Special Issue

State-of-the-Art in Severe Weather Research

Message from the Guest Editor

Severe and large-scale hailstorms produce significant damage in many regions globally. In recent years, the occurrence trends of very large hail have tended to rise in most parts of the world with global warming, and only some areas have shown different behaviors. On the other hand, small hail events seem to have reduced in number. As well as global warming, several other direct and indirect factors could influence hail occurrence and distribution. However, the irregularity of such cases and the complexity of the processes inside thunderstorms make it difficult to definitively conclude about the future trends of hail. This Special Issue will publish research that enhances our understanding of the hail cycle's different steps, including studies analyzing topics from the identification of favorable large-scale and meso-scale environments to micro-physics inside hailstorms. The issue will thus provide insights into this specific field of atmospheric sciences.

Guest Editor

Dr. Tomeu Rigo
Servei Meteorologic de Catalunya, 08029 Barcelona, Spain

Deadline for manuscript submissions

28 February 2026

Atmosphere

an Open Access Journal by MDPI

Impact Factor 2.3
CiteScore 4.9

mdpi.com/si/243204

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))