



Committee on Earth Observation Satellites (CEOS) perspectives about the GEO Supersite initiative

Wolfgang Lengert (1), Simona Zoffoli (2), Christine Giguere (3), Joern Hoffmann (4), Francis Lindsay (5), and Guy Seguin (5)

(1) ESA, (2) ASI, (3) CSA, (4) DLR, (5) NASA

This presentation is outlining the effort of the Committee on Earth Observation Satellites (CEOS) using its global collaboration structure to support implementing the GEO priority action DI-01 Informing Risk Management and Disaster Reduction addressing the component: C2 Geohazards Monitoring, Alert, and Risk Assessment.

A CEOS Supersites Coordination Team (SCT) has been established in order to make best use of the CEOS global satellite resources. For this, the CEOS SCT has taken a holistic view on the science data needs and availability of resources, considering the constraints and exploitation potentials of synergies. It is interfacing with the Supersites Science Advisory Group and the Principle Investigators to analyze how the satellite data associated with seismic and Global Navigation Satellite System (GNSS) data can support national authorities and policy makers in risk assessment and the development of mitigation strategies.

CEOS SCT aims to support the establishment of a fully integrated approach to geohazards monitoring, based on collaboration among existing networks and international initiatives, using new instrumentation such as in-situ sensors, and aggregating space (radar, optical imagery) and ground-based (subsurface) observations. The three Supersites projects which are funded under the EC FP7 action, namely (i) FUTUREVOLC: A European volcanological supersite in Iceland: a monitoring system and network for the future Geohazards Monitoring, Alert, and Risk Assessment, (ii) MARSite: New Directions in Seismic Hazard assessment through Focused Earth Observation in the Marmara Supersite, (iii) MED-SUV: MEDiterranean Volcanoes and related seismic risks, have been examined as a vehicle to fulfill these ambitious objectives. FUTUREVOLC has already been granted CEOS support.

This presentation will outline CEOS agreed process and criteria applied by the Supersites Coordination Team (SCT), for selecting these Supersites in the context of the GSNL initiative, as well provide information about the satellite data provided by CEOS for the different Supersites.

ASI - COSMO-Skymed

CNES - SPOT-5, Pleiades

CSA - Radarsat-2

DLR - TerraSAR-X, TanDEM-X

ESA - ERS-1/2, Envisat, Sentinel (on behalf of EC - Copernicus)

JAXA - ALOS-2, ALOS-1, J-ERS

NASA - ASTER