
ALYSSA R. ATWOOD

Assistant Professor

Department of Earth, Ocean, and Atmospheric Science

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EDUCATION

2015 Ph.D. School of Oceanography, University of Washington, Seattle, WA. Thesis: *Mechanisms of Tropical Pacific Climate Change During the Holocene*. Advisors: Julian Sachs and David Battisti.

2010 M.S. University of Washington, Oceanography.

2010 Certificate in Climate Sciences, University of Washington, Program on Climate Change.

2006 B.A. University of California, Berkeley, Atmospheric Science.

2006 B.A. University of California, Berkeley, Physics.

PRIMARY APPOINTMENTS

2019–present Assistant Professor, Florida State Univ., Earth, Ocean, and Atmospheric Sciences.

2015–2019 Postdoctoral Researcher, Georgia Institute of Technology, School of Earth and Atm. Sciences & UC Berkeley, Geography Dept. Hosts: *Kim Cobb* and *John Chiang*.

2007–2015 Graduate Research Assistant. University of Washington, School of Oceanography. Research Advisors: *David Battisti* & *Julian Sachs*

2006–2007 Postgraduate Research Assistant. UC Berkeley, Geography Department. Research Advisor: *Robert Rhew*.

FELLOWSHIPS AND AWARDS

2023 Dean's Postdoctoral Scholar Fellow Award

2015–2017 NOAA Climate and Global Change Postdoctoral Fellow

2015 NSF Ocean Sciences Postdoctoral Fellowship (*declined*)

2015 NSF Atm. and Geospace Sciences Postdoctoral Fellowship (*declined*)

2010–2012 DOE Graduate Research Environmental Fellow

2009–2014 NSF Graduate Research Fellow

2008–2009 Egtvedt Endowment in the School of Oceanography Recipient

2007–2008 University of Washington Program on Climate Change Fellow

2007–2008 UW Graduate School Fund for Excellence and Innovation recipient

2006–2007 Charles H. Ramsden Endowed Fund Research Fellow

RESEARCH INTERESTS: Paleoclimatology, stable isotope and trace element geochemistry of coral and lacustrine sediments, tropical climate variability and change, ocean-atmosphere interactions, data-model intercomparison

RESEARCH GRANTS

Current and recent:

- 2022-2027 “CAREER: Contextualizing recent extreme El Niño events over the late Holocene using trace element paleothermometry in tropical Pacific corals,” NSF-OCE CAREER- 2145725. PI: Alyssa Atwood (FSU); \$684,736.
- 2021-2024 “Collaborative Research: Central tropical Pacific climate variability over the last millennium,” NSF OCE-2103035. PI: Alyssa Atwood (FSU); \$345,825.
- 2021-2023 “CoralHydro2k Data Stewardship Scholarship,” PAGES-Past Global Changes. PI: Alyssa Atwood (FSU); \$26,190.
- 2020-2023 “Collaborative Research: Response of the Tropical Pacific to the Abrupt Climate Change Event 8,200 Years Ago”, NSF-EAR-2002444. PI: Alyssa Atwood (FSU); \$173,502 (FSU portion).
- 2019-2022 “The tropical Pacific mean state, annual cycle and ENSO in Holocene corals: a multi-proxy approach”, NSF-OCE-1903640. PI: Alyssa Atwood (FSU); \$707,826.
- 2017-2020 “Collaborative Research: The expansion/contraction of the intertropical convergence zone; an emerging mechanism of tropical precipitation changes for reinterpreting paleoclimate records”, NSF-AGS-GEO/ATM-1702776. PI: Alyssa Atwood (UCB); \$105,561 (UCB portion).

Internal (FSU):

- 2020 “Constraining Tropical Rainfall Changes from Sparse Networks of Paleoclimate Data”, FSU First Year Asst. Professor Summer Award. PI: Alyssa Atwood (FSU). \$20,000.

PUBLICATIONS

Submitted/In press:

1. Rodriguez, L.G., **Atwood, A.R.**, Cobb, K.M., Sayani, H.R., Grothe, P.R. (subm., *Paleoceanography and Paleoclimatology*). “A coral diagenesis and physiology framework for improving coral $\delta^{18}\text{O}$ paleoclimate reconstructions.”

Published:

2. Konecky, B. L., McKay, N., Falster, G., Stevenson, S. L., Fischer, M. J., **Atwood, A. R.**, Thompson, D. M., Jones, M. D., DeLong, K. L., Tyler, J. J., Martrat, B., Thomas,

- E. K., Conroy, J. L., Dee, S. G., Jonkers, L., Churakova, O. V., Kern, Z., Opel, T., Porter, T. J., Sayani, H. R., Skrzypek, G., and Iso2k Project Members (2023). "Temperature-driven changes in the global water cycle during the past two millennia." *Nature Geoscience*, 997–1004. <https://doi.org/10.1038/s41561-023-01291-3>
3. Stevenson, S., Cobb, K. M., Merrifield, M., Powell, B., Sanchez, S., Nusbaumer, J., O'Connor, G., **Atwood, A.** (2023). "Contrasting central equatorial Pacific oxygen isotopic signatures of the 2014/2015 and 2015/2016 El Niño events." *Geophysical Research Letters*, 50, e2023GL104454. <https://doi.org/10.1029/2023GL104454>
 4. Walter, R. M., Sayani, H. R., Felis, T., Cobb, K. M., Abram, N. J., Arzey, A. K., **Atwood, A. R.**, Brenner, L. D., Dassié, É. P., DeLong, K. L., Ellis, B., Emile-Geay, J., Fischer, M. J., Goodkin, N. F., Hargreaves, J. A., Kilbourne, K. H., Krawczyk, H., McKay, N. P., Moore, A. L., Murty, S. A., Rosabelle Ong, M., Ramos, R. D., Reed, E. V., Samanta, D., Sanchez, S. C., Zinke, J., and the PAGES CoralHydro2k Project Members (2023). "The CoralHydro2k Database: a global, actively curated compilation of coral $\delta^{18}\text{O}$ and Sr/Ca proxy records of tropical ocean hydrology and temperature for the Common Era." *Earth System Science Data*, 15, 2081–2116. <https://doi.org/10.5194/essd-15-2081-2023>
 5. Dee, S.G., Bailey, A., Conroy, J.L., **Atwood, A.**, Stevenson, S., Nusbaumer, J., Noone, D. (2023). "Water isotopes, climate variability, and the hydrological cycle: recent advances and new frontiers". *Environmental Research: Climate* 2, 022002. <https://doi.org/10.1088/2752-5295/accbe1>
 6. Chiang, J. C. H., **Atwood, A. R.**, Vimont, D. J., Nicknisch, P. A., Roberts, W. H. G., Tabor, C. R., Broccoli, A. J. (2022). "Two annual cycles of the Pacific cold tongue under orbital precession." *Nature* 611, 295–300. <https://doi.org/10.1038/s41586-022-05240-9>
 7. Zhang, X., **Atwood, A. R.**, Nag, B., & Cobb, K. M. (2022). "The tropical Pacific annual cycle and ENSO in PMIP4 simulations of the mid-Holocene." *Journal of Geophysical Research: Oceans*, 127, e2021JC017587. <https://doi.org/10.1029/2021JC017587>
 8. Donohoe, A., **Atwood, A. R.**, Battisti, D. S. (2022). "Optimal geometric characterization of forced zonal mean tropical precipitation changes." *Climate Dynamics* 59, 2181–2196. <https://doi.org/10.1007/s00382-022-06203-6>
 9. Hitt, N. T., Sayani, H. R., **Atwood, A. R.**, Grothe, P. R., Maupin, C., O'Connor, G. K., Walter, R. M., Gebregiorgis, D., Hardt, M. E., Lu, Y., Cheng, H. Edwards, R. L., Cobb, K. M. (2022). "Central equatorial Pacific warming and freshening in the 20th century: New insights from a coral ensemble approach." *Geophysical Research Letters*, 49, e2021GL094051. <https://doi.org/10.1029/2021GL094051>
 10. O'Connor, G. K., Cobb, K. M., Sayani, H. R., **Atwood, A. R.**, Grothe, P. R., Stevenson, S., Baum, J. K., Chen, T., Claar, D. C., Hitt, N. T., Lynch-Stieglitz, J., Schmidt, G. A., Walter, R. (2021). "Coral oxygen isotope and in situ records capture the 2015/2016 El Niño event in the central equatorial Pacific." *Geophysical Research Letters*, 48, e2021GL094036. <https://doi.org/10.1029/2021GL094036>
 11. Wyman, D. A., Conroy, J. L., Osburn, M. R., and **Atwood, A. R.** (2021). "Coeval

- drying across the central tropical Pacific over the last millennium.” *Paleoceanography and Paleoclimatology*, 36, e2021PA004311. <https://doi.org/10.1029/2021PA004311>
12. **Atwood, A. R.**, Battisti, D. S., Wu, E., Frierson, D. M. W., Sachs, J. P. (2021). “Data-Model Comparisons of Tropical Hydroclimate Changes Over the Common Era.” *Paleoceanography and Paleoclimatology*, 36, e2020PA003934. <https://doi.org/10.1029/2020PA003934>
 13. Baldwin, J. W., **Atwood, A. R.**, Vecchi, G. A., Battisti, D. S. (2021). “Outsize Influence of Central American Orography on Global Climate.” *AGU Advances*, 2, e2020AV000343. <https://doi.org/10.1029/2020AV000343>
 14. **Atwood, A. R.**, Donohoe, A., Battisti, D. S., Liu, X., & Pausata, F. S. R. (2020). “Robust longitudinally variable responses of the ITCZ to a myriad of climate forcings.” *Geophysical Research Letters*, 47, e2020GL088833. <https://doi.org/10.1029/2020GL088833>
 15. Konecky, B. L., McKay, N. P., Churakova (Sidorova), O. V., Comas-Bru, L., Dassié, E. P., DeLong, K. L., Falster, G. M., Fischer, M. J., Jones, M. D., Jonkers, L., Kaufman, D. S., Leduc, G., Managave, S. R., Martrat, B., Opel, T., Orsi, A. J., Partin, J. W., Sayani, H. R., Thomas, E. K., Thompson, D. M., Tyler, J. J., Abram, N. J., **Atwood, A. R.**, Conroy, J. L., Kern, Z., Porter, T. J., Stevenson, S. L., von Gunten, L., and the Iso2k Project Members (2020). “The Iso2k Database: A global compilation of paleo- $\delta^{18}\text{O}$ and $\delta^2\text{H}$ records to aid understanding of Common Era climate.” *Earth System Science Data*. <https://doi.org/10.5194/essd-12-2261-2020>
 16. Donohoe, A., **Atwood, A. R.**, Byrne, M. P. (2019). “Controls on the width of tropical precipitation and its contraction under global warming.” *Geophysical Research Letters*. <https://doi.org/10.1029/2019GL082969>
 17. Zhang, H., Griffiths, M. L., Chiang, J. C. H., Kong, W., Wu, S., **Atwood, A.** Huang, J., Cheng, H., Ning, Y., Xie, S. (2018). “East Asian hydroclimate modulated by the position of the westerlies during Termination I.” *Science* 362, 580-583. <https://doi.org/10.1126/science.aat9393>
 18. *PAGES Hydro2k Consortium*: J. E. Smerdon, J. Luterbacher, S. J. Phipps, K. J. Anchukaitis, T. Ault, S. Coats, K. M. Cobb, B. I. Cook, C. Colose, T. Felis, A. Gallant, J. H. Jungclaus, B. Konecky, A. LeGrande, S. Lewis, A. S. Lopatka, W. Man, J. S. Mankin, J. T. Maxwell, B. L. Otto-Bliesner, J. W. Partin, D. Singh, N. Steiger, S. Stevenson, J. E. Tierney, D. Zanchettin, H. Zhang, **A. R. Atwood**, L. Andreu-Hayles, S. H. Baek, B. Buckley, E. R. Cook, R. D'Arrigo, S. Dee, M. Griffiths, C. Kulkarni, Y. Kushnir, F. Lehner, C. Leland, H. W. Linderholm, A. Okazaki, J. Palmer, E. Piovano, C. C. Raible, M. P. Rao, J. Scheff, G. Schmidt, R. Seager, M. Widmann, A. P. Williams, E. Xoplaki (2017). “Comparing proxy and model estimates of hydroclimate variability and change over the Common Era.” *Climate of the Past* 13, 1851-1900. <https://doi.org/10.5194/cp-13-1851-2017>
 19. **Atwood, A. R.**, D. S. Battisti, A. T. Wittenberg, W. H. G. Roberts, D. J. Vimont (2017). “Characterizing unforced multi-decadal variability of ENSO: A case study with the GFDL CM2.1 coupled GCM.” *Climate Dynamics* 49, 2845-2862. <https://doi.org/10.1007/s00382-016-3477-9>

20. **Atwood, A. R.**, E. Wu, D. M. W. Frierson, J. P. Sachs, D. S. Battisti (2016). “Quantifying climate forcings and feedbacks over the last millennium in CMIP5-PMIP3 models.” *Journal of Climate* 29, 1161-1178. <https://doi.org/10.1175/JCLI-D-15-0063.1>
21. **Atwood, A. R.** and J. P. Sachs (2014). “Separating ITCZ- and ENSO-related rainfall changes in the Galápagos over the last 3 kyr using D/H ratios of multiple lipid biomarkers.” *Earth and Planetary Science Letters* 404, 408-419. <https://doi.org/10.1016/j.epsl.2014.07.038>
22. **Atwood, A. R.**, J. K. Volkman, J. P. Sachs (2014). “Characterization of unusual sterols and long chain diols, triols, keto-ols and *n*-alkenols in El Junco Lake, Galápagos.” *Organic Geochemistry* 66, 80-89. <https://doi.org/10.1016/j.orggeochem.2013.11.004>
23. Myhrvold, C. L., F. Janny, D. Nelson, S. N. Ladd, **A. R. Atwood**, J. P. Sachs (2014). “Holocene Closure of Lib Pond, Marshall Islands.” *PLoS ONE* 9, e90939. <https://doi.org/10.1371/journal.pone.0090939>
24. **Atwood, A. R.** and J. P. Sachs (2012). “Purification of dinosterol from complex mixtures of sedimentary lipids for hydrogen isotope analysis.” *Organic Geochemistry* 48, 37-46. <https://doi.org/10.1016/j.orggeochem.2012.04.006>
25. Teh, Y. A., O. Mazeas, **A. R. Atwood**, T. Abel, R. C. Rhew (2009). “Hydrologic regulation of gross methyl chloride and methyl bromide uptake from Alaskan Arctic tundra.” *Global Change Biology* 15, 330-345. <https://doi.org/10.1111/j.1365-2486.2008.01749.x>
26. Teh, Y. A., R. C. Rhew, **A. Atwood**, T. Abel (2008). “Water, temperature, and vegetation regulation of methyl chloride and methyl bromide fluxes from a shortgrass steppe ecosystem.” *Global Change Biology* 14, 77-91. <https://doi.org/10.1111/j.1365-2486.2007.01480.x>
27. Rhew, R. C., Y. A. Teh, T. Abel, **A. Atwood**, O. Mazeas (2008). “Chloroform emissions from the Alaskan Arctic tundra.” *Geophysical Research Letters* 35, L21811. <https://doi.org/10.1029/2008GL035762>

Non-peer reviewed:

1. **A. R. Atwood** (2022). “Rapid warming linked to leap in tropical ocean seasonality.” *Nature* 612, 36-38. <https://doi.org/10.1038/d41586-022-03833-y>.
2. DeLong, K. L., **Atwood, A.**, Moore, A., Sanchez, S. (2022). “Clues from the sea paint a picture of Earth’s water cycle,” *Eos*, 103, <https://doi.org/10.1029/2022EO220231>

SELECTED ORAL PRESENTATIONS

- 12/2022 “Uncovering 'Hidden' Insights from the Ocean in the PAGES CoralHydro2k Seawater $\delta^{18}\text{O}$ Database.” PP23A-01, AGU Fall Meeting. **Invited.**
- 12/2022 “Announcing Phase 4 of PAGES 2k: Hydroclimate of the Common Era.” PP56A-05, AGU Fall Meeting.

- 12/2022 “Is the concept of a zonal mean ITCZ shift useful?” NCAR Paleoclimate Advances Webinar Series (PAWS). **Invited.**
- 12/2021 “Importance of Central American Orography on Tropical Pacific Climate and Inter-Basin Interactions in Modern and Past Climates,” OS41B-03, AGU Fall Meeting. **Invited.**
- 07/2021 “Reducing Uncertainties in Coral-Based Climate Reconstructions from the Central Pacific During the Holocene,” ICRS2021-2498, International Coral Reef Symposium.
- 12/2020 “Data-Model Comparisons of Tropical Hydroclimate Changes Over the Common Era,” PP034-02, AGU Fall Meeting.
- 10/2020 “Robust longitudinally variable responses of the ITCZ to a myriad of climate forcings,” Univ. of Virginia Department of Environmental Sciences seminar. **Invited.**
- 05/2020 “Robust longitudinally variable responses of the ITCZ to a myriad of climate forcings,” Univ. of Hawaii Oceanography Department seminar. **Invited.**
- 12/2019 “Is the concept of a zonally-averaged tropical precipitation change useful?” AGU Fall Meeting.
- 12/2018 “Tropical Pacific climate over the last 6,500 years – insights from a coral ensemble approach and an isotope enabled GCM,” AGU Fall Meeting.
- 08/2018 “A coral ensemble approach to reconstructing mean climate and seasonality in the central Pacific,” Goldschmidt Conference, Boston, MA.
- 07/2018 “Characterizing zonal variations in the shift of tropical precipitation to climate forcing,” 2nd WCRP Grand Challenge Meeting on Monsoons and Tropical Rain Belts, International Centre for Theoretical Physics, Trieste, Italy.
- 02/2018 “The Influence of Mean State Changes on ENSO During the Mid-Holocene: Insights from Coral Records and an Isotope-Enabled GCM,” Ocean Sciences Meeting, Portland, OR.
- 09/2017 “A Coral Ensemble Approach to Reconstructing Central Pacific Climate Change During the mid-Holocene,” GeoBremen, Bremen, Germany.
- 08/2017 “High latitude teleconnections to tropical mean climate: paleoclimate data and models,” US CLIVAR Summit, Baltimore, MD. **Invited.**
- 03/2017 “Proxy and modeling evidence of the 8.2 kyr event in the eastern equatorial Pacific”, 28th Pacific Climate Workshop, Pacific Grove, CA.
- 12/2016 “A Coral Ensemble Approach to Reconstructing Central Pacific Climate Change During the Holocene”, 185396, AGU Fall Meeting.
- 06/2016 “Hydroclimate changes in the tropical Pacific over the last millennium: data model comparisons and possible mechanisms”, PAGES2k-PMIP3 Workshop: Comparing Data and Model Estimates of Hydroclimate Variability and Change over the Common Era, Lamont-Doherty Earth Observatory. **Invited.**

- 07/2016 “Tropical Pacific climate change and ENSO evolution during the Holocene”, NOAA Climate and Global Change Summer Institute, Steamboat Springs, CO.
- 12/2015 “Possible mechanisms of a southward shift in tropical precipitation during the Little Ice Age”, PP44B-06 AGU Fall Meeting. **Invited.**
- 10/2015 “Why was there a Little Ice Age?”, Lawrence Berkeley National Laboratory seminar. **Invited.**
- 09/2015 “Spatial variations of the ITCZ response to North Atlantic freshwater forcing”, Workshop on Monsoons & ITCZ: the annual cycle in the Holocene and the future, Columbia University. **Invited.**
- 09/2015 “Why was there a Little Ice Age?”, U.C. Berkeley Atmospheric Science Center seminar. **Invited.**
- 11/2014 “Possible mechanisms of a southward shifted ITCZ during the Little Ice Age”, Univ. of Washington Chemical Oceanography seminar.
- 09/2014 “The influence of a weakened AMOC on the El Niño-Southern Oscillation”, U.S. AMOC Science Team Meeting, Seattle, WA.
- 12/2013 “Last millennium climate change in CMIP5 models”, PP41B-07 AGU Fall Meeting.
- 09/2013 “The Little Ice Age in CMIP5”, University of Edinburgh School of Geosciences seminar.
- 12/2012 “Holocene climate changes in the eastern equatorial Pacific from hydrogen isotopes of multiple biomarkers from a Galápagos lake”, PP24B-04 AGU Fall Meeting.
- 10/2012 “Initial investigations on the interactions between ENSO and the mean state of the tropical Pacific”, Univ. of Washington Chemical Oceanography seminar.
- 08/2011 “Mean state changes in the tropical Pacific and El Niño-Southern Oscillation Variability: Paleoclimate evidence and climate modeling investigations”, DOE Global Change Education Program Workshop, Knoxville, TN.
- 10/2010 “Holocene rainfall variations from hydrogen isotope ratios of algal biomarkers in a Galápagos Island lake sediment,” Univ. of Washington Graduate Climate Conference.
- 11/2008 “What can Christmas Island tell us about rainfall in the tropical Pacific over the last millennium? Univ. of Washington Chemical Oceanography seminar.

SELECTED POSTER PRESENTATIONS

- 12/2023 **Atwood, A.R.** and Moore, A. “Data-Model Comparisons of the Tropical Hydroclimate Response to the 8.2ka Event.” PP31B-1475, AGU Fall Meeting.
- 02/2021 **Atwood, A.R.**, Baldwin, J. W., Vecchi, G., Battisti, D. S. “Importance of

Central American Orography on Tropical Pacific Climate and Inter-Basin Interactions.” WCRP-CLIVAR Workshop on Climate interactions among the tropical basins. **Invited.**

- 12/2017 **Atwood, A.R.**, Battisti, D. S., Bitz, C. M., Sachs, J. P. “Response of the tropical Pacific to abrupt climate change 8,200 years ago.” PP33A-1314, AGU Fall Meeting.
- 10/2017 **Atwood, A.R.**, Frierson, D.M.W., Wu, E., Battisti, D.S., Sachs, J.P. “Hydroclimate changes in the tropical Pacific over the last millennium.” Last Millennium Reanalysis Workshop, Boulder, CO.
- 12/2014 **Atwood, A.R.**, Battisti, D.S., Bitz, C.M. (2014). “The influence of a weakened AMOC on the El Niño-Southern Oscillation in CESM,” A33E-3238, AGU Fall Meeting.
- 03/2012 **Atwood, A.R.**, Sachs, J. P. “Holocene rainfall in the eastern equatorial Pacific from hydrogen isotopes in lipid biomarkers from a Galápagos lake,” CLIVAR/PAGES Workshop: Using paleo-climate model/data comparisons to constrain future projections, University of Hawaii.
- 10/2012 **Atwood, A.R.**, Battisti, D.S. “Interactions between ENSO and the mean state of the tropical Pacific in a GCM,” Univ. of Washington Graduate Climate Conference.
- 10/2011 **Atwood, A.R.**, Sachs, J. “Holocene climate variability in the eastern equatorial Pacific from lake biomarker records,” Graduate Climate Conference, Woods Hole Oceanographic Institution.

ADVISING

Primary advisor for Luis Rodriguez, David Hsu, and Neda Mobasher (FSU PhD students), Andrea Moore (FSU MS graduated 08/2023), and Taylor Conklin (FSU MS student), Raquel Pauly (FSU Honors program)

Thesis committee member for Virginia Biede, Catherine Stauffer, Heather Forrer, John Uehling, Charles Fite, Michael Secor, Fucheng Yang (FSU PhD students), Lindsay Hooper, Gwen Dmitruk, Adihan Yulanda Widyaningsih, Carly Narotsky, Lindsay Lawrence, Megan Moore, Hanna Brasseur, Ian Siew (FSU MS students)

Supervisor for undergraduate students Raquel Pauly, Sydney Garber, Lee Wall, Sylvia Long, Olivia Graff (FSU), Melat Hagos, Gemma O’Connor, Kayla Townsend (Georgia Institute of Tech.), Elynn Wu and Kyle Thomas (Univ. of Washington) and postgraduate Aaron Jones (Georgia Institute of Tech.)

Mentor for NHMFL Magnetic Momentum Scholars Program: Chloe Allen (2023)

Mentor for FSU Research Experience for Undergraduates (REU) program: Sydney Garber (2022)

Supervisor for FSU Experience Recognition Program: Sylvia Long (2022-23)

TEACHING & COURSE DEVELOPMENT

Paleoclimatology: Data, Models, & Theory (OCC 5930/MET 6155/GLY 5297, FSU, Fall19, Fall21, Fall 2023)

Climate Change Science (MET 3013C, FSU, Spr20, Spr21, Spr24)

Fundamentals of Climate and Global Dynamics (MET 6155/OCP 5930, FSU, Fall20)

Professional Development Graduate Seminar (OCC 5930, FSU, Fall23)

Field course: Exploration seminar in the Marshall Island (Graduate Teaching Assistant, University of Washington, 2009)

Course development for Global Climate Change (Washington State University Extension Carbon Masters Program, 2008 – 2009)

NONDEGREE EDUCATION AND TRAINING

Course Design Institute, FSU Center for the Advancement of Teaching (June 12-15, 2023)

SERVICE

Journal editor or peer reviewer

Associate Editor for the *Journal of Climate* (2021-present)

Ad hoc proposal reviewer for US National Science Foundation programs: Climate and Largescale Dynamics, Ocean Sciences, and CAREER (2018-present)

Peer reviewer for scientific journals: *Nature*; *Nature Geoscience*; *Geophysical Research Letters*; *Journal of Climate*; *Paleoceanography and Paleoclimatology*; *Geochemistry, Geophysics, Geosystems*; *Earth and Planetary Science Letters*; *Quaternary Science Reviews*; *Organic Geochemistry*; *Geology*; *Journal of Geophysical Research–Atmospheres*. (2013-present)

Chairing of a meeting session or workshop organizer

Co-organizer, PAGES Topical Science Meeting “Centennial climate variability at regional scale in models and reconstruction” (March 7-10, 2023)

Co-organizer, PAGES 2k Phase 4 Workshop (March 6-7, 2023)

Session co-chair for “Advancing Paleoclimatology by Combining Data, Models, and Theory,” AGU Fall Meeting (12/2020; 12/2021; 12/2022; 12/2023)

Session co-chair for “Using observations and paleoclimate data to constrain El Niño-Southern Oscillation dynamics,” AGU Fall Meeting (12/2019)

Co-organizer, US CLIVAR Water Isotopes and Climate Workshop (10/2019)

Session co-chair for “The global expression of the 8.2 ka event,” AGU Fall Meeting (12/2018)

Session co-chair for “Applications of high-resolution geochemical proxies: seasonality and past climate variability,” Goldschmidt Conference (8/2018)

Co-organizer, Science Leadership and Management, UC Berkeley; Organize yearly seminar series and end-of-year workshop for graduate students and postdocs to promote leadership development in early career scientists. (2016-2018)

Project leader or coordinator

Project coordinator for Phase 4 of the PAGES 2k Network “Hydroclimate of the Common Era” (2021-present)

Project leader of the PAGES CoralHydro2k Project “Tropical ocean hydroclimate and temperature from coral archives” (2020-present)

Project coordinator for the US CLIVAR Working Group on “Water Isotopes in the Climate” (2018-present)

Member of the PAGES Iso2k Project “A global synthesis of Common Era hydroclimate using water isotopes” (2018-2022)

Public Outreach

Scientist volunteer, National High Magnetic Field Laboratory Open House, National High Magnetic Field Laboratory Open House (2020, 2024)

Interviewed for 'Research In Focus' article and video, FSU College of Arts and Sciences (2023)
<https://artsandsciences.fsu.edu/article/field-fsu-researchers-travel-across-globe-unravel-mysteries-el-nino>

Interviewed for article on past climate change, FSU News (12/2022)
<https://news.fsu.edu/news/science-technology/2022/12/20/research-reveals-new-insights-into-how-earths-orbit-influences-seasonal-cycles/>

Interviewed for podcast recording for 'NoleEdge', FSU College of Arts and Sciences (2022)
<https://youtu.be/Z41VCN5phTM>

Interviewed for NSF CAREER Award, FSU News (2022)
<https://news.fsu.edu/news/university-news/2022/06/24/record-number-of-fsu-faculty-win-prestigious-nsf-career-awards/>

Outstanding Student Presentation Judge, AGU Fall Meeting, American Geophysical Union (2017, 2018, 2019, 2021, 2022)

Interviewed for research spotlight, FSU College of Arts and Sciences (2021)
<https://artsandsciences.fsu.edu/article/faculty-spotlight-alyssa-atwood>

Interviewed for FSU College of Arts and Sciences Spectrum Magazine (2019)
<https://artsandsciences.fsu.edu/spectrum-magazine/faculty-forays/spectrum-summer-2019-sea-sky>

Scientist and volunteer, Developed teacher-training resources and serve as a science expert for high school science teachers, Educurious (2013–2018)

Invited Speaker, "Climate change impacts in the Pacific Northwest", Everett Public Library (2014)

Invited Speaker, Delivered invited lecture on "Our changing oceans" to the Highland Community College Environmental Chemistry class, Highland Community College (2012)

Invited speaker, Delivered invited lecture on "Current and future ocean change" to the Interlake High School AP Environmental Science class in Bellevue, WA, Interlake High School (2012)

Scientist and volunteer, Developed a pilot program and curricular materials for the Carbon Masters and Carbon Coaches community education programs, Washington State University Extension (2009–2010)

Co-organizer, Co-organized a 1-day climate change symposium in Majuro, Republic of the Marshall Islands, University of Washington (2009)

Co-organizer, US Congressional Delegation-House Science and Technology Committee to the Galápagos Islands (2008)

Volunteer, Technical Advisory Panel member and Science Judge for Washington Regional Ocean Sciences Bowl (02/2008)