

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

François Pimont <sup>1,\*</sup>, Jean-Luc Dupuy <sup>1</sup>, Eric Rigolot <sup>1</sup>, Vincent Prat <sup>1</sup> and Alexandre Piboule <sup>2</sup>

Received: 5 January 2016; Accepted: 8 January 2016; Published: 14 January 2016

Academic Editor: Prasad S. Thenkabal

<sup>1</sup> INRA, UR 629, Ecologie des Forêts Méditerranéennes, Domaine Saint Paul, Site Agroparc, F-84914 Avignon Cedex 9, France; jean-luc.dupuy@avignon.inra.fr (J.-L.D.); eric.rigolot@avignon.inra.fr (E.R.); vincent.prat84@gmail.com (V.P.)

<sup>2</sup> ONF, Département RDI-Pôle Nancy 11 rue de l'île de Corse 54000 Nancy, France; alexandre.piboule@onf.fr

\* Correspondence; francois.pimont@avignon.inra.fr; Tel.: +33-432-722-947; Fax: +33-432-722-902

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,  $v = 4/3\pi 0.35^3 = 0.180 \text{ m}^3$ .

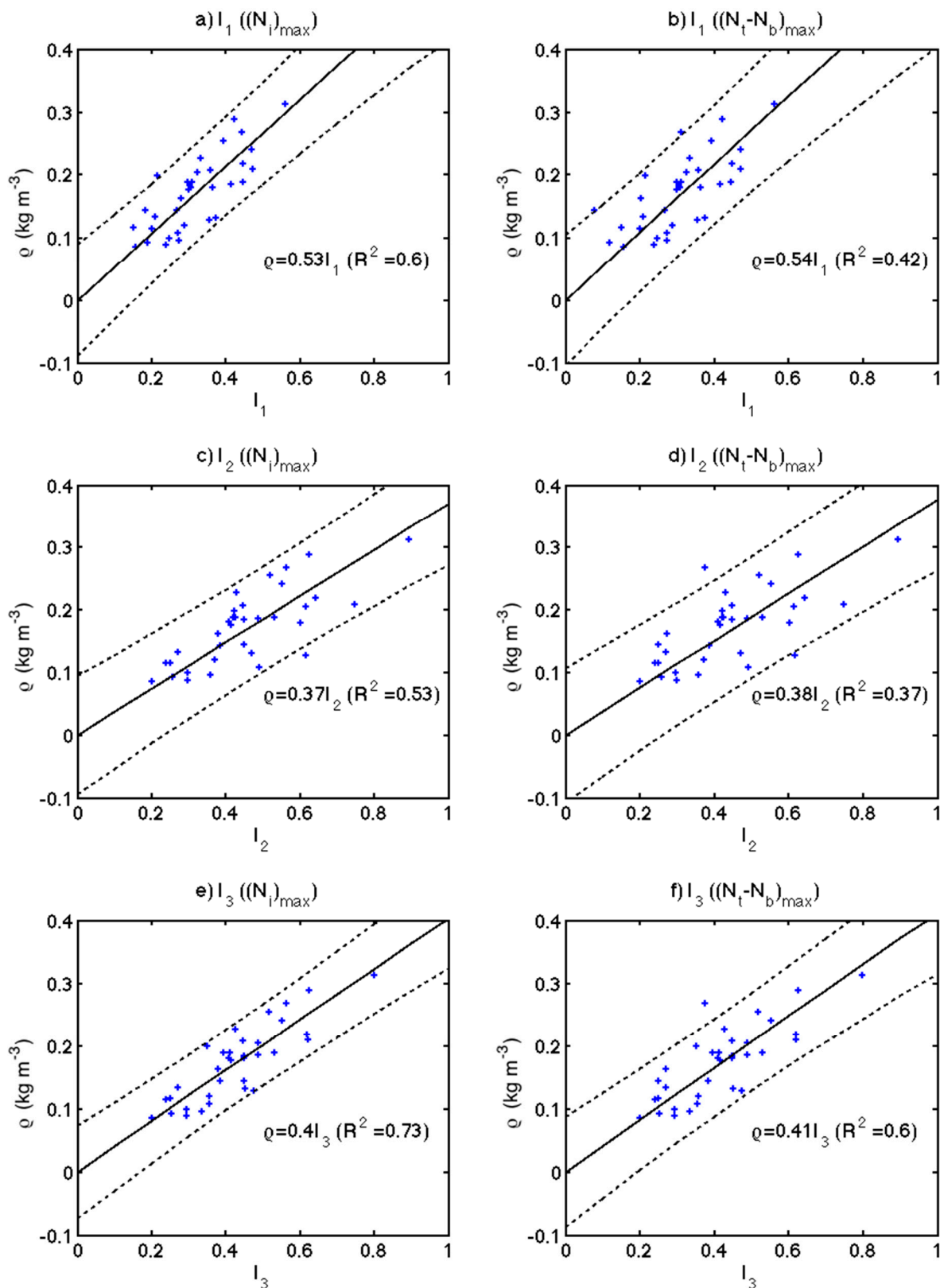
Regressions for calibration and confidence intervals were re-computed based on the correct indices, and the corresponding tables and figures of Section 3.2 are presented in the same order as the paper in the following Table 1 and Figures 1 and 2. In comparison to the originally stated values the calibration 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.

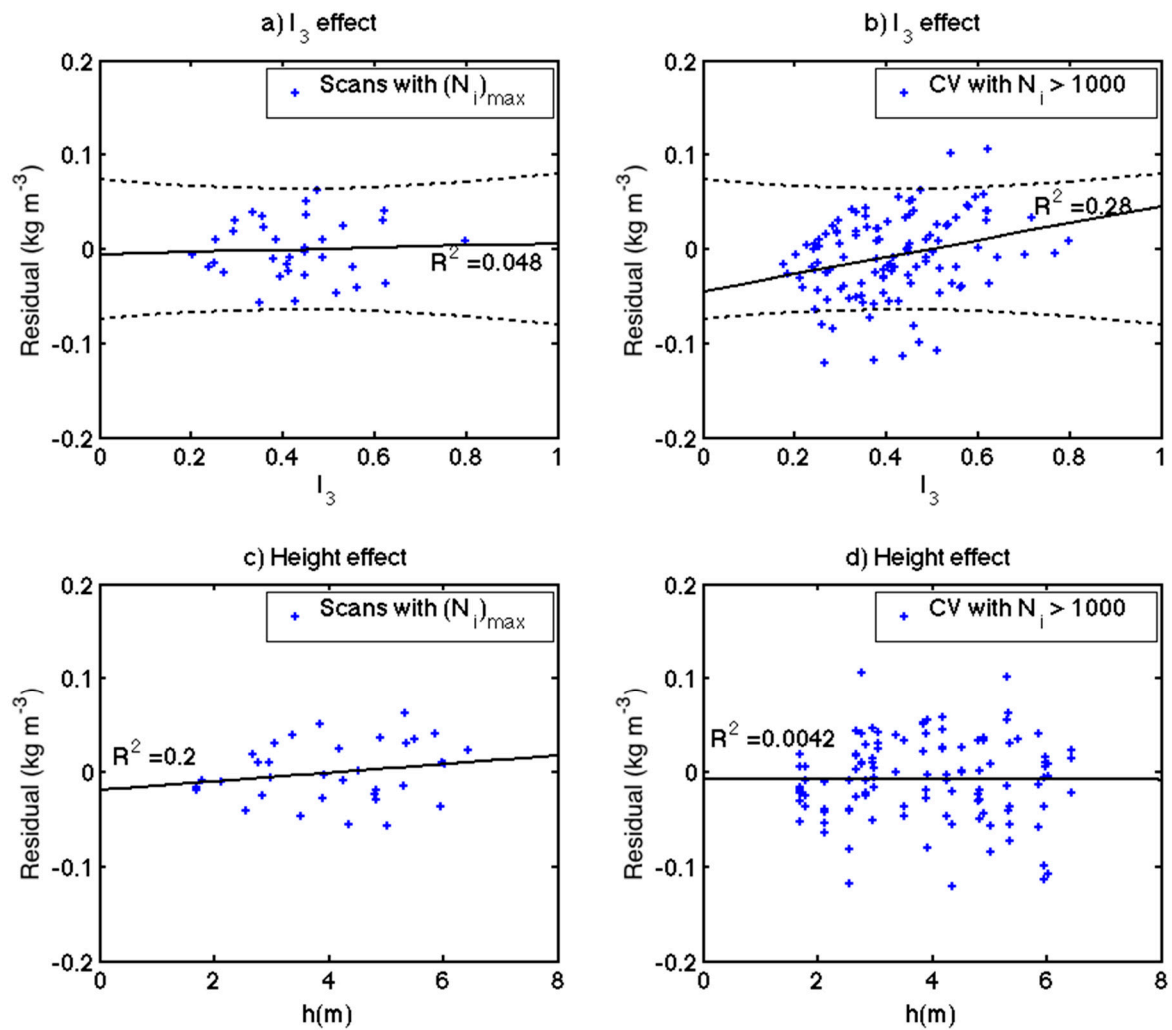
To summarize, the error was limited to a factor  $1/v$  in calibration coefficients and standard errors. We apologize for any inconvenience this has caused.

**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	$(N_i)_{\max}$	<b>0.403</b>	<b>0.0120</b>	<b>0.73</b>	<b>0.45</b>
$I_3$	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](#)]



© 2016 by the authors; licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons by Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).