



The GEO Geohazard Supersites and Natural Laboratories - GSNL 2.0: improving societal benefits of Geohazard science

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The Geohazard Supersites and Natural Laboratories initiative began with the "Frascati declaration" at the conclusion of the 3rd International Geohazards workshop of GEO held in November 2007 in Frascati, Italy. The recommendation of the workshop was "to stimulate an international and intergovernmental effort to monitor and study selected reference sites by establishing open access to relevant datasets according to GEO principles, to foster the collaboration between all various partners and end-users". This recommendation was later formalized in the GEO Work Plan as Component 2 of the GEO task DI-01, part of the GEO Disasters Societal Benefit Area.

Today GSNL has grown to a voluntary collaboration among monitoring agencies, scientific community and the CEOS space agencies, working to improve the scientific understanding of earthquake and volcanic phenomena and enable better risk assessment and emergency management.

According to its principles, actions in GSNL are focused on specific areas of the world, the Supersites, for which large amounts of in situ and satellite data are made openly available to all scientists. These areas are selected based on the importance of the scientific problems, as well as on the amount of population at risk, and should be evenly distributed among developed and less developed countries.

Seven Supersites have been established to date, six of which on volcanic areas (Hawaii, US; Icelandic volcanoes; Mt. Etna, IT; Campi Flegrei, IT; Ecuadorian volcanoes, Taupo, NZ), and one on a seismic area (Western North Anatolian fault, TR). One more proposals is being evaluated: the Corinth Gulf in Greece.

The Supersites have succeeded in promoting new scientific developments by providing a framework for an easier access to EO and in situ data. Coordination among researchers at the global scale has been achieved only where the Supersite activities were sustained through well established projects. For some Supersites a close coordination between scientists and end-users has been established or consolidated, and the clear advantages arising from such collaboration has stimulated a new vision for the GSNL initiative (GSNL 2.0).

The status of the initiative and the future developments of GSNL 2.0, aiming to increase the uptake of the Supersite geohazard science by local end-users, will be presented at the meeting and discussed with the scientific community.