Special Issue

LiDAR Technology in Forest Ecosystems: Advances and Applications in Forest Management, Monitoring and Modelling

Message from the Guest Editor

This Special Issue aims to highlight recent advances in LiDAR methodologies that support structural and biodiversity assessment in forests, with a particular focus on bridging the gap between plot-level data and large-area monitoring. This issue seeks to foster interdisciplinary research that integrates LiDAR data with ground surveys and modeling approaches, thereby advancing forest inventory techniques that are both scientifically rigorous and operationally relevant. We invite original research articles, comprehensive reviews, and case studies addressing the following themes:

- Innovative LiDAR methodologies for detailed forest structure and biodiversity assessment;
- The development and calibration of allometric and taper functions using LiDAR data;
- Statistically robust sampling designs and scaling techniques for large-area and regional forest inventories;
- The integration of LiDAR with ground-based surveys for improved forest attribute estimation;
- Applications of LiDAR in ecosystem monitoring and sustainable forest management.

Guest Editor

Dr. Matteo Mura

Department of Civil and Environmental Engineering, University of Florence, Florence, Italy

Deadline for manuscript submissions

30 January 2026

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/si/246262

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

mdpi.com/journal/remotesensing

MDPI

Remote Sensing

an Open Access Journal by MDPI

Impact Factor 4.1
CiteScore 8.6

mdpi.com/journal/remotesensing

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)