



***EMODnet - European Marine Observation and
Data Network
Physics
Past, present and future***

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]





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



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							

- Long term marine data initiative from the European Commission Directorate-General for Maritime Affairs and Fisheries (DG MARE)
- Data infrastructure is developed through a stepwise approach in three major phases
- More than 100 organisations assembling marine data, products and metadata



Data Ingestion

Central Portal

8 thematic portals

6 Regional checkpoints

Secretariat



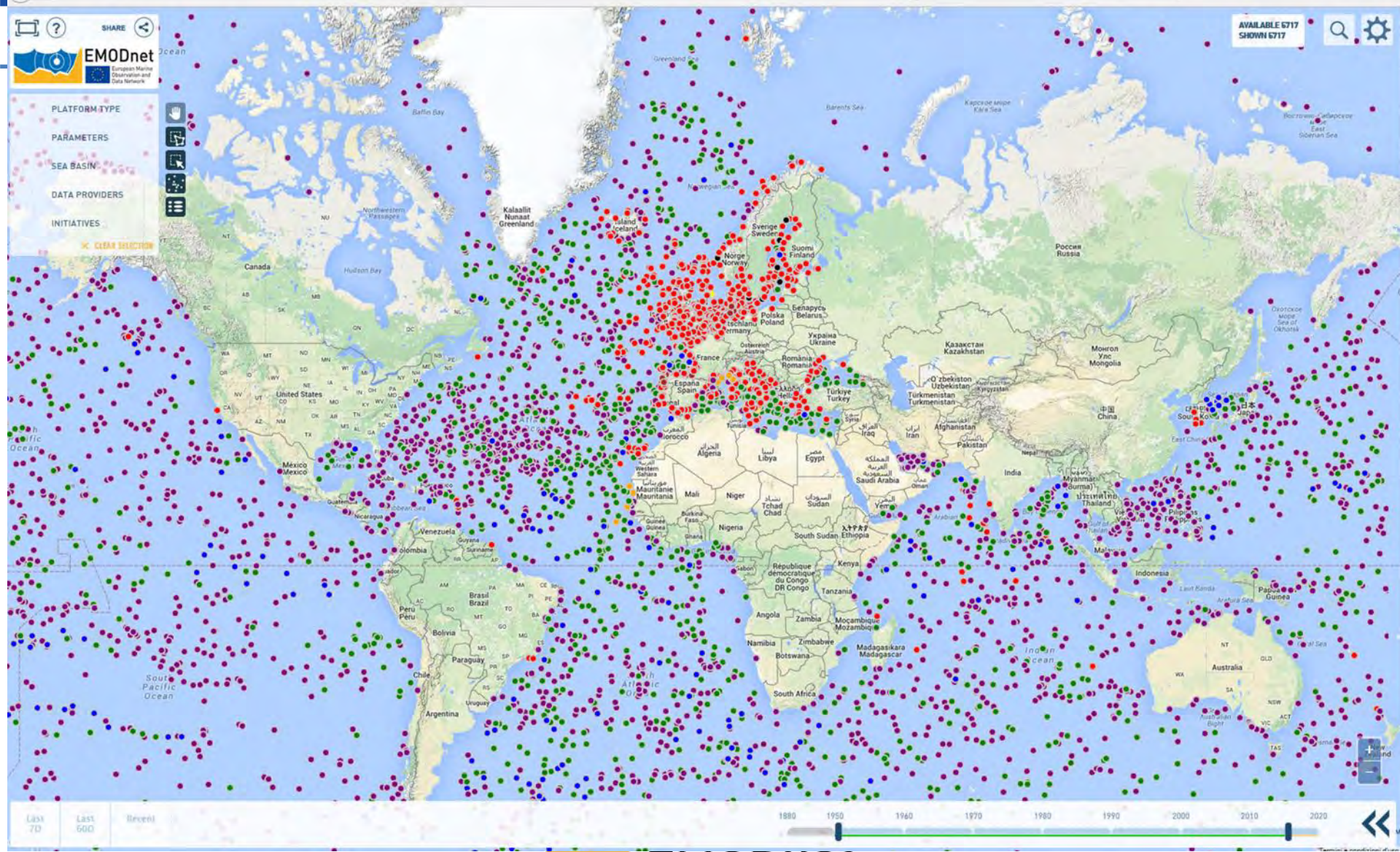


EMODnet



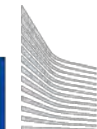
European Marine
Observation and
Data Network

Physics





- Provide a **single access point** of free and open access to marine real-time and archived data for physical parameters as monitored by fixed platforms, ferry boxes, ARGOs, gliders, HF Radars,....
- **Provides easy data access to any user** and stakeholder
- Facilitate **down- and up-stream integration** and **interoperability** (WMS, WFS, Web Service, etc.)
- Collects data in a number of formats, makes available in one common format
- Attract **new data**, new data **providers**, new **platforms**
- Built in **cooperation and coordination** with **EuroGOOS ROOSs** and on other existing European integrators infrastructures **CMEMS** and **SeaDataNet**



Initiatives for marine information

DG
GROWTH

Copernicus
INSTAC



www.copernicus.eu

Data Integration,
Operational use, RT
QC, **products**,
forecast models

DG
RESEARCH &
INNOVATION

SeaDataNet



www.seadatanet.org

Data Discovery,
archiving, standards
and common
vocabularies

DG
MARITIME AFFAIRS
& FISHERIES

EMODnet
Physics



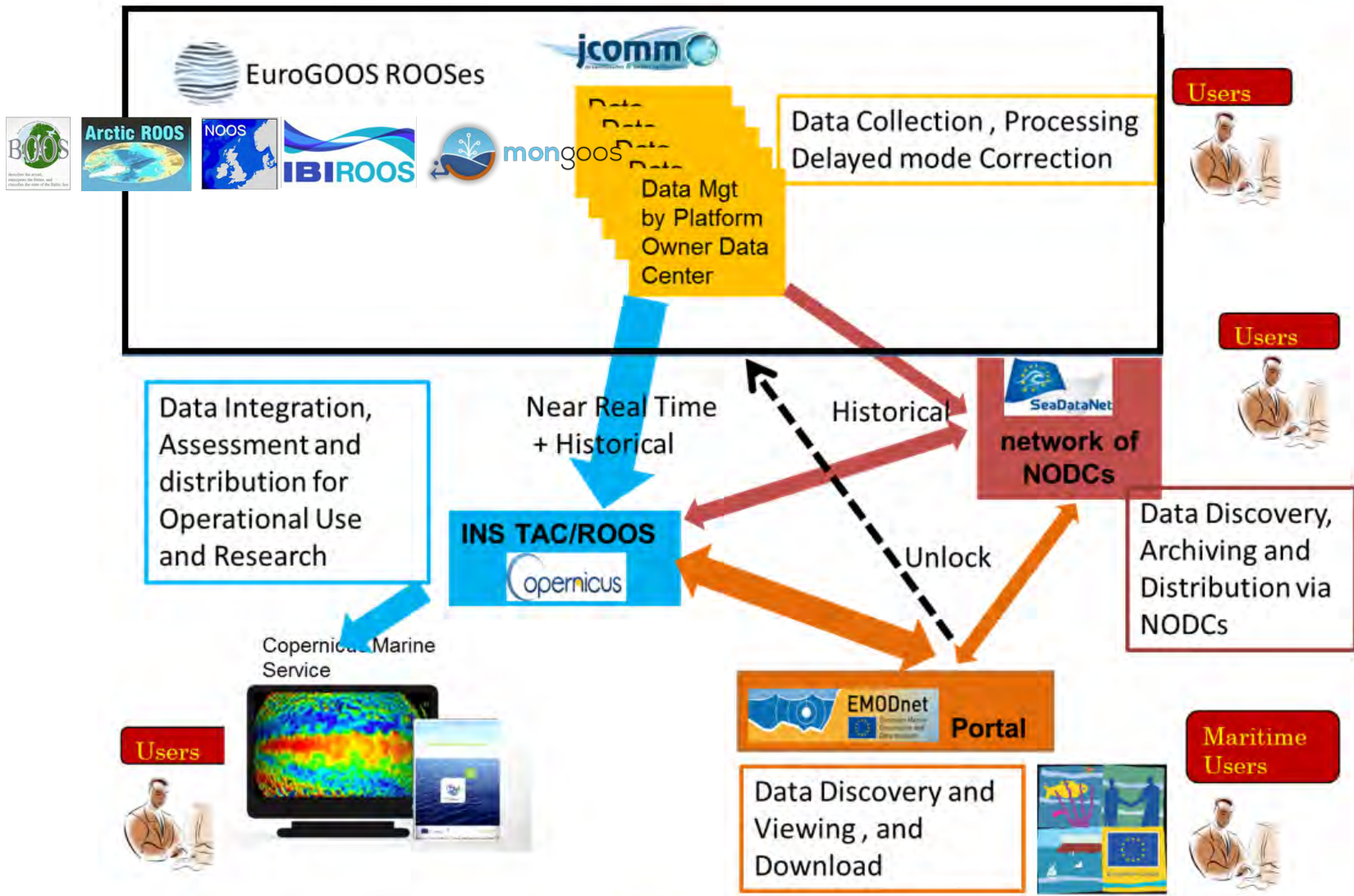
www.emodnet-physics.eu

Data discovery, view,
download,
interoperability layers

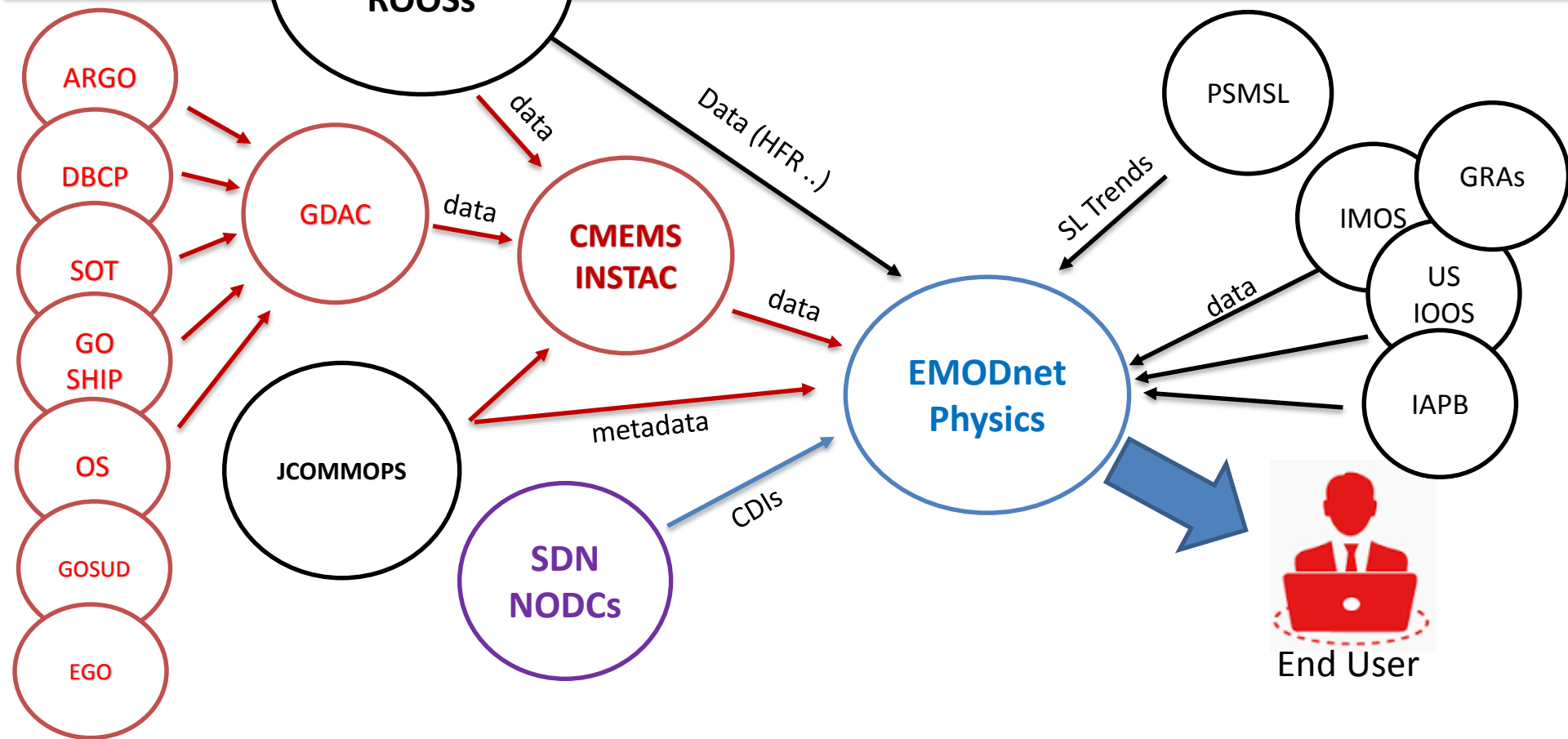
EuroGOOS

Operational oceanography community

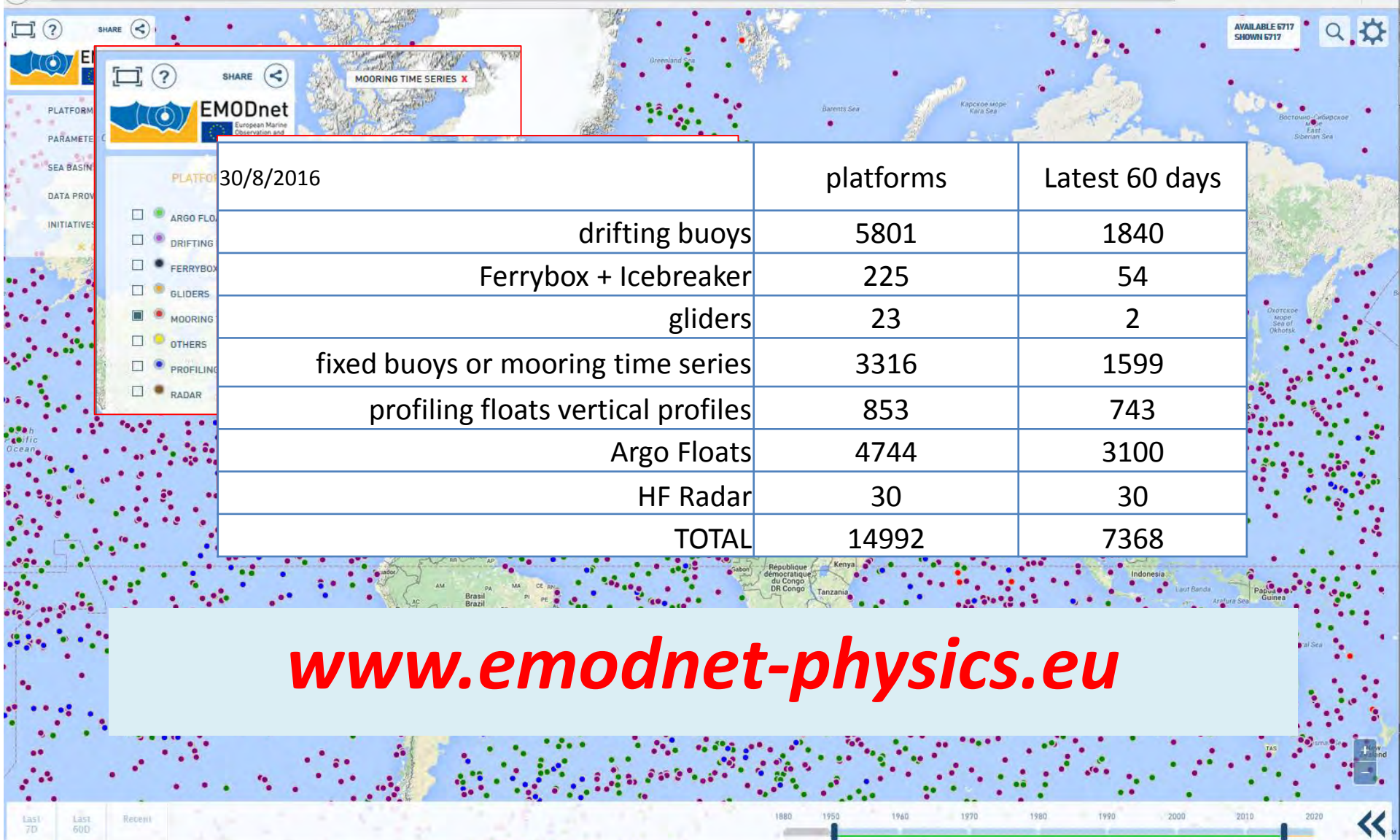




Data Flow



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



30/8/2016	platforms	Latest 60 days
drifting buoys	5801	1840
Ferrybox + Icebreaker	225	54
gliders	23	2
fixed buoys or mooring time series	3316	1599
profiling floats vertical profiles	853	743
Argo Floats	4744	3100
HF Radar	30	30
TOTAL	14992	7368

www.emodnet-physics.eu



EMODnet European Marine Observation and Data Network

LATEST DATA | AVERAGES | TIME SERIES | MORE ABOUT | DASHBOARD

6001757

EMODnet European Marine Observation and Data Network

LATEST DATA | AVERAGES | TIME SERIES | WIND PRODUCT | MORE ABOUT | DASHBOARD

f g

f g

f g

C:\Users\antonio.novellino\Desktop\Split\Csv_68422_2014-9-23.zip\68422\

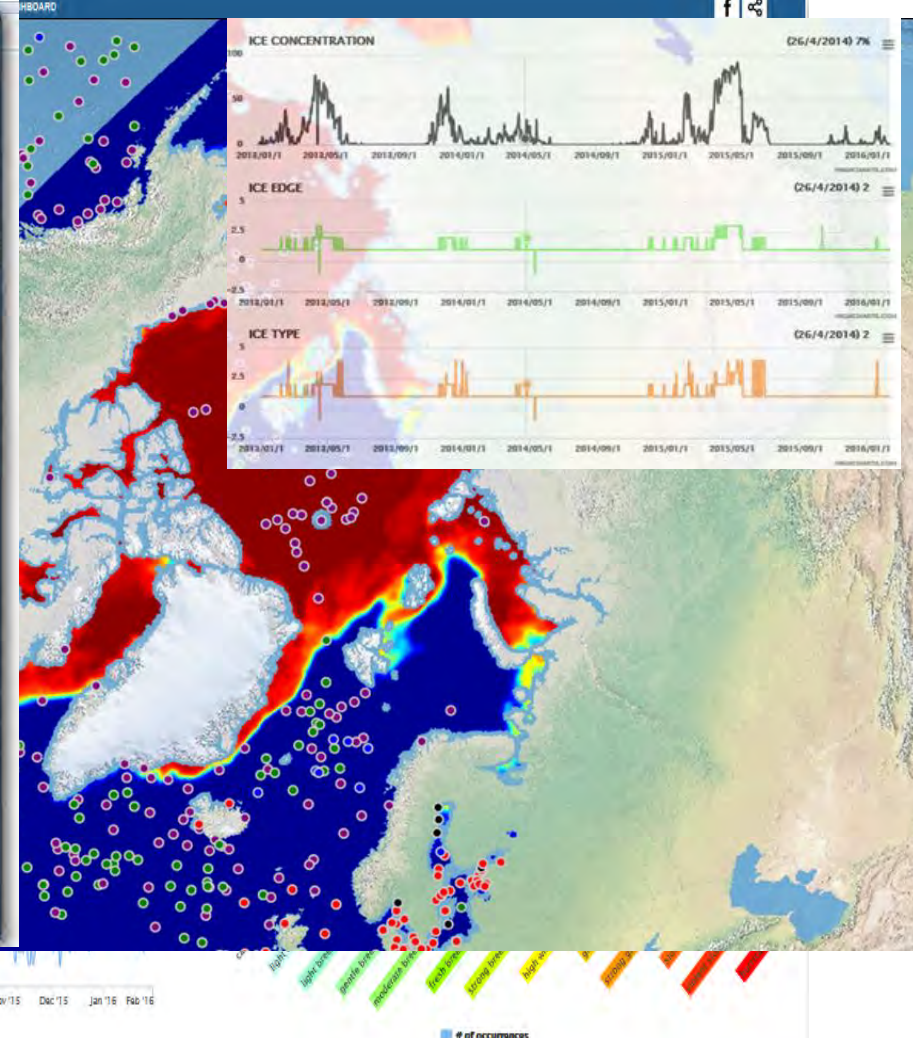
File Modifica Visualizza Preferiti Strumenti Aiuto

Aggiungi Estrai Verifica Copia Sposta Elimina Proprietà

C:\Users\antonio.novellino\Desktop\Split\Csv_68422_2014-9-23.zip\68422\

Nome	Dimensione	Dimensione compr
MO_200711_TS_MO_68422-formatted.csv	514 965	22
MO_200712_TS_MO_68422-formatted.csv	544 863	31
MO_200801_TS_MO_68422-formatted.csv	544 673	30
MO_200802_TS_MO_68422-formatted.csv	509 370	25
MO_200803_TS_MO_68422-formatted.csv	545 403	31
MO_200804_TS_MO_68422-formatted.csv	527 731	31
MO_200805_TS_MO_68422-formatted.csv	545 308	33
MO_200806_TS_MO_68422-formatted.csv	528 201	31
MO_200807_TS_MO_68422-formatted.csv	545 359	32
MO_200808_TS_MO_68422-formatted.csv	545 117	32
MO_200809_TS_MO_68422-formatted.csv	527 911	32
MO_200810_TS_MO_68422-formatted.csv	544 978	33
MO_200811_TS_MO_68422-formatted.csv	524 106	26
MO_200812_TS_MO_68422-formatted.csv	543 779	32
MO_200901_TS_MO_68422-formatted.csv	543 942	31
MO_200902_TS_MO_68422-formatted.csv	492 148	25
MO_200903_TS_MO_68422-formatted.csv	539 980	30
MO_200904_TS_MO_68422-formatted.csv	524 123	27
MO_200905_TS_MO_68422-formatted.csv	541 165	32
MO_200906_TS_MO_68422-formatted.csv	523 993	27
MO_200907_TS_MO_68422-formatted.csv	540 997	31
MO_200908_TS_MO_68422-formatted.csv	541 087	32
MO_200909_TS_MO_68422-formatted.csv	523 789	28
MO_200910_TS_MO_68422-formatted.csv	500 552	5
MO_200911_TS_MO_68422-formatted.csv	485 144	5
MO_200912_TS_MO_68422-formatted.csv	543 660	34
MO_201001_TS_MO_68422-formatted.csv	544 302	33
MO_201002_TS_MO_68422-formatted.csv	492 752	26

Oggetti selezionati: 1 514 965 514 965 2014-03-26 01:31





EuroGOOS structure

BOOS
(Baltic)

ARCTIC
ROOS

MONGOOS
(Mediterranean)

NOOS
(Northwest
shelf)

IBI-ROOS
(Iberia-Biscay-
Ireland)

Working Groups

Data-MEQ

Technology Planning

Products

Science Advisory

Coastal Modelling

Task Teams

Tide Gauge

Ferrybox

Glider

HF radar

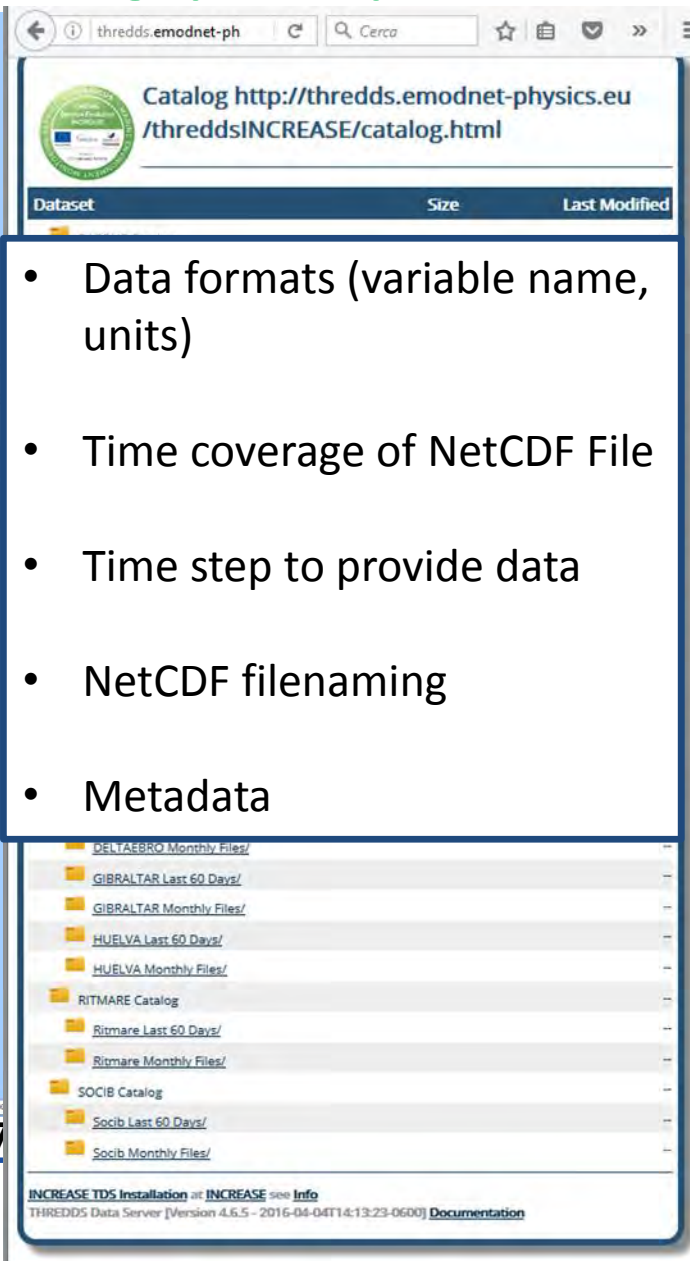
Euro-ARGO

Fixed Platforms

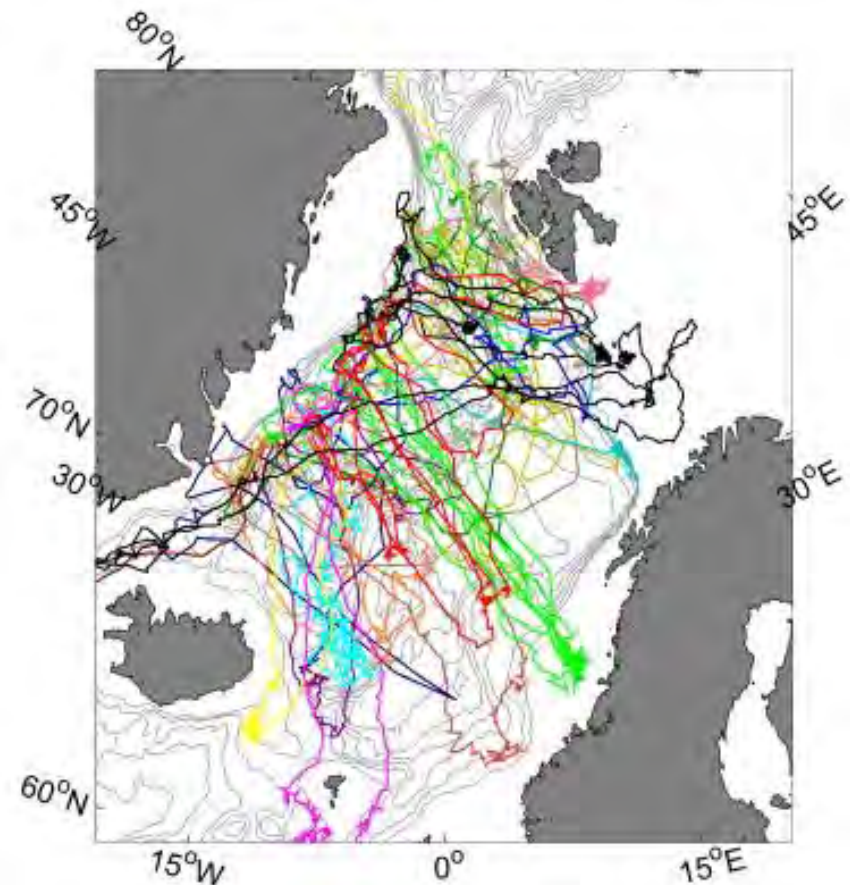
Animal-Borne TT



Setting up a European HFR node



- Data formats (variable name, units)
- Time coverage of NetCDF File
- Time step to provide data
- NetCDF filenames
- Metadata

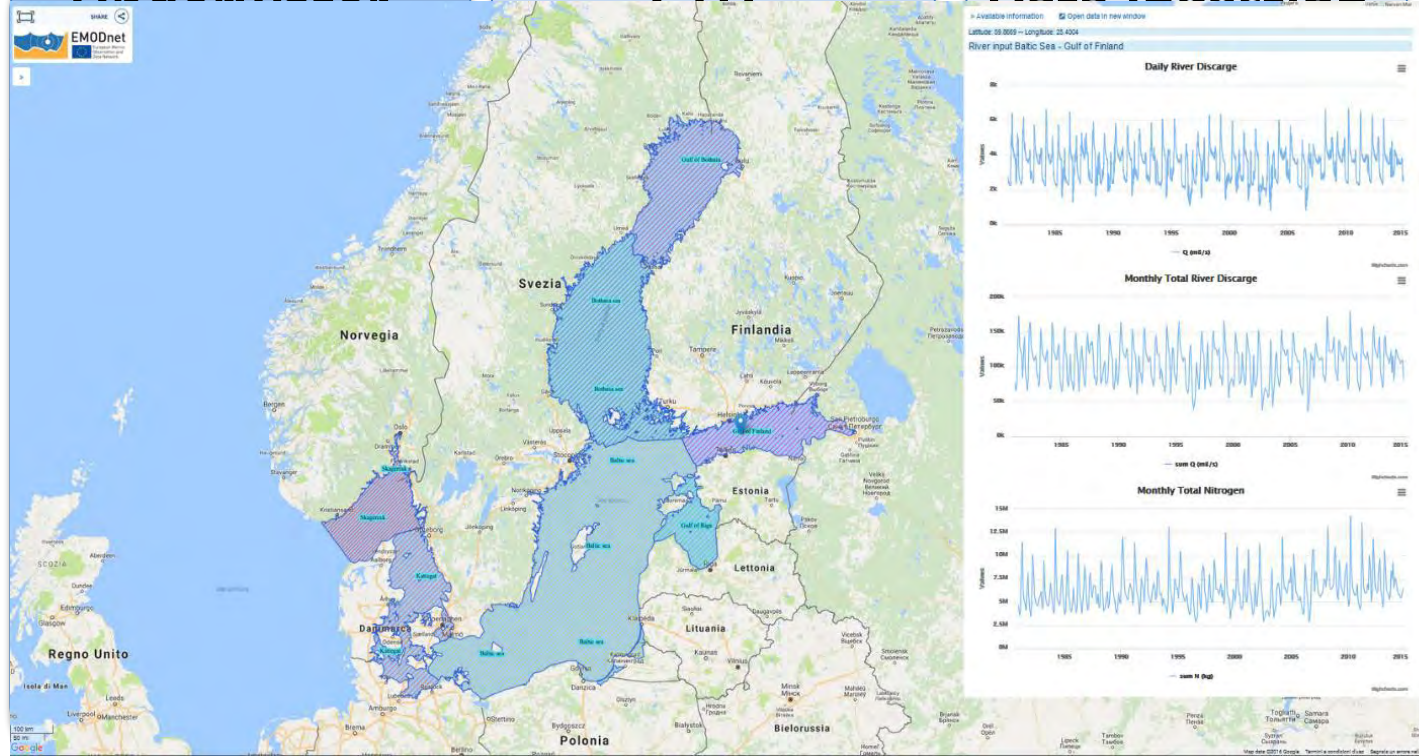


Tracks of seals in the North Sea from mid-July 2008 to end of November 2008 collecting 61112 CTD profiles (Isachsen et al. 2014).



River outflow data

- Make discoverable, accessible and downloadable river data products



Keep improving the portal, unlocking more data, improving web-services and machine-to-machine data distribution services,.....,.....



River outflow data

- Make discoverable, accessible and downloadable river data products

Underwater noise

- Define and setup a European data flow and data dissemination infrastructure

CTD

- Provide CTD data from both near real time data streams and historical repositories

Data Ingestion

- PANGAEA
- Statoil
- Nord Stream
- Galway bay cable observatory
-and many more

Keep improving the portal, unlocking more data, improving web-services and machine-to-machine data distribution services,.....,.....



Home > The Environment > Data and Information Fund > Basic Search

ENVIRONMENTAL
MONITORING

RESEARCH

DATA AND
INFORMATION FUND

Please log in to explore the
Data and Information Fund

E-Mail*

.....

→ Log in

→ Register

→ Forgot password

Feedback | Legal | Contact | Help

- Select all/none
- Bathymetry
- Benthos, Reef Effect
- Birds
- Cultural Heritage
- Currents
- Fish
- Macrophyte, Algae
- Marine Mammals
- Munitions Clearance
- Mussels
- Noise, Vibration, Pressure
- Wave
- Plankton
- Seabed Mapping
- Sediment
- Water Quality, Bacteriology



Data Ingestion

- PANGAEA
- Statoil
- Nord Stream
- Galway bay cable observatory
-and many more

improving web-services,.....,.....

River outflow data

- Make discoverable, accessible and downloadable river data products

Underwater noise

- Define and setup a European data flow and data dissemination infrastructure

CTD

- Provide CTD data from both near real time data streams and historical repositories

Data Ingestion

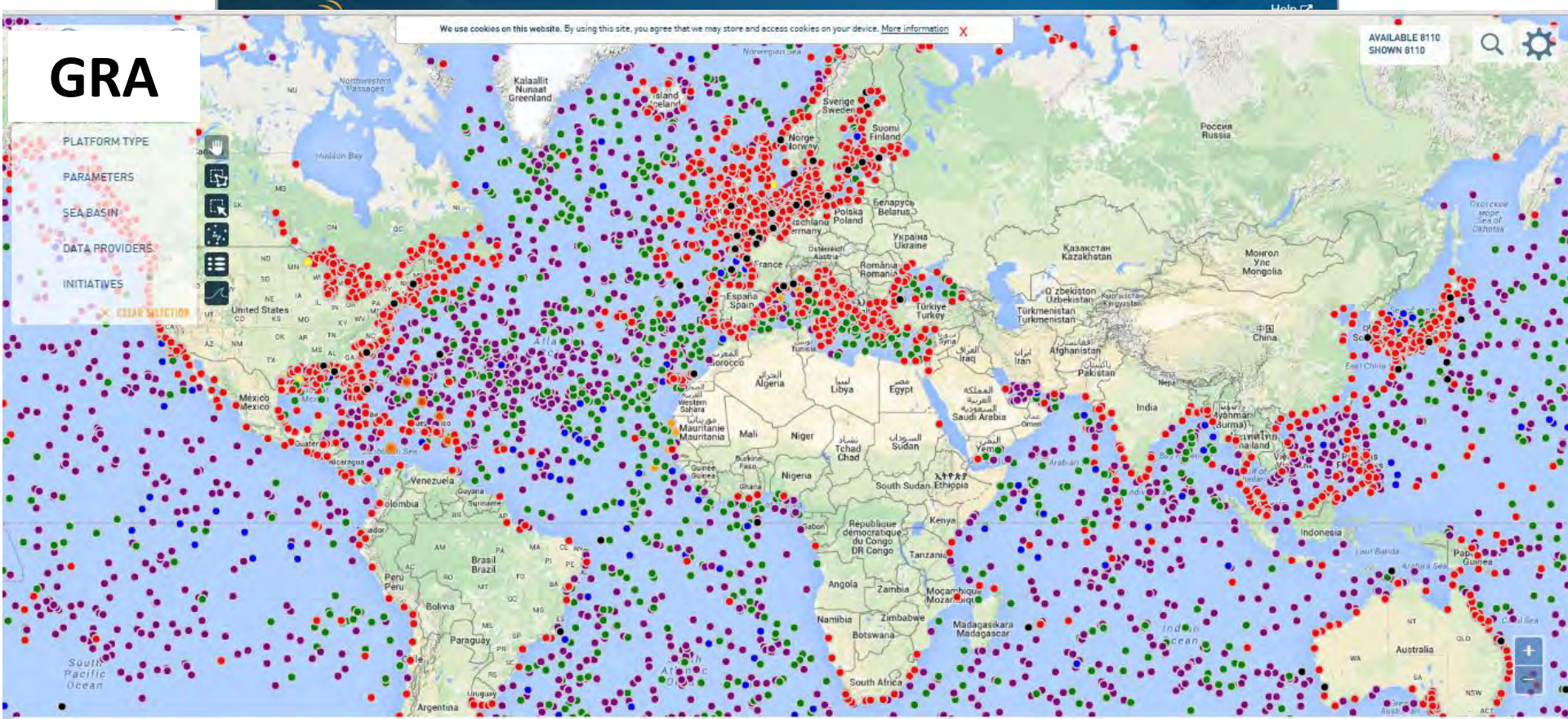
- PANGAEA
- Statoil
- Nord Stream
- Galway bay cable observatory
-and many more

Keep improving the portal, unlocking more data, improving web-services and machine-to-machine data distribution services,.....,.....



GRA

- PLATFORM TYPE
- PARAMETERS
- SEABASIN
- DATA PROVIDERS
- INITIATIVES

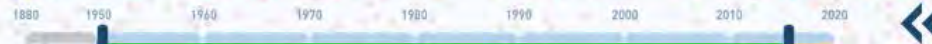


We use cookies on this website. By using this site, you agree that we may store and access cookies on your device. [More information](#) X

AVAILABLE 8110
SHOWN 8110

Last TD Last 90D Recent

Global (GFS) Ice Cov



EOOS – European Ocean Observing System



EOOS is a coordinating framework designed to:

- **align and integrate** Europe's ocean observing capacity;
- **promote** a systematic and collaborative approach to collecting information on the state and variability of our seas;
- **underpin sustainable management** of the marine environment and its resources



EuroGOOS
European Global Ocean
Observing System

Thanks

patrick.gorringe@eurogoos.eu

www.emodnet-physics.eu



EMODnet