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EDUCATION

2004 - Ph.D. (Meteorology), *University of Hawaii at Manoa*, Honolulu, USA
1996 - M.S. (Meteorology), *Chinese Academy of Meteorological Sciences*, Beijing, China
1993 - B.S. (Meteorology), *Nanjing University of Information Science and Technology*, Nanjing, China

RESEARCH INTEREST

- Climate dynamics
- Tropical intraseasonal oscillations and monsoon variability
- Large-scale atmosphere-ocean interaction
- Atmospheric and coupled GCM modeling
- Predictability of tropical cyclone activity

RESEARCH EXPERIENCE

Researcher, Joint Institute for Regional Earth System Science and Engineering, University of California, Los Angeles, 2013-present

Associate researcher, Joint Institute for Regional Earth System Science and Engineering, University of California, Los Angeles, 2010-2013

Assistant researcher, Joint Institute for Regional Earth System Science and Engineering, University of California, Los Angeles, 2007-2010

Research associate, Jet Propulsion Laboratory, California Institute of Technology, 2006-2008

Postdoctoral visiting scientist, Program in Atmospheric and Oceanic Sciences & Geophysical Fluid Dynamics Laboratory/NOAA, Princeton University, 2004-2006

Research assistant, Department of Meteorology and International Pacific Research Center, University of Hawaii at Manoa, 1999-2004

FUNDED GRANTS

NOAA/Climate Variability and Predictability (CVP) Program: "Influences of the Maritime Continent on the Eastward Propagation of the Madden-Julian Oscillation ". PI: Xianan Jiang, Co-PI: Ming Zhao; Co-Is: Duane Waliser, Baoqiang Xiang, Shian-Jiann Lin; 09/01/2017-08/31/2020.

ONR/Marine Meteorology Program: “Leveraging the MJO for Multi-Week Predictions: Improving Understanding of MJO - MC Interactions”. PI: D. Waliser, co-PI: Xianan Jiang; 04/01/2016-12/31/2018.

NOAA/Climate Variability and Predictability (CVP) Program: "A Climate Process Team: Towards an improved understanding of the initiation and propagation of the Madden-Julian Oscillation". PI: Xianan Jiang, Co-PI: Ming Zhao; Co-Is: Duane Waliser, Bin Wang, Richard Johnson, Shian-Jiann Lin; 08/01/2015-07/31/2018.

NOAA/Modeling, Analysis, Predictions, and Projections (MAPP) Program: "Process-oriented Diagnosis and Metrics Development for the Madden-Julian Oscillation Based on Climate Simulations". PI: Xianan Jiang; Co-PI: Eric Maloney; co-Is: Ming Zhao, Shian-Jiann Lin; 08/01/2015-07/31/2018.

NOAA/MAPP Program: “Modulation of Tropical Cyclone (TC) Activity over the Intra-Americas Sea by the Intraseasonal Variability: Implications for Dynamical TC Prediction on Intraseasonal Time Scales”. PI: Xianan Jiang, 08/01/2012-07/31/2016.

NSF/Climate and Large Scale Dynamics Program: “Understanding the Role of Convective Momentum Transport for the Madden-Julian Oscillation”. PI: Xianan Jiang, 08/01/2012-07/31/2016.

NSF/Climate and Large Scale Dynamics Program: “Diabatic Processes of the MJO: Enabling and Analyzing an MJO TF and GASS Global Model Evaluation Project”. PI: D. Waliser, co-PI: Xianan Jiang; 08/01/2012-07/31/2015.

ONR/Marine Meteorology Program: “Leveraging the MJO for Predicting Envelopes of Tropical Wave and Synoptic Activity at Multi-Week Lead Times”. PI: D. Waliser, co-PI: Xianan Jiang; 04/01/2012-03/31/2015.

NASA/NEWS Program: “Characterizing Uncertainties in Large-Scale Atmospheric Heating Distributions Derived from TRMM Observations and Reanalysis Datasets”. PI: Bill Olson (UMBC), UCLA PI: Xianan Jiang, 01/01/2013-12/31/2014.

NOAA/Climate Prediction Program of the Americas (CPPA): Two dominant modes of the subseasonal variability of the Eastern Pacific ITCZ: Connections between extreme events, subseasonal and interannual variability. PI: Xianan Jiang, 08/01/2009–07/31/2013.

NSF/Climate and Large Scale Dynamics Program: “Collaborative research: Vertical heating structure in large-scale coupled tropical waves”. PI: Xianan Jiang, 10/01/2009-09/30/2013.

NOAA/Modeling, Analysis, Predictions, and Projections (MAPP) Program: “Comparison of Structure and Evolution Characteristics of Boreal Summer and Winter Intraseasonal Oscillations Derived from Reanalysis Products and Satellite Observations”. PI: Tim Li (U. Hawaii), UCLA PI: Xianan Jiang; 09/01/2011-08/31/2012.

PROFESSIONAL SERVICES

Editor, *Dynamics of Atmospheres and Oceans*, 2016-present.

Program committee, “*The American Meteorological Society 33rd Conference on Hurricanes and Tropical Meteorology Conference*”, Ponte Vedra, FL, April 16-20, 2018.

Principal Investigator, a Climate Process Team for “*Understanding Madden-Julian Oscillation Initiation and Propagation*”, sponsored by NOAA Climate Project Office (CPO) for the period of 2015-2018.

Organizer, "Workshop on the Madden-Julian Oscillation", University of California, Los Angeles, November 21-22, 2016.

Session primary-convener, "The Madden-Julian Oscillation" in the *"American Geophysical Union Annual Fall Meeting"*, San Francisco , CA, December 11-15, 2017.

Program co-chair, "6th Symposium on the Madden-Julian Oscillation and Sub-Seasonal Monsoon Variability" in the *"American Meteorological Society 2018 Annual Meeting"*, Austin, Texas, January 7-11, 2018.

Session primary-convener, "The Madden-Julian Oscillation" in the *"American Geophysical Union Annual Fall Meeting"*, San Francisco , CA, December 12-16, 2016.

Session Chair, "Tropical Intraseasonal Variability" in the *"American Meteorological Society 32nd Conference on Hurricanes and Tropical Meteorology"*, San Juan, PR, April 17-22, 2016.

Session Chair, "Tropical Biases" in the *"Workshop on Translating Process Understanding to Improve Climate Models"*, Princeton, NJ, October 15-16, 2015.

Co-organizer for the "Global Multi-Model Evaluation Project on Vertical Structure and Diabatic Processes of the MJO" (http://yotc.ucar.edu/mjo/vertical-structure-and-diabatic-processes-mjo), a joint research activity by the WCRP-WWRP/THORPEX MJO Task Force & Year of Tropical Convection (YOTC) and the GEWEX Atmosphere System Study (GASS).

Co-organizer of the "*Workshop on the Vertical Heating and Moistening Process of the Madden-Julian Oscillation"*, the Centre for Climate Research Singapore, National Environmental Agency, Singapore, June 2013.

Member - NOAA Climate Project Office MAPP (Modeling, Analysis, Predictions, and Projections) Program's CMIP5 Task Force (2012-2014); Climate Prediction Task Force (2013-); Climate Diagnostics Task Force (2015-).

Regular peer reviewer for journals*: Journal of Climate, Journal of the Atmospheric Sciences, Monthly Weather Review, Weather and Forecasting, Journal of Atmospheric and Oceanic Technology, International Journal of Climatology, Geophysical Research Letters, Advances in Atmospheric Sciences, Climate Dynamics, Quarterly Journal of the Royal Meteorological Society, Journal of Geophysical Research-Atmospheres, Tropical Cyclone Research and Review, Journal of Meteorological Society of Japan, Atmospheric Science Letters, Theoretical and Applied Climatology, Journal of Hydrometeorology*

Proposal reviewer for *US National Science Foundation, National Oceanic and Atmospheric Administration, National Aeronautics and Space Administration, National Institutes for Water Resources, Department of Energy, French National Research Agency, and the Natural Environment Research Council of the UK.*

Review panelist for NOAA CPO and NASA ROSES.

Judge, the Outstanding Student Paper Awards (OSPA), *AGU Fall Meeting*, San Francisco, 2014, 2017.

PUBLICATIONS

1. **Jiang, X.**, Á. F. Adames, M. Zhao, D. Waliser, and E. Maloney, 2017: A Unified Moisture Moist Framework for Seasonality of MJO Propagation. *J. Climate*, under review.
2. **Jiang, X.**, and D. Kim, 2017: Progress and Status of MJO Simulation in Climate Models and Process-Oriented Diagnostics, Chapter in "The Global Monsoon Systems", *Sixth International Workshop on Monsoons (IWM-VI)*, 13-17 November, 2017, Singapore.
3. Baranowski D., D. Waliser, **X. Jiang**, J. Ridout, and M. Flatau, 2017: Contemporary GCM Fidelity In Representing the Diurnal Cycle of Precipitation over the Maritime Continent. *Journal of Geophysical Research - Atmosphere*, in revision.

4. Cesana, G., D. Waliser, T. S. L'Ecuyer, **X. Jiang**, and J-L. F. Li, 2017: How Clouds Affect The Vertical Structure Of Radiative Heating Rates: A Multi-Model Evaluation Using A-Train Satellite Observations. *Journal of Climate*, in revision.
5. **Jiang, X**., Baoqiang Xiang, Ming Zhao, Tim Li, Shian-Jiann Lin, Zhuo Wang, and Jan-Huey Chen, 2017: Extended-Range Tropical Cyclogenesis Prediction in a Coupled Global High-Resolution Model System, *J. Climate*, in revision.
6. Wang Z., W. Li, M. S. Peng, X. Jiang, R. McTaggart-Cowan, and C. A. Davis, 2017: Predictive Skill and Predictability of North Atlantic Tropical Cyclogenesis in Different Synoptic Flow Regimes. *Journal of the Atmospheric Sciences*, in revision.
7. Kim, J., D. E. Waliser, G. V. Cesana, **X. Jiang**, T. L'Ecuyer, and J. M. Neena, 2017: Cloud and radiative heating profiles associated with the boreal summer intraseasonal oscillation. *Climate Dynamics*, 10.1007/s00382-017-3700-3.
8. Ciesielski, P., R. H. Johnson, **X. Jiang**, Y. Zhang, and S. Xie, 2017: Relationships Between Radiation, Clouds, and Convection During DYNAMO, *Journal of Geophysical Research - Atmosphere*, **122**, doi:10.1002/2016JD025965.
9. Gonzalez, A., and **X. Jiang**, 2017: Winter mean lower-tropospheric moisture and propagation of the Madden-Julian Oscillation, *Geophys. Res. Lett.*, **43**, doi:10.1002/2016GL070898.
10. **Jiang, X.**, 2017: Key processes for the eastward propagation of the Madden-Julian Oscillation based on multi-model simulations, *Journal of Geophysical Research - Atmosphere*, **122**, doi:10.1002/2016JD025955.
11. **Jiang, X.,** M. Zhao, E. Maloney, and D. Waliser, 2016: Amplitude of the Madden-Julian oscillation and the convective time scale in multi-model simulations, *Geophys. Res. Lett.*, **43**, doi:10.1002/2016GL070898.
12. Neena, J. M., D. E. Waliser, and **X. Jiang**, 2016: Model Performance Metrics and Process Diagnostics for Boreal Summer Intraseasonal Variability, *Climate Dynamics*, doi:10.1007/s00382-016-3166-8.
13. Zhao, H.-K., **X. Jiang***, and L. Wu, 2016: Boreal summer synoptic-scale waves over the western North Pacific in multi-model simulations, *J. Climate*, **29**,4487–4508, doi: 10.1175/JCLI-D-15-0696.1. (**corresponding author*)
14. Li, J.-L. F., W.-L. Lee, D. Waliser, J.-Y. Yu, **X. Jiang**, T. L'Ecuyer, T. Kubar, and E. Fetzer, 2016: The impacts of cloud snow radiative effects on Pacific radiative heating profile in contemporary GCMs using A-Train observations, *Journal of Geophysical Research - Atmosphere*, doi: 10.1002/2015JD023587.
15. Cesana, G., D. Waliser, **X. Jiang**, and J.-L. Li, 2015: Multi-model evaluation of cloud phase transition using satellite and reanalysis data, *Journal of Geophysical Research - Atmosphere*, 120, 7871–7892, doi:10.1002/2014JD022932.
16. Oh, J.-H., **X. Jiang**, D. Waliser, M. Moncrieff, R. Johnson, and Paul Ciesielski, 2015: A Momentum Budget Analysis of Westerly Wind Events Associated with the Madden–Julian Oscillation during DYNAMO, *J. Atmos. Sci.*, **72**, 3780–3799.
17. Xiang, B., M. Zhao, **X. Jiang**, S.-J. Lin, T. Li, X. Fu, and G. Vecchi, 2015: 3-4 week MJO prediction skill in a GFDL Coupled Model, *J. Climate*, 28, 5351-5364.
18. Zhao, H.-K., **X. Jiang**, and L. Wu, 2015: Modulation of Northwest Pacific Tropical Cyclone Genesis by the Intraseasonal Variability, J. *Meteor. Soc. Japan*, 93, 1.
19. Klingaman, N. P., **X. Jiang**, P. K. Xavier, J. Petch, D. Waliser, and S. J. Woolnough, 2015: Vertical structure and diabatic processes of the Madden-Julian Oscillation: Synthesis and summary, *Journal of Geophysical Research - Atmosphere*, 120, 4671-4689.
20. Xiang, B., S.-J. Lin, M. Zhao, S. Zhang, G. Vecchi, T. Li, **X. Jiang**, Lucas Harris, J.-H. Chen, 2015: Beyond weather time scale prediction for Hurricane Sandy and Super Typhoon Haiyan in a global climate model, *Monthly Weather Review*, 143, 524–535.

21. Guo, Y, D. E. Waliser, and **X. Jiang**, 2015: A Systematic Relationship between Activity of Convectively Coupled Equatorial Waves and the Madden-Julian Oscillation in Climate Model Simulations, *Journal of Climate*, 28, 1881–1904.
22. **Jiang, X.**, D. E. Waliser, P. K. Xavier, J. Petch, N. P. Klingaman, S. J. Woolnough, Bin Guan, Gilles Bellon, T. Crueger, Charlotte DeMott, C. Hannay, H. Lin, W. Hu, D. Kim, C.-L. Lappen, M.-M. Lu, H.-Y. Ma, T. Miyakawa, J. A. Ridout, S. D. Schubert, J. Scinocca, K.-H. Seo, E. Shindo, X. Song, C. Stan, W.-L. Tseng, W. Wang, T. Wu, X. Wu, K. Wyser, G. J. Zhang, and H. Zhu, 2015: Vertical structure and diabatic processes of the Madden-Julian Oscillation: Exploring Key Model Physics in Climate Simulations, *J. Geophy. Res. - Atmos.*, 120, 4718-4748. (Highlighted in AGU research spotlight: https://eos.org/research-spotlights/circulation-models-cannot-simulate-organized-tropical-convection).
23. Xavier, P. K., J. C. Petch, N. P. Klingaman, S. J. Woolnough, **X. Jiang**, D. E. Waliser, M. Caian, S. M. Hagos, C. Hannay, D. Kim, J. Cole, T. Miyakawa, M. Pritchard, R. Roehrig, E. Shindo, F. Vitart, and H. Wang, 2015: Vertical structure and diabatic processes of the Madden-Julian Oscillation: Biases and uncertainties at short range, *Journal of Geophysical Research - Atmosphere*, **120**, DOI: 10.1002/2014JD022718, 4749–4763.
24. Klingaman, N. P., S. J. Woolnough, **X. Jiang**, D. Waliser, P. K. Xavier, J. Petch, M. Caian, C. Hannay, D. Kim, H.-Y. Ma, W. J. Merryfield, T. Miyakawa, M. Pritchard, J. A. Ridout, R. Roehrig, E. Shindo, F. Vitart, H. Wang, N. R. Cavanaugh, B. E. Mapes, A. Shelly, and G. Zhang, 2015: Vertical structure and diabatic processes of the Madden-Julian Oscillation: Linking hindcast fidelity to simulated diabatic heating and moistening, *Journal of Geophysical Research - Atmosphere*, **120**, DOI: 10.1002/2014JD022718, 4749–4763.
25. Sheffield, J., A. Barrett, D. Barrie, S. J. Camargo, E. K. M. Chang, B. Colle, D. N. Fernando, R. Fu, K. L. Geil, Q. Hu, **X. Jiang**, N. Johnson, K. B. Karnauskas, S. T. Kim, J. Kinter, S. Kumar, B. Langenbrunner, K. Lombardo, L. N. Long, E. Maloney, A. Mariotti, J. E. Meyerson, K. C. Mo, J. D. Neelin, S. Nigam, Z. Pan, T. Ren, A. Ruiz-Barradas, R. Seager, Y. L. Serra, A. Seth, D.-Z. Sun, J. M. Thibeault, J. C. Stroeve, C. Wang, S.-P. Xie, Z. Yang, L. Yin, J.-Y. Yu, T. Zhang, M. Zhao, 2014: Regional Climate Processes and Projections for North American: CMIP3/CMIP5 Difference, Attribution and Outstanding Issues, *NOAA Technical Report OAR CPO-2*.
26. Oh, J.-H., **X. Jiang***, D. Waliser, M. Moncrieff, and R. Johnson, 2015: Convective Momentum Tranport associated with the Madden-Julian Oscillation Based on a Reanalysis Dataset, *J. Climate*, 28, 5763–5782. (**corresponding author*)
27. Neena, J. M., **X. Jiang**, D. E. Waliser, June-Yi Lee, and Bin Wang, 2014: Eastern Pacific Intraseasonal Variability: A predictability perspective, *J. Climate*, 27, 8869–8883.
28. Klingaman, N. P., **X. Jiang**, P. K. Xavier, J. Petch, D. E. Waliser, S. J. Woolnough, 2014: Vertical structure and diabatic processes of the Madden-Julian Oscillation, Chapter in "The Global Monsoon Systems", *Fifth International Workshop on Monsoons (IWM-V)*, 28 October-1 November, 2013, Macao, China, in press.
29. Maloney, E., **X. Jiang**, S.-P. Xie, and J. Benedict, 2014: Process-Oriented Diagnosis of East Pacific Warm Pool Intraseasonal Variability, *J. Climate*, 27, 6305-6324.
30. Serra, Y. L., **X. Jiang**, B. Tian, J. Astua, E. D. Maloney, and G. N. Kiladis, 2014: Tropical Intra-seasonal Oscillations and Synoptic Variability, *Annual Review of Environment and Resources*, **39**, 189-215.
31. Wang, S.-Y., and **X. Jiang**, 2014: Global eastward propagation signals associated with the 4-5 year ENSO cycle in the ocean surface and the atmosphere, *Climate Dynamics*, in press.
32. **Jiang, X.**, T. Kubar, S. Wong, W. S. Olson, and D. E. Waliser, 2014: Modulation of Marine Low Clouds Associated with the Tropical Intraseasonal Variability over the Eastern Pacific. *J. Climate*, 27, 5560–5574.

33. Mani, J. N., J.-Y. Lee, D. E. Waliser, B. Wang, and **X. Jiang**, 2014: Predictability of the Madden-Julian Oscillation in the Intraseasonal Variability Hindcast Experiment (ISVHE), *J. Climate*, 27, 4531–4543.

34. Guo, Y, **X. Jiang**, and D. E. Waliser, 2014: Modulation of the Convectively Coupled Kelvin Waves over South American and the tropical Atlantic Ocean by the Madden-Julian Oscillation, *J. Atmos. Sci.*, 71, 1371-1288.

35. Maloney, E., S. J. Camargo, E. Chang, B. Colle, R. Fu, K. Geil, Q. Hu, **X. Jiang**, N. Johnson, K. Karnauskas, J. Kinter, B. Kirtman, S. Kumar, B. Langenbrunner, K. Lombardo, L. Long, A. Mariotti, J. Meyerson, K. Mo, D. Neelin, Z. Pan, R. Seager, Y. Serra, A. Seth, J. Sheffield, J. Stroeve, J. Thibeault, S.-P. Xie, C. Wang, B. Wyman, M. Zhao, 2014: North American Climate in CMIP5 Experiments: Part III: Assessment of 21st Century Projections, *J. Climate*, 2230-2270.

36. Wong, S., T. S. L'Ecuyer, W. S. Olson, **X. Jiang**, and E. J. Fetzer, 2013: Local Balance and Variability of Atmospheric Heating Budget over Oceans: Observation and Reanalysis-based Estimates, *J. Climate*, 27, 893-913.

37. Tao, W.-K., Y. N. Takayabu, S. Lang, S. Shige, W. Olson, A.Hou, **X. Jiang**, C. Zhang, W. Lau, T. Krishnamurti, D. Waliser, M. Grecu, P. E. Ciesielski, R. H. Johnson, R. Houze, R. Kakar, K. Nakamura, S. Braun, S. Hagos, R. Oki, and A. Bhardwaj, 2012: TRMM Latent Heating Retrieval and Comparisons with Field Campaigns and Large-Scale Analyses, *AMS Monograph Tribute to Michio Yanai*, in press.

38. Wang, S.-Y., H.-H. Chia, R. R. Gillies, and **X. Jiang**, 2013: Quasi-Biweekly Mode and Its Modulation on the Diurnal Rainfall in Taiwan Forecasted by the CFS, *Weather and Forecasting*, 28, 981-993.

39. Sheffield, J., S. J. Camargo, R. Fu, Q. Hu, **X. Jiang**, N. Johnson, K. B. Karnauskas, J. Kinter, S. Kumar, B. Langenbrunner, E. Maloney, A. Mariotti, J. E. Meyerson, D. Neelin, Z. Pan, A. Ruiz-Barradas, R. Seager, Y. L. Serra, D.-Z. Sun, C. Wang, S.-P. Xie, J.-Y. Yu, T. Zhang, M. Zhao, 2013: North American Climate in CMIP5 Experiments. Part II: Evaluation of 20th Century Intra-Seasonal to Decadal Variability, *J. Climate*, **26**, 9247-9290.

40. **Jiang, X.**, E. Maloney, J.-L. Li, and D. E. Waliser, 2013: Simulations of the Eastern Pacific Intraseasonal Variability in CMIP5 GCMs, *J. Climate*, **26**, 3489-3501.

41. **Jiang, X.**, M. Zhao, and D. E. Waliser, 2012: Modulation of tropical cyclone activity by the tropical intraseasonal oscillation over the Eastern Pacific in a high resolution GCM, *Journal of Climate*, **25**, 6524-6538.

42. Santra, A., M. Halder, P. Mukhopadhyay, **X. Jiang**, and B. Goswami, 2012: Role of Cloud Hydrometeors on Northward Propagation of Boreal Summer Intraseasonal Oscillations, *Climate Dynamics*, DOI 10.1007/s00382-012-1425-x.

43. Kubar, T., D. E. Waliser, J.-L. Li, and **X. Jiang**, 2012: On the annual cycle, variability, and correlations of oceanic low-topped clouds with large-scale circulation using Aqua MODIS and ECMWF-Interim, *J. Climate*, **25**, 6152-6174.

44. Lee, J.-E., B. Lintner, J. D. Neelin, **X. Jiang**, C. Boyce, J. Fisher, J. Perron, T. Kubar, R. Pierrehumbert, J. Lee, and J. Worden, 2012: Reduction of precipitation variability by transpiration from plants, *Geophys. Res. Lett.*, **39**, L19704, 2012doi:10.1029 /2012GL053417.

45. Waliser, D. E., and **X. Jiang**, 2012: Tropical Meteorology: Intertropical Convergence Zones (ITCZ). *Encyclopedia of Atmospheric Sciences*. Second Edition, Edited by G. North, F. Zhang, J. Pyle. Academic Press, in press.

46. **Jiang, X.**, D. Waliser, D. Kim, M. Zhao, K. Sperber, W. Stern, S. Schubert, G. Zhang, W. Wang, M. Khairoutdinov, R. Neale, and M.-I. Lee, 2012: Simulation of the intraseasonal variability over the Eastern Pacific ITCZ in climate models. *Climate Dynamics*, 10.1007/s00382-011-1098-x, 1-20.

47. **Jiang, X.**, D. E. Waliser, W. S. Olson, W.-K. Tao, T. S. L'Ecuyer, S. Shige, K.-F. Li, Y. L. Yung, S. Lang, and Y. Takayabu, 2011: Vertical diabatic heating structure of the MJO: Intercomparison between recent reanalyses and TRMM estimates, *Mon. Wea. Rev.*, 139, 3208–3223.

48. **Jiang, X.**, D. E. Waliser, J.-L Li, and C. Woods, 2011: Vertical cloud structures associated with the boreal summer intraseasonal oscillation based on CloudSat observations and ERA-Interim reanalysis. *Climate Dynamics*, doi: 10.1007/s00382-010-0853-8, 2219-2232.

49. Waliser, D. E., J.-L. Li, B. Tian, and **X. Jiang**, 2010: Diagnostics for the tropics: some (cautious) uses of satellite data. Proceedings of Seminar on Diagnosis of Forecasting and Data Assimilation Systems, ECMWF, 7-10 September 2009.

50. Wang, S.-Y., L. E. Hipps, R. R. Gillies, **X. Jiang**, and A. L. Moller, 2010: Circum-global teleconnection and early summer rainfall in the US Intermountain West. *Theoretical and Applied Climatology*, doi: 10.1007/s00704-010-0260-4.

51. **Jiang, X**., D. E. Waliser, W. S. Olson, W.-K. Tao, T. S. L'Ecuyer, J.-L. Li, B. Tian, Y. L. Yung, A. M. Tompkins, S. E. Lang, and M. Grecu, 2009: Vertical heating structures associated with the MJO as characterized by TRMM estimates, ECMWF Reanalyses and forecasts: A case study during 1998-99 winter. *J. Climate*, **22**, 6001-6020.

52. **Jiang, X.**, and D. E. Waliser, 2009: Two dominant modes of subseasonal variability of the eastern Pacific ITCZ. *Geophys. Res. Lett*., **36**, L04704, doi:10.1029/2008GL036820.

53. **Jiang, X.**, and D. E. Waliser, 2008: Northward propagation of the subseasonal variability over the Eastern Pacific Warm Pool. *Geophys. Res. Lett.*, **35**, L09814, doi:10.1029/2008GL033723.

54. **Jiang, X.**, D. E. Waliser, M. Wheeler, C. Jones, M.-I. Lee, and S. Schubert, 2008: Assessing the skill of an all-season statistical forecast model for the Madden-Julian Oscillation. *Mon. Wea. Rev.*, **136**, 1940-1956.

55. **Jiang, X.**, and N.-C. Lau, 2008: Intraseasonal teleconnection between the North American and western North Pacific Monsoons with a 20-day time scale. *J. Climate*, **21**, 2664–2679.

56. **Jiang, X.**, N.-C. Lau, I. M. Held and J. J. Ploshay, 2008: Mechanisms of the Great-Plains low-level jet as simulated in an AGCM. *J. Atmos. Sci*., **64**, 532-547.

57. **Jiang, X.**, N.-C. Lau, and S. A. Klein, 2006: Role of the eastward propagating convective episodes on the diurnal cycle and seasonal mean of the summertime rainfall over the U.S. Great-Plains. *Geophys. Res. Lett.*, doi:10.1029/ 2006GL027022.

58. Klein, S. A., **X. Jiang**, J. Boyle, S. Malyshev, and S. Xie, 2006: Diagnosis of the summertime warm and dry bias over the U. S. Southern Great Plains in the GFDL climate model using a weather forecasting approach. *Geophys. Res. Lett*., **33**, L18805, doi:10.1029/ 2006GL027567.

59. **Jiang, X.** and T. Li, 2005: Reinitiation of the boreal summer intraseasonal oscillation in the tropical Indian Ocean. *J. Climate*, **18**, 3777-3795.

60. **Jiang, X.**, T. Li and B. Wang, 2004: Structures and mechanisms of the northward propagating boreal summer intraseasonal oscillation. *J. Climate*, **17**, 1022-1039.

61. Gu, J., **X. Jiang**, H. Yin, and Y. Xu, 2000: The operational prediction results of the East China tropical cyclone model and improvement of the model. *Chinese J. Tropical Meteorology*, **16**, 55-61.

62. Gu, J., H. Yin, Y. Xu, **X. Jiang**, and X. Liang, 2000: The improvement and application of MM5 in numerical prediction of Shanghai Regional Meteorological Center. *Chinese J. Applied Meteorology*, **11**, 189-198.

63. **Jiang, X.** and Y. Zhu, 1998: A numerical study on factors affecting unusual motion of TC 9414 (Doug). *Chinese J. Applied Meteorology*, **9**, 36-47.

64. Zhang, Q., **X. Jiang**, and J. He, 1996: Air-sea coupling modes of tropical Pacific SSTA and wind stress fields. *Chinese J. Tropical Meteorology*, **2**, 129-136 (in English).

65. Zhang, Q., **X. Jiang**, and J. He, 1996: Air-sea coupling modes of tropical Pacific SSTA and wind stress fields. *Chinese J. Tropical Meteorology*, **1**, 43-50.

PRESENTATIONS (selected)

"Key model processes of the Madden-Julian Oscillation", Earth Research Institute, University of California, Santa Barbara, December 1, 2017. (*Invited*)

"Progress and Status of MJO Simulation in Climate Models and Process-Oriented Diagnostics", Sixth International Workshop on Monsoons (IWM-VI), 13-17 November, 2017, Singapore. (*Invited*)

"Key model physics of the Madden-Julian Oscillation", *2017 American Meteorological Society Annual Meeting*, Seattle, WA, January 21-26, 2017. (*Invited*)

"Key model physics of the Madden-Julian Oscillation", *International Workshop on the Madden-Julian Oscillation*, Chengdu, China, August 3-8, 2016. (*Invited*)

"Key Physics of the Madden-Julian Oscillation Based on Multi-model Simulations", *The American Meteorological Society 32nd Conference on Hurricanes and Tropical Meteorology"*, San Juan, PR, April 17-22, 2016.

"Towards improved understanding and modeling of the Madden-Julian Oscillation", *JIFRESSE Open House*, University of California, Los Angeles, California, Nov. 12, 2015. (*Invited*)

"Process-oriented Diagnostics for the Madden-Julian Oscillation in Climate Models", *26th IUGG Conference*, Prague, Czech Republic, June 25, 2015.

"Exploring Key Model Physics in Simulating the Large-scale Organization of Tropical Convection", Jet Propulsion Laboratory, Pasadena, California, June 2, 2015. (*Invited*)

"Exploring Key Model Physics in Simulating the Madden-Julian Oscillation", *University of California, San Diego*, California, May 26, 2014.

"Exploring Key Model Physics in Simulating the Madden-Julian Oscillation", *University of California, Irvine*, California, May 6, 2014 (*Invited*)

"Vertical Structure and Diabatic Processes of the Madden-Julian Oscillation in Climate Models", *The World Weather Open Science Conference*, Montreal, Canada, August 16-21, 2014.

"Vertical Structure of the MJO in Climate Models", the GASS/MJO Task Force Workshop on the Heating and Moistening Process of the Madden-Julian Oscillation, the Centre for Climate Research Singapore, Singapore, June 2013. (*Invited*; co-organizer of the workshop)

"Eastern Pacific Intraseasonal Variability: Northward Propagation, GCM Fidelity, and Impacts on Hurricanes", University of Reading, UK, April 2013.

"Simulations of the Eastern North Pacific Intraseasonal Variability in CMIP5 GCMs". *AGU Fall Meeting*, San Francisco, CA, December 2012.

"Modulation of TC Activity by the Tropical Intraseasonal Variability over the Eastern Pacific in a High Resolution GCM". *AGU Fall Meeting,* San Francisco, CA, December 2011.

"Characterizing the vertical diabatic heating profile of the Madden-Julian Oscillation (MJO): A joint MJO task force/YOTC and GEWEX GASS global model evaluation project". *WCRP Open Science Conference,* Denver, CO, October 2011.

"Vertical Structure of the Intraseasonal Variability from Contemporary Satellite Data: AIRS, CloudSat, and TRMM". *CLIVAR AAMP and YOTC MJO Task Force Monsoon Intraseasonal Variability Modeling Workshop*, Busan, Korea, June 2010 (*Invited*).

"Dominant intraseasonal variability modes over the Eastern Pacific ITCZ and their representation in climate models". *American Meteorological Society 29th Conference on Hurricane and Tropical Meteorology,* Tucson, AZ, May 2010.

"Vertical structures of cloud water associated with the boreal summer intraseasonal oscillation based on CloudSat observations and ERA-Interim reanalysis". *AGU Fall Meeting,* San Francisco, CA, December 2009.

"Intraseasonal Oscillation over the Eastern Pacific ITCZ: Northward Propagation, 20 & 40-day Modes, and Interannual Variability", *Department of Atmospheric and Oceanic Sciences*, University of California, Los Angeles, CA, May 2009.

"Assessing the skill of an all-season statistical forecast model for the Madden-Julian Oscillation". *MJO Workshop "New Approaches to Meet the Challenge of the Madden-Julian Oscillation",* Irvine, CA, November, 2007.

"Role of the Diurnal Cycle in the Summertime Dry-Warm Bias over the US Great Plains in the GFDL GCM". Lawrence Livermore National Laboratory, Livermore, California, April 2006. (*Invited*)

"AGCM simulated Great-Plains low-level jet and its mechanisms". *AGU Fall Meeting,* San Francisco, CA, December 2005.

"Structures and mechanisms of the northward propagating boreal summer intraseasonal oscillation". *International Asian Monsoon Symposium,* Honolulu, HI, February 2004.

PROFESSIONAL AFFILIATIONS

American Geophysical Union

American Meteorological Society