David M. Wright

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EDUCATION

Ph. D. Atmospheric Science, University of Michigan

Jan. 2012 - Present

Advisor: Dr. Derek J. Posselt

Research: Climate Change's Influences on Great Lakes Precipitation Processes

M.S. Atmospheric Science, University of Michigan

May 2010

Advisor: Dr. Derek J. Posselt

Research: Extended Inland Propagation of Lake-Effect Snowfall

B.S.E. Earth System Science Engineering, University of Michigan Concentration in Meteorology Graduated Cum Laude May 2009

RESEARCH EXPERIENCE

Associate Research Scientist, University of Michigan

Oct. 2010 - Dec. 2011

- Investigated sensitivity of lake-effect snowfall to lake ice cover and lake surface properties in the Great Lakes region
- Explored the impacts of climate change on water quality in the Great Lakes

PROFESSIONAL EXPERIENCE

Freelance Meteorologist, WTOL

Sept. 2010 - Jan. 2011

- Created and delivered weather forecasts during holiday and weekend evening newscasts
- Recorded weather reports for local radio stations

TEACHING EXPERIENCE

Team Leader, Great Lakes Simulation Multidisciplinary Design Team Jan. 2015 – Present

- Develop and lead training labs on using WRF and NCL for undergraduate and graduate students across a variety of engineering disciplines.
- Manage a group of students to create and answer a research question involving simulations of weather in the Great Lakes region.

Graduate Student Instructor, Extreme Weather Sept. 2009- May 2010, Sept. – Dec. 2013

- Answered questions from students during lectures via Lecture Tools
- Held office hours to provide additional help for students
- Created and graded exams
- Maintained grade book for 100+ students per semester

PUBLICATIONS

Wright, D. M., 2015: "Was this storm caused by climate change?" How the Great Lakes can help to connect climate change with daily weather events. *Down to Earth, Physics Today*. http://scitation.aip.org/content/aip/magazine/physicstoday/news/10.1063/PT.5.4017.

Michalak, A.M., E.J. Anderson, D. Beletsky, S. Boland, N.S. Bosch, T.B. Bridgeman, J.D. Chaffin, K.H. Cho, R. Confesor, I. Daloğlu, J. DePinto, M.A. Evans, G.L. Fahnenstiel, L. He, J. C. Ho, L. Jenkins, T. Johengen, K.C. Kuo, E. LaPorte, X. Liu, M. McWilliams, M. R. Moore, D. J. Posselt, R.P. Richards, D. Scavia, A. L. Steiner, E. Verhamme, **D. M. Wright**, M.A. Zagorski, 2013: Record-setting algal bloom in Lake Erie caused by agricultural and meteorological trends consistent with expected future conditions. *Proc. Nat. Acad. Sci.*, **110**, 6448-6452.

Wright, D. M., D. J. Posselt, and A. L. Steiner, 2013: Sensitivity of Lake-Effect Snowfall to Lake Ice Cover and Temperature in the Great Lakes Region. *Mon. Wea. Rev.*, **141**, 670-689.

PRESENTATIONS

Wright, D. M., D. J. Posselt, G. Mann, Examining the land-lake-atmosphere interactions of the May 5, 2003 severe weather event over southwest Michigan. Poster presented at the 16th Conference on Mesoscale Processes, Boston, MA. August 2015.

Wright, D. M., Sensitivity of Lake-Effect Snowfall to Lake Surface Properties in the Great Lakes Region. Seminar presented at the Great Lakes Environmental Research Lab's Brown Bag Seminar series. Ann Arbor, MI. June 10, 2015.

Wright, D. M., D. J. Posselt, G. Mann, Examining the land-lake-atmosphere interactions of the May 5, 2003 severe weather event over southwest Michigan. Talk presented at the 13th Symposium on the Coastal Environment, 95th AMS Annual Meeting, Phoenix, AZ. January 2015.

Wright, D. M., D. J. Posselt, G. Mann, Examining the land-lake-atmosphere interactions of the May 5, 2003 severe weather event over southwest Michigan. Talk presented at the 15th Annual WRF Users' Workshop, Boulder, CO. June 2014.

Wright, D. M., D. J. Posselt, G. Mann, Examining the land-lake-atmosphere interactions of the May 5, 2003 severe weather event over southwest Michigan. Talk presented at the 22nd Annual U.S./Canada Great Lakes Operational Meteorology Workshop, Ann Arbor, MI. May 2014.

Samson, P. J., and **D. M. Wright**, LectureTools: Interactive Tools to Teach Survey Courses. Talk presented in the 23rd Symposium on Education at the American Meteorological Society's 94th Annual Meeting. Atlanta, GA. February 2014.

Wright, D. M., D. J. Posselt, and G. Mann, Examining the Land-Lake-Atmosphere Interactions of the May 5, 2003 Severe Weather Event Over Southwest Michigan. Poster presented in the 26th Conference on Weather Analysis and Forecasting/22nd Conference on Numerical Weather Prediction at the American Meteorological Society's 94th Annual Meeting. Atlanta, GA. February 2014.

Wright, D. M., D. J. Posselt, and A. L. Steiner. Sensitivity of Lake-Effect Snowfall to Lake Ice Cover and Temperature in the Great Lakes Region. Poster presented at the American Meteorological Society's 15th Conference on Mesoscale Processes. Portland, OR. August 2013.

Wright D. M., D. J. Posselt, and A. L. Steiner, Sensitivity of Lake-Effect Snowfall to Lake Ice Cover and Temperature in the Great Lakes Region, Poster presented in the 25th Conference on Climate Variability and Change at the 93rd American Meteorological Society Annual Meeting, Austin, TX. January 2013.

Wright, D. M., D. J. Posselt, A. L. Steiner, Sensitivity of Lake-Effect Snowfall to Lake Ice Cover and Temperature in the Great Lakes Region, Poster presented at the 13th annual WRF Users' Workshop, Boulder, CO. June 2012.

Wright, D. M., D. J. Posselt, and A. L. Steiner, Sensitivity of Lake-Enhanced Snowfall to Lake Ice Cover in the Great Lakes Region, Poster presented at the American Geophysical Union Fall Meeting, San Francisco, CA. December 2011.

RESEARCH AND OTHER SKILLS

Computational Experience

- Extensive work using the Weather Research and Forecasting Model (WRF) at sub-1km grid spacing.
- Proficient in NCL, IDV, and VisIT for graphic visualization of observed and modeled weather data.
- Experience working on a high performance-computing environment.

Other Skills

- Developing and implementing research topics.
- Collaborating on large, inter-disciplinary projects spanning both science and the humanities.
- Communicating via different medium (written, electronic, classroom, public forums, television).
- Partnering with emergency managers to provide weather forecasts and monitoring for large outdoor sporting and public events

PROFESSIONAL AFFILIATIONS

American Meteorological Society (AMS) 2008 – Present American Geophysical Union (AGU) 2011 - 2012, 2015 – Present

PROFESSIONAL DEVELOPMENT AND SERVICE

Reviewer for: Journal of Climate, Journal of Applied Meteorology and Climatology, and Geoscientific Model Development
University of Michigan Engineering Council Constitutional Convention Delegate
Rackham-CRLT Preparing Future Faculty Conference
Sept. 2013

AWARDS

13 th Symposium on the Coastal Environment 2 nd Place Student Paper	2015
Michigan Geophysical Union 3 rd Place Poster Presentation	2012