Special Issue

Advances in Extreme Hydrological Events Modeling

Message from the Guest Editor

This Special Issue aims to provide a scientific platform for exploring innovative methodologies and advanced tools to enhance the understanding, prediction, and management of extreme hydrological events. This Special Issue emphasizes the significance of uncertainty analysis in modeling extreme hydrological events. We seek research that quantifies uncertainties in precipitation, streamflow, and other hydrological extremes, providing robust frameworks for improved predictive modeling and risk assessments. Innovative approaches integrating uncertainty quantification into hydrological and climate models are particularly valuable. Additionally, we encourage submissions that showcase the application of data assimilation techniques to improve the accuracy of extreme event predictions. We welcome research that advances our understanding of drought dynamics and flood events, including their spatiotemporal characteristics, causative factors, and long-term trends. Contributions that investigate the impacts of climate change on these hydrological extremes, along with adaptive strategies to mitigate their adverse effects, are highly relevant to this Special Issue.

Guest Editor

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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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