



EMODnet
European Marine
Observation and
Data Network
Your gateway to marine data in Europe

EMODnet 9th Steering Committee

Item 13: EMODnet Catalogue/Portfolio

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 The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) No 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund.



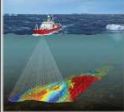






EMODnet Catalogue/Portfolio: 1st step

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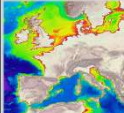

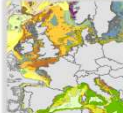

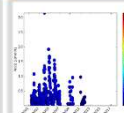
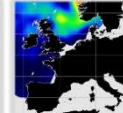

- ④ Description of EMODnet offer in terms of:
 1. Data
 2. Data Products
 3. Services (including web services)
- ④ It can be useful to develop dissemination material and to give a simple/friendly overview of what a user can find in the different portals
- ④ It follows initial slide by Patrick Goringe describing EMODnet thematic coverage

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Thematic DATA coverage by the portals

Bathymetry	Geology	Seabed habitats	Physics	Chemistry	Biology	Human activities
						
Survey tracks	Seabed substrate	Seabed habitat maps (broad-scale and specific per basin)	Wave height and duration	Acidity	Occurrences and abundances of species of:	Aggregate extraction
Water depth and depth profiles	Sediment accumulation rates	Individual seabed habitat maps from surveys	Sea temperature	Antifoulants	Phytoplankton	Aquaculture
Undersea features	Seafloor lithology	Environmental variables influencing habitat type (depth, salinity, currents, light, ...)	Wind speed and direction	Chlorophyll	Zooplankton	Cultural heritage
Wrecks	Seafloor stratigraphy		Salinity	Dissolved gases	Macro-algae	Dredging
High resolution bathymetry in coastal areas	Coastal behaviour		Horizontal speed of the water column	Fertilisers	Angiosperm	Fisheries
	Geological events and probabilities		Water clarity	Hydrocarbons		Hydrocarbon extraction
	Mineral occurrences		Changes in sea level	Marine litter (micro, beach, seafloor)	Fish	Traffic in main ports
			Inflow from rivers	Heavy metals	Reptile	Ocean energy facilities
			Water conductivity / biochemical parameters	Organic matter	Benthos	Pipelines and cables
			Atmospheric parameters	Polychlorinated biphenyls	Bird	Protected areas
			Underwater noise	Pesticides and biocides	Sea mammal	Status of bathing sites
				Radionuclides		Vessel density
				Silicates		Waste disposal (solids)
						Wind farms
						Other forms of area management/ designation

Thematic DATA PRODUCT coverage by the portals


Bathymetry	Geology	Seabed habitats	Physics	Chemistry	Biology	Human activities
						
Digital Terrain Model of:	Maps of:	EMODnet broad-scale seabed habitat map for Europe (EUSeaMap)	Time series	Concentration maps using DIVA software	Map viewer of:	Map viewer of:
Survey tracks	Seabed substrate	Confidence maps	Dynamic plots	Dynamics plots	Phytoplankton	Aggregate extraction
Water depth and depth profiles	Sediment accumulation rates	Maps of:	Profiles	Profiles of:	Zooplankton	Aquaculture
Undersea features	Seafloor lithology	Seabed habitat maps (broad-scale and specific per basin)	Statistics (trends, max, min, average, ...)	Acidity	Macro-algae	Cultural heritage
Wrecks	Seafloor stratigraphy	Individual seabed habitat maps from surveys	Maps of:	Antifoulants	Angiosperm	Dredging
High resolution bathymetry in coastal areas	Coastal behaviour	Environmental variables influencing habitat type (depth, salinity, currents, light, ...)	Wave height and duration	Chlorophyll	Fish	Fisheries
	Geological events and probabilities		Sea temperature	Dissolved gases	Reptile	Hydrocarbon extraction
	Mineral occurrences		Wind speed and direction	Fertilisers	Benthos	Traffic in main ports
			Salinity	Hydrocarbons	Bird	Ocean energy facilities
			Horizontal speed of the water column	Heavy metals	Sea mammal	Pipelines and cables
			Water clarity	Organic matter		Protected areas
			Changes in sea level	Polychlorinated biphenyls	Dynamic gridded abundance plots showing geographical variability of species of:	Status of bathing sites
			Inflow from rivers	Pesticides and biocides	Benthos	Vessel density
			Water conductivity/biochemical parameters	Radionuclides	Birds	Waste disposal (solids)
			Atmospheric parameters	Silicates	Fish	Wind farms
			Ice cover	Marine litter (micro, beach, seafloor)	Sea mammals	Other forms of area management/ designation
			Underwater noise		Micro-organisms	
					Physoplankton	
					Reptiles	
					Zooplankton	

SERVICES provided by the portals

Bathymetry	Geology	Seabed habitats	Physics	Chemistry	Biology	Human activities
CDI Survey Data Discovery and Access Service	Map Viewer and Download	Interactive (custom) Map Viewer and Download	Map Viewer and Download	CDI Data Discovery and Access Service or Map Viewer and Download	Data Catalogue	View, Query and Download
Sextant Catalogue Service providing metadata on composite DTMs	Metadata Catalogue	Data Download	Dashboard and Catalogue	Products Viewing and Download Service (OceanBrowser)	Product Gallery	
Bathymetry Viewing and Download Service		Metadata Search and Catalogue (ICES)	Thredds Catalogue	Data Products Catalogue	Data Download	
			Videos	River Data Inventory	Map Viewer	
			GITHUB			




WEB SERVICES provided by the portals

Bathymetry	Geology	Seabed habitats	Physics	Chemistry	Biology	Human activities
			ERDDAP-service			
Web Map Service (WMS), Web Feature Service (WFS), Web Map Tile Service (WMTS), Web Coverage Service (WCS)	Web Map Service (WMS), Web Feature Service (WFS), Catalogue Service (CSW)	Web Map Service (WMS), Web Feature Service (WFS)	Web Map Service (WMS), Web Feature Service (WFS), Web Service ASMX, Web Coverage Service (WCS), Web Processing Service (WPS), Tile Map Service (TMS), WMS Tile Caching (WMS-C), Web Map Tile Service (WMTS)	Web Map Service (WMS), Web Feature Service (WFS)	Web Map Service (WMS), Web Feature Service (WFS)	Web Map Service (WMS), Web Feature Service (WFS)



EMODnet Catalogue/Portfolio: 2nd step

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-  Focus on EMODnet Data Products
-  Expansion of the list of Data Products with a description using features that can be applied to all portals
-  IDEA: use the vocabulary of some of the checkpoints (ISO based)

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Data Product	Unit	Spatial coverage	Spatial resolution	Temporal coverage	Temporal resolution	Update frequency	Search function	View function	Download function	Extra features	Data Policy	OTHERS ?	
Digital Terrain Model		European sea regions	grid size: 0,125 arc minute x 0,125 arc minute (ca. 230 m x 230 m)	01-01-1830 - 31-08-2016	n.a.	Yearly	YES	YES	YES	Making depth profiles	Nothing		Bathymetry
Seabed substrate map	n.a.	European marine areas	1:250000	n.a.	n.a.		NO	YES	YES	Visualisation Bathymetry layers	Organisational details asked before download		Geology
EMODnet broad-scale seabed habitats for Europe (EUSeaMap)			1:250000				YES (metadata search)	YES	YES	Build a custom map	Organisational details asked before download		Seabed Habitats
- Waves (wave spreading at wave peak, wave spectrum peak period, spectral significant wave height, ...)	m ; degree spreading at wave peak ; s	Global marine regions	Could we have a proxy for this?				YES	YES	YES	Selection of depth	Nothing		Physics
- Concentration maps	µmol/l ; mg/m ³	Atlantic Sea, Baltic Sea, Black Sea, Mediterranean Sea, North Sea	10-20 km???	Decades	quarterly		YES	YES	YES	Making vertical/depth profiles	No	Spatial resolution: visually derived from the grid	Chemistry
Map viewer of abundances and occurrences of species	records/grid	European marine regions					YES	YES	YES	NO			Biology
View Data - Map Aggregate Extraction	n.a.	European marine regions	? (a proxy could be obtained: dividing by the number of points)	less than 5y?	n.a.	yearly?	YES	YES	YES	NO		Organisational details asked before download	Human Activities

