

The Deutsches Geodätisches Forschungsinstitut of the Technical University of Munich ([DGFI-TUM](http://www.dgfi.tum.de)) is accepting applications for a

PhD position (m/f/d) in the research area **Satellite Altimetry** with focus on **ionospheric corrections**

DGFI-TUM has a 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 the polar oceans. The institute's data base comprehends the complete observation record of all altimetry missions that have been launched until now. 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 a specific focus on ionospheric corrections. The research is part of the IDA Project (*Improved Ionospheric Delay Correction for Satellite Altimetry*) funded by the German Research Foundation (DFG).

You will develop an innovative ionospheric delay correction that is of the best possible quality, long-term stable, and consistent over all surface types (open ocean, coastal and polar seas, inland waters). This will be achieved by combining existing model corrections and observations taken on board the altimeter satellite (dual-frequency altimeter and DORIS microwave observations) using innovative machine learning techniques as well as analytical model approaches. This new correction will enable improved water level estimations and the consistent long-term monitoring of various processes such as global and regional sea level change, ocean tides or variations in continental surface waters.

Your profile

- University degree (M.Sc.) in geodesy, mathematics, informatics, or related
- Experience in data analysis, statistics and machine learning
- 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

All PhD candidates of the TUM are required 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. TUM strives to raise the proportion of women in its workforce and explicitly encourages applications from qualified women. Disabled applicants will be preferred in case of equivalent suitability, aptitude and professional performance.

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 no later than **March 31, 2024** to:

Deutsches Geodätisches Forschungsinstitut der Technischen Universität München (DGFI-TUM)

Univ.-Prof. Dr.-Ing. Florian Seitz

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As part of your application, you provide personal data to the Technical University of Munich (TUM). Please view our privacy policy on collecting and processing personal data in the course of the application process pursuant to Art. 13 of the General Data Protection Regulation of the European Union (GDPR) at <https://portal.mytum.de/kompass/datenschutz/Bewerbung/>. By submitting your application you confirm to have read and understood the data protection information provided by TUM.