

Raymond W. Arritt

Professor, Department of Agronomy, Iowa State University, Ames, Iowa 50011-1010

email rwarritt@bruceagron.iastate.edu, telephone 515-294-9870

Education

1979 B.A., Environmental Sciences, Economics, University of Virginia

1982 M.S., Environmental Sciences, University of Virginia

1985 Ph.D., Atmospheric Science, Colorado State University

Sample of publications relevant to the proposed research

Gutowski, W.J., Jr. K.A. Kozak, R.W. Arritt, J.H. Christensen, J.C. Patton and E.S. Takle, 2007: A possible constraint on regional precipitation intensity changes under global warming. *J. Hydromet.* (in press).

Anderson, C.J., R.W. Arritt and J.S. Kain, 2007: An alternative mass flux profile in the Kain-Fritsch convective parameterization and its effects in seasonal precipitation. *J. Hydromet.* (in press).

Takle, E.S., J. Roads, B. Rockel, W.J. Gutowski, Jr., R.W. Arritt, I. Meinke, C.G. Jones and A. Zadra, 2006: Transferability intercomparison: An opportunity for new insight on the global water cycle and energy budget. *Bulletin of the American Meteorological Society* (in press).

Duffy, P.B., R.W. Arritt, J. Coquard, W. Gutowski, J. Han, J. Iorio, J. Kim, L.-R. Leung, J. Roads and E. Zeledon, 2006: Simulations of present and future climates in the western U.S. with four nested regional climate models. *J. Climate* 19, 873-895.

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. Lett.*, 31, L17109, doi:10.1029/2004GL02528.

Anderson, C.J., R. W. Arritt, E. S. Takle, Z. Pan, W. J. Gutowski, R. da Silva, and PIRCS modelers, 2003: Hydrologic processes in regional climate model simulations of the central United States flood of June-July 1993. *J. Hydromet.* 4, 584-598.

Pan, Z., R.W. Arritt, W.J. Gutowski, Jr. and E.S. Takle, 2001: Soil moisture in a regional climate model: simulation and projection. *Geophys. Res. Lett.*, 28, 2947-2950.

Pan, Z., J. H. Christensen, R.W. Arritt, W.J. Gutowski, Jr., E.S. Takle, and F. Otieno, 2001: Evaluation of uncertainties in regional climate change simulations. *J. Geophys. Res.*, 106, 17,735-17,752.

Yang, Z. and R.W. Arritt, 2002: Tests of a perturbed physics ensemble approach for regional climate modeling. *J. Climate*, 15, 2881-2896.

Arritt, R.W., D.C. Goering and C.J. Anderson, 2000: The North American monsoon system in the Hadley Centre coupled ocean-atmosphere GCM. *Geophys. Res. Lett.*, 27, 565-568.

Synergistic activities

Associate Editor, *Journal of Hydrometeorology*, 2004-present

Contributing author, Intergovernmental Panel on Climate Change Fourth Assessment Report

Contributing author, Intergovernmental Panel on Climate Change Third Assessment Report

Chair, Scale Interactions in Variability and Extremes (SIEVE) working group of the GEWEX

Coordinated Energy and water-cycle Observations Project (CEOP)