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Interactive comment on "Long-term erosion of the Nepal Himalayas by bedrock landsliding: the role of monsoons, earthquakes and giant landslides" *by* Odin Marc et al.

Odin Marc et al.

odin.marc@unistra.fr

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We thank Manny Gabet for his positive appraisal of our work.

We will give a detailed answer to all comments when receiving the other review, but here we want to quickly address the major comments made by the referee about the importance of the roll-over.

We agree with the referee that the roll-over may be physical and not due to censoring.

Thus, the sentence P19 L420 : "exhibit a roll-over likely due to incompleteness of mapping associated with the low image resolution and the length of time between succes-

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sive images" is indeed likely misguiding and we will rephrase it and mention possible physical origin of the roll-over, as described in Stark and Guzzetti, 2009 and Frattini and Crosta 2013.

However, this has no impact of the rest of our analyses, because we have already computed the equivalent erosion due to landslides within the rollover, as stated P19-L437: "The contribution from landslides smaller than 1000m^2 (i.e., in the roll-over of the size-frequency distribution) is <5%."

So in our study, given the power law exponent of alpha=1.5 and maximal size of 40km2, the numerical integration of landsldie frequency in the roll-over is <5% of the integral of the power-law behavior between 2000 and 40,000,000 m^2. Contribution of the roll-over for the EQIL would even be less with alpha=1.45 or less.

We consider rephrasing slightly this point so it is clear to any reader that we do not assume that the roll-over do not exist but actually compute its contribution and find it negligible. For example: "For both MIL and EQIL, we numerically computed the long-term erosion associated with landslides smaller than 1000m^2 (i.e., in the roll-over of the size-frequency distribution) and found it to be less than 5% of the long-term erosion due to the large landslides following a power-law behavior. "

Sincerely, Odin Marc

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