

Curriculum Vitae

Yi Dai

Lawrence Berkeley National Laboratory
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Education:

Ph.D., Atmospheric Sciences 2014.8-2019.8

University of Miami

Rosenstiel School of Marine and Atmospheric Science

Thesis Title: The Effects of Outflow-Environmental-Flow Interaction on Tropical Cyclones

Advisor: Sharan Majumdar

B.S., Meteorology 2008.9-2012.6

School of Atmospheric Sciences, Nanjing University, China

Research and Teaching Experiences:

Postdoc Fellow

2019.9 – current

Earth and Ecosystem Sciences Area, Lawrence Berkeley National Laboratory

Advisor: Ian Williams

Research Assistant

2014.8 – 2019.8

Department of Atmospheric Sciences,

Rosenstiel School of Marine and Atmospheric Science, University of Miami

Teaching Assistant

Spring 2016

MSC220 (Climate and Global Change), University of Miami

Teaching Assistant

Fall 2015

ATM 406 (Atmospheric Dynamics II), University of Miami

Research Assistant

2012.9 – 2014.6

School of Atmospheric Sciences, Nanjing University, China

Publications

Dai, Y., S.J. Majumdar, and D.S. Nolan, 2017: Secondary Eyewall Formation in Tropical Cyclones by Outflow–Jet Interaction. *J. Atmos. Sci.*, **74**, 1941–1958.

Dai, Y., S.J. Majumdar, and D.S. Nolan: The outflow-rainband relationship induced by environmental flow around tropical cyclones. *J. Atmos. Sci.*, **76**, 1845–1863.

Dai, Y., S.J. Majumdar, and D.S. Nolan: Tropical cyclone recovery under strong vertical wind shear: the role of upper-level induced outflow, *in preparation*.

Presentations:

The Influence of the Upper-Level Environmental Flow on Tropical Cyclone Structure and Intensity Predictability. *33th AMS Conference on Hurricanes and Tropical Meteorology* in Ponte Vedra, FL, April 2018. (Talk)

The role of environmental flow interactions in inducing rainbands in tropical cyclones. *AGU meeting*, New Orleans, December 2017. (Poster)

Secondary eyewall formation in tropical cyclones by outflow-jet-interaction. *Tropical Cyclone Intensity (TCI) Science Meeting* in NCAR, Boulder, October 2016. (Talk)

Eyewall replacement cycle (ERC) by outflow-environment-interaction. *32th AMS Conference on Hurricanes and Tropical Meteorology* in San Juan, Puerto Rico, April 2016. (Talk)

Skills: Numerical models such as WRF, CM1; Fortran; C; Matlab; NCL

Memberships:

2015-Present: *American Meteorological Society*.

2017-Present: *American Geophysical Union*.

Volunteer work:

Help elementary school students play table tennis in Hard Rock Stadium, FL.	2016.10
Help elementary school students play table tennis in Hard Rock Stadium, FL.	2015.10
Help disabled high school students to rehearse Shakespeare's play.	2013.05
Repair, categorize and arrange books in the school library.	2009.12