

The Deutsches Geodätisches Forschungsinstitut (German Geodetic Research Institute) of the Technical University of Munich (DGFI-TUM) is accepting applications for a

PhD student (m/f) in the research area Satellite Altimetry

The determination of water level changes of the ocean and inland waters (lakes, reservoirs, rivers and wetlands) via satellite altimetry has been a primary research goal of DGFI-TUM for many years. The institute's data base comprehends the complete observation record of all altimetry missions that have been launched until now. After consistent preprocessing and relative calibration, these data are available for the joint analysis (multi-mission altimetry) and for the investigation of various phenomena in the ocean and the continental hydrosphere.

In the field of inland altimetry, DGFI-TUM works on advanced and new approaches for the estimation of inland water level time series and provides results for more than 650 targets for hydrological applications through the DAHITI web service (<http://dahiti.dgfi.tum.de>). Special focus is given to the classification of altimeter radar echoes (waveforms), to the estimation of precise water levels from the raw measurements using improved retracking methods, to the combination of different altimeter missions (consecutive as well as contemporaneous), and to the minimization of inter-mission biases. Moreover, in order to provide reliable accuracy information along with the time series, DGFI-TUM works on error estimation and error propagation.

In order to strengthen our team we are looking for a PhD candidate for altimetry research with specific focus on continental applications. In the frame of a third-party funded project, the candidate will work on methods to refine the estimates of absolute water levels for inland waters from multi-mission satellite altimetry. The project is part of the DFG research unit "Understanding the global freshwater system by combining geodetic and remote sensing information with modeling using a calibration/data assimilation approach" (GlobalCDA). The research unit comprehends a total of 9 interacting projects.

Your profile

- University degree (M.Sc./Diploma) in geodesy, hydrology, mathematics or a related discipline
- Advanced computer literacy and programming skills, preferably in Python
- Ability for independent research as part of a team, interest in data analysis, mathematical and statistical model development, presentation and publication of scientific results
- Good command of the English language (speaking and writing)

We offer

- Independent and challenging research in an internationally well connected team
- Flexible and family friendly working hours
- Fixed term contract for a period of initially 3 years, starting as soon as possible
- Salary according to employment category E13 (100%) of the collective labor contract TV-L
- Attractive office in the Residence of Munich at the Odeonsplatz

All PhD candidates of the TUM are obligated to participate in the TUM Graduate School (<http://www.gs.tum.de>) that offers attractive additional funds for research training, soft-skill programs and international mobility/stays abroad. The TUM aims to increase the number of women employees. Qualified women are therefore especially encouraged to apply. Handicapped applicants will be preferred if applicability and qualification are equivalent

Interested?

Do not hesitate to contact us for questions regarding the position. We are looking forward to receiving your application with relevant documents per mail or email no later than **February 15, 2018** to:

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