

HAZRUNOFF

PROJECT

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<http://www.hazrunoff.eu/>



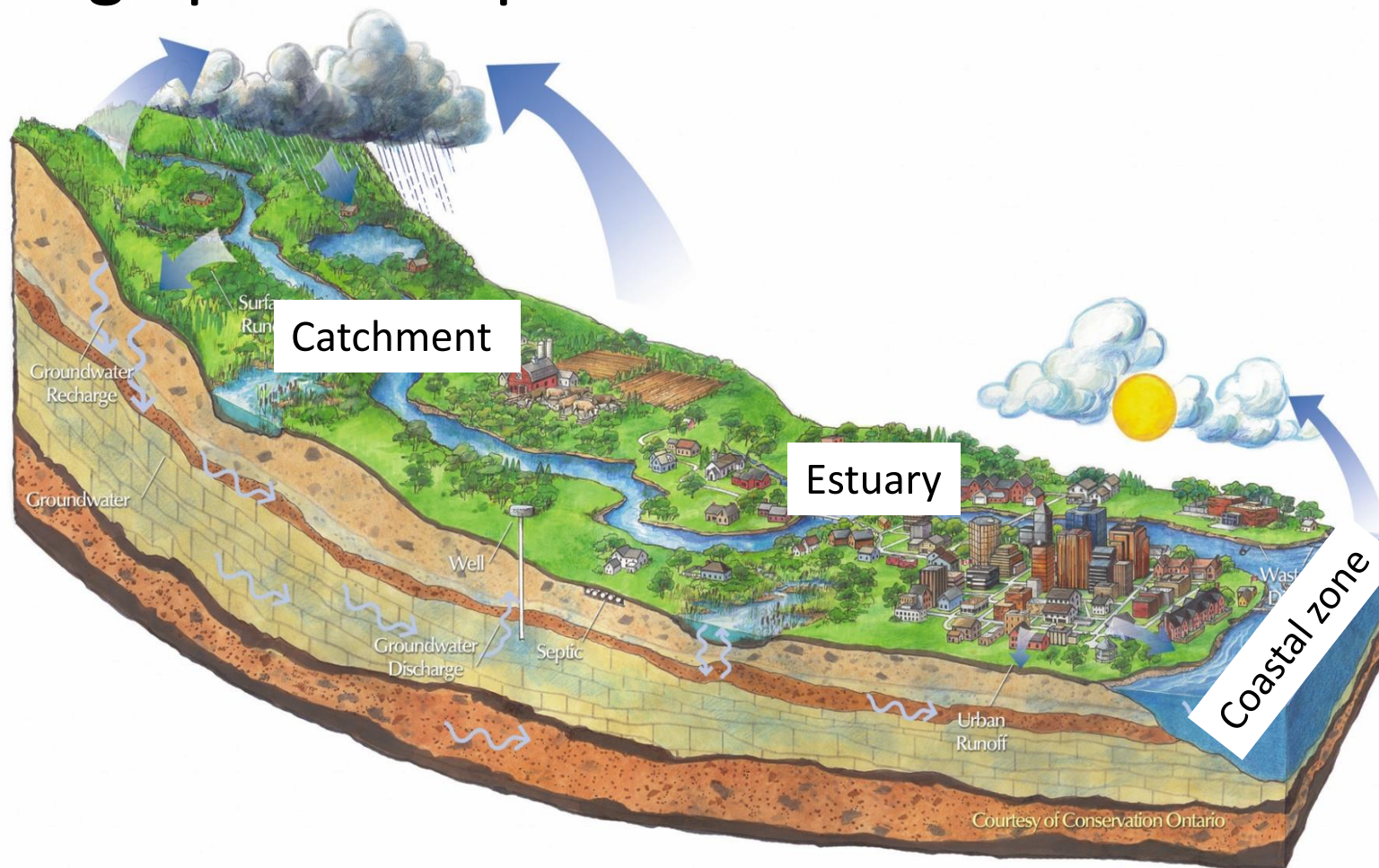
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Civil Protection
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Integration of sensing and modelling technologies for early detection and follow-up of hazmat and flood hazards in inland, transitional and coastal waters



Project Concern – Flood events and hazmat contamination

Geographical Scope



Continuum between the rivers, transitional waters and coastal areas process



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HazRunoff objectives

- To fill the gaps around knowledge and preparedness involving early warning & detection, follow-up, and early response to flooding and hazmat contamination in inland and transitional waters, including urban areas
- To provide a fast, reliable, flexible and comprehensive framework to face different or combined types of flooding and hazmat pollution in transitional waters, integrating:
 - in-situ sensing technologies;
 - airborne (UAV/drones) and satellite remote sensing;
 - holistic high resolution modelling;
 - operational tools for situational awareness and crisis management;
 - improved contingency planning and adapted protocols for response and communication.



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Consortium

- 2 year project from 01/01/2018 till 31/12/2019
- **Partnership**
 - Instituto Superior Técnico (IST) (Coordination)
 - Bentley Systems
 - Centre de documentation, de recherche et d'expérimentation sur les pollutions accidentelles des eaux (CEDRE)
 - Centro Tecnológico del Mar – Fundación CETMAR
 - EOMAP GMBH & CO KG (EOMAP)
 - Public Health England (PHE)
 - Câmara Municipal de Loures (CM-Loures)

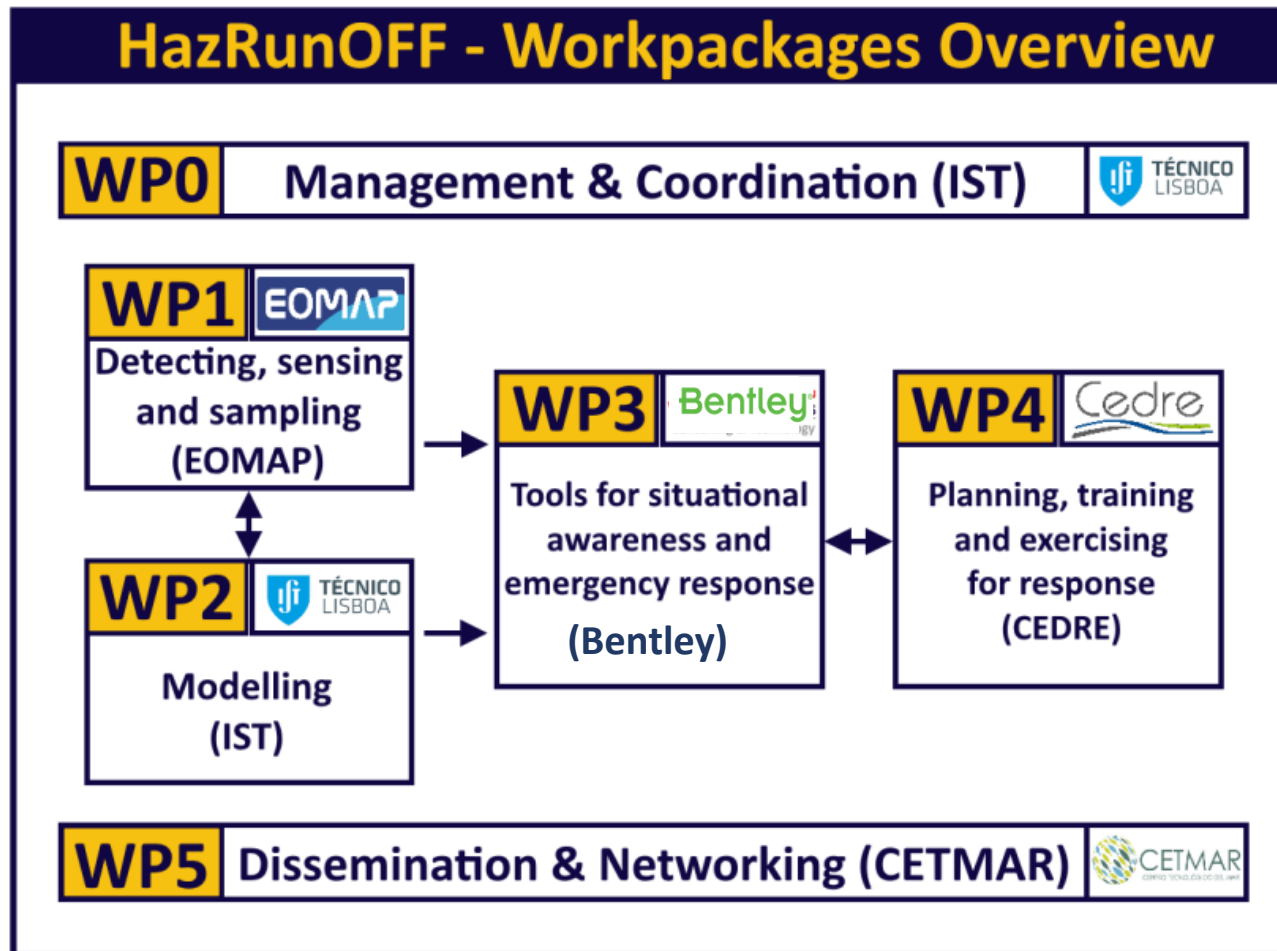


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Workpackages



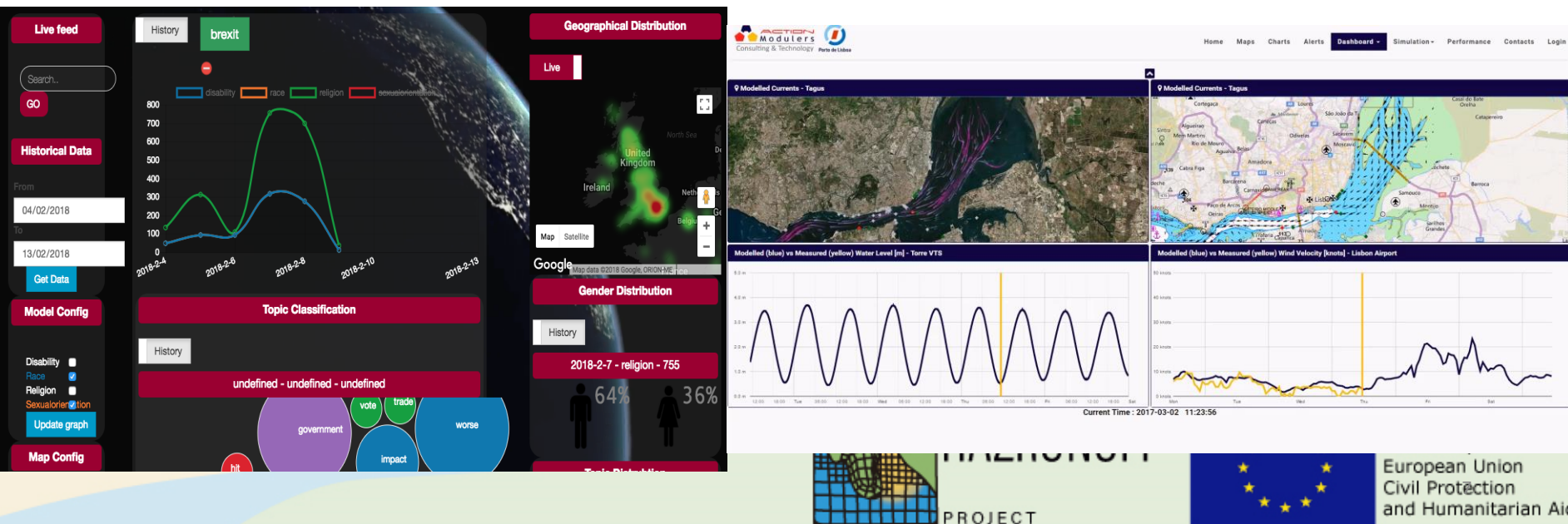
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Products \ Tools

- Operational tools for situational awareness and crisis management
- Risk management tools to support contingency planning and decision making;
- Response protocols adapted for transitional waters
- Training material and courses to help key staff in emergency response
- Communication and social media in crisis management



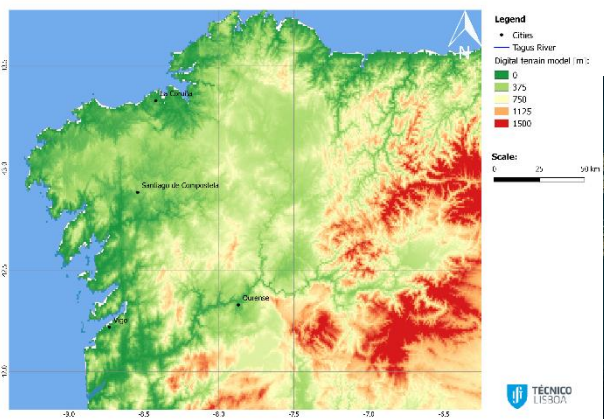
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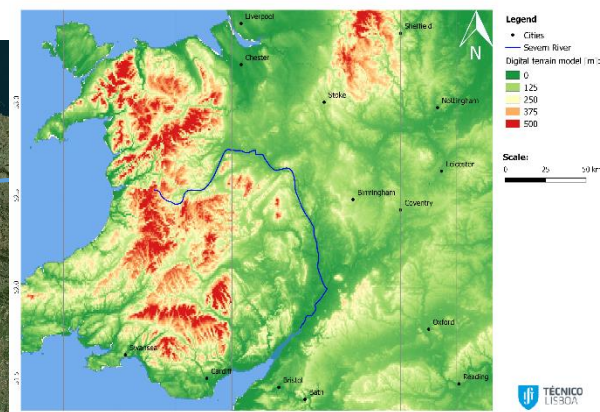
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HazRunoff Pilot areas

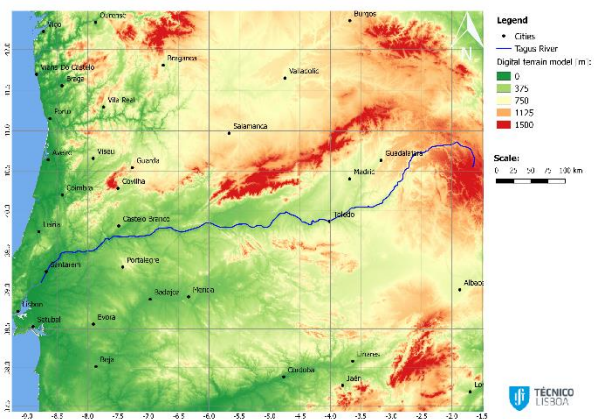
Ulla and Sar rivers \ Ria Arosa



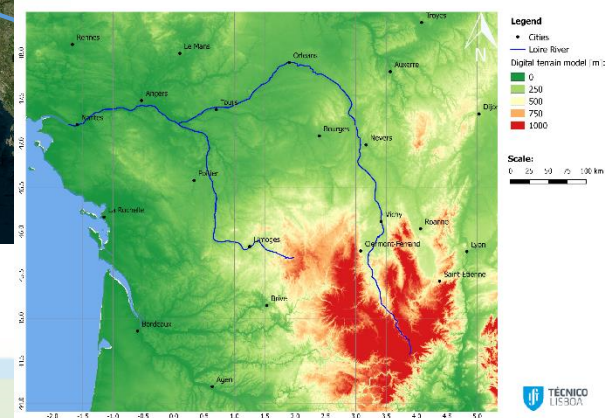
Severn river \ estuary



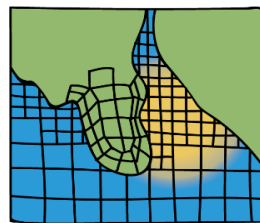
Tagus river \ estuary



Loire river \ estuary



HazRunoff Workshop

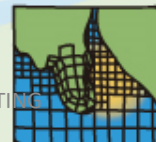


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“Integration of sensing and modelling technologies for early detection and follow-up of hazmat and flood hazards in transitional and coastal waters”

-Date: 01.02.19-



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MEETING

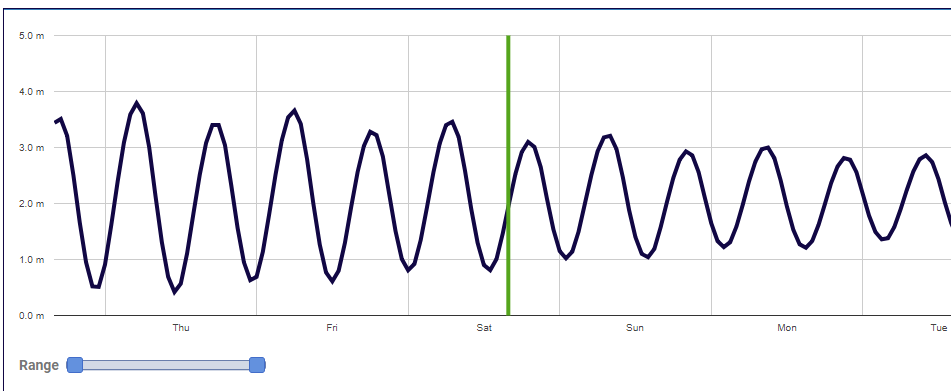
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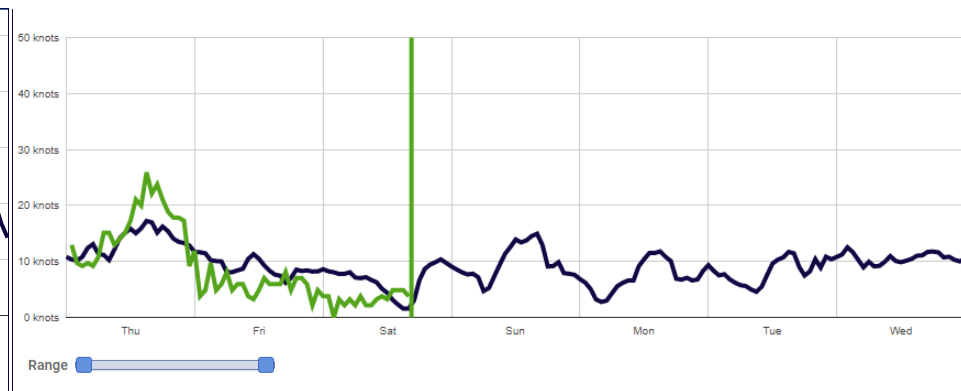
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Digital toolkit towards improved situational awareness & crisis management: the Galician context (Bentley)

Vilagarcia tidal gauge



Vilagarcia tidal gauge



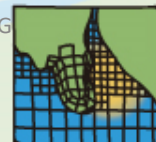
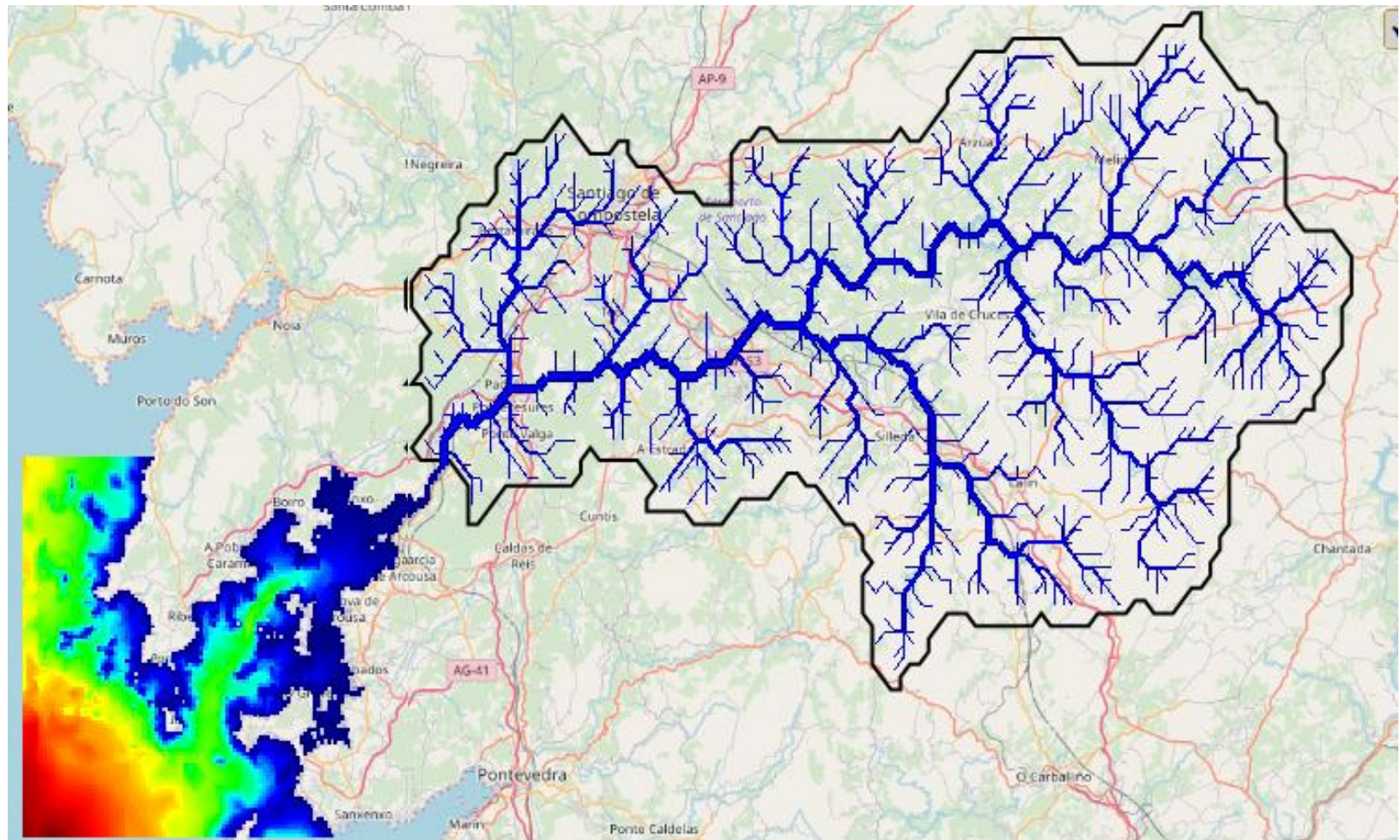
Water flow [m/s] & water column]



Webcam



Watershed – Estuary connection in MOHID

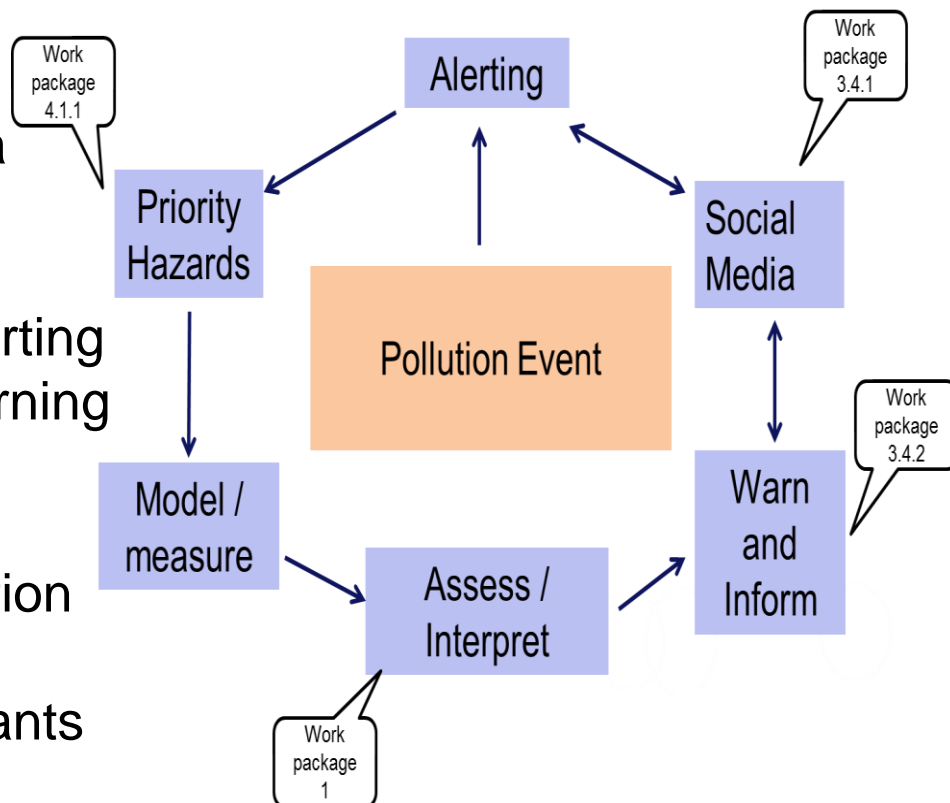


Novel Tools for planning, preparedness and response (PHE)

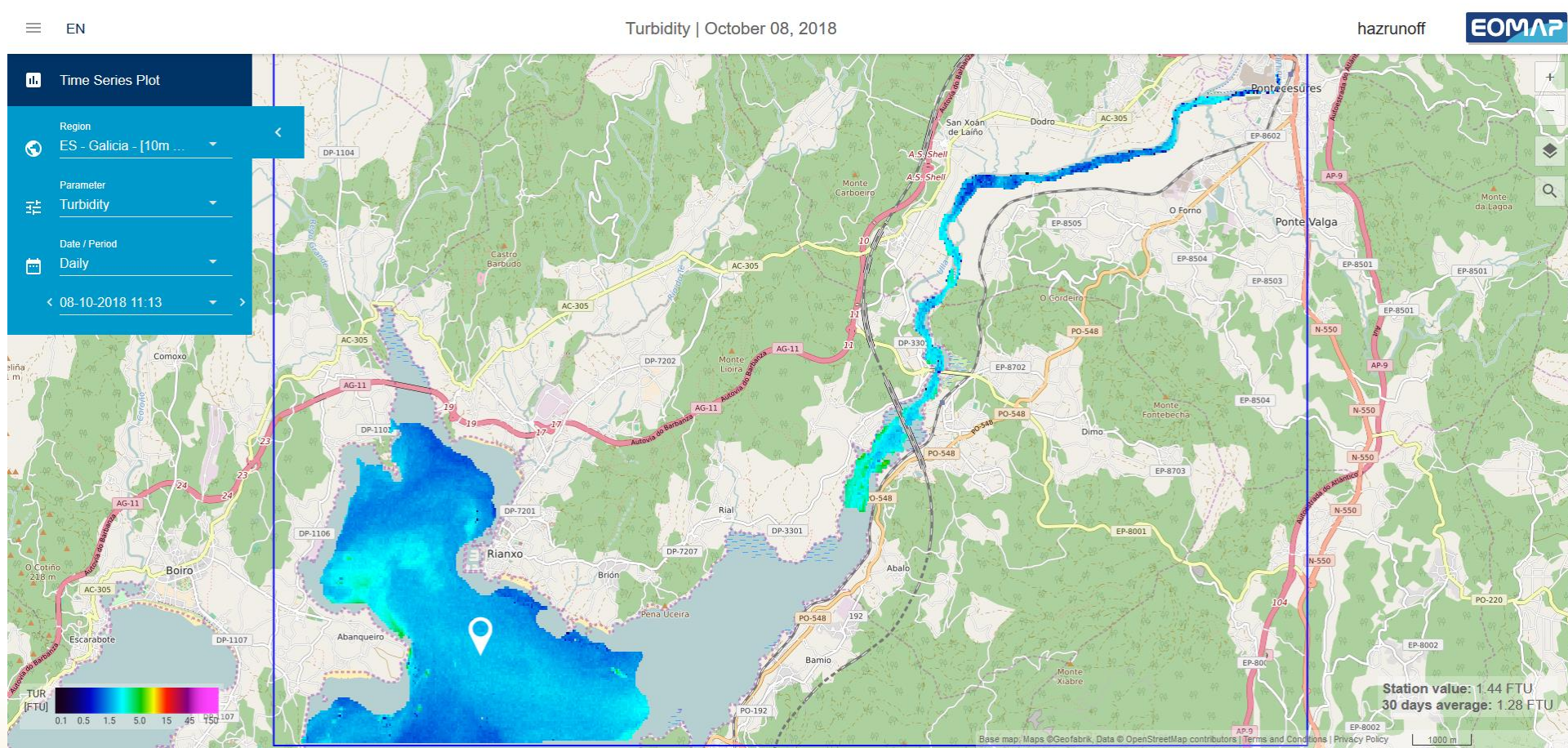
Development of an automated data assessment tool

Use of social media as an early alerting mechanism and assessment of warning and informing messages

Development of a hazard prioritisation framework for planning and preparedness to identify key pollutants



Earth observation in operational context: reviewing the potential of integrating satellite-based remote sensing technologies (EOMAP)

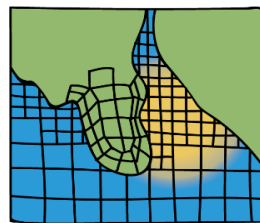


Learning from past incidents; preparing for the future (CEDRE)

A medium spill in an estuary (France) : lessons learnt



HazRunoff Workshop

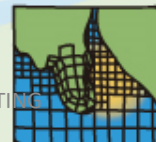


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Obrigada
Thank you

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