

CURRICULUM VITAE

LEI MENG

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Education

Ph.D. (2009) Geography (Climatology), Department of Geography, Texas A&M University, College Station, Texas, USA
Primary Advisor: Dr. Steven M. Quiring
Dissertation: Examining the relationship between antecedent soil moisture and summer precipitation in the U.S. Great Plains.

M.S. (2005) Geology, Department of Geology, University of Illinois at Urbana-Champaign, Urbana, Illinois, USA
Primary Advisor: Dr. Craig M. Bethke

M.S. (2003) Soil Physics, Department of Soil and Water Sciences, China Agricultural University, Beijing, China
Primary Advisor: Dr. Qiang Zuo

B.S. (2000) Geo-hydrology & Engineering Geology, Department of Earth Sciences, Nanjing University, Nanjing, China

Professional Employment

08/2011- current Assistant Professor at Western Michigan University
09/2009-08/2011 Post-doc associate at Cornell University

Research Interests

Climate Variability and Climate Change	Drought Analysis and Prediction
Land-Atmosphere Interaction	Climate Modeling
Soil Moisture Modeling	Methane Biogeochemical Modeling
Extreme Climates	

Peer-Reviewed Journal Publications Since Joining WMU

2016

21. Meng, L., T. Ford, and Ying Guo (2016) Logistic regression analysis of drought

persistence in East China. *International Journal of Climatology*. DOI: 10.1002/joc.4789 (Journal Impact Factor: 3.157)

20. Paudel, R., N.M. Mahowald, P.G.M. Hess, **L. Meng**, and W.J. Riley (2016) Attribution of changes in global wetland methane emissions from pre-industrial to present using CLM4.5-BGC. *Environmental Research Letters*, 11, doi:10.1088/1748-9326/11/3/034020 (Journal Impact Factor: 3.9)
19. Zhang C. G., Y. J. Shen, F. G. Liu, and **L. Meng**. 2016. Changes in reference evapotranspiration over an agricultural region in the Qinghai-Tibetan plateau, China. *Theoretical and Applied Climatology*, 123, 107-115, DOI 10.1007/s00704-014-1335-4. (Journal Impact Factor: 1.76)

2015

18. **Meng, L.**, Paudel, R., Hess, P. G. M., and Mahowald, N. M.: Seasonal and interannual variability in wetland methane emissions simulated by CLM4Me' and CAM-chem and comparisons to observations of concentrations, *Biogeosciences*, 12, 4029-4049, doi:10.5194/bg-12-4029-2015, 2015.
<http://www.biogeosciences.net/12/4029/2015/bg-12-4029-2015.html> (Journal Impact Factor: 3.98)
17. Zhang, L., S. Wang, C. He, K. Shang, **L. Meng**, X. Li, and B. M. Lofgren. 2015. A new method for instant correction of Numerical Weather Prediction Products in China. *Science China: Earth Sciences*, 58(2): 231-244, doi: 10.1007/s11430-014-4957-6. (Journal Impact Factor: 1.49)

2014

16. **Meng, L.** and Y. J. Shen, 2014. On the relationship of soil moisture and extreme temperatures in East China. *Earth Interactions*, **18**, 1–20.
doi: <http://dx.doi.org/10.1175/2013EI000551.1> (Journal Impact Factor: 1.84)
15. **Meng, L.**, D. Long, S. M. Quiring, Y.J. Shen, 2014. Statistical analysis of the relationship between spring soil moisture and summer precipitation in East China. *International Journal of Climatology*, 34: 1511–1523, DOI: 10.1002/joc.3780. (Journal Impact Factor: 3.157)

2013

14. Ryu Saito, Prabir K. Patra, Colm Sweeney, T. Machida, Maarten Krol, Sander Houweling, Philippe Bousquet, Anna Agustí-panareda, Dmitry Belikov, Daniel Bergmann, Huisheng Bian, Philip Cameron-Smith, Martyn Chipperfield, Audrey Fortems-Cheiney, Annemarie Fraser, Luciana Gatti, Manuel Gloor, Peter Hess, Stephan Kawa, Rachel Law, Robin Locatelli, Zoe Loh, Shamil Maksyutov, **Lei Meng**, John Miller, Paul Palmer, Ronald Prinn, Matt Rigby, Christopher Wilson. (2013): TransCom model simulations of methane: comparison of vertical profiles with in situ aircraft measurements. *Journal of Geophysical Research-Atmospheres*, 118, 3891–3904, doi:10.1002/jgrd.50380. (Journal Impact Factor: 3.426)
13. Belikov, D. A., Maksyutov, S., Krol, M., Fraser, A., Rigby, M., Bian, H., Agustí-Panareda, A., Bergmann, D., Bousquet, P., Cameron-Smith, P., Chipperfield, M. P., Fortems-Cheiney, A., Gloor, E., Haynes, K., Hess, P., Houweling, S., Kawa, S. R., Law, R. M., Loh, Z., **Meng, L.**, Palmer, P. I., Patra, P. K., Prinn, R. G.,

Saito, R., and Wilson, C. (2013): Off-line algorithm for calculation of vertical tracer transport in the troposphere due to deep convection, *Atmospheric Chemistry and Physics*, 13, 1093-1114, doi:10.5194/acp-13-1093-2013. (Journal Impact Factor: 5.053)

2012

12. Long, Di, B. R. Scanlon, D. N. Fernando, **L. Meng**, S. M. Quiring, 2012: Are Temperature and Precipitation Extremes Increasing over the U.S. High Plains?. *Earth Interactions*, **16**, 1–20. doi: <http://dx.doi.org/10.1175/2012EI000454.1> (Journal Impact Factor: 1.84)
11. **Meng, L.**, Hess, P. G. M., Mahowald, N. M., Yavitt, J. B., Riley, W. J., Subin, Z. M., Lawrence, D. M., Swenson, S. C., Jauhiainen, J., and Fuka, D. R (2012): Sensitivity of wetland methane emissions to model assumptions: application and model testing against site observations, *Biogeosciences*, 9, 2793-2819, doi:10.5194/bg-9-2793-2012. (Journal Impact Factor: 3.98)

2011

10. Patra, P. K., Houweling, S., Krol, M., Bousquet, P., Belikov, D., Bergmann, D., Bian, H., Cameron-Smith, P., Chipperfield, M. P., Corbin, K., Fortems-Cheiney, A., Fraser, A., Gloor, E., Hess, P., Ito, A., Kawa, S. R., Law, R. M., Loh, Z., Maksyutov, S., **Meng, L.**, Palmer, P. I., Prinn, R. G., Rigby, M., Saito, R., and Wilson, C. (2011): TransCom model simulations of CH₄ and related species: linking transport, surface flux and chemical loss with CH₄ variability in the troposphere and lower stratosphere, *Atmospheric Chemistry and Physics*, 11, 12813-12837, doi:10.5194/acp-11-12813-2011. (Journal Impact Factor: 5.053)

Peer Reviewed Journal Publications Prior to Joining WMU

9. Riley, W. J., Subin, Z. M., Lawrence, D. M., Swenson, S. C., Torn, M. S., **Meng, L.**, Mahowald, N. M., and Hess, P. (2011): Barriers to predicting changes in global terrestrial methane fluxes: analyses using CLM4Me, a methane biogeochemistry model integrated in CESM, *Biogeosciences*, 8, 1925-1953, doi:10.5194/bg-8-1925-2011.
8. **Meng, L.** and S. M. Quiring (2010) Examining the Influence of Spring Soil Moisture Anomalies on Summer Precipitation in the U.S. Great Plains using the Community Atmosphere Model version 3. *Journal of Geophysical Research-Atmospheres*, 115, D21118, doi:10.1029/2010JD014449.
7. **Meng, L.** and S. M. Quiring (2010) Observational Relationship of Sea Surface Temperatures and Precedent Soil Moisture with Summer Precipitation in the U.S. Great Plains. *International Journal of Climatology*, 30: 884-893, DOI: 10.1002/joc.1941.
6. Cox, W., **L. Meng**, C. Khedun, A. Nordfelt, and S.M. Quiring (2009) Discharge Variability for an Artesian Spring of the Edwards Aquifer: Comal Springs (1933-2007). *International Journal of Climatology*, 29: 2324–2336, DOI:10.1002/joc.1871.
5. **Meng, L.** and S. M. Quiring (2008) A Comparison of Soil Moisture Models Using Soil Climate Analysis Network Observations. *Journal of Hydrometeorology*. 9(4): 641-659, DOI:10.1175/2008JHM916.1.(The Association of American Geographers Climate Specialty Group “John Russell Mather” Paper of the Year Award Winner).

4. Zuo, Q., **L. Meng** and R. Zhang (2004) Simulating Soil Water Flow with Root-Water-Uptake Applying an Inverse Method. *Soil Science*. 169:13-24, DOI: 10.1097/01.ss.0000112018.97541.85.
3. Zuo, Q., F. Jie, R. Zhang and **L. Meng** (2004) A Generalized Function of Wheat's Root Length Density Distributions. *Vadose Zone Journal*. 3: 271-277.
2. Zuo, Q., **L. Meng** and D. Wang (2004) Estimating Normalized Root Length Density Distribution of Winter Wheat Using Measured Soil Water Content Profiles. *Transactions of the Chinese Society of Agricultural Engineering*. 20(4): 1-6 (in Chinese with English abstract).
1. **Meng, L.** and Q. Zuo 2003. Effects of Reclaimed Wasterwater Irrigation on Distributions of Root-Length-Density and Root-Water-Uptake-Rate in Winter Wheat. *Journal of Irrigation and Drainage*. 22: 25-29 (in Chinese with English abstract).

WMU Internal Grants (Funded)

2014 PI: Examining the impact of land cover/use changes and agricultural irrigation on summer monsoons over East Asia. The Milton E. and Ruth M. Scherer Endowment Fund of Department of Geography at Western Michigan University.

2014 PI: Examining the relationship between soil moisture and precipitation in CMIP5 simulations. Faculty Scholars Award (SFSA), Office of the Vice President for Research, Western Michigan University.

2012 PI: Role of antecedent soil moisture conditions in summer precipitation variation in East China. The Milton E. and Ruth M. Scherer Endowment Fund of Department of Geography at Western Michigan University.

2012 PI: Role of antecedent soil moisture conditions in summer precipitation variation in East China. Faculty Research and Creative Activities Award (FRACAA), Office of the Vice President for Research, Western Michigan University. (Budget: \$9,979).

Submitted (or Funded) External Grant Proposals

6. PI: Collaborative Research: Role of antecedent soil moisture in the climate system. Submitted to National Science Foundation, co-PI: Steven M. Quiring. (WMU Budget: \$270,876) (Submission date: August 5, 2015)

5. co-PI: Collaborative Research: Effects of human-induced land cover/use changes on summer monsoon rainfall over East Asia. Submitted to National Science Foundation, (WMU budget: 177,621) (Submission date: July 30, 2015, declined on Jan 18, 2016)

4. co-PI: Collaborative Research: Effects of human-induced land cover/use changes on summer monsoon over East Asia. Submitted to National Science Foundations, PI: Eungul Lee. (WMU Budget: \$147,040) (Status: Declined) (Apr 2014)

3. PI: Collaborative Research: The role of antecedent soil moisture in summer precipitation patterns. Submitted to National Science Foundations, co-PI: Steven M. Quiring. (WMU

Budget: \$174,611) (Status: Declined) (Aug 2013)

2. co-PI: Improved simulation of methane fluxes in tropical wetlands using CLM4Me'. Submitted to Department of Energy Office of Biological and Environmental Research, PI: Steven M. Quiring, other co-PIs: Brendan Roark, and Jason Vogel, November 2012. (WMU budget: \$80,508) (Status: Declined) (Nov 2012)

1. Investigator: Department of Energy, Building improved optimized parameter estimation algorithms to improve methane and nitrogen fluxes in a climate model, subcontract through Cornell University. (Budget: \$23,224.00). (Status: Funded)

Teaching

Fall, 2011: Physical Geography (GEOG 1050) (43 students)

Spring, 2012: Introduction to Meteorology and Climatology (GEOG 2250) (78 students), Climate Change: Atmosph Persp (GEOG 3060) (26 students)

Fall, 2012: Introduction to Meteorology and Climatology (GEOG 2250) (77 students), Senior Seminar for Environmental Studies (ENVS 4500) (Capstone course, 9 students)

Spring 2013: Introduction to Meteorology and Climatology (GEOG 2250) (81 students), Climatic Change: Atmosph Persp (GEOG 3060) (31 students)

Summer I 2013: Introduction to Meteorology and Climatology (GEOG 2250 online) (20 students)

Fall, 2013: Introduction to Meteorology and Climatology (GEOG 2250) (80 students). Senior Seminar for Environmental Studies (ENVS 4500) (Capstone course, 11 students)

Spring, 2014: Introduction to Meteorology and Climatology (GEOG 2250) (78 students). Climate Change: Atmosph Persp. (GEOG 3060) (24 students)

Fall, 2014: Introduction to Meteorology and Climatology (GEOG 2250) (77 students). Environmental Systems and Cycles (ENVS 2150-Hybrid course): 15 students (Freshwater program)

Spring, 2015: Introduction to Meteorology and Climatology (GEOG 2250) (76 students). Climatic Change: Atmosph Persp (GEOG 4060) (14 students)

Fall, 2015: Introduction to Meteorology and Climatology (GEOG 2250) (78 students). Environmental Systems and Cycles (ENVS 2150-Hybrid course): 8 students (Freshwater program)

Spring 2016: Introduction to Meteorology and Climatology (GEOG 2250) (78 students). Climatology (GEOG 6250) (4 students)

Summer 2016: Introduction to Meteorology and Climatology (GEOG 2250) (40 students). Climate Change-Atmospheric Perspectives (GEOG 3060) (15 students)

Honors and Awards

Invited to participate in the United Nations Framework Convention on Climate Change (UNFCCC) Meeting COP20/CMP10 sessions, 2014

International Education Faculty Development Fund, Haenicke Institute for Global Education, 2014

Adjunct Associate Professor, Lanzhou University, China. 2012-2015.

CAS Global Engagement Award, College of Arts and Sciences, Western Michigan University, October 2012, \$500

WMU Instructional Development Travel Award, Geography Faculty Development Alliance (GFDA) workshop, 10-16 June, University of Colorado at Boulder, CO, 2012

Listed in the AcademicKeys Who's Who in Science Higher Education, July 2012

CAS Teaching and Research Award (ASTRA), College of Arts and Sciences, Western Michigan University, summer 2012

Gwen Frostic Funding, Environmental Studies Program, September 2011

Travel Support, CESM tutorial, NCAR, 12-16 July, Boulder, CO, 2010

Travel support, the 15th Annual CCSM workshop, NCAR, 28 June -1 July, Breckenridge, CO, 2010

John Russell Mather Paper of the Year Award, Climate Specialty Group of the Association of American Geographers (for Meng, L. and S. M. Quiring, 2008, A comparison of soil moisture models using Soil Climate Analysis Network observations. *Journal of Hydrometeorology*, 9:641-659), 2009

Graduate Research and Presentation Grant, Office of Graduate Studies, Texas A&M University, summer 2008

TWRI Mills Scholarship, Texas Water Resources Institute, 2007-2008

Second Place Poster Award, Student Research Week, Texas A&M University, 2007

Travel Grants, Department of Geography, Texas A&M University, 2006, 2007, 2008, 2009

Incentive Tuition Scholarship, Department of Geography, Texas A&M University 2005

Travel Grant, Visiting Student, Department of Geography, Texas A&M University, College Station, TX March 23-25, 2005

Travel Grant, Visiting Student, Department of Soil Sciences, Pennsylvania State University, State College, PA March 17-21, 2005

Graduate Scholarship, China Agricultural University, October 2002

Excellent Academic Scholarships (People Scholarships), Department of Earth Sciences, Nanjing University, 1996, 1997, 1998, 1999, 2000

XinQiShan Scholarship, Department of Earth Sciences, Nanjing University. May, 1997

Award to My Advisee

Rudy Bartels, **Third Place** Award in the Master Student Paper Competition, Joint Annual Meeting of East Lakes Division of the Association of American Geographers (ELDAAG) and Canadian Association of Geographers - Ontario Division, October 25-26, University of Toledo, OH.

Department/University Service

Environmental and Sustainability Studies Program Faculty Search Committee 2014-2015

Environmental and Sustainability Studies Program Faculty Search Committee 2013-2014

Environmental and Sustainability Studies Program Faculty Search Committee 2012-2013

Geography Faculty Search Committee 2014-2015

Geography Faculty Search Committee 2011-2012

Lucia Harrison Committee Chair, 2014 – 2015

Lucia Harrison Committee Chair, 2013 – 2014

Geography Department Curriculum Committee 2013-2014

Lucia Harrison Committee Member 2011 – 2013

Spring Colloquium Coordinator. Department of Geography. January 2013

Fall Colloquium Coordinator. Department of Geography. August 2012

Masters Thesis Advisor and Committee

Completed

Paul Roehsner (Served as Committee Member)

Thesis Title: Develop Processing and Storage Methodologies of Gridded National Weather Service Data for Crop Disease Risk Forecasting, 05/2012-06/2013.

Rudy Bartels (Served as Primary Advisor)

Thesis Title: The climatology of drought in southwestern Michigan, 05/2012-04/2014.

Currently a PhD student at Louisiana State University.

Guzhaliayi Sataer (Serves as Primary Advisor)

Thesis Title: Temporal and Spatial Patterns of Droughts in Xinjiang, China, 08/2013-06/2015.

Currently a PhD student at Saint Louis University.

Fatma Ulku Karatas (Serves as Committee Member)

Thesis Title: Estimating Sediment and Nutrient Loading in the Davis Creek Watershed Using Soil and Water Assessment Tool (SWAT). (08/2013-06/2015)

Current

Nirjala Koirala (Serves as Primary Advisor)

Thesis Title: Inter-annual Variability of Lake-effect Snowfall in Michigan

Conference Presentations and Proceedings (* denotes presenter)

Ayon, B.D.*, D. Arnold*, B. Chambers*, N. Koirala*, **L. Meng**. 2016. Inter-annual variability of lake-effect snowfall in the Lower Peninsular of Michigan. Contributed poster presentation at the annual Research and Creative Activities Poster and Performance Day at Western Michigan University, April 14, 2016, Kalamazoo, MI. (This is also a class project under my supervision in GEOG 6250 Climatology course).

Meng, L. * 2016. Spatial-temporal variations in wetland methane emissions in a process-based biogeochemical model CLM4Me. Illustrated paper presented at the Annual meeting of American Association of Geographers, March 29-April 2, 2016, San Francisco, CA, USA

Meng, L. *, R. Paudel, P.G.M. Hess, and N.M. Mahowald. 2015. Variability in wetland methane Emissions simulated by CLM4Me and its contribution to atmospheric methane concentration in CAMchem. Contributed poster presentation presented at the Fall Meeting of the American Geophysical Union, Dec 14-18, 2015, San Francisco, CA, USA.

Meng, L. *, R. Paudel, P.G.M. Hess, and N.M. Mahowald. 2015. Seasonal and inter-annual variability in wetland methane emissions simulated by CLM4Me' and CAM-chem and comparisons to observations of concentrations. Contributed poster presentation presented at Our Common Future Under Climate Change, July 7-10, 2015, Paris, France.

Meng, L. *, R. Paudel, P.G.M. Hess, and N.M. Mahowald. 2015. Seasonal and inter-annual variability in wetland methane emissions simulated by CLM4Me' and CAM-chem and comparisons to observations of concentrations (*The trip was funded by Cornell University*). Contributed paper presentation presented at the 20th CESM Workshop, June 15-18, 2015, Breckenridge, CO, USA

Meng, L. *, E. Lee, and Y.Q. He (2015) Spatial and temporal variations of agricultural irrigated areas in China. Contributed poster presented at the Annual Meeting of the Association of American Geographers, Apr 21-25, 2015, Chicago, IL, USA

Meng, L. * and Y. J. Shen (2015) Quantile regression analysis of soil moisture and extreme temperatures in East China. Contributed poster presentation presented at the 95th Annual Meeting of the American Meteorological Society, January 3-9, 2015, Phoenix, AZ, USA

Meng, L.*(2014) Examining the impact of spring soil moisture on summer extreme temperature in East China. Contributed paper presented at the EL/WL Division regional meeting of the Association of American Geographers, October 16-18, 2014, Kalamazoo, MI,

USA

Meng, L. * (2014) Examining the relationship between soil moisture and summer extreme temperatures in East China. Contributed poster presentation presented at the General Assembly 2014 of the European Geosciences Union, 27 April to 2 May, 2014, Vienna, Austria.

Meng, L. * (2014) The Role of Soil Moisture Persistence and Precipitation Autocorrelation in Summer Precipitation Variations in East China. Contributed poster presentation presented at the Eighth Annual Research and Creative Activities Poster Day, Apr. 11, 2014.

Bartels, R[#]. and **L. Meng** (2014) A Climatological Study on Drought in Southern Michigan. Contributed oral presentation presented at the Annual Meeting of the Association of American Geographers, 8-12 April, Tampa, FL. (# student advisee)

Meng, L. * (2014) Does soil moisture affect temperature extremes? Contributed oral presentation presented at the Annual Meeting of the Association of American Geographers, 8-12 April, Tampa, FL.

Meng, L. *(2013) Role of soil moisture persistence and precipitation autocorrelation in summer precipitation variations in East China. Contributed poster presentation presented at the Fall Meeting of the American Geophysical Union, 9-13 December, San Francisco, CA.

Meng, L.* (2013) Contributed poster presentation presented at the NCAR-CESM workshop, June. Development of a Methane Biogeochemistry Model Integrated in CESM: Modifications and Model Testing Against Site Observations. June 17-20, Breckenridge, CO.

Meng, L. * (2013) Statistical analysis of the relationship between spring soil moisture and summer precipitation in East China. Contributed oral presentation presented at the Annual Meeting of the Association of American Geographers. 9-13 April, Los Angeles, CA.

Meng, L. *, P. M. Hess, N. M. Mahowald, J. Yavitt, Z. Subin, W. J. Riley, and D. M. Lawrence, S. Swenson, J. Jauhiainen, and D. Fuka (2012). Estimation of wetland methane emissions in a biogeochemical model integrated in CESM: sensitivity analysis and comparison against surface and atmospheric measurements. Contributed oral presentation presented at the American Geophysical Union (AGU) fall meeting. 4-7 December, San Francisco, CA.

Meng, L. *, P. M. Hess, N. M. Mahowald, J. Yavitt, Z. Subin, W. J. Riley, and D. M. Lawrence, S. Swenson, J. Jauhiainen, and D. Fuka (2012). Sensitivity of wetland methane emissions to model assumptions: application and model testing against site observations. Contributed paper presented at the Annual Meeting of the Association of American Geographers. 22-28 February, New York, NY.

Meng, L. *, P. M. Hess, N. M. Mahowald, J. Yavitt, Z. Subin, W. J. Riley, and D. M. Lawrence (2011) Development of a process-based methane biogeochemical model in the Community Land Model (CLM4)-Carbon/Nitrogen. Contributed paper presented at the Annual Meeting of the Association of American Geographers. 12-16 April, Seattle, WA.

Meng, L. *, P. M. Hess, N. M. Mahowald, J. Yavitt, Z. Subin, W. J. Riley, and D. M.

Lawrence (2010) Simulation of methane emissions from tropical wetlands and rice paddies in the Community Land Model (CLM4)-CN: Introduction and preliminary results. Contributed poster presented at the AGU meeting. 13-17 December, San Francisco, CA.

Meng, L. *, P. M. Hess, N. M. Mahowald, and J. Yavitt (2010) Simulation of methane emissions from rice paddies and tropical wetlands in CLM4-CN. Contributed paper presented at the CCSM 15th workshop. 29 June-1 July, Breckenridge, CO.

Meng, L. * and S. M. Quiring (2010) Examining the influence of spring soil moisture anomalies on summer precipitation in the U.S. Great Plains using the Community Atmosphere Model version 3 (CAM3.0). Contributed paper presented at the Annual Meeting of the Association of American Geographers. 14-18 April, Washington, DC.

Meng, L. * and S. M. Quiring (2009) Examining the influence of spring soil moisture anomalies on summer precipitation in the U.S. Great Plains using the Community Atmosphere Model version 3 (CAM3.0). Contributed poster presented at the symposium on "Climate, Statistics, and Satellites". 8-10 June, College Station, TX.

Meng, L. * and S. M. Quiring (2009) Observational relationship between precedent soil moisture and summer precipitation in the U.S. Great Plains. Contributed paper presented at the Annual Meeting of the Association of American Geographers. 22-27 March, Las Vegas, NV.

Meng, L. * and S. M. Quiring. (2009) Influence of Niño sea-surface temperatures and soil moisture on summer precipitation in the U.S. Great Plains. Contributed poster presented at the 23rd conference on Hydrology and AMS forum, 11-15 January, Phoenix, AZ.

Meng, L. * and S. M. Quiring. (2008) Examining the relationship between fall/spring soil moisture and summer precipitation in the northern Great Plains. Contributed poster presented at the 22nd Conference on Hydrology and AMS forum, 20-24 January, New Orleans, LA.

Meng, L. * and S. M. Quiring. (2008) Examining the relationship between fall/spring soil moisture and summer precipitation in the northern Great Plains. Contributed poster presented at the 11th Student Research Week, 24-28 March, Texas A&M University, College Station, TX.

Meng, L. * and S. M. Quiring. (2008) Relationship between antecedent soil moisture and summer precipitation in the northern Great Plains. Contributed paper presented at the Annual Meeting of the Association of American Geographers, 15-19 April, Boston, MA.

Cox, W. *, **L. Meng**, A. Nordfelt, C. Khedun, J. Kincaid, and S. M. Quiring. (2008) Teleconnections and discharge characteristics for an artesian spring of the Edwards Aquifer: Comal Springs 1933-2007. Contributed poster presented at "Forecast: Climate Change Impacts on Texas Water", 28-30 April, Austin, TX. (Available online at <http://www.rivers.txstate.edu/CCTW/PDF/Poster%20-%20Teleconnections%20and%20Comal%20Springs.pdf>)

Meng, L. *# and S. M. Quiring. (2007) A comparison of soil moisture models using SCAN observations. Poster presentation at the 10th Student Research Week, 26-30 March, Texas A&M University, College Station, TX. (#Second Place winner in student poster competition)

Meng, L.* and S. M. Quiring. (2007) A comparison of soil moisture models. Contributed paper presented at the Annual Meeting of the Association of American Geographers, 7-11 April, San Francisco, CA.

Meng, L.* and S. M. Quiring. (2007) Evaluation of soil moisture models: a water balance perspective. Contributed paper presented at Southwest Division of the Association of American Geographers (SWAAG), 1-3 November, Texas A&M University, Bryan, TX.

Meng, L.* and A.M. Filippi. (2006) Comparison of change detection methods for post-Hurricane Katrina damage assessment. Contributed paper presented at the Annual Meeting of the Association of American Geographers, 7-11 March, Chicago, IL.

Filippi, A.M.* and **L. Meng**. (2006) Autonomous endmember identification for remote-sensing assessment of hurricane-induced vegetation damage. Contributed poster presented at Southwest Division of the Association of American Geographers (SWAAG), 26-28 October, University of Oklahoma, Norman, OK.

Filippi, A.M.* , S. Kobara, A. Mishonov, C. Graff, R. Duckworth, B. Shi, **L. Meng**. (2005) Post-Hurricane Katrina and Rita remote-sensing damage assessment of National Park Service resources. Contributed paper presented at the Southwest Division of the Association of American Geographers (SWAAG) 9-12 November, University of Arkansas, Fayetteville, AR.

Invited Presentations

Meng, L. (2013) The relationship between spring soil moisture and summer precipitation in the U.S. Great Plains. Invited Talk at the Institute of Geochemistry, Chinese Academy of Sciences, May 16, 2013, Guiyang, Guizhou Province, China.

Meng, L. (2013) Sensitivity of Wetland Methane Emissions to Model Assumptions: Application and Model Testing Against Site Observations. Invited talk at Lanzhou University, May 11, 2013, Lanzhou, Gansu Province, China.

Meng, L. (2012) Sensitivity of wetland methane emissions to model assumption: Application and model testing against site observations. Invited talk in the Department of Earth Sciences, Central Michigan University. September 28, Mt. Pleasant, MI.

Meng, L. (2012) The relationship between spring soil moisture and summer precipitation in the U.S. Great Plains. Invited talk in the Center for Agricultural Resources Research, Chinese Academy of Science, August 21, 2012, Shijiazhuang, Hebei Province, China

Meng, L. (2012) Predicting changes in global terrestrial methane fluxes: analyses using CLM4Me, a methane biogeochemistry model integrated in CESM. Invited talk in the Department of Geography, Texas A&M University. July 17, 2012, College Station, TX

Meng, L. (2011) Sensitivity of wetland methane emissions to model assumption: Application and model testing against site observations. Invited talk in the Department of Soil, Water, and Climate, University of Minnesota. February 2011, Minneapolis, MN.

Meng, L. (2011) Simulation of methane emissions from natural wetlands in the Community

Land Model (CLM4)-CN. Invited talk in the Department of Geography, Western Michigan University. February, 2011, Kalamazoo, MI.

Meng, L. (2009) A comparison of soil moisture models using Soil Climate Analysis Network observations. Invited talk in Soil and Water Lab in the Department of Biological and Environmental Engineering at Cornell University. September 18, Ithaca, NY.

Meng, L. (2009) Examining the relationship between antecedent soil moisture and summer precipitation in the U.S. Great Plains. Center for Climatic Research, University of Wisconsin-Madison, June, 2009, Madison, WI.

Meng, L. (2009) A comparison of soil moisture models using Soil Climate Analysis Network observations. Invited talk in Mather session at the Annual Meeting of the Association of American Geographers. 25 March, Las Vegas, NV.

Meng, L. (2009) The relationship between spring soil moisture and summer precipitation in the U.S. Great Plains (GP). Department of Geography, Geology, and the Environment, Slippery Rock University of Pennsylvania, March, 2009, Slippery Rock, PA.

Meng, L. (2005) Development of a reactive transport model of the Middendorf aquifer, South Carolina. 18 March, 2005. Department of Soil Sciences, Pennsylvania State University, March 17-21, 2005, State College, PA.

Other Publications

Meng, L. and S. M. Quiring (2008). Examining the relationship between fall/spring soil moisture and summer precipitation in the northern Great Plains. Extended abstract of poster presented at the American Meteorological Society Forum: the 22nd conference on Hydrology, January, New Orleans, LA.

[Available online at <http://ams.confex.com/ams/pdfpapers/129341.pdf>]

Manuscript Reviewer

International Journal of Climatology

Journal of Climate

Journal of Arid Land

Global and Planetary Change

Plos One

Journal of Geophysical Research-Atmospheres

Agricultural and Forest Meteorology

Journal of Hydrometeorology

Theoretical and Applied Climatology

Earth Science Informatics

Journal of Applied Meteorology and Climatology

Environmental Research Letters

Rocky Mountain Geology

Physical Geography

Bulletin of the American Meteorological Society (BAMS)

Climate Change

Advances in Atmospheric Sciences

Earth Interactions

Funding Proposal Reviewer

National Science Foundation (2014, 2015)

West Virginia University Senate Research Grant (2013)

Professional Service

Judge, CSG Student Paper Competition, the Annual Meeting of the Association of American Geographers, March 29-April 2, 2016, San Francisco, CA

Judge, Student Paper Competition, the Annual Meeting of the East Lake Division of the Association of American Geographers, Oct 16-18, 2014, Kalamazoo, MI

Judge, CSG Student Paper Competition, the Annual Meeting of the Association of American Geographers, Apr 8-12, 2014, Tampa, FL.

Session Organizer and Chair, CSG Student Paper Competition Session, the Annual Meeting of the Association of American Geographers, Apr 8-12, 2014, Tampa, FL

Session co-Organizer and Chair, Advances in understanding land-atmosphere interactions, the Fall Meeting of the American Geophysical Union (AGU), Dec 9-13, 2013, San Francisco, CA.

Honors Director, Member of Executive Committee, Climate Specialty Group (CSG), Association of American Geographers, 2013-2015.

Session co-Organizer and Chair, Climate Variability and Hydrological Processes I: Transformation of Glacier-Forest-Grassland-Oasis-Desert Systems in Arid Northwest China, Annual Meeting of the Association of American Geographers, Los Angeles, CA, April 9-13, 2013.

Session co-Organizer, Land-Atmosphere Interactions, Annual Meeting of the Association of American Geographers, Los Angeles, CA, April 9-13, 2013.

Lead Guest Editor, Special issue on the Impact of Climate Change on Wetland Ecosystem Carbon Dynamics, Environmental Research Letters (Impact Factor: 3.61 in 2011), 2012-2016.

Editorial Board member, Datasets in Geology, 2012-current.

Session Chair, MCAA panel 6, 61st Midwest Conference on Asian Affairs (MCAA), September 2012.

Judge, CSG student paper competition, Association of American Geographers, 2011.

Session Organizer and Chair, Climate Change and Wetland Ecosystems, Annual Meeting of the Association of American Geographers, Seattle, WA, 12-16, April, 2011.

Judge, John Russell Mather Paper of the Year Competition, Climate Specialty Group, Association of American Geographers, 2010.

Session Chair, Hurricane Katrina and Remote Sensing session, Annual Meeting of the Association of American Geographers, Chicago, IL, 11 March, 2006.

Professional Affiliations

Association of American Geographers

European Geosciences Union

American Meteorological Society

American Geophysical Union