MATTHEW T. LUONGO

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8858 Biological Grade ◇ La Jolla, CA 92037

EDUCATION

Scripps Institution of Oceanography *San Diego, CA*
University of California, San Diego

Ph.D., Climate Sciences — Expected 2025
M.S., Oceanography — 2020
Advisors: Professors Shang-Ping Xie & Ian Eisenman
Committee Members: Professors Nicholas Lutsko, Jennifer Burney, & Shantong Sun

Harvard University *Cambridge, MA*

A.B., Earth & Planetary Sciences, *Magna Cum Laude with Highest Honors* — 2017
A.B., Engineering Sciences
Advisor: Professor Peter Huybers
Thesis: Comparison & Calibration of Climate Proxy Data in Medieval Europe

EMPLOYMENT

Scripps Institution of Oceanography, UCSD — Sep. 2019 - Present
Graduate Student Researcher — San Diego, CA

Wildlands Trust — Oct. 2018 - Sep. 2019
Research Assistant — Plymouth, MA

West Monroe Partners — Aug. 2017 - Sep. 2018
Energy & Utilities Experienced Consultant — New York, NY

Harvard University, Dept. of Earth & Planetary Sciences — Apr. 2015 - May 2017
Undergraduate Research Assistant — Cambridge, MA

RESEARCH PUBLICATIONS

Published

3. Lutsko, N.J., **Luongo, M.T.**, Wall, C.J., & Myers, T.A., 2022. Correlation Between Cloud Adjustments and Cloud Feedbacks Responsible for Larger Range of Climate Sensitivities in CMIP6. *Journal of Geophysical Research: Atmospheres*, e2022JD037486. doi: 10.1029/2022JD037486

2. **Luongo, M.T.**, Xie, S.-P., & Eisenman, I., 2022. Buoyancy Forcing Dominates the Cross-Equatorial Ocean Heat Transport Response to Northern Hemisphere Extratropical Cooling. *Journal of Climate, 35*(20), pp. 3071-3090. doi: 10.1175/JCLI-D-21-0950.1

1. **Luongo, M.T.**, Kurbatov, A.V., Erhardt, T., Mayewski, P.A., McCormick, M., More, A.F., Spaulding, N.E., Wheatley, S.D., Yates, M.G., & Bohleber, P.D., 2017. Possible Icelandic Tephra Found in European Colle Gnifetti Glacier. *Geochemistry, Geophysics, Geosystems, 18*(11), pp. 3904-3909. doi: 10.1002/2017GC007022

Accepted

1. **Luongo, M.T.**, Xie, S.-P., Eisenman, I., Hwang, Y.-T., & Tseng, H.-Y. A Pathway for Northern Hemisphere Extratropical Cooling to Elicit a Tropical Response. Manuscript accepted in *Geophysical Research Letters*.

In Review

1. Tseng, H.-Y., Hwang, Y.-T., Xie, S.-P., Kang, S.M., Tseng, Y.-H., **Luongo, M.T.** & Eisenman, I. Fast and Slow Responses of the Tropical Pacific to Radiative Forcing in Northern High Latitude. Manuscript submitted to *Journal of Climate*.

PRESENTATIONS

Conference Presentations

4. AGU Fall Meeting, Chicago, IL, USA (Dec. 2022): *Surface and Subsurface Ocean Adjustment and Tropical Pattern Formation Responses to Extratropical Radiative Forcing.*
3. Scripps Student Symposium, La Jolla, CA, USA (Sep. 2022): *A Surface Pathway by which Northern Hemisphere Extratropical Cooling Elicits a Tropical Response.*
2. CalGFD, Pasadena, CA, USA (Aug. 2022): *A Surface Pathway by which Northern Hemisphere Extratropical Cooling Elicits a Tropical Response.*
1. AGU Fall Meeting, New Orleans, LA, USA (Dec. 2021): *The Ocean's Dynamic Response to Northern Hemisphere Cooling and Insights into Cross-Equatorial Energy Transport.*

Conference Posters

2. Graduate Climate Conference, Pack Forest, WA, USA (Oct. 2022): *Coupled Ocean-Atmosphere Processes Lead to La Niña-like Steady-State Response to NH Extratropical Cooling*
1. Graduate Climate Conference, Virtual (Oct. 2020): *Western European Heatwave Identified in Historical Texts and Paleoclimate Reconstructions.*

Invited Presentations & Seminars

2. Equilibrium Climate Sensitivity & Cloud Feedback Symposium, Virtual (Aug. 2022): *A Surface Pathway by which Northern Hemisphere Extratropical Cooling Elicits a Tropical Response.*
1. NOAA Climate Sensitivity Task Force Meeting, Virtual (Mar. 2022): *Correlation between Cloud Adjustments and Cloud Feedbacks Responsible for Larger Range of Climate Sensitivities in CMIP6.*

TEACHING EXPERIENCE

2x-Guest Lecturer (2022): *SIOC 224– Numerical Modeling of the Climate System*, SIO, UCSD. Instructor: Ian Eisenman.
Graduate Teaching Assistant (2021): *SIO 173– Dynamics of the Atmosphere and Climate*, SIO, UCSD. Instructors: Shang-Ping Xie & Ian Eisenman.
Undergraduate Teaching Assistant (2015-2017): *PS 11– Frontiers and Foundations of Modern Chemistry: A Molecular and Global Perspective*, Department of Chemistry, Harvard University. Instructors: Jim Anderson & Gregg Tucci.

HONORS & AWARDS

2022-2025	FINESST Graduate Research Fellowship (NASA)
2022	Outstanding Teaching Assistant (SIO)
2021	GRFP Honorable Mention (NSF)
2021	Outstanding Student Mentor (SIO)
2019	Regents Fellowship (UCSD)
2017	Hoopes Prize for Outstanding Senior Thesis Work (Harvard)
2015	Undergraduate Summer Research Fellow (Harvard University Center for Environment)
2013	National Merit Program Commended Scholar
2013	John Joseph Moakley Scholar
2012	Eagle Scout

LEADERSHIP AND SERVICE

Seminar Series

SIO Climate Journal Club: Organizer (2020-present).

Department Leadership

SIO Graduate Peer Mentor Program: Leadership Team (2021-present), Mentor (2020-present).
SIO Graduate Student Council: Climate Sciences Student Representative (2021-present).
SIO GFD Faculty Search Committee: Student Member (2022).

Peer Review

Nature Communications (1)

COMPUTER SKILLS

Substantial Experience: Matlab, Python, Fortran 77/90, R, ArcGIS
Additional Experience: C, HTML, Javascript

GENERA

Memberships: American Geophysical Union, Sierra Club, Wildlands Trust
Languages: English, Latin (8 years)
Interests: Camping, Hiking, Punk Rock, National Parks, Land Conservation, New England Sports, Vinyl Records, Amateur Fermentation