

Interactive comment on “The response of annual minimum temperature on the eastern central Tibetan Plateau to large volcanic eruptions for the period 1380–2014 AD” by Yajun Wang et al.

Anonymous Referee #1

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Line 34/35: Related to which events? Not really clear how minimums are related to 8,15, an 18 months. What causes interval cooling? A mechanism must have been discussed.

Line 55: Are these new samples or samples from the studies referenced in the sentence before? Were they published for another study? This must be clarified.

Line 55: Explain what a “strong” volcanic event is.

Line 61: The site name has “farm” in it which suggests that the area has had human activity and disturbance. Please elaborate.

C1

Line 61: Give coordinates for the site.

Map: Need to zoom closer to the sites, currently some of the names are unreadable.

Line 63: Briefly describe rainfall amount and temperature. From the closest met station in fine. I see this information is in Table 1- this should be mentioned when you first discuss met data and seasonality—line 63.

Line 81: Reference your map when talking about station locations.

Line 116: Some description of what SEA is would be helpful for readers.

Are there any longer met records to test? Even if they are further away? These met records are very short, with a lot of overlap between calibration/verification periods. Some of the met records here do not also show up in the US, NOAAs, Global Historical Climatology Network- why is that?

I would like to see a variant of the reconstruction using longer station records, even if they are further away, using just current JJ.

Line 131: Explain the obvious differences. It's better to explain it then to just say it is obvious.

Line 132: Refer to this as the 1st differenced chronology otherwise it is confusing.

Line 135: More information is needed in the introductory section about the growing season to understand if these correlations make sense.

Line 137: What do you mean by annual? P8-C7? That needs to be stated.

Figure 3. So much of the relationship between the trees and meteorological data is based on trend, as apparent by Figure 3b. Why not just reconstruct CJJ- the relationship (Fig 4b) must improve or look more convincing?

Section 3.5: This very large area of correlation is based on the warming trend across most of Asia, this needs to be stated more clearly. It is fine to show both, but Fig. C and

C2

D are more representative of your results and reconstructed area, so I would suggest leading with that.

Line 185, Figure 6. The region that each Tmin timeseries is from needs to be labeled and mentioned in the text.

Line 188: The ratio description is unclear.

Figure captions could be more detailed.

Watch your tense- sometimes the text is written in past tense and sometimes in present tense.

Interactive comment on Clim. Past Discuss., <https://doi.org/10.5194/cp-2020-93>, 2020.