EUROVOLC – A European Network of Observatories and Research Infrastructures for Volcanology

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EUROVOLC (https://eurovolc.eu/) is an EC Horizon2020 Infrastructure project established to support interconnection and collaboration within the European volcanological community and enable access to the community’s research infrastructure and data. The project materialized from the collaboration of partners in EPOS’s Volcanological group and builds upon experiences gained in two previous FP7 volcano Supersite projects, FUTUREVOLC AND MEDSUVE. EUROVOLC will rely on EPOS’s Volcanological Thematic Core Service (VO-TCS) to sustain long-term access to data and products, which will be made available within the project. The partners of EUROVOLC comprise a diverse group of Earth and atmospheric scientists from 9 European countries, representing volcano research and monitoring institutions, civil protection agencies, a volcanic ash advisory center and companies from R&D, IT and geothermal industries.

The project structure consists of the three typical Activities of EC Infrastructure projects, Networking, Trans-national Access and Joint Research, and is built around four main themes:

- Community building
- Sub-surface processes
- Volcano-atmosphere interaction
- Volcanic crisis preparedness and risk management,

all with the common goal of reaching EUROVOLC’s main objectives, which are to:

1. Network the European volcanological community and its data
2. Enhance knowledge transfer between Volcano Observatories (VO) and Volcano Research Institutions (VRI) and foster development of new, integrated, multidisciplinary volcanological observing systems
3. Strengthen interaction and communication between the community and its stakeholders and define new strategies for best practices and harmonization in communication between scientists and society
4. Advance and optimize research activities to assure the best possible European response before, during and after volcanic crises.

EUROVOLC started in February 2018 with a kick-off meeting at the...
Icelandic Volcano Observatory. During its first year the project held its first community building workshop at the Cities on Volcanoes 10th conference in Naples and enabled trans-national access to the VO and VRI research infrastructures through open research calls. The projects selected for EUROVOLC funding will be carried out in summer 2019. Several services, providing virtual access to volcanological products and modeling have been activated in the first year and construction of a web service to provide virtual access to a new European Catalogue of Volcanoes (ECV) has started. Preparations have also started for the first of two summer schools, which will be held at Mt Etna in 2019. Work is underway to develop access to additional, multidisciplinary data and databases from volcanic areas, where the EPOS VO-TCS will be utilized for servicing the access. The ongoing research work within EUROVOLC focuses on determination of eruptive source parameters to improve modelling of volcanic plumes, development of pre-eruptive unrest detection schemes based on real-time processing of geophysical and geochemical data, and rapid integration and modelling of geophysical, geochemical and petrological data to monitor magma migration and changes in magmatic systems.

At the beginning of EUROVOLCs second year, in February 2019, a workshop will be held in Exeter, England (https://eurovolc.eu/?p=841) to build connections between the volcanological community and the European volcanic ash advisory centers (VAAC), and during the projects M12 meeting at the Azores islands Volcano Observatory, a field survey will be conducted to develop best practices in gas observations.

More information about the project and its activities can be found on the project’s web site.