Special Issue

Atmospheric Aging Processes

Message from the Guest Editors

Atmospheric processes can not only form secondary aerosols but also alter the physicochemical properties of primary particles, which underlines their importance in influencing the climate, air quality, human health, and global geochemical cycling. Due to the complexity of atmospheric processes, atmospheric science still needs more studies to better understand them via theoretical analysis, laboratory experiments, and field observations. In this Special Issue, we call for research and review articles focused on atmospheric processes. In particular, the following topics are very welcome:

- The development of instruments and techniques for improving the accurate characterization of atmospheric processes;
- The mechanisms of the formation of secondary inorganic and organic aerosols;
- The measurement of aerosol physicochemical properties of mixing state, chemical composition, phase state, effective density, hygroscopicity, and shape during the atmospheric processes;
- Particle toxicity in association with the atmospheric ageing process;
- Impacts of the atmospheric ageing process on global geochemical cycling.

Guest Editors

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Deadline for manuscript submissions

closed (17 February 2023)



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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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