

Hydrol. Earth Syst. Sci. Discuss., referee comment RC1
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Comment on hess-2020-667

Anonymous Referee #1

Referee comment on "River runoff in Switzerland in a changing climate – changes in moderate extremes and their seasonality" by Regula Muelchi et al., Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2020-667-RC1>, 2021

The article analyses climate change impacts on runoff regimes in 93 rivers in Switzerland. The study is based – like a companion paper by the same authors (submitted as hess-2020-516) – on the results of a large Swiss research project, which provided consistent downscaled local climate projections under three emission pathways. While the earlier paper presents seasonal and yearly changes in the mean discharge, this contribution analyses the same data (simulated daily runoff for the period 1981-2099) with respect to moderate runoff extremes, both high and low flows. The dataset is available in a publicly available data repository (Zenodo), and is described in a corresponding paper in Geoscience Data Journal, which is under review.

After some careful revisions, which refer mainly to a clearer and more consistent style, the article certainly deserves publication, also because it complements the previous companion paper.

My review is provided in 2 documents: 1) a PDF document with rather general remarks and recommendations, and 2) detailed PDF annotations directly in the manuscript.

Please also note the supplement to this comment:

<https://hess.copernicus.org/preprints/hess-2020-667/hess-2020-667-RC1-supplement.zip>