



**EMODnet**



European Marine  
Observation and  
Data Network

*Your gateway to marine data in Europe*

# EMODnet Physics

EASME/2019/OP/0003 - European Marine Observation and Data Network - Physics  
EASME/EMFF/2018/1.3.1.8/Lot3/SI2.810790

Antonio Novellino

[antonio.novellino@ettsolutions.com](mailto:antonio.novellino@ettsolutions.com)



**EMODnet**



# EMODnet Physics

[map.emodnet-physics.eu](http://map.emodnet-physics.eu)  
[erddap.emodnet-physics.eu](http://erddap.emodnet-physics.eu)  
[thredds.emodnet-physics.eu](http://thredds.emodnet-physics.eu)  
[geoserver.emodnet-physics.eu](http://geoserver.emodnet-physics.eu)  
[catalogue.emodnet-physics.eu](http://catalogue.emodnet-physics.eu)

## Sources – connected infras.

CMEMS INSTAC

SeaDataNet network of  
National Oceanog. Data Center

Coriolis (GDAC), ICES, ...

Permanent Service for Mean  
Sea Level (PSMSL)

GLOSS, SONEL, ...

Regional Impulsive Noise  
Registers

SOOS, IOOS, IMOS, IAPB, DBCP

....

## Data age

Real Time

Near real-time (NRT) data at in  
situ observatories at sea

Reprocessed NRT data  
(average/trends)

Archived data derived from  
further elaboration and  
validation

## Coastal data and products

Sea Currents fields

Sea Level

River outflow and Suspended  
Matter

Temperature and Salinity

Waves and Winds

Impulsive Noise registry and  
Sound Pressure Levels

QC/QF are semi-automatic or done by experts according the age of the data, es.  
NRT flow: is semi-automatic  
HV: experts from SDN-NODC apply a multi-level QC/QF

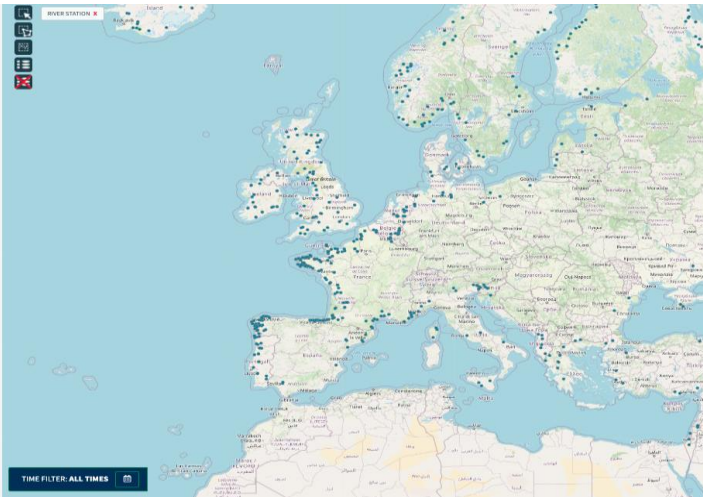


EMODnet

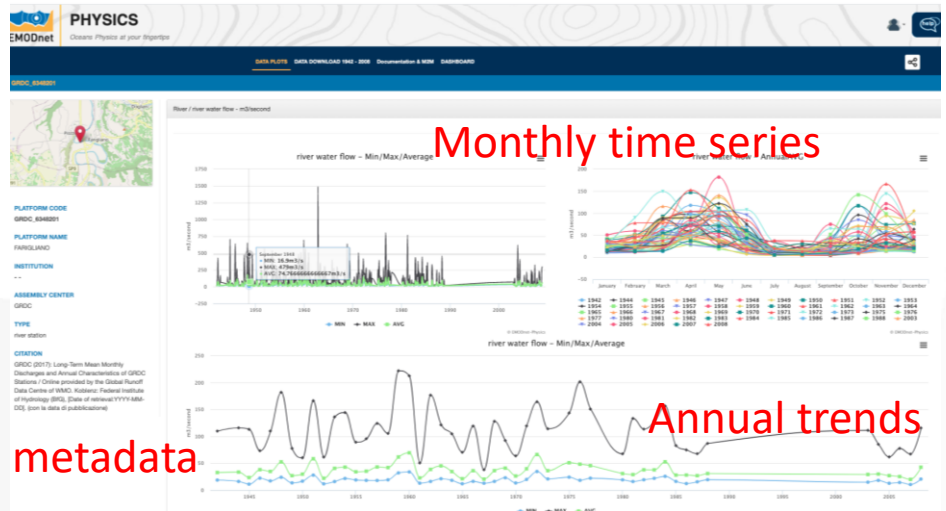


European Marine Observation and Data Network

# Coastal data and products

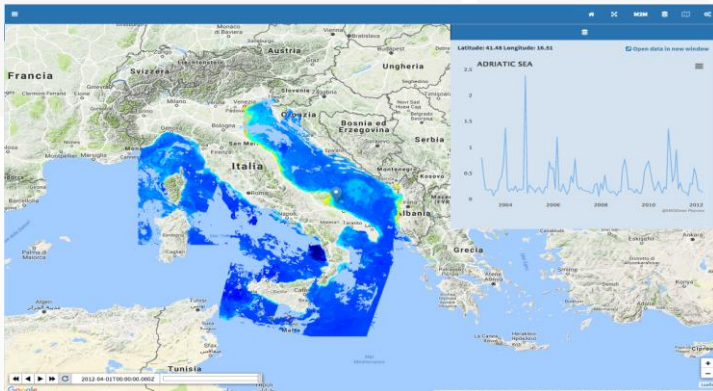


River Stations – River Runoff flow



metadata

Annual trends



TSM - Concentration of total suspended matter (conc\_tsm, mg/l) - 300 m full resolution - monthly averaged



EMODnet



# Coastal data and products

Sea Level data – Sea Level Trends – from daily data to monthly and annual reanalysis

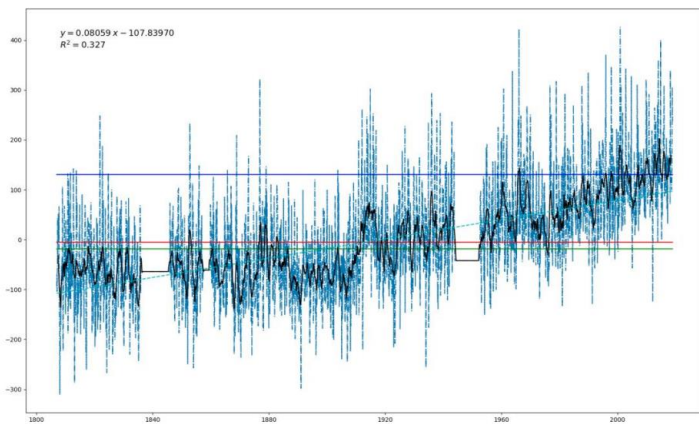
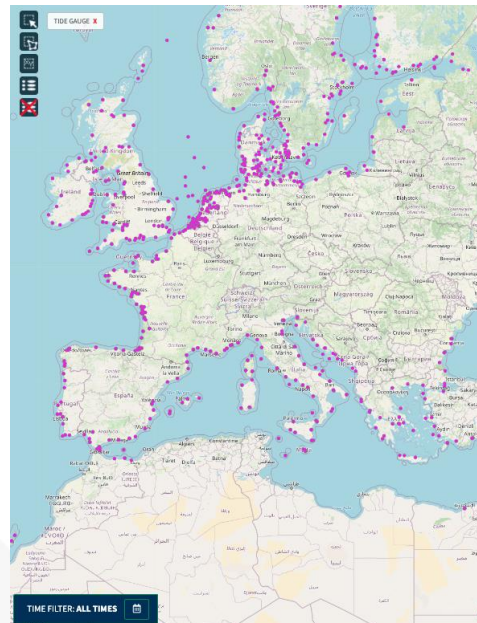
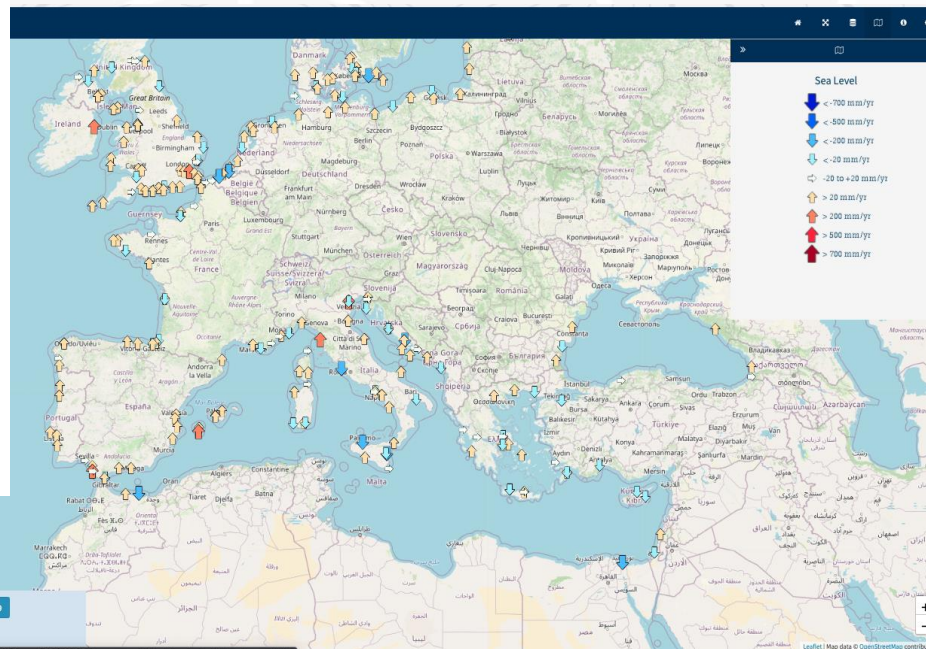


Figure 4. Example of the processing for the RLR timeseries in BREST. The dashed blue line is the monthly RLR timeserie, the black line is the annual average trend timeseries, the solid blue line is the mean sea level of the monthly RLR along the baseline (2000-2019), the solid red line is the mean sea level of the monthly RLR along the full timeseries (1807-2019), the solid green line is the mean sea level of the monthly RLR along the timeseries but the baseline (i.e. 1807-1999).

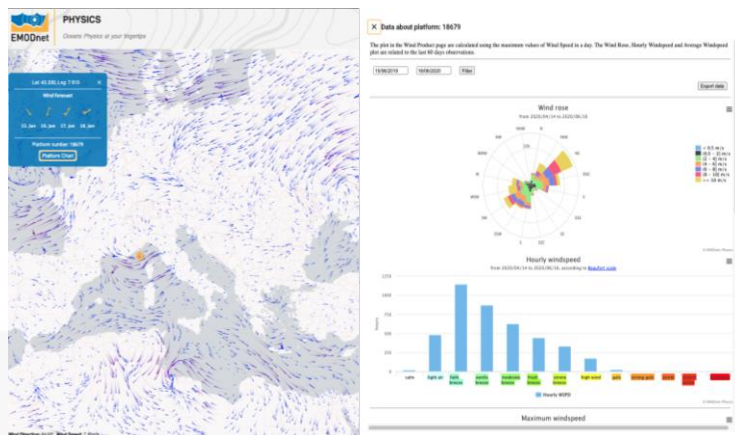




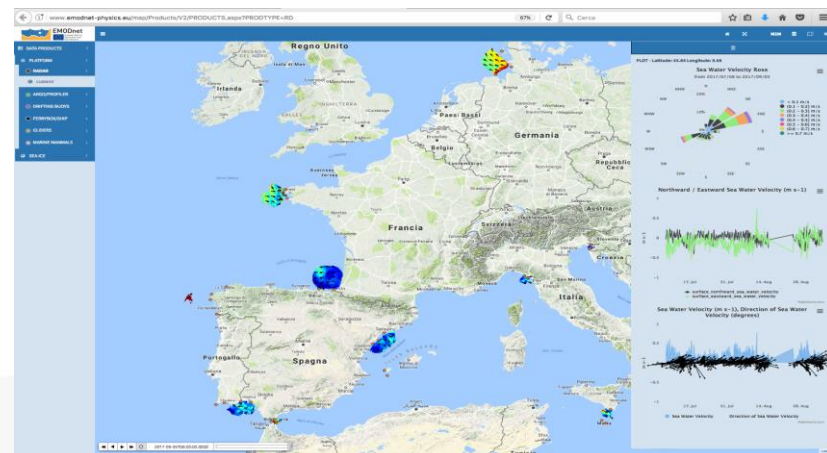
# EMODnet



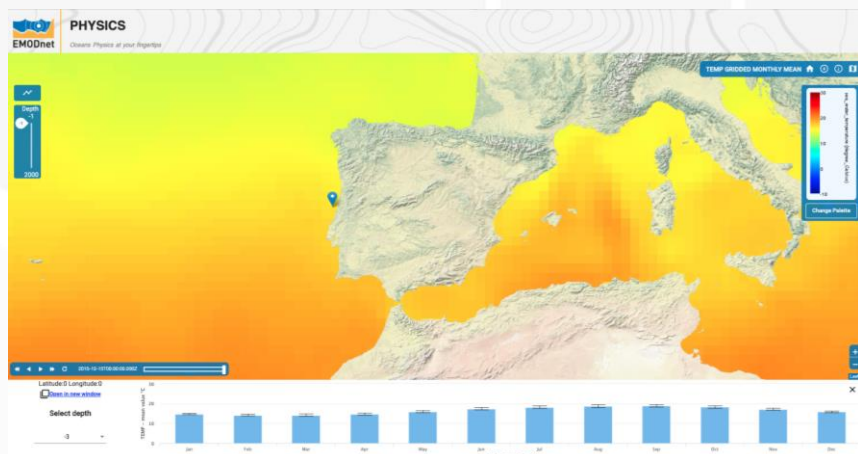
# Coastal data and products



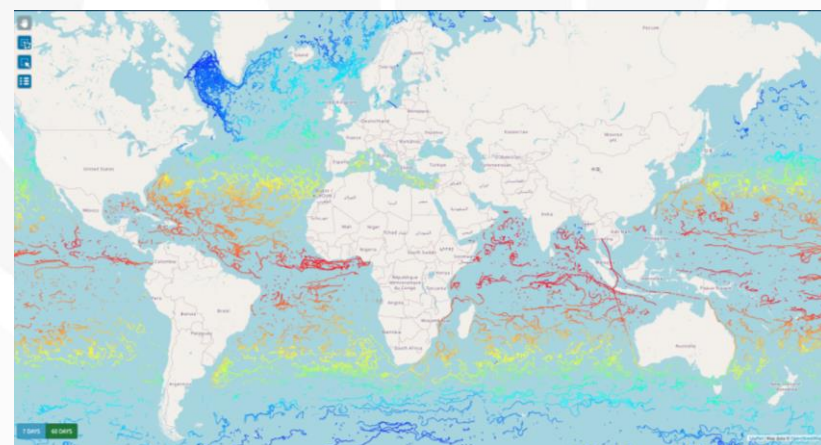
Wind @ Sea Level – direction and intensity - daily



Sea Surface Currents – direction and intensity - daily



Temperature and Salinity fields - monthly



Temperature and Salinity - daily



# EMODnet



# Discovery and access services

[map.emodnet-physics.eu](http://map.emodnet-physics.eu)  
[erddap.emodnet-physics.eu](http://erddap.emodnet-physics.eu)  
[thredds.emodnet-physics.eu](http://thredds.emodnet-physics.eu)  
[geoserver.emodnet-physics.eu](http://geoserver.emodnet-physics.eu)  
[catalogue.emodnet-physics.eu](http://catalogue.emodnet-physics.eu)



## ERDDAP > search

Do a Full Text Search for Datasets:

2 matching datasets, with the most relevant ones listed first.  
 (Or, refine this search with [Advanced Search](#))

Grid DAP Data	Sub-set	Table DAP Data	Make A Graph	W M S	Source Data Files	Access-ible	Title	Summary	FGDC, ISO, Metadata	Back-ground Info	RSS	E mail	Institution	Dataset ID
	set	data	graph			public	EMODnet Physics - Collection of River Flow Rate (RVFL) TimeSeries - MultiPointTimeSeriesObservation	?	F I M	<a href="#">background</a>			EMODnet Physics	EP_ERD_INT_RVFL_AL_TS_NRT
	set	data	graph			public	CMEMS-LAMBDA data from a local source.	?	M	<a href="#">background</a>			CMEMS-LAMBDA	EP_ERD_LAM_RVFL_RF_TS_PRX

The information in the table above is also available in other file formats (.csv, .htmlTable, .itx, .json, .jsonCSV1, .jsonCSV, .jsonKVP, .mat, .nc, .nccsv, .tsv, .xhtml) [via a RESTful web service](#).

[https://erddap.emodnet-physics.eu/erddap/tabledap/EP\\_ERD\\_INT\\_RVFL\\_AL\\_TS\\_NRT.htmlTable?EP\\_PLATFORM\\_ID%2CEP\\_PLATFORM\\_TYPE%2CEP\\_PLATFORM\\_CODE%2CEP\\_PLATFORM\\_LINK%2Ctime%2CTIME\\_QC%2Cdepth%2CDEPTH\\_QC%2Cpres%2CPRES\\_QC%2Clatitude%2CLongitude%2CPOSITION\\_QC%2CRVFL%2CRVFL\\_QC%2CRVFL\\_DM%2Csite\\_code%2Cplatform\\_code%2Cplatform\\_name%2Cpi\\_name%2Carea%2Cauthor%2Csource%2Ccontributor\\_name%2Ccontributor\\_url%2Cdata\\_assembly\\_center%2Cinstitution\\_edmo\\_code%2Cinstitution\\_references%2Cinstitution%2Cwmo\\_platform\\_code&time%3E=2020-05-19T08%3A28%3A29Z](https://erddap.emodnet-physics.eu/erddap/tabledap/EP_ERD_INT_RVFL_AL_TS_NRT.htmlTable?EP_PLATFORM_ID%2CEP_PLATFORM_TYPE%2CEP_PLATFORM_CODE%2CEP_PLATFORM_LINK%2Ctime%2CTIME_QC%2Cdepth%2CDEPTH_QC%2Cpres%2CPRES_QC%2Clatitude%2CLongitude%2CPOSITION_QC%2CRVFL%2CRVFL_QC%2CRVFL_DM%2Csite_code%2Cplatform_code%2Cplatform_name%2Cpi_name%2Carea%2Cauthor%2Csource%2Ccontributor_name%2Ccontributor_url%2Cdata_assembly_center%2Cinstitution_edmo_code%2Cinstitution_references%2Cinstitution%2Cwmo_platform_code&time%3E=2020-05-19T08%3A28%3A29Z)

**Ocean physics at your fingertips**

**contacts@emodnet-physics.eu**



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

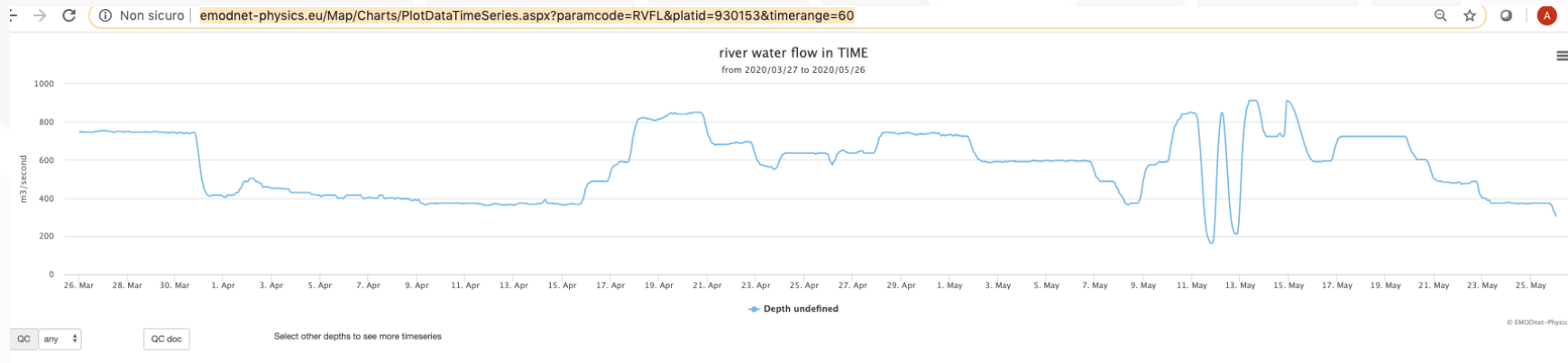
*Your gateway to marine data in Europe*



# EMODnet

Service	Description	Examples
platformURL	All platforms	<a href="http://www.emodnet-physics.eu/map/platinfo/piradar.aspx?platformid=10273">http://www.emodnet-physics.eu/map/platinfo/piradar.aspx?platformid=10273</a> <a href="http://www.emodnet-physics.eu/map/platinfo/pidashboard.aspx?platformid=10273">http://www.emodnet-physics.eu/map/platinfo/pidashboard.aspx?platformid=10273</a> Service description @ <a href="http://www.emodnet-physics.eu/map/spi.aspx">http://www.emodnet-physics.eu/map/spi.aspx</a>
widgets	All plots	<a href="http://www.emodnet-physics.eu/Map/Charts/PlotDataTimeSeries.aspx?paramcode=TEMP&amp;platid=3427&amp;timerange=7">www.emodnet-physics.eu/Map/Charts/PlotDataTimeSeries.aspx?paramcode=TEMP&amp;platid=3427&amp;timerange=7</a>

<http://www.emodnet-physics.eu/Map/Charts/PlotDataTimeSeries.aspx?paramcode=RVFL&platid=930153&timerange=60>



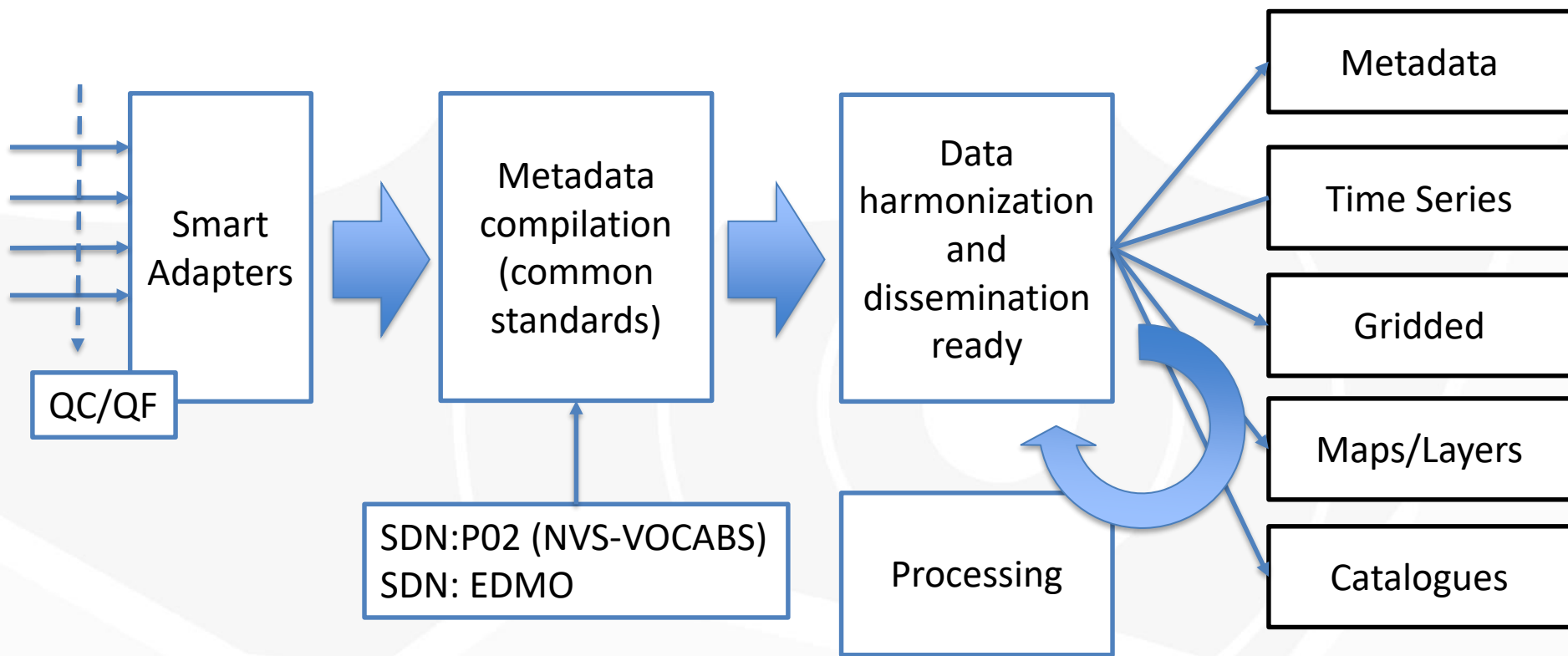




**EMODnet**



# From input to products



QC/QF are semi-automatic or done by experts according the age of the data, es. NRT flow: is semi-automatic  
HV: experts from SDN do apply a multi-level QC/QF