Special Issue

Hydrological Modeling and Evaluation for Flood Risk Management

Message from the Guest Editors

Floods can be considered to be one of the most devastating natural hazards, with severe socioeconomic and environmental impacts on the affected areas. In the future, flood risk will increase as a consequence of several factors including population growth in flood-prone areas, decaying or poorly engineered flood control infrastructure, and climate change that leads to increases in sea level, rainfall, and storm winds. This Special Issue welcomes multidisciplinary studies that aim to showcase innovation in numerical techniques for improved prediction of the dynamics and extent of flooding in a reliable and effective manner. Researchers of various disciplines, including coastal and hydraulic engineering, hydrology, meteorology, remote sensing, geography, and geotechnics, are invited to explore advances in analysis of model prediction skill (e.g., uncertainty quantification, sensitivity analysis, data assimilation, machine learning, multi-scale modeling) and/or integration of multiple flood drivers into hydrological modeling.

Guest Editors

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Message from the Editor-in-Chief

As the world of science becomes ever more specialized, researchers may lose themselves in the deep forest of the ever increasing number of subfields being created. This open access journal Applied Sciences has been started to link these subfields, so researchers can cut through the forest and see the surrounding, or quite distant fields and subfields to help develop his/her own research even further with the aid of this multi-dimensional network.

Editor-in-Chief

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