

Postdoctoral Crop-Climate Modeler for USDA-NIFA project

Earth System Science Interdisciplinary Center

University of Maryland College Park

Description:

We are seeking a highly motivated postdoctoral associate to support the dynamic crop growth modeling component of a project funded by the United States Department of Agriculture's National Institute of Food and Agriculture (USDA-NIFA). The project's goal is to develop, evaluate, and apply a fully coupled modeling framework to predict climate-agroecosystem interactions and economic impacts. The post-doctoral associate will calibrate, test, and analyze a suite of crop growth and biogeochemistry models. The associate will additionally assist other team members in coupling these models with a regional climate model. This coupled modeling system will then be integrated into a predictive decision support dashboard to provide farmers across the U.S. Corn Belt with relevant and reliable information for farm-level decision-making.

Details:

The position will be based at the Earth System Science Interdisciplinary Center in College Park, Maryland. It is extendable annually up to two years, and potentially longer depending on funding availability. Salary is commensurate with experience; university benefits will be included.

Qualifications:

Applicants should have a Ph.D. (within 5 years) in agricultural, atmospheric or climate sciences, and a strong background in crop dynamics, biogeochemistry (C, N, P), and model development. They must have experience and skill in programming (particularly Fortran and C) as well as analytical skill in model evaluation and crop-climate interaction. Experience with parallel computing, machine learning, GIS applications, and regional climate models are particularly desired. Strong verbal and written English communication skills are required for this position.

To apply:

Interested applicants should submit a cover letter, CV, and contact information for three references to Professor Xin-Zhong Liang at xliang@umd.edu and copy Drew Gower at dbgower@umd.edu. The position is available immediately, and applications will be reviewed on a rolling basis until it is filled.