

Special Issue

Advances in Flood Hazard and Risk Analysis: Theory, Methods, Numerical Models, Strategies, and Applications

Message from the Guest Editors

Floods are among the Earth's most common and most destructive natural hazards, posing a significant threat to population, properties, buildings, transport infrastructures, cultural/environmental heritage, and economic activities. In recent decades, the effects of extreme flooding events have been increasing in many parts of the world, being exacerbated by the pressure of anthropic factors and climate evolution. While the hydraulic and hydrologic scientific communities are actively involved in improving fundamental physical understanding about this threat and extending the capabilities of mathematical and numerical models, increased societal awareness has caused the shift from a classic risk-based territory management to innovative risk-based approaches of the entire flood risk cycle (precaution, event, response, recovery). Recent scientific advances have involved, among others: the optimal design of systems of flood-mitigation reservoirs; For further reading, please follow the link to the Special Issue Website at: https://www.mdpi.com/journal/water/special_issues/6Z2W515689

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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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