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Erratum

# Erratum: A Machine Learning Method for Co-Registration and Individual Tree Matching of Forest Inventory and Airborne Laser Scanning Data. *Remote Sens.* 2017, 9, 505

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Since Equation (2) has been rearranged incorrectly during preparation for this article [1], the authors would like to correct the relevant text of Section 3.4.3 as follows:

### 3.4.3. Synthetic Tree Detections

A tree crown is defined by the tree species-specific parameters  $b$  and  $c$  (see Table 2), the tree height  $h$ , crown base height  $cbh$ , and its crown radius  $r$  (all provided by the *Waldplaner 2.0* software, [2]). The height above ground  $e_i$  of a point with distance  $d_i$  to the tree location less than or equal to  $r$  is calculated by Equation (2). Please note that since the parameters of the Douglas fir were not given by Pretzsch [3], these were assumed to be similar to the parameters of the Norway spruce.

$$e_i = h - c \cdot (h - cbh) \cdot \left(\frac{d_i}{r}\right)^{\frac{1}{b}} \quad (2)$$

For each plot, we generated uniquely-distributed xy-coordinates with the same pulse density as the original point cloud. For each point, the z-coordinate was calculated by applying Equation (2) for all trees and adding the value of the DTM (of the original ALS point cloud) at the tree location. Finally, the point is linked to the tree which resulted in the maximum z-coordinate and—for a subsequent evaluation—it is labeled with the ID of that tree.

We apologize for any inconvenience caused to the readers by these changes. The changes do not affect the scientific results. The manuscript will be updated and the original will remain online on the article webpage.

### References

1. Lamprecht, S.; Hill, A.; Stoffels, J.; Udelhoven, H. A Machine Learning Method for Co-Registration and Individual Tree Matching of Forest Inventory and Airborne Laser Scanning Data. *Remote Sens.* 2017, 9, 505.
2. Hansen, J.; Nagel, J. *Waldwachstumskundliche Softwaresysteme auf Basis von TreeGROSS-Anwendung und Theoretische Grundlagen*; Niedersächsische Staats- und Universitätsbibliothek: Göttingen, Germany, 2014.
3. Pretzsch, H. *Modellierung des Waldwachstums*; Parey: Berlin, Germany, 2001.



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