

Sentinel-3 products for detecting EUtROphication and Harmful Algal Blooms in the French-English Channel (S-3 EUROHAB).



TASK 2. Activity 2.3: Deliverable T2.3.1. Prototype Harmful Algal Bloom and Water Quality Web alert system.

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Summary: Through dedicated workshops with stakeholders in France and the UK, a prototype web based alert system for harmful algal bloom (HAB) risk and water quality was built by Partner 1 (Plymouth Marine Laboratory). At these workshops, feedback was obtained from a range of stakeholders including; shellfisheries, monitoring organisations, conservation groups, Marine management bodies and academia. The initial design simple and easy to visualise satellite maps, at a resolution of 1km or 300 m, to indicate the presence of the following phytoplankton blooms: *Pseudonitzschia* spp., *Karenia mikimotoi*, *Phaeocystis* spp (provided by partner 1). It also included the water quality indicators; Chlorophyll-a, Particulate Inorganic Carbon, Turbidity (provided by partner 2; IFREMER-Brest) and the Shellfish productivity parameters; Sea Surface Temperature and Rainfall (provided by partner 1). In tandem with the launch of the prototype web alert system, satellite algorithms for the detection of *Lepidodinium chlorophorum*, and environmental proxies for the detection of *Dinophysis* spp., were also being developed by Partner 1 in collaboration with Partners 2, 3 (University of Southampton) and 8 (IFREMER-Port-en-Bessin) through Task 1.2. In addition, from the analyses conducted in Task 1.3., potential dispersion and transport maps were also being developed in consultation with Partners 6 (CRPN) and 7 (D&S-IFCA) and the shell fishery community that they represent.

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