

Special Issue

Coupling of Lower, Middle, and Upper Atmosphere

Message from the Guest Editors

The middle atmosphere is a highly dynamical region driven by vertical coupling through waves transporting energy and momentum from their source regions to the altitudes of their dissipation. In this Special Issue, we are interested in observations, modeling, and simulations investigating the wave propagation from the troposphere up to the lower thermosphere and ionosphere. In particular, we encourage studies of gravity waves and secondary wave generation due to body forces, atmospheric tides, and planetary waves, as well as their interaction between each other and mean flow. This also includes research dedicated to developing or improving remote sensing techniques or diagnostics of wave parameters at various scales. Research papers related to external forcing and the vertical coupling between the middle atmosphere and the thermosphere–ionosphere system, including forcing from outer space (particle precipitation, solar irradiance variations, and so forth) are also welcome.

Guest Editors

Dr. Gunter Stober

University of Bern, Bern, Switzerland

Dr. Klemens Hocke

1. Institute of Applied Physics, University of Bern, CH-3012 Bern, Switzerland

2. Oeschger Centre for Climate Change Research, University of Bern, CH-3012 Bern, Switzerland

Deadline for manuscript submissions

closed (30 September 2020)



Atmosphere

an Open Access Journal
by MDPI

Impact Factor 2.3
CiteScore 4.9



mdpi.com/si/31528

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))