

## ***Interactive comment on “Using street view imagery for 3D survey of rock slope failures” by Jérémie Voumard et al.***

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Overall this is an interesting paper, but i think it requires some more scientific thought and the quality of the analysis and figures require improvement. As is the paper reads like a conference paper, not a journal paper.

In general it is an interesting idea, but the tests are limited to three sites with dramatically different settings. This limits the authors ability to quantify the method, they should have focused on a slope type (close and rock, or far and soil) and tested three or four of that type. This would have led to a more robust analysis and conclusion. As it stands the authors state it works in some places better than others based on picture quality, lightening, etc. These are not geotechnical qualities, which should have been the

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focus. If the focus was on image quality, NHESS is the wrong journal for submission.

I encourage the authors to dive deeper into their work and test many more sites and resubmit.

Some specific comments: Stating LiDAR is expensive and demanding from a logistics point of view is irrelevant, especially when referencing a paper from 2014, that was likely written in 2012 or 2013. Modern applications of lidar are neither of those. Avoid general language with little meaning like “reasonably good” You state in Section 4 VisualSFM gave the ‘best results’ – this is arbitrary, you need numbers to back this up. What metric are you using to define ‘best’? Section 4.1: Standard deviation of the error below 20 cm – what error are you assessing? 3D vector, Z, or XY? Your volume estimates do not have ranges, yet your point cloud has alignment errors. You should report volumes with +/- amounts. Again, ‘reasonably good’ should not be used in a scientific paper. Same for ‘We hardly perceive’ ‘Same strong radial’ ? In your conclusions you state the method is useful to ‘quantify slope movements and displacements’ yet you did not show this anywhere in your paper. You showed the ability to measure failed volumes, not displacements. This is a misleading conclusion. On your change mapping images the colours below the limit of detectable change should be coloured grey. All figures need a scale bar. Figure caption 5 is too long. The min and max difference calculated in Table 1 adds no value, those points are likely outliers.

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