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MED-SUV 1th Year Meeting

Nicolosi (Catania) 7 | 9 July 2014

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Geofisica e Vulcanologia

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Editors: Giuseppe Puglisi, Letizia Spampinato, Danilo Reitano, Salvatore Mangiagli

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MEDiterranean SUpersite Volcanoes
MED-SUV

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Comune di Nicolosi

Parco dell'Etna

PARCO DELL'ETNA

Revisione e normazione ortoeditoriale

Francesca Di Stefano — Centro Editoriale Nazionale INGV
Rossella Celi — Centro Editoriale Nazionale INGV

Immagine di frontespizio

La lava dell'eruzione del 1669 circonda Catania. Affresco di Giacinto Platania (testimone oculare dell'evento), conservato nella cattedrale di Catania.

Partners

INGV	Istituto Nazionale di Geofisica e Vulcanologia
CNR	Consiglio Nazionale delle Ricerche
AMRA	Analisi e Monitoraggio del Rischio Ambientale Scarl
DPC	Presidenza del Consiglio dei Ministri - Dipartimento della Protezione Civile
DLR	Deutsches Zentrum Fuer Luft - und Raumfahrt EV
LMU	Ludwig-Maximilians-Universitaet Muenchen
GFZ	Helmholtz - Zentrum Potsdam Deutsches GeoForschungsZentrum
UDUR	University of Durham
UNIVBRIS	University of Bristol
CNRS	Centre National de la Recherche Scientifique
BRGM	Bureau de Recherches Geologiques et Minieres
ESA	European Space Agency
CSIC	Agencia Estatal Consejo Superior de Investigaciones Cientificas
UGR	Universidad de Granada
UAc	Universidade dos Açores
UoM	Universita Ta Malta
Surveylab	Survey Lab
MATEC	Marwan Technology
T2	Terradue UK LTD
Western	The University of Western Ontario
USGS-HVO	United States Geological Survey
UMIL	Università degli Studi di Milano
DELTAG	DELTAG SRL
UBP-LMV	Université Blaise Pascal Clermont-Ferrand II

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WP6 | Posters

MED-SUV Project: First results and Ongoing Activities of WP 5 – Task 5.1 Characterization of the Threatening Phenomena from Space and Ground

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Explosive events, lava-fountains and effusions frequently characterize eruptive activity at Etna. Consequently, the town of Catania and many local municipalities are potentially exposed to ash fallout and lava flows. Besides volcanic hazard, earthquakes and landslides affect this volcanic region as well. The Task 5.1 of the European project "MED-SUV" (Grant Agreement n°. 308665) deals with the observation of these threatening phenomena from space and ground and their characterization and understanding. The Task encompasses six subtasks, which focus on and analyze the aforementioned hazards in terms of their characteristics, duration and spatial dimension:

- Test cases for significant eruptive events have been defined by the subtask 5.1.1. The time span from 2005 to 2011 was chosen for its wealth of eruptive episodes and their well-documented evolution;
- The mapping of eruptive products from satellite data will allow us the improvement of the interpretation and modeling of the mechanisms of cone-forming and lava flow emplacement. This topic is developed in the subtask 5.1.2;
- Multidisciplinary experiments are planned in the subtask 5.1.3, and will be carried out at the North-East Crater in July 2014;
- Another important deliverable is given by tools of data mining proposed by the subtask 5.1.4. These tools will be available for the analysis of parameters of whatever nature (e.g., geochemical, geophysical), providing they are processed in numerical format;
- The subtask 5.1.5 provides a characterization of the volcanic plume and eruptive products, with an integrated analysis of atmospheric, satellite and ground-based measurements, which play an important role in ash-cloud dispersal models;
- The sub 5.1.6 focuses on landslide susceptibility analysis and zoning.

The goal will be to highlight the regional distribution of potentially unstable slopes based on a detailed study of the factors responsible for landslides.