Special Issue

Prediction and Modeling of Extreme Weather Events

Message from the Guest Editors

Extreme events are currently becoming more frequent and extreme in many regions. Unfortunately, these events are causing numerous losses of life and property, especially in places where more socioeconomically vulnerable people live, which has awakened interest in the issue of climate justice. Currently, the countries that are the largest emitters of GHG are also the ones that develop atmospheric general circulation models, used both at the weather and climate scale. However, these models are often neither validated nor adapted to the atmospheric conditions of countries located in the equatorial and subtropical zones of the Southern Hemisphere. Thus, within the idea of climate justice, the proposal would be an edition focused on the application/validation of numerical modeling. The articles can be both about climatic extremes linked to the occurrence of prolonged droughts, intense precipitation volumes, heat waves, etc., and the prognosis of events on a more regional scale, such as floods, landslides, severe storms, cyclones, etc.

Guest Editors

Dr. Marcio Cataldi

Post-Graduate Program in Civil Engineering-Management, Production and Environment, Federal Fluminense University-UFF, Niterói, Rio de Janeiro 24210-240, Brazil

Prof. Dr. Franciele Zanandrea

Department of Agricultural Engineering and Environment, Federal Fluminense University-UFF, Niterói, Rio de Janeiro 24210-240, Brazil

Deadline for manuscript submissions

closed (30 May 2025)



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/164129

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

mdpi.com/journal/

atmosphere





an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



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))