Deutsches Geodätisches Forschungsinstitut (DGFI-TUM)
Department of Aerospace and Geodesy
Technical University of Munich

Opportunities for Talents

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

# PhD position (m/f/d) in the research area Satellite Altimetry with focus on sea level variability in the coastal and shelf ocean

DGFI-TUM has long-standing experience with the analysis of observation data from satellite altimetry. The determination of sea surface changes and their interpretation in terms of ocean dynamics and climate signals has been a primary research goal for many years. In particular, DGFI-TUM is at the forefront in the determination of sea level, sea state and sea surface topography in challenging areas such as the coastal seas and polar oceans. The institute's database comprehends the complete observation record of all altimetry missions. Via its data portal OpenADB (http://openadb.dgfi.tum.de) DGFI-TUM provides homogenized observation data and various derived products.

In order to strengthen our team we are looking for a PhD candidate with specific focus on the spatial and temporal variability of sea level, driven for example by changes in ocean circulation. Your research will be strongly cross-linked with other institutions and integrated into the CIRCOS Project (*Circulation from In-situ and Remote-sensing data in COastal and Shelf ocean*) funded by the German Research Foundation (DFG). Embedded in the international satellite altimetry community, you will work in close contact with scientists from the Scripps Institution of Oceanography (USA) and the University of Buenos Aires (Argentina).

Your task will be to develop a methodology for improving gridded data sets of sea level variability from satellite altimetry in coastal/shelf regions, supported by data combination with other relevant variables (such as wind). The information on coastal sea level will help in better understanding the underlying processes and provides the basis for predicting climate change impacts. Moreover, it will enable better exploitation of marine resources and coastal management.

**Your profile**

- University degree (M.Sc.) in geodesy, oceanography, mathematics, informatics or related
- Previous experience in the analysis of geospatial data from remote sensing or geophysical models is requested
- Advanced computer literacy and programming skills, preferably in Python
- Ability for independent research as part of a team, interest in the 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

As a PhD candidate in this project, you will be affiliated with TUM's International Graduate School of Science and Engineering (*www.igsse.gs.tum.de*). IGSSE acts as the hub for innovative research across TUM departments and their international partners. PhD candidates within IGSSE are provided with attractive funds for equipment, research training, soft-skill programs and international mobility. 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 email. Interviews will be conducted starting **April 30, 2021**, until the position is filled.

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