

EMODnet Thematic Lot n° 06 - Physics

5th Bi-monthly Report

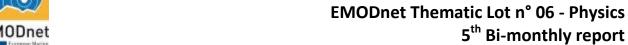
Reporting Period: 01/05/2014 - 30/06/2014

Date: 05/07/2014



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1. Highlights in this reporting period

- EMODnet Workshop in Iceland + Meeting with ARTIC ROOS
- Working on of the EMODnet-EuroGOOS HF Radar coordination Group
- Monthly-average data product available via both platform- product-page and interoperability service
- Agreement between EMODnet Physics and IODE/ODP to enable data provided from EMODnet Physics to the ODP to be made available to the WMO Information System (WIS).
- Identification of validated historical datasets and metadata



2. Meetings held since last report

The project officially started 24th July 2013. List of the held meetings for the period May – June 2014

Meetings		
When	What	note
4 th 5 th June 2014	Meetings with Steering Committee, Rome, Italy	
10 th June 2014	EMODnet Workshop Iceland, Reykjavik	
23 rd 26 th June 2014	ODP - ETDMP-IV, Oostende, Belgium	

Meetings with ROOSs		
When	What	note
	Meeting with BOOS, Riga, Latvia	
21 st 23 rd May 2014	EuroGOOS annual meeting, Brussels, Belgium	
28 th May 2014	Meeting with MONGOOS chair, Lecce, Italy	

Dissemination						
When	What	note				
	BOOS newsletter	Article				
	FIXO3 project, Rome, Italy	Oral presentation				
20 th May 2014	Day of the Sea – DLTM, la Spezia, Italy	Oral presentation				
26 th 29 th May 2014	6th IEEE/OES Baltic Symposium 2014, to be	Oral presentation				
	held in Tallinn, Estonia	(IEEE paper)				
27 th May 2014	Safer Transport in the Mediterranean Sea,	Oral presentation				
	Lecce, Italy					

Technical Meetings		
When		note
5 th 7 th May 2014	JERICO general assembly, Oslo Norway	
4 th June 2014	Meeting with INGV as representative for EMSO	
25 th June 2014	Internal technical meeting – Oostende,	
	Belgium	



3. Work package updates

WP1 - Project Management

Objectives:

 To manage and to coordinate all project activities, ensuring timely delivery and high quality of results and products

Each ROOS is still finalizing the list of activities to be done under the EMODnet umbrella for infrastructure empowerment and in coming months the early activities are going to start, as soon as they're finalized they will be listed in the report.

The 10th June planned meeting in Iceland took place and the ur-EMODnet, and in particular EMODnet Physics state of art and its connection with the ARTIC ROOS were presented. Iceland is going to contribute to EMODnet Physics with about 20-30 platforms.

Follow up activities for the EMODnet-EuroGOOS HF Radar coordination Group were also done and the group is now of 58 people.

Furthermore an agreement has been made between EMODnet Physics and IODE/ODP to enable data provided from EMODnet Physics to the ODP to in turn be made available to the WMO Information System (WIS). WIS provides a single coordinated global infrastructure for the collection and sharing of information in support of all WMO and related international programmes.

The ODP team will provide this as a service to EMODnet Physics making available EMODnet Physics data to the international exchange of meteorological and related data and products to the entire domain of such data and products used globally.

For more information on WIS, please visit: http://www.wmo.int/pages/prog/www/WIS/



WP2 - Data Collection, Metadata Compilation and QA/QC

Objectives:

- To implement access to data and metadata from the data sources identified in EMODnet Physics
- To identify specific additional data sources that contribute to the EMODnet physical parameters portfolio (Argo profiling floats (Euro-Argo), gliders, radar, etc)
- To arrange that identified data sources become available *via* the underlying EuroGOOS ROOSes, MyOcean, and SeaDataNet infrastructures with common metadata and data formats. Arrange the data availability from other international programmes (Euro-Argo) through MyOcean *in situ* global component
- To validate the coverage and to complete the EDIOS metadata directory and standardised station index
- To establish and give guidance on common data and metadata models for complimentary data suppliers

During these two months the activity was focused on the Gliders, Drifting Buoys and ARGO data management and end-user interfaces to access metadata and data. The following table shows the (about 1350) platforms ready to be presented and provided via the EMODnet Physics portal.



	drifting bouys (DB)	ferrybox (FB)	gliders (GL)	fixed buoys or mooring time series (MO)	profiling floats vertical profiles (PF)	Argo Floats (AR)
AWI	0	0	0	0	0	2
BODC	0	0	0	5	0	0
BSH	0	0	0	75	0	122
CEFAS	0	0	0	0	0	0
CETMEF	2	0	0	17	0	0
CMR	0	0	0	1	0	0
CMRE	0	0	0	0	0	0
DaMSA	0	0	0	0	0	0
DELTARES	0	0	0	88	0	0
DMI	0	0	0	34	0	0
EPA	0	0	0	0	0	0
Euskalmet	0	0	0	1	0	0
FMI	0	1	0	6	0	8
HCMR	0	0	0	4	0	1
HPA	0	0	0	1	0	0
IEO	0	0	0	1	0	32
IFM	0	0	6	0	0	13
IFREMER	0	0	0	11	4	162
IMEDEA	0	0	1	0	0	0
IMR	0	0	0	0	0	7
IMS-METU	0	0	0	0	0	4
IH	0	0	0	4	0	0
INSU	0	0	3	0	0	0
IOBAS	0	0	0	1	0	6
IOPAS	0	0	0	1	0	0
IRD	0	0	0	0	0	64
ISMAR	0	0	0	7	0	0
ISPRA	0	0	0	18	0	0
KNMI	0	0	0	0	0	29
LEGMA	0	0	0	2	0	0
LOCEAN	0	0	0	0	0	5
LOV	0	0	0	0	0	28
МІ	0	0	0	27	0	0
MDK	0	0	0	3	0	0
MET	0	0	0	0	0	0
MetFR	27	0	0	4	0	0



METNO	0	0	0	9	0	0
MIO	0	0	0	0	0	4
MSI	0	2	0	11	0	0
MUMM	0	0	0	11	0	0
NHS	0	0	0	0	0	0
NIB	0	0	0	1	0	0
NIMRD	0	0	0	1	0	0
NIVA	0	2	0	0	0	0
NMA	0	0	0	0	0	0
NOC/METOFFICE	0	0	0	91	11	115
NWAHEM	0	0	0	2	0	0
OGS	0	0	0	4	0	36
OILPLAT - Industry	0	0	0	7	0	0
PdE	0	0	0	46	0	0
RIKZ	0	0	0	0	0	0
SBR	0	2	0	0	0	0
SHOM	25	0	0	49	0	13
SMHI	0	1	0	28	0	0
SYKE	0	0	0	0	0	0
UAC	0	0	0	5	0	0
UKM	0	0	0	6	0	0
UKMO/MF	0	0	0	0	0	0
UPC	0	0	0	1	0	0
WSAL	0	0	0	10	0	0
WSAW	0	0	0	3	0	0
WSOB	0	0	0	1	0	0
WSOS	0	0	0	9	0	0
WSOT	0	0	0	7	0	0
TOTAL	54	8	10	613	15	651



The following tables give the present status of the EMODnet Physics portfolio¹:

table ²	Wave & Winds	Temp.	Salinity	Currents	Light Attenuation	Sea Level	Atmospheric	Others	Chemical	
Artic, Barrents, Greenland, Norvegian Sea	0	1	1	0	0	4	0	1	0	7
Baltic Sea	16	21	11	5	2	110	6	4	11	186
Black Sea	0	2	1	0	0	2	0	0	1	6
Global Ocean	6	7	1	0	0	6	2	3	3	28
Atlantic, Bay of Biscay, Celtic Sea	45	53	23	11	2	86	45	8	35	308
Mediterranean Sea	46	41	12	10	3	27	42	10	20	211
TOTAL	113	125	49	26	7	235	95	26	70	746

Difference with previous period:

	Wave & Winds	Temp.	Salinity	Currents	Light Attenuation	Sea Level	Atmospheric	Others	Chemical	
Artic, Barrents, Greenland,										
Norvegian Sea	0	0	0	0	0	-1	0	0	0	0
Baltic Sea	2	2	-1	0	0	-11	0	4	-1	2
Black Sea	0	0	0	0	0	0	0	0	0	0
Global Ocean	2	1	0	0	0	-1	1	0	1	2
Atlantic, Bay of Biscay, Celtic Sea	0	2	1	0	0	-31	0	2	0	0
Mediterranean Sea	6	6	2	0	0	-35	1	2	1	6
TOTAL	10	11	2	0	0	-79	2	8	1	10

There is a significant difference in the sea level that will be investigated in coming months.

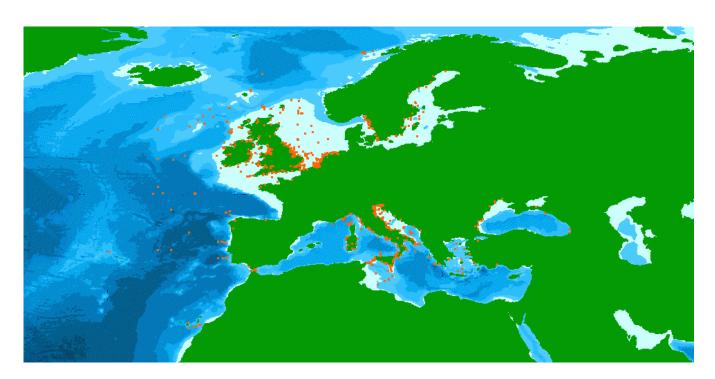
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¹ http://www.emodnet-physics.eu/arh/dashboardserver/default.aspx

 $^{^2\} http://www.emodnet-physics.eu/map/Dashboard/Section2.aspx?typeplat=MO,FB$



Consortium is working on the integration of identified historical validated datasets under the SeaDataNet network of NODCs. The procedure is not finalized yet and at portal map page level no progress are visible, anyhow the following figure provides an idea of the locations of these datasets.



Historical validated datasets location

The following table gives more details:

Data provider	number of platforms	number of datasets (CDIs)
BODC - British Oceanographic Data Centre	224	3074
ENEA Centro Ricerche Ambiente Marino - La Spezia	1	1622
HCMR/HNODC - Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre	12	5
IEO/Spanish Oceanographic Institute	9	1180
IFREMER / IDM/SISMER	113	494
UM - International Ocean Institute - Malta Operational Centre University Of Malta / Physical Oceanography Unit	1	36
TSU - Iv.Javakhishvili Tbilisi State University, Centre of Relations with UNESCO Oceanological Research Centre and GeoDNA	2	113
UHI - Marine branch of Ukrainian Hydrometeorological Institute	5	2327



MI - Marine Institute	30	46
IOBAS - National Institute of Meteorology and Hydrology, Bulgarian Academy of Sciences	6	17
OGS - Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Division of Oceanography	332	212
P.P. Shirshov Institute of Oceanology, RAS	1	40
UT- Polytechnic University of Tirana - Institute of GeoSciences, Energy, Water and Environment	1	19
Rijkswaterstaat Waterdienst	74	21
SMHI- Swedish Meteorological and Hydrological Institute	53	2244
total	864	11450



WP 3 Metadata aggregation, Data access and Data products

Objectives:

- To compile aggregated metadata with common format and quality for the EMODnet Physics portal
- To implement/create access to data sets and to compile aggregated data sets with common format and quality for the EMODnet Physics data products
- To generate products from the metadata and aggregated data sets

The development of three basic EMODnet Physics products was completed and fully provided via both web service for the EMODnet Central portal and EMODnet Physics end user page (see WP4). The EMODnet Physics is now providing monthly averages, max and min for some of the parameters (e.g. temperature, wave high, etc).

During the ODP - ETDMP-IV meeting it was also discussed how some of the near real time data can be packed and described to provide specific data products to new potential endusers via the ODP and WMO Information System (WIS). The activity will be developed in coming months.

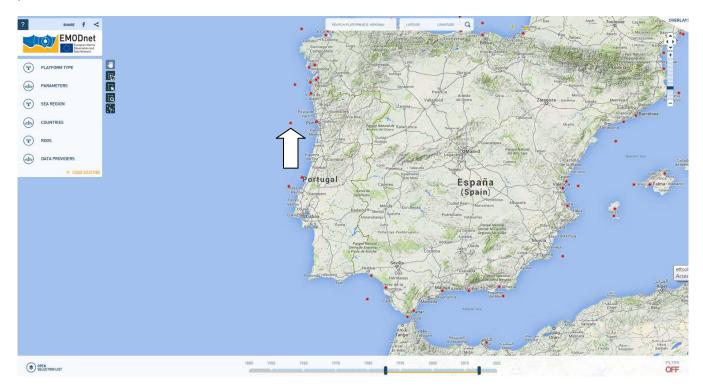


WP 4 Portal technical development and operation

Objectives:

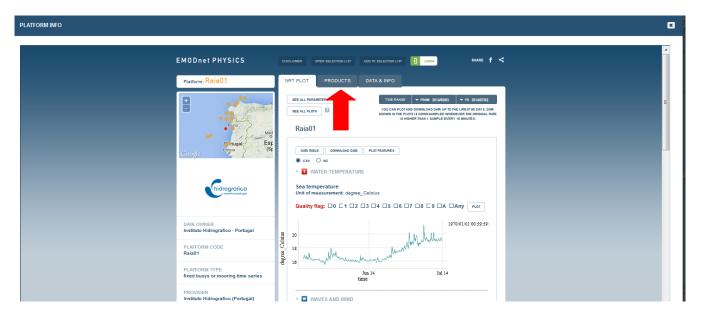
- To implement the existing EMODnet Physics website with new services
- To keep the website and portal services operational, including monitoring

The platform page was re-designed in order to present and provide the platform parameters products. Now the user accesses to the map page and selects a platform, and the platform page provides a specific "products" section and the monthly average, min and max are presented. Products can be also downloaded as a csv file.

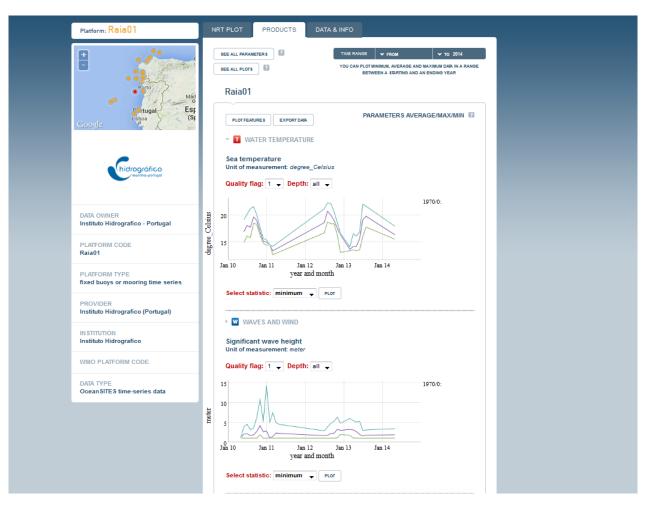


EMODnet - Physics map page





EMODnet Physics - Raia01 platform page



EMODnet Physics - Raia01 platform products page



WP 5 Analysis, evaluation and feedback

Objectives:

- To report on the effectiveness of the system in meeting the needs of users and other EMODnet portals
- To analyse what further steps need to be taken for improvement, expansion and sustainability
- To assess the operationality of the EMODnet Physics portal Information System; Validate the services of the portal

The ARTIC ROOS is going to use EMODnet Physics interoperability services as soon as the other ARTIC platforms (i.e. ARGO, Drifting, VOS) will be integrated and available.

User evaluation feedback about the Secretariat managed survey of the Physics portal:

F: "The overall feedback was positive with regards to the objective of providing a marine gateway to European physical parameters. However, all the users mentioned that there needs to be a refinement of the user guidance and tailoring of the information on the central portal less to the funders with regards to the nature of the information provided and presented. The overall achievement of providing access would be re-enforced with a refining of the service and outlining the current state of the deliverables. This would make users realise that it is an ongoing project to which they can contribute and allow for work in progress tasks"

The document was analyzed and in what follow some comments and actions are reported (F = user Feedback, C = EMODnet Physics comment, A = EMODnet Physics Action):

1. User flow between central and thematic portal

F: "The users requested that the access point to data discovery services could be simplified, i.e. would be able to access the portal directly from the main page on the central portal. They all stated that if the aim is a data discovery service, any additional information (the summary page) could be of interest but should be optional, they did not want to have to navigate past it to get to the data".

C: The EMODnet Physics portal is designed to reduce as much as possible the time (and clicks) to access to the data. If the user is asked to access to EMODnet Physics data via the EMODnet Central he is going to find at least 2 further levels before accessing the EMODnet Physics data. the feedback is biased by the way the users were asked to test the system.

From the central portal's summary page, the users found it not apparent where to go next. It was not clear but confusing to see option of website/portal/documentation links; what is the difference? One of the user expected to be able to link directly through the parameters listed



on the summary page, or at least have an indication of what parameters are currently available.

One of the user tried to access the website but was unable too. (Note subsequent verification with Physics, highlighted that the link on the central portal was out of date due to upgrading work

C: These comments concern how the EMODnet Central portal is designed and provides information rather than the EMODnet Physics landing page and operational portal.

- 2. Review of core information services of the thematic portal
 - 2.1. Search & visualization functionality

F: Main comments from users were with regards to the tools and operations of the layers.

- When the map is first accessed, data is shown but this is not reflected in the 'on' and 'off' of layers.
- No tooltips or an indication of the metadata/origin of the data provided for the layers
- Symbology with no explanation, yellow and red warning triangles?
- What is ROOS ?

C1: The EMODnet Physics map was designed to instantaneously show the full (near real time) data availability – filters are designed to refine the selection.

A1: the portal is under continuous development – it is still missing (and they are already planned to be developed) some more help-tooltips, easy user guides, legends

- Why is the data listed under the heading 'platform'?
 - o What is meant by the different types of data?
 - o What is CDI?

A2: filters label will be re-written and reorganized to be more logic (e.g. a time range filter will be added)

• Can the individual parameters had different symbology, such that their data sources can easily be identified on the map.

C2: one of the farmer release of the EMODnet Physics map was designed in a such way but as soon as the platform number and typology increased there was a need (user feedback) to clear up the displayed symbols

• Functionality that allows the search to be refined (narrowed down) by selecting multiple tabs (i.e. sea level and temperature) to view data sources where multiple parameters are being monitored. For example, when 'sea level' is selected buoys with sea level data are shown, and it may be helpful that when an additional parameters is selected,



such as 'temperature', only buoys which provide both sea level and temperature data be shown on the map.

• If multiple parameters are selected at first search, why does the search not reflect just the items that have all of the multiple parameters available?

C3: filters are designed to work in AND between macro-filters and OR between intra-filters A3: see A1

What are 'other parameters'?

C4: everything that was not possible to classify in a different way – full legend is described in the landing page: http://www.emodnet-physics.eu/portal/user-s-guide

- Overlays menu very hidden in the corner, make them more prominent?
- There seems to be no difference in the filter being ON or OFF (in terms of visibility) (at the bottom of the map)
- On the bottom of the legend (x clear) the user thought it closed the legend box, not clear the data search.
- The smaller toolbar next to the legend what is the functionality

C5: see C2 A4: see A1

• Is there a measuring tool if someone needed to calculate the distance of a platform to shore or another platform?

C6: no there is not and it is not planned at the moment

2.2. Documentation

F: The users did not locate the documentation, and there was an expectation of it to be more in build into the actual portal via tooltips (see above). User would value a workflow from data search to publication

C7: the User Guide is available into the landing page: http://www.emodnet-physics.eu/portal/user-s-guide

A5: see A1, a specific focus will be to create a user guidance document that documents the user flow from searching till publication

2.3. Sign in/login

F: No reference to data login until at the platform info. Why is the login necessary, what additional services are available? Can I save my searches?



C8: login is required to download data older than 60 days. According the data source infrastructure different credentials maybe required. The adoption of the Open-ID management is under study and development. The system is both using cookies to save last selection and a "share" feature that creates a unique url with the applied search (it is a way to save and share the search)

A6: see A1, furthermore the support for accessing and downloading data via major Open-ID credentials (e.g. Facebook, Twitter, etc.)

2.4. QA/QC

F: The users where unsure of the QA/QC procedure the dataset had been through. What is the meaning of the quality flag on the information box

C9: The QA/QC are applied at institute and assembly level according international standardized procedure, they are and they should be in charge for this activity and responsibility as they really know their data. See also C2. A7: see A1

2.5. Accreditation

F: The users were not sure how to accredit the data, and what the citation for EMODnet would need to be

A8: a tooltip/description about how to cite data will be provided



4. Specific challenges or difficulties encountered during the reporting period

Difficulties. The integration of the historical data provided via the SeaDataNet network is taking more than planned. At the moment a specific new service is under development in order to be able to make the SeaDataNet physical metadata available from the EMODnet Physic map interface. The access to this data will still require the acceptance of the SeaDataNet data access policy license.

The management and plotting of ARGO data took more than planned. Information and data are under a second tier of checks before the final release.

5. User Feedback

List any useful feedback you received on your portal, your activities or those of other EMODnet projects/activities. Also provide any suggestions you have received for EMODnet case studies and/or future products/activities/events.

Date	Name	Organization	Type of user feedback (e.g. technical, case study etc)	Response time to address user request
7 th May 2014	Joaquin Del Rio Fernandez	UPC - Spain	Technical: EMODnet Physics was missing/not showing the Obsea – platform	The platform was available from the EMODnet the day after

A specific test case is under development in collaboration with the EMSA (European Marine Safety Agency) in order to make EMODnet Physics data and metadata available and totally integrated into the EMSA internal data management system.



6. Outreach and communication activities

Please list all the relevant communications activities or products you have developed/executed during this period (including presentations, lectures, trainings, demonstrations and development of communication materials such as brochures, videos, etc.). Relevant scientific and/or popular articles you know have been published using/referring to EMODnet should be reported under indicator 11 in Section 7.

Date	Media	Title	Short description and/or link to the activity
4 th May 2014	Article	BOOS newsletter	
19 th May 2014	Oral presentation	FIXO3 project, Rome, Italy	
20 th May 2014	Oral presentation	Day of the Sea - DLTM, la	
		Spezia, Italy	
26 th 29 th May 2014	Oral presentation	6th IEEE/OES Baltic Symposium	
	(applied for IEEE	2014, to be held in Tallinn,	
	paper)	Estonia	
27 th May 2014	Oral presentation	Safer Transport in the	
		Mediterranean Sea, Lecce, Italy	



7. Updates on Progress Indicators

The Physics portal provides data from different platforms with specific set of parameters which can be classified into different time periods:

Latest data → freely available up to 60 days (automatic quality check/flag procedures) **Recent data** → organized in monthly data files (post 60 days, automatic quality check/flag procedures³, requires user registration)

Long Term time series data → organized one data file for platform (automatic quality check/flag procedures, requires user registration)

Historical validated data → organized in CDI - dataset files hosted by NODCs (validated data⁴, requires user registration).

The information for each of these types of information is summarized in the tables below each indicator listed.

http://www.seadatanet.org/content/download/18414/119624/file/SeaDataNet_QC_procedures_V2_%28May_2010%29.pdf

³ http://www.emodnet-physics.eu/map/ARH/QualityCheck/recommendations_for_rtqc_procedures_v1_2.pdf

⁴ Validated according the SeaDatanet Quality Check procedure -



Indicator 1 - Volume of data made available through the portal⁵

- 1. Summary table of all the data (latest, recent, long term and validated historical) by Country, Organization, Platform type and Data availability
 - → see to Annex I

2. Summary of operational platforms by typology, Country, Organization

		June	July 2014	previo	previous period		Variation	
Country	Data Provider	FB	MO	FB	MO	FB	MO	
Belgium	MDK	0	3			0	3	
Belgium	MUMM	0	11		1	0	10	
Bulgaria	IOBAS	0	1		1	0	0	
Denmark	DMI	0	34		34	0	0	
Estonia	MSI	3	11	3	11	0	0	
Finland	FMI	1	6		6	1	0	
Finland	SYKE	0	0			0	0	
France	CETMEF	0	17		16	0	1	
France	IFREMER	0	11		11	0	0	
France	Meteo France	0	4		4	0	0	
France	SBR	2	0	2		0	0	
France	SHOM	0	49		47	0	2	
Germany	BSH	0	75		68	0	7	
Germany	HPA	0	1			0	1	
Germany	WSAL	0	10			0	10	
Germany	WSAW	0	3			0	3	
Germany	WSOB	0	1			0	1	
Germany	WSOS	0	9			0	9	
Germany	WSOT	0	7			0	7	
Greece	HCMR	0	4	0	4	0	0	
Ireland	Marine Institute	0	27		11	0	16	
Italy	ISMAR	0	7		7	0	0	
Italy	ISPRA	0	18		13	0	5	
Italy	OGS	0	4		4	0	0	
Latvia	LEGMA	0	2		2	0	0	
Netherlands	DELTARES	0	88		67	0	21	
Norway	CMR	0	1			0	1	
Norway	METNO	0	9		9	0	0	
Norway	NIVA	2	0	2		0	0	

 $^{^{\}rm 5}$ Databases connected to the system is the number of providers



Portugal	Instituto Hidrografico	0	4		3	0	1
Portugal	UAC	0	5		5	0	0
Romania	NIMRD	0	1		1	0	0
Russian Federation	NWAHEM	0	2		2	0	0
Slovenia	NIB	0	1		1	0	0
Spain	Euskalmet	0	1		1	0	0
Spain	IEO	0	1		1	0	0
Spain	Puertos del Estado	0	46		46	0	0
Spain	UPC	0	1			0	1
Spain	Xunta Galicia	0	5		5	0	0
Sweden	SMHI	1	28	1	28	0	0
United Kingdom	BODC	0	5			0	5
United Kingdom	NOC/METOFFICE	0	91		48	0	43
United Kingdom	UKM	0	6		11	0	-5
	OilPlatforms(*)		7		7	0	0

(http://www.emodnet-physics.eu/map/Dashboard/Section5.aspx)

(*) platforms already present in the system but not reported before.

3. Summary of the number of platforms measuring each parameter by Sea Basin

					<u>-</u>					
table ⁶	Wave & Winds	Temp.	Salinity	Currents	Light Attenuation	Sea Level	Atmospheric	Others	Chemical	
Artic, Barrents, Greenland, Norvegian Sea	0	1	1	0	0	4	0	1	0	7
Baltic Sea	16	21	11	5	2	110	6	4	11	186
Black Sea	0	2	1	0	0	2	0	0	1	6
Global Ocean	6	7	1	0	0	6	2	3	3	28
Atlantic, Bay of Biscay, Celtic Sea	45	53	23	11	2	86	45	8	35	308
Mediterranean Sea	46	41	12	10	3	27	42	10	20	211
TOTAL	113	125	49	26	7	235	95	26	70	746

^(*) platforms can measure multiple parameters

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 $^{^6\} http://www.emodnet-physics.eu/map/Dashboard/Section2.aspx?typeplat=MO,FB$



4. Summary of recent data availability (how much data in last month)

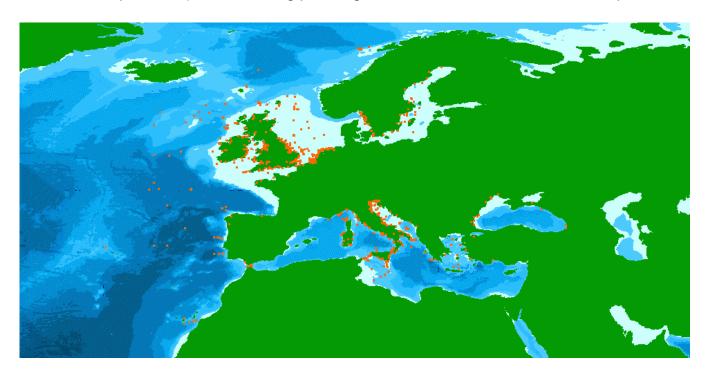
→ See Annex II

5. Summary table of platforms linked to historically validated datasets.

ĺ				Platforms
	Country	Organization	Platform Type	connected to CDIs
	DE	BSH	MO	1
	SE	SMHI	МО	16
	UK	NOC/METOFFICE (BODC)	MO	38

^(*) in the previous report there was a wrong assignment

The previous table only presents the number of platforms that are providing both latest-recent and historical validate data. While the number of platforms that are providing latest-recent data is reported in Indicator 1.1, there are many platforms that provide only validated data (to be shown on the portal still). The following picture gives an idea of the location of those platforms.



Historical validated datasets location

The following table gives the figures in detail.



Data provider	number of platforms	number of datasets (CDIs)
BODC - British Oceanographic Data Centre	224	3074
ENEA Centro Ricerche Ambiente Marino - La Spezia	1	1622
HCMR/HNODC - Hellenic Centre for Marine Research, Hellenic National Oceanographic Data Centre	12	5
IEO/Spanish Oceanographic Institute	9	1180
IFREMER / IDM/SISMER	113	494
UM - International Ocean Institute - Malta Operational Centre University Of Malta / Physical Oceanography Unit	1	36
TSU - Iv.Javakhishvili Tbilisi State University, Centre of Relations with UNESCO Oceanological Research Centre and GeoDNA	2	113
UHI - Marine branch of Ukrainian Hydrometeorological Institute	5	2327
MI - Marine Institute	30	46
IOBAS - National Institute of Meteorology and Hydrology, Bulgarian Academy of Sciences	6	17
OGS - Istituto Nazionale di Oceanografia e di Geofisica Sperimentale, Division of Oceanography	332	212
P.P. Shirshov Institute of Oceanology, RAS	1	40
UT- Polytechnic University of Tirana - Institute of GeoSciences, Energy, Water and Environment	1	19
Rijkswaterstaat Waterdienst	74	21
SMHI- Swedish Meteorological and Hydrological Institute	53	2244
total	864	11450

Although this data is not yet available from the portal, for the past 6 months there was an increase in the metadata provision:

	number of platforms	number of datasets (CDIs)
metadata for the January- June 2014 period	864	11450
metadata before January 2014	828	10642
Variation	+36	+808



Indicator 2 – Organizations supplying each data type⁷

→ See Indicator 1.1

Indicator 3 – Organization that have been approached to supply data

The last two months were focused on consolidation of the HFR Group. At the moment the group is of about 60 people and already interacting with US and Australian groups.

Country	Institute	Name	email
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Greece	HCMR	Anna Konstantinidou	agkwnsta@hcmr.gr
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lawa al	The Institute of Earth Sciences The Hebrew		
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Italy	CNR ISMAR	Lorenzo Corgnati	lorenzo.corgnati@sp.ismar.cnr.it
Italy	ETT	Antonio Novellino	antonio.novellino@ettsolutions.com

⁷ Groups partner involved in the EMODnet Physics project are different from groups hosting and providing data from the same institute: all contributors are "non" partners.



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Italy	DiST Università Parthenope and CoNISMa	Enrico Zambianchi	enrico.zambianchi@uniparthenope.it
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US IOOS/MARACOOS and Rutgers			
University - chair of GOOS HF Radar Task -			
sub working group		Hugh Roarty	
US IOOS/SCCOOS and Scripps - chair of GOOS HF Radar Task - sub working group		Lisa Hazard	
US IOOS/MARACOC University.	S and Rutgers	Scott Glenn	



Indicator 4 – Volume of each data type download from portal⁸

Tracking and identification of the downloads from the portal is a work in progress. Currently the number of data request per country is used as a metric to provide a reference to the monitor activity. Tracking is limited to the IP.

1. Recent data download requests

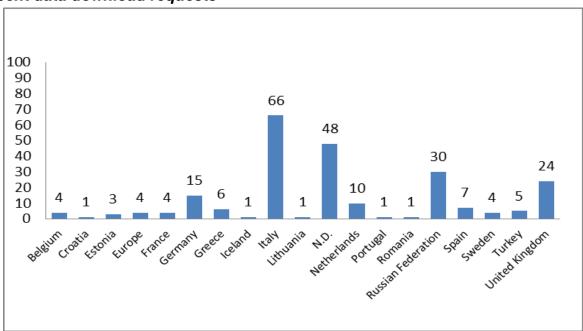


Figure for the period May to June 2014 (including latest data and recent data). Data is extracted from IPs where the ETT IP is filtered out. Data request maybe a single platform or a list of platforms, for one day or more.

⁸ Products are foreseen in the second phase of the project, when available they will be tracked as the same as the recent data



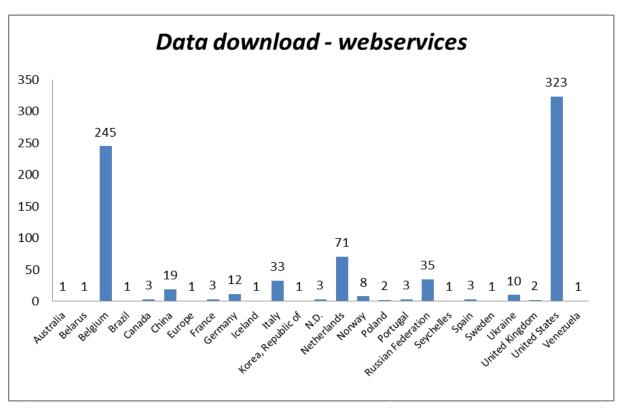
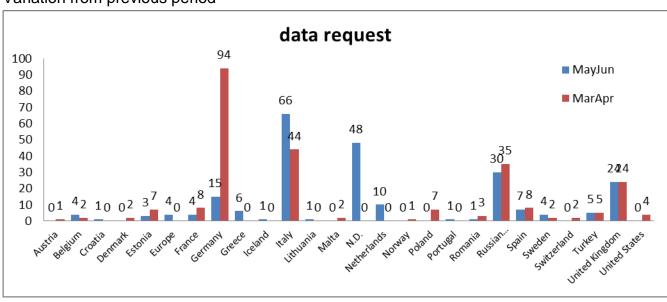


Figure for the period May to June 2014. Data is extracted from IPs where the ETT IP is filtered out. Web Service data request maybe a single platform or a list of platforms, for one day or more.

Variation from previous period





2. Summary of data download requests

Country	Artic, Barrents, Greenland, Norvegian Sea	Baltic Sea	Black Sea	Global Ocean	Atlantic, Bay of Biscay, Celtic Sea	Mediterranean Sea	North Sea	All Sea Basins
Belgium	5	130	2	27	246	68	233	0
China	0	0	0	10	0	0	0	0
Croatia	0	0	0	0	1	0	0	0
Estonia	0	7	0	0	0	0	0	1
Europe	0	0	1	2	0	0	1	1
France	0	1	0	0	2	1	0	0
Germany	0	9	0	0	4	1	103	0
Greece	0	0	0	0	0	6	0	0
Iceland	0	0	0	0	1	0	0	0
Italy	0	3	0	10	4	52	71	7
Lithuania	0	0	0	0	0	1	0	0
N.D.	0	8	0	0	1	39	1	0
Netherlands	0	2	0	31	4	4	7	0
Norway	0	0	0	3	0	0	0	0
Portugal	0	0	0	1	0	0	0	0
Romania	0	0	1	0	0	0	0	0
Russian Federation	0	26	3	5	3	3	0	0
Spain	0	0	0	0	5	1	0	1
Sweden	0	4	0	1	0	0	0	0
Turkey	0	0	0	0	0	5	0	0
United Kingdom	0	0	0	1	0	0	23	0
United States	0	0	0	78	14	16	0	0
total	5	190	7	169	285	197	439	10

Figure for the period May to June 2014. The first column lists the countries from where the data request was done, while the other columns lists the number of requests (e.g. platforms) in which area.



3. Most downloaded platforms

Platform	Download	Web service	Total
41702	0	148	148
13130	1	128	129
Oostende	2	51	53
61417	43	0	43
61001	38	0	38
6901962	0	26	26
Akkaert	1	12	13
Arkona	11	0	11
Elbe	9	0	9
Kwintebank	1	8	9
ATHOS	7	0	7
64046	6	0	6
68422	6	0	6
Anasuria	6	0	6

Figure for the period May to June 2014

2. Validated historical data (6 monthly basis)9

Number of requested CDIs by how many users from different data centers over a given time period → the first update will be in June/July 2014

→ See Indicator 5.2

Indicator 5 - Organization that have downloaded each data type

1. Recent data¹⁰

→ See Indicator 4.1

2. Validated historical data: Number of requested CDIs by user organizations that have requested and downloaded dataset

Given the limited integration of CDIs under the EMODnet Physics direct downloads are virtually not existing. Users downloaded from the EMODnet Physics portal both latest (60days) and recent data (older than one month up ten years old), as well as more and more users are starting connecting to the webservices for daily data.

⁹ Actions for downloading of data sets are registered in SeaDataNet Request Status Manager (RSM) which allows for reporting (in terms of statistics)

¹⁰ Latest 60 days are free available to any user, the portal can track up to the IP which the request comes from.



Country	Recent data requests	
Belgium	•	2
Estonia		4
Germany		178
Italy		76
N.D.		51
Poland		1
Russian Federation		59
Spain		2
Switzerland		1
Turkey		3
United Kingdom		17

Figure for the period January to June 2014

The table above reports the number of requests for data older than 60days. To note that some platforms provide data for past 10 years (see Annex I), some others for a few years. The reported number only indicates how many data requests have been received and each data request could be for one specific dataset (e.g. a month) of one platform or for the full data availability (all platforms any available data).



Indicator 6 – Using user statistics to determine the main pages utilized and to identify data products being used

1. Monthly portal views as reported by Google Analytics

		<u> </u>			
Portal	Visits	visit duration (average)	Page views	New visitors	New visitors %
June 2013	325	03:51	740	190	58%
July 2013	284	02:01	466	185	65%
August 2013	242	02:26	486	143	59%
September 2013	280	01:29	458	192	69%
October 2013	385	02:21	783	270	70%
November 2013	355	02:26	688	260	73%
December 2013	311	02:42	658	211	68%
January 2014	272	01:57	505	166	61%
February 2014	377	04:00	1007	191	50%
March 2014	342	02:06	686	191	56%
April 2014 (1 st -18 th)*	210	02:35	465	115	55%
April 2014 (18 th -30 th)	124	06:38	627	64	51%
May 2014	579	05:33	2014	191	33%
June 2014	282	03:49	685	155	57%

^{(*) 18&}lt;sup>th</sup> April the new EMODnet Physics landing portal was published

Map Page	Visits	visit duration (average)	Page views	New visitors	new visitors %
November 2013	247	09:41	1210	42	17%
December 2013	263	11:37	1520	55	21%
January 2014	345	10:20	1671	38	11%
February 2014	426	08:38	2031	130	31%
March 2014	502	06:29	2005	176	35%
April 2014	440	06:27	1452	162	36%
May 2014	582	05:32	2040	193	33%
June 2014	534	05:37	2102	188	39%

(map page was not monitored before November)



Home page

Home Page	Visits	visit duration (average)	Page views	unique visitors	unique visitors %
May 2014	579	05:33	2014	191	33%
June 2014	282	03:49	685	155	57%
	total	average	total	Total	Average
	861	04:41	2699	346	45%

^(**) total

Map Page

Map Page	Visits	visit duration (average)	Page views	unique visitors	unique visitors %
May 2014	582	05:32	2040	193	33%
June 2014	534	05:37	2102	188	39%
	total	average	total	Total	average
	1016	05:35	4142	381	36%



3. Demography and Location of visitors

Location of Visitors for the period June 2014 to July 2014 (ETT accesses are not filtered out)

Table A – landing page visitors

							av.
			% new		Bounce	Pages /	Session
	location	Session	session	New users	rate	session	Duration
		705	49.22%	347	58.01%	2.93	00:03:53
1.	it	182(25.82%)	28.57%	52(14.99%)	52.20%	4.83	00:06:26
2.	en-us	166(23.55%)	60.84%	101(29.11%)	51.20%	2.58	00:03:19
3.	it-it	110(15.60%)	31.82%	35(10.09%)	68.18%	2.60	00:04:33
4.	es	40(5.67%)	70.00%	28(8.07%)	67.50%	1.78	00:01:19
5.	SV	37(5.25%)	10.81%	4(1.15%)	51.35%	2.59	00:02:55
6.	es-es	26(3.69%)	61.54%	16(4.61%)	57.69%	1.62	00:02:30
7.	fr	19(2.70%)	78.95%	15(4.32%)	52.63%	2.16	00:02:12
8.	de-de	16(2.27%)	68.75%	11(3.17%)	68.75%	1.56	00:01:06
9.	en-gb	14(1.99%)	85.71%	12(3.46%)	71.43%	2.00	00:01:21
10.	pt-br	13(1.84%)	100.00%	13(3.75%)	100.00%	1.00	00:00:00
11.	en	9(1.28%)	100.00%	9(2.59%)	66.67%	2.22	00:02:01
12.	sv-se	8(1.13%)	87.50%	7(2.02%)	75.00%	2.38	00:01:13
13.	de	7(0.99%)	100.00%	7(2.02%)	85.71%	1.29	00:00:02
14.	nl	7(0.99%)	71.43%	5(1.44%)	57.14%	1.71	00:01:26
15.	ca	6(0.85%)	50.00%	3(0.86%)	66.67%	2.00	00:04:32
16.	pl	6(0.85%)	50.00%	3(0.86%)	33.33%	2.17	00:03:35
17.	el	4(0.57%)	50.00%	2(0.58%)	25.00%	2.00	00:05:44
18.	et	4(0.57%)	50.00%	2(0.58%)	75.00%	2.00	00:00:12
19.	nl-be	4(0.57%)	0.00%	0(0.00%)	50.00%	1.75	00:00:05



Table B – map page visitors

	location	Session	% new session	New users	Bounce rate	Pages / session	av. Session Duration
		1190	33.95%	404	39.66%	3.75	00:05:44
1.	it	313(26.30%)	15.02%	47(11.63%)	31.63%	4.61	00:08:33
2.	it-it	294(24.71%)	11.56%	34(8.42%)	39.46%	4.01	00:06:08
3.	en-us	256(21.51%)	56.25%	144(35.64%)	44.53%	2.88	00:03:50
4.	sv	47(3.95%)	10.64%	5(1.24%)	55.32%	3.40	00:03:30
5.	es	37(3.11%)	56.76%	21(5.20%)	40.54%	2.22	00:02:09
6.	es-es	36(3.03%)	50.00%	18(4.46%)	44.44%	2.61	00:03:06
7.	fr	35(2.94%)	74.29%	26(6.44%)	28.57%	3.03	00:04:33
8.	en-gb	30(2.52%)	50.00%	15(3.71%)	53.33%	2.27	00:01:41
9.	nl	20(1.68%)	35.00%	7(1.73%)	40.00%	3.65	00:07:52
10.	de-de	19(1.60%)	84.21%	16(3.96%)	47.37%	2.79	00:02:33
11.	sv-se	15(1.26%)	66.67%	10(2.48%)	46.67%	4.13	00:06:55
12.	de	12(1.01%)	83.33%	10(2.48%)	8.33%	5.50	00:10:43
13.	ru	11(0.92%)	45.45%	5(1.24%)	0.00%	7.18	00:11:11
14.	el-gr	9(0.76%)	55.56%	5(1.24%)	55.56%	9.33	00:09:25
15.	pl	6(0.50%)	50.00%	3(0.74%)	50.00%	4.83	00:05:16
16.	en	5(0.42%)	60.00%	3(0.74%)	20.00%	5.20	00:05:29
17.	pt-pt	5(0.42%)	80.00%	4(0.99%)	40.00%	3.20	00:02:44
18.	ca	4(0.34%)	50.00%	2(0.50%)	50.00%	3.50	00:01:53
19.	el	4(0.34%)	100.00%	4(0.99%)	0.00%	3.25	00:06:12



Annex I

Indicator 1 - Volume of data made available through the portal¹¹

The EMODnet Physics portal makes available the following data type:

- Latest data → freely available up to 60 days (automatic quality check/flag procedures)
- Recent data → organized in monthly data files (post 60 days, automatic quality check/flag procedures¹², requires user registration)
- Long Term time series data → organized one data file for platform (automatic quality check/flag procedures, requires user registration)
- Historical validated data → organized in CDI dataset files hosted by NODCs (validated data¹³, requires user registration).

The following table lists the full data availability, in particular it lists the typology of platform (MO= mooring buoy/fixed platform; FB=ferrybox), whether it is operational and provides data on daily base (NRT on/off), recent data time coverage (from to) and number of files (if the first number is lower than the second there are temporal gaps in the monthly data files; if the first number is higher than the second the platform hosts different data acquisition sets – e.g. Arkona), long term time series files (from to), if there are historical validated data for that platform (CDI) in SeaDataNet-NODCs network.

(NRT) Latest data → freely available up to 60 days (automatic quality check/flag procedures)

Recent data → organized in monthly data files (post 60 days, automatic quality check/flag procedures¹¹, requires user registration)

Long Term time series (TS) data → organized one data file for platform (automatic quality check/flag procedures, requires user registration)

Historical validated data → organized in CDI - dataset files hosted by NODCs (validated data ¹¹, requires user registration).

http://www.seadatanet.org/content/download/18414/119624/file/SeaDataNet_QC_procedures_V2_%28May_2010%29.pdf

¹¹ Description:

¹² http://www.emodnet-physics.eu/map/ARH/QualityCheck/recommendations_for_rtqc_procedures_v1_2.pdf

¹³ Validated according the SeaDatanet Quality Check procedure -



1. Summary table of all the data (latest, recent, long term and validated historical) by Country, Organization, Platform type and Data availability 14

							CDI	
							dataset ID	
						Long	_	
				Recent	Recent	term	validated	
				data	data	TS	historical	NRT
Country	Data provider	Platform	Type	From to	#files	from to	data	on/off

See the ExcelFile – "EMODnetPhysics Annex JunJuly2014"

Where N.D. means that metadata or data is not available yet or it is under check procedure. M: $YY/XX \rightarrow$ if YY = XX there are no temporal gaps in monthly time series

Annex II

The following table indicates how much data was delivered by each platform, if the value is lower than 60 it means that there are gaps into the data platform temporal time series.

Number of daily files per platform in the last month¹⁵

			Number of daily files in last two solar month (last update
Country	Data provider	Platform code	•

See the ExcelFile – "EMODnetPhysics Annex JunJuly2014"

http://www.emodnet-physics.eu/map/Dashboard/Section13.aspx

¹⁴ http://www.emodnet-physics.eu/map/Dashboard/Section1.aspx

¹⁵ each platform delivers data on daily base which is added to a daily file, after one month the daily files are reorganized and grouped in a monthly file.



Organizations Acronym

AWI	AWI - The Alfred Wegener Institute
BODC	BODC - British Oceanographic Data Centre
BSH	BSH - Bundesamt für Seeschifffahrt und Hydrographie - Germany
CEFAS	CEFAS - Centre for Environment, Fisheries & Aquaculture Science - UK
CETMEF	CETMEF - Centre d'etudes techniques maritimes et fluviales - France
CMRE	CMRE - Centre for Maritime Research and Experimentation
DaMSA	DaMSA - Danish Maritime Safety Administration - Denmark
DELTARES	Deltares - Nederland
DMI	DMI - Danmarks Meteorologiske Institut - Denmark
EPA	EPA - Environmental Protection Agency, Department of Marine Research - Lithuania
Euskalmet	Euskalmet- Basque Goverment - Spain
FMI	FMI - Finnish Meteorological Institute - Finland
HCMR	HCMR - Hellenic Centre for Marine Research - Greece
IEO	IEO - Instituto Espanol de Oceanografia - Spain
IFM	IFM - Institute of Oceanography, University of Hamburg
IFREMER	IFREMER - Institute Francais de Recherche pour l'Exploitation de la Mer - France
IMEDEA	IMEDEA - Mediterranean Institute for Advanced Studies
IMR	IMR - Institute of Marine Research in Norway
IMS-METU	IMSMETU - Middle East Technical University - Institute of Marine Sciences
Instituto	
Hidrografico	Instituto Hidrografico - Portugal
INSU	INSU - Institut National des Sciences de l'Univers
IOBAS	IOBAS - Institude of Oceanology - Bulgarian Academy of Science - Bulgaria
IRD	IRD - L'Institut de recherche pour le développement - France
ISMAR	ISMAR - Istituto di Scienze Marine - Italy
ISPRA	ISPRA - Istituto Superiore per la Protezione e la Ricerca Ambientale - Italy
KNMI	KNMI - Koninklijk Nederlands Meteorolologisch Instituut - Netherlands
LEGMA	LEGMA - Latvian Environment, Geology and Meteorology Agency - Latvia
LOCEAN	LOCEAN - Laboratoire d'Oceanographie et du Climat
LOV	LOV - Laboratoire Oceanographique de Villefranche
Marine Institute	Marine Institute - Ireland
MDK	MDK - Maritieme Dienstverlening en Kust - Belgium
MET	MET éireann - Irish Meterological Service - Ireland
Meteo France	Meteo France - France
METNO	MetNo - Norwegian Meteorological Institute - Norway
MIO	MIO - Mediterranean Institute of Oceanography
MSI	MSI - Marine Systems Institute - Estonia
MUMM	MUMM - Management Unit of the North Sea Mathematical Models - Belgium



NHS	NHS - Norwegian Hydrographic Service - Norway
NIB	NIB - National Institute of Biology
NIMRD	NIMRD - National Institute for Marine Research and Development
NIVA	NIVA - Norsk Institutt for Vannforskning
NMA	NMA - Norwegian Mapping Authority - Norway
NOC/METOFFICE	NOC - National Oceanography Centre Southampton - UK
	NWAHEM - North-West Regional Administration for Hydrometeorology and
NWAHEM	Environmental Monitoring - Russia
OGS	OGS - Istituto Nazionale di Oceanografia e di Geofisica Sperimentale - Italy
OILPLAT	Oil Platform - Private Industry
Puertos del	
Estado	Puertos del Estado - Spain
RIKZ	RIKZ - Rijkswaterstaat – Netherlands
SBR	SBR - Station Biologique de Roscoff
SHOM	SHOM - Service Hydrografique et Oceanographique de la marine - France
SMHI	SMHI - Swedish Meteorological and Hydrographic Institute – Sweden
SYKE	SYKE - Finnish Environment Institute
UAC	UAC - Universidade dos Açores
UKM	UKM - United Kingdom Recent Marine Data - UK
UKMO/MF	UKMO/MF - Met Office/Meteo France - UK/France
Xunta Galicia	Xunta Galicia - Spain