



CALL FOR PAPERS
IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing
Special Issue on
“Applications of Remote Sensing Techniques in Forest Mensuration”

Forest mensuration is the key to gathering data and information on forest resources for forest planning and adaptive management. Fully developed forest mensuration schemes and technologies help us to formulate appropriate forest rules and regulations for sustainable forest management and support forest product needs. Taking advantage of state-of-the-art remote sensing technologies, forest information including tree-level parameters, stand-level attributes and structures, and ecosystem services can be measured or retrieved through UAV, airborne, and spaceborne platforms with massive remote sensing data (including high-resolution optical images, SAR, LiDAR, social media data). Reliable data collection and analysis enable forest societies to conduct integrity procedures involving forest measurement, reporting, and validation (the MRV processes) with global consistency.

This Special Issue intends to highlight the significance of applying big remote sensing data and processing techniques to gather accurate forest information on MRV processes in plantation forests, secondary forests, and pristine forests. Techniques for retrieving tree parameters, stand attributes, and the structure of forest ecosystems for tropical, temperate, and boreal ecoregions are encouraged. Recent theoretical and application results related to “remote sensing for Forest Mensuration” from the perspectives of theories, algorithms, architectures, and applications, such as the application of remote sensing data (including RGB, multispectral, and hyperspectral images, LiDAR, SAR, etc.) from multiple platforms (including UAV, airborne, and spaceborne, social media) at variant forest scales are welcome.

The broad topics include (but are not limited to):

- Multi-platforms (UAV/Airborne/Spaceborne/social median) sensing technology for forest mensuration;
- Data (color, spectral, SAR, LiDAR) processing (calibration, feature extraction, data fusion, classification, mapping, etc.);
- Tree parametrization;
- Stand attributes’ estimation;
- Species and forest type mapping;
- Stand dynamics;
- Forest degradation diagnosing;
- Plantation precision management;
- Secondary forest management;
- Ecosystem productivity;
- Adaptive management of forest ecosystems.

Schedule

June 1, 2024: Submission system opening

February 28, 2025: Submission system closing

Format

All submissions will be peer reviewed according to the IEEE Geoscience and Remote Sensing Society guidelines. Submitted articles should not have been published or be under review elsewhere. Submit your manuscript on <http://mc.manuscriptcentral.com/jstars>, using the Manuscript Central interface and select the “**Applications of Remote Sensing Techniques in Forest Mensuration**” special issue manuscript type. Prospective authors should consult the site <https://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=9082768> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). Please visit http://www.ieee.org/publications_standards/publications/authors/author_templates.html to download a template for transactions. Please note that since Jan. 1, 2024, IEEE J-STARS, as a fully open-access journal, is charging a flat publication fee \$1,496 per paper.

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