

SENTINEL-6: POTENTIAL FOR OCEAN SWELL DETECTION

Effect of on-board data compression on
geophysical parameter retrieval, a data-driven analysis

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RESEARCH OBJECTIVES

- To assess the impact of on-board data compression on the retrieval of swell wave parameters from FFSAR (Fully Focused Synthetic Aperture Radar) spectra obtained from the Sentinel-6 altimeter

HOW NOR SUPPORTED THE RESEARCH

- My research heavily relies on the use of carefully processed FFSAR data and through NoR, I could obtain the support needed to access the Earth Console FFSAR processing services
- I made use of on-demand bulk processing services, this allowed me to save storage space and processing time
- My requests were spread over time and always welcomed with fast and efficient user support by competent engineers
- I had the chance to provide feedback to the service provider directly and thereby influence the processing on-the-go

ADVANTAGES OF USING AN EXTERNAL PROCESSING SERVICE

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RESEARCH BENEFITS

- Oceanic swell waves are an important element to characterize the sea state nearby coasts exposed to this phenomenon
- This research is part of a bigger research. The main interest point is the potential that FFSAR spectra have to infer information on swell wave parameters which can usually not be derived from conventional altimetry data processing