



## Analysis of Global Glacier Mass Balance Changes and Their Impacts

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:

**27 September 2024**

### Message from the Guest Editors

Dear Colleagues,

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.

Dr. Wenfeng Chen

Dr. Weibing Du

*Guest Editors*





an Open Access Journal by MDPI

## 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

## 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!

## Author Benefits

**Open Access:** free for readers, with article processing charges (APC) paid by authors or their institutions.

**High Visibility:** indexed within Scopus, SCIE (Web of Science), Ei Compendex, GEOBASE, GeoRef, Inspec, CAPlus / SciFinder, Astrophysics Data System, and other databases.

**Journal Rank:** CiteScore - Q2 (*Environmental Science (miscellaneous)*)

## Contact Us

---

Atmosphere Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland

Tel: +41 61 683 77 34  
[www.mdpi.com](http://www.mdpi.com)

[mdpi.com/journal/atmosphere](http://mdpi.com/journal/atmosphere)  
[atmosphere@mdpi.com](mailto:atmosphere@mdpi.com)  
[X@Atmosphere\\_MDPI](https://twitter.com/Atmosphere_MDPI)