

# BREANNA ZAVADOFF, PhD

## EDUCATION

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**University of Miami Rosenstiel School of Marine and Atmospheric Science**, Miami, FL

Doctor of Philosophy in Meteorology and Physical Oceanography, August 2020

*GPA:* 4.00

*Honors:* Dean's Fellowship

**Stony Brook University**, Stony Brook, NY

Bachelor of Science in Atmospheric and Oceanic Science, *Summa Cum Laude*, May 2016

Minor Degrees in Coastal Environmental Studies & Geospatial Science, May 2016

*GPA:* 3.99

*Honors:* Presidential Scholarship, University Scholars Program, Phi Beta Kappa, Provost Award for Academic Excellence, Petra M. Udelhofen Memorial Scholarship

*Activities:* Meteorology Club, Women's Rugby Club (Treasurer, President, Captain)

## EXPERIENCE

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**University of Miami Cooperative Institute for Marine & Atmospheric Studies**, Miami, FL April 2022 – Present

*Assistant Scientist*

- Perform research in the field of atmospheric science using observational and climate model data
- Utilize a wide range of skills including critical thinking, problem solving, computer programming, and data analysis
- Collaborate with internal and external partners on research goals, methods, findings, and dissemination
- Publish findings in peer reviewed scientific journals and present results to broader scientific and public audiences at national and international conferences

**NOAA/National Weather Service: Weather Prediction Center**, College Park, MD August 2020 – March 2022

*Meteorologist*

- Perform 3-hourly North American surface analyses, forecast CONUS surface weather patterns out to 2.5 days, identify potential weather-related hazards affecting any part of the country 3 to 7 days in the future
- Consolidate information from a wide range of resources to make forecast decisions
- Quickly and accurately assess model information to incorporate into product development
- Compose plain language forecast discussions that are accessible to broader scientific and public audiences
- Collaborate with internal and external partners on a daily basis to develop products with consistent messaging

**Rosenstiel School of Marine and Atmospheric Science**, Miami, FL

August 2016 – August 2020

*Graduate Research Assistant*

- Perform independent research in the field of atmospheric science using observational and climate model data
- Utilize a wide range of skills including critical thinking, problem solving, computer programming, and data analysis
- Produce papers for publication in peer reviewed scientific journals
- Present results to broader scientific and public audiences at national and international conferences

**National Center for Atmospheric Research (NCAR)**, Boulder, CO

May 2015 – August 2015

*Summer Intern*

- Perform tropical cyclone research in collaboration with a mentor over the course of 11 weeks
- Utilize a wide range of skills including critical thinking, problem solving, computer programming, and data analysis
- Summarize research in a scientific journal formatted paper and an informative poster
- Present results at NCAR as well as at a national conference to the scientific and public communities

## TEACHING EXPERIENCE

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University of Miami, Miami, FL

August – December 2018, 2019

Teaching Assistant

- Provide students with extra guidance on difficult topics, homeworks, and test preparation
- Lead 2-3 lectures per course to obtain teaching experience
- Courses: Climate and Global Change (undergraduate, 30 students) & Computer Models in Fluid Dynamics (graduate, 5 students)

## PEER REVIEWED PUBLICATIONS

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Zavadoff, B. L., 2021: Greenhouse gases strengthen atmospheric rivers. *Nat. Clim.*, **11**, 904-905.

Zavadoff, B. L. and B. P. Kirtman, 2021: The Pacific decadal oscillation as a modulator of summertime North Atlantic Rossby wave breaking. *Clim. Dyn.*, **56**, 207-225.

Zavadoff, B. L. and B. P. Kirtman, 2020: Dynamic and thermodynamic modulators of European atmospheric rivers. *J. Climate*, **33** (10), 4167-4185.

Zavadoff, B. L. and B. P. Kirtman, 2019: North Atlantic summertime anticyclonic Rossby wave breaking: Climatology, impacts, and connections to the Pacific decadal oscillation. *J. Climate*, **32** (2), 485-500.

## PRESENTATIONS

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Zavadoff, B. L. and B. P. Kirtman. Dynamic modulators of European atmospheric rivers. Oral presentation at the University of Miami Graduate and Postdoctoral Research Symposium, March 5, 2020; Miami, FL.

Zavadoff, B. L. and B. P. Kirtman. North Atlantic summertime anticyclonic Rossby wave breaking: Climatology, impacts, and connections to the Pacific decadal oscillation. Oral presentation at the European Geosciences Union General Assembly, April 7-12, 2019; Vienna, Austria.

Zavadoff, B. L. and B. P. Kirtman. Anticyclonic Rossby wave breaking over the North Atlantic during boreal summer: Climatology and impacts. Poster presented at the 98<sup>th</sup> Annual American Meteorological Society Meeting; January 7-11, 2018; Austin, TX.

Zavadoff, B. L. and T. J. Galarneau Jr. Examining tropical cyclone development in the southwest Caribbean Sea. Oral presentation at the 41<sup>st</sup> Annual Northeastern Storms Conference; March 4-6, 2016; Saratoga Springs, NY.

Zavadoff, B. L. and T. J. Galarneau Jr. Examining tropical cyclone development in the southwest Caribbean Sea. Poster presented at the 96<sup>th</sup> Annual American Meteorological Society Meeting; January 10-14, 2016; New Orleans, LA.

## WORKSHOPS ATTENDED

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Community Earth System Model (CESM) Tutorial, Boulder, CO

August 2017

## ARTICLE REVIEWS

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|--------------------------------|-------------------------|
| • Earth's Future               | • Journal of Climate    |
| • Geophysical Research Letters | • Nature Climate Change |

## COMPUTER SKILLS

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| • Community Earth System Model (CESM) | • NCAR Command Language (NCL) |
| • GitHub                              | • Python                      |
| • MATLAB                              | • PostgreSQL                  |
| • Microsoft Word, Power-Point & Excel | • Unix/Linux                  |