

Special Issue

Advances in Urban Flood Modeling, Forecasting and Early Warning

Message from the Guest Editors

The goal of this Special Issue is to collect original research articles and review papers that provide new insights into urban flood modeling, forecasting systems, and early warning strategies. This topic aligns closely with the scope of *Hydrology*, particularly in areas related to surface hydrology, hydrological processes, extreme events, and water management in urban systems. This Special Issue welcomes manuscripts that link the following themes:

- Physically based and data-driven urban flood models;
- Coupled hydrological-hydrodynamic modeling;
- Real-time flood forecasting systems;
- Machine learning and AI in flood prediction;
- Urban drainage and stormwater management;
- Climate change impacts on urban flooding;
- Uncertainty analysis and statistical models;
- Early warning systems and decision-support tools;
- Case studies and comparative analyses;
- Review papers on emerging methodologies.

Guest Editors

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Deadline for manuscript submissions

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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

Prof. Dr. Ezio Todini

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Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), PubAg, GeoRef, and other databases.

Journal Rank:

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

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.9 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).