Measurement and Variability of Atmospheric Ozone

Guest Editor:

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Message from the Guest Editor

Ozone is a major atmospheric component and is significant for human health, ecological balance and climate change. As an important secondary pollutant, ozone in the troposphere is mainly produced in polluted air by photochemical oxidation of nitrogen oxides and volatile organic compounds in the presence of sunlight. Advanced measurement technology, retrieval algorithms and model simulation are crucial to understand the variability characteristics of the atmospheric ozone and its forming mechanism. At present, the primary methods and platforms of ozone observations include ground-based ozone concentration sampling and remote sensing, tethered balloon, sounding balloon, airborne observation, satellite retrieval, etc. We are pleased to announce the launch of a new Special Issue entitled “Measurement and Variability of Atmospheric Ozone”, which invites contributions presenting research on the variability of atmospheric ozone based on various observation approaches and model simulations. This covers the instrument developments, retrieval algorithms, observation experiments, data analysis research, model simulations, mechanism research, etc.
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!