Special Issue

Hydrometeorological Simulation and Prediction in a Changing Climate

Message from the Guest Editors

Global climate change is deeply affecting hydrometeorological processes in the system that is Earth, creating great challenges to traditional hydrometeorological simulation and prediction. Climate change has led to more frequent extreme weather events, altered hydrological cycle patterns, and significant changes in precipitation patterns, all of which pose major threats to the sustainable development of human society. With climate change accelerating, we urgently need to develop more advanced simulation and prediction methods to improve our understanding and the predictive capabilities of complex hydrometeorological systems under non-stationary climate conditions. This Special Issue of *Atmosphere*, "Hydrometeorological Simulation and Prediction in a Changing Climate", aims to bring together the latest research findings and explore innovative methods and solutions in the context of climate change. In particular, we welcome research that improves simulation and prediction capabilities, expands our understanding of climate change impacts, and supports climate-adaptive management decisions.

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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!

Editor-in-Chief

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