EVE: the European Volcano Early Warning System

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The amount of active volcanic zones in continental Europe and outermost regions recommends Europe to be prepared against volcanic threat. The EVE project will promote actions focusing on supranational and cross border risk awareness and risk communication by facilitating the interaction and cooperation between scientists and Civil Protection Agencies (CPs) to timely anticipate to volcanic disasters. The main objective of EVE is to help European Civil Protections, to anticipate as early as possible to new volcanic eruptions, thus contributing to enhance their prevention and preparedness to reduce the impact of such hazards. EVE offers an easy and rapid way to forecast in real time how, when and where a new eruption may occur, thus helping to predict the most probable eruption scenarios and their potential impacts. EVE will include: 1) a communication operator that will allow the user, once an alert is declared, to contact with all or selected European Civil protections and the Response Coordination Centre and inform them in a standardised way on the new alert, current unrest situation, eruption forecast and probable eruption scenarios, and evolution of the potential hazards (e.g: ash eruption cloud), 2) a probabilistic time evolution forecast of unrest and its possible outcomes, and 3) a visualisation system to represent probable eruption scenarios and the extent of possible derived hazards.

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