



mercator-ocean.eu  
marine.Copernicus.eu

# In Situ Thematic Assembly Centre for Copernicus Marine Service

Indicators and monitoring tool:  
the INSTAC Dashboard!!

I. Serra, C. Troupin, J. Tintor (SOCIB)



## Main goal

To provide more **visibility**  
to the in situ data & services

# Context

1. November 2014 (Lisbon): proposal of a SOCIB-like dashboard  
<http://seaboard.socib.es>

**SOCIB SeaBoard**  
 Observation and real time data

**Forecast**

**Beach overview**

**París BC weather station**

**Wind speed**  
 9 km/h (NW)

**Current deployments**

Platform type	Deployments
Surface drifter	8
Sea Level	8
Coastal Station	8
Drifter drifter	8
Weather Station	8
Oceanographic Buoy	8
Glider	1
Research Vessel	8

**Weather forecast**

No precipitation throughout the week, with temperatures rising to 20°C on Sunday

**Today**  
 15°C / 18°C / 20°C / 22°C / 25%

**Wednesday**  
 15°C / 18°C / 20°C / 22°C / 25%

**Thursday**  
 15°C / 18°C / 20°C / 22°C / 25%

**Waves forecast**

Waves of 25' by 2000' 0000

**Balearic sea state**

Parameter	Min	Max
Wind speed	28 km/h	228 km/h
Wave height	0.2 m	0.3 m
Sea level	-0.05 m	-0.05 m
Air temperature	18.3°C	18.3°C
Sea water salinity	38.4200	38.4200
Current speed	0.2 km/h	0.8 km/h
Sea water temperature	17.8°C	18.1°C
Air pressure	1018.8 hPa	1018.8 hPa

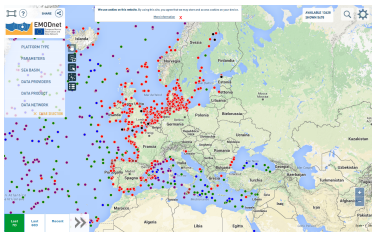


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  - ▶ showing the data + capability to characterize ocean state & variability

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  - ▶ showing the data + capability to characterize ocean state & variability
  - ▶ observations related to extreme events

# The protagonists

## 1. Mercator: managing web and data access (<http://marine.copernicus.eu/>)

ONLINE CATALOGUE

[CATALOGUE PDF](#) [FIRST VISIT ?](#) [MY CART](#)

**YOUR SEARCH** ?

NEW SEARCH

**AREA**

- All areas
- Global Ocean (1)
- Arctic Ocean (3)
- Baltic Sea (2)
- European North-West Shelf Seas (2)
- North-Black-Sea-Inland Regional Seas (2)
- Mediterranean Sea (3)
- Black Sea (2)

**PARAMETER**


- All parameters
- Ocean Temperature (16)
- Ocean Salinity (16)
- Ocean Currents (16)
- Sea Ice (6)
- Sea Level (6)
- Winds (6)

**Found 20 products** matching your criteria.

KEYWORD SEARCH

**GLOBAL OBSERVED OCEAN PHYSICS TEMPERATURE SALINITY HEIGHTS AND CURRENTS PROCESSING**  
 Satellite-observation, In-situ-observation, Salinity, Temperature, Currents, Near real-time, Global-epoch


GLOBAL\_OBS\_PHYS\_001\_000



More INFO

**GLOBAL OBSERVED OCEAN PHYSICS TEMPERATURE SALINITY HEIGHTS AND CURRENTS REPROCESSING (1983-2014)**  
 In-situ-observation, Satellite-observation, Salinity, Currents, Temperature, Sea level, Multi-year, Global-epoch

GLOBAL\_REP\_PHYS\_001\_013



More INFO

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1. Mercator: managing web and data access (<http://marine.copernicus.eu/>)
2. Regional portals: data locations + data values (ex: <http://ibidatportal.puertos.es>)

Home - Real Time



Real time data viewing service

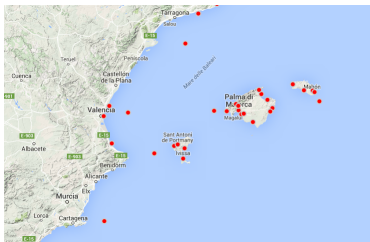
Station: Tridageja MarinaMallorca (2017)  
 Provider: Puertos del Estado (Spain)  
 Parameter: SLEW - Observed sea level (OSL) - meter



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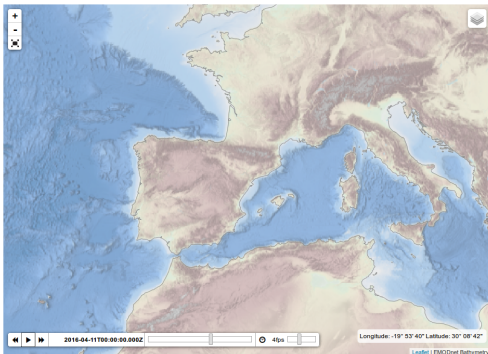
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2. Regional portals: data locations + data values (ex: <http://ibidataportal.puertos.es>)
3. EMODnet Physics: data locations + data values (<http://www.emodnet-physics.eu/Map/>)

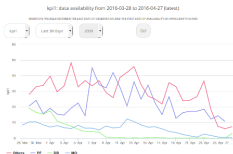




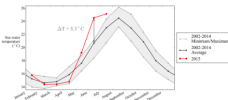
Yes,  
but a better dashboard!



### KPIs



### Extreme events



## Filters

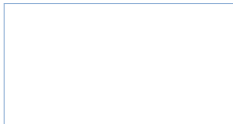
- region
- platform type
- **scales**

## Tools

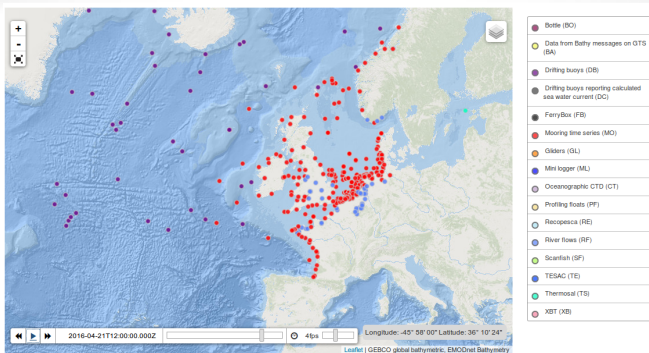
- data density
- number of data in selected area

## Variables

### Ocean state and variability



# First version, based on index files



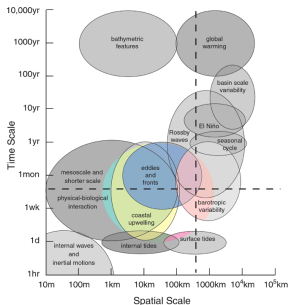
- ▶ Time control!
- ▶ Filtering according to platform type
- ▶ Dynamic histograms of data types
- ▶ Background layers

(including EMODnet-Bathymetry)



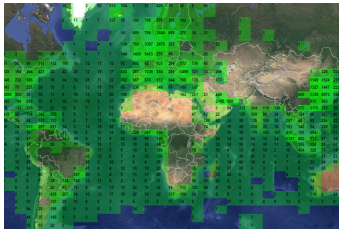
# What's missing?

## 1. Filtering according to scale of interest



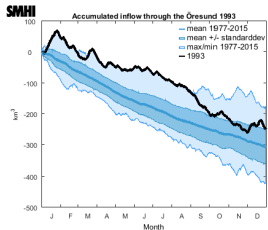
# What's missing?

1. Filtering according to scale of interest
2. Computation of data density



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1. Filtering according to scale of interest
2. Computation of data density
3. Extreme events





# Questions and discussion

1. Should we group the data types?

tell us



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3. Sources of information other than index files?

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Please don't upload this version on the cloud, another one will be provided