



LiDAR Remote Sensing for Forestry

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Deadline for manuscript
submissions:

31 August 2024

Message from the Guest Editors

Dear Colleagues,

Forests are essential to maintaining ecological function, biodiversity and the health of the planet. To better investigate forest resources and promote the study of tree growth mechanisms, it is urgent to obtain more accurate and timely forest inventory information. In recent decades, with continuous improvements made to the measurement accuracy and sampling rates of laser scanners, LiDAR has been widely employed for calculating tree metrics, estimating above-ground biomass (AGB), and identifying tree species remotely. Nonetheless, existing studies continue to encounter the challenges of low accuracy or low robustness across different forest environments. Thus, this Special Issue focuses on the latest studies addressing forest inventory using LiDAR technology. The scope of this Special Issue includes, but is not limited to, the following topics:

- Multi-platform point cloud fusion
- Filtering for forest environment
- Individual tree detection
- Biomass estimation
- Tree species identification
- Quantitative structure modeling for trees
- Forest parameters estimation
- Forest ecology
- Carbon cycle analysis
- Forest planning and management





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Journal Rank: JCR - Q1 (*Forestry*) / CiteScore - Q1 (*Forestry*)

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