



Correction : Estimating leaf bulk density distribution in a tree canopy using terrestrial LiDAR and a straightforward calibration procedure

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Correction

Correction: Pimont, F. *et al.* Estimating Leaf Bulk Density Distribution in a Tree Canopy Using Terrestrial LiDAR and a Straightforward Calibration Procedure. *Remote Sens.* 2015, 7(6), 7995–8018

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After publication of the research paper [1] an error during the data analysis process was recognized. In the Model Calibration Section 3.2, the indices I_1 , I_2 and I_3 were accidentally divided by the volume of calibration volume, $v = 4/3\pi 0.35^3 = 0.180 \text{ m}^3$.

Regressions for calibration and confidence intervals were re-computed based on the correct indices, and the corresponding tables and figures of Section 3.2 are presented in the same order as the paper in the following Table 1 and Figures 1 and 2. In comparison to the originally stated values the calibration parameters and standard errors were simply multiplied by $1/v$, whereas R^2 values were not modified, so that the statements of the section remain correct.

In the Model Application and Evaluation Section 3.3, the same $1/v$ factor was initially used in the computation of indices at plot scale as in the calibration, so that the mistake has no consequence on the results presented at plot scale. Consequently, the statements, figures and tables in the rest of the document are correct.

To summarize, the error was limited to a factor $1/v$ in calibration coefficients and standard errors. We apologize for any inconvenience this has caused.

Table 1. Correction of Table 3 in [1]. Bulk density model characteristics.

Index I	Element Distribution	Criteria	Calibration Parameter	Standard Error	R^2	R^2 (on CV with $N_i > 1000$)
I_1	Spherical	$(N_i)_{\max}$	0.534	0.0194	0.60	−0.19
I_1	Spherical	$(N_t - N_b)_{\max}$	0.542	0.0239	0.42	−0.16
I_2	Spherical	$(N_i)_{\max}$	0.370	0.0145	0.53	0.34
I_2	Spherical	$(N_t - N_b)_{\max}$	0.376	0.0172	0.37	0.36
I_3	Spherical	$(N_i)_{\max}$	0.403	0.0120	0.73	0.45
I_3	Spherical	$(N_t - N_b)_{\max}$	0.412	0.0149	0.60	0.45
I_3	Plagiophile	$(N_i)_{\max}$	0.427	0.0122	0.74	0.32
I_3	Uniform	$(N_i)_{\max}$	0.432	0.0125	0.74	0.29
I_3	Erectophile	$(N_i)_{\max}$	0.380	0.0137	0.60	0.36
I_3	Planophile	$(N_i)_{\max}$	0.426	0.0220	0.22	−0.78

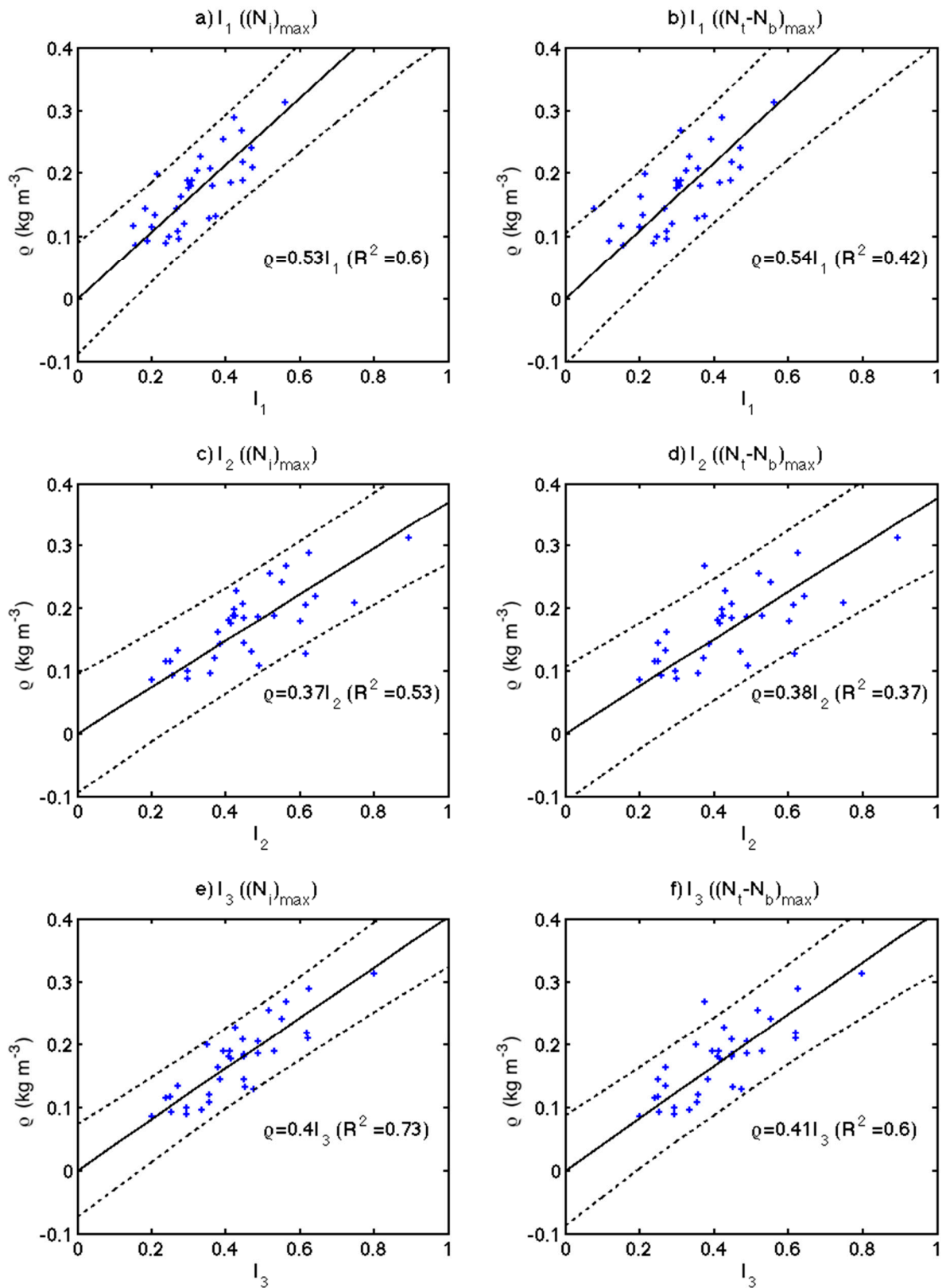


Figure 1. Correction of Figure 6 in [1]. Calibration of indices I_1 (a,b), I_2 (c,d), I_3 (e,f) against leaf bulk densities in 35 CVs. Left figures (a, c and e) used the largest number of intercepted beams in the CV for scan selection $(N_i)_{\max}$; Right figures (b, d and f) used the largest number of incident beams on the CV for scan selection $(N_t - N_i)_{\max}$. Dashed lines are 95% confidence interval.

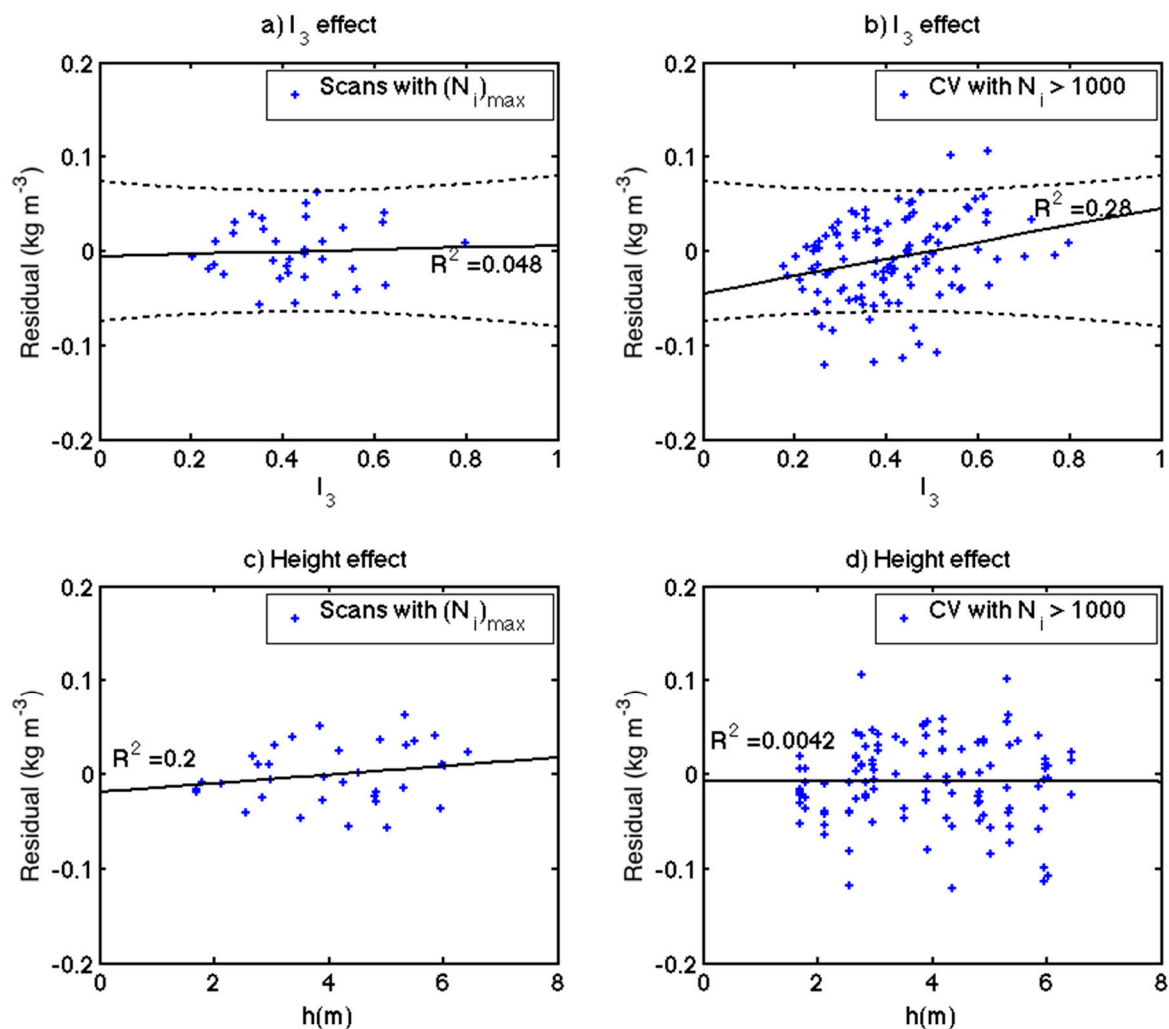


Figure 2. Correction of Figure 7 [1]. Analysis of residuals of the model based on I_3 and the $(N_i)_{\max}$. (a) function of I_3 on the $(N_i)_{\max}$ data set (b) function of I_3 on the $N_i > 1000$ data set (c) function of calibration volume heights on the $(N_i)_{\max}$ data set (d) function of calibration volume heights on the $N_i > 1000$ data set.

Reference

1. Pimont, F.; Dupuy, J.-L.; Rigolot, E.; Prat, V.; Piboule, A. Estimating leaf bulk density distribution in a tree canopy using terrestrial LiDAR and a straightforward calibration procedure. *Remote Sens.* **2015**, *7*, 7995–8018. [CrossRef]



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