



Lightning Flashes: Detection, Forecasting and Hazards

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Message from the Guest Editors

Dear Colleagues,

Severe storms that usually produce high lightning activity are responsible for hundreds of deaths and billions of dollars of damage annually worldwide. The almost real-time detection of lightning activity is important for a wide variety of applications and for the development of new nowcasting techniques. Climatological lightning data are also essential to understand humanity's influence on the climate and, conversely, how these climate changes can affect the behavior of severe storms in the long term. Accessing the impacts of severe storms on the population will help us to understand its vulnerabilities, leading to more effective mitigation and adaptation actions.

Based on this discussion, we are planning a Special Issue dedicated to multi-disciplinary contributions in all areas related to lightning: detection techniques and/or systems, nowcasting and/or forecasting methods, hazard characterization, severe storm signatures and life cycle development (micro-physics, electrification, thermodynamics, and dynamics).

We welcome contributions of various article types such as original research and reviews.





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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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