Postdoctoral regional Earth system modelers

Earth System Science Interdisciplinary Center
University of Maryland College Park

We are seeking two highly motivated postdoctoral researchers to support the model system development and forecast applications. The research focus of the postdocs will be on coupling regional Earth system models, including climate, hydrology, and agroecosystem processes, and understanding various interactions and feedbacks among these processes, evaluating model performance and predictive skills, and integrating agricultural decision support tools. The postdocs will also be actively involved with the overall project integration of the research, extension and education activities among an interdisciplinary team. Salary is commensurate with experience and University benefits will be included.

The key responsibilities of the postdocs include: 1) Research on the development, evaluation, and application of an advanced dynamic climate-hydrology-crop modeling and decision support system. This will involve calibrating, testing, and analyzing a suite of component models, coupling them into a fully integrated system, conducting system forecasts, and linking with decision support tools. The postdocs will collaborate with a large team of scientists on these tasks and be encouraged and supported in conducting and publishing research on crop (food and energy), water, and climate modeling and real-world applications. 2) Coordination of project-wide activities such as organizing program meetings and conferences, composing meeting agendas and discussion summaries, compiling material for semi-annual and annual reports, and coordinating workflow among various model development, forecasting and, application components. Through these coordination activities (representing an anticipated 10% of the total work) the postdoc will gain hands-on experience in managing a large, interdisciplinary research project and in transforming research into solutions to real-world problems.

Applicants should have a recent Ph.D. (within 5 years) in agricultural, hydrologic, atmospheric or climate sciences, and a strong background in model development and application. They must have experience and skill in programming (particularly Fortran), as well as analytical abilities in model evaluation and climate-hydrology-crop interactions. Applicants should also have an interest and willingness to take responsibility for some project management activities. Excellent spoken and written English is required.

The appointment of these postdoc positions are initially for two years and renewable depending on performance and funding availability.

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. This position is available immediately, and applications will be reviewed on a rolling basis until the position is filled.