



## Peidong Wang

Postdoctoral Scholar, Earth System Science

### Bio

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#### PROFESSIONAL EDUCATION

- Bachelor of Science, University of Wisconsin Madison (2019)
- Doctor of Philosophy, Massachusetts Institute of Technology (2025)

#### STANFORD ADVISORS

- Noah Diffenbaugh, Postdoctoral Faculty Sponsor

#### LINKS

- Personal Website: <https://peidwang.github.io>

### Publications

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#### PUBLICATIONS

- **Ocean Outgassing of Methyl Chloroform as an Underestimated Source of Emission** *GEOPHYSICAL RESEARCH LETTERS*  
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- **Recent Warming of the Southern Hemisphere Subtropical Lower Stratosphere and Antarctic Ozone Healing** *AGU ADVANCES*  
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- **Fingerprinting the recovery of Antarctic ozone** *NATURE*  
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- **Contrasting Chlorine Chemistry on Volcanic and Wildfire Aerosols in the Southern Mid-Latitude Lower Stratosphere** *GEOPHYSICAL RESEARCH LETTERS*  
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- **Stratospheric Chlorine Processing After the Unprecedented Hunga Tonga Eruption** *GEOPHYSICAL RESEARCH LETTERS*  
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- **Physical Insights From the Multidecadal Prediction of North Atlantic Sea Surface Temperature Variability Using Explainable Neural Networks** *GEOPHYSICAL RESEARCH LETTERS*  
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- **On the Influence of Hydroxyl Radical Changes and Ocean Sinks on Estimated HCFC and HFC Emissions and Banks** *GEOPHYSICAL RESEARCH LETTERS*  
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Wang, P., Solomon, S., Stone, K.  
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- **Chlorine activation and enhanced ozone depletion induced by wildfire aerosol.** *Nature*  
Solomon, S., Stone, K., Yu, P., Murphy, D. M., Kinnison, D., Ravishankara, A. R., Wang, P.  
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- **Non-Local Parameterization of Atmospheric Subgrid Processes With Neural Networks** *JOURNAL OF ADVANCES IN MODELING EARTH SYSTEMS*  
Wang, P., Yuval, J., O'Gorman, P. A.  
2022; 14 (10)
- **Ambient Formaldehyde over the United States from Ground-Based (AQS) and Satellite (OMI) Observations** *REMOTE SENSING*  
Wang, P., Holloway, T., Bindl, M., Harkey, M., De Smedt, I.  
2022; 14 (9)
- **Quantifying the Imprints of Stratospheric Contributions to Interhemispheric Differences in Tropospheric CFC-11, CFC-12, and N<sub>2</sub>O Abundances** *GEOPHYSICAL RESEARCH LETTERS*  
Lickley, M., Solomon, S., Kinnison, D., Krummel, P., Muhle, J., O'Doherty, S., Prinn, R., Rigby, M., Stone, K. A., Wang, P., Weiss, R., Young, D.  
2021; 48 (15)
- **On the effects of the ocean on atmospheric CFC-11 lifetimes and emissions.** *Proceedings of the National Academy of Sciences of the United States of America*  
Wang, P., Scott, J. R., Solomon, S., Marshall, J., Babbin, A. R., Lickley, M., Thompson, D. W., DeVries, T., Liang, Q., Prinn, R. G.  
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