





Special Issue Reprint

# **Extreme Weather Events in a Warming Climate**

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Edited by Masoud Rostami

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This Reprint presents a collection of ten peer-reviewed articles originally published in the *Atmosphere* Special Issue titled "Extreme Weather Events in a Warming Climate". As climate change intensifies, extreme weather events—such as droughts, heatwaves, typhoons, and heavy precipitation—are becoming more frequent and severe globally, impacting ecosystems, human health, and socio-economic systems. This volume offers diverse regional case studies from Africa, Asia, Europe, and South America, employing advanced observational data, climate modeling, and innovative statistical techniques to analyze these phenomena.

The key topics explored herein include the influence of El Niño on droughts in South Africa, terrain effects on precipitation in China, vapor pressure deficit impacts on global forests, compound extremes of temperature and rainfall, and projections of future rainfall extremes under climate change. The Reprint also addresses drought risks in Romania, heatwaves in China and Algeria, and shifting precipitation patterns in the Amazon. Collectively, these studies highlight the complex, localized nature of climate extremes, emphasizing the critical need for tailored adaptation and mitigation strategies.

This volume can serve as a resource for researchers, policymakers, and practitioners aiming to improve climate resilience and sustainable management in the face of accelerating environmental change.



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