



Faculty of Mathematics and Natural Sciences

## Post-doctoral researcher position (f/m/x) on low-dimensional climate models

Institute for Geophysics and Meteorology (IGMK)

We are one of the largest and oldest universities in Europe and one of the most important employers in our region. Our broad range of subjects, the dynamic development of our main research areas and our central location in Cologne make us attractive for students and researchers from around the world. We offer a wide range of career opportunities in science, technology, and administration.

The position is funded by the SmartEO Cluster Development Programme, which is designed to develop innovative methods for using new earth observation data.

### YOUR TASKS

- » Apply and develop data-driven approaches to identify persistent weather regimes and derive reduced models for the dynamics based on climate reanalysis datasets
- » Study the dynamics of transitions between weather regimes and identify factors favouring regime transitions
- » Further analyses could study the impact of weather regimes on other atmospheric features such as cloud organization or the occurrence of atmospheric rivers
- » Close interaction with scientists of the cluster development programme, including theoretical computer scientists
- » Active participation in research communication (seminars, conferences, publication in international journals)

### YOUR PROFILE

- » PhD degree in Meteorology, Atmospheric Sciences, Physics, Applied Mathematics or a related field
- » Experience in scientific programming and analysis of observation datasets
- » Very good communication skills in written and spoken English and ability to work in a team as well as independently
- » Experience with machine learning is an advantage

### WE OFFER

- » Possibility for qualification
- » Being part of an international and interdisciplinary research team
- » A diverse working environment with equal opportunities
- » Support in balancing work and family life
- » Flexible working time models
- » Extensive advanced training opportunities
- » Occupational health management offers
- » Opportunity to work remotely

The University of Cologne is committed to equal opportunities and diversity. Women are especially encouraged to apply and will be considered preferentially in accordance with the Gender Equality Act of the State of North Rhine-Westphalia (LGG NRW). We also expressly welcome applications from people with disabilities/special needs or of equal status.

The position is available immediately on a full-time basis (39,83 hours per week). The position is limited until 31.12.2025. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group 13 TV-L of the pay scale for the German public sector.

Please apply online with proof of the required qualifications without a photo to : <https://jobportal.uni-koeln.de>. The reference number is Wiss2310-17. The application deadline is 27.11.2023.

For further inquiries, please contact Professor Dr Nikki Vercauteren ([nikki.vercauteren@uni-koeln.de](mailto:nikki.vercauteren@uni-koeln.de)).