

Jiafu Mao, Ph.D.

R&D Staff Scientist

Ecosystem Simulation Science Group

[Climate Change Science Institute](#)

[Environmental Sciences Division](#)

[Oak Ridge National Laboratory](#)

Mailing address: P.O. Box 2008, MS 6301, Oak Ridge, Tennessee 37831-6201, USA

Phone: +1 (865) 576-7815 (work);

Email: maoj (AT) ornl.gov

EDUCATION

- Combined MS-PhD, Atmospheric Sciences, 2007, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China
- BS, Meteorology, 2001, Nanjing University of Information Science and Technology (Nanjing Institute of Meteorology), Nanjing, China

RESEARCH GOAL

- Understand the global Carbon-Climate feedbacks and improve the climate prediction through the modeling of Earth System

CURRENT RESEARCH AND OTHER PROJECTS AWARDED

- “The Next Generation Ecosystem Experiment-Tropics”, 2015-2017, the Office of Biological & Environmental Research within the Department of Energy (DOE) Office of Science (Main participant)
- “Evaluation of the Large-Scale and Regional Climatic Response Across North Africa to Natural Variability in Oceanic Modes and Terrestrial Vegetation Among the CMIP5 Models”, 2014-2017, the Office of Biological & Environmental Research within the Department of Energy (DOE) Office of Science (\$739,000, Co-PI with Dr. Michael Notaro at the University of Wisconsin-Madison)
- The stochastic coupling of Community Land Model (CLM) to the atmosphere component of the Community Atmosphere Model (CAM), and the analysis of different results from the fully stochastic ensemble model. 2012-present, the “Stochastic parameterization of the influence of subgrid scale land heterogeneity on convective initiation”. Laboratory Directed Research and Development (LDRD) fund, ORNL (\$709,924, Co-PI with Dr. Daniel S. McKenna, ORNL LDRD project)
- “The effects of land use/cover conversion assumptions on the global carbon cycle and climate in historical CESM simulations”, 2015-2016, NCAR SDWG computer allocation for historical land conversion simulations (Co-PI with Dr. Alan V. Di Vittorio, LBNL)
- The evaluation of Earth System Model with remote sensing products, and the Detection and Attribution study of the global historical vegetation change, and terrestrial ecosystem carbon and hydrology dynamics. 2014–present, the “Quantifying Feedbacks and Uncertainties of Biogeochemical Processes in Earth System Models”, Department of Energy, (1\$M/yr, Main participant, DOE C-Climate project)
- (1) Simulation, evaluation and application of CLM at different spatial-temporal scales; (2) Study the Carbon-Climate feedbacks with Community Earth System Model (CESM); (3) Calibration and improvement of CLM based on $^{13}\text{CO}_2$ and shading manipulations in a pine stand (Partitioning in Trees and Soil (PiTS)). 2011-present, the “Terrestrial Ecosystem Science Scientific Focus Area”, Department of Energy (\$8.2M/yr, Main participant, DOE TES SFA project)
- The development of CLM two-layer soil biogeochemical model using EBIS observations. 2011-2014, the “Climate Science for a Sustainable Energy Future”, Department of Energy (Main participant, DOE CSSEFF project)
- The coupling among CESM/CLM, GCAM and GLM. 2009-present, the “Improving the Representations of Human-Earth Interactions”, Department of Energy (\$3.3M, Main participant, DOE iESM project)
- The coupling of CESM/CLM with IMAGE. 2008-2011, the “Prognostic land use and land cover change for a coupled climate-biogeochemistry model”, Laboratory Directed Research and Development (LDRD) fund, ORNL (\$634,330, Main participant, ORNL LDRD project)
- Improvement of terrestrial ecosystem modeling in earth system model. 2007-2008, the “China Meteorological Administration through Grant GYHY (QX) 2007-25” (Rmb300,000, Co-PI, with Prof. Yongjiu Dai at the Beijing Normal University)

RESEARCH AND PROFESSIONAL EXPERIENCE

11/2011 – present Member of R&D Staff, Oak Ridge National Laboratory (ORNL)

08/2009 – 11/2011 Postdoctoral Research Fellow, ORNL

- *I worked with Peter E. Thornton, Xiaoying Shi and other collaborators on the LDRD and multi-DOE lab projects. We coupled the global land use and land cover change models (IMAGE and GCAM) with the latest CESM1 model to research on the controls on future greenhouse gas concentrations and climate-biosphere feedbacks by the introduction of human dimension in the complex earth system model. The related modeling structure was employed and extended to a larger DOE-funded iESM project.*

01/2008 – 08/2009 Joint Postdoctoral Research Fellow, The University of New South Wales and CSIRO, Sydney and Melbourne, Australia

- *I worked with Prof. Andrew J. Pitman, Yingping Wang, Steven Phipps and Gab Abramowitz on the linkage of latest CABLE model with Mk3L. Then I incorporated the NCAR-DGVM into the coupled CABLE-Mk3L. After systematic evaluations of Mk3L-CABLE and Mk3L-CABLE-DGVM, I applied them for carbon and water simulations at relevant temporal and spatial scales.*

10/2006 – 01/2008 Assistant Research Scientist, Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China

- *Collaborated with Bin Wang, Yongjiu Dai and F. Ian Woodward, I developed the updated version of SDGVM model over continental China. The M-SDGVM (Modified SDGVM) was comprehensively calibrated using observed sites and regional carbon and water data over China, and applied in the studies for the changes of carbon storage and fluxes.*

ACEDMIC AWARDS

- Significant Event Award (SEA) in recognition of significant contribution to the Next Generation Ecosystem Experiment-Tropics, April 2015, Oak Ridge National Laboratory
- Significant Event Award (SEA) in recognition of significant contribution to the Intergovernmental Panel on Climate Change and National Climate Assessment Work, April 2014, Oak Ridge National Laboratory
- Visiting scholar fully funded by the Natural Environment Research Council (NERC) in UK, March 2007 to August 2007, Center for Terrestrial Carbon Dynamics (CTCD), The University of Sheffield, UK
- Visiting scholar fully funded by the Chinese Academy of Sciences, June 2005 to August 2005, CTCD, The University of Sheffield, UK
- Outstanding Doctoral scholarship, Chinese Academy of Sciences, 2006
- Outstanding Graduate Student Leader Award, Chinese Academy of Sciences, 2005
- Outstanding Doctoral scholarship, Chinese Academy of Sciences, 2005
- Outstanding Doctoral scholarship, Chinese Academy of Sciences, 2004
- Outstanding Graduate, Nanjing Institute of Meteorology, 2001
- Scholarship for undergraduate, Nanjing Institute of Meteorology, 2000
- Scholarship for undergraduate, Nanjing Institute of Meteorology, 1999
- Scholarship for undergraduate, Nanjing Institute of Meteorology, 1998

PROFESSIONAL ACTIVITIES

- **Membership:** American Geophysical Union, 2011-present
- **Co-convener:** the session named “Vulnerability of Arctic and Boreal Ecosystem Under a Changing Climate” for the 2014 Annual Symposium of the US Regional Association of the International Association for Landscape Ecology (US-IALE).
- **Referee for:** Nature Geoscience, Global Change Biology, the Journal of Climate, Global Biogeochemical Cycles, the Journal of Geophysical Research-Atmosphere, the Journal of Geophysical Research-Biogeosciences, Geophysical Research Letters, Geoscientific Model Development, Remote Sensing, Remote Sensing of Environment, the International Journal of Climatology, PLOS ONE, Global and Planetary Change, Journal of Hydrometeorology, Atmosphere and Oceanic Science Letters, Journal of Cleaner Production, Journal of Scientific Research and Reports, the International Journal of Climatology, Global Ecology and Biogeography, and the chapter of a book entitled “Biophysical Applications of Satellite Remote Sensing”.

QUOTES IN THE NEWS MEDIA

- Highlight in phys.org for our Partitioning in Trees and Soil (PiTS) project: “[Carbon tracking and climate models: Researchers study carbon cycling in deciduous trees](#)”.
- Highlight at ORNL for our Partitioning in Trees and Soil (PiTS) project: “[Refining climate models: Researchers study carbon cycling in deciduous trees](#)”.

PEER-REVIEWED PUBLICATIONS (*denotes the corresponding author)

44. **Mao Jiafu***, Wenting Fu, Xiaoying Shi, Daniel M. Ricciuto, and MsTMIP participants, 2015. Disentangling climatic and anthropogenic controls on global terrestrial evapotranspiration trends. Finished and to be submitted to *Geophysical Research Letters*.
43. Huntzinger, D.N., C.R. Schwalm, Y. Wei, R.B. Cook, A.M. Michalak, K. Schaefer, A.R. Jacobson, M.A. Arain, P. Ciais, J.B. Fisher, D.J. Hayes, M. Huang, S. Huang, A. Ito, A.K. Jain, H. Lei, C. Lu, F. Maignan, **J. Mao**, N. Parazoo, C. Peng, S. Peng, B. Poulter, D.M. Ricciuto, H. Tian, Xiaoying Shi, W. Wang, N. Zeng, F. Zhao, and Q. Zhu (in press). NACP MsTMIP: Global 0.5-deg Terrestrial Biosphere Model Outputs (version 1) in Standard Format. Data set. Available on-line [<http://daac.ornl.gov>] from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge, Tennessee, USA. DOI: 10.3334/ORNLDAAAC/1225.
42. Wei, Y., S. Liu, D. Huntzinger, A.M. Michalak, N. Viovy, W.M. Post, C. Schwalm, K. Schaefer, A.R. Jacobson, C. Lu, H. Tian, D.M. Ricciuto, R.B. Cook, **J. Mao**, and X. Shi. 2014. NACP MsTMIP: Global and North American Driver Data for Multi-Model Intercomparison. Data set. Available on-line [<http://daac.ornl.gov>] from Oak Ridge National Laboratory Distributed Active Archive Center, Oak Ridge, Tennessee, USA. <http://dx.doi.org/10.3334/ORNLDAAAC/1220>
41. **Mao Jiafu***, Aurelien Ribes, Binyan Yan, and Xiaoying Shi et al. 2015. Human-induced greening of the northern high-latitude land surface. Finished and to be submitted to *Nature Climate Change*.
40. Shi Xiaoying, Peter E. Thornton, Daniel M. Ricciuto, Paul J. Hanson, **Jiafu Mao**, Stephen D. Sebestyen, Natalie A. Griffiths, and G. Bisht (2015), Representing northern peatland microtopography and hydrology with the Community Land Model, *Biogeosciences Discuss.*, 12, 3381-3418.
39. Tian Hanqin, Chaoqun Lu, Jia Yang, Kamaljit Banger, Deborah N. Huntzinger, Christopher R. Schwalm, Anna M. Michalak, Robert Cook, Philippe Ciais, Daniel Hayes, Maoyi Huang, Akihiko Ito, Andrew Jacobson, Atul Jain, Huimin Lei, **Jiafu Mao**, Shufen Pan, Wilfred M. Post, Shushi Peng, Benjamin Poulter, Wei Ren, Daniel Ricciuto, Kevin Schaefer, Xiaoying Shi, Bo Tao, Weile Wang, Yaxing Wei, Qichun Yang, Bowen Zhang, Ning Zeng, 2014, Global patterns of soil carbon stocks and fluxes as simulated by multiple terrestrial biosphere models: sources and magnitude uncertainty, submitted to *Global Biogeochemical Cycles*.
38. Zhang Li, **Jiafu Mao**, Xiaoying Shi, Daniel Ricciuto, Honglin He, Peter Thornton, Guirui Yu, Shijie Han, Yingnian Li, Junhua Yan, Yanbin Hao, huimin Wang, 2014, Evaluation of the Community Land Model simulated carbon and water fluxes against observations over ChinaFLUX sites, Finished and to be submitted *JGR-Biogeosciences*.
37. Shilong Piao, Guodong Ying, Jianguang Tan, Lei Chen, Ronggao Liu, Yongwen Liu, **Jiafu Mao**, Ranga B Myneni, Shushi Peng, Ben Poulter, Xiaoying Shi, Zhiqiang Xiao, Ning Zeng and Yingping Wang, 2015. Detection and attribution of vegetation greening trend in China over the last 30 years. *Global Change Biology*, 21, 1601-1609, doi: 10.1111/gcb.12795.
36. Shilong Piao, Huijuan Nan, Chris Huntingford, Philippe Ciais, Pierre Friedlingstein, Stephen Sitch, Shushi Peng, Anders Ahlstrom, Josep G. Canadell, Sam Levis, Peter E. Levy, Lingli Liu, Mark R Lomas, **Jiafu Mao**, Ranga B. Myneni, Philippe Peylin, Ben Poulter, Xiaoying Shi, Guodong Ying, Nicolas Viovy, Tao Wang, Xuhui Wang, Soenke Zaehle, Ning Zeng, Zhenzhong Zeng and Anping Chen. Evidence for a weakening relationship between temperature variability and northern vegetation activity, 2014. *Nature Communications* 5, 5018, doi:10.1038/ncomms6018.
35. **Mao Jiafu***, Daniel M. Ricciuto, Peter E. Thornton, Jeffrey M. Warren, Anthony W. King, Xiaoying Shi, Colleen M. Inversen and Richard J. Norby, 2015. Evaluating the Community Land Model in a pine stand with ¹³CO₂ and shading manipulations. *Biogeosciences Discuss.*, 12, 6971-7015, 2015.
34. Christopher R. Schwalm, Deborah N. Huntzinger, Joshua B. Fisher, Anna M. Michalak, Kevin Bowman, Robert Cook, Bassil El-Masri, Daniel Hayes, Maoyi Huang, Akihiko Ito, Andrew Jacobson, Atul Jain, Anthony W. King, Huimin Lei, Junjie Liu, Chaoqun Lu, **Jiafu Mao**, Shushi Peng, Benjamin Poulter, Daniel Ricciuto, Kevin Schaefer, Xiaoying Shi, Bo Tao, Hanqin Tian, Weile Wang, Yaxing Wei, Jia Yang, Ning Zeng, 2015. Toward “optimal” integration of terrestrial biosphere model ensembles. To be submitted to *Geophysical Research Letters*.
33. Wang Shusen, Ming Pan, Qiaozhen Mu, Xiaoying Shi, **Jiafu Mao**, Christian Brummer, Rachhpal S. Jassal, Praveena Krishnan, Junhua Li and T. Andrew Black, 2015. Assessing evapotranspiration from eddy covariance measurements, water budgets, remote sensing, and land surface models over Canada. *Journal of Hydrometeorology* (Accepted).
32. A. V. Di Vittorio, L. P. Chini, B. Bond-Lamberty, **J. Mao**, X. Shi, J. Truesdale, A. Craig, K. Calvin, A. Jones, W. D. Collins, J. Edmonds, G. C. Hurtt, P. Thornton and A. Thomson, 2014. From land use to land cover: Restoring the afforestation signal in a coupled integrated assessment-earth system model and the implications for CMIP5 RCP simulations. *Biogeosciences Discuss.*, 11, 6435-6450.

31. Jianguang Tan, Shilong Piao, Anping Chen, Zhenzhong Zeng, Philippe Ciais, Ivan Janssens, **Jiafu Mao**, Ranga Myneni, Shushi Peng, Josep Penuelas, Xiaoying Shi and Sara Vicca, 2015. Seasonally different response of photosynthetic activity to daytime and night-time warming in the Northern Hemisphere. *Global Change Biology*, 21: 377-387, doi:10.1111/gcb.12724.
30. Jakob Zscheischler, Anna Michalak, Christopher Schwalm, Miguel Mahecha, Deborah Huntzinger, Markus Reichstein, Gwenaelle Berthier, Philippe Ciais, Robert Cook, Bassil El-Masri, Maoyi Huang, Akihiko Ito, Atul Jain, Anthony W. King, Huimin Lei, Chaoqun lu, **Jiafu Mao**, Shushi Peng, Ben Poulter, Daniel Ricciuto, Xiaoying Shi, Bo Tao, Hanqin Tian, Nicolas Viovy, Weile Wang, Yaxing Wei, Jia Yang, Ning Zeng. Impact of Large-Scale Climate Extremes on Biospheric Carbon Fluxes: An Intercomparison Based on MsTMIP Data, 2014, *Global Biogeochemical Cycles*, 28, 585-600.
29. Ben Bond-Lamberty, Katherine Calvin, Andrew D. Jones, **J. Mao**, Pralit Patel, Xiaoying Shi, Allison Thomson, Peter Thornton, and Yuyu Zhou, 2014. Coupling earth system and integrated assessment models: the problem of steady state. *Geosci. Model Dev. Discuss.*, 7, 1499–1524.
28. R. Langan, R. Archibald, M. Plumlee, S. Mahajan, D. Ricciuto, C. Yang, R. Mei, **J. Mao**, X. Shi and J. Fu, 2014. Procedia Computer Science, Volume 29, Pages 1146-1155, ISSN 1877-0509, <http://dx.doi.org/10.1016/j.procs.2014.05.103>.
27. Liu Zhen*, Ray P. Bambha, Joseph Pinto, Tao Zeng, Jim Boylan, Maoyi Huang, Huimin Lei, Chun Zhao, Shishi Liu, **Jiafu Mao**, Christopher R. Schwalm, Xiaoying Shi, Yaxing Wei and Hope A. Michelsen, 2014. Toward verifying fossil fuel CO₂ emissions with the Community Multi-scale Air Quality (CMAQ) model: motivation, model description and initial simulation. *Journal of the Air & Waste Management Association*, 64(4), 419-435, DOI:10.1090/10962247.2013.816642.
26. Z. Zeng, T. Wang, F. Zhou, P. Ciais, **J. Mao**, X. Shi and S. Piao*, 2014. A worldwide analysis of spatiotemporal changes in water balance based evapotranspiration from 1982 to 2009. *Journal of Geophysical Research-Atmosphere*, 119, 1186-1202, DOI:10.1002/2013JD020941.
25. Y. Wei*, S. Liu, D. Huntzinger, A.M. Michalak, N. Viovy, W.M. Post, C. Schwalm, K. Schaefer, A. Jacobson, C. Lu, D.M. Ricciuto, R.B. Cook, **J. Mao**, and X. Shi, 2014. The North American Carbon Program Multi-Scale Synthesis and Terrestrial Model Intercomparison Project: Part 2 – Environmental Driver Data. *Geoscientific Model Development*, 7, 2875-2893, 2014, OI:10.5194/gmd-7-2875-2014.
24. D. N. Huntzinger, C. Schwalm, A. M. Michalak, K. Schaefer, A. W. King, Y. Wei, A. Jacobson, S. Liu, R. B. Cook, W. M. Post, G. Berthier, D. Hayes, M. Huang, A. Ito, H. Lei, C. Lu, **J. Mao**, C. H. Peng, S. Peng, B. Poulter, D. Ricciuto, X. Shi, H. Tian, W. Wang, N. Zeng, F. Zhao, and Q. Zhu. The North American Carbon Program Multi-Scale Synthesis and Terrestrial Model Intercomparison Project: Part I - Overview and Experimental Design. *Geoscientific Model Development*, 2013(6), 2121-2133.
23. Lei Huimin, Maoyi Huang*, L. Ruby Leung, Dawen Yang, Xiaoying Shi, **Jiafu Mao**, Daniel J. Hayes, Christopher R. Schwalm, Yaxing Wei and Shishi Liu. 2014. Sensitivity of global terrestrial gross primary production to hydrologic states simulated by the Community Land Model using two runoff parameterizations. *Journal of Advances in Modeling Earth Systems*, 6(3), 658-679, doi:10.1002/2013MS000252.
22. Shi Xiaoying*, **Jiafu Mao**, Peter E. Thornton and Maoyi Huang. Spatiotemporal patterns of evapotranspiration in response to multiple environmental factors simulated by the Community Land Model. *Environmental Research Letters*, 2013(8), 0424012.
21. Wang Kai, **Jiafu Mao***, Robert E. Dickinson, Xiaoying Shi, Wilfred M. Post, Zaichun Zhu and Ranga B. Myneni. 2013. Evaluation of CLM4 solar radiation partitioning scheme using remote sensing and site level FPAR datasets. *Remote Sensing*, 2013, 5(6), 2857-2882.
20. **Mao Jiafu***, Xiaoying Shi, Peter E. Thornton, Forrest M. Hoffman, Zaichun Zhu and Ranga B. Myneni. 2013. Global latitudinal-asymmetric vegetation growth trends and their driving mechanisms: 1982-2009. *Remote Sensing*, 2013, 5(3), 1484-1497.
19. Edmonds, James*; Jones, Andrew; Collins, William; Thornton, Peter; Janetos, Anthony; Bond-Lamberty, Ben; Calvin, Katherine; Chini, Louise; Hurtt, George; **Mao, Jiafu**; Shi, Xiaoying; Thomson, Allison; Wise, Marshall; M. Torn. 2013. Land-use policy complicates radiative forcing and the IPCC climate assessment process. Submitted to *Climatic Change*.
18. Jones, A. D.*, Collins, W.D., Edmonds, J., Torn, M.S., Janetos, A.C., Calvin, K., Thomson, A., Chini, L., **Mao, J.**, Shi, X., Thornton, P., Hurtt, G. C. and Wise, M, 2013. Greenhouse gas policy influences climate via direct effects of land-use change. *Journal of Climate*, doi: <http://dx.doi.org/10.1175/JCLI-D-12-00377.1>.
17. Wang Dali*, Xiaoying Shi, Daniel Ricciuto, **Jiafu Mao** and Jens Domke, 2013. A scalable framework for global offline Community Land Model ensemble simulation. *International Journal of Computational Science and Engineering* (in press)
16. **Mao Jiafu***, Peter E. Thornton, Xiaoying Shi, Maosheng Zhao and Wilfred M. Post, 2012. Remote sensing evaluation of CLM4 GPP for the period 2000 to 2009. *Journal of Climate*, 25, 5327-5342.

15. **Mao Jiafu***, Xiaoying Shi, Peter E. Thornton, Shilong Piao and Xuhui Wang, 2012. Causes of spring vegetation growth trends in the northern mid-high latitudes from 1982 to 2004, 2012. *Environmental Research Letters*, 7 014010 doi:10.1088/1748-9326/7/1/014010.
14. Piao Shilong*, A.Ito, S.Li, Y.Huang, P.Ciais, X.Wang, S.Peng, R R. J. Andres, J. Fang, S. Jeong, **J. Mao**, A. Mohammat, H. Muraoka, H. Nan, C. Peng, P. Peylin, X. Shi, S. Sitch, S. Tao, H. Tian, M. Xu, G. Yu, N. Zeng, and B. Zhu, 2012. The carbon budget of the terrestrial ecosystems in East Asia over the last two decades. *Biogeosciences*, 9, 3571-3586.
13. **Mao Jiafu**, Steven Phipps, Andrew J. Pitman*, Yingping Wang and Bernard Pak, 2011. The CSIRO Mk3L climate system model v1.0 coupled to the CABLE land surface scheme v1.4b: evaluation of the control climatology, *Geoscientific Model Development* 4: 1115-1131.
12. Shi Xiaoying*, **Jiafu Mao**, Yingping Wang, Yongjiu Dai and Xuli Tang, 2011. Coupling a Terrestrial Biogeochemical model to the Common Land Model, *Advances in Atmospheric Sciences* 28(5): 1-14.
11. Shi Xiaoying*, **Jiafu Mao**, Peter E. Thornton and Forrest m. Hoffman and Wilfred M. Post, 2011. The impact of climate change, CO₂, nitrogen deposition and land use change on contemporary global river flow, *Geophysical Research Letters* 38, L08704, doi:10.1029/2011GL046773.
10. **Mao Jiafu**, Andrew J. Pitman*, Steven J. Phipps, Gab Abramowitz and Yingping Wang, 2010. Global and regional coupled climate sensitivity to the parameterization of rainfall interception. *Climate Dynamics* DOI: 10.1007/s00382-010-0862-7.
9. **Mao Jiafu***, Xiaoying Shi, Lijuan Ma, Dale P. Kaiser, Qingxiang Li and Peter E. Thornton, 2010. Assessment of re-analysis daily extreme temperatures with China's homogenized historical dataset during 1979 to 2001 using Probability Density Functions, *Journal of Climate* 23(24): 6605-6623.
8. **Mao Jiafu***, Li Dan, Bin Wang and Yongjiu Dai, 2010. Simulation and evaluation of terrestrial ecosystem NPP with M-SDGVM over continental China, *Advances in Atmospheric Sciences* 27(2): 427-442.
7. **Mao Jiafu***, Bin Wang and Yongjiu Dai, 2009. Sensitivity of the carbon storage of potential vegetation to historical climate variability and CO₂ in continental China, *Advances in Atmospheric Sciences* 26(1): 87-100.
6. Zhang Hailing, Bin Wang* and **Jiafu Mao**, 2009. A Generalized Approach of Three-dimensional Variational Data Assimilation for Land Surface Air Temperature and Its Tests under Simplification Cases, *Climatic and Environmental Research* (in Chinese with English Abstract) 14(3): 273-283.
5. Shi Xiaoying*, Xiaohui Shi and **Jiafu Mao**, 2009. Interdecadal variation of Water Vapor Transport over East Asia and Its Impacts on Rainfall over Eastern China in summer (in Chinese with English Abstract), *Acta Geographica Sinica* 64(7): 861-870.
4. **Mao Jiafu***, Bin Wang, Yongjiu Dai, and Morales Pablo, 2008. Simulations of carbon and water fluxes with the M-SDGVM in major European forest biomes, *Chinese Journal of Atmospheric Sciences* (in Chinese with English Abstract) 32(6): 1379-1391.
3. **Mao Jiafu***, Bin Wang, Yongjiu Dai, F. I. Woodward, P. J. Hanson and M. R. Lormas, 2007. Improvements of a dynamic global vegetation model and simulations of carbon and water at an upland-oak forest, *Advances in Atmospheric Sciences* 24 (2): 311-322.
2. **Mao Jiafu***, Bin Wang and Yongjiu Dai, 2006. Perspective on terrestrial ecosystem models and their coupling with climate system models, *Climatic and Environmental Research* (in Chinese with English Abstract) 11(6): 75-83.
1. **Mao Jiafu***, Bin Wang, Li Dan and Yinpeng Li, 2005. Coupling of an Atmosphere-Vegetation Interaction Model (AVIM) to a New Generation Grid Point Atmospheric General Circulation Model (GAMIL), *Chinese Journal of Atmospheric Sciences* (in Chinese with English Abstract) 29(6): 897-910.

PRESENTATIONS

88. Lianhong Gu et al., Climate variability as a key factor for model improvement: insights from observed and modeled ecosystem functional responses to precipitation regimes and associated stresses in a central US forest. April 28-29, 2015, Environmental System Science Principal Investigator (PI) Meeting, Potomac, MD, USA.
87. Daniel M. Ricciuto et al., Sensitivity of Community Land Model carbon fluxes and biomass to parameters. April 28-29, 2015, Environmental System Science Principal Investigator (PI) Meeting, Potomac, MD, USA.
86. Xiaoying Shi, Peter E. Thornton, Daniel M. Ricciuto, Paul J. Hanson, **Jiafu Mao**, Stephen D. Sebestyen, Natalie A. Griffiths, and Gautam Bisht, Representing northern peatland microtopography and hydrology within the Community Land Model. April 28-29, 2015, Environmental System Science Principal Investigator (PI) Meeting, Potomac, MD, USA.
85. **Mao Jiafu**, Daniel M. Ricciuto, Peter E. Thornton, Jeffrey M. Warren, Anthony W. King, Xiaoying Shi, Colleen M. Inversen and Richard J. Norby. Evaluating the Community Land Model in a pine stand with ¹³CO₂ and shading manipulations, April 28-29, 2015, Environmental System Science Principal Investigator (PI) Meeting, Potomac, MD, USA.

84. **Mao Jiafu** et al., Disentangling Climatic and Anthropogenic Controls on Global Terrestrial Evapotranspiration Trends. April 9, CCSI SAB meeting, Oak Ridge, TN.
83. Yaxing Wei et al., The North American Carbon Program Multi-scale Synthesis and Terrestrial Model Intercomparison Project: Environmental driver data. April 9, CCSI SAB meeting, Oak Ridge, TN.
82. Cheng-En Yang, Jiafu Mao, Forrest M. Hoffman, Daniel M. Ricciuto and Joshua S. Fu, Evaluation of the vegetation biomass in the CMIP5 models over the northern high-latitudes. April 9, CCSI SAB meeting, Oak Ridge, TN.
81. Xiaoying Shi, Peter E. Thornton, Daniel M. Ricciuto, Paul J. Hanson, **Jiafu Mao**, Stephen D. Sebestyen, Natalie A. Griffiths, and Gautam Bisht, Representing northern peatland microtopography and hydrology within the Community Land Model. April 9, CCSI SAB meeting, Oak Ridge, TN.
80. Alan Di Vittorio et al., From Land Use to Land Cover: Restoring the Afforestation Signal in a Coupled Integrated Assessment - Earth System Model and the Implications for CMIP5 RCP Simulations. April 12-17, 2015, European Geosciences Union General Assembly, Vienna, Austria.
79. Alan Di Vittorio et al., The effects of land unit boundaries on GCAM land use and cover, March 2-4, 2015, Boulder, Colorado.
78. **Jiafu Mao** et al., How anthropogenic effects modulate the climate-dominated land evapotranspiration. CESM land model and biogeochemistry working group meetings, March 2-4, 2015, Boulder, Colorado.
77. Yuanyuan Fang et al., Can terrestrial biosphere models capture the response of atmospheric CO₂ growth rate to ENSO? Jan. 26-29, 2015, NACP and AmeriFlux Joint Meeting, Washington D.C.
76. Yaxing Wei et al., The North American Carbon Program Multi-scale Synthesis and Terrestrial Model Intercomparison Project: Environmental driver data. Jan. 26-29, 2015, NACP and AmeriFlux Joint Meeting, Washington D.C.
75. Daniel M. Ricciuto et al., Biogeophysical controls on land-atmosphere fluxes in the Community Earth System Model. Jan. 26-29, 2015, NACP and AmeriFlux Joint Meeting, Washington D.C.
74. Yuanyuan Fang et al., Can terrestrial biosphere models capture the response of atmospheric CO₂ growth rate to ENSO? December 2014, AGU Fall Meeting, San Francisco, CA.
73. Deborah Huntzinger et al., Trends in the Global Net Land Sink and Their Sensitivity to Environmental Forcing Factors: Results From the Multi-Scale Synthesis and Terrestrial Model Intercomparison Project (MsTMIP). December 2014, AGU Fall Meeting, San Francisco, CA.
72. Daniel Hayes et al., Model and Inventory Perspectives on the Role of Forests in the Global Carbon Cycle: Results from the Multi-scale Synthesis and Terrestrial Model Intercomparison Project (MsTMIP). December 2014, AGU Fall Meeting, San Francisco, CA.
71. Alan Di Vittorio et al., From Land Use to Land Cover: Restoring the Afforestation Signal in a Coupled Integrated Assessment - Earth System Model and the Implications for CMIP5 RCP Simulations. December 2014, AGU Fall Meeting, San Francisco, CA.
70. Daniel M. Ricciuto et al., Biogeophysical controls on land-atmosphere fluxes in the Community Earth System Model. December 2014, AGU Fall Meeting, San Francisco, CA.
69. Li Zhang et al., Evaluation of the Community Land Model simulated carbon and water fluxes against observations over ChinaFLUX sites. December 2014, AGU Fall Meeting, San Francisco, CA.
68. Xiaoying Shi et al., Investigating the biogeophysical impacts of land cover change on future climate. December 2014, AGU Fall Meeting, San Francisco, CA.
67. Shilong Piao et al., Evidence for A Weakening Relationship between Interannual Temperature Variability and Northern Vegetation Activity. December 2014, AGU Fall Meeting, San Francisco, CA.
66. Jiafu Mao et al., Dynamics of global vegetation biomass simulated by the integrated Earth System Model. December 2014, AGU Fall Meeting, San Francisco, CA.
65. Zhenzhong Zeng et al., A Worldwide Analysis of Spatiotemporal Changes in Water Balance-based Evapotranspiration from 1982 to 2009. December 2014, AGU Fall Meeting, San Francisco, CA.
64. **Mao Jiafu**, Xiaoying Shi, Peter E. Thornton, Binyan Yan and Wenting Fu. The impact of natural and human forcings on the global terrestrial hydrology cycle and vegetation dynamics for the past 3 decades, Oct 24, 2014, Department of Industrial and Systems Engineering Graduate Seminar, The University of Tennessee at Knoxville, Knoxville, US (**Invited**).
63. **Mao Jiafu**, Binyan Yan, Xiaoying Shi, Peter E. Thornton and Forrest M. Hoffman. Global vegetation growth tendencies during the past 3 decades: a study with multiple satellite LAI products and model simulations, May 18-22, 2014, The 2014 Annual Symposium of the US International Association of Landscape Ecology (US-IALE) meeting, Anchorage, Alaska, USA (**Invited**).
62. **Mao Jiafu**, Binyan Yan, Xiaoying Shi, Peter E. Thornton, Forrest M. Hoffman and David M. Lawrence. Synthesis of long-term remote sensing LAI for applications in Land Surface and Earth System Models: Homogenization and intercomparison, May 16, 2014, BGC Feedbacks SFA Review Meeting, Washington,

DC, USA.

61. **Mao Jiafu**, Binyan Yan, Xiaoying Shi, Peter E. Thornton, Forrest M. Hoffman and David M. Lawrence. Synthesis of long-term remote sensing LAI for applications in Land Surface and Earth System Models: Homogenization and intercomparison, May 12-14, 2014, Integrated Climate Modeling Principal Investigator Meeting, Washington, DC, USA.
60. **Mao Jiafu**, Daniel M. Ricciuto, Peter E. Thornton, Jeffrey M. Warren, Anthony W. King, Xiaoying Shi, Colleen M. Inversen and Richard J. Norby. Evaluating the Community Land Model in a pine stand with $^{13}\text{CO}_2$ and shading manipulations, May 6-7, 2014, Terrestrial Ecosystem Science (TES)-Subsurface Biogeochemical Research (SBR) Joint Investigators Meeting, Washington, DC, USA.
59. Shi Xiaoying, Peter E. Thornton, Daniel M. Ricciuto, Paul J. Hanson and **Jiafu Mao**. Development and testing the hydrological dynamics of vegetated wetland for CLM, May 12-14, 2014, Integrated Climate Modeling Principal Investigator Meeting, Washington, DC, USA.
58. Daniel M. Ricciuto, **Jiafu Mao**, Xiaoying Shi, Peter E. Thornton, and NACP site interim synthesis participants. Performance of the Community Land Model at AmeriFlux and FLUXNET sites, May 6-7, 2014, Terrestrial Ecosystem Science (TES)-Subsurface Biogeochemical Research (SBR) Joint Investigators Meeting, Washington, DC, USA.
57. Roisin Langan, R. Archibald, R. Mei, M. Plumlee, C. Yang, S. Mahajan, **Jiafu Mao**, D. Ricciuto, X. Shi and J. Fu. Stochastic parameterization for extreme precipitation in Climate Models. March 31-April 3, 2014, SIAM Conference on Uncertainty Quantification, Savannah, Georgia, USA.
56. Alan Di Vittorio, Louise Chini, Ben Bond-Lamberty, **Jiafu Mao** Xiaoying Shi, John Truesdale. From land use to land cover: Restoring the afforestation signal in GCAM to CESM land coupling and the implications for CMIP5 RCP simulations. February 2014, SDWG Winter Meetings, Boulder, CO.
55. Peter E. Thornton, Ben Bond-Lamberty, Kate Calvin, Louise Chini, Bill Collins, Tony Craig, Alan Di Vittorio, Jae Edmunds, George Hurtt, Andy Jones, **Jiafu Mao**, Xiaoying Shi, Allison Thomson, John Truesdale. The influence of prognostic land use and land cover change representations in CESM simulations over the period 1850-2100. February 2014, SDWG Winter Meetings, Boulder, CO.
54. **Jiafu Mao**, Binyan Yan, Xiaoying Shi, Peter E. Thornton, Forrest M. Hoffman and David M. Lawrence. Synthesis of long-term remote sensing LAI for applications in land surface and earth system models: Homogenization and intercomparison. February 2014, CESM Land Model and Biogeochemistry Working Group Meetings, Boulder, CO.
53. **Jiafu Mao**, Binyan Yan, Xiaoying Shi, Peter E. Thornton, Forrest M. Hoffman, Shilong Piao, Shunlin Liang and David M. Lawrence. Synthesis of remote sensing LAI for benchmark of global land surface models. Part 1: Homogenization and intercomparison. December 2013, AGU Fall Meeting, San Francisco, CA.
52. R. Langan, R. Archibald, S. Mahajan, D. Ricciuto, C. Yang, R. Mei, **Jiafu Mao** and Xiaoying Shi. Stochastic Parameterization for extreme precipitation. December 2013, AGU Fall Meeting, San Francisco, CA.
51. Jianguan Tan, Xuhui Wang, **Jiafu Mao**, Xiaoying Shi, Shushi Peng, Zhenzhong Zeng and Shilong Piao. Detection and attribution of vegetation growth change in China during the last thirty years. December 2013, AGU Fall Meeting, San Francisco, CA.
50. Xiaoying Shi, Peter E. Thornton, Daniel M. Ricciuto, Paul J. Hanson and **Jiafu Mao**. Development and testing the hydrological dynamics of vegetated wetland for CLM. December 2013, AGU Fall Meeting, San Francisco, CA.
49. Jeff Warren and coauthors. Partitioning in Trees and Soils (PiTS): A field research facility for testing dynamic carbon partitioning representations within global models. August 2013, the 98th Ecological Society of America (ESA) Annual Meeting, Minneapolis MN.
48. **Mao Jiafu** and coauthors. Global estimation of CMIP5 Earth System Models in simulating Leaf Area Index against remote-sensing products. June 2013, the 18th Annual CESM Workshop, Breckenridge, CO.
47. Xiaoying Shi and coauthors. Development and testing the hydrological dynamics of vegetated wetland for CLM. June 2013, the 18th Annual CESM Workshop, Breckenridge, CO.
46. R. Archibald, S. Mahajan, Jiafu Mao, B. Mayer, R. Mei, D. Ricciuto, X. Shi. Parameterization of the Influence of Sub-grid Scale Land Heterogeneity on Convection in a Climate Model. June 2013, the 18th Annual CESM Workshop, Breckenridge, CO.
45. AV Di Vittorio, B Bond-Lamberty, **Jiafu Mao**, LP Chini, J Truesdale, X Shi, ML Branstetter, W Collins, P Thornton, J Edmonds, A Thomson, GC Hurtt, K Calvin, A Jones and T Craig. iESM update: New land-use coupling and initial results of a fully-coupled experiment. June 2013, the 18th Annual CESM Workshop, Breckenridge, CO.
44. Daniel M. Ricciuto, **Jiafu Mao**, Xiaoying Shi, Daniel J. Hayes, Anthony W. King, Peter E. Thornton. Modeling the terrestrial carbon cycle at regional to global scales: Parameter sensitivity and evaluation against benchmarks. May 2013, TES/SBR Joint Principal Investigator's Meeting, Washington DC.

43. Xiaoying shi et al. Development and testing the hydrological dynamics of vegetated wetland for CLM. May 2013, TES/SBR Joint Principal Investigator's Meeting, Washington DC.
42. **Mao Jiafu** and coauthors. Global estimation of CMIP5 Earth System Models in simulating Leaf Area Index against remote-sensing products. April 2013, a special symposium entitled "Phenology for Disturbance Detection and Monitoring" at the 2013 US International Association of Landscape Ecology (US-IALE) meeting, Austin, Texas (**Invited**).
41. Xiaoying Shi, Wilfred M. Post, Peter E. Thornton **Jiafu Mao**, and Daniel M. Ricciuto. Evaluation and improvement of CLM4 litterfall and liitermass based on the observed database. March 2013, CCSI SAB meeting, Oak Ridge, TN.
40. **Jiafu Mao**, Xiaoying Shi, Peter E. Thornton, Forrest M. Hoffman, Zaichun Zhu, and Ranga B. Myneni. Global latitudinal-asymmetric vegetation growth trends and their driving mechanisms: 1982-2009. March 2013, CCSI SAB meeting, Oak Ridge, TN.
39. Daniel Ricciuto and coauthors. Sensitivity of site-level CLM4 simulations to input meteorology. February 2013, CESM Land Model and Biogeochemistry Working Group Meetings, Boulder, CO.
38. **Mao Jiafu**. Global simulations, evaluations and applications of CLM4 at ORNL. February 2013, CESM Land Model and Biogeochemistry Working Group Meetings, Boulder, CO.
37. **Mao Jiafu**, Daniel Ricciuto, Peter Thornton, Jeffrey Warren, Richard Norby, Colleen Iversen. Performance of simulated C partitioning within CLM4 based on ¹³CO₂ and shading manipulations in a pine stand. February 2013, CESM Land Model and Biogeochemistry Working Group Meetings, Boulder, CO.
36. **Mao Jiafu**, Peter Thornton, Xiaoying Shi, Daniel Ricciuto, Gangsheng Wang, Paul J. Hanson. The development of CLM4 two-layer soil biogeochemical model using EBIS observations. February 2013, CESM Land Model and Biogeochemistry Working Group Meetings, Boulder, CO.
35. Daniel Ricciuto, Anthony King, **Jiafu Mao**, Peter Thornton. An ensemble global carbon cycle modeling framework for calibration and uncertainty quantification. February 2013, 4th NACP All-Investigators Meeting, Albuquerque, NM.
34. Xiaoying Shi, Wilfred Post, Peter Thornton, **Jiafu Mao**. Evaluation of CLM4 litterfall based on the observed database. February 2013, 4th NACP All-Investigators Meeting, Albuquerque, NM.
33. **Mao Jiafu**, Daniel Ricciuto, Peter Thornton, Jeffrey Warren, Richard Norby, Colleen Iversen. Performance of simulated C partitioning within CLM4 based on ¹³CO₂ and shading manipulations in a pine stand. February 2013, 4th NACP All-Investigators Meeting, Albuquerque, NM.
32. Xiaoying Shi, **Jiafu Mao**, Peter E. Thornton, Forrest M. Hoffman. Spatiotemporal pattern of CLM4 simulated evapotranspiration in response to multifactor environmental changes. December 2012, AGU Fall Meeting, San Francisco, CA.
31. **Mao Jiafu**, Xiaoying Shi, Peter E. Thornton, Forrest M. Hoffman. Global latitudinal-asymmetric vegetation growth trends and their driving mechanisms over the past three decades. December 2012, AGU Fall Meeting, San Francisco, CA.
30. Peter E. Thornton, James A. Edmonds, William Collins, Anthony C. Janetos, George C. Hurtt, Xiaoying Shi, **Jiafu Mao**, Allison M. Thomson, Katherine V. Calvin, Ben P. Bond-Lamberty, Louise P. Chini. Influence of Human-Climate System Feedbacks on Predicted 21st Century Land Use/Land Cover Trajectories, Fossil Fuel Emissions, and Climate Change. December 2012, AGU Fall Meeting, San Francisco, CA.
29. Hoffman, Forrest M., James T. Randerson, and **Jiafu Mao**. "Using Remotely-sensed Data Sets for Model Evaluation and Benchmarking." ForestSAT 2012 (September 11–14, 2012), Oregon State University, Corvallis, Oregon, USA (**Invited**).
28. **Mao Jiafu**. September 2012, the eleventh CTWF (which is organized by Chinese Academy of Sciences (CAS), Third World Academy of Sciences (TWAS), World Meteorological Organization (WMO).) international workshop on "Terrestrial Ecosystems under the Changing Climate", Beijing, China (**Invited**).
27. **Mao Jiafu** and coauthors. Remote sensing evaluation of CLM4. January 2012, CCSI SAB meeting, Oak Ridge, TN
26. **Mao Jiafu** and coauthors. Remote sensing evaluation of CLM4. April 2012, TES Principal Investigator's Meeting, Washington DC.
25. **Mao Jiafu** et al. Simulation and improvement of CLM4 based on ¹³CO₂ and shading manipulations in a pine stand. April 2012, TES Principal Investigator's Meeting, Washington DC.
24. Xiaoying Shi, **Mao, J.** and coauthors. The impact of climate change, CO₂, nitrogen deposition and land use change on contemporary global river flow. April 2012, TES Principal Investigator's Meeting, Washington DC.
23. Jeff Warren and coauthors. Partitioning in Trees and Soils (PiTS): A field research facility for testing dynamic carbon partitioning representations within global models. April 2012, TES Principal Investigator's Meeting, Washington DC.

22. Hayes et al. Global carbon cycle model development, application and evaluation. April 2012, TES Principal Investigator's Meeting, Washington DC.
21. **Mao Jiafu** and coauthors. Two-layer treatment of litter and soil organic matter pools and fluxes for CLM. February 2012, Joint Land, Biogeochemistry, and Chemistry-Climate Working Groups NCAR, Boulder, CO.
20. **Mao Jiafu** and coauthors. Comparison of CLM predicted GPP, LAI, and NDVI against remote sensing-based estimates. February 2012, Joint Land, Biogeochemistry, and Chemistry-Climate Working Groups NCAR, Boulder, CO.
19. Thornton, P.E., **Mao, J**, Shi, X. and coauthors Influence of prognostic land use on 21st century climate prediction. December 2011, AGU Fall Meeting (**Invited**).
18. **Mao Jiafu**, Xiaoying Shi, Peter E. Thornton, Shilong Piao and Xuhui Wang. Causes of spring vegetation growth in the northern mid-high latitudes from 1982 to 2004. December 2011, AGU Fall Meeting, San Francisco, CA.
17. Jones, A. D., Collins, W.D., Edmonds, J., Torn, M.S., Janetos, A.C., Calvin, K., Thomson, A., Chini, L., **Mao, J.**, Shi, X., Thornton, P., Hurtt, G. C. and Wise, M. Greenhouse gas policy influences climate via direct effects of land-use change. December 2011, AGU Fall Meeting, San Francisco, CA.
16. Xiaoying Shi, **Mao, J.** et al. Runoff of the 20th and 21st centuries simulated by CESM1. December 2011, AGU Fall Meeting, San Francisco, CA.
15. **Mao Jiafu** and coauthors. Remote sensing evaluation of CLM4. June 2011, the 16th Annual CESM Workshop, Breckenridge, CO.
14. **Mao Jiafu** and coauthors. The impact of climate, CO₂, nitrogen deposition and land use change on simulated contemporary global river flow. March 2011, CESM Land Model Working Group Meeting, Boulder, CO.
13. **Mao Jiafu** and coauthors. ORNL progress in the IESM project. March 2011, CESM Land Model Working Group Meeting, Boulder, CO.
11. **Mao Jiafu** and coauthors. Remote sensing evaluation of CLMCN GPP. December 2010, AGU Fall Meeting, San Francisco, CA.
11. **Mao Jiafu** and coauthors. The progress of prognostic land use and land cover change in CESM1. June 2010, the 15th Annual CCSM Workshop, Breckenridge, CO.
10. US-China Workshop on the Climate-Energy Nexus, Oak Ridge, USA, November 11 to November 13, 2009.
9. North American Carbon Program Second Joint Workshop Site-level Interim Synthesis Regional and Continental Interim Synthesis, Oak Ridge, USA, November 9 to November 11, 2009.
8. **Mao Jiafu** and coauthors. Improvements of a dynamic global vegetation model and simulations of carbon and water from stand point to region. August 2006, International Conference on Regional Carbon Budgets, Beijing, China.
7. The international summer school of Climate Change Science for International Graduate Students, Beijing, China, July 30 to August 12, 2006
6. **Mao Jiafu** and coauthors. Improvements of a dynamic global vegetation model and simulations of carbon and water at an upland-oak forest. July 2006, the University Allied Workshop for Climate and Environmental Modeling (UAW), Taiwan.
5. **Mao Jiafu** and coauthors. Perspective of Dynamic Global Vegetation Models and Their Coupling with Climate System Model. May 2006, the forth allied workshop of LASG/CAS and Nanjing University on the development of climate system model, Shaoxing, China.
4. **Mao Jiafu** and coauthors. The sensitivity of a dynamic global vegetation model to historical climate variability and CO₂ in the conterminous China. November 2005, the forth CTWF (which is organized by Chinese Academy of Sciences (CAS), Third World Academy of Sciences (TWAS), World Meteorological Organization (WMO).) international workshop on Land Surface Models and Their Applications, Zhuhai, China.
3. **Mao Jiafu** and coauthors. Coupling of an Atmosphere-Vegetation Interaction Model (AVIM) to a New Generation Grid Point Atmospheric General Circulation Model (GAMIL). July 2004, the 8th meeting of Chinese outstanding youth scientist of atmospheric science, Chengdu Province, China.
2. The international summer school of Climate System and Climate Modeling, Beijing, China, June, 2004
1. **Mao Jiafu** and coauthors. Land surface models and their coupling with GCM. September 2003, the workshop of '973' project of large dataset management, Hunan Province, China.

TECHINAL SKILLS

- Familiar with the structure and operation of CSIRO Mk3L, CESM, CLM, NCAR-DGVM, CoLM (Common Land Model), AVIM, LPJ, SDGVM, M-SDGVM, ED and ED-JULES
- Working knowledge of various operation systems and softwares such as LINUX, Windows operating systems, Fortran 95, C Language, NCL, Ferret, MatLab, Origin and R

- Good experience in large dataset management, utilization, diagnostics and visualization.

COLLABORATORS

Peter E. Thornton (ORNL); Xiaoying Shi (ORNL); Forrest M. Hoffman (ORNL); Dan Ricciuto (ORNL); Mac Post (ORNL); Dali Wang (ORNL); Ranga B. Myneni (BU); Elke Stehfest (NEPA); Andrew J. Pitman (UNSW); Yingping Wang (CSIRO); Gab Abramowitz (UNSW); F. Ian Woodward (Sheffield U); Bin Wang (LASG/IAP); Yongjiu Dai (BNU); Shilong Piao (PKU); Maoyi Huang (PNNL); Maosheng Zhao (UMD); Geoge C. Hurtt (UMD); Louise Parsons Chini (UMD); Allison M. Thomson (PNNL); Benjamin B. Lamberty (PNNL); Alan Di Vittorio (LBL); Andrew Jones (LBL); David M. Lawrence (NCAR); Deborah N. Huntzinger (NAU); Mingzhou Jin (UTK)

GRADUATE AND POSTDOCTORAL ADVISORS

Postdoctoral Advisor in US: Peter E. Thornton (ORNL)

Postdoctoral Advisor in Australia: Andrew J. Pitman (UNSW) and Yingping Wang (CSIRO)

Graduate Advisor in China: Bin Wang (LASG/IAP) and Yongjiu Dai (BNU)

Graduate Advisees

Kai Wang (U. Texas at Austin); Binyan Yan (U. Texas at Austin); Wenting Fu (U. Texas at Austin); Xuebin Yang (U. Texas at Austin); Chengen Yang (U. Tennessee at Knoxville); Whitney Leeann Forbes (U. Tennessee at Knoxville); Yan Yu (U. of Wisconsin-Madison)

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