



New Technologies and Data Analysis Methods for Seismic Monitoring

Guest Editors:

Dr. Francesco Grigoli

Swiss Seismological Service,
ETH-Zurich, Sonneggstrasse 5,
8092 Zurich, Switzerland

Dr. Simone Cesca

German Research Centre for
Geosciences (GFZ),
Telegrafenberg, 14473 Potsdam,
Germany

Dr. Claudio Satriano

Institut de physique du globe de
Paris (IPGP), 1 rue Jussieu, 75238
Paris cedex 05, France

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Message from the Guest Editors

Dear Colleagues,

Since the last decade, seismology has been characterized by an exponential growth of data, mainly due to the increasing number of high-quality seismic networks being installed around the world. Modern microseismic networks based on new sensor technologies allow detecting a massive number of tiny earthquakes, generating an extremely large dataset for analysis. The analysis of such a huge amount of data highlights the limits of standard routines for seismic analysis. Exploiting these new massive datasets is a challenge that can be overcome only by using new-generation, automated, and noise-robust data analysis methods.

Waveform-based detection and location methods have grown in popularity, and their application has dramatically improved seismic monitoring capability. Moreover, machine learning approaches to data-intensive seismic analysis are showing promising results, opening new horizons for the development of innovative, fully automated, and noise-robust methods.

This Special Issue aims to highlight advances in the development of new monitoring technologies and data analysis methods.

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Editor-in-Chief

Prof. Dr. Vittorio M. N. Passaro

Dipartimento di Ingegneria
Elettrica e dell'Informazione
(Department of Electrical and
Information Engineering),
Politecnico di Bari, Via Edoardo
Orabona n. 4, 70125 Bari, Italy

Message from the Editor-in-Chief

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Sensors Editorial Office
MDPI, St. Alban-Anlage 66
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