

## ***Interactive comment on “Displacement mechanisms of slow-moving landslides in response to changes in pore water pressure and dynamic stress” by Jonathan M. Carey et al.***

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This is an interesting paper showing the possibility to analyze with an advanced direct shear apparatus, the moving pattern of slow moving landslides induced by groundwater fluctuations and seismic acceleration. A short description of the apparatus in the form of a sketch would be interesting for the reader who is not familiar with this equipment. The paper gives in detail the test results, supported by a number of figures. I doubt whether these figures are all necessary, to explain the moving pattern of the samples. Moreover the figures are not all well explained, difficult to read with these complex codes and colors which can not be read by a color blind reader. An important

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omission of the paper is the fact that the reader has no insight in the moving patterns of the landslide measured in the field. For example the hysteresis in the moving pattern with a rising and falling groundwater level. In that way all what was observed in the lab can be verified with the monitoring results in the field. The conclusions mentioned in the paper are very clear are not all the results a confirmation of what was found by former research? I ask the author to be more specific on that. I will stimulate the authors to resubmit the paper, but there is still work to do. I would have recommended moderate revision but since this is not an option in this classification I recommend major revision since I want that the authors make a clear link with the results measured in the field. See further my annotations made in the manuscript.

Please also note the supplement to this comment:

<https://www.earth-surf-dynam-discuss.net/esurf-2018-73/esurf-2018-73-RC1-supplement.pdf>

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