

Special Issue

Satellite- and Ground-Based Remote Sensing and In Situ Measurements of Aerosols and Trace Gases

Message from the Guest Editors

Dear Colleague, Aerosols with their direct and indirect radiative forcing are thought to be the largest source of uncertainty in global climate change modeling. Satellite remote sensing has evolved dramatically over the past few decades. Continuous advancement in instrument design and retrieval techniques allows for more extensive and frequent observations of a wide range of aerosols and trace gases.

This Special Issue welcomes manuscripts that present new and advanced scientific contributions in the remote sensing of aerosols and trace gases from satellite measurements, from both global and local perspectives. This includes submissions relating to the remote sensing of anthropogenic aerosols from industrial and agricultural sources as well as natural aerosols from volcanic eruptions, mineral dust, and biogenic aerosols. Submissions focusing on ground-based in situ and remote sensing measurements for aerosol model evaluation, the radiative effects of aerosols, and the development of statistical models for air quality studies are also encouraged.

Guest Editors

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Deadline for manuscript submissions

closed (20 March 2022)



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CiteScore 4.9



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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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