Special Issue

Recent Advances in Remote Sensing of Soil Moisture

Message from the Guest Editors

Soil moisture is a key variable in a number of environmental processes, at both regional and global scales, due to its contribution to water, carbon and energy cycles. Therefore, soil moisture information is important for a wide range of applications, including hydrology, climatology and agriculture. Advancements in both active and passive remote sensing technologies, satellite remote sensing, drone technologies and data assimilation methods have been able to provide soil moisture estimations at different spatial scales from meters to tens of kilometers, as well as temporal resolutions from regional to global coverage. Data from passive microwave instruments, such as the multifrequency AMSR-E/2, FY-3 MWRI, L-band SMOS and SMAP, and active microwave instruments, including ASCAT/MetOp, ALOS-2, Sentinel-1 and the P-band GRACE, have in the last two decades been widely used for soil moisture applications at different spatial scales. This Special Issue aims to encourage the submission of studies covering recent advances in remote sensing in soil moisture.

Guest Editors

Dr. Indishe Senanayake

Dr. Natthachet Tangdamrongsub

Dr. Bin Fang

Deadline for manuscript submissions

14 November 2025

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/154631

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

mdpi.com/journal/remotesensing

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/journal/remotesensing

MDPI

About the Journal

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

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)