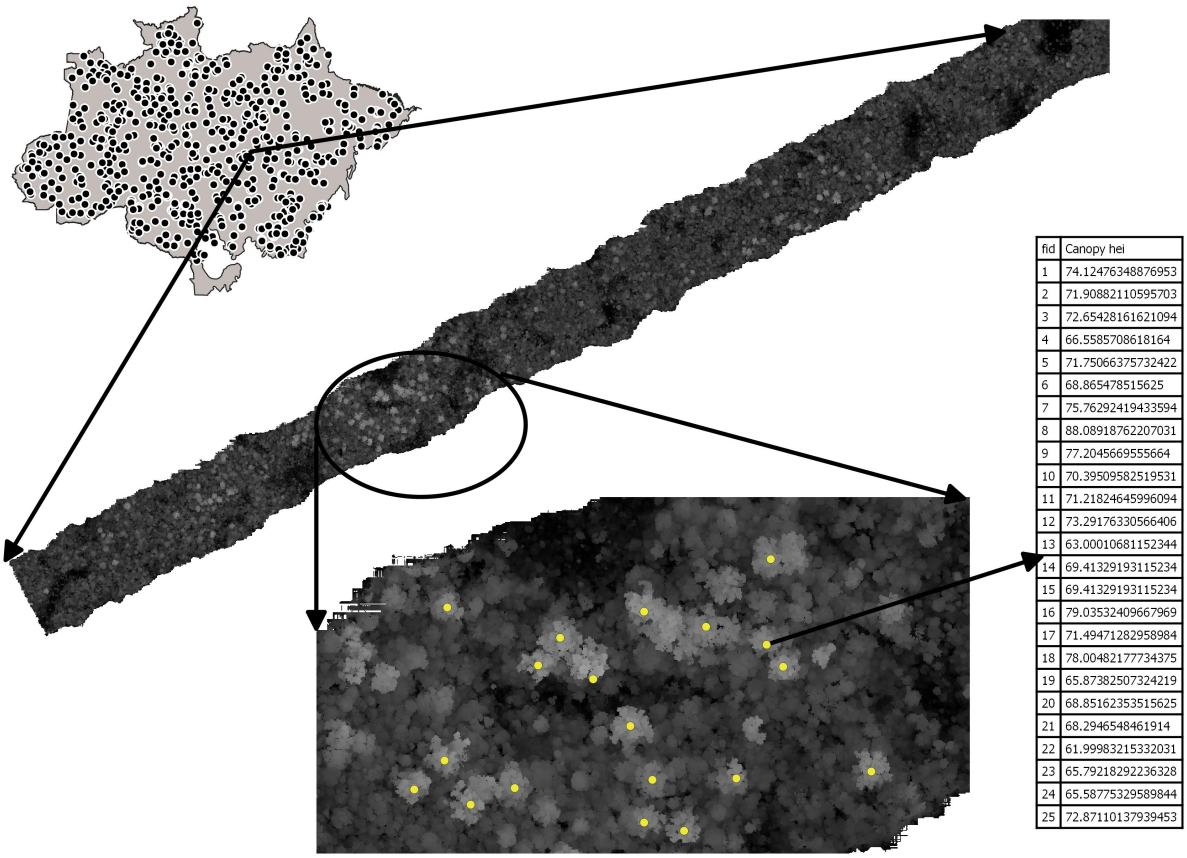
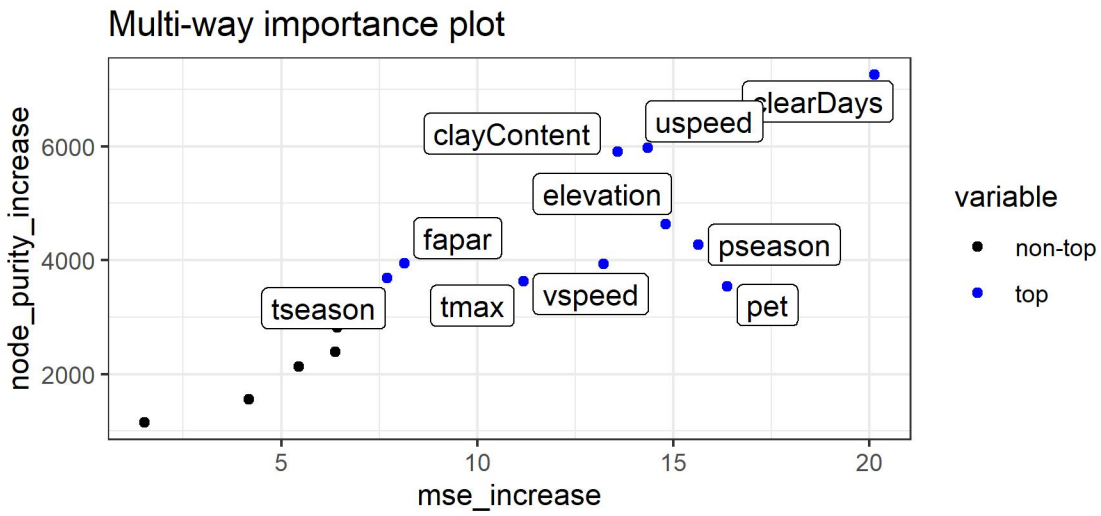
Supporting Figures

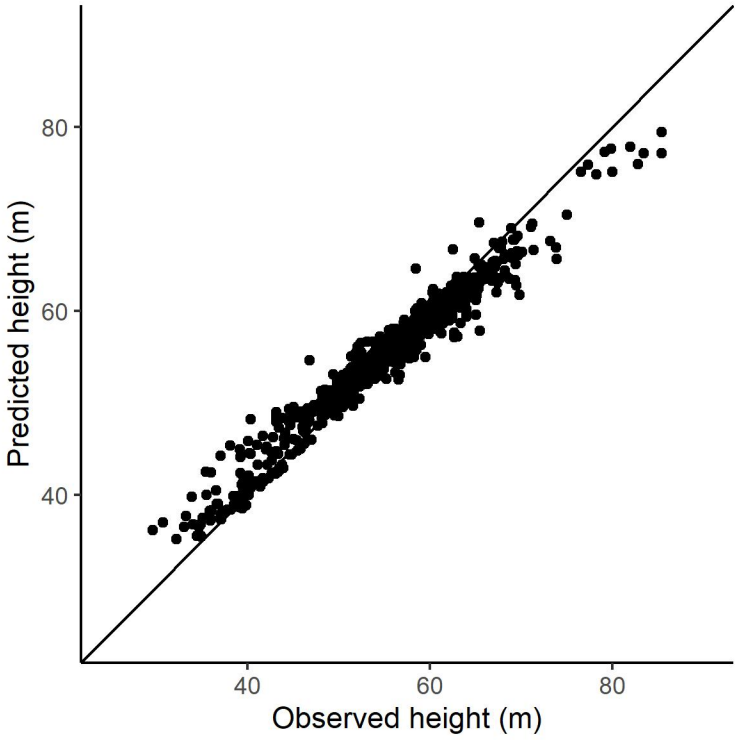


fid	Canopy hei
1	74.12476348876953
2	71.90882110595703
3	72.65428161621094
4	66.5585708618164
5	71.75066375732422
6	68.865478515625
7	75.76292419433594
8	88.08918762207031
9	77.2045669555664
10	70.39509582519531
11	71.21824645996094
12	73.29176330566406
13	63.00010681152344
14	69.41329193115234
15	69.41329193115234
16	79.03532409667969
17	71.49471282958984
18	78.00482177734375
19	65.87382507324219
20	68.85162353515625
21	68.2946548461914
22	61.99983215332031
23	65.79218292236328
24	65.58775329589844
25	72.87110137939453

Supporting Figure 1. The uppermost vegetation heights were employed to compute a canopy height model CHM for each transects. Based on a local maximm filter, the tallest trees of each transects was located, and the tallest individual was identified and isolated to represent each transect.



Supporting Figure 2. Variable importance considering the mean increase in accuracy (mse_increase) and the mean increase in node purity (node_purity_increase).



Supporting Figure 3. Observed versus predicted maximum height by the Random Forest model.

Supporting Table

Supporting Table 1. Variable importance results for the Random Forest model adjusted considering all the transects, and removing transects located in secondary and degraded forests (i.e. intact forest).

Layer	Importance including all transects (increase accuracy)	Importance excluding secondary and degraded forest (increase accuracy)
clearDays	25.5	22.5
clayContent	23.4	21.8
topography	23.3	20.9
pannual	22.4	21.4
pseason	21.3	19.3
tseason	21.3	19.4
uspeed	21.1	18.4
pet	20.2	17.4
fapar	20.0	17.3
pwettest	19.9	18.3
tmax	19.8	18.9
vspeed	18.1	18.4
lightning	18.0	17.2
days20	16.4	18.9
tannual	15.6	15.3
waterContent	9.7	9.6