

RESPONSE

We thank the Reviewers for their positive evaluation of the paper's revision and helpful comments. In the new version of the paper, the main changes are highlighted by blue text (for the convenience of Reviewers).

- Reviewer #1 -

1. Page 1: There is a sentence in there that has one *ly* too many: "In the following sections, we firstly briefly ..." -> "In the following sections, we first briefly..."

Response: Done, thanks.

2. Page 9: In the middle of the page there is a lost 'data(EnergyEthiopia)'; obviously the data needs to be loaded. This can either be done by hiding it from the user, or better just as you did it in example 1.

Response: Done. Many thanks.

- Reviewer #2 -

1. The first example in the related R script has not been updated with the latest changes in the package (e.g. the function names).

Response: We amended the R script. Thanks.

2. In the paper you repeatedly refer to ‘dependent data’, but it is not clear what you mean. Do you mean ‘clustered data’? Please, describe what do you mean with that terminology the first time you mention it.

Response: We have expanded the explanation in the third paragraph of the introduction.

3. Page 1: why do you highlighted the word ‘classifier’? I suggest to avoid boldface.

Response: The boldface was just a misprint. Thanks for pointing our attention to this. Now it has been removed.

4. Page 4: you implemented nonparametric bootstrap when the Box-Cox transformation is used in the `clus_opt_thres3()` function. I tried running it with the second example, but it took a very long time (I stopped it manually after 10 minutes). Please check that the procedure is implemented correctly in the code. If that depends on the size of the problem (e.g. number of clusters), please report it in the paper. Nevertheless, I also suggest adding a progression bar to show (approximately) how much time the procedure will take.

Response: Parallel computation is advised whenever nonparametric bootstrap needs to be employed. We have added a comment in the paper in the first application (also in Conclusion). The progression bar is a nice suggestion, but under parallel computation is hard to implement. Therefore, we decided not to insert the progression bar.

5. Pages 4-5: I suggest providing a justification for why you decided to use the Box-Cox transformation in the first example but not in the second one.

Response: To address the Reviewer’s suggestion, we added some comments on the diagnostic plots (Figure 1), and the analysis for the model without Box-Cox transformation, reported in Appendix, which highlights the reason why the Box-Cox transformation is needed in the first example.

6. As a general comment, it would be nice to provide a little explanation for the results you report each time.

Response: Explanation of the results of Application 1 can be found in the referenced paper (To *et al.*, 2022). As for the second application, a short discussion is already available.

7. Finally, I suggest a thorough proofreading of the paper.

Response: Done.