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1. 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.*

Honours B.Sc. in Earth and Atmospheric Science and Applied Mathematics (1987-1991).

2. Positions Held:

Associate Professor and Canada Research Chair in Northern Hydrometeorology, *UNBC* (July 2010-present)

Assistant Professor and Canada Research Chair in Northern Hydrometeorology, *UNBC* (July 2005-June 2010)

Adjunct Associate Research Scientist, *Columbia University* (Feb. 2004-June 2009)

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)

3. Peer-Reviewed Publications:

- 1) Mlynowski, T. J., Hernández-Henríquez, M. A., and **Déry, S. J.**, 2011: An evaluation of hydrometric monitoring across the Canadian pan-Arctic region, 1950-2008, *Hydrol. Res.*, **42**, 479-490.
- 2) **Déry, S. J.**, Mlynowski, T. J., Hernández-Henríquez, M. A., and Straneo, F., 2011: Interannual variability and interdecadal trends in Hudson Bay streamflow, *J. Mar. Systems*, **88**, 341-351.
- 3) Shi, X., Groisman, P. Ya., **Déry, S. J.**, and Lettenmaier, D. P., 2011: The role of surface energy fluxes in pan-Arctic snow cover changes, *Env. Res. Lett.*, **6**, 035204.

- 4) Hernández-Henríquez, M. A., Mlynowski, T. J., and **Déry, S. J.**, 2010: Reconstructing the natural streamflow of a regulated river: A case study of La Grande Rivière, Québec, Canada, *Can. Water Resour. J.*, **35**, 301-316.
- 5) Tong, J., **Déry, S. J.**, Jackson, P. L., and Derksen, C., 2010: Testing snow water equivalent retrieval algorithms for passive microwave remote sensing in an alpine watershed of western Canada, *Can. J. Remote Sens.*, **36**, S74-S86.
- 6) Tong, J., **Déry, S. J.**, Jackson, P. L., and Derksen, C., 2010: Snow distribution from SSM/I and its relationship to the hydroclimatology of the Mackenzie River Basin, Canada, *Adv. Water Resour.*, **33**, 667-677.
- 7) **Déry, S. J.**, Clifton, A., MacLeod, S., and Beedle, M. J., 2010: Blowing snow fluxes in the Cariboo Mountains of British Columbia, Canada, *Arctic, Antarctic and Alpine Research*, **42(2)**, 188-197.
- 8) Lenaerts, J. T. M., van den Broeke, M. R., **Déry, S. J.**, König-Langlo, G., Ettema, J., and Kuipers-Munneke, P., 2010: Modelling snowdrift sublimation on an Antarctic ice shelf, *The Cryosphere*, **4**, 179-190.
- 9) Tong, J., **Déry, S. J.**, Hu, B., Chen, Y., 2010: An alternative method for in-flight absolute radiometric calibration of thermal infrared channels of Chinese geostationary meteorological satellites, *Int. J. Remote Sens.*, **31**, 791-803.
- 10) Tong, J., **Déry, S. J.**, and Jackson, P. L., 2009: Interrelationships between MODIS/Terra remotely sensed snow cover and the hydrometeorology of the Quesnel River Basin, British Columbia, Canada, *Hydrol. Earth Syst. Sci.*, **13**, 1439-1452.
- 11) **Déry, S. J.**, Hernández-Henríquez, M., Burford, J. E., and Wood, E. F., 2009: Observational evidence of an intensifying hydrological cycle in northern Canada, *Geophys. Res. Lett.*, **36**, L13402, doi: 10.1029/2009GL038852.
- 12) Burford, J. E., **Déry, S. J.**, and Holmes, R. D., 2009: Some aspects of the hydroclimatology of the Quesnel River Basin, British Columbia, Canada, *Hydrol. Proc.*, **23(10)**, 1529-1536, doi: 10.1002/hyp.7253.
- 13) **Déry, S. J.**, Stahl, K., Moore, R. D., Whitfield, P. H., Menounos, B. and Burford, J. E., 2009: Detection of runoff timing changes in pluvial, nival and glacial rivers of western Canada, *Water Resour. Res.*, **45**, W04426, doi:10.1029/2008WR006975.
- 14) Tong, J., **Déry, S. J.**, and Jackson, P. L., 2009: Topographic control of snow distribution in an alpine watershed of western Canada inferred from spatially-filtered MODIS snow products, *Hydrol. Earth Syst. Sci.*, **13**, 319-326.

- 15) Tong, J., **Déry, S. J.**, Hu, B., Chen, Y., Yang, C., and Rong, Z., 2009: On-board real time absolute radiometric calibration for thermal infrared channels of Chinese geostationary meteorological satellites, *J. Atmos. Oceanic Tech.*, **26**, 281-289.
- 16) 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.
- 17) **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: 10.1029/2007GL031474.
- 18) Rennermalm, A., Wood, E. F., Weaver, A. J., Eby, M., and **Déry, S. J.**, 2007: Relative sensitivity of the Atlantic Meridional Overturning Circulation to river discharge into Hudson Bay and the Arctic Ocean, *J. Geophys. Res.*, **112**, G04S48, doi: 10.1029/2006JG000330.
- 19) **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.
- 20) Rennermalm, A., 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.
- 21) 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.
- 22) **Déry, S. J.** and Wood, E. F. 2005. Observed twentieth century land surface air temperature and precipitation covariability. *Geophys. Res. Lett.*, **33**, L06715, doi: 10.1029/2006GL025753.
- 23) **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**, D23106, doi: 10.1029/2005JD006173.
- 24) **Déry, S. J.**, Stieglitz, M., Rennermalm, Å. K., and Wood, E. F. 2005. The water budget of the Kuparuk River Basin, Alaska. *J. Hydrometeorol.*, **6**, 633-655.
- 25) 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.
- 26) **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**, 1540-1557.
- 27) **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, doi:10.1002/hyp.5784

- 28) **Déry, S. J.** and Wood, E. F. 2005. Decreasing river discharge in northern Canada. *Geophys. Res. Lett.*, **32**, L10401, doi: 10.1029/2005GL022845.
- 29) **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/ 2004GL020729.
- 30) **Déry, S. J.** and Tremblay, L.-B. 2004. Modeling the effects of wind redistribution on the snow mass budget of Arctic sea ice. *J. Phys. Ocean.*, **34**(1), 258-271.
- 31) **Déry, S. J.**, Crow, W. T., Stieglitz, M., and Wood, E. F. 2004. Modeling snowcover heterogeneity over complex Arctic terrain for regional and global climate models. *J. Hydrometeorol.*, **5**(1), 33-48.
- 32) Stieglitz, M., **Déry, S. J.**, Romanovsky, V. E., Osterkamp, T. E. 2003: The role of snow cover in the warming of Arctic permafrost, *Geophys. Res. Lett.*, **30**(13), 1721, doi:10.1029/2003GL017337.
- 33) **Déry, S. J.** and Yau, M. K. 2002: Large-scale mass balance effects of blowing snow and surface sublimation, *J. Geophys. Res.*, **107**(D23), 4679, doi:10.1029/ 2001JD001251.
- 34) **Déry, S. J.** and Stieglitz, M. 2002: A note on surface humidity measurements in the cold Canadian environment, *Boundary-Layer Meteorol.*, **102**, 491-497.
- 35) **Déry, S. J.** and Yau, M. K. 2001: Simulation of blowing snow in the Canadian Arctic using a double-moment model, *Boundary-Layer Meteorol.*, **99**(2), 297-316.
- 36) **Déry, S. J.** and Yau, M. K. 2001: Simulation of an Arctic ground blizzard using a coupled blowing snow-atmosphere model, *J. Hydrometeorol.*, **2**, 579-598.
- 37) Xiao, J., Bintanja, R., **Déry, S. J.**, Mann, G. W. and Taylor, P. A. 2000: An intercomparison among four models of blowing snow, *Boundary-Layer Meteorol.*, **97**, 109-135.
- 38) **Déry, S. J.** and Yau, M. K. 1999: A climatology of adverse winter-type weather events, *J. Geophys. Res.*, **104**(D14), 16,657-16,672.
- 39) **Déry, S. J.** and Yau, M. K. 1999: A bulk blowing snow model, *Boundary-Layer Meteorol.*, **93**(2), 237-251.
- 40) **Déry, S. J.**, Taylor, P. A and Xiao, J. 1998: The thermodynamic effects of sublimating, blowing snow in the atmospheric boundary layer, *Boundary-Layer Meteorol.*, **89**(2), 251-283.
- 41) **Déry, S. J.** and Taylor, P. A. 1996: Some aspects of the interaction of blowing snow with the atmospheric boundary layer, *Hydrol. Proc.*, **10**, 1345-1358.

4. Manuscripts submitted for publication

- 1) Lenaerts, J., van den Broeke, M., **Déry, S. J.**, van Meijgaard, E., van de Berg, W. J., Palm, S., and Rodrigo, J. S., 2011: Modeling snowdrift in Antarctica with a regional climate model, Part I: Methods and model evaluation, submitted to *J. Geophys. Res.*
- 2) Stott, T. A., Owens, P. N., Forrester, B. J., Lee, J., **Déry, S. J.**, Menounos B., 2011: Suspended sediment fluxes in the proglacial zone of a rapidly retreating glacier, Cariboo Mountains, British Columbia, submitted to *J. Soils and Sediments*.
- 3) Picketts, I. M., Werner, A. T., Murdock, T. Q., Curry, J., **Déry, S. J.**, and Dyer, D., 2011: Planning for climate change adaptation: Lessons learned from a community-based workshop, submitted to *Env. Science & Policy*.
- 4) **Déry, S. J.**, Hernández-Henríquez, M. A., Owens, P. N., Parkes, M. W., and Petticrew, E. L., 2011: A century of hydrological variability and trends in the Fraser River Basin: Implications for migrating salmon, submitted to *Env. Res. Lett.*

5. Peer reviewed book chapters

- 1) **Déry, S. J.**, 2011: Global warming and its effect on snow/ice/glaciers, in Singh, V. P., Singh, P., and Haritashya, U. K. (eds.), *Encyclopedia of Snow, Ice, and Glaciers*, Springer, 468-470.
- 2) Cherry, J. E., **Déry, S. J.**, Stieglitz, M., Pan, F.-F., 2009: Chapter 2: Meteorology and climate of Toolik Lake and the North Slope of Alaska, in Hobbie, J. E. (ed.), *Environmental Change in an Arctic tundra Landscape*, Oxford University Press, submitted.
- 3) **Déry, S. J.**, and Yau, M. K., 2007: Chapter 14: Recent studies on the climatology and modelling of blowing snow in the Mackenzie River Basin (MRB), *Atmospheric Dynamics of a Cold Region: The Mackenzie GEWEX Study Experience*, Springer, 241-257

6. Non-peer reviewed publications:

- 1) **Déry, S. J.**, 2010: Book Review: Snow and Climate, *Polar Research*, **29**, 461-462.
- 2) **Déry, S. J.**, 2010: Snow sublimation on the Ekström Ice Shelf, *Newsletter of the Canadian Antarctic Research Network*, **29**, 2.
- 3) Brown, R. and **S. J. Déry**, 2008: Characteristics of recent trends in Northern Hemisphere snow cover extent, IGARSS 2008, Boston, MA.
- 4) MacLeod, S. and **Déry, S. J.**, 2007: The Cariboo Alpine Mesonet, *CMOS Bull. SCMO*, **35**, 45-51.

- 5) **Déry, S. J.** and Yau, M. K., 2006: Recent studies on the climatology and modeling of blowing snow in the Mackenzie River Basin, *Final Report of the Mackenzie GEWEX Study (MAGS): Proc. Of the Final (11th) Annual Scientific Meeting, 22-25 Nov. 2005, Ottawa, Ont., Canada, 367-386.*
- 6) **Déry, S. J.**, Luo, L., Sheffield, J., and Wood, E. F. 2005. Do dynamical models pick up pan-Arctic teleconnections? *GEWEX News*, **15**(4), 12-13.
- 7) **Déry, S. J.**, Sheffield, J., and Wood, E. F. 2005. Connectivity between Eurasian snow extent and Canadian snow mass and river discharge. *Conference Proceedings of the 62nd Annual Eastern Snow Conference*, June 2005, Waterloo, ON.
- 8) **Déry, S. J.**, and Wood, E. F. 2005. Characteristics, trends, and atmospheric drivers of Canadian river discharge to high latitude oceans. *Preprints 8th Conf. Polar Meteorology and Oceanography*, American Meteorological Society, January 2005, San Diego, CA.
- 9) **Déry, S. J.**, Stieglitz, M., McKenna, E. and Wood, E. F. 2004. Recent trends and changes in freshwater discharge into Hudson, James, and Ungava Bays. *EOS Trans. AGU*, **85**(17), H34A-03, American Geophysical Union, May 2004, Montreal, QC.

7. Conference presentations:

- 1) Mlynowski, T. J., Hernández-Henríquez, M. A., and **Déry, S. J.**, 2010: An evaluation of hydrometric monitoring across the Canadian pan-Arctic region, 1950-2008, NASH Symposium, Canadian Water Resources Association's annual meeting, Vancouver, BC.
- 2) **Déry, S. J.**, Mlynowski, T. J., Hernández-Henríquez, M. A., and Straneo, F., 2010: Variability and trends in streamflow input to Hudson Bay, NASH Symposium, Canadian Water Resources Association's annual meeting, Vancouver, BC.
- 3) Hernández-Henríquez, M. A., Mlynowski, T. J. and **Déry, S. J.**, 2010: Reconstructing the natural streamflow of a regulated river: A case study of La Grande Rivière, Québec, Canada, Canadian Water Resources Association's annual meeting, Vancouver, BC.
- 4) Lenaerts, J., van den Broeke, M., **Déry, S. J.**, van Meijgaard, E., and van de Berg, W. J., 2010: Including snowdrift in a regional climate model of Antarctica: Preliminary results, AGU Fall meeting, San Francisco, California.
- 5) **Déry, S. J.**, Ainslie, B., Jackson, P. L., 2010: Modeling intense blowing snow events in the Cariboo Mountains of British Columbia, Canada, AGU Fall meeting, San Francisco, California.
- 6) Shi, X., Groisman, P. Ya., **Déry, S. J.**, and Lettenmaier, D. P. 2010: Including snowdrift in a regional climate model of Antarctica: Preliminary results, AGU Fall meeting, San Francisco, California.

- 7) **Déry, S. J.** 2010: Climate change and water: A focus on Alexis Creek, Water Workshop, First Nation, BC.
- 8) **Déry, S. J.**, 2010: Climate change and water: A focus on Stellat'en and Nadleh Whut'en First Nations, Water Workshop, Stellat'en First Nation, BC.
- 9) Tong, J., **Déry, S. J.**, and Jackson, P. J., and Derksen, C., 2010: Remote sensing of snow in the Cariboo Mountains of British Columbia, Canada, EGU annual congress, Vienna, Austria (invited talk).
- 10) **Déry, S. J.**, Hernandez-Henriquez, M., Mlynowski, T. J., Hernandez-Henriquez, M. A., and Straneo, F., 2010: Variability and trends in streamflow input to Hudson Bay, Canada, EGU annual congress, Vienna, Austria.
- 11) **Déry, S. J.**, Hernandez-Henriquez, M., Mlynowski, T., Burford, J. E., and Wood, E. F., 2009: Observational evidence of an intensifying hydrological cycle in northern Canada, AGU Joint Meeting, Toronto, ON.
- 12) Tong, J., **Déry, S. J.**, and Jackson, P. J., 2009: Topographic and hydrometeorological controls of remotely sensed snow cover distribution in the Quesnel River Basin of British Columbia, AGU Joint Meeting, Toronto, ON (invited talk).
- 13) Yadghar, A., Ainslie, B., **Déry, S. J.**, and Jackson, P. J., 2009: Assessing the potential contribution of blowing snow to the mass balance of glaciers in the Cariboo Mountains of British Columbia, Canada, AGU Joint Meeting, Toronto, ON.
- 14) Straneo, F., Sutherland, D., St. Laurent, P., **Déry, S. J.**, Harvey, M., and Saucier, F., 2009: Freshwater and the MOC: The example of Hudson Strait, AMOC conference, Palisades, NY.
- 15) Lenaerts, J., van den Broeke, M., and **Déry, S.**, Modeling snowdrift sublimation on Antarctica using RACMO-SCM, MOCA, Montreal, QC.
- 16) **Déry, S. J.**, K. Stahl, R. D. Moore, P. Whitfield, B. Menounos, and J. E. Burford, 2008: Detection of runoff timing changes in pluvial, nival, and glacial rivers of western Canada, Canadian Meteorological and Oceanographic Society, Kelowna, BC.
- 17) **Déry, S. J.**, S. MacLeod and A. Clifton, 2008: Development of the Cariboo Alpine Mesonet (CAMnet) to detect ecohydrological change in British Columbia's great "snowforest", Canadian Geophysical Union, Banff, AB.
- 18) **Déry, S. J.**, 2008: Snow, soils and climate, Canadian Soil Science Society, Prince George, BC (invited plenary talk).
- 19) Upton, T., and **S. J. Déry**, 2008: Contribution of snowmelt to soil moisture replenishment and storage in the Cariboo Mountains of British Columbia, Canadian Soil Science Society, Prince George, BC.

- 20) **Déry, S. J.**, 2008: Recent Northern Hemisphere snow cover extent trends, University of Alberta, Edmonton, AB (invited talk).
- 21) Burford, J. E., and **S. J. Déry**, 2008: Recent trends in the timing and variability of river discharge in northern Canada, Canadian Meteorological and Oceanographic Society, Kelowna, BC.
- 22) Tong, J., and **S. J. Déry**, 2008: Relationships between remotely sensed snowcover, streamflow and hydrometeorology of the Quesnel River Basin, Canadian Meteorological and Oceanographic Society, Kelowna, BC.
- 23) **Déry, S. J.**, 2008: Development of the Cariboo Alpine Mesonet and Preliminary results, NRESi colloquium, Prince George, BC.
- 24) **Déry, S. J.**, M. Hernandez, J. E. Burford, and E. F. Wood, 2008: Recent trends and variability in river discharge in Northern Canada, Arctic Change 2008 conference, Quebec City, Quebec (invited talk).
- 25) **Déry, S. J.**, M. Hernandez, J. E. Burford, and E. F. Wood, 2008: Recent trends and variability in river discharge in Northern Canada, IP3/IPY workshop, Whitehorse, Yukon.
- 26) **Déry, S. J.**, 2008: Global climate change and some of its implications to northern BC, CUPE Climate Change Workshop, UNBC, Prince George, BC (invited talk).
- 27) **Déry, S. J.**, 2008: Recent activities at the QRRC by the Northern Hydrometeorology Group, QRRC Open House, Likely, BC.
- 28) Tong, J., **S. J. Déry**, B. Hu, Y. Chen, C. Yang, and Z. Rong, 2008: On-board real-time absolute calibration for thermal infrared channels of Feng Yun-2C (FY-2C), Ninth Biennial Pan Ocean Remote Sensing Conference, Guangzhou, China.
- 29) Brown, R. and **S. J. Déry**, 2008: Characteristics of recent trends in Northern Hemisphere snow cover extent, IGARSS 2008, Boston, MA (invited talk).
- 30) Sutherland, D., F. Straneo, K. Drinkwater, and **S. J. Déry**, 2008: How does a changing river input and sea ice cover affect the Hudson Strait Outflow?, Fall AGU, San Francisco, CA.
- 31) **Déry, S. J.**, 2008: Flooding in a changing climate, PIBC Annual conference, Prince George, BC (invited session talk).
- 32) **Déry, S. J.**, K. Stahl, R. D. Moore, P. Whitfield, B. Menounos, and J. E. Burford, 2008: Detection of runoff timing changes in pluvial, nival, and glacial rivers of western Canada, WC2N workshop, Prince George, BC.

- 33) **Déry, S. J.**, A. Clifton, S. MacLeod and A. Yadghar, 2008: On the potential contribution of blowing snow on the mass balance of glaciers in the Cariboo Mountains, WC2N workshop, Prince George, BC.
- 34) **Déry, S. J.** (on behalf of the WC2N network), 2007: The Western Canadian Cryospheric Network (WC2N): An update, Canadian Geophysical Union, St. John's, NF.
- 35) **Déry, S. J.**, and Brown, R. D., 2007: Poleward amplification of Northern Hemisphere weekly snowcover extent trends, Eastern Snow Conference, St. John's, NF.
- 36) **Déry, S. J.**, 2007: Changing Arctic Rivers, ARCUS workshop, Washington, DC (invited talk).
- 37) **Déry, S. J.**, 2007: Changing climate, Visions 2007 workshop, Prince George, BC (invited talk).
- 38) **Déry, S. J.**, 2007: Changing climates and our BC forests and fish habitats, Pine beetle workshop, Prince George, BC (invited talk).
- 39) **Déry, S. J.**, 2007: Detection of runoff timing changes in pluvial, nival and glacial rivers of western Canada, WC2N workshop, Banff, AB.
- 40) **Déry, S. J.**, 2007: Overview of Arctic Rivers, Eurasian hydroclimatology workshop, Fairbanks, AK (invited talk).
- 41) **Déry, S. J.**, Stahl, K., Moore, R. D., Whitfield, P. H. and Menounos, B., 2006: Twentieth century trends in observed river discharge in western Canada, Canadian Geophysical Union, Banff, AB.
- 42) Rennermalm, A. K., Wood, E. F., **Déry, S. J.**, and Weaver, A., 2006: Sensitivity of thermohaline circulation to freshwater export from Hudson Bay and Arctic Ocean rivers, 2006 Freshwater initiative meeting, Denver, CO.
- 43) **Déry, S. J.**, 2006: Large-scale interaction between the seasonal snow cover in Eurasia and hydroclimatic conditions in northern Canada, American Geophysical Union (invited talk), San Francisco, CA.
- 44) MacLeod, S., and **Déry, S. J.**, 2006: The Cariboo Alpine Mesonet, American Geophysical Union, San Francisco, CA.
- 45) **Déry, S. J.**, 2006: Snow conditions: Ecological impact and remote sensing, Prey-Predator workshop (invited talk), Vancouver, BC.
- 46) **Déry, S. J.**, Sheffield, J., and Wood, E. F., 2005: Connectivity between Eurasian snow extent and Canadian snow mass and river discharge, *62nd Annual Eastern Snow Conference*, June 2005, Waterloo, Ontario, Canada

- 47) **Déry, S. J.**, and Wood, E. F., 2005: Characteristics, trends, and atmospheric drivers of Canadian river discharge to high-latitude oceans, *American Meteorological Society*, Jan. 2005, San Diego, CA, USA
- 48) **Déry, S. J.**, Stieglitz, M., McKenna, E. and Wood, E. F. 2004: Recent changes and trends in freshwater discharge into Hudson, James, and Ungava Bays, *American Geophysical Union*, May 2004, Montreal, QC, Canada.
- 49) **Déry, S. J.**, Crow, W. T., Stieglitz, M., and Wood, E. F. 2003: Modeling snowcover heterogeneity in polar regions, *Preprints 7th Conf. Polar Meteorology and Oceanography*, AMS, May 2003, Hyannis, MA, USA.
- 50) **Déry, S. J.**, and Tremblay, L.-B., 2003: The Arctic Ocean snow mass budget, *Preprints 7th Conf. Polar Meteorology and Oceanography*, AMS, May 2003, Hyannis, MA, USA.
- 51) **Déry, S. J.** and Yau, M. K. 2001: Numerical simulation of an Arctic ground blizzard, *Preprints 6th Conf. Polar Meteorology and Oceanography*, AMS, May 2001, San Diego, CA, USA.
- 52) **Déry, S. J.** and Yau, M. K. 2001: A numerical study of a severe Arctic ground blizzard, CMOS, May/June 2001, Winnipeg, Manitoba, Canada.
- 53) **Déry, S. J.**, Bintanja, R., Mann, G., Taylor, P. A., Xiao, J. and Yau, M. K. 1999: The Blowing Snow Model Intercomparison Project: An update, CMOS, May/June 1999, Montreal, Quebec, Canada.
- 54) **Déry, S. J.** and Yau, M. K. 1999: A climatology of significant winter-type events for the Mackenzie River Basin inferred from the ECMWF Re-Analysis, *Preprints 5th Conf. Polar Meteorology and Oceanography*, AMS, January 1999, Dallas, Texas, USA, 69-70.
- 55) **Déry, S. J.** and Yau, M. K. 1999: Blowing snow modelling and parameterization, *Preprints 5th Conf. Polar Meteorology and Oceanography*, AMS, January 1999, Dallas, Texas, USA, 349-350.
- 56) **Déry, S. J.** and Yau, M. K. 1999: A preliminary assessment of the blowing snow transport and sublimation fluxes for the Mackenzie River Basin, CMOS, May/June 1999, Montreal, Quebec, Canada.
- 57) Xiao, J., Bintanja, R., **Déry, S. J.**, Mann, G. and Taylor, P. A., 1999: An intercomparison between three models of blowing snow in the atmospheric boundary layer, IUGG, July 1999, Birmingham, UK.
- 58) Xiao, J., Taylor, P. A. and **Déry, S. J.**, 1999: A model of blowing snow and its predictions for sensible and latent heat flux perturbation in blowing snow events, EGS, April 1999, The Hague, Netherlands.

- 59) Xiao, J., Taylor, P. A. and Déry, S. J., 1999: Sensible and latent heat fluxes in blowing snow events, CMOS, May/June 1999, Montreal, Quebec, Canada.
- 60) Déry, S. J. and Taylor, P. A. 1997: Thermodynamic effects of blowing snow in the atmospheric boundary layer, *Proceedings of the Hydro-ecology Workshop on the Arctic Environmental Strategy Action on Water*, CGU, May 1996, Banff, Alberta, Canada, 293-302.
- 61) Déry, S. J. and Taylor, P. A. 1996: On the impact of blowing snow sublimation in the Mackenzie River Basin, CMOS, May/June 1996, Toronto, Ontario, Canada.
- 62) Déry, S. J. and Taylor, P. A. 1995: Northern boundary-layer modelling; Some ideas on blowing snow, CGU, May 1995, Banff, Alberta, Canada.
- 63) Déry, S. J., Stewart, R. E. and Taylor, P. A. 1995: A preliminary study of surface effects within Avalon Peninsula winter storms, CMOS, May/June 1995, Kelowna, British Columbia, Canada.

8. Professional Service:

8.1 Memberships

American Geophysical Union (AGU)
 American Meteorological Society (AMS)
 Canadian Geophysical Union (CGU)
 Canadian Meteorological and Oceanographic Society (CMOS)
 Canadian Water Resources Association (CWRA)
 European Geosciences Union (EGU)
 International Glaciological Society (IGS)

8.2 Affiliations

Eastern Snow Conference (ESC)
 Natural Resources and Environmental Studies Institute (NRESi), UNBC
 North American Stream Hydrographers (NASH) Association
 Northern Climate Change Network (NCCN)
 Pacific Institute for Climate Solutions (PICS)
 Water Elevation Recovery Satellite Mission

8.3 Active Positions

2011-present Member, Geosciences Evaluation Group, NSERC
 2006-present Member, editorial board, *Canadian Water Resources Journal*
 2006-present Member, scientific committee, CMOS
 2006-present Member, review committee, Eastern Snow Conference student paper competition

8.4 Former Positions

2008-2011 Member, editorial board, *The Cryosphere*
 2008-2011 Member and Chair, Northern Research Supplement Committee, NSERC
 2007-2011 UNBC representative, ARCUS
 2008, 2011 Member, science planning committee, CMOS annual congress
 2008-2009 Member, program committee, PICS
 2008-2009 Member, director search committee, PICS
 2008 Member, graduate student fellowship adjudicating committee, PICS
 2008 Member, science planning committee, 39th annual CMOS Congress

8.4 Reviews

8.4.1 Journals

Journal	Number (Year)
<i>Advances in Water Resources</i>	1 (2005)
<i>Annals of Glaciology</i>	2 (2003), 1 (2006), 1 (2009)
<i>Arctic, Antarctic and Alpine Research</i>	1 (2010), 1 (2011)
<i>Atmosphere-Ocean</i>	1 (2005), 1 (2009), 1 (2010), 1 (2011)
<i>Atmospheric Research</i>	1 (2011)
<i>Boundary-Layer Meteorology</i>	1 (1995), 1 (2002), 1 (2004), 1 (2006), 1 (2008), 1 (2011)
<i>Bulletin of the AMS</i>	1 (2002)
<i>Canadian Water Resources Journal</i>	2 (2007), 2 (2009), 1 (2010), 1 (2011)
<i>Climate Dynamics</i>	1 (2008), 1 (2009)
<i>Climate Research</i>	1 (2010)
<i>Cold Regions Science and Technology</i>	2 (2003), 1 (2007)
<i>The Cryosphere</i>	1 (2008), 1 (2010), 1 (2011)
<i>Environmental Research Letters</i>	2 (2009), 1 (2010), 3 (2011)
<i>Forest Ecology and Management</i>	1 (2006)
<i>Geophysical Research Letters</i>	2 (2004), 2 (2005), 3 (2006), 3 (2007), 3 (2008), 3 (2009), 2 (2010), 1 (2011)
<i>Global and Planetary Change</i>	1 (2009)
<i>Hydrological Processes</i>	3 (2006), 1 (2007), 1 (2009), 1 (2010)
<i>Hydrological Sciences Journal</i>	2 (2009)
<i>Hydrology & Earth System Sciences</i>	1 (2010)
<i>Hydrology Research</i>	2 (2009)
<i>International Journal of Climatology</i>	1 (2001), 1 (2006), 1 (2009), 1 (2010)
<i>Journal of Applied Meteorology</i>	1 (2006), 1 (2008)
<i>Journal of Climate</i>	3 (2008)
<i>Journal of Cold Regions Engineering</i>	1 (2003)
<i>Journal of Geophysical Research</i>	1 (2000), 1 (2001), 1 (2002), 1 (2005), 1 (2007), 3 (2009), 2 (2010), 2 (2011)
<i>Journal of Glaciology</i>	1 (2005)
<i>Journal of Hydrology</i>	1 (2010), 1 (2011)
<i>Journal of Hydrometeorology</i>	3 (2003), 1 (2004), 1 (2005), 1 (2006), 1

	(2007), 2 (2010)
<i>Journal of Water Sciences (in French)</i>	1 (2006), 1 (2007)
<i>Remote Sensing</i>	1 (2011)
<i>Remote Sensing of Environment</i>	1 (2009)
<i>Water Resources Research</i>	1 (2007), 2 (2008)
<i>Weather and Forecasting</i>	1 (2004)
<i>Western Geography</i>	1 (2008)
Total	115

8.4.2 Grants

I have reviewed 20 proposals for various funding agencies including the Swiss National Science Foundation (2003, 2004), the United Kingdom Natural Environment and Research Council (2 reviews in 2004), the Canadian Foundation for Climate and Atmospheric Science (2005), the Canadian Natural Sciences and Engineering Research Council (2006, a French Discovery grant application in 2007, a site visit in 2007, Discovery grants in 2008, 2009, and 2010), and a Strategic grant in 2010, the Canada Foundation for Innovation (2010, 2011) the United States National Science Foundation (2006, 2008, 2010, 2011), a Canada Research Chair application (2007) and a Chilean Fondcyt application (2010).

8.4.3 Professional Reports

In 2008, I performed the peer review of a professional report entitled “Climate Change Impacts in Prince George - A Summary of Past Trends and Future Projections of climate in North-Central British Columbia” produced by the Pacific Climate Impacts Consortium. In 2008/2009, I also acted as a consultant for a project entitled “Microclimate analysis and unique weather patterns of Highway 401 Northumberland County” conducted by 4DM Inc. on behalf of the Ministry of Transportation of Ontario.

8.4.4 Theses

I have acted as the external examiner for three doctoral theses: one from Princeton University, one from Université du Québec à Rimouski, and one from McGill University.

9. Recent Collaborators:

Ross Brown (Ouranos), Jessie Cherry (UAF), Wade Crow (USDA Research Laboratory), Chris Derksen (Environment Canada), Gavin Gong (Columbia), Scott Green (UNBC), Dorothy Hall (NASA GSFC), Peter Jackson (UNBC), Richard Kelly (U. Waterloo), Dennis Lettenmaier (U. Washington), Jim McClelland (U. Texas), Brian Menounos (UNBC), Dan Moore (UBC), Vincent Salomonson (U. Utah), Nils C. Stenseth (U. Oslo), Marc Stieglitz (Georgia Tech), Fiamma Straneo (WHOI), Peter Taylor (York U.), Bruno Tremblay (McGill), Michiel van den Broeke (Utrecht U.), Jon Olav Vik (U. Oslo), Roger Wheate (UNBC), Paul Whitfield (Environment Canada), Andrew Weaver (UVic), Eric Wood (Princeton), Peter Yau (McGill).

10. Grants and Funding:

Name of Applicant, Role	Title of proposal, funding source and program	Total Amount	Years of Tenure
Principal applicant	A century of hydrological variability in the Fraser River Basin, Env. Canada Science Horizons	\$12,000	2011-2012
Phil Owens, co-applicant	Climate, water and salmon, SSHRC	\$45,000 (25%)	2011-2012
Principal applicant	Floods in the Nechako River Basin, BC Real Estate Foundation	\$12,000	2011-2012
Principal applicant	Climate change and the water towers of western Canada, NSERC Discovery grant + Accelerator grant	\$166,500 \$120,000	2011-2015 2011-2013
Principal applicant	Infrastructure in support of CRC renewal, CFI	\$11,454	2010-2011
Principal applicant	Infrastructure in support of CRC renewal, BCKDF	\$11,454	2010-2011
Principal applicant	The Cariboo Alpine Transect Expansion, Env. Canada Science Horizons	\$12,000	2010-2011
Darwyn Coxson, co-applicant	Climate change vulnerability of old-growth forests in BC's Inland Temperate Forest, FFESC	\$43,000	2010-2011
Principal applicant	The water budget of a mountainous watershed, NSERC Discovery grant	\$111,500	2006-2010
Principal applicant	Canada Research Chair in Northern Hydrometeorology	\$500,000 (×2)	2005-2010 2011-2015
Principal applicant	Supplement to the CRC	\$200,000 (×2)	2005-2010 2011-2015
Eddison Lee-Johnson, co-applicant	Reducing the carbon footprint of Stelat'en First Nation, Environment Canada, ecoAction	\$47,578 (0%)	2009-2010
Darlene Sanderson, co-applicant	Reducing the carbon imprint of Stelat'en First Nation, MITACS	\$15,000 (100%)	2009-2010
Fiamma Straneo, co-applicant	From rivers to the ocean..., National Science Foundation (USA) - Oceans	\$887,239 (0%)	2008-2010
Alain Pietroniro/Fred Wrona, co-applicant	Arctic Freshwater Systems, NSERC-IPY	\$100,000	2007-2010
Brian Menounos, co-applicant	Western Canadian Cryospheric Network, CFCAS	\$2,130,591 (4.6%)	2006-2010
Principal applicant	Monitoring the changing climate of BC's Interior Wetbelt, Environment Canada Science Horizons	\$12,000	2009

Eric Rapaport, co-applicant	PIBC climate change workshop, BC Hydro	\$5,000 (0%)	2008
Principal applicant	Development of the Cariboo Alpine Mesonet, HRSDC Career Focus	\$15,000	2008
Principal applicant	Arctic Change 2008, UNBC travel grant	\$1,000	2008
Principal applicant	A meteorological network to monitor environmental change..., NSERC RTI	\$32,300	2008
Principal applicant	An eddy covariance system..., NSERC RTI	\$24,975	2007
Principal applicant	Closing the water budget of the Quesnel River Basin, UNBC seed grant	\$4,990	2007
Principal applicant	Publication grant, UNBC	\$1,461	2006
Principal applicant	CGU 2006, UNBC travel grant	\$1,162	2006
Principal applicant	BCKDF supplement to CFI grant, BCKDF	\$60,416	2005
Principal applicant	Infrastructure grant, CFI	\$60,416	2005
Principal applicant	UNBC start-up funds	\$15,000	2005
Principal applicant	UNBC supplement to CFI, UNBC	\$20,200	2005
Total (direct funds)		\$2,372,085	

10. Supervision:

Current Students and Research Staff

2011-2011	Sam Albers (Research Assistant)
2011-2011	Marco Hernández-Henríquez (Part-time Research Associate)
2010-2011	Heidi Knudsvig (Master's)
2011-2011	Allan Padilla (Research Associate)
2009-2011	Ian Picketts (Ph.D., co-supervised with Dr. John Curry)

Former Students and Research Staff

2010-2011	Bryndel Fell (Research Associate)
2011-2011	Jake McQueen (Undergraduate Field Assistant, now UNBC student)
2007-2010	Kara Przewczek (Master's, co-supervised with Dr. Brian Menounos)
2007-2010	Tullia Upton (Master's, now Ph.D. candidate, Oregon State U.)
2009-2010	Darlene Sanderson (Post-doctoral Fellow, now post-doctoral fellow, University of Victoria)
2008-2010	Theo Mlynowski (Research Assistant, now Master's student, UNBC)
2008-2010	Marco Hernández-Henríquez (Research Assistant, now doctor of naturopathic medicine student at the Canadian College of Naturopathic Medicine, Toronto, Ontario)

2008-2009	Amir Yadghar (Research Associate, now post-doctoral fellow at Concordia)
2008-2010	Jinjun Tong (Ph.D., now post-doctoral fellow, U. of California, Irvine)
2007-2008	Andy Clifton (Post-doctoral Fellow, now technical sales manager at Natural Power Consultants)
2007-2008	Sara Ormenyi (Undergraduate Student from California State University, Northridge, now customer service specialist at REI)
2006-2008	Shane MacLeod (Research Assistant, now environmental technician at Goldcorp Canada – Equity Silver)
2005-2008	Jason Burford (Research Associate, now meteorologist with Environment Canada)

11. Teaching:

Since joining UNBC, I have taught three courses regularly: ENSC 312 (“Boundary-Layer Meteorology”), ENSC 408/608 (“Storms”), and ENSC 454/654 (“Snow and Ice”), a course that I proposed and developed. These are either required or optional courses in the upper level environmental science and engineering undergraduate degrees, although many of our students come from other programs such as geography, chemistry, and biology. “Storms” and “Snow and Ice” are also offered as graduate courses in the natural resources and environmental studies master’s program. Typically, the number of students in these classes ranges from 5 to 20, allowing for a personal and informal approach to teaching. Apart from these courses, I have contributed to three directed readings (NRES 799), two seminar courses (NRES 799 and NRES 804), and one undergraduate thesis (GEOG 499). I have also contributed six guest lectures in various UNBC courses.

Maintaining a high level of teaching excellence is one of my main goals as faculty. This includes ensuring course materials are presented in a clear and easily accessible manner. Thus all electronic course materials (lecture notes and labs, presentations, articles, etc.) are provided on the course website for the students’ convenience. Notes and presentations are usually provided prior to the lectures to the students and they are thus encouraged to actively engage in the class discussions rather than focus on taking notes. Field trips (such as to UNBC’s Quesnel River Research Centre in Likely, BC) are advocated since these provide students with unique opportunities to learn in their natural environment. Being accessible to students remains one of my highest priorities as UNBC faculty. I have an open-door policy and students are always encouraged to drop by my office with questions or comments on course materials, even outside my normal office hours. I also respond to voice mail and email messages as quickly as possible, even on evenings and weekends.