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Global Flood Hazard: Applications in Flood Modelling and Mapping

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Deadline for manuscript submissions:

closed (30 September 2023)

Message from the Guest Editors

Floods are among the most frequent and devastating types of natural hazards which can cause great losses on a global scale, damage the economy and infrastructures, cause damage to various human activities, injuries, loss of human lives, and disruption of transportation systems.

Due to climate change, flood events becoming more frequent and unpredictable in recent years.

Flood modelling provides the possibility of informing about the many aspects of flood management. With recent progress in computer-based numerical modelling tools, one-dimensional (1D) and two-dimensional (2D) hydrodynamic models have been used for simulating flood events. Coupled 1D-2D model, which maintain high accuracy and superior computational efficiency, has been developed in recent years and it is of particular importance for many flood-modelling projects.

Flood mapping has made significant progress and it serves as an important tool for flood prediction, control, and mitigation.

For this Special Issue, we welcome research articles and reviews addressing the causes, effects, and consequences of flooding, as well as models that can indicate its simulation.







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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 technological scientific domains and 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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