



Supporting landslide risk management in emergency conditions: the case of San Benedetto Ullano (Calabria - Italy)

Giulio G.R. Iovine, Pasquale Iaquinta, and Oreste Terranova
CNR-IRPI, Rende (Cosenza), Italy (g.iovine@irpi.cnr.it, +39 0984 835.319)

In Calabria, the Autumn/Winter 2008-09 was so severe that the Italian Government had to declare the “state of emergency” on 30 January 2009. The effects of the prolonged rainfalls extended over large portions of the territory; the worst hazard conditions were induced mainly in the NW sector of the region, along the Eastern slope of the Coastal Chain, and subordinately along its Western slope facing the Tyrrhenian Sea. Other villages were also threatened by slope instabilities along the Southern Tyrrhenian and on the Jonian coasts.

In this study, the progressive mobilization of a rainfall-induced slope movement threatening the Southern suburbs of San Benedetto Ullano (Cosenza) is briefly described. The phase of activation lasted from 28 January to early April 2009. The results of a detailed geomorphologic field survey, combined with the cross-analysis of rainfall data and superficial displacements at a number of datum points, allowed to support the Major of the village for better managing the state of geo-hydrological emergency.

Scenarios related to the presumable development of the phenomenon are being analysed. The simplified control system, promptly implemented during the first phases of analysis, is going to be refined, based on geological and kinematic data which are progressively being gathered via explorative drillings, and thanks to the installation of essential instrumentations. Accordingly, the set of provisional emergency procedures devised from the very beginning of the study will be detailed.