

Karlsruhe Institute of Technology (KIT) – The Research University in the Helmholtz Association creates and imparts knowledge for the society and the environment. It is our goal to make significant contributions to mastering the global challenges of mankind in the fields of energy, mobility, and information. For this, about 9000 employees of KIT cooperate in a broad range of disciplines in research, academic education, and innovation.

For our **Institute of Meteorology and Climate Research / Atmospheric Environmental Research (KIT/IMK-IFU)** at Campus Alpin in **Garmisch-Partenkirchen, Germany**, Division Regional Climate Systems, Research group Regional Climate and Hydrology, we are looking for a

## PhD student / Doctoral Researcher (f/m/d)

in the field of **global and regional seasonal drought forecasting**.

The successful candidate will develop and apply multi-variate bias correction and regional adjustment of operational global seasonal forecasts (forecasts up to 7 months ahead). The candidate will further systematically explore the predictive skill of the developed global-scale seasonal drought forecasts, improve their performance, interpret the probabilistic information, connect their predictability with regional weather patterns and will finally make the workflow available as “cloud-ready”.

The position is part of the **OUTLAST** project “Development of an Operational, mULTi-sectoral global drought hAzard forecasting SysTem”. The overall objective of the OUTLAST project is to develop, in co-design with potential users, a global and operational drought forecasting system for rainfed agriculture, irrigated agriculture, water supply, and terrestrial and riverine ecosystems, and to implement it as a component of the WMO's Global Hydrological Status and Outlook System (HydroSOS).

The position is limited for 3 years.

### Your Profile

- A Master/Diploma in Meteorology, Environmental- or Geo-Sciences, Hydrology, Geo-Informatics, Physics, or related fields with strong relation to scientific computing
- Experience in at least one of the fields of (multi-variate) bias-correction, weather pattern classification or cloud-computing is desired
- Strong programming and modern software engineering skills
- Deep knowledge of programming languages such as Python and FORTRAN
- Experience in high-performance computing, working on Linux clusters
- German and English language proficiency
- Strong writing skills
- Self-motivated personality, with strong communication and coordination skills to work within a multi-disciplinary team and environment on challenging international problems
- Willingness to present the research results at international conferences, to interact with stakeholders and to travel to the project regions of Lake Victoria and West and Central Asia

**We offer**

- International, interdisciplinary and friendly working environment
- Payment will be in accordance with German public service positions (75 % TV-L E13)
- Attractive research campus at the foot of Germany's highest mountain

**Applications**

Applications should be sent by email as one pdf file to Prof. Dr. Harald Kunstmann (harald.kunstmann [at]kit.edu) and in copy to Verena Wedler (verena.wedler [at]kit.edu) and should include a detailed CV, including personal contact information as well as a statement addressing your specific interest, motivation and qualifications for the position.

The application will remain open until a suitable candidate has been found.

We prefer to balance the number of employees (f/m/d). Therefore, we kindly ask female applicants to apply for this job. Recognized severely disabled persons will be preferred if they are equally qualified.

Start of application phase: 07.11.2022