

Job ID: 302696
Directorate: Fundamental & Computational Sciences
Group: Climate Physics Educational Development

Job Description

We seek a post-doctoral scientist who will perform land surface model simulations and will characterize and quantify the associated uncertainty. The successful candidate will develop, integrate, and apply uncertainty quantification techniques to identify uncertainties associated with model parameters and/or parameterizations in the Community Land Model (CLM) using observations at various spatiotemporal scales. The primary goal of the planned research is to apply the Community Land Model (CLM) under an existing uncertainty quantification framework, and integrate the CLM with a scalable multi-chain MCMC-Bayesian inversion method to be developed in this project.

Minimum Requirements

Candidates must have received a PhD within the past five years from an accredited college or university. All staff at the Pacific Northwest National Laboratory must be able to demonstrate the legal right to work in the United States.

Qualifications

PhD in Atmospheric Sciences, Hydrology, Hydrometeorology, Geography, Ecology, or other closely related field.

Knowledge of land surface modeling in a high-performance computing environment is required, and basic knowledge in sensitivity analysis and calibration/inversion is preferred. We are looking for highly motivated individuals who can demonstrate the ability to develop hypotheses, test those hypotheses, write and take the lead in publishing papers, and work in a collaborative environment. The researcher will join an interdisciplinary team of scientists performing research on land modeling in an Earth system modeling framework and applied math and statistics. Experience with unix/linux systems, F90/F95 programming, shell scripting, and familiarity with CLM/CESM is desirable, but not required. The selected candidate will work closely with scientists at PNNL and other DOE National Laboratories.

Equal Employment Opportunity

Pacific Northwest National Laboratory (PNNL) is an Affirmative Action / Equal Opportunity Employer and supports diversity in the workplace. All employment decisions are made without regard to race, color, religion, sex, national origin, age, disability, veteran status, marital or family status, sexual orientation, gender identity, or genetic information. All staff at the Pacific Northwest National Laboratory must be able to demonstrate the legal right to work in the United States.

About Tri-Cities

<http://www.visittri-cities.com/>

The Tri-Cities started out with 3 main communities: Kennewick, Pasco, and Richland - but the phenomenal growth of neighboring West Richland has made the area more of a "Quad-City". Located just hours from Seattle, WA and Portland, OR, the area is embraced by the beauty of a desert landscape and connected by the Columbia, Snake, and Yakima rivers. The Tri-Cities offers a multitude of recreational, cultural, and historical activities and is a great place to visit and live. We're known for our premier golf courses, award-winning wineries, unique shopping, and abundant outdoor and water recreation. Click on the link above to learn more about the various communities. PNNL is located in Richland, WA.

You can view and apply for this job at:

https://erecruit.pnnl.gov/psp/hrext/EMPLOYEE/HRMS/c/HRS_HRAM.HRS_CE.GBL?Page=HRS_CE_JOB_DTL&Action=A&JobOpeningId=302696&SiteId=1&PostingSeq=1