CALL FOR PAPERS

IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing

Special Issue on
"Intelligent perception of geohazards from earth observations and remote sensing"

Intelligent perception is an innovative field that develops intelligent approaches to sensing the world. The focus of this special issue is the new applications of intelligent perception in geohazards. Here geohazards refer to geological effects or geological phenomena that are formed under the action of natural or man-made factors which cause enormous human and economic losses and disruption. Geohazards continue to grow worldwide, especially in the era of rapid global population growth. For example, earthquakes and landslides are the two major geohazards which are causing casualties, infrastructural damage, and economic losses, while volcanic eruptions are another geohazard which can modulate regional or global atmospheric composition and climate in detrimental ways. The development of earth observation (EO) technology has generated an important tool for investigating, monitoring, and managing geohazards and disasters. Satellite- and drone-based EO can particularly provide a distinctive way to investigate how the earth system works when the ground observations are not available due to physical or political restrictions. Especially in the last decades, the artificial intelligence (AI) has developed rapidly, and how to employ AI to serve better the monitoring, management, recognition, and mapping of geohazards is a hot and important research field. Future improvements in resolution, precision, efficiency, accuracy and smartness can be foreseen. In this Special Issue, we welcome papers related to the innovative use of sensors and AI methods which aim to improve geohazards investigation, mapping, characterization, monitoring, zonation, and early warning, as well as papers which explore the smart processing of data captured from different platforms and compare the advantages and potentials of these data with traditional measurements are also welcome.

The broad topics include (but are not limited to):

- Insightful reviews of new achievements of geohazard studies;
- Innovative methods and perspectives for geohazard investigation;
- Quantitative geohazards susceptibility, hazard and risk mapping;
- Recent progress in geohazards mapping, characterization, monitoring, zonation, and early warning;
- Advanced remote sensing approaches for geohazard investigation;
- Artificial intelligence (AI) for geohazard prediction and modelling;
- Innovative unmanned aerial vehicle applications;
- Time-series analysis of very high-resolution images;
- New geohazard datasets.

Schedule

June 01, 2021	Submission system opening
December 31, 2021	Submission system closing

Format

All submissions will be peer reviewed according to the IEEE Geoscience and Remote Sensing Society guidelines. Submitted articles should not have been published or be under review elsewhere. Submit your manuscript on http://mc.manuscriptcentral.com/jstars, using the Manuscript Central interface and select the "**Intelligent perception of geohazards from earth observations and remote sensing**" special issue manuscript type. Prospective authors should consult the site https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9082768 for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). Please visit http://www.ieee.org/publications_standards/publications/authors/author_templates.html to download a template for transactions. Please note that as of Jan. 1, 2020, IEEE J-STARS has become a fully open-access journal charging a flat publication fee $1,250 per paper.

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