

Hydrol. Earth Syst. Sci. Discuss., referee comment RC1  
<https://doi.org/10.5194/hess-2021-5-RC1>, 2021  
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## **Comment on hess-2021-5**

Anonymous Referee #1

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Referee comment on "Drought-induced non-stationarity in the rainfall-runoff relationship invalidates the role of control catchment at the Red Hill paired-catchment experimental site" by Yunfan Zhang et al., Hydrol. Earth Syst. Sci. Discuss.,  
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The results are clear and it's an interesting topic which indeed needs more attention. The main part of the analysis is only applied for the control catchment and not for the treated catchment; based on the assumptions that only the control catchment behaved non-stationary during drought. The primary objectives are based on the concept that a catchment may not show non-stationary rainfall-runoff relationships during changes in climate; this need to be introduced and discussed in depth in the manuscript.

Please also note the supplement to this comment:

<https://hess.copernicus.org/preprints/hess-2021-5/hess-2021-5-RC1-supplement.pdf>