

Special Issue

Advances in Integrating Distributed Hydrologic Models with Novel Monitoring Data

Message from the Guest Editors

Progress in sensors and sensor networks over the last decade has positively impacted water management, with accurate and timely data becoming the key to identifying existing and emerging issues. In parallel, there has been a surge of interest in the development and application of distributed hydrologic models that integrate physical, chemical, and ecological/biological processes across different hydrologic domains and scales. Applications of these new models are opening up the possibility to gain new insights into the inner workings of complex water systems (e.g., the food-energy-water nexus) while allowing model variables and states to be evaluated using new types of data. This Special Issue invites papers that report recent developments in monitoring and modelling of water quality and quantity in catchments and their sub-units (rivers, streams, wetlands and groundwater) with a focus on new types of sensors and integration between models and data. These include, but not limited to, distributed sensor networks and smart, real-time sensing of temperature, nutrients, dissolved oxygen, microbial metabolism, and species abundance.

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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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