Special Issue

Planetary Atmospheres: From Solar System to Exoplanets (2nd Edition)

Message from the Guest Editor

There is currently a considerable effort from the science community to study the planetary atmospheres, within and beyond our Solar System. Nevertheless, the knowledge of all mechanisms at work on Solar System planet atmospheres is still limited. An understanding of the dominant factors and mechanisms controlling the atmospheric general circulation and its chemical composition is a prerequisite to our understanding of planets' climate variability and evolution. In this context, Solar System's gas giant planets, as well as telluric planets, are natural comparative laboratories to investigate the diversity of circulation regimes and the composition of planetary systems' atmospheres. This Special Issue is the second edition of a series of publications dedicated to "Planetary Atmospheres: From Solar System to Exoplanets". It aims to explore the diverse atmospheric phenomena of planets both within our Solar System and on exoplanets. We welcome all original research related to this topic.

Guest Editor

Dr. Pedro MacHado Insitute of Astrophysics and Space Sciences, Porto Rua das Estrelas, 4150-762 Porto, Portugal

Deadline for manuscript submissions

closed (30 April 2025)



an Open Access Journal by MDPI

Impact Factor 2.3 CiteScore 4.9



mdpi.com/si/212633

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))