

Special Issue

Remote Sensing of Vegetation Structural and Biochemical Parameters: Retrieval, Measurement, Validation, and Application

Message from the Guest Editors

Vegetation structural and biochemical parameters—such as leaf area index (LAI), canopy height, fractional vegetation cover (FVC), leaf chlorophyll (LCC), carotenoid content (LCar), nitrogen concentration, and biomass—are fundamental for ecosystem monitoring, carbon budget assessment, and the study of climate–vegetation feedbacks. With recent advances in remote sensing, these parameters can now be estimated at increasingly finer spatial and temporal resolutions by integrating multi-source observations. Current research highlights several frontiers, including 3D mapping of vegetation traits through multi-platform data (satellite, UAV, tower/ground-based measurements), the generation of high-resolution products with time-series reconstruction, and cross-scale validation across diverse ecosystems. This Special Issue particularly encourages submissions that explore innovative developments in the retrieval of vegetation structural and biochemical traits. Submissions covering broader functional or process-driven traits—such as gross primary productivity, net primary productivity, water content, or phenological dynamics—are also encouraged.

Guest Editors

Dr. Hu Zhang

Dr. Baodong Xu

Prof. Dr. Yelu Zeng

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

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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.

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

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