

Interactive comment on “Simulating ectomycorrhiza in boreal forests: implementing ectomycorrhizal fungi model MYCOFON into CoupModel (V5)” by Hongxing He et al.

Anonymous Referee #2

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The authors coupled an ectomycorrhizal fungi (ECM) model MYCOFON with a terrestrial biogeochemistry model to show that it is important to consider the plant-ECM interaction to properly model the ecosystem nitrogen dynamics. While I could see the legitimacy of their statement, I agree with the other reviewer that the paper seems submitted in a hurry: there are too many problems with grammars, syntaxes and formats, making it unreadable to some extent. Thus a thorough rewritten is needed before it can be better judged.

The language problem becomes more severe as the paper goes closer to the end. For instance, the description of 2.3.2 is pretty much a mess. I guess it is really awkward that

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a paper would use “Bayesian calibration procedure” as section title. Personally, I think “Bayesian calibration of models” would be much more appropriate. The use of “data likelihood function” is also not accordant with the general terminology in data assimilation or Bayesian inference based model calibration. I strongly suggest the authors to read more relevant papers and revise the description to make it more readable.

As for the description of MCMC method, there are many excellent papers on this topic, however, the authors barely mention them and the description is again very poor.

As the paper reaches the results section, there are many more language/presentation problems. Many of the sentences are incomplete, such as missing verbs or wrong use of juxtapositions. The other reviewer has listed many of those issues and I won't add more to the list.

Further, I don't know why Appendix is shown in the middle of the paper. Have the authors carefully checked their submission? Is the wrong version uploaded?

Overall I suggest rejecting the paper for a resubmission.

Interactive comment on Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2017-170, 2017.

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