Special Issue

Analysis of Global Glacier Mass Balance Changes and Their Impacts

Message from the Guest Editors

This Special Issue focuses on recent variations and future projections in the global glacier mass balance and explores its broader impacts. It aims to bring together multidisciplinary research, combining perspectives from the fields of glaciology, hydrology and climatology to contribute to a holistic understanding of glacier dynamics. It includes investigations of glacier mass changes on different continents using observations, modeling and remote sensing techniques. This Special Issue also explores the drivers of changes in glacier mass balance, such as temperature changes, precipitation patterns, and atmospheric circulation. In addition, it examines the impacts of these changes on local water resources and associated disaster risks. Contributions addressing extreme melting events, the dynamic interactions between glaciers, climate, and local hydrology are particularly encouraged.

Guest Editors

Dr. Wenfeng Chen

State Key Laboratory of Tibetan Plateau Earth System, Resources and Environment, Institute of Tibetan Plateau Research, Chinese Academy of Sciences, Beijing 100101, China

Dr. Weibing Du

School of Surveying and Land Information Engineering, Henan Polytechnic University, Jiaozuo 454000, China

Deadline for manuscript submissions

closed (5 March 2025)

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/si/179263

Atmosphere
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
atmosphere@mdpi.com

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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

Dr. Daniele Contini
Institute of Atmospheric Sciences and Climate (ISAC), National Research Council (CNR), Str. Prv. Lecce-Monteroni km 1.2, 73100 Lecce, Italy

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