

Special Issue

Hydraulic Modeling and Climate Change: Impacts on River Systems and Extreme Events

Message from the Guest Editors

We are pleased to announce this Special Issue, entitled “Hydraulic Modeling and Climate Change: Impacts on River Systems and Extreme Events”. This Special Issue centers on the impact of climate change on river hydraulics, trends in extreme flooding, and the use of innovative hydraulic modeling techniques to forecast future flood risks. It investigates long-term shifts in extreme hydrological events and examines the contributions of both natural and anthropogenic factors, leveraging statistical and machine learning models. The Issue also highlights novel methodologies and case studies in flood frequency analysis, focusing on parameter estimation methods, statistical models, and their practical application in flood risk assessment. Additionally, it showcases recent advancements in statistical distributions and techniques for analyzing extreme hydrological events, with applications to flood frequency analysis and prediction. For this Special Issue, we invite original research materials that employ multidisciplinary approaches and explore various facets of hydraulic modeling and hydrometeorological extremes.

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Message from the Editor-in-Chief

Geographies is an open access, cross-disciplinary journal that covers the physical features of the earth and its atmosphere, also including the human dimension. The scope of this journal is extremely wide, from the study of the various components that make up our planet, to the tools used to conduct these studies, to the human impacts that affect us all. All of these issues can be addressed at a variety of spatial and temporal scales from global to local and from a single point in time through eons. *Geographies* promotes a quest for knowledge and to finding solutions to many of our most pressing and timely issues to benefit our world.

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