Special Issue

Accounting for Climate Change in Water and Agriculture Management

Message from the Guest Editors

The relationships between water, agriculture, and climate are highly interdependent and complex. Weather and climate-related disasters such as droughts, floods, and wildfires are becoming far too common. For this Special Issue, we welcome contributions that cover a range from basic science and theories to application studies around the following topics:

- Use of surface hydrology models for water resource assessment;
- Use of in situ, satellite, and modeled data in surface hydrology models;
- Use of satellite and modeled data for drought and flood vulnerability assessments;
- Multi-source data assimilation for improved hydrological accounting and forecasting;
- Development, improvement, validation, and comparison of hydrometeorological datasets;
- Water availability assessment and forecasting;
- Basin water accounting methods, forecasting, and applications;
- Shifts in precipitation patterns and extremes;
- Melting glaciers and snow drought;
- Sustainable use of land and water under changing climate;
- Climate forecast applications for food security and agricultural management;
- Case studies on climate-smart water and agricultural management.

Guest Editors

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Deadline for manuscript submissions

closed (30 April 2023)

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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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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).