



Integration of Coastal Ocean Observations Along Europe VLab

SERVICE #2 - EXTREME EVENTS

FAIR coastal observations and analytical services for understanding extreme events in European coastal waters.



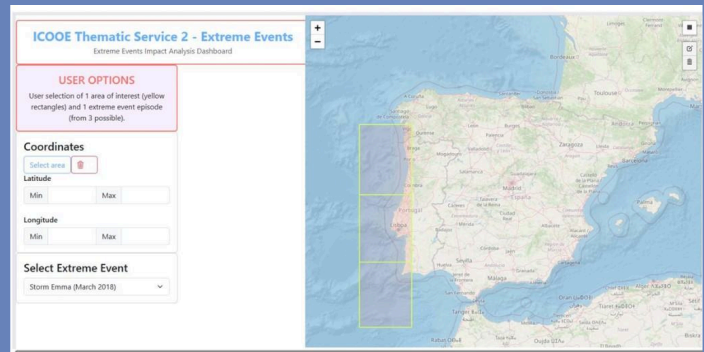
WHAT IS THE EXTREME EVENTS SERVICE?

The Extreme Events Service provides researchers and coastal stakeholders with tools to investigate the impacts of severe ocean and coastal events across Europe.

The service combines observations from JERICO-RI coastal observatories with complementary datasets from EMODnet and Copernicus Marine Services, allowing users to analyse the effects of storms, marine heatwaves, coastal flooding, ocean acidification events and other extreme phenomena.

Users can discover, access, process and visualise multiple datasets through an integrated environment designed to support evidence-based coastal research and management.

EXPLORE EXTREME EVENTS IN EUROPEAN COASTAL WATERS



Example: Dashboard for Thematic Service 2, showing the User Options



COASTAL
OBSERVATIONS



EXTREME EVENT
ANALYSIS



INTEGRATED
VISUALISATION

KEY TOOLS AND SERVICES



DATA DISCOVERY &
ACCESS

Access coastal observations and environmental datasets from European infrastructures.



EXTREME EVENT
CATALOGUE

Explore selected historical extreme events affecting European coastal waters.



IMPACT
ASSESSMENT TOOLS

Evaluate impacts on coastal environments and marine activities.



SEDIMENT DYNAMICS
ANALYSIS

Assess bottom shear stress, sediment mobilisation and seabed impacts.



AQUACULTURE
IMPACT ANALYSIS

Investigate potential impacts on aquaculture installations and coastal operations.



VRE INTEGRATION

Fully integrated in Blue-Cloud Virtual Research Environment for seamless access.

WHO CAN BENEFIT?



Researchers & scientists



Coastal observatories



Policy makers



Environmental Analysts



Trainers & students



Aquaculture operators

TRAINING AND RESOURCES



OTGA training lessons
Step-by-step learning modules.



Video tutorials
Guidance on accessing and using the VLab.



Documentation
User manuals and technical guidance.



Reproducible workflows
Transparent, FAIR and reusable analytical workflows.

HOW TO GET STARTED

1

Register on the Blue-Cloud Gateway
<https://blue-cloud.d4science.org/>

2

Access the VLab:
Integration of Coastal Ocean Observations Along Europe

3

Select an extreme event, choose your area of interest and start exploring impacts and environmental conditions.

SCAN TO ACCESS
THE VLAB



Funded by
the European Union



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