

Special Issue

Remote Sensing of Air Quality

Message from the Guest Editors

Air quality is determined by atmospheric aerosols and trace gases, which have adverse effects on, e.g., health, visibility and climate. In particular, the near-surface concentrations of NO₂, SO₂, O₃, NH₃, Volatile Organic Compounds (VOCs) and aerosol properties, for air quality purposes often expressed as PM_{2.5} or PM₁₀, are important. The vertical column densities (VCDs) of trace gases and the column-integrated aerosol extinction coefficients (i.e., the aerosol optical depth, or AOD) can be determined from satellite observations, using the same method globally. However, to determine the near-surface concentrations and emissions of trace gases and aerosols (PM) requires the use of a model taking into account processes affecting the vertical profile. In addition, the determination of emissions of aerosols and trace gases requires inverse modeling in which the concentrations are constrained by satellite observations. This top-down approach allows for the determination of near surface concentrations and emissions with high temporal resolution and reveals emission and concentration changes on very short time scales (~1 month).

Guest Editors

Prof. Dr. Gerrit de Leeuw

Royal Netherlands Meteorological Institute (KNMI), R & D Satellite Observations, 3731 GA De Bilt, The Netherlands

Prof. Ronald van Der A

Royal Netherlands Meteorological Institute (KNMI), R&D Satellite Observations, Utrechtseweg 297, 3731GA De Bilt, The Netherlands

Deadline for manuscript submissions

closed (31 March 2019)



Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



mdpi.com/si/14746

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)