

# EMODnet Seabed Habitats - Overview of data and data products and data access

Remote Meeting « EMODnet and nature » - EMODnet and EEA, 19/02/2021

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On behalf of EMODnet Seabed Habitats  
Partnership



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# Structure

1. Background of EMODnet Seabed Habitats
2. EMODnet Seabed Habitats portal and access to data



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# EMODnet Seabed Habitats

⦿ Coordination: Ifremer and JNCC

⦿ Web portal and services: JNCC

⦿ Data collation: ISPRA





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# The development of EMODnet Seabed Habitats in different phases

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
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## Phase I – coord. JNCC

- A broad-scale seabed habitat map for limited basins

## Phase II – coord. Ifremer

- A broad-scale habitat map for all basins

## Phase III – coord. JNCC, then Ifremer

- A multi-resolution broad-scale habitat map
- Make primary data and metadata available

### Phase 1

- A broad-scale seabed habitat map (EUSeaMap) for a limited selection of basins

### Phase 2

- EUSeaMap extended to all basins

### Phase 3

- EUSeaMap with improved resolution
- Making existing data (survey maps, groundtruth) and metadata available
- New products from existing data

### Phase 4: Starts end of September 2021

- Thematic web portals transferred to the central EMODnet portal
- EUSeaMap extended to European waters of Caribbean Sea and to Caspian Sea
- A new category of data ingested: coastal wetlands



# EMODnet Seabed Habitats portal and access to data



2/22/2021





## About Us

The EMODnet Seabed Habitats website provides a permanent single portal for accessing seabed



## ALL LAYERS

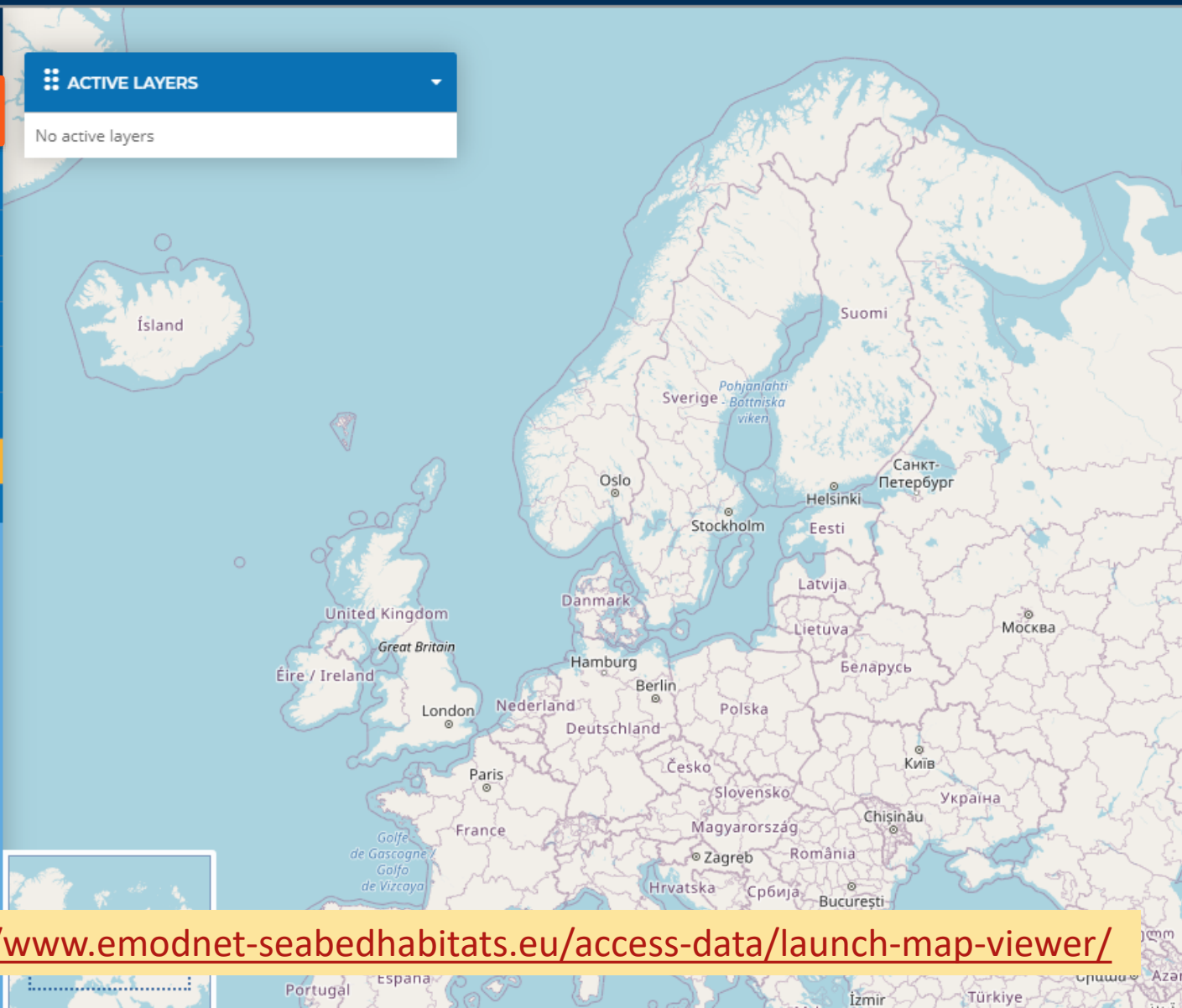


- EMODnet broad-scale seabed habitat map for Europe (EUSeaMap) 0
- Environmental variables that influence habitat type 0
- Individual habitat maps from surveys 0
- Modelled maps of specific habitats 0
- Survey sample points 0
- Composite data products 0
- Boundaries 0
- External Layers 0

Add external layers +

### ACTIVE LAYERS

No active layers



<https://www.emodnet-seabedhabitats.eu/access-data/launch-map-viewer/>

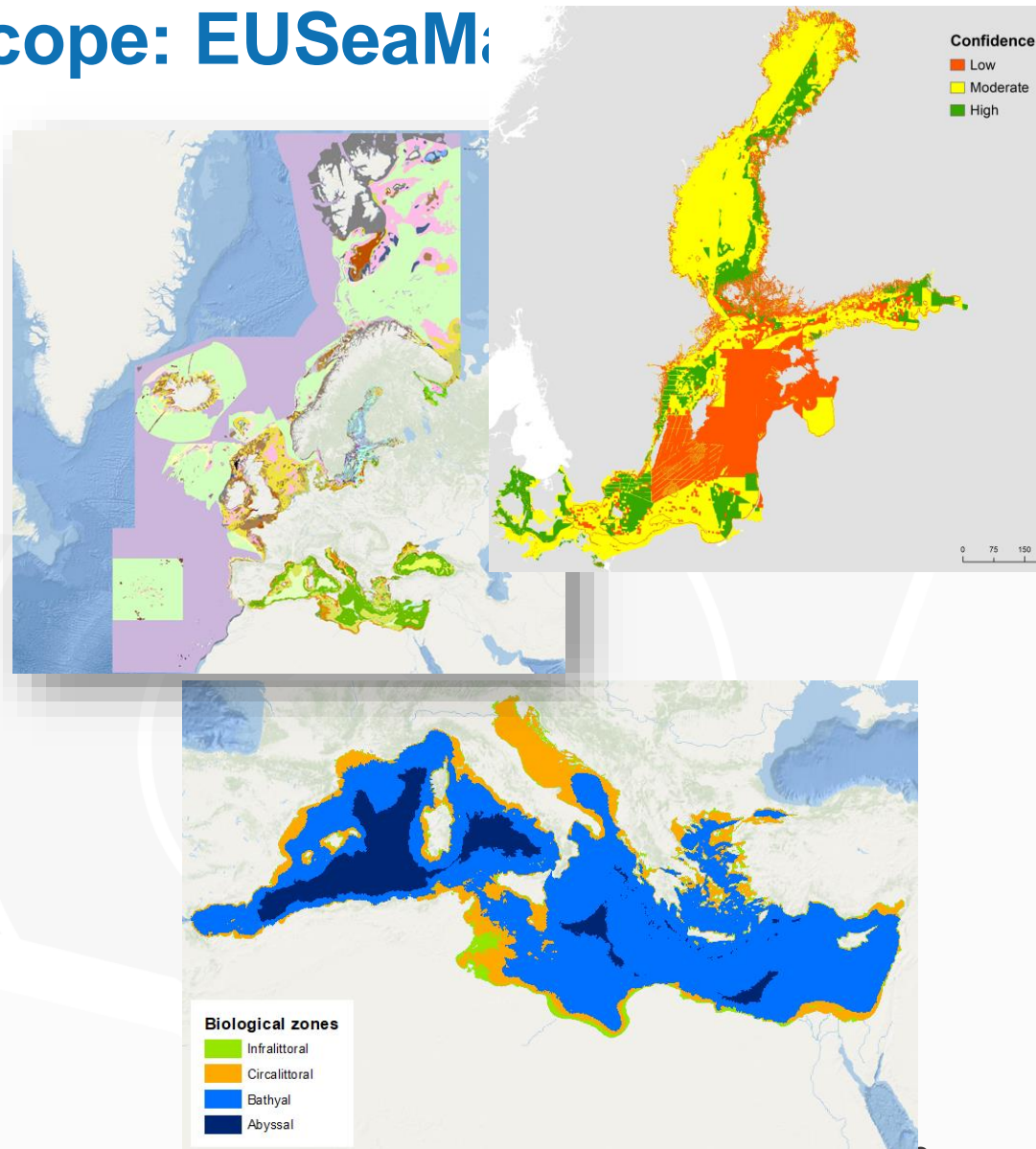


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# Data and Scope: EUSeaMap

- ① Broadscale modelled seabed habitats for Europe: “EUSeaMap 2019”
- ① Made available in several classifications
  - ① EUNIS
  - ① MSFD broad habitat types
  - ① Region-specific
- ① Associated confidence layer
- ① Habitat descriptor layers
  - ① Biological zones
  - ① Water-induced energy levels
  - ① Oxygen regimes
  - ① Salinity regimes





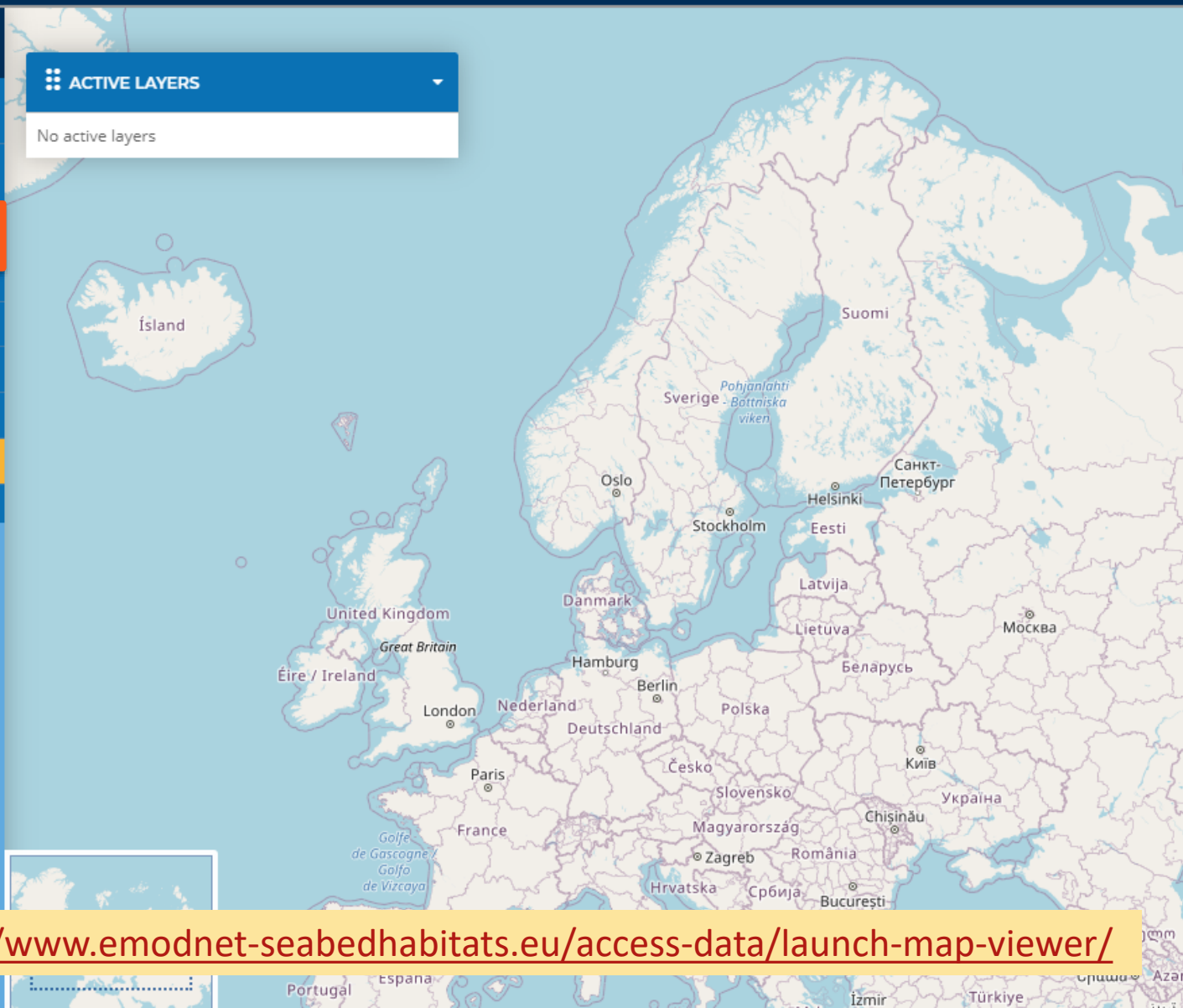
## ALL LAYERS ✕

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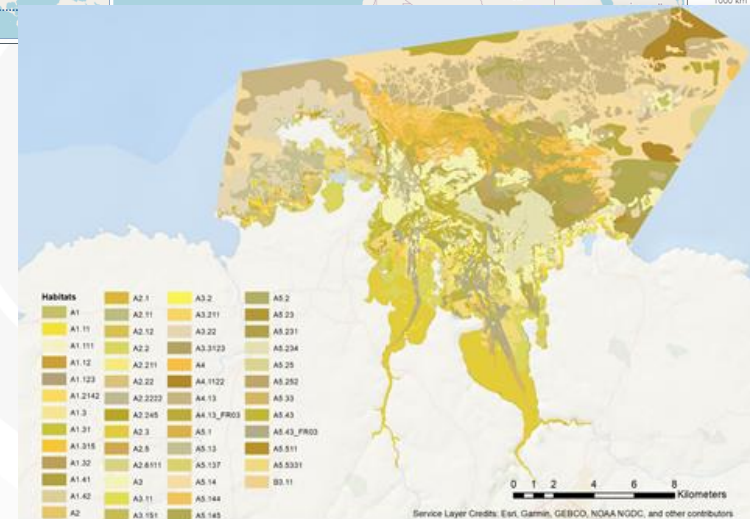
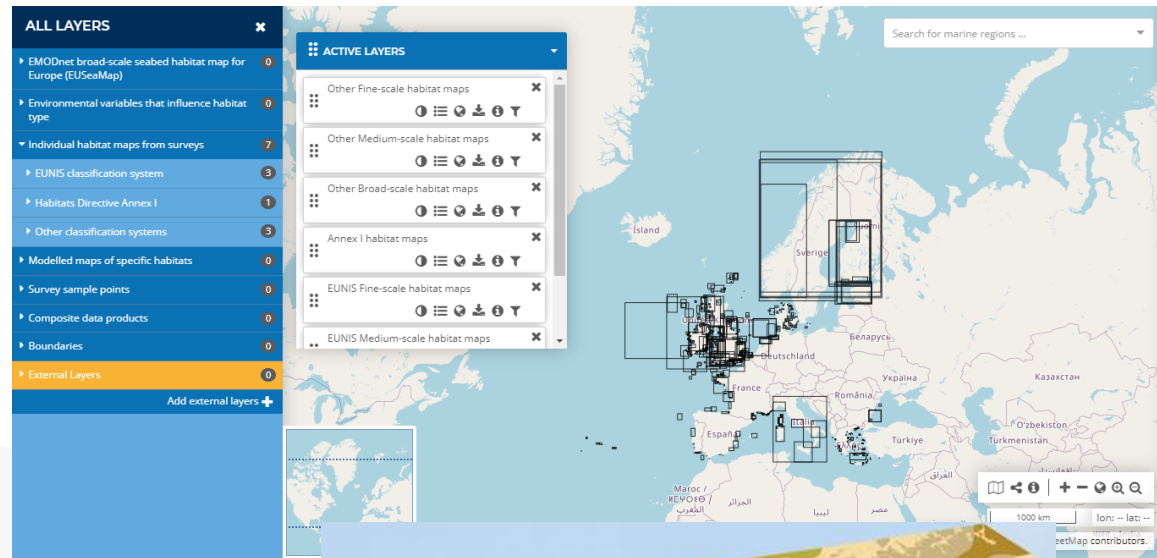


# Data and Scope: individual maps from survey

(( )) Making available individual habitat maps from survey

(( )) EUNIS, Habitat directive Annex 1 habitat types & Other classifications

(( )) Various scales



Survey habitat map in EUNIS classification (Morlaix, Bretagne, France)



## ALL LAYERS

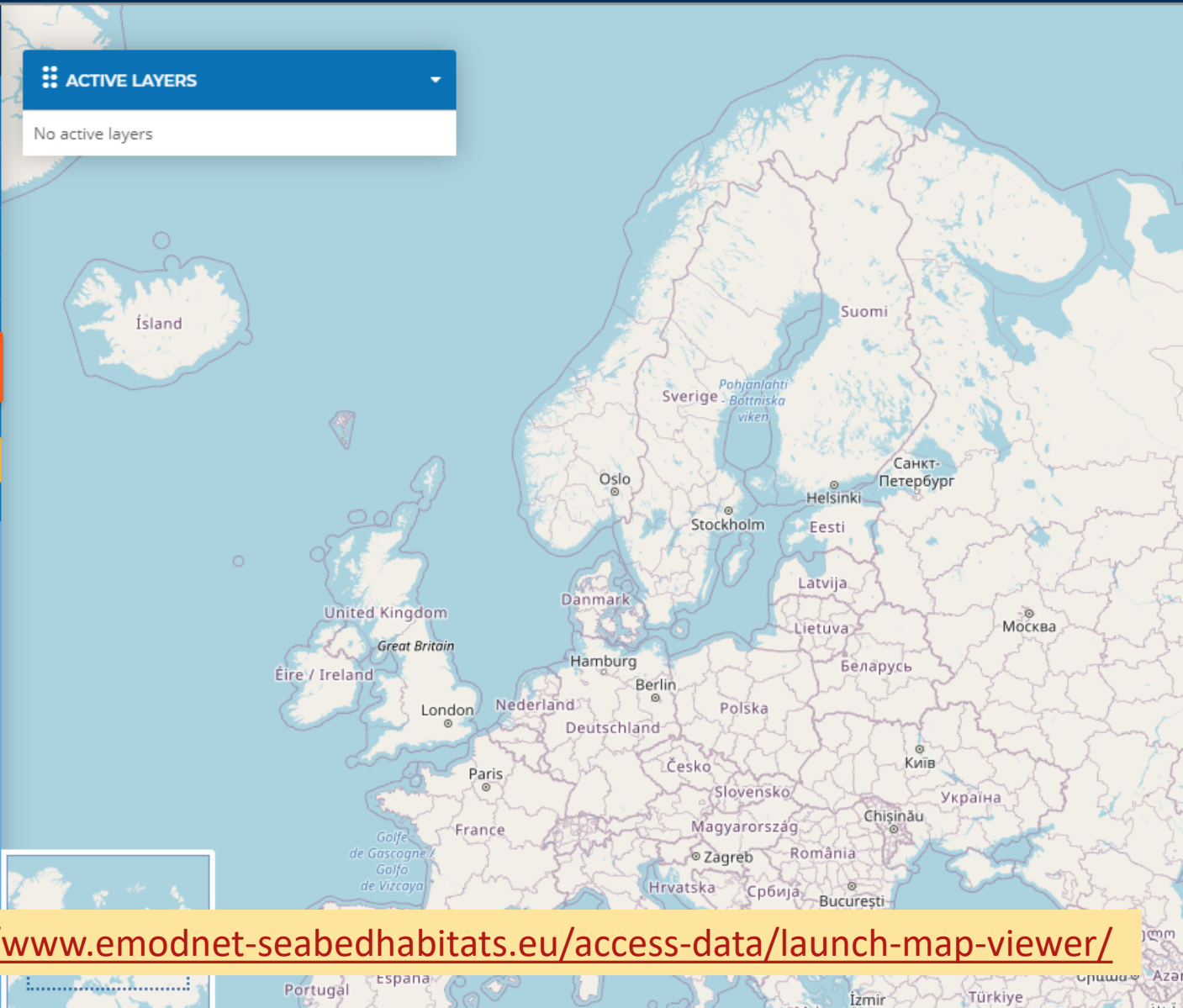


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ACTIVE LAYERS

No active layers



<https://www.emodnet-seabedhabitats.eu/access-data/launch-map-viewer/>



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# Data and Scope – Composite data products

Composite products from existing survey maps

Spatial distribution of EOVs

Macroalgal canopy

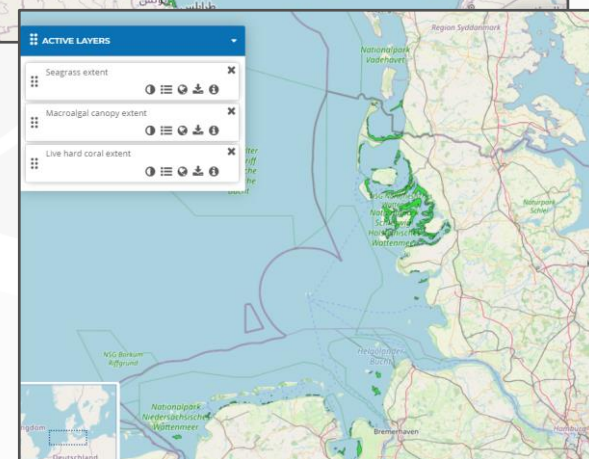
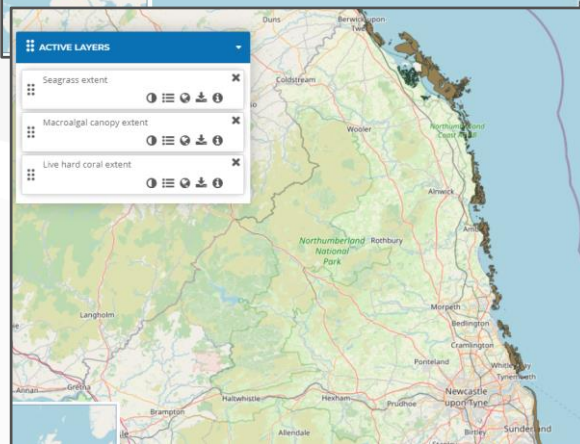
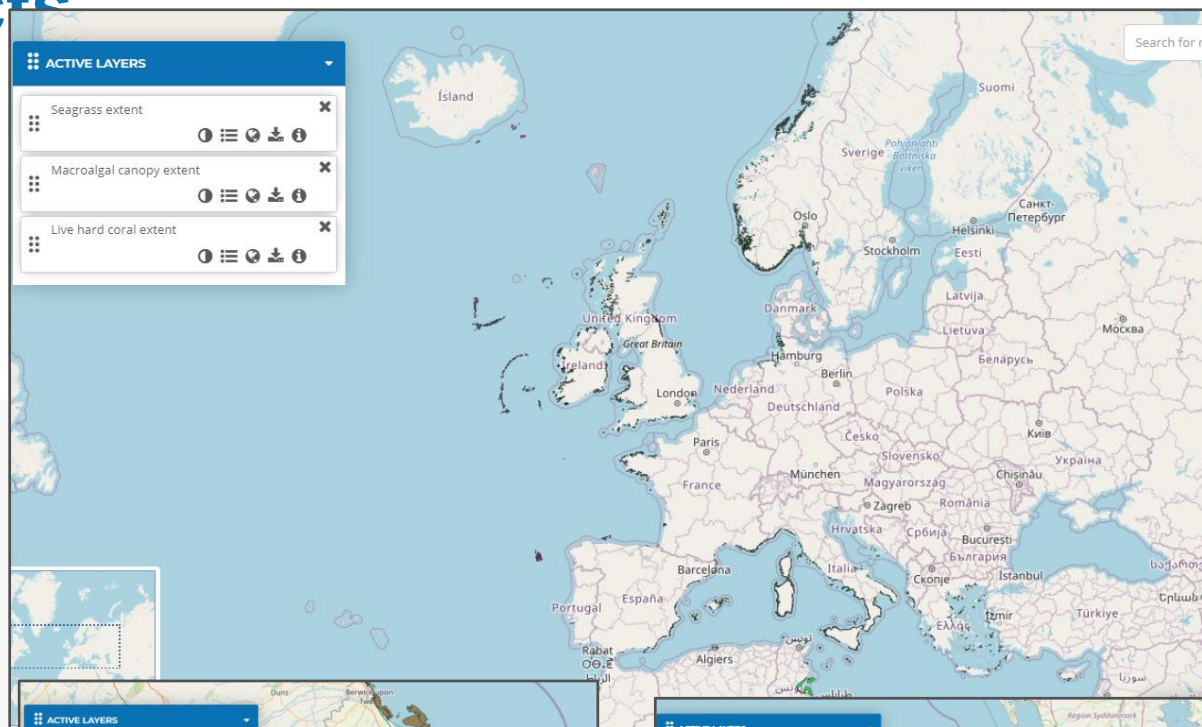
Seagrass

Cold-water coral

Upcoming

Corraligenous

Biogenic habitats (oyster beds, coral reefs, worm reefs, etc)





## ALL LAYERS

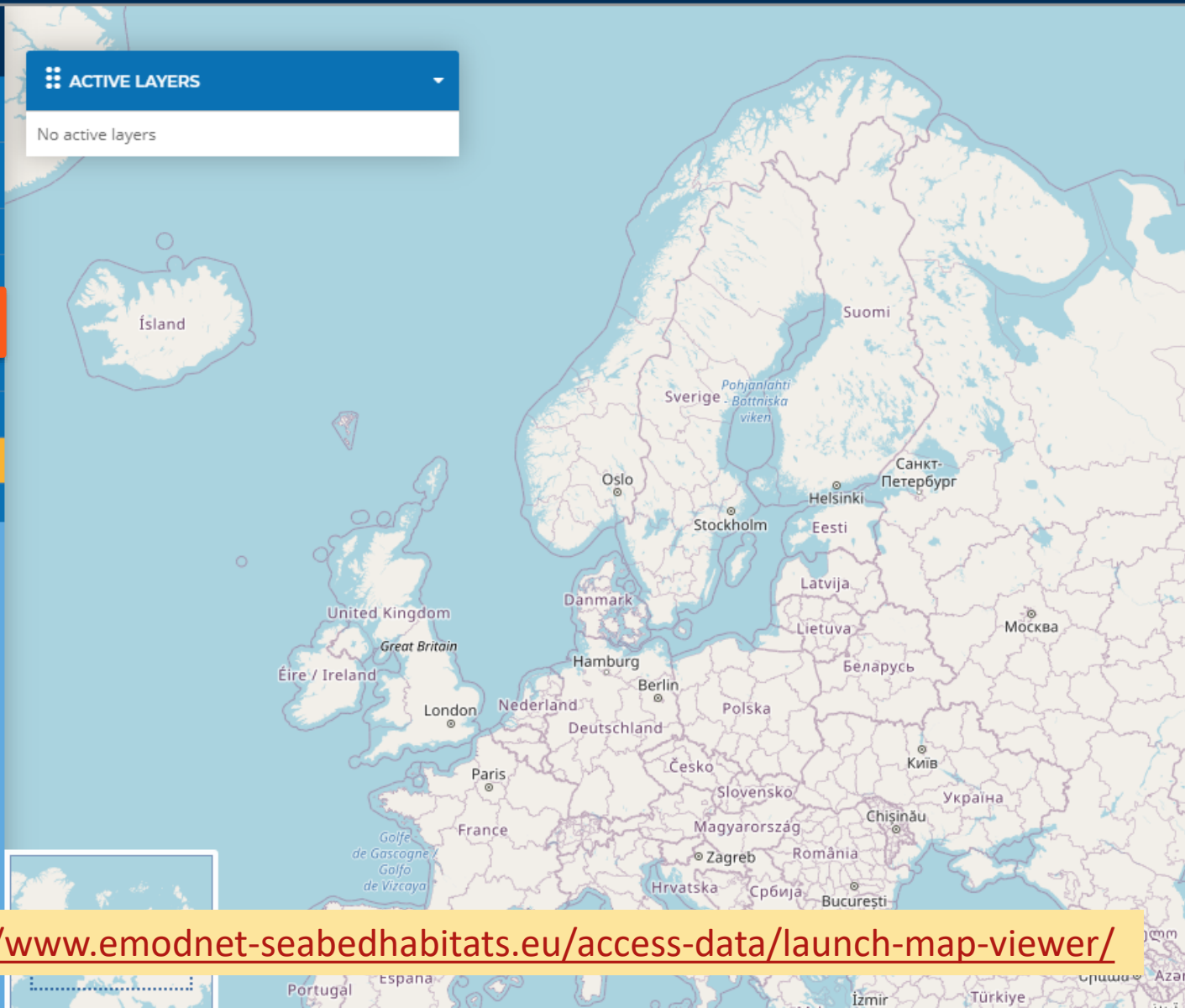


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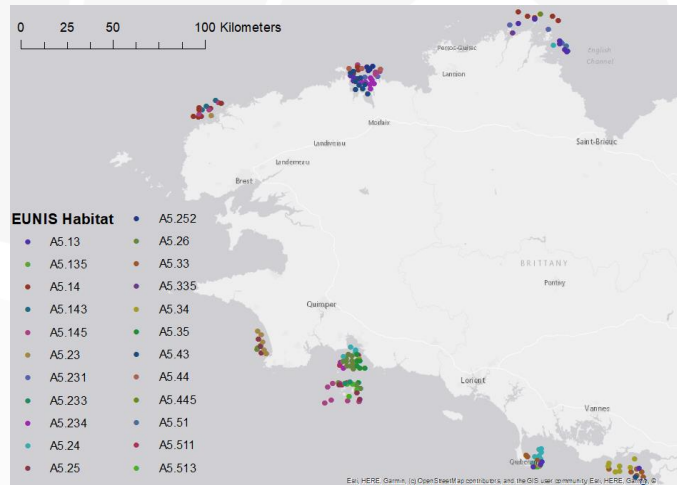
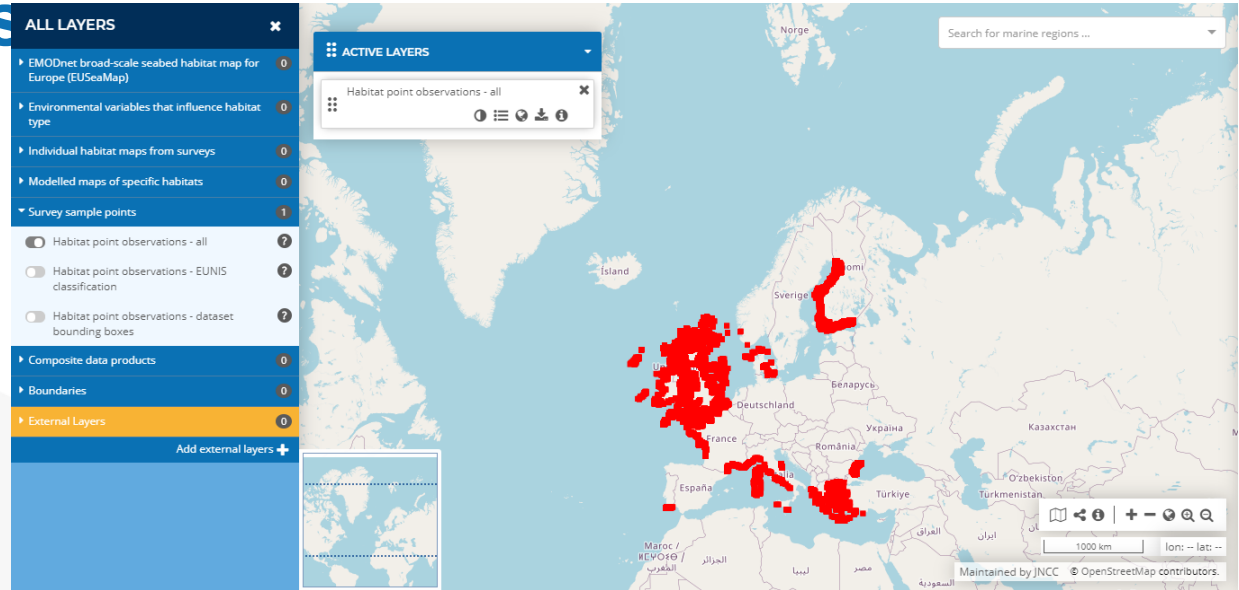
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# Data and Scope – Survey sample points

- Ⓜ Making available ground-truthing sample points
- Ⓜ Various classifications
- Ⓜ Local to global coverage



Occurrence of EUNIS habitat (Britanny, France)





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## Links

- ④ Data and data products are made available following FAIR principles
  - ④ through a mapper <https://www.emodnet-seabedhabitats.eu/access-data/launch-map-viewer/>
  - ④ through the ICES data catalog: <http://gis.ices.dk/geonetwork>
  - ④ through web services <https://www.emodnet-seabedhabitats.eu/access-data/web-services/>
  
- ④ Data products summary <https://www.emodnet-seabedhabitats.eu/about/data-products-summary/>

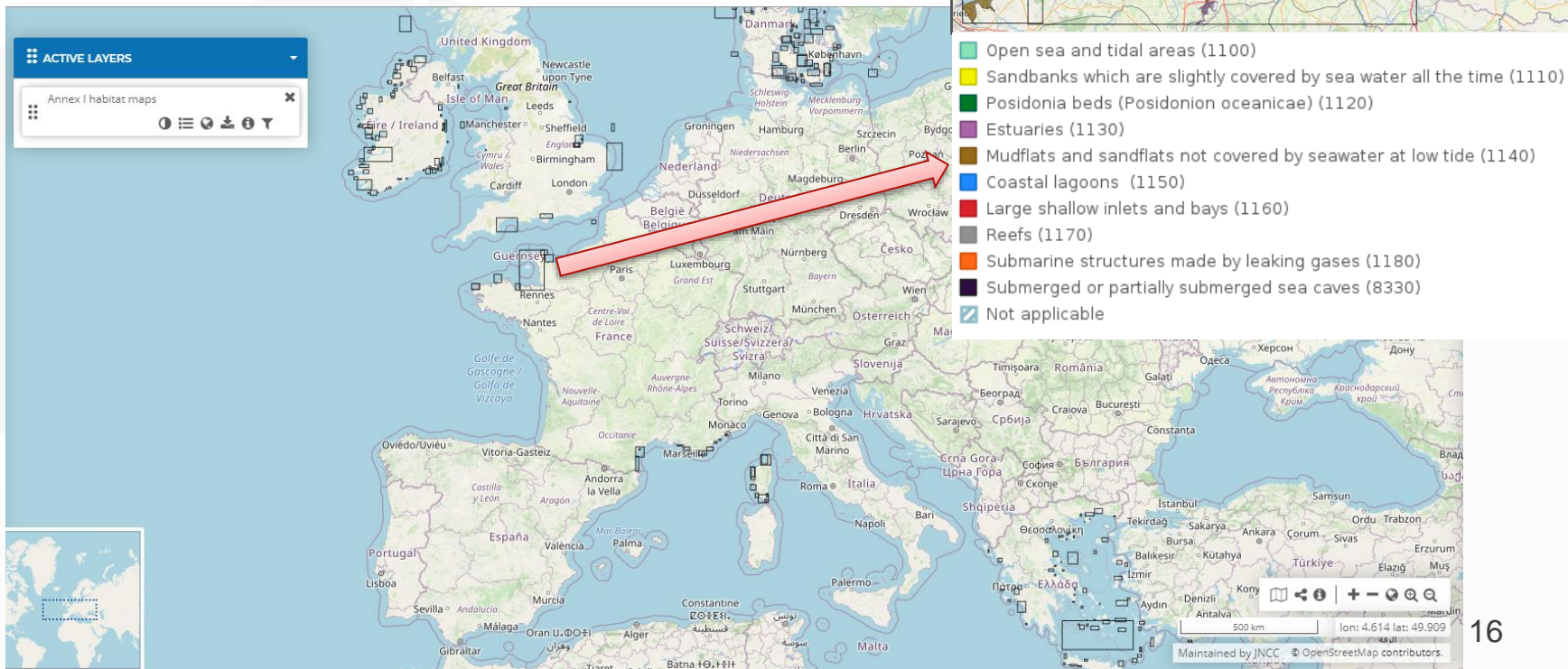
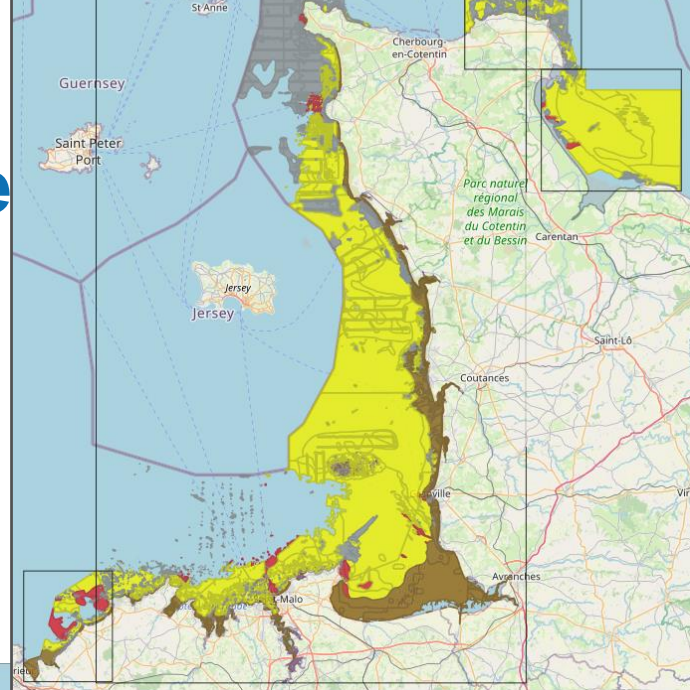


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# Habitat directive wise

Some of the maps from survey are made available in the Habitat directive Annex 1 habitat types







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# Habitat directive wise

- 📶 The Habitat directive Annex 1 habitat types distribution reported by the EEA is also made available as « composite data product »
- 📶 Current version is 2013, we are planning to update





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# Reminder for comments and discussion

- ⦿ Habitat directive Annex 1 habitat types distribution reported by the EEA
  - ⦿ We are going to provide access to latest datasets (version 2020), if possible via M2M
    - ⦿ Are they available as WFS?
  - ⦿ Is EEA happy for us to still provide access to the 2013 dataset?
    - ⦿ May be useful for users to see how the dataset changes over time



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## Just in case...

MSFD benthic broad habitat types  (Commission Decision (EU) 2017/848)	Habitat types listed in Annex 1 of the Habitats Directive and considered 'marine' for Article 17 reporting									
	1110 Sandbanks slightly covered all the time	1120 <i>Posidonia</i> beds (*)	1130 Estuaries	1140 Mudflats & sandflats not covered at low tide	1150 Coastal lagoons	1160 Large shallow inlets and bays	1170 Reefs	1180 Submarine structures made by leaking gas	1650 Boreal Baltic narrow inlets	8330 Submerged or partially submerged sea caves
Littoral rock & biogenic reef								These structures may occur in a range of broad habitat types		
Littoral sediment										
Infralittoral rock & biogenic reef										
Infralittoral coarse sediment										
Infralittoral mixed sediment										
Infralittoral sand										
Infralittoral mud										
Circalittoral rock & biogenic reef										
Circalittoral coarse sediment										
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