Special Issue

Precipitation, Flood and Earthquake Events Monitoring, Simulation, Analysis and Early Warning by Advanced Environmental Remote Sensing and Al

Message from the Guest Editors

Climate change has led to an increase in the frequency of natural disasters and extreme weather events, such as heavy precipitation, flooding, and earthquakes, along with their impacts, raising significant concern. Advanced technologies, such as microwave detection, remote sensing, radar, and optical fiber sensing, can be utilized to construct an integrated sky–ground and underground three-dimensional monitoring network. This Special Issue aims to include papers which discuss, but are not limited to, the following topics:

- Advances and new findings that enhance the accuracy of precipitation monitoring and short-term precipitation nowcasting;
- Exploring high-resolution fiber-optic acoustic sensing equipment and imaging technologies for geophysical exploration;
- Research on physical models and numerical methods for flood prediction, simulation, monitoring, analysis, and early warning;
- Disaster monitoring and disaster mitigation and avoidance simulation;
- The advancement of environmental remote sensing and AI technologies and their applications in disaster prevention and management.

Guest Editors

Prof. Dr. Congzheng Han

Dr. Jiamou Liu

Prof. Dr. Hongbin Chen

Deadline for manuscript submissions

25 February 2026



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/210083

Remote Sensing Editorial Office MDPI, Grosspeteranlage 5 4052 Basel, Switzerland Tel: +41 61 683 77 34 remotesensing@mdpi.com

mdpi.com/journal/remotesensing





an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



About the Journal

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 peerreview 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.

Editor-in-Chief

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001, USA

Author Benefits

Open Access:

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

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

Journal Rank:

JCR - Q1 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)

