Special Issue

Remote Sensing in Soil Organic Carbon Dynamics

Message from the Guest Editors

The scope of this Special Issue includes developing novel methods for predicting SOC dynamics from multisource remote sensing data, interdisciplinary research integrating remote sensing with soil science, ecology, climate science, and agricultural management, as well as SOC dynamics monitoring, which is directly linked to global challenges such as climate change mitigation (carbon sink assessment), land degradation management (SDG-15), and food security (SDG-2). Therefore, this Special Issue aligns closely with the journal in three key dimensions: technology, interdisciplinarity, and applied value.

- High-accuracy dynamic monitoring of SOC content with multi-source remote sensing data;
- Extracting features from multi-source remote sensing data to enable SOC content prediction with deep learning models;
- Integrating remote sensing technology with ecosystem models for dynamic SOC content monitoring;
- Advanced sensors and data fusion techniques for SOC content prediction;
- Investigating the drivers of SOC spatiotemporal dynamics, including land management, climate change, and other influencing factors;
- Accurate validation of SOC spatiotemporal dynamics.

Guest Editors

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Deadline for manuscript submissions

closed (29 August 2025)



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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 peerreview 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

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