Special Issue

The Role of Natural Aerosols in Climate and Extreme Meteorological Events

Message from the Guest Editors

Aerosols are one of the most important forcing agents that largely contribute to the total uncertainties in estimated the global radiative forcing on the climatic time scale. They directly modify the radiation budget. Depending on their chemical compositions and diameters, aerosol particles can act as cloud condensation nuclei (CCN) and ice nuclei (IN), and deeply impact the microphysical processes inside clouds and the atmosphere's optical properties, henceforth referred to as the hydrological cycle and climate. Although in situ measurements and satelliteand ground-based remote sensing provide important information regarding aerosol loading, distribution, and influences, such measurements are essentially limited in space and time and, above all, are limited in their ability to distinguish between natural and anthropogenic aerosol components. In this context, the assessment of aerosols' influences on climate by means of numerical simulations is essential for interpreting the climate in the past and for projecting future changes for different emission scenarios.

Guest Editors

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Deadline for manuscript submissions

closed (30 June 2023)



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Message from the Editor-in-Chief

Remote Sensing is now a prominent international journal of repute in the world of remote sensing and spatial sciences, as a pioneer and pathfinder in open access format. It has highly accomplished global remote sensing scientists on the editorial board and a dedicated team of associate editors. The journal emphasizes quality and novelty and has a rigorous peerreview process. It is now one of the top remote sensing journals with a significant Impact Factor, and a goal to become the best journal in remote sensing in the coming years. I strongly recommend Remote Sensing for your best research publications for a fast dissemination of your research.

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