



Unlocking the potential for Integration of Coastal Ocean Observations along Europe Virtual Laboratory

A **Virtual Laboratory** providing the access to a diversified set of **FAIR oriented tools** that take advantage of globally accepted **Best Practices** and standards to support in the **identification, processing, exploration, integrations** and **visualization** of coastal ocean observations and complementary information.

Three services that contribute to the Mission by supporting the protection of marine ecosystems and biodiversity, and the prevention of marine pollution, improving science through in situ observations, with particular emphasis on **European coastal ocean areas**:

- **Thematic Service #1: Transboundary processes and connectivity along the European margins:** Analyzes cross-border ocean circulation and ecosystem linkages to understand how physical and biogeochemical processes connect European coastal regions.
- **Thematic Service #2: Extreme events:** Provides integrated observation and modeling tools to monitor, assess and predict marine extreme events such as storms, heatwaves, and coastal flooding.
- **Thematic Service #3: Ocean glider:** Process autonomous glider data to deliver high-resolution insights into ocean dynamics and water column properties.



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