Faculty of Environmental Sciences

At the Department of Geosciences, the Institute for Photogrammetry and Remote Sensing offers, subject to the availability of resources, within a DFG-funded project and an EU-funded project at the Junior Professorship in Environmental Remote Sensing from April 1, 2021 a project position as

**Research Associate / Postdoc**

(Subject to personal qualification employees are remunerated according to salary group E 13 TV-L)

for a duration of 3 years. The period of employment is governed by § 2 (2) Fixed Term Research Contracts Act (Wissenschaftszeitvertragsgesetz - WissZeitVG).

The DFG-funded project investigates the influence of vegetation changes on the carbon cycle in northern ecosystems. The EU-funded project aims to develop a strategy for the management of wildfire risks in Europe. In both projects, TU Dresden will conduct research on the integration of Earth observations and dynamic global vegetation models in close cooperation with the Potsdam Institute for Climate Impact Research and further national and international partners.

**Tasks:** Your main task is the research in model-data integration for phenology, photosynthesis, vegetation dynamics and fires with a dynamic global vegetation model, in situ and Earth observation data. You will gather, process and analyse remote sensing data; conduct, evaluate and analyse model simulations; develop and apply model-data integration and machine learning methods; implementation of improved model formulation in the global vegetation model; write and publish scientific publications and presentation at international conferences and workshops.

**Requirements:** university and doctoral degree in the fields of environmental remote sensing or environmental modelling; expert knowledge in the analysis of remote sensing and climate data with R and/or Python; practical experiences in Linux/Unix, HPC and Git, C and shell scripting; first scientific publications; comprehensive experience in large-scale ecological modelling, optimization algorithms or machine learning; interest in global environmental change; high capacity for team work and communication skills; business fluent English skills; knowledge in German language would be advantageous but is not required.

Applications from women are particularly welcome. The same applies to people with disabilities.

**What we offer:** An interesting work in a young and social research group, embedded in two projects with many German, European and global partners. If necessary, we offer mobile/remote working.

Please send further to Mr. Jun.-Prof. Dr. Matthias Forkel (matthias.forkel@tu-dresden.de, Tel.: +49 351 463 32270).

Please submit your comprehensive application (personal research abstract, CV, study certificates, main publications, two reference contacts) by **February 22, 2021** (stamped arrival date of the university central mail service applies) via the TU Dresden SecureMail Portal https://securemail.tu-dresden.de by sending it as a single pdf document to: matthias.forkel@tu-dresden.de or to TU Dresden, Fakultät Umweltwissenschaften, Fachrichtung Geowissenschaften, Institut für Photogrammetrie und Fernerkundung, Juniorprofessur für Umweltfernerkundung, z.Hd. Herrn Jun.-Prof. Dr. Matthias Forkel, Helmholtzstr. 10, 01069 Dresden. Please submit copies only, as your application will not be returned to you. Expenses incurred in attending interviews cannot be reimbursed.

**Reference to data protection:** Your data protection rights, the purpose for which your data will be processed, as well as further information about data protection is available to you on the website: https://tu-dresden.de/karriere/datenschutzhinweis