

Special Issue

Estimating Atmospheric Aerosols and Cloud Physics with Optical and Multispectral Sensors

Message from the Guest Editors

This Special Issue will focus on advancing our understanding of aerosol–cloud interactions using remote sensing technologies. Aerosols and clouds play crucial roles in Earth’s climate system, influencing radiative forcing, precipitation patterns, and weather dynamics. Accurately measuring and characterizing these interactions is essential in improving climate models and weather forecasts. For this Special Issue, we invite contributions that explore the use of optical and multispectral sensors, such as nephelometers, lidar, radiometers, and satellite-based imaging systems, to estimate the physical and chemical properties of aerosols and clouds. We encourage studies that develop new retrieval algorithms to improve the accuracy of aerosol optical depth (AOD), cloud microphysical properties, cloud condensation nuclei (CCN) concentrations, and so on. The integration of machine learning techniques into sensor data is also a key theme, with the aim of enhancing the interpretation of complex aerosol–cloud systems.

Guest Editors

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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 peer-review 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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