

# Opportunities and Challenges of GNSS Reflectometry in Backscatter Mode

- GNSS-R has to-date focused on forward-scattered signals but recent work has identified the potential of a back-scatter mode
- Raw data has been collected from TechDemoSat-1
- Potential applications:
  - Ship detection
  - Ice Edge Detection
  - Multiple geometries help separate parameters for soil moisture sensing.
- Challenges:
  - Specular intrusions (due to GNSS spreading codes)
  - Spatial resolution
- A tool for predicting intrusions has been developed and tested.

