



water

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GIS-Based Hydrology and Water Quality Modeling

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Message from the Guest Editors

Accurate estimation of the temporal and spatial distribution characteristics of water resources are required to manage water in a sustainable manner. Geographic Information Systems (GIS) and remote sensing (RS) technologies have been widely used in hydrologic/water quality modeling areas. Various satellites can also provide necessary data that can make up for the lack of on-the-ground monitoring of water resources at various scales. The use of GIS/RS have increased in hydrological modeling and water resources system analysis (ET, soil moisture, runoff, groundwater, soil erosion, etc.) in the last decade. There is a growing need to improve the current GIS/RS technologies and obtain a better understanding of its use in hydrology. Besides, Machine-Learning/Deep-Learning applications have rapidly become the state-of-the-art, leading to enhanced performance in various hydrological modeling applications that can be integrated with GIS and hydrological modeling.

We welcome contributions on GIS/RS, hydrology and non-point pollution modeling, integration of GIS and models, Machine-Learning/Deep-Learning application in GIS-based modeling, and decision support systems.



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Special Issue

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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.

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