

A sampling of Mobile GIS URLs
Craig Anderson
Last updated February 2003

*<http://map.sdsu.edu/mobilegis/index.htm> - Integrated Mobile GIS and Wireless Internet Image Servers for Environmental Monitoring and Management
*<http://map.sdsu.edu/arc/> - Web-based GIS and Analytic Tools for Natural Habitat Conservation and Management
<http://hpwren.ucsd.edu> – High Performance Wireless Research and Education Program
<http://roadnet.ucsd.edu> – Real-Time Observatories, Applications, and Data Management Network
http://www.csiss.org/aboutus/presentations/files/goodchild_boulder_sept02.pdf - Mike Goodchild, Augmented Reality

Scripps Institution of Oceanography Visualization Center

<http://siovizcenter.ucsd.edu/>

UCSD, SDSU, Cal(IT)2, and four California-based companies have unveiled the world's first visualization complex dedicated to Earth and ocean sciences, linking wide-screen, "immersive" environments over a 2.4 gigabit-per-second optical network. The group has also dedicated a permanent Visualization Center at SIO's Cecil H. and Ida M. Green Institute of Geophysics and Planetary Physics that is linked to SDSU with 44 miles of optical fiber, optical switches, and 3.2 million-pixel screens on each end.

High Performance Wireless Research and Education Network (HPWREN)

<http://hpwren.ucsd.edu/>

The HPWREN team is creating, demonstrating, and evaluating a non-commercial, prototype, high-performance, wide-area, wireless network in San Diego county. The NSF-funded network includes backbone nodes on the UC San Diego campus and a number of "hard to reach" areas in San Diego county. Not only is HPWREN used for network analysis research, but the network also provides high-speed Internet access to field researchers from several disciplines (geophysics, astronomy, ecology) and educational opportunities for rural Native American learning centers and schools.

Cal-(IT)2

<http://www.calit2.net/>

One of four institutes established through the California Institutes for Science and Innovation initiative proposed in the year 2000 by Governor Gray Davis. Cal-(IT)2, a partnership between UC San Diego and UC Irvine, seeks to ensure that California maintains its leadership in the telecommunications and information technology marketplace. The institute's mission is simple: Extend the reach of the current information infrastructure throughout the physical world to enable anytime/anywhere access. This, complemented by research and development in related

information technologies, will help the State provide new capabilities to important market segments poised to be transformed by the new Internet and prototype ways to monitor and manage growth anticipated in the coming years.

VORB-Design Group

<http://hpwren.ucsd.edu/ITR/vorb-design>

A clearing house for design information.

An Ecological *In Situ* Sensor Resource:

<http://www.lternet.edu/technology/sensors/index.html>

Sensor information, collaborative effort between the Long-Term Ecological Research (LTER) network office and the San Diego Supercomputer Center.

NLANR MOAT

<http://moat.nlanr.net/>

NLANR is supporting and extending a Network Analysis Infrastructure (NAI) to derive a better understanding of systemic service models and metrics of the Internet, with a specific focus on NSF's High Performance networking community. This includes passive measurements based on analysis of packet header traces to, e.g., derive workload profiles, active measurements which probe service properties, SNMP information from participating servers, and Internet routing related information based on BGP data.

IGPP Broadband Seismic Data Collection Center

<http://epicenter.ucsd.edu/ANZA/>

Regional Networks, Arrays, and Portable Deployments <http://epicenter.ucsd.edu/ANZA/>

Project Ida

<http://quakeinfo.ucsd.edu/idaweb/>

Project Ida is a global network of broadband and a very long period seismometers operated by the institute of Geophysics and Planetary Physics at the Scripps Institute of Oceanography.

Geological Data Center

<http://SIOExplorer.ucsd.edu>

At the Scripps Institution of Oceanography, in cooperation with the San Diego Supercomputer Center and the University of California, San Diego

The Scripps Orbit and Permanent Array Center (SOPAC)

<http://sopac.ucsd.edu>

SOPAC provides high precision geodetic and geophysical measurements using Global Positioning System (GPS) satellites, particularly for the study of earthquake hazards, tectonic plate motion, plate boundary deformation, and meteorological processes.

California Spatial Reference Center (CSRC)

<http://csrc.ucsd.edu>

CSRC ensures the availability of accurate, consistent, and timely spatial referencing data for California. The Center provides the geodetic framework for scientific research, surveying, engineering, and geographic information systems.

Virtual Seismic Network

<http://epicenter.ucsd.edu/ANZA/vsn/vsn.html>

Real-time integration of seismic data from regional seismic networks, arrays, and the IRIS Global Seismic Network.

The IRIS Broadband Array

<http://epicenter.ucsd.edu/ANZA/bbarray/bbarray.html>

The IRIS Broadband Array is a 24-bit, digital spread-spectrum telemetered seismic array.

Equipment consists of Streckeisen STS-2 seismometers with Reftek 24-bit digitizers linked to a central data concentrating and relay site via digital spread-spectrum radios.

ANZA and TriNET San Diego Region Orbmonrtd Display

<http://epicenter.ucsd.edu:5850>

Data currently being recorded by the ANZA broadband array and supplemented by data received from the TriNET network operated by Caltech. Waveforms are returned in real-time to IGPP at the Univ. of California, San Diego.

California Applications Platform (CAP)

<http://meteora.ucsd.edu/cap/>

CAP aims to develop improved forecasts for interested users in California and the surrounding region. By working directly with users, the program will be able to evaluate forecasts from the user perspective to improve their usefulness and to develop new forecast application strategies.

Santa Barbara Channel - Santa Maria Basin Circulation Study

<http://ccs.ucsd.edu/research/sbcsmb/>

[At the Center for Coastal Studies](#)

Wind Events and Shelf Transport

<http://ccs.ucsd.edu/coop/west/>

This is a 5-year, NSF-funded study of the role of wind-driven transport in shelf productivity.

This team of 11 principle investigators from 5 academic institutions aims to better understand the competing influences of wind on productivity.

Data Intensive Computing (DICE)

<http://www.npaci.edu/dice>

The DICE project is building a national digital library that accelerates the publication of scientific data. This requires the integration of distributed persistent digital archives, hierarchical storage systems, databases, data-handling systems, and digital libraries into integrated scientific information repositories.

SDSC Storage Resource Broker (SRB)

<http://www.npaci.edu/dice/srb>

The SRB is client-server middleware that provides a uniform interface for connecting to heterogeneous data resources over a network and accessing replicated data sets. SRB, in conjunction with the Metadata Catalog (MCAT), provides a way to access data sets and resources based on their attributes rather than their names or physical locations.