

## Dr. Peter D. Blanken

Department of Geography  
University of Colorado, Boulder, Colorado 80309-0260  
blanken@colorado.edu; www.colorado.edu/geography/blanken

### Administrative Experience

*Department Chair, 2010 - 2014:* Department of Geography.  
*Associate Chair, 2007-2010, 2016-2017:* Department of Geography.  
*Associate Chair, 2006-2010:* Environmental Studies Program.  
*Faculty Advisor, 2004-2006:* Faculty Advisor, Vice Chancellor of Student Affairs Honor Code.

### Research Interests

*Long-term Objective:* To integrate water and carbon balance research toward furthering our understanding of their importance to climate change and its effect on people and their environment.  
*Water Cycle:* Evaporation, transpiration, canopy and stomatal conductance, soil moisture and temperature.  
*Carbon Cycle:* Net ecosystem exchange, photosynthesis, respiration.  
*Spatial and Temporal Variations:* Fine-scale mapping and visualization of vegetation canopies, soil moisture and temperature, energy and radiation fluxes, remote sensing and modeling of surface water and carbon cycles.  
*Geographic Locations:* Great Lakes, Arctic lakes, forests, rangelands, tundra, wetlands.

### Teaching Expertise

*Biometeorology:* Quantifying the interactions between weather and life.  
*Climatology:* Processed-based studies of global and micro-scale climatology.  
*Hydrology:* Processed-based studies of global and regional-scale hydrology.  
*Mountain Geography:* Integrating natural and social sciences in Alpine regions world-wide.

### Education

*Ph.D. 1997:* Department of Soil Science, University of British Columbia, Vancouver, British Columbia, Canada. Thesis: *Evaporation Within and Above a Boreal Aspen Forest.*  
*M.Sc. 1993:* Department of Geography, McMaster University, Hamilton, Ontario, Canada. Thesis: *Vegetation Controls on Evaporation from a Subarctic Willow-Birch Forest.*  
*B.Sc. First Class Honors, 1990:* Department of Geography, McMaster University, Hamilton, Ontario, Canada. Major: Physical Geography Honors Thesis: *Evaporation from a Subarctic Wetland.*

## Academic Positions

**2016 – present:** Full Professor, Department of Geography, University of Colorado, Boulder.

**2005 – 2016:** Associate Professor, Department of Geography and Environmental Studies Program, University of Colorado, Boulder.

**2000 – present:** Faculty, Hydrologic Sciences Graduate Program, University of Colorado, Boulder.

**1998 – 2005:** Assistant Professor, Department of Geography and Environmental Studies Program, University of Colorado, Boulder.

**1998 – present:** Affiliated Faculty, Program in Atmospheric and Oceanic Sciences, University of Colorado, Boulder.

**1997 – 1998:** Postdoctoral Fellow: School of Geography and Geology, McMaster University, Hamilton, Ontario, Canada. Special Projects: Global Energy and Water Cycle Experiment (GEWEX).

## Grant Activity

2014-2020 **Department of Energy – Terrestrial Ecosystem Science – Lawrence Berkeley National Laboratory.** *Niwot Ridge AmeriFlux Core Site.* Blanken P.D. (PI). Award # 7094866. \$1,044,185

2019-2020 **Colorado Water Research Institute.** Direct Measurements of Colorado Reservoir Evaporation: A Comparison between Eddy Covariance and Class-A Pan Measurements, and Model Results. Project 1558158. \$44,392.

2016-2018 **Great Lakes Observing System (GLOS-NOAA).** *The Great Lakes Evaporation Network (GLOS). Providing Critical Observations in Support of Multiple Resource Management.* Blanken P.D. (PI). Award #NA16NOS0120025. \$22,534

2017-2018 **Niwot Ridge Long-term Ecological Research Program 2017.** *Improving the Quality and the Usefulness of the Niwot Ridge Past and Future Precipitation Record.* Blanken P.D., (PI), Friedrich K., and Curtis B. Award #1555096. \$12,200

2017 **NGEE Arctic Field Work.** Blanken P.D. (PI), and Curtis B. United States Department of Energy, Terrestrial Ecosystem Science. Award #DE-AC02-05CH11231. \$9,864.

2014-2015 **National Oceanic and Atmospheric Administration (NOAA) – Great Lakes Environmental Research Laboratory (GLERL).** *Evaporation Measurements on Lakes Michigan and Huron.* Blanken P.D. (PI). Project #M8R3SS8 P05. \$81,479

2011-2013 **International Joint Commission-National Science Foundation.** *Direct Measurements of Evaporation from Lake Superior, Huron, Michigan and Erie.* Blanken, P.D. (PI) and Spence, C. (Co-PI). \$273,000

2011-2013 **Great Lakes Integrated Sciences and Assessment Center (GLISA).** *Assessing the Impacts of Climate Variability and Change on Great Lakes Evaporation: Implications for Decision Making, Adaptation, and Water Resource Management.* Lenters, J. (PI), Blanken, P.D., (Co-PI), Anderton, J. (Co-PI), and Suyker, A. (Co-PI). \$30,000

- 2011-2013 **National Science Foundation – Behavioral and Cognitive Science.** *Doctoral Dissertation Research: Spatio-Temporal Patterns of Soil Respiration and Age of Respired Carbon from High-Elevation Alpine Tundra.* Blanken P.D. (PI), Knowles J.F. Award #1129562, \$11,820
- 2009-2014 **National Science Foundation-Environmental Biology.** *Forest-atmosphere Fluxes in a Subalpine Ecosystem.* Blanken, P.D. (PI) transfer from Monson, R.K. \$450,000
- 2008-2011 **International Joint Commission-National Science Foundation.** *Direct Measurements of Evaporation from Lake Superior and Lakes Huron/Michigan.* Blanken, P.D. (PI) and Spence, C. (Co-PI). \$250,000
- 2004-2012 **National Science Foundation-Environmental Biology.** *Long-Term Ecological Research: The Landscape Continuum Model: A Biogeochemical Paradigm for High Elevation Ecosystems.* Williams, M., (PI), and Blanken, P.D. (Co-PI), Niwot Ridge LTER. \$5.7 million
- 2004-2006 **National Sciences and Research Council of Canada.** *ArcticNet BaySys-The Hudson Bay System Study.* Barber, D.G. (PI), and Blanken, P.D. (Collaborator).
- 2003-2005 **National Science Foundation-Environmental Biology.** *Long Term Ecological Research: Short grass Steppe.* Blanken, P.D. (Collaborator).
- 2003-2005 **National Science Foundation-Large-scale Dynamic Meteorology.** *SGER: Extension of the Surface Energy and Water Cycle Flux Measurements Beyond the International H2O Project (IHOP) Intensive Observation Period (Supplement).* Blanken, P.D. (PI), and Grossman, R. (Co-PI). \$7,000
- 2003-2005 **Department of the Interior-National Park Service.** *Snow Drift Control by Vegetation in Rocky Mountain National Park.* Blanken, P.D. (PI). \$14,047
- 2002-2005 **National Science Foundation-Large-scale Dynamic Meteorology.** *SGER: Extension of the Surface Energy and Water Cycle Flux Measurements Beyond the International H2O Project (IHOP) Intensive Observation Period.* Blanken, P.D. (PI), and Grossman, R. (Co-PI). \$43,342
- 2001 **Smarter Kids Foundation.** *Use of an Interactive Whiteboard Projection Screen as a Teaching Aid.* Blanken, P.D. (PI). \$650
- 2000-2004 **National Science Foundation-Major Research Instrumentation.** *Development of the Platteville Atmospheric Observatory.* Avery, S. (PI), Thorsen, D. (Co-PI), and Blanken, P.D. (Co-PI). \$610,000
- 1999-2003 **National Sciences and Research Council of Canada-Mackenzie GEWEX Study.** *Evaporation from Large Lakes.* Rouse, W.R. (PI), Blanken, P.D. (Co-PI), Eaton, A. (Co-PI), and Spence, C. (Co-PI). \$64,500
- 1999 **National Sciences and Research Council of Canada-Mackenzie GEWEX Study.** *Interannual Variability of Over-lake Evaporation from Great Slave Lake, and Preliminary Modelling of Lake Thermal Response.* Rouse, W.R. (PI), Blanken, P.D. (Co-PI), and Schertzer, W.M. (Co-PI). \$37,190
- 1999-2000 **National Sciences and Research Council of Canada-Mackenzie GEWEX Study.**

*Evaporation from Wetlands and Large Lakes.* Rouse, W.R. (PI), Blanken, P.D. (Co-PI), Eaton, A. (Co-PI), and Petrone, R. (Co-PI). \$64,500

1999-2000 **National Sciences and Research Council of Canada-Mackenzie GEWEX Study.** *Interannual Variability of Over-lake Evaporation and Heat Exchanges of Great Slave Lake and Preliminary Modelling of Lake Thermal Response.* Rouse, W.R. (PI), Blanken, P.D. (Co-PI), and Schertzer, W.M. (Co-PI). \$37,190

### ***Awarded from the University of Colorado***

2019 **College of Arts and Sciences.** *Direct Measurements of Colorado Reservoir Evaporation: A Comparison between Eddy Covariance and Class-A Pan Measurements, and Model Results.* Cost Sharing. Project 1558158. \$12,00.

2012 **ASSETT Award.** *Integration of Mobile Technology across the Geography Curriculum.* Blanken, P.D. (PI), and Cumming, P. (Co-PI). \$5,000

2007 **Office for the Vice President for Academic Affairs and Research.** *Developing graduate student assessment measures.* Blanken, P.D. (PI). \$1,000

2007 **Undergraduate Research Opportunity Program.** *A Tracer Experiment to Identify Groundwater Sources to High Creek Fen.* Legg, T., (PI), and Blanken, P.D. (Co-PI). \$3,000

2007 **President's Teaching and Learning Collaboration.** *The Impact of Class Size on Teaching Quality.* Blanken, P.D. (PI). \$800

2002 **Faculty Teaching Excellence Program.** *Alternative Visual Technology.* Blanken, P.D. (PI). \$1,250

2001 **Faculty Teaching Excellence Program.** *Use of an Interactive Whiteboard Projection Screen as a Teaching Aid.* Blanken, P.D. (PI). \$2,000

2001 **Junior Faculty Development Award.** *Surface-atmosphere Coupling at the Platteville Atmospheric Observatory.* Blanken, P.D. (PI). \$5,000

2001 **Undergraduate Research Opportunity Program.** *The Spatial Variation of the Surface Energy Balance of a Sage-sand Grassland.* Blanken, P.D. (PI), and Alfieri, J. (Co-PI). \$2,300

2001 **Faculty Teaching Excellence Program.** *Vertical Integration of Global Positioning Technology in Geography.* Blanken, P.D. (PI). \$2,000

2000 **Faculty Teaching Excellence Program.** *Use of Digital Video Technology as a Teaching and Research Aid.* Blanken, P.D. (PI). \$2,000

1999-2001 **Alliance for Technology, Learning, and Society (ATLAS).** *Vertical Integration of Technology into the Geography Curriculum.* Williams, M. (PI), Battenfield, B. (Co-PI), Pitlick, J. (Co-PI), Caine, N. (Co-PI), Steffan, K. (Co-PI), and Blanken, P.D. (Co-PI). \$49,335

1999 **Faculty Teaching Excellence Program.** *Vertical Integration of Global Positioning Technology in Geography.* Blanken, P.D. (PI). \$2,000

1999      **Undergraduate Research Opportunity Program.** *The Impacts of an Air Quality Advisory Program on Voluntary Mobile Source Air Pollution Reduction.* Blanken, P.D. (PI). \$2,000

## **Awards, Honors and Invited Talks**

2019      Invited Speaker: Smith Lecture. The Other Greenhouse Gas. Sources of Water Vapor, from Lakes to Leaves, from a Surface Measurement Perspective. Earth and Environmental Sciences, University of Michigan, 13 September 2019.

2019      Invited Keynote Speaker. Climate Means and Meteorological Extremes: Causes and Consequences of a Warming Climate. Thailand Space Week 2019 - Space and Climate Change, Bangkok, Thailand, 29 August 2019.

2019      Invited Speaker. Fluxes of Greenhouse Gases and Energy Across Ecosystems – Five Decades to State-of-the-art of Measurements and Modelling. University of British Columbia, Vancouver, Canada, 20 to 22 August 2019.

2019      Invited Speaker, American Water Resources Association Annual Symposium, Measuring Evaporation from Lakes, Reservoirs, and Forests. 19 April 2019, Golden, Colorado.

2017      Invited Keynote Speaker. Integrating Remote Sensing and Eddy Covariance Observations for Microclimate Studies. Geo-Informatics and Space Technology Development Agency, Bangkok, Thailand, 26 January 2017.

2015      Delegate nominated by the Association of American Geographers to attend the 21<sup>st</sup> Session of the Conference of the Parties (COP21) and the 11<sup>th</sup> Session of the Conference of the Parties serving as the Meeting of the Parties to the Kyoto, Paris, France.

2014      College Scholar Award. *Negative Feedbacks in the Climate System: A Great Lakes Example.* Semester Sabbatical Leave. University of Colorado, Boulder.

2009,10,11      NOAA’s “Teachers in the Laboratory” Fellowship recipient.

2009      Provost’s Faculty Achievement Award for the publication “*The Time Scales of Evaporation from Great Slave Lake*”

2007      President’s Teaching and Learning Scholar. University of Colorado, Boulder.

2003      National Science Foundation Junior Leadership Education for Advancement and Promotion (LEAP) Fellow.

1996      University of British Columbia Graduate Scholarship for Ph.D. Studies: \$16,000

1994      Natural Sciences and Engineering Research Council of Canada Post-Graduate Scholarship for Ph.D. Studies: \$34,000

1990      Natural Sciences and Engineering Research Council of Canada Post-Graduate Scholarship for M.Sc. Studies: \$34,000

1990      McMaster University Centennial Scholarship: \$1,000

1990      Cameron D. Allen Book Prize for Best Honors Thesis: \$150

1989           The McMaster University Scholarship: \$800  
1988           Edwin Marwin Dalley Memorial Scholarship: \$800

## Scholarly Works

### **Refereed Journal Articles**

1. Knowles, J.F., Blanken, P.D., Lawrence, C.R., and Williams, M.W. (2019) Evidence for non-steady-state carbon emissions from snow-scoured alpine tundra. *Nature Communications*, **10** (1) (December 2019): 1306. (Published online March 21, 2019).
2. Magney, T.S., Bowling, D.R., Logan, B.A., Grossmann, K., Stutz, J., Blanken, P.D., Burns, S.P., Cheng, R., Garcia, M.A., Köhler, P., et. al. (2019) Mechanistic evidence for tracking the seasonality of photosynthesis with solar-induced fluorescence. *Proceedings of the National Academy of Sciences* (May 28, 2019): 201900278-201900278. (Published online May 28, 2019).
3. Peaucelle, M., Bacour, C., Ciais, P., Vuichard, N., Kuppel, S., Penuelas, J., Marchesini, L.B., Blanken, P.D., Buchmann, N., Chen, J., et. al. (2019) Covariations between plant functional traits emerge from constraining parameterization of a terrestrial biosphere model. *Global Ecology and Biogeography*. **28** (9) (June 30, 2019): 1351-1365.
4. Raczka, B., Porcar-Castell, A., Magney, T., Lee, E., Kohler, P., Frankenberg, C., Grossmann, K., Logan, B.A., Stutz, J., Blanken, P.D., et. al. Sustained Nonphotochemical Quenching Shapes the Seasonal Pattern of Solar-Induced Fluorescence at a High-Elevation Evergreen Forest. *Journal of Geophysical Research-Biogeosciences*, **124** (7) (July 01, 2019): 2005-2020.
5. Bowling, D. R., Logan, B. A., Hufkens, K., Aubrecht, D. M., Richardson, A. D., Burns, S. P., Anderegg, W.R., Blanken, P.D., and Eiriksson, D. P. (2018) Limitations to winter and spring photosynthesis of a Rocky Mountain subalpine forest. *Agricultural and Forest Meteorology*, **252**, 241-255.
6. Burns, S. P., Swenson, S. C., Wieder, W. R., Lawrence, D. M., Bonan, G. B., Knowles, J. F., & Blanken, P. D. (2018) A comparison of the diel cycle of modeled and measured latent heat flux during the warm season in a Colorado subalpine forest. *Journal of Advances in Modeling Earth Systems*, **10**(3), 617-651.
7. Friedrich, K., Grossman, R.L., Huntington, J., Blanken, P.D., Lenters, J.D., Holman, K.D., Gochis, D., Livneh, B., Prairie, J., Skeie, E., Healey, N.C., Dahm, K., Pearson, C., Finnessey, T., Hook, S.J., and Kowalski, T. (2018) Reservoir evaporation in the Western United States: Current science, challenges, and future needs. *Bulletin of the American Meteorological Society*, **99**, 168-187.
8. Gao, Z., Liu, H., Li, D., Katul, G. G., & Blanken, P. D. (2018) Enhanced temperature-humidity similarity caused by entrainment processes with increased wind shear. *Journal of Geophysical Research: Atmospheres*, **123**(8), 4110-4121.
9. Xin, Y-F., Chen, F., Zhao, P., Barlage, M., Blanken, P.D., Chen, Y-L., Chen, B., and Wang, Y-J. (2018) Surface energy balance closure at ten sites over the Tibetan plateau. *Agricultural and Forest Meteorology*, **259**, 317-328.
10. Zuromski, L.M., Bowling, D.R., Kohler, P., Frankenberg, C., Goulden, M.L., Blanken, P.D., and Lin, J.C. (2018) Solar-induced fluorescence detects inter-annual variation in gross primary

production of coniferous forests in the western United States. *Geophysical Research Letters*, doi: 10.1029/2018GL077906.

11. Moukomla, S., and Blanken, P.D. (2017) Estimating the Great Lakes net radiation using satellite remote sensing and MERRA reanalysis. *International Journal of Digital Earth*, **10(8)**, 764-784.
12. Moukomla, S., and Blanken, P.D. (2017) The estimation of the North American Great Lakes turbulent fluxes using satellite remote sensing and MERRA reanalysis data. *Remote Sensing*, **9(2)**:141.
13. Wieder, W.R., Knowles, J.F., Blanken, P.D., Swenson, S.C., and Suding, K.N. (2017) Ecosystem function in complex mountain terrain: combining models and long-term observations to advance process-based understanding. *Journal of Geophysical Research: Biogeosciences*, **122(4)**, 825-845.
14. Berkelhammer, M., Noone, D.C., Wong, T.E., Burns, S.P., Knowles, J.F., Kaushik, A., Blanken, P.D., and Williams, M.W. (2016) Convergent approaches to determine an ecosystem's transpiration fraction. *Global Biogeochemical Cycles*, **30 (6)**, 933-951.
15. Biederman, J.A., Scott, R.L., Goulden, M.L., Vargas, R., Litvak, M.E., Kolb, T.E., Yopez, E.A., Oechel, W.C., Blanken, P.D., and Bell, T.W. (2016) Terrestrial carbon balance in a drier world: the effects of water availability in southwestern North America. *Global Change Biology*, **22 (5)**, 1867-1879.
16. Novick, K.A., Ficklin, D.L., Stoy, P.C., Williams, C.A., Bohrer, G., Oishi, A.C., Papuga, S.A., Blanken, P.D., Noormets, A., Sulman, B.N., Scott, R.L., Wang, L., and Phillips, R.P. (2016) The increasing importance of atmospheric demand for ecosystem water and carbon fluxes. *Nature Climate Change*. **6 (11)**, 1023-1027.
17. Burns, S.P., Maclean, G.D., Blanken, P.D., Oncley, S.P., Semmer, S.R., and Monson, R.K. (2016) The Niwot Ridge Subalpine Forest US-NR1 AmeriFlux site – Part 1: Data acquisition and site record-keeping. *Geoscientific Instrumentation, Methods and Data Systems*, **5 (2)**, 451-471.
18. Knowles, J.F., Blanken, P.D., and Williams, M.W. (2016) Wet meadow ecosystems contribute the majority of overwinter soil respiration from snow-scoured alpine tundra. *Journal of Geophysical Research: Biogeosciences*, **121 (4)**, 1118-1130.
19. Lenters J., Blanken P.D., and Kerkez B. (2016) Predicting a Great Lake's response to a warm winter. *Eos*, **97** (November 11, 2016).
20. Livneh B., Friedrich K., and Blanken P.D. (2016) New interest in reservoir evaporation in Western United States. *Eos*, **97**, (March 23, 2016).
21. Metzger, S., Burba, G., Burns, S.P., Blanken, P.D., Li, J., Luo, H., and Zulueta, R.C. (2016) Optimization of an enclosed gas analyzer sampling system for measuring eddy covariance fluxes of H<sub>2</sub>O and CO<sub>2</sub>. *Atmospheric Measurement Techniques*, **9(3)**, 1341-1359.
22. Moukomla, S., and Blanken, P.D. (2016) Remote sensing of the North American Laurentian Great Lakes' surface temperature. *Remote Sensing*, **8(4)**, 286-286.
23. Novick, K.A., Ficklin, D.L., Stoy, P.C., Williams, C.A., Bohrer, G., Oishi, A.C., Papuga, S.A., Blanken, P.D., Noormets, A., Sulman, B.N., Scott, R.L., Wang, L., and Phillips, R.P. (2016) The increasing importance of atmospheric demand for ecosystem water and carbon fluxes. *Nature Climate Change*, **6**, 1023-1027.

24. Hinckley, E-LS., Anderson, S.P., Baron, J.S., Blanken, P.D., Bonan, G.B., Bowman, W.D., Elmendorf, S.C., Fierer, N., Fox, A.M., and Goodman, K.J. (2016) Optimizing available Network resources to address questions in environmental biogeochemistry. *Bioscience*, **66** (4), 317-326.
25. Yao, Y., Liang, S., Li, X., Liu, S., Chen, J., Zhang, X., Jia, K., Jiang, B., Xie, X., Munier, S., Lui, M., Yu, J., Lindroth, A., Varlagin, A., Raschi, A., Noormets, A., Pio, C., Wohlfahrt, G., Sun, G., Domec, J.C., Montagnani, L., Lund, M., Eddy, M., Blanken, P.D., Grunwald, T., Wolf, S., and Magliulo, V. (2016) Assessment and simulation of global terrestrial latent heat flux by synthesis of CMIP5 climate models and surface eddy covariance observations. *Agricultural and Forest Meteorology*, **223**, 151-167.
26. Zhou, Y., Wu, X., Ju, W., Chen, J.M., Wang, S., Wang, H., Yuan, W., Black, T.A, Jassal, R., Ibrom, A., Han, S.J., Yan, J.H., Margolis, H., Rouspard, O., Li, Y.N., Zhao, F.H., Kiely, G., Starr, G., Pavelka, M., Montagnani, L., Wohlfahrt, G., D'Odorico, P., Cook, D., Arain, M.A., Bonal, D., Beringer, J., Blanken, P.D., Loubet, B., Leclerc, M.Y., Matteucci, G., Nagy, Z., Olejnik, J., U, K.T.P., and Varlain, A. (2016) Global parameterization and validation of a two-leaf light use efficiency model for predicting gross primary production across FLUXNET sites. *Journal of Geophysical Research: Biogeosciences*. **121**(4), 1045-1072.
27. Zscheischler, J., Faticchi, S., Wolf, S., Blanken, P.D., Bohrer, G., Clark, K., Desai, A.R., Hollinger, D., Keenan, T., and Novick, K.A. (2016) Short-term favorable weather conditions are an important control of interannual variability in carbon and water fluxes. *Journal of Geophysical Research: Biogeosciences*, **121** (8), 2186-2198.
28. Burns, S.P., Blanken, P.D., Turnipseed, A.A., Hu, J., and Monson, R.K. (2015) The influence of warm-season precipitation on the diel cycle of the surface energy balance and carbon dioxide at a Colorado subalpine forest site. *Biogeosciences*, **12**, 7349-7377, doi:10.5194/bg-12-7349-2015.
29. Gronewold, A.D., Anderson, E.J., Lofgren, B., Blanken, P.D., Wang, J., Smith, J., Hunter, T., Lang, G., Stow, C.A., Beletsky, D., and Bratton, J. (2015) Impacts of extreme 2013-2014 winter conditions on Lake Michigan's fall heat content, surface temperature, and evaporation. *Geophysical Research Letters*, **42**(9), 3364-3370, doi: 10.1002/2015GL063799.
30. Knowles, J.F., Blanken, P.D., and Williams, M.W. (2015) Soil respiration variability across a soil moisture and vegetation community gradient within a snow-scoured alpine meadow. *Biogeochemistry*, **125**(2), 185-202, doi: 10.1007/s10533-015-0122-3.
31. Knowles, J.F., Harpold, A.A., Cowie, R., Zeliff, M., Barnard, H.R., Burns, S.P., Blanken, P.D., Morse, J.F., and Williams, M.W. (2015) The relative contributions of alpine and subalpine ecosystems to the water balance of a mountainous, headwater catchment. *Hydrological Processes*, **29**, 4794-4808, doi: 10.1002/hyp.10526.
32. Shao, J., Zhou, X., Luo, Y., Li, B., Aurela, M., Billesbach, D., Blanken, P.D., Bracho, R., Chen, J., Fisher, M., Fu, Y., Gu, L., Han, S., He, Y., Kolb, T., Li, Y., Nagy, Z., Niu, S., Oechel, W., Pinter, K., Shi, P., Suyker, A., Torn, M., Varlagin, A., Wang, H., Yan, J., Yu, G., and Zhang, J. (2015) Biotic and climate controls on interannual variability in carbon fluxes across terrestrial ecosystems. *Agricultural and Forest Meteorology*, **205**(1), 11-22, doi: 10.1016/j.agformet.2015.02.007.
33. van Dijk, A.I.J.M., Gash, J.H., van Gorsel, E., Blanken, P.D., Cescatti, A., Emmel, C., Gielen, B., Harman, I., Kiely, G., Merbold, L., Montagnani, L., Moors, E., Roland, M., Sottocornola, M., Varlagin, A., Williams, C.A., and Wohlfahrt, G. (2015) Rainfall interception and the coupled



surface water and energy balance. *Agricultural and Forest Meteorology*, **214-215**, 402-445, doi: 10.1016/j.agrformet.2015.09.006.

34. Wu, X., Ju, W., Zhou, Y., He, M., Law, B.E., Black, T.A., Margolis, H.A., Cescatti, A., Gu, L., Montagnani, L., Norrmets, A., Griffis, T.J., Pilegaard, K., Varlagin, A., Valentini, R., Blanken, P.D., Wang, S., Wang, H., Nan, S., Yan, J., Li, J., Zhou, B., and Liu, Y. (2015) Performance of linear and nonlinear two-leaf light use efficiency models at different temporal scales. *Remote Sensing*, **7**, 2238-2278, doi: 10.3390/rs70302238.
35. Xia, J., Nie, S., Ciais, P., Janssens, I.A., Chen, J., Ammann, C., Arain, A., Blanken, P.D., Cescatti, A., Bonal, D., Buchmann, N., Curtis, P.S., Chen, S., Dong, J., Flanagan, L.B., Frankenberg, C., Georgiadis, T., Gough, C.M., Hui, D., Kiely, G., Li, J., Lund, M., Magliulo, V., Marcolla, B., Merbold, L., Montagnani, L., Moors, E.J., Olesen, J.E., Piao, S., Raschi, A., Rouspard, O., Suyker, A.E., Urbaniak, M., Vaccari, F.P., Varlagin, A., Vesala, T., Wlkinson, M., Wend, E., Wohlfahrt, G., Yan, L., and Luo, Y. (2015) Joint control of terrestrial gross primary productivity by plant phenology and physiology. *Proceedings of the National Academy of Sciences of the United States of America*, **112(9)**, doi: 10.1073/pnas.1413090112.
36. Blanken, P.D. (2014) The effect of winter drought on evaporation from a high-elevation wetland, *Journal of Geophysical Research: Biogeosciences*, **119(7)**, 1354-1369, doi:10.1002/2014JG002648.
37. Burns, S.P., Molotch, N.P., Williams, M.W., Knowles, J.F., Seok, B., Monson, R.K., Turnipseed, A.A., and Blanken, P.D. (2014) Snow temperature changes within a seasonal snowpack and their relationship to turbulent fluxes of sensible and latent heat. *Journal of Hydrometeorology*, **15**, 117-142, doi:10.1175/JHM-D-13-026.1.
38. Guillod, B. P., Orlowsky, B., Miralles, D., Teuling, A. J., Blanken, P. D., Buchmann, N., Ciais, P., Ek, M., Findell, K. L., Gentine, P., Lintner, B. R., Scott, R. L., Van den Hurk, B., and I. Seneviratne, S. (2014) Land-surface controls on afternoon precipitation diagnosed from observational data: uncertainties and confounding factors. *Atmospheric Chemistry and Physics Discussions*, **14**, 8343-8367, doi:10.5194/acp-14-8343-2014.
39. Knowles, J. F., Burns, S. P., Blanken, P. D., and Monson, R. K. (2014). Fluxes of energy, water, and carbon dioxide from mountain ecosystems at Niwot Ridge, Colorado. *Plant Ecology & Diversity*, **1-14**, doi: 10.1080/17550874.2014.904950.
40. Mahmood, R., Pielke Sr., R.A., Hubbard, K.G., Niyogi, D., Dirmeyer, P., McAlpine, C., Carleton, A., Hale, R., Gameda, S., Beltran-Przekurat, A., Baker, B., McNider, R., Legates, D.R., Shepherd, M., Du, J., Blanken, P.D., Frauenfeld, O.N., Nair, U.S., and Fall, S. (2014) Land cover changes and their biogeophysical effects on climate. *International Journal of Climatology*, **34(4)**, 929-953, doi: 10.1002/joc.3736.
41. Xiao, J., Ollinger, S. V., Frohking, S., Hurtt, G. C., Hollinger, D. Y., Davis, K. J., Pan, Y., Zhang, X., Deng, F., Chen, J., Baldocchi, D.D., Law, B.E., Arain, M.A., Desai, A.R., Richardson, A.D., Sun, G., Amiro, B., Margolis, H., Gu, L., Scott, R.L., Blanken, P.D., and Suyker, A. E. (2014) Data-driven diagnostics of terrestrial carbon dynamics over North America. *Agricultural and Forest Meteorology*, **197**, 142-157. doi: 10.1016/j.agrformet.2014.06.013.
42. Yuan W.P., Cai W.W., Liu, S., Dong, Q., Chen, J. Arain, M.A., Blanken, P.D., Cescatti, A., Wohlfahrt, G., Georgiadis, T., Genesio, L., Gianelle, D., Grelle, A., Kiely, G., Knohl, A., Liu, D., Marak, M., Merbold, L., Montagnani, L., Panfernov, M., Ramba, S., Raschi, A., Varlagin, A.,

- and Xia, J. (2014) Vegetation-specific model parameters are not required for estimating gross primary production. *Ecological Modelling*, **292** (24), 1-10. doi:10.1016/j.ecolmodel.2014.08.017.
43. Yuan, W.P., Cai, W.W., Xia, J.Z., Chen, J.Q., Liu, S.G., Dong, W.J., Merbold, L., Law, B., Arain, A., Beringer, J., Bernhofer, C., Black, A., Blanken, P.D., Cescatti, A., Chen, Y., Francois, L., Gianelle, D., Janssens, I.A., Jung, M., Kato, T., Kiely, G., Liu, D., Marcolla, B., Montagnani, L., Raschi, A., Rouspard, O., Varlagin, A., and Wohlfahrt, G. (2014) Global comparison of light use efficiency models for simulating terrestrial vegetation gross primary production based on the La Thuile database. *Agricultural and Forest Meteorology*, **192**, 108-120, doi: 10.1016/j.agrformet.2014.03.007.
44. Wu, C., Chen, J.M., Black, T.A., Price, D.T., Kurz, W.A., Desai, A.R., Gonsamo, A., Gough, C.M., Bohrer, G., Dragoni, D., Herbst, M., Gielen, B., Berninger, F., Vesala, T., Mammarella, I., Pilegaard, K., and Blanken, P.D. (2013) Interannual variability of net ecosystem productivity in forests is explained by carbon flux phenology in autumn. *Global Ecology and Biogeography*, **22**(8), 994-1006. doi: 10.1111/geb.12044.
45. Spence, C., Blanken, P.D., Lenters, J.D., and Hedstrom, N. (2013) The importance of spring and autumn atmospheric conditions for the evaporation regime of Lake Superior. *Journal of Hydrometeorology*, **14**(5), 1647-1658.
46. Alfieri, J.G., and Blanken, P.D. (2012) How representative is a point? The spatial variability of surface energy fluxes across short distances in a sand-sagebrush ecosystem. *Journal of Arid Environments*, **87**(2012), 42-49, doi:10.1016/j.jaridenv.2012.04.010.
47. Burns, S.P., Horst, T.W., Jacobsen, L., Blanken, P.D., and Monson, R.K. (2012) Using sonic anemometer temperature to measure sensible heat flux in strong winds. *Atmospheric Measurement Techniques Discussions*, **5**(9), 2095-2111, doi:10.519/amt-5-2095-2012.
48. Deacu, D., Fortin, V., Klyszejko, E., Spence, C., and Blanken, P.D. (2012) Predicting the net basin supply to the Great Lakes with a hydrometeorological model. *Journal of Hydrometeorology*, doi:10.1175/JHM-D-11-0151.1
49. Knowles, J.F., Blanken, P.D., Williams, M.W., and Chowanski, K.M. (2012) Energy and surface moisture seasonally limit evaporation and sublimation from snow-free alpine tundra. *Agricultural and Forest Meteorology*, **157**, 106-115, doi:10.1016/j.agrformet.2012.01.017.
50. Chaoyang, W., Chen, J.M., Pumpanen, J., Cescatti, A., Marcolla, B., Blanken, P.D., Ardo, J., Tang, Y.H., Magliulo, V., Georgiadis, T., Soegaard, H., Cook, D.R., and Harding, R.J. (2012) An underestimated role of precipitation frequency in regulating summer soil moisture. *Environmental Research Letters*, **7**(2), doi:10.1088/1748-9326/7/2/024011.
51. Wu, C.Y., Chen, J.M., Black, T.A., Gonsamo, A., Jassal, R.A., Desai, A.R., Gough, C.M., Dragoni, D., Bohrer, G., Herbst, M., Gielen, B., Beringer, F., Kurz, W.A., Price, D.T., Pilegaard, K., and Blanken, P.D. (2012) Interannual variability of net ecosystem productivity in forests is explained by carbon flux phenology in autumn. *Global Ecology and Biogeography*, **22**(8), 994-1006.
52. Liu, H., Blanken, P.D., Weidinger, T., Nordbo, A., and Vesala, T. (2011) Variability in cold front activities modulating cool-season evaporation from a southern inland water in the USA. *Environmental Research Letters*, **6**(2), doi:10.1088/1748-9326/6/2/024022.

53. Blanken, P.D., Spence, C., Hedstrom, N., and Lenters, J. (2011) Evaporation from Lake Superior 1. Physical controls and processes. *Journal of Great Lakes Research*, **37(4)**, 707-716.
54. Spence, C., Blanken, P.D., Hedstrom, N., Fortin, V., and Wilson, H. (2011) Evaporation from Lake Superior 2: Spatial distribution and variability. *Journal of Great Lakes Research*, **37(4)**, 717-724.
55. Mahmood, R., Pielke, R.A., Hubbard, K.G., Niyogi, D., Bonan, G., Lawrence, P., McNider, R., McAlpine, C., Etter, A., Gameda, S., Qian, B.D., Carleton, A., Beltran-Przekurat, A., Chase T., Quintanar, A.I., Adegoke, J.O., Vezhapparambu, S., Conner, G., Asefi, S., Sertel, E., Legates, D.R., Wu, Y.L., Hale, R., Frauenfeld, O.W., Watts, A., Shepherd, M., Mitra, C., Anantharaj, V.G., Fall, S., Lund, R., Trevino, A., Blanken, P.D., Du, J.Y., Chang, H.I., Leeper, R.E., Nair, U.S., Dobler, S., Deo, R., and Syktus, J. (2010) Impacts of land use/land cover change on climate and future research priorities. *Bulletin of the American Meteorological Society*, **91(1)**, 37-46.
56. Petchprayoon, P., Blanken, P.D., Ekkawatpanit, C., and Hussein, K. (2010) Hydrological impacts of land use/land cover change in a large river basin in central-northern Thailand. *International Journal of Climatology*, **30(13)**, 1917-1930, doi:10.1002/joc.2131.
57. Alfieri, J.G., Blanken, P.D., Smith, D. and Morgan, J.A. (2009) Concerning the measurement and magnitude of heat, water vapor and carbon dioxide exchange from a semiarid grassland. *Journal of Applied Meteorology and Climatology*, **48(5)**, 982-996.
58. Blanken, P.D. (2009) Design of a living snow fence for snowdrift control. *Arctic, Antarctic, and Alpine Research*, **41(4)**, 418-425.
59. Blanken, P.D., Williams, M.W., Burns, S.P., Monson, R.K., Knowles, J., Chowanski, K, and Ackerman, T. (2009) A comparison of water and carbon dioxide exchange at a windy alpine tundra and subalpine forest site near Niwot Ridge, Colorado. *Biogeochemistry*, **95(1)**, 61-76.
60. Pielke R.A., Davey C.A., Niyogi D., Fall S., Steinweg-Woods, J., Hubbard, K., Lin, X., Cai, M., Lim, Y.K., Li, H., Nielsen-Gammon, J., Gallo, K., Hale, R., Mahmood, R., Foster, S., McNider, R.T., and Blanken P.D. (2009) Reply to comment by David E. Parker et al on "Unresolved issues with the assessment of multidecadal global land surface temperature trends". *Journal of Geophysical Research-Atmospheres*, **114**, D05105.
61. Williams, M.W., Helmig, D. and Blanken, P. (2009) White on Green: Under-snow microbial processes and trace gas fluxes through snow, Niwot Ridge, Colorado Front Range. *Biogeochemistry*, **95(1)**, 1-12.
62. Alfieri, J.G., Niyogi, D., Blanken, P.D., Chen, F., LeMone, M.A., Mitchell, K.E., Ek, M.B., and Kumar, A. (2008) Estimation of the minimum canopy resistance for croplands and grasslands using data from the 2002 International H2O Project. *Monthly Weather Review*, **136(11)**, 4452-4469.
63. Rouse, W.R., Blanken, P.D., Bussi eres, Oswald, C.J., Schertzer, W.M., Spence, C, and Walker, A.E. (2008) An investigation of the thermal and energy balance regimes of Great Slave and Great Bear Lakes. *Journal of Hydrometeorology*, **9(6)**, 1318-1333.
64. Alfieri, J.G., Blanken, P.D., Yates, D.N., and Steffen, K. (2007) Variability in the environmental factors driving evapotranspiration from a grazed rangeland during severe drought conditions. *Journal of Hydrometeorology*, **8(2)**, 207-220.

65. Chen, F., Manning, K.W., LeMone, Trier, S.B., Alfieri, J.G., Roberts, R., Wilson, J., Tewari, M., Niyogi, D., Horst, T.W., Oncley, S.P., Basara, J.B., and Blanken, P.D. (2007) Description and evaluation of the characteristics of the NCAR high-resolution land data assimilation system, *Journal of Applied Meteorology and Climatology*, **46(6)**, 694-713.
66. Cullen, J., Steffen, K., and Blanken, P.D. (2007) Nonstationarity of turbulent heat fluxes at Summit, Greenland. *Boundary-layer Meteorology*, **122(2)**, 439-455.
67. Misson, L., Baldocchi, D.D., Black, T.A., Blanken, P.D., Brunet, Y., Curiel Yuste, J., Dorsey, J.R., Falk, M., Granier, A., Irvine, M.R., Jarosz, N., Lamaud, E., Launiainen, S., Law, B.E., Longdoz, B., Loustau, D., McKay, M., Paw U, K.T., Vesala, T., Vickers, D., Wilson, K.B., and Goldstein, A.H. (2007) Partitioning forest carbon fluxes with overstory and understory eddy-covariance measurements: A synthesis based on FLUXNET data. *Agricultural and Forest Meteorology*, **144(1-2)**, 14-31.
68. Molotoch, N.P., Blanken, P.D., Williams, M.W., Turnipseed, A.A., Monson, R.K., and Margulis, S.A. (2007) Estimating sublimation of intercepted and sub-canopy snow using eddy covariance systems. *Hydrological Processes*, **21(12)**, 1567-1575.
69. LeMone, M.A., Chen, F., Alfieri, J.G., Cuenca, R.H., Hagimoto, Y., Blanken, P.D., Niyogi, D., Kang, S., Davis, K., and Grossman, R.L. (2007). NCAR/CU surface, soil, and vegetation observations during the International H2O Project 2002 field campaign. *Bulletin of the American Meteorological Society*, **88(1)**, 65-81.
70. Pielke R.A., Davey C.A., Niyogi D., Fall S., Steinweg-Woods, J., Hubbard, K., Lin, X., Cai, M., Lim, Y.K., Li, H., Nielsen-Gammon, J., Gallo, K., Hale, R., Mahmood, R., Foster, S., McNider, R.T., and Blanken P.D. (2007) Unresolved issues with the assessment of multidecadal global land surface temperature trends. *Journal of Geophysical Research-Atmospheres*, **112(D24)**, D24S08.
71. Rouse, W.R., Oswald, C.L., Binyamin, J., Spence, C., Blanken, P.D., Bussieres, N., Dugay, C.R. and Schertzer, W.M. (2005) Role of northern lakes in landscape energy balance. *Journal of Hydrometeorology*, **6(3)**, 291-305.
72. Blanken, P.D., and Black, T.A. (2004) Canopy conductance from a boreal aspen forest. *Hydrological Processes*, **18(9)**, 1561-1578.
73. Turnipseed, A.A., Anderson, D.E., Burns, S., Blanken, P.D., and Monson, R.K. (2004) Airflows and turbulent flux measurements in mountainous terrain. Part 2. Mesoscale effects. *Agricultural and Forest Meteorology*, **125(3-4)**, 187-205.
74. Blanken, P.D., Rouse, W.R., and Schertzer, W.M. (2003) Enhancement of evaporation from a large northern lake by the entrainment of warm, dry air. *Journal of Hydrometeorology*, **4(4)**, 680-693.
75. Rouse, W.R., Oswald, C.M., Binyamin, J., Blanken, P.D., Schertzer, W.M. and Spence, C., (2003) Interannual and seasonal variability of the surface energy balance and temperature of central Great Slave Lake. *Journal of Hydrometeorology*, **4(4)**, 720-730.
76. Schertzer, W. M., Rouse, W.R., Blanken, P.D., and Walker, A.E. (2003) Over-lake meteorology and estimated bulk heat exchange of Great Slave Lake in 1998 and 1999. *Journal of Hydrometeorology*, **4(4)**, 649-659.

77. Turnipseed, A.A., Anderson, D.E., Blanken, P.D., Baugh, W.M., and Monson, R.K. (2003) Airflows and turbulent flux measurements in mountainous terrain. Part 1. Canopy and local effects. *Agricultural and Forest Meteorology*, **119(1-2)**, 1-21.
78. Turnipseed, A.A., Blanken, P.D., Anderson, D.E., and Monson, R.K. (2002) Energy budget above a high-elevation subalpine forest in complex topography. *Agricultural and Forest Meteorology*, **110(3)**, 177-201.
79. Blanken, P.D., Black, T.A., Yang, P.C., Neumann, H.H., Nesic, Z., Staebler, R. and den Hartog, G. (2001) The seasonal energy and water exchange above and within a boreal aspen forest. *Journal of Hydrology*, **245(1-4)**, 118-136.
80. Blanken, P.D., Dillon, J., and Wismann, G. (2001) The impact of an air quality advisory program on voluntary mobile source air pollution reduction. *Atmospheric Environment*, **35(13)**, 2417-2421.
81. Eaton, A.K., Rouse, W.R., Lafleur, P.M., Marsh, P. and Blanken, P.D. (2001) Surface energy balance of the western and central Canadian subarctic: Variations in the energy balance among five major terrain types. *Journal of Climate*, **14(17)**, 3692-3703.
82. Bellisario, L.M., Boudreau, L.D., Verseghy, D.L., Rouse, W.R. and Blanken, P.D. (2000) Comparing the performance of the Canadian Land Surface Scheme (CLASS) for two subarctic terrain types. *Atmosphere-Ocean*, **38(1)**, 181-204.
83. Blanken, P.D., Rouse, W.R., Culf, A.D., Spence C., Boudreau, L.D., Jasper, J.N., Kochtubajda B., Schertzer, W.M., Marsh, P., and Verseghy, D. (2000) Eddy covariance measurements of evaporation from Great Slave Lake, Northwest Territories, Canada. *Water Resources Research*, **36(4)**, 1069-1077.
84. Schertzer, W.M., Rouse, W.R. and Blanken, P.D. (2000) Cross-lake variation of physical limnological and climatological processes of Great Slave Lake. *Physical Geography*, **21(5)**, 385-406.
85. Wu, A., Black, T.A., Verseghy, D.L., Blanken, P.D., Novak, M.D., Chen, W. and Yang, P.C. (2000) A comparison of parameterization of canopy conductance of Aspen and Douglas-fir forests for CLASS. *Atmosphere-Ocean*, **38(1)**, 81-112.
86. Chen, W.J., Black, T.A., Yang, P.C., Barr, A.G., Neumann, H.H., Nesic, Z., Blanken, P.D., Novak, M.D., Eley, J., Ketler, R.J and Cuenca, R. (1999) Effects of climatic variability on the annual carbon sequestration by a boreal aspen forest. *Global Change Biology*, **5(1)**, 41-53.
87. Grant, R.F., Black, T.A., den Hartog, G., Berry, J.A., Neumann, H.H., Blanken, P.D., Yang, P.C., Russell, C. and Nalder, I.A. (1999) Diurnal and annual exchanges of mass and energy between an aspen-hazelnut forest and the atmosphere: Testing the mathematical model Ecosys with data from the BOREAS experiment. *Journal of Geophysical Research*, **104(D22)**, 27699-27717.
88. Yang, P.C., Black, T.A., Neumann, H.H., Novak, M.D. and Blanken, P.D. (1999) Spatial and temporal variability of CO<sub>2</sub> concentration and flux in a boreal aspen forest. *Journal of Geophysical Research*, **104(D22)**, 27653-27661.
89. Blanken, P.D., Black, T.A., Neumann, H.H., den Hartog, G. Yang, P.C., Nesic, Z., Staebler, R., Chen, W. and Novak, M.D. (1998) Turbulent flux measurements above and below the overstory of a boreal aspen forest. *Boundary-Layer Meteorology*, **89(1)**, 109-140.

90. Russell, C.A., Voroney, R.P., Black, T.A., Blanken, P.D. and Yang, P.C. (1998) Carbon dioxide efflux from the floor of a boreal aspen forest. II. Evaluation of methods – verification by infra-red analysis of a dynamic closed chamber. *Canadian Journal of Soil Science*, **78(2)**, 311-316.
91. Schreader, C.P., Rouse, W.R., Griffis, T.J., Boudreau, L.D. and Blanken, P.D. (1998) Carbon dioxide fluxes in a northern fen during a hot-dry summer, *Global Biochemical Cycles*, **12(4)**, 729-740.
92. Blanken, P.D. Black, T.A., Yang, P.C., den Hartog, G., Neumann, H.H., Nestic, Z., Staebler, R., Novak, M.D. and Lee, X. (1997) Energy balance and canopy conductance of a boreal aspen forest: Partitioning overstory and understory components. *Journal of Geophysical Research*, **102(D24)**, 28915-28927.
93. Chen, J.M., Blanken, P.D., Black, T.A., Guilbeault, M. and Chen, S. (1997) Radiation regime and canopy architecture in a boreal aspen forest. *Agricultural and Forest Meteorology*, **86(1-2)**, 107-125.
94. Hogg, E.H., Black, T.A., den Hartog, G., Neumann, H.H., Zimmermann, R., Hurdle, P., Blanken, P.D., Nestic, Z., Yang, P.C., Staebler, R., McDonald, K.C. and Oren, R. (1997) A comparison of sap flow and eddy fluxes of water vapour from a boreal deciduous forest. *Journal of Geophysical Research*, **102(D24)**, 28929-28937.
95. Lee, X., Neumann, H.H., den Hartog, G., Fuentes, J.D., Black, T.A., Mickle, R.E., Yang, P.C. and Blanken, P.D. (1997) Observation of gravity waves in a boreal forest. *Boundary-Layer Meteorology*, **84(3)**, 383-398.
96. Black, T.A., den Hartog, G., Neumann, H.H., Blanken, P.D., Yang, P.C., Russell, C., Nestic, Z., Staebler, R., Lee, X., Chen, S.C., Staebler, R. and Novak, M.D. (1996) Annual cycles of water vapour and carbon dioxide fluxes in and above a boreal aspen forest. *Global Change Biology*, **2(3)**, 219-229.
97. Blanken, P.D. and Rouse, W.R. (1996) Evidence of water conservation mechanisms in several subarctic wetland species, *Journal of Applied Ecology*, **33(4)**, 842-850.
98. Blanken, P.D. and Rouse, W.R. (1995) Modelling evaporation from a high subarctic willow-birch forest. *International Journal of Climatology*, **15(1)**, 97-106.
99. Blanken, P.D. and Rouse, W.R. (1994) The role of willow-birch forest in the surface energy balance at arctic treeline. *Arctic and Alpine Research*, **26(4)**, 403-411.
100. Blanken, P.D. and Rouse, W.R. (1992) Environmental controls on the stomatal conductance of *Salix planifolia* Pursh, a subarctic willow. *Musk-Ox*, **39**, 133-140.

### **Books**

1. Barry, R.G., and Blanken, P.D. (2016) *Microclimate and Local Climate*. Cambridge University Press. 379 pp., ISBN: 9781316535981.
2. Planisek, S. L., and Blanken, P.D. (2015) *Straits of Mackinac Weather*. Sandy Planisek Publishing. 112 pp., ISBN: 9780979513336.

### **Refereed Book Chapters**

1. Blanken, P.D. (2015) Canopy Processes. In: Gerald R. North (editor-in-chief), John Pyle and Fuqing Zhang (editors). *Encyclopedia of Atmospheric Sciences*, 2<sup>nd</sup> edition, Vol 3, pp. 244–255. ISBN: 9780123822253, Academic Press.
2. Molotch, N.P., Blanken, P.D., and Link, T.E. (2011) Snow: Hydrological and Ecological Feedbacks in Forests. In *Forest Hydrology and Biogeochemistry, Synthesis of Past Research and Future Directions Series: Ecological Studies*, D. F. Levia, D. Carlyle-Moses, and T. Tanaka (eds.), Springer, New York, Vol. 216, pp. 541-555.
3. Blanken, P.D., Rouse, W.R., and Schertzer, W.M. (2008) The Time Scales of Evaporation from Great Slave Lake. In *Atmospheric Dynamics of a Cold Region: The Mackenzie GEWEX Study Experience Volume II*, M.-K Woo (ed.). Springer, New York, pp. 181-196.
4. Rouse, W.R., Blanken, P.D., Duguay, C.R., Oswald, C.J., and Schertzer, W.M. (2008) Climate-Lake Interactions. In *Atmospheric Dynamics of a Cold Region: The Mackenzie GEWEX Study Experience Volume II*, M.-K Woo (ed.). Springer, New York, pp. 139-160.
5. Rouse, W.R., Oswald, C.J., Binyamin, N., Spence, C., Schertzer, W.M., Blanken, P.D., N. Bussi eres, N., and Duguay, C.R. (2008) The Influence of Lakes on the Regional Energy and Water Balance of the Central Mackenzie River Basin. In *Atmospheric Dynamics of a Cold Region: the Mackenzie GEWEX Study Experience Volume I*, M.-K Woo (ed.). Springer, New York, pp. 309-326.
6. Schertzer, W.M., Rouse, W.R., Blanken, P.D., Walker, A.E., Lam, D.C.L., and Leon, L. (2008) Interannual Variability of the Thermal Components and Bulk Heat Exchange of Great Slave Lake. In *Atmospheric Dynamics of a Cold Region: The Mackenzie GEWEX Study Experience Volume II*, M.-K Woo (ed.). Springer, New York, 197-220.
7. Blanken, P.D. (2002) Land/Atmosphere Interactions: Canopy Processes. In *Encyclopedia of Atmospheric Sciences*, J.R. Holton, J. Pyle, and J.A. Curry (eds.), pp. 1121-1130, Academic Press.

#### **Papers Published in Non-referred Conference Proceedings**

1. Burns, S. P., Metzger, S., Blanken, P. D., Burba, G., Swiatek, E., Li, J., Conrad, B. Luo, H., and Taylor, J. (2014) A comparison of infrared gas analyzers above a subalpine forest in complex terrain. America Meteorological Society 17<sup>th</sup> Symposium on Meteorological Observations and Instrumentation, Westminster, Colorado, 8-13 June, 2014.
2. Wang, J., Miura, T., Kato, A., Blanken, P.D., Brunzell, N., and Torn, M.S. (2014) Radiometric validation of satellite vegetation indices using flux tower measurements. Geoscience and Remote Sensing Symposium (IGARSS), Quebec City, QC, 13-18 July 2014, pp. 2383-2386, doi: 10.1109/IGARSS.2014.6946951.
3. Alfieri, J.G., Blanken, P.D. (2012) How representative is a point? The spatial variation of surface flux measurements across short distances. C.M.U. Neale and M.H. Cosh (eds.), Proceedings of the 2010 Remote Sensing and Hydrology Symposium, IAHS Publ. No. 352: 210-214. (Peer-reviewed Proceedings).
4. Wolfe D.E., Blanken P.D., Fairall, C.W., and Stanitski, D.M. (2010) NOAA: Teachers in the Lab. 90<sup>th</sup> American Meteorological Society Annual Meeting, 19<sup>th</sup> Symposium on Education, Atlanta, Georgia, January 16-21, 2010.

5. Molotch, N.P., Blanken, P.D., Williams, M.W., Turnipseed, A.A., Monson, R.K., and Margulis, S.A. (2006) Estimating sublimation of intercepted and sub-canopy snow using eddy covariance systems. Proceedings of the 63<sup>rd</sup> Eastern Snow Conference, Newark, Delaware, USA.
6. Rouse, W.R., Blanken, P.D., Duguay, C.R., Oswald, C.J., and Schertzer, W.M. (2006) Climate-Lake Interactions In: P. di Cenzo (ed.) Final Report of the Mackenzie GEWEX Study (MAGS): Proceedings of the Final (11<sup>th</sup>) Annual Scientific Meeting. November 22-25, 2005, Ottawa, Ontario, Canada. pp. 132-153.
7. Blanken, P.D., Rouse, W.R., and Schertzer, W.M. (2006) The time scales of evaporation from Great Slave Lake. In: P. di Cenzo (ed.) Final Report of the Mackenzie GEWEX Study (MAGS): Proceedings of the Final (11<sup>th</sup>) Annual Scientific Meeting. November 22-25, 2005, Ottawa, Ontario, Canada. pp. 132-153.
8. Rouse, W.R., Oswald, C.J., Binyamin, J., Spence, C., Schertzer, W.M., Blanken, P.D., Bussi eres, N., and Duguay, C.R. (2006). The influence of lakes on the regional energy and water balance of the central Mackenzie River Basin. In: P. di Cenzo (ed.) Final Report of the Mackenzie GEWEX Study (MAGS): Proceedings of the Final (11<sup>th</sup>) Annual Scientific Meeting. November 22-25, 2005, Ottawa, Ontario, Canada. pp. 585-602.
9. Schertzer, W.M., Rouse, W.R., Blanken, P.D., Walker, A.E., Bussi eres, N., Lam, D.C.L., Le on, L., McCrimmon R.C., and Rowsell R.D. (2006) Interannual Variability in Heat and Mass Exchange and Thermal Components of Great Slave Lake. In: P. di Cenzo (ed.) Final Report of the Mackenzie GEWEX Study (MAGS): Proceedings of the Final (11<sup>th</sup>) Annual Scientific Meeting. November 22-25, 2005, Ottawa, Ontario, Canada. pp. 603-633.
10. Schertzer, W.M., Rouse, W.R., Lam, D.C.L., Swayne, D., Leon, L., McCrimmon, R.C., Binyamin, J., Sharnma, V., and Blanken, P.D. (2005) Modelling temperature and hydrodynamics of Lakes: Towards parameterization of lakes in CRCM-CLASS. In P. di Cenzo (ed.) Proceedings of the 10th Annual Scientific Meeting of the Mackenzie GEWEX Study (MAGS), November 3-5, 2004, Vancouver, British Columbia, Canada, pp. 211-226.
11. Schertzer, W.M., Rouse, W.R., Blanken, P.D., Lam, D.C.L., and McCrimmon, R.C. (2004) Interannual variability and modelling of Great Slave Lake. In P. di Cenzo (ed.) Proceedings of the 9<sup>th</sup> Annual Scientific Meeting of the Mackenzie GEWEX Study (MAGS), November 12-14, 2003, Montr al, Qu ebec, Canada, pp. 153-162.
12. Schertzer, W.M., Rouse, W.R., Blanken, P.D., Lam, D.C.L., and McCrimmon, R.C. (2003) Interannual variability and preliminary thermal modeling of Great Slave Lake. In G.S. Strong (ed.) Proceedings of the 8th Annual Scientific Meeting of the Mackenzie GEWEX Study (MAGS), November 6-8, 2002, Jasper, Alberta, Canada, pp. 106-115.
13. Rouse, W.R., Oswald, C., Spence, C., Schertzer, W.M., and Blanken, P.D. (2002) Cold region lake and landscape evaporation. In P. diCenzo and L.W. Martz (eds.) Proceedings of the 2nd GEWEX Asian Monsoon Experiment (GAME)-Mackenzie GEWEX Study Joint International Workshop, pp. 37-42, Sapporo, Japan, October 8-9, 2001.
14. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (2002) Preliminary assessment of inter-annual variability in heat and mass exchange components of Great Slave Lake. In Proceedings of the 7th Annual Scientific Meeting of the Mackenzie GEWEX Study (MAGS), pp. 76-88, Hamilton, Ontario, Canada, November 7-9, 2001.



15. Schertzer, W.M., Rouse, W.R., Walker, A.E., Bussieres, N., Leighton, H.G., and Blanken, P.D. (2002) Heat exchange, evaporation, and thermal response of high latitude lakes. In P. diCenzo and L.W. Martz (eds.) Proceedings of the 2nd GEWEX Asian Monsoon Experiment (GAME)-Mackenzie GEWEX Study Joint International Workshop, pp. 43-51, Sapporo, Japan, October 8-9, 2001.
16. Rouse, W.R., Blanken, P.D., Eaton, A.K., Petrone, R.M., Schertzer, W. M., and Spence, C. (2001) Energy and water balance of high latitude surfaces. In G.S. Strong (ed.) The Mackenzie GEWEX Study (MAGS) Phase 1 - Final Reports and Proceedings of the 6th Scientific Workshop, pp. 81-98, Saskatoon, Saskatchewan, Canada. November 15-17, 2000.
17. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (2001) Climatological and limnological responses of Great Slave Lake. In G.S. Strong (ed.) The Mackenzie GEWEX Study (MAGS) Phase 1 - Final Reports and Proceedings of the 6th Scientific Workshop, pp. 99-119, Saskatoon, Saskatoon, Canada. November 15-17, 2000.
18. Rouse, W.R., Blanken, P.D., Eaton, A.K., and Spence, C. (2000) Energy and water balance of high latitudes. In G.S. Strong (ed.) Proceedings of the 5th Scientific Workshop for the Mackenzie GEWEX Study (MAGS), pp. 80-86, Edmonton, Alberta, Canada. November 21-23, 1999.
19. Rouse, W.R., Blanken, P.D., Schertzer, W.M., and Spence, C. (2000) The role of lakes in the surface climates of cold regions. In M. Nakawo, I. Nagao, and K. Suzuki (eds.) Proceedings of the GAME-MAGS International Workshop, Institute for Hydrospheric-Atmospheric Sciences, Research Report 7, Nagoya, Japan, pp. 77-80, Edmonton, Alberta, Canada. November 24-27, 1999.
20. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (2000) Annual heat content of Great Slave Lake. In G.S. Strong (ed.) Proceedings of the 5th Scientific Workshop for the Mackenzie GEWEX Study (MAGS), pp. 87-92, Edmonton, Alberta, Canada. November 21-23, 1999.
21. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (2000) Modelling of large lakes in cold regions. In M. Nakawo, I. Nagao, and K. Suzuki (eds.) Proceedings of the GAME-MAGS International Workshop, Institute for Hydrospheric-Atmospheric Sciences, Research Report 7, Nagoya, Japan, pp. 126-129, Edmonton, Alberta, Canada. November 24-27, 1999.
22. Rouse, W.R., Blanken, P.D., Eaton, A.K., and Petrone, R.M. (1999) Evaporation from Wetlands and Lakes. In G.S. Strong (ed.) Proceedings of the 4<sup>th</sup> Scientific Workshop for the Mackenzie GEWEX Study (MAGS), pp. 32-35, Montreal, Quebec, Canada. November 16-18, 1998.
23. Schertzer, W.M., Rouse, W.R. and Blanken, P.D. (1999) Cross-lake variation of evaporation, radiation and limnological processes in Great Slave Lake. In G.S. Strong and Y.M.L. Wilkinson (eds.) Proceedings of the 4<sup>th</sup> Scientific Workshop for the Mackenzie GEWEX Study (MAGS), pp. 36-42, Montreal, Quebec, Canada. November 16-18, 1998.
24. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (1999) Physical characteristics of Great Slave Lake during the ice-free period of 1998. International Association for Great Lake Research 42<sup>nd</sup> IAGLR Conference, Case Western University, Cleveland, Ohio. May 25-28, 1999.
25. Blanken, P.D., Rouse, W.R., Spence C., Culf, A.D., Boudreau, L.D., Jasper, J. Kochtubajda B., and Versegny, D. (1998) Processes controlling evaporation from Great Slave Lake. Proceedings of the 3<sup>rd</sup> Scientific Workshop for the Mackenzie GEWEX Study (MAGS), pp. 37-39, Downsview, Ontario, Canada. November 17-19, 1997.

26. Yang, P.C., Black, T.A., Chen, W., Blanken, P.D., Neumann, H.H., Novak, M.D., Nestic, Z. and Lee, X. (1997) Effect of turbulence on nocturnal CO<sub>2</sub> fluxes above a boreal aspen forest. 12<sup>th</sup> American Meteorological Society Symposium on Boundary Layers and Turbulence, pp. 395-396, Vancouver, BC, July 28-August 1, 1997.
27. Black, T.A., Yang, P.C., Blanken, P.D., Nestic, Z., den Hartog, G., Neumann, H.H., Lee, X., Chen, S.C. and Novak, M.D. (1996) Eddy correlation measurements of water vapour and CO<sub>2</sub> fluxes above the understory of a boreal aspen forest. 22<sup>nd</sup> Conference on Agricultural and Forest Meteorology, American Meteorological Society, pp. 121-124, Atlanta, GA., January 28-February 2, 1996.
28. Neumann, H.H., den Hartog, G., Staebler, R.M., Black, T.A., Yang, P.C. and Blanken, P.D. (1996) Comparison of eddy fluxes above and at the bottom of a boreal aspen forest. 22<sup>nd</sup> Conference on Agricultural and Forest Meteorology, American Meteorological Society, Atlanta, GA., January 28-February 2, 1996.

***Papers Presented at Professional Conferences and Meetings but not Published (Oral Format)***

1. Anderson, E.J., Manome, A., Kelley, J.G.W., Chen, Y., Mann, G.E., Lang, G., Fitzpatrick, L.E., Kessler, J., Chu, P.Y., Gronewold, A., Blanken, P.D., Spence, C., Lenters, J., Benjamin, S., and Alexander, C. (2019) Coordinating Improvements to Short-Term Forecasts of Ice, Water Temperature, Turbulent Heat Fluxes, and Lake-Effect Precipitation Forecasts with the Next-Generation NOAA Great Lakes Operational Forecast System (GLOFS). 99<sup>th</sup> American Meteorological Society Annual Meeting, San Francisco, CA., 2019.
2. Burns, S.P., and Blanken, P.D. (2019) Characteristics of Airflow and Turbulence Just-Above and Within a Subalpine Forest in Complex Terrain. AmeriFlux Annual Meeting, Boulder CO, 2019.
3. Helbig, M., Waddington, J.W., Alekseychik, P., Amiro, B.D., Aurela, M., Barr, A., Black, T.A., Blanken, P.D. et al. (2019). Peatland-dominated boreal ecoregions at risk of drying in a warmer climate. American Geophysical Union Fall Meeting, San Francisco, CA., 2019.
4. Knowles, J.F., and Blanken, P.D. (2019) Eddy fluxes from snow-scoured alpine tundra on Niwot Ridge, Colorado. AmeriFlux Annual Meeting, Boulder CO, 2019.
5. Knowles, J.F., Barron-Gafford, G., Blanken, P.D., Dore, S., Kolb, T., Litvak, M.E., and Scott, R.L. (2019). Mountain forest productivity across a regional climatic gradient in the southwestern USA. American Geophysical Union Fall Meeting, San Francisco, CA., 2019.
6. Blanken, P.D., Bariteau, L., Wolfe, D., Spence, C., Hedstrom, N., Fairall, C., Lenters, J.D., and Gronewold, A. (2018) Vessel-based observations of meteorological and evaporation gradients on the Laurentian Great Lakes. International Association for Great Lakes Research 61<sup>st</sup> Annual Conference on Great Lakes Research, Scarborough, Ontario, 18-22 June, 2018.
7. Blanken, P.D., Lenters, J.D., Spence, C., Zhong, Y., Vavrus, S., and Notaro, M (2018). Decadal variability of Lake Superior ice cover and water temperature: An ecosystem in transition? International Association for Great Lakes Research 61<sup>st</sup> Annual Conference on Great Lakes Research, Scarborough, Ontario, 18-22 June, 2018.
8. Bowling, D.R., Blanken, P.D., Burns, S.P., Frankenberg, C., Grossman, K., Lin, J.C., Logan, B.A., Magney, T.S., Richardson, A.D., Stutz, J., and Aubrecht, D. (2017) Seasonality of

photosynthesis of a Rocky Mountain subalpine forest: Implications for SIF as a metric for GPP. Paper A44C-04. American Geophysical Union Fall Meeting, New Orleans, LA, 14-Dec-2017.

9. Spence, C., Hedstrom, N., Gabriele, J., and Blanken, P.D. (2017) Ship-Borne observations of Great Lakes evaporation. International Association for Great Lakes Research 60<sup>th</sup> Annual Conference, Detroit, MI. 15-19 May 2017.
10. Bernstein, D.N., Austin, J.A., Xue, P., and Blanken, P.D. (2015) Estimation of the spatial distribution of evaporative flux on Lake Superior. International Association for Great Lakes Research 58<sup>th</sup> Annual Conference on Great Lakes Research, Burlington, Vermont, 25-29 May, 2015.
11. Biederman, J., Scott, R., Goulden, M.M., Litvak, M., Kolb, T., Yezpe, E., Oechel, W., Bell, T., and Blanken, P.D. (2015) Fast and slow processes in terrestrial biosphere carbon exchange across a water availability gradient. Oral Presentation. AmeriFlux PI Meeting, Washington DC, 29-30 Jan, 2015.
12. Blanken, P.D., Spence, C., Lenters, J.D., Gronewold, A.D. Petchprayoon, P., and Moukomla, S. (2015) An observational study of the influence of ice formation on heat and water loss from the Upper Great Lakes. AGU-GAC-MAC-CGU Joint Assembly, Montreal, Quebec, Canada. 3-7 May, 2015.
13. Blanken, P.D., Spence, C., Lenters, J.D., Gronewold, A.D. Petchprayoon, P., and Moukomla, S. (2015) An observational study of the influence of ice formation on heat and water loss from the Upper Great Lakes. International Association for Great Lakes Research 58<sup>th</sup> Annual Conference on Great Lakes Research, Burlington, Vermont, 25-29 May, 2015.
14. Bowling, D., Garcia, M., Blanken, P.D., Burns, S.P., Dlugokencky, E., Britton, S., and Vaughn, B. (2015) Carbon dioxide and its stable isotopes at Niwot Ridge, Colorado. B54A-04. 2015 Fall Meeting, AGU, San Francisco, CA, 14-18 Dec, 2015.
15. Golub, M., Desai, A., Bohrer, G., Blanken, P.D. et al. (2015) Environmental controls of energy and trace gas exchanges at the water-air interface: Global synthesis of eddy fluxes over inland waters. B54C-07. 2015 Fall Meeting, AGU, San Francisco, CA, 14-18 Dec, 2015.
16. Gronewold, A.D., Anderson, E.J., Lofgren, B.M., Blanken, P.D., Wang, J., Smith, J.P., Hunter, T., Beletsky, D., Lang, G., and Stow, C.A. (2015) Impact of regional climate perturbations on Lake Michigan's Heat Content. International Association for Great Lakes Research 58<sup>th</sup> Annual Conference on Great Lakes Research, Burlington, Vermont, 25-29 May, 2015.
17. Lenters, J.D., Blanken, P.D., Spence, C., Gronewold, A.D., Kerkez, B., Froelich, N., and Leger, W. (2015) The Great Lakes Evaporation Network (GLEN): More than just evaporation. AGU-GAC-MAC-CGU Joint Assembly, Montreal, Quebec, Canada. 3-7 May, 2015.
18. Spence, C., Lenters, J.D., Blanken, P.D., Gronewold, A.D., Kerkez, B., Froelich, N., and Leger, W. (2015) The Great Lakes Evaporation Network (GLEN): More than just evaporation. International Association for Great Lakes Research 58<sup>th</sup> Annual Conference on Great Lakes Research, Burlington, Vermont, 25-29 May, 2015.
19. Zscheischler, J., Blanken, P.D., et al. (2015) Short-Term Weather Variability is an important control of interannual variability in carbon and water fluxes in temperate forests. B31E-03. 2015 Fall Meeting, AGU, San Francisco, CA, 14-18 Dec. 2015.

20. Blanken, P.D. (2014) Great Lakes Research Retreat/Workshop. UMBS, Pellston, MI. Invited Speaker. 7-8 September 2014.
21. Blanken, P.D., and Burns, S.P. (2014) Niwot Ridge subalpine forest AmeriFlux site information. The First AmeriFlux Data Manager's Workshop, 12-13 February, Berkeley, California.
22. Blanken, P.D., Knowles, J.K., and Burns, S.P. (2014) Eddy covariance measurements as a tool to investigate fluxes of energy, water, and carbon at the ecosystem-to-regional scale. Niwot Ridge LTER Annual Meeting, Boulder, Colorado, 12-May 2014.
23. Blanken, P.D., Spence, C., Lenters, J.D., Petchprayoon, P., and Gronewold, A.D. (2014) Impacts of ice cover on Great Lakes evaporation: An analysis of simultaneous ice-covered and ice-free conditions on Lakes Michigan and Huron during the 2013-14 winter. International Association for Great Lakes Research 57<sup>th</sup> Annual Conference on Great Lakes Research, Hamilton, Ontario, Canada, 26-30 May, 2014.
24. Burn, S., Metzger, S., Blanken, P.D., Burba, G., Swiatek, E., Li, J., and Conrad, B. (2014) A Comparison of infrared gas analyzers above a subalpine forest. Invited Oral. American Geophysical Union's Annual Fall Meeting, San Francisco, CA, 15-19 Dec, 2014.
25. Knowles, J.K., Cowie, R., Zeliff, M., Harpold, A.A., Barnard, H.P., Burns, S.P., Morse, J.F., Blanken, P.D., and Williams, M.W. (2014) The relative contributions of alpine and subalpine ecosystems to the water balance of a mountainous, headwater catchment in Colorado, USA. Global Fair and Workshop on Long-term Observing Systems of Mountain Social-Ecological Systems, Reno, Nevada, 16-19 July, 2014.
26. Lenters, J.D., Blanken, P.D., Healey, K.M., Ong, J.B., Potter, C.B.L., Riveros-Iregui, D., Spence, C., Van Cleave, K., Zlotnik, V. (2014) Physical controls on lake evaporation across a variety of climates and lake types. 17<sup>th</sup> International Workshop on Physical Processes in Natural Waters. Italy. 3-4 July 2014.
27. Lenters, J.D., Blanken, P.D., Spence, C., Gronewold, A., Kerkez, B., Leger, W., Froelich, N.J., Paige, K., Slawewski, T., Fortin, V., Ruberg, S., Seglenieks, F., Wolfe, D.E., Fairall, C.W., and Chen, J. (2014) The Great Lakes Evaporation Network (GLEN): Building an integrated observing system for Great Lake flux measurements. Coastal CARbon Synthesis (CCARS) Community Workshop, Woods Hole, MA, 19-21 Aug 2014.
28. Lenters, J.D., Blanken, P.D., Healey, N., Hinkel, K., Ong, J., Peake, C., Potter, B., Riveros-Iregui, D., Spence, C., Van Cleave, K., and Zlotnik, V. (2014) Physical drivers of lake evaporation across a gradient of climate and lake types. Invited. American Geophysical Union's Annual Fall Meeting, San Fransisco, CA, 15-19 Dec, 2014.
29. Lenters JD, Blanken PD, Healey NC, Hinkel KM, Ong JB, Peake CS, Potter BL, Riveros-Iregui D, Spence C, Van Cleaev K, and Zlotnic V (2014) Physical drivers of lake energy budgets across a variety of climates and lake types. Advancing the Science of Gas Exchange between Fresh Waters and the Atmosphere. Hyttiala Forestry Field Station, Finland, 15-19 September 2014.
30. Lenters, J.D., Spence, C., Blanken, P.D., Gronewold, A.D., Kerkez, B., Froelich, N.J., Paige, K., and Slawewski, T.A.D. (2014) Great Lakes evaporation: "Measuring to manage" during a time of transition. International Association for Great Lakes Research 57<sup>th</sup> Annual Conference on Great Lakes Research, Hamilton, Ontario, Canada, 26-30 May, 2014.

31. Metzger S, Burns SP, Luo H, Hehn T, Kath D, Burba G, Li JH, Anderson T, Blanken PD, and Taylor J. (2014) A gas analyzer sampling optimized for eddy covariance applications. American Meteorological Society 17th Symposium on Meteorological Observations and Instrumentation, 8-13 June 2014, Westminster, Colorado.
32. Metzger S, Xu K, Desai A, Taylor J, Kljun N, Blanken PD, Burns S, and Scott R. (2014) Assessing and Correcting Spatial Representativeness of Tower Eddy-covariance Flux Measurements. Oral. American Geophysical Union's Annual Fall Meeting, San Francisco, CA, 15-19 Dec, 2014.
33. Petchprayoon, P., Blanken, P.D., Lenters, J.D., Spence, C., and Gronewold, A.D. (2014) A decade of warming on the Great Lakes from MODIS surface temperature observations. International Association for Great Lakes Research 57<sup>th</sup> Annual Conference on Great Lakes Research, Hamilton, Ontario, Canada, 26-30 May, 2014.
34. Van Cleave, K., Lenters, J.D. Blanken, P.D., Petchprayoon, P., Spence, C., Wang, J., Gronewold, A.D., and Verhamme, E.M. (2014) The rapid warming of Lake Superior: A regime shift in summer water temperature and evaporation following the winter of 1997/98. Joint Aquatic Sciences Meeting, Portland, Oregon, 18-23 May, 2014.
35. Blanken, P.D. (2013) The Development of an Enhanced Evaporation Network across the Great Lakes. Invited Contribution. NOAA Great Lakes Environmental Research Laboratory, Ann Arbor, Michigan. 17-Dec-2013.
36. Blanken, P.D. (2013) The Development of an Enhanced Evaporation Network across the Great Lakes. Invited Contribution. University of Michigan, Ann Arbor, Michigan. 17-Dec-2013.
37. Blanken, P.D. (2013) The Development of an Enhanced Evaporation Network across the Great Lakes. Invited Contribution. LimnoTech, Ann Arbor, Michigan. 17-Dec-2013.
38. Bowling, D.R., Blanken, P.D., Brooks, P.D., Ehleringer, J.R., Ewers, B.E., Lehman, S., Litvak, M.E., Massman, W.J., Miller, J.B., Britton, B., Stephens, B.B., and Vaughn, B.H. (2013) Land-atmosphere carbon cycle research in the Southern Rocky Mountains. Oral Presentation. Abstract B21A-0446 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
39. Lenters, J., Blanken, P.D., Spence, C., and Suyker, A. (2013) Direct measurements of heat, moisture, and carbon fluxes on the Great Lakes. Biogeochemistry of the Great Lakes System (BOGLS) workshop, 11-13 March 2013, Wayne State University, Detroit, MI.
40. Lenters, J., Blanken, P.D., Spence, C., and Suyker, A. (2013) Direct measurements of heat, moisture, and carbon fluxes on the Great Lakes. Biogeochemistry of the Great Lakes System (BOGLS) workshop, 11-13 March 2013, Wayne State University, Detroit, MI.
41. Powell KM, Anderson DE, and Blanken PD. (2013) Links between soil water availability and soil respiration in semi-arid ecosystems along the Colorado Front Range. Poster Presentation. Abstract B21A-0446 presented at 2013 Fall Meeting, AGU, San Francisco, Calif., 9-13 Dec.
42. Lenters, J.D., Van Cleave, K., Blanken, P.D., Hanes, J., Hedstrom, H., Spence, C., Suyker, A.E., and Wang, J. (2012) Interactions among evaporation, ice cover, and water temperature on the world's largest lake: Seasonal feedbacks and long-term change. Invited oral presentation. Abstract H54E-04 presented at 2012 Fall Meeting, AGU, San Francisco, Calif., 3-7 Dec.

43. Graham, E.B., Wolfe, D.E., and Blanken, P.D. (2012) Regional eddy covariance measurements of CO<sub>2</sub> exchange over an anthropogenically-altered landscape from a tall tower near Denver, Colorado. Oral Presentation. Abstract COS 1-1-5 presented at 2012 97<sup>th</sup> Annual Meeting of the Ecological Society of America, Portland, Oregon, Aug 5-10, 2012.
44. Blanken, P.D., Spence, C., and Hedstrom, N. (2012) A Comparison of Simultaneous Measurements of the Surface Energy Balance on Lakes Superior and Huron. IAGLR 55<sup>th</sup> Annual Conference on Great Lakes Research. Oral Presentation. May 17, 2012. Cornwall, Ontario, Canada.
45. Spence, C., Blanken, P.D., and Hedstrom, N. (2012) Change in Shoulder Season Climate Leads to an Increase in Lake Superior Evaporation. IAGLR 55<sup>th</sup> Annual Conference on Great Lakes Research. Oral Presentation. May 17, 2012. Cornwall, Ontario, Canada.
46. Blanken, P.D. (2012) Evaporation Measurements at Stannard Rock. Invited oral presentation. Public Forum on Great Lakes Research. Northern Michigan University, Marquette, MI. August 24, 2012
47. Blanken, P.D., and Spence, C. (2012) Development of a Great Lakes Observation Network. Invited oral presentation. Methods of Projecting Hydrologic Impacts of Climate Change. NOAA Great Lakes Environmental Research Laboratory. Muskegon, MI, August 27-29, 2012.
48. Grant, J.P., Wigneron, J.-P., Drusch, M., Bible, K., Blanken, P.D., Dragoni, D., Kolb, T.E., Law, B.E., Meyers, T.P., Novello, N., Kerr, Y. (2012). Understanding temporal variations in vegetation water content derived from SMOS optical depth. European Space Agency Terrestrial Biosphere in Earth System 2<sup>nd</sup> Symposium February 6 -8, 2012 in Frascati, Italy.
49. Knowles, J.F., Blanken, P.D., Williams, M.W., Chowanski, K.M. (2012) Energy and surface moisture seasonally limit evaporation and sublimation from snow-free alpine tundra. Oral Presentation. Hydrological Sciences Symposium, University of Colorado Boulder, April 5-6, 2012.
50. Powell, K.M., Blanken, P.D., Anderson, D.E., Stannard, D.I., and Thienelt, T. (2012) Soil Carbon Links to Soil Water Cycling in Ecosystems in the Colorado Front Range. Oral Presentation. Hydrological Sciences Symposium, University of Colorado Boulder, April 5-6, 2012.
51. Blanken, P.D., Spence, C., and Nedstrom, N. (2011) Direct Measurements of the Surface Energy Balance on Lakes Superior and Huron. IAGLR 54<sup>th</sup> Annual Conference on Great Lakes Research. Oral Presentation, June 2, 2011, Duluth, MN.
52. Deacu, D., Fortin, V., Spence, C., and Blanken, P.D. (2011) Effect of Improving the Consistency of the Atmospheric Forcing in a Hydrometeorological Model of the Great Lakes Basin. IAGLR 54<sup>th</sup> Annual Conference on Great Lakes Research. Oral Presentation, June 2, 2011, Duluth, MN.
53. Grant, J.P., Wigneron, J.P., Novello, N., Drusch, M., Bible, K., Blanken, P.D., Dragoni, D., Kolb, T.E., LeMaire, G., Meyers, T.P., Moisy, C., Nouvellon, Y., Stape, J.L., Vickers, D., and Kerr, Y. (2011). Working towards a global-scale functional relationship between L-band optical depth and forest water content. SMOS Science Workshop, Oral Presentation, Arles, France. 27-29 September 2011.
54. Deacu, D., Fortin, V., Klyszejko, E., Spence, C., and Blanken, P.D. (2011) Predicting the Net Basin Supply to the Great Lakes When the Lack of Surface-Atmosphere Interaction Hinders the

Improvement of a Hydrometeorological Model. Oral Presentation. EC/GLERL Workshop Ann Arbor, Michigan, October 18, 2011.

55. Lenters, J., Blanken, P.D., and Spence C. (2011) Assessing the Impacts of Climate Variability and Change on Great Lakes Evaporation. Invited oral presentation. GLISA Symposium, Ann Arbor, MI., November 3, 2011.
56. Alfieri, J.G., and Blanken, P.D. (2010) How representative is a point? The spatial variation of surface flux measurements across short distances. Invited oral presentation. Remote Sensing and Hydrology 2010 Symposium. Jackson Hole, WY, September 27-30, 2010.
57. Blanken, P.D., Williams, M.W., Knowles, J.F., and Chowanski, K. (2010) Ecosystem level integration of CO<sub>2</sub> and H<sub>2</sub>O exchanges observed on Niwot Ridge. Invited Oral Presentation. ESA 95<sup>th</sup> Annual Meeting, Pittsburgh, PA, August 3, 2010.
58. Spence, C., Blanken, P.D., Hedstrom, N., Fortin, V., and Haywood, H. (2010) Evaporation from Lake Superior. 53rd Annual Conference on Great Lakes Research. International Association for Great Lakes Research. May 17-21, 2010, Toronto, ON, Canada.
59. Blanken, P.D. (2010). Maymester: Lessons, Layout, and the Learning Curve. Invited Speaker with Provosts, Deans, and selected Faculty on Quarter-to-Semester Conversion Process and Curriculum Development. The Ohio State University, May 7, 2010.
60. Marsh, P., Poh, S., Endrizzi, S., Bartlett, P., Mackay, M., Blanken, P.D., Onclin, C., Russell, M., Haywood, H., Marsh, C., Mauder, M., Desjardins, R., Lantz, T., Hedstrom, N., and Roberts, A. (2009) Snow and small lake processes at the Arctic forest/tundra transition in the Western Canadian Arctic. P3/WC2N Joint Annual Workshop, Lake Louise Inn, Lake Louise, Alberta. Invited. October 14-17, 2009.
61. Spence, C., Blanken, P.D., Hedstrom, N., Leshkevich, G., Fortin, V., Charpentier, D., Haywood, H. (2009) Evaporation from Lake Superior. Eos Trans. AGU, 90(22), Jt. Assem. Suppl., Abstract CG21B-03.
62. Malmberg, J., and Blanken, P.D. (2008). Recollections of climate in the Denver metropolitan area. American Meteorological Society Annual Meeting - Third Symposium on Policy and Socio-Economic Research. New Orleans, Louisiana, Jan 20-24, 2008.
63. Alfieri, J.G., Niyogi, D., Blanken, P.D., Chen, F., Ek, M., Kumar, A., LeMone, M.A., and Mitchell, K. (2008) Minimum canopy resistance for croplands and grasslands during the 2002 International H<sub>2</sub>O Project. American Meteorological Society Annual Meeting – 22<sup>nd</sup> Conference on Hydrology. New Orleans, Louisiana, Jan 20-24 2008.
64. Schertzer, W.M., Rouse, W.R., Blanken, P.D., Lam, D.C.L., Yerubandi, R., Swayne, D.A., Carmack, E., Gyakum, J. (2008) Quantifying the Fundamental Physical Responses of Great Bear Lake to Climate Variability and Change: Measurement and Modelling of Temperature and Fluxes. Canadian Meteorological and Oceanic Society Annual Meeting, May 2008.
65. Schertzer, W.M., Rouse, W.R., Blanken, P.D., Lam, D.C.L., Yerubandi, R., Swayne, D.A., Carmack, E., Gyakum, J. (2008) Quantifying the Fundamental Physical Responses of Great Bear Lake to Climate Variability and Change: Measurement and Modelling of Temperature and Fluxes. Canadian Meteorological and Oceanic Society Annual Meeting Congress IPY Session (Hydrology: Chair B. Goodison) May 25, 2008.

66. Blanken, P.D. (2008) Direct measurements of evaporation from Lake Superior. June 9-10, 2008, International Joint Commission Meeting, Cleveland OH, June 9-10, 2008, Invited.
67. Blanken, P.D. (2008) Measuring fluxes from alpine tundra using the eddy covariance method. NEON Site Selection Meeting, Boulder, CO, August 17-20, 2008. Invited
68. Marsh, P, Blanken P.D., Russell M., Onclin, C. (2008) Hydrology of, and turbulent fluxes from, lakes in a tundra setting. American Geophysical Union Chapman Conference: Lakes and Reservoirs as Sentinels , Integrators, and Regulators of Climate Change. September 8-10 2008, Incline Village, Nevada, USA. Invited.
69. Spence, C., and Blanken, P.D. (2008) Evaporative fluxes from Lake Superior. American Geophysical Union Chapman Conference: Lakes and Reservoirs as Sentinels , Integrators, and Regulators of Climate Change. September 8-10 2008, Incline Village, Nevada, USA. Invited.
70. Blanken, P.D., Marsh, P., Russell, M., and Onclin, C. (2008) Evaporation measurements from two contrasting arctic lakes. Improved Process and Parametrization for Prediction in Cold Regions Workshop #3. 12-15 November 2008. Whitehorse, YK.
71. Marsh, P., Blanken P.D., Russell, M. and Onclin, C. (2008) Snow and small lake processes at the Arctic forest/tundra transition in the Western Canadian Arctic. Improved Process and Parameterization for Prediction in Cold Regions Workshop #3. 12-15 November 2008. Whitehorse, YK.
72. Alfieri, J.G., Niyogi, D., Blanken, P.D., Chen, F., LeMone, M.A., Mitchell, K., Ek, M. and Kumar, A. (2008) Minimum canopy resistance for croplands and grasslands during the 2002 International H2O Project. 22nd Conference on Hydrology, American Meteorological Society, New Orleans, Louisiana, January 20-24, 2008.
73. Blanken, P.D. (2008) Direct observations of evaporation from Lake Superior. Invited. International Joint Commission. Cleveland, OH, June 9-10, 2008.
74. Blanken, P.D. (2008) Measuring fluxes from alpine tundra using the eddy covariance method. Invited. NEON Site Selection Meeting, Boulder, CO August 17-20, 2008.
75. Malmberg, J. and Blanken, P.D. (2008) Recollections of climate in the Denver metropolitan area. Oral Presentation. American Meteorological Society Annual Meeting - Third Symposium on Policy and Socio-Economic Research. New Orleans, Louisiana, January 20-24 2008.
76. Marsh P., Blanken P.D., Russell, M. and Onclin, C. (2008) Snow and small lake processes at the Arctic forest/tundra transition in the Western Canadian Arctic. Improved Process and Parameterization for Prediction in Cold Regions Workshop #3. 12-15 November 2008. Whitehorse, YK.
77. Schertzer, W.M., Rouse, W.R., Blanken, P.D., Lam1, D.C.L., Yerubandi1, R., Swayne, D.A., Carmack, E., Gyakum, J. (2008) Quantifying the Fundamental Physical Responses of Great Bear Lake to Climate Variability and Change: Measurement and Modelling of Temperature and Fluxes. Canadian Meteorological and Oceanographic Society Meeting, May 25-29, 2008.
78. Spence, C. and Blanken P.D. (2008) Evaporative fluxes from Lake Superior. Invited. American Geophysical Union Chapman Conference: Lakes and Reservoirs as Sentinels, Integrators, and Regulators of Climate Change. September 8-10 2008, Incline Village, Nevada, USA. Invited Presentation.



79. Blanken P.D. (2007) Water and carbon fluxes across an alpine treeline. Invited. LTER Monthly Meeting, University of Colorado -Boulder, September 13, 2007.
80. Blanken P.D., Williams, M., Monson, R.K., Burns, S., Chowanski, K., Ackerman, T., and Knowles, J. (2007) Preliminary observations of water and carbon dioxide fluxes across alpine treeline. Invited. Detecting the Atmospheric Response to the Changing Face of the Earth: A Focus on Human-Caused Regional Climate Forcings, Land-Cover/Land-Use Change, and Data Monitoring. NSF-Sponsored Workshop, 27-29 August 2007. NCAR, Boulder, Co
81. Blanken P.D., Williams, M., Knowles, J., Monson, R.K., Burns, S., Chowanski, K., and Ackerman, T. (2007) Preliminary Observations of water and carbon dioxide fluxes across an alpine treeline. Eos Trans. AGU, 88(52), Fall Meet. Suppl., Abstract B21D-07.
82. Legg T, Blanken, P.D., and Anderson, S. (2007) A hydrologic study of High Creek Fen: Groundwater dynamics and sources. Eos Trans. AGU, 88(52), Fall Meet. Suppl., Abstract H31M-05
83. Pielke Sr. R.A., Davey, C., Niyogi, D., Hubbard, K., Lin, X., Cai, M., Lim, Y-K., Li, H., Nielsen-Gammon, J., Gallo, K., Hale, R., Mahmood, R., Foster, S., Steinweg-Woods, J., Boyles, R., Fall, S., McNider, R.T., and Blanken, P.D. (2007) Unresolved issues with the assessment of multi-decadal global land surface temperature trends. 2007 NOAA ESRL Global Monitoring Conference, Boulder, CO. May 2-3, 2007.
84. Blanken, P.D. (2006) High Creek Fen Climate and Hydrology. Invited. The Nature Conservancy. Boulder CO. May 30, 2006.
85. Blanken, P.D. (2006) From Leaves to Lakes: Lessons learned about Evaporation. Purdue University, Department of Agronomy. Invited Speaker, Spring Seminar Series. April 5-7, 2006.
86. Blanken, P.D. (2006) Geography Faculty Development Alliance. Invited Workshop Leader, June 3-10 2006, Boulder CO, Workshops on Writing and Publishing, Web-based Learning, Teaching Large Classes, Syllabus Design for Physical Geography, 50 participants.
87. Legg, T., Petchprayoon, P., and Blanken, P.D. (2006) Interannual Variation in Evaporation and Vegetation Cover of a High Altitude Wetland. 61st Annual Meeting of the Rocky Mountain Hydrologic Research Center. National Center for Atmospheric Research, Boulder, CO. November 3, 2006.
88. Alfieri, J.G., Blanken, P.D., Morgan, J., and Smith, D. (2005) Intercomparison of surface flux measurements over shortgrass steppe. The Association of American Geographers 2005 Annual Meeting, Denver, CO. April 5-9, 2005.
89. Blanken, P.D. (2005) Design of a living snow fence for drift control in Rocky Mountain National Park. Presentation to Rocky Mountain National Park Staff, Estes Park, CO, February 9, 2005.
90. Blanken, P.D., and Schulz, T.T. (2005) Interannual variation in the energy balance of a high altitude wetland. The Association of American Geographers 2005 Annual Meeting, Denver, CO., April 5-9, 2005.
91. Oakley, T.M., and Blanken, P.D. (2005) The spatial and temporal variability of soil moisture and temperature in response to fire in a montane ponderosa pine forest. The Association of American Geographers 2005 Annual Meeting, Denver, CO., April 5-9, 2005.

92. Alfieri, J.G., Yates, D.N., and Blanken, P.D. (2004) A comparison of observed and modeled energy fluxes. Ninth Annual Community Climate System Model Workshop, Eldorado Hotel, Santa Fe, NM., July 7-9, 2004.
93. Blanken, P.D. (2004) The design of a living snow fence for snow drift control in Rocky Mountain National Park. Rocky Mountain National Park Research Conference 2004, Estes Park, CO., April 6, 2004.
94. Blanken, P.D. (2004) Preliminary results from the CU eddy covariance site. Land-Atmosphere Group Meeting, Long-term Ecological Research, Shortgrass Steppe. Colorado State University, Fort Collins, CO., April 26, 2004
95. Alfieri, J.G., and Blanken, P.D. (2004) Temporal variability of the controls on evapotranspiration from grazed pastureland during extreme drought. 26th Conference on Agricultural and Forest Meteorology, American Meteorological Society, Vancouver, British Columbia, Canada, August 23-27, 2004.
96. Blanken, P.D. (2004) A humidity-free calculation of canopy conductance. 26th Conference on Agricultural and Forest Meteorology, American Meteorological Society, Vancouver, British Columbia, Canada, August 23-27, 2004.
97. Blanken, P.D. (2004) Design of a living snowfence for snow drift control in Rocky Mountain National Park, Rocky Mountain National Park Science Meeting, Estes Park, CO. April 6-8, 2004.
98. Oakley, T.M., and Blanken, P.D. (2004) Spatial and temporal variability of soil moisture and temperature in response to fire in a montane ponderosa pine forest. 26th Conference on Agricultural and Forest Meteorology, American Meteorological Society, Vancouver, British Columbia, Canada, August 23-27, 2004.
99. Rouse, W.R., Oswald, C.J., Spence, C., Blanken, P.D., Bussisres, N., Schertzer, W.M., Duguay, C.R., and Binyamin J. (2004) The role of northern lakes in landscape energy balance. Eos Trans. AGU, 85 (17), Joint Assem. Suppl., Abstract H42B-01., Montreal, PQ, Canada. May 17-21, 2004.
100. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (2004) Sensitivity of Great Slave Lake temperature and heat exchange to climate variability. Eos Trans. AGU, 85 (17), Joint Assem. Suppl., Abstract H42B-05., Montreal, PQ, Canada. May 17-21, 2004.
101. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (2004) Variability of the bulk heat exchange of Great Slave Lake. 38th Congress of the Canadian Meteorological and Oceanographic Society, Edmonton, Alberta, Canada. May 30-June 4, 2004.
102. Schertzer, W.M., Rouse, W.R., McCrimmon, R.C., Roswell, R., and Blanken, P.D. (2004) Interannual variability in temperature, heat content and bulk heat exchange of Great Slave Lake. 47th Conference on Great Lakes Research (IAGRL), Waterloo, Ontario, Canada. May 24-28, 2004.
103. Alfieri, J.G., and Blanken, P.D. (2003) Relationship between surface characteristics and the surface energy budget in a sand-sagebrush steppe ecosystem. 58th Annual Meeting of the Rocky Mountain Hydrologic Research Center, National Center for Atmospheric Research, Boulder, CO. November 10, 2003.

104. Bates, C., Blanken, P.D., and Oakley, T.M. (2003) Understory vegetation characteristics in response to fire. 58th Annual Meeting of the Rocky Mountain Hydrologic Research Center, National Center for Atmospheric Research, Boulder, CO. November 10, 2003.
105. Blanken, P.D., Grossman, R., Chen, F., Yates, D., LeMone, M., Alfieri, J.G., and Baden, M. (2003) Assessing the impacts of drought on the surface energy balance. International H2O Project Workshop, National Center for Atmospheric Research, Boulder, CO., March 24-26, 2003.
106. Blanken, P.D. (2003) Observations and questions on the linkage between surface fluxes and overlying meteorological conditions over lakes. Mackenzie GEWEX Study Workshop, McMaster University, Hamilton, Ontario, Canada. May 8-9, 2003.
107. Blanken, P.D., Alfieri, J.G., and Oakley, T.M. (2003) The response of the surface energy balance to drought. Land-Atmosphere Group Meeting, Long-term Ecological Research, Shortgrass Steppe. Colorado State University, Fort Collins, CO., November 20, 2003.
108. Chen, F., LeMone, M.A., Yates, D.N., Horst, T., Grossman, R.L., Blanken, P.D., Cuenca, R.H., and Niyogi, D.S. (2003) Utilizing the IHOP data to study the variability in surface evaporation, runoff, and precipitation for the SGP. 83rd American Meteorological Society Annual Meeting, Long Beach, CA. February 9-13, 2003.
109. Chen, F., LeMone, M.A., Horst, T., Yates, D.N., Semmer, S., Trier, S., Manning, K., Tewari, M., McIntyre, H., Grossman, R., Cuenca, R., Niyogi, D., Blanken, P.D., Alfieri, J., Uebelherr, J. (2003): Utilizing the IHOP 2002 data to study variability in surface water cycle and precipitation process, (Invited) IHOP 2002 Spring Science Workshop, NCAR, Boulder, CO. March 24-26, 2003.
110. Oakley, T.M., Blanken, P.D. and Bates, C. (2003) Spatial and temporal variability of soil moisture in response to fire. 58th Annual Meeting of the Rocky Mountain Hydrologic Research Center, National Center for Atmospheric Research, Boulder, CO. November 10, 2003.
111. Schertzer, W.M., Rouse, W.R., McCrimmon, R.C., Roswell, B., and Blanken, P.D. (2003) Interannual variability in temperature, heat content and bulk heat exchange of Great Slave Lake, 1998-2000. Mackenzie GEWEX Study Annual Workshop, Montreal, Quebec, Canada. November 12-14, 2003.
112. Alfieri, J.G., and Blanken, P.D. (2002) Surface characteristics of the University of Colorado's Site 10. International H2O Project Surface, Soil, and Vegetation Workshop, National Center for Atmospheric Research, Boulder, CO. August 5-6, 2002.
113. Alfieri, J.G., and Blanken, P.D. (2002) The relationship between vegetation cover, soil moisture, and evapotranspiration over a sparse grassland canopy. 56th Annual Meeting of the Rocky Mountain Hydrologic Research Center, Boulder, CO. September 26, 2002.
114. Baden, M, and Blanken, P.D. (2002) Stomatal conductance and transpiration at High Creek Fen, Park County, Colorado. 56th Annual Meeting of the Rocky Mountain Hydrologic Research Center, Boulder, CO. September 26, 2002.
115. Blanken, P.D. (2002) Micrometeorological measurements at the Platteville Atmospheric Observatory. Platteville Atmospheric Observatory Annual Meeting, CIRES, Boulder, CO. May 14, 2002.

116. Blanken, P.D., Rouse, W.R., and Schertzer, W.M. (2002) Dynamics of convective heat fluxes in Great Slave Lake. Canadian GEWEX Enhanced Study Workshop, Edmonton, Alberta, Canada. March 22, 2002.
117. Rouse, W.R., Blanken, P.D., and Schertzer, W.M. (2002) Seasonal patterns in the thermal regime and surface energy balance of central Great Slave Lake. Canadian GEWEX Enhanced Study Workshop, Edmonton, Alberta, Canada. March 22, 2002.
118. Schertzer, W.M., Rouse, W.R., Binyamin, J., Worth, D., Oswald, C., and Blanken, P.D. (2002) The water and energy budgets of lake components overview: Measurements, modeling, and research gaps. MAGS-WEBS Workshop, Downsview, Ontario, Canada. May 27-28, 2002.
119. Schertzer, W.M., Rouse, W.R., Blanken, P.D., and Walker, A.E. (2002) Thermal structure and heat content response of Great Slave Lake under CASES (1998-1999) climactic conditions. Canadian GEWEX Enhanced Study Workshop, Edmonton, Alberta, Canada. March 22, 2002.
120. Schertzer, W.M., Rouse, W.R., Blanken, P.D., Walker, A.E., Stewart, R.E., and Gyakum, J. (2002) Response of Great Slave Lake heat cycle components under an intense El Nino: Implications for potential climate warming impacts on large deep lakes. International Association for Great Lakes Research: IAGLR-2000, Manitoba, Canada. June 1-7, 2002.
121. Blanken, P.D. (2001) Partitioning energy through the canopy of a subalpine forest: The significance of forest floor. 56<sup>th</sup> Annual Meeting of the Rocky Mountain Hydrologic Research Center, Boulder, CO. September 26, 2002.
122. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (2001) Heat exchange, evaporation, and thermal response of Great Slave Lake. Canadian Geophysical Union Fall Meeting, Ottawa, Ontario, Canada. May 14-17, 2001.
123. Blanken, P.D. (2000) The surface energy balance of a high latitude wetland. 55<sup>th</sup> Annual Meeting of the Rocky Mountain Hydrologic Research Center, Allens Park, CO. October 14, 2000.
124. Schertzer, W.M., Rouse, W.R. and Blanken, P.D. (2000) Synthesis of heat and mass exchange components of Great Slave Lake: GEWEX-MAGS Phase 1, 6<sup>th</sup> Scientific Workshop for the Mackenzie GEWEX Study (MAGS), Saskatoon, Saskatchewan, Canada. November 15-17, 2000.
125. Schertzer, W.M., Rouse, W.R. and Blanken, P.D. (2000) Comparison between annual cycles of temperature and heat content of Great Slave Lake and the Laurentian Great Lakes. 43<sup>rd</sup> Conference of the International Association for Great Lakes Research, Cornwall. Ontario, Canada. May 21-26, 2000.
126. Schertzer, W.M., Rouse, W.R. and Blanken, P.D. (1999) Physical limnological characteristics of Great Slave Lake during the ice-free period of 1998. 42<sup>nd</sup> Conference of the International Association for Great Lakes Research (IAGLR), Case Western Reserve University, Cleveland, OH. May 24-28, 1999.
127. Schertzer, W.M., Rouse, W.R. and Blanken, P.D. (1999) Cross-lake variation of evaporation, heat flux and thermal responses of Great Slave Lake during the ice-free season in 1998. GEWEX-MAGS, 33<sup>rd</sup> Canadian Meteorological and Oceanographic Society (CMOS) Congress, University of Quebec at Montreal, Montreal, Quebec, Canada. May 31-June 4, 1999.

128. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (1999) Heat and mass exchange characteristics of Great Slave Lake, Canadian Association of Geographers - CAGONT-99, McMaster University, Hamilton, Ontario, Canada. October 22-23, 1999.
129. Blanken, P.D. (1999) Evaporation studies from several high latitude surface. United States Geological Survey Workshop on Evapotranspiration Research, Lakewood, CO. August 31-September 2, 1999.
130. Blanken, P.D., Rouse, W.R., and Petrone, R. (1998) Evaporation from large lakes and wetlands. Mackenzie GEWEX Study 4<sup>th</sup> Science Workshop, Montreal, Quebec, Canada. November 6-8, 1998.
131. Blanken, P.D., Rouse, W.R., Spence C., Culf, A.D., Boudreau, L.D., Jasper, J., Kochtubajda B., Verseghy, D. and Marsh, P. (1998) Processes controlling evaporation from Great Slave Lake. Canadian Geophysical Union Annual Meeting, Quebec City, Quebec, Canada. p. A-20, May 18-19, 1998.
132. Schertzer, W.M., Rouse, W.R., and Blanken, P.D. (1998) Cross-lake variation of evaporation, radiation, and limnological processes. Mackenzie GEWEX Study 4<sup>th</sup> Science Workshop, Montreal, Quebec, Canada. November 6-8, 1998.
133. Blanken, P.D., Black, T.A., Yang, P.C. and Neumann, H.H. (1997) Evaporation and water balance at the Old Aspen site. BOREAS Science Workshop, Annapolis, MD. March 18-21, 1997.
134. Chen, W., Black, T.A., Yang, P.C., Barr, A.G., Neumann, H.H., Blanken, P.D., Nesic, Z., Eley, J. and Novak, M.D. (1997) Effects of turbulence and climate variability on the annual carbon sequestration by a boreal aspen forest. Canadian Meteorological and Oceanic Society 31st Congress, Saskatoon, Saskatchewan, Canada. p. 23, June 1-5, 1997.
135. Hogg, E.H., Hurdle, P.A., Black, T.A., Blanken, P.D., Wu, A., Chen, W. and Barr, A.G. (1997) Hypotheses on feedbacks of trembling aspen forests on regional weather and climate in the southern boreal forest of western Canada. Canadian Meteorological and Oceanic Society 31st Congress, Saskatoon, Saskatchewan, Canada. p. 30, June 1-5, 1997.
136. Wu, A, Black, T.A., Blanken, P.D. and Verseghy, D.L. (1997) Evaluating canopy conductance models for CLASS, 3<sup>rd</sup> CLASS Workshop, Toronto, Ontario, Canada. February 24-25, 1997.
137. Yang, P.C., Black, T.A., Chen, W., Blanken, P.D., Neumann, H.H., Barr, A.G., Novak, M.D., Nesic, Z. and Lee, X. (1997) Effect of turbulence on CO<sub>2</sub> exchange of a boreal aspen forest. BOREAS Science Workshop, Annapolis, MD. March 18-21, 1997. Black, T.A., Anderson, D., Arkebaurer, T., Baldocchi, D., Bessemoulin, P., Blanken, P.D., Desjardins, R., Fitzjarrald, D., Goulden, M., den Hartog, G., Jarvis, P., Jelinski, D., Lafleur, P., McCaughey, H., Massheder, J., Moncrieff, J., Moore, K., Neumann, H.H., Novak, M., Pattey, E., Simpson, I., Staebler, R., Striegl, R., Thurtell, G., Verma, S., Wofsy, S. and Yang, P.C. (1996) Comparison of evaporation and net ecosystem exchange at BOREAS tower sites in 1994. BOREAS Science Workshop, Toronto, Ontario, Canada. May 21-24, 1996.
138. Blanken, P.D., Black, T.A., Yang, P.C., den Hartog, G., Neumann, H.H., Nesic, Z., Staebler, R., Novak, M.D. and Lee, X. (1996) Carbon dioxide and water vapor fluxes in and above a boreal aspen forest. (Invited) 81<sup>st</sup> Meeting of the Ecological Society of America-Trace Gas Symposium, Providence, RI, p. 39, August 10-14, 1996.

139. Blanken, P.D., Black, T.A., Nesic, Z., Chen, S.G., and Yang, P.C. (1995) Influence of leaf development on the radiation regime beneath a boreal aspen forest canopy. Canadian Meteorological and Oceanic Society 29<sup>th</sup> Congress, p. 47. Kelowna, British Columbia, Canada. May 29-June 2, 1995.
140. Blanken, P.D., Yang, P.C., Black, T.A., Nesic, Z., Chen, S.G., and Novak, M.D. (1995) Eddy-correlation measurements of water vapour fluxes beneath a boreal aspen forest. Canadian Meteorological and Oceanic Society 29<sup>th</sup> Congress, p. 35, Kelowna, British Columbia, Canada. May 29-June 2, 1995.
141. Yang, P.C., Black, T.A., Blanken, P.D., Nesic, Z., Russell, C. and Chen, S.G. (1995) Eddy-correlation measurements of CO<sub>2</sub> fluxes beneath a boreal aspen forest. Canadian Meteorological and Oceanic Society 29<sup>th</sup> Congress, p. 28, Kelowna, British Columbia, Canada. May 29-June 2, 1995.

***Papers Presented at Professional Conferences and Meetings but not Published (Poster Format)***

1. Bowling, D.R., Magney, T.S., Seyednasrollah, B., Cheng, R., Frankenberg, C., Logan, B.A., Yang, J., Arain, M.A., Burns, S.P., Blanken, P.D., Jassal, R., Black, T.A., Hollinger, D.Y., and Richardson, A.D. (2019) Seasonal Pigment Changes Allow Detection of Activity and Dormancy of Evergreen Photosynthesis in Cold-Climature Conifer Forests. American Geophysical Union Fall Meeting Fall Meeting, San Francisco, CA., 2019.
2. Wang, X., and Blanken, P.D. (2019) Monitoring Rubber Productivity and Health in Southeast Asia using Remote Sensing and Eddy Covariance Measurements. AmeriFlux Annual Meeting, Boulder CO, 2019.
3. Fujisaki-Manome, A., Gronewold, A., Loftgen, B.M., Anderson, E.J., Fitzpatrick, L., Blanken, P.D., Spence, C., Lenters, J.D., Xiao, C., and Charusambot, U. (2017) Validating modeled turbulent heat fluxes across large freshwater surfaces. Paper E11C-1565. American Geophysical Union Fall Meeting, New Orleans, LA, 11-Dec-2017.
4. Wang, H., Loeb, N.G., Lenters, J.D., Spence, C., and Blanken, P.D. (2017) Evaluation of Satellite-Based Surface Energy Budget Products with Surface Measurements Over the Great Lakes. Paper A53-2352. American Geophysical Union Fall Meeting, New Orleans, LA, 15-Dec-2017.
5. Blanken, P.D., Spence, C., Lenters, J.D., Gronewold, A., Kerkez, B., Xue, P., and Froelich, N. (2015) The Dynamics of Laurentian Great Lakes Surface Energy Budgets. B51F-0499. 2015 Fall Meeting, AGU, San Francisco, CA, 14-18 Dec. 2015.
6. Fratini, G., Metzger, S., Kathilankal, J., Trutna, D., Luo, H., Burns, S.P., Blanken, P.D., and Burba, G. (2015) Sampling line heating improves frequency response of enclosed eddy covariance gas analyzers. B33A-0621. 2015 Fall Meeting, AGU, San Francisco, CA, 14-18 Dec. 2015.
7. Knowles, J.F., Blanken, P.D., Williams, M.W., and Lawrence, C. (2015) Increasing carbon loss from snow-scoured alpine tundra in the Colorado Rocky Mountains: An indicator of climate change? B13F-0673. 2015 Fall Meeting, AGU, San Francisco, CA, 14-18 Dec. 2015.

8. Metzger, S., Burns, S.P., Luo, H., Hehn, T., Kath, D., Burba, G., Li, J., Anderson, T., Blanken, P.D., and Taylor, J. (2015) A gas analyzer sampling system optimized for eddy-covariance applications. AmeriFlux PI Meeting, Washington DC, 29-30 Jan 2015.
9. Metzger, S., Xu, K., Desai, A., Taylor, J., Natascha, K., Fox A., Blanken, P.D., Burns, S.P., and Scott, R. (2015) Expanding the representativeness of eddy-covariance fluxes: Seeing the landscape for the footprint. North American Carbon Program Meeting, Session: Uncertainties in Carbon Cycle Science and Decision Making. Washington DC, 26-28 Jan 2015.
10. Weider, W., Knowles, J.F., Blanken, P.D., and Suding, K. (2015) Using Earth system models and long-term observations to generate ecological hypotheses. B11C-0437. 2015 Fall Meeting, AGU, San Francisco, CA, 14-18 Dec.
11. Yang, J., Tian, H., Ren, W., Lu, C., Wolf, S., Desai, A., Pan, S., Tao, B., Zhang, B., Gough, C., Blanken, P.D., Lohrenz, S., and Torn, M. (2015) Current and future sensitivity of ecosystem productivity to precipitation in the humid United States. AmeriFlux PI Meeting, Washington DC, 29-30 Jan 2015.
12. Biederman, J., Scott, R., Bowling, D., Litvak, M., Oechel, W., Kolb, T., Goulden, M., Blanken, P.D., Yopez, E., Watts, C., Vivoni, E., Rodriguez, J., Garatuza, J., Dore, S., Bell, T., and Burns, S. (2014) Maturing flux datasets reveal carbon uptake sensitivity to temporal climate variability across a summer-rainfall gradient. 2014 AmeriFlux Annual Principal Investigators Meeting, 4-5 May 2014, Potomac, Maryland.
13. Burns, S. P., Metzger, S., Blanken, P.D., Burba, G., Swiatek, E., Li, J., Conrad, B., Luo, H., and Taylor, J. (2014). A comparison of infrared gas analyzers above a subalpine forest in complex terrain. American Meteorological Society 17<sup>th</sup> Symposium on Meteorological Observation and Instrumentation, 8-13 June 2014, Westminster, Colorado.
14. Chan, A., Brooks, P., Burns, S., Litvak, M., Blanken, P.D., and Bowling, D. (2014) Ecohydrological and biophysical controls on carbon cycling in two seasonally snow-covered forests. Poster. American Geophysical Union's Annual Fall Meeting, San Francisco, CA, 15-19 Dec, 2014.
15. Gronewold, A., Anderson, E., Blanken, P.D., Lofgren, B., Wang, J., and Stow, C. (2014) Modeling transitions in the hydrologic and thermal regimes of Earth's largest lake system. Poster. American Geophysical Union's Annual Fall Meeting, San Francisco, CA, 15-19 Dec, 2014.
16. Knowles, J., Blanken, P.D., and Williams, M. (2014) Variation in soil respiration across an alpine soil moisture and vegetation community gradient at Niwot Ridge, Colorado. Poster. American Geophysical Union's Annual Fall Meeting, San Francisco, CA, 15-19 Dec, 2014.
17. Metzger, S., Ayres, E., Blanken, P.D., Burba, G., Burns, S.P., Desai, A., Desjardins, R., Dietze, M., Fox, A., Kljun, N., Loescher, H.W., Luo, H., Mauder, M., Moore, D.P., Munger, J.W., Ollinger, S., Pinguha-Durden, N., Schmid, H-P., Serrano-Ortiz, P., Taylor, J., Xu, K., and Zulueta, Z. (2014) Gauging terrestrial environments – First lessons learned from NEON . 2014 AmeriFlux Annual Principal Investigators Meeting, 4-5 May 2014, Potomac, Maryland.
18. Metzger, S., Burns, S.P., Luo, H., Hehn, T., Kath, D., Burba, G., Li, J.H., Anderson, T., Blanken, P.D., and Taylor, J., (2014) A gas analyzer sampling optimized for eddy covariance applications. American Meteorological Society 17<sup>th</sup> Symposium on Meteorological Observations and Instrumentation, 8-13 June 2014, Westminster, Colorado.

19. Powell, K., and Blanken, P.D. (2014) More rain, less often: Extreme precipitation events and the impact on carbon cycling in the grasslands of Rocky Flats NWR, Colorado. Poster. American Geophysical Union's Annual Fall Meeting, San Francisco, CA, 15-19 Dec, 2014.
20. Zulueta, R., Metzger, S., Burns, S., Luo, H., Hehn, T., Kath, D., Burba, G., Li, J., Anderson, T., Blanken, P.D., and Taylor, J. (2014) Optimizing gas analyzer frequency response and temperature regiments for the NEON Eddy Covariance System. Poster. American Geophysical Union's Annual Fall Meeting, San Francisco, CA, 15-19 Dec 2014.
21. Knowles, J.F., Blanken, P.D., and Williams, M.W. (2012) Net ecosystem exchange, soil respiration, and the age of respired carbon from high-elevation alpine tundra. Poster Number 178, 2012 LTER ASM, September 10-13, Estes Park, Colorado.
22. Morse, J.F., Kittel, T.G.F., Williams, M.W., Chowanski, K., Hartman, M., Ackerman, T., Losleben, M., and Blanken, P.D. (2012) Elevational and seasonal dependence in climate change within a mid-latitude high mountain system, Colorado Front Range USA. Poster Number 151, 2012 LTER ASM, September 10-13, Estes Park, Colorado.
23. Grant, J., Wigneron, J-P., Drusch, M., Bible, K., Blanken, P.D., Dragoni, D., Kolb, T. Law, B., Meyers, T., Novello, N., and Kerr, Y. (2012) Understanding Temporal Variations in Vegetation Water Content Derived from SMOS Optical Depth. IEEE International Geosciences and Remote Sensing Symposium. July 22-27 2012, Munich, Germany.
24. Burns, S.P., Sun, J., Lenschow, D.H., Oncley, S.P., and Blanken, P.D. (2012) Gravity Waves Within and Above a Subalpine Forest in Complex Terrain. The American Meteorological Society 20<sup>th</sup> Symposium on Boundary Layers and Turbulence, July 8-13, 2012, Poster Presentation. Boston, MA.
25. Knowles, J.F., Blanken, P.D., Williams, M.W., and Chowanski, K. (2011). Desiccation of Alpine Tundra due to Persistent High Winds at Niwot Ridge, Colorado. Abstract GC31A-1009. Poster presentation. 2011 Fall Meeting, AGU, San Francisco, Calif., 5-9 December 5-9, 2011.
26. Powell, K., Anderson, D.E., Stannard, D.I., Mladinich, C.S., Thienelt, T.S., and Blanken, P.D. (2011). Soil Water Cycling Links to Carbon Content between Ecosystems in the Colorado Front Range. Poster Presentation. Abstract B41C-0225. 2011 Fall Meeting, AGU, San Francisco, Calif., December 5-9, 2011.
27. Graham, E.B., Wolfe, D.E., and Blanken, P.D. (2010) Regional Eddy Covariance Measurements of CO<sub>2</sub> Exchange from a Tall Tower near Boulder, Colorado. American Geophysical Union, Fall Meeting 2010, abstract #B31F-0376, San Francisco, CA, December 14-21, 2010.
28. Knowles, J.F., and Blanken, P.D. (2010) Spatio-temporal variability of soil moisture, soil temperature, and CO<sub>2</sub> efflux from alpine tundra at Niwot Ridge, Colorado. Poster Presentation. ESA 95<sup>th</sup> Annual Meeting, Pittsburgh, PA, Aug 3, 2010.
29. Knowles, J.F., Blanken, P.D., and Williams, M.W. (2009) Carbon cycling above treeline: eddy covariance results from high elevation alpine tundra at Niwot Ridge, Colorado. 2009 LTER All Scientists Meeting, Estes Park, CO Sept 13-17, 2009.
30. Knowles, J.F., Blanken, P.D., and Williams, M.W. (2009) Meteorological controls on the energy balance and CO<sub>2</sub> exchange over alpine tundra at Niwot Ridge, Colorado. EOS, Vol. 90, Number 52, 29 December 2009, Fall Meet. Suppl., Abstract B33A-0368.



31. Blanken, P.D., Marsh, P., Russell, M. and Onclin, C. (2008) Evaporation measurements from two contrasting arctic lakes. Improved Process and Parameterization for Prediction in Cold Regions Workshop #3. 12-15 November 2008. Whitehorse, YK.
32. Alfieri, J.G., Niyogi, D., Blanken, P.D., LeMone, M.A. and Chen, F. (2007) The role of precipitation in the coupling of the land surface with the atmosphere. 21<sup>st</sup> Conference on Hydrology, 87th Annual Meeting of the American Meteorological Society, San Antonio, TX, January 14-18, 2007.
33. Alfieri, J.G., Niyogi, D., Blanken, P.D., Chen, F. and LeMone, M.A. (2007) Estimating the minimum canopy resistance using data from IHOP\_2002. NCAR Advance Study Program Summer Colloquium, June 4-15, Boulder, CO.
34. Legg, T., and Blanken, P.D. (2007) Methods for identifying groundwater sources to High Creek Fen, South Park, Colorado (paper 174-24). Invited. 2007 Geological Society of America Annual Meeting, October 28-31, 2007, Denver, CO.
35. Malmberg, J., and Blanken, P.D. (2006) Memories and perceptions of weather and climate in the Denver metropolitan area: Calibrating the human thermometer. Eos Trans. AGU, 87(52), Fall Meet. Suppl., Abstract GC51A-0448. San Francisco, CA, December 11-15, 2006.
36. Alfieri, J.G., Blanken, P.D., Morgan, J., Smith, D., LeCain, D, Wolchansky, L., and Grossman, R. (2005) A comparison of the Bowen ratio energy balance and eddy covariance methods for determining surface fluxes over shortgrass steppe. Long-term Ecological Research Shortgrass Steppe Symposium, Fort Collins, CO, January 14, 2005.
37. Misson L., Baldocchi, D.D., Black, T.A., Blanken, P.D., Dorsey, J.R., Falk, M., Goldstein, A.H., Granier, A., Jarosz, N., Curiel-Yuste, J., Law, B.E., Longdoz, B., Loustau, D., McKay, M., Paw U, K.T., and Wilson, K.B. (2005) Micrometeorology and flux partitioning between forest understorey and overstorey: a synthesis based on FLUXNET data. Annual Ameriflux Meeting. Boulder, CO, October 18-25, 2005.
38. Misson L., Baldocchi, D.D., Black, T.A., Blanken, P.D., Dorsey, J.R., Falk, M., Goldstein, A.H., Granier, A., Jarosz, N., Curiel-Yuste, J., Law, B.E., Longdoz, B., Loustau, D., McKay, M., Paw U, K.T., and Wilson, K.B. (2005) Micrometeorology and flux partitioning between forest understorey and overstorey: a synthesis based on FLUXNET data. The 7<sup>th</sup> International CO<sub>2</sub> Conference. Broomfield, CO, September 25-30, 2005.
39. Misson, L., Baldocchi, D.D., Black, T.A., Blanken, P.D., Brunet, Y., Dorsey, J.R., Falk, M., Goldstein, A.H., Granier, A., Irvine, M.R., Jarosz, N., Lamaud, E., Law, B.E., Longdoz, B., Loustau, D., McKay M., Paw U, K.T., Vickers, D., and Wilson, K.B. (2005) Micrometeorology and flux partitioning between forest understorey and overstorey: A synthesis based on FLUXNET data. Eos Trans. AGU, 86 (52), Fall Meet. Suppl., Abstract B41B-0180, San Francisco, CA, December 5-9, 2005.
40. Wolchansky, J., Blanken, P.D., Morgan, J., Smith, D., Alfieri, J., and Grossman, R. (2005) effect of grazing on soil temperature and moisture on the shortgrass steppe. Long-term Ecological Research Shortgrass Steppe Symposium, Fort Collins, CO, January 14, 2005.
41. Wolchansky, J., Blanken, P.D., Morgan, J., Alfieri, J., and Grossman, R. (2004) Effect of grazing on soil temperature and moisture and subsequent implications. Eos Trans. AGU, 85 (47), Fall Meet. Suppl., Abstract B51C-0964, San Francisco, CA, December 13-17, 2004.

42. Blanken, P.D., Rouse, W.R., and Schertzer, W.M. (2003) On the enhancement of evaporation from a large northern lake by the entrainment of warm, dry air. 83<sup>rd</sup> American Meteorological Society Annual Meeting, Long Beach, CA, February 9-13, 2003.
43. Uebelherr, J., Grossman, B., LeMone, M., and Blanken, P.D. (2003) Bulk canopy conductance and NDVI along a precipitation gradient during IHOP 2002 in the U.S. Southern Great Plains, Eos Trans. AGU, 84 (46), Fall Meet. Suppl., Abstract B51E-1012, San Francisco, CA, December 8-12, 2003.
44. Alfieri, J.G., and Blanken, P.D. (2001) Variations in the surface energy balance over sagebrush: Implications for energy balance closure. American Geophysical Union Fall Meeting, San Francisco, CA, December 10-14, 2001.
45. Turnipseed, A.A., Sparks, J.P., Harely, P.C., Blanken, P.D., Sparks, K., Huxman, T.E., and Monson, R.K. (2001) The effects of snowpack on carbon sequestration in a high elevation subalpine forest. American Geophysical Union Fall Meeting, San Francisco, CA, December 10-14, 2001.
46. Blanken, P.D. (2000) The surface energy balance of a high latitude wetland. American Geophysical Union Fall Meeting, San Francisco, CA, December 15-19, 2000.
47. Uebelherr, J., Grossman, R., and Blanken, P.D. (2000) Variations in canopy conductance over a grassland site in CASES 97. American Geophysical Union Fall Meeting, San Francisco, CA., December 15-19, 2000.
48. Blanken, P.D., Black, T.A., Neumann, H.H., Yang, P.C., Nestic, Z., Novak, M.D., Wu, A., Chen, W. and Lee, X. (1997) Evaporation within and above a boreal aspen forest. BOREAS Science Workshop, Annapolis, MD, March 18-21, 1997.
49. Blanken, P.D., Rouse, W.R., Spence C., Culf, A.D., Boudreau, L.D., Jasper, J., and Kochtubajda B. (1997) Processes controlling evaporation from Great Slave Lake. Mackenzie GEWEX Study 3rd Science Workshop, Toronto, Ontario, Canada. November 17-19, 1997.
50. Yang, P.C., Black, T.A., Chen, W., Blanken, P.D., Neumann, H.H., Barr, A.G., Novak, M.D., Nestic, Z. and Lee, X. (1997) Effect of turbulence on CO<sub>2</sub> exchange of a boreal aspen forest. BOREAS Science Workshop, Annapolis, MD, March 18-21, 1997.
51. Black, T.A., Anderson, D., Arkebaurer, T., Baldocchi, D., Bessemoulin, P., Blanken, P.D., Desjardins, R., Fitzjarrald, D., Goulden, M., den Hartog, G., Jarvis, P., Jelinski, D., Lafleur, P., McCaughey, H., Massheder, J., Moncrieff, J., Moore, K., Neumann, H.H., Novak, M., Pattey, E., Simpson, I., Staebler, R., Striegl, R., Thurtell, G., Verma, S., Wofsy, S. and Yang, P.C. (1996) Comparison of evaporation and net ecosystem exchange at BOREAS tower sites in 1994. BOREAS Science Workshop, Toronto, Ontario, Canada. May 21-24, 1996.
52. Blanken, P.D., Black, T.A., Yang, P.C., den Hartog, G., Neumann, H.H., Nestic, Z., Staebler, R., Novak, M.D., and Lee, X. (1996) Energy balance and canopy conductance of a boreal aspen forest: partitioning overstory and understory components. BOREAS Science Workshop, Toronto, Ontario, Canada. May 21-24, 1996.
53. Yang, P.C., Black, T.A., Blanken, P.D., den Hartog, G., Neumann, H.H., Russell, C., Staebler, R., and Novak, M.D. (1996) Carbon dioxide exchange in and above an old boreal aspen forest. BOREAS Science Workshop, Toronto, Ontario, Canada. May 21-24, 1996.

54. Black, T.A., den Hartog, G., Neumann, H.H., Thurtell, G.W., Novak, M.D., Voroney, R.P., Blanken, P.D., Yang, P.C., Simpson, I., Russell, C., Edwards, E., Nestic, Z., Staebler, R., Fuentes, J., Lee, X. and Chen, S.G. (1995) Fluxes of H<sub>2</sub>O, CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O at the old aspen site, southern study area. BOREAS Science and Planning Workshop, Calverton, MD.

### ***Non-referred Technical and Research Reports***

1. Lenters JD, Anderton JB, Blanken PD, Spence C and Suyker AE (2013) Assessing the Impacts of Climate Variability and Change on Great Lakes Evaporation. In: 2011 Project Reports. D. Brown, D. Bidwell, and L. Briley, eds. Available from the Great Lakes Integrated Sciences and Assessments (GLISA) Center: [http://glisaclimate.org/media/GLISA\\_Lake\\_Evaporation.pdf](http://glisaclimate.org/media/GLISA_Lake_Evaporation.pdf)
2. Moody, J.A., Martin, D.A., Oakley, T.M., and Blanken, P.D. (2007) Temporal and Spatial Variability of Soil Temperature and Moisture after a Wildfire. USGS Scientific Investigations Report 2007-5015.
3. Blanken, P.D. (2005) SGER: Extension of the Surface Energy and Water Cycle Flux Measurements Beyond the International H<sub>2</sub>O Project (IHOP) Intensive Observation Period. National Science Foundation Final Report. 35 pp.
4. Moody, J.A., Martin, D.A., Oakley, T.A., and Blanken, P.D. (2005) Spatial and Temporal Variability of Soil Properties after a Wildfire. United States Geological Survey Report, 80 pp.
5. Blanken, P.D. (2004) Design of a Living Snowfence for Drift Control in Rocky Mountain National Park, Rocky Mountain National Park Cooperative Research Agreement, 40 pp.
6. Blanken, P.D., Dillon, J., and Wismann, G. (2000) The Impact of an Air Quality Advisory Program on Voluntary Mobile Source Air Pollution Reduction. UROP Faculty Research Team Final Report, April 2000, 41 pp.
7. Schertzer, W.M., Rouse, W.R. and Blanken, P.D. (2000) Assessment of the Predictive Capability of Convective Static Wave Models on Great Slave Lake. NWRI Study Report, National Water Research Institute, Burlington, Ontario, Canada. 20 pp.
8. Schertzer, W.M., Rouse, W.R. and Blanken, P.D. (2000) Characteristics of Cross-lake Variations of Evaporation, Radiation, and Physical Processes in Great Slave Lake. NWRI Contribution No. 00-1-2, 29 pp.
9. Schertzer, W.M., Rouse, W.R. and Blanken, P.D. (1999) Preliminary Characteristics of the Annual Heat Content Cycle of Great Slave Lake. NWRI Study Report, National Water Research Institute, Burlington, Ontario, Canada. 20 pp.

### ***Theses***

1. Blanken, P.D. (1997) Evaporation Within and Above a Boreal Aspen Forest. Ph.D. Thesis. Department of Soil Science, University of British Columbia, Vancouver, British Columbia, Canada. 185 pp., 28 preliminary. Supervisory Committee: T.A. Black (supervisor, Soil Science), T.R. Oke (Geography), R.D. Guy (Forestry), M.D. Novak (Soil Science).
2. Blanken, P.D. (1993) Vegetation Controls on Evaporation from a Subarctic Willow-Birch Forest. M.Sc. Thesis. Department of Geography, McMaster University, Hamilton, Ontario, Canada. 171 pp., 25 preliminary. Supervisor: W.R. Rouse (Geography).

- Blanken, P.D. (1990) Evaporation from a Subarctic Wetland. B.Sc. Thesis. Department of Geography, McMaster University, Hamilton, Ontario, Canada. 38 pp., 7 preliminary. Supervisor: W.R. Rouse (Geography).

### **Popular Press**

- Aurora Water District's Forest to Faucets Continuing Education Workshop. Invited Speaker. 31 July 2018.
- To the Lighthouse: Where is the Water Going in the Great Lakes? Agnieszka Gautier, *NASA Sensing Our Planet, Earth Science Research Features*, 2017. pp. 38-42.
- Looking for climate change on the largest freshwater resource in the world: The North American Great Lakes*. Invited public oral presentation, YMCA of the Rockies, Estes Park, CO. 4-Nov 2014.
- Frigid Forecast for Water Temperature on Great Lakes this Summer. *National Geographic News Watch*, 4-June-2014.
- Lighthouse Study Tracks Evaporation. *The St. Ignace News*, 6-March-2014.
- The Value of Observations: The Great Lakes Evaporation Network. *International Joint Commission Newsletter*, 18-February-2014.
- Do Low Lake Levels Impact Old Lighthouses? *Mackinaw Island Town Crier*, 5-July-2013.
- Research Looks at Lakes in New Way. *The St. Ignace News*, 4-July-2013.
- Blanken, P.D. (2009) A New Life for Spectacle Reef Lighthouse. *The Beacon*, **28(4)**, 30-34.
- Blanken, P.D. (2009) *Nature Geoscience*, **2**, 827-828. Photo credit.
- Blanken, P.D. (2006) University of Colorado Honor Code. Several newspaper and internet articles on academic ethics and integrity.
- Blanken, P.D. (2005) Research for Maintenance. Continental Divide Research Learning Center, Issue 5, March 2005.
- Blanken, P.D. (2000) Denver Air Quality. Several newspaper, internet, radio and television articles on the Denver air quality study.
- Blanken, P.D. (2000) *Geography 1001 Laboratory Manual*. Pearson Custom Publishing, Boston, 91 pp.
- Blanken, P.D. (1999) Evaporation Project Update. In B. Kotchtubadja (ed.) *Canadian GEWEX Study (CAGES) Bulletin*, **Vol. 2, No. 1**, July 1999.

### **Published Reviews**

- Blanken, P.D. (2009) Colorado Weather Almanac, 342 pp., *Bulletin of the American Meteorological Society*, **90(6)**, 870.
- Blanken, P.D. (2003) Ecological Climatology: Concepts and Applications, Bonan, G.B., Cambridge University Press, 2002, 678 pp., *Bulletin of the American Meteorological Society*, **84**, 935-936.

## Courses Taught

### University of Colorado at Boulder

#### GEOG 1001: Environmental Systems 1 – Climate and Vegetation

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
	Fall 2005	152	B-	C+
	Fall 2002	192	C	C+
	Fall 2000	177	B+	B
	Spring 1999	181	B	B
	Fall 1999	172	B	B
	Fall 1998	180	B-	B-

#### HONR 2500: Colorado's Weather and Climate

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
	Fall 2006	10	4.8/6	4.3/6

#### GEOG 3251: Mountain Geography

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
	Maymester 2019	32	6.0/6	5.9/6
	Spring 2018	43	5.6/6	5.5/6
	Maymester 2009	44	5.5/6	5.2/6
	Maymester 2008	49	5.5/6	5.4/6
	Maymester 2007	38	5.7/6	5.6/6
	Maymester 2006	49	A	A-
	Maymester 2005	49	A-	B+
	Maymester 2004	45	A	B+
	Maymester 2003	45	A	A-
	Summer A 2002	30	A	A

#### GEOG 3511: Introduction to Hydrology

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
	Fall 2006	22	5.2/6	4.9/6
	Spring 2005	28	B	B
	Spring 2004	29	B+	B+

#### GEOG/ENVS 3601 ATOC 3600: Principles of Climate

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
	Spring 2019	99	5.4/6	5.1/6
	Spring 2018	48	5.5/6	4.9/6
	Spring 2017	48	5.7/6	5.3/6
	Spring 2016	49	5.2/6	4.9/6
	Spring 2014	44	5.3/6	4.9/6
	Spring 2013	49	5.6/6	5.1/6
	Spring 2012	49	5.2/6	4.4/6
	Spring 2011	49	5.0/6	4.8/6

Spring	2010	48	5.2/6	4.9/6
Spring	2009	50	5.0/6	4.6/6
Spring	2008	50	4.8/6	4.6/6
Spring	2002	34	B+	B
Spring	2001	36	A-	B+
Fall	1999	29	A-	B+

**GEOG/ENVS 4201: Biometeorology**

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
Fall	2019	32	TBD	TBD
Fall	2018	25	5.7/6	5.1/6
Fall	2017	30	5.9/6	5.3/6
Fall	2016	24	5.5/6	4.9/6
Fall	2015	13	5.5/6	5.2/6
Fall	2009	28	4.9/6	4.8/6
Fall	2008	14	5.2/6	5.0/6
Fall	2004	19	A	B+
Spring	2002	9	A+	A+

**GEOG 4430/ENVS 4800: Conservation Trends**

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
Spring	2000	13	B	B
Spring	1999	11	A	A-

**GEOG 4742/ENVS 4800: Environmental Problem Solving – Critical Thinking**

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
Fall	2006	20	5.1/6	5.2/6
Spring	2006	25	B	B
Fall	2003	24	A	B+
Fall	2001	26	B	B

**GEOG 6181: Topics in Physical Geography – Boreal Environments**

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
Fall	2004	9	A+	A

**GEOG 6211: Readings in Climatology**

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
Spring	2014	4	6.0/6	5.3/6
Spring	2013	5	5.7/6	5.1/6
Fall	2013	7	6.0/6	5.7/6
Spring	2002	4	A	A-
Fall	2002	6	A-	A+
Spring	2001	2	A+	A+
Fall	2001	2	A+	A-
Fall	2000	3	B	B

**Seminar in Academic Ethics and Integrity**

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
	Spring 2006	120	N/A	N/A
	Fall 2005	30	N/A	N/A
	Spring 2005	16	N/A	N/A
	Fall 2004	10	N/A	N/A

## **McMaster University**

### **GEOG 2F03: Earth's Surface Climates**

	<i>Term</i>	<i>Enrollment</i>	<i>Instructor Rating</i>	<i>Course Rating</i>
	Fall 1997	40	B+	B+

## **Student Supervision**

### **Principal Dissertation/Thesis Advisor for Graduate Students**

2019 – present	Holly Roth	M.A. <i>Reservoir Evaporation: Measurements and Modeling for Water Resource Purposes.</i>
2019 - present	John Bryan Curtis	Ph.D. <i>Characteristics of Alpine Precipitation using Ground-based Doppler Radar.</i>
2017 - present	Xueqian Wang	Ph.D. <i>Using Solar Influenced Florescence to Detect Gross Primary Productivity of Rubber Plantations in Thailand and Southeastern Asia.</i>
2016 - 2019	John Bryan Curtis	M.A. <i>Improving the Quality of Subalpine Precipitation Measurements with Hydrometeor Information and a Hierarchical Bayesian Gauge Correction Model.</i>
2011-2018	Sean Burns	Ph.D. <i>The Influence of Warm-Season Precipitation on Water Cycling and the Surface Energy Budget within and just-above a Colorado Subalpine Forest in Mountainous Terrain: Measurements and Modeling.</i> 253 pp.
2014-2017	Kristy Weber	M.A. <i>Using Profiles of Water Vapor Flux to Characterize Turbulence in the Convective Boundary Layer.</i> 107 pp.
2010-2016	Katherine Powell	Ph.D. <i>The Impact of Changing Precipitation on Water and Carbon Cycling in Semiarid Grassland of the Colorado Front Range.</i> 187 pp.
2009-2012	Emily Graham	M.Sc. <i>Regional Eddy Covariance Measurements of Carbon Dioxide from a Tall Tower near Boulder, Colorado.</i> 175 pp.
2009-2015	John Knowles	Ph.D. <i>Spatio-Temporal Patterns of Soil Respiration and the Age of Respired Carbon from High-Elevation Alpine Tundra.</i> 131 pp.
2008-2011	Brian Butterworth	M.A. <i>A Climatological Study of the Relationship</i>

		<i>between Alpine Treeline and Thermally-drive Upslope Winds on Niwot Ridge, Colorado.</i> 136 pp.
2007-2009	John Knowles	M.A. <i>Meteorological Controls on the Seasonal Exchange of Water and Carbon Dioxide from High-elevation Alpine Tundra at Niwot Ridge, Colorado.</i> 155 pp.
2008-2015	Sitthisak Moukomla	Ph.D. <i>The Estimation of the Surface Energy Balance of the North American Laurentian Great Lakes Using Satellite Remote Sensing and MERRA Reanalysis.</i> 225 pp.
2007-2015	Pakorn Petchprayoon	Ph.D. <i>Analysis of Climate Change Impacts on the Surface Energy Balance of Lake Huron (Estimation of Surface Energy Balance Components: Remote Sensing Approach for Water-Atmosphere Parameterization).</i> 207 pp.
2006-2011	Teresa Legg	M.A. <i>The Hydrology and Hydrochemistry of High Creek Fen.</i> 89 pp.
2005-2014	Julie Malmberg	Ph.D. <i>Social, Demographic, and Environmental Influences on Perceptions and Memories of Weather, Climate and Climate Change.</i> 198 pp.
2005-2007	Pakorn Petchprayoon	M.A. <i>The Effects of Urbanization on River Discharge and River Flood Potential in a Central Northern Watershed, Thailand.</i> 60 pp.
2003-2005	Jennifer Wolchansky	M.A. <i>Effects of Simulated Grazing on Soil Temperature, Moisture, and Respiration in a Shortgrass Steppe in Northeastern Colorado.</i> 85 pp.
2002-2005	Joseph Alfieri	M.A. <i>Effects of Temporal Variability in the Environmental Controls Driving Evaporation Over Grazed Pasture During Extreme Drought.</i> 142 pp.
2002-2004	Taryn Oakley	M.A. <i>The Spatial and Temporal Variability of Soil Moisture and Temperature in Response to Fire in a Montane Ponderosa Pine Forest, Bailey, Colorado.</i> 146 pp.
2000-2002	Maria Baden	M.A. <i>Stomatal Conductance and Transpiration at High Creek Fen, Park County, Colorado.</i> 148 pp.

**Principal Honors Thesis Advisor for Undergraduate Student**

2019 - present	Michaela Jackson	Geography: <i>Carbon Emissions from Subalpine Soils and Streams. Honors Thesis.</i>
2009-2010	Austin Rand	ENVS: <i>Investigating the Factors for Environmental Concern Among Undergraduate Environmental Studies</i>



		<i>Majors. 45 pp.</i>
2005-2006	David Millar	Geography: <i>Developing Eddy Covariance Systems for CO<sub>2</sub> Advection Studies.</i>
2003-2005	Casey Bates	Geography: <i>The Spatial Variability of Understory Vegetation in Response to Fire and Topography in a Montane Ponderosa Pine Forest, Bailey, Colorado. 86 pp.</i>

***Principal Research/Independent Study Advisor for Undergraduate Students***

Spring 2018	Lauren Eng	Independent Study: <i>Growth of Microcystin in Connection to Carbon Fluxes and Meteorological Conditions: Study of the Great Lakes with an Emphasis in Lake Erie.</i>
1999-2001	Joshua Uebelherr	Environmental Studies: <i>Bulk Canopy Conductance over a Grassland Site in CASES-97.</i>
Spring 2013	Matthew Glassett	Undergraduate Research Opportunity Program: <i>The Characteristics of Convective Cloud Streets over the Great Lakes.</i>
Fall 2008	Annie Pepper	Independent Study: <i>Design and Installation of an Internet-based Weather Station.</i>
Summer 2008	Allyson Daniels, Anna Marincovich Gregory Sudac, Andrew Haffenreffer	Internship Advisor in Geography:
Spring 2008	Mark Parsons	Independent Study: <i>Data for Modeling - Building Understanding of the Arctic Climate System.</i>
Summer 2006	David Millar	Research Assistant: <i>Developing Eddy Covariance Systems for CO<sub>2</sub> Advection Studies.</i>
Summer 2004	Casey Bates	Undergraduate Research Opportunity Program: <i>Characteristics of Vegetation Recovery After a High-severity Burn.</i>
Spring 2003	Brain Lam	Educational Technology House Faculty Sponsor: <i>Seasons and the Solar System.</i>
Spring 2003	Mike Albain	Educational Technology House Faculty Sponsor: <i>Seasons and the Solar System.</i>
Summer 2003	Casey Bates	Independent Study: <i>Understory Vegetation Characteristics in Response to Fire.</i>
Spring 2002	Joseph Alfieri	Independent Study: <i>The Effects of Fine-scale Variability on Land-surface Models.</i>

Spring 2002	Julie Wilson	Independent Study: The Effects of Temperature and Salinity on TDR Soil Moisture Probes.
Spring 2001	Andrew Rossi	Independent Study: Spatial and Temporal Variations in the Subalpine Snowpack During the Melt Season.
Summer 2001	Joseph Alfieri	Undergraduate Research Opportunity Program: <i>Spatial Variation of the Surface Energy Balance in a Sage-sand Grassland.</i>
Spring 2000	Jennifer Dillon	Undergraduate Research Opportunity Program: <i>The Impact of an Air Quality Advisory Program on Voluntary Mobile Source Air Pollution Reduction.</i>
Spring 2000	Genevieve Wismann	Undergraduate Research Opportunity Program: <i>The Impact of an Air Quality Advisory Program on Voluntary Mobile Source Air Pollution Reduction.</i>
Fall 2000	Ian Morikawa	Independent Study: <i>Water Balance and the Importance of Evaporation and Evapotranspiration Applied to Wetlands and Fens.</i>

**Ph.D. Committee Member (completed degrees only)**

2018	Keith Jennings	<i>Evaluating the Climatic and Energy Balance Controls on Snow Accumulation and Melt Processes in Mountain Snowpacks.</i> Supervisor: Noah Molotch, Geography.
2018	Aleya Kaushik	<i>Atmosphere-Land Surface Fluxes and Continental Boundary Layer Moisture Recycling: Insights from Stable Water Isotope Ratios in Soil, Surface Vapor, and Precipitation at a Mid-Latitude Tall-Tower Site.</i> Supervisor: David Noone, Atmosphere and Oceanic Sciences.
2018	Theodore Barnhart	<i>The Response of Streamflow and Evapotranspiration to Changes in Snowmelt Across the Western United States.</i> Supervisor: Noah Molotch, Geography.
2017	Alexander Crawford	<i>The Influence of the Arctic Frontal Zone on Summer Cyclone Activity Today and in the Future.</i> Supervisor: Mark Serreze, Geography.
2017	Dominik Schneider	<i>Snow Distribution from Remotely Sensed Fractional Snow Covered Area.</i> Supervisor: Noah Molotch, Geography.
2014	Thomas Detmer	<i>Effects of Fish on Aquatic Food Webs at High Elevation.</i> Supervisor: William Lewis, Ecology and

Evolutionary Biology.

2014	Erik Noble	<i>Investigation of Daily Circulation and Precipitation over West Africa with the WRF Model: A Regional Climate Model Adaptation Study.</i> Supervisor: Jim White, ENVS.
2013	Jason Brodeau	<i>Data-driven Approaches for Sustainable Operation and Defensible Results in a Long-term, Multi-site Ecosystem Flux Measurement Program.</i> Supervisor: Altaf Arain, McMaster University, Geography.
2013	Patrick Boylan	<i>Ozone Cycling and Boundary-Layer Dynamics in Polar Region.</i> Supervisor: Detlev Helmig, INSTAAR.
2013	Preston Cuming	<i>Spatial and Temporal Variation of Soil Temperature and Moisture Following Disturbance in the Montane Forests of Colorado.</i> Supervisor: Susan Beatty, Geography.
2010	John Adler	<i>Assessing Supraglacial Water volume and the Changing Dynamics of the Surface Topography near the Jakobshavn Glacier, Greenland.</i> Supervisor: Konrad Steffen, Geography.
2010	Thomas Philips	<i>Modelling the Effect of Englacial Water and Surface Snow Cover on the Greenland Ice Sheet.</i> Supervisor: Konrad Steffen, Geography.
2010	Atsuhiko Muto	<i>Use of Geophysical Inverse Methods to Reconstruct the Firn Temperature Record of the Antarctic Ice Shelf.</i> Supervisor: Konrad Steffen, Geography.
2009	Juan Paritsis	<i>Insect Defoliator Outbreaks and Environmental Heterogeneity in <i>Nothofagus</i> Forests in the Patagonian Andes.</i> Supervisor: Thomas Veblen, Geography.
2007	Eungul Lee	<i>Land Surface and Ocean Effects on the Variabilities of Three Asian Summer Monsoons.</i>
2006	Shirley Kurc	<i>Dynamics and Controls of Ecosystem Scale Water, Carbon, and Energy Cycling at Semiarid Grassland and Shrubland.</i> Supervisor: Eric Small, Geology.
2005	Jason Sibold	<i>A Multi-scale Analysis of Natural and Human Influences on the Variability of Subalpine Forest Fire History in Rocky Mountain National Park.</i>
2005	Laura Scott-Denton	<i>Soil respiration rate in a subalpine forest.</i> Supervisor: Russell Monson, Ecology and Evolutionary Biology.

2004	Shari Fox	<i>When the Weather is Uggianaqtuq: Linking Inuit and Scientific Observations of Recent Environmental Change in Nunavut, Canada.</i> Supervisor: Roger Barry, Geography.
2003	Nicolas Cullen	<i>Characteristics of the Atmospheric Boundary Layer at Summit, Greenland.</i> Supervisor: Konrad Steffen, Geography.
2002	Mauro Gonzalez	<i>Fire History of Araucaria-Nothofagus Forests in the Andean Cordillera of South-Central Chile.</i> Supervisor: Thomas Veblen, Geography.
1999	Joseph Donnegan	<i>Climate and Human Influences on Fire Regime in Pike National Forest.</i> Supervisor: Thomas Veblen, Geography.

***Masters Committee Member (completed degrees only)***

2018	Sara Morris	<i>Variability of Ground Heat Flux at Tiksi Station.</i> Supervisor: Mark Serreze, Geography.
2017	Rachel Chai	<i>Influences of Stand Development and Climate on Above-ground Biomass in a Subalpine Forest.</i> Supervisor: Tom Veblen, Geography.
2014	Alexander Crawford	<i>Development of the Low Level Polar Jet Along the Ice Margins in Arctic Regions.</i> Supervisor: Mark Serreze, Geography.
2014	Allison Hurley	<i>Comparison and Validation of Arctic Precipitation Fields from Three Atmospheric Reanalyses: CFSR, MERRA, ERA-Interim.</i> Supervisor: Mark Serreze, Geography.
2014	Alana Wilson	<i>Hydrograph Separation using Mixed Models.</i> Supervisor: Mark Williams, Geography
2012	Leah Meromy	<i>Simulated Warming of Subalpine Snowpack.</i> Supervisor: Noah Molotch, Geography.
2004	Andrew Schmidt	<i>Modeling the Effects of Vegetation Green Fraction on the Surface Fluxes in a Semiarid Region.</i> Supervisor: Eric Small, Geology.
2004	Ingrid Corson	<i>Shield's Stress Patterns through Adjacent Meandering and Braided Reaches of a Gravel-bed River: Implications for Sediment Transport.</i> Supervisor: John Pitlick, Geography.
2002	Rosemary Sherriff	<i>Fire History at High Elevation in the Colorado Front Range.</i> Supervisor: Thomas Veblen, Geography.

2002 Eileen Hall-McKim *Variability of the North American Monsoon System: Analysis of Climate Dynamics and Frequency Modes.* Supervisor: Roger Barry, Geography.

### ***Undergraduate Honors Thesis Committee Member (completed degrees only)***

2010 Austin Rand *Constructing a more concerned citizenry: Investigating the factors impacting environmental concern among undergraduate students.* Supervisor: Dale Miller.

2006 Jaclyn Gorman *The Fluvial Transportation of the New Zealand Mud Snail,* Supervisor: John Pitlick.

2004 Kevin Bigsby *Orangutan Conservation: Illegal Logging and the Orangutan.* Supervisor: Michele Sauther.

## **Other Professional Services and Activities**

### ***Journal Editorial Boards***

2001-present *Bulletin of the American Meteorological Society.* Biometeorology Subject Matter Editor.

2008-2009 *Biogeochemistry.* Guest Editor, White-on-Green special issue.

### ***National Panels***

2013 **US Department of Energy, Office of Science, Terrestrial Carbon Cycle Research.** Invited Panel Member. March 14, 2013.

2011 **US Department of Energy, Office of Science, Terrestrial Carbon Cycle Research.** Invited Panel Member. February 6, 2011.

2010 **US Department of Energy, Office of Science, Terrestrial Carbon Cycle Research.** Invited Panel Member. October 10, 2010.

2009-present **National Ecological Observatory Network.** Invited Advisory Panel Member.

2002 **National Science Foundation-Office of Polar Programs.** Proposal review panel member.

### ***Professional Organizations***

2019 **AmeriFlux.** Chair of Organizing Committee for 2019 Annual Meeting, Early Career Workshop, and Field Site Visit. Boulder, Colorado, 19-20 Sept 2019.

2015 **American Geophysical Union – Canadian Geophysical Union Joint Assembly.** Session Convener and co-chair, Hydroclimatic Processes in the Laurentian Great Lakes, AGU-CAG-MAC-CGU Joint Assembly. Montreal, Canada, 3-7 May 2015.

2015 **International Association of Great Lakes Research.** Session co-chair, Understanding Lake-climate Interactions Across Broad Spatial Scales:

Observations, Models, and Research Networks. 58<sup>th</sup> Annual Meeting, Burlington, Vermont. May 25-29, 2015.

- 2014 **American Geophysical Union.** Session Convener and co-chair, Drivers and Variability of Greenhouse Gas, Energy, and Water Cycling in Inland Waters I, American Geophysical Union's Annual Fall Meeting. San Francisco, CA, 15-19 Dec 2014.
- 2014 **International Association of Great Lakes Research.** Session co-chair, Hydroclimate Variability in the Great Lakes Region and its Impacts on Aquatic Ecosystems. 57<sup>th</sup> Annual Meeting, Hamilton, Ontario, Canada. May 26-30, 2014.
- 2012 **International Association of Great Lakes Research.** Session co-chair, Interactions between Climate and the Energy and Water Balance of Lakes and their Watersheds. 55<sup>th</sup> Annual Meeting, Cornwall, Ontario, Canada. May 13-17, 2012.
- 2005 **The Association of American Geographers.** Session Chair, Energy and Water Balance, 2005 Annual Meeting, Denver, Colorado, April 5-9, 2005.
- 2004 **American Meteorological Society.** Session Chair, Canopy Microclimate, 26<sup>th</sup> Conference on Agricultural and Forest Meteorology, Vancouver, B.C., Canada. August 22-26, 2004.
- 2003 **American Meteorological Society.** Chair, Nomination Committee for Professor Andrew T. Black's Award for Outstanding Achievement in Biometeorology.
- 2002 **American Meteorological Society.** Member, Committee to organize the 25<sup>th</sup> Conference on Agricultural and Forest Meteorology, Norfolk, VA. May 20-24, 2002.
- 2002 **American Meteorological Society.** Session Chair, Weather and Climate Effects on Vegetation Growth, 25<sup>th</sup> Conference on Agricultural and Forest Meteorology, Norfolk, VA. May 20-24, 2002.
- 2001-2004 **American Meteorological Society.** Member, Scientific and Technological Activities Committee on Agricultural and Forest Meteorology.
- 1998-present **American Meteorological Society.** Member.
- 1998-present **American Geophysical Union.** Member.
- 1998-present **Association of American Geographers.** Member.

### **University Committees and Service Activities**

- 2017 **External Promotion to Full Reviewer.** Civil and Environmental Engineering, Washington State University, Washington.
- 2017 **External Promotion to Full Reviewer.** Civil, Environmental and Geodetic Engineering, The Ohio State University, Ohio.
- 2017 **External Promotion to Full Reviewer.** Department of Geography, National University of Singapore, Singapore.

- 2015 **External Tenure and Promotion Reviewer.** Department of Geography, University of South Carolina, South Carolina.
- 2013 **External Tenure and Promotion Reviewer.** School of Earth and Environmental Sciences, Queen's College, New York.
- 2013 **External Tenure and Promotion Reviewer.** Department of Geography, University of Victoria, Victoria, BC.
- 2013 **Internal Reviewer.** Museum Academic Review and Planning Advisory Committee.
- 2013 **Vice Chancellor for Research.** Internal Reviewer – National Science Foundation Sustainability Networks Competition.
- 2011 **Internal Reviewer.** INSTAAR Academic Review and Planning Advisory Committee.
- 2011 **Vice Chancellor for Research.** Internal Reviewer – National Science Foundation Sustainability Networks Competition.
- 2010 **External Tenure and Promotion Reviewer.** University of Idaho.
- 2010 **Provost's Faculty Achievement Award Selection Committee Member.** University of Colorado. Reviewed 18 nominations.
- 2010 **University of Colorado.** Helped write successful proposal for Peace Corps International masters Degree Program.
- 2010 **Member,** Task Force on Statistics Education.
- 2009 **Member,** Search Committee, Associate Director of Undergraduate Advising.
- 2008 **University of Colorado – Office of the Provost.** Flagship 2030 Task Force Member – Staffing and Operations.
- 2004-2006 **University of Colorado-Vice Chancellor of Student Affairs.** Honor Code Faculty Advisor.
- 2004 **University of Colorado-Graduate Task Force on Interdisciplinary Studies.** Provided invited testimony on the issue of interdisciplinary studies on campus.
- 1999-2005 **University of Colorado-Faculty Teaching Excellence Program.** Liaison to the Department of Geography.

### ***Department Committees and Service Activities***

#### *University of Colorado, Department of Geography*

- 2019 **Chair,** Awards Committee
- 2019 **Chair,** Promotion and Tenure Committee for Professor Colleen Reid
- 2018-2019 **Chair,** Academic Review and Planning Committee, Department of Geography
- 2019 **Chair,** Post-tenure Review Committee for Professor Mark Serreze
- 2018 **Member,** Promotion and Tenure Committee for Professor Barbara Buttenfield

2017-2018 **Member**, Undergraduate Committee

2016-2017 **Associate Chair**, Undergraduate Studies Director

2015 **Member**, Promotion and Tenure Committee for Professor Mara Goldman

2015-2016 **Member**, Graduate Committee

2010-2014 **Chair**, Department of Geography

2009 **Member**, Post-tenure Review Committee for Professor Bill Travis

2008 **Member**, Search Committee, Hydrology-INSTARR position

2008 **Member**, Search Committee, Energy-Natural Science position

2007-2010 **Associate Chair**, Graduate Studies Director

2007 **Member**, Comprehensive Review Committee for Professor Suzanne Anderson

2007 **Member**, Promotion and Tenure Committee for Professor Elizabeth Dunn

2005 **Member**, Post-tenure Review Committee for Professor Kenneth Foote

2005 **Member**, Promotion and Tenure Committee for Professor Rachel Silvey

2005-2007 **Member**, Graduate Committee

2004-2005 **Chair**, Development and Honor's Committee

2004 **Editor**, Department Newsletter *Latitudes* Spring 2004 Edition

2004 **Member**, Post-tenure Review Committee for Professor Susan Beatty

2003-2004 **Member**, Development and Honor's Committee

2003 **Chair**, Ad-hoc Committee to Revise Merit Review Document

2003 **Chair**, Ad-hoc Committee to Develop Success Guide for New Faculty

2002 **Member**, Comprehensive Review Committee for Professor Thomas Chase

2001-2003 **Member**, Personnel Committee

2000-2002 **Member**, Colloquium Committee

1999-2000 **Member**, Computer Committee

*University of Colorado, Environmental Studies Program*

2012-2013 **Member**, Visioning Committee

2005-2010 **Chair**, Undergraduate Curriculum Committee

2005 **Chair**, Undergraduate Advisor Search Committee

2000-2005 **Member**, Undergraduate Curriculum Committee

2000-2001 **Member**, Self Study Report Committee on Teaching Programs and Student Concerns

**Manuscript Reviews**



- 2015 *Agricultural and Forest Meteorology, Bulletin of the American Meteorological Society, Ecological Applications, Journal of Hydrologic Engineering, Journal of Hydrology, Journal of Geophysical Research-Atmospheres, Journal of Geophysical Research-Biogeosciences, Physical Geography, Water Resources Research (2)*
- 2014 *Agricultural and Forest Meteorology (2), Journal of Applied Meteorology and Climatology, Journal of Hydrology, Journal of Geophysical Research-Biogeosciences (2), Water Resources Research.*
- 2013 *Arctic, Antarctic, and Alpine Research, Agricultural and Forest Meteorology, Boundary-Layer Meteorology, Earth Interactions, Ecohydrology, Journal of Applied Meteorology and Climatology, Remote Sensing of the Environment, Water Resources Research (2)*
- 2012 *Arctic, Antarctic, and Alpine Research (2), EOS, Journal of Geophysical Research-Atmospheres (2), Journal of Hydrometeorology.*
- 2011 *Agricultural and Forest Meteorology (2), Arctic, Antarctic, and Alpine Research, Boundary-Layer Meteorology, Ecosystems, Hydrological Processes (5), Journal of Hydrology, Water Resources Research*
- 2010 *Agricultural and Forest Meteorology, Applied Engineering in Agriculture, Canadian Journal of Water Resources, Earth Interactions (2), Ecohydrology, Global Change Biology, Hydrology and Earth System Sciences (2), Hydrological Processes, International Journal of the Physical Sciences, Oecologia, Plant Ecology and Diversity, Water Resources Research*
- 2009 *Agricultural and Forest Meteorology, Boundary-Layer Meteorology, Ecohydrology, Journal of Geophysical Research – Atmospheres, Hydrological Processes, Plant Ecology and Diversity.*
- 2008 *Journal of Geophysical Research – Atmospheres (2), Journal of Hydrometeorology, Professional Geographer (2).*
- 2007 *Hydrological Processes (2), Journal of Geophysical Research – Atmospheres (2), Journal of Geophysical Research – Biogeosciences, Journal of Hydrology, Ninth International Permafrost Conference Proceedings, Tree Physiology.*
- 2006 *Annals of Glaciology, Agricultural and Forest Meteorology (2), Global Change Biology, Journal of Geophysical Research-Atmospheres (3), Journal of Hydrology, Tree Physiology, Water Resources Research (2)*
- 2005 *Agricultural and Forest Meteorology (3), Hydrological Processes, Journal of Applied Meteorology, Journal of Geophysical Research-Atmospheres (3), Water Resources Research.*
- 2004 *Arctic, Antarctic, and Alpine Research, Agricultural and Forest Meteorology, Journal of Applied Meteorology, Journal of Hydrology, United States Geological Survey.*
- 2003 *Global Change Biology, Journal of Applied Meteorology, Journal of Geophysical Research-Atmospheres (4), Journal of Hydrometeorology.*

- 2002 *Arctic, Antarctic, and Alpine Research, Hydrological Processes (2) Journal of Applied Meteorology (2), Journal of Geophysical Research-Atmospheres.*
- 2001 *Agricultural and Forest Meteorology, Canadian Journal of Botany, New Mexico Water Resources Research Institute, Water Resources Research.*
- 2000 *Arctic, Antarctic, and Alpine Research.*
- 1999 *Agricultural and Forest Meteorology, Annals of Glaciology, Water Resources Research (2), United States Geological Survey.*
- 1998 *Agricultural and Forest Meteorology, Water Resources Research.*

### **Grant Reviews**

- 2015 National Science Foundation – Division of Ocean Sciences.
- 2014 Netherlands Organization for Scientific Research-Research Council for Earth and Life Sciences.
- 2013 National Science Foundation – Division of Earth Sciences, National Research Council of Canada, The University of Michigan Water Center.
- 2011 National Science Foundation – Arctic Sciences Division, National Science Foundation – Behavioral and Cognitive Sciences, US Department of Energy – Terrestrial Ecosystem Science (Panel Member). Vice Chancellor for Research - University of Colorado at Boulder (Panel Member).
- 2010 National Science Foundation – Arctic Natural Sciences. National Sciences and Engineering Research Council of Canada, NOAA National Sea Grant College Program, US Department of Energy – Terrestrial Ecosystem Science (Panel Member).
- 2009 National Science Foundation – Hydrology
- 2008 National Sciences and Engineering Research Council of Canada.
- 2007 Department of Energy – National Institute for Climate Change Research.
- 2007 Innovative Grant Program, Vice Chancellor for Research - University of Colorado at Boulder (5).
- 2006 National Science Foundation – Hydrology. National Sciences and Engineering Research Council of Canada.
- 2005 National Science Foundation-Climate Dynamics. National Science Foundation-Geography and Regional Science. National Science Foundation-Office of Polar Programs. National Sciences and Engineering Research Council of Canada. State of California (3).
- 2004 National Science Foundation-Geography and Regional Science. National Science Foundation-Hydrological Sciences.
- 2003 National Aeronautics and Space Administration-Earth System Science, National Science Foundation-Hydrological Sciences, National Science Foundation-Geography and Regional Sciences, National Science Foundation-Integrated

- Carbon Cycle Research.
- 2002 Israel Science Foundation, National Science Foundation - Hydrological Sciences (4).
- 2001 National Science Foundation-Hydrological Sciences (2).
- 2000 National Science Foundation-Hydrological Sciences.
- 1999 New Mexico Water Resources Research Institute.

### **Consulting**

- 2008 **McGraw-Hill.** *Physical Geography Symposium Participant*, Tucson, AZ, February 8-10, 2008.
- 2007 **Thompson.** *Review of Essentials of Physical Geography, 8<sup>th</sup> Edition*
- 2006 **McGraw-Hill.** *Review of Understanding Physical Geography, 1<sup>st</sup> Edition.*
- 2005 **Prentice-Hall.** *Review of Great Systems and Global Environments.*
- 2005 **Prentice-Hall.** *Review of Physical Geography, 8<sup>th</sup> Edition.*
- 2004 **McGraw-Hill.** *Review of The Physical Environment: Laboratory Manual for Physical Geography.*
- 2003 **Prentice-Hall.** *Review of Animation CD to Accompany Elemental Geosystems, 4<sup>th</sup> Edition.*
- 2003 **McGraw-Hill.** *Review of ALEKS Artificial Intelligence Educational Knowledge System.*
- 2002 **McGraw-Hill.** *Physical Geography Symposium Participant*, Vancouver, B.C., Canada, September 26-29, 2002.
- 2002 **Prentice-Hall.** *Review of The Theory and Practice of Physical Geography.*
- 2001 **John Wiley and Sons.** *Review of Introducing Physical Geography, Third Edition.*
- 2000 **Prentice-Hall.** *Review of Geosystems, 4<sup>th</sup> Edition.*
- 2000 **Prentice-Hall.** *Review of Virtual Field Trips.*
- 2000 **Prentice-Hall.** *Geosystems Focus Group Participant*, Boulder, CO. Oct 11, 2000.
- 2000 **Prentice-Hall.** *Review of Applied Physical Geography.*
- 2000 **Prentice-Hall.** *Review of Elemental Geosystems.*
- 2000 **John Wiley and Sons.** *Review of Introduction to Physical Geography*
- 1999 **John Wiley and Sons.** *Review of Physical Geography: Science and Systems of the Human Environment.*
- 1999 **John Wiley and Sons.** *Review of Physical Geography of the Global Environment.*

Updated January 13, 2020