Special Issue

Simulation and Modeling of Climate: Recent Trends, Current Progress and Future Directions

Message from the Guest Editors

In this Special Issue, we focus on the recent trends, current progress, and future directions of climate modeling and simulation. Topics in this Special Issue include but are not limited to those outlined below:

- development of climate models, including dynamic core, physical parameterizations and more
- improving predictability of the earth system by machine learning
- model simulations, evaluation, analysis and benchmarking
- uncertainty quantification
- evaluation of regional or global simulations using in situ or remote-sensing observations
- regional climate change
- coupling of different climate components (e.g., land–atmosphere coupling, air–sea interaction) and their climate impacts
- evaluation of the cmip6 simulations and their improvement from the previous cmips

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Deadline for manuscript submissions

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About the Journal

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!

Editor-in-Chief

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