Robert R. Ford

Department of Atmospheric & Environmental Sciences
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Education

PhD, Climate Science, University at Albany, SUNY, Expected 2027
Advisor: Brian Rose

BS, Applied Physics & Mathematics, Stockton University, 2021

Research Experience

Research Assistant, University at Albany, SUNY, 2021 – Present (Advisor: Brian Rose)

Undergraduate Researcher, Stockton University, 2019 – 2021 (Advisor: Russell Manson)

Publications

Submitted

2. **Ford, R. R.**, and B. E. J. Rose: A Southern Ocean Multidecadal Oscillator Forced by Deep Convection, *Submitted to Geophysical Research Letters*. https://doi.org/10.22541/essoar.176384862.21026088/v1.

1. 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, and A. Zacharias: Pythia Foundations: A community learning resource for Python-based computing in the geosciences. *Submitted to Journal of Open Source Education*.

Published

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.

Conference Presentations

4. **Ford, R.**, and B. E. J. Rose, 2026: Exploring Mechanisms for Southern Ocean Convective Variability in a High-Resolution GCM [poster], Ocean Sciences Meeting.

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], AMS 18th Conference on Polar Meteorology and Oceanography.

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], AGU Fall Meeting.

1. **Ford, R.**, and J. R. Manson, 2021: Solute transport modeling using a Preissmann scheme [oral], 6th IAHR Europe Congress.

Teaching Experience

Climatematch Academy

Teaching Assistant, Computational Tools for Climate Science, Summer 2025

Stockton University

Teaching Assistant, Physics for Life Sciences I/II, Fall 2019 – Spring 2021

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

Service & Outreach

Department of Atmospheric & Environmental Sciences, University at Albany, SUNY

Organizer, Climate Group seminar, 2024 – Present

Mentor, Undergraduate–graduate mentorship program, 2024 – Present

Tutor, Volunteer undergraduate tutoring (program lead 2024 – 2025), 2022 – Present

Professional

Organizer, Project Pythia Cook-off workshops held at NCAR, 2023 – 2025

Contributed presentations on climate modeling to Climatematch Academy, 2024

Technical Skills

Programming & tools: Python, Git, Bash, NCO, LaTeX

Models: Community Earth System Model (CESM) versions 1 and 2

Professional Affiliations

American Geophysical Union

American Meteorological Society