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# **Precipitation Observations and Prediction**

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## Message from the Guest Editors

In this Special Issue on "Precipitation Observations and Prediction", we aim to publish state-of-the-art research articles or review papers that document new advances in observational datasets, novel precipitation retrieval algorithms, analysis methods, predicting techniques, and physical theories for the Earth's precipitation. We welcome the topics listed below and other scientific results related to this Special Issue:

Remote sensing techniques to observe precipitation (solid or liquid) at different scales, including local, regional, and global;

Long-term observations informing the impacts of climate change;

New methods to detect or attribute global-warminginduced precipitation responses;

Cloud and precipitation microphysics;

Ground validation of remote sensing precipitation products;

Development of new numerical modeling techniques and physical parameterizations for improving precipitation forecast;

Investigations on sub-seasonal-to-seasonal prediction of precipitation;

Climate-scale projections of future rainfall and snowfall, including extreme events;

Data fusion of precipitation observations or predictions from different retrieval systems or projections.







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# **Editor-in-Chief**

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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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