

Special Issue

Climate Change Effects on Hydrology and Water Resources

Message from the Guest Editors

Climate change has emerged as one of the major threats to hydrology and water resource systems. Climate change is expected to alter hydrologic processes in many parts of the world; there is a tendency to increase precipitation occurrence and consequently increase the risk of flood in some regions, whereas climate change enhances the risk of drought and creates additional stresses over water resources in other regions. Unusual precipitation patterns such as varying annual rainfall patterns, change in quantity, frequency and intensity of rainfall would significantly alter hydrologic processes in temporal and spatial distribution of water resources and affect streamflow, soil moisture and water availability. These impacts directly affect water supply, the environment, infrastructure, ecosystems, and indirectly affect socio-economic behavior, as water is a critical element for human activities, human communities and local economies. The purpose of this Special Issue is to provide an opportunity for researchers in different disciplines to publish their high impact research outcomes related to climatic change, hydrology and water resources.

Guest Editors

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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

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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).