Special Issue

Hydrometeorological Extremes: Mechanisms, Impacts and Future Risks

Message from the Guest Editor

Hydrometeorological extremes, such as floods, droughts, intense precipitation events, and compound events, such as heat waves combined with droughts, are among the most destructive natural phenomena globally. With climate change, the frequency, intensity, and spatial extent of these events are increasing, posing significant threats to human life, infrastructure, ecosystems, and socio-economic systems. This Special Issue aims to gather cutting-edge research that explores the mechanisms driving hydrometeorological extremes, their wide-ranging impacts on natural and human systems, and the future risks under changing climate conditions. We seek interdisciplinary contributions that integrate climatology, hydrology, meteorology, environmental science, and other relevant fields to provide a comprehensive understanding of these complex events.

Guest Editor

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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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