

Special Issue

Satellite Soil Moisture Estimation, Assessment, and Applications

Message from the Guest Editors

As an essential hydrologic state variable in the Earth system, soil moisture plays an important role in modulating water and energy exchange within the soil–vegetation–atmosphere continuum, from a watershed to a global scale, largely through controlling the partitioning of precipitation into evapotranspiration, surface runoff, and infiltration. The global monitoring of soil moisture from space is important for improved land and weather forecasts, and the understanding of water, energy, and carbon cycles, as well as the improved management of water and food resources. Today, multiple space-borne platforms, such as the ESA's Soil Moisture and Ocean Salinity (SMOS) satellite and NASA's Soil Moisture Active Passive (SMAP) satellite, provide an unprecedented opportunity to estimate soil moisture. However, the retrieval of soil moisture remains challenging due to limited satellite observations, the high correlation between different polarizations, angles, and channels, as well as uncertainties in radiative transfer models and ancillary datasets.

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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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