

The research and development department of the **German Meteorological Service (DWD)** at Frankfurt/Offenbach is looking for a

## Research Scientist

**Reference code 20160992**

starting **on 1.10.2016** to be filled on a temporary position **until 30.03.2019** within the *HD(CP)<sup>2</sup>* Phase II project.

The *HD(CP)<sup>2</sup>* project phase II (high definition clouds and precipitation for climate prediction, <http://hdcp2.eu/>) aims to improve precipitation forecasts and to reduce uncertainty in climate simulations. The entire project comprises in total about 50 positions within Germany for two periods of three years each. The focus of the project is the development and evaluation of a large-eddy-model (LEM) version of the ICON model. High-resolution (~100m) model runs on a regional scale will then be used as a reference for the development of cloud and precipitation parameterisations in the global ICON weather and climate model.

The S3 part of *HD(CP)<sup>2</sup>* focuses on the role of high level anvil cirrus and stratiform convective outflow with five researchers working on theory, microphysics, macrophysics, observations of clouds and convection. The position advertised will analyse high-resolution LES to learn about the precipitation generation in convection and the resulting outflow of cloud from convective systems. The goal will be an improvement of the parameterisation of convection and it's outflow.

### **The job description includes the following activities:**

- Evaluation of convection and ice clouds in ICON-LES, ICON-NWP and ICON-climate
- Investigation of trajectories in convective updrafts in ICON-LES to understand moisture transports
- Test improvements in the parameterization of convection and detrainment of ice into cirrus
- Sensitivity of summer convective days as a proxy of climate change
- Documentation and publication, including presentation at internal and external meetings and in scientific journals

### **Necessary requirements for the candidates are:**

- Scientific studies with a master degree or diploma, preferably in meteorology, mathematics or physics
- Confident knowledge of English (Level B2 CEFR) in written and oral form
- Knowledge of German (Level B2 CEFR) in written and oral form

### **Further essential experiences:**

- Solid knowledge in the field of general meteorology
- Knowledge in the field of meteorological research and development
- Knowledge in the parameterization of physical processes
- Knowledge in convection
- Knowledge in microphysics
- Knowledge and experiences in analysis and visualization of complex and extensive datasets

- Knowledge and experiences with programming languages, e.g. FORTRAN or C, and UNIX
- Practical experiences with large-eddy models
- Practical experiences with weather and climate models
- Ability to think and act conceptually and target-oriented
- Motivation and initiative
- Skills in communication and cooperation (nationally and internationally)
- Creativity and ability to innovate
- Quick perception and motivation to learn
- Skills in the presentation of scientific results (orally and written)
- Ability to transfer complex theoretical approaches into practical methods

Experience in international collaboration is advantageous.

The post is rated according to EG 13 TvöD (see <http://oeffentlicher-dienst.info/tvoed/bund/>). The assignment of levels will be carried out according to personal experiences.



The Deutsche Wetterdienst supports work-family-balance and has been certified accordingly. Further information is available at: [www.beruf-und-familie.de](http://www.beruf-und-familie.de).

Part-time assignment is possible.

Women with equivalent skills and experiences will be given preference according to the law of equal opportunities.

Disabled applicants with equal competences will be given preference. Only a minimum of physical ability is needed.

If your interest has been sparked, please apply until **26.08.2016** via the Electronic Application Process on the website <https://ebvpbe.bsh.bvbs.bund.de/refcode>.

Here, please enter the reference code **20160992** .

Please upload your complete application documents (CV, master/diploma certificate) as an attachment in your candidate profile.

In addition, please maintain your candidate profile in "**Ausbildung/Abschlüsse**" your graduation, in "**Berufserfahrung**" your employer and in "**Sprachen**" your German and English language skills.

For administrative help please feel free to contact Frau Sabine Kopp, Tel.: +49 69 8062-4254.