

Review of Huang et al. paper:

First I sincerely apologize for not having been able to process in due time your manuscript and your detailed responses to the reviewers comments.

After a careful reading of your responses, i believe that you have answered for a large part to the main reviewer's comments. Although one reviewer do not recommend the publication of your paper in GMD, I suggest that it is considered for publication after few last revisions. Indeed, you can still improve the manuscript by taking into account more significantly some of the reviewers critics:

- *Shortening the manuscript:* As pointed by one reviewer, the manuscript has « *quite a few repetitive elements (e.g. the list of elements included in the workflow appears at multiple places)* ». I find that these redundancies are still present and that shortening the manuscript would greatly help. For example information on the potential of EcoPad are presented in the results and then re-state in the discussion section. Also some of the concept brought in the introduction are mentioned also again with similar phrasing in the results or discussion (Ex. 1st paragraph of the discussion section ; 1st paragraph of section 3.4.1 (case 1) is also redundant with the introduction, etc...).
Please consider decreasing all repetitions that occur in the manuscript in order to make it more concise and thus easier to read. Try to focus the manuscript on what is new by maybe shortening the summary of past experiences described elsewhere. You may also consider grouping the discussion with the results as for some parts the "discussion section" resumes what has been presented in the "result sections".
- *Technical developments of EcoPAD:* As stated by reviewer 1, I also find that an important message of the paper is linked to the "technical implementation of EcoPAD": how generic EcoPAD is, in order to facilitate the inclusion of other models, other experiments and other data assimilation systems. It is not straightforward to relate model state variables to observations for a meaningful data assimilation. I thus agree that more details on the technical engineering could be provided (how it will facilitate the inclusion of other model, data stream, DA,...), possibly in an appendix in order not to overload the core of the manuscript and even if this is slightly in contradiction to reviewer2 suggestions (i.e. that these technical aspects are not the core of GMD). In your response to reviewer1's comment you insist on the scientific messages of the paper; I do agree but these can be more concise and focused on the most novel parts linked to ecological forecasting. To my mind some statements are relatively general and well recognized by the scientific community while the description of how EcoPAD may become a widely used platform is less clear.
- *Promotion to non-specialist of EcoPAD:* Although your response to reviewer 1 comment is solid, I believe that the discussion section do not emphasize on the limits/risks of web-based tools. No need for large changes but few general warnings/self criticisms could be beneficial.

- Note that reviewer1 concern about your expression ““help experimentaters think” is an interesting expression”, is that such expression is quite negative and may imply that experimentaters do not think enough on average!
- Figure 7 (now 6) about updated vs forecasted meteorological impact: Although the new caption and text is more clear, I still find that few more details are needed for a non specialist to understand clearly what is done: what is the updated meteorology and how the stochastically generated forcing is done. Please consider providing few additional information so that the set up of the simulations become clearer.
- Grammar and Typo correction (as pointed by reviewer 2) : although you have clear most of them, I still find some typos or grammatical issues that could be cleared with a thorough reading (ex. P22: “SPRUCE is an ongoing project focuses....”)
- Else I do agree that it is difficult to account for some of reviewer2 comments on the need to discuss more in details why some parameters are not well constrained and in the same time to focus the paper on the concept of EcoPAD. Maybe few more self-critical views on the limits of EcoPAD would help.

Best regards,
Philippe