Special Issue

Hydrometeorological Extremes: Current Status and Emerging Challenges

Message from the Guest Editors

Severe hydrometeorological events are serious issues that have a big impact on global society, agriculture, infrastructure, human safety, and water resources. For management and mitigation efforts to be effective, it is imperative to comprehend the current state, as well as upcoming difficulties related to these extremes. We invite original research materials that explore various facets of hydrometeorological extremes, such as floods, excessive precipitation, and droughts, for this Special Issue. We are particularly interested in research that examines how these catastrophic events impact local and regional climate scales.

We invite submissions that employ multidisciplinary approaches, integrating modern technologies like remote sensing and satellite data to enhance the monitoring and forecasting of extreme events. Topics of interest include the following: floods, frequency analyses, trend analyses, hydrological and hydrometeorological drought analyses, etc. This Special Issue aims to explore the current status and emerging challenges, providing a deeper understanding of these extreme events, which is essential for effective management and mitigation strategies.

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About the Journal

Message from the Editor-in-Chief

Continued developments in instrumentation and modeling have driven atmospheric science to become increasingly more complex with a deeper understanding of concepts, mechanisms, and interactions. This is the field that innovation built and it has led to a better appreciation for the complexity with atmosphere. Human life is intertwined in this complexity as we strive to better understand our atmosphere. Climate change is constantly stretching the limits of our thinking and forcing new ideas and concepts to be played out. Welcome to the Anthropocene!

Editor-in-Chief

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