Interactive comment on “Estimating aboveground carbon density and its uncertainty in Borneo’s structurally complex tropical forests using airborne laser scanning” by Tommaso Jucker et al.

Anonymous Referee #2

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Dear editor and authors, This paper deals with the estimation of aboveground biomass in the tropical forest of Borneo Island using the model and airborne laser scanning. I think that this paper is very innovative and important for the evaluation of the carbon stock of the tropical forest. The model of this study can estimate aboveground carbon density (ACD) well, but I’d like to request one to authors. Coomes et al. (2017) reported that ACD is closely related to basal area than to tree height. However, canopy cover at 20m and top-of-canopy height by airborne laser scanning were not good correlation with basal area (Fig.3). I understand that data from airborne laser scanning is not enough and we have to know the basal area and woody density to estimate ACD by using your model. Please give us some suggestion to estimate the ACD by only airborne
laser scanning data in the future. If authors are possible, please add explanation for the difference of representativeness of the data between field observation and airborne laser scanning. This manuscript is nicely ordered, but order of the figure number is not correct, especially page 11 (order is Fig.2, Fig.5 (line 385), Fig.3…), please correct it.