

# Xinyue Wang

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## EDUCATION

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**Ph.D., Atmospheric Sciences, Purdue University** Sept. 2015 – Oct. 2020  
Advisors: Dr. Yutian Wu / Dr. Wen-wen Tung  
**Certificate of Applied Management Principles (mini-MBA), Purdue University** Aug. 2020  
**B.Sc., Atmospheric Sciences, Nanjing University, China** Sept. 2011 – May. 2015  
Advisor: Dr. Yang Zhang

## PROFESSIONAL EXPERIENCE

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**Advanced Study Program Postdoctoral Fellow** Nov. 2020– present  
Atmospheric Chemistry Observations & Modeling (ACOM), National Center for Atmospheric Research (NCAR)  
**Research Assistant & Teaching Assistant** Sept. 2015 – Oct. 2020  
Department of Earth, Atmospheric and Planetary Sciences, Purdue University  
**Graduate Student Visitor** June – Aug. 2018, May – Aug. 2019  
ACOM, NCAR  
**Intern**  
Ocean and Climate Physics (OCP) Division Jan. – June. 2018, Mar. – May 2019  
Lamont-Doherty Earth Observatory (LDEO), Columbia University  
Cold & Arid Regions Environmental & Engineering Research Institute July. 2014  
Chinese Academy of Sciences, Lanzhou, China.

## PUBLICATIONS

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- **Wang, X.**, Wu, Y., Tung, W.-w., Richter, J.H., Glanville, A.S., Tilmes, S., Orbe, C., Huang, Y., Kinnison, D., 2018: “The Simulation of Stratospheric Water Vapor over the Asian Summer Monsoon Region in the CESM1(WACCM) Models” *Journal of Geophysical Research: Atmospheres*, <https://doi.org/10.1029/2018JD028971>
- Wu, Y., Orbe, C., Tilmes, S., Abalos, M., **Wang, X.**, 2019: “Fast transport pathways into the Northern Hemisphere upper troposphere and lower stratosphere during northern summer”. *Journal of Geophysical Research: Atmospheres*, <https://doi.org/10.1029/2019JD031552>
- **Wang, X.**, Wu, Y., Randel, W.J., Tilmes, S.: 2020: “Stratospheric Contribution to the Summertime High Surface Ozone Events over the Western United States”. *Environmental Research Letters*, doi: 10.1088/1748-9326/abba53
- Zheng, C., Wu, Y., Ting, M., Orbe, C., **Wang, X.**, Tilmes, S., 2020: “Summertime Transport Pathways from Different Northern Hemisphere Regions into the Arctic”. *Journal of Geophysical Research: Atmospheres*, <https://doi.org/10.1029/2020JD033811>
- **Wang, X.**, Randel, W.J., Wu, Y., 2021: “Infrequent, Rapid Transport Pathways to the Summer North American Upper Troposphere and Lower Stratosphere”. *Geophysical Research Letters*, doi: 10.1029/2020GL089763

## FELLOWSHIPS & GRANTS

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- NCAR's Advanced Study Program Postdoctoral Fellowship Mar. 2020

- June L. and Tan Sun Chen Research Scholarship, Purdue University Apr. 2019, 2020
- European Geosciences Union Early Career Scientist's Travel Support Dec. 2019
- 2019 College of Science Graduate Student International Travel Award Dec. 2019
- Purdue Climate Change Research Center Travel Grant Nov. 2016, 2018, 2019
- 24<sup>th</sup> Annual CESM Workshop Travel Grant May. 2019
- NCAR's Advanced Study Program's Graduate Student Fellowship Jan. 2019
- A.H. Ismail Interdisciplinary Graduate School Grant Nov. 2018
- Purdue Graduate Student Government Travel Grant Oct. 2018
- 23<sup>rd</sup> Annual CESM Workshop Travel Grant June. 2018
- American Meteorological Society (AMS) Student Travel Grant June. 2017
- EAPS Teaching Honor Roll May. 2017
- The Ross Purdue Graduate Fellowship Aug. 2015

## SERVICE & OUTREACH

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- Publication Referee: *Atmospheric Chemistry and Physics*, *Atmospheric Environment*, *Climate Dynamics*, *Journal of the Atmospheric Sciences*, *Journal of Geophysical Research: Atmospheres*
- Judge for Purdue Undergraduate Research Conference poster session (2020-04-20)
- Judge for SOARS poster session, Boulder, CO (2018-08-02)
- Earth Science Passport Day at Imagination Station volunteer, Lafayette, IN (2017-11-04)
- Indiana State Museum exhibitor for Nature Unleashed exhibit (2017-03-20)
- Habitat for Humanity: Collegiate Challenge program volunteer, Dade City, FL (June. 2016)

## ACADEMIC ACTIVITIES

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- International HPC Summer School on HPC Challenges in Computational Sciences, Toronto, Canada (July. 2021)
- 24<sup>th</sup> Annual CESM Workshop, NCAR, Boulder, CO (June. 2019)
- CGD-CISL Python Tutorial and Hackathon, NCAR, Boulder, CO (June. 2019)
- Future Physics for Global Atmospheric Model Workshop, NCAR, Boulder, CO (June. 2019)
- Fundamentals of Atmospheric Chemistry and Aerosol Modeling Workshop, NCAR, Boulder, CO (Aug. 2018)
- 2018 CESM Tutorial, NCAR, Boulder, CO (Aug. 2018)
- Weather Research and Forecasting (WRF) Model Tutorial, NCAR, Boulder, CO (July. 2018)
- 23<sup>rd</sup> Annual CESM Workshop, NCAR, Boulder, CO (June. 2018)

## PRESENTATIONS

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- The 101<sup>st</sup> AMS Annual Meeting, January 2021, online. (oral)
- AGU Fall Meeting, December 2019, San Francisco, CA. (poster)
- 24<sup>th</sup> Annual CESM Workshop, June 2019, Boulder, CO. (poster)
- AGU Fall Meeting, December 2018, Washington, D.C. (poster)
- 23<sup>rd</sup> Annual CESM Workshop, June 2018, Boulder, CO. (oral)
- AMS 21<sup>st</sup> Atmospheric and Oceanic Fluid Dynamics and 19<sup>th</sup> Middle Atmosphere, June 2017, Portland, OR. (poster)

- AGU Fall Meeting, December 2016, San Francisco, CA. (poster)

## **TECHNICAL SKILLS**

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- Programming: NCL, MATLAB, Python, R, Fortran, C
- Models: WACCM, CAM, WRF, GEOS-Chem
- Experience working with geographical data formats: Evaluating large-ensemble model outputs (in netcdf); Processing and analyzing satellite observations (MLS, in hdf)
- Presentation/Typesettings: LaTeX, Microsoft Office, Procreate, Adobe Illustrator