

Comment on cp-2021-13

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Community comment on "A 406-year non-growing-season precipitation reconstruction in the southeastern Tibetan Plateau" by Maierdang Keyimu et al., Clim. Past Discuss., <https://doi.org/10.5194/cp-2021-13-CC1>, 2021

The precipitation during non-growth season (coincide with non-monsoon season) in the monsoonal areas are extremely important for the forest ecosystems, because they are the critical moisture source in the early growth season when the monsoon has not arrived. This manuscript provided with opportunity to observe the long-time variability of the NGS precipitation in the southeastern Tibetan Plateau, where historical NGS precipitation was not reconstructed before, and such work provides with important knowledge to evaluate the future of regional forest development. The background of the study and importance of the current investigation were introduced well. The methodology was sound and provided in detail. The results and discussions were convincing and were presented logically in order. However, there are some minor points which needs to be addressed, as well as some suggestions which can be considered to refine the work.

- It was used as "non-growth season precipitation" on the title of the manuscript, however, it was used as "winter precipitation" in the keywords, such mixed usage also existed at some other places within the main text, please synchronize.
- Please separate the ombrothermic diagram of the climate variables form Fig. 1, because an important term "saddle shaped rainfall pattern" was mentioned in the discussion, and it was not clear to observe such rainfall pattern in the current status of Fig. 1.
- Please alternate a higher resolution map of the study area because a lot of information were hard to obtain from the current map. In addition, please provide an image showing the landscape of the tree-ring sampling site.
- What is the sample depth In Fig. 2? Is it number of tree-ring cores or number of trees?
- It is important in dendrochronology (of course not limited to) science to present the complex and abstract results in a clear and easy to understand way for the readers. Please place the Rbar, EPS, and Sample depth on the right side of the Fig. 2, and use similar tick position for them, in this way, it would be easier for readers to have a sense that, which sample depth corresponded with which EPS and Rbar.
- It is suggested to re-check the running EPS value, because it seems that sample depth was already quite high when the EPS reached threshold value.
- Please mention the meaning of Durban Watson test (Table2) in the results section, what does it imply.
- Please add the unit of NGS precipitation in the transfer function.
- Too much area was involved in the Fig. 7 to show the spatial representativeness of the

reconstruction and actual NGS precipitation.

- Some references were not inserted in the main text, while some citations were not provided in the reference list. Besides, the references should be re-organized according to the journal template. For instance, it was used as "D'Arrigo, R. D" at one place, while it was used as "D'Arrigo, R" at another place. "Clim. Dynam." in one place, while "Clim. Dyn." in other place, and so on, please rectify.