



RAL SEMINAR SERIES

From Forecast to Action: Site-Specific Impact-Based Early Warnings - Lessons from Valencia 2024 & GOBEYOND Project

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1-2 PM (MT)

HYBRID MEETING FL2-1022 | [Watch Live](#)

Extreme floods in Germany (2021) and Valencia (2024) revealed a critical gap in our ability to turn accurate weather forecasts into effective local action. This talk will explore a new generation of impact-based early warning systems going from continental forecasts to site-specific warnings that can trigger timely, targeted responses to support adaptation to climate change.

When extreme floods strike, as in Germany in July 2021 or Valencia in October 2024, the unexpected scale and nature of their impacts often trigger a cascading failure in emergency management, despite accurate meteorological forecasts. These events expose a crucial gap: the inability to consistently transform forecast data into actionable, site-specific warnings that prompt effective local response.

This lecture explores the need for a new generation of **impact-based early warning systems (IEWS)** that integrate hazard forecasts with detailed local vulnerability and exposure information to produce targeted **site-specific impact-based warnings**. Such systems can empower authorities, first responders, and communities to act before disaster strikes, strengthening both resilience and climate change adaptation strategies. The presentation will also provide an overview of the GOBEYOND project, a European initiative developing and demonstrating multi-risk, impact-based early warning platforms across diverse pilot sites in Europe and beyond. [Event website](#)