

Generally, the authors have made some revisions and improvements to the manuscript according to the reviewers' comments. However, I feel the authors did not try their best to improve the manuscript. There are still the following points that the authors need to pay attention:

- 1) In the "response to reviewers", authors often did not mention the lines where they have made the revisions, which made the review process inconvenient. In some cases, the authors also mentioned wrongly for the line numbers (e.g. Line numbers for the response to the major comment 2 from reviewer 1) – I feel the authors could take the revision more seriously.
- 2) Sometimes the authors did not respond directly or ignore the comments from authors (e.g. to indicate the elevation in the map) – It is definitely fair and reasonable to not accept all the comments from the reviewers. But it is good to give a reasonable reasoning, and in most of cases, I think it only needs at most 1-2 phrases or sentences to explain the situation (e.g. comment 8 for reviewer 1). Besides, sometimes the authors mention they would not change the phrasing but to add some references to support their statement, but they did not specify what they have added (e.g. comment 20 from reviewer 1).
- 3) Sometimes, the authors could think more to make the information more efficient—for instance, for Table 1, both reviewers 1 and 2 suggested adding some more details in the Table to make the audience understand easily. Of course, as the authors indicated, we can find all the information on the website link – but I think you would like to make your data be used by peers as often as possible, not just publish a paper, right? Anyway, the weblink is long, but I think you can use for instance some hyperlinks to avoid the long characters.
- 4) The mean SPEI between 1980-2010 should not be useful enough as a reference to compare with the SPEI data between 2019-2021. As the SPEI is a normalized index considering the distribution of water deficit in the study period (1980-2010), that's why the authors can notice the mean of SPEI between 1980-2010 is close to 0. Hence, in this situation, the mean SPEI between 1980-2010 is not informative and wrongly used. Somehow, it could be rather simple to use P-PET as an indicator to illustrate the water status in 2019-2020 compared to the historical period in each site.
- 5) The figures that reviewers provided sometimes look vague – I suggest the authors enlarge the font size to make the figures more readable (if possible, to beautify some plots). Besides, all the figures should be clearly described in the figure caption.

As several senior and even well-established scientists on the coauthor list, I feel the manuscript should be better presented compared to the current version.