

Special Issue

Desert Climate and Environmental Change: From Past to Present

Message from the Guest Editors

Drylands constitute approximately 41% of the Earth's land surface. Currently, they are increasingly affected by unprecedented global changes and human activities. This Special Issue aims to gather original and innovative research papers focusing on the desert climate and environmental changes from the past to the present. The discussion topics should be focused on, but are not limited to:

- Aeolian Geomorphology: wind-driven processes shaping desert landscapes; dune formation, migration, and stabilization; wind-induced soil erosion and impacts.
- Quaternary Geology and Environmental Evolution: desert climates and environments in the Quaternary; historical desertification triggered by human activity; modern aeolian activities and dust emissions.
- Environmental Archeology and Human–Environment Interaction: human impacts on desert ecosystems; adaption of ancient human communities to desert environments; human–environment interactions within desert regions.
- Climate Change Impacts: climatic factors in desert regions; extreme climatic and environmental events; modeling future climate scenarios and potential impacts on desert regions.

Guest Editors

Dr. Bing Liu

Dr. Xiaokang Liu

Dr. Zhiyong Ding

Deadline for manuscript submissions

31 December 2025



Atmosphere

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.9



mdpi.com/si/218757

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

[mdpi.com/journal/
atmosphere](https://mdpi.com/journal/atmosphere)





Atmosphere

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.9



[mdpi.com/journal/
atmosphere](https://mdpi.com/journal/atmosphere)



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

Dr. Daniele Contini

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

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))