

Stephen J. Déry

Environmental Science and Engineering Program, UNBC
3333 University Way, Prince George, BC, V2N 4Z9, Canada
Tel: (250) 960-5193 Fax: (250) 960-5845
e-mail: sdery@unbc.ca http://nhg.unbc.ca

EDUCATION

McGill University, Montreal, Quebec (Sept. 1996–Feb. 2001).

Ph.D. in Atmospheric Science, conferred June 2001.

Thesis advisor: Dr. M. K. Yau.

Thesis title: *The role of blowing snow in the hydrometeorology of the Mackenzie River Basin*

York University, Toronto, Ontario (Sept. 1991–Dec. 1993).

M.Sc. in Atmospheric Science, conferred June 1994.

Thesis advisor: Dr. R. E. Stewart.

Thesis title: *Surface effects within Avalon Peninsula winter storms*

B.Sc. in Earth and Atmospheric Science (1987–1991).

POSITIONS HELD

Assistant Professor and Canada Research Chair in Northern Hydrometeorology, *UNBC* (July 2005–present)

Adjunct Associate Research Scientist, *Columbia University* (Feb. 2004–present)

Visiting Research Scientist, *Princeton University* (Jan. 2004–June 2005)

Post-Doctoral Research Scientist, *Columbia University* (Dec. 2000–Dec. 2003)

Project Scientist, *York University* (Nov. 1994–Aug. 1996)

Research Scientist, *Technical University of Budapest* (Summer 1994)

Meteorological Technician, *Ontario Hydro* (Summers of 1991 and 1992)

PEER-REVIEWED PUBLICATIONS (since 2004)

1. Déry, S. J., and Brown, R. D., 2007: Recent Northern Hemisphere snow cover extent trends and implications for the snow-albedo feedback, *Geophys. Res. Lett.*, **34**, L22708, doi: 2007GL031474.
2. Cherry, J. E., Tremblay, L.-B., Stieglitz, M., Gong, G., and Déry, S. J., 2007: Development of the pan-Arctic Snowfall Reconstruction: New land-based solid precipitation estimates for 1940-1999, *J. Hydrometeorol.*, **8**, 1243-1263.
3. Rennermalm, A. K., Wood, E. F., Weaver, A. J., Eby, M., and Déry, S. J., 2007: The relative sensitivity of the Atlantic Meridional Overturning Circulation to river runoff from Hudson Bay and the Arctic Ocean rivers, *J. Geophys. Res.*, **112**, G04S48, doi: 10.1029/2006JG000330.
4. Déry, S. J., and Wood, E. F., 2006: Analysis of snow in the 20th and 21st century Geophysical Fluid Dynamics Laboratory coupled climate model simulations, *J. Geophys. Res.*, **111**, D19113, doi: 10.1029/2005JD006920.

5. Rennermalm, A. K., Wood, E. F., Déry, S. J., Weaver, A. J. and Eby, M., 2006: Sensitivity of the thermohaline circulation to Arctic Ocean runoff, *Geophys. Res. Lett.*, **33**, L12703, doi: 10.1029/2006GL026124.
6. McClelland, J. W., Déry, S. J., Peterson, B. J., Holmes, R. M., and Wood, E. F., 2006: A Pan-Arctic evaluation of changes in river discharge during the latter half of the 20th century, *Geophys. Res. Lett.*, **33**, L06715, doi: 10.1029/2006GL025753.
7. Déry, S. J., Sheffield, J., and Wood, E. F., 2005: Connectivity between Eurasian snow cover extent and Canadian snow water equivalent and river discharge, *J. Geophys. Res.*, **110**(D23), D23106, doi: 10.1029/2005JD006173.
8. Déry, S. J., and Wood, E. F., 2005: Observed twentieth century land surface air temperature and precipitation covariability, *Geophys. Res. Lett.*, **32**, L21414, doi: 10.1029/2005GL024234.
9. Déry, S. J., Stieglitz, M., McKenna, E. C., and Wood, E. F., 2005: Characteristics and trends of river discharge into Hudson, James, and Ungava Bays, 1964-2000, *J. Climate*, **18**, 2540-2557.
10. Déry, S. J., and Wood, E. F., 2005: Decreasing river discharge in northern Canada, *Geophys. Res. Lett.*, **32**, L10401, doi: 10.1029/2005GL022845.
11. Cherry, J. E., Tremblay, L.-B., Déry, S. J., and Stieglitz, M., 2005: Reconstructing solid precipitation from snow depth measurements and a land surface model, *Water Resour. Res.*, **41**, W09401, doi: 10.1029/2005WR003965.
12. Déry, S. J., Stieglitz, M., Rennermalm, A. K., and Wood, E. F., 2005: The water budget of the Kuparuk River Basin, Alaska, *J. Hydrometeorol.*, **6**, 633-655.
13. Déry, S. J., Salomonson, V. V., Stieglitz, M., Hall, D. K., and Appel, I., 2005: An approach to using snow areal depletion curves inferred from MODIS and its application to land surface modelling in Alaska, *Hydrol. Proc.*, **19**, 2755-2774.
14. Déry, S. J., and Wood, E. F., 2004: Teleconnection between the Arctic Oscillation and Hudson Bay river discharge, *Geophys. Res. Lett.*, **31**, L18205, doi: 10.1029/2004GL022845.
15. Déry, S. J., Crow, W. T., Stieglitz, M., and Wood, E. F., 2004: Modeling snow-cover heterogeneity over complex Arctic terrain for regional and global climate models, *J. Hydrometeorol.*, **5**(1), 33-48.
16. Déry, S. J., and Tremblay, L.-B., 2004: Modeling the effects of wind redistribution on the snow mass budget of polar sea ice, *J. Phys. Ocean.*, **34**(1), 258-271.

INVITED TALKS (since 2004): Dept. Earth Atmos. Sciences, University of Alberta, Edmonton, AB (18 Jan 2008); Eurasian Hydroclimatology Workshop, Fairbanks, AK (11 Nov 2007); ARCUS Workshop, Washington, DC (23 May 2007); Visions workshop, PG, BC (23 Mar 2007); Mountain pine beetle threats to salmon and fisheries resources workshop, PG, BC (30 Jan 2007); Fall AGU, San Francisco, CA (11 Dec 2006); Predator-prey-snow workshop, Vancouver, BC (3 Oct 2006); CWRA/Environment Canada, Hydrology for the Orographically Challenged, Manning Park, BC (28 Nov 2005); BC's Mountain Pine Beetle Epidemic: Linking Science and Innovation to Communities, UNBC, PG, BC (9 Nov 2005); Dept. of Earth and Atmospheric Sciences, University at Albany, Albany, NY (29 Apr 2005);

Geophysical Fluid Dynamics Laboratory, Princeton, NJ (28 Apr 2005); Center for Ocean-Land-Atmosphere (COLA) Studies, Calverton, MD (1 Mar 2005); Dept. of Earth Sciences, University of Waterloo, Waterloo, ON (10 May 2004); Dept. of Env. and Geography, University of Manitoba, Winnipeg, MB (4 Mar 2004).

PROFESSIONAL MEMBERSHIPS: American Geophysical Union; American Meteorological Society; Canadian Geophysical Union; Canadian Meteorological and Oceanographic Society; Canadian Water Resources Association; International Glaciological Society.

SERVICE AND TRAINING: Reviewer, Eastern Snow Conference student paper competition (2006); Member, CMOS Scientific Committee (2006-2009); Member, editorial board of Canadian Water Resources Journal (2007-2009); Reviewer, at least 10 papers/year in scientific journals; reviewer of proposals for national and international funding agencies (e.g., NSERC, CFCAS, etc.); training of HQP as supervisor for 1 Ph.D. student, 2 Master's students, 3 research assistants, and co-supervisor of many others.