

Special Issue

Compound Events and Climate Change Impacts in Agriculture

Message from the Guest Editors

Climate change is increasingly altering global weather patterns, leading to a rise in the frequency, intensity, and complexity of compound events. These are defined as the combination of multiple climate drivers or hazards (e.g., drought and heatwaves, consecutive flood and storm events, or concurrent oceanic and atmospheric extremes) that contribute to societal or environmental risk. The impacts of these compound events on agricultural systems are often non-linear and disproportionate, posing a severe threat to global food security, water resources, and ecosystem stability. While significant progress has been made in understanding individual extreme events, the integrated analysis of compound events and their cascading impacts on crops, livestock, and farm economies remains a critical research gap. In this Special Issue, original research articles and reviews are welcome.

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Deadline for manuscript submissions

31 March 2026



Atmosphere

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Impact Factor 2.3
CiteScore 4.9



mdpi.com/si/253703

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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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