



**Preparatory Actions for  
European Marine Observation and Data Network  
MARE 2010/02 - Physical Parameters [SI2.579120]**

-

**Knowledge base for growth and innovation in ocean  
economy: assembly and dissemination of marine data  
for seabed mapping  
MARE/2012/10 - Lot 6 Physics [SI2.656795]**



**A Novellino G Manzella D Schaap S Pouliquen L Rickards P Gorringer**

# Marine Knowledge 2020 and MSFD

## Bring together Marine Data from different sources with the aim of:

- *helping industry, public authorities and researchers find the data and make more effective use of them to develop new products and services.*
- *improving our understanding of how the seas behave.*

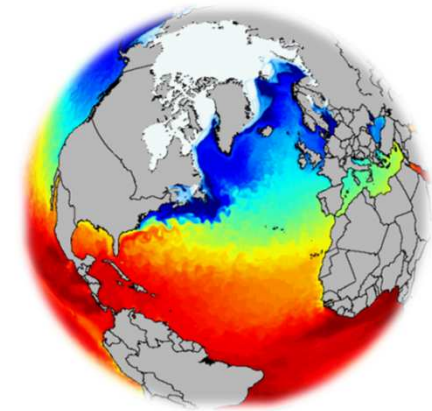
## Why EU-level action?

- ***National data do not tell us all*** we need to know about the seas ***as a global system*** connected by shifting winds, seasonal currents and migrating species; *analysis at European level is essential.*

## Marine Strategy Framework Directive (MSFD)

- *Comprehensive compulsory monitoring of the Marine environment beyond geographical limits and borders*

[http://ec.europa.eu/maritimeaffairs/policy/marine\\_knowledge\\_2020/](http://ec.europa.eu/maritimeaffairs/policy/marine_knowledge_2020/)  
Marine Strategy Framework Directive (2008/56/EC)





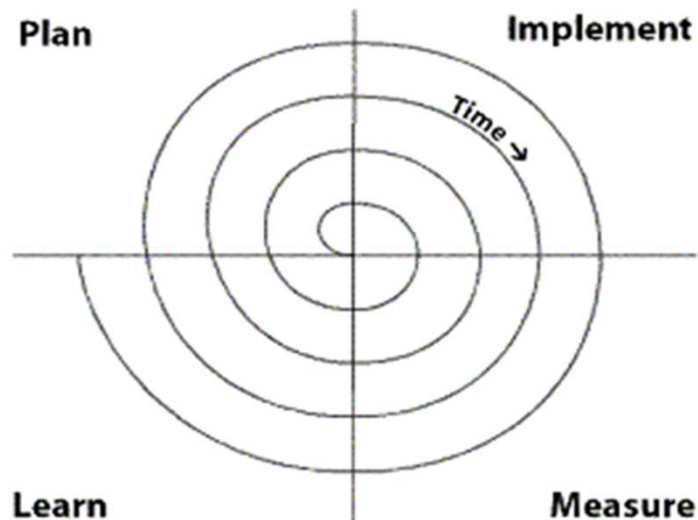
**EMODnet**



European Marine  
Observation and  
Data Network

## prototype method

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Phase 1 – limited sea basins											
			Phase 2 - low resolution								
					Phase 3 - multi-resolution						



allows users to assess and improve product by trying it out



# EMODnet Physics – background

## EMODnet Physics objectives

- ***Provides free and open access to marine real-time and archived data on physical conditions as monitored by:***
  - Fixed Stations<sup>1</sup>, Ferrybox<sup>1</sup>, (Euro)Argo<sup>2</sup>, Gliders<sup>2</sup>, HF Radars<sup>2</sup>
- ***Parameters:***
  - Sea Temperature<sup>1</sup>, Sea Level<sup>1</sup>, Sea Salinity<sup>1</sup>, Winds<sup>1</sup>, Waves<sup>1</sup>, Sea Currents<sup>1</sup>, Light Attenuation<sup>1</sup>, Ice Coverage<sup>2</sup>, Sea Level trends<sup>2</sup>
- ***Geographical coverage:***
  - All the European Sea Basins
- ***Make layers of physical data and metadata available***
- ***Determine how well data meets the need of users***
- ***Contribute towards the definition of an operational European Marine Observation and Data Network***



<sup>1</sup>MARE/2010/06 (2011-2013)

<sup>2</sup>MARE/2012/10 Lot 6 (2013 – 2016)

# EMODnet Physics – background

## Marine Data Observation Infrastructures in Europe



**EuroGOOS**

Operational  
Oceanography  
community

DG ENTERPRISE & INDUSTRY  
**GMES - Copernicus  
MyOcean**



DG RESEARCH & INNOVATION  
**FP7 SeaDataNet**



DG MARITIME AFFAIRS & FISHERIES  
**Ur- EMODnet  
EMODnet Physics**



## Existing Infrastructures in Europe

### **EuroGOOS**



### **EuroGOOS**

Operational  
Oceanography  
community

- 36 members from 16 European Countries
- **6 Regional operational oceanographic systems**
- support and facilitate members cooperation to establish a **coordinated European Operational Oceanography approach** for:
  - Identifying **priorities** for operational oceanography
  - Defining **standards** and **recommendations**
  - Promoting **integration** within the framework of GOOS
  - Contributing to national, regional and international implementation of recommendations
- The European Component of the **Global Ocean Observing System (GOOS)**, recognized by the **Intergovernmental Oceanographic Commission (IOC)**



## Existing Infrastructures in Europe

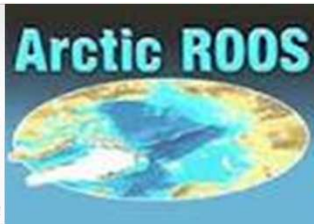
### ROOS



**EuroGOOS**

Operational  
Oceanography  
community

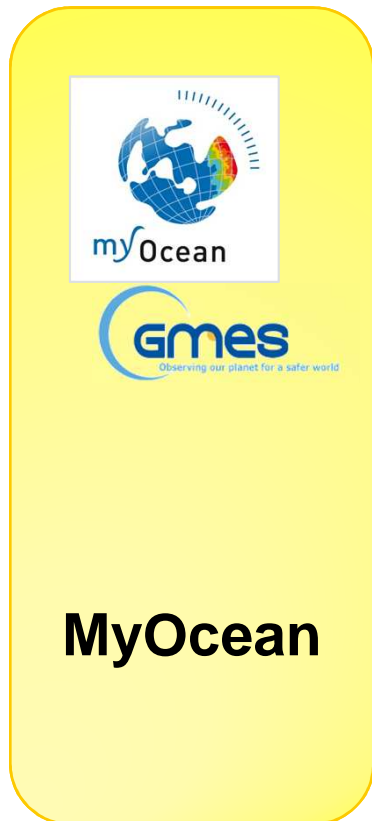
- **6 Regional Operational Oceanographic Systems**
- *The ROOSs are the operational arm(s) of EuroGOOS*
- **About 60 additional partners in ROOSs**
- **The ROOSs cooperation focus on improved national and regional services and products**
- **ROOSs coordinate the observations and the data transfer for internal use and to other users i.e. acting as the regional data broker**



## Existing Infrastructures in Europe

### MyOcean

- *GMES/Copernicus - Marine Information Service*
- Provides **free and open access to real-time and delayed mode** «ocean monitoring and forecasting» information
- based on the combination of satellite, **in situ observations** and assimilative ocean models
- Covers global oceans and European seas
- Provides free and open access to products on
  - Currents, Temperature, Salinity, Sea Level, Sea Ice, Surface winds, Biogeochemistry)



#### NRT products

- within a few hours to a week
- homogeneous **automatic quality check** procedures

#### Delayed products

- updated on annual base
- scientifically validated data for reanalysis
- integrated historical T&S data (SeaDataNet, ROOSs et JCOMM)



## Existing Infrastructures in Europe

### SeaDataNet



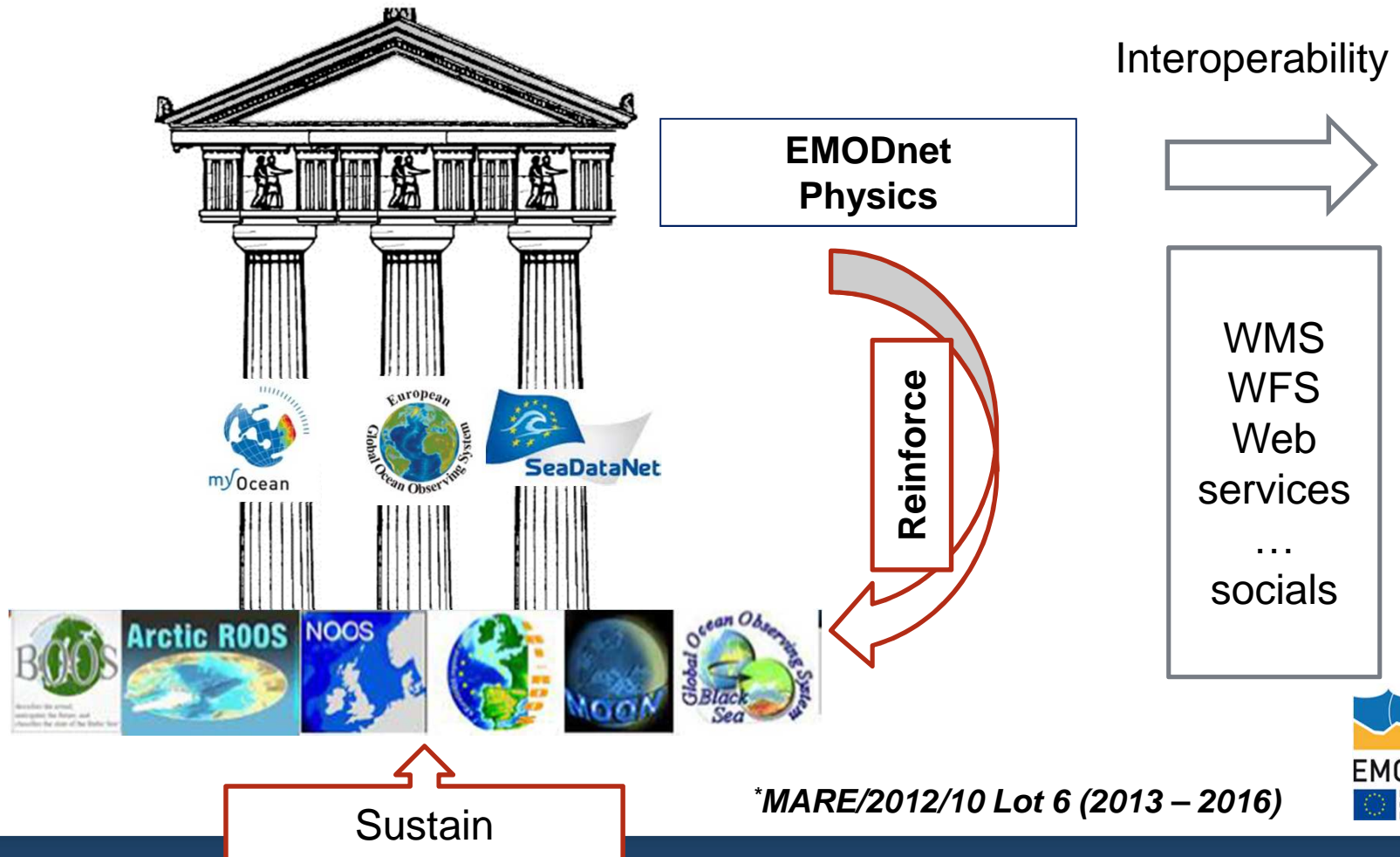
- *DGRTD - Marine Information System*
- *Connects the National Oceanographic Data Centres – NODCs*
  - **EDMO**: European Directory of Marine Organisations (>2200 entries)
  - **EDMED**: European Directory of Marine Environmental Data sets (>3000 entries)
  - **EDMERP**: European Directory of Marine Environmental Research Projects (>2500 entries)
  - **CSR**: Cruise Summary Reports (>31500 entries)
  - **EDIOS**: European Directory of Ocean-observing Systems
- *Develops **CDI** – Common Data Index (ISO19115) – and gives access to **quality controlled and long time series** of ocean observations*

*i.e. physical observations from fixed stations for winds, temperature, pressure, waves, currents, and sea level, etc. **complimentary** to the NRT*



# EMODnet Physics

## EMODnet Physics approach



\*MARE/2012/10 Lot 6 (2013 – 2016)



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# EMODnet Physics



# EMODnet Physics

**EMODnet Physics** is a Marine Observation and Data Information System

- Provide a **single point of access** to marine near real time and achieved data
- Build up on **existing infrastructures** by adding value – no unless complexity
- Provide a **System of Systems** to **ensure data access to any user**
- Facilitate integration and interoperability with further systems  
(INSPIRE compliant, WMS, WFS, etc)
- Bring together the main European Marine Observation and Data Communities  
(EuroGOOS, MyOcean and SeaDataNet)
- **Attract new and better data and new data owners/providers,**
- **Attract new users and stakeholders**
- **Full engagement of the EuroGOOS ROOSs and ROOSs Chairs\***  
(50% of the budget to empower ROOSs data interoperability infrastructure)



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# EMODnet Physics



## Welcome to EMODnet - Physical Parameters

The EMODnet Physical Parameters portal is aimed at providing layers of physical data and metadata available for use by public authorities, scientists and industry, and contribute towards the definition of an operational **European Marine Observation and Data Network** (EMODnet) and contribute to developing of the definition of the Global Monitoring for Environment and Security (GMES) marine core service.

The portal is being developed by a European consortium and operated in a cooperation between EuroGOOS, its Regional components (ROOSs), and exploiting SeaDataNet and MyOcean infrastructures and services bringing together many marine data users and providers.

The EMODnet Physical Parameters portal provides access to near real time and archived data series from fixed stations and ferry box lines in the European Sea and provides OGC services (WMS, WFS, and WCS) for data discovery, view and download.



### EMODnet-Physics Test System

### News from web

Europe still playing catch-up on air pollution, despite reduction successes  
Many Europeans still exposed to harmful air pollutants

More

### Meetings

GROOM General Assembly - Trieste, Italy  
BOOS Annual Meeting - Tallinn, Estonia  
More

### Tag Cloud

bodc bsh cnr emodnet enea  
eurogoos hcmr myocean  
seadatanet

## INSPIRE Services

DISCOVER

VIEW

DOWNLOAD

WMS/WFS

Data Policy

Open & Free

[www.emodnet-physics.eu](http://www.emodnet-physics.eu)



[contacts@emodnet-physics.eu](mailto:contacts@emodnet-physics.eu)

# Discover, View, Download

DOWNLOAD

Near Real Time data from a **single station**

users

EMODnet Map

Search point: Insert latitude - Insert longitude Go

Search region: Insert region

File Home Inserisci Layout di pagina Formule Dati Revisione Visualizza

Calibri 11

Generale

W6

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
4	03/01/2012	12:00:00	TEMP	15,9	1		03/01/2013	12:00:00	TEMP	15,8	1			03/09/2011	12:00:00	TEMP	25,4	1				
5	04/01/2012	12:00:00	TEMP	15,6	1		05/01/2013	12:00:00	TEMP	15,6	1			04/09/2011	12:00:00	TEMP	24,7	1				
6	05/01/2012	12:00:00	TEMP	15,6	1		06/01/2013															
7	06/01/2012	12:00:00	TEMP	15,8	1		07/01/2013															
8	07/01/2012	12:00:00	TEMP	15,2	1		08/01/2013															
9	08/01/2012	12:00:00	TEMP	15,3	1		09/01/2013															
10	09/01/2012	12:00:00	TEMP	15,5	1		10/01/2013															
11	11/01/2012	12:00:00	TEMP	15,3	1		11/01/2013															
12	13/01/2012	12:00:00	TEMP	15,2	1		12/01/2013															
13	14/01/2012	12:00:00	TEMP	15,3	1		13/01/2013															
14	15/01/2012	12:00:00	TEMP	15,2	1		14/01/2013															
15	16/01/2012	12:00:00	TEMP	15,2	1		15/01/2013															
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17	18/01/2012	12:00:00	TEMP	14,9	1		17/01/2013															
18	19/01/2012	12:00:00	TEMP	14,9	1		18/01/2013															
19	01/01/2012	02:00:00	VTDH	1,07	1		01/01/2013	01:30:00	VTDH	0,36	1			01/09/2011	01:30:00	VTDH	0,37	1				
20	01/01/2012	02:30:00	VTDH	1,17	1		01/01/2013															
21	01/01/2012	03:00:00	VTDH	1,15	1		01/01/2013															
22	01/01/2012	03:30:00	VTDH	1,1	1		01/01/2013															
23	01/01/2012	04:00:00	VTDH	1,18	1		01/01/2013															
24	01/01/2012	04:30:00	VTDH	1,17	1		01/01/2013															
25	01/01/2012	05:00:00	VTDH	1,12	1		01/01/2013															
26	01/01/2012	05:30:00	VTDH	1,16	1		01/01/2013															
27	01/01/2012	06:00:00	VTDH	1,04	1		01/01/2013															
28	01/01/2012	06:30:00	VTDH	1,1	1		01/01/2013															
29	01/01/2012	07:00:00	VTDH	1,13	1		01/01/2013															
30	01/01/2012	07:30:00	VTDH	1,08	1		01/01/2013															
31	01/01/2012	08:00:00	VTDH	1,07	1		01/01/2013															
32	01/01/2012	08:30:00	VTDH	1,06	1		01/01/2013															
33	01/01/2012	09:00:00	VTDH	1,07	1		01/01/2013															
34	01/01/2012	09:30:00	VTDH	1,1	1		01/01/2013															
35	01/01/2012	10:00:00	VTDH	1,03	1		01/01/2013															

La Spezia - TEMP @ 12:00:00

Temperature [°C]

La Spezia - VTDH

Significant Wave Height [m]

EMODnet  
European Marine Observation and Data Network

contacts@emodnet-physics.eu

# Discover, View, Download

DOWNLOAD

The screenshot shows the EMODnet web interface. At the top, there are search fields for latitude, longitude, and region. Below these is a map showing the location of station FINO1. A 'Disclaimer' box indicates the data is from 2013/06/28 to 2013/08/27, with a 'Download data' button. The main part of the interface is a 'Menu Download' window for station FINO1, which contains a table for selecting data by year and month. Below the table is an 'NRT data preview' window showing a time series plot with three red arrows pointing to specific dates: 04/08/2013, 11/08/2013, and 18/08/2013.

Year	January	February	March	April	May	June	July	August	September	October	November	December
2013	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2012	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2011	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2010	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2009	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2008	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2007	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2006	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2005	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2004	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2003	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2002	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2001	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2000	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Near Real Time data from a **stations list**



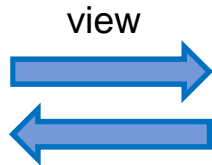
[contacts@emodnet-physics.eu](mailto:contacts@emodnet-physics.eu)



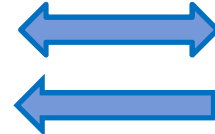
# BackOffice Infrastructure



**Near Real Time Data  
Discovery and Access**



authentication



**Federative standardized Infrastructure**

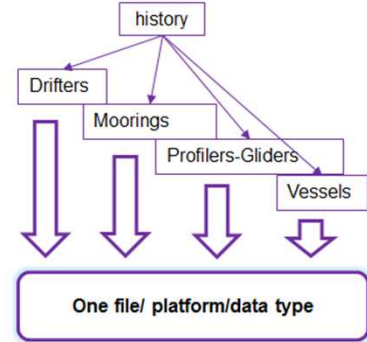
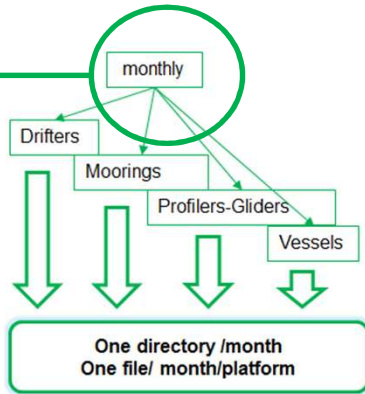


**Folders and info files**



Free discovery, access  
and download of NRT  
(myo users)

latest



Temperature, Salinity  
Current, Sea Level,  
O2,chl, Nutrients

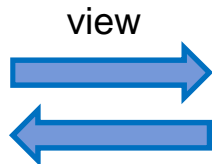
# BackOffice Infrastructure



## Near Real Time Data Discovery and Access



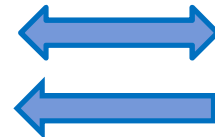
users



download



authentication



Federative standardized Infrastructure

Folders and info files

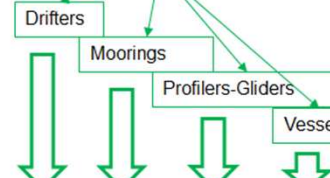


latest



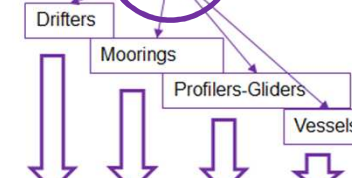
One directory /day  
One file/ day/platform

monthly



One directory /month  
One file/ month/platform

history



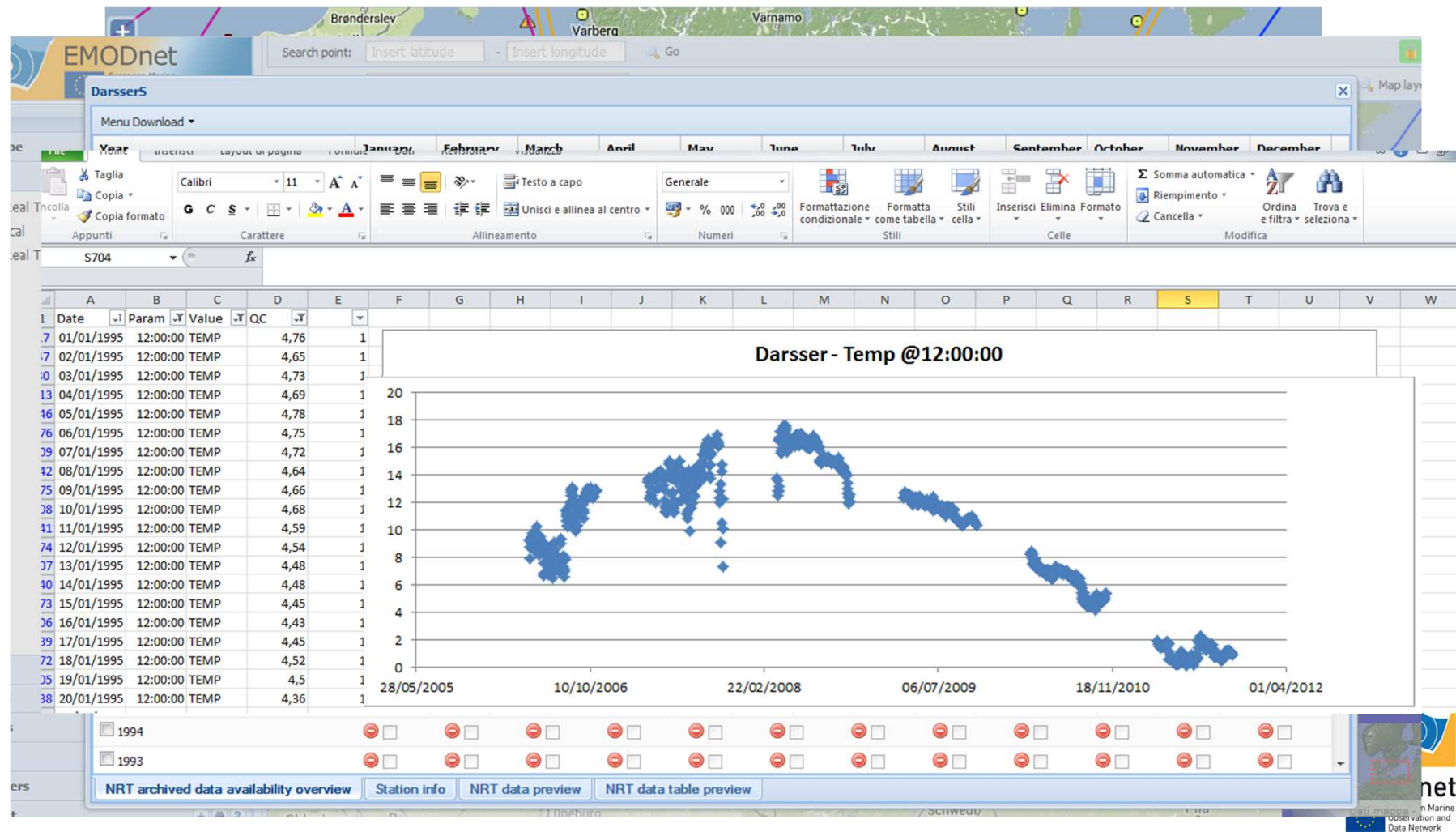
One file/ platform/data type

joint MyO+SDN collaboration -  
result

available under EMODnet **only**  
**for internal use**  
i.e. facilitate NRT data towards  
CDIs archives



# Discover, View, Download



e.g. Darsser

[contacts@emodnet-physics.eu](mailto:contacts@emodnet-physics.eu)

# CDI discover, view and data request

The screenshot displays the EMODnet Pilot Portal For Physical Parameters. The main content area is titled "Requesting Datasets" and includes a "Shopping basket" header. Below the header, there is a paragraph explaining the request process and an "IMPORTANT NOTICE" box. At the bottom of the main content, there are three buttons: "Search for more", "Cancel request", and "Submit request". Below these buttons, there is a table listing the datasets in the shopping basket.

**Shopping basket**

**EMODnet** Pilot portal for Physics  
European Marine Observation and Data Network

### 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
1033265	202/2000/001	SeaDataNet licence
1033324	202/2001/001	SeaDataNet licence
1033587	202/2002/003	SeaDataNet licence
1035118	202/2003/001	SeaDataNet licence
1036273	202/2004/001	SeaDataNet licence
1037421	202/2005/001	SeaDataNet licence

Galway Bay wave Rider Administration and dimensions  
> Administration and dimensions  
Physical oceanography  
> Waves

EMODnet  
European Marine Observation and Data Network

# BackOffice Infrastructure

## Near Real Time Data Discovery and Access



users

view



download



EMODnet  
European Marine  
Observation and  
Data Network



Federative standardized Infrastructure



Folders and info files

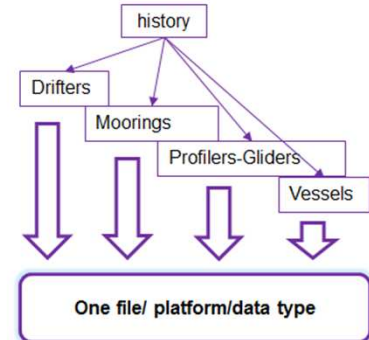
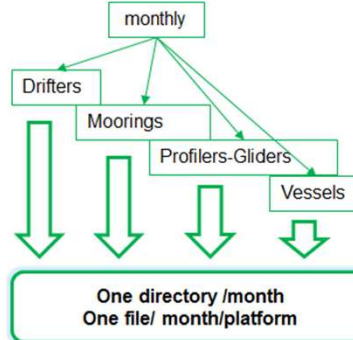
/root → myo\_index\_platform.txt index\_latest.txt index\_monthly.txt index\_history.txt

Free discovery, access  
and download of NRT for  
latest 60 days (any)



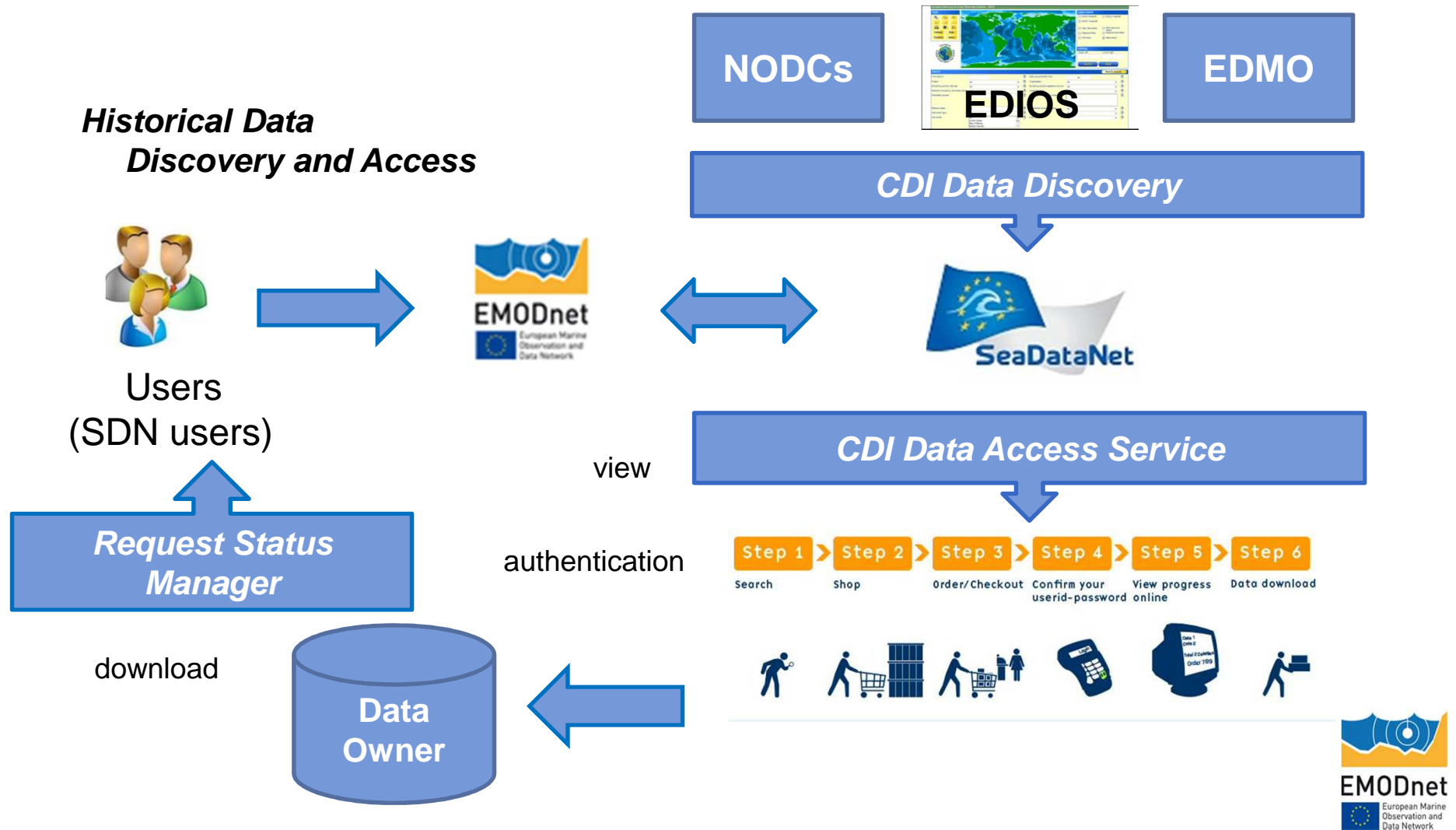
latest

One directory /day  
One file/ day/platform

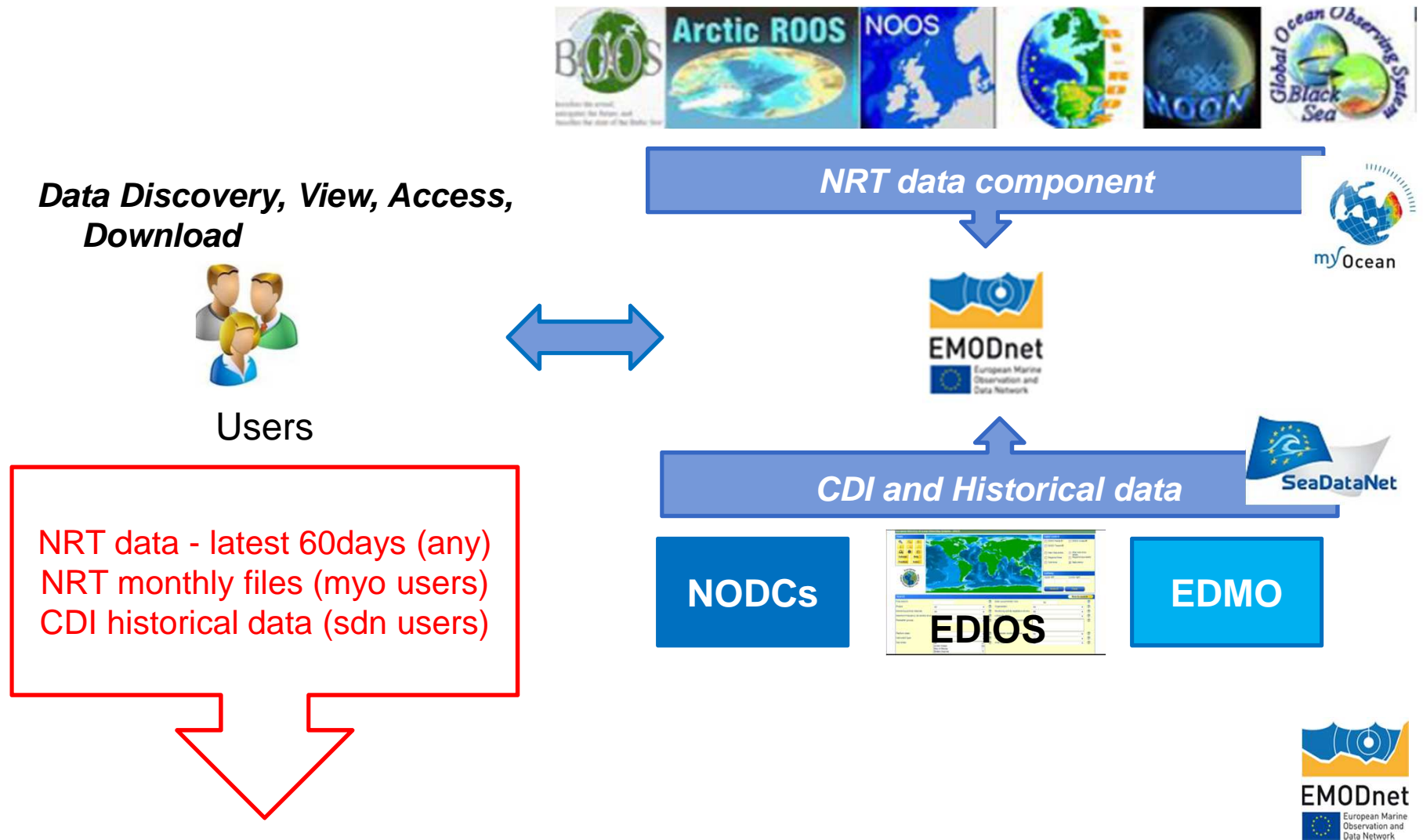


Temperature, Salinity  
Current, Sea Level,  
O<sub>2</sub>, Chl, Nutrients

# BackOffice Infrastructure



# Back Office



## EMODnet Physics

- **December 2010** – formal start of *EMODnet Physics preparatory action*
- **June 2011** – first *EMODnet Physics workshop (Tallinn)*
- **December 2011** – *EMODnet Physics provides access to about 40 stations (Baltic, Celtic Sea, North West Shelf)*
- **February 2012** – *second and third EMODnet Physics workshops (Rome, Istanbul)*
- **June 2012** - *EMODnet Physics provides access to about 350 unique stations working on: Baltic – Poland, in Mediterranean – Italy, Malta, Slovenia, Croatia, Cyprus, Black Sea found about 50 of duplicates in the back office infrastructure*
- **November 2012** – *fourth EMODnet Physics workshop (Sopot)*
- **December 2012** – *ISPRA (Italy) stations available under EMODnet Physics portal*
- **June 2013** – *EMODnet Physics provides access to about 460 stations Italian Stations connected, Slovenian, Croatian, Malta and Cypriot data connection ongoing working on: Baltic – Poland; Black Sea*





# Milestones

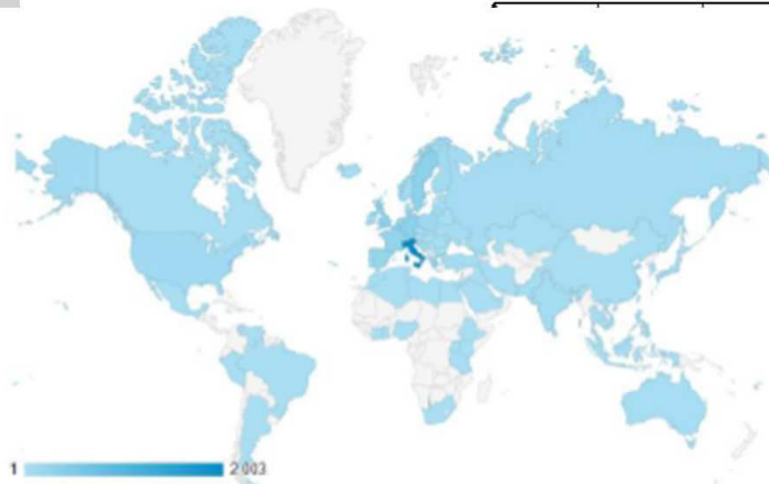


Fig. 31. Google analytics @ 31/7/2013

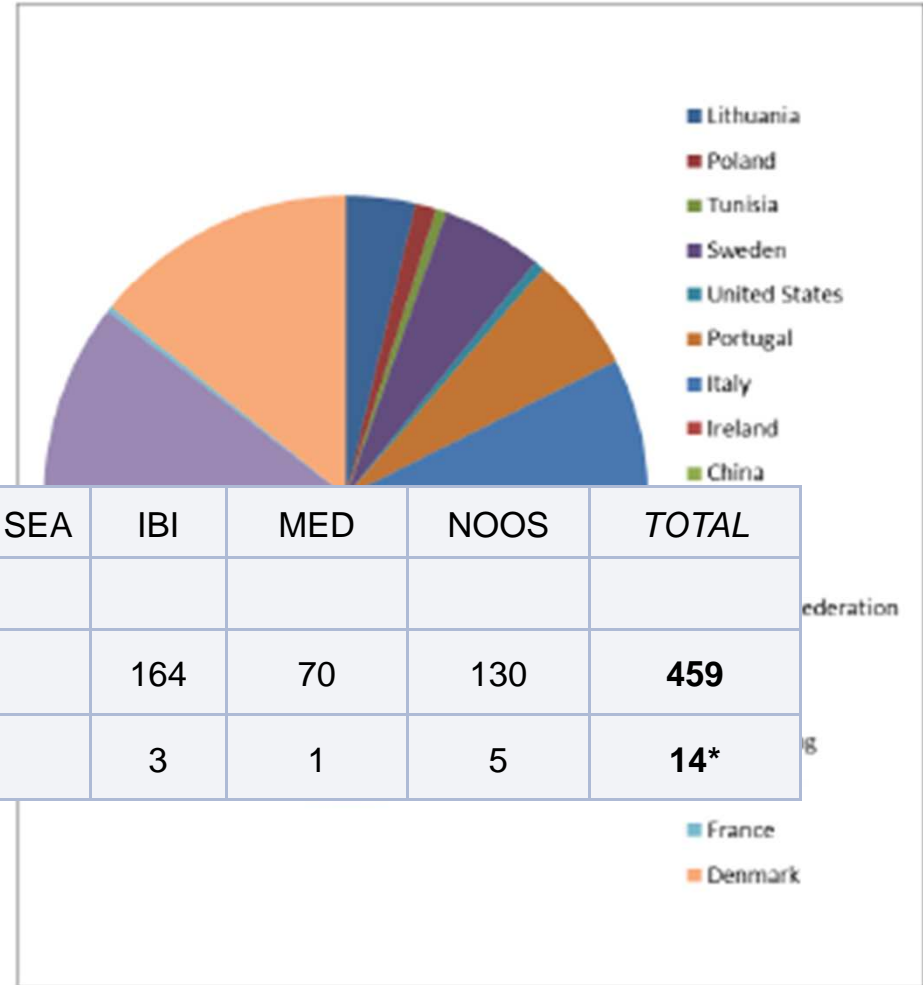
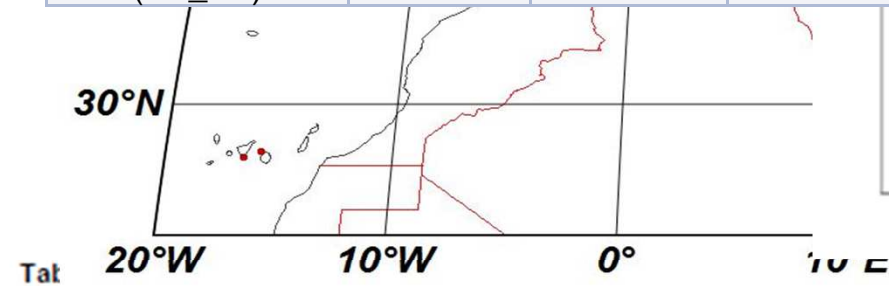
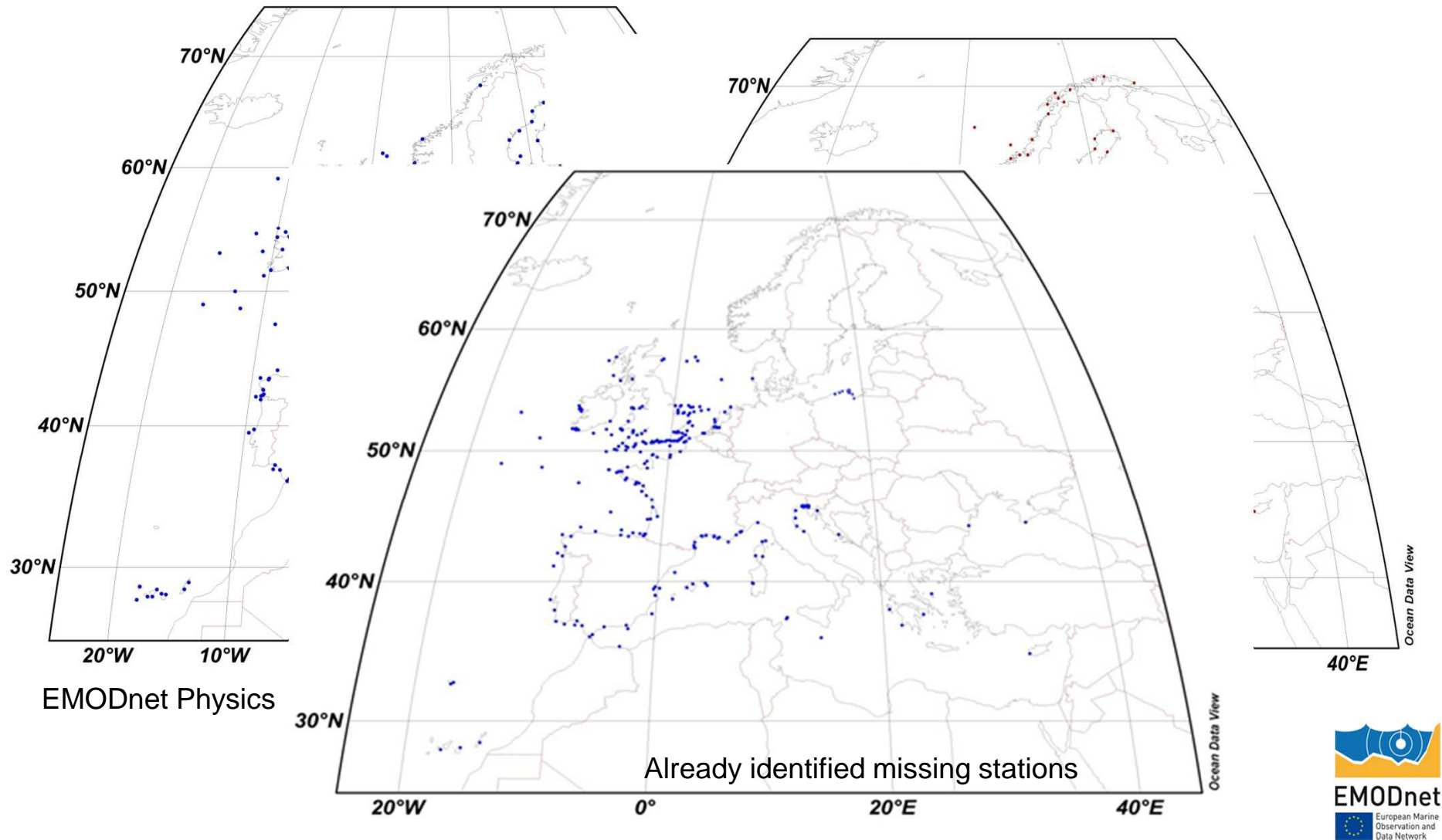


Fig. 34. Demographic pie chart for data downloads

EuroGOOS area	ARTIC	BOOS	BLACK SEA	IBI	MED	NOOS	TOTAL
Platform							
Fixed station (TS_MO)	3	91	1	164	70	130	<b>459</b>
Ferrybox (TS_FB)	1	5		3	1	5	<b>14*</b>



# EMODnet Physics work in progress



# *EMODnet Physics, Interoperability OGC*

## **EMODnet Physics WMS/WFS/WCS**

WMS specifies a number of different request types, two of which are required by any WMS server:

- GetCapabilities - returns information about the WMS
- GetMap - returns a map image

<http://151.1.25.219:8080/gisclient/services/ows.php?project=ett&map=stazioni&request=getcapabilities&service=WMS>

<http://www.emodnet-physics.eu/test.wms.getfeatureinfo.html>

WFS provides an interface allowing requests for geographical features across the web using platform-independent calls

- GetCapabilities - this queries the WFS service to determine available options

<http://151.1.25.219:8080/gisclient/services/ows.php?project=ett&map=stazioni&request=getcapabilities&service=WFS>

- GetFeature

<http://www.emodnet-physics.eu/test.wfs.html>

Web Services

<http://www.emodnet-physics.eu/arh/wsemodnet.aspx>



# *EMODnet Physics work in progress*

## **EMODnet Physics – End Users**

- *Meteo Group France*
- *Regione Liguria (IT)*
  - *Distretto Ligure delle Tecnologie del Mare*
  - *Consorzio Tecnomar*
- *Swedish ECDS (Environment Climate Data Sweden)*
- *EMODnet central portal*

### *Working on*

- *GOOS*
- *IODE – ODP*
- *Regione Marche*



# *EMODnet Physics – Conclusions*

- An impressive effort made by key technical players in MyOcean, Seadatanet, EMODnet and EuroGOOS to **reduce unnecessary redundancies and develop common approaches** towards users
  - e.g. MoU signed between Seadatanet and MyOcean to share efforts, and discussion to improve user access to databases
- A clear and convincing move towards **open& free access to data**, a strong **involvement at the community level** in IT tools and methods to offer modern data information services to users
- EuroGOOS, MyOcean, SeaDataNet and **EMODnet-Physics** have developed a strategy of **active cooperation**, cross-cutting DG ENTR, RTD and MARE initiatives to achieve a **wider coverage of data sources and overall interoperability**.



# Lesson learnt and future strategy

- Support to ROOSs/MyO/SDN
  - Automatic mail services
  - Daily notification about station status
  - Weekly notification about downloads
  - On demand Google analytics

To be changed

Report download data - Messaggio (HTML)

Invia: venerdì 08/02/2013 02:26  
emodnet@emodnet-physcs.eu; federica.parrone@emodnet-physcs.eu

EMODnet - Physical Parameters  
Report cache data

dal 01/02/2013 al 08/02/2013

Series name	Data	IP	Zip name
62001	01/02/2013 10:49:28	82.245.194.4	20130201_104927.zip
62103	01/02/2013 10:52:17	82.245.194.4	20130201_105217.zip
62029	01/02/2013 10:55:35	82.245.194.4	20130201_105534.zip
LASPEZIA61219	05/02/2013 10:05:19	2.116.198.162	20130205_100519.zip
61197	05/02/2013 10:06:55	2.116.198.162	20130205_100654.zip
LASPEZIA61219	05/02/2013 10:42:22	2.116.198.162	20130205_104222.zip
61196	05/02/2013 11:51:39	2.116.198.162	20130205_115139.zip
LiverpoolBay	05/02/2013 16:42:57	147.143.15.9	20130205_164257.zip
61280	07/02/2013 15:13:36	168.202.253.3	20130207_151335.zip

Servizio E-Mail Emodnet

Report download data - Error/Wa...

Messaggio

Da: Servizio E-Mail Emodnet <ettlog@emodnet-physcs.eu> Inviato: lunedì 11/02/2013 02:28  
A: matteo.diogene@emodnet-physcs.eu; marco.giordano@emodnet-physcs.eu; federica.parrone@emodnet-physcs.eu; antonio.novellino@emodnet-physcs.eu  
Cc:  
Oggetto: Report download data - Error/Warning

EMODnet - Physical Parameters  
Report cache data

Settings : NGiorni15, timeout15000, da station  
Range dal 27/01/2013 al 11/02/2013  
Start : 11/02/2013 02:00:00  
Stations count : 442

Errori :

Record list is empty; [URL 00001](#) ; 43,04; 28,19;  
Record list is empty; [URL 61001](#) ; 43,4; 7,8;  
Record list is empty; [URL 61002](#) ; 42,1; 4,7;  
Record list is empty; [URL 6100292](#) ; 43,20834; 5,23;  
Record list is empty; [URL 61004](#) ; 42,93; 6,207;  
Record list is empty; [URL 61187](#) ; 43,636; 7,226;  
Record list is empty; [URL 61188](#) ; 42,4883; 3,1683;  
Record list is empty; [URL 61190](#) ; 43,3715; 3,7797;  
Record list is empty; [URL 61191](#) ; 42,9162; 3,1245;  
Record list is empty; [URL 61431](#) ; 43,425; 4,1333;  
Record list is empty; [URL 62021](#) ; 47,46; -2,6567;  
Record list is empty; [URL 62064](#) ; 44,6503; -1,4478;  
Record list is empty; [URL 62066](#) ; 43,53; -1,614;  
Record list is empty; [URL 62068](#) ; 48,7167; -3,9607;  
Record list is empty; [URL 62069](#) ; 48,2903; -4,9683;  
Record list is empty; [URL 62070](#) ; 47,239; -2,787;  
Record list is empty; [URL 62074](#) ; 47,285; -3,285;  
Record list is empty; [URL 62307](#) ; 44,9142; -0,2489;  
Record list is empty; [URL 68422](#) ; 36,829; 21,608;  
Record list is empty; [URL ATHOS](#) ; 39,9736; 24,7242;  
Record list is empty; [URL IF000548](#) ; 47,7151; -4,0029;  
Record list is empty; [URL IF000549](#) ; 47,3938; -2,9577;  
Record list is empty; [URL IF000550](#) ; 49,492; -1,1567;  
Record list is empty; [URL IF000552](#) ; 46,7022; -2,2903;  
Record list is empty; [URL IF000562](#) ; 49,66884; 0,12346;  
Record list is empty; [URL IF000600](#) ; 46,0373; -1,3373;  
Record list is empty; [URL ItoDA&TG](#) ; 46,01; -1,17;  
Record list is empty; [URL LESVO](#) ; 39,159; 25,815;  
Record list is empty; [URL MYKON](#) ; 37,523; 25,462;  
Record list is empty; [URL S MO 62059](#) ; 49,695; -1,62;

Servizio E-Mail Emodnet

contacts@emodnet-physcs.eu

# *EMODnet Physics – Conclusions*

- Results show technical success, common vision, and positive response of users.
- It builds a convincing marine community contribution to the overall aim of EMODnet with respect to pan-European marine data management and data access.
- It brings to the fore the critical need for sustained marine observation networks.



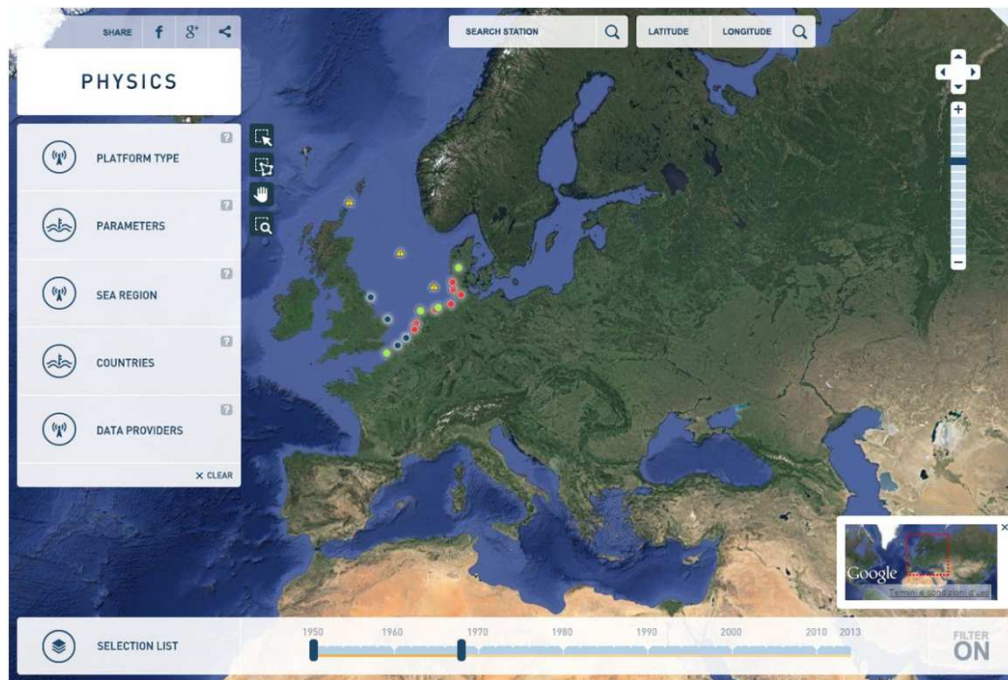
# EMODnet Physics

***NRT data provider, Historical data provider, end user willing to contribute?***

*Contact us!*

***contacts@emodnet-physics.eu***

**Thank you**



**[www.emodnet-physics.eu](http://www.emodnet-physics.eu)**



**contacts@emodnet-physics.eu**