

Special Issue

Advances in Calibration, Validation, and Quality Assurance for Optical Remote Sensors

Message from the Guest Editors

Optical remote sensing has become crucial in monitoring the earth's environment, supporting applications that range from climate change assessment to disaster management. However, the accuracy and reliability of these observations hinge on robust calibration, validation (Cal/Val), and quality assurance (QA) processes. For optical remote sensors deployed on ground-based, airborne, and spaceborne platforms, challenges regarding the radiometric, spectral, geometric and polarimetric accuracy and quality of the data persist. In particular, the development of emerging technologies in optical remote sensing, along with multi-source data fusion and the growing demand for quantitative remote sensing, have further amplified the need for innovation in Cal/Val and QA methodologies to enhance the accuracy and quality of cross-sensor and long-term time-series remote sensing data. This Special Issue aims to consolidate the latest advancements in these areas, promoting technical developments that enhance the trustworthiness of optical remote sensing data and supporting precision measurement and quantitative remote sensing applications.

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Deadline for manuscript submissions

31 December 2025



Remote Sensing

an Open Access Journal
by MDPI

Impact Factor 4.1
CiteScore 8.6



mdpi.com/si/243881

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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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