

Job Opening: Postdoctoral Fellow in Great Lakes Regional Climate Modeling with WRF

Cooperative Institute for Great Lakes Research
School for Environment and Sustainability
University of Michigan

Summary

A postdoctoral fellowship is available for a highly qualified individual to join the Cooperative Institute for Great Lakes Research (CIGLR: <https://ciglr.seas.umich.edu/>). The successful candidate will work with a team of atmospheric and hydrodynamic modelers at CIGLR and the National Oceanic and Atmospheric Administration (NOAA) Great Lakes Environmental Research Laboratory (GLERL) to improve our ability to make climate projections for all aspects of the dynamical system in the Great Lakes Region. Specifically, the candidate will use the Weather Research and Forecasting (WRF) model to dynamically downscale global climate model output from multiple members of the Coupled Model Intercomparison Project Phase 6 (CMIP6) suite. The candidate will also test and evaluate methods to couple a hydrodynamic model of the Great Lakes with the WRF regional climate model (RCM) to best represent the lake-atmosphere feedbacks unique to the region. This project will support multiple interdisciplinary projects within CIGLR and GLERL to provide the high-resolution atmospheric climate projections needed to force hydrodynamic, hydrologic, and ecosystem models.

The primary focus of this project is to create high-resolution atmospheric data guided by future climate projections from global models with the added necessity of including appropriate lake information as a boundary condition for the WRF model. The candidate will be welcome to explore any research questions that arise from analyzing the atmospheric phenomena and climate trends within the coupled model. The postdoc will be expected to maintain a strong record of scholarly publication and presentations at scientific conferences and public meetings.

The appointment will be with CIGLR, which is part of the University of Michigan's School for Environment and Sustainability located in Ann Arbor, Michigan. CIGLR is a collaboration between the University of Michigan and NOAA that brings together experts from academia and government research labs to work on pressing problems facing the Great Lakes region. You will spend the majority of your time at NOAA's Great Lakes Environmental Research Laboratory (GLERL) in Ann Arbor and will collaborate closely with colleagues at CIGLR, GLERL, SEAS and other Great Lakes partners.

This position offers a highly competitive salary plus benefits and comprehensive mentoring for scientific and professional development. The initial appointment is for one year, with opportunity for extension for the second year contingent on performance. Applications will be reviewed on a first-come first-served basis until the position is filled. The position is expected to start during late Fall 2024 or early Winter 2025.

Qualifications

- A Ph.D. in meteorology, geosciences, climate sciences, data science, or a similar field, with a strong background in atmospheric modeling is required
- Experience with the Weather Research and Forecasting model (WRF) is ideal but not required
- Familiarity with data analysis and visualization in a scripting environment using R, Python, or similar software is also necessary

- Strong communication skills and a demonstrated ability to lead the development of manuscripts for refereed journal publication are needed
- Successful candidates must be able to work effectively both as part of a team and independently

For more information and to apply:

Visit https://careers.umich.edu/job_detail/251493/postdoctoral-fellow-great-lakes-regional-climate-modeling-wrf

The application deadline is 10/01/2024.