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Author's response regarding the revised version of the manuscript

“Comment on: Dynamics of the Askja caldera July 2014 landslide, Iceland, from seismic signal analysis: precursor, motion and aftermath”

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We thank Tim Greenfield and an anonymous reviewer for suggestions that improved our comment. We have rewritten the second paragraph that Tim Greenfield found hard to read and now include discussion of the higher velocity estimated by the seismic analysis of Schöpa higher up the path as suggested by him. We have expanded our discussion of the unrealistically low velocity with an added reference and we have omitted a sentence about which the anonymous reviewer commented “The above comment is qualitative in several parts” and replaced it with this expanded discussion. We also note that velocity estimates of both Gylfadóttir et al. and Schöpa et al. are “indirect measurement” as suggested by the anonymous reviewer.

The anonymous reviewer suggests that we add a discussion about “the lessons to be learned for the land-slide community from the discrepancies between the two studies? It may point on a necessity to switch from the deterministic outputs of both the Gylfadóttir et al. 2017 and Schöpa et al. 2018 studies to a more probabilistic approach where ensemble solutions are provided explicitly for geometry and kinematic of landslides”. We intended to write only a short comment to draw attention to the problems that we find with the analysis in Schöpa et al. Expanding the comment to include discussion along this line would widen the scope of comment too much in our opinion so we did not elaborate on this point. We point out that the analysis of Gylfadóttir included model calibration that explored a large set of potential slide parameters and in that sense included some statistical aspects that are along the lines suggested by the reviewer.

Yours sincerely,
Tómas Jóhannesson