OSCARS
Open Science Clusters' Action for Research & Society

Funded Project

FLOODWISE

FLOODWISE - Open GeoAI Repository for Flood Risk Management

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Porvalor

- Fragmented and heterogeneous datasets on road damage limits interoperability.

- Historical damage records are inconsistently documented and rarely FAIR-compliant.

- Existing models often estimate inundation extent but fail to predict actual damage probability.

(Van Ginkel et al., 2021: Papilloud et al.,2020; Koks et al., 2019)

Damage on A1 motorway near Coimbria in 2026. Source: BBC

- Connection with potential end users to collect historical damage data (in Portugal, Spain, and Germany)
- Tool development for crowdsourcing, risk identification and risk analysis
- Community Engagement for feedback acquisition on tool development for flood risk management
- GeoAI Model Development for Risk Analysis

Flood Risk Levels
— Low
— Medium
— High

Source (Images): Dall- e and GPT-4

- Creation of indicators based on open-science datasets
- Development of a pipeline for the risk analysis of roads
- Development of the FLOODWISE platform (Repository demonstrator)
- Creation of an open interface for researchers, urban planners, and civil protection agencies

Source (Images): Dall- e and GPT-4

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