGTHS USING CRIRES AT VLT: Y L Radeva, M J Mumma, G Villanueva, R Novak, P Hartogt, E Trenzen, H Kaufl, A Smette

1340h **P53E-1561** POSTER Modeling Mars’ Ionospheric Electrodynamics: C S Paty, M O Fillingim, R J Lillis, S England, C Carrera

1340h **P53E-1562** POSTER The effect of airborne dust on the stabilization of the early Mars atmosphere against atmospheric collapse: M A Kahre, R M Haberle, J Hollingsworth, C B Leovy

1340h **P53E-1563** POSTER Initial results from Ensemble Data Assimilation of radiances and retrieved temperatures from TES and MCS in an Martian GCM: C Lee, M I Richardson


1340h **P53E-1565** POSTER Investigation of X-ray emission from Martian exospheres at solar minimum with Suzaku: K Ishikawa, Y Eozoe, T Ohashi, N Terada, Y Futaana

1340h **P53E-1566** POSTER Comparison of FFSM Transient Eddies and MOC Storms, MY 24-26: J Noble, J R Barnes, R M Haberle, B A Cantor

1340h **P53E-1567** POSTER Time-of-day variations of atmospheric temperature and water ice opacity observed by Mars Climate Sounder: A Kleinbohl, J T Schofield, D Kass, D J Mcleese

1340h **P53E-1568** POSTER CO2 Clouds on Mars: New Constraints from CRISM Data: M Vincendon, B Gondet, C Pilorget, S L Murchie, J Bibring


1340h **P53E-1570** POSTER Three Martian years of observations with SPICAM on Mars Express: F Montmessin, J Bertaux, O Korabyle, L Maltagliati, A Fedorova, F Lefevre, F Forget, E Marcq, C Listowski, A E Maatmanen, A Reberac

1340h **P53E-1571** POSTER 3D, multi-fluid, MHD calculations of Mars interaction with the solar wind: D Najib, G Toth, A F Nagy, S Curry, Y Ma

1340h **P53E-1572** POSTER Monitoring Atmospheric Dust Opacity at High Latitudes on Mars by Imaging Spectroscopy: S Douste, M Vincendon, Y Langevin, A Spiga, J Bibring, Title of Team: The OMEGA Team

1340h **P53E-1573** POSTER Water Ice Clouds and Thermal Structure in the Martian Tropics as Revealed by Mars Climate Sounder: R Wilson, A Kleinbohl, J T Schofield, D P Hinson, J H Shirley, D Kass

1340h **P53E-1574** POSTER Meteorological Predictions in Support of the Mars Science Laboratory Entry, Descent and Landing: A Rothchild, S C Rafkin, R A Pielke Sr.

1340h **P53E-1575** POSTER Radiatively-Active Aerosols Within Mars’ Atmosphere: Influences on the Weather and Climate as Simulated by the NASA ARC Mars GCM: J Hollingsworth, M A Kahre, R M Haberle, F Montmessin, R Wilson, J Schaeffer

---

**Paleoceanography and Paleoclimatology**

**PP53A Moscone West: 2003**

**Friday 1340h**

**PP53A-01** Candidate ice-rich material within equatorial craters on Mars: D E Shean

1355h **PP53A-02** HiRISE Monitoring of Ongoing Activity in the North Polar Region of Mars: K E Herkenhoff, P S Russell, S Byrne, M E Banks, C J Hansen, Title of Team: the HiRISE Team

1410h **PP53A-03** SHARAD Radar investigations into the initiation of spiral troughs on Planum Boreum, Mars: J B Smith, J W Holt

1425h **PP53A-04** Planum Boreum Basal Unit Topography and its Influence on Surface Structures: T C Brothers, J W Holt, K L Tanaka

1440h **PP53A-05** Quantitative Mapping of Surface Texture on the Northern Polar Residual Cap of Mars: S M Milkovich, S Byrne, P S Russell

1455h **PP53A-06** Polar gyspum on Mars : wind-driven exhumation from the North Polar Cap and redistribution in the Circumpolar Dune Field: M Masse, O Bourgeois, S Le Mouélic, C Verpoorter, L Le Deit, E Mercier, J Bibring

1510h **PP53A-07** Can the Solid State Greenhouse Effect Produce ~100 Year Cycles in the Mars South Polar Residual CO2 Ice Cap?: M R Line, A P Ingersoll

1525h **PP53A-08** Thermal properties of heterogeneous granular materials - control of grain porosity, packing porosity, and paste-phase: K Kurita, A Iwasaki, T Toyota, D Baratoux

---

**Presiding: S M Milkovich, Jet Propulsion Laboratory; M Masse, Laboratoire de Planetologie**

**1340h Studying Uncertainty in Paleoclimate Reconstruction II (joint with A, B, GC, OS, V)**

**Presiding: C E Buck, University of Sheffield; W E Austin; M N Evans, University of Maryland; B Wohlfarth, Stockholm University**

**1340h PP53A-01** Uncertainties in climate proxies (Invited): P D Jones

1400h **PP53A-02** Testing teleconnections – chronological uncertainties of independently dated and tuned past climate events (Invited): M Blaauw, B Wohlfarth

1420h **PP53A-03** The use of perturbed physics ensembles and emulation in palaeoclimate reconstruction (Invited): T L Edwards, R A Pielke Sr.

1440h **PP53A-04** Comparison of century-long regional climate experiments with proxy based climate reconstructions over the Iberian Peninsula (Invited): J Luterbacher, J Gomez Navarro, J P Montavez, F J Gonzalez-Rouco, J G Werner, E Zorita

1500h **PP53A-05** Intercomparison of 20th century tropical climate model hindcasts and coral δ18O data using a forward proxy system model: D M Thompson, T R Ault, M N Evans, J E Cole, J Emile-Geay
1520h PP53A-06 Studying Uncertainty in Palaeoclimate Reconstruction: a framework for research: C E Buck, Title of Team: SUPRANet

SP-Acronym

SA53A Moscone South: 302 Friday 1340h Atomic and Odd Hydrogen From the Mesosphere Through the Exosphere II (joint with A)

Presiding: G Crowley, ASTRA; D E Siskind, Naval Research Lab; E J Mierkiewicz, Univ. of Wisconsin-Madison

1340h SA53A-01 Water vapor and odd hydrogen in the middle and upper atmosphere: an overview of current observations and modeling (Invited): E R Talaat, G Crowley, D R Marsh, H Liu, M G Mlynczak, J Russell


1407h SA53A-03 Global Spatial and Climatological Dependencies of the Hydrogen Geocorona Inferred From TIMED/GUVI Measurements of Lyman α Radiance: L S Waldrop, L J Paxton

1419h SA53A-04 Investigating Mesospheric Hydroxyl Using SHIMMER Data (Invited): C R Engler, D E Siskind, M H Stevens, J Harlander

1434h Break Change of session and chairs

SA53B Moscone South: 302 Friday 1440h Ion-Neutral Coupling in the Atmosphere II

Presiding: J H Clemmons, The Aerospace Corporation; R F Pfaff, NASA/GSFC; G Crowley, ASTRA; R A Heelis, University of Texas at Dallas

1440h SA53B-01 Lithium Release Experiment in the Thermosphere (Invited): S Watanabe, T Abe, H Habu, M Yamamoto

1455h SA53B-02 Radar and optical observations of irregular midlatitude sporadic E layers and MSTIDs (Invited): D L Hysell, E Nossa, M F Larsen, J Munro, S J Smith, M P Sulzer, S A Gonzalez

1510h SA53B-03 In-situ Measurements Within and Above the Ion-Neutral Coupling Region: Sounding Rocket versus Satellite Measurements (Invited): D J Knudsen, J K Burchill, M F Larsen, R F Pfaff, D E Rowland, L Sangalli


SPA-Solar and Heliospheric Physics

SH53A Moscone South: 307 Friday 1340h Nonlinear Structures and Processes in the Solar Wind Plasma II

Presiding: D Shaikh, The University of Alabama in Huntsville; A Lazarian, University of Wisconsin


1418h SH53A-03 The magnetohydrodynamic turbulent cascade in polar solar wind: the role of local dynamic alignment: L Sorriso-Valvo, R Marino, R Bruno, V Carbune, A Noullez


1442h SH53A-06 Proton beam-core system in the expanding solar wind: Hybrid simulations: P Hellinger, P Travniec


1506h SH53A-08 Evidence for a single stochastic physical process for fast solar wind magnetic field magnitude fluctuations at 1AU across ‘turbulent’ and ‘1/f’ temporal scales: B Hnat, S C Chapman, K H Kiyani

1518h SH53A-09 MHD Fluctuations in the Presence of Large Scale Flows: D Shaikh

SH53B Moscone South: 309 Friday 1340h Solar and Heliospheric Physics General Contributions IV: Sunspots, Active Regions, and Flares

Presiding: A Y Shih, NASA Goddard Space Flight Center; A Caspi, Space Sciences Laboratory

1340h SH53B-01 The Solar Cycle Dependence of Active Region Properties: P Higgins, P T Gallagher, D Bloomfield

1355h SH53B-02 The free energy of NOAA active region AR 11029: S A Gilchrist, M S Wheatland

1410h SH53B-03 OBJECTIVE CALIBRATION OF SUNSPOT NUMBERS: L Svalgaard

1425h SH53B-04 What is the relationship between solar torsional oscillations and solar activity?: R C Altrock

1440h SH53B-05 The Solar Oblateness at Solar Minimum as Observed by RHESSI/SAS: M D Fivian, H S Hudson, R P Lin

1455h SH53B-06 A magnetohydrodynamic model of a solar penumbral microjet: T Magara

1510h SH53B-07 Temporal Variability of Ion Acceleration and Abundances in Solar Flares: A Y Shih, D M Smith, R P Lin

1525h SH53B-08 Thermal Imaging of Multi-Temperature Flare Plasma with RHESSI Visibilities: A Caspi, S Krucker, G J Hurford, J M McTiernan

SH53C Moscone South: 308 Friday 1340h Specification, Prediction, and Observation of the Inner Solar System’s Radiation Environment II

Presiding: K A Kozarev, Boston University; L Townsend, The University of Tennessee; C Zeitlin, Southwest Research Institute; M A Dayeh, Southwest Research Institute

1340h SH53C-01 Two Years into Verification and Validation of the Relativistic Electron Alert System for Exploration (RElASE): An Update into Rising Solar Activity: A Posner, O M Rother, B Heber, R Müller-Mellin, J Lee

1355h SH53C-02 Assessing the Space-Radiation Hazard in Ground-Level Enhanced (GLE) Solar Particle Events (Invited): A J Tylka, W F Dietrich, W A Atwell

1410h SH53C-03 HZETRN2010 – A Space Radiation Analysis Tool for Research and Engineering Applications (Invited): T C Slaba, S R Blattmig, F F Badavi, R B Norman, A M Adamczyk, L Townsend, S I Sripriyan, J W Norbury
1425h  SH53C-04  An Overview of First-Year Results from the Lunar Reconnaissance Orbiter (LRO) Cosmic Ray Telescope for the Effects of Radiation (CRAFTER)  *(Invited)*: H E Spence, M Golightly, N A Schwadron, J K Wilson, A Case, J C Kasper, J Blake, M D Looper, J Mazur, L Townsend, C Zeitlin, T J Stubbs, Title of Team: The CRAFTER Science Team

**SH53D Moscone South: 308 Friday 1440h**

**Cosmic Rays During the Recent Unusual Solar Minimum II**

*Presiding:* V A Florinski, University of Alabama, Huntsville; J Kota, University of Arizona

1440h  SH53D-01  Galactic and Anomalous Cosmic Rays at 1 AU During the Recent Unusual Solar Minimum *(Invited)*: R A Leske, A C Cummings, R A Mewaldt, E C Stone

1455h  SH53D-02  PAMELA MEASUREMENTS OF GALACTIC AND SOLAR COSMIC RAYS IN THE 23rd SOLAR MINIMUM *(Invited)*: M Casolino, J R Jokipii, M Golightly, T G Onsager

1525h  SH53D-04  Anomalous Cosmic Rays in the Outer Heliosphere During the Present Solar Minimum *(Invited)*: J P McCollough, A Glover, A M Hilgers

**SPA-Magnetospheric Physics**

**SM53A Moscone South: 301 Friday 1340h**

**Magnetotail Transients and Their Ionospheric Signatures III** *(joint with SA)*

*Presiding:* J Birn, Los Alamos Nat. Lab.; P L Pritchett, UCLA; A Runov, University of California Los Angeles

1340h  SM53A-01  Parallel Electric Fields in the Magnetotail *(Invited)*: R E Ergun


1414h  SM53A-03  Particle Source For Auroral Electrons From Proposed Substorm Onset Processes: A C Cummings, E C Stone, F B McDonald, B Heikkila, N Lal, W R Webber

1427h  SM53A-04  The Magnetospheric Source Location of the Proton Aurora: E L Spanswick, E F Donovan, J P McFadden, B J Jackel, A Lui, V Angelopoulos

1440h  SM53A-05  MHD Wave Propagation And The Ionospheric Signatures Of Fast Plasma Sheet Flows *(Invited)*: R L Lysak, Y Song, N Lin

1501h  SM53A-06  The Auroral and Ground-Magnetic Response to Different Magnetotail Drivers: J Rae, I R Mann, K R Murphy, A P Walsh, D K Milling, V Angelopoulos

1514h  SM53A-07  Formation of nongyrotropic current sheets in the magnetotail during substorm growth phases and their possible role in magnetospheric/auroral connection: K Schindler, M Hesse, J Birn

1527h  SM53A-08  Space-borne and ground-based observations of transient processes occurring around substorm onset: E L Kepko, E L Spanswick, V Angelopoulos, E F Donovan

**SM53B Moscone South: 305 Friday 1340h**

**Space Weather Forecasting: Present Status and Future Directions II (joint with SH)**

*Presiding:* J P McCollough, Air Force Research Laboratory; J Koller, Los Alamos National Lab

1340h  SM53B-01  A Modeler’s Perspective on Space Weather Forecasting *(Invited)*: M J Wilberger

1350h  SM53B-02  Space weather specification and geospace forecasting *(Invited)*: D N Baker

1400h  SM53B-03  SM20: Space Weather Forecasting: Present Status and Future Directions *(Invited)*: J Harris

1410h  SM53B-04  Opportunities and Challenges for Space Weather Forecasting *(Invited)*: T G Onsager

1420h  Panel Discussion  A panel consisting of the invited authors will have a moderated discussion on the current status and future directions of space weather forecasting.

1455h  SM53B-05  ESA SSA Programme in support of Space Weather forecasting: J Luntama, A Glover, A M Hilgers

1510h  SM53B-06  A Baseline Space Weather Forecast Capability: S L Young, J Quinn, J C Johnston, Title of Team: The Space Weather Forecasting Laboratory

1525h  SM53B-07  A coordinated effort to address space weather and environment needs: J I Minow, J F Spann, D Edwards, D Burns, D L Gallagh, M Xapsos, K De Groh

**Seismology**

**S53A Moscone South: Poster Hall Friday 1340h**

**Advances in Signal Processing Methods for Seismology II**

*Posters* *(joint with T)*

*Presiding:* Y Sun, MIT; L Chen, Institute of Geology and Geophysics, Chinese Academy of Sciences

1340h  S53A-1942 POSTER Efficient Signal Extraction From Ambient Noise Data From a Local to a Global Scale: M Schimmel, E Stutzmann, J Gallart

1340h  S53A-1943 POSTER mb(Pn) SCALING FOR THE KOREAN PENINSULA: K Lee, T Hong

1340h  S53A-1944 POSTER Ocean-bottom cable seismic data calibration using median filters for waveform separation: S S Haines, M W Lee, P E Murray, B A Hardage

1340h  S53A-1945 POSTER An automated waveform window selection algorithm based on continuous wavelet transforms: P Chen, E Lee

1340h  S53A-1946 POSTER Dynamic Neural Networks for Classification of Volcanic Earthquakes: C P Bruton, M E West


1340h  S53A-1948 POSTER Earthquake magnitudes based on Coda-Derived Moment-Rate Spectra in Taiwan: F Tu, Y Gung, S Yoo, J Rhie

1340h  S53A-1949 POSTER The characteristics recognition of preseismic groundwater fluctuation in Dor-Her station, Taiwan: F Chiu, K Hsu, C Wang

1340h  S53A-1950 POSTER mb(Pn) SCALING FOR THE KOREAN PENINSULA: K Lee, T Hong

1340h  S53A-1951 POSTER Efficient Signal Extraction From Ambient Noise Data From a Local to a Global Scale: M Schimmel, E Stutzmann, J Gallart

1340h  S53A-1952 POSTER mb(Pn) SCALING FOR THE KOREAN PENINSULA: K Lee, T Hong

1340h  S53A-1953 POSTER Ocean-bottom cable seismic data calibration using median filters for waveform separation: S S Haines, M W Lee, P E Murray, B A Hardage

1340h  S53A-1954 POSTER An automated waveform window selection algorithm based on continuous wavelet transforms: P Chen, E Lee

1340h  S53A-1955 POSTER Dynamic Neural Networks for Classification of Volcanic Earthquakes: C P Bruton, M E West


1340h  S53A-1957 POSTER Earthquake magnitudes based on Coda-Derived Moment-Rate Spectra in Taiwan: F Tu, Y Gung, S Yoo, J Rhie

1340h  S53A-1958 POSTER The characteristics recognition of preseismic groundwater fluctuation in Dor-Her station, Taiwan: F Chiu, K Hsu, C Wang

1340h  S53A-1959 WITHDRAWN

1340h  S53A-1960 POSTER 3D prestack generalized-screen migration for VSP data: H Song, S Shin, S Seol, J Byun

1340h S53A-1962 POSTER Wavelet-Based Measurements of Surface Wave Phase Velocity Beneath Southern Taiwan: H Yang, L Zhao, S Hung, B Huang


1340h S53A-1964 POSTER Battlefield Seismology from Baghdad, Iraq: G I Aqlabqi, M E Wysession, H A Ghahli

1340h S53A-1965 POSTER Local Earthquake Detection in Marine Environments Using Seismic Signal Parameters: M C Williams, A M Trehu, J Braumannl


S53B Moscone South: Poster Hall Friday 1340h Research and Development in Earthquake Explosion Monitoring II Posters

Presiding: S Tsuboi, Japan Agency for Marine Sci & Tech


1340h S53B-1968 POSTER Studying Regional Wave Source Time Functions Using A Massive Automated EGF Deconvolution Procedure: J "Xie, D P Schaff

1340h S53B-1969 POSTER SALSA3D – A Global 3D P-Velocity Model of the Earth's Crust and Mantle for Improved Event Location: S Ballard, M L Begnaud, C J Young, J R Hipp, M Chang, A V Encarnacao, C A Rowe, W S Phillips, L Steck

1340h S53B-1970 POSTER Seismic Radiation from Material Damage During Explosions: A J Rodgers, Y Ben-Zion


1340h S53B-1972 POSTER Effects of Inhomogeneous Structure and Damaged Zone on the P Wave Seismograms A Numerical Study: C K Saikia, A Pitarka, G Ichinose, J J Dwyer

1340h S53B-1973 POSTER Global-scale multiple-event location and travel-time analysis using BayesLoc: G Johannesson, S C Myers


1340h S53B-1975 POSTER A Global-scale P-wave Tomography Model for Regional and Teleseismic Event Monitoring: N A Simmons, S C Myers, G Johannesson

1340h S53B-1976 POSTER 3D Structure of Iran and Surrounding Areas From The Simultaneous Inversion of Complementary Geophysical Observations: C J Ammon, M Maceira, M Cleveland

1340h S53B-1977 POSTER Adjoint tomography of the Middle East: D B Peter, B Savage, A J Rodgers, J Tromp

1340h S53B-1978 POSTER Lithospheric Velocity Models of Eurasia and the Middle East From the Joint Inversion of P- and S-Wave Receiver Functions and Dispersion Velocities: J Julia, E Matzel, A Nyblad, A J Rodgers

1340h S53B-1979 POSTER Nuclear Explosion Monitoring Research and Development in the Middle East: M E Pasyanos, W R Walter, S C Myers, E Matzel, R Gok, N A Simmons, S R Ford, A J Rodgers, S Ruppert, T F Hauk, D Dodge, M Ganzberger, A L Ramirez, F Ryall

1340h S53B-1980 POSTER Surface Wave Attenuation and Blockages in the Area of the Great Caucasus Mountains and the Caspian Sea: A F Stroujkova, J Bonner

1340h S53B-1981 POSTER Detection of unidentified events through T-phase observed by the Dense Oceanfloor Network System for Earthquakes and Tsunamis (DONET): T Nakamura, A To, M Nakano, S Tsuibo, T Watanabe, Y Kaneda

1340h S53B-1982 POSTER CHARACTERISTICS OF REGIONAL SEISMIC WAVES FROM THE 2006 AND 2009 NORTH KOREAN NUCLEAR EXPLOSIONS: T Hong, S Rhee


1340h S53B-1984 POSTER Infrasound Sensor Coverage at Regional Ranges as driven by the Atmospheric State: D Norris

1340h S53B-1985 POSTER Infrasound analysis of I18DK, northwest Greenland: L G Evers, C Weemstra

S53C Moscone South: Poster Hall Friday 1340h Source Inversion Validation (SIV): Quantifying Uncertainties in Earthquake Source Studies II Posters

Presiding: P M Mai, Division of Physical Science and Engineering; M T Page, USGS Pasadena; D Schorlemmer, USC

1340h S53C-1986 POSTER Multiple Moment Tensor Inversions For the December 26, 2004 Sumatra Earthquake Based Upon Adjoint Methods: L Ren, Q Liu, V Hjoerleifsdottir

1340h S53C-1987 POSTER Source complexity of the 4 March 2010 JiaSian, Taiwan, Earthquake determined by joint inversion of teleseismic and near field data: S Lee, W Liang, L Mozziconacci, B Huang


1340h S53C-1989 POSTER Modeling Events in the Lower Imperial Valley Basin: X Tian, S Wei, Z Zhan, E J Fielding, D V Helmerger

1340h S53C-1990 POSTER Waveform inversion for seismic source processes with uncertainty of Green's function: Y Yagi, Y Fukahata


1340h S53C-1992 POSTER Adjoint Inversion for Extended Earthquake Source Kinematics From Very Dense Strong Motion Data: J P Ampuero, S Somala, N Lapusta

1340h S53C-1993 POSTER SOURCE INVERSION VALIDATION - GREEN’S FUNCTIONS TEST: M Causee, P M Mai

1340h S53C-1994 POSTER What Exercise of the Source Inversion Validation BlindTest I didn’t Tell You?: C Ji, G Shao

1340h S53C-1995 POSTER Investigation on the Rupture dynamics of non-planer seismic fault: F Hu, Q Liu, J Xu, X Chen

S53D Moscone West: 2009 Friday 1340h Characterization and Simulation of Long-Period Earthquake Ground Motions II (joint with NH, G)

Presiding: K Koketsu, University of Tokyo; R W Graves, US Geological Survey

1340h S53D-01 POSTER Low-Frequency Amplitudes Observed in a Set of the Strongest Recorded Ground Motions (Invited): J G Anderson, K Koketsu, H Miyake
1355h  S53D-02 Characteristics of Long-Period (3 to 10 s) Strong Ground Motions Observed in and around the Los Angeles Basin during the Mw7.2 El Mayor-Cucapah Earthquake of April 4, 2010: K Hatayama, E Kalkan

1410h  S53D-03 Testing the USGS 3D San Francisco Bay Area Seismic Velocity Model using Observations of 0.5 to 2 s Surface Waves from Local and Regional Earthquakes (Invited): T M Brocher, A D Frankel, D H Oppenheimer, J B Fletcher, J H Luigert

1425h  S53D-04 Estimation of Three-dimensional Boundary Shape of the Osaka Sedimentary Basin, Japan, Based on Waveform Modeling of Multi-event Ground Motion Data: A Iwaki, T Iwata

1440h  S53D-05 Testing the Double Corner Source Spectral Model for Long- and Short-Period Ground Motion Simulations: H Miyake, K Kotrosu

1455h  S53D-06 EARTHQUAKE GROUND MOTION SIMULATIONS IN THE CENTRAL UNITED STATES: L Ramirez Guzman, O S Boyd, S Hartzell, R A Williams

1510h  S53D-07 Seismic Hazard and Risk Posed by the Mentawai Segment of the Sumatran Megathrust: K Megawati, X Han


SS3F  Moscone West: 3024  Friday  1340h  The Seismic Wavefield

Presiding: L A Preston, Sandia National Laboratories; S Wenk, Munich University

1340h  SS3F-01 Rayleigh Wave Numerical Dispersion in a 3D Finite-Difference Algorithm: L A Preston, D F Aldridge

1355h  SS3F-02 THE DISCONTINUOUS GALERKIN FINITE ELEMENT METHOD AND ITS APPLICATION TO GLOBAL WAVE PROPAGATION: S Wenk, M Kaeser, H Igel

1410h  SS3F-03 Finite-difference Modeling of Global Seismic Wave Propagation on a Cross Section of Self-gravitating Earth: G Toyokuni, H Takenaka

1425h  SS3F-04 Spectral-Element Simulations of Seismic Waves and Coseismic Deformations generated by the 2009 L’Aquila Earthquake: E Casarotti, F Magnoni, A Michelini, A Piersanti, D Komatsitsch, J Tromp

1440h  SS3F-05 Frequency Dependent Polarization Analysis of Ambient Seismic Noise Recorded at Broadband Seismometers: K Koper, V Hawley

1455h  SS3F-06 A New Global Group Velocity Dataset for Constraining Crust and Upper Mantle Properties: Z Ma, G Masters, G Laske, M E Pasyanos

1510h  SS3F-07 Observations of Long-Period Rotational Ground Motions: From Ambient Noise to Earth’s Free Oscillations: H Igel, D Kurrle, A M Ferreira, J M Wassermann, P Gaebler, K U Schreiber

1525h  SS3F-08 The Airy phase in oceanic Rayleigh and Scholte waves: L M Dorman

Tectonophysics

T53A  Moscone South: Poster Hall  Friday  1340h  Advances in 2-D and 3-D Numerical and Analog Modeling of Mountain Building and Plate Deformation II Posters (joint with G, S)

Presiding: S S Haq, Purdue University; L Cruz, Stanford University; M L Cooke, University of Massachusetts

1340h  T53A-2097 POSTER Kinematic Modeling of Deformation Near a Ridge-Transform Intersection in the Troodos Ophiolite, Cyprus: C P Scott, S J Titus, J R Davis

1340h  T53A-2098 POSTER Modeling the Evolution of a Transform Fault in the Mantle Section of the New Caledonia Ophiolite: S J Titus, J R Davis

1340h  T53A-2099 POSTER Non-orogenic mountain building due to slab breakoff in northcentral Taiwan: W Wang

1340h  T53A-2100 POSTER MECHANICS OF FORMATION OF FOREARC BASINS OF INDONESIA AND ALASKA: T Cassola, S Willett, H Kopp

1340h  T53A-2101 POSTER Mechanical Models of Bed-Perpendicular Fractures in Layered Rocks Subjected to Extensional Strain: P Sanz, D D Pollard, R I Borja

1340h  T53A-2102 POSTER Dynamic coupling between the San Jacinto Fault and the San Andres Fault in Southern California: G Luo, M Liu

1340h  T53A-2103 POSTER Recent structure of the lithosphere beneath Siberia and surrounding areas based on the results of seismic tomography and numerical thermo-gravity modeling: N Bushenkov, V Chervov, I Koukalov

1340h  T53A-2104 POSTER Constraints from Field Geology for Numerical Modeling of the Crustal Overturn Processes During the Cretaceous High-Magma-Flux Episode in the Central and Southern Sierra Nevada, USA: W Cao, S R Paterson, B J Kaus, J L Anderson, V Memeti

1340h  **T53A-2106 POSTER** Integrative model of the crust and upper mantle for understanding of intra-plate deformations in Central and Northern Asia: W Stolk, M K Kaban, M Tesauro, F Beekman, S Cloetingh

1340h  **T53A-2107 POSTER** The Impact of Partial Melting in the Orogenic Cycle: P F Rey, C Teyssier, D L Whitney

1340h  **T53A-2108 POSTER** Simultaneous development of compressional and extensional tectonic activities and stress regimes in the thin-skinned fold-and-thrust belt of Himalaya: a finite element approach: G R Joshi, Title of Team: Daigoro Hayashi

1340h  **T53A-2109 WITHDRAWN**

1340h  **T53A-2110 POSTER** Mechanical Controls on Fault Vergence and Fold and Thrust Belt Kinematics Based on Discrete Element Simulations: J K Morgan


1340h  **T53A-2113 POSTER** Effects of side wall friction in compressional analog experiments with sand: P Souloumiac, B Mailloir, Y M Leroy

1340h  **T53A-2114 POSTER** analogue experiments applied to active tectonics studies: the case of seismogenic normal faults: S Seno, L Bonini, G Toscani

1340h  **T53A-2115 POSTER** Why Wet Kaolin can be used as a Crustal Analog and its Application to Fault Evolution at Restraining Bends: M L Cooke, N van der Elst, M T Schottenfeld

1340h  **T53A-2116 POSTER** Folding in Regions of Extension: F Levy, C P Jaupart

1340h  **T53B Moscone South: Poster Hall Friday 1340h** Characterization of the 4 April 2010 El Mayor-Cucapah Earthquake and Implications for Earthquake Preparedness in Southern California and Baja California II Posters (joint with G, NH, S)

**Presiding:** J J Gonzalez-Garcia, CICESE; J M Fletcher, R Arrowsmith, Arizona State Univ; E J Fielding, Jet Propulsion Lab Caltech; A J Barbour, Scripps Institution of Oceanography; B W Crowell, Scripps Institution of Oceanography


1340h  **T53B-2118 POSTER** Precise Relocation of the Northern Extent of the Aftershock Sequence Following the 4 April 2010 M7.2 El Mayor-Cucapah Earthquake Kayla A. Kroll (UCR) and Elizabeth S. Cochran (UCR): K Kroll, E S Cochran

1340h  **T53B-2119 POSTER** Infra sonic Observations of Ground Shaking along the 2010 Mw 7.2 El Mayor Rupture: C D deGroot-Hedlin, K Walker

1340h  **T53B-2120 POSTER** SPECTRAL ANALYSIS OF PORE PRESSURE DATA RECORDED FROM THE 2010 SIERRA EL MORA (BAJA CALIFORNIA) EARTHQUAKE AT THE NEES@UCSB WILDLIFE FIELD SITE: S H Seale, D Lavallee, J H Steidl, H Ratzesberger, P Hegarty

1340h  **T53B-2121 POSTER** Validating and refining distributed source models for the El Mayor-Cucapah Earthquake: S Wei, Z Zhan, R Chu, D V Helmerberger

1340h  **T53B-2122 POSTER** The Obsidian Creep Project: Seismic Imaging in the Brawley Seismic Zone and Salton Sea Geothermal Field, Imperial County, California: R D Catchings, M J Rymer, M Goldman, R B Lohman, J J McGuire

1340h  **T53B-2123 POSTER** Rupture process of the 4 April 2010 Baja California Earthquake estimated from high-rate GPS data: Y Nakamura, M Hashimoto

1340h  **T53B-2124 POSTER** GPS coseismic and postseismic surface displacements of the El Mayor-Cucapah earthquake: A Gonzalez, J J Gonzalez-Garcia, D T Sandwell, Y Fialko, D C Agnew, B Lipovsky, J M Fletcher, F A Nava Pichardo

1340h  **T53B-2125 POSTER** Static Rupture Model of the 2010 M7.2 El Mayor-Cucapah Earthquake from ALOS, ENVISAT, SPOT and GPS Data: Y Fialko, A Gonzalez, J J Gonzalez-Garcia, S Barbot, S Leprince, D T Sandwell, D C Agnew

1340h  **T53B-2126 POSTER** Deformation associated with the 2010 Sierra El Mayor earthquake from GPS and InSAR: G J Funning, M A Floyd, D Ben-Zion

1340h  **T53B-2127 POSTER** GPS Measurements of crustal motion associated with the 2010 Mw 7.2 Sierra El Mayor-Cucapah Earthquake, Baja California, Mexico: C S Spinhler, R A Bennett, J J Gonzalez-Garcia, C P Walls, S Lawrence

1340h  **T53B-2128 POSTER** UNAVCO Response to the M7.2 El Mayor-Cucapah Earthquake: C P Walls, S Lawrence, A Bassett, D Mann, A A Borsa, M E Jackson, K Feaux

1340h  **T53B-2129 POSTER** UAVSAR and GPS Observations of Crustal Deformation in Southern California and Implications for Earthquake Risk: A Donnellan, J W Parker, G A Lyzenga, J B Rundle, L Grant Ludwig, R A Granat, M T Glasscoe, M B Heflin

1340h  **T53B-2130 POSTER** Coseismic Offsets on PBO Borehole Strainmeters: Real, or Spurious?: A J Barbour, D C Agnew

1340h  **T53B-2131 POSTER** Coseismic Deformations Associated with the M=7.2, April 04, 2010, El Mayor-Cucapah Earthquake, Observed from Leveling Survey, Geotechnical Instruments and Water Level Changes in the Mexicali Valley: E Glowacka, B Robles, R Vázquez, O Sarychikhina, F Suárez-Vidal, J Ramírez, F A Nava Pichardo, T Farfan, G Diaz de Cossio

1340h  **T53B-2132 POSTER** Triggered Fault Slip in Southern California Associated with the 2010 Sierra El Mayor-Cucapah, Baja California, Mexico, Earthquake: M J Rymer, J A Treiman, K J Kendrick, J J Lienkaemper, M Wei, R J Weldon, R G Bilham, E J Fielding

1340h  **T53B-2133 POSTER** Distributed fault rupture in the Yuha Desert, California, associated with the El Mayor-Cucapah earthquake, and the contribution of InSAR imagery to its documentation: J A Treiman, K J Kendrick, M J Rymer, E J Fielding

1340h  **T53B-2134 POSTER** Slip on faults in the Imperial Valley Triggered by the 4 April 2010 Mw 7.2 El Mayor earthquake as revealed by InSAR: M Wei, D T Sandwell, Y Fialko, R G Bilham


1340h  **T53B-2136 POSTER** Effects of the El Mayor Cucapah April 4, 2010 earthquake and water management decisions on the Colorado River Delta tidal inundation patterns: implications for shorebirds habitat availability: M Gomez-Sapiens, K W Flessa, E P Glenn, S M Nelson
Volcanology, Geochemistry, and Petrology

V53A  Moscone South: Poster Hall  Friday  1340h
Earth’s First Few Hundred Million Years IV Posters (joint with GP, MR, DI, P, S, T)

Presiding: J Badro, Institut de Physique du Globe de Paris; J Badro, Institut de Physique du Globe de Paris; M J Walter, University of Bristol; M J Walter, University of Bristol

1340h  V53A-2222 POSTER Mineral inclusion thermobarometry in >4 Ga Jack Hills zircons provide further constraints on Hadean geodynamics: M Hopkins, T M Harrison, C E Manning

1340h  V53A-2223 POSTER Depth Profiling Hadean Zircons for Evidence of the Late Heavy Bombardment: S S Abbott, T M Harrison, S J Mojsis

1340h  V53A-2224 POSTER A Change in Igneous Activity of the Jack Hills Zircon Sources ca. 3.9 Ga: E A Bell, T M Harrison

1340h  V53A-2225 POSTER GEOLOGY OF QUARTZITES HOSTING PRE-3.9 Ga ZIRCONs IN THE HELLOARING PLATEAU, BEARTOOTH MOUNTAINS (MONTANA): A C Maier, N L Cates, S J Mojsis

1340h  V53A-2226 POSTER Discovery of Eoarchean rocks in Gaeseland, northeast Greenland: M Eastlick, S M Johnston, A R Kylander-Clark


1340h  V53A-2228 POSTER Progressive removal of an upper-mantle KREEP component by TTG magmatism through the Archean: M Guittreau, J Blichter-Toft, M Herve, S J Mojsis, F Albarede

1340h  V53A-2229 POSTER Heat Partitioning by Metal-Silicate Plumes during Earth Differentiation and Core Formation: C A King, P Olson

1340h  V53A-2230 POSTER Lead is probably not in the core after all: F Albarede

1340h  V53A-2231 POSTER SILICATE PEROVSKITE AND THE TERRESTRIAL NOBLE GAS SIGNATURE: S S Shcheka, H Kepler

1340h  V53A-2232 WITHDRAWN

1340h  V53A-2233 WITHDRAWN

1340h  V53A-2234 POSTER Marangoni effect in metal-silicate self separation: S Labrosse, H Terasaki, Y R Ricard

1340h  V53A-2235 POSTER Polybaric critical melting with high melt retention explains the compositions of Barberton komatiites: C Robin, N Arndt, C Chauvel, G R Byerly, A Wilson

1340h  V53A-2236 POSTER Oxygen and silicon partitioning between molten iron and silicate melts: A Ricollet, Y Fei, J Siebert, A Corgne, J Badro

1340h  V53A-2237 POSTER Decoupling of Hf-Nd isotope ratios in early Archean rocks from southern West Greenland – primary or secondary disturbance?: J Hoffmann, C Munker, A Polat, M Rosing

1340h  V53A-2238 POSTER New experimental constraints for Hadean zircon source melts from Ce and Eu anomalies in zircon: D Trail, E B Watson, N Taliby

1340h  V53A-2239 POSTER Limits Imposed on Heat Produced during Core Formation by Radiative Transfer Processes and Thermodynamic Laws: R E Criss, A Hofmeister

1340h  V53A-2240 POSTER Self consistent model of core formation and the effective metal-silicate partitioning: H Ichikawa, S Labrosse, M Kameyama

V53B  Moscone South: Poster Hall  Friday  1340h
The Constraint of Magma and Gas Transport by Geophysical and Geochemical Data III Posters (joint with NS)

Presiding: F Witham, University of Bristol; J Biggs, University of Bristol; T Menand, Universite Blaise Pascal, Laboratoire Magmas & Volcans, IRD R 163, CNRS UMR 6524; J O Hammond, University of Bristol

1340h  V53B-2241 POSTER The implications of re-melting and crystallization for estimating magma fluxes from geodetic observations: L Caricchi, C Annen, J D Blundy, J Biggs, J Gottsmann

1340h  V53B-2242 POSTER Broadband Seismic Monitoring of Mayon Volcano, the Philippines: D Hidayaat, E Laguerta, A Baloloy, S Marcial, C Widjijayanti

1340h  V53B-2243 POSTER Ground Deformation at Effusively Erupting Volcanoes from Physics-Based Models: K R Anderson, P Segall

1340h  V53B-2244 POSTER The control of extensional stress field on the intensity of explosive volcanic eruptions through dykes: A Costa, J Gottsmann, O E Melnik, R S Sparks

1340h  V53B-2245 POSTER An Experimental Investigation of Sill Formation in Layered Elastic Media: Rigidity Contrasts and the Strength of an Interface: J L Kavanagh, R S Sparks, T Menand, J Blundy

1340h  V53B-2246 POSTER Bi-Directional Flow Experiments and Implications for Degassing Processes at Basaltic Volcanoes: F Beckett, H Mader, J C Phillips, A Rust

1340h  V53B-2247 POSTER Bingham fluid behavior of plagioclase-bearing basaltic magma: Approach from laboratory viscosity measurements: H Ishibashi, H Sato

1340h  V53B-2248 POSTER EVOLUTION OF CRUST- AND CORE-DOMINATED LAVA FLOWS USING SCALING ANALYSIS: A Castruccio, A Rust, R S Sparks

1340h  V53B-2249 POSTER The partitioning behaviour of trace metals between melts and H-O-C-Cl fluids: an experimental study: A Teague, J D Blundy, C Coath


1340h  V53B-2251 POSTER Barometric pressure forcing on radon-222 and temperature in fumarolic gases: a tool to describe flow-rate dynamics: P Richon, A Salaun, G Boudon, B Villemant, O Crispi, J Sabroux

1340h  V53B-2252 POSTER Radon and thoron emission from high and low porosity rocks under increasing deformation: An experimental study: S Vinciguerra, S Mollo, P Tuccimei, M J Heap, M Soligo, M Castelluccio, P Scarlato, D B Dingwell

1340h  V53B-2253 POSTER Variation in OMI SO 2 measurements between extrusive and non-extrusive periods of Soufrière Hills volcano, Montserrat: C Hayer, G Wadge, M Edmonds

1340h  V53B-2254 POSTER In-situ, high spatio-temporal resolution measurements of CO 2 flux and isotopic composition on Mammoth Mountain, CA: J L Lewicki, G E Hillery, B Marino, D Bergfeld, M L Fischer, J Hancyk, L Xu
1340h  **V53B-2255** **POSTER** Investigating the trigger mechanism of low-intensity explosive activity at Santiaguito Volcano with a UV camera: P Holland, M I Watson, J C Phillips

1340h  **V53B-2256** **POSTER** Gas-driven eruptions at Mount Ruapehu, New Zealand: towards a coherent model of eruption: G N Kilgour, H M Mader, M Mangan, J Blundy

1340h  **V53B-2257** **POSTER** Linking conduit and surface activity at Arenal volcano using broadband seismometers and Doppler radar: do we need a new conduit model?: S Valade, F R Donnadieu, P Lesage, M Mora Fernandez, A J Harris, G E Alvarado

1340h  **V53B-2258** **POSTER** Volcano Inflation prior to Gas Explosions at Semeru Volcano, Indonesia: T Nishimura, M Iguchi, R Kagwuchi, S Suroto, M Hendrasto, U Rosadi

1340h  **V53B-2259** WITHDRAWN

1340h  **PA21D-1659** **POSTER** Sealing the deal? Vent dynamics and strombolian eruptions recorded with broadband seismic, acoustic and gas observations at Fuego Volcano, Guatemala: J J Lyons, G P Waite, P A Nadeau

---

**V53C Moscone South: Poster Hall ** **Friday** **1340h**

**Volatiles in Magmas: Breath of the Deep Earth**

**V Posters (joint with MR, DI)**

**Presiding:** S Demouchy, Geosciences Montpellier -CNRS; P Ruprecht, Lamont-Doherty Earth Observatory

1340h  **V53C-2260** **POSTER** Volatile contents in olivine-hosted melt inclusions from primitive magmas in the Northern Cascade arc: S D Shaw, S M Debari, P J Wallace, T W Sisson

1340h  **V53C-2261** **POSTER** Experimental Determination of the Partitioning Behavior of Noble Gases Between Carbonate and Silicate Liquids: P Burnard, K T Koga

1340h  **V53C-2262** **POSTER** Characterizing the helium isotope signatures of the mantle beneath the Society Islands, French Polynesia: D M Huckle, M Jackson

1340h  **V53C-2263** **POSTER** Water in the oceanic lithosphere: Salt Lake Crater xenoliths, Oahu, Hawaii: A H Peslier, M Bizimis

1340h  **V53C-2264** **POSTER** Effect of water on mantle melting and magma differentiation, as modeled using Adabat_1ph 3.0: P M Antoshechkin, P D Asimow, E H Hauri, P I Lucaffe

1340h  **V53C-2265** **POSTER** Melt inclusion re-equilibration with complex shapes: P Ruprecht, T Plank, A S Lloyd

1340h  **V53C-2266** **POSTER** Composition and volatile contents of melt inclusions from Mayon Volcano, Philippines: R R Maximo, J A Walker

1340h  **V53C-2267** **POSTER** Eruption and Degassing Processes in a Supervolcanic System: The Volatile Record Preserved in Melt Inclusions from the 3.49Ma Taranigmbite in the Central Andes: S Grocke, S L de Silva, A K Schmitt, P J Wallace

1340h  **V53C-2268** **POSTER** Is there excess argon in the Fish Canyon magmatic system?: C M Wilkinson, S Sherlock, S P Kelley, B L Charlier

1340h  **V53C-2269** **POSTER** The Role of Volatiles During Historical Eruptions of Kilauea Volcano, Hawaii i: Constraints on Source to Surface Processes Using Melt Inclusions: I Sides, M Edmonds, J Maclennan, D Swanson

1340h  **V53C-2270** **POSTER** Halogen/sulphur variations over the active lava lake of Nyiragongo: G Giuffrida, N Bobrowski, D Tedesco, M Yalire, S Arellano, C Balagizi, B Galle

1340h  **V53C-2271** **POSTER** Implications of Pt crucibles - H2O vapour interaction on past AD measurements in silicate glasses and minerals: M Clog, P Cartigny, C P Aubaud

1340h  **V53C-2272** **POSTER** Experimental Phase Relations of Hydroxyl, Primitive Melts: Implications for variably depleted mantle melting in arcs and the generation of primitive high-SiO2 melts: S Weaver, P J Wallace, A Johnston

1340h  **V53C-2273** **POSTER** Temperature- and fO2-Dependence of the Volatility and Condensation Behavior of Volatile Elements: Experimental Results: W Ertel, D B Dingwell

1340h  **V53C-2274** **POSTER** Experimental Insights Into the Formation of High-Mg Andesites in the Trans-Mexican Volcanic Belt: R M Weber, P J Wallace, A Johnston

1340h  **V53C-2275** **POSTER** Behavior of Volatile Metals in Basaltic Systems: Insights from Kilauea Iki and Loihi Volcanoes, Hawaii: M Loewen, A J Kent

1340h  **V53C-2276** **POSTER** Geochemistry and Petrogenesis of the Wenseqi Mafic-Ultramafic Complex and Associated PGE Mineralization, Guyang County, Inner Mongolia, China: S Su, C Lesher

1340h  **V53C-2277** **POSTER** Calibration for Infrared Measurements of OH in Apatite: K L Wang, F Naab, Y Zhang

1340h  **V53C-2278** WITHDRAWN

1340h  **V53C-2279** **POSTER** The degassing and crystallisation behaviour of basaltic lavas: L J Applegarth, H Tuffin, H Pinkerton, M R James

1340h  **V53C-2280** **POSTER** Real-time radon measurements at Stromboli volcano: new insights on gas transport process to the surface: C Cigolini, M Laiolo, G Gervino

1340h  **V53C-2281** **POSTER** Source mechanism regimes for the acoustic signals generated during the expansion of rising and bursting gas slugs in low-viscosity magmas: S J Lane, S B Corder, M R James

1340h  **V53C-2282** **POSTER** BrO formation in the plume of Pacaya volcano, plume chemistry at high resolution plume ages: N Bobrowski, J Vogel, V R Cárceles Espínosa, C Kern, U Platt

1340h  **V53C-2283** **POSTER** The shallow degassing system of Stromboli volcano: insights from geochemical and geophysical data: M Laiolo, G Olivieri, C Cigolini, M Rippe

1340h  **V53C-2284** **POSTER** CO2 emission from lake-filled Katanuma crater, Narugo volcano, Japan: E Padron, P A Hernandez Perez, T Mori, N Perez

1340h  **V53C-2285** **POSTER** Soil CO2 Efflux Monitoring at Izu-Oshima Volcano, Japan: P A Hernandez Perez, T Mori, E Padron, K Notsu, N Perez, G Virgili


1340h  **V53C-2287** **POSTER** Tree-ring 14C and CO2 emissions at Mammoth Mountain and Yellowstone, USA: D Bergfeld, J P McGeehin, J King, H Heasler, W C Evans

1340h  **V53C-2288** **POSTER** Dynamic of diffuse CO2 emission from Deception volcano, Antarcrica: D Nolasco, E Padron, P A Hernandez Perez, F Christian, M Kusakabe, H Wakita

---

**V53D Moscone West: 2018 Friday** **1340h**

**Innovations in Isotope Mass Spectrometry and Isotope Metrology in Geosciences II**

**Presiding:** S Richter, IRMM-JRC-EU; C Shen, Nat Taiwan Univ; A Nestler, European Commission, Joint Research Centre, Institute for Reference Materials and Measurements

1340h  **Introduction** Stephan Richter, IRMM
1341h V53D-01 Sr – an element shows the way – Applications of Sr isotopes for provenance, tracing and migration (Invited): T Prohaska, J Irgerhe, A Zitke, M Tescher, Nicola

1356h V53D-02 Precise Sr isotopic compositions determination by the double spike technique (Invited): D Lee, Y Liu, L Lin

1411h V53D-03 CERTIFICATION OF THE URANIUM ISOPTIC RATIOS IN NBL CRM 112-A, URANIUM ASSAY STANDARD (Invited): K Mathew, P Mason, U Narayanan

1426h V51B-2178 Concordant 240Pu-244Am Dating of Environmental Samples: Results from Forest Fire Ash: S J Goldstein, W J Oldham, M T Murrell, D Katzman

1441h V53D-04 Uranium and Calcium Isootope Measurements using the Modified Total Evaporation Method in TIMS: S Richter, H Kuehn, M Berglund, C Hennessy

1455h V53D-06 Calcium Isotope Analysis by Mass Spectrometry: S Boulyga, S Richter

1510h V53D-07 Isotopes for improved management of nitrate pollution in aqueous resources: review of surface water field studies: A Nestler, M Berglund, F Accoe, S Duta, D Xue, P F Boeckx, P Taylor


---

V53E Moscone West: 2020 Friday 1340h Quantifying Magma Mixing Processes II

Presiding: B J Andrews, UC Berkeley; B L Browne, Cal State Fullerton

1340h V53E-01 Toward a more quantitative understanding of open magmatic systems (Invited): M A Dungan

1355h V53E-02 Homogeneous crystal-rich vs. zoned crystal-poor ignimbrites: how much strain accumulates in large magma reservoirs between a new magma recharge and eruption? (Invited): C Huber, O Bachmann, J Dufek, M Manga

1410h V53E-03 Thermo-mechanical reactivation of locked crystal mushes: melting-induced internal fracturation and assimilation processes in magmas: O Bachmann, C Huber, J Dufek

1425h V53E-04 Combined Petrological and Numerical Modeling Approach to Address Highly Crystalline Magma Remobilization Prior to Eruption at Volcán Llaima (Chile, 38.7°S): C Bouvet de Maisonneuve, M A Dungan, A Burgisser, O Bachmann, F Costa Rodriguez

1440h V53E-05 Strontium Isotopes and Magma Dynamics: J A Wolff, B S Ellis, F C Ramos

1455h V53E-06 Diffusion Fractionation of Trace Elements During Mixing of Magmas: A new Petrological Clock for Measuring Time-Scales of Volcanic Eruptions: M Petrelli, D Perugini, C P De Campos, G Poli, D B Dingwell

1510h V53E-07 Preferential eruption of andesitic magmas through recharge filtering at Mount Hood, Oregon: A J Kent, C Darr, A M Kolesar, M J Salisbury, K M Cooper, G R Eppich

1525h V53E-08 Hybridisation during magma ascent at Soufrière Hills Volcano, Montserrat: M Humphreys, M Edmonds, T E Christopher, V Hards

---

V53F Moscone West: 2022 Friday 1340h The 2010 Eruption of Eyjafjallajökull: A Landmark Event for Volcanic Cloud Hazards III (joint with A, NH)

Presiding: S A Carn, Michigan Technological University; F Prata, NILU; S Karlsdottir, Icelandic Meteorological Office


1425h V53F-04 On-ground distribution and modes of deposition of the Eyjafjallajokull 2010 tephra: G Larsen, T Thordarson, A Hoskuldsson, M T Gudmundsson, G Sverrisdottir, B Oddsson, B V Oskarsson, I Jonsdottir, B Oladottir, T Thorsteinsson, M E Hartley, R Meara

1440h V53F-05 Aircraft-borne Measurements of Emissions from the Eyjafjallajokull Eruption (Invited): H Schlager, U Schumann, B Weinzierl, A Minikin, O Reitebuch, T Sailer, R Baumann

1455h V53F-06 Volatile budget of Eyjafjallajokull magmas: H Sigurdsson, C W Mandeville

1510h V53F-07 Chemistry and fluxes of magmatic gases powering the explosive trachyandesitic phase of Eyjafjallajokull 2010 eruption: constraints on degassing magma volumes and processes: P Allard, M R Burton, N Oskarsson, A Michel, M Polacci

1525h V53F-08 Sulfur Budget of the 2010 Eyjafjallajokull Eruption Derived From Satellite Observations: S A Carn, J Wang, K Yang, N A Krotkov

---

Atmospheric Sciences

A54A Moscone West: 3004 Friday 1600h Climate Processes and Other Research Applications Enabled by Satellite Sounders, Imagers, and Profilers IV (joint with H)

Presiding: B H Kahn, Jet Propulsion Laboratory; B Tian, Jet Propulsion Lab

1600h A54A-01 The Observed Sensitivity of High Clouds to Mean Surface Temperature Anomalies in the Tropics: M D Zelinka, D L Hartmann

1615h A54A-02 Relationship between oceanic boundary layer clouds and lower tropospheric stability observed by AIRS, CloudSat and CALIOP: Q Yue, B H Kahn, E Fetzer, J Teixeira

1630h A54A-03 Deriving Climate Quality Products from Hyper-Spectral Satellite Data: X Liu, D K Zhou, A Larar, W Wu, H Li, P Yang

1700h A54A-05 Passive multiangle imaging of clouds, aerosols, and atmospheric dynamics: Broadening our vision from MISR to WindCam and MIPSE: D J Diner, D L Wu, R Chipman, A Davis, Title of Team: MISR Science Team

1715h A54A-06 Boundary layer remote sensing with combined active and passive techniques: GPS radio occultation and high-resolution stereo imaging (WindCam) small satellite concept: A J Mannucci, D L Wu, J Teixeira, C O Ao, F Xie, D J Diner, D F Young

1730h A54A-07 From Aircraft to GEO: Using Microwave Sounders to Observe the Atmosphere: B Lambrigtsen, S Brown, T Gaier, A Tanner, P Kangaslahti, B Lim, J Tanabe

1745h A54A-08 Cloud-climate feedbacks and climate models: using satellite experiments to probe the boundary layer and improve parameterizations (Invited): J Teixeira, H Kawai, J P Martins, J Karlsson, B H Kahn, S Lee

A54B Moscone West: 3002 Friday 1600h Ocean-Cloud-Land-Atmosphere Interactions in the Southeastern Pacific II (joint with OS)

Presiding: P Zuidema, RSMAS/U of Miami; J D Fast, Pacific Northwest National Laboratory

1600h A54B-01 The South “West” Pacific Convergence Zone: Large-scale feedback on atmospheric subsidence to the east: M J Widlansky, P J Webster, C Hoyos

1615h A54B-02 Eddies in the Southeast Pacific and their influence on the upper ocean (Invited): F Straneo, C F Moffat, R A Weller, J T Farrar

1630h A54B-03 A discussion on the processes that maintain a cool ocean surface under the stratus decks of the Southeastern Pacific: C R Mechoso, T Toniazzo, J C McWilliams, F Colas

1645h A54B-04 The Open-Cellular Cloud System as a Coupled Oscillator (Invited): G Feingold, I Koren, H Wang, H Xue, A Brewer

1700h A54B-05 Characterization of sub-cloud vertical velocity distributions and precipitation-driven outflow dynamics using a ship-based, scanning Doppler lidar during VOCALS-Rex: A Brewer, G Feingold, S C Tucker, D S Covert, R Hardesty

1715h A54B-06 Aerosol buffering of marine boundary layer cloudiness: J Kazil, G Feingold, H Wang

1730h A54B-07 Simulating contemporary and preindustrial atmospheric chemistry and aerosol radiative forcing in the Southeast Pacific (Invited): S Spak, M Mena-Carrasco, G R Carmichael

1745h A54B-08 VOCALS-UK: An overview of UK VOCALS science (Invited): H Coe, Title of Team: The VOCALS-UK Science Team

A54C Moscone West: 3008 Friday 1600h Physics and Chemistry of the Upper Troposphere and Lower Stratosphere III (joint with GC)

Presiding: W J Randel, K H Rosenlof, NOAA ESRL CSD

1600h A54C-01 Seasonal and regional variation in UTLS convective water transport from ACE isotopic measurements (Invited): E J Moyer, W Randel, M Park, E J Jensen, P F Bernath, K A Walker, C Boone

1615h A54C-02 The Roles of Deep Convection in the Tropical Tropopause Layer (Invited): C Liu

1630h A54C-03 Aerosol, Clouds and Water Vapor Transport across the Tropopause: Observations and Model Results: H Su, J H Jiang, X Liu, W G Read

1645h A54C-04 CALIPSO Observations of a TTL Aerosol Feature Associated with the Asian Monsoon: J Vernier, L W Thomason, J Kar

1700h A54C-05 Transport analysis and source attribution of seasonal and interannual variability of CO in the tropical upper troposphere and lower stratosphere: J Liu, J A Logan

1715h A54C-06 The impact of TTL processes on VSLS contribution to stratospheric ozone depletion: S Tegtmeier, K Krueger, B Quack

1730h A54C-07 The Relationship of Cloud Top to the Tropopause/ Jet Structure from CALIPSO Data: L Pan, L A Munchak

1745h A54C-08 Dynamically forced upwelling in the tropical lower stratosphere: climatology, trends and response to ENSO: H Garny, M Dameris, W Randel, G E Bodeker, R Deckert, E Leuthold

A54D Moscone West: 3006 Friday 1600h Remote Sensing of CO2 Emissions and Atmospheric Transport III (joint with GC)

Presiding: M T Chahine, JPL; A M Michalak, University of Michigan; C E Miller, California Institute of Technology

1600h A54D-01 Tropical Mid-Tropospheric CO2 Variability driven by the Madden-Julian Oscillation: K Li, B Tian, D E Waliser, Y L Yung

1615h A54D-02 Interannual Variability of Mid-tropospheric CO2 from Atmospheric Infrared Sounder: X Jiang, M T Chahine, E Olsen, L Chen, Y L Yung

1630h A54D-03 Spatial interpolation of carbon dioxide using Fixed Rank Kriging: H M Nguyen, N Cressie, A J Braverman, E Olsen

1645h A54D-04 Spatial patterns and time variability of CO2 from AIRS: A Ruzmaikin, H H Aumann, B Moghaddam


1715h A54D-06 High-resolution global CO2 modeling: a comparison to GOSAT column CO2 retrievals: D F Baker

1730h A54D-07 Using High-Resolution Forward Model Simulations of Ideal Atmospheric Tracers to Assess the Spatial Information Content of Inverse CO2 Flux Estimates: S Pawson, J E Nielsen

1745h A54D-08 A comprehensive carbon dioxide analysis system for estimating CO2 emissions: A Denning, N Parazoo, R Lokupitiya, D F Baker

Biogeoosciences

B54A Moscone West: 2006 Friday 1600h Metal and Radionuclide Transformation and Remediation in Biogeochemically Dynamic Subsurface Environments III (joint with V)

Presiding: K L Skubal, U.S. Dept. of Energy; E M Pierce

1600h B54A-01 Novel Insights Into Microbial Uranium Reduction and Immobilization: F E Loeffler, K Fletcher, S Thomas, K M Kemner, M Boyanov, R Sanford


1640h B54A-03 Whole-sediment speciation of U(IV) in acetate-bioreduced aquifer sediments at the Rifle, CO, IFRC site: J Bargar, K H Williams, K M Campbell, P E Long, J E Stubbs, L Blue, E Suvorova, J Lezama-Pacheco, R Bernier-Latmani, D Giammar
1700h  B54A-04 Sulfur isotope fractionation as an early indicator of microbial sulfate reduction under conditions of stimulated subsurface metal bioremediation; J L Druhm, M E Conrad, K H Williams, C Steefel, D J DePaolo

1720h  B54A-05 Meta-Transcriptomic Analysis of a Chromate-Reducing Aquifer Microbial Community; H R Beller, E L Brodie, R Han, U Karaoz

1740h  B54A-06 Microbial respiration and dissolution precipitation reactions of minerals: thermo-kinetics and reactive transport modelling; M M Azaroual, M Parmentier, L Andre, N Croiset, M Pettenati, S Kremer

B54B Moscone West: 2002 Friday 1600h

Process-Based Approaches in Geobiology: Understanding Modern and Ancient Systems III (joint with GC, PP, V)

Presiding: D A Fike, Washington University; W W Fischer, Caltech

1600h  B54B-01 What they eat is how they fractionate: controls on sulfur isotope fractionations during microbial sulfate reduction in culture and nature (Invited); T Bosak, M Sim, K Donovan, J D Grabenstatter, S Ono

1615h  B54B-02 Using Stable Isotopes to Trace Microbial Hydrogen Production Pathways; J Moran, E Hill, R Bartholomew, H Yang, L Shi, N E Ostrom, H Gandhi, E Hegg, H Kreuzer

1630h  B54B-03 Impact of large atmospheric CO₂ decline on marine life and sedimentation 375-325 million years ago; R Riding

1645h  B54B-04 Constraints on the duration and magnitude of Late Ordovician-Early Silurian glaciation and its relationship to the Late Ordovician mass extinction from carbonate “clumped” isotope paleothermometry; S Finnegan, K D Bergmann, J Eider, D S Jones, D A Fike, I L Eisenman, N Hughes, A K Tripati, W W Fischer


1715h  B54B-06 Molecular fossils in modern genomes provide physiological and geochemical insights to the ancient earth (Invited); C Dupont, G Caetano-Anolles

1730h  B54B-07 Genetic and geological imprints of evolutionary advance: A trace metal view; R E Rickaby, B J Williams

1745h  B54B-08 Iron and Carbon Isotope Evidence for Microbial Iron Respiration Throughout the Archean: P R Craddock, N Dauphas

B54C Moscone West: 2004 Friday 1600h

Remote Sensing of Terrestrial Carbon Fluxes III (joint with EP)

Presiding: K F Huemmerich, University of Maryland Baltimore County; A F Rahman, Indiana University

1600h  B54C-01 Model development for estimations of northern forest GPP from MODIS time series data: P Schubert, F Lagergren, A Lindroth, M Aurela, A Grelle, L Klemmedson, T Vesala, L Eklundh

1615h  B54C-02 An Ecophysiological Model for Remote Sensing of GPP: K P Tu

1630h  B54C-03 Parameterization of a Diagnostic Carbon Cycle Model for Continental-Scale Application: D P Turner, D A King, W D Rits

1645h  B54C-04 DEVELOPING A DATA DRIVEN PROCESS-BASED MODEL FOR REMOTE SENSING OF ECOSYSTEM PRODUCTION: B Elmarsi, A F Rahman

1700h  B54C-05 Impact of Fire Disturbance on Regional Net Ecosystem Exchange for a Sub-Humid Woodland and Grassland Ecosystem: J Yao, J D White

1715h  B54C-07 Assessing the Impact of Droughts on Tropical Forests Using Spaceborne Microwave and Optical Observations: S Asefi-Najafabady, S S Saatchi

1730h  B54C-08 Monitoring Amazon Rain Forest Drought Using MODIS Land Surface Temperature Data: M P Toomey, D A Roberts

B54D Moscone West: 2003 Friday 1600h

Role of Methane Hydrates in the Earth System: “Burps of Death” or Seductive Irrelevance? (joint with OS, PP)

Presiding: A J Ridgwell, University of Bristol

1600h  B54D-01 Global Inventory of Methane Hydrate: How Large is the Threat? (Invited): B A Buffett, J M Frederick

1615h  B54D-02 Constraining the global inventory of methane hydrates in marine sediments (Invited); K J Wallmann, E Burwicz, L Rupke, M Marquardt, E Pinero, M Haeckel, C Hensen

1630h  B54D-03 Large methane reserves beneath Antarctica?: J L Wadham, S M Tulaczyk, M Stibal, S Arndt, J Telling, G Liss, E C Lawson, A Dubnick, M Tranter, M J Sharp, A Anesio

1645h  B54D-04 A 2-D basin-scale methane hydrate model: equilibrium and transient sensitivity to ocean temperature. (Invited): D E Archer, P C McGuire, B A Buffett

1700h  B54D-05 The Great Escape? Assessing the efficiency of the sedimentary AOM barrier and its implications for past climate change: S Arndt, A Dale, P Regnier, A Ridgwell

1715h  B54D-06 Ice core δD(CH₄) record precludes marine hydrate CH₄ emissions at the onset of Dansgaard-Oeschger events: M Bock, J Schmitt, L Möller, R Riding, T Blunier, H Fischer

1730h  B54D-07 WITHDRAWN

Cryosphere

C54A Moscone West: 3010 Friday 1600h

ANDRILL (Antarctic Drilling Program): Scientific Outcomes of the Two Inaugural Projects II (joint with GP, PP)

Presiding: F Florindo, INGV; D M Harwood, Univ. Nebraska-Lincoln; R D Powell, Northern Illinois Univ.

1600h  C54A-01 Hysteresis in Cenozoic East Antarctic ice sheet variations: model-dependent or real?: D Pollard, R DeConto

1615h  C54A-02 The Offshore New Harbor (ONH) Seismic Expedition: Revealing the Stratigraphic History in the Southern McMurdo Sound Region, Ross Sea, Antarctica from the Greenhouse to Icehouse Worlds: S F Pekar, M A Speece, G S Wilson, D A Sunwall, K J Tinto


1645h  C54A-04 McMurdo Dry Valleys Climate Response to Pliocene-Early Pleistocene Warm Interglacial Climate Forcing: D E Kowalewski, R DeConto, A Seth, D Pollard

1700h  C54A-05 Pliocene Antarctic sea-ice reconstruction based on the diatom record the ANDRILL 1B core: R P Scherer, C M Sjønneskog, D Winter, C Riesselman

1715h  C54A-06 Antarctic Paleoclimate and Ice Sheet Behavior During the Early and Middle Miocene: Results from the ANDRILL AND-2A Drillcore: D M Harwood, F Florindo, R H Levy, Title of Team: SMS Project Science Team http://andrill.org/projects/smsteam.html
1730h  **C54A-07** The Role of Antarctica in Global Late Pliocene Cooling Scenarios - Insights from AND-1B: R M Mckay, T Naish, L Carter, C Rieselman, C M Sjunneskog, D Winter, R B Dunbar, R H Levy, R P Scherer, R D Powell

1745h  **C54A-08** Downhole logs of natural gamma radiation and magnetic susceptibility and their use in interpreting lithostratigraphy in AND-1B, Antarctica: T Williams, R H Morin, R D Jarrard, C L Jackolski, S A Henrys, F Niessen, D Magens, G Kuhn, D Monien, R D Powell

---

**C54B Moscone West: 301 I** Friday 1600h

**Remote Sensing of the Cryosphere III** (joint with H, OS, G)

**Presiding:** T H Painter, Jet Propulsion Laboratory; T Neumann, NASA Goddard Space Flight Ctr.

1600h  **C54B-01** Spectral variability of debris covered glaciers via optical remote sensing: examples from Iceland, Khumbu Himalaya, New Zealand and Norway: K Casey, A Käab

1615h  **C54B-02** Development of an ice thickness retrieval algorithms for large northern lakes from AMSR-E brightness temperature measurements: K Kang, C R Duguay, J Lemmetynen, Y Gel

1630h  **C54B-03** MICROWAVE RADAR RETRIEVAL OF SNOW WATER EQUIVALENT: S H Yueh, H Rott, T F Nagler, D W Cline, C R Duguay, R Essery, P Etchevers, I Hajnsek, M Kern, G Macelloni, E Malnes, J T Pulliainen, L Tsang, X Xu, H Marshall, K Elder

1645h  **C54B-04** Mapping ice dynamics from multi-mission SAR satellite data: M Braun

1700h  **C54B-05** Scale and sensor dependency of measurements of dust radiative forcing in snow: A C Bryant, T H Painter

1715h  **C54B-06** An evaluation of the transferability of a coupled snow hydrology and microwave emission model for data-sparse regions: D Kang, A P Barros

1730h  **C54B-07** Assessing Forest Cover Effects on Passive Microwave Snow Retrievals Using 2009 Snow Observations from NASA’s Airborne Earth Science Microwave Imaging Radiometer (AESMR): E J Kim

1745h  **C54B-08** SIMPL Laser Altimeter Measurements of Lake Erie Ice Cover: a Pathfinder forICESat-2: D J Harding, P Danby, S R Valett, A Kelly

---

**Earth and Planetary Surface Processes**

**EP54A Moscone South: 310** Friday 1600h

**Source to Sink Insights Into Integrated Sedimentary System Evolution II** (joint with H, OA, G)

**Presiding:** J A Covault, USGS; A Fildani, R&D - Chevron

1600h  **EP54A-01** Source-to-Sink System Evolution as Recorded in Clastic Facies in Two New Zealand Examples: the Bounty System of South Island and the Waipaoa System of North Island: K M Marsaglia

1615h  **EP54A-02** Source to Sink Tectonic Fate of Large Oceanic Turbidite Systems and the Rupturing of Great and Giant Megathrust Earthquakes (Invited): D W Scholl, S H Kirby, R von Huene

1630h  **EP54A-03** Climate and Provenance Evolution Recorded in the Sub-aqueous Indus Delta since the Last Glacial Maximum: D R Limmer, P D Clift, C Koehler, L Giosan, C Ponton, T Henstock, A Tabrez


1700h  **EP54A-05** Cenozoic North American Drainage Basin Evolution, Sediment Yield, and Accumulation in the Gulf of Mexico Basin: W Galloway, P E Ganey-Curry


1730h  **EP54A-07** Fluvial backwater zones as filters on source to sink sediment transport (Invited): M P Lamb, J A Nittoure, D C Mohrig, J B Shaw

1745h  **EP54A-08** The role of tectonic depressions in floodplain development and in influencing the Source to Sink paradigm (Invited): J P Syvitski

---

**Geodesy**

**G54A Moscone West: 2008** Friday 1600h

**Identification and Mitigation of Systematic Errors in Space Geodetic Results II** (joint with A, OS, SM, SA)

**Presiding:** S D Desai, Jet Propulsion Laboratory; P Willis, Institut Geographique National

1600h  **G54A-01** Accuracy of SLR Observations and Stability of its Analysis Products: E C Pavlis, M Kuzmicz-Cieslak, N Wolford

1615h  **G54A-02** Systematic errors in VLBI analysis: H Spicakova, L Plank, T Nilsson, A Pany, J Boehm, H Schuh


1645h  **G54A-04** Empirical Modeling of Solar Radiation Pressure Forces Affecting GPS Satellites: A Sibthorpe, J P Weiss, N Harvey, D Kuang, Y Bar-Sever

---

All information is current as of November 12, 2010
Global Environmental Change

**GC54A Moscone West: 3001**  
**Friday 1600h Greening/Sustainable Arctic III** *(joint with B, A, C, H)*  
**Presiding:** M S Murray, University of Alaska Fairbanks; P Schlosser, Columbia University; M K Tjernstrom, Stockholm University


1612h  **GC54A-02** Will a large-scale expansion of Arctic shrub extent increase or decrease permafrost vulnerability to climate change?: D M Lawrence

1624h  **GC54A-03** Spatio-temporal trends in vegetation structure and NDVI in Low Arctic northwest Siberia: evidence from the satellite record and ground observations: G V Frost, H E Epstein, D A Walker

1636h  **GC54A-04** Modeling dynamics of tundra plant communities on the Yamal Peninsula, Russia: Q Yu, H E Epstein, D A Walker

1648h  **GC54A-05** Arctic Social Indicators: Measuring Change in Arctic Human Systems *(Invited): L Hamilton*

1700h  **GC54A-06** Ice Roads in the Northwest Territories: The Intersection of Climate, Economics, and Transportation Policy *(Invited): H Huntington, M Sturm, M Goldstein, T A Douglas*

1712h  **GC54A-07** State of the Arctic Coast 2010: Scientific Review and Outlook: V Rachold, D L Forbes, H Kremer, H Lantuit

1724h  **GC54A-08** WITHDRAWN

1736h  **GC54A-09** Monitoring Sea Ice Conditions and Use in Arctic Alaska to Enhance Community Adaptation to Change: M L Druckenmiller, H Eicken

1748h  **GC54A-10** Current and Projected Changes in Permafrost and Societal Impacts of Permafrost Degradation *(Invited): V E Romanovsky, S S Marchenko, M Brubaker*

**GC54B Moscone West: 3005**  
**Friday 1600h Regional Patterns of Global Warming: Models, Mechanisms, and Observations III** *(joint with A, H, OS)*  
**Presiding:** A C Clement, RSMAS, University of Miami; K B Karnaukas, Woods Hole Oceanographic Institution

1600h  **GC54B-01** The Challenge of Low-Frequency ENSO Variability *(Invited): J E Cole, T R Ault, D M Thompson*

1615h  **GC54B-02** Tropical Pacific Ocean Mean Circulation: A Model-Data Intercomparison and Implications for Climate Change Projections *(Invited): K B Karnaukas, G C Johnson, R G Murtugudde*

1630h  **GC54B-03** Increasing intensity of El Niño in the central equatorial Pacific: M J McPhaden, T Lee

1645h  **GC54B-04** Weather-forced variations of Central and East Pacific ENSO events: M A Alexander, M Newman, S Shin

1700h  **GC54B-05** Role of Natural Variability in the Low Cloud Response to Increasing CO2 in Climate Models: M Watanabe, Title of Team: Team “MIROC climate sensitivity”

1715h  **GC54B-06** Variability and trends in area, location, cloudiness and cloud top temperature of the ITCZ in the east to central Pacific over the past 30 years: G Magnusdottir, C Bain, P Smyth, H Stern, K Knapp

1730h  **GC54B-07** Experiments on the Southern Oscillation with CAM3 coupled to a Mixed Layer Ocean: E Monier, A P Sokolov

1745h  **GC54B-08** At What Temporal and Spatial Scales Are the Coupled Climate Model Hindcasts in the 20th Century Reliable?: K Sakaguchi, X Zeng

**GC54C Moscone West: 2005**  
**Friday 1600h Use of Observations for Evaluating CMIP5/IPCC Simulations III** *(joint with A, IN)*  
**Presiding:** A J Braverman, Jet Propulsion Laboratory; G L Potter, NASA GSFC

1600h  **GC54C-01** Towards routine quantitative assessment of climate model performance *(Invited): P J Gleckler, K E Taylor, D N Williams*

1615h  **GC54C-02** Necessary but Not Sufficient Conditions for Constraining Climate Model Simulations *(Invited): A Gettelman, J E Kay*

1630h  **GC54C-03** A Bayesian Approach to Evaluating Consistency between Climate Model Output and Observations: H Cressie, J Teixeira

1645h  **GC54C-04** Improve Multi-model Ensemble Climate Prediction by Using Observation Data: A Bayesian Approach: Y Huang, S S Leroy, R Goody, J Anderson

1700h  **GC54C-05** Removing the spatial scale dependence of simulated high-impact weather and climate extremes in the CMIP/ IPCC climate models: C Chen, Y Tung, S Luo

1715h  **GC54C-06** Thinking about metrics: adequacy, performance & quality: W Parker

1730h  **GC54C-07** On the optimal combination of multi-model results using observational constraints: B M Sanderson

1745h  **GC54C-08** Requirement and technique for the application of satellite observations for multi-model evaluations: A M Aghedo, K W Bowman
Hydrology

H54A Moscone West: 3014 Friday 1600h
Climate Forcing of Surface and Subsurface Hydrology and Biogeochemistry: Processes, Models, Management III (joint with A, B, EP, GC)

Presiding: S Arumugam, NC State University; S Floegel, IFM -GEOMAR; B Peucker-Ehrenbrink, Woods Hole Oceanographic Institution; R M Holmes, Woods Hole Research Center; N A Chappell, Lancaster University; M T Coe, The Woods Hole Research Center; U Lall, Columbia Univ; G Parkin, Newcastle University; J Drake, University of Tennessee; M J Waterloo, VU University

1600h H54A-01 Will hydrologists learn from the world around them?: Empiricism, models, uncertainty and stationarity (Invited): U Lall

1615h H54A-02 Utility of stochastic decadal simulations in water resource planning (Invited): A M Greene, L M Goddard, P L Gonzalez


1715h H54A-06 Managing Colorado River Water Resources In a Nonstationary Climate (Invited): B Rajagopalan, K C Nowak, J R Prairie, E A Zagona

1730h H54A-07 Modelling climate impact on water in Australia: issues, methods and uncertainty (Invited): F H Chiew

1745h H54A-08 Hydrometeorological basis for the geographic distribution of tropical wet forests in the Western Ghats of southwest India: V MANOHARAN, D K Ray, R M Welsh

Ocean Sciences

OS54A Moscone West: 3007 Friday 1600h
Nearshore Processes V (joint with EP)

Presiding: C Chickadel, University of Washington; J W Long, USGS; D Foster, University of New Hampshire; G R Pawlak, University of Hawaii

1600h OS54A-01 Hydrodynamic roughness for wave and current flow over irregular beds (Invited): G R Pawlak, M D Bandet, S Jaramillo

1615h OS54A-02 Vertical structure of fluid velocity for flow through vegetation under waves: H Yoon, D Cox, D Albert, N Mori, H D Smith

1630h OS54A-03 Sediment Resuspension and Bed Morphology in Highly Turbulent Flows: B A Johnson, E A Cowen

1645h OS54A-04 Bedform Initiation and Development under Combined Flows: M M Perillo, E W Prokocki, J Best, M H Garcia

1700h OS54A-05 Laboratory Experiments of Sand Ripples with Bimodal Size Distributions Under Asymmetric Oscillatory Flows: J Calantoni, B J Landry

1715h OS54A-06 Quantifying Bottom Friction over Rippled Beds with High Resolution Observations: D L Foster, S Rodriguez-Abudo, L W Henry

All information is current as of November 12, 2010

1745h  P54A-08 Possible smectites identified by MGS-TES at Thaumasia Planum, Mars: J Huang, S W Ruff, C S Edwards, P R Christensen, L Xiao

OS54B  Moscone West: 309  Friday  1600h
Water Masses, Circulation, and Variability of the North Atlantic Ocean From Observations and Models II
Presiding: I Yashayaev; H L Bryden, National Oceanography Centre

1600h  OS54B-01 The effect of composition anomalies on the conductivity and density of seawater: RA Pawlowicz, D Wright, F J Millero

1615h  OS54B-02 Fifty Years of Water Cycle Change expressed in Ocean Salinity: PJ Durack, S Wijffels


1645h  OS54B-04 Interannual to Decadal Variability of Outflow from the Labrador Sea: M Visbeck, J Fischer, R Zantopp, N Nunes

1700h  OS54B-05 50 years of Atlantic hydrographic changes at 24°N: C P Atkinson, H L Bryden, S A Cunningham, B A King

1715h  OS54B-06 A Simple Model of the Nordic Sea Circulation and Outflows: L J Pratt, J Yang

1730h  OS54B-07 Deep convection in the Labrador Sea, as captured by a global ocean reanalysis and regional downscalings: N C Jourdain, B Barnier, J Molines, J Chanut, N Ferry, G Garric, L Parent, Title of Team: Mercator-Ocean team

1745h  OS54B-08 An Interdecadal Oscillatory Mode of the Atlantic Meridional Overturning Circulation: F Sevellec, A V Fedorov

Planetary Sciences

P54A  Moscone South: 306  Friday  1600h
Mars Surface and Mineralogy (joint with MR)
Presiding: R E Arvidson, Washington University; N K McKeown, Grant MacEwan University


1615h  P54A-02 Opportunity Mars Rover Mission: Overview and Selected Results from Leaving Purgatory Ripple to Travels Toward Endeavour Crater: R E Arvidson, Title of Team: The Athena Team

1630h  P54A-03 Discovery of Carbonate-Rich Outcrops in the Gusev Crater Columbia Hills by the MER Rover Spirit: R V Morris, S W Ruff, R Gellert, D W Ming, R E Arvidson, B C Clark, D C Golden, K L Siebach, G Klingelhoefer, C Schroeder, I Fleischer, A S Yen, S W Squyres

1645h  P54A-04 Hydrated Silica at Mawrth Vallis and Implications for Past Environment: N K McKeown, J L Bishop, J Cuadros, S Hillier, M Parente

1700h  P54A-05 Mini-TES Observations of Comanche Carbonate and its Distribution: S W Ruff, R V Morris

1715h  P54A-06 Estimated Optical Constants of Calcite at visible to mid-infrared wavelengths (0.3-6 µm): T L Roush


1745h  P54A-08 Possible smectites identified by MGS-TES at Thaumasia Planum, Mars: J Huang, S W Ruff, C S Edwards, P R Christensen, L Xiao

P54B  Moscone South: 302  Friday  1600h
Science From Multispacecraft Observations: The Moon, Mars, and Jupiter II (joint with G)
Presiding: J Lebreton, ESA/ESTEC; D A Senske, Jet Propulsion Laboratory

1600h  P54B-01 The Europa Jupiter System Mission: Synergistic Science Enabled by JEO and JGO: D A Senske, R T Pappalardo, L M Proctor, J Lebreton, R Greeley, E J Bunce, M K Dougherty, O GRASSET, D Titov

1615h  P54B-02 Global ENA Imaging of the Jovian Magnetsphere: A Tool for Global Exploration of the Giant Accelerator of Energetic Particles and Their Interaction with the Torus Region and Moons (Invited): P C Brandt, D G Mitchell, B H Mauk, C Paranasics, N Kripp


1645h  P54B-04 Constraining Martian Water Abundance via Combination of MONS and CRISM data: L A Teodoro, V R Eke, R C Elphic, T L Roush, G Marzo, A J Brown, W C Feldman

1700h  P54B-05 Analysis of Multi-Satellite Tracking Data of the Kaguya Satellites for Orbit and Gravity Field Determination: S J Goossens, K Matsumoto, F Kikuchi, Q Liu, H Hanada, F G Lemoine, D M Rowlands, Y Ishihara, Y Jianguo, H Araki, H Noda, N Namiki, T Iwata

1715h  P54B-06 Lunar altimetric datasets: Global comparisons with the Lunar Orbiter Laser Altimetry elevation model: G A Neumann, T C Duxbury, F G Lemoine, E Mazarico, J Oberst, M S Robinson, D E Smith, M H Torrence, M T Zuber

1730h  P54B-07 Anomalous deformation of the Earth’s bow shock in the lunar wake: Joint observations by Chang’E-1 and SELENE: M N Nishino, X Wang, M Fujimoto, H Tsunakawa, Y Saito, S Yokota, W Bian, C Li, H Shibuya, M Matsushima, H Shimizu, F Takahashi, T Terasawa

1745h  P54B-08 Non-monotonic potentials above the lunar surface: implications for electron reflectometry measurements: A R Poppe, J S Halekas, M Horanyi

SPA-Solar and Heliospheric Physics

SH54A  Moscone South: 309  Friday  1600h
Coronal Prominence Cavities II
Presiding: S E Gibson, NCAR; T E Berger, Lockheed Martin Solar and Astrophysics Laboratory; T A Kucera, NASA/GSFC


1630h  SH54A-03 Hot Prominence Shrouts (Invited): S R Habbal, M Druckmuller, H Morgan, Title of Team: Solar Wind Sherpas
SH54A Moscone South: 307
Nonlinear Structures and Processes in the Solar Wind Plasma III

Presiding: D Shaikh, The University of Alabama in Huntsville; A Lazarian, University of Wisconsin

1600h SH54A-01 Ion/electron heating associated with low-frequency turbulence (Invited): W Dorland, T Tatsuno, R Numata, G Howes, M Barnes

1619h SH54A-02 Strong MHD Turbulence (Invited): A Beresnyak


1650h SH54A-04 Highly Alfvénic Slow Solar Wind: D Roberts

1702h SH54A-05 Are Solar Wind Reconnection Events Fossil Sites?: H X Yu, H Karambadi, J D Scudder, V Ruytershsteyn, W S Daughton, J T Gosling, J Egedal

1714h SH54A-06 Proton heating by pick-up proton-generated waves in the expanding solar wind: Hybrid simulations: P M Travnicke, P Hellinger


1749h SH54A-09 Solar Wind Electron Thermodynamics: C S Salem, M Pulupa, K I Horaites, S Bale

SH54C Moscone South: 308
Solar and Heliospheric Physics General Contributions V: Corona, Radio Bursts, Interplanetary Dust

Presiding: I H Cairns, University of Sydney; J C Kasper, Smithsonian Astrophysical Obse

1600h SH54C-01 Constraints on Solar Coronal Abundances from MESSENGER X-ray Solar Monitor Data: L Nittler, R D Starr, C Schlemm III, R L McNutt, S C Solomon

1615h SH54C-02 Current Sheet Formation and Reconnection Dynamics in the Closed Corona Due to Ingranular Flow Planes: J E Edmondson, M M Velli, C R DeVore

1630h SH54C-03 Evidence for Gently Sloping Plasma Density Profiles in the Deep Corona: Type III Observations: I H Cairns, V Lobzin, P A Robinson, A Warmuth, G J Mann, R Gorgutsa, V Fomichev

1645h SH54C-04 Type III Radio Bursts at Long Wavelengths: Statistics from STEREO/Waves 2007-2010: V Krupar, O Santolik, M Maksimovic, B Cecconi

1700h SH54C-05 Type III Solar Radio Bursts Observed by Multiple Spacecraft: M Bergamo, T Golla, R J MacDowall

1715h SH54C-06 Relationship between solar radio type-I noise storm and Coronal Mass Ejection: K Iwai, S Masuda, Y Miyoshi, M Shimono, H Misawa, F Tsuchiya, A Morioka

1730h SH54C-07 Type II Solar Radio Bursts: Extraction of Shock Parameters and Detailed Comparison of Theory with Observations: D Hillan, I H Cairns, P A Robinson

1745h SH54C-08 Interplanetary dust fluxes measurements using the Waves instrument on STEREO: A Zaslavsky, N Meyer-Vernet, I Mann, A CZECHOWSKI, K Issautier, G Le Chaz, M Maksimovic, J C Kasper
Seismology

**SS4A Moscone West: 2007**

**Friday 1600h**

**Earthquake Source Processes: What Have We Learned from Recent Large Earthquakes? IV** *(joint with T)*

*Presiding: B Aagaard, U.S. Geological Survey; D D Oglesby, University of California, Riverside*

- **1600h** **SS4A-01** Surface roughness of ancient seismic faults exhumed from 10 km depths (Gole Larghe Fault, Italian Alps) characterized over five orders of magnitude: A Bistacchi, W A Griffith, S B Nielsen, S A Smith, G Di Toro, R J Jones
- **1615h** **SS4A-02** Slip Trajectories and Absolute Traction from Analysis of Slickenlines: J D Kirkpatrick, E E Brodsky
- **1630h** **SS4A-03** Self-affine fault surface roughness: implications for the slip distribution and the amount of static stress drop after an earthquake: T Candela, P Renard, M P Bouchon, J Schmittbuhl, E E Brodsky
- **1645h** **SS4A-04** Extracting seismological parameters from laboratory data: results from high velocity friction experiments in the melt-lubricated regime: A Niemeyer, G Di Toro, S B Nielsen
- **1700h** **SS4A-05** Micromechanics of friction studied nanoseismically on laboratory faults: G C McLaskey, S D Glaser

- **1715h** **SS4A-06** Numerical Models of Thrust Earthquakes on Homalite Faults: D D Oglesby, N Lapusta, V Gabuchian, A Rosakis
- **1730h** **SS4A-07** Thermal Pressurization During the Transition From Quasi-Static Nucleation to Dynamic Rupture: S V Schmitt, E M Dunham, A M Bradley, P Segall

**Tectonophysics**

**T54A Moscone West: 2016**

**Friday 1600h**

**Deformation Processes in Collisional Orogens III** *(joint with G, S)*

*Presiding: A G Webb, Louisiana State University; K Larson, University of Saskatchewan; G Hetenyi, Swiss Federal Institute of Technology Zurich*

- **1600h** **T54A-01** A Tectonic Tear Of The Philippine Sea Plate Under The Taiwan Orogen: F T Wu, H Kuo-Chen, Title of Team: US and Taiwan TAIGER teams
- **1615h** **T54A-02** Thermal structure of southern Taiwan by the regional heat flow and fission track thermochronometry: C Liu, S Song, E Yeh, T Wang
- **1630h** **T54A-03** Collisions on a curved Earth *(Invited): R O Bendick, L Mahadevan*
- **1645h** **T54A-04** WITHDRAWN
1700h T54A-05 Development of an arcuate fold-thrust belt as a result of basement configuration: an example from the Rocky Mountain Front Range, Montana: C M Burberry, D L Cannon, T Engelder, J W Cosgrove
1715h T54A-06 Application of the Orogenic Float Model for the Structural Evolution of the Venezuelan Andes: D Dhont, B Monod, Y Hervouet, S Klarica
1730h T54A-07 Exhumation of the Baltoscandian continental margin during late-stage (Early Devonian) Caledonian contraction, northern Norway: M Anderson, M G Steltenpohl, W E Hames, T B Key, A Andresen
1745h T54A-08 Deep crustal structures of the Cape Fold Belt, South Africa: U Weckmann, O Ritter, X Chen, K Tietze, M De Wit

T54B Moscone West: 2011 Friday 1600h Great Earthquakes and Active Fault Scientific Drilling III (joint with S, NH)

Presiding: Z Xu, J J Mori, Kyoto University
1600h T54B-01 Monitoring and modeling the multi-time-scale seismic hazard of the southern Longmenshan fault: an experimental design of the 'monitoring and modeling for prediction' system: Z Wu, L Li, G Liu, C Jiang, H Ma
1615h T54B-02 Current Results Of The Taiwan Chelungpu-Fault Drilling Project (Invited): E Yeh, S Song, K Ma, W Lin, J Hung, A Boullier, C Wang
1630h T54B-03 The state of stress near the Chelungpu Fault, Taiwan, post Chi-Chi earthquake – a new interpretation of test data: B C Haimson
1645h T54B-04 Temperature estimates of coseismic heating in clay-rich fault gouges, the Chelungpu-fault zones, Taiwan: L Kuo, S Song, L Huang, E Yeh, H Chen
1700h T54B-05 Earthquake mechanism studies by active-fault drilling: Chi-Chi Taiwan to Wenchuan earthquakes: T Togo, T Shimamoto, S Ma, H Noda, T Hirose, W Tanikawa
1715h T54B-06 a case of casing deformation and fault slip for the active fault drilling: H Ge, L Song, S Yuan, W Yang
1730h T54B-07 Combining Borehole and Laboratory Observations to Explain the Stress State of the San Andreas Fault at SAFOD (Invited): T Wong, D A Lockner, S Tembe, C A Morrow, D E Moore
1745h T54B-08 Surface Rupture Characteristics and Rupture Mechanics of the Yushu Earthquake (Ms7.1), 14/04/2010: J Pan, H Li, Z Xu, N Li, F Wu, R Guo, W Zhang

Volcanology, Geochemistry, and Petrology

V54A Moscone West: 2018 Friday 1600h Chemical, Physical, and Petrographic Perspectives on Magmatic Differentiation IV (joint with MR)

Presiding: A J Kent, Oregon State University; S Collins, Durham University; C L McLeod, Durham University; G W Bergantz, Univ. Washington
1600h V54A-01 Sr isotopic microsampling of magmatic rocks: a review (Invited): J P Davidson
1630h V54A-02 Understanding Crystal Populations; Looking Towards 3D Quantitative Analysis: D A Jerram, D J Morgan
1645h V54A-03 Skaergaard vs Sudbury: Solidification Times and Crystal Sizes: B D Marsh, T Mittal, R M Currier, E Jordon
1700h V54A-05 Decoding low dihedral angles in gabbroic layered intrusions: M B Holness, M Humphreys, I V Veksler
1715h V54A-06 Enhancement of Magma Mixing Efficiency by Chaotic Dynamics: an Experimental Study: D Perugini, C P De Campos, W Ertel, D B Dingwell, G Poli
1730h V54A-07 High-Ni Olivines and the Mantle Origin of Arc Andesites in the Central Mexican Volcanic Belt: S M Straub, A Gomez-Tuena, F Stuart, G F Zellmer, Y Cair, R Espinosa-Perena

V54B Moscone West: 2020 Friday 1600h Magmatic Architecture During Flow: Constraints on Timescales and Dynamics of Magma Ascent II

Presiding: L Caricchi, University of Bristol; J M Castro, Monash University; Y Lavallee, LMU Munchen; H Tuffen, Lancaster University
1600h V54B-01 Sub-Volcanic Plumbing Systems Imaged Through Crystal Size Distributions (Invited): O E Melnik, J D Blundy, A Rust, D D Muir
1615h V54B-02 Evolution of microstructure of bubbles and gas permeability in sheared rhyolite (Invited): S Okumura, M Nakamura, T Fujioka, A Tsuchiya, S Takeuchi, T Nakano, K Uesugi
1630h V54B-03 Description of flow microstructure of a phenocrystal-bearing magmatic dyke swarm from Southern Mexico (Invited): J M Chavez Alvarez, M Cerca
1645h V54B-04 Field and experimental constraints on the deformation and break-up up of injected magma (Invited): K P Hodge, G Carazzo, M Jellinek
1700h V54B-05 WITHDRAWN
1700h V43B-2375 Pahoehe lavas at arc volcanoes with >50% crystals. How and why?: M A Dungan, C Bouvet de Maisonneuve, A Burgeris, O Bachmann, H Moreno
1715h V54B-06 Rheology of Magma at Tungurahua, from the Magma Chamber to the Eruption: J B Hanson, F Goldstein, Y Lavallee, U Kueppers, K Hess, J M Castro, D B Dingwell
1730h V54B-07 Multiple magma fracturing events: rhyolite degassing and defusing explosive eruptions at the Mt Pilato-Rocche Rosse eruptions, Italy: A P Cabrera, R F Weinberg, H M Wright, R A Cas
1745h V54B-08 Mechanisms of Strain Localization within the 2004-2008 Mt. St. Helens lava domes: The role of effusion rate?: B Friedlander, L Kennedy, J K Russell, J S Pallister

V54C Moscone West: 2022 Friday 1600h The 2010 Eruption of Eyjafjallajökull: A Landmark Event for Volcanic Cloud Hazards III (joint with A, NH)

Presiding: S A Carn, Michigan Technological University; F Prata, NILU; S Karlsdottir, Icelandic Meteorological Office
1600h V54C-01 Automated Infrared Retrievals of Eyjafjallajökull Volcanic Ash Cloud Properties (Invited): M J Pavolonis, J Sieglaflf
1615h V54C-02 NAME predictions of ash dispersion from Eyjafjallajökull: B Devenish
1630h V54C-03 Why do models predict such large ash clouds? An investigation using data from the Eyjafjallajökull eruption, Iceland: I Dufek
1645h V54C-04 Reconstructing the volcanic eruption source term for Eyjafjallajökull using inverse modeling and satellite retrievals: F Prata, A Stohl, S Eckhardt, N Kristiansen, K Stebel, L Clarisse, P Seibert, H E Thomas
1700h V54C-05 Multiphase Dynamics in the Eyjafjallajökull Eruption: J Miers, J Dufek
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1715h</td>
<td>V54C-06</td>
<td>Thermal Stability of Volcanic Ash versus Turbine Ingestion Test Sands: an Experimental Investigation: C Cimarelli, U Kueppers, K Hess, D B Dingwell, D S Rickerby, P C Madden</td>
<td></td>
</tr>
<tr>
<td>1730h</td>
<td>V54C-07</td>
<td>Observation of the volcanic plume of Eyjafjallajökull over continental Europe by Multi-Axis Differential Optical Absorption Spectroscopy (MAX-DOAS): S Yilmaz, U Friess, C Kern, L Vogel, C Hoermann, T Wagner, U Platt</td>
<td></td>
</tr>
<tr>
<td>1745h</td>
<td>V54C-08</td>
<td>Ash and dust together in the UTLS: April 2010 Eyjafjallajökull volcano eruptions and Taklimakan Desert dust storms: M D Fromm, D L Westphal, J Campbell, R Servranckx, G P Kablick</td>
<td></td>
</tr>
</tbody>
</table>