

Oceanographic Data Management Platforms

Part III: From Data to Products & Services

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UNIVERSITY OF LISBON
INTERDISCIPLINARY STUDIES
ON SUSTAINABLE ENVIRONMENT AND SEAS



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University Network for Innovation,
Technology and Engineering



UNIVERSIDADE
DE LISBOA



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Temperature and Salinity in the water body

Input

CMEMS INSTAC

COROLIS

MEOP

PANGAEA

IAPB

IOOS, NOAA

IMOS

...

SDN climatology

CORA – Coriolis Ocean Dataset for Reanalysis v.5.2

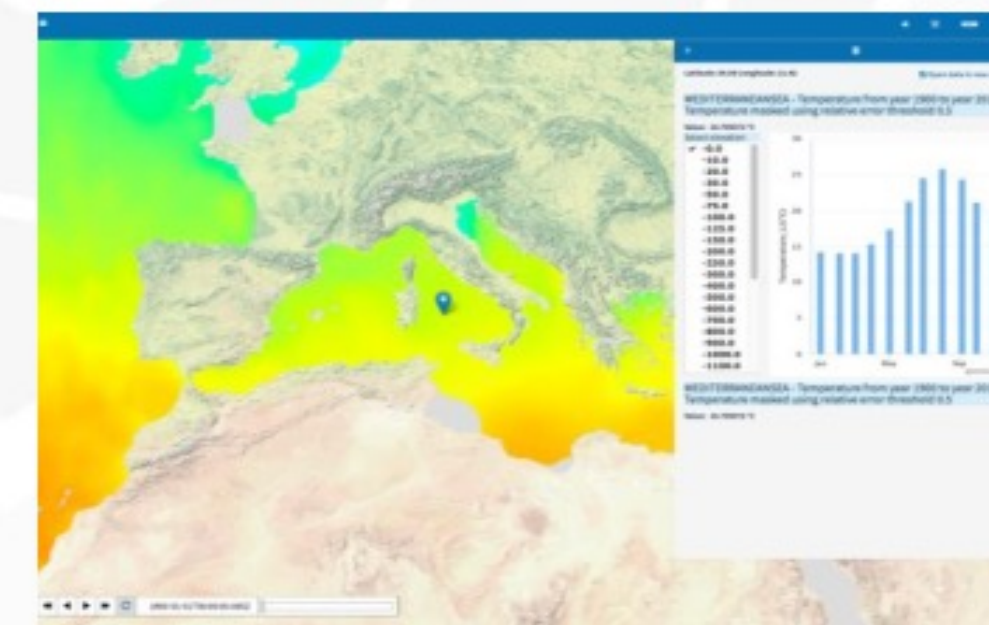
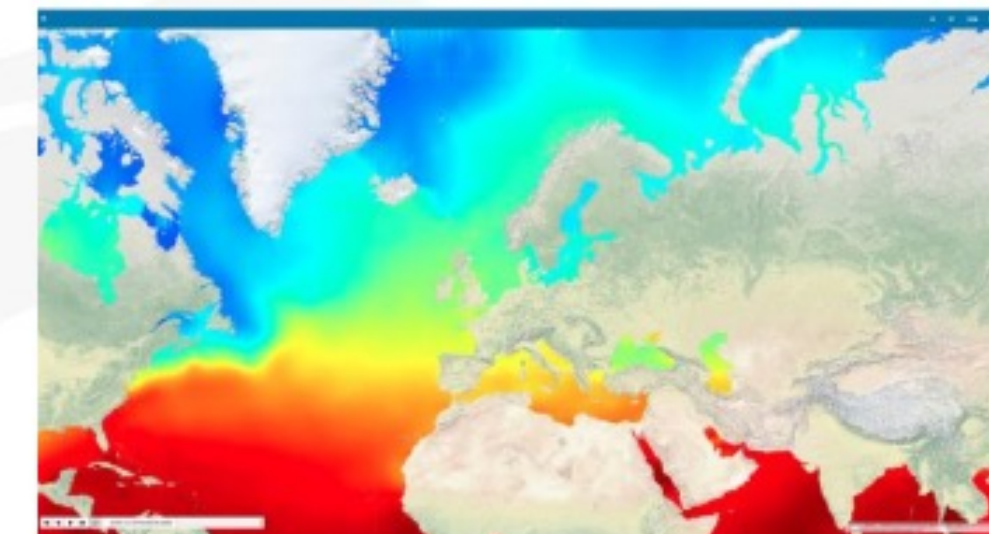
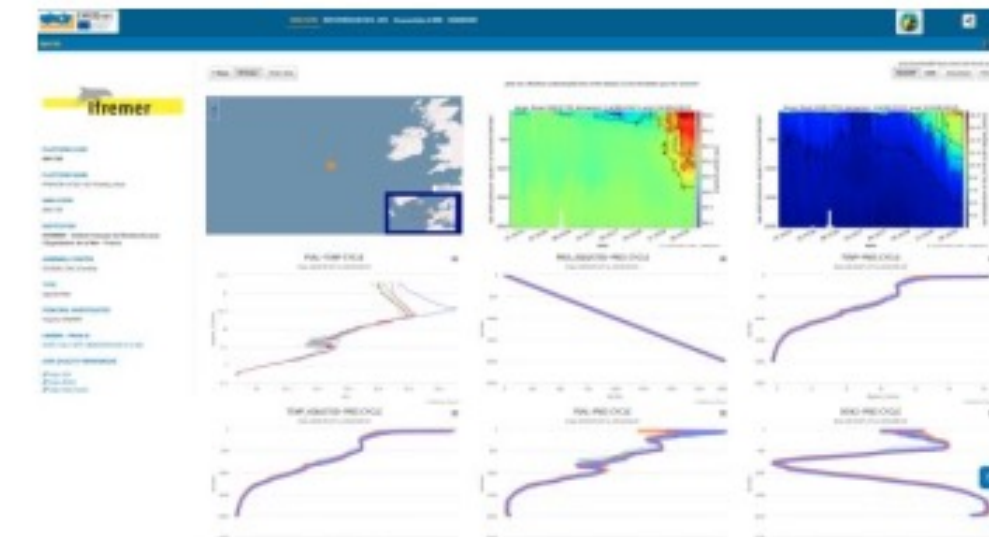
Output

Nowcast timeseries and profiles

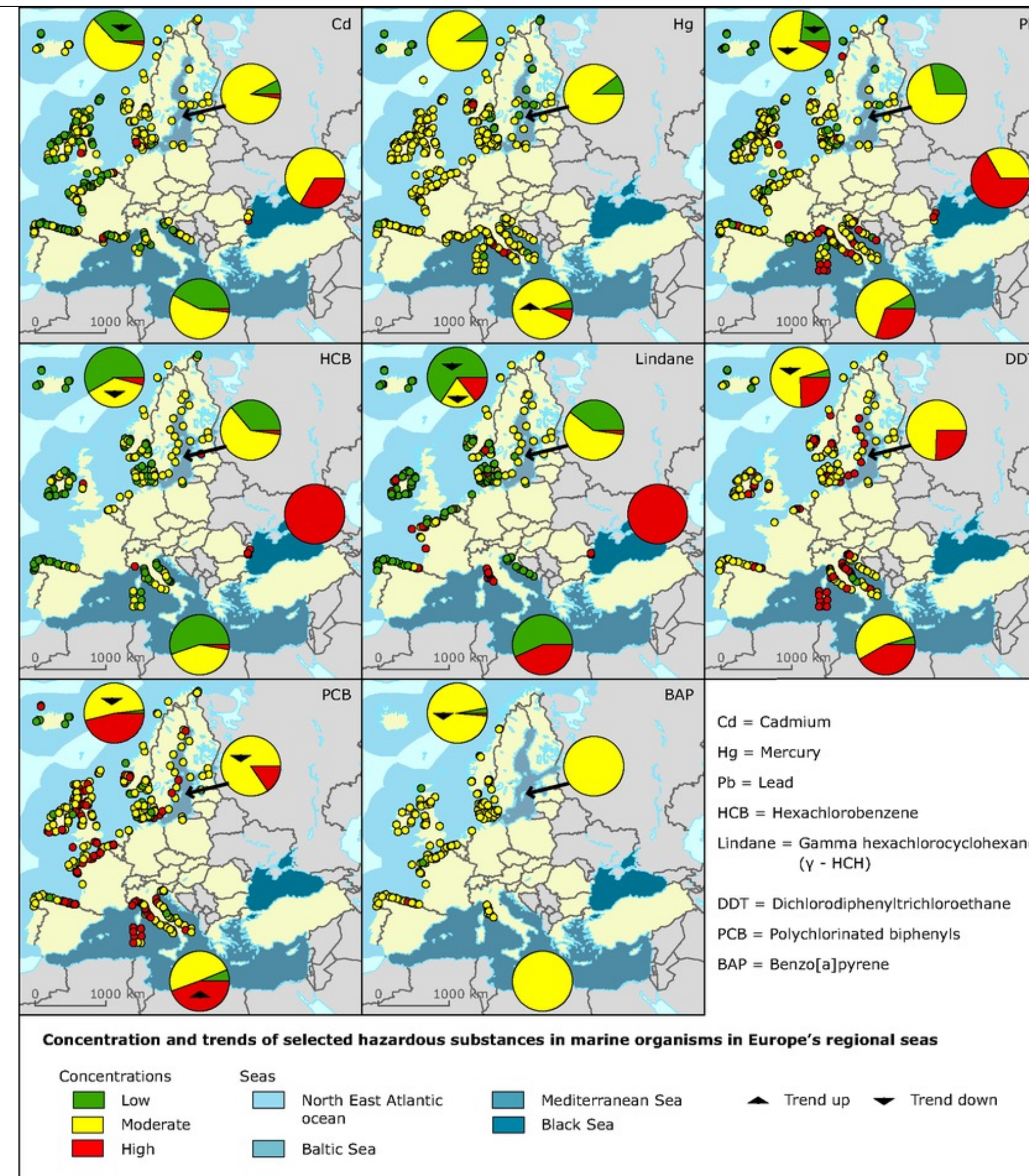
Trends

Climatology

Maps (asset mapping)

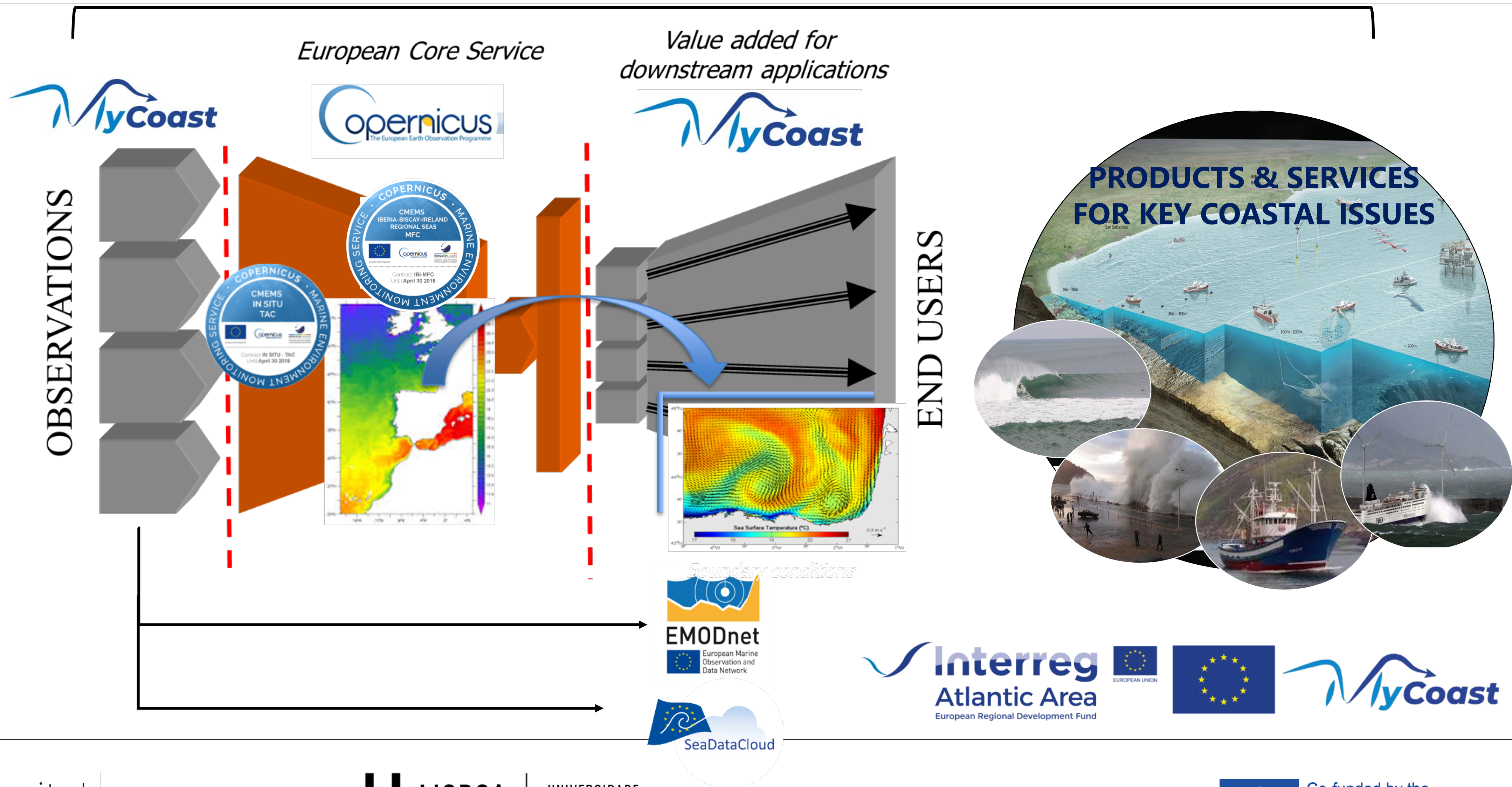


The beginning of the end? of the EIONET dataflow and shift to EMODnet/ICES dataflow for EEA indicators





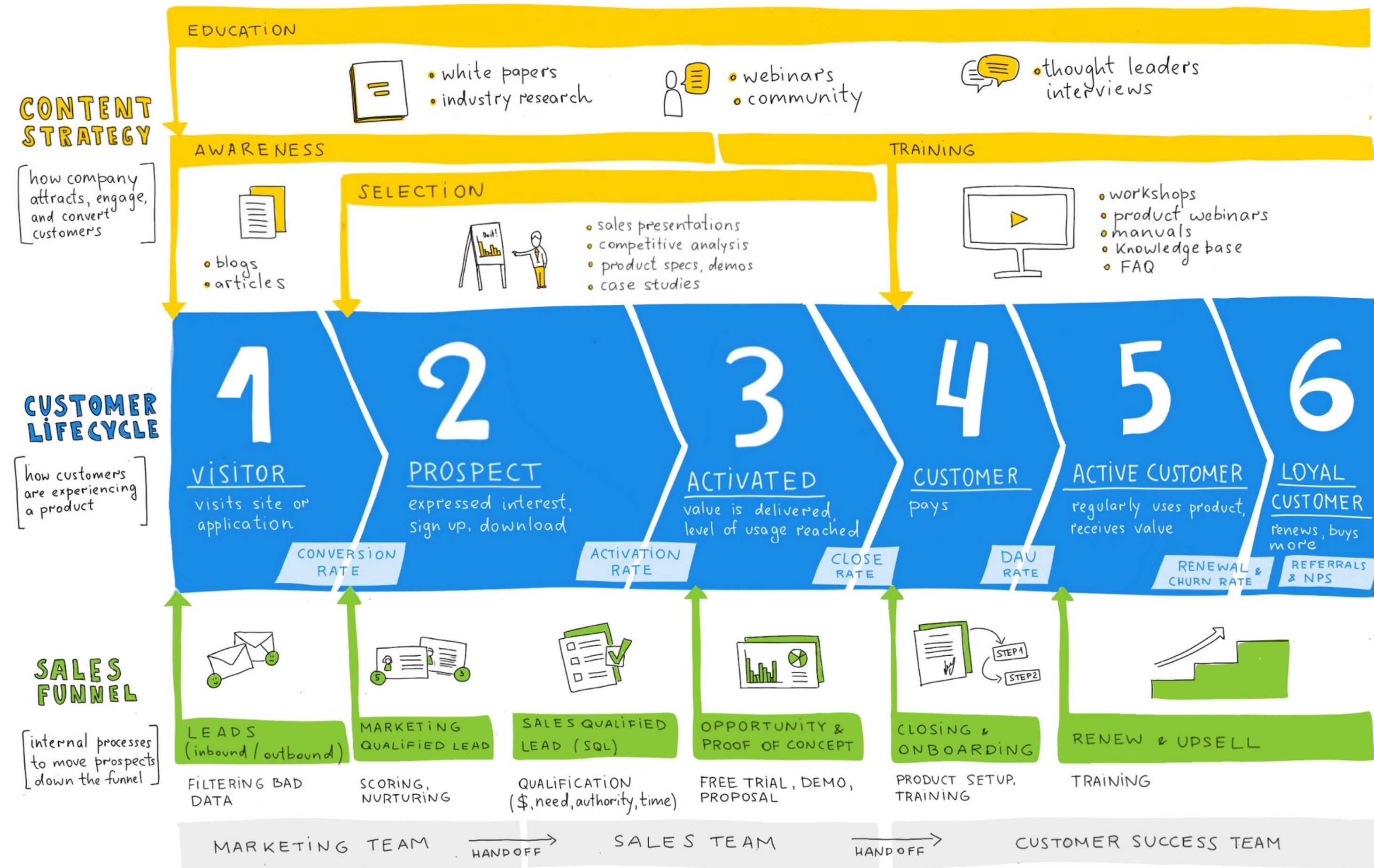
https://ec.europa.eu/maritimeaffairs/atlas/maritime_atlas/#lang=EN



CUSTOMER ACQUISITION

CUSTOMER-CENTRIC APPROACH TO ACQUISITION PROCESS

by MyK Pono @myxys



CRAFTED @STANFY



Daily Forecast for fishing associations and yacht clubs

- High resolution forecast
- Available on web and sent by e-mail (pdf)

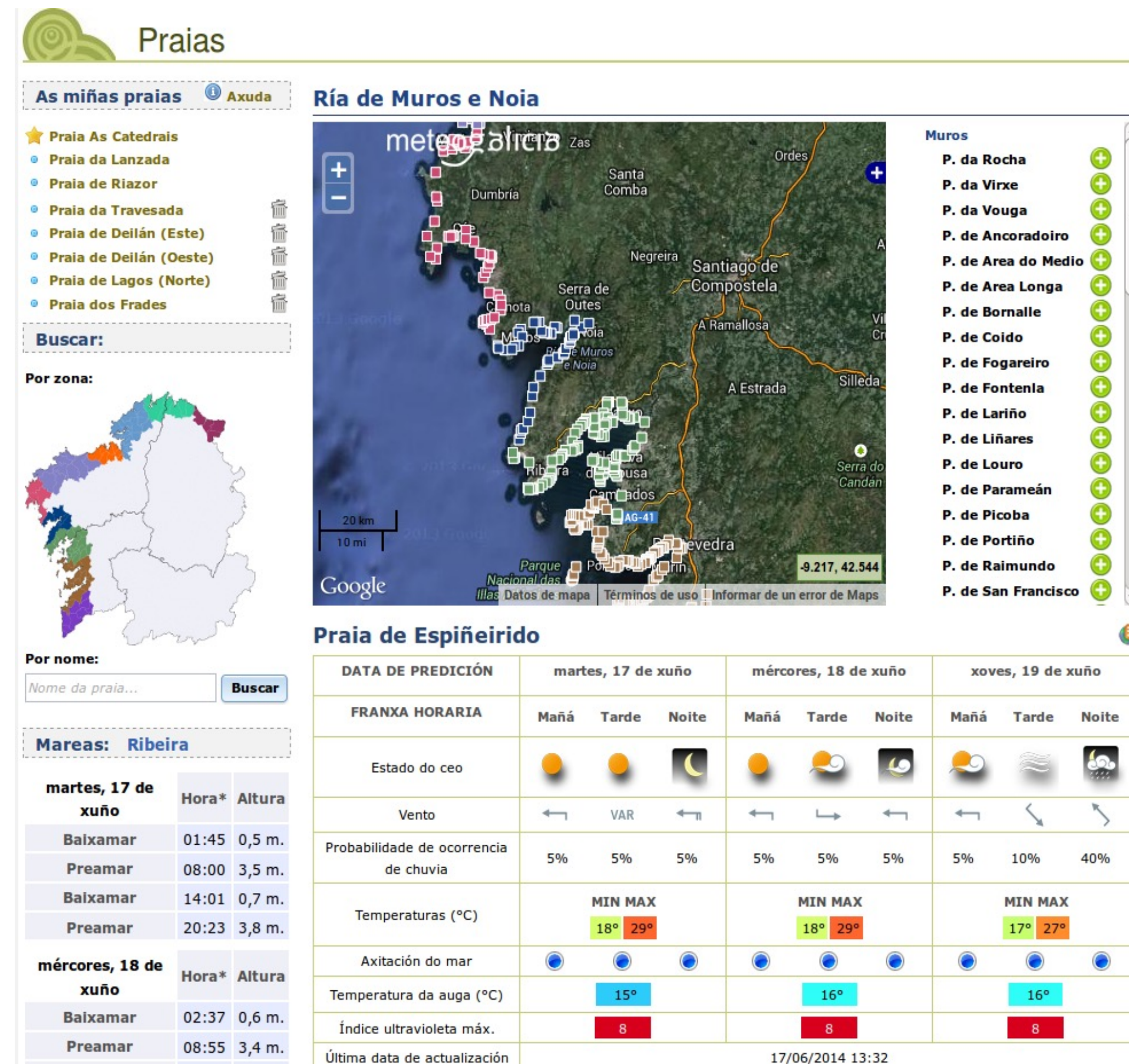


XUNTA DE GALICIA CONSELLERÍA DE MEDIO AMBIENTE, TERRITORIO E INFRAESTRUTURAS Secretaría Xeral de Calidade e Auditoría Ambiental		MALPICA (43° 19' 24" -8° 48' 24")		METEOGALICIA Creada o martes, 24 xaneiro 08:00							
24 xaneiro 2012		00:00	03:00	06:00	09:00	12:00	15:00	18:00	21:00		
Estado do ceo											
Vento											
Temperatura do aire (°C)			13°	12°	13°	13°	13°	13°	13°		
Altura significativa (m)		2.41	2.44	2.44	2.38	2.29	2.21	2.11	1.98		
Dirección do mar											
Temperatura da auga (°C)											
Período da onda		11	11	12	12	11	11	11	11		
25 xaneiro 2012		00:00	03:00	06:00	09:00	12:00	15:00	18:00	21:00		
Estado do ceo											
Vento											
Temperatura do aire (°C)		12°	12°	12°	12°	14°	13°	13°	13°		
Altura significativa (m)		1.84	1.71	1.61	1.52	1.53	1.51	1.45	1.35		
Dirección do mar											
Temperatura da auga (°C)											
Período da onda		11	10	10	10	10	10	10	10		
26 xaneiro 2012		00:00	03:00	06:00	09:00	12:00	15:00	18:00	21:00		
Estado do ceo											
Vento											
Temperatura do aire (°C)		13°	13°	12°	12°	12°	12°	12°	12°		
Altura significativa (m)		1.3	1.54	2.29	2.86	3.18	3.99	5.28	5.77		
Dirección do mar											
Temperatura da auga (°C)											
Período da onda		10	10	11	12	12	13	14	15		

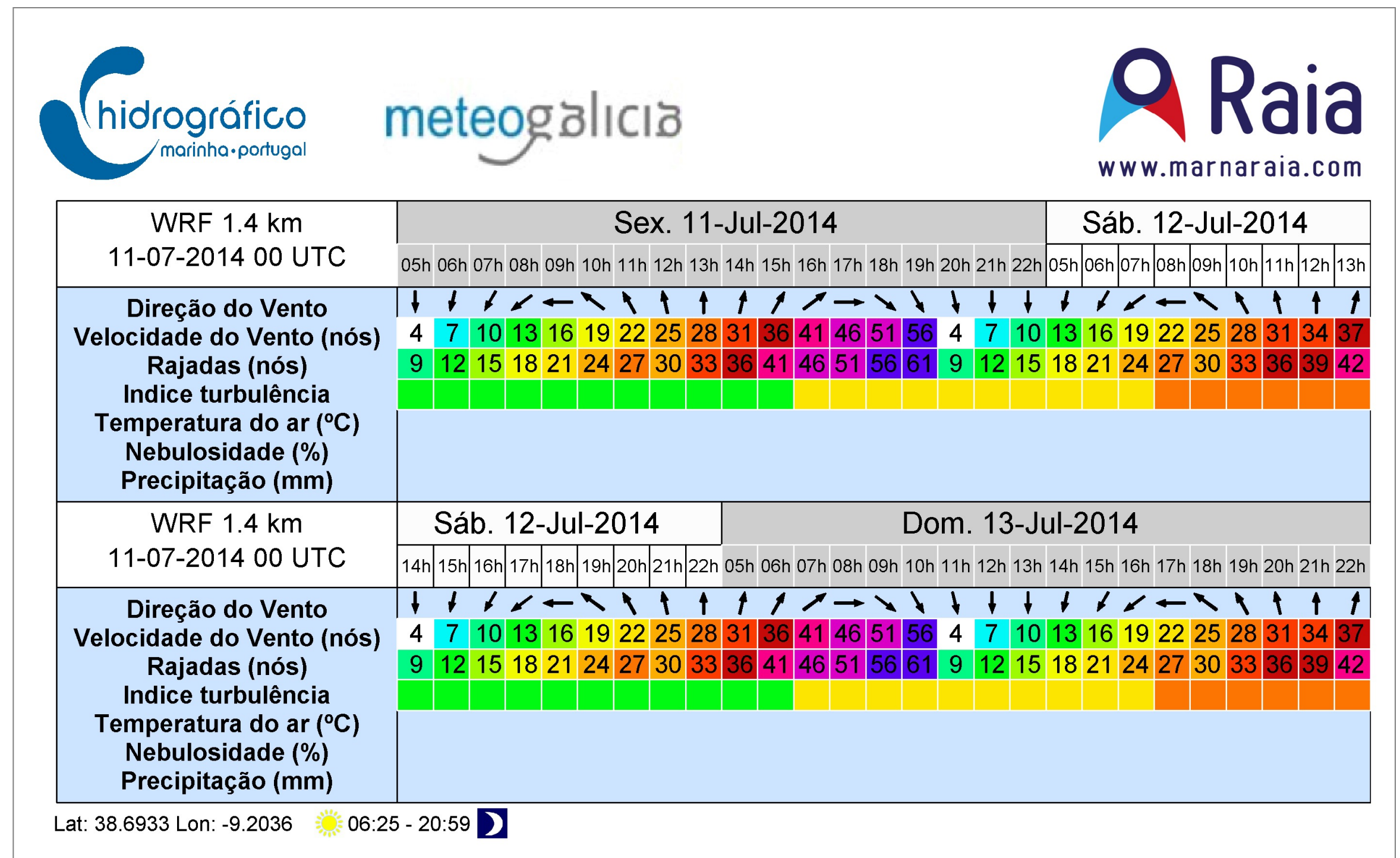
Vento: a dirección en graos meteorolóxicos ó nivel do mar.
 Altura significativa (m): altura característica da distribución de
 Dirección do mar: dirección media de propagación de ondaxe.
 Período da onda: período pico.

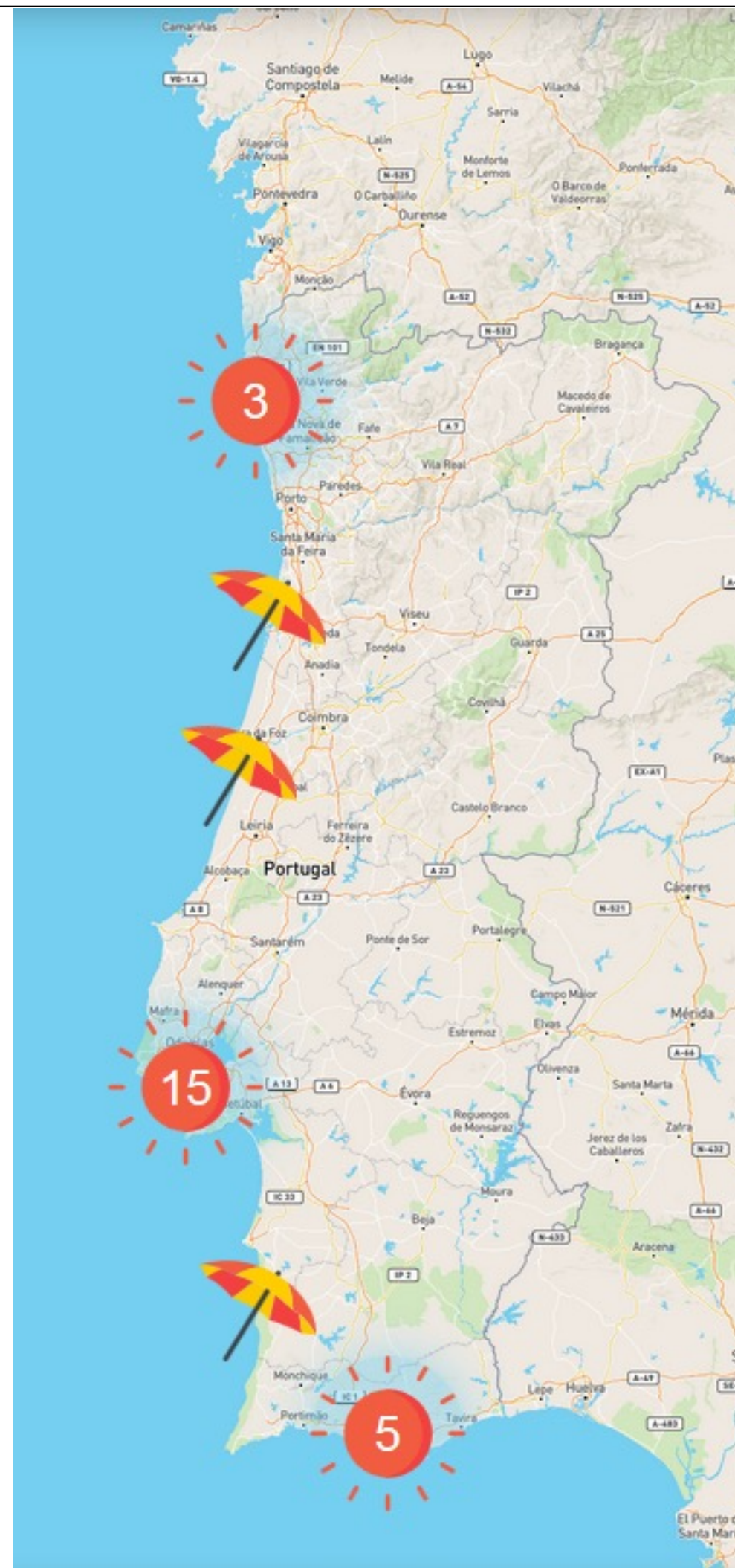
Aviso para navegación
 Os datos proporcionados son resultado da utilización dos modelos de
 predición de ondas WaveWatch III e SWAN e do modelo de predición
 meteorolóxica WRF.
 As horas amosanse en horario UTC.
 Para ver máis detalles sobre a operativa e a fiabilidade dos modelos e da
 predición consulte a páxina web: www.meteogalicia.es

Beach Forecasts

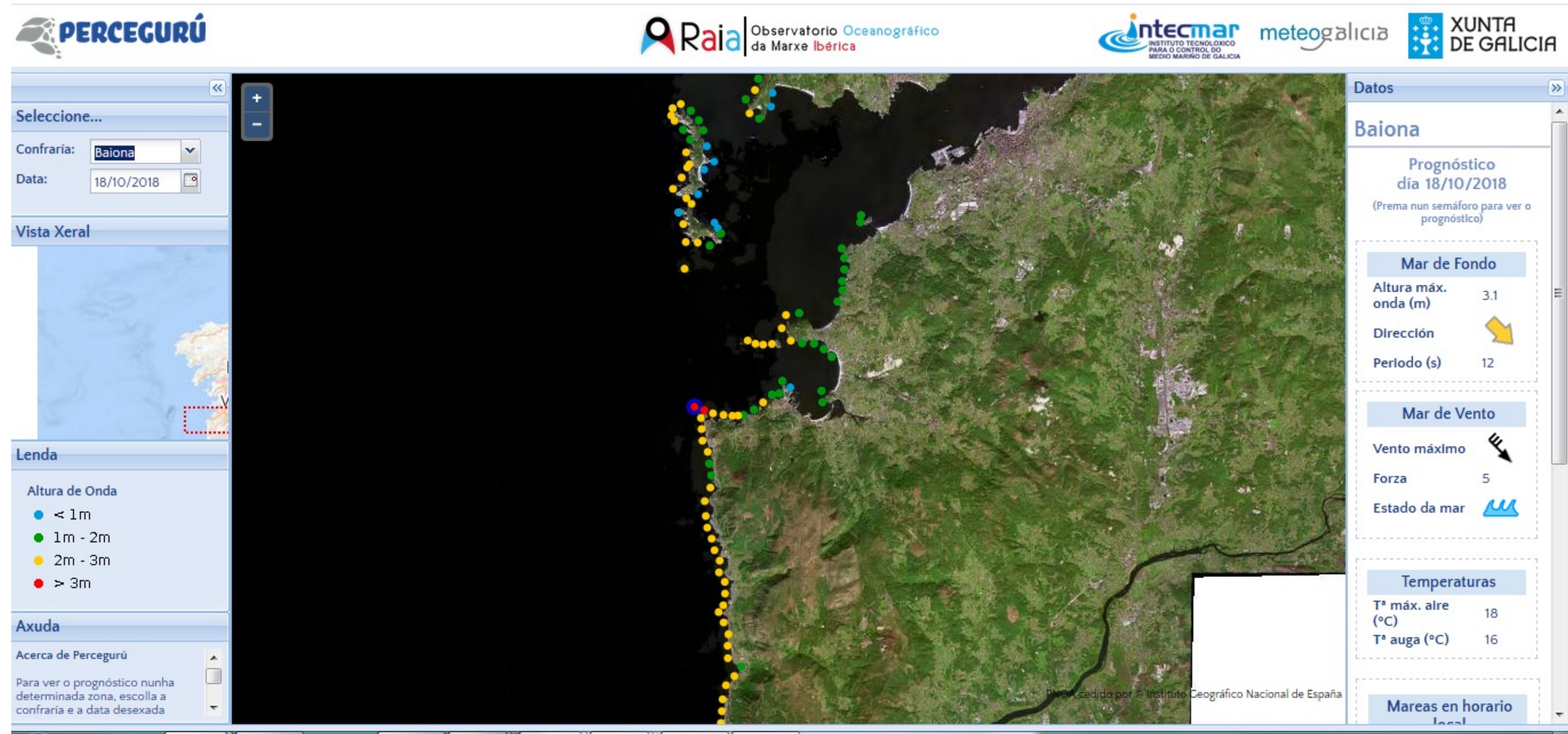


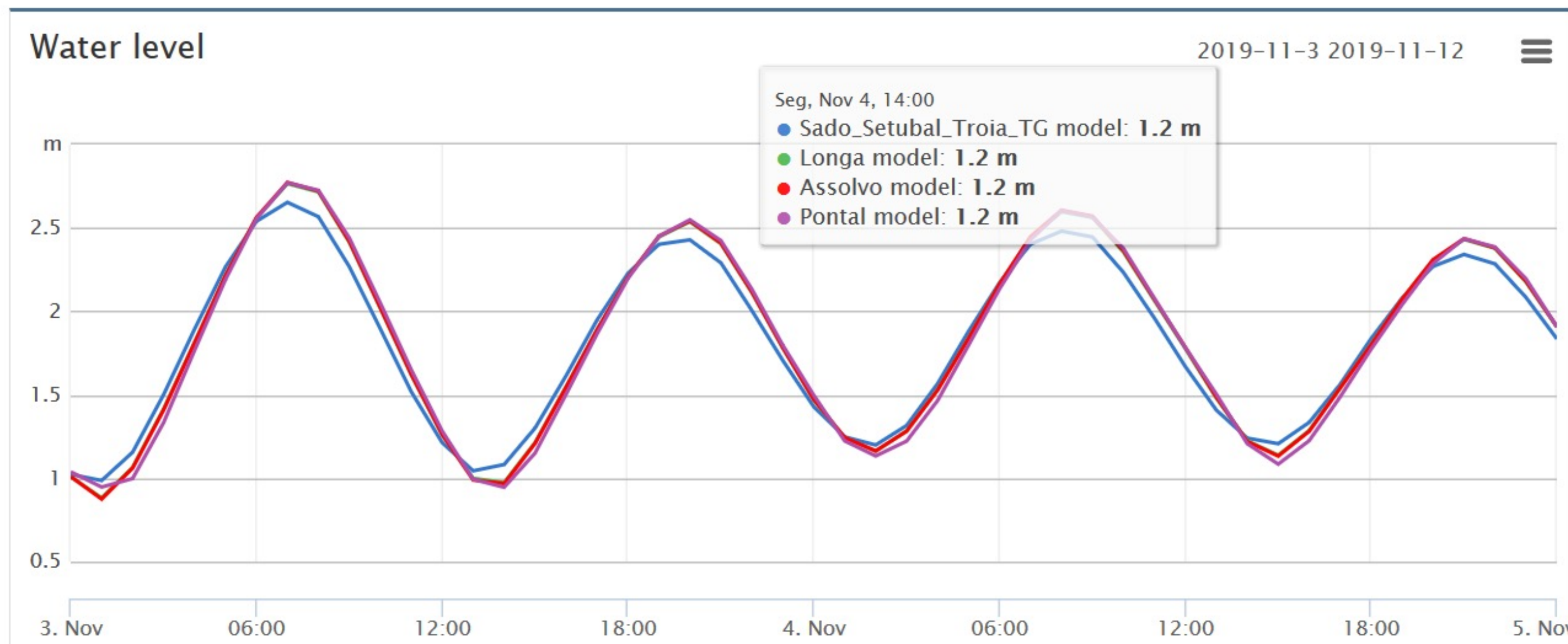
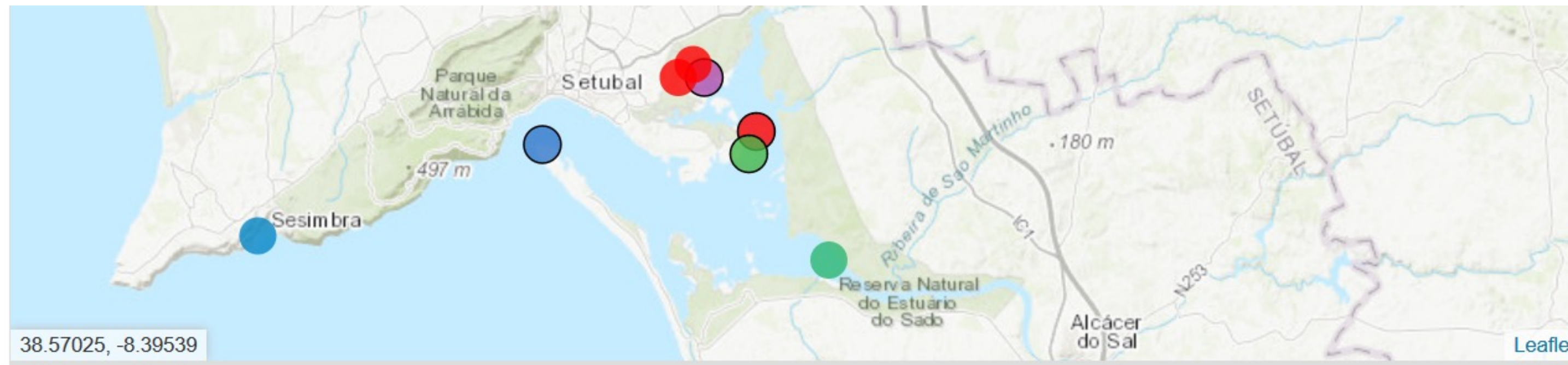
Kite Surf Forecasts





State of the sea for Barnacle Harvesting





<http://forecast.maretec.org/stations>

Available Parameters

Water level

CHART

CLEAR

Data info

Model data source:

- MARETEC:



- Sado_Setubal_Troia_TG
- Longa
- Assolvo
- Pontal



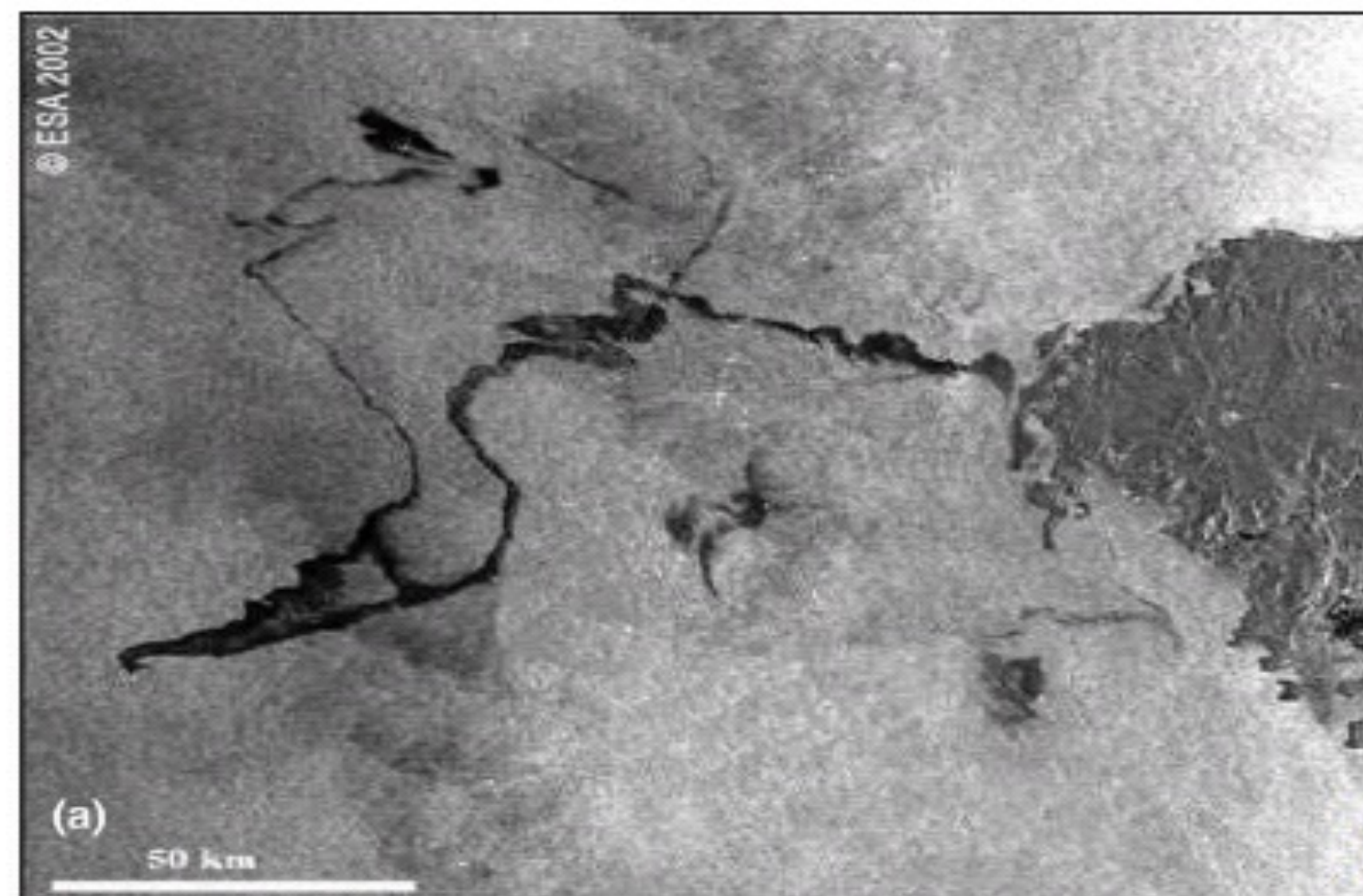
FORCOAST



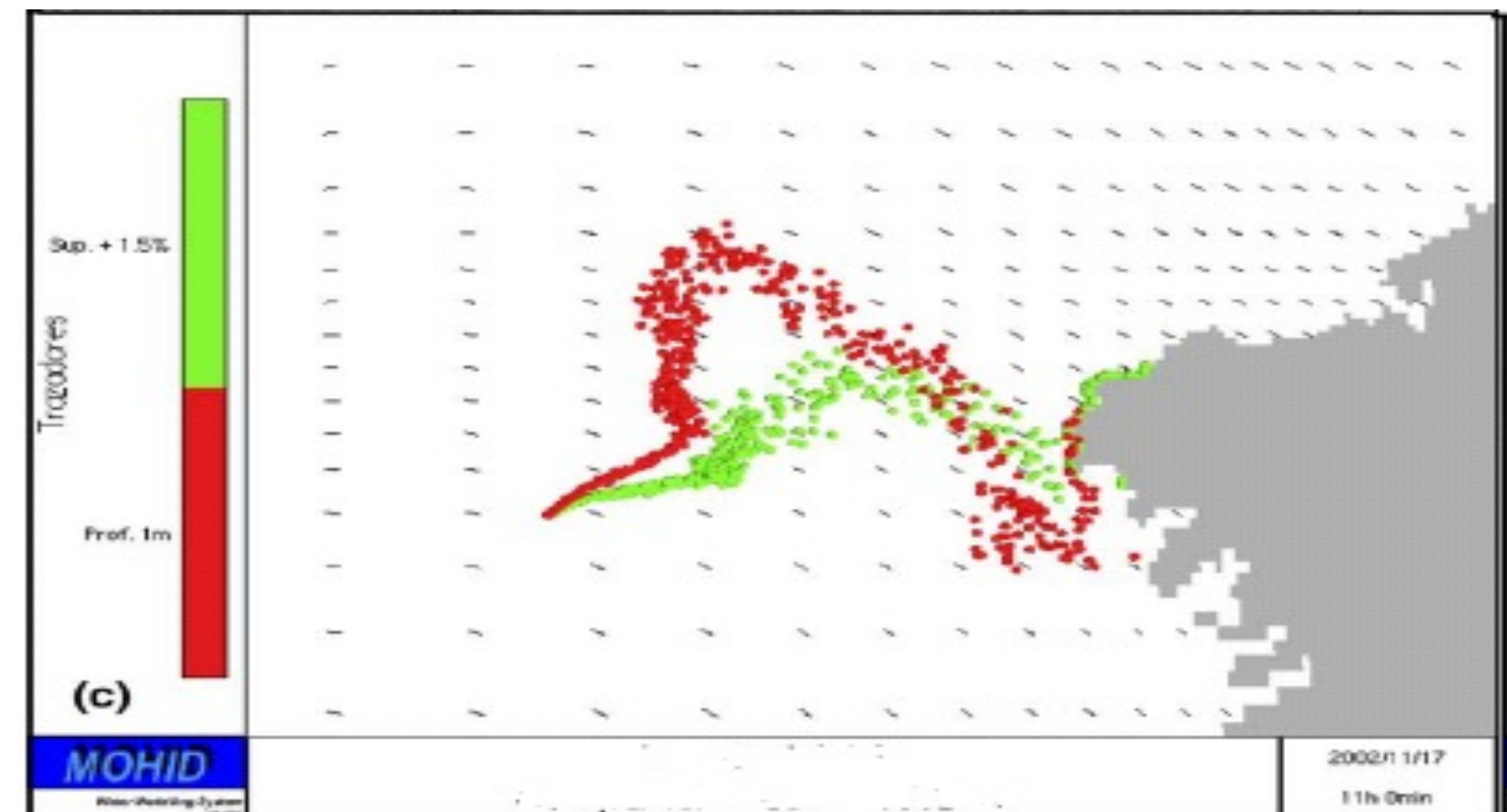
Prestige (2002)

Oil Spill simulation before ship break

ENVISAT satellite image taken on
17th November 2002

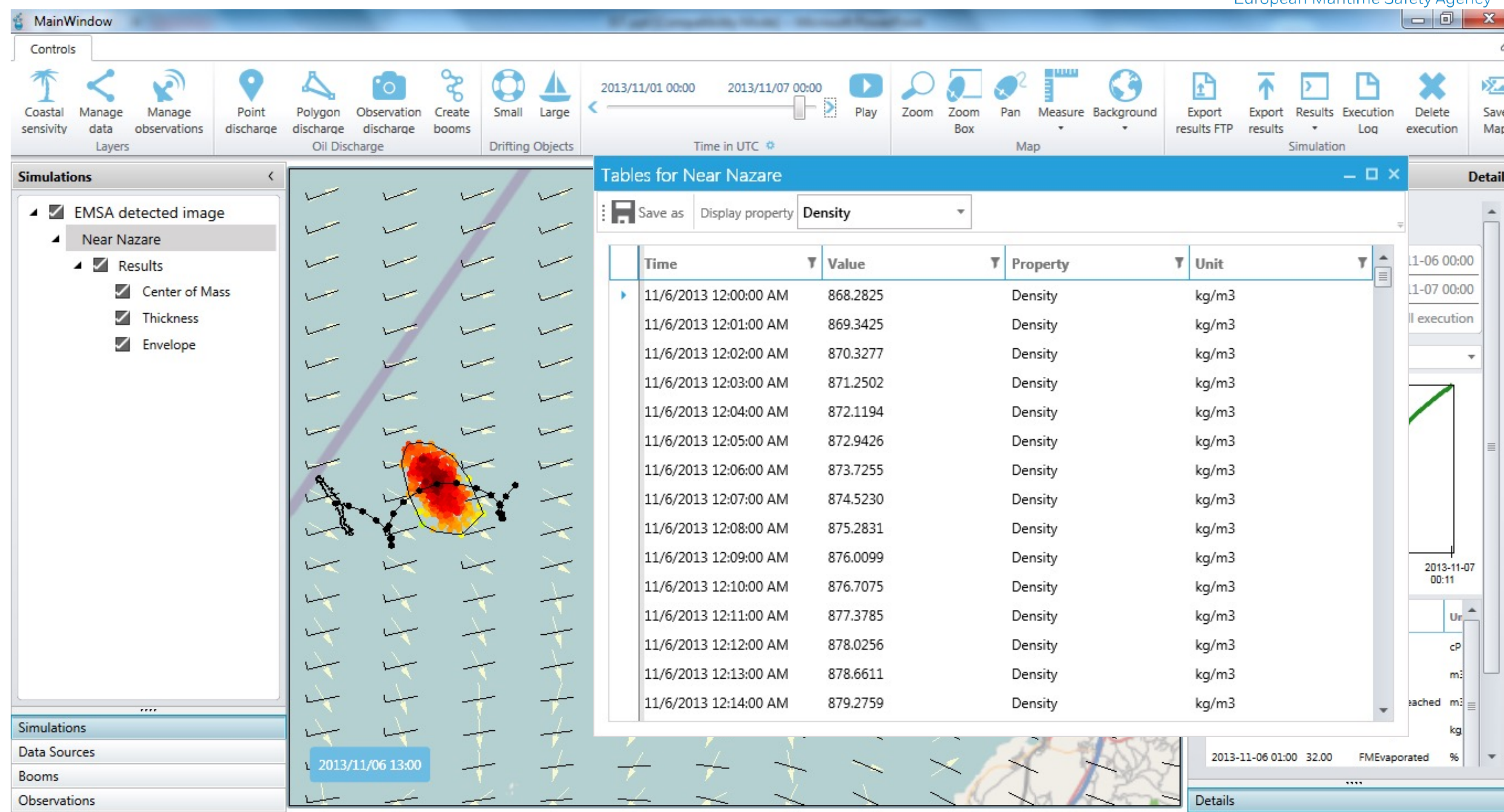
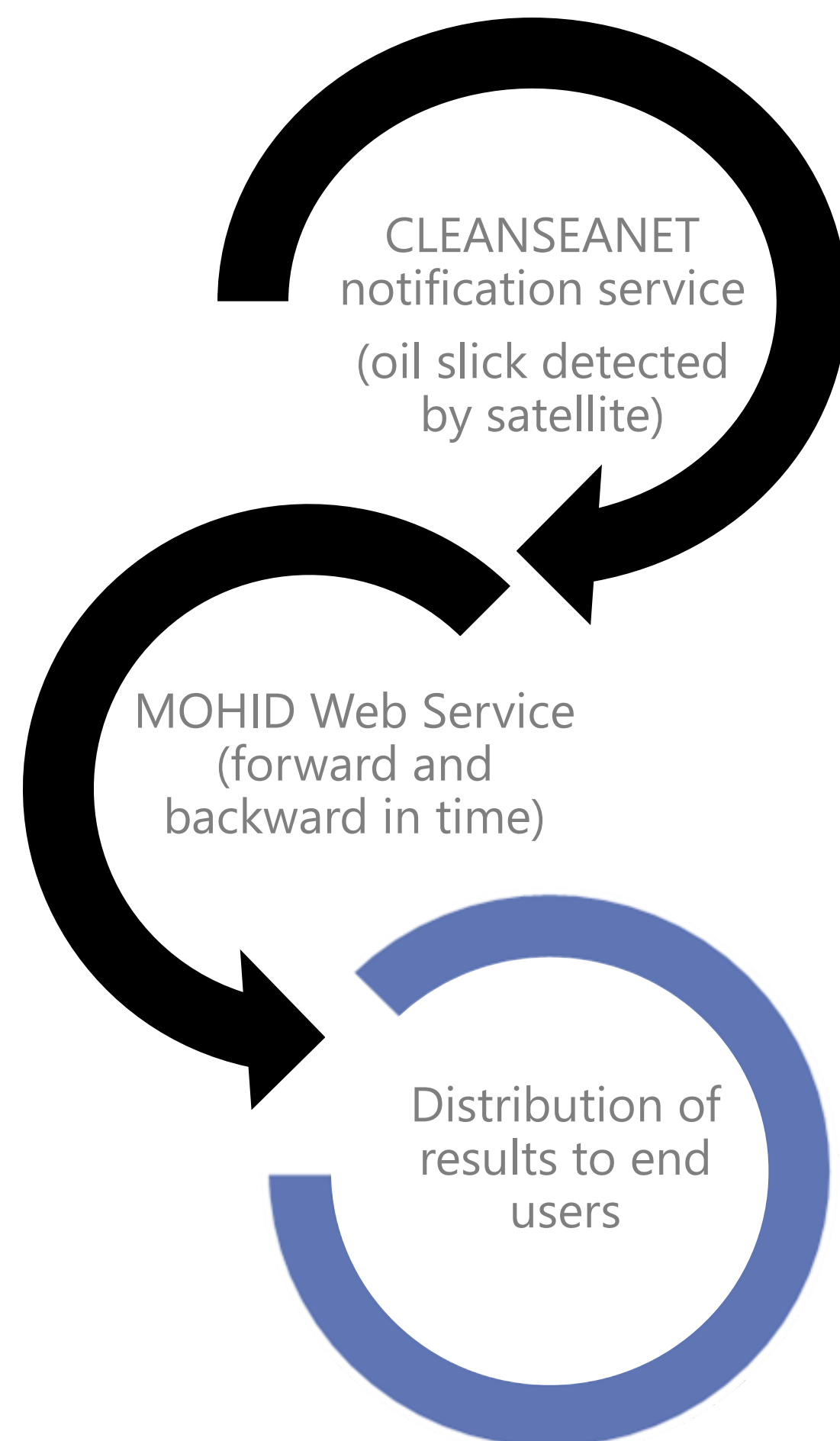


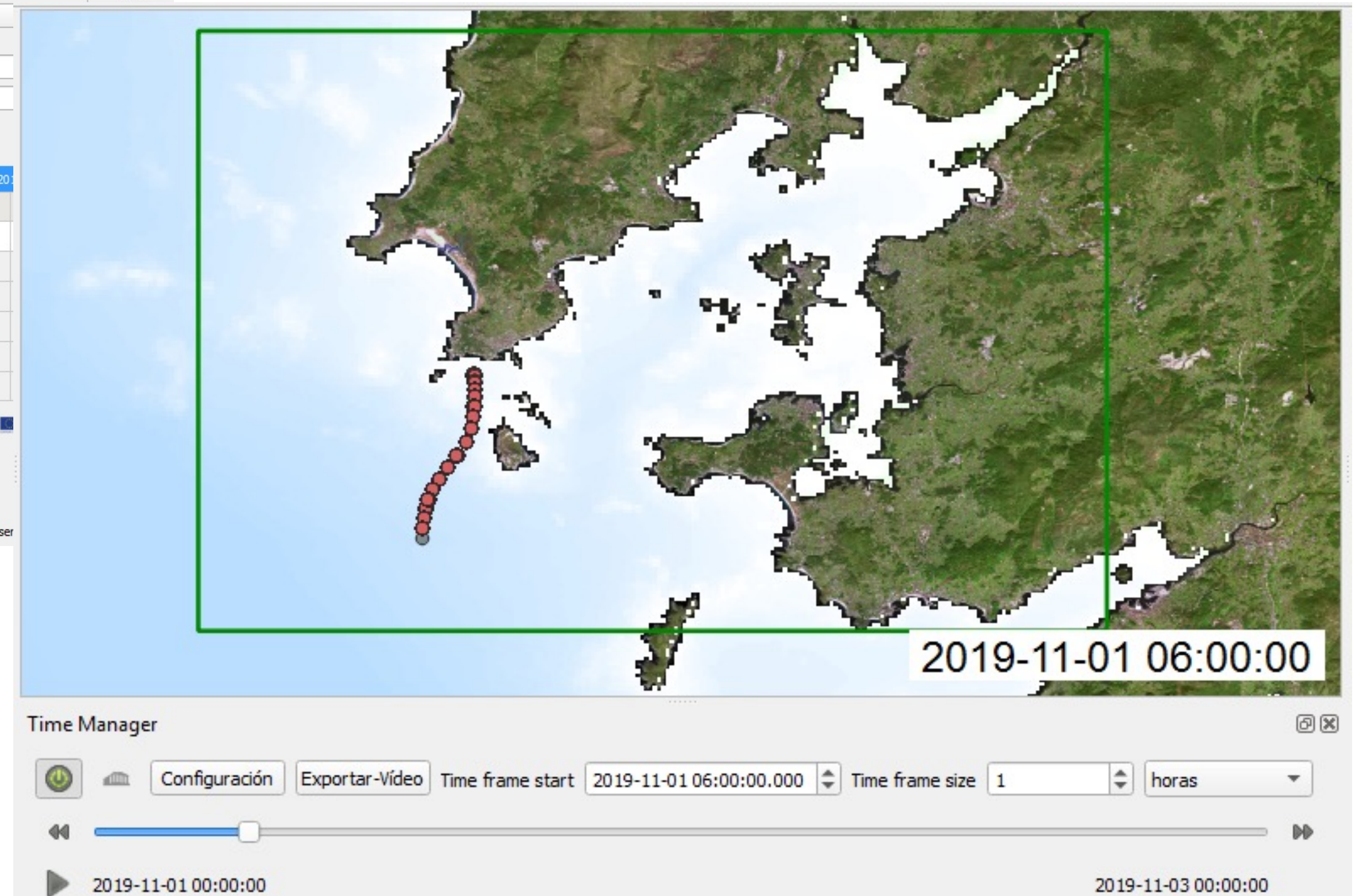
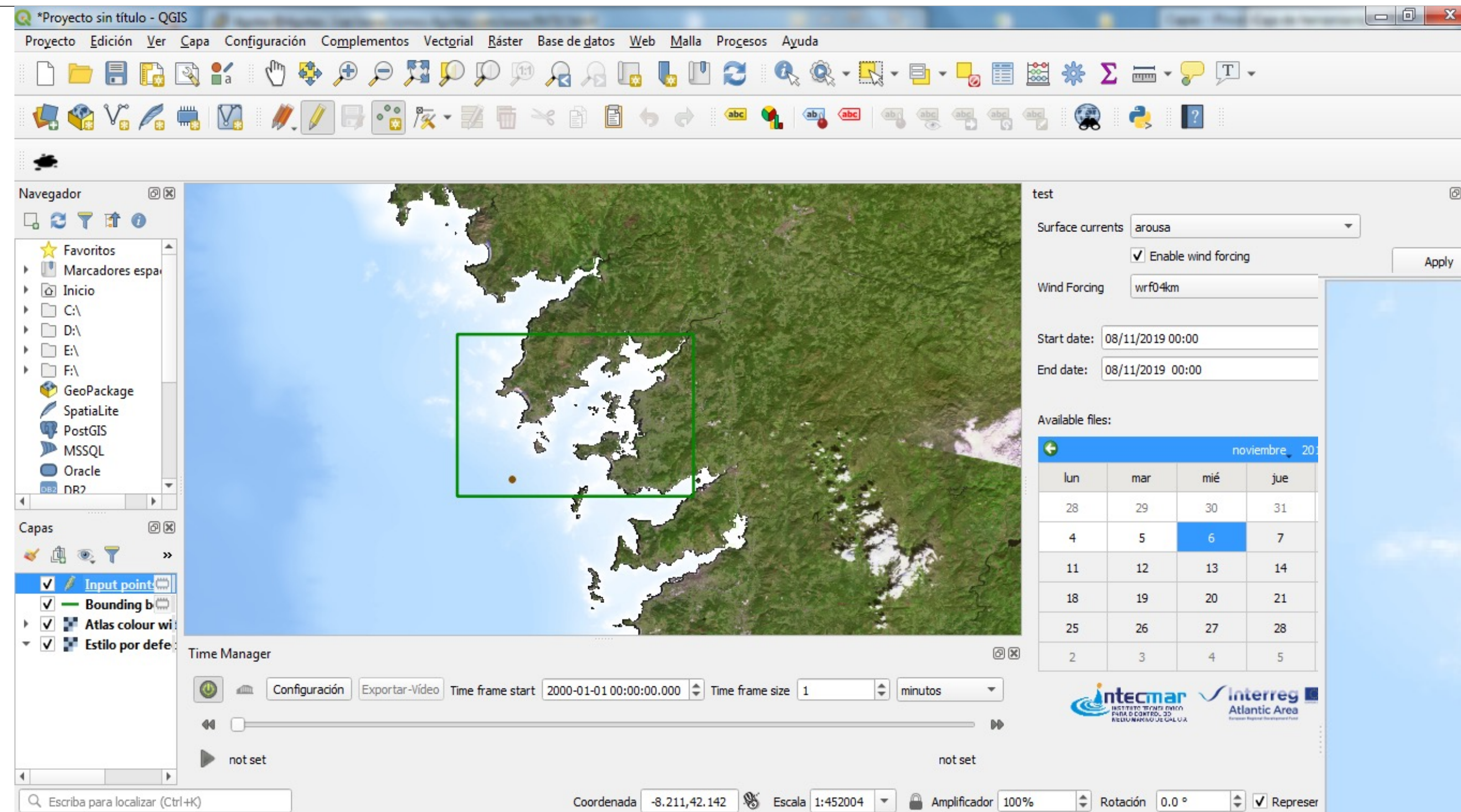
MOHID simulation, with tracers at
different depths: surface tracers
(green) + 1m depth tracers (red)



ARCOPOL Oil Spill Simulator (OSS)

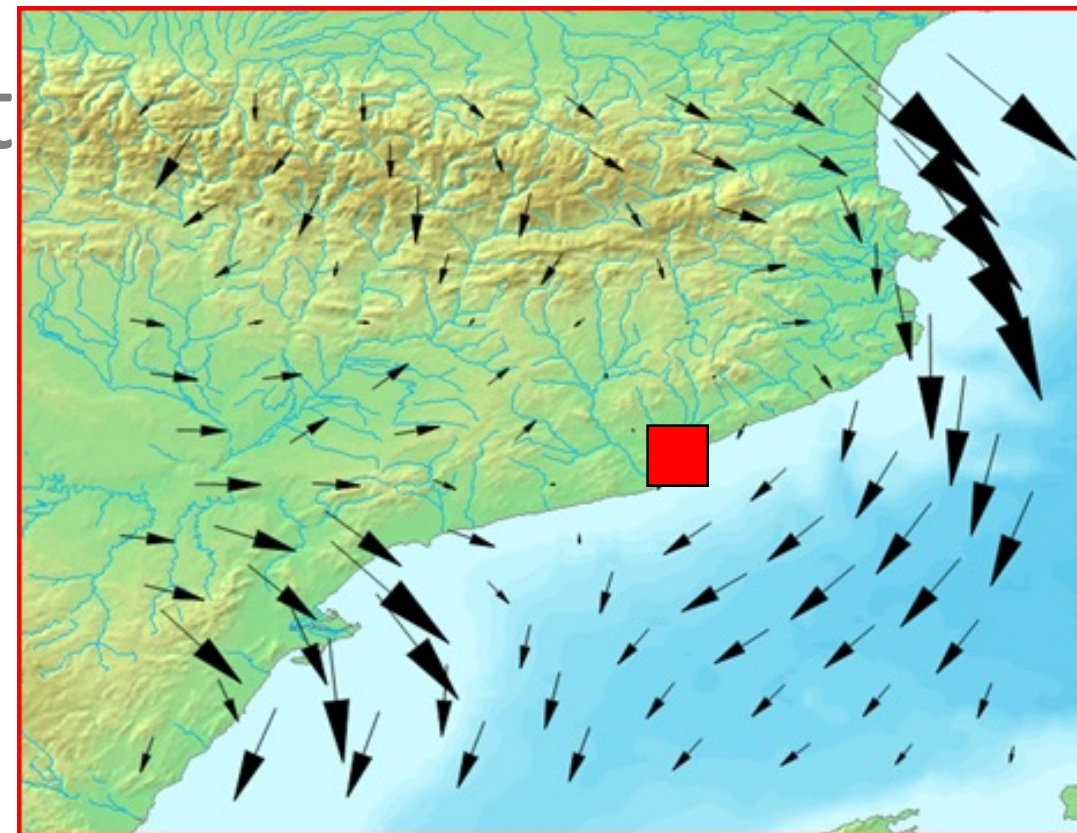
Protocol with EMSA European Maritime Safety Agency



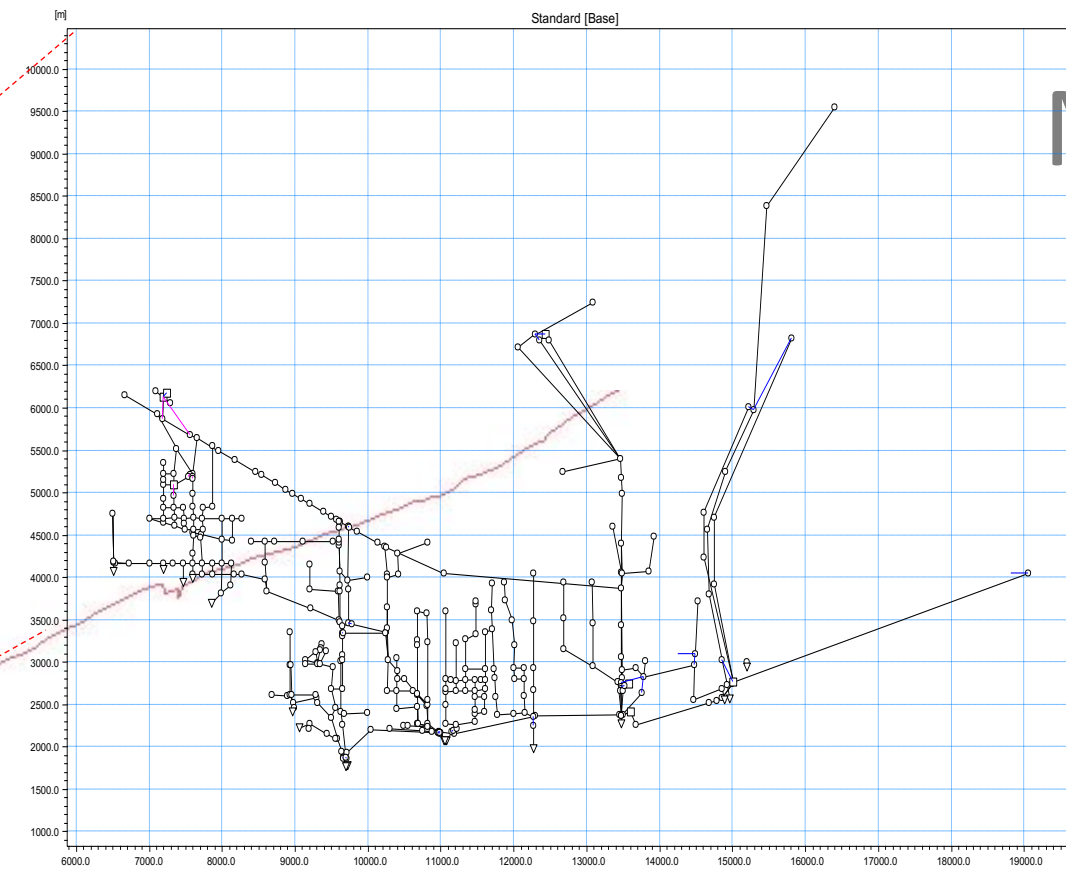


Ulysses MOHID Applications | Risk Assessment - Bathing Water Quality (Barcelona)

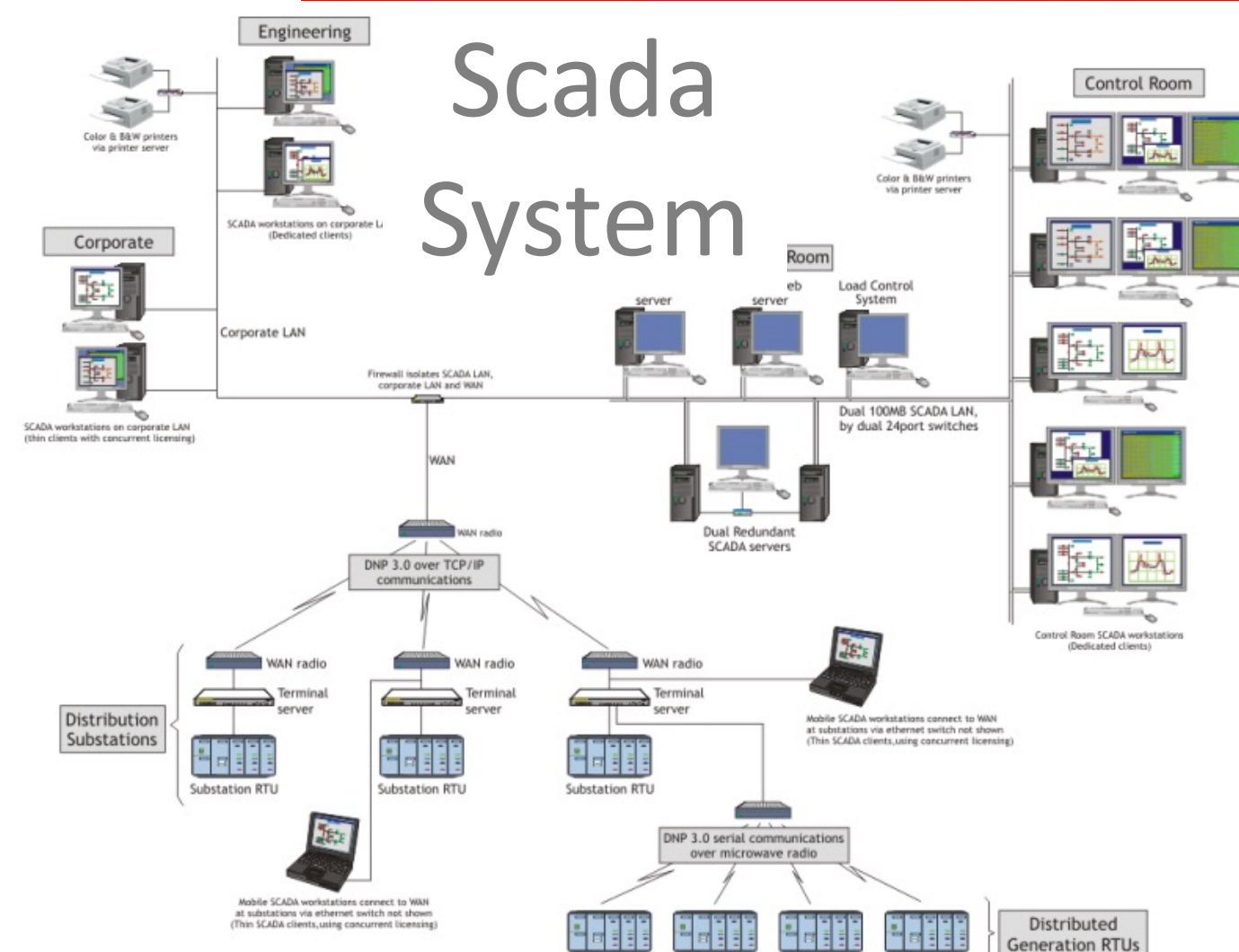
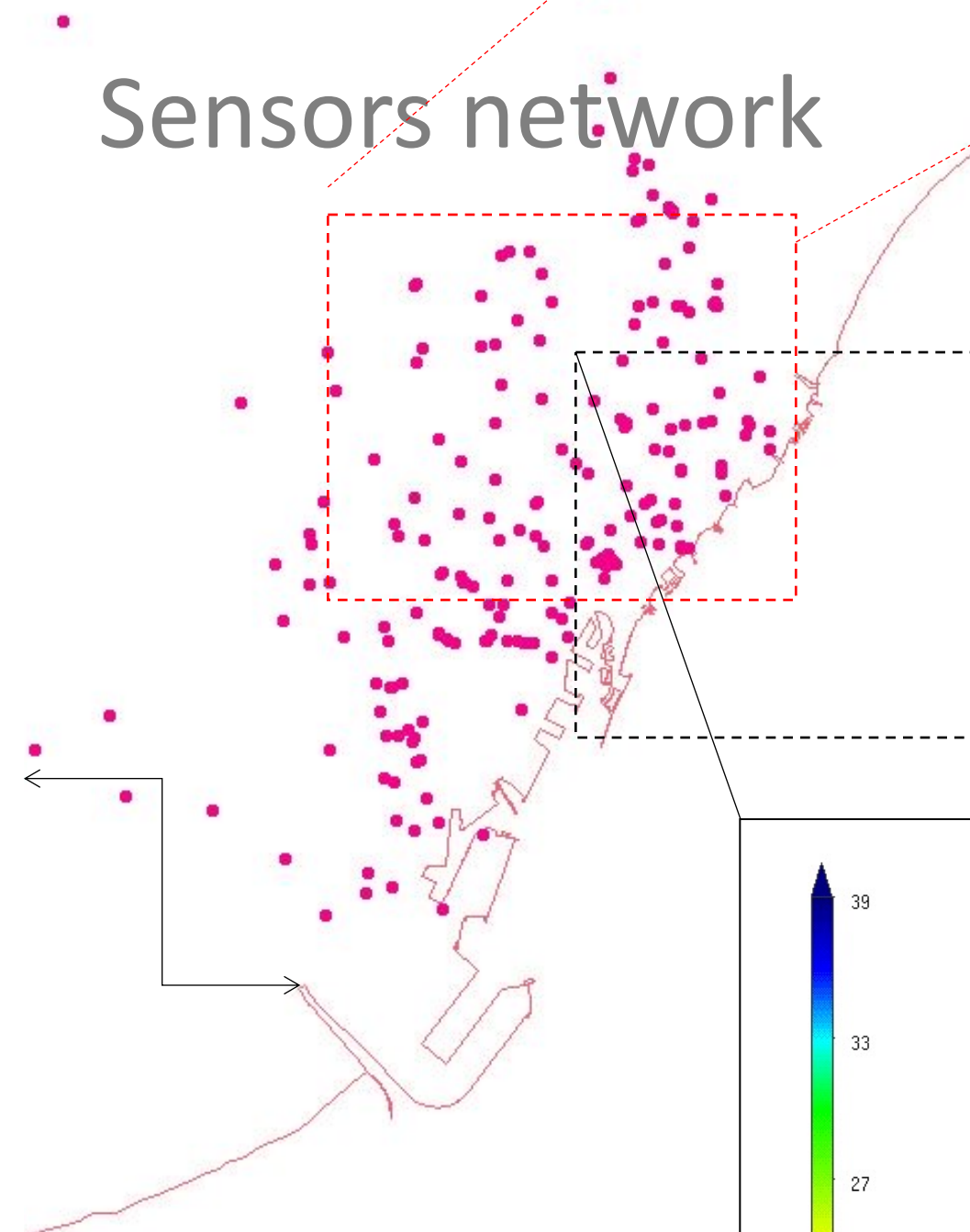
Wind forecast



Mouse model

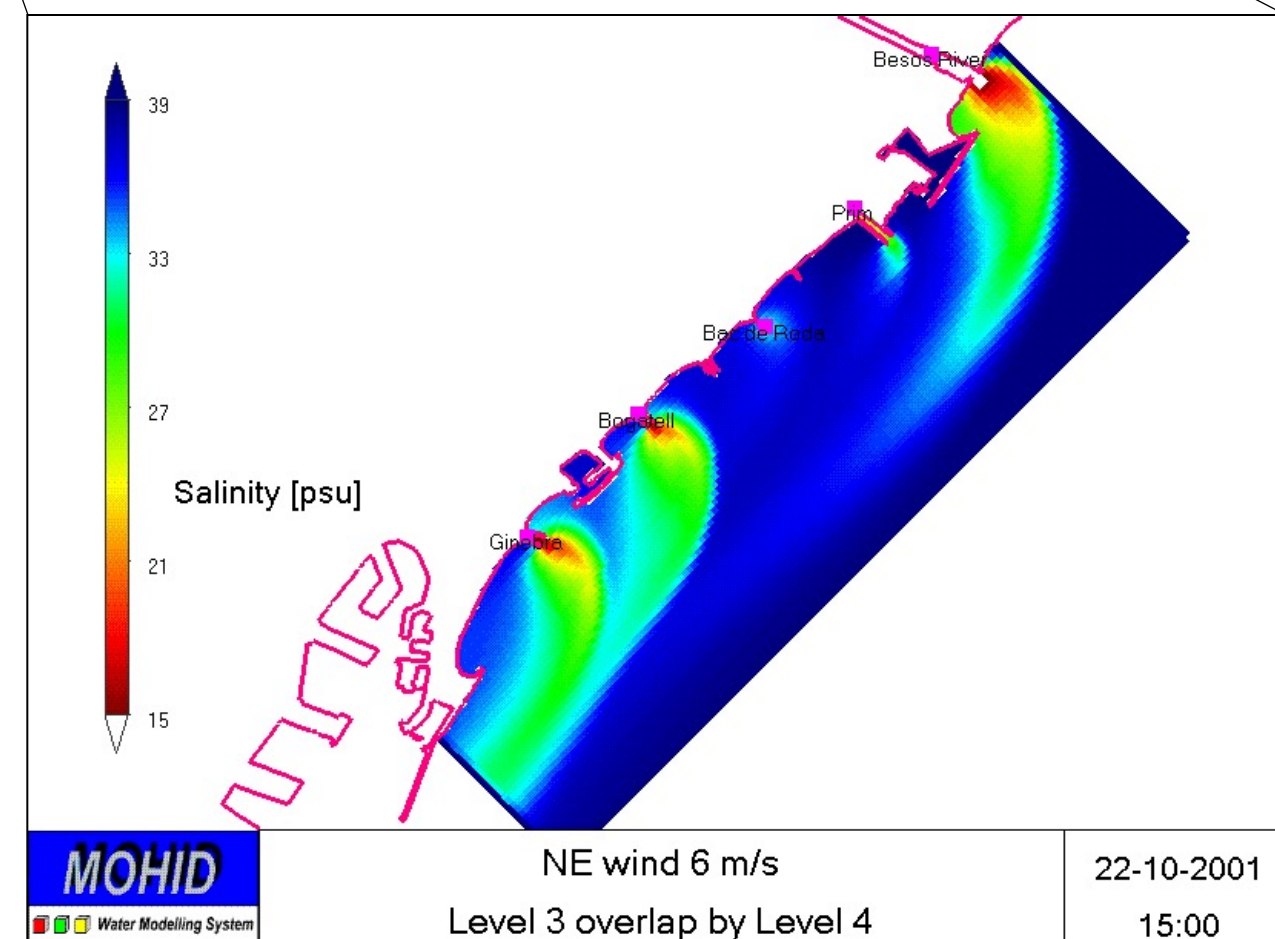
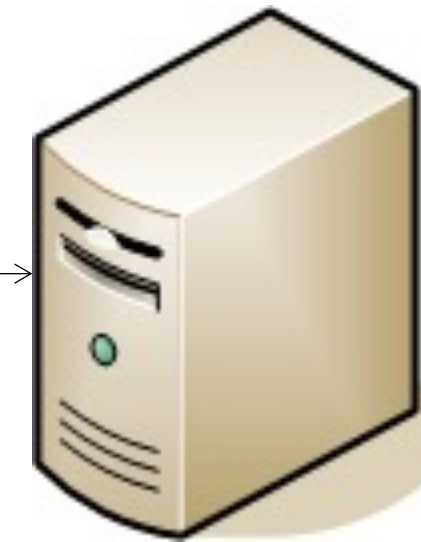


Sensors network

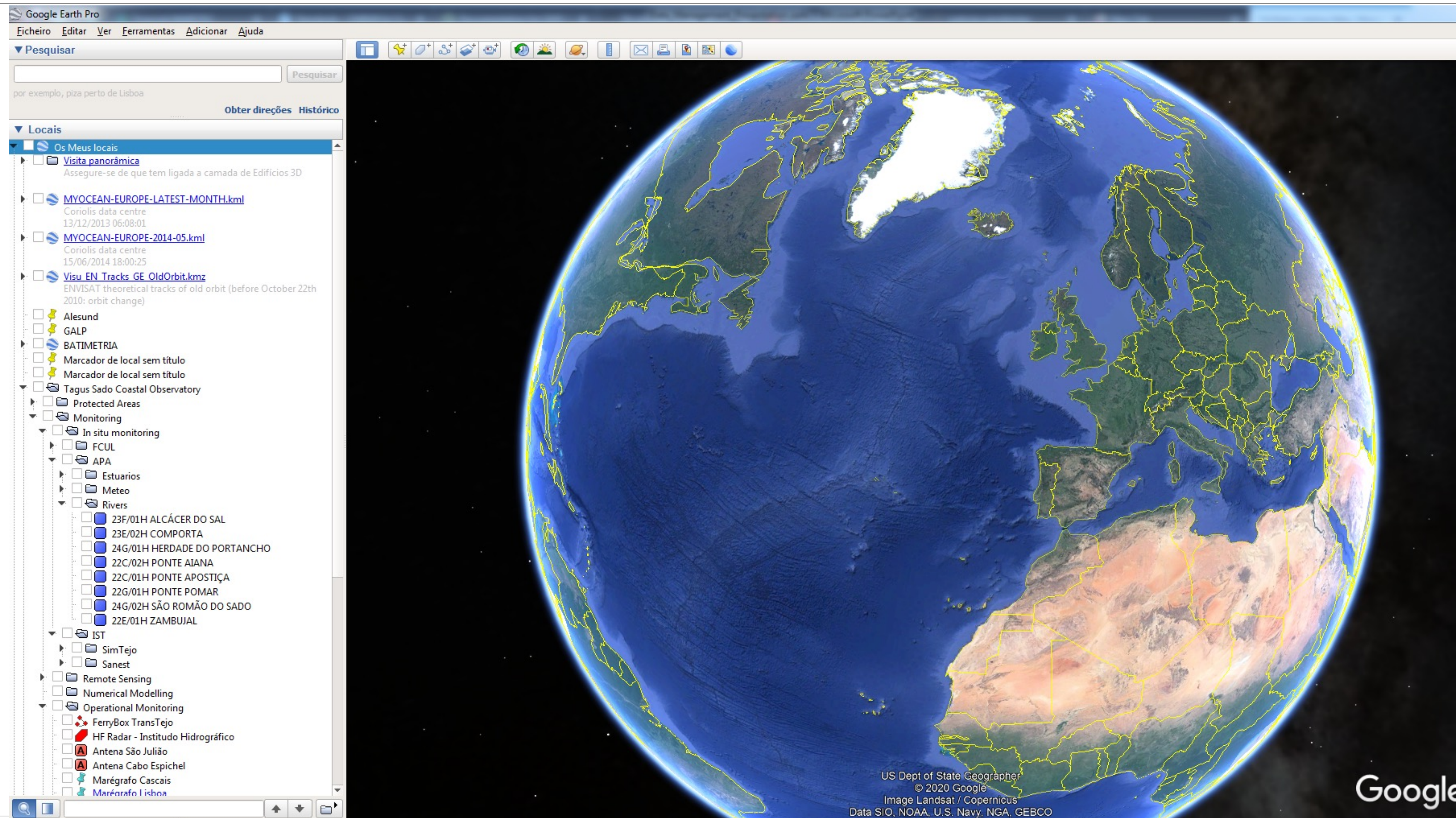


Oracle

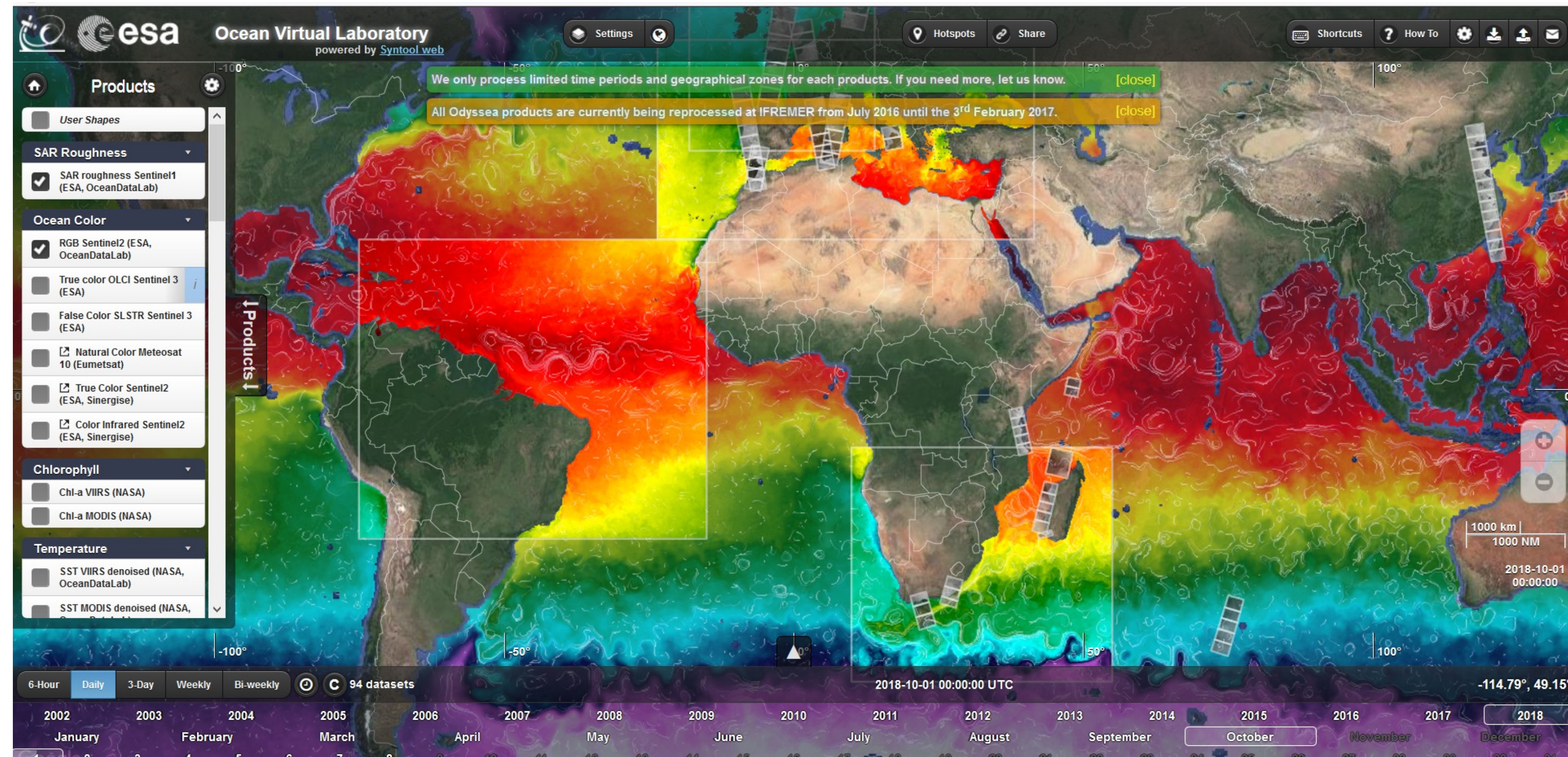
U
Data Base

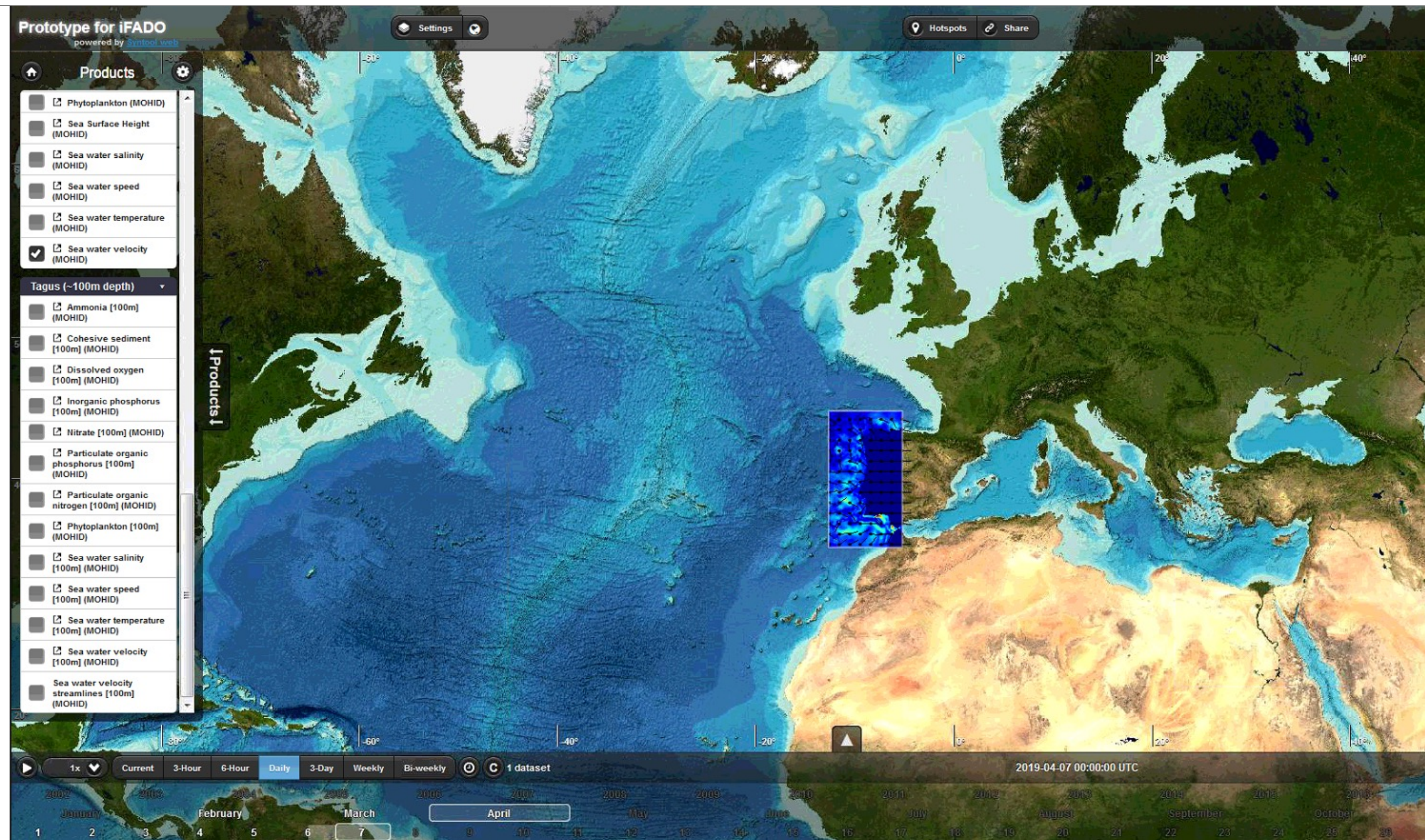


Ulissee Cross-platform services Web Map Service (WMS)



<https://ovl.oceandatalab.com/> syntool web





Questions or comments to:
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francisco.campuzano@colabatlantic.com

Thank you very much for your attention

Ulisses
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