

## Special Issue

# Aerosols and Trace Gas Emissions: Methods and Applications

### Message from the Guest Editors

According to the published research, the significant increase in aerosol and trace gases from both anthropogenic and natural sources significantly contributes to world air pollution. The World Health Organization (WHO) reported that air pollution levels are dangerously high worldwide as 9 out of 10 people breathe polluted air and 7 million deaths are caused by outdoor and indoor air pollutants each year. Ground-based measurements and satellite remote sensing play a crucial role in the understanding of aerosol and trace gases sources and types, their radiative forcing, aerosol retrievals, the secondary formation of aerosol particles from precursor gases, and the estimation of particulate matter.

This Special Issue welcomes all those manuscripts presenting advances in remote sensing techniques, new methodologies, and applications with new scientific contributions for aerosol and trace gases, their radiative forcing, the estimation of aerosol optical depth and particulate matter, the classification of aerosol types, aerosol–cloud interactions, and related topics.

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### Guest Editors

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### Deadline for manuscript submissions

closed (30 June 2023)



## 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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