# SEABED HABITATS

*Unlocking seabed habitat data in Europe*

EMODnet

# EMODnet Seabed Habitats

**Coastal workshop: EMODnet and CMEMS – 16th June 2020**

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# EMODnet Seabed Habitats
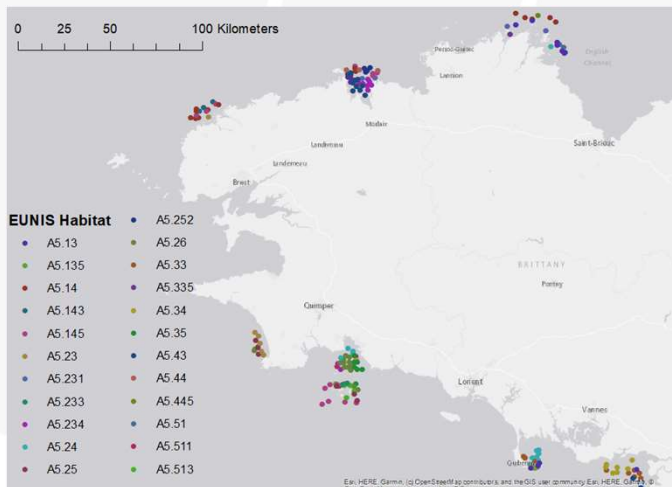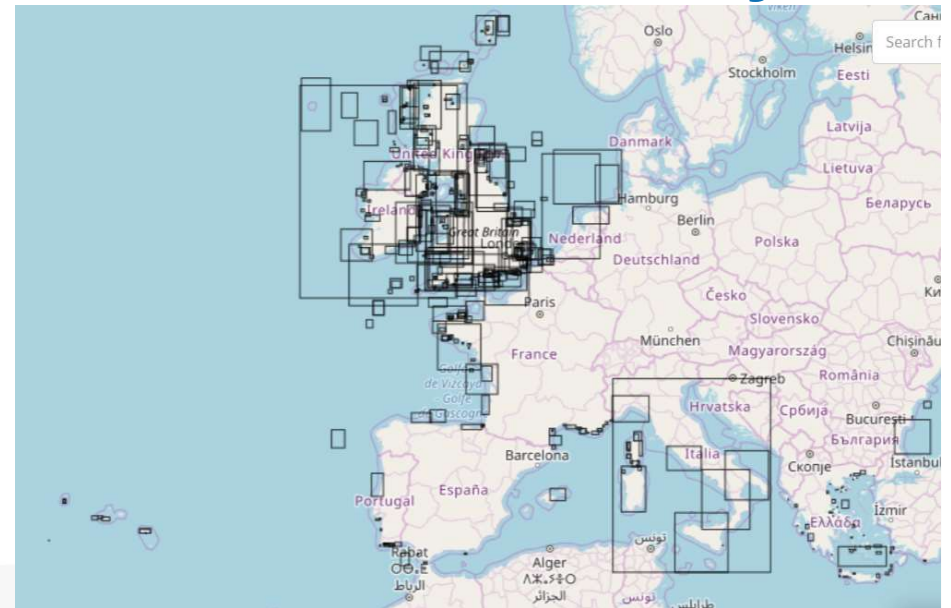


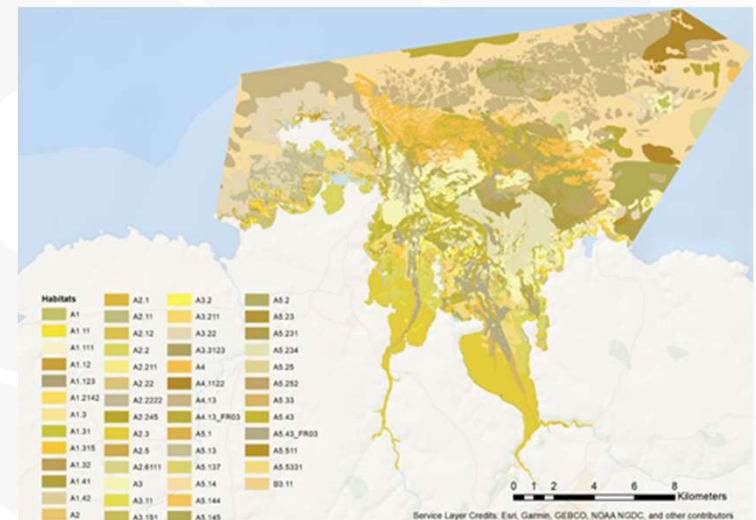Coordination: Ifremer

Technical project
management: JNCC

# Habitat data from survey



- Over 800 habitat maps from survey
- >500.000 Survey ground-thruthing points
- Intertidal zone to the deep sea
- EUNIS, Annex I & Other classifications



*Occurence of EUNIS habitat (Britanny, France)*



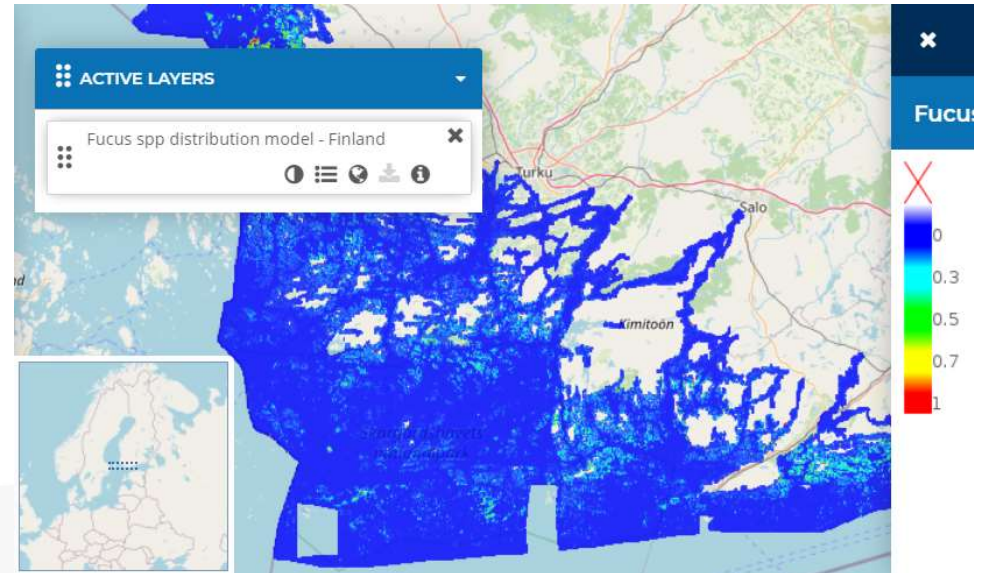*Survey habitat map in EUNIS classification (Morlaix, Bretagne, France)*

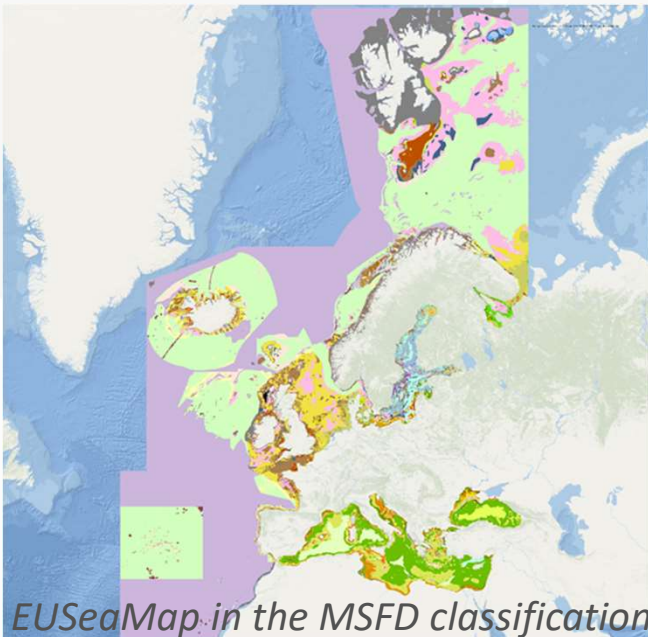# Habitat models



EMODnet
European Marine Observation and Data Network

- ((o)) **>70 Modelled maps of specific habitats**
- ((o)) **EUSeaMap broad –scale full coverage habitat map and confidence map**



*Habitat suitability for Fucus SPP in Finland*



*EUSeaMap in the MSFD classification*

EUSeaMap:
produced using a top-down modelling approach using classified environmental variables (e.g bathymetry, substrate, light at the seabed) and some biotope data for validation of classes
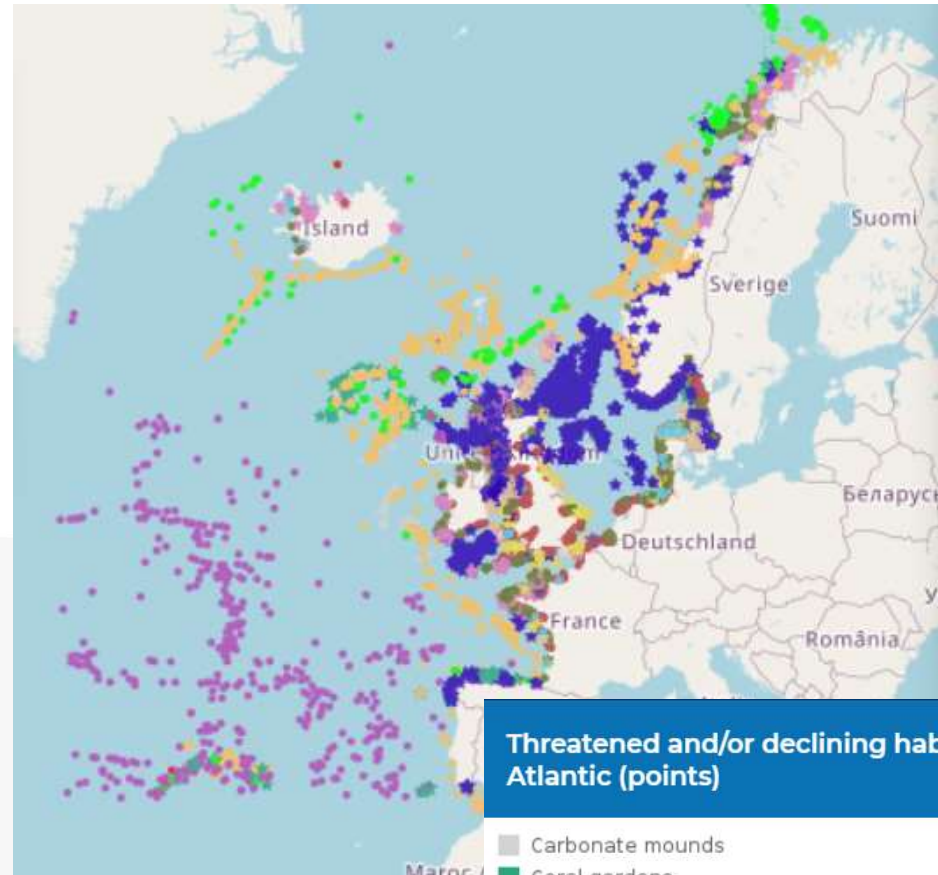
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# Composite habitat products



**EMODnet**
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Observation and
Data Network

- Composite habitat Products
- Including OSPAR T&D habitats
- Essential Ocean Variables (Seagrass, macrophytes cold waters corals)

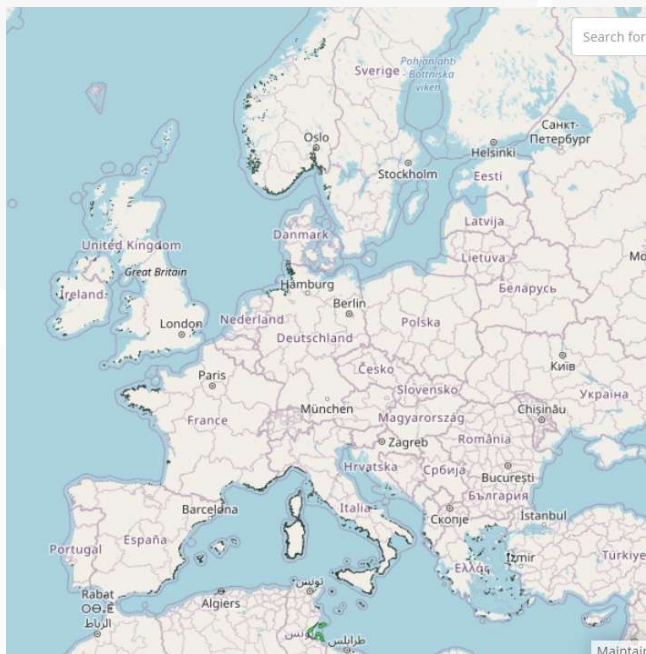*OSPAR Threatened and Declining habitats*

*Seagrass Extent*

**Threatened and/or declining habitats in Atlantic (points)**

- Carbonate mounds
- Coral gardens
- Deep-sea sponge aggregations
- Intertidal Mytilus edulis beds on mixed and sandy s...
- Intertidal mudflats
- Littoral chalk communities
- Lophelia pertusa reefs
- Maerl beds
- Modiolus modiolus horse mussel beds
- Ostrea edulis beds
- Sabellaria spinulosa reefs
- Sea-pen and burrowing megafauna communities
- Seamounts

# Environmental variables



*KdPAR (average 2005-2009)*
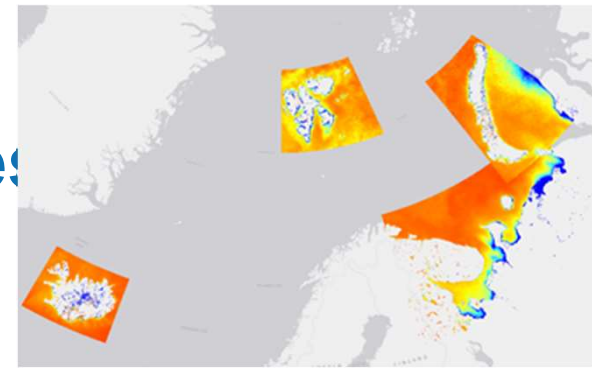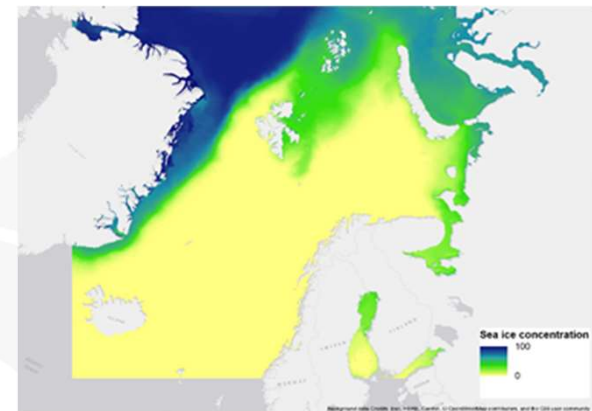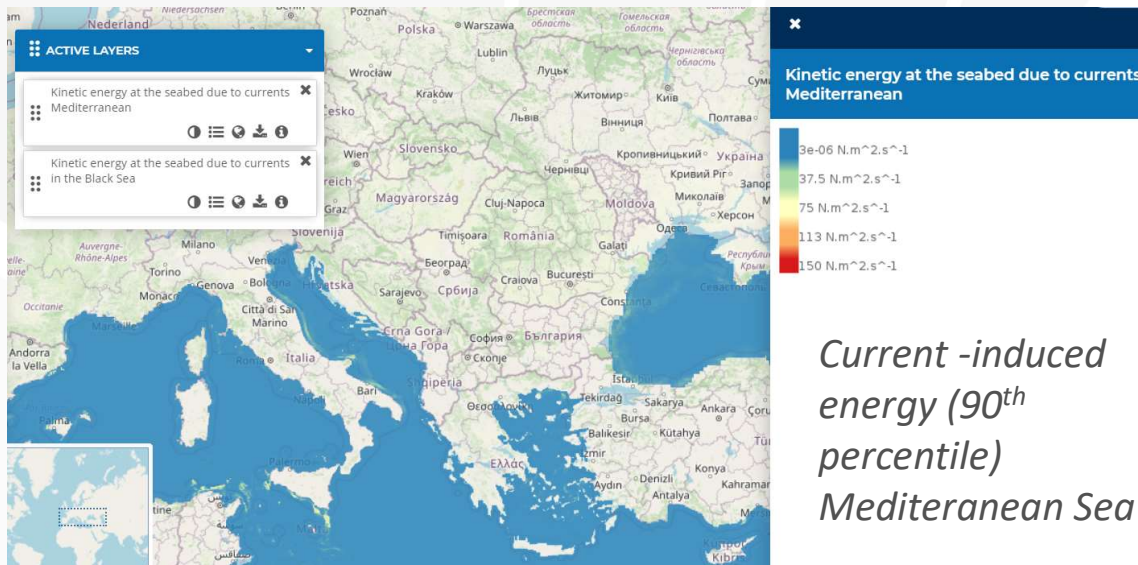
- Environmental variables influencing habitat type
- Light availability, wave kinetic energy, Current kinetic energy, temperature, ice coverage

- CMEMS products used
- For example Ke_current the Black Sea and Med



*Ice concentration (average 2018)*
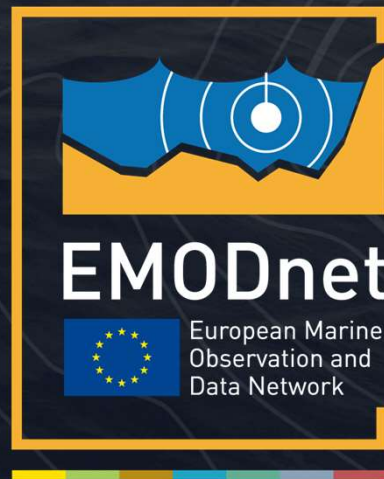


*Current -induced energy (90th percentile) Mediteranean Sea*

https://www.emodnet-seabedhabitats.eu/about/data-products-summary/

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*Your gateway to marine data in Europe*