



Dewetra, an ICT-based system for multi-risk forecasting, monitoring and prevention

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Dealing with multi-risk assessment needs reliable forecasting and warning systems able both to rapidly make available observational data and to make accessible forecast tools to the Decision Makers. In this work we present Dewetra, a real-time integrated system for risk forecasting, monitoring and prevention. Dewetra provide Decision Makers with a quantitative detailed evaluation of the effects of the main atmospheric variables, along with the expected risk over the considered area and highlighting the zones denoted by the highest risk values. In the preparedness and response phases, Dewetra can be conveniently deployed to forecast the dynamics of the expected events, taking into the whole risk scenario defined by the kind and the value of element at risk exposed to the effects of the considered variables.

In this work we provide a description of Dewetra features and examples of its operational use at the Italian Prime Minister Office - National Department for Civil Protection- Centro Funzionale Centrale. In particular its applications to flood risk management and to wild fire risk management are presented.