

Clim. Past Discuss., referee comment RC2
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Comment on cp-2022-37

Anonymous Referee #2

Referee comment on "Drought increase since the mid-20th century in the northern South American Altiplano revealed by a 389-year precipitation record" by Mariano S. Morales et al., Clim. Past Discuss., <https://doi.org/10.5194/cp-2022-37-RC2>, 2022

The paper by Morales et al presents a tree-ring precipitation reconstruction from the northern South American Altiplano that spans the last c. 400 years. The study fills a knowledge gap in the region, whilst simultaneously complementing existing work that has been undertaken a broader scale. I am not a technical expert, so cannot comment on the statistical methodology employed for this paper. In terms of the scientific quality and the "story" from start to finish, this is a very neat and comprehensive piece of research which will be valuable to a range of researchers working on hydroclimate variability in South America. The unique record will add value to disciplines beyond dendrochronology and climate reconstructions - it will be of use to the broader palaeo community and also the archaeological community. The authors often cite the issue of water stress and how this can inform management - and this is alluded to in the text at several points. It could be useful for the authors to articulate exactly how their study can be used in management. It would provide context, but as written can not inform management of water supplies. Perhaps more articulation (in a few sentences) could be included in the discussion section of this paper. Overall the quality of the science and the manuscript is very high. There are a few areas where sentences are a little long, and need to be shortened and/or rephrased to make sure the information is not lost. I attach an annotated manuscript with corrections / edits for the authors to undertake.

Please also note the supplement to this comment:

<https://cp.copernicus.org/preprints/cp-2022-37/cp-2022-37-RC2-supplement.pdf>