Special Issue

Recent Advances in Quantitative Thermal Imaging Using Remote Sensing

Message from the Guest Editors

Thermal remote sensing has become an essential tool for the quantitative analysis of land, water, atmosphere, and infrastructure dynamics. The emergence of high-resolution thermal sensors, integration with AI, and multisource data fusion further extend the frontiers of what thermal remote sensing can achieve.

This Special Issue aims to gather innovative research and review articles that advance the theory, methods, and applications of **quantitative thermal imaging** using remote sensing platforms (e.g., satellite, airborne, UAV-based). We seek contributions that not only showcase cutting-edge science but also provide practical insights into processing chains, calibration protocols, and validation strategies.

We welcome submissions on topics including, but not limited to the following:

- Land Surface Temperature retrieval and modeling;
- Calibration and correction techniques for thermal sensors;
- Urban Heat Island detection and mitigation;
- Wildfire detection and thermal anomaly tracking;
- Integration of thermal data with machine learning and data fusion;
- UAV and satellite-based thermal mapping in agriculture or hydrology;
- Infrastructure and industrial monitoring using thermal imaging.

Guest Editors

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Deadline for manuscript submissions

31 January 2026

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/248001

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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 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

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