

Interactive comment on “Do Himalayan treelines respond to recent climate change? An evaluation of sensitivity indicators” by U. Schickhoff et al.

Anonymous Referee #1

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This multifaceted review provides a well-differentiated picture of the Himalayan upper treeline. The paper may be considered as a consequent follow-up of another paper by Schickhoff published in 2005. The recent paper is mainly based on the first authors own extensive investigations in many different regions of the Himalayas and on a profound evaluation of the literature. As in many other high-mountain areas of Eurasia already settled in prehistoric times, the present altitudinal location of the Himalayan treeline must mainly be attributed to human impact. Thus, explanation of treeline response (spatial pattern, succession, establishment of new trees) to the warming climate is still questionable. The treeline has been considerably lowered by human impact, and is therefore located far below the mountain tops and crests. Thus, also the lack of climatically shaped growth forms may be explained by this low and fairly wind-protected treeline. Anyway, this article is an essential contribution to a better regional differenti-

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ation of the Himalayan treelines and treelines in general. The paper is well-organized and well-illustrated with good maps and figures. However, those who are not familiar with this mountain region will miss some instructive photographs.

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