



an Open Access Journal by MDPI

Modeling and Simulation of Planetary Atmospheres

Guest Editor:

Prof. Dr. Timothy E. Dowling

Atmospheric Science Program, Department of Physics & Astronomy, University of Louisville, Louisville, KY 40292, USA

Deadline for manuscript submissions: **18 April 2024**

Message from the Guest Editor

This Topical Collection is an appropriate venue for original results, review papers, and model expositions related to the simulation of planetary atmospheric dynamics and chemistry, both inside and outside our solar system, are all welcome contributions. Authors are encouraged to consider including comparative planetology and model-user accessibility in their discourse whenever appropriate, and to optionally include a section touching on future issues, opportunities, and/or concerns related to their topics, on the 5-, 10-, and 20-year horizons.

The main goals are for this Topical Collection to be a useful starting point for students, a valuable snapshot of the overarching field for practitioners, and a means of stimulating model interoperability, multidisciplinary collaborations, and new functionality, across the entire hierarchy, from idealized process modeling, to regional, global, fluid-interior, and whole-atmosphere simulations, to planetary operational forecasting.









an Open Access Journal by MDPI

Editor-in-Chief

Prof. Dr. Ilias Kavouras

Environmental, Occupational, and Geospatial Health Sciences, CUNY School of Public Health, New York, NY 10027, USA

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!

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)*)

Contact Us

Atmosphere Editorial Office MDPI, St. Alban-Anlage 66 4052 Basel, Switzerland Tel: +41 61 683 77 34 www.mdpi.com mdpi.com/journal/atmosphere atmosphere@mdpi.com X@Atmosphere_MDPI