

Special Issue

Solar Radiation and Its Influences on Climate Change

Message from the Guest Editor

Recently, we have witnessed episodes of severe weather all over the world, such as violent storms, record temperatures, long droughts or massive floods. Many of these phenomena are considered signs of imminent climate change, and the common perception in both the scientific world and society at large is that renewable sources of energy, in particular solar energy, can significantly contribute to slowing down climate change. The large-scale integration of photovoltaic plants requires accurate information about the collectable solar energy, in the form of estimates at the design stage and forecasts at the operational stage. Solar energy at ground level is fundamentally conditioned by the radiative transfer in the Earth's atmosphere. In this general picture, the current Special Issue aims to bring together relevant studies on the relationship between solar energy and climate.

Guest Editor

Prof. Dr. Marius Paulescu

Faculty of Physics, West University of Timisoara, 300223 Timișoara, Romania

Deadline for manuscript submissions

31 December 2025



Atmosphere

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.9



mdpi.com/si/241069

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))