RIVER DATA MANAGEMET FOR COASTAL OCEANOGRAPHY

Antonio Novellino, Flavio Santos, Estrella Olmedo,
Marco Alba, Luca Bonofiglio, Patrick Gorringe
and Francisco Campuzano

EMODnet Physics
www.emodnet-physics.eu

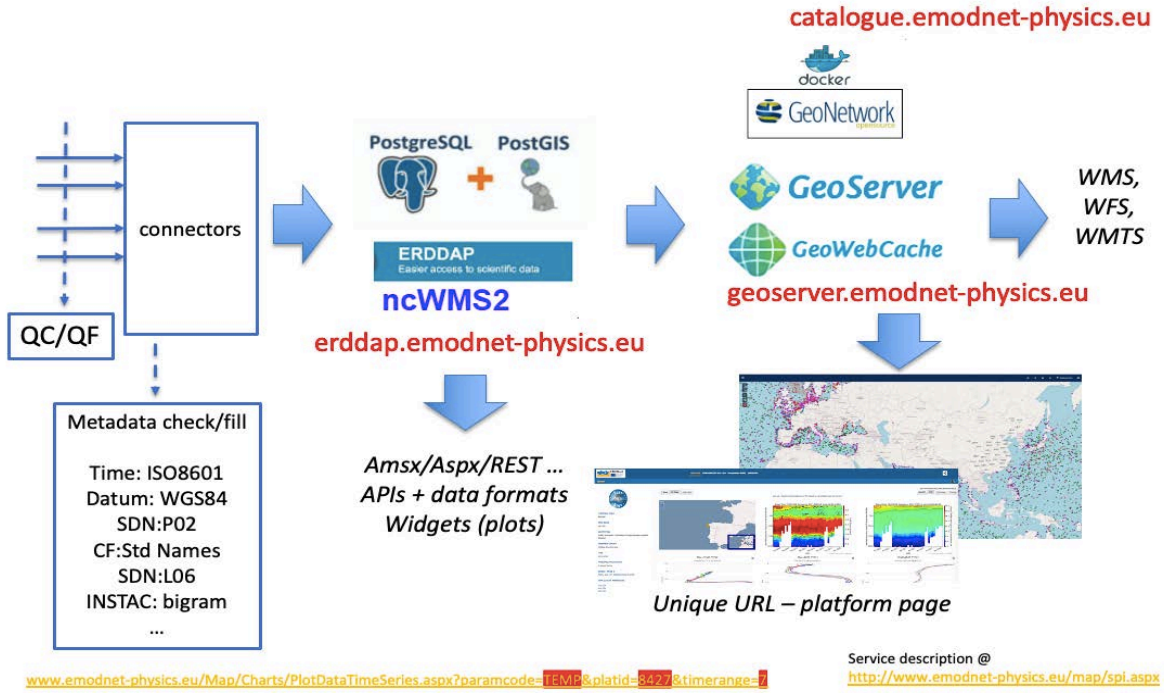
The European Marine Observation and Data Network (EMODnet) is financed by the European Union under Regulation (EU) No 508/2014 of the European Parliament and of the Council of 15 May 2014 on the European Maritime and Fisheries Fund.

EMODnet Physics

Data age
SWE-SOS Real-time (RT) data
Near real-time (NRT) data at in situ observatories at sea
Reprocessed NRT data (average/trends)
Archived data derived from further elaboration and validation

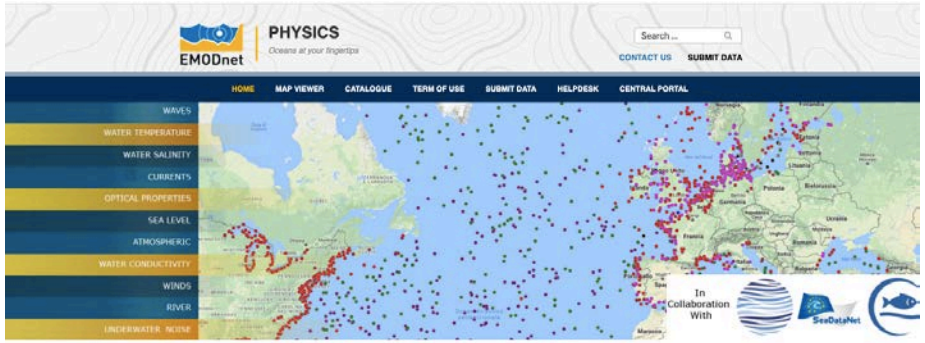
Products
Sea Level trends
Sea level anomalies
Temp & Sal maps
Surface Currents fileds
Ice coverage and thick
River Runoff & TSM
Impulsive Noise registry

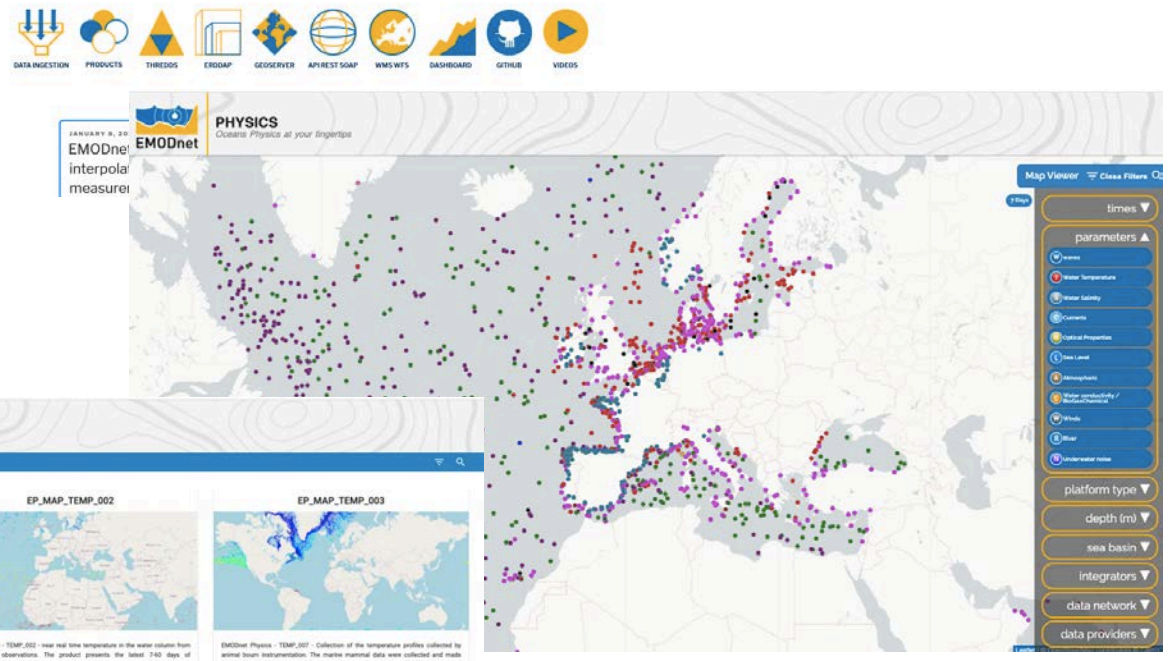
Parameters
Temperature
Salinity
Waves
Currents
Sea Level
Under water noise
Wind
Atmospheric param.
Biogeochemical param.
Optical properties
Ice data
River Runoff

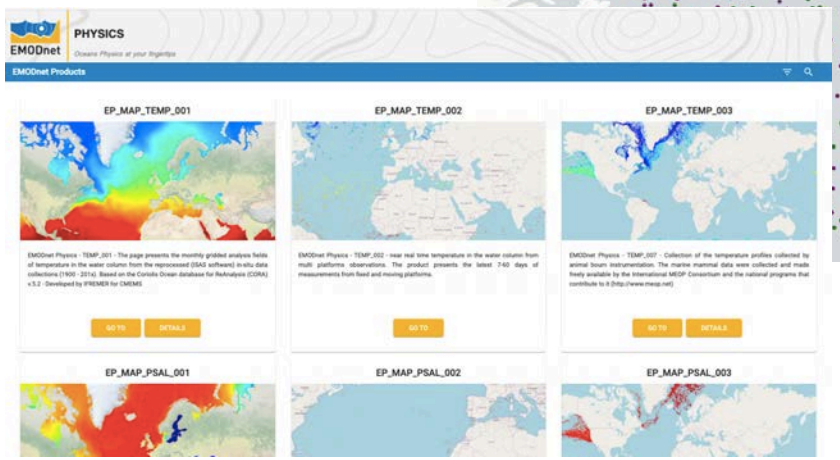


EMODnet Physics – River Runoff

- Operational outflow river data are collected from sources and harmonized by applying common standards and vocabulary
- Water level are processed by MOHID into river outflow
- Historical data are periodically synch from the Global Runoff Data Center
- Salinity fields at rivers mouth are made integrated by SMOS SSS product
- Total Suspended Matter is computed from an Ocean Color SENTINEL 2 product







River Outflow data

270 river stations

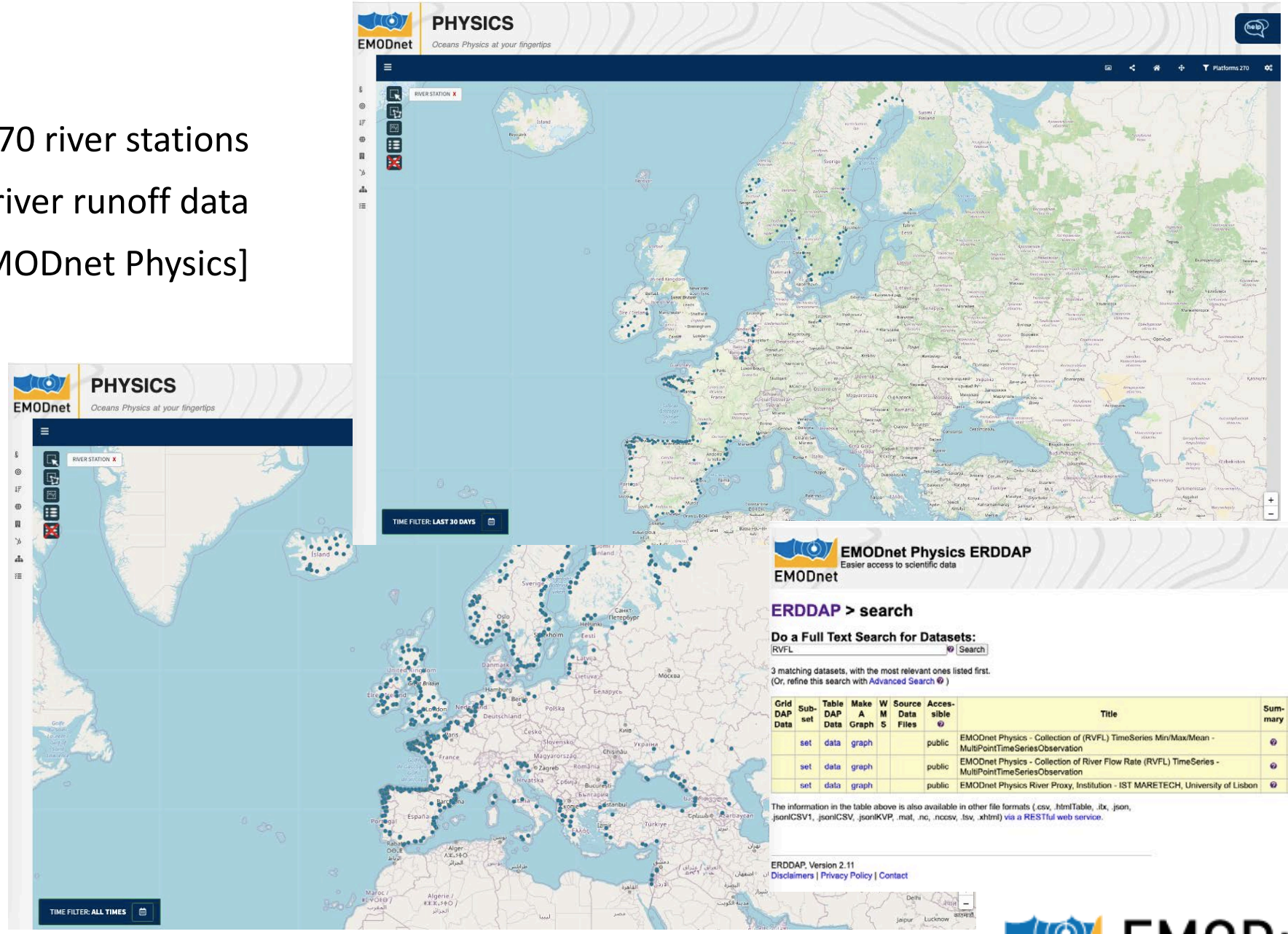
Operational river runoff data

[EMODnet Physics]

760 river stations

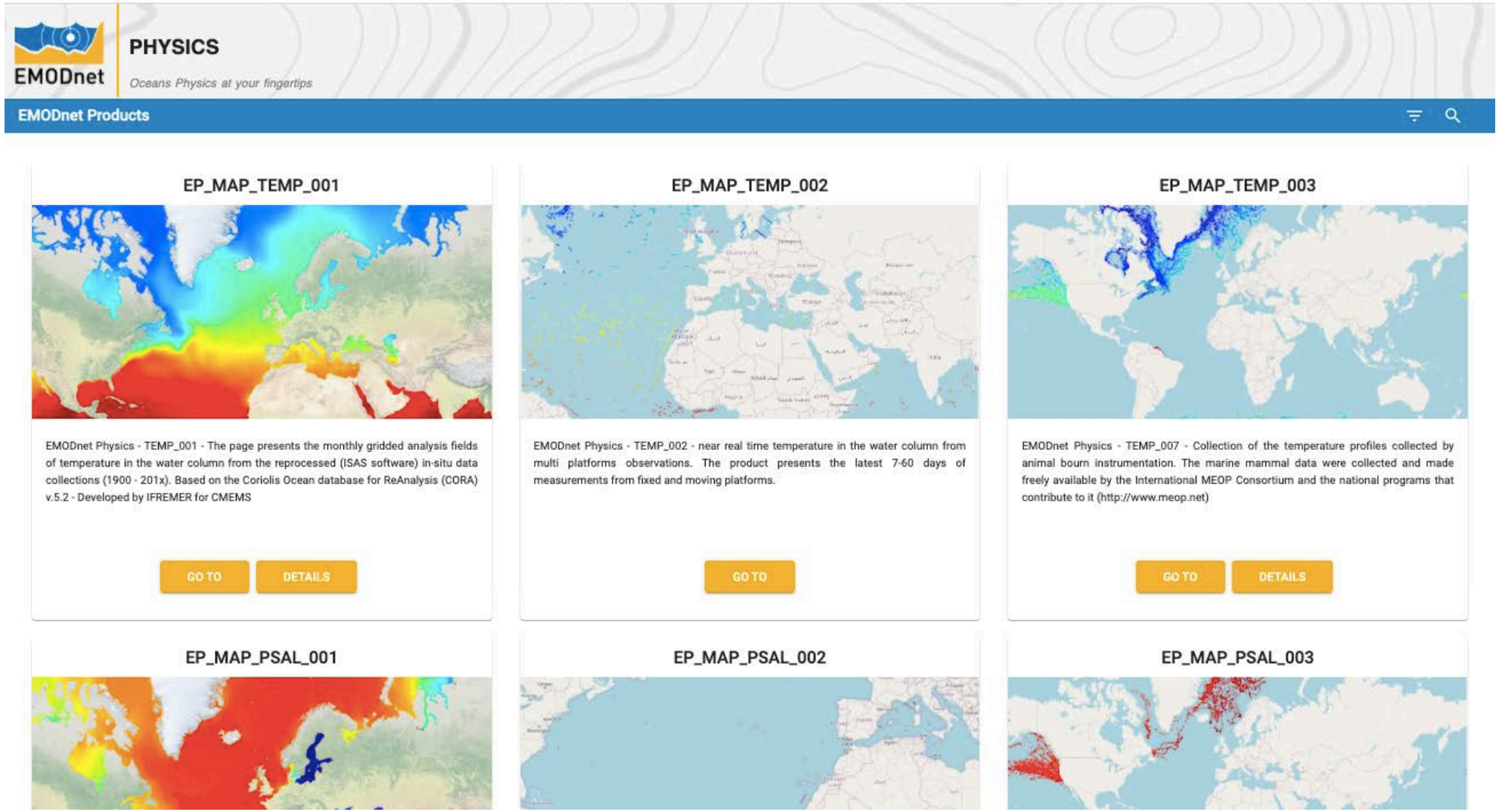
river runoff monthly means

[Global Runoff Data Center]




EMODnet
PHYSICS
Oceans Physics at your fingertips
DATA PLOTS
DATA DOWNLOAD
Documentation & M2M
DASHBOARD
PoPontelagoscuro
7 Days
60 Days
Older data
plots are a Runtime undersampled view of the dataset. to see full details open the "preview"
quick download(60 days): select data format and go
NetCDF
CSV
Download
Preview
download
River / river water flow - m3/second
river water flow in TIME
from 2021/01/11 to 2021/03/12
m3/second
4000
3500
3000
2500
2000
1500
1000
28. Dec
4. Jan
11. Jan
18. Jan
25. Jan
1. Feb
8. Feb
15. Feb
22. Feb
Depth undefined
© EMODnet-Physics
QC
any
QC doc
Select other depths to see more timeseries
timeseries
arpae
agenzia prevenzione ambiente energia emilia-romagna
PLATFORM CODE
PoPontelagoscuro
PLATFORM NAME
PoPontelagoscuro
INSTITUTION
Agenzia regionale per la prevenzione, lambiente e lenergia dellEmilia-Romagna (Arpae)
ASSEMBLY CENTER
MARETEC, Instituto Superior Tecnico, Universidade de Lisboa, Portugal
TYPE
river station
PRINCIPAL INVESTIGATOR
MARETEC
metadata

New products landing page

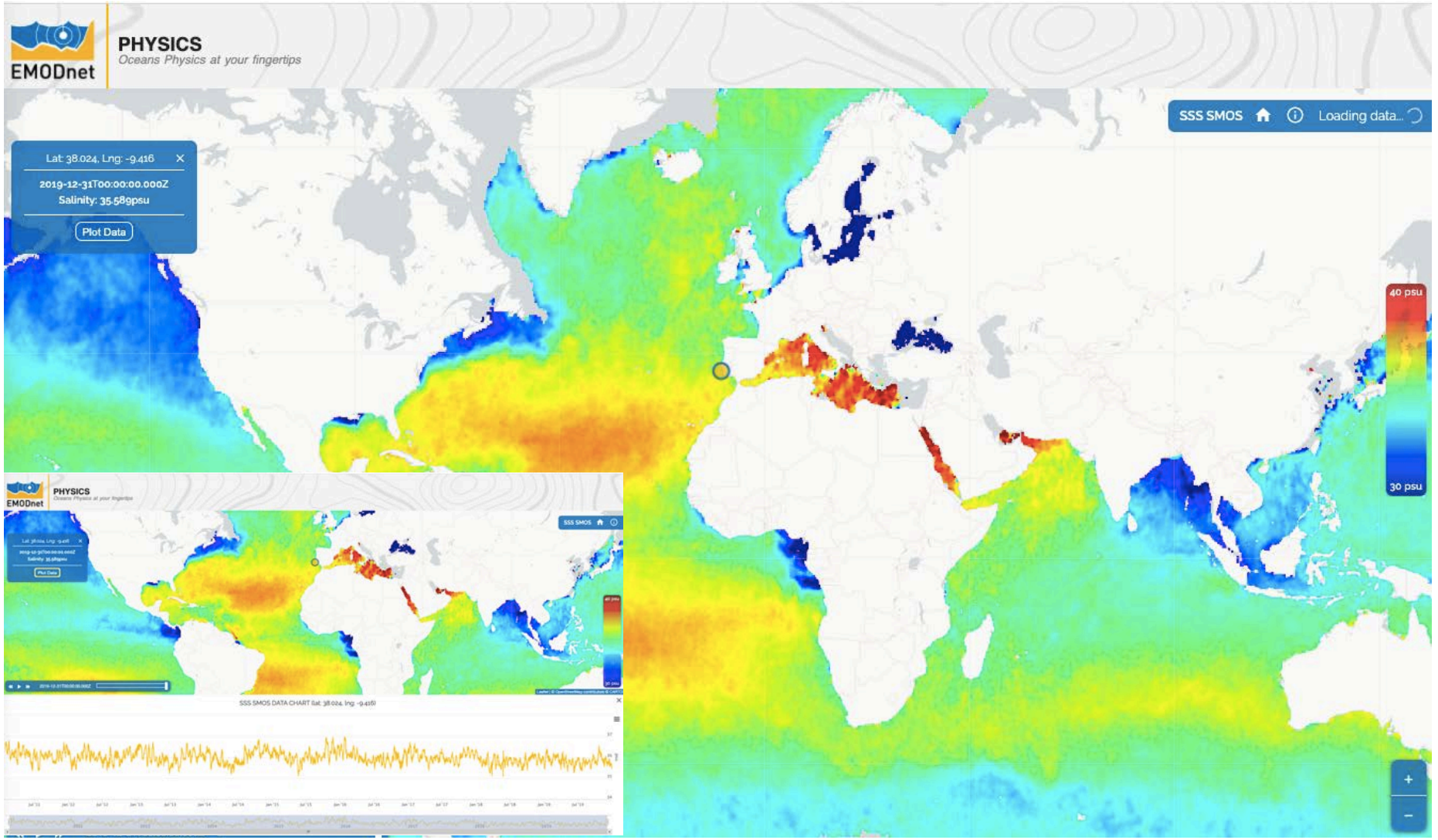


https://www.emodnet-physics.eu/map/Products/

https://www.emodnet-physics.eu/map/Products/EP_MAP_PSAL_004/

The SMOS SSS maps have been generated in the Barcelona Expert Center.

SSS have been retrieved following the algorithm described in Olmedo, E. et al 2019.



https://www.emodnet-physics.eu/map/Products/EP_MAP_RFVL_001/

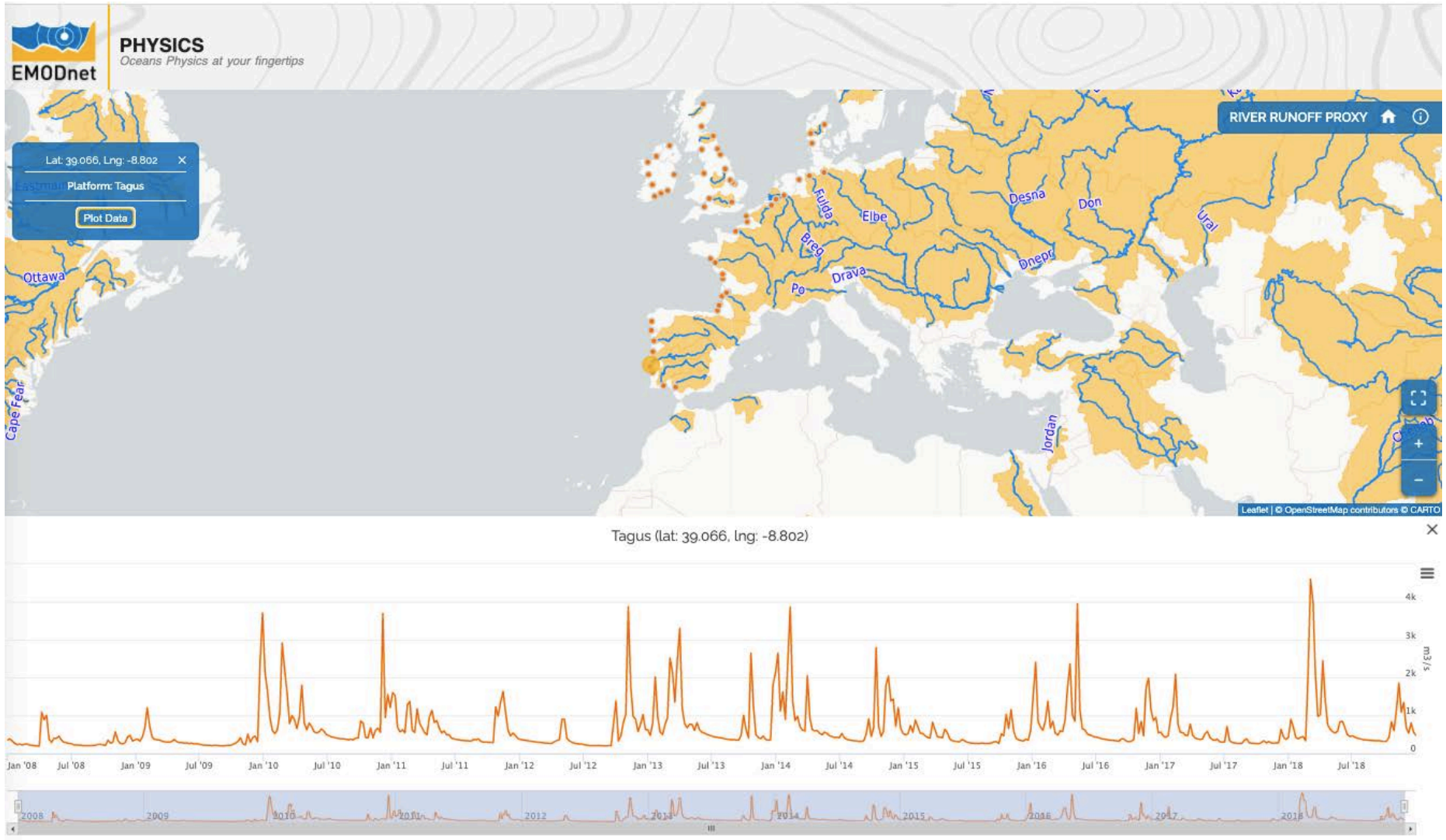
The product is 1D MOHID model that represent estuaries (i.e. proxy) schematically.

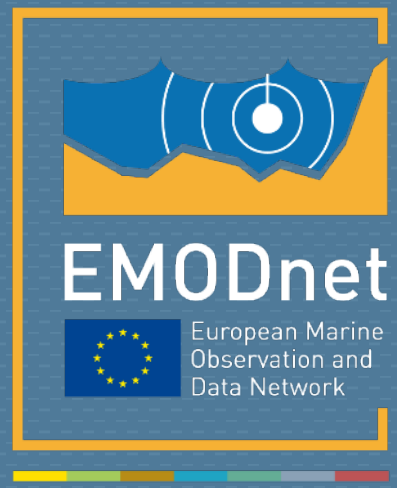
In the open boundary, the model receives tides and water properties such as salinity and temperature.

The model includes the local tides.

Tides were imposed using the Finite Element Solution 2014 (FES2014; Carrère et al., 2016) as the global tidal solution.

In the land boundary, the model is forced in the innermost cell by river flow and temperature.





@EMODnet

www.emodnet.eu

Your gateway to marine data in Europe