

Interactive comment on “Warm-season hydroclimate variability in Central China since 1866 AD and its relations with the East Asian Summer Monsoon: evidence from tree-ring earlywood width” by Yesi Zhao et al.

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The authors selected the earlywood width to reconstruct the early summer drought in eastern Qinling Mountain. Their reconstruction follows standard methods and presented new datasets. The authors also have some discussion on the drought regimes in relation to easm. I agree with publication after a revision. I have some suggestions as shown below.

1. Line 35, p2, I feel that there are many tree-ring data in southern China is related to

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hydroclimate. This is not rare.

2 line 21-24, p4, you mentioned the monsoon indices by Wang and then you actually used the one by Zhao. I think you just need to mention the one by Zhao. You may need to introduce why this one is better and then you select it, but not just because it is longer. You may also do not need to detail the reanalysis data that used to derive the indices. I suggest you to focus on the introduction of the key part of this index.

3 line18-19, I do not understand well on why you calculate partial correlation with temperature and precipitation, because actually pdsi are calculated based on the temperature and precipitation. So they are related. Please add some explanations.

4 is it common for earlywood to respond to early summer moisture but the latewood has no response? It would be interesting to add more interpretation on this part in the revision. I am curious why the latewood has no correlation at all.

5. I feel that figure 3 can be moved into the appendix.

6. it is interesting you found a shift in correlations in the 1950s. This may be related to a shift between monsoon and local precipitation. You can use long instrumental precipitation to test their relationships. It is also helpful to add more discussion in relation the dipole pattern. This can be a novel point of the study

7. The authors identified 10 anomalously dry years and 11 anomalously wet years in the reconstruction period, and most of the anomalously dry (wet) years could be verified by corresponding descriptions in historical documents. Seems that there are some mismatches with the reconstruction, such as the flooding in 1954 and 1998 and the drought in 1958. Please add more discussion.

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