

I am grateful to the authors for the detailed response and the various improvements to the manuscript. In particular, the method description has improved considerably, and the added subsection on uncertainty estimates in the results also strengthens the manuscript.

However, I continue to have major concerns about the uncertainty analysis of the velocity change and the evidential basis of several statements in the conclusion section. In addition, the presentation warrants further improvement, as language issues such as incomplete sentences detract from the content.

1) Velocity change analysis I continue to have major reservations about the correctness of Equation 2 and am concerned about the absence of quantitative estimates and uncertainty estimates in Section 5.5.

a) Equation 2

Equation 2 looks wrong and the assumptions and derivation remain unclear. Assuming the errors in V_1 and V_2 are uncorrelated and their variances identical and equal to σ_V^2 (none of these assumptions is invoked in the manuscript), the variance of $f(V_1, V_2) = (V_2 - V_1)/V_1$ is, to leading order, given by

$$\begin{aligned}\sigma_f^2 &= \sigma_V^2 \left(\frac{\partial f}{\partial V_1} \right)^2 + \sigma_V^2 \left(\frac{\partial f}{\partial V_2} \right)^2 \\ &= \sigma_V^2 \left(-\frac{V_2}{V_1^2} \right)^2 + \sigma_V^2 \left(\frac{1}{V_1} \right)^2 \\ &= \sigma_V^2 \frac{V_1^2 + V_2^2}{V_1^4},\end{aligned}\tag{1}$$

which upon taking the square root yields a standard error estimate of

$$\sigma_f = \sigma_V \frac{\sqrt{V_1^2 + V_2^2}}{V_1^2}.$$

Conversely, the authors' equation (2) replaces the numerator with $V_1 + V_2$. I mentioned last time that their equation can give meaningless negative results for negative values of V_1 or V_2 .

b) Results: Section 5.5

The second half of the only paragraph states selected relative velocity changes, but no comprehensive presentation of quantitative estimates or their uncertainty is provided. While Fig. 5 is referenced, neither the relative velocity change nor its uncertainty is directly shown. Given the claims in the conclusion about the estimation of velocity changes, I feel the reader needs to be presented quantitative information to appraise the authors' claims.

2) Unclear basis for conclusions The conclusion sections continues to contain statement for which I cannot identify solid evidence. In particular,

a) A sentence I highlighted in the same context in the first round "Although underestimations occurred due to pixel size, temporal data gaps and velocity field heterogeneity, decadal velocity changes were observable under certain conditions, particularly for features exceeding 1 m a⁻¹". What is the evidence that pixel size and temporal data gaps caused the observed underestimation? What is the precise meaning of observable, and how was this conclusion established? I assume you mean features whose velocity exceeds 1 m/a on average.

b) "Below this threshold, velocity changes detected with L7/8 data were not statistically significant." I am not aware of any formal statistical test that was conducted (see 1) and hence cannot identify the empirical basis for this claim.

3) Presentation I encourage the authors, especially the senior authors, to make further improvements to the presentation. Language issues include missing articles (e.g. "Average velocity field" in l 296 [or plural]), incomplete sentences ("By considering PMAs with velocities exceeding 1 m a⁻¹, nine rock glaciers and 2 landslides." in line 467); or sentences such as the following from line 312: "Stable areas were defined using TanDEM-X DEM and slopes lower than 35°, without taking into account neither glacier outlines with a buffer of 500 m for each glacier (RGI Consortium, 2017) nor all PMAs, also not confirmed ones produced in this study." Do you mean that glaciers and their surroundings (500 m buffer) and PMAs were excluded?

This sentence is a representative example of the verbose style that I find difficult to follow. Adopting a more concise style and reducing the word count by ~20% could make this manuscript easier to follow.

Additional remark Consider including a quantitative statement on the uncertainty estimate in abstract and conclusion.