

## Special Issue

# The Impact of Atmospheric Aerosol Perturbations on Aerosol-Cloud Interactions and Climate Forcing during the COVID-19 Outbreak

### Message from the Guest Editors

Aerosol particles are known to interact with clouds by acting as cloud condensation nuclei and affecting cloud radiative properties, with significant implications for global climate change. Following the outbreak of the Severe Acute Respiratory Syndrome Coronavirus-2 (COVID-19) pandemic. These global emission disruptions are likely to affect the climate at both regional and global scales, and represent an unprecedented opportunity to improve the understanding of the impact of perturbations in aerosol properties on climate forcing and aerosol-cloud interactions. The special issue focuses on all aspects of aerosol influence on the atmosphere during the COVID-19 pandemic. These include, but not limited to, experimental assessment of new sensors, monitoring network, and observation platform, the deployment to specifically support the observation during pandemic, observational and model analysis of changes in aerosol properties, and lessons learned to decision-making support systems. Contributions discussing the implications of reduced anthropogenic aerosol emissions on cloud systems are especially welcome.

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### Guest Editors

Dr. Francesca Gallo  
Dr. Fan Mei  
Dr. Manish Shrivastava

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### Deadline for manuscript submissions

closed (15 July 2021)



## Atmosphere

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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!

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### Editor-in-Chief

Dr. Daniele Contini

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