



# *EMODnet - European Marine Observation and Data Network - Physics*

**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]



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L Rickards

P Gorringe

# What is EMODnet?

- A network of people and technology that work together to compile and distribute data, metadata and products on European coastal and ocean waters



## Provide access to data

- (i) easily accessible,
- (ii) free of restrictions on use and
- (iii) Interoperable

→ Collected stored & managed by MS and/or regional aggregators

## Create data products of common interest

→ Developed, stored and made available by EMODnet



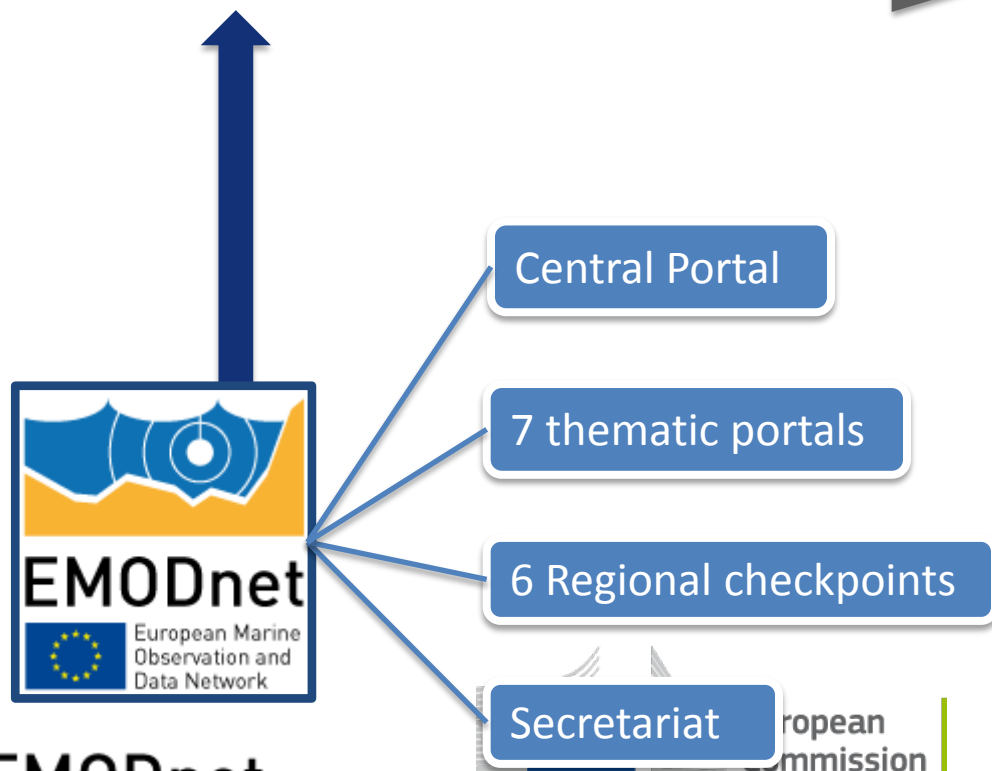
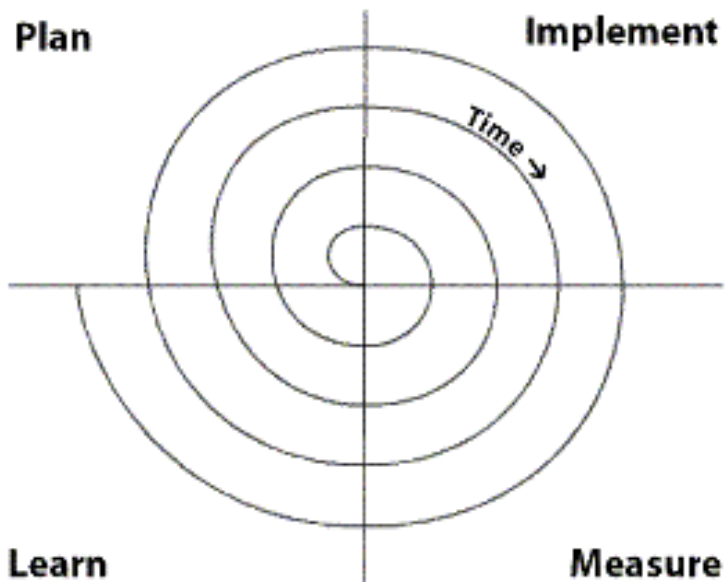
# EMODnet



European Marine  
Observation and  
Data Network

# How?

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





# EMODnet Central Portal



[Home](#)

[Data Portals](#)

[Data Services](#)

[Sea Basin Checkpoints](#)

[Partners](#)

[About](#)

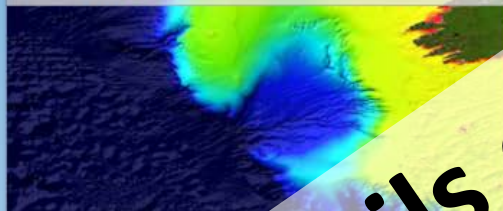
[Secretariat](#)

The European Marine Observation and Data Network (EMODnet) consists of more than 100 organisations assembling marine data, products and metadata to make these fragmented resources more available to public and private users relying on quality-assured, standardised and harmonised marine data which are interoperable and free of restrictions on use. EMODnet is currently in its second development phase with the target to be fully deployed by 2020.

[More information about EMODnet and its development process](#)

Latest Video: EMODnet as a gateway for users of European Marine Observations and Data

## Bathymetry



Data on bathymetry (water depth), coastlines and geographical location of underwater features, reefs.

[Read more](#) [Portal](#)

## Geology



Data on seabed substrate, sea-floor geology, coastal behaviour, geological events, and minerals.

[Read more](#) [Portal](#)

## Seabed Habitats



Data on modelled seabed habitats based on seabed substrate, energy, biological zone, and salinity.

[Read more](#) [Portal](#)

## Chemistry

## Biology

## Physics

Find details on [www.emodnet.eu](http://www.emodnet.eu)



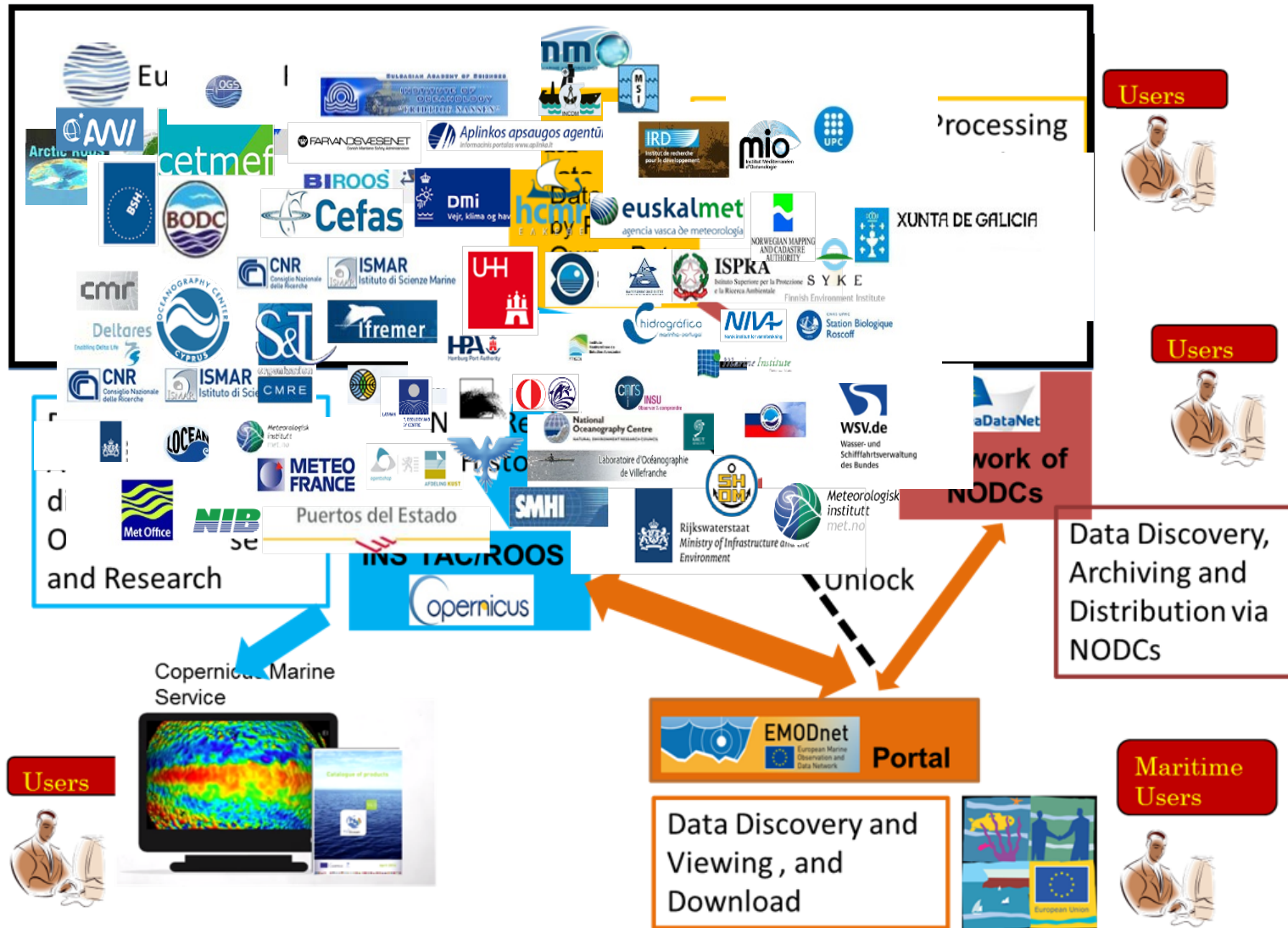
EMODnet

# *EMODnet Physics*

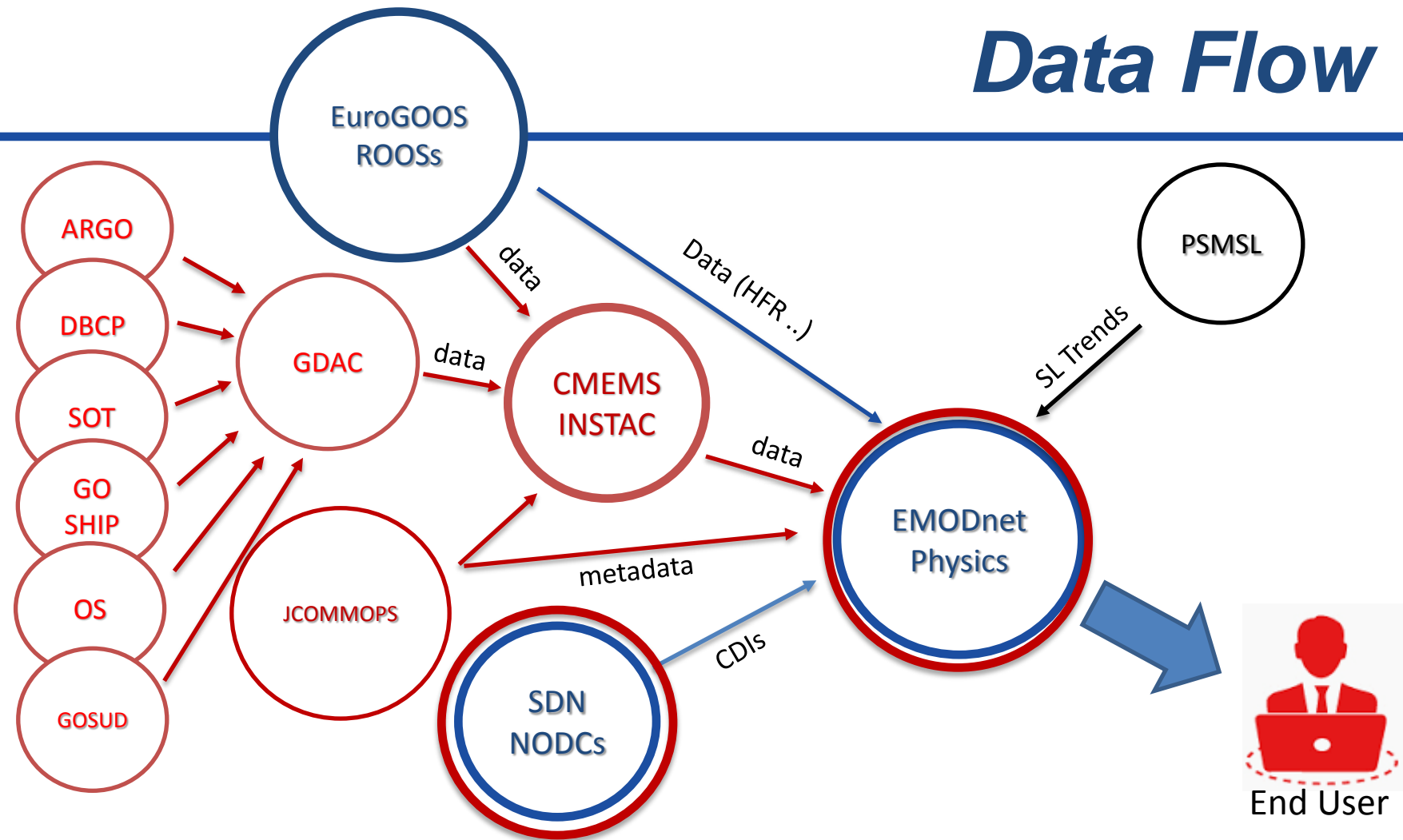
## EMODnet Physics objectives and commitments:

- Provides a single point of **free and open** access to marine **real-time and archived data on physical** conditions of all European Seas as monitored by fixed platforms, ferry boxes, ARGO, gliders, mammals, HF Radars,....
- Make available monthly averages, sea level trends, ice info, etc.
- Attract and provide access to **any relevant user**
- Facilitate down- and up-stream **integration** and **interoperability** (WMS, WFS, Webservice, etc)
- Attract new data, new data providers, new platforms
- Collects data in a number of formats, makes available in one common format
- Built in **cooperation and coordination** with **EuroGOOS** and ROOSs and other existing European integrators infrastructures, **CMEMS** and **SeaDataNet**

# EMODnet Physics



# Data Flow



ROOS: Regional Oceanographic Operational Sys.; NODC: National Oceanographic Data Centre;  
CMEMS: Copernicus Marine Environment Monitoring Service; SDN: SeaDataNet;  
JCOMMOPS: JCOMM in situ Observing Platform Support Centre;  
GDAC: Global Data Assembly Centre; PSMSL: Permanent Service Mean Sea Level  
DBCPC: Data Buoy Coop. Panel; SOT: Ship Obs. Team; OS: OceanSites;

# EMODnet Physics



Welcome to EMODnet Physics



Access to data

EMODnet Physics provides one stop access point to near real time and historical data on physical conditions of seas and oceans  
EMODnet Physics is built in cooperation and coordination with EuroGOOS and ROOS, Copernicus Marine Environment Monitoring Service (CMEMS) and SeaDataNet

Meetings | News

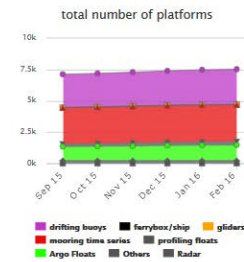
- 2015/02/06 Job opportunity at EMODnet Secretariat (Belgium)
- 2015/02/06 EuroGOOS and EMODnet Physics are working on an International Partnerships for Ocean Observing and HF Radar
- 2015/01/07 HF Radar special session at the EGU General Assembly 2015 – last day for your contribution
- 2014/12/05 HF Radar special session at the EGU General Assembly 2015

News from web

- 2013/02/16 JERICO TNA sampling polar organic chemicals in marine water with organic-diffusive gradient in thin-film (o-DGT)
- 2012/10/14 The JERICO presentation at the MonGOOS 2013 annual meeting
- 2013/09/19 Third TNA Call Opens
- 2013/09/02 JERICCO Workshop WP10



Search, Discover, Analyse, Inform



Interoperability layers and OGC Services:

- ACCESS TO DATA
- ACCESS TO WMS
- ACCESS TO WFS
- ACCESS TO WEB SERVICES
- ACCESS TO CATALOGUE
- ACCESS TO THREDDS
- PRODUCTS FROM CONTRIBUTING PARTNERS (CMEMS, SDN)

Other EMODnet portals:

- EMODnet Bathymetry
- EMODnet Geology
- EMODnet Seabed Habitats
- EMODnet Chemistry
- EMODnet Biology
- EMODnet Human Activities



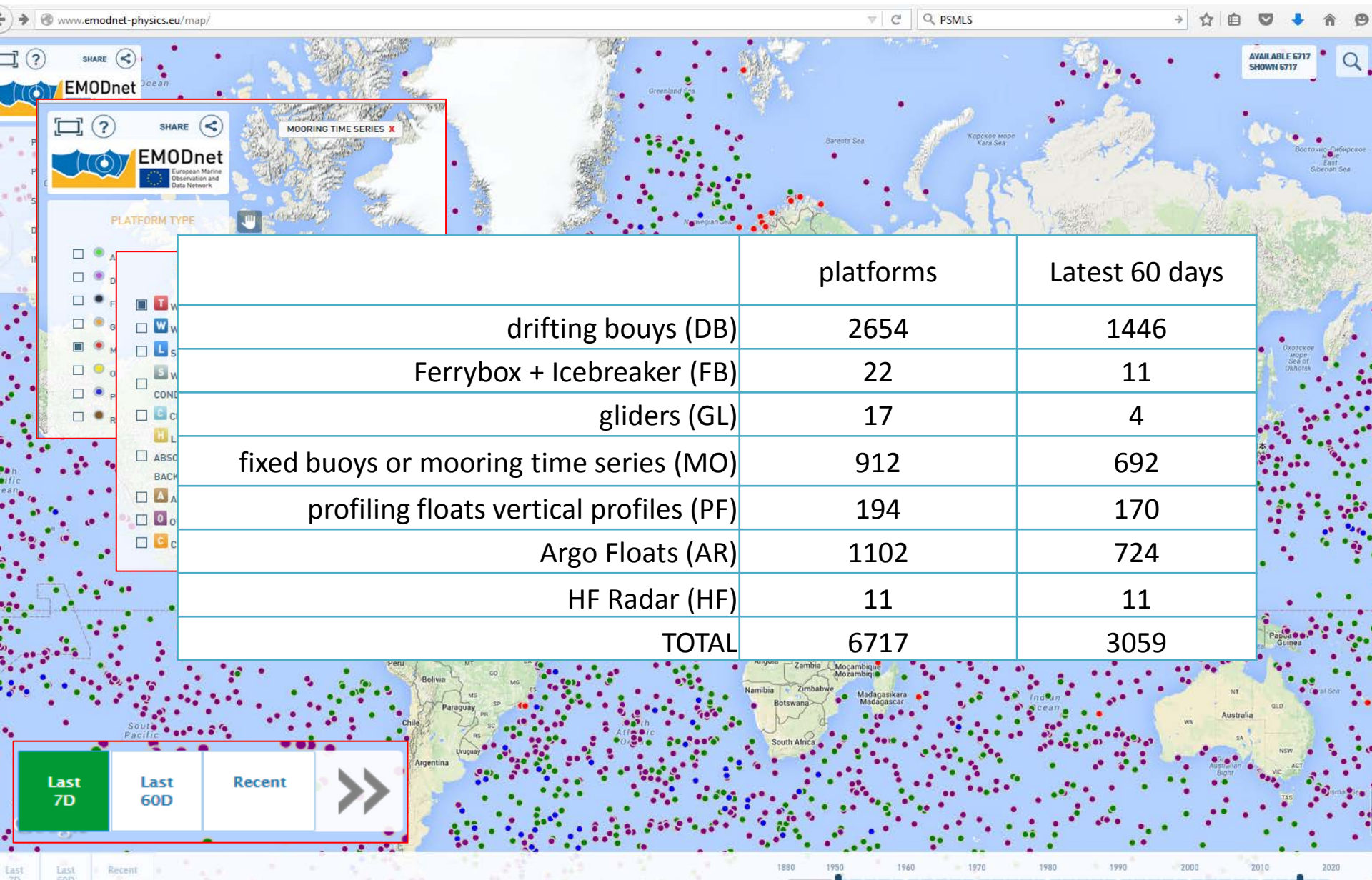
For support, feedback and further information contact us: [contacts@emodnet-physics.eu](mailto:contacts@emodnet-physics.eu)  
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[www.emodnet-physics.eu](http://www.emodnet-physics.eu)

- Background information
- Discovery interface
- Interoperability Services
- Catalogues
- Contributors



# EMODnet Physics

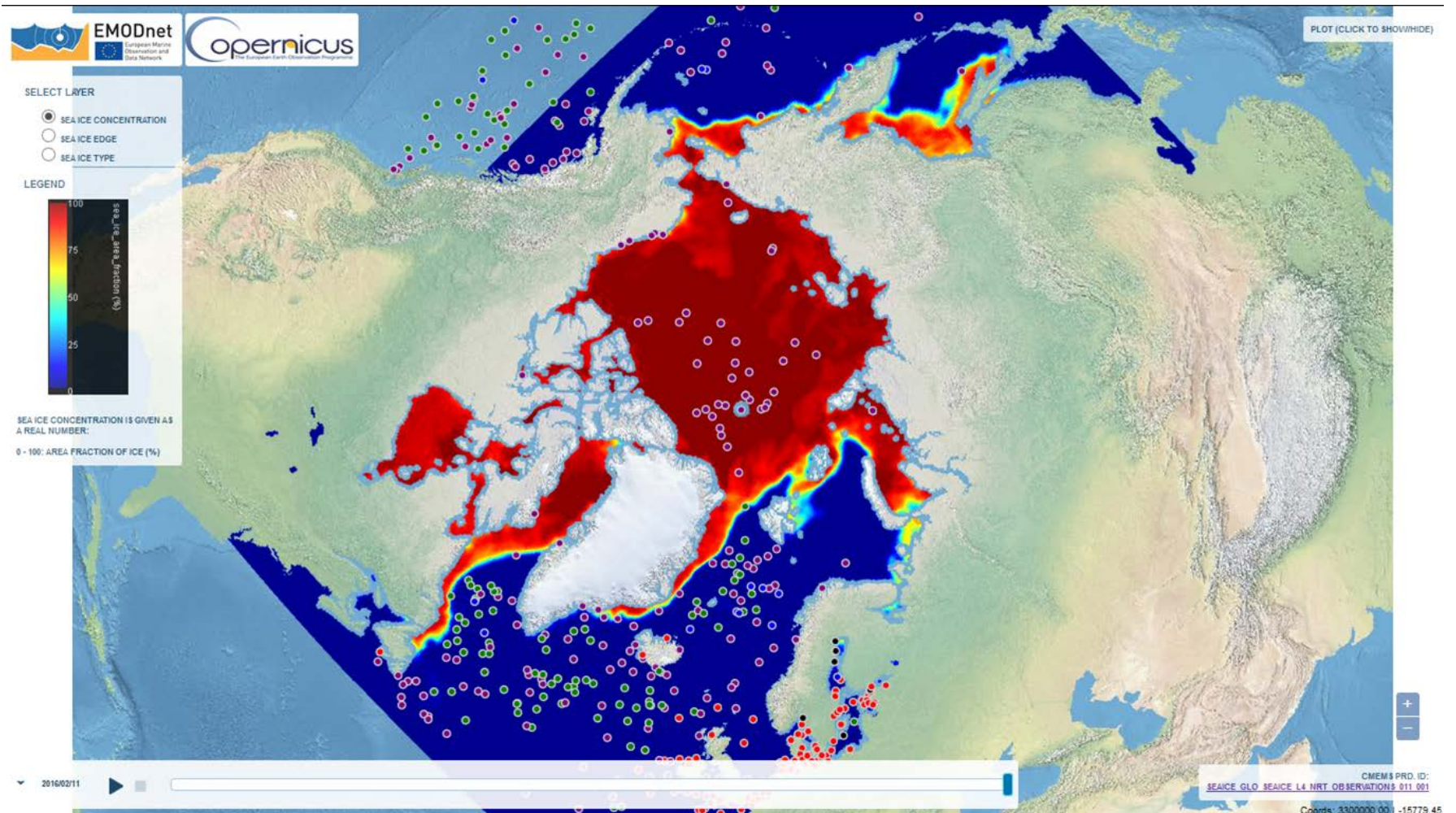


# EMODnet Physics

The screenshot displays the EMODnet Physics web interface. At the top, there is a navigation bar with links for 'LATEST DATA', 'AVERAGES', 'TIME SERIES', 'MORE ABOUT', and 'DASHBOARD'. The EMODnet logo and 'European Marine Observation and Data Network' text are visible on the left. A user profile icon is on the right. Below the navigation bar, a data table is shown with columns for DATE, TIME, and various temperature (TEMP) and pressure (PRES) measurements across different stations (SA to SN). A time-series plot titled 'TEMP, depth: 0' is overlaid on the table, showing temperature fluctuations over time from 2006 to 2014. The plot shows a clear seasonal cycle with peaks around 25-30°C and troughs around 10-15°C. The interface also includes a file explorer window showing a list of CSV files and a toolbar with various data manipulation options.

	A	B	SA	SB	SC	SD	SE	SF	SG	SH	SI	SJ	SK	SL	SM	SN	
1	DATE	TIME	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	TEMP	PRES	PRES	PRES
2		31/08/2014 20:00:00	--	26,94214	--	--	--	--	--	--	--	--	--	--	R	R	R
3		31/08/2014 17:00:00	--	27,07642	--	--	--	--	--	--	--	--	--	--	R	R	R
4		31/08/2014 14:00:00	--	27,3999	--	--	--	--	--	--	--	--	--	--	R	R	R
5		31/08/2014 11:00:00	--	27,7478	--	--	--	--	--	--	--	--	--	--	R	R	R
6		31/08/2014 08:00:00	--	27,9126	--	--	--	--	--	--	--	--	--	--	R	R	R
7		31/08/2014 05:00:00	--	26,48438	--	--	--	--	--	--	--	--	--	--	R	R	R
8		31/08/2014 02:00:00	--	26,48438	--	--	--	--	--	--	--	--	--	--	R	R	R
9		30/08/2014 23:00:00	--	26,68579	--	--	--	--	--	--	--	--	--	--	R	R	R
10		30/08/2014 20:00:00	--	26,80786	--	--	--	--	--	--	--	--	--	--	R	R	R
11		30/08/2014 17:00:00	--	26,92993	--	--	--	--	--	--	--	--	--	--	R	R	R
12		30/08/2014 14:00:00	--	27,05200	--	--	--	--	--	--	--	--	--	--	R	R	R
13		30/08/2014 11:00:00	--	27,17407	--	--	--	--	--	--	--	--	--	--	R	R	R
14		30/08/2014 08:00:00	--	27,29614	--	--	--	--	--	--	--	--	--	--	R	R	R
15		30/08/2014 05:00:00	--	27,41821	--	--	--	--	--	--	--	--	--	--	R	R	R
16		30/08/2014 02:00:00	--	27,54028	--	--	--	--	--	--	--	--	--	--	R	R	R
17		29/08/2014 23:00:00	--	27,66235	--	--	--	--	--	--	--	--	--	--	R	R	R
18		29/08/2014 20:00:00	--	27,78442	--	--	--	--	--	--	--	--	--	--	R	R	R
19		29/08/2014 17:00:00	--	27,90649	--	--	--	--	--	--	--	--	--	--	R	R	R
20		29/08/2014 14:00:00	--	28,02856	--	--	--	--	--	--	--	--	--	--	R	R	R
21		29/08/2014 11:00:00	--	28,15063	--	--	--	--	--	--	--	--	--	--	R	R	R
22		29/08/2014 08:00:00	--	28,27270	--	--	--	--	--	--	--	--	--	--	R	R	R
23		29/08/2014 05:00:00	--	28,39477	--	--	--	--	--	--	--	--	--	--	R	R	R
24		29/08/2014 02:00:00	--	28,51684	--	--	--	--	--	--	--	--	--	--	R	R	R
25		28/08/2014 23:00:00	--	28,63891	--	--	--	--	--	--	--	--	--	--	R	R	R
26		28/08/2014 20:00:00	--	25,67261	--	--	--	--	--	--	--	--	--	--	R	R	R
27		28/08/2014 17:00:00	--	25,73364	--	--	--	--	--	--	--	--	--	--	R	R	R
28		28/08/2014 14:00:00	--	25,88013	--	--	--	--	--	--	--	--	--	--	R	R	R
29		28/08/2014 11:00:00	--	25,73364	--	--	--	--	--	--	--	--	--	--	R	R	R
30		28/08/2014 08:00:00	--	25,57495	--	--	--	--	--	--	--	--	--	--	R	R	R
31		28/08/2014 05:00:00	--	25,57495	--	--	--	--	--	--	--	--	--	--	R	R	R

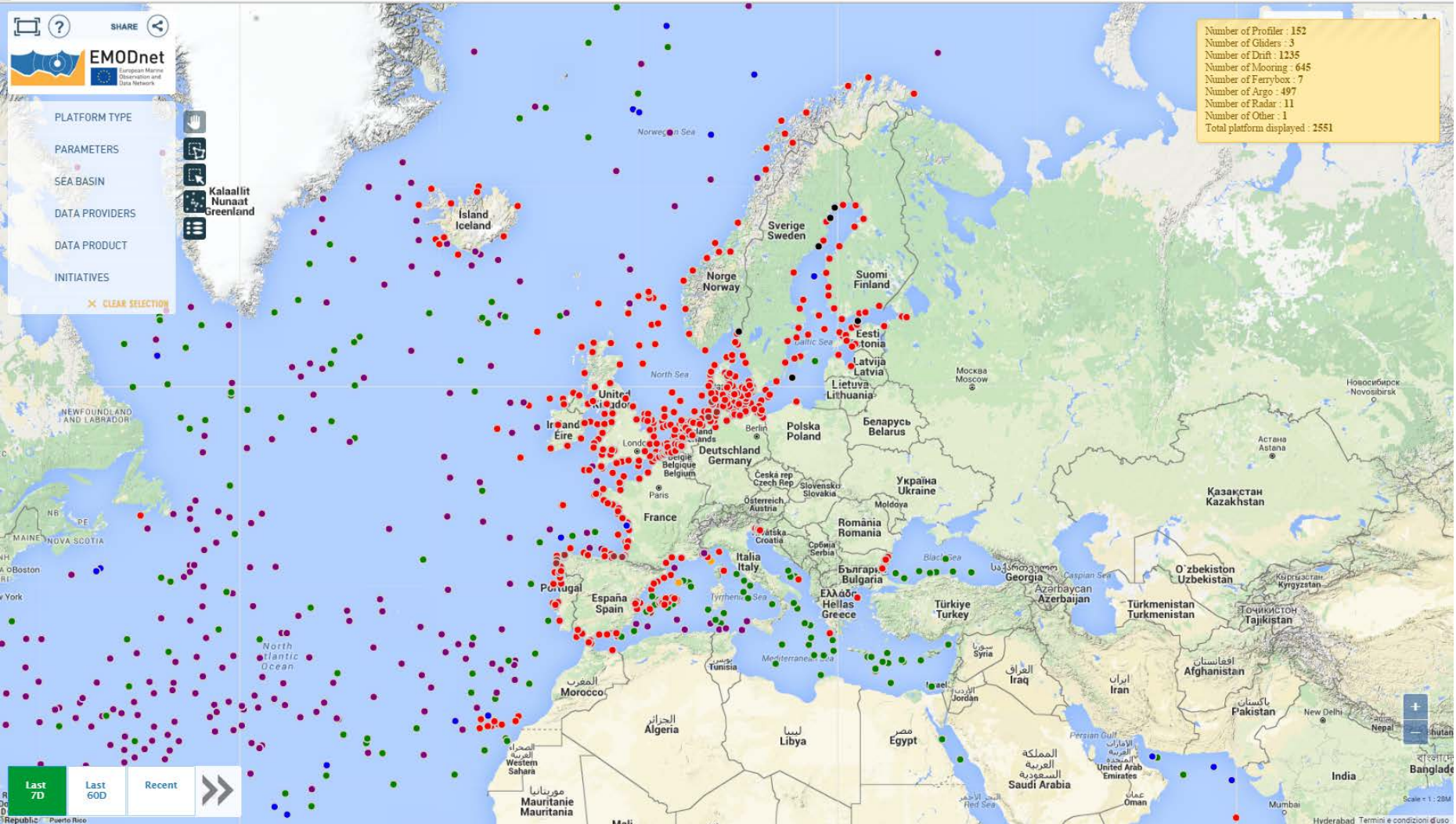
# EMODnet Physics



# EMODnet



European Marine  
Observation and  
Data Network



Unlocking new data, (platforms and number), enabling easy download



## EMODnet

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# Thank You For Listening

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