



## Precipitation and Convection: From Observation to Simulation

Guest Editors:

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Deadline for manuscript  
submissions:

**closed (5 August 2022)**

### Message from the Guest Editors

This Special Issue aims to advance our knowledge of precipitation and convective processes, diagnosing existing problems in current climate models and exploring new techniques and methods to improve parameterizations in weather and climate models. We invite researchers to submit papers related to precipitation and convection from both observation and modeling perspectives. Topics of interest for this Special Issue include but are not limited to:

- Precipitation measurement techniques and applications;
- Precipitation characteristics and variabilities (from diurnal to centurial) locally, regionally, or globally;
- Precipitation uncertainties in observations and models;
- Convective systems (e.g., MCSs, elevated convection, terrain-forced convection);
- Conceptual models of convection;
- Convective parameterizations;
- Interactions between convection and environment, land surface, aerosols, etc.;
- Model assessment, evaluation, or improvement regarding convection and precipitation;
- Monsoons, MJO, ITCZ, storm tracks, etc.;
- Precipitation and convection under climate change scenarios.





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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!

## Author Benefits

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