Reviewer Report

Title: Bayes Forest: a data-intensive generator of morphological tree clones

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Reviewer name: Jean-francois Cote

Reviewer Comments to Author:

The manuscript describes a tree modeling approach using a quantitative structural model (QSM) for reconstructing the intricate details of trees from terrestrial lidar data. Then, a stochastic growth model is first parameterized (through optimization) by comparing structure attributes from the QSM, and applied to reproduce a large amounts of similar trees or clones. The tree generator is quite innovative and could serve in many forest ecological studies where a variety of tree structure is required but with limited data on the actual trees under studies extracted from terrestrial lidar. Overall, the technical note is generally well written and the methods detailed with sufficient information. However, I found the section ordering a bit confusing. The methods section is found at the end of the manuscript, but many variables and concepts that are defined in this section are referred in the previous ones. This makes it difficult for the reader to follow the ideas and concepts explained without having to read ahead in the text. Depending on the editorial choice in the section ordering, moving the "methods" before "III. Testing for the algorithm" would certainly improve the reader experience. Another element which needs to be looked at is the extensive use of sub-sentence parts enclosed by parenthesis. It is generally not a good practice and breaks the text flow. Those should be either written as independent sentences or simply removed. Lastly, the manuscript has some grammar and language issues, which need to be addressed. Specific comments and recommendations can be found in the annotated PDF attached with this review report.

Level of Interest

Please indicate how interesting you found the manuscript: An article whose findings are important to those with closely related research interests

Quality of Written English

Please indicate the quality of language in the manuscript: Needs some language corrections before being published

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