



## Volcano Monitoring of the Italian active Volcanoes

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In Italy million of people are treated by active volcanoes. Volcano monitoring is carried out by the Istituto Nazionale di Geofisica e Vulcanologia (INGV), which is the research institution charged of the geodynamic monitoring and surveillance of the Italian territory by law, since 2000. INGV also leads fundamental research on the physics of the Earth interior, the earthquake generation processes and volcano dynamics.

Volcano monitoring in Italy is carried out by adopting a multidisciplinary approach, which allows observing and studying all phenomena directly or indirectly related to the volcanic activity.

Volcano monitoring systems are centralised at three Departments, located in Naples, Catania and Palermo. They acquire information on seismicity, ground deformations, geochemistry, petrology and field volcanology by deploying on volcanoes networks of permanent stations (often multiparametric), by carrying out fieldworks and surveys and by exploiting data from space based systems.

All these data have been fundamental for the Civil Protection activities during the several volcanic crisis occurred on Italy through the last decades at Mt. Etna (2001, 2002-03, 2004-05, 2006, 2007, 2008-09) and Stromboli (2002-03 and 2007).