

PostDoc position in the field of large-scale atmospheric dynamics and air-sea interaction at the Karlsruhe Institute of Technology (KIT), Karlsruhe, Germany

We are inviting applications for a three-year PostDoc position in the field of large-scale atmospheric dynamics in the collaborative German-Swiss project “GULFimpact” investigating the Gulf stream’s impact on the large-scale extratropical circulation. The aim of the project is to broaden our mechanistic understanding of how air mass transformations due to air-sea interaction along the Gulf stream oceanic front, latent heat release in cyclones, and cold air outbreaks from the Arctic affect the large-scale circulation over the North Atlantic and Europe. The successful candidate will join the project part at KIT led by Dr Christian Grams (KIT) and develop Lagrangian air mass diagnostics in order to investigate the link of weather regimes and air-sea interaction in ERA5 reanalysis data. A companion project at ETH Zurich led by Dr Lukas Papritz will focus on the conditions favourable for cyclone intensification and its downstream impact. The position will be hosted in the “Large-scale Dynamics and Predictability” group (<http://www.imk-tro.kit.edu/english/7425.php>) at the Institute of Meteorology and Climate Research – Department Tropospheric Research of KIT (<https://www.imk-tro.kit.edu/english/index.php>). The group investigates sub-seasonal prediction from an atmospheric dynamics’ perspective with a focus on weather regimes in the Atlantic-European region.

We are looking for a highly motivated, independent candidate who is keen to contribute to and to become part of an enthusiastic team. We offer a dynamic work environment at one of Germany’s foremost research institutions for natural science and technology (read more at <http://www.kit.edu/english/index.php>) with attractive programs for young researchers (<http://www.khys.kit.edu/english/index.php>). The candidate will work closely with the project partners at ETH Zurich, Switzerland (<https://iac.ethz.ch/people-iac/person-detail.html?persid=136619>), and collaborate with colleagues at the European Centre for Medium-Range Weather Forecasts (ECMWF), including the opportunity for visits at both institutions.

Requirements

The position requires a PhD in Atmospheric Science, Meteorology, Climate Science or equivalent. We expect the candidate to be familiar to work in a Linux environment (shell-scripting, etc.), to have good programming skills in Python, R, or alike, and some expertise in investigating reanalysis data or alike with sophisticated diagnostic tools. We further expect interest and ideally expertise in extratropical atmospheric dynamics, the work with numerical model output, and in the analysis of big data sets. A background in research on air-sea interaction, in the work with Lagrangian trajectories, and in numerical modelling is beneficial. The candidate should be fluent in English. Finally, the candidate should have good project-management skills, the ability and willingness to work in an international team, experience in scientific writing and documentation, and be willing to present research at international conferences and to participate in workshops.

Employment conditions

The position is offered for 3 years with flexible starting date in 2021. The position is remunerated according to TV-L (Collective Agreement for the Public Service Sector of the Federal States). The group is based on the research campus of KIT located about 10 km to the North of Karlsruhe city centre.

Applications and deadline

Please send your applications to Dr Christian Grams (grams@kit.edu) and Dr Lukas Papritz (lukas.papritz@env.ethz.ch), including a motivation letter, CV, copies of relevant certificates, preferred starting date, the names of at minimum two references in a single pdf file named “KITETHZ_lastname_firstname.pdf”.

Review of all applications will start on **15th April 2021** and will continue until the position is filled.

We support diversity, equity, and inclusion and aim to balance the number of female and male employees. We therefore explicitly encourage applications from women as well as from all others who will bring additional diversity to research and teaching. Applicants with disabilities will be preferentially considered if suitably qualified.

For further questions please contact Dr Christian Grams.

E-mail: grams@kit.edu

Web: <http://www.imk-tro.kit.edu/english/7425.php>