



## EMODnet Bathymetry in MACHC area

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<https://emodnet-bathymetry.eu/>

# Bathymetric metadata

- Each polygon/poly-line shows the bathymetric coverage/location
- Associated Metadata (INSPIRE compatible, ISO 19115- based upon an unified and agreed thesaurus – BODC held )
- Source data held by the data provider, who decide how to provide its dataset to the final user

## WHAT?

Data set name: vaklodng NH-SK  
Discipline: Marine geology  
Terrestrial  
Parameter groups: Gravity, magnetics and bathymetry  
Terrestrial  
Discovery parameters: Bathymetry and Elevation  
GEMET-INSPIRE themes: Oceanographic geographical features  
Abstract: Bathymetric data extract from bathymetric database  
Data format: XYZ ASCII **Version 1.0**  
Data size: 0.1  
Data set creation date: 20140613

## WHERE?

Map



GML id

GML objects

Datum

Measuring area type

Water depth (m)

Depth reference

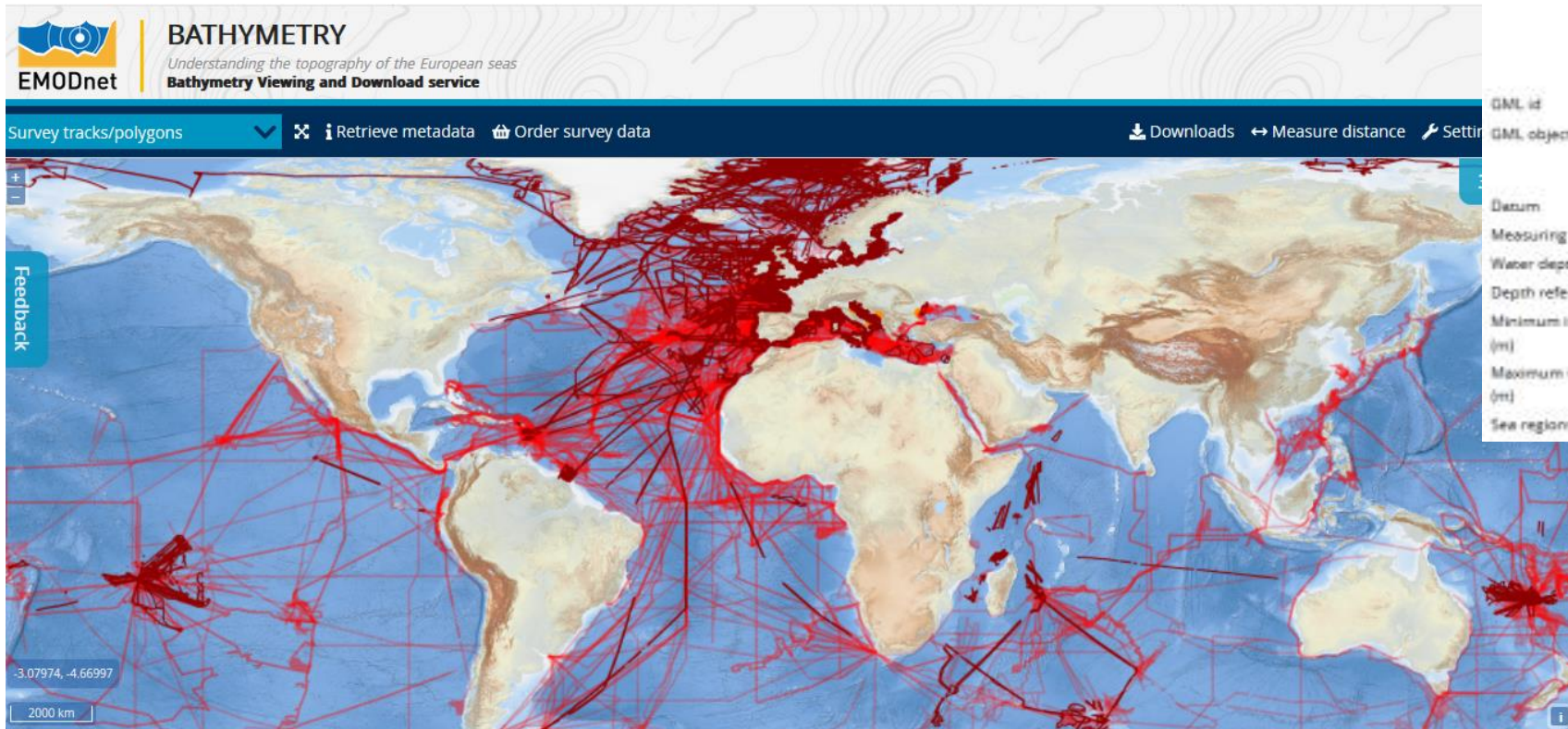
Minimum instrument depth (m)

Maximum instrument depth (m)

Sea regions

msD1

Name	Description
RA16522_6132	coverage
Datum	World Geodetic System 84
Measuring area type	surface
Water depth (m)	-9999
Depth reference	Normaal Amsterdams Peil
Minimum instrument depth (m)	-9999
Maximum instrument depth (m)	-9999
Sea regions	North Sea



# CDI and CPRD catalogues

**BATHYMETRY**  
Understanding the topography of the European seas  
CDI Data Discovery and Access Service

NEW SEARCH | REFINER SEARCH | SEARCH RESULTS | SUMMARY | TIMESERIES

Filter search: 100 | 1000 | 10000 Found 30562 | Show (1 - 100) | First | Prev | Next | Last

EXPORT RESULT | SAVE QUERY

INPUT FIELDS

Free search

Date search: From yyyyymmdd To yyyyymmdd

Geographic search: North | West | East | South | Search within bounding box

SEARCH | RESET

SEA REGIONS: Atlantic Ocean (16337) | North Atlantic Ocean (16270)

Dataset name	Country originator	Start date	Instrument / gear type
<input type="checkbox"/> Celtic Explorer Bathymetry CE0701 Kerry 14m Globe dtm	Ireland	20070417	multi-beam echosounders   Differential Global Positioning System receivers
<input type="checkbox"/> Celtic Explorer Bathymetry CE0702 Kerry 14m Globe Dtm	Ireland	20070516	multi-beam echosounders   Differential Global Positioning System receivers
<input type="checkbox"/> Celtic Voyager Bathymetry CV0901 Shannon 14m Globe Dtm	Ireland	20090318	multi-beam echosounders   Differential Global Positioning System receivers
<input type="checkbox"/> Celtic Voyager Bathymetry CV0902 Dingle 5m NetCDF	Ireland	20090515	multi-beam echosounders   Differential Global Positioning System receivers
<input type="checkbox"/> Celtic Voyager Bathymetry CV0902 Kerry 14m Globe Dtm	Ireland	20090515	multi-beam echosounders   Differential Global Positioning System receivers

- Circa 41 315 surveys entries (CDI – leadline, singlebeam, multibeam, Lidar)
- Circa 274 Composite DTM (CPRD – eg MAREANO, Israel NBS, IBCAO, Satellite Derived Bathymetry, ...)

**BATHYMETRY**  
Understanding the topography of the European seas

Free search | CONTACT | SUBMIT DATA

APPROACH | METADATA & DATA | DATA PRODUCTS | NEWS | PROMOTION | PARTNERS | HELPDESK

## Sextant Catalogue service

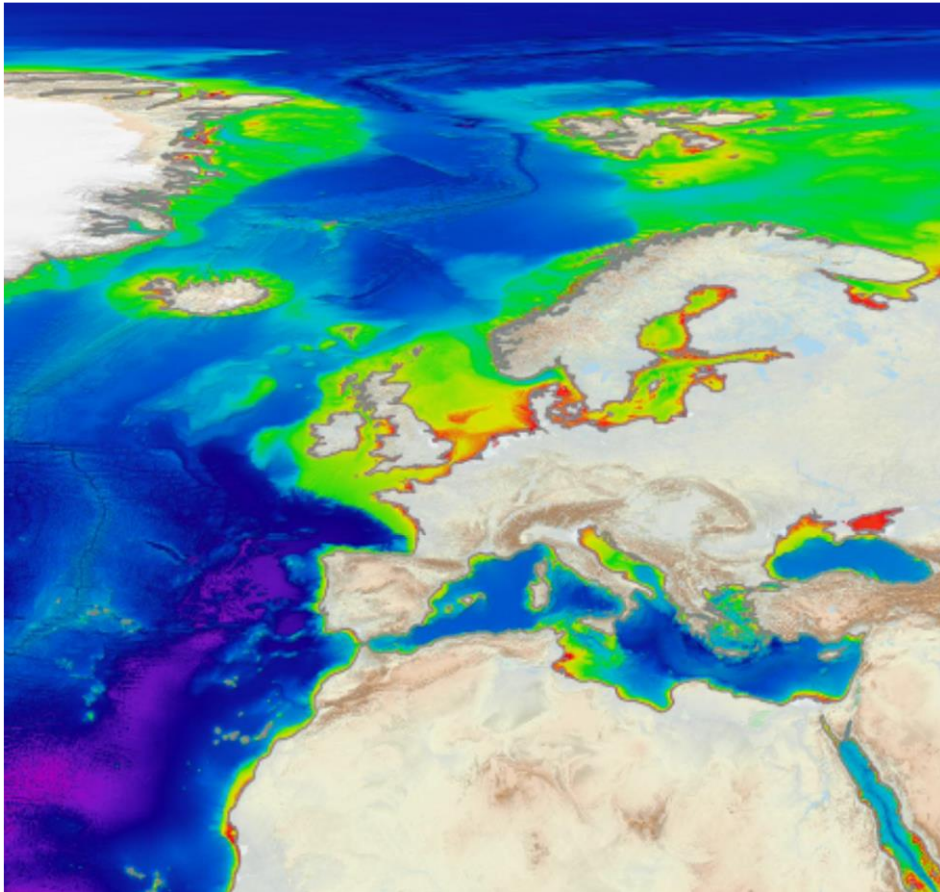
Search ...

Results 1 to 20 on 116 : 20 by page | Sort by: Popularity

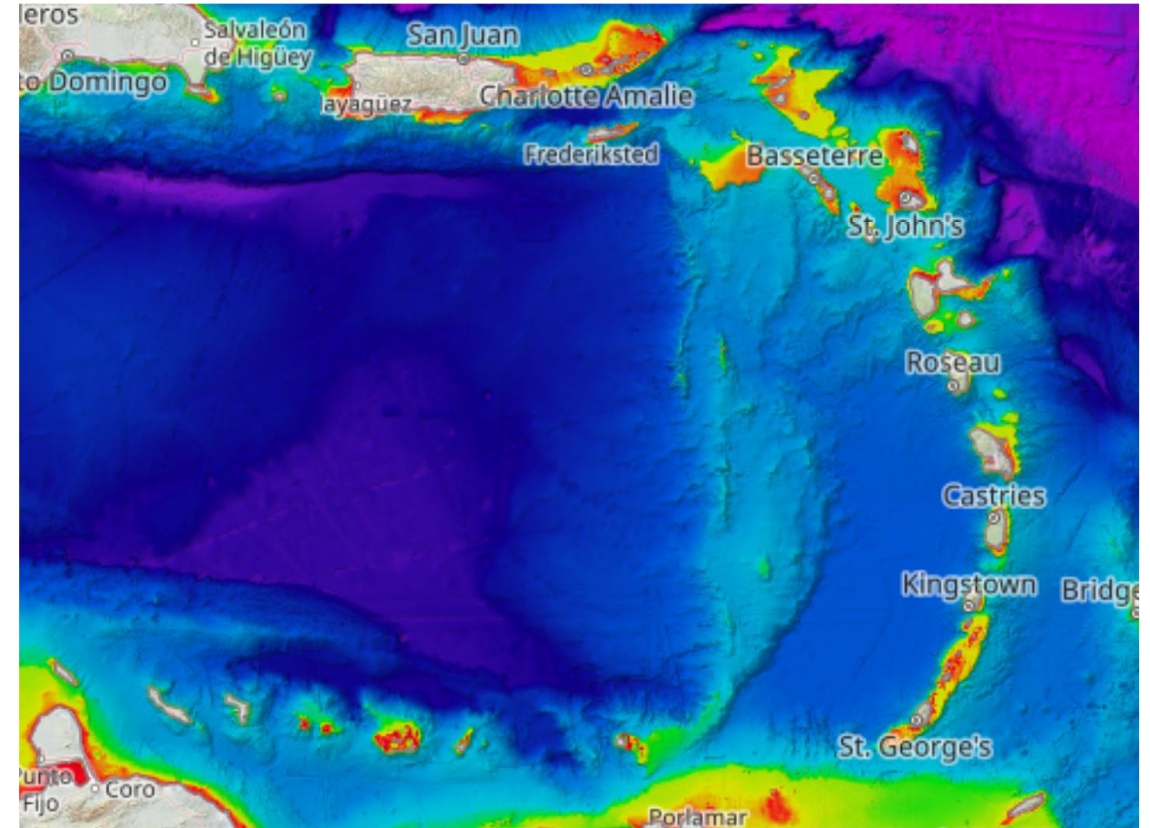
- Baltic Sea Bathymetry Database**  
The Baltic Sea Bathymetry Database (BSBD) gathers and distributes water depth data & bathymetry for the areas of the Baltic Sea countries. Measuring bathymetry is mostly a national duty for each country, primarily because the production of nautical charts lies ...
- 574\_EMODNET REGIONAL DTM OF NETHERLANDS CONTINENTAL SHELF**  
DTM compiled for inclusion into the EMODnet hydrography dataset. Original data was received from Netherlands Hydrographic Service at a source resolution of approximately 125 meters. An area north of the northern deep water routes on the Dutch continental shelf was not part of the...
- 145\_DTM\_CNR-ISMAR-22\_Adrionic\_singlebeam**  
Bathymetry of the Adriatic Sea compiled by CNR-ISMAR for the Italian side of the Adriatic Sea to illustrate the main geological features of the Western Adriatic Basin using a single beam echosounder.
- 486\_Bathymetry\_Bay of Biscay - Channel (DTM resolution : 1000m ; ed. : 2008)**  
The Digital Terrain Model of the Bay of Biscay and of the Channel is the result of the processing of a compilation of single and multibeam echosounder data, of DTMs and of chart contours produced before 2008 for hydrodynamic modeling.
- 353\_291002-Catalan Margin**  
Composite DTM of Catalan margin at approximately 250m of resolution
- 543\_EMODNET REGIONAL DTM FOR NORWAY AREA OF INTEREST**  
DTM data source was created by taking contour lines and spot soundings from Norwegian Electronic Navigational Charts. NOTE: Data east of approx.
- 353\_291105 - Cantabric Sea**  
DTM of continental margin of Cantabric Sea, approximately 200 m resolution. This DTM includes the whole area from coast
- 3005\_Joint Israel National Bathymetric Survey Data (NBS) at 0,25 minutes resolution**  
Composite DTM of the Israel National Bathymetric Survey at 0.25 minutes resolution

# EMODnet Bathymetry DTM

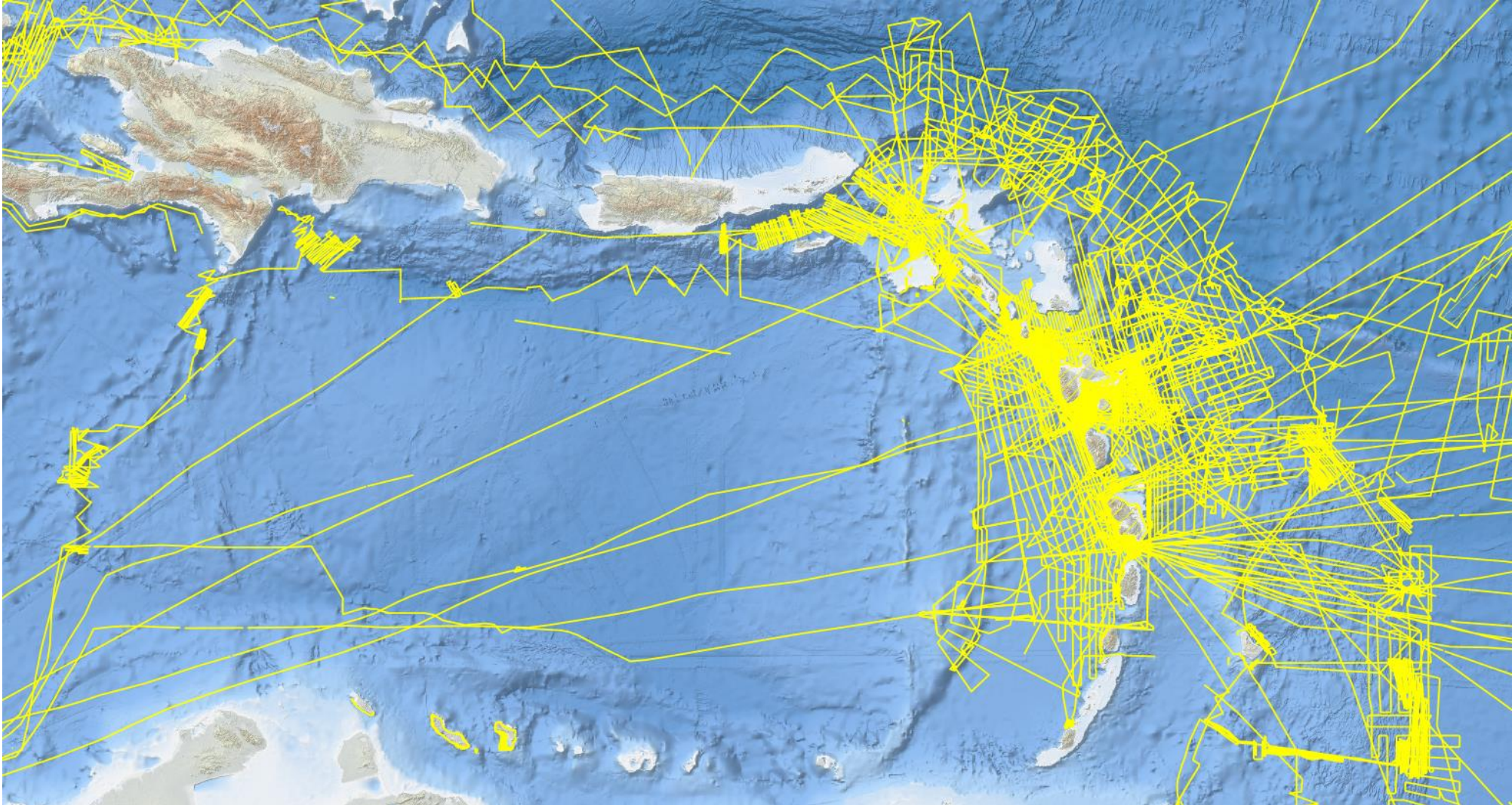
- 1/16 arc-minute (approx. 100m)
- Built from data from partners (HO, Oceanographic centers, private partners)
- DOI, free of charge, free to use
- Available at MSL and LAT



<http://doi.org/10.12770/18ff0d48-b203-4a65-94a9-5fd8b0ec35f6>

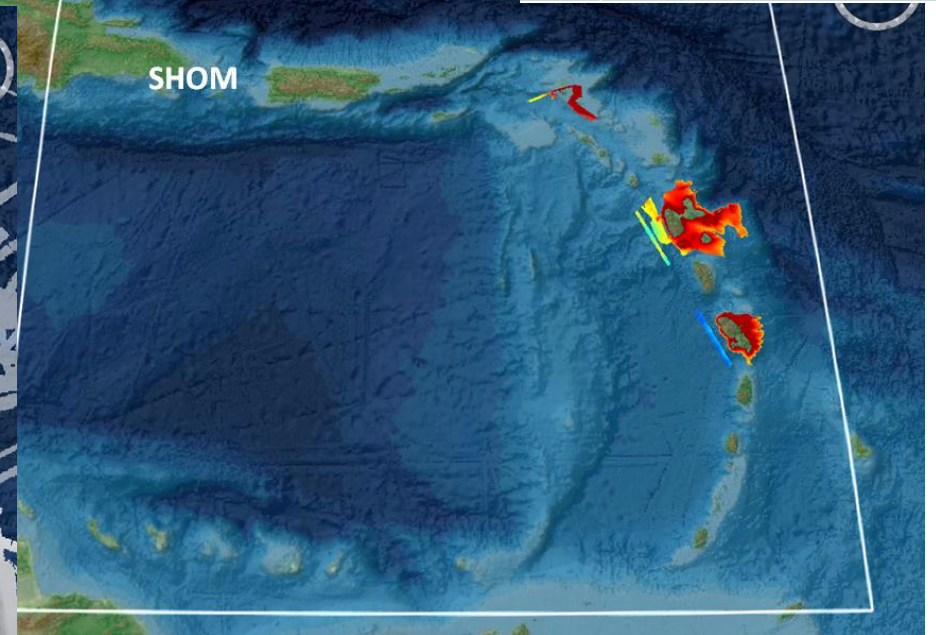
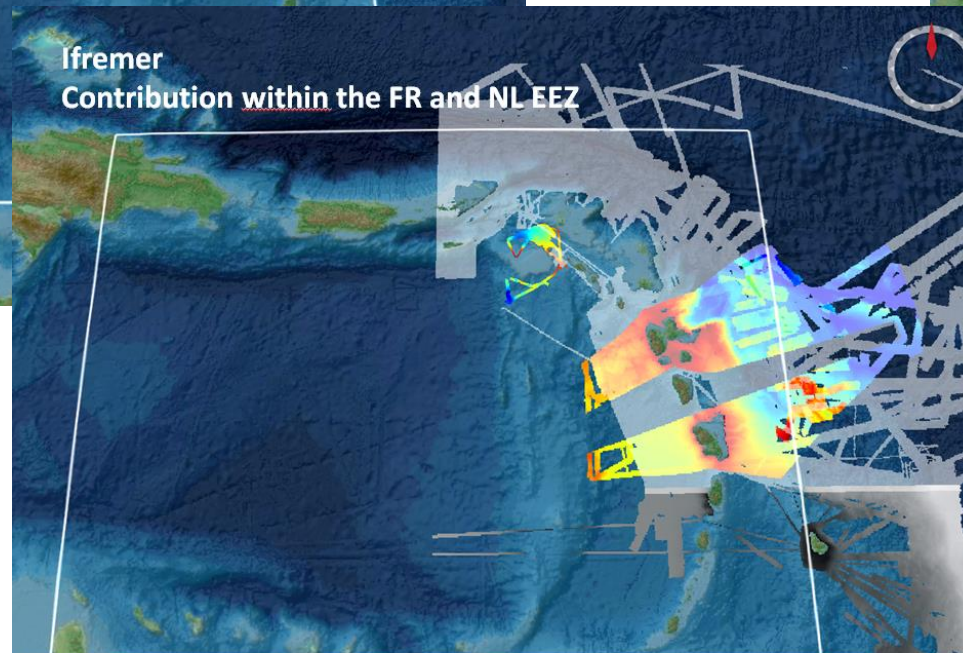
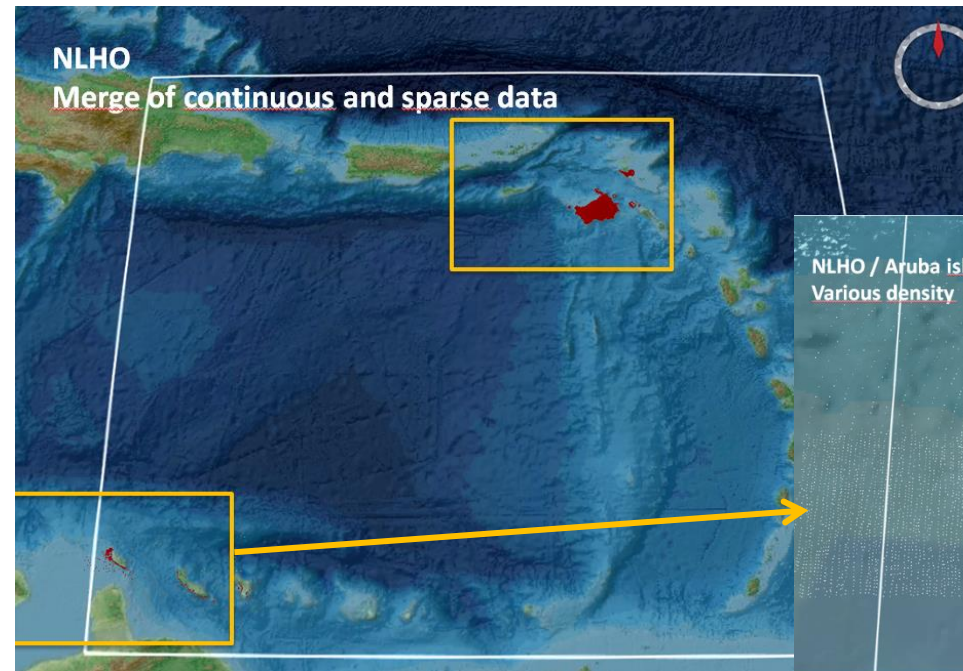
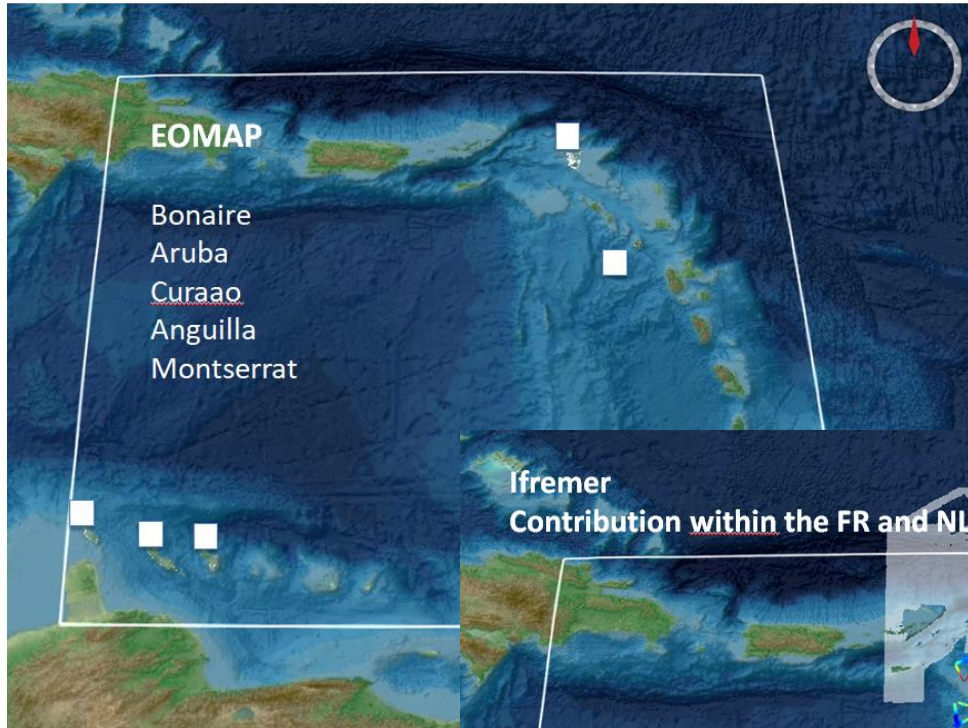


# Singlebeam/Multibeam tracklines from EU data centers



# EMODnet bathymetry contribution

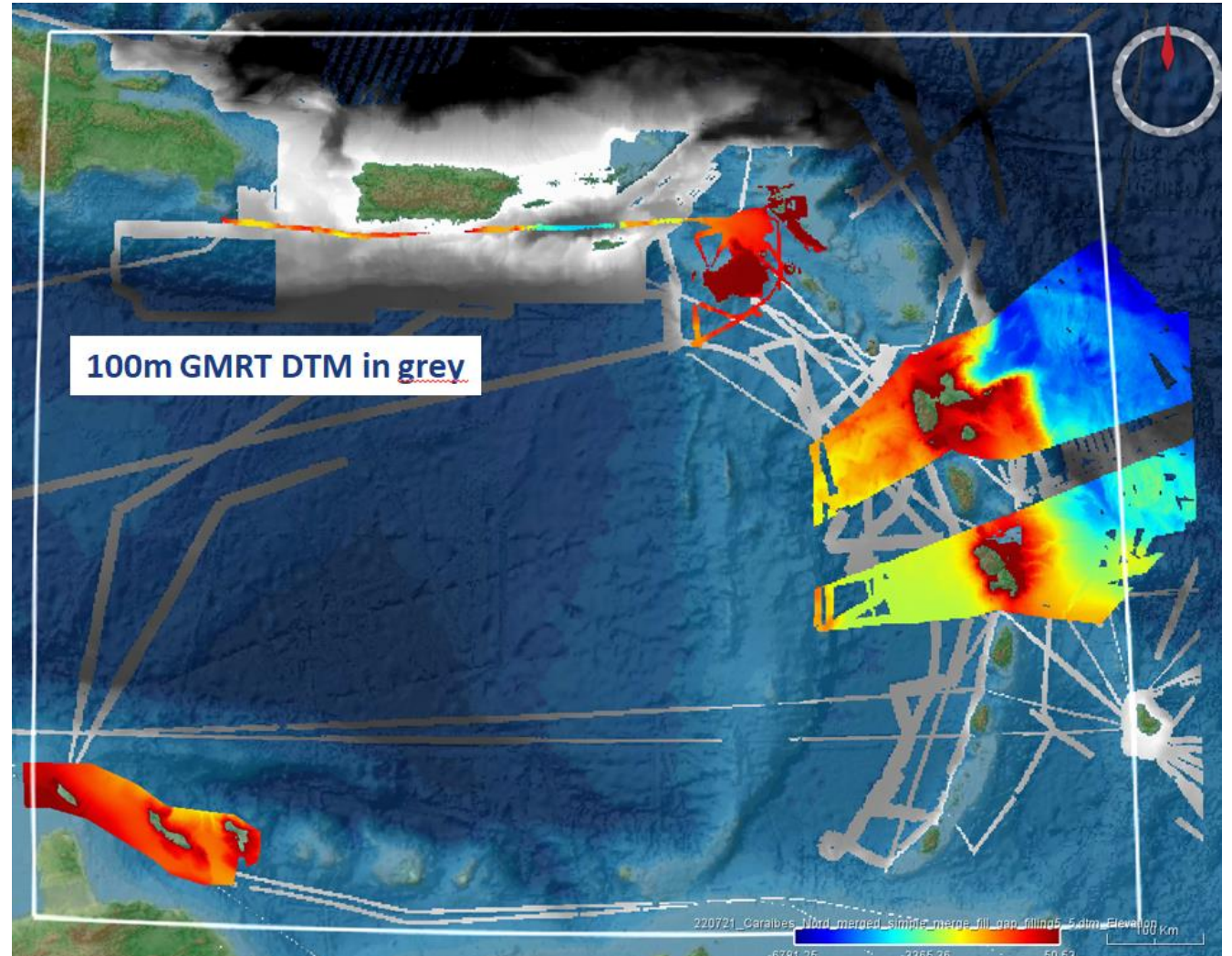
## SDB, Multibeam and Singlebeam



Grey colored DTM :  
Ifremer Géosciences Marines, TALBOT Sophie, LOUBRIEU Benoît. **Bathymétrie - Arc Antillais (synthèse, 2020)**. Ifremer(Ifremer)  
<http://dx.doi.org/10.12770/915d04a1-220f-4784-934c-c269a515e5a9>

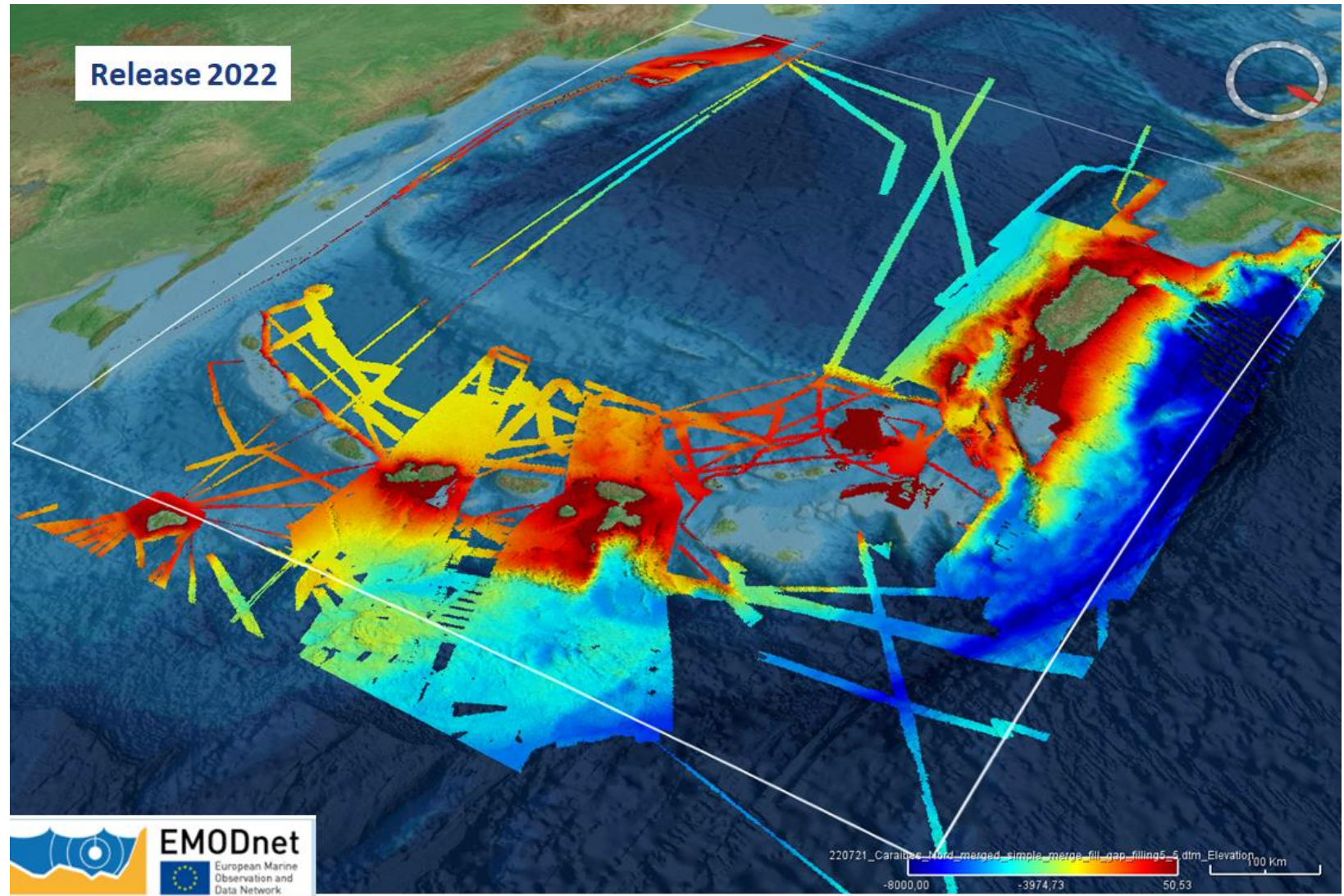
# Aggregating datasets

- Contribution from EMODnet partners : areas covered in colors (1/16' resolution)
- Existing data in the area : extraction from the GMRT webservices (1/16' resolution). Areas in grey
- Merging by deconflicting and / or mixing grids, on the basis of resolution, quality and age.



# Final product

- View of the 1/16 minute DTM, before filling by the Gebco grid.





# Use of the Quality layer

European Commission | EMODnet Map Viewer

EN English

**Legend**

**Age**

- undefined
- >30 years
- 10 - 30 years
- 5 - 10 years
- < 5 years

5 km    -62.99164, 17.63989

EMODnet  
European Marine Observation and Data Network

# International collaboration: IHO, GEBCO and EMODnet

- Inventory / production of bathymetric survey metadata (ISO based + vocabulary and associated footprint)
  - > made available as web services to DCDB
- Produced EMODnet bathymetry grid
  - > incorporated into the GEBCO product (using remove-restore procedure)
- Reciprocally, GEBCO embedded data to be used in the EMODnet grid to fill gaps

