

ROGER G. BARRY - Vitae

List of Publications

- 1987 *Large-Scale Effects of Seasonal Snow Cover*. B.E. Goodison, R.G. Barry, and J. Dozier, eds. International Association of Hydrological Sciences, Publ. No. 166, IAHS Press, Wallingford, Oxfordshire, UK, 425 pp.
- 1975 Continental ice sheets: conditions for growth. R.G. Barry, J.T. Andrews, and M.A. Mahaffy. *Science* 190: 179-181.
- 1975 Fast ice characteristics with special reference to the eastern Canadian Arctic. J.D. Jacobs, R.G. Barry, and R.L. Weaver. *Polar Record* 17: 521-536.
- 1975 Growth and decay of the Laurentide ice sheet and comparisons with Fennoscandinavia. J.D. Ives, J.T. Andrews, and R.G. Barry. *Naturwissenschaften* 62: 118-125.
- 1975 Ice age experiments with the NCAR general circulation model. J. Williams and R.G. Barry. In: G. Weller and S.A. Bowling, eds., *Climate of the Arctic*. University of Alaska, Fairbanks: 163-169.
- 1979 The fast ice regimes of the Beaufort and Chukchi Sea coasts, Alaska. R.G. Barry, R.E. Moritz and J.C. Rogers. *Cold Regions Sci. and Technol.* 1: 129-152.
- 1980 Climate, snow cover, microclimate and hydrology of the Arctic coastal plain. S.L. Dingman, R.G. Barry, G. Weller, C. Benson, E. LeDrew, and C. Goodwin. In: J. Brown et al., eds., *An Arctic Ecosystem: the coastal Tundra at Barrow, Alaska*. Dowden, Hutchinson and Ross, Stroudsburg, Pennsylvania: 30-65.
- 1980 Meteorology and climatology of the seasonal sea ice zone. R.G. Barry. *Cold Regions Sci. Technol.* 2: 133-150.
- 1981 Trends in snow and ice research. R.G. Barry. *EOS* 62: 1,139-1,144.
- 1982 Analysis of atmosphere-sea ice interactions in the Arctic Basin using ESMR microwave data. R.G. Crane, R.G. Barry, and H.J. Zwally. *Internat. J. Remote Sensing* 3: 259-276.
- 1983 Arctic Ocean ice and climate: perspectives on a century of polar research. R.G. Barry. *Annals Assoc. Amer. Geogr.* 73: 485-501.
- 1983 Research on snow and ice. R.G. Barry. *Rev. Geophys. Space Phys.* 21(3): 765-776.
- 1984 Sea ice and snow cover data availability, needs and problems. R.G. Barry, R.G. Crane, R.L. Weaver and M.R. Anderson. *Annals Glaciol.* 5: 9-15.
- 1985 Characteristics of Arctic Ocean ice determined from SMMR data for 1979: Case studies in the seasonal sea ice zone. M.R. Anderson, R.G. Crane, and R.G. Barry. *Advances in Space Research* 5(6), In: G. Ohring and H.J. Bolle, eds., *Space Observations for Climate Studies*: 257-261.
- 1985 Lake ice cover as a temperature index for monitoring climate perturbations. F. Tramoni, R.G. Barry and J. Key, *Zeitschrift f. Gletscherkunde und Glazialgeologie* 21: 43-49.
- 1985 Snow and ice data. R.G. Barry. In: A.D. Hecht, ed., *Paleoclimate Analysis and Modeling*. J. Wiley and Sons, New York: 259-290.
- 1985 Snow cover, sea ice and permafrost. R.G. Barry. In: *Glaciers, Ice Sheets and Sea Level: Effects of CO₂-Induced Climatic Change*. National Academy Press, Washington, D.C.: 241-247.

- 1986 The sea ice data base. R.G. Barry. In: N. Untersteiner, ed., *The Geophysics of Sea Ice*. Plenum, New York: 1,099-1,134.
- 1986 Snow melt and surface albedo in the Arctic Basin. D.A. Robinson, G. Scharfen, M.C. Serreze, G. Kukla and R.G. Barry. *Geophys. Res. Lett.* 13(9): 945-948.
- 1987 Analysis of interannual variations of snow melt on Arctic sea ice mapped from meteorological satellite imagery. D.A. Robinson, G. Scharfen, R.G. Barry and G. Kukla. In: B.E. Goodison, R.G. Barry and J. Dozier, eds., *Large-Scale Effects of Seasonal Snow Cover*. IAHS Publ. No. 166, , IAHS Press, Wallingford, UK: 315-327.
- 1987 Lake ice formation and breakup as an indicator of climate change: Potential for monitoring using remote sensing techniques. J.A. Maslanik and R.G. Barry. In: *The Influence of Climate Change and Climate Variability on the Hydrologic Regime and Water Resources*. IAHS Publ. No. 168, IAHS Press, Wallingford, UK: 153-161.
- 1987 Large-scale patterns of snow melt on Arctic sea ice mapped from meteorological satellite imagery. G. Scharfen, R.G. Barry, D.A. Robinson, G. Kukla and M. Serreze. *Annals Glaciol.* 9: 200-205.
- 1987 Passive microwave data for snow and ice research: planned products from the DMSP SSM/I system. R. Weaver, C. Morris and R.G. Barry. *EOS* 68(39): 769-777.
- 1987 Seasonal variations of sea ice motion in the Canada Basin and their implications. A.S. McLaren, M.C. Serreze and R.G. Barry. *Geophys. Res. Lett.* 14: 1,123-1,126.
- 1987 Snow cover data management: The role of WDC-A for Glaciology. R.G. Barry and R.L. Armstrong. *J. Hydrol. Sci.* 32: 281-295.
- 1987 Snow cover parameter retrieval from various data sources in the Federal Republic of Germany. A.J. Schweiger, R. Armstrong, R.G. Barry. In: B.E. Goodison, R.G. Barry, J. Dozier, eds., *Large-Scale Effects of Seasonal Snow Cover*. IAHS Publ. No. 166, IAHS Press, Wallingford, UK: 353-364.
- 1988 Melting of polar ice caps. R.G. Barry. *Weather* 43: 60-61.
- 1988 World Data Center-A for Glaciology, National Snow and Ice Data Center. R.G. Barry and A.M. Brennan. *Arctic Res. of the U.S.* (Interagency Arctic Research Policy Committee) 2: 32-38.
- 1989 Arctic sea ice characteristics and associated atmosphere-ice interactions in summer inferred from SMMR data and drifting buoys: 1979 to 1985. R.G. Barry and J.A. Maslanik. *GeoJournal* 18: 35-44.
- 1989 Characteristics of Arctic sea ice from remote sensing data and their relationship to atmospheric processes. R.G. Barry, M.W. Miles, R.C. Cianflone, G. Scharfen and R.C. Schnell. *Annals Glaciol.* 12: 9-15.
- 1989 Evaluation of algorithms for mapping snow cover in the Federal Republic of Germany using passive microwave data. A.J. Schweiger and R.G. Barry. *Erdkunde* 43: 85-94.
- 1989 Glaciology. R.G. Barry and R.L. Armstrong. *Geotimes*, 35(2): 58-59.
- 1989 Lidar detection of leads in Arctic sea ice. R.C. Schnell, R.G. Barry and six others. *Nature* 339: 530-532.

- 1989 Merging AVHRR and SMMR data for remote sensing of ice and cloud in polar regions. J.A. Maslanik, J.R. Key and R.G. Barry. *Internat. J. Rem. Sens.*, 10: 1,691-1,696.
- 1989 Seasonal variations in sea ice motion and effects on sea ice concentrations in the Canada Basin. M.C. Serreze, R.G. Barry and A.S. McLaren. *J. Geophys. Res.* 94(8): 10,955-10,970.
- 1989 Seasonal variations of sea ice motion in the Transpolar Drift Stream. M.C. Serreze, A.S. McLaren and R.G. Barry. *Geophys. Res. Letters* 16(8): 811-814.
- 1989 Short-term interactions between atmospheric synoptic conditions and sea ice behavior in the Arctic. J.A. Maslanik and R.G. Barry. *Annals Glaciol.* 12:113-117.
- 1990 Could Arctic ice be thinning? A.S. McLaren, R.G. Barry and R.H. Bourke. *Nature* 345(6278): 762.
- 1990 Evidence of recent changes in global snow and ice cover. R.G. Barry. *GeoJournal* 20(2): 121-7.
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- 1991 Climate-Ice Interactions. R.G. Barry. In: W.A. Nierenberg, ed., *Encyclopedia of Earth System Science. Vol. 1*, Academic Press, Orlando, Florida: 517-524.
- 1991 Large-scale characteristics of fractures in multi year Arctic pack ice. M.W. Miles and R.G. Barry. In: K.B.E. Axelsson and L.A. Fransson. *International Conference on Port and Ocean Engineering, 10th, under Arctic Conditions (POAC 89) Vol. 1*, University of Technology, Lulea, Sweden, 103-112.
- 1991 Observational evidence of changes in global snow and ice cover. R.G. Barry. In: M.E. Schlesinger ed., *Greenhouse Gas-Induced Climatic Change: a Critical Appraisal of Simulations and Observations*. Elsevier, Amsterdam: 329-345.
- 1992 Large-scale patterns and variability of snow melt and parameterized surface albedo in the Arctic Basin. D.A. Robinson, M.C. Serreze, R.G. Barry, G. Scharfen and G. Kukla, *J. Climate* 5(10): 1,109-1,119.
- 1992 The significance of global snow and ice cover for global change studies, R.G. Barry. *GeoJournal* 27: 293-297.
- 1993 Advances in sea ice research based on remotely-sensed passive microwave data. R.G. Barry, J. Maslanik, K. Steffen, R.L. Weaver, V. Troisi, D.J. Cavalieri and S. Martin. *Oceanography*, 6: 5-13.
- 1993 The Arctic sea-ice-climate system: Observations and modeling. R.G. Barry, M.C. Serreze, J.A. Maslanik and R.H. Preller. *Rev. Geophys.*, 31: 397-422.
- 1993 Interannual variations in snow melt over Arctic sea ice and relationships to atmospheric forcing. M.C. Serreze, J.A. Maslanik, G.R. Scharfen, R.G. Barry and D.A. Robinson. *Annals of Glaciol.*, 17: 327-331.
- 1995 Remotely-sensed and simulated variability of Arctic sea-ice concentrations in response to atmospheric synoptic systems. J.A. Maslanik, C. Fowler, J. Heinrichs, R.G. Barry and W.J. Emery. *Int. J. Remote Sensing* 16(17): 3,325-3,342.
- 1995 Twentieth-century variability in snow cover conditions and approaches to detecting and monitoring changes: Status and prospects. R.G. Barry, J.-M. Fallot and R.L. Armstrong. *Progr. Phys. Geog.*, 19(4): 520-532.

- 1996 The parameterization of surface albedo for sea ice and its snow cover. *Progr. Phys. Geog.*, 20(1): 61-77.
- 1996 Recent decreases in Arctic summer ice cover and linkages to atmospheric circulation anomalies. J.A. Maslanik, M.C. Serreze and R.G. Barry. *Geophys. Res. Lett.*, 23(13), 1,677-1,680.
- 1998 A 5-year satellite climatology of winter sea ice leads in the western Arctic. M.W. Miles and R.G. Barry. *J. Geophys. Res.*, 21: 723-734.
- 1999 Statistics and characteristics of permafrost and ground ice distribution in the Northern Hemisphere. T. Zhang, R.G. Barry, K. Knowles, J. Brown, J.A. Heginbottom. *Polar Geography*. 23(2):147-169.
- 2000 Historical trends in lake and river ice cover in the Northern Hemisphere. J.D. Magnuson and 18 others/inc. R.G. Barry). *Science*, 289(5485): 1743-46.
- 2000 New eyes in the sky measure glaciers and ice sheets. H. Kieffer, J. Kargel, R.G. Barry, and 39 others. *EOS*, 81(24): 265, 270-71.
- 2000 Use of the data of hydrometeorological survey for century history of soil temperature trends in the seasonally frozen and permafrost areas of Russia. D.A. Gilichinsky, S.S. Bykhovets, V.A. Sorikov, D.G. Federov-Davydov, R.G. Barry, T. Zhang, M.K. Gavrilova, and O.I. Alexander. *Kriosfera Zemli*, 4(3): 56-9. (In Russian).
- 2000 Further statistics on the distribution of frozen ground and permafrost. T. Zhang, J.A. Heginbottom, R.G. Barry and J. Brown. *Polar Geography*, 24:(2) 126-131.
- 2001 The proposed international permafrost monitoring network and service. In R. Paepe and V. Melnikov, eds. *Permafrost Response on Economic Development, Environmental Security and Natural Resources*. J. Brown, W. Haeberli. R.G. Barry and F.E. Nelson. *Kluwer Academic*, pp. 601-606.
- 2001 The cryosphere. Mountain climates, R.G. Barry. In T. Munn, (ed-in chief). *Encyclopedia of Global Environmental Change, Vol. 1, The Earth System: physical and chemical dimensions of global environmental change*. (Volume Editors: M.C. MacCracken and J.S. Perry). J Wiley and Sons, Chichester, UK. pp. 330-31; and 540-41.
- 2001 The influence of climate variations on the thermoinsulation effect of snow cover and on the temperature regime in the underlying soil. S.A. Sokratov, V.N. Golubev and R.G. Barry. *Kriosfera Zemli* 5(2): 83-91. (In Russian).
- 2002 Sokratov, S.A. and R.G. Barry. Intraseasonal variations in the thermoinsulation effect of snow cover on soil temperatures and energy balance. *J. Geophys. Res.*, 107(D9-10), ACL 13 1-7.