

Special Issue

Solar Activity Influence on Atmospheric Dynamics

Message from the Guest Editors

Influence of solar activity and associated disturbances of interplanetary medium on the lower atmosphere circulation, weather, and climate remain one of the most important problems in contemporary solar–terrestrial physics. The knowledge of the nature of solar–atmospheric links has a significant practical importance allowing us to improve weather and climate forecasts. Moreover, the question of how solar activity influences the Earth’s atmosphere has acquired special significance in recent decades due to a lively discussion of the possible reasons for global warming. And the physical mechanism of solar–atmospheric links still contains many uncertainties and needs further comprehensive studies, using both experimental and model data. This Special Issue aims to clarify different aspects of solar activity influence on the atmospheric circulation, weather, and climate and contribute to a better understanding of processes involved in the formation of atmospheric response to solar variability.

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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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