



Near and Remote Sensing for Integrated Monitoring of Instability Processes

Guest Editors:

Dr. Fabio Bovenga

Consiglio Nazionale delle
Ricerche, Istituto per il
Rilevamento Elettromagnetico
dell'Ambiente (IREA), Bari, Italy

Dr. Roberta Pellicani

Department of European and
Mediterranean Cultures,
University of Basilicata, Matera,
Italy

Prof. Giuseppe Spilotro

Consiglio Nazionale delle
Ricerche, Istituto per il
Rilevamento Elettromagnetico
dell'Ambiente (IREA), Bari, Italy

Deadline for manuscript
submissions:

closed (31 December 2019)

Message from the Guest Editors

The use of appropriate technologies for monitoring environmental phenomena is of paramount importance in reducing disaster risk and territorial planning and managing. The wide availability and reduced cost of some types of sensors (Time Domain Reflectometry, Acoustic Emission, Laser, Inclinometers, GNSS), the greater availability of satellite remote sensing data, and the possibility of sharing in real time, determine a convenience to the integration of near and remote techniques of detection and monitoring of instability processes. For instance, SAR Interferometry allows identifying displacement signals valuable for monitoring ground and structural stability. However, for a real practical support, this technique should be combined with in situ monitoring networks and modelling tools. In this framework, several issues still remain open: optimal data integration; data requirements; validation experiments; finalization to process monitoring and early warning. This special issue is aimed at addressing all these themes through examples of algorithm development and application to case studies.





an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Jesus Martinez-Frias

Instituto de Geociencias, IGEO
(CSIC-UCM), C/ Del Doctor Severo
Ochoa 7, Edificio
Entrepabellones 7 y 8, 28040
Madrid, Spain

Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherent set of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientifically based political decisions.

We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, ESCI (Web of Science), GeoRef, Astrophysics Data System, and other databases.

Journal Rank: JCR - Q2 (*Geosciences, Multidisciplinary*) / CiteScore - Q1 (General Earth and Planetary Sciences)

Contact Us

Geosciences Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/geosciences
geosciences@mdpi.com
[X@Geosciences_OA](https://twitter.com/Geosciences_OA)