**Climate
of the Past**

Discussions

EGU

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.

Anonymous Referee #2

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Using reanalyzing tree-ring material from Shi et al. (2012), this manuscript found that EWW was a better hydroclimatic index in central China than TRW and LWW. The author reconstructed the growing season scPDSI based on standard procedure of dendroclimatology, and proved the fidelity of the reconstruction. I totally agreed another reviewer's comments, and suggest publication after they fully consider the comments. My confusions are listed as following: 1. Pinus tabulaeformis may stop radial growth during November and December in the study area. It may be unreasonable to consider these months for pearson's correlation in line 8 of page 4 and Figure 6. 2. The MJJ

scPDSI was reconstructed based on downloaded scPDSI (32°-35°N, 110°-112°E), it is unnecessary to compare them again in Figure 9. r value in the contents is enough. 3. I'm confused about the contents in lines 18-19 of page 5. Since the calculation of scPDSI was based on multi-proxies including precipitation and temperature, the result of partial correlation ($r = 0.59$, $p < 0.01$) that removed the effects of temperature and precipitation could only indicate that factors other than precipitation and temperature control tree-ring growth. It's not helpful for your conclusion. 4. After you reconstructed MJJ scPDSI using the linear model, do you deal the reconstruction with special method to make it match the variance of instrumental scPDSI? and how? (Page 6, line 12-13). I'm interested in it. 5. The reasons for the unstable relationship between scPDSI reconstruction and EASM are simply discussed. Is it caused by the calculation method of EASM? Because there are several EASM indices calculated in different ways. Do you try to compare your reconstruction with other EASMI, such as EASMI from Jianping Li?

Interactive comment on Clim. Past Discuss., https://doi.org/10.5194/cp-2018-141, 2018.