

Special Issue

Understanding the Roles of Aerosols and Clouds in Environment, Meteorology and Climate with Advanced Lidar Remote Sensing Techniques

Message from the Guest Editors

There has been an increasing interest in atmospheric aerosols and clouds given their confirmed impact on meteorology, climate change and air quality, and how there is a large amount of uncertainty brought on by the variability in spatial and temporal distributions of aerosols, as well as aerosol–cloud and aerosol–planetary boundary layer (PBL) interactions. Advanced Lidar remote sensing techniques with different platforms, data quality control schemes and novel retrieval algorithms allow for the yielding of the vertical profiles of aerosol properties with a high temporal resolution at the regional and global scale. These observations have also been employed to further increase the current knowledge of aerosols, clouds or the PBL, as well as their natural and human-driven processes. This Special Issue aims to report any new Lidar technique developments, new retrieval algorithms alongside their applications, featured observations for aerosols, clouds and their processes, and findings on aerosol–cloud and aerosol–planetary boundary layer interactions.

Guest Editors

Prof. Dr. Xuan Wang

Dr. Longlong Wang

Dr. Yun He

Dr. Zhenping Yin

Deadline for manuscript submissions

closed (30 November 2023)



Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



mdpi.com/si/142023

Remote Sensing
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
remotesensing@mdpi.com

[mdpi.com/journal/
remotesensing](https://mdpi.com/journal/remotesensing)





Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



[mdpi.com/journal/
remotesensing](https://mdpi.com/journal/remotesensing)



About the Journal

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.

Editors-in-Chief

Dr. Prasad S. Thenkabail

Senior Scientist (ST), U. S. Geological Survey (USGS), USGS Western Geographic Science Center (WGSC), 2255, N. Gemini Dr., Flagstaff, AZ 86001, USA

Prof. Dr. Dongdong Wang

Institute of Remote Sensing and Geographic Information Systems, Peking University, Beijing, China

Author Benefits

Open Access:

free for readers, with article processing charges (APC) paid by authors or their institutions.

High Visibility:

indexed within Scopus, SCIE (Web of Science), Ei Compendex, PubAg, GeoRef, Astrophysics Data System, Inspec, dblp, and other databases.

Journal Rank:

JCR - Q1 (Geosciences, Multidisciplinary) / CiteScore - Q1 (General Earth and Planetary Sciences)