Wenhao Dong

Geophysical Fluid Dynamics Laboratory Princeton, NJ 08540 201 Forrestal Rd. Wenhao.Dong@noaa.gov http://gfdl.noaa.gov/wenhao-dong-2/

Research Interests

Model diagnostic, Variability of large-scale circulation, Tropical disturbance (low-pressure systems, mesoscale convective systems, etc.), Environmental data analysis

Education

2012-2018	Ph. D., Department of Earth System Science, Tsinghua University
2008-2012	B.E., School of Water Resources and Hydropower Engineering, Wuhan University

Research Experience

2018-present	Postdoctoral Research Associate, Geophysical Fluid Dynamics Laboratory
2013-2016	Graduate Teaching Assistant, General Circulation, Tsinghua University
2012-2018	Research Assistant, Tsinghua University

Field Experiment

2015

Tibetan Plateau: Himalayan glacier (Rongbuk), lakes (Namco, Yamzhog Yumco), and different rainfall types observation

Publications

- **1. Dong, W.**, Y. Ming, V. Ramaswamy (2020). <u>Projected changes in Indian monsoon low-pressure system</u>, *J Climate*, **33** (17): 7275–7287.
- **2. Dong, W.**, Lin, Y., Zhang, M., & Huang, X. (2020). <u>Footprint of tropical mesoscale convective system variability on stratospheric water vapor</u>, *Geophys. Res. Lett.*, 47, e2019GL086320.
- **3. Dong, W.**, Y. Lin, J. Wright *et al.* (2019). <u>Precipitable water and CAPE dependence of rainfall intensities in China</u>, *Clim. Dyn.*, 52, 3357–3368.
- **4. Dong, W.**, Y. Lin, J. Wright *et al.* (2018) <u>Connections between a late summer snowstorm over the southwestern Tibetan Plateau and a concurrent Indian monsoon low pressure system</u>, *J. Geophys. Res. Atmos.*, 123 (24), 13,676–13,691.
- **5. Dong, W.**, Y. Lin, J. Wright, Y. Ming *et al.* (2018). <u>Regional disparities in summer rainfall changes over the arid eastern-Central Asia</u>. *Sci. Rep.*, *8*, 13051, D0I:10.1038/s41598-018-31246-3.
- **6.** Lin, Y., **Dong, W.**, M. Zhang *et al.* (2017): <u>Causes of model dry and warm bias over central U.S. and impact on climate projections</u>, *Nat. Commun.*, **8**, 881.
- **7. Dong, W.**, Y. Lin, J. Wright *et al.* (2017): Monsoon low pressure systems feed up-and-over moisture transport to the southwestern Tibetan Plateau, *J. Geophys. Res. Atmos.*, 122, 12140–12151.
- **8. Dong, W.**, Y. Lin, J. Wright, Y. Ming *et al.* (2016): <u>Summer rainfall over the southwestern Tibetan Plateau controlled by deep convection over the Indian subcontinent</u>, *Nat. Commun.*, **7**, 10925.

Academic service

Reviewer for Atmospheric Research, Earth Systems and Environment, Geophysical Research Letter, Journal of Climate, Journal of Geophysical Research–Atmospheres, Journal of Meteorological Research, and Scientific Reports

Conferences & Presentation

GFDL Poster EXPO, 2019, "Causes of model dry and warm bias over central U.S. and impact on climate projections", Poster, Princeton, U.S.

Atmospheric Composition and the Asian Monsoon (ACAM), 2017, "The potential role of up-and-over in trans-Himalayan pollution transport", Oral, Guangzhou, China

Asia-Oceania Geosciences Society (AOGS), 2016, "Summer rainfall over the southwestern Tibetan Plateau controlled by deep convection over the Indian subcontinent", Oral, Beijing, China

American Geophysical Union (AGU), 2014, "Propagating convective system as a rainfall connection between southwestern Tibetan Plateau and Indian continent", Poster, San Francisco, U.S.

Honors & Awards

Outstanding graduate of Tsinghua University [1%], 2018

Excellent Doctor Degree Dissertation of Tsinghua University [1%], 2018

Young scientist of the Department of Earth System Science, Tsinghua University [1%], 2016&2018 National Scholarship, 2016

Outstanding graduate of Wuhan University, 2012

Excellent Graduation Thesis of Hubei Province, 2012