

Graham P. Taylor

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<https://grahamptaylor.github.io>

Research Interests

Western North America Climate Change, Atmospheric Circulation, Rain Season Onset, Downscaled Models

Academic Employment

Postdoctoral Researcher, UCAR/NOAA GFDL 2024-Present

Adjunct Research Associate, Department of Geography, Portland State University, 2024

Graduate Research Assistant, Department of Geography, Portland State University, 2019-2024

Student Intern, Uncertainty Quantification and Statistical Analysis, Jet Propulsion Laboratory/NASA, 2023

Education

Ph.D. 2024 Earth, Environment, and Society, Portland State University, Portland, Oregon

M.S. 2021 Geography, Portland State University, Portland, Oregon

B.S. 2013 Physics, St. Olaf College, Northfield, Minnesota

Peer-Reviewed Publications

Taylor, G.P., P. C. Loikith, H. Lee, 2023: Projected Changes in the Timing of Autumn Rain, Wind, and Their Co-Occurrence Over western North America. *In Review*.

Taylor, G. P., P. C. Loikith, H. Lee, B. Lintner, and C. M. Aragon, 2023: Projections of Large-Scale Atmospheric Circulation Patterns and Associated Temperature and Precipitation over the Pacific Northwest Using CMIP6 Models. *Journal of Climate*, 36, 7257–7275, <https://doi.org/10.1175/JCLI-D-23-0108.1>

Taylor, G. P., P. C. Loikith, C. M. Aragon, H. Lee, and D. E. Waliser, 2022: CMIP6 model fidelity at simulating large-scale atmospheric circulation patterns and associated temperature and precipitation over the Pacific Northwest. *Clim Dyn*, 60, 2199–2218, <https://doi.org/10.1007/s00382-022-06410-1>

Loikith, P. C., D. Singh, and **G. P. Taylor**, 2022: Projected Changes in Atmospheric Ridges over the Pacific–North American Region Using CMIP6 Models. *Journal of Climate*, 35, 5151–5171, <https://doi.org/10.1175/JCLI-D-21-0794.1>

Conference Presentations

Projections of Change in the Timing of Fall Rain and Wind Over the Western United States, **Graham P. Taylor**, Paul C. Loikith, and Hugo K. Lee. Winter Meeting of the American Meteorological Society, New Orleans, Louisiana, 2024 (poster)

Projections of Change in the Timing of Fall Rain and Wind Over the Western United States, **Graham P. Taylor**, Paul C. Loikith, and Hugo K. Lee. Fall Meeting of the American Geophysical Union, San Francisco, California, 2023 (talk)

Future conditions of wind and rain associated with fall wildfire conditions in CMIP6 models over western North America, **Graham P. Taylor**, Paul C. Loikith, and Hugo K. Lee. International Conference on Regional Climate ICRC-CORDEX, Trieste, Italy, 2023. (poster)

Projections of Large-Scale Atmospheric Circulation Patterns and Associated Temperature and Precipitation Anomalies over the Pacific Northwest using CMIP6 Models, **Graham P. Taylor**, Paul C. Loikith, and Christina Aragon. Fall Meeting of the American Geophysical Union, Chicago, Illinois, 2022. (poster)

Projections of Large-Scale Atmospheric Circulation Patterns and Associated Temperature and Precipitation Anomalies over the Pacific Northwest using CMIP6 Models, **Graham P. Taylor**, Paul C. Loikith, and Christina Aragon. Fall Meeting of the American Geophysical Union (virtual), New Orleans, Louisiana, December, 2021. (talk)

Projections of Large-Scale Meteorological Patterns, Temperature, and Precipitation over the Pacific Northwest

using CMIP6 Models, **Graham P. Taylor**, Paul Loikith, and Christina Aragon. 11th Northwest Climate Conference (virtual), 2021 (talk).

Projections of Future Large-Scale Meteorological Patterns, Temperature, and Precipitation over the Pacific Northwest, **Graham P. Taylor**, Paul C. Loikith, and Christina Aragon. Virtual Fall Meeting of the American Geophysical Union, 2020 (poster).

Assessing Climate Change Impacts on Precipitation Over Bull Run Watershed, **Graham P. Taylor**, Paul C. Loikith, Christina M. Aragon, Kavita Heyn, Kristin Anderson, and Benjamin Beal. Northwest Climate Conference, Portland, Oregon, 2019 (poster).

Invited Talks

2025 Rutgers, *Department of Environmental Science Seminar Series*

2024 Center for Western Weather and Water Extremes, Scripps Institution of Oceanography at University of California San Diego, *Science Friday Speaker Series*

2023 Portland State University, *Geography Department Speaker Series*

Other Presentations

2023 Jet Propulsion Laboratory, *Uncertainty Quantification and Statistical Analysis Seminar Series*

2022 Portland State University, *Student Research Symposium*

2022 Portland State University, *Three Minute Thesis*

Awards

Travel grant to International Conference on Regional Climate ICRC-CORDEX 2023 and 11th Workshop on the Theory and Use of Regional Climate Models in Trieste, Italy, 2023.

Professional Affiliations

American Geophysical Union, 2020-present

American Meteorological Society, 2020-present

Science Communication and Outreach

Guest Author – Early Career Climate Network. *What do climate models tell us about the future of ridges over the pacific northwest?* 2022 <https://earlycareerclimate.wordpress.com/2022/09/27/what-do-climate-models-tell-us-about-the-future-of-ridges-over-the-pacific-northwest/>

Interviewee - KOIN Podcast Special: Climate in Crisis. 2021

Skills

Python, MATLAB, R, unix/linux OS and scripting, high-performance computing, machine learning

Journal reviewer: *Climate Dynamics*, *International Journal of Climatology*