

Special Issue

Simulation and Analysis of Flood Disaster in River Basins during Typhoons and Heavy Rainstorms

Message from the Guest Editors

Global warming and climate change have increased typhoons and heavy rainstorms. The loss in occasions of flood disaster is severe because the population is more concentrated in urban areas. The simulation of a flood event is initiated from the upstream rainfall–runoff process, midstream flood wave propagation to the downstream inundation imitation. Flood disaster prevention can be implemented through structural or nonstructural measures. Since both are based on a series of hydrological simulations, a better understanding of current flood simulation methods is considered necessary. **Keywords:** Hydrology, hydraulic Rainfall–runoff processes Flood wave propagation Inundation simulation Stability of numerical algorithms Historic flood analysis Flood forecasting and risk analysis Sediment transport during flood Flood economic impact

Guest Editors

Prof. Dr. Kwan Tun Lee

Department of River & Harbor Engineering, National Taiwan Ocean University, Keelung City, Taiwan

Dr. Chaiwat Ekkawatpanit

Civil Engineering Department, Faculty of Engineering, King Mongkut's University of Technology Thonburi, Bangkok, Thailand

Deadline for manuscript submissions

closed (31 May 2023)



Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 5.8



mdpi.com/si/88741

Water

MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
water@mdpi.com

[mdpi.com/journal/
water](https://mdpi.com/journal/water)





Water

an Open Access Journal
by MDPI

Impact Factor 3.0
CiteScore 5.8



[mdpi.com/journal/
water](https://mdpi.com/journal/water)



About the Journal

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

Centre de Recherche sur la Biodiversité l'Environnement (CRBE) UMR CNRS/UPS/INPT/IRD, Centre National de la Recherche Scientifique (CNRS), University of Toulouse, Campus ENSAT, Auzeville Tolosane, Toulouse, France

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)