

Special Issue

Advances in Machine Learning and Artificial Intelligence Technologies for Hydrological Processes and Hydrologic Disasters

Message from the Guest Editors

The Special Issue aims to highlight the latest developments and applications of artificial intelligence (AI) technologies and machine learning (ML) in addressing challenges related to hydrological processes and disasters. The development of machine learning and artificial intelligence technologies offers innovative approaches to understanding, modeling and predicting the movement and storage of water in the environment, as well as its interactions with geological, atmospheric and ecological systems. Traditional methods often struggle to capture the highly nonlinear and spatiotemporal variability of water systems, but recent advances in ML and AI provide alternative tools to enhance predictive capabilities, optimize resource management, and improve risk assessment capability.

We warmly welcome submissions focused on innovative methodologies or applications that tackle key challenges in understanding, predicting and managing hydrological processes and related disasters.

For more details, please find at:

https://www.mdpi.com/journal/water/special_issues/504PQA1POD

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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

Dr. Jean-Luc PROBST

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