



Assessment and Prediction of Volcano Hazard Using Remote Sensing

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Message from the Guest Editors

Dear Colleagues,

The accurate forecasting and characterization of volcanic activity, and the assessment of their potential impact on land and population, is an open challenge given the inhomogeneity of monitoring networks around active volcanoes. For the last forty years, satellite- and ground-based remote sensing techniques have been extensively used to monitor volcanoes worldwide. All those measurements are fundamental to effectively track the evolution of volcanoes and enhance physics-based dynamic models that link those spatial and temporal observations with volcanic phenomena. In this context, ensemble-based data assimilation approaches have been successfully implemented to model time-varying ground deformation observations from InSAR, or to forecast volcanic ash and SO₂ dispersal in the atmosphere.

We invite papers dealing with the integration of satellite- and ground-based remote sensing observations into modelling with the aim to nowcast and possibly forecast volcanic hazards and their impact. Contributions on novel methodologies and applications are welcome.

