

Special Issue

Polar Glacier Mass Balance and Climate Change

Message from the Guest Editor

Polar glaciers, the key indicators of climate and cryosphere change, play a critical role in the Earth's hydrological cycle, ecosystem stability, and global sea-level rise. Moreover, glacial changes affect those of the climate and sea level. This Special Issue welcomes original research articles, review papers, and case studies that explore various aspects of glaciers, such as glacier mass balance, glacier retreat and advance, glacial hydrology, glacier-atmosphere interactions, glacial geomorphology, and the influence of glaciers on local and regional climate systems. We encourage submissions that utilize multidisciplinary approaches, combining field observations, remote sensing, modeling, and historical analyses to provide a holistic view of glacier responses to climate change.

Additionally, studies focusing on the impact of glacier dynamics on downstream ecosystems, water resources, and sea-level rise are also encouraged. This Special Issue aims to foster discussions on cutting-edge research, methodologies, and modeling approaches related to glaciers, promoting a deeper understanding of the processes governing these vital components of the Earth's cryosphere.

Guest Editor

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Deadline for manuscript submissions

closed (15 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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