

Dear Authors,

I have now examined the reviewers' comments, your replies, and the revised manuscript. Both reviewers stress the importance of this work, presenting the use of IMU technology for tracking boulders and thus landslide movements, in addition to recognizing the substantial effort that went into this study. I think you did a very nice job addressing the comprehensive comments. However, there are a few minor comments I would like you to address before the manuscript is ready for publication.

- You clarify in the response to reviewer 1's comment that "the main point of this paper is not that of offering a 3D representation of boulder movement" and that "the main point of this first paper is to show that this technology might mature quickly in the near future to provide real time data on the initiation of hazardous boulder movement, which we believe our data already highlights, despite the capability limitation at the time of data acquisition." However, in the Discussion it could be interpreted as if you are contending that the main point of your paper is to show 3D representations of boulder movement ("this indicating the potential of the technology used for detecting both gradual angular variations and changes in boulder orientation associated with rapid movements in real or near real time"). Please clarify your text in order to not overstate the realistic objectives/outcomes of this paper.
- L114: This sentence is missing a word. Either add 'us'/'researchers' after 'allow' or change 'to investigate' to 'investigation of'
- L140: This sentence is missing a word. One suggestion is to add 'providing' before 'the potential' (remove comma before 'and')
- L169: 'PGA' has not been defined previously in the text.
- Figure 1: Pink box showing 'Zoom Fig. 4' is quite hard to see.
- L287: change to 'a 4-panel solar system'
- L304: Change to either: 'have a b-axis of' or 'have b-axes of'
- L324: A word is missing here: 'in the following \_\_\_\_\_'. Should this be text, paragraph, section?
- Figure 3: Are the measurements given on the scale bars the b-axis measurements? If so, please add that information in the caption. If not, why choose such different scale bars and not use a consistent measurement of 0.5 or 1 m?
- Figure 5: Please describe the different elements of the figure in alphabetical order (i.e., A & B before C-G)
- Figure 6: As the reviewer required additional explanations of how the representations were created in Fig. 6B, D, F, I think it could benefit readers to include equations (1) and (2) (from the 'Author response') together with a brief explanation in the text.
- Figure A3. The yellow text and arrows are quite difficult to read; please choose a more distinct color.

Best Regards,

Lina Polvi Sjöberg