

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.

Guest Editors

Dr. Cristian Anghel

Faculty of Hydraulics, Technical University of Civil Engineering Bucharest, Lacul Tei, Nr. 122-124, 020396 Bucharest, Romania

Dr. Jeroen Meersmans

TERRA Teaching and Research Centre, Gembloux Agro-Bio Tech, University of Liège, 5030 Gembloux, Belgium

Deadline for manuscript submissions

31 July 2025



Geographies

an Open Access Journal
by MDPI

CiteScore 1.7
Tracked for Impact Factor



mdpi.com/si/219503

Geographies

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

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





Geographies

an Open Access Journal
by MDPI

CiteScore 1.7
Tracked for Impact Factor



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



About the Journal

Message from the Editor-in-Chief

Editor-in-Chief

Prof. Dr. Luca Salvati
Department of Economics and Law, University of Macerata, Via
Amaroli 43, I-62100 Macerata, Italy

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within ESCI (Web of Science), Scopus, AGRIS, RePEc, and other databases.

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 23.5 days after submission; acceptance to publication is undertaken in 5.7 days (median values for papers published in this journal in the first half of 2024).