Curriculum Vita
David A. R. Kristovich, Ph.D.

9 June 2022

Adjunct Assoc. Professor
Department of Atmos. Sciences
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Head & Senior Scientist
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Editor-in-Chief
Journal of Applied Meteor. & Clim.
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Scientific Interests

My research falls within the intersections of the fields of boundary layer meteorology, mesoscale meteorology, and cloud/precipitation microphysics. My overall interest is in understanding how local variations in the earth's surface alter low-level atmospheric flow fields and, ultimately, change larger-scale weather conditions. Much of my work has been on weather and climate in the Great Lakes region. My research group has collected and/or analyzed field data taken in and around wintertime lake-effect snow storms, and examined microphysical changes due to blowing snow in Wyoming, atmospheric drainage flows in stable boundary layers in Illinois, frontal systems over the ocean near Ireland, and intense convective storms in Florida. We have also conducted collaborative studies on many of these topics using mesoscale numerical models. Other areas of interest include lake- and sea-breezes, near-shore thunderstorms, urban circulations and climate impacts on renewable energy.

Academic Background

Ph.D. Cloud Physics/Meteorology, Dept. Geophys. Sci., The University of Chicago, Chicago, IL, 1991. *The three-dimensional flow fields of boundary layer rolls observed during lake-effect snow storms*, 182 pp. Research advisor: Dr. Roscoe R. Braham, Jr.

S.M. Cloud Physics/Meteorology, Dept. Geophys. Sci., The University of Chicago, Chicago, IL 1988. *Reflectivity profiles and core characteristics along horizontal roll convection in lake-effect snowstorms*, 78 pp.

B.S. Meteorology, Dept. Meteorology and Physical Oceanography, Cook College, Rutgers University, New Brunswick, NJ, 1985.

Academic Employment History

ISWS, Prairie Research Institute, University of Illinois

- *Center / Section Head*, Center for Atmos. Sci., Climate & Atmos. Science Section (2007-present)
- *Senior Professional Scientist* (2001-2007)
- *Professional Scientist* (1998-2001)
- *Associate Professional Scientist* (1995-1998)
- *Assistant Professional Scientist* (1993-1995)

University of Illinois, Department of Atmospheric Sciences

- *Adjunct Associate Professor* (2000-present)
- *Visiting Associate Professor* (1998-2000)

Other Academic Appointments

- *Graduate Faculty member*, University of Illinois in Urbana-Champaign (2001-present)
- *Faculty of the Environment member*, University of Illinois in Urbana-Champaign
- *Visiting Lecturer*, Department of Physics, University of Illinois in Chicago (1992)
- *Research Associate*, Dept. of Geophysical Sciences, University of Chicago (1991-1992)
- *Graduate Research Assistant*, Dept. of Geophysical Sciences, University of Chicago (1985-1991)
- *Graduate Teaching Assistant*, Dept. of Geophysical Sci., University of Chicago (Fall 1986, 1987)

Peer-Reviewed Publications (48 published or in press - 16 first authored, 9 first auth by my grad students)

2020-Present

Hiscox, A., S. Bhimireddy, J. Wang, D.A.R. Kristovich, J. Sun, N. Patton, S. Oncly, W. Brown, 2022: When Stable Isn't Stable: Exploring the Variability of the Nocturnal Boundary Layer with the SAVANT Field Campaign, *Bulletin of the American Meteorological Society,* in review.

Bhimireddy, S. R., J. Wang, A. L. Hiscox, and D. A. R. Kristovich, 2021: Influence of Stability, and Surface Roughness on Turbulence during the Stable Atmospheric Variability and Transport (SAVANT) Field Campaign. *J. Appl. Meteorol. Climatol*., early online release. https://doi.org/10.1175/JAMC-D-21-0160.1

Griggs, C. B., C. F. M. Lewis, D. A. Kristovich, 2022: A late glacial lake-effect climate regime and abundant tamarack in the Great Lakes region, North America. *Quarternary Resch*., 1-19. doi:10.1017/qua.2021.76

Notaro, M., Y. Zhong, P. Xue, C. Peters-Lidard, C. Cruz, E. Kemp, D. A. R. Kristovich, M. Kulie, J. Wang, C. Huang, and S. J. Vavrus, 2021: Cold Season Performance of the NU-WRF Regional Climate Model in the Great Lakes Region. *J. Hydromet.*, **22** (9), 2423-2454. https://journals.ametsoc.org/view/journals/hydr/22/9/JHM-D-21-0025.1.xml.

2015-2019

Linares, A., C. H. Wu, A. J. Bechle, E. J. Anderson, and D. A. R. Kristovich, 2019: Unexpected rip currents induced by a meteotsunami. *Nature Scientific Reports*, doi:10.1038/s41598-019-38716-2.

Kristovich, D.A., E. Takle, G.S. Young, and A. Sharma, 2018: 100 Years of Progress in Mesoscale Planetary Boundary Layer Meteorological Research. *Meteorological Monographs,* **59**, 19.1–19.41, https://doi.org/10.1175/AMSMONOGRAPHS-D-18-0023.1

Kristovich, D. A., L. Bard, L. Stoecker, and B. Geerts, 2018: Influence of Lake Erie on a Lake Ontario lake-effect snow storm. *J. Appl. Climatol. Meteorol*., 57, 2019-2033.

Sharma, A., A.F. Hamlet, H.J.S. Fernando, C.E. Catlett, D.E. Horton, V.R. Kotamarthi, D.A.R. Kristovich, A. Packman, J.L. Tank, and D.J. Wuebbles, 2018: The need for an integrated land-lake-atmospheric modeling system for the Great Lakes. *Earth's Future*, 6(10), 1366-1379. https://doi.org/10.1029/2018EF000870.

Kristovich, D. A., 2017. Lake Climates. *The International Encyclopedia of Geography*. 1–8. https://doi.org/10.1002/9781118786352.wbieg0887

Kristovich, D.A.R., R. Clark, J. Frame, B. Geerts, K. Knupp, K. Kosiba, N. Laird, J. Minder, N. Metz, T. Sikora, J. Steenburgh, S. Steiger, J. Wurman, G. Young, 2017: The Ontario Winter Lake-Effect Systems Field Campaign: Scientific and Educational Adventures to Further Our Knowledge and Prediction of Lake-Effect Storms. *Bulletin of the American Meteorological Society*, **98**, 315-332. http://dx.doi.org/10.1175/BAMS-D-15-00034.1.

Bechle, A. J., C. H. Wu, D. A. R. Kristovich, E. J. Anderson, D. J. Schwab, and A. B. Rabinovich, 2016: Meteotsunamis in the Laurentian Great Lakes: An Overlooked Hazard. *Nature Sci. Rep.*, 6, 37832. http://dx.doi.org/10.1038/srep37832.

Geerts, B., B. Pokharel, and D. A. R. Kristovich, 2015: Blowing Snow as a Natural Glaciogenic Cloud Seeding Mechanism. *Mon. Wea. Rev*., **143**, 5017–5033. http://dx.doi.org/10.1175/MWR-D-15-0241.1

Xu, X., T. Zhao, F. Liu, S. L. Gong, D. Kristovich, C. Lu, Y. Guo, X. Cheng, Y. Wang, and G. Ding, 2016: Climate modulation of the Tibetan Plateau on haze in China. *Atmos. Chem. Phys.,* **16**, 1365-1375. doi:10.5194/acpd-15-28915-2015.

Bechle, A. J., D. A. R. Kristovich, and C. H. Wu, 2015: Meteotsunami occurrences and causes in Lake Michigan. *J. Geophys. Resch. – Oceans*, **120**, 8422-8438. doi:10.1002/2015JC011317

2010-2014

Bard, L. and D.A.R. Kristovich, 2012: Trend Reversal in Lake Michigan Contribution to Snowfall. *J. Appl. Meteor. and Climatol*., **51**, 2038–2046. doi: http://dx.doi.org/10.1175/JAMC-D-12-064.1

Workoff, T. E., D.A.R. Kristovich, N. F. Laird, R. LaPlante, and D. Leins, 2012: A climatological analysis of deep convective interaction with the Lake Erie marine boundary layer. *Wea. Forecasting*. **27**, 1279-1289.

Kunkel, K.E., D.R. Easterling, D.A.R. Kristovich, B. Gleason, L. Stoecker, and R. Smith, 2012: Meteorological causes of the secular variations in observed extreme precipitation events for the conterminous United States. *J. Hydrometeor*. **13**, 1131-1141.

Keeler, J. M., and D. A. R. Kristovich, 2012: Observations of Urban Heat Island Influence on Lake-Breeze Frontal Movement. *J. Appl. Meteor. Climatol.*, **51**, 702–710.

Markus, M., D. J. Wuebbles, X.-Z. Liang, K. Hayhoe, and D. A. R. Kristovich, 2012: Diagnostic analysis of future climate scenarios applied to urban flooding in the Chicago metropolitan area. *Climatic Change*. **11**, 879-902. DOI 10.1007/s10584-011-0172-z.

Barthold, F. E., and D. A. R. Kristovich, 2011: Observations of the cross-lake cloud and snow evolution in a lake-effect snow event. *Mon. Wea. Rev*. **139**, 2386-2398.

Kunkel, K.E., D. R. Easterling, D.A.R. Kristovich, B. Gleason, L. Stoecker, and R. Smith, 2010: Recent increases in U.S. heavy precipitation associated with tropical cyclones. *Geophysical Research Letters*. **37**, L24706, doi:10.1029/2010GL045164.

2005-2009

Kristovich, D. A. R., 2009: *Climate Sensitivity of Great Lakes – Generated Weather Systems*. In *Climatology, Variability, and Change in the Midwest*, S. C. Pryor, Editor. Indiana University Press, 236-250.

Kristovich, D. A. R., and K. E. Kunkel, 2009: *Overview: Climate Hazards*. In *Climatology, Variability, and Change in the Midwest*, S. C. Pryor, Editor. Indiana University Press, 219-224.

Westcott, N. E., and D. A. R. Kristovich, 2009: A climatology and case study of continental cold season dense fogs associated with low clouds. *J. Appl. Meteor. and Climatol*., **48**, 2201-2214.

Gerbush, M.R., D.A. Kristovich, and N.F. Laird, 2008: Mesoscale Boundary Layer and Heat Flux Variations over Pack Ice–Covered Lake Erie. J. Appl. Meteor. Climatol., 47, 668–682, https://doi.org/10.1175/2007JAMC1479.1

Rodriguez, R., D.A.R. Kristovich, and M.R. Hjelmfelt, 2007: Lake-to-Lake Cloud Bands: Frequencies and Locations. *Mon. Wea. Rev*., **135**, 4202-4213.

Schroeder, J.J., D.A.R. Kristovich, and M.R. Hjelmfelt, 2006: Boundary layer and microphysical influences of natural cloud seeding on a lake-effect snow storm. *Mon. Wea. Rev*., **134**, 1842-1858. *(Featured in the "Papers of Note" section, Bull. of the Amer. Meteorol. Soc., Sept. 2006)*

Kristovich, D.A.R., and M. L. Spinar, 2005: Diurnal variations in lake-effect precipitation near the western Great Lakes. *J. Hydrometeorology*, **6**, 210-218.

2000-2004

Grim, J. A., N. F. Laird, and D. A. R. Kristovich, 2004: Mesoscale Vortices Embedded within a lake-effect shoreline band. *Mon. Wea. Rev*., **132**, 2269-2274.

Laird, N.F., and D.A.R. Kristovich, 2004: Comparison of observations with idealized model results for a method to resolve winter lake-effect mesoscale morphology. *Mon. Wea. Rev*., **132**, 1093-1103.

Laird, N.F., J.E. Walsh, and D.A.R. Kristovich, 2003: Model simulations examining the relationship of lake-effect morphology to lake shape, wind direction, and wind speed. *Mon. Wea. Rev*., **131**, 2101-2111.

Kristovich, D.A.R., N.F. Laird, and M.R. Hjelmfelt, 2003: Convective evolution across Lake Michigan in a lake-effect snow event. *Mon. Wea. Rev*., **131**, 643-655.

Laird, N.F., D.A.R. Kristovich, and J.E. Walsh, 2003: Idealized Model Simulations Examining the Mesoscale Structure of Winter Lake-Effect Circulations. *Mon. Wea. Rev*., **131**, 206-221.

Kunkel, K.E., N.E. Westcott, and D.A.R. Kristovich, 2002: Effects of climate change on heavy lake-effect snowstorms near Lake Erie. *J. Great Lakes Res*., **28**, 521-536.

Young, G.S., D.A.R. Kristovich, M.R. Hjelmfelt, and R.C. Foster, 2002: Rolls, Streets, Waves and More. *Bull. Amer. Meteor. Soc*., **83**, electronic 1001-1001.

Young, G.S., D.A.R. Kristovich, M.R. Hjelmfelt, and R.C. Foster, 2002: Supplement to Rolls, Streets, Waves and More: A review of quasi-two dimensional structures in the atmospheric boundary layer. *Bull. Amer. Meteor. Soc*., **83**, 997–1001. Also, an extended electronic supplement.

Laird, N.F., and D.A.R. Kristovich, 2002: Variations of sensible and latent heat fluxes from a Great Lakes buoy and associated synoptic weather patterns, *J. Hydrometeor*., **3**, 3-12.

Laird, N.F., L. J. Miller, and D.A.R. Kristovich, 2001: Synthetic dual-Doppler analysis of a winter mesoscale vortex. *Mon. Wea. Rev*., **129**, 312-331.

Laird, N.F., D.A.R. Kristovich, X.-Z. Liang, R.W. Arritt, and K. Labas, 2001: Lake Michigan lake breezes: Climatology, local forcing, and synoptic environment. *J. Appl. Meteor*., **40**, 409-424.

Kristovich, D.A.R., G.S. Young, J. Verlinde, P.J. Sousounis, P. Mourad, D. Lenschow, R.M. Rauber, M.K. Ramamurthy, B.F. Jewett, K. Beard, E. Cutrim, P.J. DeMott, E.W. Eloranta, M.R. Hjelmfelt, S.M. Kreidenweis, J. Martin, J. Moore, H.T. Ochs, D.C. Rogers, J. Scala, G. Tripoli, and J. Young, 2000: The Lake-Induced Convection Experiment (Lake-ICE) and the Snowband Dynamics Project. *Bull. Amer. Meteor. Soc*., **81**, 519-542. https://doi.org/10.1175/1520-0477(2000)081<0519:TLCEAT>2.3.CO;2

Kunkel, K.E., N.E. Westcott, and D.A.R. Kristovich, 2000: Effects of climate change on heavy lake-effect snowstorms near Lake Erie and other Great Lakes. *National Assessment on Impacts of Global Climate Change*, Environmental Protection Agency.

Cooper, K.A., M.R. Hjelmfelt, D.A.R. Kristovich, N.F. Laird, and R.G. Derickson, 2000: Numerical simulations of convective rolls and cells in lake-effect snow bands. *Mon. Wea. Rev.*, **128**, 3283–3295.

1995-1999

Kristovich, D.A.R., N.F. Laird, M.R. Hjelmfelt, R.G. Derickson, and K. Cooper, 1999: Transitions in boundary layer meso-γ convective structures: An observational case study. *Mon. Wea. Rev.*, **127**, 2895-2909.

Kristovich, D.A.R. and N.F. Laird, 1998: Observations of widespread lake-effect cloudiness: Influences of upwind conditions and lake surface temperatures. *Wea. Forecasting*., **13**, 811-821.

Isard, S.A., D.A.R. Kristovich, S.H. Gage, C.J. Jones, and N.F. Laird, 1998: Atmospheric motion systems that influence the redistribution and accumulation of insects on the beaches of the Great Lakes in North America. *Physical Aerobiology*, vol. **1**.

Kristovich, D. A. R., and R. R. Braham, Jr., 1998: Mean profiles of moisture fluxes in snow-filled boundary layers. *Bound.-Lay. Meteor.,* **87**, 195-215.

Braham, R.R., Jr., and D.A.R. Kristovich, 1996: On calculating the buoyancy of convective cores. *J. Atmos. Sci.,* **53***,* 654-658.

Kristovich, D.A.R., and R. Steve, 1995: A Satellite Study of Cloud-Band Frequencies over the Great Lakes. *J. Appl. Meteor.*, **34**, 2083-2090.

Laird, N.F., D.A.R. Kristovich, R.M. Rauber, H.T. Ochs, III, and L.J. Miller, 1995: The Cape Canaveral sea and river breezes: Kinematic structure and convective initiation. *Mon. Wea. Rev.,* **123***,* 2942-2956.

1990-1994

Kristovich, D.A.R., 1993: Mean circulations of boundary-layer rolls in lake-effect snow storms. *Bound.-Lay. Meteor*., **63**, 293-315.

Kristovich, D.A.R., 1992: ***Discover Weather***. Publications International, Lincolnwood, IL, 48 pp. *(Reviewed in Bull. Amer. Meteor. Soc., **76**, 778, nominated for AMS L.J. Battan Award)*.

Braham, R.R., Jr., D.A.R. Kristovich & M.J. Dungey, 1992: Comparison of lake-effect snow precipitation rates determined from radar and aircraft measurements, *J. Appl. Meteor.*, **31**, 237-246.

Other Publications

Kristovich, D. A. R. (2021). Marking 60 Years of Applied Meteorology and Climate Publishing, *J. Appl. Meteor. Climatol.*, **60**(12), 1613-1614. https://journals.ametsoc.org/view/journals/apme/60/12/JAMC-D-21-0238.1.xml

Kristovich, D.A.R., 2020: Data Availability Principles and Practice, *J. Appl. Meteor. Climatol*., **59** (12). http://dx.doi.org/10.1175/JAMC-D-20-0236.1.

Kristovich, D.A.R., 2020: Significance Statements Communicate Our Science More Widely, *J. Appl. Meteor. Climatol*., **59** (12). http://dx.doi.org/10.1175/JAMC-D-20-0228.1

Kristovich, D.A.R., 2013: Editorial (on JAMC contributions of Stan Changnon). *J. Appl. Meteor. Climatol*., **52**, 3–3. doi: http://dx.doi.org/10.1175/JAMC-D-12-0270.1.

Changnon, S. A., J. Angel and D. Kristovich, 2010: *The Unusual Weather of 2009 in Illinois Created Major Economic Impacts*. Illinois State Water Survey Publication Series. ISWS RI-120.

Changnon, S. A. and D. Kristovich, 2009: *The Severe Winter of 2008-09 in Illinois*. Illinois State Water Survey Publication Series. ISWS RI-118.

Rauber, R.M., M. Garstang, and D.A.R. Kristovich, 2003: Editorial (on career of Dr. Marvin Wesely). *J. Appl. Meteor*., **42**, 669.

Labas and Kristovich, 2002: Enhanced lake-effect storms. Chicago Chapter of AMS. *Bulletin Amer. Meteor. Soc.,* **83**, 962-963.

Research Grants (26 funded)

Current Kristovich, D.A.R., National Science Foundation Physical and Dynamic Meteor. Prog., Influence of Natural Cloud Seeding on Lake-effect Snow System Microphysical and Entrainment Processes (2020-2023).

Current Hiscox, A., J. Wang, and D.A.R. Kristovich, National Science Foundation Physical and Dynamic Meteor. Prog., *COLLABORATIVE RESEARCH: SAVANT: Stable Atmospheric Variability And Transport*. (2017-2021).

Current Kristovich, D.A.R., and J. Wang, DOE Argonne National Laboratory, Lidar Observations in Support of the Argonne Wind Study (2021).

Previous Wang, Kristovich, NASA Modeling, Analysis, and Prediction Program, Heavy Lake-Effect Snowstorms in NU-WRF. (2017-2020) Subcontract through Notaro, et al. Univ. Wisconsin – Madison.

Previous Kristovich, D.A.R. and K. E. Bauer, US Army Corps of Engineers. Maintenance and Upgrade of the Cook County Precipitation Network (2018-2020).

Previous Kristovich, Clark, Sikora, Young, Laird, and Metz, National Science Foundation Physical and Dynamic Meteor. Prog., *Collaborative Research: Ontario Winter Lake-effect Systems-Surface and Atmospheric Influences on Lake-effect Convection (OWLeS-SAIL).* (2013-2017).

Previous Wang, J. and Kristovich, 2015, University of Illinois Office of the Vice Chancellor for Research Equipment grant, University of Illinois AtmosPheric Lidar System (UI-APLS). (2014-2016)

Previous Kristovich, University of Illinois Office of the Vice Chancellor for Research, National Great Rivers Research and Education Center Challenge Grant Program, *Riverside Urban-Produced Extreme Rainfall (RUPER)*. (2014-2015)

Previous Kristovich, University of Illinois Research Board. *Investigation of the Climatic Reversal in Lake-Effect Snows near Lake Michigan.* Named a Arnold O. Beckman Award for "special distinction, special promise, or special resource value". (2011-2012)

Previous Kristovich, National Science Foundation Physical & Mesoscale Meteorol. Prog. *Collaborative Research: Multi-Scale Study of Lake Breezes and the Impact of Marine Boundary Layers on Convection in the Great Lakes Region.* Collaborative with Laird, Hobart and William Smith Colleges. (2007-2012)

Previous Kunkel, Easterling, and Kristovich, National Oceanic and Atmospheric Administration-Office of Global Programs, *Meteorological Causes of the Secular Variations in Observed Heavy Precipitation Events for the Conterminous United States*. (2007-2012)

Previous Geerts, Rasmussen, Breed, Friedrich, Deshler, and Kristovich, National Science Foundation Physical & Mesoscale Meteorol. Prog. *AgI Seeding Cloud Impact Investigation (ASCII). (2012, funded through Univ. Wyoming).*

Previous Kristovich, Laplante, and Leins, Cooperative Prog. for Operational Meteorol., Educ., and Training (COMET), Partners Project. *Variations in Thunderstorm Interactions with Lake Erie.* (2009-2012)

Previous Kristovich, Czapar, and Markus, National Great Rivers Research & Educ. Center. *Internship: Effects of Climate Change on Increased Rainfall Intensity and Nutrient Loss.* (Summer 2011)

Previous Kristovich, Department of Commerce, National Oceanic and Atmospheric Administration. Illinois-Indiana Sea Grant Development Prog. *Pilot field observations of Lake Michigan atmospheric boundary layers.* (2010-2011)

Previous Kristovich and Caughey, Illinois State Toll Highway Auth., *Atmospheric Deposition of Roadway Deicing Material: Part B.* Collaborative with Tao, Univ. Maryland. (2007-2010)

Previous Kristovich, National Science Foundation, Mesoscale Dynamic Meteorology Program, *Collaborative Research: Effects of Non-Uniform Surface Conditions on Lake-Effect Systems*. Collaborative with Hjelmfelt, South Dakota School of Mines and Tech., and Laird, Hobart and William Smith Colleges. (2005-2010)

Previous Kristovich, and Laird, National Science Foundation, Mesoscale Dynamic Meteorol. Prog., *Collaborative Research: Investigations of Non-Classic Lake-Effect Boundary Layer Processes*. Collaborative with Hjelmfelt, South Dakota School of Mines & Tech. (2002-2006)

Previous Kristovich, University of Illinois Research Board, *Multiple-Lake Lake-Effect Snowstorms: Frequency of Occurrence and Favorable Environmental Conditions*. (2002-2004)

Previous Kristovich, Laird, LaPlante, and Kubina, The Cooperative Program for Operational Meteorology, Education, and Training (COMET), *The influence of the Lake Erie lake breeze on thunderstorm initialization.* (2001-2003)

Previous Kristovich, National Science Foundation, Mesoscale Dynamic Meteorology Program, *Investigations of Mesoscale Boundary Layer Structures Observed during the Lake-Induced Convection Experiment (Lake-ICE).* Collaborative with Hjelmfelt, South Dakota School of Mines and Tech. (1999-2003)

Previous Kristovich, University Corporation for Atmospheric Research, *Supercomputer support for NSF projects on lake-effect snow storms.* (1996-2010)

Previous Kristovich, National Science Foundation, Mesoscale Dynamic Meteorology Program, *Convective Rolls and Cells in Lake-effect Snowstorms: Structures, Mechanisms, and Effects*. Collaborative with Hjelmfelt, South Dakota School of Mines and Tech. (1996-2000)

Previous Kristovich, University of Illinois Research Board, *Investigations of mesoscale circulations in Lake-ICE*. (1999-2000)

Previous Kristovich, National Oceanic and Atmospheric Administration, Great Lakes Environmental Research Laboratory, *Estimation of Lake-Effect Snowfall Rates from New Observational Facilities.* (1995-1998)

Previous Kristovich, National Science Foundation, Mesoscale Dynamic Meteorology Prog., *Lake-Effect Boundary Layer Processes*. Collab. with Braham, North Carolina State Univ. (1993-1996)

Previous Kristovich, University of Illinois Research Board, *Radar Investigations of Lifetimes of Lake-Effect Convection*. (1993-1994)

Journal Editorial Activities, Reviews, Professional Committees

Journal Editorships

- *Editor-in-Chief*, American Meteorological Society Journal of Applied Meteorology & Climatology (2012-present)
- *Associate Editor,* National Weather Digest, National Weather Association (2005-2012)
- *Editor,* American Meteorological Society Jour. of Applied Meteorol. & Climatol. (2001-2011)
- *Associate Editor,* American Meteorological Society Monthly Weather Review (2001)

Professional Committees

- *Member*, American Meteorological Soc. Earth Interactions journal subcommittee (2018-present)
- *Member*, American Meteorological Soc. Publications Commission (2012-present)
- *Member,* American Meteorological Soc. Comm. on Boundary Layers & Turbulence (2006-2008)

Workshops and Panels

- Invited presenter, *Airborne Doppler Radar Data Analysis Workshop.* Atmospheric Technology Div., National Center for Atmos. Research. (2000)
- Organizer, *Workshop on Lake-ICE and Snowband projects*. Illinois State Water Survey. (1999)
- Panel Member, *Boundary Layer Section, Workshop on the Midwest Collaborative Regional Climate Center*, Argonne National Laboratory. (1999)
- Participant, *Cooperative Atmosphere Surface Exchange Study (CASES) Workshop*. (1995)
- Panel Member, *Workshop on Cloud Microphysics and Radar,* American Meteor. Society. (1990)

Review Activities

- Reviewed proposals to the National Science Foundation (several programs), NCAR Atmos. Tech. Div., DOE Atmos. Radiation Meas. (ARM) Program, and Univ. Illinois Research Board.
- Conducted "red team" review of proposal at Argonne National Laboratory
- Reviewed manuscripts submitted to the *J. Applied Meteor., Monthly Weather Rev., Bulletin of the Amer. Meteor. Soc., Weather and Forecasting, J. Geophysical Research, Geophysical Research Letters, Meteorology and Atmospheric Physics, Quarterly Journal of the Royal Meteorological Society, J. Hydrology, International J. Climatology,* and *National Weather Digest.*

Field Projects

Leadership Activities

- Lead-PI (with Geerts, Steenburgh), *Ontario Winter Lake-effect Systems (OWLeS) – Surface and Atmospheric Influences (SAIL)* field project (2013-2014) * Developed a Special Collection of OWLeS articles in American Meteorological Society journals.
- Hiscox, Wang, and Kristovich, *Stable Atmospheric Variability And Transport (SAVANT)* (2018) * Developed a Special Collection of OWLeS articles in American Meteorological Society journals.
- Laird and Kristovich, D.A.R.. National Science Foundation, Mesoscale Dynamic Meteorol. Program, *Facilities and Operations Support for the Great Lakes Ice Cover – Atmospheric Flux (GLICAF) experiment.* (2004)

- Kristovich, Young, Verlinde, Sousounis, Mourad, Lenschow, Cutrim, DeMott, Eloranta, Hjelmfelt, Kreidenweis, Martin, Moore, Ochs, Rogers, Scala, Tripoli, and Young. National Science Foundation, Mesoscale Dynamic Meteorology Program. *Facilities and operations support for the Lake-Induced Convection Experiment (Lake-ICE).* (1997-1998)

Field Projects

- Stable Atmospheric Variability And Transport (SAVANT), co-PI, Mahomet, IL (2018)
- Ontario Winter Lake-effect Systems (OWLeS), Lead PI, New York & Toronto (2013-2014)
- AgI Seeding Cloud Impact Investigation (ASCII), Co-PI, Wyoming (2012)
- The Great Lakes Ice Cover – Atmospheric Flux (GLICAF), Co-PI., Lake Erie (2004)
- Lake-Induced Convection Experiment (Lake-ICE), *Head, Scientific Steering Committee, Lead PI.,* Lake Michigan (1997-1998)
- NWS Lake-Effect Snow Study (LES), participant, PI. (1994-1997)
- Winter Icing and Storms Project (WISP), participant, Colorado (1994)
- Fronts and Atlantic Storm Track Exp. (FASTEX), participant, Ireland (1997)
- Convection and Precipitation/Electrification experiment (CaPE), research (1996)
- Univ. Chicago Lake-effect Snow Storm (LESS) project, research using observations (1983-1984)

Invited Presentations (Partial List)

Conferences and Workshops

- Kristovich, D.A.R., 2018: Impact of Climate Change and Variability on Water Resources, Air & Waste Management Association Lake Michigan Section, Chicago, IL, 15 May.
- Kristovich, D.A.R., J. Wang, and A. Hiscox, 2018: Dispersion of Particles in Temperature Inversions, *73rd Annual Meeting of the North Central Weed Science Society*, Milwaukee, WI, 4 December.
- The OWLeS Project: Preliminary Observations of Lake-effect Boundary Layer Interactions. *Invited Presentation, 15th Conf. Mountain Meteorology, American Meteorological Society,* (2014).
- Observed Influences of Chicago on Lake-breeze Inland Movement: Climatological Approach. *Workshop on Urban Landscapes and Climate Change: From Measurements to Modeling*, Argonne National Laboratory (2013)
- Coastal Urban Heat Islands. *Workshop, Illinois-Indiana Sea Grant Program*. (2010)
- ELDORA observations of Great Lakes snowstorms. *Airborne Doppler Radar Data Analysis Workshop, National Center for Atmos. Research*. (2000)
- Methods of estimating lake-effect snowfall rates near Lake Michigan. *National Weather Service Operational Support Facility, Fac. for Integrated Remote Sensing Tech. Training*. (1996)
- Overview of the Lake-ICE project. *GEWEX/GCIP/LSA-NC Detailed Design Workshop*. (1995)

Departmental Seminars

- The OWLeS Project: Preliminary Observations of Lake-effect Boundary Layer Interactions *Seminar Series. Notre Dame University* (2014).
- Influence of Upwind Conditions on Lake-effect Snow Systems. *Colloquium Series, Dept. Atmospheric and Oceanic Sciences, University of Wisconsin-Madison* (2013).
- Kristovich and Bard, Lake-effect Snow Evolution and Climatic Trends. *Dept. Atmos. Sci., University of Wyoming*. (2012)
- Recent trends in heavy precipitation in the Great Lakes. *Ohio State University Climate Change Webinar Series* (2011).
- Encounters Between Thunderstorms and the Great Lakes. *Department of Geophysical Sciences, Hobart and William Smith Colleges* (2010)
- Observations of atmospheric boundary layers in regions with complex surfaces. *Center for Numerical Weather Prediction, Chinese Academy of Meteorological Sciences* (2010)
- Lake-effect snow storms: from crystals to climate. *Department of Geography and Meteorology, Valparaiso University* (2010)
- The Influence of Low-Level Shear on Lake-Effect Roll Formation. *Colloquium, Dept. Meteorology, Pennsylvania State University*. (2000)
- Observations of lake-effect mesoscale circulations (Lakesnow Project, NWS Lake-effect snow study, Lake-ICE). *Colloquium, Dept. Meteorology, Pennsylvania State University*. (1999)
- Who holds the reigns on lake-effect snows? *Colloquium. Univ. Wisconsin - Milwaukee*. (1996)

Conference Activities

Conference Presentations and Preprint Articles

- Dr. Kristovich has authored or co-authored more than 50 preprint articles presented at scientific conferences and meetings. Conferences include *American Meteorological Society, American Geophysical Union,* and *International* Conferences on Clouds and Precipitation, Mesoscale Processes, Boundary Layers and Turbulence, Coastal Atmospheric and Oceanic Prediction, Air-Sea Interactions, Weather Analysis and Forecasting, Radar Meteorology, Hurricanes and Tropical Meteorology, Applied Climatology, Great Lakes Research, and Global Change.

Conference Program Committees, Session Chair Activities

- Program Committee Member, *American Meteorological Society Conference on Radar Meteorology, Chicago*. (2011)
- Observed Seasonal to Interannual Variability, *22nd Conference on Climate Variability and Change*, American Meteorological Society. (2010)
- Tropical Cyclones, *34th Conference on Radar Meteorology*, American Meteorol. Society. (2009)
- Program Committee Member, *American Meteorological Society Conference on Boundary Layers and Turbulence*, Stockholm. (2008)
- Boundary Layer Clouds, *18th Symposium on Boundary Layers and Turbulence*, American Meteorological Society. (2008)
- Marine Boundary Layers, *18th Symposium on Boundary Layers and Turbulence*, American Meteorological Society. (2008)
- Session Co-organizer and Co-Chair, *Regional Lake-Atmosphere Interactions: Past, Present, and Future*. 50th Annual Meeting of the International Association for Great Lakes Research. (2007)
- Cloudy Boundary Layers, *Symp. on Boundary Layers and Turbulence,* Amer. Meteor. Soc. (2006)

Memberships in Professional Organizations

- American Meteorological Society (National, Central Illinois, and Chicago Chapters)
- American Geophysical Union
- National Weather Association

Educational Activities

Graduate Student Advising

Student Name	Degree	Departmental Affiliation	My role	Status
Sophia Sagrestano	M.S.	Atmos. Sci., Univ. Illinois	Advisor	In progress
David King	M.S.	Atmos. Sci., Univ. Illinois	Advisor	Complete
Sarah Trojniak	Ph.D.	Earth & Atmos. Sci., Saint Louis University	Advisory Comm.	Complete 2018
Alvaro Linares	Ph.D.	Civil and Environ. Engin., the University Wisconsin – Madison	Advisory Comm.	Complete 2018
Sara Strey-Mellema	Ph.D.	Atmos. Sci., Univ. Illinois	Advisory Comm.	Complete 2016
Adam Bechle	Ph.D.	Civil and Environ. Engin., the University Wisconsin – Madison	Advisory Comm.	Complete 2015
Kirstin Harnos	Ph.D.	Atmos. Sci., Univ. Illinois	Advisory Comm.	Complete 2015
Jennifer Davison	Ph.D.	Atmos. Sci., Univ. Illinois	Advisory Comm.	Complete 2012
Luke Bard	M.S.	Atmos. Sci., Univ. Illinois	Advisor	Complete May 2012
Jason Keeler	M.S.	Atmos. Sci., Univ. Illinois	Advisor	Complete Aug 2010
Thomas Workoff	M.S.	Atmos. Sci., Univ. Illinois	Advisor	Complete May 2010
Faye Barthold	M.S.	Atmos. Sci., Univ. Illinois	Advisor	Complete Dec 2008
Paul Henne	Ph.D.	Ecology & Evol. Biol., U Illinois	Advisory Comm.	Complete Dec 2006
Yarice Rodriguez	M.S.	Dept. Geography, Univ. Illinois	Co-Advisor	Complete Dec 2005
Anthony Liu	Ph.D.	University of Toronto, Canada	Advisory Comm.	Complete 2005
Steven Jackman	M.S.	Atmos. Sci., Univ. Illinois	Co-Advisor	Complete Sep 2005

Matheiu Gerbush	M.S.	Atmos. Sci., Univ. Illinois	Advisor	Complete May 2005
Nancy Westcott	Ph.D.	Geography, Univ. Illinois	Advisory Comm.	Complete May 2005
Mei Han	Ph.D.	Atmos. Sci., Univ. Illinois	Advisory Comm.	Complete Dec 2004
Natasha Miles	Ph.D.	Meteorology, Penn. State. U.	Advisory Comm.	Complete Dec 2002
Joshua Schroeder	M.S.	Atmos. Sci., Univ. Illinois	Advisor	Complete 2002
Neil F. Laird	Ph.D.	Atmos. Sci., Univ. Illinois	Co-Advisor	Complete Jul 2001
Bruce Rose	Ph.D.	Atmos. Sci., Univ. Illinois	Co-Advisor	Complete Dec 2000
Greg Mann	Ph.D.	AOSS, Univ. Mich.	Advisory Comm.	Complete 1999
Ronald Steve	M.S.	Atmos. Sci., Univ. Illinois	Advisor	Complete Apr 1996

Teaching Activities

- Courses Taught
  - *Mesoscale Processes* (ATMS 314), Department of Atmospheric Sciences, University of Illinois in Urbana-Champaign. (2009)
  - *Boundary Layer Meteorology* (ATMS 405), Department of Atmospheric Sciences, University of Illinois in Urbana-Champaign. (2009)
  - *Weather and Climate* (GEOG 102), Department of Geography, University of Illinois in Urbana-Champaign (1998)
  - Funding for Development and Teaching, *Discovery Course*, Isard and Kristovich, Dept. of Geog., College of Liberal Arts & Sci., Univ. of Illinois in Urbana-Champaign. (1999-2000)
  - *Physics of Weather (lecture and lab)* (PHYS 111), Department of Physics, University of Illinois in Chicago (1992)
- *Invited lectures* in graduate-level courses, including Radar Meteorology, Mesoscale Meteorology, Professional Development and Boundary Layer Meteorology (Department of Atmospheric Sciences, University of Illinois in Urbana-Champaign), and Cloud Dynamics (Department of Meteorology, Pennsylvania State University).
- Numerous presentations on weather at local schools grades K-8.
- Consultant, *New Webster's Children's Visual Dictionary*, Publications International, Inc. (1995)