



EMODnet



European Marine
Observation and
Data Network

Your gateway to marine data in Europe

EMODnet High Resolution Seabed Mapping

EMODnet Steering Committee, Brussels – Belgium, 20 November 2018

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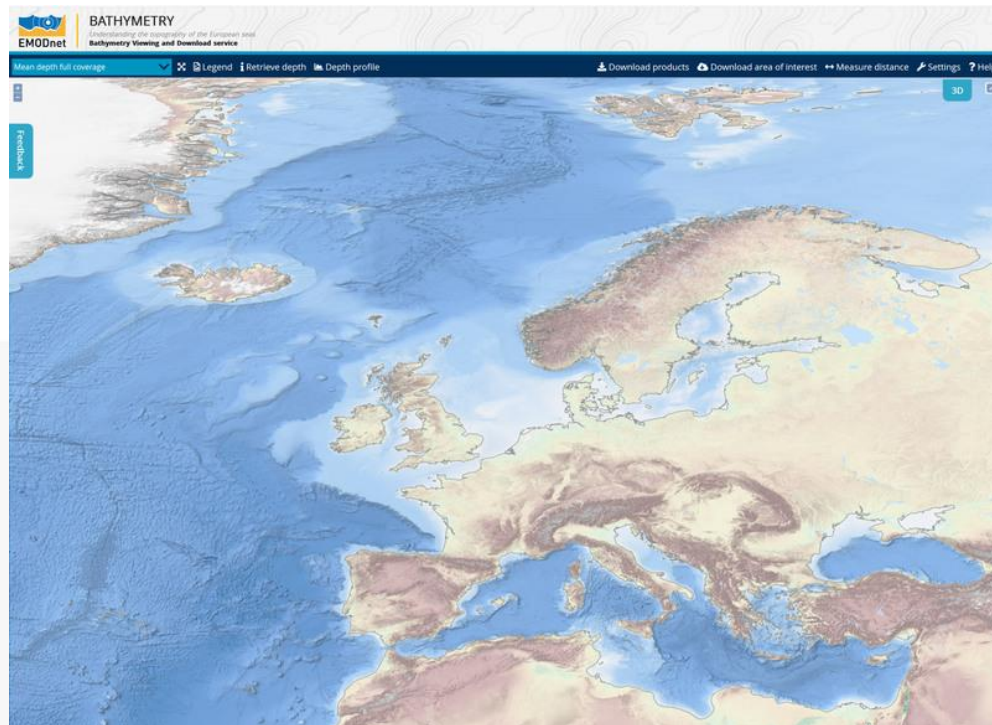
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New DTM release – 21 Sept 2018

- Resolution increased from $1/8 * 1/8$ arc minutes to $1/16 * 1/16$ arc minutes (circa $115 * 115$ meters);
- The EMODnet DTM now contains $113892 * 108132 =$ circa 12.3 billion data points;
- Expanded coverage including all European seas as well as the European part of the Arctic Ocean and Barents Sea;
- The inclusion of Satellite Derived Bathymetry data products, in particular for coastal stretches of Spain and Greece.
- <http://doi.org/10.12770/18ff0d48-b203-4a65-94a9-5fd8b0ec35f6>



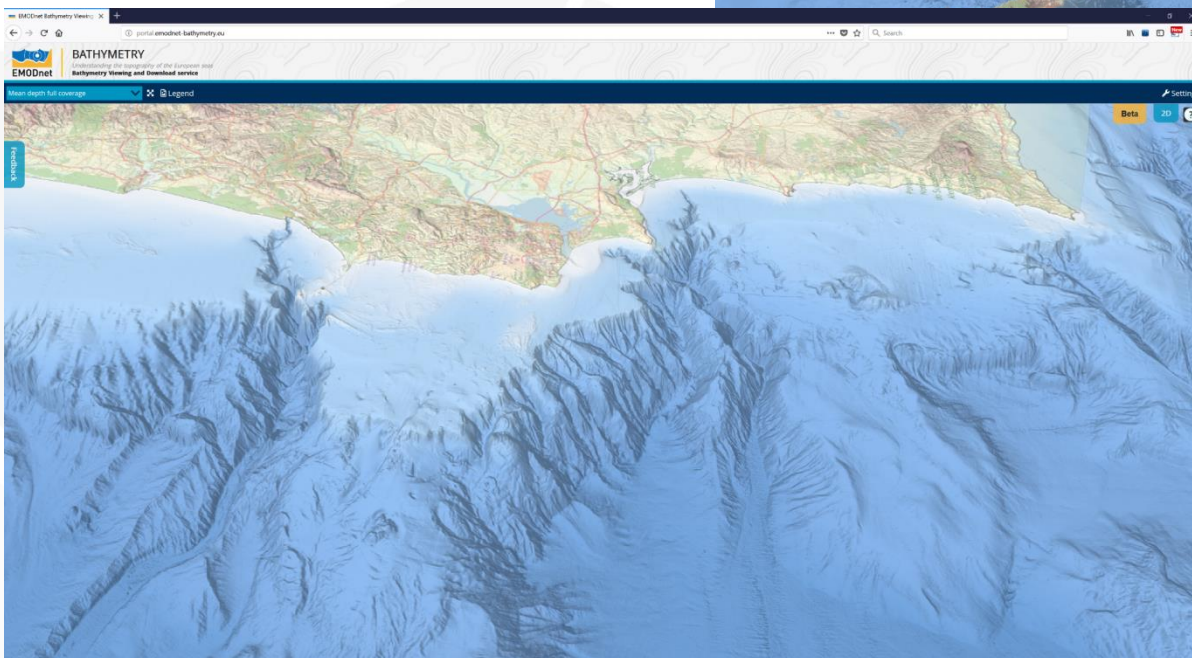
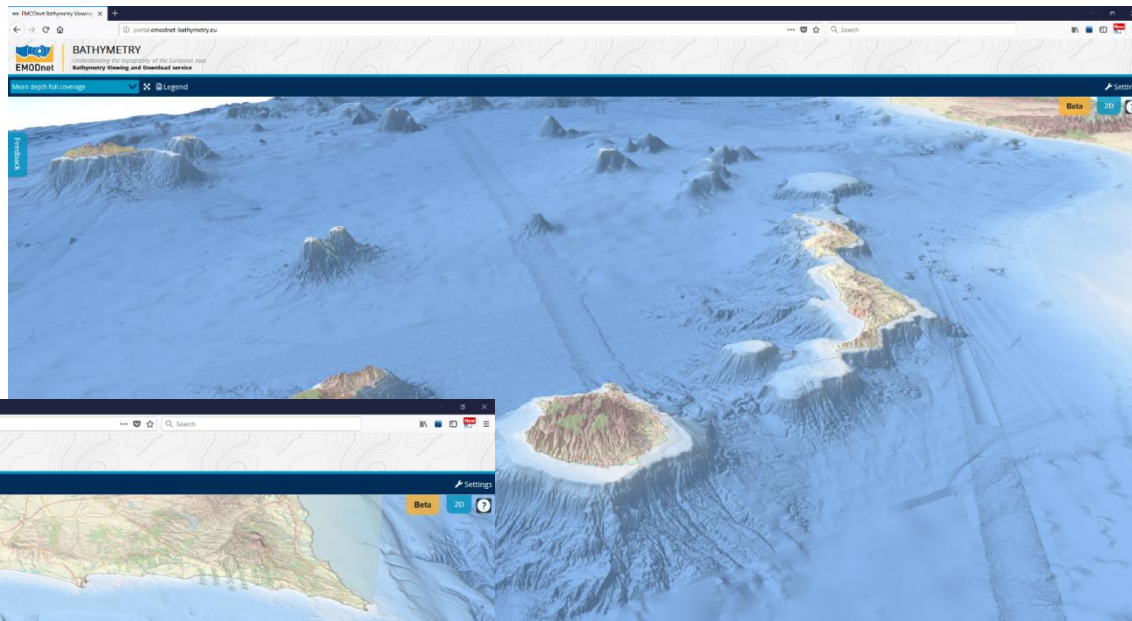


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3D visualisation in the browser



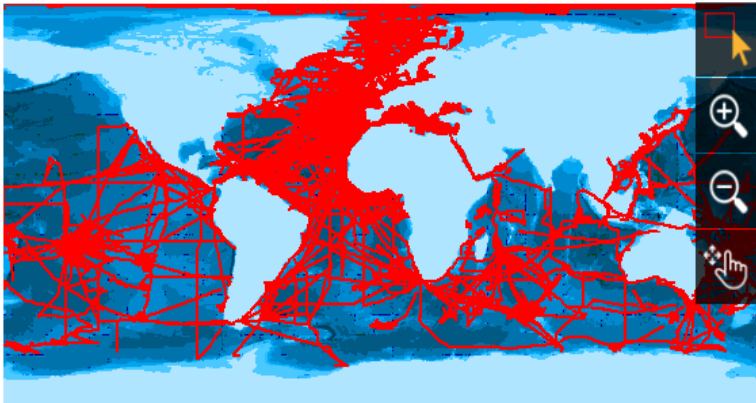
3/25/2019



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BATHYMETRY

Understanding the topography of the European seas
EDI Data Discovery and Access Service

Dataset(s) 0
Proceed to basket
Reset basket
Timeseries on
Export
Store query
Summary
Show map
Help

Reset all steps

Search by:

Geographical Box

Time period

Measuring area type

surface (25290)

curve (1866)

point (5)

Parameter categories

Gravity, magnetics and bat... (27161)

Terrestrial (27161)

Administration and dimens... (454)

Field geophysics (424)

Water column temperature... (15)

[More](#)

Disciplines

Marine geology (27161)

Terrestrial (27161)

Administration and dimens... (454)

Physical oceanography (15)

Biological oceanography (10)

[More](#)

ADD TO BASKET 20 100 1000 Records [GO](#) | Found 27161 | Show (1-20) | Previous | [Next 20](#)

#	Data set name	Disciplines - Topics	Instrument / gear type	Show
<input type="checkbox"/>	medwaves_formigasbank	Marine geology > Gravity, magnetics and bathymetry Terrestrial > Terrestrial	multi-beam echosounders, sound velocity sensors, Differential Global Positioning System receivers	
<input checked="" type="checkbox"/>	medwaves_ormondebank	Marine geology > Gravity, magnetics and bathymetry Terrestrial > Terrestrial	multi-beam echosounders, sound velocity sensors, Differential Global Positioning System receivers	
<input type="checkbox"/>	medwaves_transitline	Marine geology > Gravity, magnetics and bathymetry Terrestrial > Terrestrial	multi-beam echosounders, sound velocity sensors, Differential Global Positioning System receivers	
<input checked="" type="checkbox"/>	JC105_PROD_NAV	Administration and dimensions > Administration and dimensions Marine geology > Gravity, magnetics and bathymetry Terrestrial > Terrestrial	single-beam echosounders, Differential Global Positioning System receivers, inertial navigation systems, Kinematic Global Positioning System receivers	
<input type="checkbox"/>	DY008_PROD_NAV	Administration and dimensions > Administration and dimensions Marine geology > Gravity, magnetics and bathymetry Terrestrial > Terrestrial	single-beam echosounders, platform attitude sensors, Differential Global Positioning System receivers, inertial navigation systems, Kinematic Global Positioning System receivers	

Task 1: Bathymetric surveys

Data from bathymetric surveys held in national, regional or commercial information systems shall become interoperable, discoverable and downloadable. Latest technologies that increase the robustness and speed of the operations shall be used.

Job Done

Task 8: INSPIRE compliance

The service shall be compliant with the standards and protocols set out in INSPIRE. This will require dialogue with those responsible for the standards.

Undegoing with help of DG-MARE, SC, JRC



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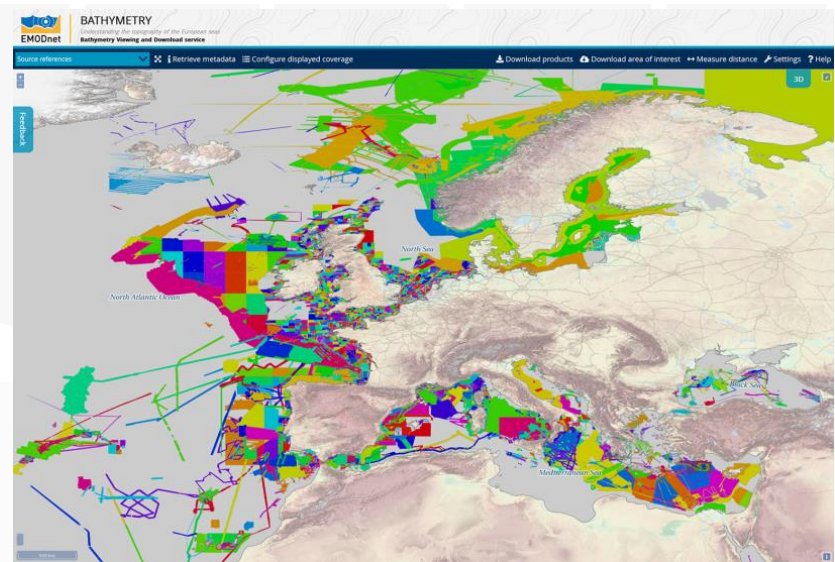
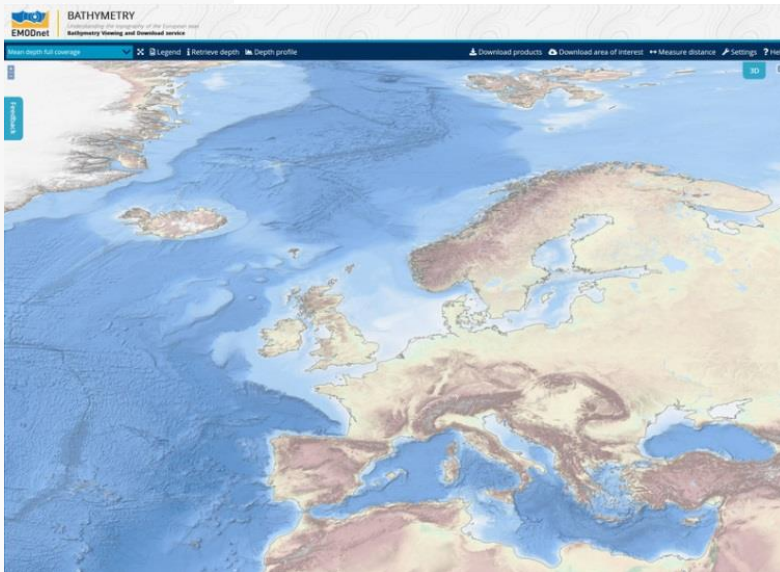
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Task 2: Digital terrain model

A multi-resolution digital terrain model of European seas shall be set up with a base resolution of 3 arc seconds¹¹ and higher resolution (down to ¼ arc seconds) where the underlying data permit it. The metadata shall include:

- ownership
- assessment of accuracy and precision
- (for data products) indication of method used for their construction

90% Done

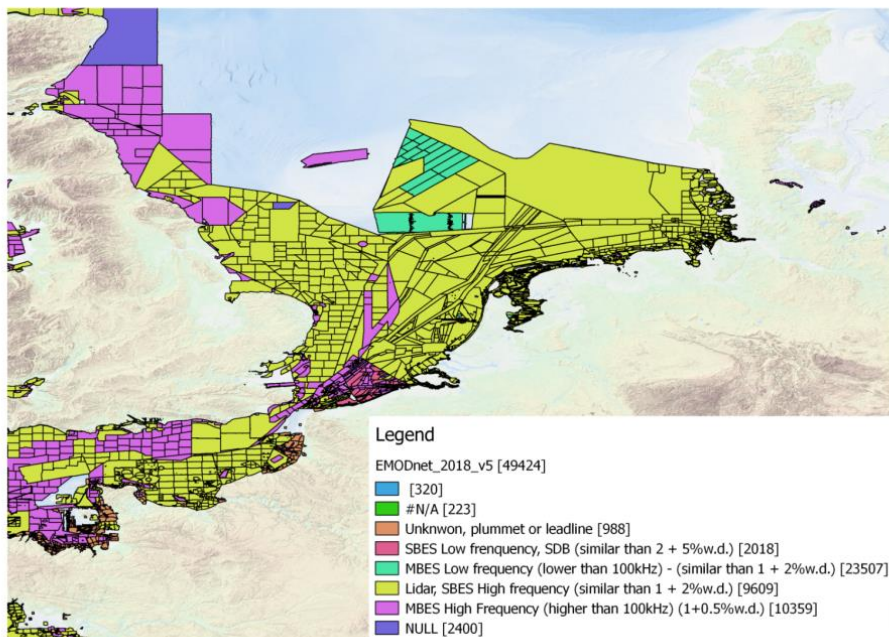
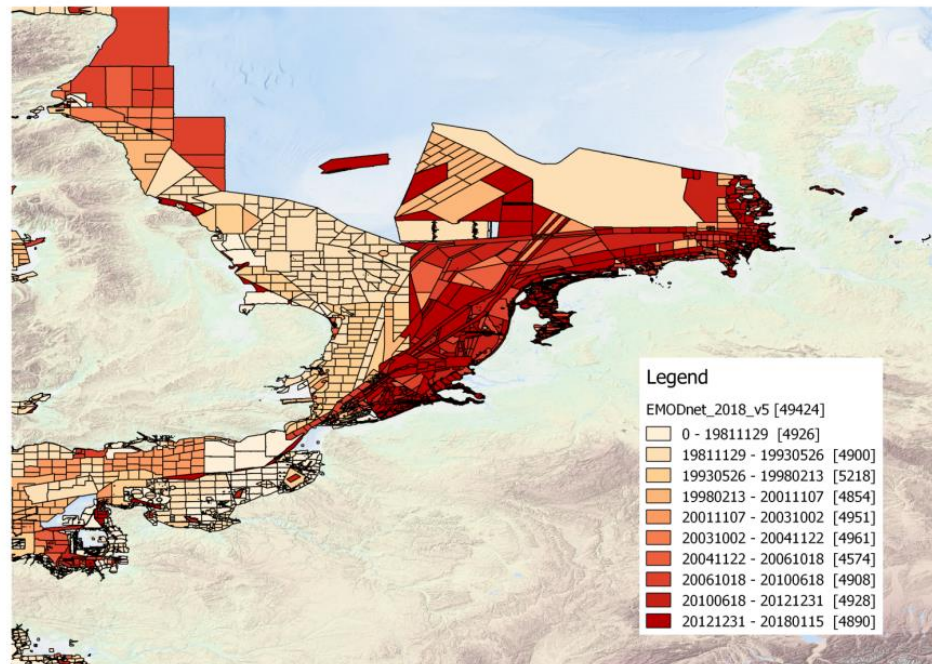




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Task 3: Coastline data

A best-estimate digital coastline related to the GRS80 ellipsoid shall be set up including:

- (a) mean sea level
- (b) highest astronomical tide level
- (c) lowest astronomical tide level
- (d) level of the hydrographic vertical datum
- (e) legal baseline
- (f) indications of most appropriate technique for future mapping
- (g) intertidal area

90% Done



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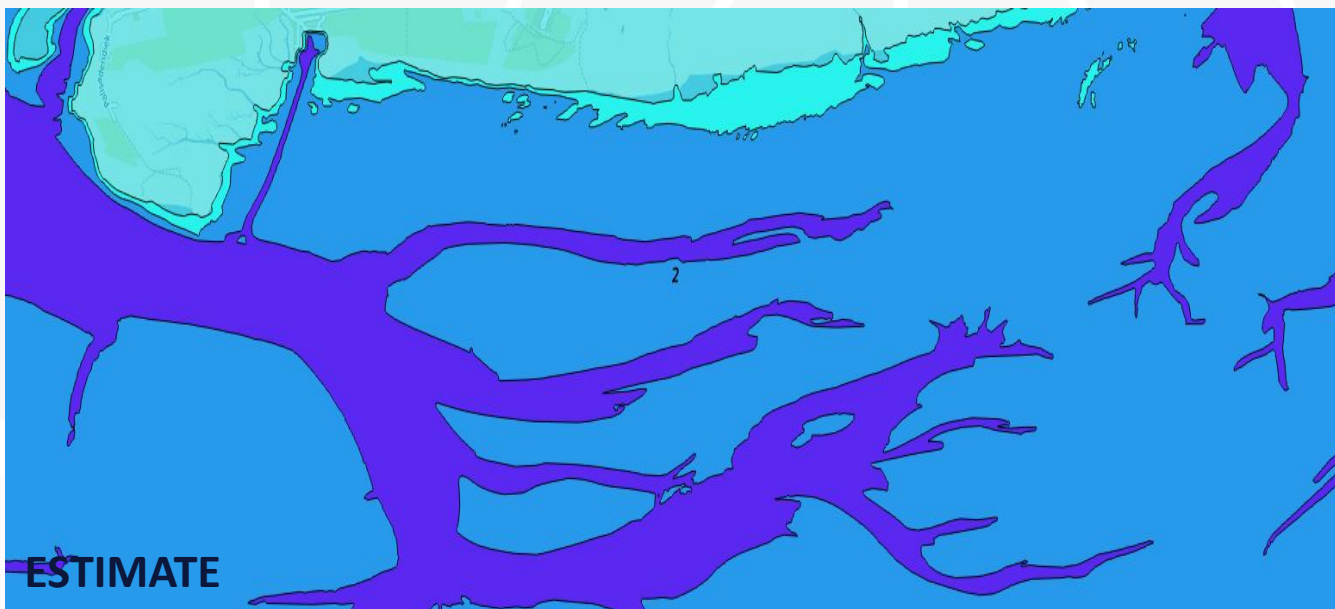
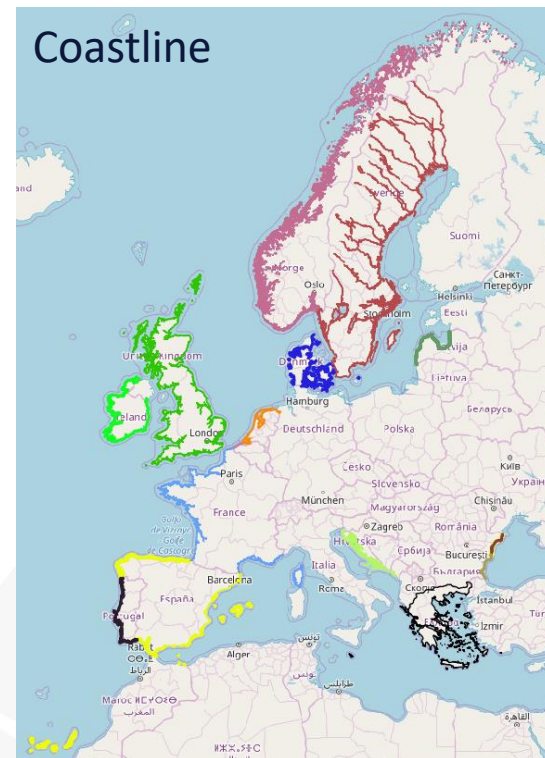


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Baseline



Coastline





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Task 4: Machine-to-machine connections to data and data products

Web services will be set up so that the data (surveys, coastlines, digital terrain models, etc.) can be accessed by interoperable machine-to-machine interaction through the Internet

90% Done

BATHYMETRY
Understanding the topography of the European seas
Data services

EMODnet Bathymetry data services

EMODnet Bathymetry publishes the following (OGC compliant) webservice:

- WMTS for retrieving pre-rendered map files
- WMS for retrieving pre-rendered map images
- WFS for querying and downloading feature data
- WCS for querying and downloading raster data
- REST for retrieving DTM depth samples

Available data layers

Mean depths full coverage
Average depths rendered in atlas style
Layer name: mean_atlas_lndf

Available as

- WMTS
- WMS
- REST

Mean depths rainbow colour
Average depths rendered in rainbow colour
Layer name: mean_rainbowcolour

Available as

- WMTS
- WMS
- REST

Mean depths multi colour
Average depths rendered in multi colour
Layer name: mean_multicolour

émissions améliorées votre navigation.

ifremer Personal login for each user of the group

Sessions: Globe

Connecting to Globe...
Problems with the automatic connection? Please use this [direct link](#)

Owner: bathymetry
Project: Default
Status: Running

SESSION

Remote Host:	datasrv01
Cluster:	datasrv00
Operating System:	Linux
Creation Time:	2017-12-08T13:56:39+01:00
Site:	1920x1080
Color Depth:	1688 colors
Remoteization Protocol:	NICE Desktop Cloud Visualization (DCV)

Launching a Globe session

data/srv01 (bathymetry) - NICE DCV Endstation

GLOBE - VERSION - 1.0.0

Background
Shape
WMS
Data

Properties
Parameters view

Property Value

Globe session

Altitude: 1,052 km
Off Globe



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Task 5: Web portal

A web portal with an EMODnet look and feel will be set-up that allows users to search for, visualise and download survey data, digital terrain models and coastline data.

Job Done

Task 6: Help-desk

The help-desk shall offer telephone queries and an on-line chat service by means of a live operator available from 9:00 to 17:00 (Brussels time) from Monday to Friday. Correspondence by e-mail shall also be possible. The telephone service shall not be charged at premium rate and e-mails shall be answered within two working days. A record shall be kept of all contacts and the reaction to them.

Job Done

Task 9: Monitoring of performance

The service shall include a process for monitoring and reporting the nature of use, the purpose of the use they make of the service, and shall also react to feedback from users (see also section 1.7 "Performance and Quality Requirements").

Job Done



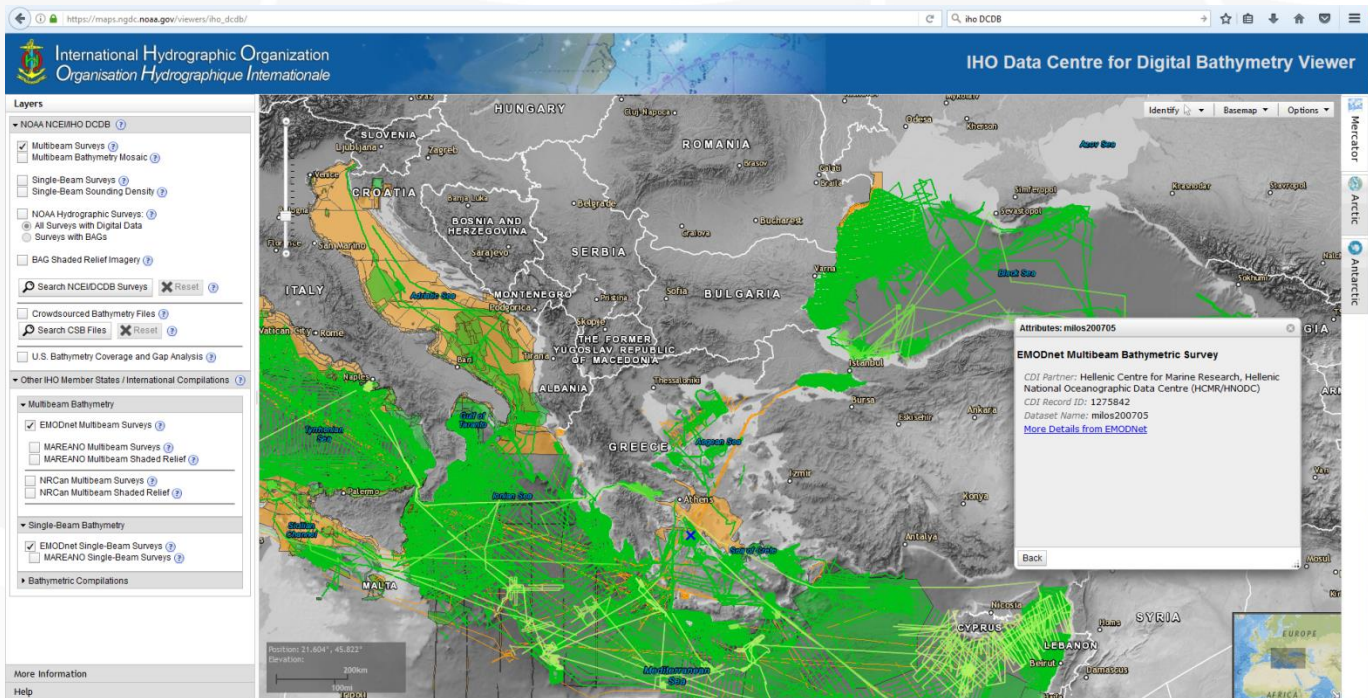
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Task 7: International interoperability

A report will be delivered one year after the start of the project identifying issues compromising interoperability with digital terrain models developed by organisations from outside the EU. Account should be taken of the Galway Statement process for the Atlantic¹² and appropriate linkages ensured.

Job Done





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Pre existing rights documents for EU

Annex V

Statement by the creator (or right holder)

Concerning *[insert name of the relevant result]* delivered as part of the [framework] [specific] contract *[insert title and number]* concluded between the contracting authority and *[name of the contractor]*

I the undersigned *[insert name of the creator or authorised representative of the right holder]* [representing *[insert name of the right holder]*] declare that I am the right holder of: *[identify the relevant parts of the result]* [which I created] [for which I received rights from *[insert name of other right holder]*].

I am aware of the above [framework] [specific] contract, especially Articles [I.10 and II.13] concerning intellectual property rights and exploitation of the results and I confirm that I transferred all the relevant rights to *[insert name of contractor or other intermediary right holder]*.

I declare that [I have received full remuneration] [I agreed to receive remuneration by *[insert date]*].

[As creator, I also confirm that I do not object to the following:

- (a) that my name be mentioned or not mentioned when the results are presented to the public;
- (b) that the results be divulged or not after they have been delivered in their final version to the contracting authority;
- (c) that the results be adapted, provided that this is done in a manner which is not prejudicial to my honour or reputation.]

Date, place, signature

Annex IV

Statement of contractor concerning rights to delivered results

I, *[insert name of the authorised representative of the contractor]* representing *[insert name of the contractor]*, party to the [framework] [specific] contract *[insert title and number]* ('the contractor') warrant that the contractor holds all rights to the delivered results listed below *[insert titles and description of relevant results]*.

The above-mentioned results were prepared by *[insert names of creators]*. The creators transferred all their relevant rights to the results to [the contractor] *[insert name of the rights holder]* through [an agreement] [an employment contract] [a relevant extract of] which is attached to this statement.

The creators [received all their remuneration on *[insert date]*] [will receive all their remuneration as agreed within *[complete]* weeks from [delivery of this statement] [receipt of confirmation of acceptance of the work]. [The statement of the creators confirming payment is attached].

Date, place, signature