

Dear Editor,

Thank you for your message. We are happy that the reviewers were satisfied with our revisions. We made the few corrections required to answer the reviewers' last remaining points, and are happy to send you our final manuscript.

Thanks again to you and to the two reviewers for your time and efforts.

Best wishes,

Alexandre Tuel (on behalf of all authors)

Reviewer #1 comments

Fig. 11 and Fig. A5: see methods → report the reference to the specific section of Methods.

Line 308: see methods → same as before

Fig. A5: the limits of panel (c) are not set correctly

Sec. 4.3: check figures' references

All points checked and corrected.

Reviewer #2 comments

l.21-22: The newly added sentence seems out of place/unrelated to topic and I would again remove it because it disturbs the reading flow.

Sentence removed.

l. 37: P is not usually used in flood frequency analysis and I think that this sentence needs rephrasing.

We rephrased as follows: "*The study of the influence of the temporal structure of precipitation on the catchment-scale hydrologic response is one of the foundations of runoff response analysis and flood frequency estimation.*"

L. 64: what are you referring to by spatial dependence?

We meant to say that Swiss catchments, being nearer in space, exhibited precipitation and discharge series that were more correlated in time. We rephrased the sentence as follows: "*There is also interest in going beyond the borders of Switzerland, to consider a larger number of catchments that cover more diverse climates and whose precipitation and discharge series are less correlated*".

L. 157: sensitivity to...

Corrected, thanks.

Section 4.3: quite a few undefined figure references.

Bug fixed.

L. 375: the role of discharge regime on clustering behavior has not been investigated in this catchment and I would rephrase this sentence.

We rephrased the sentence as follows: “*Despite its uneven spatial coverage across Europe, GRDC could be used to further analyse the sensitivity of the TCEP response to discharge regimes, and to detect potential spatial patterns.*”

L. 390: contributions of JZ and BS missing. Specify.

Their contributions are specified in “all authors discussed the results and contributed to the manuscript”.

Number of figures still at the upper limit. Are all these figures really needed?

We moved figure 7 to the supplementary material.