

Clim. Past Discuss., community comment CC1
<https://doi.org/10.5194/cp-2021-159-CC1>, 2021
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Comment on cp-2021-159

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Community comment on "Changes in paleo-underground water levels revealed by water wells and their relationship with climate variations in imperial China" by Chenyao Jiang et al., Clim. Past Discuss., <https://doi.org/10.5194/cp-2021-159-CC1>, 2021

The idea of this paper is quite novel and it is potentially suitable for CP, however the introduction of the data and the interpretation are not enough. My major concerns are as following,

The introduction of the data sources is too brief, and should be strengthened. Maybe a few examples of the original data source would be helpful for readers to better understand them.

The authors emphasised the 30N zone, but actually no evidence indicated the water levels changes of wells were related to the latitude 30N.

The direct cause of the variations of water levels of wells should be hydrology. Hydrology should be discussed on various scales, including channel change of rivers and desiccation/expansion of lakes.

Another major cause should be precipitation, and it should be helpful to compare the ancient wells in the lower reaches of Yangtze River with local and regional precipitation chronologies, instead of the temperature chronologies.