Special Issue

Climate Extremes in Europe: Causes, Impact, and Solutions

Message from the Guest Editors

We invite you to contribute your scientific work to this Special Issue of *Atmosphere*, entitled “Climate Extremes in Europe: Causes, Impact, and Solutions”. According to the Copernicus Climate Change Service (C3S) [https://climate.copernicus.eu/], Europe is experiencing increased extreme weather events due to climate change, with a record persistence of heat waves, severe droughts, intense storms, and heavy rainfall. The summer of 2024 was the warmest on record, with southeastern Europe experiencing unprecedented heat stress for 66 days. Mediterranean Sea temperatures also reached record highs. While some regions saw fewer rainy days, others, like northern UK and Fennoscandia, experienced above-average precipitation. These changes are driven by rising greenhouse gas concentrations. In response, Europe has intensified its climate policies, such as the European Green Deal, promoting renewable energy and improving climate resilience infrastructure. Without urgent and coordinated action, extreme weather events will continue to escalate, posing significant threats to human health, ecosystems, and economies.

Guest Editors

Dr. Adrian Timofte

National Meteorological Administration, Bacău Regional Forecast Centre, Timpului Street, No. 3, 600234 Bacău, Romania

Dr. Diana Bostan

National Meteorological Administration, Bacău Regional Forecast Centre, Timpului Street, No. 3, 600234 Bacău, Romania

Deadline for manuscript submissions

1 December 2025

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/si/235982

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

mdpi.com/journal/atmosphere

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/journal/atmosphere

MDPI

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))