

Interactive comment on “Recent glacier mass balance and area changes in the Kangri Karpo Mountain derived from multi-sources of DEMs and glacier inventories” by Wu Kunpeng et al.

B. Smith (Editor)

bsmith@apl.washington.edu

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I thank the authors for their improvements to the manuscript, and for their responses to the two referees' comments. I recommend that the authors provide an annotated manuscript showing the changes made in response to the referee's comments. Both referees indicated that the manuscript required only minor revisions, so once the revisions in response to their comments are complete (see my own comments on this below) it seems like the manuscript can proceed.

Regarding the authors' response to referee 1. The additional observation of the glacier terminus with the Landsat-5 scenes and the more detailed analysis of the precipitation

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appear to provide a partial response to the reviewer's first concern. I would encourage the authors to edit the corresponding text in their revised manuscript carefully for English, and to consider whether the comparison between the minimum and maximum precipitation at the meteorological stations is the best way to answer this question; the comparison between the maximum and the minimum leaves open the question of whether the minimum was exceptionally low or the maximum was exceptionally high; a comparison between the mean precipitation and the maximum might be more informative. The manuscript should also clarify what the authors mean by "increase high precipitation." Should this be "increased high-altitude precipitation?" The last sentence of the response also does not make sense to me, and probably needs to be explained in more words.

I agree with referee 1 that the changes in figure 4 are somewhat difficult to see. I would recommend that the information about the improvement in the registration between the two DEMs be illustrated with a histogram of the elevation differences before and after the registration procedure.

Regarding the authors' response to referee 2: The authors should more completely respond to the referee's concerns about surging glaciers: The referee's comment seems to be a polite suggestion that there may not be any surging glaciers in the region, so the authors' suggestion on page 11, lines 20-21, that the glaciers were advancing because of surges, may not be correct. The referee also recommended that the authors consider whether precipitation measured at stations would represent snow or rain, which I do not see in the authors' response.

The authors' response to the referee 2's comment about the climate controls is a step in the right direction, but the discussion needs to be more quantitative. What is the magnitude of the precipitation change and of the warming trends for each region and time period? What magnitude do the authors expect to be needed to produce a significant mass-balance trend?

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