Special Issue

Linking Climate Change to Hydrological Dynamics and Water Resource Management

Message from the Guest Editors

Climate change is reshaping hydrological systems across the globe. The anticipated increase in the frequency and intensity of extreme events (such as floods and droughts) poses additional threats to water security. These changes present significant challenges for sustainable water management, particularly in the context of growing demand, ecological stress, and increasing hydrometeorological extremes. This Special Issue aims to bring together original research, case studies, and reviews that explore the multifaceted interactions between climate change and hydrological processes. We particularly welcome interdisciplinary contributions that integrate climate modeling, hydrological simulation, remote sensing, water policies and governance, and socio-environmental analysis. Key topics include, but are not limited to, the following:

- Climate-induced changes in runoff, recharge, and streamflow dynamics;
- Hydrological extremes: floods, droughts, and hydrometeorological variability;
- Modeling approaches for future water availability and risks;
- Adaptation strategies in water resource planning and policy;
- Climate adaptation of irrigation and drainage systems;

Guest Editors

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Message from the Editor-in-Chief

Understanding the Earth's origin and its bio-geological evolution, the multiple implications of the geosciences (as a coherentset of interconnected disciplines), and the sociocultural and ethical interdisciplinary approaches, will be crucial for a better understanding of Nature, and also for undertaking scientificallybased political decisions.
We are committed to drive *Geosciences* to a position in which it is recognized for its high-quality, cutting-edge research and scientific influence, and strongly encourage and invite your participation and manuscripts.

Editor-in-Chief

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