

PhD graduate research student

CRC 1211 | Water transport into desert areas investigated by atmospheric remote sensing

The University of Cologne is one of the largest and most research-intensive universities in Germany, offering a wide range of subjects. With its six faculties and its interfaculty centres, it offers a broad spectrum of scientific disciplines and internationally outstanding profile areas, supported by the administration with its services.

The research group „Integrated Remote Sensing“ of Prof. Susanne Crewell in Atmospheric Sciences as an integral part of the Collaborative Research Center „Earth - Evolution at the Dry Frontier“ (<https://sfb1211.uni-koeln.de/>) of the SFB 1211 funded by the German Research Foundation (DFG) now wants to deepen in its second phase our understanding of the mutual evolutionary relationships between processes at the Earth's surface and biota in (hyper-)arid desert systems, where both are severely restricted by water availability. The successful candidate will be a member of the SFB's Integrated Research Training Group, which is intended to educate a generation of truly interdisciplinary doctoral students in the earth and life sciences, a combination of growing importance in the course of ongoing and accelerated global change.

YOUR TASKS

- » Study differences in water vapor transport into the desert between the Atacama and Namib deserts with the help of satellite data
- » Investigate the importance of atmospheric rivers for desert moisture supply and precipitation formation using microwave radiances
- » Use geostationary satellite data to analyse diurnal cycle effects in particular in respect to fog formation and occurrence
- » Analyse big satellite data sets jointly with project partners performing ground-based observations and model simulations
- » Collaboration with the international and interdisciplinary team of CRC 1211
- » Develop scientific skills including independent critical thinking, writing journal articles, and defending scientific results

YOUR PROFILE

- » Master of Science or equivalent university degree in meteorology, geophysics, physics, informatics, or a related field at the time of appointment
- » Very good written and oral English skills
- » Good meteorological knowledge, ideally with focus on atmospheric remote sensing and/or climate

- » Willingness to participate in desert expeditions and interest in interdisciplinary research, i.e., linking results of physical processes to other projects in CRC 1211
- » Ability for critical and creative thinking

WE OFFER YOU

- » the opportunity to work as a researcher and to complete your Ph.D. within an international team of scientists
- » Association with the graduate school of geosciences with a structured PhD program (<https://geosciences.uni-koeln.de/gsgs>)
- » a diverse and fair working environment
- » support in reconciling work and family life
- » flexible working time models
- » extensive advanced training opportunities
- » occupational health management offers
- » local transport ticket at a discount for UoC employees

The position is available from 1 January 2021 on a part-time basis (75%). It is limited to three years. If the applicant meets the relevant wage requirements and personal qualifications, the salary is based on remuneration group TV-L 13 of the pay scale for the German public sector.

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 Equal Opportunities Act of North Rhine-Westphalia (Landesgleichstellungsgesetz – LGG NRW). We also expressly welcome applications from people with disabilities / special needs or of equal status.

Please apply online at: <https://jobportal.uni-koeln.de> with proof of the sought qualifications. The reference number is Wiss2009-12

If you have questions regarding the position please to contact meteo-jobs@uni-koeln.de.

The application deadline is 15 October 2020.