Special Issue

Climate Extremes and Their Impacts

Message from the Guest Editors

Climate extremes affect all humanity, and their impacts can be catastrophic. We invite you to submit model and observationally based studies that assess the probability and impacts of individual climate extremes, coincident climate extremes, and compound climate extremes at regional to global scales. Such climate extremes may include but are not limited to heatwaves, bushfires, floods, extreme rainfall, storms, hail, lightning, extreme winds, and tropical and so on. We also welcome studies that link climate change to impacts on different sectors such as energy, infrastructure, health, and finance. Studies that demonstrate how simulations or observations of extremes are used to inform adaptation and risk assessments are also welcomed. Examples include how the latest big data—such as the Climate Model Intercomparison Project and the Coordinated Regional Climate Downscaling Experiment -are applied to inform decision making. This issue aims to demonstrate the latest in climate science surrounding extreme events as well as showcasing impacts analyses and current best practices in applying climate data to real-world scenarios through adaptation or risk assessments.

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Deadline for manuscript submissions

closed (9 March 2023)



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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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