Special Issue

Remote Sensing of Cloud and Aerosol Properties in a Three-Dimensional Atmosphere

Message from the Guest Editors

Clouds and aerosols play a vital role in modulating the radiative energy budget of the Earth-atmosphere system. They often co-exist with each other and can have significant 3-D structures and variations at various scales. This Special Issue invites recent theoretical, observational and technological studies that attempt to advance the 3-D remote sensing of clouds and aerosols. Potential topics include, but are not limited to the following:

- The identification and reduction of the uncertainties and errors caused by 3-D radiative effects and unresolved small-scale horizontal variations in cloud and aerosol remote sensing, and in atmospheric correction for other surface remote sensing.
- Theoretical and/or numerical studies of how 3-D radiative effects of clouds and aerosols influence cloud dynamics, surface energy budget, and land-air interactions.
- Advanced theories and novel techniques (e.g., machine learning) to retrieve the 3-D structure of clouds and aerosols.
- Sub-grid parameterization schemes to account for the impacts of small-scale cloud and aerosol variability on radiation simulations in global climate models.
- Advances in 3-D radiative transfer theory and models.

Guest Editors

Dr. Zhibo Zhang

Dr. Tamas Várnai

Dr. Hironobu Iwabuchi

Prof. Dr. Bernhard Mayer

Deadline for manuscript submissions

closed (30 June 2021)

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/27854

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

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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.

Editor-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

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