

## Jiacan Yuan

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CONTACT INFORMATION	Department of Earth and Planetary Sciences School of Arts and Sciences Rutgers University, Piscataway, NJ 08854	<i>Work:</i> 848-445-2044 <i>Mobile:</i> 919-813-8493 <i>E-mail:</i> jy519@eps.rutgers.edu
EDUCATION	<b>Ph.D.</b> , Meteorology, <b>Peking University</b> , Beijing, China, 2012 Visiting student, Meteorology, <b>Pennsylvania State University</b> , State College, PA, USA, 2008 ~ 2010 <b>B.S.</b> , Meteorology, <b>Lanzhou University</b> , Lanzhou, Gansu, China, 2006	
RESEARCH EXPERIENCE	<b>11/2015 - Present Postdoctoral Research Associate</b> , Rutgers University, School of Arts and Sciences, Earth and Planetary Sciences, Piscataway, NJ, USA <ul style="list-style-type: none"><li>- Impact and risk assessment of global climate change</li><li>- Empirical-Statistical Downscaling</li><li>- Changes in large-scale atmospheric circulation in response to anthropogenic forcing, and their influence on regional hydrological extremes.</li></ul> <b>09/2014 - 10/2015 Research Associate</b> , Duke University, Nicholas School of the Environment, Earth and Ocean Sciences, Durham, NC, USA <ul style="list-style-type: none"><li>- The response of large-scale circulations in the warming climate, and its effects on regional weather extreme events, using reanalysis and observational data</li><li>- Link between heat waves and medication usage</li></ul> <b>10/2012 - 08/2014 Postdoctoral Fellow</b> , Peking University, School of Physics, Atmospheric and Oceanic Sciences, Beijing, China <ul style="list-style-type: none"><li>- Subseasonal variability of atmospheric teleconnections over North Pacific and their influence on sea ice and regional precipitations (PI of the China postdoctoral Science Foundation project)</li><li>- The variability of atmospheric circulation in subseasonal time scale using neutral network method</li><li>- Dynamical linkage in atmosphere between tropics and extra-tropics</li></ul> <b>09/2006 - 06/2012 Research Assistant</b> , Peking University, School of Physics, Atmospheric and Oceanic Sciences, Beijing, China <b>09/2008 - 06/2010 Visiting Research Scholar</b> , Pennsylvania State University, Meteorology Department, State College, PA, USA <ul style="list-style-type: none"><li>- Dynamical mechanisms of the jet variability in the Northern Hemisphere on intraseasonal time scale, with advanced statistical analysis and climate models.</li><li>- Participated in the Eastern Pacific wave trains studies.</li><li>- Mechanisms of equatorial stratosphere circulation with an idealized model.</li></ul>	
TEACHING EXPERIENCE	2017, <b>Instructor</b> , <i>Building and Maintaining a Habitable Planet</i> (01:460:203), Rutgers University	
SELECTED HONORS AND AWARDS	China Postdoctoral Science Foundation, first class award, 2013 Outstanding Oral Presentation Award, Chinese Ph.D. Forum of Atmospheric and Oceanic Sciences, 2011 Chinese Scholarship Council Graduate Research Fellowship for Studying Overseas,	

2008, 2009, 2010

Outstanding Bachelor of Science Award, Lanzhou University, 2006

“Chun-Tsung” Scholar Undergraduate Research Fellowship, funded by Tsung-Dao Lee, 2005

PUBLICATIONS

**J. Yuan**, S. B. Feldstein, S. Lee and B. Tan (2011): The relationship between the North Atlantic jet and tropical convection over the Indian and western Pacific Oceans. *J. Climate*, 24, 6100-6113.

P. Zhou, L. Suo, **J. Yuan**, B. Tan (2012): The East Pacific Wavetrain, Its Variability and Impact on the Atmospheric Circulation in the Boreal Winter. *Adv. Atmos. Sci.*, 29 (3), 471-483

**J. Yuan**, S. Lee and B. Tan (2013): Observational evidence for the mechanism of the poleward propagation of zonal wind anomalies over the North Atlantic. *Quart. J. Roy. Meteorol. Soc.*, 139(673):992-998, doi: 10.1002/qj.2010

B. Tan, **J. Yuan**, Y. Dai, S. B. Feldstein and S. Lee (2015): The linkage between the Eastern Pacific teleconnection pattern and convective heating over the tropical western Pacific. *J. Climate*, 28, 5783-5794

**J. Yuan**, B. Tan, S. B. Feldstein and S. Lee (2015): Wintertime North Pacific teleconnection patterns: seasonal and interannual variability. *J. Climate*, 28: 8247-8263

**J. Yuan**, W. Li and Y. Deng (2015): Amplified subtropical stationary waves in boreal summer and their implications on water extremes. *Environ. Res. Lett.*, 10, 104009

R. E. Kopp, R. Shwom, G. Wagner, and **J. Yuan** (2016). Tipping elements and climate-economic shocks: Pathways toward integrated assessment. *Earth's Future*, 4: 346-372

**J. Yuan**, W. Li, R. E. Kopp, and Y. Deng (2018). Response of subtropical stationary waves and hydrological extremes to climate warming in boreal summer. *J. Climate*, in press.

T. Carleton, M. Greenstone, S. Hsiang, A. Jina, R. Kopp, I. Nath, J. Rising, A. Rode, S. Seo, A. Viaene, **J. Yuan**, and A. Zhang (2018). Valuing the Global Mortality Consequences of Climate Change Accounting for Adaptation Costs and Benefits. Summer Institute 2018 Environmental and Energy Economics, accepted.

R. Baker, T. Carleton, A. D'Agostino, T. Foreman, M. Greenstone, S. Hsiang, A. Hultgren, A. Jina, R. Kopp, I. Nath, M. Pecenco, J. Rising, A. Rode, **J. Yuan** (2017). Human Productivity in a Warmer World: The Impact of Climate Change on the Global Workforce. In preparation.

**J. Yuan**, S. B. Feldstein (2018). Connection between North Atlantic Oscillation and ENSO on the intraseasonal timescale. In preparation.

**J. Yuan**, R. E. Kopp (2018). Probabilistic ensemble of global downscaled projections of future climate. In preparation.

INVITED  
LECTURES

**Seminar in Department of Environmental Sciences, Rutgers University**, New Brunswick, NJ, United States. Amplified subtropical stationary waves in boreal summer and their implications on hydrological extremes. February 05, 2016

**SEAS Colloquium in Climate Science, Columbia University**, New York City, NY, United States. Subseasonal variabilities of jet streams in boreal winter and their mechanisms, May 08, 2014

**Monsoon Salon, Institute of Atmospheric Physics, Chinese Academy of Science**, Beijing, China. The dynamic mechanisms of the jet variability over North Atlantic in boreal winter, November 23, 2012

CONFERENCE  
PRESENTATIONS

**AGU Fall Meeting** (New Orleans, LA, United States). Oral: Probabilistic Projections of European Climate for Risk Assessment, December 11-15, 2017

**AMS annual Meeting** (Seattle, WA, United States). Oral: Seasonal variability of wintertime Eastern Pacific teleconnection pattern and its linkage with tropical convective heating, January 21-27, 2017

**AGU Fall Meeting** (San Francisco, CA, United States). Oral: Amplified subtropical stationary waves in boreal summer and their implications on hydrological extremes, December 14-18, 2015

**EGU General Assembly** (Vienna, Austria). Oral: Mechanisms of Poleward propagation of North Atlantic jet, April 27-May 02, 2014

**Conference on Atmospheric and Oceanic Fluid Dynamics** (Newport, RI, United States). Oral: Variability of North Pacific Jet anomalies and their link to tropical convection in winter, June 17-21, 2013

**AGU Fall Meeting** (San Francisco, CA, United States). Poster: Observational evidence for the mechanism of the poleward propagation of zonal wind anomalies over the North Atlantic, December 3-7, 2012

**Conference on Atmospheric and Oceanic Fluid Dynamics** (Spokane, WA, United States). Poster: The relationship between the North Atlantic jet and tropical convection over the Indian and western Pacific Oceans, June 13-17, 2011

PROFESSIONAL  
SERVICE

**Reviewer** for *Journal of Climate*, 2012-present

**Reviewer** for *International Journal of Climatology*, 2015-present

**Reviewer** for *Journal of Geophysical Research*, 2016-present

LANGUAGE

English and Chinese