TDX DEM for the Campi Flegrei/Vesuvius and Mt. Etna Supersites
available since January 2017

As reported in the DLR TanDEM-X Science Service System web-page at [https://tandemx-science.dlr.de/](https://tandemx-science.dlr.de/), the primary objective of the TanDEM-X mission is the generation of a global Digital Elevation Model (DEM) covering all land surfaces with an accuracy of 12 m in horizontal resolution and better than 2 m in relative height. The goal is achieved by extending the TerraSAR-X SAR mission by a second, TerraSAR-X-like satellite, TanDEM-X (TDX) flying in close formation with TerraSAR-X (TSX), thus resulting in a large single-pass SAR interferometer.

At the end of November, 2016 the proposal DEM_GEO1102 named “TanDEM-X data exploitation in the framework of the International Supersites initiative: an application to the Italian Supersites volcanoes” was submitted by the Campi Flegrei/Vesuvius Supersite Coordinator, Sven Borgstrom, in response to the DLR Announcement of Opportunity for TDX DEM product requests.

The TanDEM X proposal has been accepted by DLR on January 13, 2017. The two DEM product types requested are the standard product 0.4 arcsec (~12 m pixel spacing) and 1 arcsec (~30 m pixel spacing).

The two areas covered by the TDX DEM products are the two Italian Supersites volcanoes: Vesuvius/Campi Flegrei in the Campania Region (12m + 30m, 6 tiles each, total 12 tiles, Fig.1) and Mt. Etna in Sicily (12m + 30m, 4 tiles each, total 8 tiles, Fig.2), both in Southern Italy, with the Sicily tiles covering also the Aeolian Islands.

Fig.1 - TDX DEM products covering the Vesuvius/Campi Flegrei Supersite area (12m + 30m, 6 tiles each, total 12 tiles)
The principal investigator, co-investigators and authorized users of the data presently listed mentioned in the proposal are known members of the science teams of the two Italian Supersites. Any new colleague wanting to take part in the activities of the two Supersites and having need of the DEM can be added as additional authorized user via the web page on the TanDEM-X Science Service System portal. Please write to sven.borgstrom@ingv.it to be added.

The TDX DEM products will be distributed through the MED-SUV portal, available at http://medsuv_portal.ct.ingv.it/. MED-SUV (“MEDiterranean SUpersites Volcanoes”) was an FP-7 Project funded by EC, supporting the Italian Supersites and finished in May, 2016. Please write to giuseppe.puglisi@ingv.it to be granted access to the MED-SUV portal.