Special Issue

Advanced Technologies in Monitoring of Volcanic Clouds with GNSS

Message from the Guest Editors

The volcanic emission of hazardous gas and ash into the atmosphere poses a worldwide risk to human society. It can impact the health of and threaten local population, but it is also a major risk for the safety of air traffic. In order to enhance the monitoring of these problems, this Special Issue invites studies aiming at characterising volcanic clouds. Using GNSS ground-based and/or radio-occultation techniques, this characterisation can rely on retrieving the composition of the volcanic emission and its plume height, thickness and density. Such studies can include observations of the ground-deformation and the seismicity, the understanding of the mechanisms of an eruption using multi-techniques, and the analysis of the composition of gas emissions. The implementation of new GNSS products characterising the volcanic cloud can be explored in synergy with other observations from ground-based instruments or hyperspectral and broadband sensors on-board polar orbiting and geostationary satellites. Study combining GNSS solutions to retrieve continuous 3D properties of volcanic plume with tomographic technique can also be investigated and compared with other techniques.

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Deadline for manuscript submissions

closed (31 March 2022)

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/87040

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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peer-review process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend *Remote Sensing* for your best research publications for a fast dissemination of your research.

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