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EDUCATION

Ph.D., University of Texas at Austin, Hydrology, 2001.
M.A., University of Texas at Austin, Mathematics, 1995.
B.S., Southwestern University, Mathematics, 1986.

RESEARCH EXPERIENCE

2001-date Postdoctoral Research Scientist, Oak Ridge National Laboratory
1995-2001 Graduate Fellow, Dept. of Geological Sciences, University of Texas.
1994-1995 Graduate Research Assistant, Dept. of Mathematics, University of Texas.

FELLOWSHIPS AND AWARDS

AMS Global Change Scholarship (2000)
DOE Graduate Research Environmental Fellowship (1999-2001)
NASA Graduate Student Researchers Program/HPCC Fellowship (1996-1999)
NSF Graduate Research Traineeship in Hydrology (1995-1996)

PUBLICATIONS

- Branstetter, M.L. and D.J. Erickson III, 2003: Continental runoff dynamics in the Community Climate System Model (CCSM2) control simulation, accepted by *Journal of Geophysical Research-Atmospheres*.

CONFERENCE PRESENTATIONS

- Branstetter, M.L. and D.J. Erickson, 2003: Improved representation of rivers in climate models. *7th SIAM Conference on Mathematical and Computational Issues in the Geosciences*, Society for Industrial and Applied Mathematics, Austin.
- Branstetter, M.L., D.J. Erickson, and J.B. Drake, 2003: Interannual variability and continental runoff in the CCSM2 control simulation. *Observing and Understanding the Variability of Water in Weather and Climate Symposium*, American Meteorological Society, Long Beach.
- Sale, M.J., M.L. Branstetter, F. Pan, F.M. Hoffman, W.W. Hargrove, D.J. Erickson, 2003: Regional water cycle studies: Model versus observational data. *10th U.S.-Japan Workshop on Global Climate Change: Climate and Water*, January 15-17, 2003, Irvine.

- Branstetter, M.L., D.J. Erickson, and J.B. Drake, 2002: Continental runoff dynamics in the CCSM2.0 control simulation. *7th CCSM Workshop*, UCAR, Breckenridge.
- Famiglietti, J., M. Branstetter, S. Doney, S. Graham, N. Rosenbloom, D. Schimel, and W. Washington, 2001: Continental runoff feedbacks using fully-coupled climate system models. *XXVI General Assembly*, European Geophysical Society, Nice, France.
- Famiglietti, J.S., F. Olivera, J.P. Walker, P.R. Houser, M. Rodell, and M.L. Branstetter, 2001: A catchment-based global river routing scheme for climate models and assimilation of streamflow and altimetry data. *XXVI General Assembly*, European Geophysical Society, Nice, France.
- Branstetter, M.L., J.S. Famiglietti, W.M. Washington, and A.P. Craig, 2001: Using a 200-year simulation of a fully-coupled climate system model to investigate the role of the continental runoff flux on the global climate system. *Climate Variability, the Oceans, and Societal Impacts Symposium*, American Meteorological Society, Albuquerque.
- Branstetter, M.L., J.S. Famiglietti, W.M. Washington, and A.P. Craig, 2000: Implications of the inclusion of continental runoff in climate models. *Conference on Oceans*, American Geophysical Union, San Francisco.
- Branstetter, M.L., J.S. Famiglietti, A. P. Craig, and W. M. Washington, 2000: Investigation of the sensitivity of global oceans to continental runoff using the PCM parallel climate model. *11th Symposium on Global Change Studies*, American Meteorological Society, Long Beach.
- Branstetter, M.L., K.I. Mohr, and J.S. Famiglietti, 1999: A coupled biosphere-atmosphere climate model study of global land cover change and its impact on regional and global hydrologic cycles. *Conference on Hydrology*, American Geophysical Union, San Francisco.
- Olivera, F., J.S. Famiglietti, and M.L. Branstetter, 1999: Resolution dependence of cell-to-cell runoff routing models. *Conference on Hydrology*, American Geophysical Union, Boston.
- Branstetter, M.L., and J.S. Famiglietti, 1999: Using a parallel algorithm to model river transport in climate system models. *5th SIAM Conference on Mathematical and Computational Issues in the Geosciences*, Society for Industrial and Applied Mathematics, San Antonio.
- Branstetter, M.L., and J.S. Famiglietti, 1999: Testing the sensitivity of GCM-simulated runoff to climate model resolution using a parallel river transport algorithm. *14th Conference on Hydrology*, American Meteorological Society, Dallas.
- Branstetter, M.L. and J.S. Famiglietti, 1998: Investigation of the effects of continental runoff on climate dynamics using a parallel Earth system model. *Conference on Hydrology*, American Geophysical Union, Boston.
- Devereaux, J.A., J. S. Famiglietti, M. L. Branstetter, S. T. Graham, K. I. Mohr, M. Rodell, G. Kim, D. Miller, E. Amano, J. Levine, R. Reichle, T. J. Jackson, 1997: Correlation of Remotely Sensed Soil Moisture Content With Gravimetric and Impedance Probe Measurements at Two Sites During SGP97. *Conference on Hydrology*, American Geophysical Union, San Francisco.
- Famiglietti, J.S., J.A. Devereaux, C. Laymon, T. Tsegaye, P.R. Houser, T.J. Jackson, M.L. Branstetter, S.T. Graham, D. Miller, B. Mohanty, K.I. Mohr, M. Rodell, G. Kim, E. Amano, J. Levine, 1997: Ground-based investigation of subgrid-scale spatial-temporal soil moisture variability in support of SGP '97. *Conference on Hydrology*, American Geophysical Union, San Francisco.
- Branstetter, M. L., and J. S. Famiglietti, 1997: Development of a Parallel River Transport Model for Use in Coupled Climate System Models. *NASA/GSFC Symposium*, Greenbelt, MD, Sept. 24-26.

REFERENCES

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