

BIOGRAPHICAL SKETCH — John E. Walsh

ADDRESS

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EDUCATION

1970 B.A. Dartmouth College, Hanover, NH (Mathematics and Computer Science)
1974 Ph.D. Massachusetts Institute of Technology, Cambridge, MA (Meteorology)

EMPLOYMENT

1974–pres. University of Illinois, Department of Atmospheric Sciences
Professor Emeritus (2003–pres.); Professor of Meteorology (1985–2003);
Associate Professor (1979–85); Assistant Professor (1974–79)
Research: Climate change and meteorology of polar regions; Arctic sea ice;
extreme events and impacts
Course instruction: Introduction to meteorology (ATMOS 100)
Severe and Unusual Weather (ATMOS 120)
Physical and Dynamical Oceanography (ATMOS 310/410)

2003–2006 International Arctic Research Center, University of Alaska, Fairbanks
President’s Professor of Global Change

1986–1987 Naval Postgraduate School, Department of Oceanography, Monterey, CA
ONR Chair in Arctic Marine Science, Visiting Professor

1977, 1983 National Center for Atmospheric Research, Boulder, CO
Visiting Scientist: polar meteorology and climatology

OTHER EXPERIENCE

Member, Polar Research Board (National Research Council), 2003–2006
Lead Author, IPCC Fourth Assessment, Working Group II (Polar Regions), 2004
Fellow, American Meteorological Society, 1997–present
Co-Chair, SEARCH Understanding Change Panel, 2005–present
Associate Editor, *Journal of Climate*, 1992–present
Lead Author (Cryosphere), International Arctic Climate Impact Assessment, 2001–2004
Co-Chair, Arctic Monitoring and Assessment Program, Climate Expert Group, 2005–
Member, Arctic Observing Network Committee, Polar Research Board, 2004–2005
Chair, Polar Research Board Committee to Review NASA’s Polar Geophysical Datasets, 2001
Editor’s Award, American Meteorological Society, 1992; 1999
Member, Board of Directors, Arctic Research Consortium of U.S., 1998–2001
Member, Committee on NSF Arctic Marine Science Strategic Plan, 1998–1999
Chief Scientific Editor, IGS Symposium on Role of Cryosphere in Climate, 1996
Member, SPEC Review Committee, University Corp. for Atmospheric Research, 1990; 1996
Member, Climate Research Committee, National Research Council, 1987–1990
ONR Chair in Arctic Marine Science, Naval Postgraduate School, Monterey, CA, 1986–87
Chair, AMS Committee on Polar Meteorology, 1983–1985

FIVE PUBLICATIONS RELATED TO THIS PROPOSAL

- Peterson, B. J., J. McClelland, R. Curry, R. M. Holmes, J. E. Walsh and K. Aagaard, 2006: Trajectory shifts in the Arctic and subarctic freshwater cycle. *Science*, 313, 1061-1066, DOI: 10.1126/science/1122593.
- Zhang, X., and J. E. Walsh, 2006: Toward a seasonally ice-covered Arctic Ocean: Scenarios from the IPCC AR4 model simulations. *J. Climate*, 19, 1730-1747.
- Kattsov, V. M., J. E. Walsh, W. L. Chapman, V. A. Govorkova, T. V. Pavlova and X. Zhang, 2006: Simulation and projection of Arctic freshwater budget components by the IPCC AR4 global climate models. *J. Hydrometeorology*, in press.
- Walsh, J. E., and M. S. Timlin, 2003: Northern Hemisphere sea ice simulations by global climate models. *Polar Research*, 22, 75-82.
- Walsh, J. E., V. M. Kattsov, W. L. Chapman, V. Govorkova and T. Pavlova, 2002: Comparison of Arctic climate simulations in uncoupled and coupled global climate models. *J. Climate*, 15, 1429-1446.

FIVE OTHER RECENT PUBLICATIONS

- Walsh, J. E., 2006: Climate of the Arctic marine environment. *Ecological Applications*, in press.
- Chapman, W. L., and J. E. Walsh, 2006: Simulations of Arctic temperature and pressure by global coupled models. *J. Climate*, in press.
- Polyakov, I. V., U. S. Bhatt, H. L. Simmons, D. Walsh, J. E. Walsh and X. Zhang. 2005: Multidecadal Variability of North Atlantic Temperature and Salinity during the Twentieth Century. *Journal of Climate*, 18, 4562–4581.
- Walsh, J. E. (lead author) and 11 contributing authors, 2005: Cryospheric and Hydrologic Variability. Chapter 6 in *Arctic Climate Impact Assessment*, Cambridge University Press, Cambridge, U.K., in press.
- Rauber, R. M., J. E. Walsh and D. J. Charlevoix, 2005: *Severe and Hazardous Weather (2nd Ed.)*, Kendall-Hunt, 568 pp.

RECENT COLLABORATORS

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| P. Doran, Univ. of Illinois/Chicago | V. Romanovsky, Univ. of Alaska |
| P. Duffy, Univ. of Alaska | T. Shy, NOAA/NWS |
| M. Ikeda, Univ. of Sapporo | M. Timlin, Univ. of Illinois |
| V. M. Kattsov, MGO, St. Petersburg | J. Zhang, Univ. of Alaska |
| D. McGuire, Univ. of Alaska | X. Zhang, Univ. of Alaska |

GRADUATE ADVISOR: N. A. Phillips (M.I.T.)

M.S. and Ph. D. THESIS ADVISEES: D. Allen (M.S.), A. Barnston (M.S.), T. Bennett (Ph.D.), M. Cellitti (M.S.), W. Chapman (M.S.), Y. Cheng (M.S.), M. Ferguson (M.S.), R. Gudgel (M.S.), C. Johnson (M.S.), T. Mayer (M.S.), B. Mills (M.S.), A. Mostek (M.S.), S. O'Connor, M. Peterson (M.S.), A. Phillips (M.S.), B. Rose (Ph.D.), T. Shy (Ph.D.), M. Timlin (M.S.), D. Tucek (M.S.), J. Weatherly (Ph.D.), B. Weinand (M.S.), R. Wu (M.S.), A. Yih (M.S.), X. Zhou (M.S.)