

Special Issue

Advances in Multidisciplinary Investigations of Volcano Dynamics

Message from the Guest Editors

Volcano dynamics result from the complex interaction of several physical and chemical processes occurring at different spatial and temporal scales. Such processes produce a broad range of manifestations (seismic activity, ground deformation, geofluid circulation) whose detection is fundamental to the definition of the background state and tracking the evolution of the volcanic system. Multidisciplinary analysis of data from different fields represents a successful strategy for investigating the dynamics of volcanoes and modeling the relevant physicochemical processes of the system. In particular, contemporary variations in multiparametric datasets help us to identify the eventual transition mechanisms from stationarity to a phase of unrest and eruption.

The present Special Issue aims to promote original research studies concerning the joint analysis and interpretation of combined geophysical (including seismic, tiltmeter, GPS, gravity, magnetic, electrical, and electromagnetic data) and geochemical observables. Contributions related to innovative techniques and new methodologies are strongly encouraged.

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal *Applied Sciences* has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

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