Andrea L. Moore

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Education

2023 (*Expected*)	M.Sc. Oceanography, Florida State University
2019	B.S. Environmental Geology (*cum laude*) with Minors in Applied Mathematics, Climate Science, and Data Science, University of Mary Washington
2016	A.A.&S. Science, Germanna Community College

Professional Experience

2022–present	Graduate Assistant in Teaching. Florida State University, Department of Earth, Ocean, and Atmospheric Science. Supervisor: *Jay (Danny) Goddard.*
2021–present	Data Steward. Past Global Changes (PAGES), CoralHydro2k Seawater δ^{18}O Database Team. Supervisor: *Dr. Alyssa R. Atwood.*
2020–present	Graduate Research Assistant. Florida State University, Department of Earth, Ocean, and Atmospheric Science. Research Advisor: *Dr. Alyssa R. Atwood*.
2017–2019	Undergraduate Research Assistant. University of Mary Washington, Department of Earth and Environmental Sciences. Research Advisor: *Dr. Pamela R. Grothe*.

Research Interests

Paleoclimatology, ocean-climate interactions, climate model-data intercomparison, data assimilation, water isotope systematics, abrupt change detection, Bayesian methods, AI/ML applications in Earth sciences.

Skills

Analysis: Correlation analysis, exploratory data analysis, hypothesis testing, regression analysis, spatial and temporal data analysis, statistical modeling, time-series analysis, and unstructured data analysis.

Data Management: Data cleansing, data curation, data mining, data quality assurance and control, FAIR (findability, accessibility, interoperability, and reusability) metadata standards.

Programming: Python (cartopy, matplotlib, netCDF4, NumPy, pandas, SciPy, seaborn, xarray) and R (actR, geoChronR, ggplot2, tidyverse).

Other: Adobe Creative Suite (Illustrator and Photoshop), ArcGIS, GitHub, ImageJ, LaTeX, Linux (Ubuntu), Mathematica, Microsoft Office (Access, Excel, PowerPoint, and Word), Unix/bash (Community Earth System Model [CESM], high performance computing, shell scripting).

Publications and Presentations

Peer-reviewed Publications

Grothe, P.R., K.M. Cobb, G. Liguori, E. Di Lorenzo, A. Capotondi, Y. Lu, H. Cheng, R.L. Edwards, J.R. Southon, G.M. Santos, D.M. Deocampo, J. Lynch-Stieglitz, T. Chen, H.R. Sayani, D.M. Thompson, J.L. Conroy, **A.L. Moore**, K. Townsend, M. Hagos, G. O'Connor, L.T. Toth (2019), Enhanced El Niño-Southern Oscillation variability in recent decades: Geophysical Research Letters. doi: 10.1029/2019GL083906.

Non-refereed Publications

    DeLong, K. L., A. Atwood, **A. Moore**, and S. Sanchez (2022), Clues from the sea paint a picture of Earth's water cycle, Eos, 103, https://doi.org/10.1029/2022EO220231.

Oral Presentations

    Moore, A.L., P.R. Grothe (2018), Constraining the Mid-Holocene ENSO Minimum in the Central Pacific Using Geochemistry of a 5,000-year-old Porites Fossil Coral, Presented at the UMW Summer Science Symposium, University of Mary Washington, Fredericksburg, VA.

Selected Poster Presentations

    Moore, A.L., E.C. Ornouski, A.R. Atwood, K.L. DeLong, A.J. Wagner, T. Felis, H.R. Sayani (2021), The CoralHydro2k Seawater δ^{18}O Database: A Crowdsourced, FAIR-aligned Database of 'Hidden' Seawater Isotope Data, Presented at the Ocean Sciences Meeting 2022, Honolulu, HI (Virtual).

    Moore, A.L., P.R. Grothe, H.R. Sayani, A.R. Atwood, and K.M. Cobb (2018), Constraining the Mid-Holocene ENSO Minimum in the Central Pacific Using Geochemistry of a 5,000-year-old Porites Fossil Coral, Presented at the American Geophysical Union Fall Meeting 2018, Washington, DC.

    Moore, A.L., P.R. Grothe, H.R. Sayani, A.R. Atwood, and K.M. Cobb (2017), Evaluating the fidelity of El Niño-Southern Oscillation reconstructions from Northern Line Islands Holocene-aged corals, Presented at the Fall 2017 Virtual Poster Showcase, American Geophysical Union, Washington, DC.

Guest Lectures

    "Paleoclimate: What's Past is Prologue" in *Environmental Science*, Florida State University. Instructor: *David Hsu*.

    "The Ocean-Climate Connection" in *Environmental Science*, Florida State University. Instructor: *David Hsu*. (In preparation.)

    "Intro to Data Science for the Earth and Environmental Sciences with Python" in *Environmental Science Capstone*, Florida State University. Instructor: *Jay (Danny) Goddard*. (In preparation.)

Grants and Awards

Award	Amount	Date
NCAR Small Allocation ("North Atlantic Hosing and ITCZ Simulations with iCESM 1.2")	--	Fall 2022
PAGES Data Stewardship Scholarship (Renewal)	$6300	Summer 2022
PAGES Data Stewardship Scholarship	$6300	Summer 2021
UMW Undergraduate Research Supply Grant	$1200	Spring 2019
Irene Piscopo Rogers '59 Scientific Endowment	$1176	Fall 2018
UMW Undergraduate Research Travel Grant	$2515	Summer 2018
UMW Summer Science Institute Fellowship	$2800	Summer 2018
UMW Undergraduate Research Travel Grant	$2600	Spring 2018
TCCSWCD Natural Resource Conservation Scholarship	$500	Fall 2016
NSF-ATE/GeoTEd Geospatial Studies Scholarship	$1000	Summer 2016

Professional Development

2022	Paleoclimate Data Assimilation Workshop
2022	geoChronR Hack-a-thon
2021	LinkedEarth PaleoHack

2021	Unlearning Racism in Geoscience (URGE)
2021	US CLIVAR Tropical Pacific Observing Needs to Advance Process Understanding and Representation in Models Workshop (TPON)
2021	National High Magnetic Field Laboratory FAIR Data Workshop

Outreach and Service

2022–present	EOAS Department Representative, FSU Graduate Assistants United
2022–present	Mentor, Sylvia Long (FSU EOAS undergraduate), Seawater δ^{18}O Database
2021–2022	Mentor, Katherine Zollner (FSU EOAS undergraduate), Seawater δ^{18}O Database
2020–2021	Collaborator, LGBTQ+ in Geosciences Survey (PI: Nick Smith, UT Knoxville)
2020	Reader, Virginia Junior Academy of Science
2019–present	Pen Pal, Letters to a Pre-Scientist
2018–2019	Mentor, Clare Sparling (Oakton High School student), SEM Pollutant Filter Imaging
2016	Coach, Dominion Energy Envirothon Area III
2015–2016	Organizer, Germanna Community College Earth Week
2015–2016	Water Quality Monitoring Volunteer, TCCSWCD

Memberships and Affiliations

2017–present	American Geophysical Union, member
2017–present	Earth Science Women's Network, member
2017–present	PAGES – Past Global Changes, member
2017–present	SWMS – Society for Women in Marine Science