

Commercial service platform for user-relevant coastal water monitoring services based on Earth observation





AIMS AND APPROACH

CoastObs aims at setting up user-relevant and marketable EO-based information products and services. To ensure user uptake of our services we work in an iterative process with our users to our product and system development with their requirements. An important aspect is to lower cost of production by setting up a highly automated information production system using innovative data cube technology and targeting a user base with overlapping interests.

CASE STUDIES



Food availability for mussels Environmental / turbidity monitoring Coastal dynamics

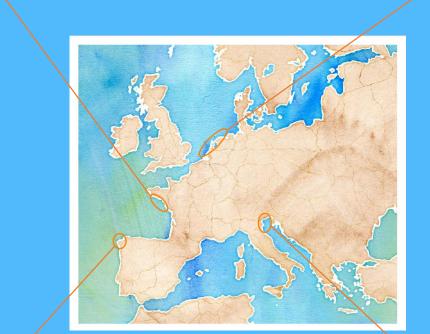
Dutch coast





South Brittany

Intertidal macrophytes Submerged seagrass WFD reporting Sediment plumes



Monitoring, forecast &

harmful algae blooms

(Pseudo-nitzschia spp)

early warning of

Galicia

Adriatic coast Submerged macrophytes Morphodynamics, coastal

erosion & accretion

Environmental monitoring





<u>Standard</u> Products

Innovative Products

• Chlorophyll-a

 \lesssim

- Total suspended matter, turbidity
- Phycocyanin, Coloured dissolved organic matter
- Sea surface temperature

- Seagrass, macro algae
- Phytoplankton size classes
- Harmful/indicator algae species
- Phytoplankton primary production

Higher level products

- Statistics/aggregation
- Indicators for water framework directive reporting
 Harmful algal blooms forecast
- Shellfish culture potential

Near real-time service Harmful algae bloom warning for aquaculture industry

Turbidity threshold monitoring for dredging



Periodic reporting service

Water Framework Directive reporting

Monitoring of trends (e.g. eutrophication, carrying capacity) One-off analysis Spatial suitability analysis Source identification Long-term coastal erosion &accretion analysis



CONSORTIUM



UNIVERSITY of STIRLING

Universida_{de}Vigo





UNIVERSITÉ DE NANTES







This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement n° 776348