

Clim. Past Discuss., community comment CC2 https://doi.org/10.5194/cp-2021-43-CC2, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

## Comment on cp-2021-43

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Community comment on "Extreme historical droughts and floods in the Hanjiang River Basin, China, since 1426" by Xiaodan Zhang et al., Clim. Past Discuss., https://doi.org/10.5194/cp-2021-43-CC2, 2021

Authors highlighted multi-decadal to century-scale variations of drought and flood events in Hanjiang River basin based on historical documents

I think this manuscript is well organized and topic of this work is important for understanding long-term variations of extreme events in historical period.

This manuscript is worth publishing for Climate of the Past.

As a suggestion, I have some following comments

Figure 1: Author claims that investigating long-term variations in extereme events within medium to small scale river basin is important due to comprehensive influences, such as topography and geomophology(P3, line 110-114). Therefore, I think it is better to show topography of Hanjiang River Basin in this Figure 1. Readers outside of China are not familir with topography in this area.

Figure 5: Author analyzed correlation between El Nino and extreme floods in Hanjiang River Basin. As authors analyzed long-term(multi-decadal to century-scale) variations, I think it is better to give somme comments on relationship with PDO. Changes in the PDO phase occur on multidecadal, rather than inter-annual timescales. If appropriate proxy for PDO is available, correlation analysis with PDO and could provide more robust results on multi-decadal to century-scale variations on extreme floods.

Figure6: Author showed that large volcanic eruptions may influence occurrence of the extreme floods in Hanjiang River Basin.

I think it is better to explain some possible mechanism for relationship between volcanic eruptions and

occurrence of extreme floods in this area.