



CALL FOR PAPERS

IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing

Special Issue on

“Recent Advances in LiDAR Remote Sensing for Forest Inventory”

Forest inventories are designed to measure the extent, quantity, composition, and condition of forest resources. However, our understanding of forestry has in part been restricted by the difficulty of obtaining high-quality measurements. Remote sensing using LiDAR sensors has provided a simple and cost-effective method to obtain such measurements for forest inventory. Point clouds acquired by LiDAR sensors have become a well established data source for characterizing tree structure and estimating forest biomass. Accurate and update tree information is often required in a number of diverse applications, including forestry inventory, habitat mapping and ecology, urban forestry. However, given the fact that large-scale point cloud processing remains to be a labor-intensive, a number of challenges in forest inventory from point clouds need to be addressed. Recent work has demonstrated the use of multispectral and hyperspectral LiDAR to measure and advance our understanding of tree composition and structure of forest. This Special Issue aims at promoting forest inventory and management using LiDAR point clouds.

The special issue editors seek contributions that may address, but are not limited, to the following topics:

- Point clouds for characterizing 3D tree structure;
- Point clouds for estimating forest biomass;
- Machine learning algorithms for estimating tree quality based on LiDAR measurements;
- Multispectral and hyperspectral LiDAR for monitoring forest health;
- Tree and stand variables inventory;
- LiDAR-derived DSMs/DEMs in wooded areas;
- LiDAR-derived metrics for quantifying ladder fuels;
- Individual tree detection and tree species classification;
- Urban tree inventory for smart cities;
- Novel case studies in forest inventory and management.

Schedule

March 1, 2020:	Submission system opening
August 31, 2020:	Submission system closing
2020:	Publication date

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 “Recent Advances in LiDAR Remote Sensing for Forest Inventory” special issue manuscript type. Prospective authors should consult the site <http://www.grss-ieee.org/publication-category/jstars/> for guidelines and information on paper submission. All submissions must be formatted using the IEEE standard format (double column, single spaced). For a transactions template in this format please consult the site http://www.ieee.org/publications_standards/publications/authors/author_templates.html. Please note that as of January 1, 2020, J-STARS will become a fully open-access journal, charging a flat rate of \$1,250 for each paper.

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