Special Issue

Future Trends of Our Atmospheric Electric Environments

Message from the Guest Editors

Global climate models have suggested that the frequency of thunderstorms and their intensity are likely to increase in the future. Cloud electrification through microphysics processes should clarify the relationship between faster updrafts and lightning frequency. The meteorology and climatology reanalysis with observation and numerical modeling will improve forecasting of a severely convective system. We should further inspect their causes and effects on lightning activities, transient luminous events (TLEs), and terrestrial gamma-ray flashes (TGFs). We invite papers on topics related to thunderstorms, lightning, and transient luminous events. Enhancing our understanding of future trends or climate change for our atmospheric electric environment is of great interest. This also includes findings dealing with thunderstorm dynamics, lightning statistical studies, observation/campaign on transient luminous events, or airglow/aurora monitoring for tide and gravity wave phenomena. Statistical/case studies on global/regional or rural/urban for lightning/TLEs/TGF trends responding to severe weather conditions or climates changes are of particular interest.

Guest Editors

Prof. Dr. Cheng-Ling Kuo

Department of Space Science and Engineering, National Central University, Taoyuan City 320, Taiwan

Prof. Dr. Sato Mitsuteru

Faculty of Science, Hokkaido University, Hokkaido 060-0808, Japan

Deadline for manuscript submissions

closed (1 March 2023)



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/108346

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



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))

