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Prediction, Observation, and Monitoring of Weather and Climate Extremes

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Deadline for manuscript submissions: closed (15 December 2023)



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Message from the Guest Editors

Dear Colleagues,

The increase in the intensity and frequency of weather and climate extremes is a growing concern. Therefore, the accurate prediction and timely monitoring of extreme events are of great significance in saving lives and minimizing the destruction of property.

To better understand regional weather and climate characteristics under global warming, we expect to know how extreme-event monitoring techniques and indices perform in different areas. For the simulation and prediction of extreme events, we expect to obtain more insights into the ability of numerical models to adequately simulate extreme events in different areas and at different time scales. To improve the skill of model simulation and prediction, we expect to understand the predictability of extreme events based on dynamic models, physicalempirical models, dynamic-statistical models, and deeplearning approaches.

In this context, for this Special Issue of *Atmosphere*, we are calling for submissions related but not limited to the above questions. Articles that may contribute to a better understanding of extreme-weather/climate-event monitoring and predictions are invited.







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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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