

## Interactive comment on "A generic pixel-to-point comparison for simulated large-scale ecosystem properties and ground-based observations: an example from the Amazon region" by Anja Rammig et al.

## Anonymous Referee #1

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I have found this paper quite interesting as how to approach scale mismatch. The mathematical/statistical procedures are rigorous, and appropriate to derive indexes.

I only suggest including brief comments or modifying the following:

Do you think that DGVM models might increase resolution by using remote sensing data in order to improve spatial variability? Such as MODIS GPP/NPP at 1km.

I see more emphasis in spatial variability than temporal variability. How to assess the variability of the observed/estimated forest properties (as biomass) due to gap

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dynamics? Is this more important than edaphic properties or Site Index?

Do you consider that some of the forest plots you used were subject to selective logging or natural gaps? and for this reason a cause of mismatch.

Can you provide a reference of studies calculating a "pixel-wise within-pixel variability"? See line 1 page 10.

Page 2, Line 27, do you mean "uneven spatial distribution and -temporal- variability due to natural gap dynamics"

Page 3, line 10, there is a typo error.

Page 3 line 24, what do you mean by "resolution of the study area"

I found figure 1 misleading. At some point, the distance between plots (in b) should depict what "corresponds to the size of the grid cell" (in c). Or maybe explaining this better in the caption.

Page 5, line 30. I assume is 2.1.3 instead of 1.3

Interactive comment on Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2018-182, 2018.