

The meteorological Institute, University of Bonn (MIUB), Germany invites applications for a

Position as Research Associate

for managing especially the two polarimetric X-band radars within the DFG-funded Core Facility Jülich Observatory for Cloud Evolution (JOYCE-CF, see geomt.uni-koeln.de/joyce). JOYCE-CF is jointly operated by the Universities of Cologne, Bonn and Forschungszentrum Jülich GmbH (FZJ) and has been established in order to provide a better physical understanding of clouds and precipitation formation over heterogeneous terrain. JOYCE-CF consists of a multitude of atmospheric ground-based remote sensing and in-situ sensors located at FZJ as well as of two polarimetric X-band weather radars in Bonn (<https://www.meteo.uni-bonn.de/messdaten/radarbilder/aktuelle-bilder-1/bonn>) and Jülich (<https://www.meteo.uni-bonn.de/messdaten/radarbilder/aktuelle-bilder-1/sophienhoehe>). The overall technical objective of JOYCE-CF is to provide long-term, continuous (near-real-time) and quality controlled measurements of clouds and precipitation and the environment in which they evolve.

This position (100% TV-L E13) is awarded for 3 years. We offer a productive and interdisciplinary working atmosphere including several possibilities for career development.

Requirements

We expect a strong background in atmospheric science, remote sensing and radar polarimetry. Profound knowledge in hard- and software development (sensors, data acquisition, -processing, -presentation) are appreciated. Further qualifications in microwave radiometry would be beneficial. Applicants should have a Master-of-Science-equivalent university degree in meteorology, geophysics, physics or mathematics and in addition hold a related PhD degree. Experience in scientific programming, preferably in a UNIX/LINUX environment, knowledge in computational modelling as well as in handling of large data amounts is highly desirable. Candidates must possess excellent communication skills both in written and spoken English. In addition, we welcome experience in the management of scientific projects.

Applications

Interested candidates should send a CV; a cover letter describing background, training and research interests; certificates; and the contact information of two referees as a single PDF to silke.troemel@uni-bonn.de. Review of applications will begin immediately and continue until the positions have been filled, March 31 latest.

Selection

The selection for the positions will be based solely on merit without regard to gender, religion, national origin, political affiliation, marital or family status or other differences. Among equally qualified candidates, handicapped candidates will be given preference.

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Detailed project description

The candidate of this project is responsible for the polarimetric X-band radars located at Bonn and Jülich. Together with a counterpart research associate from the University of Cologne, responsible for the JOYCE-CF instrumentation, and further supporting members of the research groups in Bonn and Cologne, the candidate aims at six major research objectives. 1.) Sustainment of standardized observation procedures: In order to make JOYCE observations attractive for various applications, procedures will be defined to ensure continuous highest-quality observations, minimize data loss, and to provide an automatic quality control and documentation 2.) Ensure and document automated data life cycle: The definition of a data life cycle will govern which and how the raw observational data is transformed to atmospheric variables and how, when and where they are stored and made available via database access. 3.) Regulate access of users to JOYCE -CF for performing dedicated observational experiments. 4.) Regulate access to the JOYCE observational data base: A data policy will be developed on which users and when will be able to obtain JOYCE-CF data and under which conditions. 5.) Create a center for best practices: A "reference center" for passive microwave remote sensing observations and polarimetric X-band radar calibration/validation will be set-up. Workshops and measurement campaigns will be carried out. 6.) Create a website and offer outreach: A JOYCE-CF website will be conceived containing all relevant information for instrument operators and users. Also, outreach activities will be organized.

The candidate is encouraged to embed his/her activities into current research projects on clouds and precipitation as well as into teaching at the university.

For more information contact Dr. Silke Trömel: [silke.troemel\[at\]meteo.uni-bonn.de](mailto:silke.troemel@meteo.uni-bonn.de).