

EDERA - Main page

EDERA - Early warning Demonstration of pan-European rainfall-induced impact forecasts

This is the internal project space intended for storing all the project related materials for use of the project members. Project members are encouraged to actively update the contents.

PROJECT DURATION: Feb 2023 - Jan 2025

PROJECT WEBSITE: www.edera-project.eu

CONSORTIUM:

- [Universitat Politècnica de Catalunya \(UPC\)](#)
- [European Centre for Medium-Range Weather Forecasts \(ECMWF\)](#)
- [Finnish Meteorological Institute \(FMI\)](#)
- [Agencia de Medio Ambiente y Agua de Andalucía \(AMAYA\)](#)
- [Dirección General de Protección Civil y Emergencias - Ministerio del Interior \(DGPCE\)](#)
- [Autoridade Nacional de Emergência e Proteção Civil \(ANEPC\)](#)

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Summary:

Heavy rain and convective storms trigger a number of different natural hazards (floods, landslides, debris flows...) that have impacts on people's life and goods throughout Europe and across borders.

Although the policies for emergency management and response are turning to a more adapted risk management approach, Civil Protection agencies still face multiple challenges hampering their active decisions, including absence of multi-hazard forecasts or difficulty in translating hazards forecast in impact-based decisions, or the coordination between emergency management authorities during extreme and/or large-scale events affecting multiple regions and countries.

In this context, integrating advanced multi-hazard impact-based forecasts in the currently existing Early Warning Systems (capitalising on the advances in hazard observation and forecasts and vulnerability and exposure datasets) is key for improved emergency management leading to disaster risk reduction and climate change adaptation.

The EDERA Project inherits the results from previous UCPM projects ERICHA, SMUFF and TAMIR for seamless forecasting of heavy rainfall and flash flood impacts and aims at using the river flood forecasting component from the CEMS European Flood Awareness System (EFAS) to propose an improved strategy for compound flood impact forecasts over Europe, combining convective hazards and pluvial floods and river floods.

The developed strategy will be demonstrated in real time during 15 months at two levels: (1) at European scale, evaluating the performance of the impact forecasts in cooperation with the stakeholders of the project (with this aim, the products will be further integrated in EFAS), and (2) in two pilot sites (Spain-Portugal and Finland+), where the Early Warning Systems of the operational end-users (involved in the project as partners and stakeholders) will be improved integrating the developed EDERA flood impact forecasts in real time to assess their usefulness for improved cross-border cooperation and coordination among the relevant authorities (at national and regional scales).

The integration of these impact forecasts in the EFAS, which provides direct support to the DG-ECHO ERCC will ensure their availability beyond the duration of the project.

Project partners:

 or type unknown

[Universitat Politècnica de Catalunya \(UPC\)](#)

 or type unknown

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Agencia de Medio Ambiente y Agua de Andalucía (AMAYA)

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Dirección General de Protección Civil y Emergencias - Ministerio del Interior (DGPCE)

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Autoridade Nacional de Emergência e Proteção Civil (ANEPC)

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