



## Climate Events and Extreme Weather

Guest Editor:

### Prof. Dr. Zbigniew Ustrnul

1. Department of Climatology,  
Jagiellonian University,  
Gronostajowa 7, 30-387 Krakow,  
Poland

2. Institute of Meteorology and  
Water Management (IMGW-PIB),  
01-673 Warszawa, Poland

Deadline for manuscript  
submissions:

**closed (31 July 2020)**

### Message from the Guest Editor

Extreme weather events become one of the most important topics in meteorology and climatology in recent years. Regarding current possibilities for their detection, with remote sensing techniques and systems above all, meteorological extremes have been permanently monitored and have become a bit easier to forecast. This monitoring should also contribute to early warning systems.

Regardless, the nature of weather extremes seems to be fascinating, including the scale, plot, and their atmospheric and environmental origins. It usually refers to extremes of different spatial and temporal scale, especially thermal, precipitation or anemological events. In many areas, it could also be limited to the others like fog, deposits, thunderstorms, snow cover, etc.

The following topics concerning weather and climate extremes are preferable, but other related problems are also welcome:

- (1) Criteria and indices of meteorological extremes and their evaluation in different spatial and temporal scales;
- (2) Circulation and other determinants of events;
- (3) Long-term variability and changes;
- (4) Challenges in forecasting;
- (5) Social and economic impacts.





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)