



## The Influence of Physical and Chemical Processes on the Variability of Polar Ozone

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### Message from the Guest Editor

Stratospheric ozone protects the Earth's biosphere from the harmful effects of the sun's hard ultraviolet radiation. Taking into account the fact that in the Arctic in 2020 one of the deepest spring ozone anomalies was recorded, understanding the processes affecting the variability of the ozone content in polar regions under the conditions of the decrease in the concentration of ozone-depleting substances in the atmosphere controlled by the Montreal Protocol and its amendments requires further clarification.

This special issue welcomes the presentation of the analysis of measurement results, model and analytical studies, which allow a better understanding of the interaction of chemical and dynamic processes affecting the interannual variability of the stratospheric ozone content in the Arctic and Antarctic, the influence of variability of atmospheric circulation and periodic fluctuations, wave activity, cooling of the stratosphere, polar vortex evolution, polar stratospheric clouds formation, gaseous and heterogeneous chemical reactions involving both halogen ozone depleting substances and other gases affecting ozone.





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## 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!

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