

Special Issue

Research about Permafrost–Atmosphere Interactions

Message from the Guest Editors

Permafrost is a result of the exchange and development of material and energy between Earth and atmosphere. On one hand, changes in the atmosphere can lead to changes in permafrost, and on the other hand, changes in permafrost can also have an impact on the climate system. The study of the mutual feedback mechanism between permafrost and the atmosphere is crucial for understanding the global balance of nature, material and energy exchange.

Current research has made advancements in using mathematical modeling tools to predict the effects of atmospheric changes on permafrost. However, there are a limited researchs of studying the feedback mechanism of permafrost changes on the atmosphere, and the feedback mechanism between the two. This Special Issue aims to publish research that combines these three aspects. We encourage the submission of papers that focus on technologies and methods to study the feedback mechanism between permafrost and atmosphere. The submission for this Special Issue can include modeling and predicting the correlation between permafrost and atmosphere using mathematical techniques, and observation results obtained from ground or spatial measurement data analysis.

Guest Editors

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Deadline for manuscript submissions

closed (1 July 2024)



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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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