



EMODnet Bathymetry

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GEBCO TSCOM SCRUM meeting, Viña del Mar - Chile



General overview

- Ongoing in 3 consecutive projects since 2009 with expanding consortium (at present >30 partners)
- **Overall objective:** to bring together bathymetric surveys of European seas and to produce, publish and serve a harmonised and medium resolution Digital Terrain Model of all European seas

PARTNERS



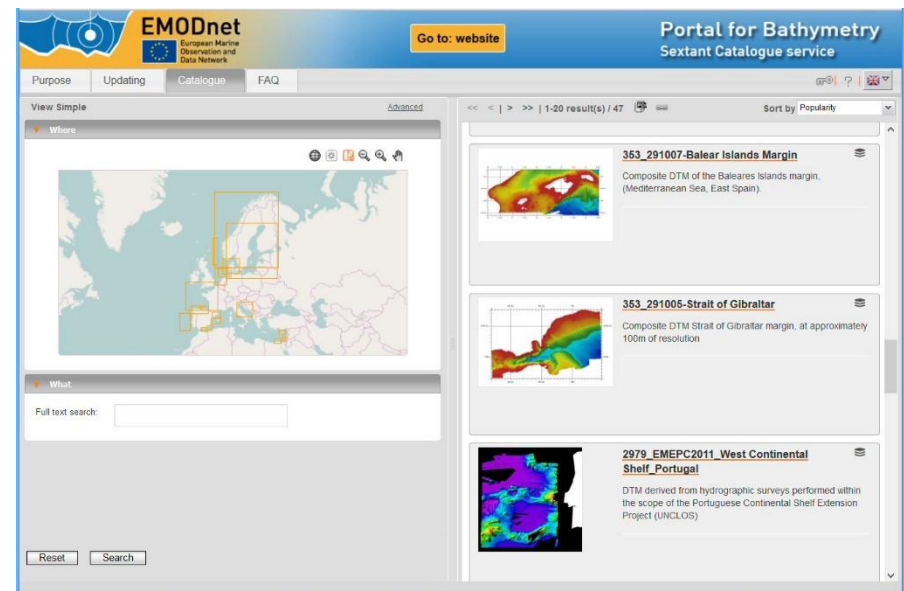
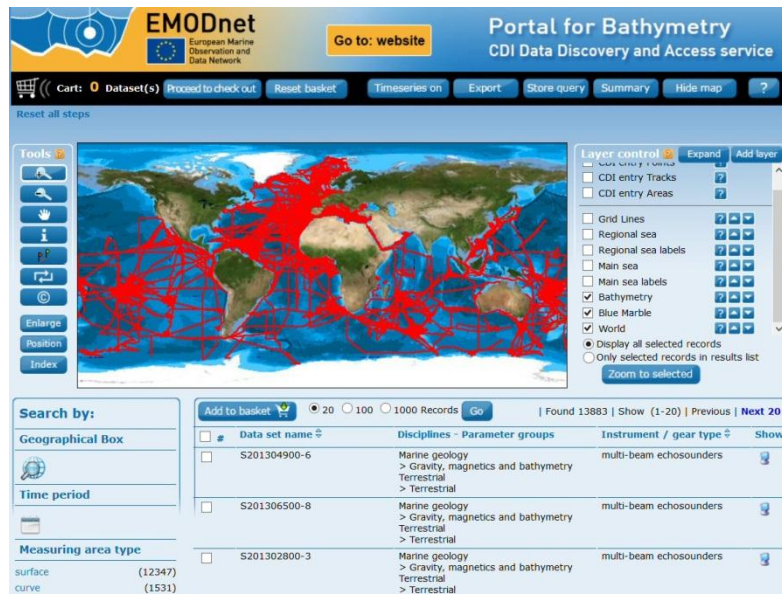
- Consortium consisting of bathymetric and IT experts and data providers from National Hydrography Services, marine research institutes and SME's

ASSOCIATE PARTNERS

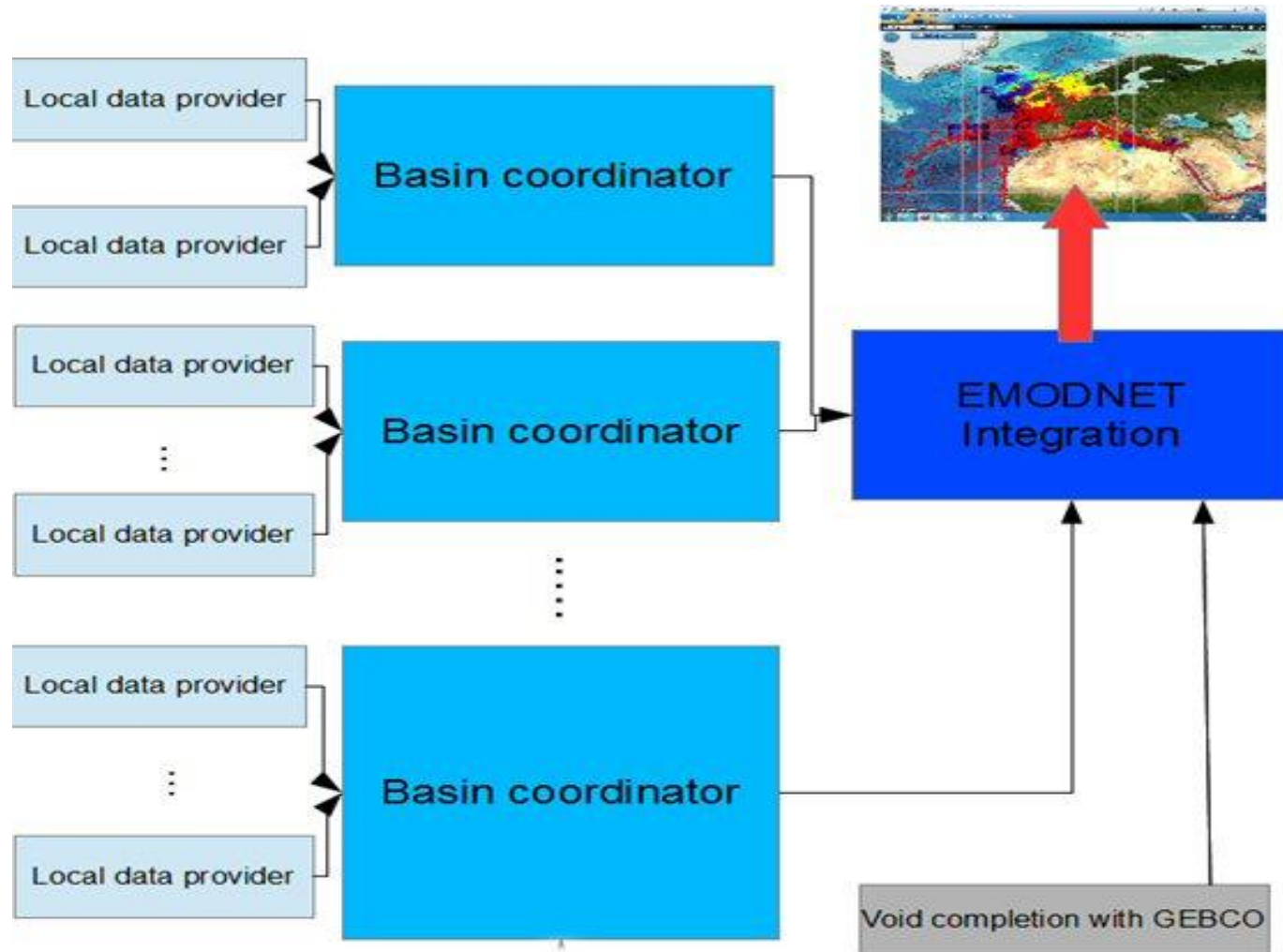


Data gathering results

- Up till today, **14791** survey CDI metadata records from **27** data centres and **169** data originators **from 1816 to 2016** have been collated and imported into the dedicated EMODnet Bathymetry CDI data discovery and access service. This service was launched in May 2010 and has been upgraded over time with extra functionality
- The SeaDataNet Data Products Catalogue service (Sextant) gives **78** metadata records about composite DTMs that have been used next to survey data sets



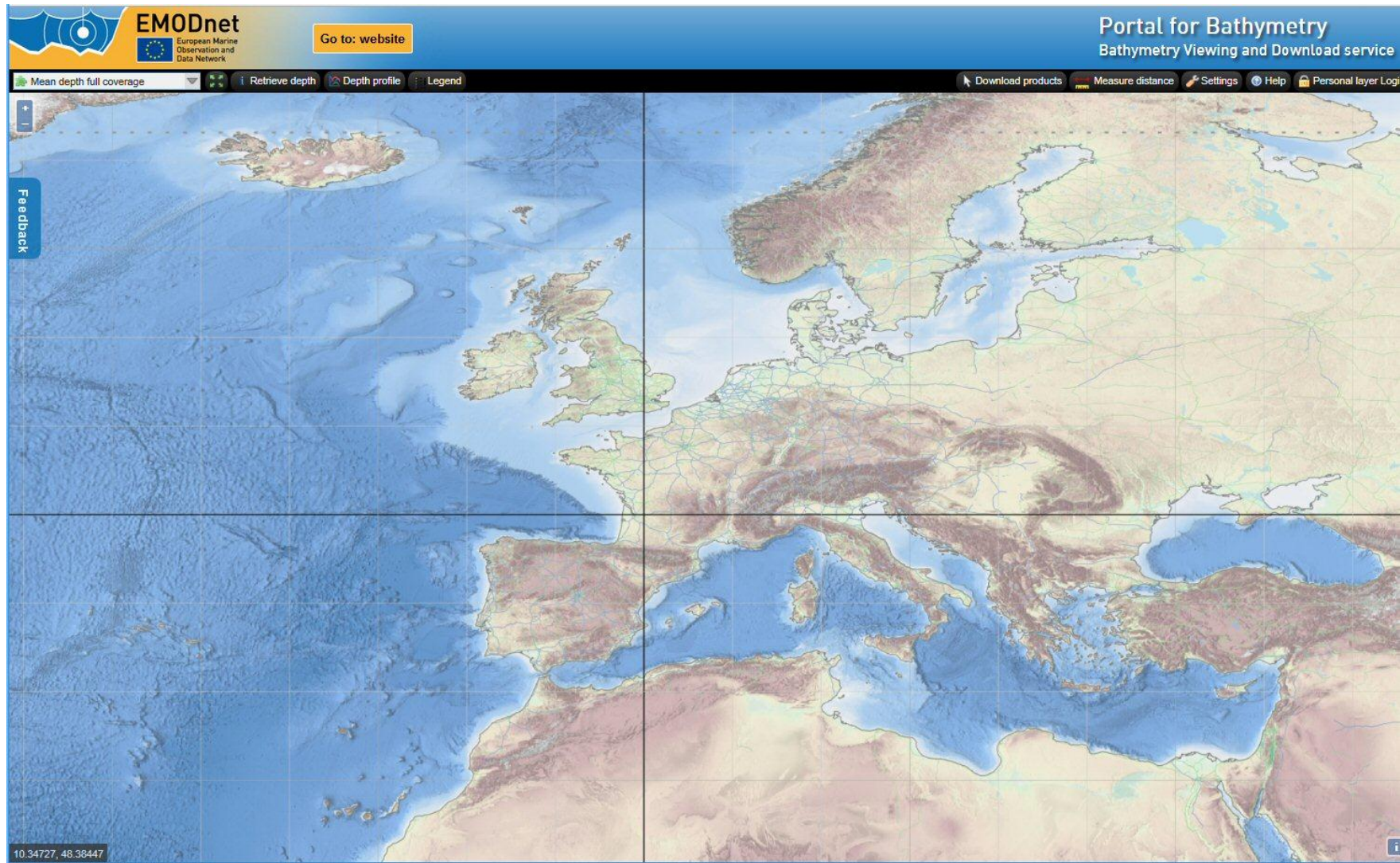
Distributed knowledge implies distributed contribution



From local data to regional DTMs to EMODnet DTM

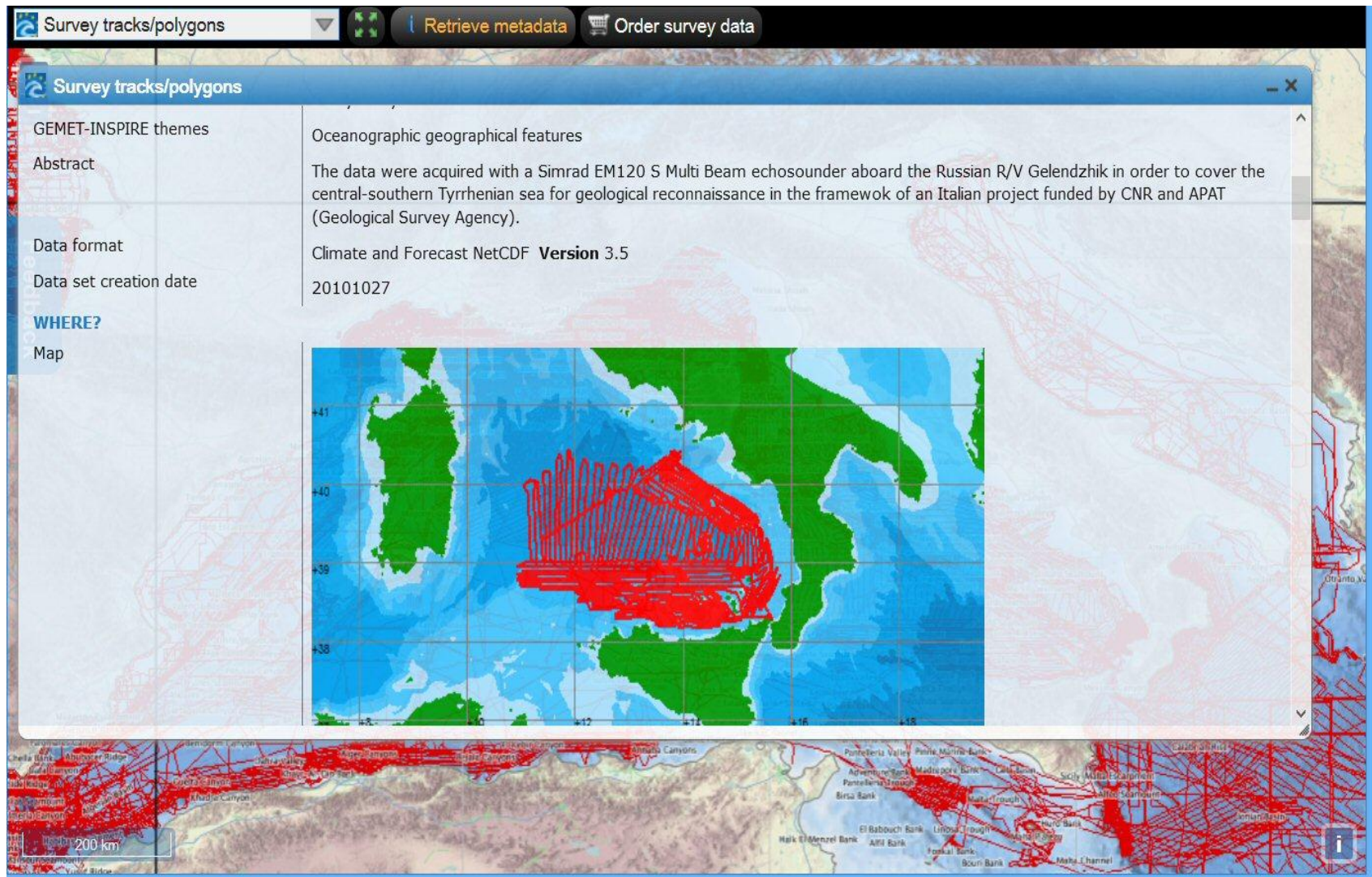
EMODnet DTM @ 250m

last release 03/10/16



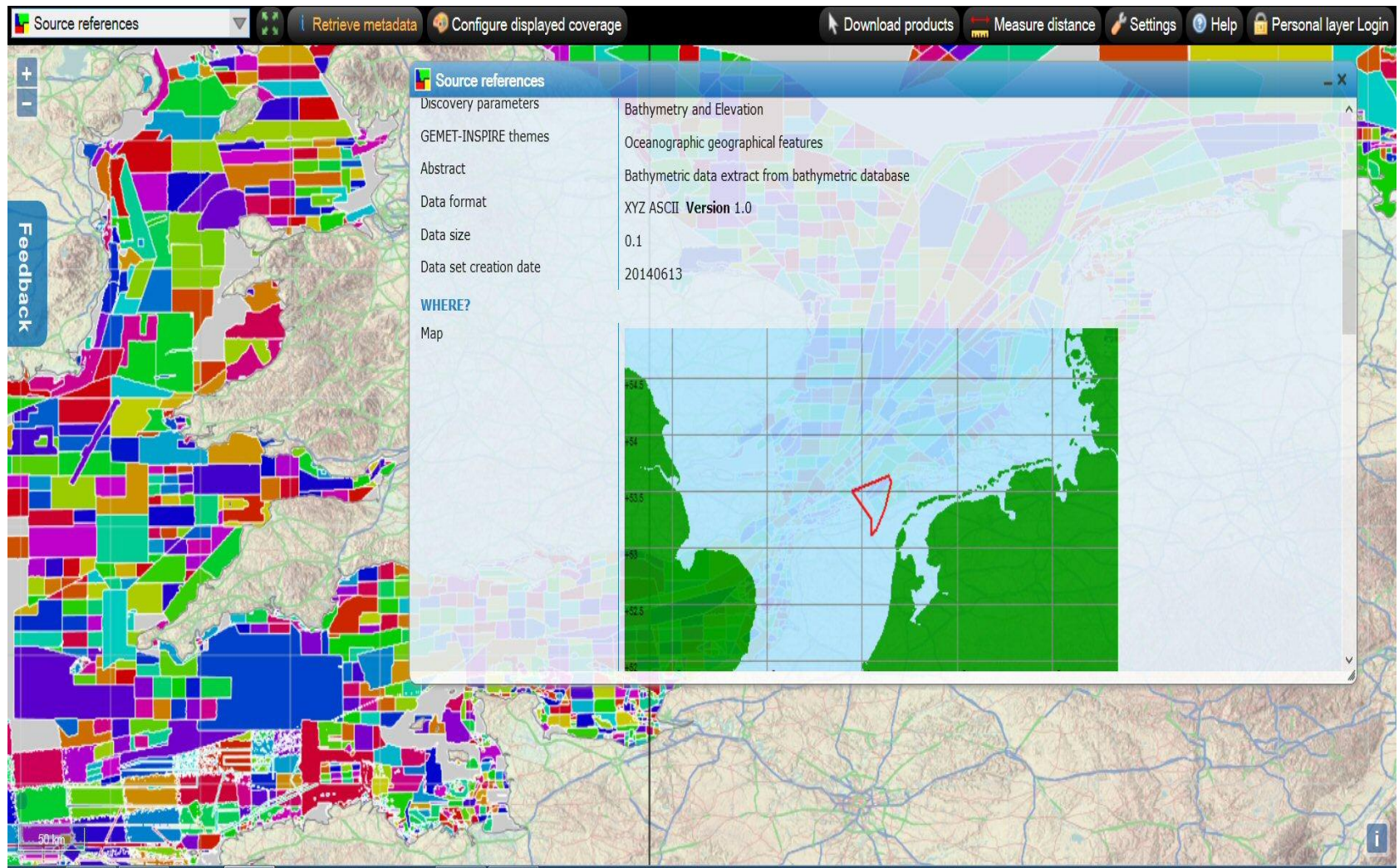
<http://www.emodnet-bathymetry.eu>

EMODnet source metadata



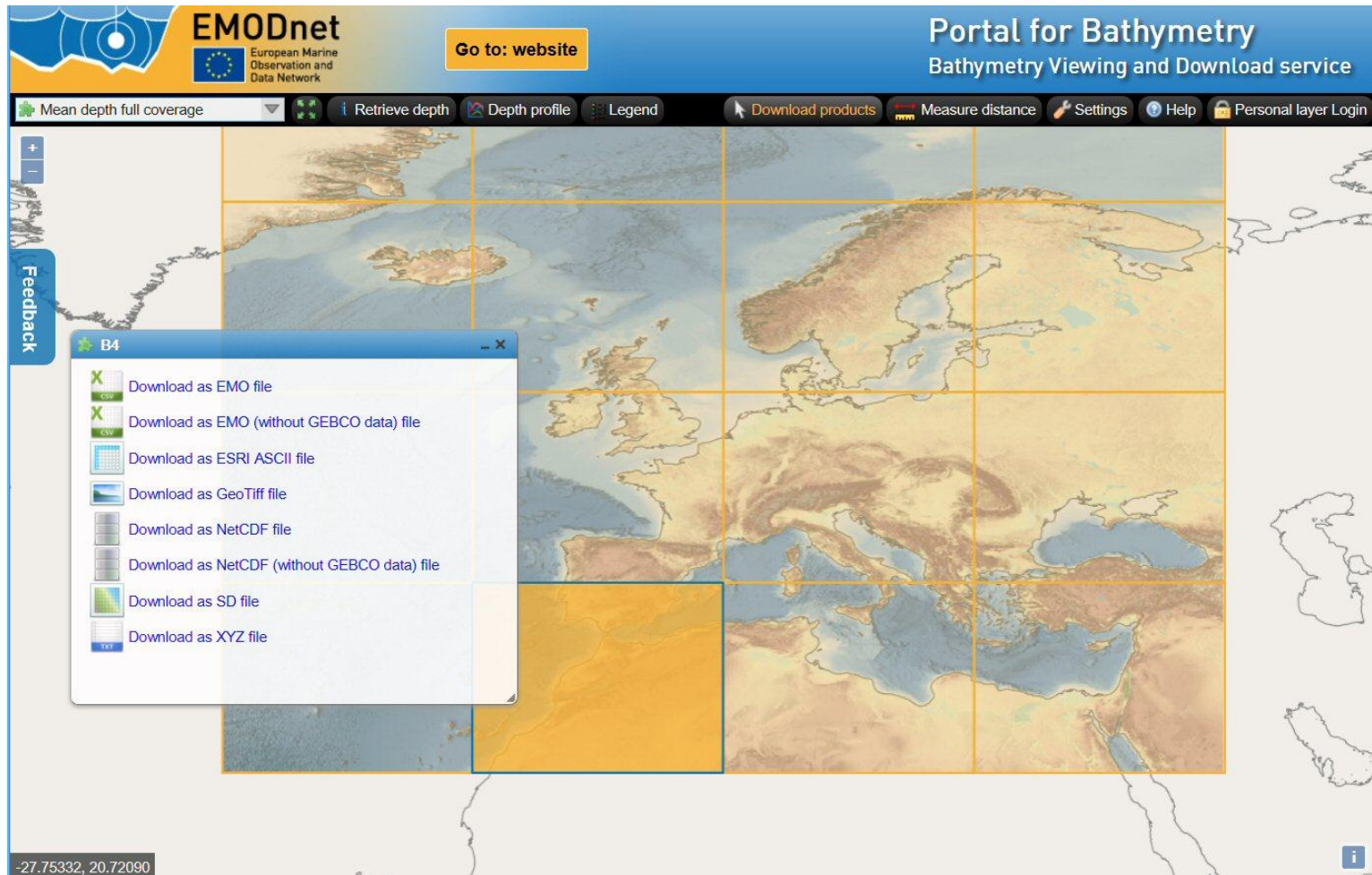
CDI layer of survey data with metadata retrieval

EMODnet attribute grids



Source references layer with retrieval of metadata

EMODnet downloading service



Download DTM tiles in various formats

EMODnet Web Services

- **CDI Data Discovery and Access service:** WMS and WFS service:

http://geoservice.maris2.nl/wms/seadatanet/emodnet_hydrography

- GetCapabilities

http://geoservice.maris2.nl/wms/seadatanet/emodnet_hydrography?service=WMS&request=GetCapabilities

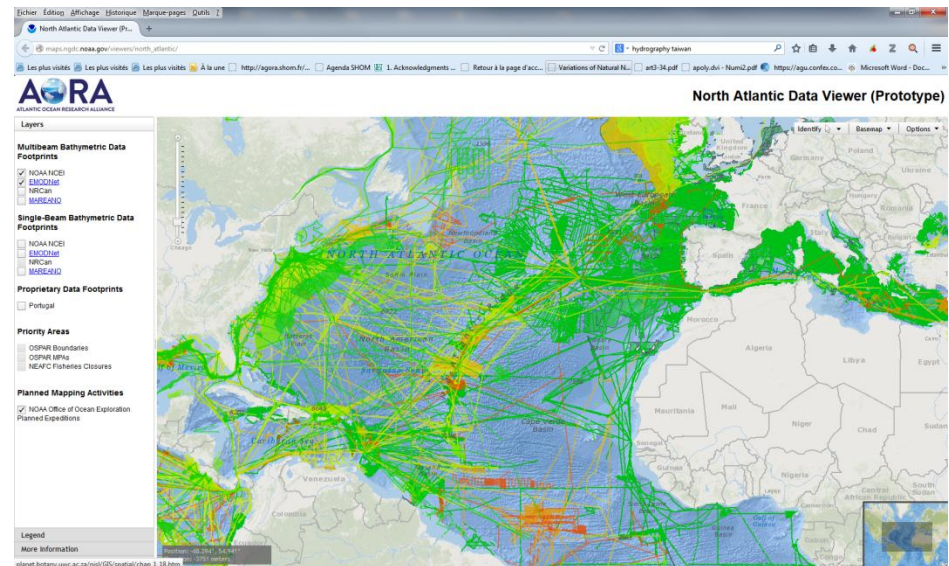
- **Bathymetry Viewing and Downloading service:**

- WMS: <http://ows.emodnet-bathymetry.eu/wms>

- WFS: <http://ows.emodnet-bathymetry.eu/wfs>

- WMST: <http://ows.emodnet-bathymetry.eu/wmts>

- WCS: <http://v7.geosrv.eu/wcs>



EMODNet Bathymetry – next phase (under review)

- Expanding partnership to include more data (up to 40 contributors)
- Expanding North to the Barents Sea
- Expanding DTM including coastal areas
- increasing overall resolution (Multiple resolution)
- Focus on vertical referencing and alternative data acquisition (inc SDB)
- Determining best European coastline, also using European tidal model

Innovation:

- Latest DTM uses > 7.700 survey data sets and composite DTMs from 31 data providers from 18 countries and GEBCO_2015
 - Latest DTM contains 1.092.115.678 data points (28.799 rows x 37.922 columns)
- ⇒ Reaching the limit => developing cloud process around GLOBE for higher performance of computations and improved quality by more interaction between regions and extra viewing and qc services