Special Issue

New Technologies for Hydrological Forecasting and Modeling

Message from the Guest Editors

In the face of increasing climate variability, intensified hydrological extremes, and rapid environmental changes, the demand for advanced hydrological forecasting and modeling has never been more urgent. Emerging technologies—such as remote sensing, real-time data assimilation, high-performance computing, and artificial intelligence (AI)—can improve our ability to predict, simulate, and manage water-related processes and hazards.

In this Special Issue of Water, we are particularly interested in studies related to recent advancements, applications, and evaluations of modern technologies in hydrological forecasting and modeling. We invite authors to present their research on the following topics (not limited to the list below):

- Real-time hydrological data assimilation and forecasting.
- Remote sensing for hydrological model input and validation.
- Integration of hydrological and hydraulic models.
- Uncertainty quantification and model evaluation techniques.
- Climate change impact assessment on future hydrological conditions.
- Machine learning and AI applications in hydrology.

[...]

For further reading:
https://www.mdpi.com/journal/water/special_issues/W86P4S5215

Guest Editors

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Message from the Editor-in-Chief

In the context of global changes, the sustainable management of water cycles, going from global and regional water cycles to urban, industrial and agricultural water cycles, plays a very important role on the water resources and on their relationships with food, energy, biodiversity, ecosystem functioning and human health. *Water* invites authors to provide innovative original full articles, critical reviews and timely short communications and to propose special issues devoted to new technological and scientific domains and to interdisciplinary approaches of the water cycles. We ensure a critical review process and a quick turnaround between submission and final decision.

Editor-in-Chief

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