Special Issue

Advances in Large Scale Flood Monitoring and Detection

Message from the Guest Editors

The last decades have seen a massive increase in new technologies for Earth observation (EO) and environmental monitoring, which provided scientists and engineers with valuable spatial information for studying hydrologic processes. A variety of research fields have progressed significantly, e.g., the extreme flood events. In fact, flood exposure and risk over large areas and in scarce data environments has always been a challenging topic. The Special Issue is dedicated to contributions focusing on the benefit of the use of new algorithms, new measurements systems and EO data for flood assessment, monitoring, and management. The research presented might focus on:

- New methods and technologies for river morphology monitoring;
- Innovative methods for flood mapping over large areas;
- Use of open/big data in hydrologic modelling of floods;
- Advanced applications of EO and UAS data for hazard, vulnerability, risk mapping, and post-disaster recovery phase;
- Innovative applications in support to disaster risk reduction strategies;
- Development of tools and platforms for assessment

Guest Editors

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Deadline for manuscript submissions

closed (30 June 2018)

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About the Journal

Message from the Editor-in-Chief

Hydrology is the study of the waters of the Earth. *Hydrology* has close ties with hydraulics, hydrogeology and the multiple sciences that study the atmosphere, the land surface, the soil and the subsoil, and ranges from complex problems of risk, forecasting and optimization of water resources to interactions with ecological, urban, social and economic systems.
The purpose of *Hydrology* is then to provide a journal where research results and real-world problems can be presented and discussed in order to bridge the traditional gaps between the academic world and the professionals and decision makers. Therefore, *Hydrology*, invites authors to submit their original theoretical, field, experimental, and numerical studies on hydrology with strong emphasis on multidisciplinary approaches and interdisciplinary topics, which cross the typical boundaries of our science.

Editor-in-Chief

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Author Benefits

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JCR - Q2 (Water Resources) / CiteScore - Q1 (Oceanography)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 15.7 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the first half of 2025).