

BRANDON M. DURAN

PhD Candidate, Scripps Institution of Oceanography

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RESEARCH INTERESTS

aerosol-cloud interactions, aerosol radiative forcing, circulation responses to aerosol forcing, satellite simulators

EDUCATION

Scripps Institution of Oceanography, University of California San Diego 2022 - Present
Masters in Earth Science (2024), Ph.D. expected in 2027

Georgetown University 2018-2022
BA in Physics, Computer Sciences

PEER REVIEWED PUBLICATIONS

3. Michibata, T., Wall, C.J., Hirota, N., **Duran, B.M.**, and Nozawa, T. Recent Advances in the Observation and Modeling of Aerosol-Cloud Interactions, Cloud Feedbacks, and Earth's Energy Imbalance: A Review (2025). *Current Pollution Reports*.
<https://doi.org/10.1007/s40726-025-00382-6>.
2. Wall, C.J., Paynter, D., Qin, Y., Debolskiy, M., Duffy, M.L., Michibata, T., **Duran, B.M.**, Lutsko, N.J., Ma, P.L., Medeiros, B., Storelvmo, T., and Zhao, M. Decomposing Cloud Radiative Feedbacks by Cloud-Top Phase (2025). *Journal of Climate*. <https://doi.org/10.1175/JCLI-D-24-0538.1>.
1. **Duran, B.M.**, Wall, C.J., Lutsko, N.J., Michibata, T., Ma, P.L., Qin, Y., Duffy, M.L., Medeiros, B., and Debolskiy, M. A new method for diagnosing effective radiative forcing from aerosol-cloud interactions in climate models (2025). *Atmospheric Chemistry and Physics*.
<https://doi.org/10.5194/acp-25-2123-2025>.

SUBMITTED MANUSCRIPTS

1. **Duran, B.M.**, Lutsko, N.J., and Wall, C.J. Aerosol-Ice-Cloud Interactions in a Perturbed Parameter Ensemble (submitted to *Journal of Climate*). *Authorea*

AWARDS RECEIVED

2022 National Science Foundation Graduate Research Fellow

CONFERENCE PRESENTATIONS

2025 Oral: CESM Workshop
2025 Invited Talk: Equilibrium Climate Sensitivity and Cloud Feedback Virtual Symposium
2024 Poster: AGU, Washington, D.C.
2024 Poster: Micro2Macro Workshop, University of Wyoming
2024 Oral: CFMIP Conference at Boston University

ACADEMIC TEACHING EXPERIENCE

- 2025** Teaching assistant for undergraduate course *The Atmosphere*. Oversaw grading and office hours for 90+ students. (UC San Diego)
- 2021** Teaching assistant for undergraduate physics courses *Mechanics* and *Electromagnetic Phenomena*, Georgetown University