The Department of Geographical Sciences at University of Maryland, College Park, is seeking up to two Professional Track Research Faculty Members (non-tenure positions) to support the development of an integrated inundation monitoring algorithm suite that will be used to produce dynamic inundation products at a weekly time-step for the United States and Canada.

Following university policies, a candidate with a master’s degree will be hired as a Faculty Assistant, whereas a candidate with a PhD degree will be hired as a Postdoctoral Researcher, Assistant Research Professor or Associate Research Professor depending on his/her qualifications. Salary and benefits are highly competitive.

The products will be developed using a combination of Landsat and Sentinel-1/2 data, starting with currently available data and incorporating new datasets as they become available. Various classification approaches will be examined, including object-based classification and machine learning techniques (e.g., decision trees and support vector machines). The approach developed as part of this effort will support operational capabilities leading to a long-term inundation record. These data will be highly relevant for a wide variety of applications, including those involving natural hazard assessment, pollutant regulation, provision of freshwater, support for biotic diversity, and regulation of greenhouse gas emissions.

Applicants should have a strong background in remote sensing of land cover dynamics, including algorithms for land cover classification and cal/val techniques, as well as an interest in aquatic ecosystems. Technical expertise in synthetic aperture radar remote sensing and topographic modeling using DEMs, and ability to process very large datasets using cloud computing are highly desirable. Applicants should be capable of independent research, but also able to work well as part of a dynamic research team. Candidates should have a demonstrated ability to independently conduct research as evidenced by peer-reviewed publications.

The researcher will be located at the University of Maryland at College Park. Limited travel in support of field cal/val campaigns may also be required.

**Minimum Qualifications and Required Skills**

An earned master’s degree is required for the Faculty Assistant position. A doctoral degree is required for the Postdoctoral Researcher or the Assistant or Associate Research Professor position. A doctoral degree in Geographical Sciences or allied fields in environmental science, such as Biology or Forestry is highly desired. Candidates with doctoral degrees in other fields (for example, Physics, Computer Science, and Electrical Engineering) with demonstrated knowledge and understanding of remote sensing of the land surface will also be considered, as well as candidates who have a master’s degree with multi-year experience and exceptional qualifications. Strong programming and statistical skills (such as IDL, Linus/UNIX scripts, MatLab, C/C++, and R) are required.
Applications should include a personal statement of background and experience relevant to the position, a signed, dated Curriculum Vitae, reprints (or accessible download urls) of selected peer-reviewed publications, and names and addresses (including e-mail) of 3-5 references.

For best consideration applications should be submitted no later than July 13th, 2015 but the search will continue until a suitable candidate is appointed.

To apply, visit: https://ejobs.umd.edu/postings/34117. Applications from women and minorities are particularly sought. The University of Maryland is an Equal Opportunity Affirmative Action Employer.

Further information on the research programs of the Department may be obtained from the address above and can be found at http://www.geog.umd.edu.