



EMODnet

European Marine
Observation and
Data Network



- *The European framework*
- *The "proof of concept" of EMODnet...*
- *Objectives of DGMARE tender*
- *EMODnet PP*
 - *the Methodology, the Parameters, the Pillars, the Sustainability*
 - *Geographical coverage (and acting communities)*
 - *Data origin*
 - *Web Portal Architecture*
 - *EMODnet PP - NRT Data, Historical Data, Data Access*
 - *EMODnet PP - pilot portal*
- *Enlarge the community*

The European framework EUROPEAN INTEGRATED MARITIME POLICY



"the particular need for an all-embracing maritime policy aimed at developing a thriving maritime economy, in an environmentally sustainable manner. Such a policy should be supported by excellence in marine scientific research, technology and innovation"

President of the European Commission

- Knowledge built on extended use of data
- Maritime Spatial Planning

The European framework

**MARIA DAMANAKI,
COMMISSIONER FOR
MARITIME AFFAIRS AND
FISHERIES**

(..) the data collected through these observations can only generate knowledge and innovation if Europe's engineers and scientists are able to find, access, assemble and apply them efficiently and rapidly. At present this is often not the case.



EUROPEAN FRAMEWORK

Green Paper *on a Future Maritime Policy for the Union:*

- In its strategic objectives for 2005-2009, the European Commission declared “*the particular need for an all-embracing maritime policy aimed at developing a thriving maritime economy, in an environmentally sustainable manner. **Such a policy should be supported by excellence in marine scientific research, technology and innovation***”.
- **Better understanding** of the competing uses of the ocean will **require better data and information** on maritime activities, be they **social, economic or recreational**, as well as on their impacts on the resource base.

EU Initiatives

- Marine Strategy Framework Directive (MSFD) - 2007
 - comprehensive monitoring of the marine environment beyond the geographical limits set in the Water Framework Directive.
- European Environment Information and Observatory Network – EIONET
 - EEA tools for sharing coastal, transitional and marine waters observations at EU level.
- Global Monitoring for Environment and Security (GMES)
 - GMES MARINE → information system in the field of marine environment and security for forecasts, hindcasts, nowcasts
- Water Information System for Europe (WISE)
 - WISE MARINE → for water related component of environmental data access and reporting
- Shared Environmental Information System (SEIS) and INSPIRE



PRESENT LIMITATIONS

Data Collection Framework only deals with **fisheries data**;

GMES only targets services where data from **satellites** plays a **substantial role**;

SEIS and WISE marine are **limited to data** that must be reported as part of the **Marine Strategy Framework Directive**

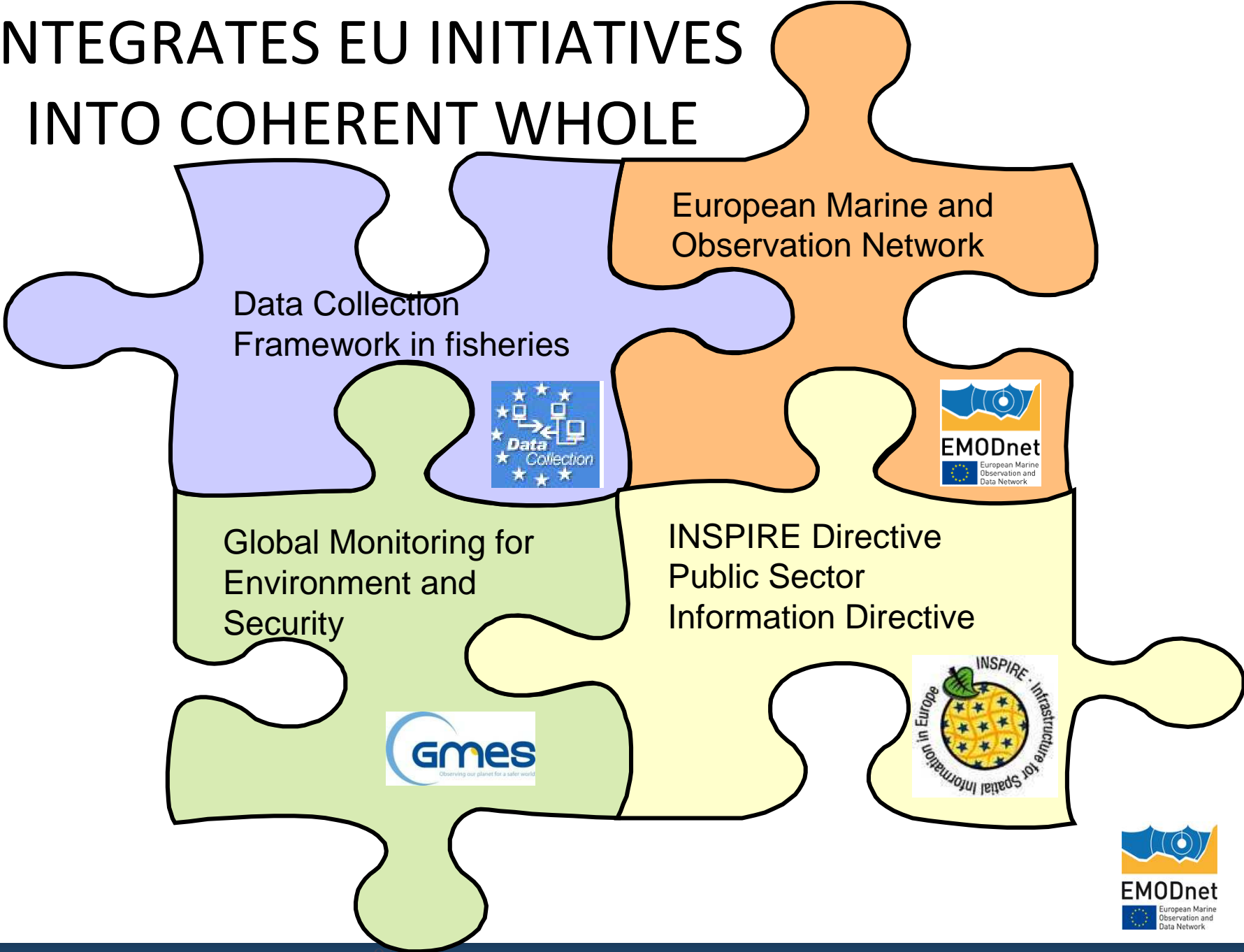
European Agencies only hold limited amounts of data and national archives on their own cannot provide the seamless **cross-border sea-basin-scale** data layers that are required;

SETTING EMODNET

Green Paper on a Future Maritime Policy for the Union:

- **Good data** are also of importance for maritime economic operators. However, there are still major problems of **harmonisation and reliability of data, as well as insufficient and geographically imbalanced monitoring in EU marine regions**. These gaps must be addressed if we are to devise a sound and sustainable EU Maritime Policy.
- The EU could consider setting up a **European Marine Observation and Data Network** which would provide a sustainable focus for improving systematic observation

INTEGRATES EU INITIATIVES INTO COHERENT WHOLE



EMODnet Pilot portal for Hydrography
European Marine Observation and Data Network
Data Discovery and Access Service

Cart: 0 Dataset(s) Proceed to check out Reset basket Export Store query Summary Hide map ?

Reset all steps

Tools: [Map navigation icons]

Layer control: Expand Add layer

- CDI entry Points
- CDI entry Tracks
- CDI entry Areas
- Grid Lines
- Regional sea
- Regional sea labels
- Main sea
- Main sea labels
- Bathymetry
- Blue Marble

Display all selected records
 Only selected records in results list

Zoom to selected

prototypes

OneGeology Europe - Client - Microsoft Internet Explorer provided by The British Geological Survey

http://onegeology-europe.bgs.fr/geosort/Viewer.jsp?lang=en

Search Map viewer

Layers:

- Emodnet Substrate map
- Emodnet Substrate map
- Country Outlines/Political boundaries
- 1:00 - 1:1M Harmonized Geological Map

EMODnet Pilot Portal For Bio...
European Marine Observation and Data Network
Data Discovery and Access Service

Search Legend Feedback Help

Lat: 50.7 Lon: -37.77

Legend:

- Google Satellite #
- NOAA ETOP10
- NOAA Blue Marlin
- OSPO_00
- Abiotic data
- Salinity Mediterranean
- Salinity North Sea
- Salinity Baltic Sea
- Seabed substrate (North Sea and Baltic Sea)
- Administrative Boundaries
- Exclusive Economic Zones
- ICES Ecoregion
- ADMINISTRATIVE BOUNDARIES
- IHO sea areas
- Data
- Methic eddies in EuroBS

EMODnet EUSeaMap
European Marine Observation and Data Network
Pilot portal for broadscale modelled seabed habitats

Home > EUSeaMap > EUSeaMap web-GIS

Map Layers Key

Add layer(s) from other mapping portals

- Modelled seabed habitats
- Detailed classification
- Baltic in North Seas
- Baltic Sea - by energy
- Baltic Sea - by salinity
- West Mediterranean
- Simplified classification
- Input layers
- Raw data
- Confidence
- Boundaries

Portal For Physical Parameters

Regions:

- Light attenuation
- Sea levels
- Arctic ROOS
- Baltic - BOOS
- Iransharyzhen Region IRLAZHS
- North Sea - NOOS
- Black Sea - DS-GOOS
- Mediterranean - MOON

Station name: test_mems
Bidos Series ID: 10002

Active parameters:

- Waves and winds
- Sea water temperature
- Sea water salinity
- Currents
- Sea levels

EMODnet Pilot portal for...
European Marine Observation and Data Network
Viewing and Downloading

DIVA 4D analysis of Nitrate.19871987

Nitrate masked using relative error threshold 0.3

Nitrate masked using relative error threshold 0.5

Additional fields:

- Nitrate
- Error standard deviation of Nitrate
- Relative error of Nitrate
- Logarithm10 of number of data in bins
- Logarithm10 of number of

Horizontal Section Vertical Section

Logarithm10 of number of data in bins

depth[meters]: -0.0

time[season]: 1

Nitrate masked using relative error threshold 0.3 (Units: millimole/m³)

depth[meters]: -0.0

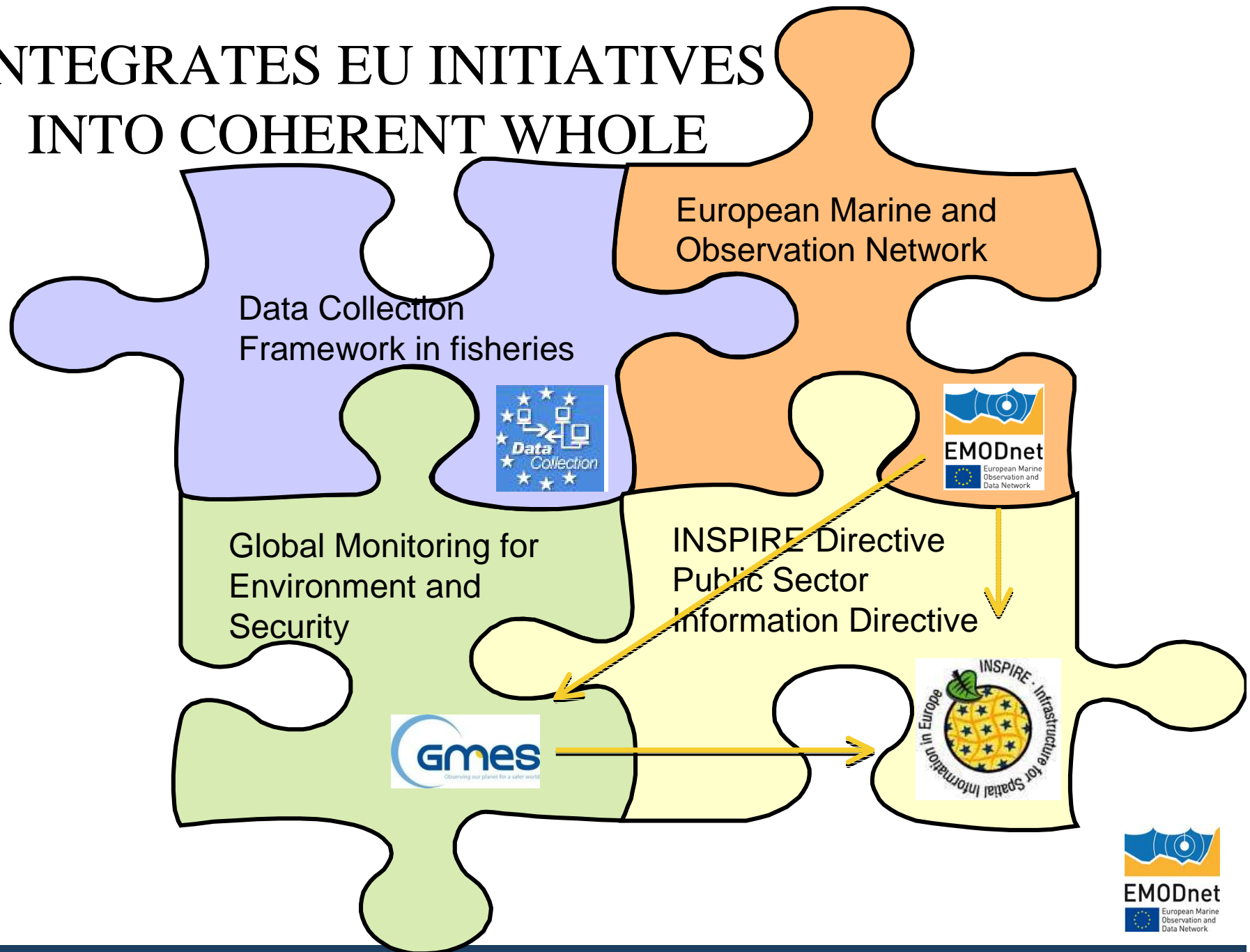
time[season]: 1

Field produced by EMODNET

Add server Plot/update

About Help

INTEGRATES EU INITIATIVES INTO COHERENT WHOLE



EMODNET AND GEOSS/GMES

An Integrated Maritime Policy for the European Union

- **Data** on oceans and seas are available from many sources **but assembling them** for particular applications **takes considerable effort and there is no overall policy for keeping them for posterity**. The objective here is to **integrate existing, but fragmented initiatives** in order to facilitate access to primary data for public authorities, maritime services, related industries and researchers.
- The **European Marine Observation and Data Network** ... Integrated with **GEOSS and GMES**, it will increase the precision of estimates of the magnitude and impact of climate change.

OBJECTIVES OF DGMARE TENDER

- **Provide access to archived and real-time data on physical conditions in Europe's seas and oceans and to determine how well the data meet the needs of users.**
- Make layers of physical data and their metadata available for use by industry, public authorities and scientists
- Contribute towards the definition of an operational European Marine Observation and Data Network (EMODnet)
- Contribute to developing the definition of the Global Monitoring for Environment and Security (GMES) marine core service.



EMODNET PP – THE METHODOLOGY

- Provide through a portal:
 - free and open access to marine data from measurement stations and ferryboxes.
 - metadata to these parameters using EMODnet/INSPIRE standards.
- Monitoring and reporting on the effectiveness of the portal in meeting the **needs of users** in terms of ease of use, quality of information and fitness for purpose of the products delivered.

EMODNET PP – THE PARAMETERS

Measurements from **fixed stations** that should cover :

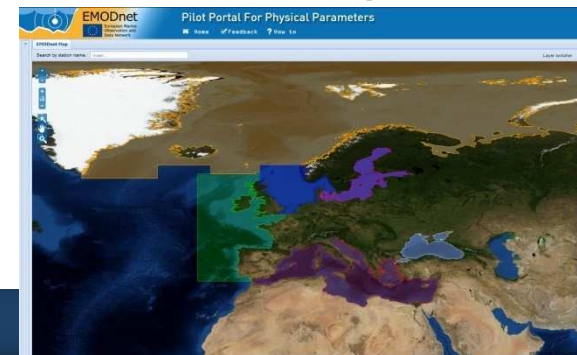
- wave height and period
- temperature of the water column
- wind speed and direction
- salinity of the water column
- horizontal velocity of the water column
- light attenuation
- sea level

Measurements from **ferryboxes** that should cover :

- temperature of the water column
- salinity of the water column

GEOGRAPHICAL COVERAGE (AND ACTING COMMUNITIES)

- Western Mediterranean Sea (*ROOS Med and SeaDataNet*);
- Adriatic Sea (*ROOS Med and SeaDataNet*);
- Ionian Sea and Central Mediterranean Sea (*ROOS Med and SeaDataNet*);
- Aegean-Levantine Sea (*ROOS Med and SeaDataNet*);
- Greater North Sea, including Kattegat, and English Channel (*ROOS NWS [North West Shelf] and SeaDataNet*);
- Celtic Seas (*ROOS IBI and SeaDataNet*);
- Bay of Biscay and the Iberian Coast (*ROOS IBI and SeaDataNet*);
- In the Atlantic Ocean, the Macronesian bio-geographic region, being the waters surrounding the Azores, Madeira and the Canary Islands (*Coriolis and SeaDataNet*), and Cape Verde (*E subtropical Atlantic*)
- North Atlantic (including Porcupine Abyssal Plain, Central Irminger Basin, Norwegian Sea)
- Black Sea (*BSGOOS*)



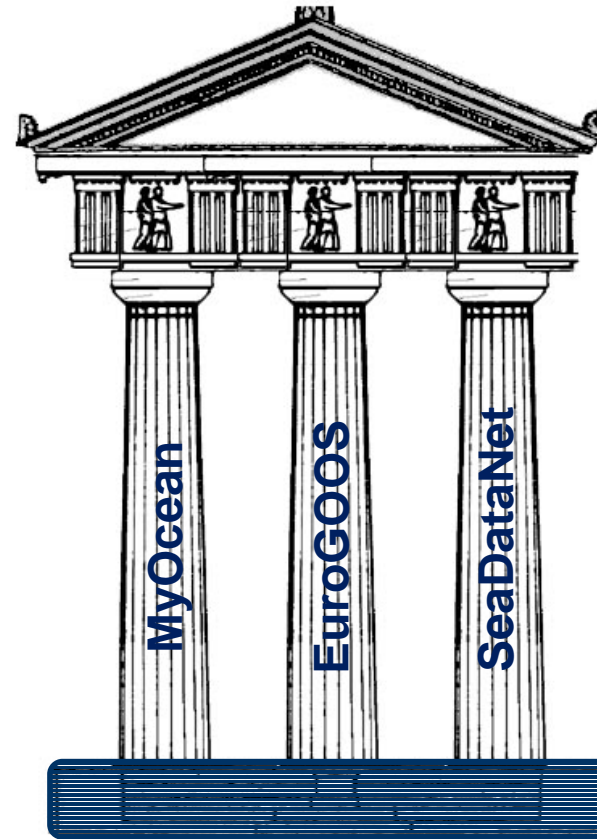
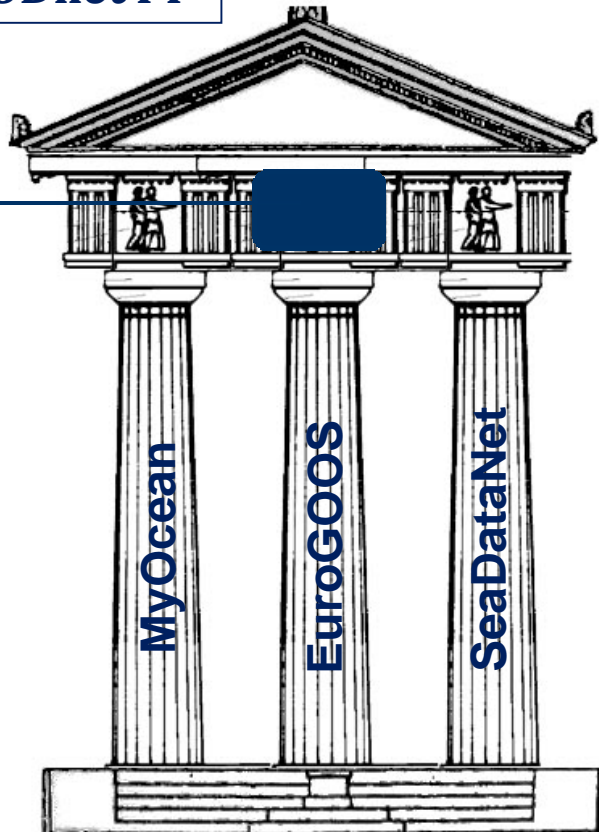
DATA ORIGIN

- **EuroGOOS ROOS's**
 - **SeaDataNet**
 - **MyOcean – In Situ**

 - Jerico
 - Data Buoy Cooperation Panel
 - National initiatives
- All contributors will be actors in the project:
 - documents will be agreed during ad hoc EuroGOOS meetings
 - EuroGOOS technical reports will contain results and names of contributors
 - EMODnet PP is being presented in EuroGOOS regions and Black Sea

THE EMODNET PP PILLARS

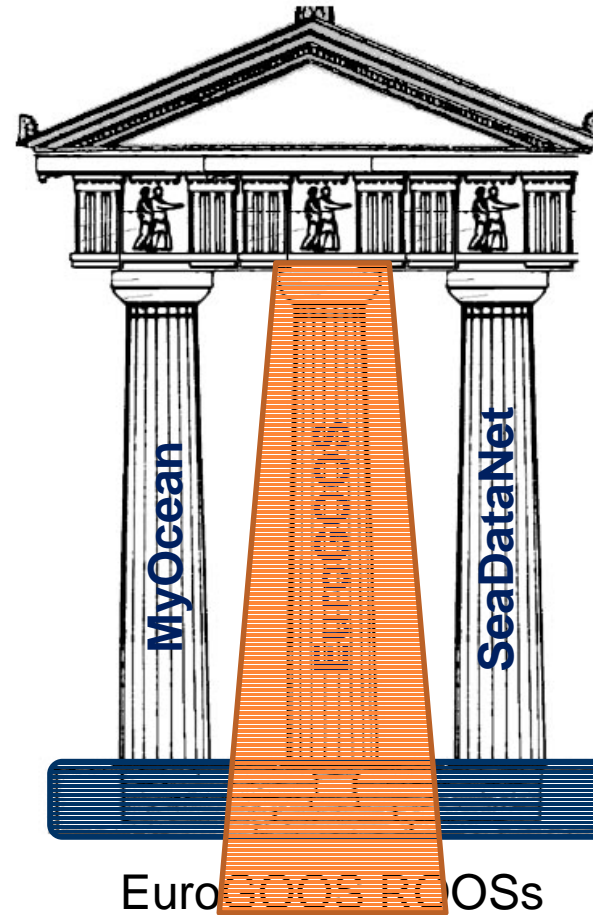
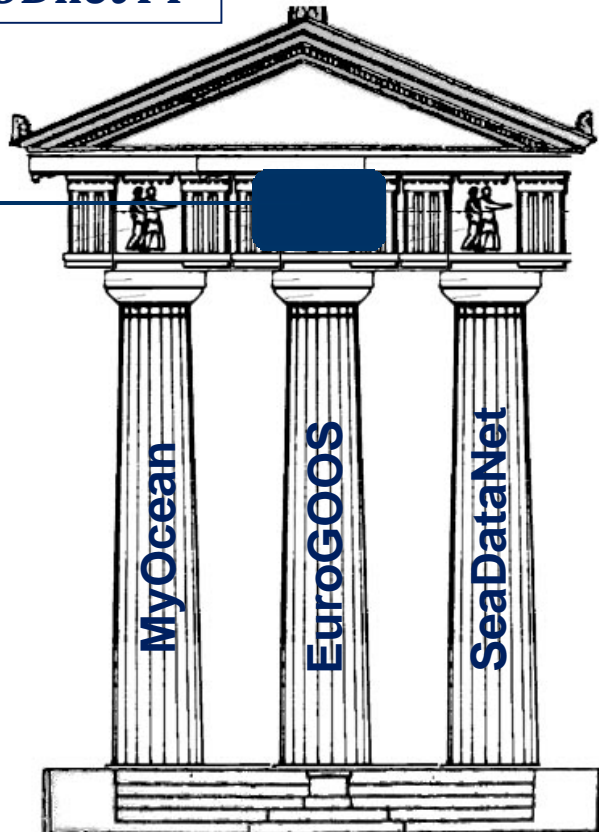
EMODnet PP



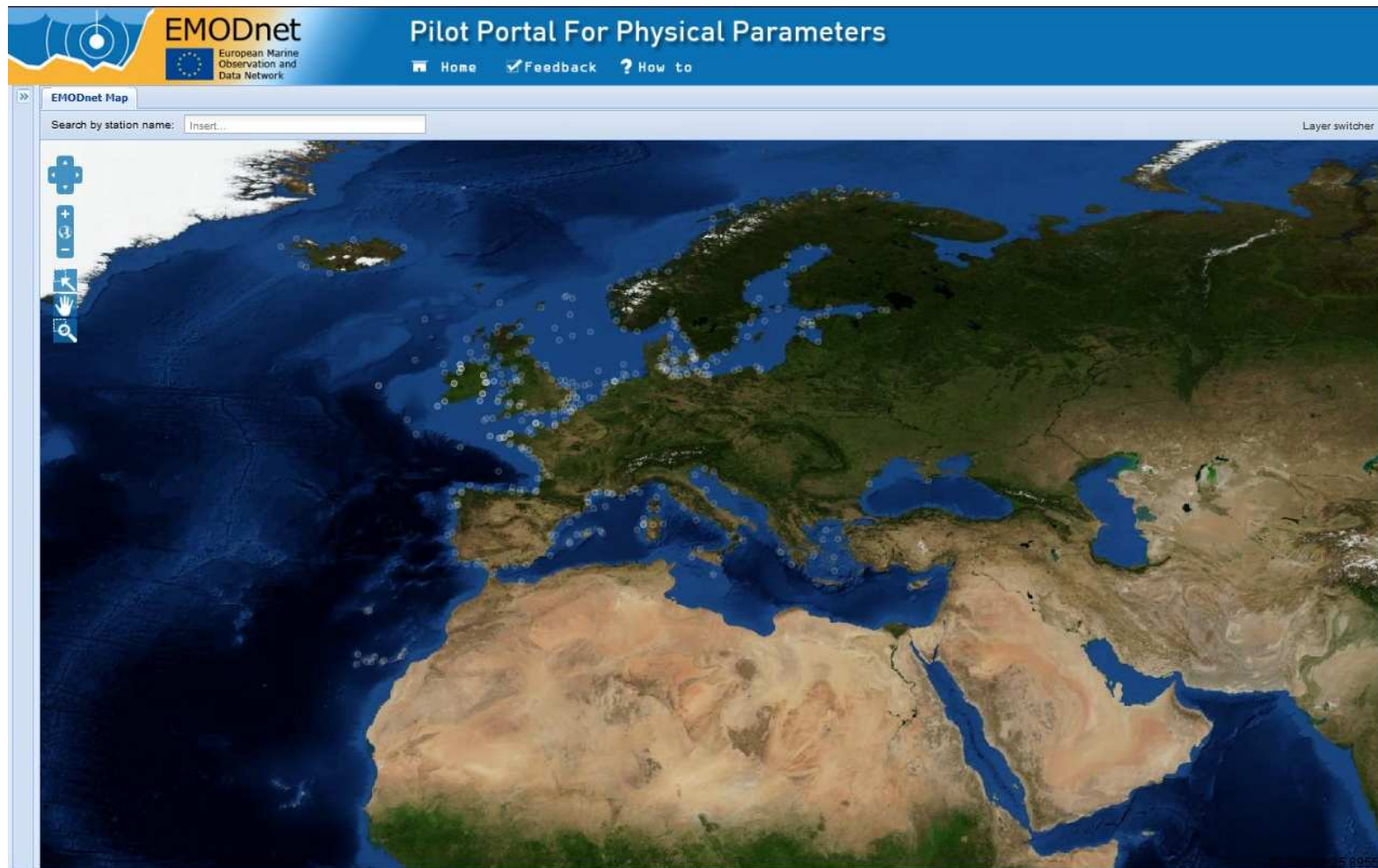
EuroGOOS ROOSs

THE EMODNET PP PILLARS

EMODnet PP



SEPRISE HEREDITY



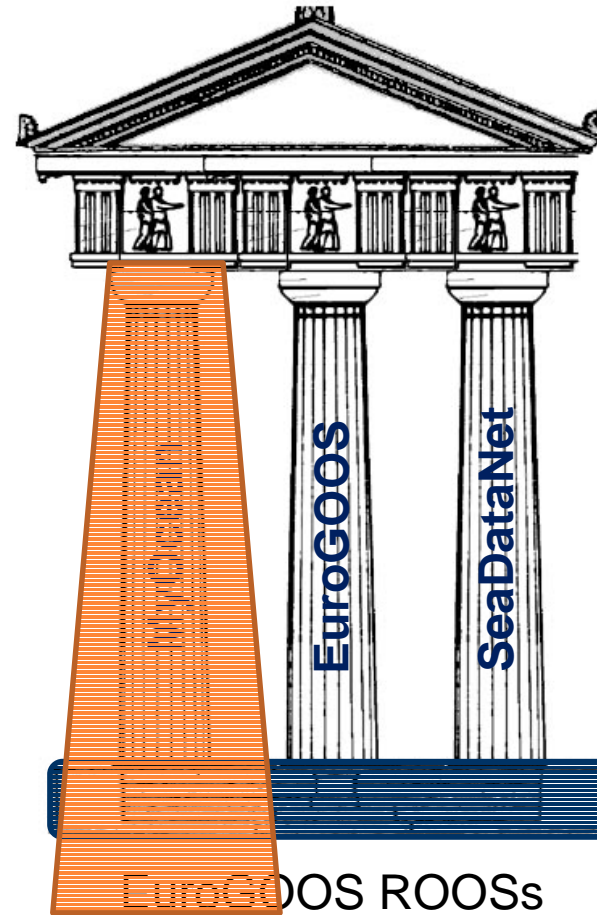
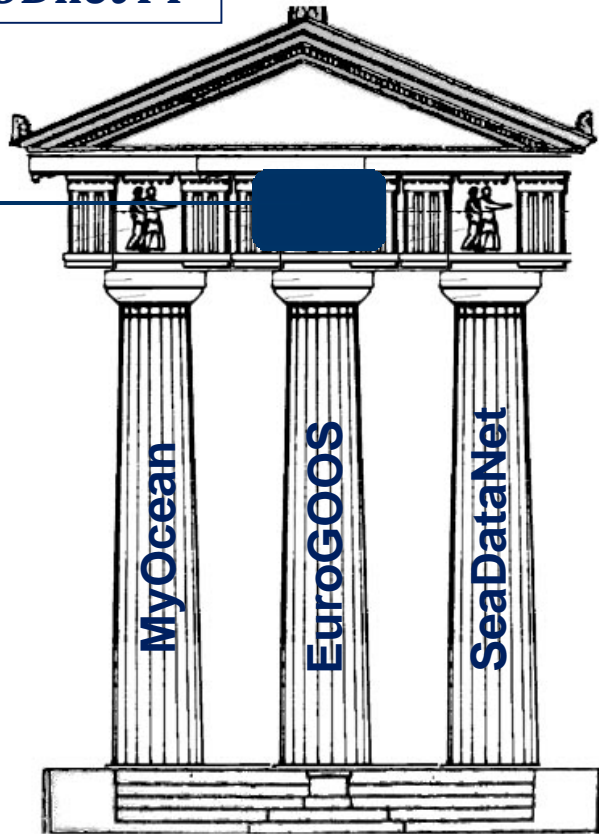
EUROPEAN DIRECTORY OF THE OCEAN-OBSERVING SYSTEM (EDIOS)

- On-line searchable directory of observing, measuring, and monitoring systems
- Approx. 10,000 observation entries
- Links to on-line real-time and archive data

The image displays the EDIOS website interface. On the left, a 'QUICK SEARCH' window shows a grid of colored squares representing data points. On the right, a 'FULL SEARCH' window features a map of Europe with a red line indicating a search path, alongside various search filters and a detailed data table. Below the search windows is the logo for the 'European Global Ocean Observing System' (EuroGOOS), which includes a globe and the text 'An EuroGOOS initiative'. At the bottom, the text 'European Directory of the Ocean-observing System (EDIOS)' is displayed in orange.

THE EMODNET PP PILLARS

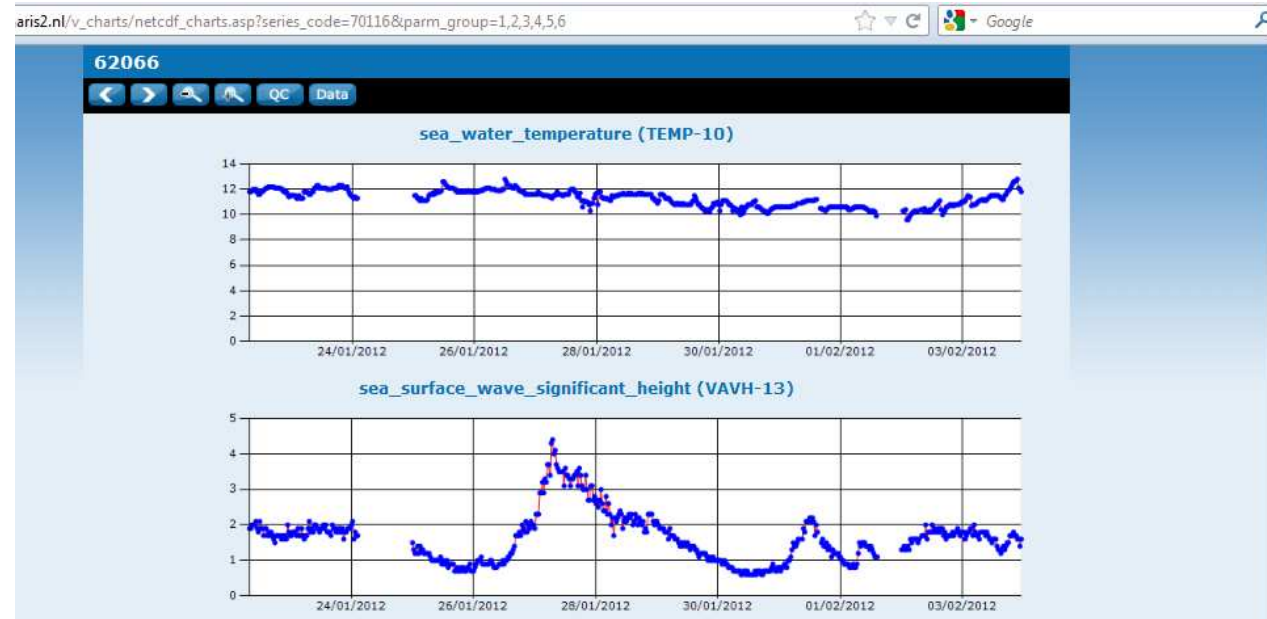
EMODnet PP



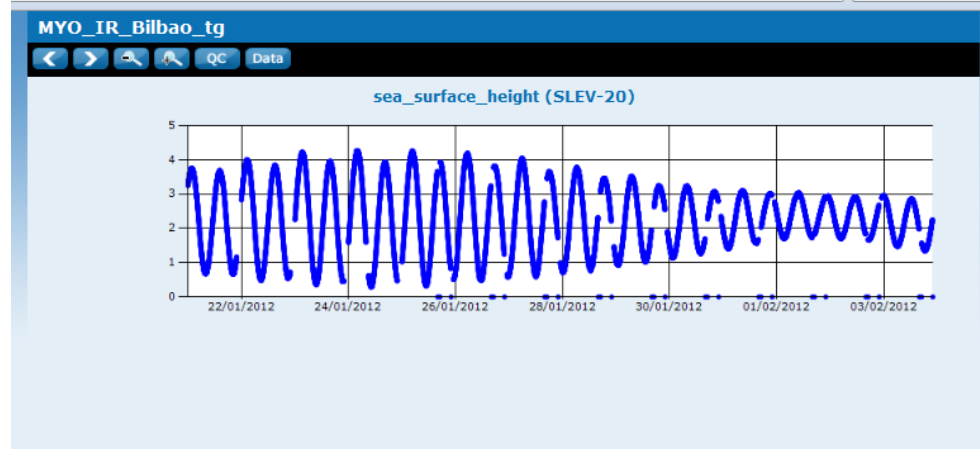
EMODnet PP - NRT Data

- Access to NRT data is pretty much organized within ROOSs in collaboration with MyOcean
- The existing network RT observing system is presenting spatial and temporal gaps.
- A goal of EMODnet PP is to demonstrate that we are missing the observations needed for the operational and research applications in the area.

EMODnet PP – NRT Data

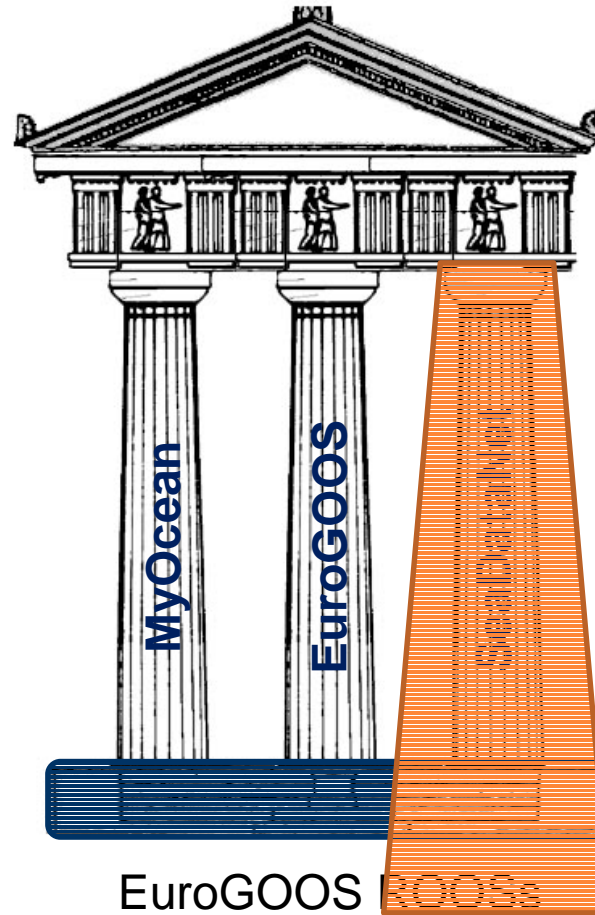
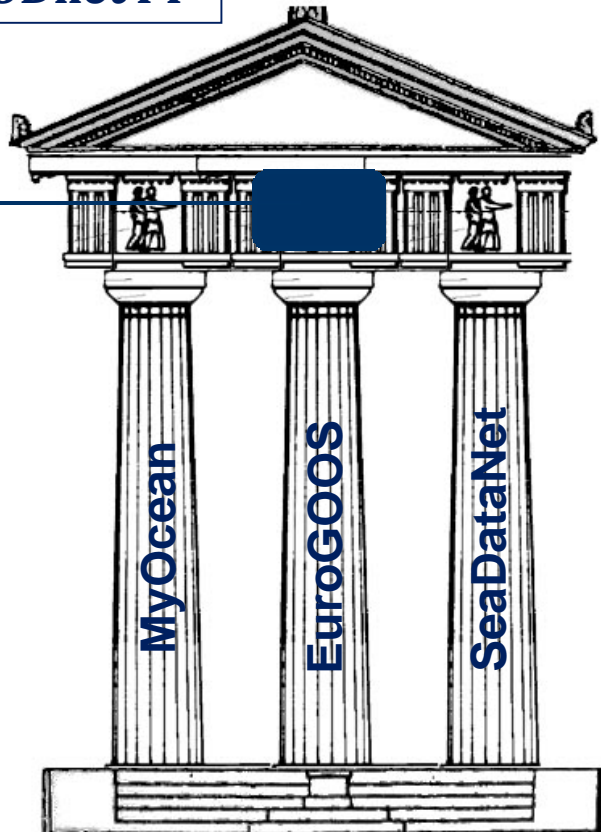


/v_charts/netcdf_charts.asp?series_code=70427&parm_group=1,2,3,4,5,6



THE EMODNET PP PILLARS

EMODnet PP



EMODnet PP - Historical Data

- Access to historical data is organised through SeaDataNet, but there are still gaps (data not yet available)
- EMODnet PP wants to demonstrate that NRT and historical data can be well organised in an unique Informative System (IS)
- EMODnet PP wants to demonstrate that it is possible to benefit of such project for the reanalysis product that are required for (e.g.) climate and fisheries applications.

EMODnet PP – Historical Data



- **Germany:**
 - 10 - Series CDI
 - 1 - Program CDI



- **Ireland:**
 - 73 - Series CDI
 - 12 - Programs CDI

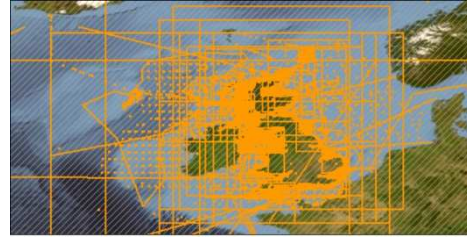


- **Italy:**
 - 28 - Series CDI
 - 26 - Programs CDI

→ to be validated



- **Sweden:**
 - 16 - Series CDI
 - 2 - Programs CDI



- **United Kingdom:**
 - 15103 - Series CDI
 - 275 - Programs CDI



- **France:**
 - 990 - Series CDI
 - 27 - Programs CDI

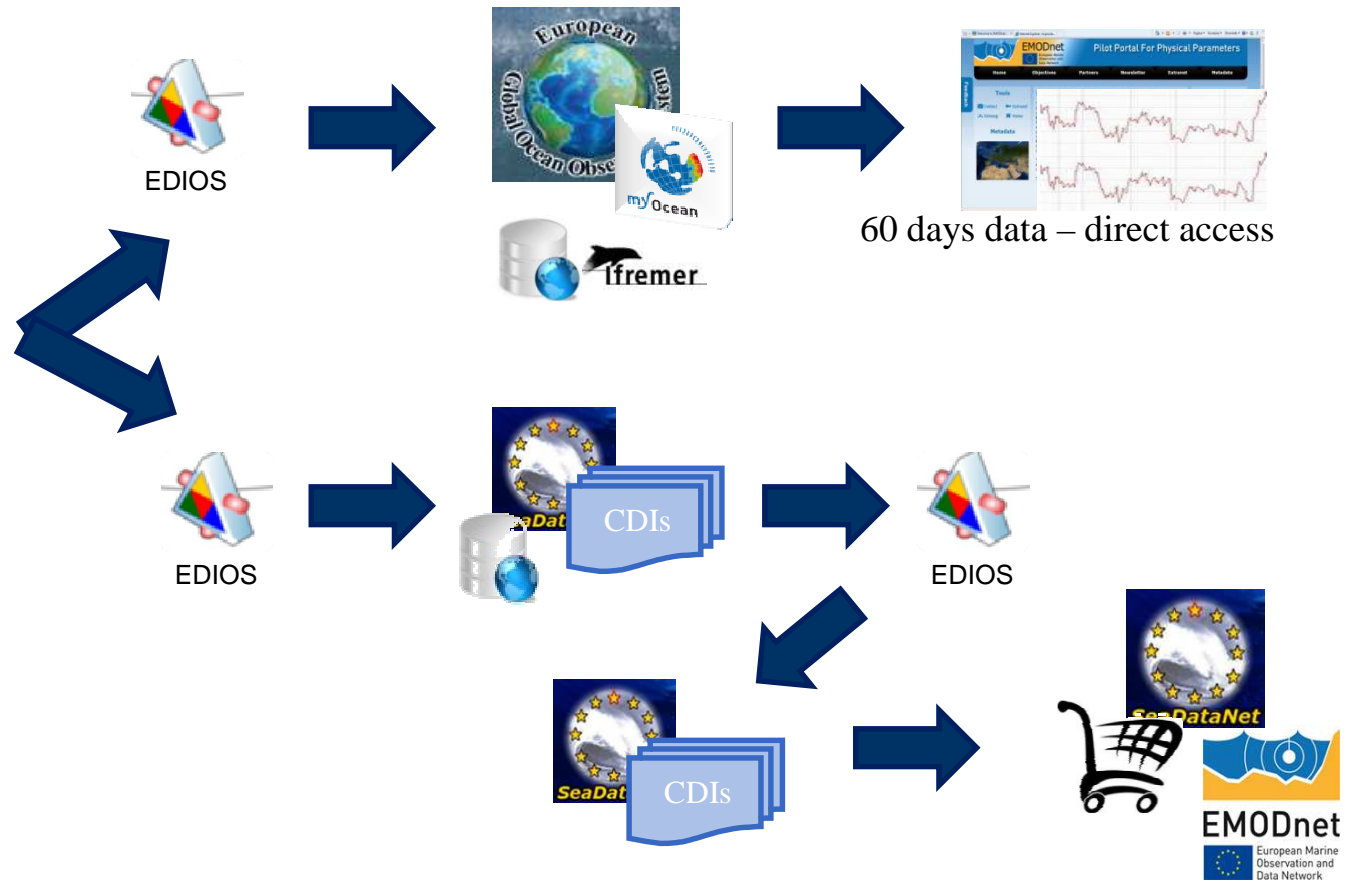
→ to be validated

EMODnet PP – Data Access

Near Real Time



Archived Data



EMODnet PP - pilot portal

The screenshot displays the EMODnet Pilot Portal For Physical Parameters. The interface is divided into several sections:

- Header:** EMODnet logo and "Pilot Portal For Physical Parameters" title. Navigation links for Home, Feedback, and How to are present.
- Left Sidebar:**
 - Data type:** Radio buttons for "Near RealTime" and "Historical". A red arrow labeled "1" points to the "Historical" option.
 - Parameters:** Checkboxes for "Waves and winds", "Sea water temperature", "Sea water salinity", "Currents", "Light attenuation", and "Sea levels". A red arrow labeled "2" points to this section.
 - Sea area (EuroGOOS region):** Checkboxes for "Arctic Seas (Arctic ROOS)", "Baltic Sea (BOOS)", "Ireland-Biscay-Iberia Region (IBI-ROOS)", "North Sea (NOOS)", "Black Sea (BS-GOOS)", and "Mediterranean (MOON)".
- Main Map Area:** A satellite-style map of Europe and the Mediterranean region. A search bar "Search by station name: Insert..." is at the top. A "Layer switcher" is in the top right. A red arrow labeled "2" points to the map area.

EMODnet PP - pilot portal

EMODnet
European Marine Observation and Data Network

Pilot Portal For Physical Parameters

Home Feedback How to

Data type: Near RealTime Historical

Parameters

- Waves and winds
- Sea water temperature
- Sea water salinity
- Currents
- Light attenuation
- Sea levels

Sea area (EuroGOOS region)

- Arctic Seas (Arctic ROOS)
- Baltic Sea (BOOS)
- Ireland-Biscay-Iberia Region (IBI-ROOS)
- North Sea (NOOS)
- Black Sea (BS-GOOS)
- Mediterranean (MOON)

EMODnet Map

Search by station name:

Layer switcher

Station name: FINO1

Active parameters:

- Waves and winds
- Sea water temperature
- Sea water salinity
- Currents
- Sea levels

For further information select the station and click on the "more info" button - button left

EMODnet PP - pilot portal

EMODnet
European Marine Observation and Data Network

Pilot Portal For Physical Parameters

Home Feedback How to

EMODnet Map

Search by station name:

Layer switcher

1

2

Layers

- Base Layer
 - ETOPO1 Dem
 - GEBCO 08 Grid
 - SeaDataNet World Coastline and Bathymetry
 - NASA Bluemarble
- Overlays
 - Sea basins
 - Stations position layer
 - Grid

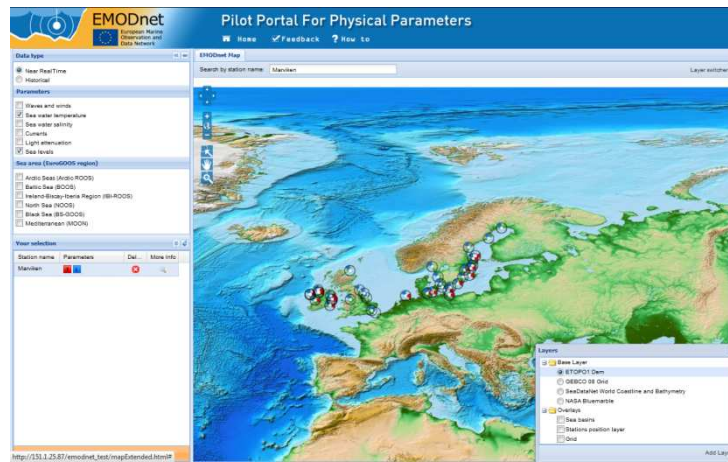
Add Layer

57.95328 23.99059

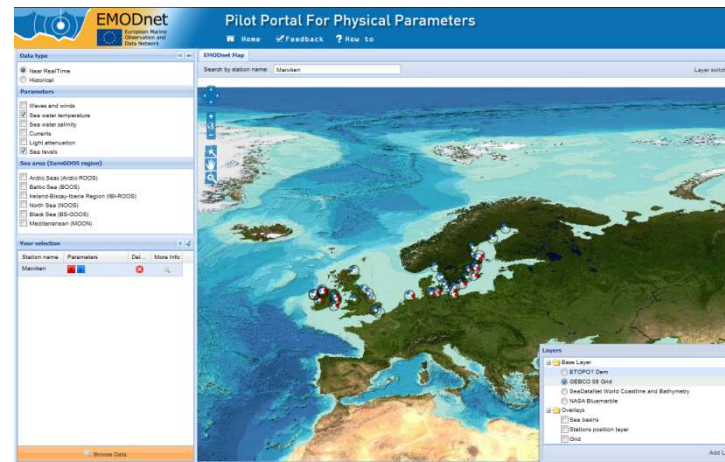
EMODnet
European Marine Observation and Data Network

Maps and Overlays

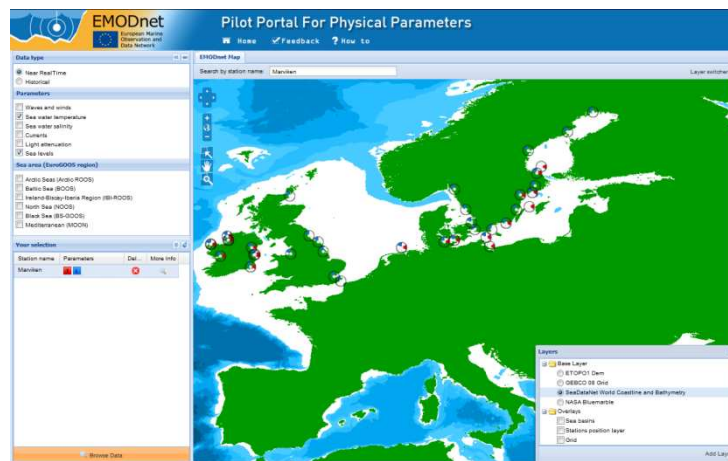
EMODnet PP - pilot portal



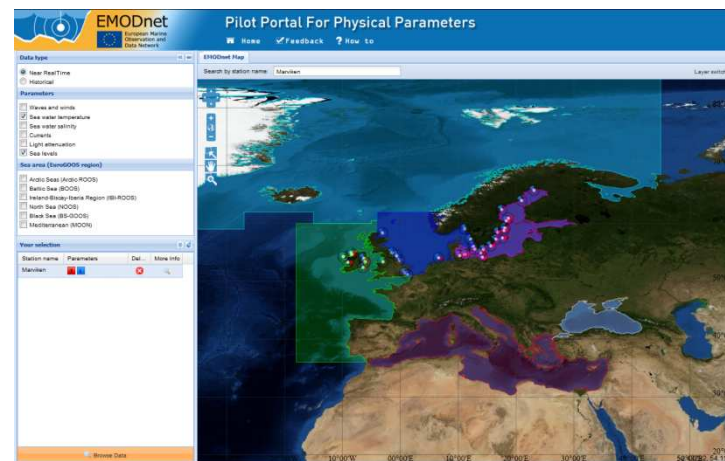
ETOP01



GEBCO



SeaDataNet



Sea Basins

EMODnet PP - pilot portal

The screenshot displays the EMODnet Pilot Portal interface. The top navigation bar includes the EMODnet logo, the title "Pilot Portal For Physical Parameters", and links for Home, Feedback, and How to. The main interface is divided into several sections:

- Data type:** Radio buttons for "Near RealTime" and "Historical".
- Parameters:** A list of parameters with checkboxes. A red arrow labeled "1" points to the "Waves and winds" checkbox, which is checked.
- Regions:** A list of regions with checkboxes, including "EuroGOOS region", "Arctic Seas (Arctic ROOS)", "Arctic Sea (BOOS)", "Ireland-Biscay-Iberia Region (IBI-ROOS)", "North Sea (NOOS)", "Black Sea (BS-GOOS)", and "Mediterranean (MOON)".
- Your selection:** A table showing the selected parameters for various stations. A red arrow labeled "2" points to this table.

Station name	Parameters	Delete	More Info
KielLighthouse	W T S C L	✗	🔍
FINO1	W T S C L	✗	🔍
FehmarnBelt	W T S C L	✗	🔍
OderBankBuoy	W T S C L	✗	🔍
ArkonaBasin...	W T S C L	✗	🔍
Finngrundet	W T	✗	🔍

The right side of the interface features an "EMODnet Map" with a search bar and a "Layer switcher". The map shows a satellite view of Europe with several station locations marked by blue icons. A "Browse Data" button is located at the bottom left of the interface.

Applying filters

EMODnet PP - pilot portal

EMODnet
European Marine Observation and Data Network

Pilot Portal For Physical Parameters

Home Feedback ? How to

Data type

Near Real Time
 Historical

Parameters

Waves and winds
 Sea water temperature
 Sea water salinity
 Currents
 Light attenuation
 Sea levels

Sea area (EuroGOOS region)

Arctic Seas (Arctic ROOS)
 Baltic Sea (BOOS)
 Ireland-Biscay-Iberia Region (IBI-ROOS)
 North Sea (NOOS)
 Black Sea (BS-GOOS)
 Mediterranean (MOON)

Your selection

Station name	Parameters	Delete	More Info
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EMODnet Map

Search by station name:

Layer switcher

1

2

Browse Data

3 94043 48 50537

Box selection

EMODnet PP - pilot portal

EMODnet
European Marine Observation and Data Network

Pilot Portal For Physical Parameters

Home Feedback How to

EMODnet Map

Search by station name:

Layer switcher

Data type

Near Real Time
 Historical

Parameters

Waves and winds
 Sea water temperature
 Sea water salinity
 Currents
 Light attenuation
 Sea levels

Sea area (EuroGOOS region)

Arctic Seas (Arctic ROOS)
 Baltic Sea (BOOS)
 Ireland-Biscay-Iberia Region (IBI-ROOS)
 North Sea (NOOS)
 Black Sea (BS-GOOS)
 Mediterranean (MOON)

Your selection

Station name	Parameters	Delete	More Info
DublinPortTi...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
DundalkTide...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
GalwayPortT...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
HowthHarbo...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
KillybegsPor...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
MalinHeadT...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Castletownb...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
BallyglassTi...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WexfordTide...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
AranmoreTi...	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

1 23349 82 68506

Historical data

EMODnet PP - pilot portal

EMODnet Pilot Portal For Physical Parameters

Home Feedback How to

EMODnet Map Historical Data

Data Discovery and Access Service

Cart: 0 Dataset(s) Proceed to check out Reset basket Export Store query Summary Show on map ?

Reset all steps

Search by:

Geographical Box

Time period

Measuring area type

point (674)

Parameter categories

Sea level

Meteorology

Water colour

temperature and salinity

Disciplines

Physical oceanography (674)

Atmosphere (28)

Instrument / gear type

sea level recorders (6)

CDI-partner

British Oceanographic Data Centre (674)

Country

United Kingdom (674)

Data Holding centre

British Oceanographic Data Centre (674)

Add to basket 20 50 100 Records | Found 674 | Show: (1-20) | Previous | Next 20

<input type="checkbox"/>	name	Variables measured	Instrument / gear type	Show
<input type="checkbox"/>	1988/001	Physical oceanography > Sea level	sea level recorders	Show
<input type="checkbox"/>	1973/001	Physical oceanography > Sea level	sea level recorders	Show
<input type="checkbox"/>	005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	035/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	174/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	042/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	015/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	032/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	011/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	001/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	024/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	234/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	026/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	061/2005/001	Physical oceanography > Sea level		Show
<input type="checkbox"/>	054/2005/001	Atmosphere > Meteorology > Physical oceanography > Sea level		Show

Historical data

EMODnet PP - pilot portal

EMODnet Pilot Portal For Physical Parameters

Home Feedback How to

EMODnet Map Historical Data

Data Discovery and Access Service

Cart: 2 Dataset(s) Proceed to check out Reset basket Export Store query Summary Show on map ?

Shopping basket

EMODnet Pilot portal for Physics Data Discovery and Access Service

Requesting Datasets

During this session you have selected the following data sets. You can shop for more or continue the ordering dialogue by submitting to finalize your order request and have it processed. When submitting you will have to log-in with your user registration details or register then first. Thereafter you can finalise your order request by deselect items, indicating which format type you require and whether you also want to include related publications (if available).

IMPORTANT NOTICE
Downloading of data sets is only possible for registered users.
Access to datasets might be restricted. In that case your request will be handled by the contact person of the SeadatanetNet Data Centre managing the specific datasets.
You will be able to follow the progress of all your requests via your personal account in the Request Status Manager, using your user id - password.

Search for more Cancel request Submit request

If you would like to continue searching (to add more to your request list) click **Search for more**.
If you would like to cancel your requests (to empty your request list) click **Cancel**.
If you are satisfied with your request list then click on **Submit order**.

The number of data-requests per shopping session has a maximum of 500 datasets.

CDI-record id	Dataset Name	Status
1041938	P011/1973/001	SeaDataNet licence
1041939	P011/1988/001	SeaDataNet licence

002/2000/001 Physical oceanography > Sea level
054/2005/001 Atmosphere > Meteorology > Physical oceanography > Sea level

Historical data

EMODnet PP - pilot portal

The image displays two screenshots of the EMODnet Pilot Portal. The top screenshot shows the main interface with a map of Europe and a list of stations. A red arrow labeled '1' points to the 'More Info' button for the 'Wick' station. The bottom screenshot shows the detailed view of the 'Wick' station, with a red arrow labeled '2' pointing to the 'More Info' button in the station list.

EMODnet Pilot Portal For Physical Parameters

Data type: Near RealTime (selected), Historical

Parameters: Waves and winds, Sea water temperature, Sea water salinity, Currents, Light attenuation, Sea levels (checked)

Sea area (EuroGOOS region): Arctic Seas (Arctic ROOS), Baltic Sea (BOOS), Ireland-Biscay-Iberia Region (IBI-ROOS), North Sea (NOOS) (checked), Black Sea (BS-GOOS), Mediterranean (MOON)

Your selection:

Station name	Parameters	Del...	More Info
Wick	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
NorthShields	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Whitby	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Sheerness	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Ringhals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Kungvik	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Station: Wick

European Directory of ocean Observing Systems - EDIOS

Details

PROGRAMME INFO

Programme name	National Tide and Sea Level Facility
Abbreviation	NTSLF
Continuity status	operational
Country	United Kingdom
Related projects	Marine Environmental Change Network Ocean Processes Evidence Group
Legislative drivers	Inapplicable
Activity rationale	Climate change

PROTOCOLS INFO

Sampling Protocols

Tide Gauge Instrument Information, Data Processing Procedures and Gauge Location (NTSLF 2005. National Report. Tide Gauge Instrument Information, Data Processing Procedures and Gauge Location. http://www.pol.ac.uk/ntslf/pdf/annual_reports/2005/2005report_maps.pdf)

Analytical Protocols

NTSLF Analysis (http://www.pol.ac.uk/ntslf/pdf/annual_reports/2005/2005report_maps.pdf)

Data Protocols

Tide Gauge Instrument Information, Data Processing Procedures and Gauge Location (NTSLF 2005. National Report. Tide Gauge Instrument Information, Data Processing Procedures and Gauge Location. http://www.pol.ac.uk/ntslf/pdf/annual_reports/2005/2005report_maps.pdf)

GENERAL SERIES INFO

EDIOS series id	10043
Series name	Wick
Abbreviation	Wick
Description	The tide gauge is located in a concrete building next to the dock entrance, the pressure points being located behind fender piles on the north seaward side of the dock gates. The wind speed and direction instruments are mounted at the top of the mast (instruments not shown) located next to the Tide Gauge building. The tide gauge consists of a pneumatic bubbler system supplying two full tide pressure points. Both pressure lines, wind speed and direction are monitored by the PDL data logger. The tide gauge is levelled to the tide gauge bench mark supported by Ordnance Survey auxiliary marks. Site history: 1992 - DATARINS system installed with full tide pressure points 1997 - Wind speed and direction instruments installed 2000 - PDL data logger installed
Date start	1995/1/1
Date end	To present

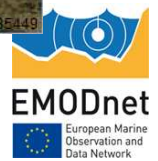
EDIOS info

EMODnet PP - pilot portal

The screenshot shows the EMODnet Pilot Portal interface. On the left, there are three red arrows pointing to the 'Data type' section (arrow 1), the 'Parameters' list (arrow 2), and the 'Sea area' selection (arrow 3). On the right, a red arrow points to the map view (arrow 4). At the bottom left, a red arrow points to the 'Browse Data' button (arrow 5). The interface includes a search bar for station names, a layer switcher, and a table of selected stations.

Station name	Parameters	Del...	More Info
Wick	L	X	
NorthShields	L	X	
Whitby	L	X	
Sheerness	L	X	
Ringhals	L	X	
Kungavik	L	X	

NRT data



EMODnet PP - pilot portal

EMODnet Pilot Portal For Physical Parameters

Home Feedback How to

Data type

- Near RealTime
- Historical

Parameters

- Waves and winds
- Sea water temperature
- Sea water salinity
- Currents
- Light attenuation
- Sea levels

Sea area (EuroGOOS region)

- Arctic Seas (Arctic ROOS)
- Baltic Sea (BOOS)
- Ireland-Biscay-Iberia Region (IBI-ROOS)
- North Sea (NOOS)
- Black Sea (BS-GOOS)
- Mediterranean (MOON)

Your selection

Station name	Parameters	Del...	More Info
Wick	L	X	
NorthShields	L	X	
Whitby	L	X	
Sheerness	L	X	
Ringhals	L	X	
Kungsvik	L	X	

Whitby

sea_surface_height (S)

26/01/2012 28/01/2012 30/01/2012 01/02/2012 03/02/2012

Date	SLEV	QC
2/4/2012 10:52:00 PM	-0.1	0
2/4/2012 10:37:00 PM	-0.28	0
2/4/2012 10:22:00 PM	-0.48	0
2/4/2012 10:07:00 PM	-0.66	0
2/4/2012 9:52:00 PM	-0.82	0
2/4/2012 9:37:00 PM	-0.98	0
2/4/2012 9:22:00 PM	-1.11	0
2/4/2012 9:07:00 PM	-1.22	0
2/4/2012 8:52:00 PM	-1.32	0
2/4/2012 8:37:00 PM	-1.38	0
2/4/2012 8:22:00 PM	-1.42	0
2/4/2012 8:07:00 PM	-1.45	0
2/4/2012 7:52:00 PM	-1.45	0
2/4/2012 7:37:00 PM	-1.43	0
2/4/2012 7:22:00 PM	-1.38	0
2/4/2012 7:07:00 PM	-1.32	0
2/4/2012 6:52:00 PM	-1.22	0
2/4/2012 6:37:00 PM	-1.12	0
2/4/2012 6:22:00 PM	-0.99	0
2/4/2012 6:07:00 PM	-0.84	0
2/4/2012 5:52:00 PM	-0.69	0

NRT data

EMODnet PP - pilot portal

EMODnet Pilot Portal For Physical Parameters

Home Feedback How to

Data type

- Near RealTime
- Historical

Parameters

- Waves and winds
- Sea water temperature
- Sea water salinity
- Currents
- Light attenuation
- Sea levels

Sea area (EuroGOOS region)

- Arctic Seas (Arctic ROOS)
- Baltic Sea (BOOS)
- Ireland-Biscay-Iberia Region (IBI-ROOS)
- North Sea (NOOS)
- Black Sea (BS-GOOS)
- Mediterranean (MOON)

Your selection

Station name	Parameters	Del...	More Info
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Search by station name: Layer switcher

Station name: Marviken

Active parameters:

- Sea water temperature
- Sea levels

For further information select the station and click on the "more info" button - bottom left

16.84546, 58.52340

EMODnet European Marine Observation and Data Network

NRT data

EMODnet PP - pilot portal

The screenshot displays the EMODnet Pilot Portal interface. On the left, a sidebar contains navigation options: 'Data type' (Near RealTime, Historical), 'Parameters' (Waves and winds, Sea water temperature, Sea water salinity, Currents, Light attenuation, Sea levels), and 'Sea area (EuroGOOS region)' (Ardic Seas, Baltic Sea, Ireland-Biscay-Iberia Region, North Sea, Black Sea, Mediterranean). A red arrow labeled '1' points to the 'Your selection' table, which lists the 'Marviken' station with selected parameters for temperature and sea level height.

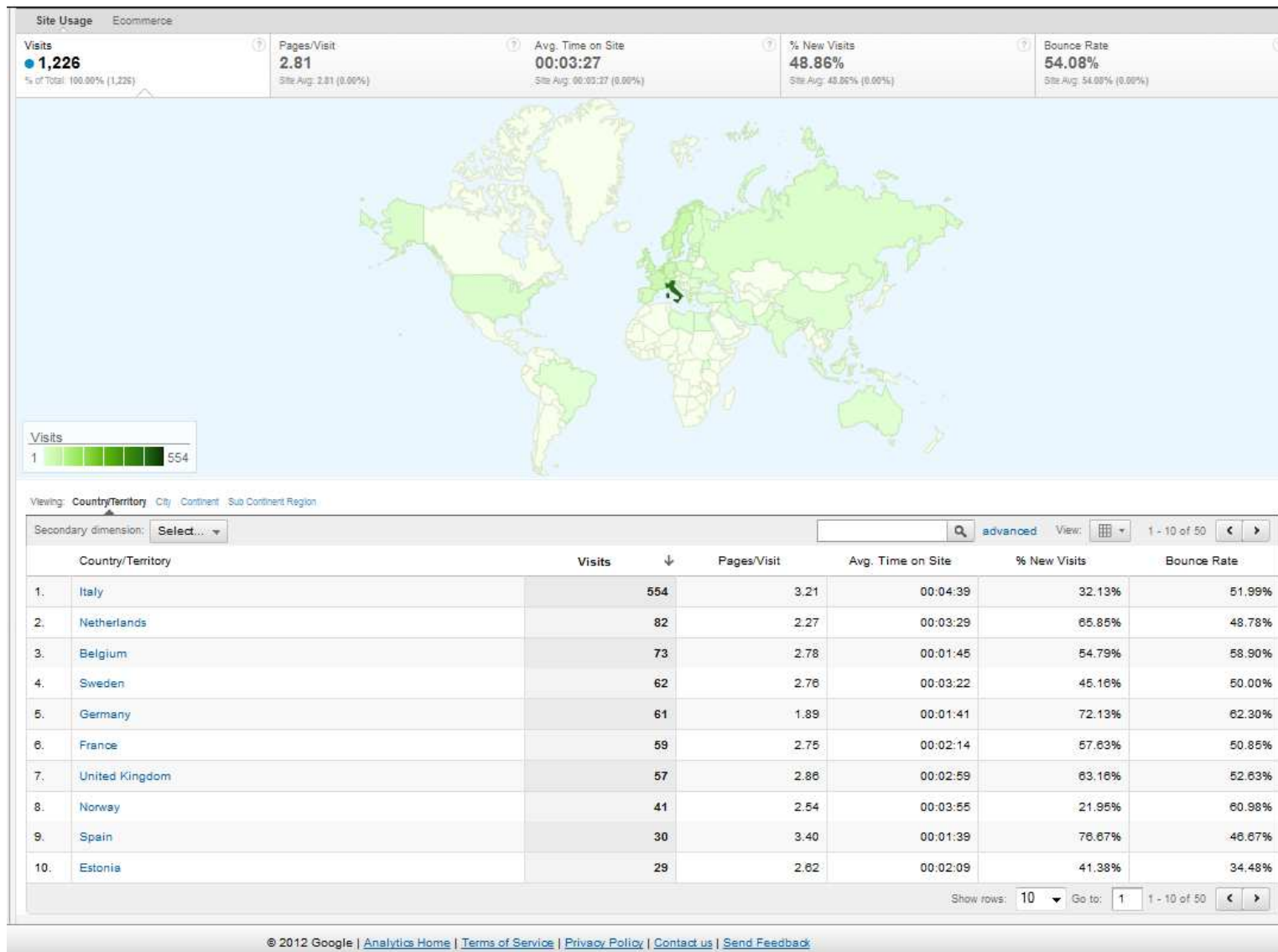
The main content area shows two time-series plots for the 'Marviken' station. The top plot is 'sea_water_temperature (TEMP-10)' and the bottom plot is 'sea_surface_height (SLEV-20)'. Both plots show data from January 24, 2012, to February 1, 2012. Below the plots is a data table with columns for Date, TEMP, QC, SLEV, and QC.

Date	TEMP	QC	SLEV	QC
2/4/2012 10:55:00 PM			-0.171	1
2/4/2012 10:45:00 PM			-0.168	1
2/4/2012 10:35:00 PM			-0.163	1
2/4/2012 10:25:00 PM			-0.164	1
2/4/2012 10:24:00 PM			-0.162	1
2/4/2012 10:15:00 PM			-0.17	1
2/4/2012 10:13:00 PM			-0.172	1
2/4/2012 10:05:00 PM			-0.167	1

A red arrow labeled '2' points to the data table.

NRT data

EMODnet PP - pilot portal



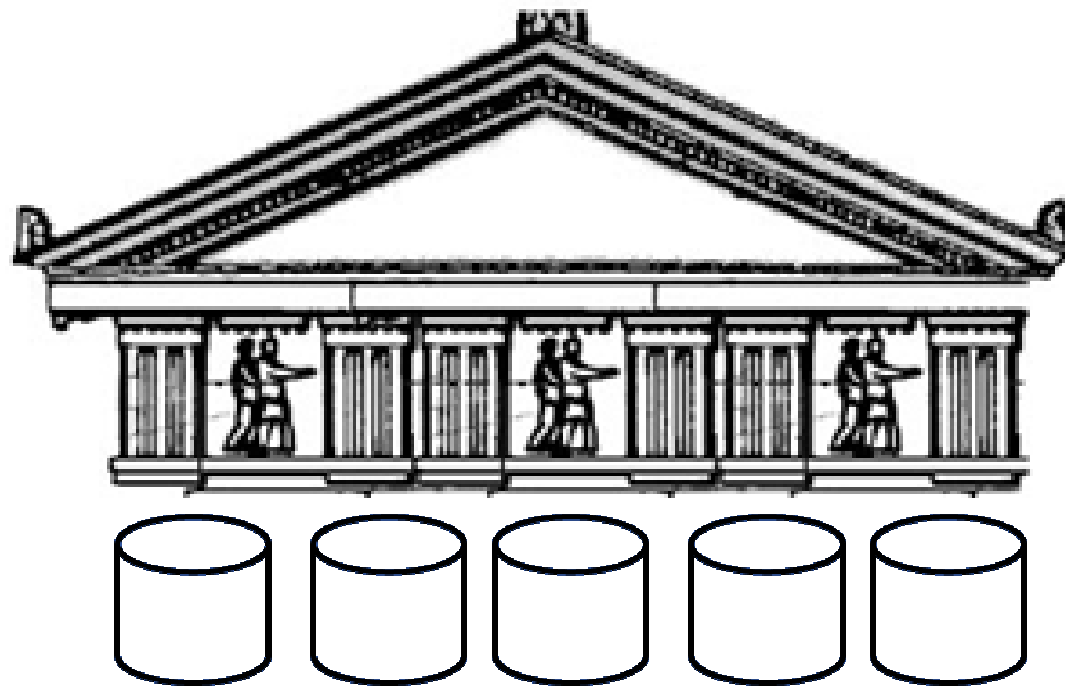
MARINE KNOWLEDGE 2020

- Marine Data and Observation for smart and sustainable growth (COM2010 461)
 - Data collection
 - Data assembly
- Collection is mostly the responsibility of Member States
- **EU has the potential to add value in the assembly phase because of the need to ensure coherence across borders and between different communities**

WORKING PRINCIPLES

- Rely on **INSPIRE** principles to **leave data** as close as possible to their **collection source** and thus the system is based on **distributed data nodes**;
- **Exchanges with other initiatives/links** with infrastructures managing **real-time/near real-time** and **delayed** mode data;
- Use harmonized reporting tools.

EMODNET IN THE EU INFRASTRUCTURES



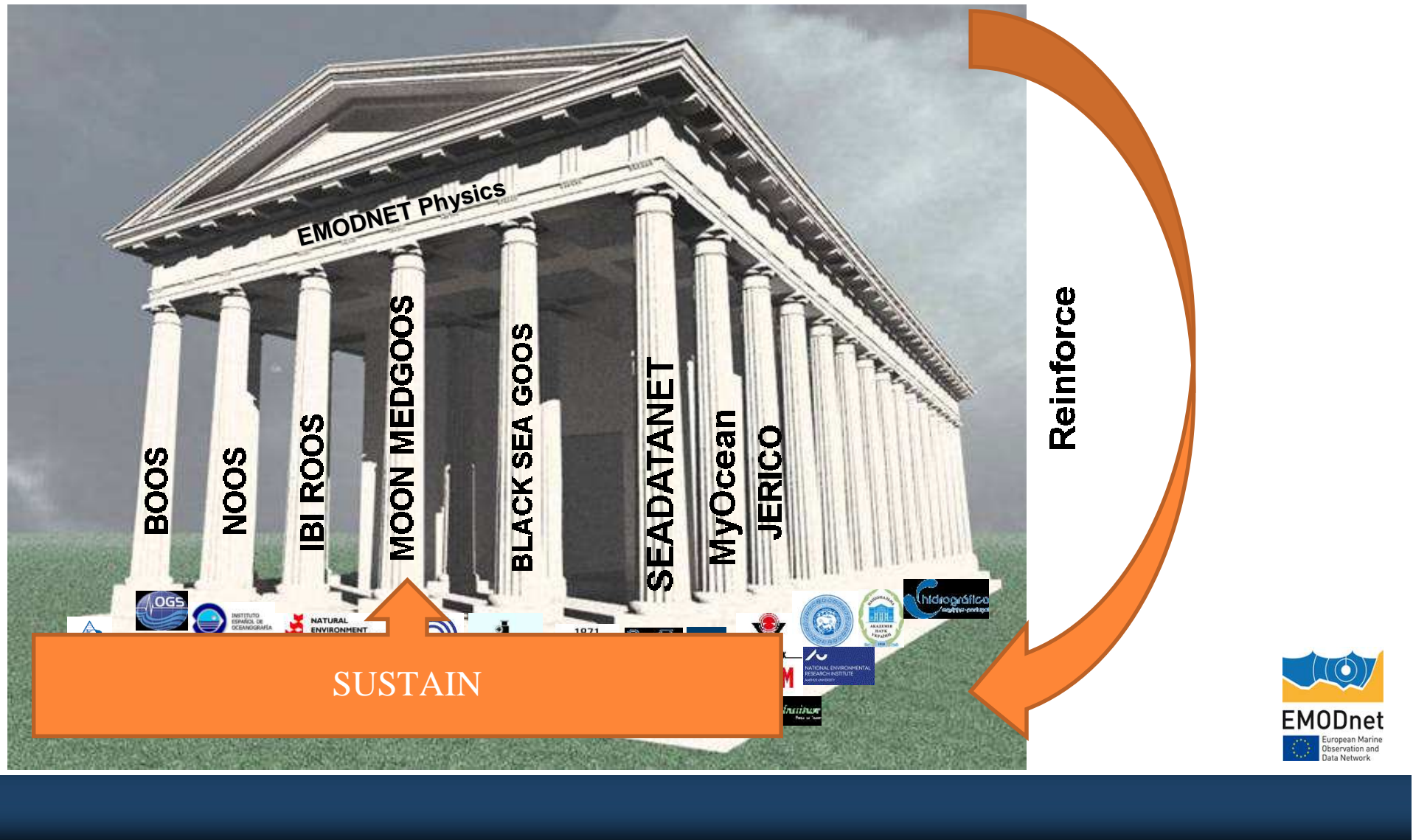
REPORTING
(Assessment, etc)

PRODUCTS' LAYER

SERVICE LAYER
(EMODnet, etc)

DATA LAYER
(ROOSs, Projects,
National initiatives,
etc)

REINFORCE THE OBSERVING SYSTEMS



Thank you for your attention

<http://www.emodnet-physics.eu/>

For further details do not hesitate to contact us!

