ROBERT R. FORD

Department of Atmospheric & Environmental Sciences (DAES)
University at Albany, SUNY

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EDUCATION

Ph.D., Atmospheric Science, *in progress*   Expected 2027
University at Albany, SUNY, Albany, NY
Advisor: Brian Rose

B.S., Applied Physics & Mathematics   2021
Stockton University, Galloway, NJ

RESEARCH EXPERIENCE

Graduate Research Assistant   2021 –
University at Albany, SUNY   Advisor: Brian Rose

· Exploring multidecadal Southern Ocean variability and trends in climate models
· Developing open-source geoscientific Python tutorials through Project Pythia

Undergraduate Researcher   2019 – 2021
Stockton University   Advisor: Russell Manson

· Modeled solute transport in streams and analyzed the error and stability of numerical schemes

PUBLICATIONS

2. Rose, B. E. J., **R. R. Ford**, A. Banihirwe, M. D. Camron, J. Clyne, O. Eroglu, K. FitzGerald, M. A. Grover, J. Kent, R. May, K. Paul, K. R. Tyle, A. Zacharias: Pythia Foundations: A community learning resource for Python-based computing in the geosciences. *Submitted to Journal of Open Source Education.*

1. **Ford, R. R.**, B. E. J. Rose, and M. C. Rencurrel, 2025: Transient Climate Sensitivity Shaped by Low Cloud Changes Remotely Driven by Southern Ocean Processes. *Journal of Climate*, **38**, 797–813, https://doi.org/10.1175/JCLI-D-24-0164.1.

PRESENTATIONS

3. **Ford, R. R.**, and B. E. J. Rose, 2025: The Role of Low-Frequency Variability and Open-Ocean Polynyas in Southern Ocean SST Trends (oral presentation), AMS 18th Conference on Polar Meteorology and Oceanography, Denver, CO.

2. **Ford, R.**, and B. E. J. Rose, 2023: Transient climate sensitivity shaped by Antarctic sea ice changes: exploring links between ocean heat uptake patterns, sea ice changes, and mid-latitude cloud cover (oral presentation), AGU Fall Meeting, San Francisco, CA.

1. **Ford, R.**, and J. R. Manson, 2020: Solute transport modeling using a Preissmann scheme (oral presentation), 6th IAHR Europe Congress, virtual.

TEACHING EXPERIENCE

Climatematch Academy
· Teaching Assistant, Computational Tools for Climate Science   Summer 2025

SERVICE & OUTREACH

DAES, University at Albany, SUNY
· Co-organizer, Climate Group seminar   2024 –
· Mentor, Undergraduate–graduate mentorship program   2024 –
· Tutor, Volunteer undergraduate tutoring (program lead 2024 – 2025)   2022 –

Climatematch Academy
· Contributed presentations on climate modeling   2024

HONORS & AWARDS

Paul Saraduke Jr. Memorial Physics Award, Stockton University   2021

Jason Shulman Award for Excellence in Physics Research, Stockton University   2020

Foundation Scholarship, Stockton University   2020

WORKSHOPS & TRAINING

OceanHackWeek 2024, Bigelow Laboratory for Ocean Sciences, East Boothbay, ME   August 2024

Project Pythia Cook-off 2024, NCAR, virtual   June 2024

Project Pythia Cook-off 2023, NCAR, virtual   June 2023

CESM Tutorial 2022, NCAR, Boulder, CO   August 2022

The Pattern Effect: Coupling of SST Patterns, Radiative Feedbacks, and Climate
Sensitivity Workshop, US CLIVAR, virtual   May 2022

TECHNICAL SKILLS

Languages and tools: Python, Git, Linux, NCO
Models: Community Earth System Model (CESM) versions 1 and 2

PROFESSIONAL AFFILIATIONS

American Geophysical Union
American Meteorological Society