

Special Issue

Middle Atmosphere Dynamics

Message from the Guest Editors

In this Special Issue, the term “middle atmosphere” refers to the layer of the Earth’s atmosphere between the upper troposphere and lower thermosphere, the dynamics of which is primarily characterized by an efficient momentum and energy exchange between the mean flow and atmospheric waves of various scales. Dynamic events occurring in the middle atmosphere can also affect weather changes and climate anomalies in the troposphere, therefore, their study is one of the most important directions in atmospheric physics. This Special Issue is intended to collect articles on the latest advances in numerical modeling, processing and analysis of observational data of dynamic processes in the middle atmosphere, including (but not limited to) analysis of inter-latitudinal and inter-hemispheric interactions, stratospheric warming events, atmospheric tides, gravity waves of various origin, etc. We welcome materials, including original and review articles on this topic, which are aimed at deepening our understanding and enhancing the ability to predict dynamic processes in the middle atmosphere that can influence, among other things, climate variability.

Guest Editors

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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

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