



Atmosphere Heatwaves: Drivers, Mechanisms and Impacts

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Message from the Guest Editors

Dear Colleagues,

During this period of ongoing global climate change, many regions of the world are experiencing an increase in the number of extreme events, which are becoming more severe, frequent and longer. Heat waves are an example of one of these events. Their effects have a direct impact on human health and life, but also on various sectors of the economy (e.g. infrastructure, agriculture and energy) and on the natural environment, causing various changes in ecosystems.

This Special Issue covers all topics regarding heat waves, especially their drivers, mechanisms and impacts on the natural and human environments.

All authors are warmly invited to present the results of their research in the fields below:

- Definitions of heat waves in various climatic zones;
- Regional and global factors of heat waves;
- Mechanisms intensifying the effects of heat waves;
- Environmental, social and economic impacts;
- Mitigation and adaptation of heat waves;
- Case studies from areas with different levels of urbanization;
- Spatio-temporal analysis of heat waves;
- Other topics related to heat waves.

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Special Issue



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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!

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