



water

an Open Access Journal by MDPI



GIS-Based Hydrology and Water Quality Modeling

Guest Editors:

Prof. Dr. Kyoung Jae Lim

Regional Infrastructure
Engineering, Kangwon National
University, Chuncheon, Gangwon
24341, Korea

Prof. Younghun Jung

Construction and Disaster
Prevention Engineering,
Kyungpook National University,
Sangju, Gyeongbuk 37224, Korea

Dr. Jonggun Kim

Institute of Agriculture and Life
Science, Kangwon National
University, Chuncheon, Gangwon
24341, Korea

Deadline for manuscript
submissions:

closed (30 January 2019)

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.



mdpi.com/si/15903

Special Issue

an Open Access Journal by MDPI

Editor-in-Chief

Dr. Jean-Luc PROBST

ECOLAB, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, campus ENSAT, Auzeville Tolosane, France

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.

Author Benefits

Open Access: free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility: indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, PubAg, AGRIS, CAPlus / SciFinder, Inspec, and other databases.

Journal Rank: JCR - Q2 (*Water Resources*) / CiteScore - Q1 (*Water Science and Technology*)

Contact Us

Water Editorial Office
MDPI, St. Alban-Anlage 66
4052 Basel, Switzerland

Tel: +41 61 683 77 34
www.mdpi.com

mdpi.com/journal/water
water@mdpi.com
[X@Water_MDPI](https://twitter.com/Water_MDPI)