

Dear authors

I judged that the authors reasonably revised the manuscript according to reviewer's requests, whenever those are affordable, except the following.

- (1) According to the Referee#1 comments, authors provided list of newly introduced and calibrated parameters in the Table S2. However, what the Referee#1 requested was to provide description of your "tuning process", not just only its result.
- (2) Also, please consider to reorganize the structure of section 2 of the discussion part (L643~715). I should say it is poor structured, and hence it requires much effort to follow for just getting a little message.

[Minor Concerns]

L150

Totally no information is available on the website without authorization. Authors should provide, at least, information concerning who is responsible for the authorization on the website.

L147~191

Very long paragraph. Please consider dividing it. Also, please provide your assumption for the crown depth.

L206 (Equation 1)

"*APAR_z*" would be replaced by "*APAR_{y,z}*".

L207

"*APAR*" would be replaced by "*APAR_{y,z}*".

L209

"were" would be replaced by "where".

L254~L260

I cannot follow the logic here.

L269~270

This "up to" is cryptic for me.

L354, L515, L529

Needless line breaks.

L406 (Equation 8)

This sigma should include the denominator.

L420 (Equation 10)

The sigma should include the second term. The sigma should be specified by indicating " $i=1$ " and " N ". Provide definition of the variable $stdGPP_{ECi}$ in the main text.

L430

I cannot understand how you grouped time-series values into 18 clusters.

L484

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

L485~L489

I cannot follow the logic here,

L492 "flattening the seasonality model"

Please describe more.

L496

The word "skill" would be replaced by more accurate words. How about "reconstruction ability"?

L503

This "low" is cryptic.

L612~613

But, performance statistics improved according to the Table 3.

L643~644 "seasonal fluctuations in GPP and their effects"

I cannot find any effects.

L645 “annual cumulated”

It seems it would be “intra-monthly”.

L650~651

I cannot follow the logic here.

L717~747

Although the section is assigned for reproducibility of *inter-annual variability*, these paragraphs describe *inter-monthly variability*.

L827~831

Provide explanation why some letters are in bold.

L846 and L854 “IGBP”

It should be replaced by “IGBP vegetation class”.

L848~851

Provide explanation how you classified the sites.

All figures and tables

Many of them lack specification tags [like (a), (b), (c)..]

Figure 1

Results for the “BLD” should be replaced with those of the “MABstd” in the Table S1

Figure 2

Provide scales for circular arcs those indicate same distance from the “REF” point.

Figure 6

“GPP” on the vertical axis would be replaced by “GPP_{MD}”.