

Special Issue

Progress in Remote Sensing and Numerical Modelling Applications for Flood Risk Assessment

Message from the Guest Editors

The last few years have seen substantial development in the field of Artificial Intelligence (AI), especially in novel Machine Learning (ML) models that are becoming ever more skilled at predicting flood risk on local scales and can greatly complement numerical flood models. By leveraging these technologies, we can enhance our understanding of flood risk and inform decision-making related to flood management and disaster response. This Special Issue seeks innovative research that leverages remote sensing and numerical modelling, empowered by the newest AI/ML techniques, to significantly advance our understanding of evolving flood risks. We are particularly interested in article contributions that focus on the following topics:

- The use of remote sensing, numerical modelling, and AI/ML techniques to assess flood risk and support flood risk management strategies;
- The exploitation of satellite imagery, optical, multi-spectral, SAR, for monitoring and assessing water-related impacts;
- Measuring or modelling small to large scale hydrology, including runoff, discharge, infiltration, drainage, etc.;
- The integration of surface processes with underground drainage systems.

Guest Editors

Dr. Guy Jean Pierre Schumann

1. Research and Education Department, RSS-Hydro, L-3593 Dudelange, Luxembourg

2. School of Geographical Sciences, University of Bristol, Bristol BS8 1QU, UK

Dr. Paolo Tamagnone

Research and Education Department, RSS-Hydro, L-3593 Dudelange, Luxembourg

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

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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 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.

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

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