Special Issue

Cloud Remote Sensing: Current Status and Perspective

Message from the Guest Editors

Clouds are composed of liquid water droplets, ice crystals or a mixture of the two. Clouds with mixtures of ice particles and cloud droplets also occur. Clouds are inherently inhomogeneous media with inhomogeneity both in the vertical and horizontal directions. Therefore, theoretical studies on radiation transport in clouds (e.g., clouds of various shapes) are performed using the 3D radiative transfer theory. Accounting for 3D effects and cloud vertical inhomogeneity is critical in modern cloud remote sensing. In addition, the modelling of light-scattering properties of irregular ice crystals and effects of possible cloud pollution via various impurities (e.g., dust, smoke, volcanic eruptions) is at the frontier of modern cloud research and remote sensing. Because clouds play an important role in the water cycle, atmospheric radiative transfer, weather prediction and climate change, they have been thoroughly studied using ground-based, shipborne, airborne and satellite instrumentation operating from the optical to thermal and microwave spectral ranges.

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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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