

## Special Issue

# Arctic Atmosphere–Sea Ice Interaction and Impacts

### Message from the Guest Editors

Arctic warming and Arctic sea ice loss have become one of the most dramatic features of the changing global climate system and ecosystem. The aim of this issue is to enhance our understanding of the linkage and physical mechanisms between the Arctic and Northern Hemispheric climate change from low to high latitudes. Statistical research, case studies, reanalysis and model evaluation, model simulations, and systematic reviews related to the theme of Arctic Atmosphere–Sea Ice Interaction and Impacts are welcome. Example topics include, but are not limited to:

- Linkage between Arctic and Northern Hemispheric atmospheric circulations.
- Impacts of Arctic sea ice on climate change, extreme weather, and pollution over Eurasia and North America.
- Intermittency of the Arctic–midlatitudes association.
- Nonlinear response of atmospheric circulation to Arctic changes.
- Bidirectional Arctic–tropical connection.
- Model studies for the physical mechanisms in linking the Arctic to low latitudes.
- Evaluation of model or reanalysis datasets for the Arctic atmosphere–sea ice interaction and Arctic–midlatitudes association.

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### Guest Editors

Dr. Shuoyi Ding  
Dr. Xiaodan Chen  
Dr. Peiqiang Xu

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### Deadline for manuscript submissions

closed (10 July 2024)



## Atmosphere

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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!

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### Editor-in-Chief

Dr. Daniele Contini

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