

Xian Wu

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Education

- Ph.D. Climate Dynamics (expected in August 2020; GPA: 3.94/4.00)
The University of Texas at Austin 2015 – Present
Project: “*Duration of El Niño and La Niña: Mechanisms and Predictability*”
Advisor: Yuko Okumura
- B.S. Atmospheric Sciences (Climatology Direction; GPA: 3.87/4.00)
Nanjing University of Information Science and Technology 2011 – 2015
Thesis: “*Interannual variations of winter precipitation over southern China and its linkage to El Niño-Southern Oscillation*”

Research Interests

Large-scale ocean-atmosphere interaction
Climate variability and change
Climate modeling and predictability

Publications

Published:

1. Okumura, Y. M., T. Sun, and **X. Wu**, 2017: Asymmetric Modulation of El Niño and La Niña and the Linkage to Tropical Pacific Decadal Variability. *J. Climate*, **30**, 4705–4733, <https://doi.org/10.1175/JCLI-D-16-0680.1>.
2. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio, 2019: What Controls the Duration of El Niño and La Niña Events? *J. Climate*, **32**, 5941–5965, <https://doi.org/10.1175/JCLI-D-18-0681.1>

Under review or in preparation:

3. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio, 2020: Predictability of El Niño Duration Based on the Onset Timing. *J. Climate*. In revision.
4. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio, 2020: Two-year predictions of ENSO event duration during 1954–2015 using the Community Earth System Model. In prep.
5. Authorship order to be decided. Tropical Hydroclimate Change during Heinrich Stadial 1: An Integrative Proxy-Model Synthesis. In prep.

Fellowships and Awards

NCAR Advanced Study Program Postdoctoral Fellowship	2020
UT Austin, Institute for Geophysics Graduate Fellowship	Spring 2020
Outstanding Student Presentation Award, American Geophysical Union Fall Meeting	2019
UT Austin, Institute for Geophysics Entry Fellowship	2015 – 2016
Excellent Honor Graduate Award, NUIST	2015
Third Prize of China Undergraduate Mathematical Contest in Modeling	2013
First-Class Scholarship, NUIST	2011 – 2015

Selected Presentations

9. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio. Duration of El Niño and La Niña event: mechanisms and multi-year predictability, Water, Climate, and Environmental Seminar Series, Austin, TX, Mar 2020 (Talk).
8. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio. Two-year Predictions of ENSO event duration during 1954-2015. American Geophysical Union Fall Meeting, San Francisco, CA, Dec 2019 (Poster).
7. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio. Predictability of El Niño duration based on the onset timing. American Geophysical Union Fall Meeting, San Francisco, CA, Dec 2019 (Talk).
6. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio. Predictability of El Niño duration based on the onset timing. UT Austin Institute for Geophysics Seminar Series, Austin, TX, Dec 2019 (Talk).
5. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio. What controls the duration of El Niño and La Niña events? Water, Climate, and Environmental Seminar Series, Austin, TX, Oct 2019 (Talk).
4. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio. Predictability of El Niño duration in a coupled general circulation model. American Meteorological Society 99th Annual Meeting, Phoenix, AZ. Jan 2019 (Talk), [Link to Recorded Presentation](#).
3. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio. What controls the duration of El Niño and La Niña events? American Meteorological Society 98th Annual Meeting, Austin, TX. Jan 2018 (Talk), [Link to Recorded Presentation](#).
2. Lawman, A. E., T. Sun, T. M. Shanahan, P. N. DiNezio, K. Gomez; N. Piatrunia, C. Sun, **X. Wu**, M. Kageyama, U. Merkel, B. L. Otto-Bliesner, A. Abe-Ouchi, G. Lohmann, J. S. Singarayer. Tropical Hydroclimate Change during Heinrich Stadial 1: An Integrative Proxy-Model Synthesis. American Geophysical Union Fall Meeting, New Orleans, CA, Dec 2017 (Poster)
1. **Wu, X.**, Y. M. Okumura, and P. N. DiNezio. Impact of Interbasin Teleconnections on the on

the Duration of El Niño and La Niña. American Geophysical Union Fall Meeting, San Francisco, CA, Dec 2016 (Poster)

Teaching Experience

Graduate Teaching Assistant, *GEO 302 Earth, Wind, and Fire* Spring 2018

Summer Schools

Advanced Climate Dynamics Courses Summer School (Dynamics of the Seasonal Cycle),
Rondvassbu, Norway Sept 2017
Community Earth System Model Tutorial, NCAR, Boulder, CO Aug 2016
Visiting Student, College of Global Change and Earth System Science, Beijing Normal University,
China Jul 2014

Community Service

Reviews for *Journal of Climate*, *Climate Dynamics*, *Journal of Geophysical Research*
Atmospheres, *Journal of Physical Oceanography*, *International Journal of Climatology*

Outreach

Event Supervisor, UT Austin Science Olympiad Tournaments (Meteorology Test) 2018–2019
K-12 STEM Outreach, Ford Elementary, Georgetown, Texas Jan 2019
Co-organize outreach activities on the 2014 World Meteorological Day, inform the public on air
pollution facts and actions to reduce air pollution, Nanjing, China Mar 2014

Computer Skills and Numerical Modeling

<i>Programming Languages</i>	FORTTRAN, NCAR Command Language, Python, Shell Script
<i>Numerical Modeling</i>	Community Earth System Modeling
<i>System</i>	Windows, Mac OS, Unix/Linux

Professional Memberships

American Meteorological Society
American Geophysical Union