Special Issue

Intelligent Extraction of Phenotypic Traits in Agroforestry

Message from the Guest Editors

This Special Issue aims to explore the application of remote sensing technologies in extracting phenotypic traits in agriculture and forestry. These fields are vital for sustainable development and environmental conservation, and accurately assessing phenotypic traits is crucial for optimizing resource management and enhancing productivity.

Authors are invited to submit original research articles, reviews, and case studies that address key themes, including machine learning, deep learning, and computer vision for phenotypic trait extraction, multisensor data fusion techniques (e.g., LiDAR and hyperspectral imaging), and integrating remote sensing data with ground observations in agriculture and forestry. Contributions covering a wide range of topics are welcome, including, but not limited to, the following:

- Intelligent extraction of agriculture and forestry phenotypic traits using deep learning;
- High-yield plant phenotype screening using remote sensing;
- Multi-sensor data fusion for high-throughput phenotyping in agriculture and forestry;
- Application of phenotypic data in genetic breeding programs for crop improvement and sustainable forest resource management.

Guest Editors

Dr. Xijian Fan

Dr. Yanjie Li

Dr. Shichao Jin

Dr. Cong (Vega) Xu

Dr. Sruti Das Choudhury

Deadline for manuscript submissions

30 September 2025



an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



mdpi.com/si/207643

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

mdpi.com/journal/ remotesensing





an Open Access Journal by MDPI

Impact Factor 4.1 CiteScore 8.6



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 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

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)