

MEGAN C. KIRCHMEIER-YOUNG

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EDUCATION

- (In progress) Ph.D. in Atmospheric and Oceanic Sciences

University of Wisconsin-Madison, Fall 2010 - present

Dissertation: *A probabilistic perspective for statistical downscaling of climate variables: model development, application, and evaluation*

Advisors: Dr. Daniel Vimont and Dr. David Lorenz

Ph.D. Minor: Statistics (completed 2013)

- B.S. Meteorology, *summa cum laude*, minor in Mathematics

University of Oklahoma, Fall 2006 - Spring 2010

Cumulative GPA: 3.98

Thesis: *An investigation of trends in winter precipitation-type in the northeastern United States*

Advisor: Dr. Frederick Carr

Honors Thesis: *An investigation of inhomogeneities in air temperature data associated with site moves in the Oklahoma Mesonet*

Advisors: Dr. Renee McPherson and Dr. Christopher Fiebrich

PROFESSIONAL EXPERIENCE

Fall 2010 - present **Graduate Research Assistant** (Advisor: Dr. Daniel Vimont)
University of Wisconsin-Madison — Madison, WI

Spring 2014 **Teaching Assistant/Lab Instructor** (Under: Dr. Jim Burt)
Geography 360, Quantitative Methods in Geographical Analysis
University of Wisconsin, Madison — Madison, WI

Spring 2008 - Spring 2010 **Quality Assurance Student Assistant** for the Oklahoma Mesonet
Oklahoma Climatological Survey — Norman, OK

Summer 2009 **Research intern** through the National Oceanic and Atmospheric Administration (NOAA) Ernest F. Hollings Scholarship Program (Mentor: Dr. Irina Petropavlovskikh)
Earth System Research Laboratory/Global Monitoring Division — Boulder, CO

Fall 2007 - Spring 2009 **Peer Learning Assistant** (academic tutor)
Assessment and Learning Center, University of Oklahoma — Norman, OK
College Reading and Learning Association (CRLA) Advanced Tutoring Certificate,
Certified Tutor Level 2 (Spring 2008)

Summer 2007 **Intern/Research Assistant**
NBC Action News Weather Center — Kansas City, MO

HONORS AND AWARDS

- American Meteorological Society Graduate Fellowship (2010-2011)
- University of Oklahoma (OU) School of Meteorology Kelvin and Lisa Droegemeier Endowed Scholarship for Excellence in Meteorology (2010)
- NOAA Ernest F. Hollings Scholar (2008-2010)
- OU College of Atmospheric and Geographic Sciences Outstanding Junior (2008-2009)
- OU School of Meteorology Junior Undergraduate Academic Achievement Award (2008-2009)
- Mary Lou Lewis Scholarship for Excellence as a Peer Learning Assistant (2008, 2009)
- OU President's Honor Roll (2006-2010)
- OU College of Atmospheric and Geographic Sciences Dean's List (2006-2010)
- OU School of Meteorology Scholarship (2006-2010)
- Alpha Lambda Delta National Honor Society (2006)

PUBLICATIONS

Kirchmeier, M. C., D. J. Lorenz, and D. J. Vimont, 2014: Statistical downscaling of daily wind speed variations. *J. Appl. Meteor. Climatol.*, **53**, 660-675.

Kirchmeier-Young, M. C., D. J. Lorenz, and D. J. Vimont, 2015: Verification of extremes from probabilistic downscaling with an emphasis on user-minded metrics. *In Preparation*.

Daloz, A. S., R. Chakraborty, T. S. L'Ecuyer, and **M. C. Kirchmeier-Young**, 2015: Evaluation of precipitation in observations, reanalysis, and climate models over the Himalayas from an agricultural point of view. *In Preparation*.

PRESENTATIONS

- Oral Presentations

Verification of probabilistic downscaling (January 2015)

Assessing the Skill of Statistical Downscaling Techniques: Questioning Assumptions and Quantifying Value, a joint session between the Special Symposium on Model Postprocessing and Downscaling and the 13th Conference on Artificial Intelligence, 95th Annual Meeting of the American Meteorological Society — Phoenix, AZ

Statistical downscaling of daily wind speed variations (January 2013)

Symposium on the Role of Statistical Methods in Weather and Climate Prediction, 93rd Annual Meeting of the American Meteorological Society — Austin, TX

An analysis of tropospheric ozone over Boulder, CO (July 2009)

NOAA Education Peer Research Symposium — Silver Spring, MD

- Poster Presentations

The use of probabilistic downscaling in relating local-scale extreme events to large-scale meteorological conditions (August 2013)

US CLIVAR Extremes Workshop — Berkeley, CA

Statistical downscaling of daily wind speed variations (January 2013)

Symposium on the Role of Statistical Methods in Weather and Climate Prediction, 93rd Annual Meeting of the American Meteorological Society — Austin, TX

The use of meteorological parameters to compare measurements of tropospheric ozone (January 2010)

16th Conference on Air Pollution Meteorology, 90th Annual Meeting of the American Meteorological Society — Atlanta, GA

SERVICE

- Co-coordinator of the Center for Climatic Research Climate, People, and the Environment Program (CPEP) Seminar series (2013-present)
- Center for Climatic Research graduate student representative (2012-2014)
- Officer in the Graduate Student Association (GSA) of the University of Wisconsin-Madison Department of Atmospheric and Oceanic Sciences
 - Faculty Liaison (2012-2013)
 - Treasurer (2013-2014)
- Student representative on the American Meteorological Society Fellowship Advisory Panel — Boston, MA (2011)
- Reviewer for the *Journal of Climate*

CONFERENCES/WORKSHOPS ATTENDED

- 95th Annual Meeting of the American Meteorological Society — Phoenix, AZ (January 2015)
- US CLIVAR Extremes Workshop — Berkeley, CA (August 2013)
- National Climate Predictions and Projections (NCPP) Quantitative Evaluation of Downscaled Climate Projections — National Center for Atmospheric Research, Boulder, CO (August 2013)
- 93rd Annual Meeting of the American Meteorological Society — Austin, TX (January 2013)
- 91st Annual National Graduate Women in Science Conference — Madison, WI (June 2012)
- 91st Annual Meeting of the American Meteorological Society — Seattle, WA (January 2011)
- 90th Annual Meeting of the American Meteorological Society — Atlanta, GA (January 2010)