

Interactive comment on “Tree-ring inferred glacier mass balance variation in southeastern Tibetan Plateau and its linkage with climate variability” by J. Duan et al.

Anonymous Referee #1

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The paper is a maiden attempt to reconstruct mass balance variation in Tibetan Plateau. I consider this study is a novel approach and I suggest the Journal to accept this paper. However, before accepting I suggest to consider some of the minor points.

Authors are requested to provide short description of wastage for general readers in simple words.

Page 3666, Line 23: later or late

Authors mentioned the Duan et.al., 2010a, 2010b deals with the climate variables but not with mass balance relationship. For the present study authors used the same taxa

C1915

which they used in their earlier study (Duan et.al., 2010a and 2010b) but for mass balance study. However, in this study mass balance data is consider but only used mean latewood density (MLD) . Authors are advised to compare mass balance data with other six tree-ring parameters also and provide the results with figure as supplementary material. After doing these steps they can provide the reason why only mean latewood density (MLD) is considered for the present study. Is there any ways to explain the biological/physiological explanation for this relationship?

Page 3667, Line 7: replace the word gotten with extracted

Page 3667, Line 16: replace resulting in the with to prepare/to build

Authors used SSS criterion to evaluate the reliable time span of the chronology. Why authors did not considered EPS threshold (>0.85) to select the number of series reliable for cut off year.

Authors prepared two models, period 1960-1993 and period 1960-1990. Why the second period (1960-1990) showed good results when 3 years data (1991-1993) deleted from the model. Why these 3 years diluting the results.

Fig. 2(c): What does red line represent in the figure 2c. Kindly mention in the figure caption.

Interactive comment on Clim. Past Discuss., 9, 3663, 2013.