The Cryosphere Discuss., 7, C2396–C2397, 2013 www.the-cryosphere-discuss.net/7/C2396/2013/

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7, C2396–C2397, 2013

Interactive Comment

Interactive comment on "Tracing glacier changes since the 1960s on the south slope of Mt. Everest (central Southern Himalaya) using optical satellite imagery" by S. Thakuri et al.

T. Mölg

thomas.moelg@campus.tu-berlin.de

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I have only read the abstract of the paper, but would like to mention one thing that is possibly relevant for the whole paper. Giving the rate of areal shrinkage in percents, and deducing from the resultant time series "an acceleration of the surface area shrinkage" can be misleading. Any glacier will increase its relative shrinkage rate even if the actual area change per year is constant. For example, a glacier with initially 10 km2 area, which loses 0.5 km2 every year over a period of ten years, will show an initial relative shrinkage of 5%/year (0.5/10) and a final relative shrinkage of 9.1%/year (0.5/5.5).

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In my opinion giving areal shrinkage in absolute numbers is the better way, especially if a trend in areal shrinkage shall be interpreted in terms of climatic forcing. Using percentages can be useful for comparing shrinkage rates between different regions/glaciers (but over a common period). I hope my comment is helpful for preparing the final version of this manuscript.

Interactive comment on The Cryosphere Discuss., 7, 5389, 2013.

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7, C2396-C2397, 2013

Interactive Comment

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