

## Special Issue

# Recent Developments in Remote Sensing Instruments, Technologies, and Results for Aerosol and Cloud Measurements

### Message from the Guest Editor

Clouds are the primary modifier of the Earth's surface temperature. Aerosols also provide a modulating effect on the Earth's temperature. Acting as cloud condensation nuclei, aerosols provide sources for cloud formation, leading to complex interactions between clouds and aerosols that are still poorly understood. This Special Issue will publish papers highlighting emerging concepts, new instruments and technologies, and scientific results related to remotely sensed measurement of clouds and aerosols in the Earth's atmosphere. The Special Issue will highlight the following topics:

- Emerging concepts that can provide improved measurements and understanding of cloud and aerosol processes in the Earth's atmosphere;
- Recent sensor and technology developments that enable new or enhanced measurements and understanding of cloud and aerosol properties including distributions, radiative properties, and interactions;
- Original scientific results from analysis of data, with emphasis on (1) diurnal variability of clouds and aerosols, (2) application of advanced machine learning techniques, and (3) synergy of active and passive remote sensing techniques.

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### Guest Editor

Prof. Dr. Matthew McGill

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### Deadline for manuscript submissions

closed (15 June 2025)



## Remote Sensing

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### Message from the Editorial Board

*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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