

Special Issue

Shock Wave Dynamics and Its Effects on Planetary Atmospheres

Message from the Guest Editor

This Special Issue is focused on shock waves and their effects on planetary atmospheres, including shock wave generation, propagation and attenuation, as well as source localization and characterization. Observational, experimental and theoretical studies are welcome. We invite researchers to contribute original research articles as well as review articles on the topic of shock wave phenomena in planetary atmospheres including but not limited to the following subtopics:

- Generation, propagation, and attenuation of shock waves resulting from natural and anthropogenic sources (e.g., meteoroids, lightning, solar storms and re-entry vehicles)
- Propagation and attenuation of weak shock (i.e., infrasound)
- The effects of ducting and atmospheric stratification, and wind on the propagation and attenuation of shock
- Source detection (direct and indirect methods), localization and characterization
- Physico-chemical effects on the local atmosphere
- Shock waves in extra-terrestrial atmospheres (e.g., Mars, Venus, Titan, Jupiter)

Guest Editor

Dr. Elizabeth A. Silber

Sandia National Laboratories, Albuquerque, NM 87123, USA

Deadline for manuscript submissions

closed (15 February 2020)



Atmosphere

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.9



mdpi.com/si/25804

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))