

## Special Issue

# Solar Activity Influence on Atmospheric Dynamics

### Message from the Guest Editors

Influence of solar activity and associated disturbances of interplanetary medium on the lower atmosphere circulation, weather, and climate remain one of the most important problems in contemporary solar–terrestrial physics. The knowledge of the nature of solar–atmospheric links has a significant practical importance allowing us to improve weather and climate forecasts. Moreover, the question of how solar activity influences the Earth’s atmosphere has acquired special significance in recent decades due to a lively discussion of the possible reasons for global warming. And the physical mechanism of solar–atmospheric links still contains many uncertainties and needs further comprehensive studies, using both experimental and model data. This Special Issue aims to clarify different aspects of solar activity influence on the atmospheric circulation, weather, and climate and contribute to a better understanding of processes involved in the formation of atmospheric response to solar variability.

### Guest Editors

Dr. Svetlana Veretenenko

Ioffe Institute, Russian Academy of Sciences, Politekhnicheskaya 26,  
194021 St. Petersburg, Russia

Dr. Alexei Krivolutsky

Laboratory for Atmospheric Chemistry and Dynamics, Central  
Aerological Observatory, Moscow Region, Russia

### Deadline for manuscript submissions

closed (20 February 2022)



## Atmosphere

---

an Open Access Journal  
by MDPI

---

Impact Factor 2.3  
CiteScore 4.9



[mdpi.com/si/96433](https://mdpi.com/si/96433)

*Atmosphere*  
Editorial Office  
MDPI, Grosspeteranlage 5  
4052 Basel, Switzerland  
Tel: +41 61 683 77 34  
[atmosphere@mdpi.com](mailto: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))