

The Institute of Geography invites applications for a doctoral candidate position at the Friedrich-Alexander-Universität Erlangen-Nürnberg (FAU) in Erlangen, Germany. **The position will preferably start from May 2024 onwards.**

Doctoral candidate, 3 years, 75%, Entgelt-/Bes.Gr. E13 (3 years)

The position is embedded in the research project PAGE, which is funded by the DFG Emmy Noether Programme. The overarching goal of this project is to assess the past, present, and future glacier evolution in the Tropical Andes, by combining remote sensing, field measurements, and modeling techniques in a comprehensive analysis.

The advertised PhD position will focus on remote sensing data analysis. In particular on:

- the generation of updated and temporally consistent glacier outlines (supported by machine-learning approaches)
- Analysis of recent glacier mass balances using TanDEM-X data
- Development of mass balance assessment approach by integrating altimeter data
- Evaluation of the suitability of SWOT data for glacier volume change and glacier lake level analysis

Required skills:

- MSc in Geography, Earth Sciences, Physics, Computer Sciences, Applied Mathematics, or a related field with a very good grade
- Programming skills (Python, R, shell, or similar)
- Affinity for scientific computing and development of processing algorithms
- Knowledge of analyzing remote sensing data
- Good reporting and presentation skills
- Excellent level of written and spoken English
- Ability to work independently, to critically assess own results, and to cooperate within a wider research team

Desired and advantageous skills are:

- Interest in understanding Earth System processes and their complex interactions
- Experience in altimeter data analysis and/or big data processing
- Experience in machine learning
- Experience or interest in high-performance computing or cloud computing
- Demonstrated capacity for independent thinking and diligence

Proficiency in German can be advantageous but not required, as the working language is English

The candidates will be placed at the FAU Institute of Geography (<https://www.geographie.nat.fau.de/>), which offers a vivid working environment with a specific research focus on mountain and polar regions. The employment is limited to 3

years due to project funds. Depending on qualification and personal requirements, this position is grouped into the Entgelt-/Bes.Gr E13. The Friedrich-Alexander Universität Erlangen-Nürnberg (FAU) is seeking to augment the number of women in research and teaching and specifically addresses female scientists to apply for this position. We further encourage persons with disabilities to apply. If desired, a member of the equal opportunity office of FAU can participate in the selection process without any disadvantage for the applicant.

For your application, please send a single PDF to thorsten.seehaus@fau.de stating "DFG PAGE doctoral candidate" as the subject.

The PDF should comprise:

- cover letter (stating your background and motivation for this project)
- CV
- transcript of records, other certificates (if any)
- max. two reference letters or contacts (if any)

Deadline for application: 30. January 2024, the position is open until filled. Further information: Dr. Thorsten Seehaus, Institute of Geography, FAU, e-mail: thorsten.seehaus@fau.de