Brendan Clark

Contact Information

Email: bjc328@cornell.edu
Website: bjc204.github.io

Education

Ph.D., Atmospheric Science 2024
Rutgers University, New Brunswick, NJ
"Stratospheric sulfate aerosol climate intervention implications for global agriculture"
Advisors: Professors Alan Robock and Lili Xia

M.S., Atmospheric Science, GPA: 3.90/4.00 2022
Rutgers University, New Brunswick, NJ

B.S., Environmental Science 2020
University of Massachusetts, Amherst, MA

Professional Appointments

Postdoctoral Research Associate, Supervisor: Prof. Daniele Visioni 2025-present
Cornell University, Department of Earth and Atmospheric Sciences

Research Assistant, Supervisor: Prof. Alan Robock 2020-2025
Rutgers University, Department of Environmental Sciences

Publications

B. Clark, A. Robock, L. Xia, S. S. Rabin, J. R. Guarin, J. Jaegermeyr. Stratospheric aerosol climate intervention could reduce crop nutritional value. *In review*

B. Clark, A. Robock, L. Xia, S. S. Rabin, J. R. Guarin, G. Hoogenboom, J. Jaegermeyr. Maize yield changes under sulfate aerosol climate intervention using three global gridded crop models. *Earth's Future* 13, e2024EF005269 (2025). 10.1029/2024EF005269

N. Grant, A. Robock, L. Xia, J. Singh, **B. Clark**. Impacts on Indian agriculture due to stratospheric aerosol intervention using agroclimatic indices. *Earth's Future* 13, e2024EF005262 (2025). 10.1029/2024EF005262

B. Clark, L. Xia, A. Robock, S. Tilmes, J. H. Richter, D. Visioni, S. S. Rabin. Optimal climate intervention scenarios for crop production vary by nation. *Nature Food* 4, 902–911 (2023). 10.1038/s43016-023-00853-3

F. Bowlick, **B. Clark**, et al. Understanding geocomputation education: A survey and syllabi informed review. *Research in Geographic Education* 23, 20-51 (2022).

Funding and Awards

- NSF NCAR Exploratory Allocation Award (500,000 core hours) 2025
- GeoMIP Annual Meeting Travel Funding Award ($3,500) 2025
- Rutgers Atmospheric Science Student Travel Support Award ($1,500) 2024

- Rutgers Atmospheric Science Student Travel Support Award ($1,200) 2023
- Rutgers Climate Institute Student Travel Support Award ($1,000) 2022
- NSF NCAR University Small Allocation Award (200,000 core hours) 2022
- Governor's Award in Recognition of Environmental Stewardship 2019
- John and Abigail Adams Scholarship Award 2016
- Stanley Z. Koplik Certificate of Mastery with Distinction Award 2016

Teaching Experience

- Guest Lecturer, Climate Modeling, Rutgers University Fall 2023
- Teaching Assistant, Geographic Information Systems, UMass Amherst Fall 2019
- Substitute Teacher, Algonquin Regional High School, Northborough, MA 2018-2019

First Author Presentations

Talks

Gordon Research Conference on Climate Engineering (Italy, 2024), American Geohysical Union (San Francisco, 2023), Agricultural Modeling Intercomparison Project Meeting (Columbia University, 2023), Solar Climate Intervention Virtual Symposium (University of Exeter, 2023), Climate Engineering in Context (University of Potsdam, 2022), NCAR Land Modeling Working Group Meeting (2022), Inter-sectoral Impact Model Intercomparison Project Meeting (University of Potsdam, 2022)

Posters

DEGREES Global Forum (South Africa, 2025), American Geophysical Union (D.C., 2024), Geoengineering Modeling Intercomparison Project Meeting (Cornell, 2024), Gordon Research Seminar on Climate Engineering (Italy, 2024), Geoengineering Modeling Intercomparison Project Meeting (University of Exeter, 2023), Gordon Research Conference on Climate Engineering (Maine, 2022), American Geophysical Union (Chicago, 2022), American Geophysical Union (New Orleans, 2021)

Membership in Professional Societies

- American Geophysical Union, Atmospheric Sciences Section 2020-present

Participation in International Experiments

- Agricultural Modeling Intercomparison Project 2020-present
- Global Gridded Crop Modeling Intercomparison Project 2020-present
- Geoengineering Modeling Intercomparison Project 2020-present
- Climate Intervention Biology Working Group 2020-present
- Inter-Sectoral Impact Model Intercomparison Project 2020-present