

Divya Rea

Education

Massachusetts Institute of Technology

Ph.D in Atmospheric Science

Began: Sept 2023

GPA: 5.00/5.00

University of Illinois Urbana-Champaign

B.S. in Atmospheric Science; *Minor in Philosophy*

May 2023

GPA: 3.99/4.00

Publications

Rea, D., Elsbury, D., Butler, A. H., Sun, L., Peings, Y., & Magnusdottir, G. (2024). Interannual influence of Antarctic sea ice on Southern Hemisphere stratosphere-troposphere coupling. *Geophysical Research Letters*, 51, e2023GL107478. <https://doi.org/10.1029/2023GL107478>

Rea, D., Rauber, R. M., Hu, H., Tessororf, S. A., Nesbitt, S. W., Jewett, B. F., & Zaremba, T. J. (2023). The contribution of subtropical moisture within an atmospheric river on moisture flux, cloud structure, and precipitation over the Salmon River Mountains of Idaho using moisture tracers. *Journal of Geophysical Research: Atmospheres*, 128, e2022JD037727. <https://doi.org/10.1029/2022JD037727>

Research Experience

Massachusetts Institute of Technology

PhD Candidate; Advisor: Talia Tamarin-Brodsky

Aug 2023 – Present

University of Illinois at Urbana-Champaign

Undergraduate Research Assistant

Aug 2020 – Aug 2023

NOAA Chemical Sciences Laboratory

2021 NOAA Hollings Scholar

June 2022 – Aug 2022

National Center for Atmospheric Research

Research Applications Lab Summer Student Collaborator

May 2021 – Aug 2021

Formal Presentations

American Geophysical Union 2024 Annual Meeting

Oral Presentation

Dec 2024

Polar Amplification Model Intercomparison Phase 2 Workshop

Oral Presentation

Oct 2024

24th Conference on Atmospheric and Oceanic Fluid Dynamics

Poster Presentation

June 2024

School of Earth, Society, and Environment Research Review

Oral Presentation and Poster Presentation

Feb 2023

4th International Atmospheric River Conference

Oral Presentation

Oct 2022

Midwest Student Conference for Atmospheric Research

Oral Presentation

Oct 2022

Collective Madison Meeting

16th Conference on Cloud Physics

Poster Presentation

Aug 2022

20th Conference on Mountain Meteorology Oral Presentation	June 2022
School of Earth, Society, and Environment Research Review Poster Presentation	Feb 2022
102nd American Meteorological Society Annual Meeting 23 rd Conference on Planned and Inadvertent Weather Modification Oral Presentation	Jan 2022
Midwest Student Conference for Atmospheric Research Oral Presentation	Sept 2021
National Center for Atmospheric Research Summer Poster Symposium Poster Presentation	Aug 2021
School of Earth, Society, and Environment Research Review Poster Presentation	March 2021
American Meteorological Society Student Conference 2021 Poster Presentation Outstanding Undergraduate Student Poster	Jan 2021

Awards & Scholarships

Norman C. Rasmussen Fellowship MIT Internal Fellowship	Sept 2024
Presidential Graduate Fellowship MIT Internal Fellowship	Sept 2023
Jule Charney Prize Outstanding Incoming Graduate Student, MIT	Aug 2023
Bronze Tablet Top 3% of Class of 2023 at UIUC	May 2023
Outstanding Senior Top Senior, Department of Atmospheric Sciences, UIUC	April 2023
Member of Phi Beta Kappa Inducted Junior Year	May 2022
Mankin Mak Scholarship Top Junior; Department of Atmospheric Sciences, UIUC	April 2022
NOAA Ernest F. Hollings Undergraduate Scholarship Class of 2021	April 2021
Outstanding Undergraduate Student Poster 101 st AMS Student Conference	Jan 2021

Teaching Experience

12.310: Intro to Weather Forecasting Graduate Teaching Assistant, MIT	Jan 2025
Discover Earth, Atmospheric, and Planetary Sciences Graduate Teaching Assistant, MIT	Aug 2024
Weather Forecasting and Storm Dynamics Workshop Graduate Instructor; MIT	Jan 2024
ATMS 120: Severe and Hazardous Weather Undergraduate Teaching Assistant; UIUC	Aug 2020 – Oct 2020

Outreach & Community Involvement

EAPS Student Advisory Committee Peer Mentoring Chair Organize and run peer mentoring program for EAPS undergrads, grads, and postdocs	Aug 2024 – June 2025
EAPS Student Advisory Committee Student Seminar Chair Organize weekly seminar series for EAPS	Aug 2024 – June 2025
Application Mentorship Program Communications Director Advertise the EAPS student-run application assistance program	Aug 2024 – June 2025
EAPS Cookie Monster Organize daily cookie/coffee break for EAPS department	Aug 2024 – Present
Program for Atmosphere, Oceans, & Climate Retreat Organizer Plan and run the PAOC department's annual retreat	May 2024 – Sept 2024
MIT Weather Forecasting Team Member Forecast daily weather for different locations across the US & compete against other schools	Aug 2023 – Present
EAPS Student Advisory Committee Open House Chair Plan, organize, and run the EAPS Department's Open House for admitted graduate students	Aug 2023 – June 2024
University of Illinois Engineering Open House Create hands-on weather and climate demonstrations for the Champaign-Urbana community	March 2024 & 2023

Professional Organizations

Student Member of the American Geophysical Union	Jan 2021 – Present
Student Member of the American Meteorological Society	Jan 2020 – Present
Illinois Student ORganization of Meteorology (ISTORM) Executive Board UIUC's Student Chapter of the American Meteorological Society Fundraise for communities impacted by severe weather Organize events bring weather and climate education to the Champaign-Urbana community Plan social events for UIUC's weather- and climate-interested community	Aug 2021 – May 2023

Skills Summary

- Proficient in compiling and running numerical weather prediction models
- Comfortable manipulating and analyzing large datasets
- Experienced in Python for data analysis and visualization
- Familiar with R for statistical analysis
- Familiar with Matlab for data visualization
- Familiar with Julia
- Experience with Oceananigans for developing numerical ocean models
- Experience speaking with live audiences, television, and print media