



EMODnet

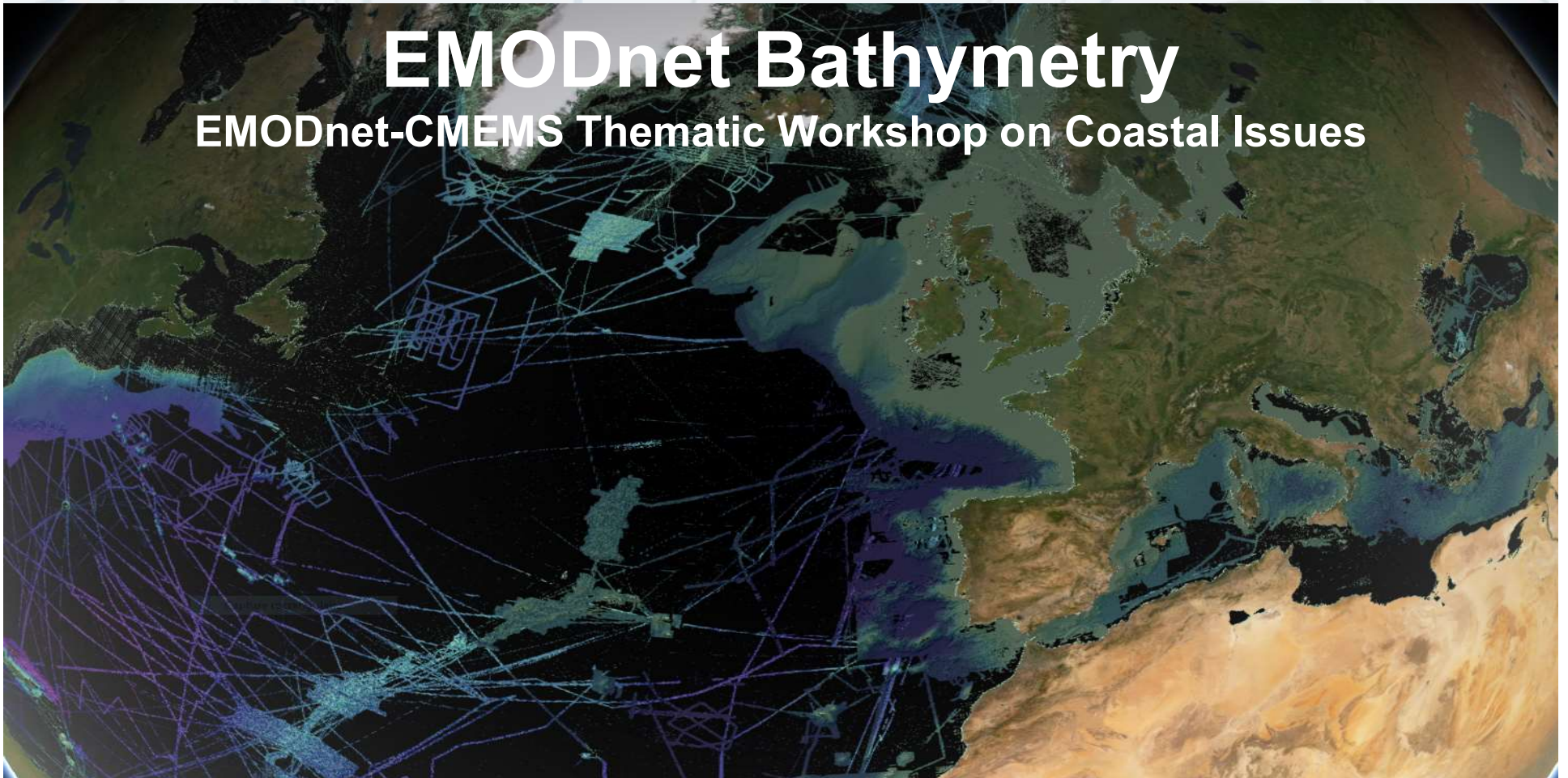


European Marine
Observation and
Data Network

Your gateway to marine data in Europe

EMODnet Bathymetry

EMODnet-CMEMS Thematic Workshop on Coastal Issues

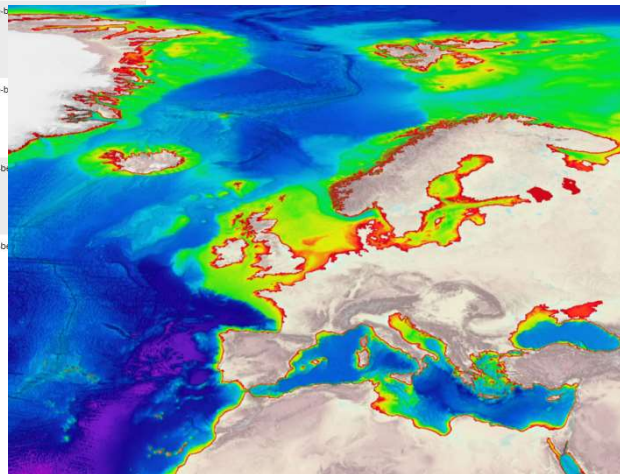


EMODnet Bathymetry: Data and Products

- **2 Catalogues** for Survey Data sets and Composite DTM
 - ~ **27 000** INSPIRE compliant metadata using the SeaDataNet common vocabulary

The screenshot shows the EMODnet Bathymetry web interface. The header includes the EMODnet logo and the text "BATHYMETRY Understanding the topography of the European seas CDI Data Discovery and Access Service". Below the header is a navigation bar with options like "Datasets(0)", "Proceed to basket", "Reset basket", "Timeseries on", "Export", "Store query", "Summary", "Show map", and "Help". The main content area features a search bar and a table of data sets. The table has columns for "Data set name", "Disciplines - Topics", and "Instrument / gear type". The table lists several data sets, including "S196900100-016", "S196900100-014", "Zeegebied_Havens_NPT_HAV", and "Zeegebied_Havens_BKB_HAV". The "Disciplines - Topics" column for these data sets includes "Marine geology", "Gravity, magnetics and bathymetry", and "Terrestrial". The "Instrument / gear type" column includes "single-b" and "multi-b".

#	Data set name	Disciplines - Topics	Instrument / gear type	Show
<input type="checkbox"/>	S196900100-016	Marine geology > Gravity, magnetics and bathymetry Terrestrial > Terrestrial	single-b	
<input type="checkbox"/>	S196900100-014	Marine geology > Gravity, magnetics and bathymetry Terrestrial > Terrestrial	single-b	
<input type="checkbox"/>	Zeegebied_Havens_NPT_HAV	Marine geology > Gravity, magnetics and bathymetry Terrestrial > Terrestrial	multi-b	
<input type="checkbox"/>	Zeegebied_Havens_BKB_HAV	Marine geology > Gravity, magnetics and bathymetry Terrestrial > Terrestrial	multi-b	



- A **Digital Terrain Model** for European seas available in various formats (ASCII, NetCDF, XYZ, RGB GeoTiff, ESRI ASCII, QPS SD) and services (WMS, WFS, WMTS, WCS)



Satellite Derived Bathymetry

Data source:

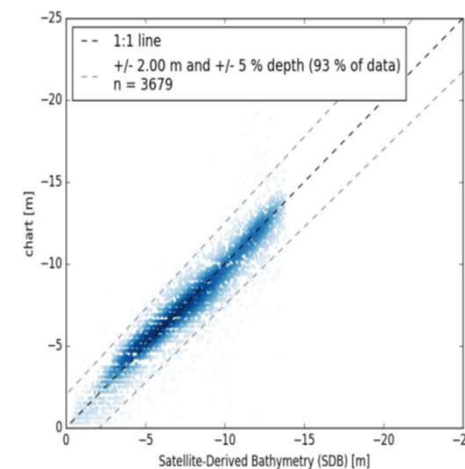
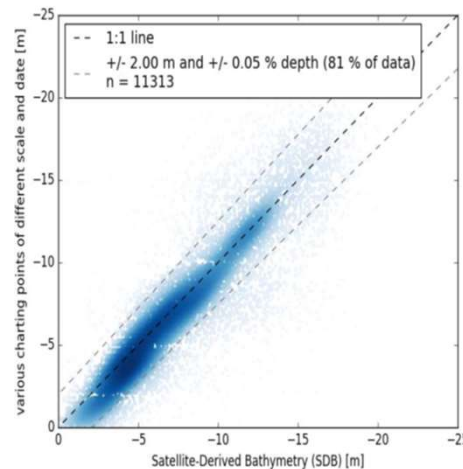
Multispectral optical sensors from ESA's Sentinel-2 and NASA's Landsat 8 data

Processing:

Analysis based on **EOMAP***'s physics SDB concept (not to be compared with empirical concepts).
Analysis were based on multi-image analysis.

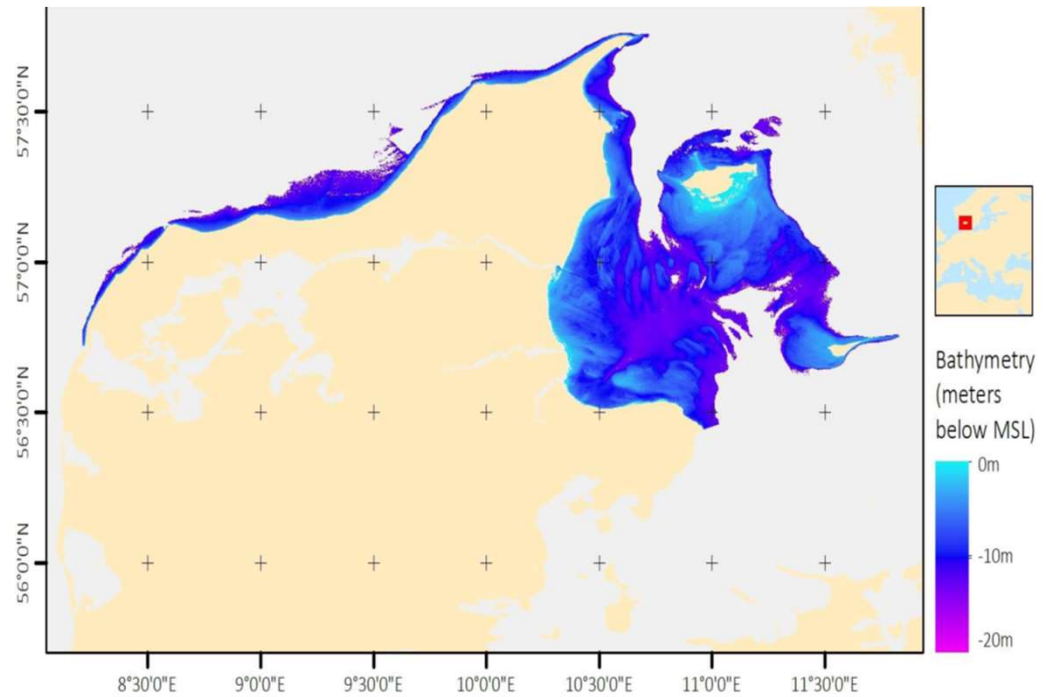
Quality control:

Comparison against sounding depth from charts, survey data when accessible and QA/QC procedures by data analysts.

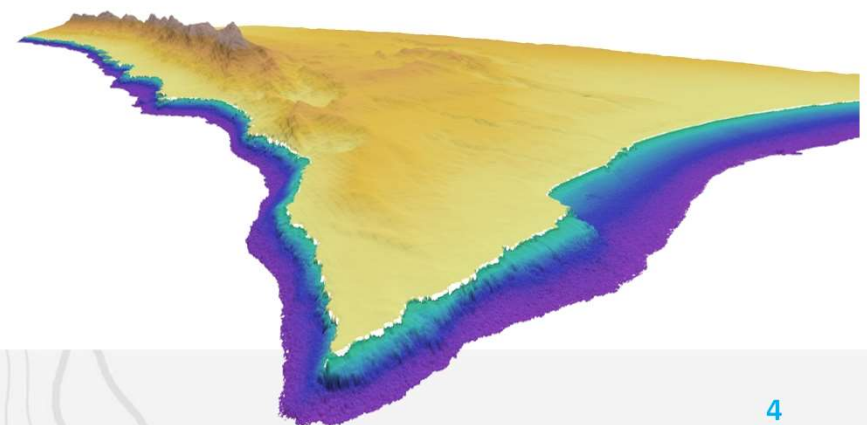


**EOMAP is a European SME specialised and leading in aquatic remote sensing.*

Satellite Derived Bathymetry (coverage)



Country	sq km of Satellite-Derived Bathymetry coverage
Channel Islands	290 sq km
Croatia	849 sq km
Cyprus	667 sq km
Denmark	6,254 sq km
Greece	3,183 sq km
Italy	989 sq km
Lybia	66 sq km
Spain	1,498 sq km
Total	13,796 sq km



Satellite Derived Coastline

Data Sources:

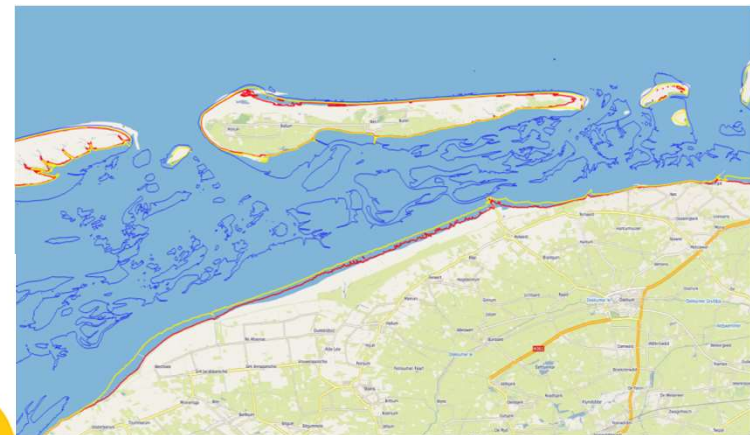
- Multispectral images from ESA's Sentinel-2 and NASA's Landsat 8 for entire Europe
- Global Tide and Surge Model (GTSM, 1.25km resolution along EU coasts)

Processing:

- Derive land-water frequencies for multi-year image stacks (1 660 524 image tiles, almost 1 Petabyte)
- Derive sea level statistics from multi-year GTSM hindcast

Products:

- Coastline at low-water, mean sea level and high-water and intertidal areas in Europe.
- Available through EMODnet-Bathymetry portal



Example of intertidal areas and SDC in Dutch Wadden Sea