6. Curriculum Vitae -Zaitao Pan

Department of Earth and Atmospheric Sciences, St. Louis University, 3643 Lindell Blvd., St. Louis, MO 63108
Tel: 314-977-3114, email: panz@eas.slu.edu http://www.eas.slu.edu/People/ZPan/

Education

1978	BS	Atmospheric Physics	Nanjing University, China
1983	MS	Meteorology	University of the Philippines
1996	PhD	Water Resources/Atmospheric Sci.,	Iowa State University

Work Experience

2003-present	Assistant Professor, Dept. of Earth and Atmospheric Sciences, St. Louis University
2002-03	Associate Scientist, Dept. of Agronomy, Iowa State University
2000-02	Assistant Scientist, Dept. of Agronomy, Iowa State University
1997-00	Research Associate, Dept. of Geological & Atmospheric Sci., Iowa State University
1993-96	Research Assistant, Dept. of Geological & Atmospheric Sci., Iowa State University
1991-93	Visiting Scientist, Forecast Systems Lab, NOAA, Boulder, CO

Publications in past three years

Pan, Z., M. Segal, and C. Graves, 2006: On the potential change in surface water vapor deposition over the continental United States due to increases in atmospheric greenhouse gases. *J. Climate*, **19**, 1576–1585.

Pan, Z., X.B. Yang, S. Pivonia, L. Xue, R. Pasken, and J. Roads, 2006. Long-term prediction of soybean rust entry into the continental United States, *Plant Disease*, 90, 840-848.

Pivonia, S., X. B., Yang, and Z. Pan, 2005: Assessment of epidemic potential of soybean rust in the United States, *Plant Disease*, **89**, 678-682.

Takle, E.S., and Z. Pan, 2005: Climate change and crop production: challenges to modeling future scenarios, In: *Climate Change and Global Food Security*, Lal, R., N. Uphoff, B.A. Stewart, and D.O. Hansen, Eds. Boca Raton, Fl. CRC Press. P. 375-395.

Pan, Z., M. Segal, R.W. Arritt, and E.S. Takle, 2004: On the potential change in solar radiation over the US due to increase of atmospheric greenhouse gases, *Renewable Energy*, **29**, 1923-1928.

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.

Jha, M, Z. Pan, E.S. Takle, and R. Gu, Impacts of climate change on stream flow in the upper Mississippi river basin: A regional climate model perspective, *J. Geophys. Res.*, **109**, D09105, doi:10.1029/2003JD003686, 2004.

Pan, Z., M. Segal, and R.W. Arritt, 2004: Role of topography in forcing low-level jets in central U.S. during the 1993 flood - altered terrain simulations. *Mon. Wea. Rev.*, **132**, 396-403.

Gutowski, W., F. Otieno, R. Arritt, E. Takle, and Z. Pan, 2004: Diagnosis and attribution of a seasonal precipitation deficit in a U.S. regional climate simulation. *J. Hydrometeor.*, **5**, 230-242.

Five other significant publications

Pan, Z., J. Christensen, R. Arritt, W. Gutowski, E. Takle, and F. Otieno, 2001: Evaluation of uncertainty in regional climate change simulations, *J. Geophys. Res.*, **106**, 17,735-17,751.

Pan, Z., R. Arritt, W. Gutowski, E. Takle, 2001: Soil moisture in regional climate models: simulation and projection. *Geophys. Res. Lttr*, **28**, 2947-2950.

Pan, Z., E. Takle, M. Segal, and R. Arritt, 1999: Simulation of potential impacts of man-made land use changes on U.S. summer climate under various synoptic regimes. *J. Geophy. Res.* **104,** 6515-6528.

Pan, Z., E. Takle, M. Segal, and R. Turner, 1996: Influences of model parameterization scheme on the response of rainfall to soil moisture in the Central United States. *Mon. Wea. Rev*., **124**, 1786-1802.

Pan, Z., M. Segal, R. Turner, and E. Takle, 1995: Model simulation of impacts of transient surface wetness on summer rainfall in the United States Midwest during drought

Research Interests

Dr. Pan's the primary research areas include: 1) regional and global climate change in the central U.S., 2) regional-scale surface hydrology, 3) numerical modeling of crop growth and development, 4) long-distance dispersal of plant pathogens, and 5 regional carbon dynamics over U.S. agroecosystem.