CURRICULUM VITAE

Jian Lu

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Education

Ocean University of Qingdao	*Meteorology*	B.Sc.	1988-1992
Ocean University of Qingdao	*Physical Oceanography*	M.Sc.	1994-1996
Ocean University of Qingdao	*Physical Oceanography*	Ph.D.	1996-1999
Dalhousie University	*Atmospheric Science*	Ph.D.	1999-2003

Professional Experience:

Aug 2013-present	Senior Scientist at PNNL
Jan 2009-Jul 2013	Assistance Professor at Department of Atmosphere Ocean and Earth Sciences, George Mason University
Dec 2008-present	Research Scientist at COLA/IGES
Dec 2006-Nov 2008	Postdoctoral Fellow of the Advanced Study Program at National Center for Atmospheric Research
Mar 2004-Nov 2006	UCAR VSP Postdoctoral Visiting Scientist at GFDL/NOAA

Awards and Fellowships:

Tertia M. C. Hughes Ph.D Graduate Student Prize (2003)
UCAR Postdoctoral Visiting Scientist Program Fellowship at GFDL (2004-2006)
Postdoctoral Fellowship of the Advanced Study Program at NCAR (2006-2008)

Professional Organization Memberships:

Canadian Meteorology and Oceanography Society (1999-2004)
American Geophysical Union (AGU)
American Meteorological Society (AMS)

Synergistic activities:

- Convener for 2015 AGU session “Atmospheric circulations and their role in the hydrological cycle: Monsoon, storm track, and ITCZ”
- Executive Editor of Climate Dynamics (since Feb. 2014)
- Lead author on revising “Hadley Circulation” in Encyclopedia of the Atmospheric Sciences, 2nd Edition.
- Contributing author of Chapter 11 of IPCC-AR5: Future Climate Change and

Predictability.
- Contributing author of Chapter 10 of IPCC-AR5: Detection and Attribution of Climate Variability
- Outreach at the 2010 US Science and Engineering Festival, Washington DC
- Co-chair of *long-term changes in atmospheric general circulation* at AGU 2008 Fall Meeting
- Judge for the science fair of Thomas Jefferson High School.
- Engaging student from Thomas Jefferson High School in research on climate change
- Speak to the congregation of Boulder Chinese Evangelical Free Church about climate change

Journal Review Experience:

Journal of Climate, Journal of Atmospheric Science, Climate Dynamics, Journal of Geophysical Research, Geophysical Research Letters, Q. J. R. Meteorol. Soc., Tellus A, J. Meteorol. Soc. Japan, Atmospheric Science Letters, Advances in Atmospheric Sciences, Advances in Space Research, Science China, Bulletin Wiley Interdisciplinary Reviews, Nature Geoscience, Nature Climate Change, SOLA, etc.

Recent Publications:

- Balaguru, K., L. R. Leung, J. Lu, and G. R. Goltz, 2016: A meridional dipole in the pre-monsoon Bay of Bengal tropical cyclone activity induced by ENSO. Submitted to *Clim. Dyn.*
- Arraut, J., J. Lu, K. Hodges, J. Manganello, and D. Straus, 2016: Storm tracks and climate change in the Southern Hemisphere: sensitivity to model resolutions. Submitted to *Geophys. Res. Lett.*
- Hagos, S., L. R. Leung, J.-H. Yoon, J. Lu, and G. Yang, 2016: A projection of changes in frequency of landfalling atmospheric rivers and extreme precipitation over the west coast of North America: Assessment of the impact of model bias and internal variability. *Geophys. Res. Lett.,* in press.
- Chen, G., Lu, J., A. D. Burrows, and R. L. Leung, 2015: Local finite-amplitude wave activity as an objective diagnostic of midlatitude extreme weather. *Geophys. Res. Lett.,* DOI: 10.1002/2015GL066959.
- Liu, F., Luo, Y., J. Lu, and X. Wan, 2016: Response of the tropical Pacific Ocean to El Niño versus global warming. Submitted to *Clim. Dyn.*
- Liu, W., S.-P. Xie, and J. Lu, 2016: Deep ocean heat uptake not tied to the surface-warming hiatus. *Nature Communications*, Accepted.
- Choi, J., J. Lu, S.-K. Son, D. M. W. Frierson, and J.-J. Yoon, 2016: Uncertainty in future projections of the North Pacific subtropical high and its implication for California

winter precipitation change. *Geophys. Res. Lett.,* in press.

- Palipane, E., J. Lu[c], et al., 2016: Investigating the zonal wind response to SST warming using transient ensemble AGCM experiments. Submitted to *Clim. Dyn.*
- Yang, Q., R. L. Leung, J. Lu, S. Hagos, K. Sakaguchi, and Y. Gao, 2016: Exploring the hydrostatic limit for climate simulations using an idealized aquaplanet modeling framework. Submitted to *J. Geophys. Res.*
- Gao, Y., J. Lu, L. R. Leung, et al., 2016: Dynamical and thermodynamical modulations of future changes in landfalling atmospheric rivers over North America. *Geophys. Rese. Lett.,* in press.
- Lu, J. et al., 2015: Towards the dynamical convergence on the jet stream in aquaplanet AGCMs. *J. Clim.,* doi: http://dx.doi.org/10.1175/JCLI-D-14-00761.1.
- Luo, Y., J. Lu, F. Liu, X. Wan, 2015: The pIDO-like tropical Indian Ocean response to global warming. *Adv. Atm. Sci.,* in press.
- Sakaguchi, K., L. R. Leung, C. Zhao, Q. Yang, J. Lu, S. Hagos, S. Rauscher, D. Li, T. Ringler, and P. Lauritzen, 2015: Exploring a multi-resolution approach using AMIP simulations. *J. Clim.,* 28, 5549-5574.
- Liu, W., J. Lu, and S.-P. Xie, 2015: Understanding the Indian Ocean to global warming. *Ocean Dyn.,* 65, 1037-1046.
- Ding, H., R. J. Greatbatch, J. Lu and B. Cash, 2015: The East Asian summer monsoon in pacemaker experiments driven by ENSO. *Geophys. Res. Lett., 65, 385-393.*
- Hagos, S., L. R. Leung, Q. Yang, C. Zhao, and J. Lu, 2015: Resolution and dynamical core dependence of atmospheric river frequency in global model simulations. *J. Clim.* 28(7):2764-2776. doi: 10.1175/JCLI-D-14-00567.1
- Liu, W., J. Lu, L. R. Leung, S.-P. Xie, Z. Liu, and J. Zhu, 2015: The de-correlation of westerly winds and westerly-wind stress over the Southern Ocean during the Last Glacial Maximun. *Clim. Dyn*., DOI 10.1007/s00382-015-2530-4.
- Gao, Y., L. R. Leung, J. Lu, 2015: Persistent cold air outbreaks over North America in a warming climate. *Env. Res. Lett.,* 10, doi:10.1088/1748-9326/10/4/044001.
- Bombardi, R. J. J Zhu, L Marx, B Huang, H Chen, J Lu, L Krishnamurthy, V Krishnamurthy, I Colfescu, JL Kinter III, A Kumar, ZZ Hu, S Moorthi, P Tripp, X Wu and EK Schneider. 2015: Evaluation of the CFSv2 CMIP5 decadal predictions. *Clim. Dyn.,* 44(1-2):543-557, DOI 10.1007/s00382-014-2360-9
- Huang, B. J Zhu, L Marx, X Wu, A Kumar, ZZ Hu, MA Balmaseda, S Zhang, J Lu, EK Schneider and JL Kinter III. 2015: Climate drift of AMOC, North Atlantic salinity and Arctic sea ice in CFSv2 decadal predictions. *Clim. Dyn.,* 44(1-2):559–583, DOI 10.1007/s00382-014-2395-y.