

## Special Issue

# Advances in the Measurement, Utility and Evaluation of Precipitation Observations: 2nd Edition

### Message from the Guest Editors

Precipitation is a critical component of the hydrological cycle, directly impacting various hydrologic processes such as runoff, groundwater recharge, and flood management. This Special Issue seeks contributions that address the challenges and innovations in precipitation measurement. Topics of interest include, but are not limited to, remote sensing technologies, ground-based observations, the integration of multiple data sources, the development of novel methodologies to improve precipitation measurement accuracy, and the simulation of rainfall-runoff processes:

- Statistical modeling of rainfall patterns;
- Deep learning approaches for precipitation measurement;
- Leveraging Internet of Things (IoT) for enhanced precipitation estimation;
- Multi-source rainfall observation fusion;
- Uncertainty and bias analysis in rainfall data;
- Impacts of climate change on precipitation trends;
- Remote sensing techniques for precipitation observation;
- Satellite-based precipitation monitoring and evaluation;
- Disaster and risk analysis induced by precipitation;
- Applications of precipitation data in hydrological modeling.

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### Guest Editors

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### Deadline for manuscript submissions

31 August 2026



## Hydrology

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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.

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### Editor-in-Chief

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JCR - Q2 (Water Resources) / CiteScore - Q1  
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#### 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).