Dear Authors, Please address my comments, those are colored in green. Hisashi SATO

## L206 (Equation 1) "APARz" would be replaced by "APAR<sub>y,z</sub>".

It's not necessary to include the "y" index because the amount of APAR is computed for a specific layer not for a specific diameter class (or height class). To avoid to have multiple canopy layers corresponding to multiple height (or diameter) classes the model include different height (or diameter) classes in a prearranged number of forest layers. So the amount of APAR is referred to that forest layer and not to that height (or diameter) class.

Then,  $GPP_{x,y,z,k}$  would be replaced by  $GPP_{x,z,k}$ . (L207 in the latest manu.) Also, explanation that each cohort had unique z, would be required.

## L484

Assuming values in Table S1(a) are correct, values for MEF and NRMSE of X data set are switched.

Addressed

Authors did not addressed neither in the manuscript (L481~482 in the latest manu.) nor in the Table 1.

*L612~613 But, performance statistics improved according to the Table 3.* 

Clarified

I cannot find where you clarified on the manuscript. In the IT-Ren site, performance of 2L-2C favors that of 1L-1C for all performance statistics except r.

L643~644 "seasonal fluctuations in GPP and their effects" I cannot find any effects.

Clarified, it referred to the effects of seasonality on GPP validation, we preferred to remove this sentence to avoid misleading.

I cannot find where on the manuscript you modified according to the comment.