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

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

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. https://doi.org/10.1002/2017GC007022

Accepted

1. **Luongo, M.T.**, Xie, S.-P., & Eisenman, I. Buoyancy Forcing Dominates the Cross-Equatorial Ocean Heat Transport Response to Northern Hemisphere Extratropical Cooling. Manuscript accepted in *Journal of Climate.* https://doi.org/10.1175/JCLI-D-21-0950.1

In Review

2. **Luongo, M.T.**, Xie, S.-P., Eisenman, I., Hwang, Y.-T., & Tseng, H.-Y. A Dynamic Pathway by which Northern Hemisphere Extratropical Cooling Elicits a Tropical Response. Manuscript submitted to *Geophysical Research Letters.*

1. Lutsko, N.J., **Luongo, M.T.**, Wall, C.J., & Myers, T.A. Correlation Between Cloud Adjustments and Cloud Feedbacks Responsible for Larger Range of Climate Sensitivities in CMIP6. Manuscript submitted to *Journal of Geophysical Research: Atmospheres.*

In Prep

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 in preparation for *Journal of Climate.*

2. Peng, Q., Xie, S.-P., Wang, D., & **Luongo, M.T.** Indian Ocean Western Boundary Current Changes and Underlying Dynamic Adjustments in a Warming Climate. Manuscript in preparation.

3. Peng, Q., Xie, S.-P., **Luongo, M.T.**, Taylor, B.A., & Geng, Y.F. El Niño-Southern Oscillation Inhibited by Ocean Heating in a Warmer Climate. Manuscript in preparation.

PRESENTATIONS

Contributed Presentations

3. **Luongo, M.T.**, Xie, S.-P., Eisenman, I., Hwang, Y.-T., & Tseng, H.-Y. (2022 August). A Surface Pathway by which Northern Hemisphere Extratropical Cooling Elicits a Tropical Response. CalGFD, Pasadena, CA, USA.

2. **Luongo, M.T.**, Xie, S.-P., & Eisenman, I. (2021 December). The Ocean's Dynamic Response to Northern Hemisphere Cooling and Insights into Cross-Equatorial Energy Transport. AGU Fall Meeting, New Orleans, LA, USA.

1. Bohleber, P.D., Spaulding, N.E., Mayewski, P.A., Kurbatov, A.V., Hoffmann, H.M., Erhardt, T., Fischer, H., More, A.F., Loveluck, C.P., **Luongo, M.T.**, & Kabala, J. (2016 April). Linking Two Thousand Years of European Historical Records with Environmental Change Recorded in High Alpine Ice Core. European Geophysical Union General Assembly, Vienna, Austria.

Contributed Posters

1. **Luongo, M.T.**, Huybers, P., & McCormick, M. (2020 October). Western European Heatwave Identified in Historical Texts and Paleoclimate Reconstructions. Graduate Climate Conference, Virtual.

Invited Presentations & Seminars

2. **Luongo, M.T.**, Xie, S.-P., Eisenman, I., Hwang, Y.-T., & Tseng, H.-Y. (2022 August). A Dynamic Pathway by which Northern Hemisphere Extratropical Cooling Elicits a Tropical Response. Equilibrium Climate Sensitivity Symposium, Virtual.

1. Lutsko, N.J., **Luongo, M.T.**, Wall, C.J., & Jeevanjee, N. (2022 March). Correlation between Cloud Adjustments and Cloud Feedbacks Responsible for Larger Range of Climate Sensitivities in CMIP6. NOAA Climate Sensitivity Task Force Meeting, Virtual.

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