

Showcasing Fundamental Data Records for Altimetry

What

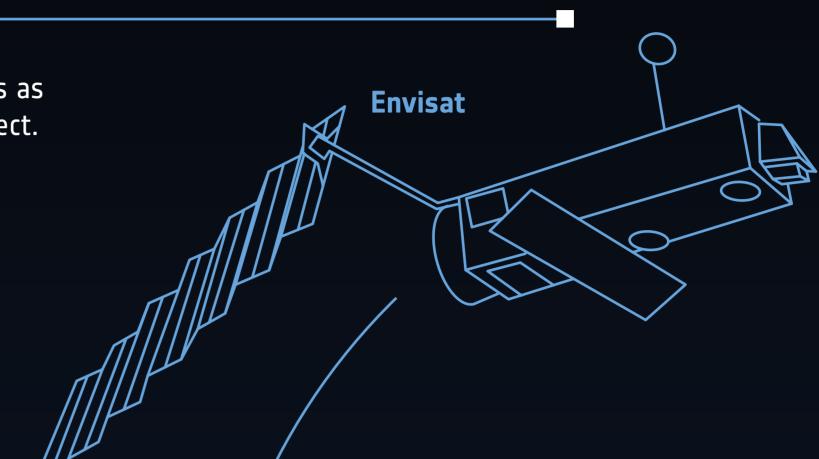
ESA has developed a comprehensive suite of Earth system data records as part of the Fundamental Data Records for Altimetry (FDR4ALT) project. Fundamental Data Records (FDRs) are long-term records containing uncertainty-quantified, calibrated and geo-located multi-instrument/multi-platform satellite sensor data

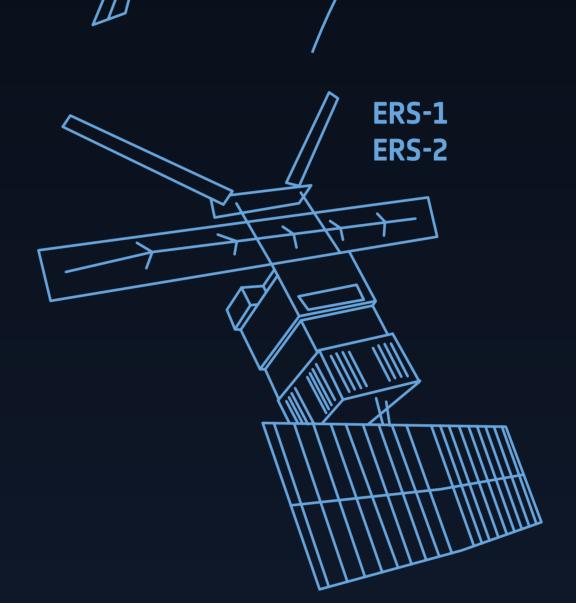
FDRs serve as a foundation for generating higher-level thematic data products and essential climate variables. They consolidate data from different missions in one collection of data products

Mission and instrument

These FDR4ALT products exploit measurements acquired by the altimeter and radiometer instruments onboard ESA's legacy Heritage Space remote sensing satellites

- the ERS-1, ERS-2 and Envisat missions







Coverage

Temporal	3 August 1991 - 8 April 2012
Spatial	90 N, -90 S, -180 W, 180 E

FDR4ALT data

that were acquired by the altimeter and radiometer instruments onboard ESA's Heritage Space remote sensing satellites

Products

The FDR4ALT initiative has developed altimeter and radiometer Level-1 Fundamental Data Records and Thematic Data Products (Level-2P geophysical parameters), available in NetCDF format. Highlights include:

- Improved calibration and instrument characterisation
- Supplementary instrumental parameters describing the altimeter operating status and configuration
- Advanced algorithms to ensure data quality
- Long-term consistency
- Wide range of thematic data products
- Uncertainty-quantified observations

Applications



Inland waters



Sea ice



Ocean and coastal topography



Greenland and Antarctica land ice



Ocean waves



Atmospheric studies

Data access

The datasets are openly available for download to anyone with an ESA EO Sign In account, via the ESA Online dissemination service. For further details on the specific datasets, accessibility, and user registration, please visit the ESA FDR4ALT dataset description pages