

Special Issue

Climatic Change Impact on Hydrology

Message from the Guest Editors

Ongoing and future climate change will impact water resources worldwide and redefine risk levels associated with hydrological extremes. Climate change impacts on catchment hydrology are likely to display strong regionalism, due to both spatially-variable climate forcing and the often unique physiographic characteristics of individual catchments. Understanding and predicting the hydrological response of catchment to climate change under different climate regimes, and elucidating the role of physiographic factors or 'catchment structure' (topography, geology, geomorphology, etc.) in mediating this response, thus represent active research areas in hydrology. This Special Issue welcomes contributions related to climate change impacts on hydrology, including but not limited to the following topics:

- Diagnostics of streamflow-climate relationships from historical observations
- Model-based projections of streamflow variability in response to climate change
- Changes in flood and baseflow characteristics in response to historical and projected climate change
- Influence of catchment structure and climate type on the catchment

Guest Editors

Prof. Dr. Ali A. Assani

Prof. Christophe Kinnard

Prof. Dr. Mhamed Mesfioui

Deadline for manuscript submissions

closed (30 June 2018)



Hydrology

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 5.9



mdpi.com/si/11456

Hydrology
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
hydrology@mdpi.com

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





Hydrology

an Open Access Journal
by MDPI

Impact Factor 3.2
CiteScore 5.9



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



About the Journal

Message from the Editor-in-Chief

Hydrology is the study of the waters of the Earth. Hydrology has close ties with hydraulics, hydrogeology and the multiple sciences that study the atmosphere, the land surface, the soil and the subsoil, and ranges from complex problems of risk, forecasting and optimization of water resources to interactions with ecological, urban, social and economic systems. The purpose of *Hydrology* is then to provide a journal where research results and real-world problems can be presented and discussed in order to bridge the traditional gaps between the academic world and the professionals and decision makers. Therefore, *Hydrology*, invites authors to submit their original theoretical, field, experimental, and numerical studies on hydrology with strong emphasis on multidisciplinary approaches and interdisciplinary topics, which cross the typical boundaries of our science.

Editor-in-Chief

Prof. Dr. Ezio Todini

Italian Hydrological Society, Piazza di Porta San Donato 1, 40126
Bologna, Italy

Author Benefits

High Visibility:

indexed within Scopus, ESCI (Web of Science), PubAg, GeoRef, and other databases.

Journal Rank:

JCR - Q2 (Water Resources) / CiteScore - Q1
(Oceanography)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 17.9 days after submission; acceptance to publication is undertaken in 2.8 days (median values for papers published in this journal in the second half of 2025).