**Advertisement**

**PhD student in Earth system modelling at the Department of Geography, University of Georgia**

**Position summary**: A fully funded PhD student position is available to evaluate impacts of land-based climate mitigation strategies in Earth System Models (ESMs). The position is with the Department of Geography, University of Georgia, Athens and will begin Fall 2024. The student will gather observational constraints on changes to carbon stored on land and to biophysical properties (such as changes to albedo and evaporation) due to land cover change (for example, planting forests, allowing ecosystems to naturally regenerate, and planting crops for bioenergy). The observational constraints will then be used to evaluate similar changes in a suite of ESMs and contribute to model developments of the forest and bioenergy routines in one of the models (up to the student’s discretion). The project will complement ongoing work a European Union-funded project involving four ESMs ([ESM2025](https://www.esm2025.eu/)), presenting opportunities for the student to interact with an international research team, including developers of the NCAR model CLM-Fates. The graduate student will be expected to communicate their results in peer-reviewed publications and at scientific conferences.

**Required qualifications**: Candidates must have proven abilities to conduct independent research and to work as part of a scientific team. Experience in data analysis (of large model or observational data sets), strong quantitative skills, and working with global land surface or Earth system models are essential. Experience in or an interest in learning R or Python also are required. One or more of the following would also be helpful: experience with machine learning, experience with land surface models, or an understanding of biophysical and biogeochemical impacts of land cover change; but the drive and willingness to learn these skills is acceptable. A strong background in geography, atmospheric sciences, mathematics, statistics, or plant or landscape ecology is also suggested.

**How to apply:** Students will join Harper Lab in the Department of Geography at the University of Georgia. The assistantship will include a salary commensurate with education level, tuition waiver, and health benefits. Interested candidates should send an email describing their past experience and their motivation for pursuing a graduate degree in the above research topic, along with a CV and the names and contact information for 3 references, to Dr. Anna Harper (a.harper@uga.edu), Department of Geography, The University of Georgia, Athens, GA 30606. Review of applications will begin after December 1, and will continue until the position is filled. The anticipated start date is August 01, 2024.

The University of Georgia values diversity and all qualified applicants are encouraged to apply. UGA is in Athens, GA, a vibrant mid-sized city with abundant shopping, restaurants and cultural experiences. In case of any questions, potential applicants are encouraged to contact Dr. Anna Harper (a.harper@uga.edu), Department of Geography, UGA.