Christopher J. Anderson, Curriculum Vitae

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Education

2001–2004	Doctor of Philosophy, Agricultural Meteorology Graduate Minor: Statistics Dissertation: An Examination of Hydrological Processes in Regional Climate Simulations Iowa State University, Ames, IA
1994–1996	Master of Science, Agricultural Meteorology Thesis: MCC and PECS Occurrences during 1992 and 1993 Iowa State University, Ames, IA
1990–1994	Bachelor of Science, Meteorology St. Cloud State University, St. Cloud, MN

Employment

2008-current	Scientist Assistant Director, Climate Science Initiative Iowa State University Ames, IA
2005-2008	Lead Mesoscale Modeler NOAA/ESRL/GSD/FAB Boulder, CO
2004-2005	North American Regional Climate Change Assessment Project Technical Coordinator Iowa State University, Ames, IA
1997–2001	Research Associate II Iowa State University, Ames, IA
1993	Research Experience for Undergraduates National Severe Storms Laboratory, Norman, OK

Recent Accomplishments

- Funded by NOAA to examine whether dynamical downscaling of NOAA global forecasts may improve seasonal forecasts of weather variables used by water managers.
- Organized the "Scoping Workshop on Climate and Weather Information Services and Needs for Flood Emergency Management and Flood Mitigation Planning", sponsored by NOAA.

- Contributed downscaling data sets and spreadsheets in support of Colorado Climate Report authored by the Western Water Assessment for the State of Colorado Water Conservation Board.
- Provided a seminar on downscaling methods at a workshop for Colorado Front Range water managers sponsored by the Western Water Assessment.
- Contributed to a Colorado Front Range proposal to study climate change impacts on water management systems.
- Co-author of Western Utility Climate Alliance commissioned report 'Options for Improving Climate Modeling to Assist Water Utility Planning for Climate Change'.

Peer-Reviewed Publications

Lead Author

Anderson, Christopher. J., Raymond W. Arritt, and John S. Kain, 2007: Tests of a modified Kain-Fritsch scheme in a regional climate model. *J. Hydrometeor.,* **8**, 1128—1140.

Anderson, Christopher J., and Christopher K. Wikle, 2007: Population influences on tornado reports. *Wea. Forecasting,* **22**, 571—579.

Anderson, Christopher J., Raymond W. Arritt, Eugene S.Takle, Zaito Pan, William J. Gutowski, Jr., Francis O. Otieno, Renato da Silva, Daniel Caya, Jens H. Christensen, Daniel Lüthi, Miguel A. Gaertner, Clemente Gallardo, Filippo Giorgi, Song-You Hong, Colin Jones, H.-M. H. Juang, J. J. Katzfey, William M. Lapenta, René Laprise, Jay W. Larson, Glen E. Liston, John L. McGregor, Roger A. Pielke, Sr., John O. Roads, John A. Taylor, 2003: Hydrological processes in regional climate model simulations of the central United States flood of June-July 1993. *J. of Hydrometeor.*, **4**, 584-598.

Anderson, Christopher J., Raymond W. Arritt, 2001: Representation of summertime low-level jets in the central United States by the NCEP–NCAR reanalysis. *J. Climate*, **14**, 234–247.

Anderson, Christopher J., and Raymond W. Arritt, 2001: Mesoscale convective systems over the United States during the 1997-98 El Nino. *Mon. Wea. Rev.*, **129**, 2443-2457.

Anderson, Christopher J., and Raymond. W. Arritt, 1998: Mesoscale convective complexes and persistent elongated convective systems over the United States during 1992 and 1993. *Mon. Wea. Rev.*, **126**, 578-599.

Coauthor

Correia, Jr., James, R. W. Arritt, and C. J. Anderson, 2008: Idealized mesoscale convective system structure and propagation using convective parameterization. *Mon. Wea. Rev.*, **136**, 2422-2442.

Yuan, H., C. Lu, J. McGinley, P. Schultz, B. Jamison, L. Wharton, and C. Anderson, 2007: Short-range precipitation forecast using time-lagged multimodel ensembles. Submitted to *Wea. Forecasting*

Yuan, H., J. A. McGinley, P. J. Schultz, C. J. Anderson, and C. Lu, 2007: Evaluation and Calibration of Short-Range PQPFs from Time-Phased and Multimodel Ensembles during the HMT-West-2006 Campaign. Submitted to *J. Hydrometeor.*

Schultz, P., S. C. Albers, C. J. Anderson, D. Birkenheuer, I. Jankov, and J. McGinley, 2007: A Computationally Efficient Method for Initializing Numerical Weather Models with Explicit Representation of Moist Convection. Submitted to *Wea. Forecasting*

Jankov, I., P. J. Schultz, C. J. Anderson, and S. E. Koch, 2007: The impact of different physical parameterizations and their interactions on cold-season QPF. Accepted by *J. Hydrometeor.*

Takle, E. S., M. Jha, and C. J. Anderson, 2005: Hydrological cycle in the upper Mississippi River basin: 20th century simulations using multiple GCMs. *Geophys. Res. Let.*, **32**, doi:10.1029/2005GL023630

Pan, Z., R. W. Arritt, E. S. Takle, W. J. Gutowski, Jr., C. J. Anderson, and M. Segal, 2004: Altered hydrologic feedback in a warming climate introduces a "warming hole". *Geophys. Res. Let.,* **31**, doi:10.1029/2004GL020528.

Wikle, Christopher, K., and Christopher J. Anderson, 2003: Climatological analysis of tornado counts using a hierarchical bayesian spatio-temporal model. *Journal of Geophysical Research*, **108(D24)**, 9005, doi:10.1029/2002JD002806.

Arritt, Raymond, W., Dustin C. Goering, and Christopher J. Anderson, 2000: The North American monsoon system in the Hadley Centre coupled ocean-atmosphere GCM. *Geophysical Research Letters*, **27**, 565-568.

Daniel, Chad J., Raymond W. Arritt, and Christopher J. Anderson, 1999: Accuracy of 404-mhz radar profilers for detection of low-level jets over the central United States. *Journal of Applied Meteorology*, **38**, 1391-1396.

Segal, Moti, Raymond W. Arritt, and Christopher J. Anderson, 1997: On the clearing of cumulus clouds downwind from lakes. *Monthly Weather Review*, **125**, 639-646.

Segal, Moti, Mark Leuthold, Raymond W. Arritt, Christopher J. Anderson, and J. Shen, 1997: Small lake daytime breezes: Some observational and conceptual evaluations. *Bulletin of the American Meteorological Society*, **78**, 1135-1147.