

Improving volcanic risk communication through hazard and risk maps evaluation: Campi Flegrei Caldera case study (Italy)

Rosella Nave¹, Roberto Isaia¹, Eliana Bellucci Sessa¹

¹Istituto Nazionale di Geofisica e Vulcanologia sez, Osservatorio Vesuviano Napoli ITALY

Keywords: hazard map, risk communication

In the communication chain between scientists and decision makers (end users), scientific outputs, as maps, are a fundamental source of information on hazards zoning and the related at risk areas definition. Anyway the relationship between volcanic phenomena, their probability and potential impact can be complex and the geospatial information not easily decoded by not experts even if decision makers. Focusing on volcanic hazard the goal has been to improve the communication efficacy of scientific outputs, to contribute in filling the gap between scientists and decision-makers. Campi Flegrei caldera, in Neapolitan area has been chosen as the pilot research area where to apply an evaluation/ validation procedure of the volcanic maps and its validation resulting from end users response. The selected sample involved are decision makers and officials from Campanian Region Civil Protection and municipalities included in Campi Flegrei RED ZONE, the area exposed to risk from to pyroclastic currents hazard. Semi-structured interviews, with a sample of decision makers and civil protection officials have been conducted to. The tested maps included the official Campi Flegrei Caldera RED ZONE map, as well as other maps showing volcanological data used to border the Red Zone. The outcomes' analysis of respondents' understanding of content as displayed, and their needs in representing the complex volcanological information, can support decision makers and officials in understanding volcanic hazard and risk maps, and also in using them as a communication tool in information program for the population at risk.