

# Radar remote sensing of snow drifts around icebergs in Antarctica

- Icebergs embedded in fast ice in Antarctica are surrounded by snow drifts that show characteristic radar signatures. The radar signatures depend on the thickness of the snow and the ice and change seasonally with increasing snow thickness and the progression of flooding during summer.
- The goal of this MSc thesis is to observe the characteristics (snow drift geometry/length/width) and seasonal changes of snow drifts around icebergs in different regions of Antarctica with radar images, to derive information about different snow climate conditions.
- Processing and use of satellite SAR data (Sentinel-1 and TerraSAR-X) in different regions of Antarctica. Validation with airborne laser scanner data from Atka Bay, near the German Neumayer station.
- Requirements: Good programming and English language skills, good grades, (experience with working with large geographic data sets is of advantage)

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