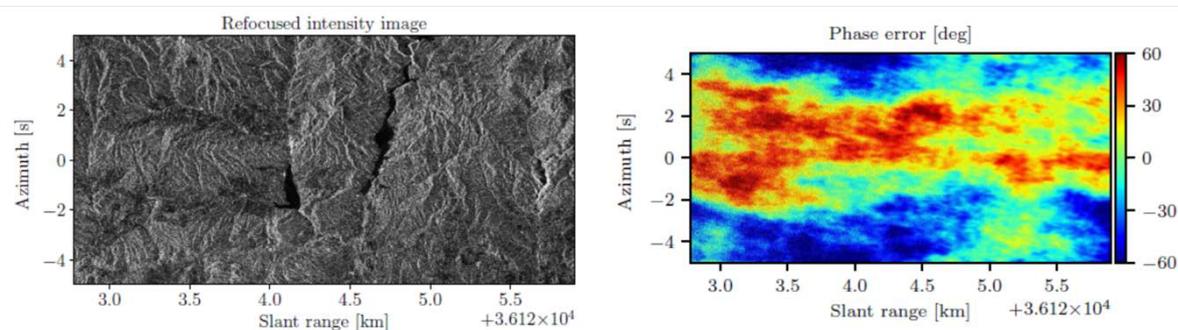
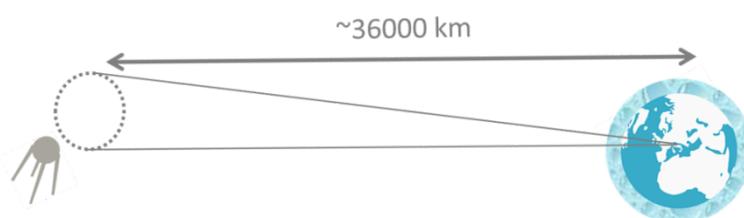


Course paper / Master Thesis, Student placement

Efficient Autofocus Techniques in Geostationary SAR Observations

Student Telecommunications Engineering, Electrical Engineering, Computer Science, Physics, Mathematics



GEO SAR surveys typically involve the integration of very long apertures and are very much affected by temporal and spatial variations of atmospheric propagation.

Starting date

Immediate

Duration of contract

6 months

Remuneration

According to German TVöD 05

Your mission:

Geostationary SAR missions offer the possibility of daily monitoring of continental areas, but are typically affected by significant changes in the propagation path within the synthetic aperture due to long integration times. The proposed work will consist of the analysis and development of efficient autofocus techniques for the recovery of residual propagation errors in GEO SAR missions, which combines the understanding of propagation physics with advanced signal processing techniques. The work will be validated with use of real data scenarios and will be conducted in the SAR Missions Group. A solid background in signal processing or programming is expected.

Your qualifications:

- experience with scientific programming languages (e.g., Python or C)
- good knowledge of English (written and oral)
- knowledge of SAR theory and processing is beneficial

Your benefits:

Room for developing creative tasks and abilities in a dynamic and challenging hi-tech environment. Disabled applicants with equivalent qualifications will be given preferential treatment.

Location: DLR Oberpfaffenhofen (Germany)

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