



EMODnet-Copernicus Marine Service 8th Coordination meeting

EMODnet Geology

Anu Kaskela, Geological Survey of Finland

20 October 2023

EMODnet Geology | Workplan priorities

- Summary of current (thematic/data ingestion) workplan priorities
- *Renewal period (24 months) of the contract started in late September. Generally, the data harvesting from the European Seas continues (continuous marine geological mapping) & we hope to improve access to data from the Caribbean Sea. More specifically, this period includes update & development of :*
 - *Seabed substrates, sedimentation, seabed erosion*
 - *Bedrock and structures, Quaternary and geomorphology*
 - ***Coastal behaviour data products, e.g., visualize uncertainty of satellite-based coastline migration in a confidence map, extend the coastal type map with a coastal-ribbon map, write case study on the difficulties and feasibility of harmonizing measured and indirectly derived rate estimates of coastline migration***
 - *Geological events and probabilities*
 - *Minerals*
 - *Submerged landscapes*
 - *Geotechnical data*

EMODnet Geology | *In situ* data flows

- Summarize (graphics if available) the data flows between EMODnet thematic/data ingestion and Copernicus Marine Service (2 slides), i.e.:
 - **Does your thematic have any EMODnet data flow to CMEMS?**

None that I'm aware of.

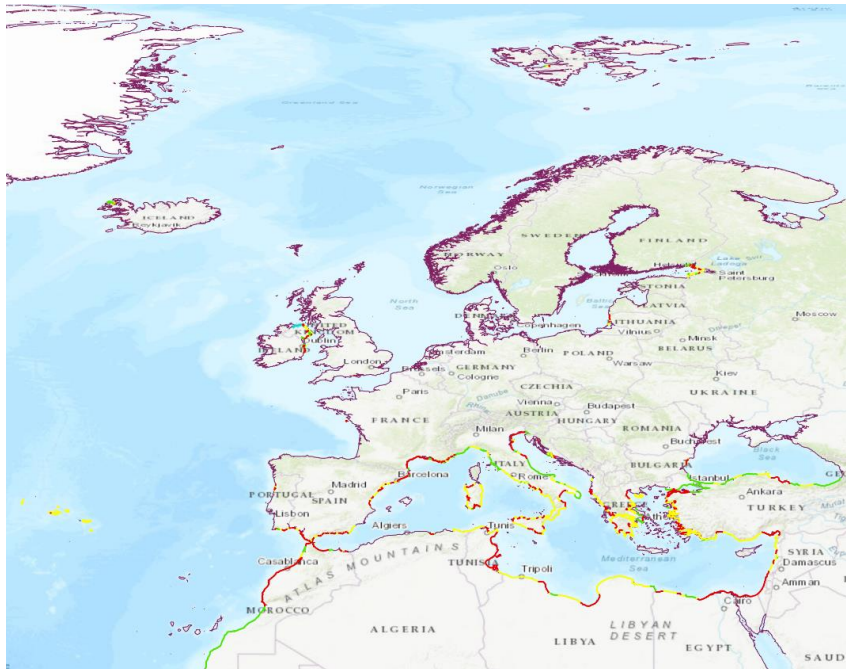
EMODnet Geology | *In situ* data flows

- Summarize (graphics if available) the data flows between EMODnet thematic/data ingestion and Copernicus Marine Service (2 slides), i.e.:
 - **Does your thematic receive/publish data from CMEMS?**
 - **Does your thematic use CMEMS data/model outputs for EMODnet data products?**

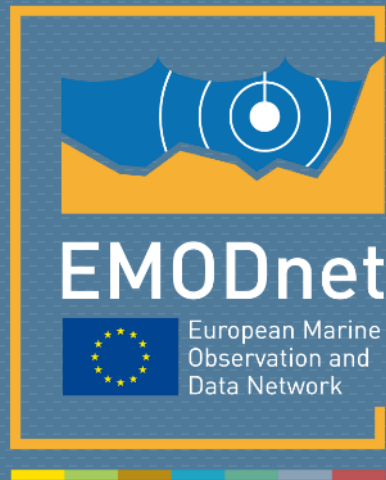
Not yet.

EMODnet Geology | Other ongoing interactions with Copernicus Marine Service

- *There has been some collaboration between the Coastal behaviour WP and CMEMS, e.g., meetings between the WP leader and CMEMS in the past (online and in Brussels).*
- *Plans to organize a meeting between EMODnet Geology, MGEG, EOEG, OCRE, GSEU and CMEMS*
- *One of the key questions for the Coastal behaviour WP is if CMEMS could be used to produce some attributes for a pan-European coastal vulnerability product*



VARIABLE	Ranking of coastal vulnerability index				
	Very low	Low	Moderate	High	Very high
	1	2	3	4	5
Geomorphology	Rocky, cliffed coasts Fiords Fiords	Medium cliffs Indented coasts	Low cliffs Glacial drift Alluvial plains	Cobble beaches Estuary Lagoon	Barrier beaches Sand Beaches Salt marsh Mud flats Deltas Mangrove Coral reefs
Coastal Slope (%)	>0.115	0.115 – 0.055	0.055 – 0.035	0.035 – 0.022	< 0.022
Relative sea-level change (mm/yr)	< 1.8	1.8 – 2.5	2.5 – 3.0	3.0 – 3.4	> 3.4
Shoreline erosion/ accretion (m/yr)	>2.0	1.0 – 2.0 Accretion	-1.0 – +1.0 Stable	-1.1 – -2.0	< - 2.0 Erosion
Mean tide range (m)	> 6.0	4.1 – 6.0	2.0 – 4.0	1.0 – 1.9	< 1.0
Mean wave height (m)	<0.55	0.55 – 0.85	0.85 – 1.05	1.05 – 1.25	>1.25



@EMODnet
emodnet.ec.europa.eu

Your gateway to marine data in Europe

