**Biogeosciences**
Discussions

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# *Interactive comment on* "Technical Note: Approximate Bayesian parameterization of a complex tropical forest model" *by* F. Hartig et al.

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The manuscript gained a lot in comparison to the first version by including understandable paragraphs about the context, the advantages and the knowledge gain of the proposed method. This makes it a valuable contribution to Biogeosciences. I have only some small remarks in the text.

P13098L1-2: Inverse parameter estimation is a technique in many fields, not 'just' ecology and evolution.

P13099L6-7: Dito

P13099L19: Change 'parameters' to 'parameter'

P13101L14: Like reviewer 1 I would like to read here a clear objective of the study.

P13101L24: Please replace 'revovery' with 'recovery'

P13102L2: Please delete 'exhibit'

P13102L25-26: Please clarify how the position of the trees and crowns is derived when trees do not have explicit positions (L20).

P13103L2: 'The model is Markov' seems rather dramatic. Markov was a Russian Mathematician, so please be more specific whhat kind of characterization you want to apply to the model.

P13107L24: The term 'virtual field data' for the inventory created by the model is still misleading. It is tempting to combine 'virtual' (because of model generated) with 'field' to show that these data in this case represent the 'observations' but I would feel more comfortable with 'virtual inventory' or something similar.

P13108L24: I would prefer 'specific' over 'concrete'.

P13110L18: Change 'parameters' with 'parameter'

P13110L22: Change 'models' with 'model'

P13111L25ff: Maybe the interpretation of the correlation is better understandable when you refer to them as 'higher mortality rates have the same effect on the model results, i.e. obtained biomass, as higher recruitment rates'. The same for the next sentence in which you infer from increased mortality rates to a need in increasing alo recruitment rates. But in my view, correlations just give an information on similar effects of changes in the respective parameters (as you describe from P13112L11). P13113L5ff: It is interesting that marginal posterior probabilities from your method is partly lower (11 parameter) and partly higher (3 parameters) than the previous estimates. Just as a interested comment: have you any idea why? There is no real pattern (like all mortality rates are lower or all parameters for pft5).

P13113L15: Is by 'reation' 'relation' meant?

P13116L18: Change 'that' to 'than'

Table 2: Abbreviation is given for SSD but in the table SDD appears. Please clarify.

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