

***Interactive comment on “Landsat TM and ETM+
derived snowline altitudes in the Cordillera
Huayhuash and Cordillera Raura, Peru,
1986–2005” by E. M. McFadden et al.***

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General Response: The discussion section has been extensively revised to reflect the uncertainty in our climatological interpretation. We cannot support our climatological interpretation with climate data because the data are limited in the closest extensively populated region, the city of Huaraz, and no data are available in the valleys surrounding both ranges.

Statistical Analysis: Data from 1991 in the Cordillera Huayhuash and 2005 in the Cordillera Raura have been removed from the statistical analysis due to their limited spatial coverage in the respective ranges. Data from Caramarca and Rasac glaciers

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have also been removed due to their limited time series. All data, however, are presented in Figures 5 and 7 to display the limitations of the data for the eliminated years and glaciers. We have not compiled a table on glacier data as suggested because it is difficult to delineate each catchment precisely so any data of this nature would be highly speculative in nature.

Figure 3: The blurriness of Figure 3 is a product of the resolution of the DEM. We decided to remove this figure in the revised version of the paper.

1941 Lines 14-24: This paragraph has been entirely re-written for clarification.

1942 Line 12: Removed “are evident”.

1943 Line 8: Changed to “We eliminated all images...”

1944 Line 19: The extent of data used in the statistical analysis have been revised and re-plotted although the implemented changes have very little effect on the significance of the data set.

Interactive comment on The Cryosphere Discuss., 4, 1931, 2010.

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