

# 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. 11<sup>th</sup> 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*