

| Reviewer 4   | Location         | Answer  |
|--|------------------|---|
| <b>General comments</b>  |                  |   |
| The abstract should be rewritten: No physical connections can be found between the optical and SAR method, and you may say "a hybrid method" instead of "a novel approach". You should also mention the method that is used to derive displacement, as this is also an important part of your work. I cannot follow the sentence "In contrast, the landslide accelerated during the rainy seasons of 2015 and 2016, but neither of those accelerations resulted in a drop of the radar coherence ratio". This sentence seems to say that the proposed coherence method is not reliable at all. | abstract         | We have made significant changes to the manuscript, including re-focusing it on the time-series analysis rather than the early warning aspect. Once all changes are completed, we will rewrite the abstract.  |
| It seems that you only showed three different results within a plot. There is a lack of quantitative integration of these three results.   | ratio figures??? | Thank you. We are not entirely sure what is expected here, since we are comparing the different metrics to understand how they can be used and/or what they can tell us. We hope that once all the edits that have been made, this concern will be addressed.   |
| The NDVI part is not described in detail. It seems that you use the mean NDVI on the moving slope and calculated the ratio with the surrounding slopes. If the mean NDVI ratio dropped so dramatically, the spatial pattern of NDVI ratios could be used to indicate the spatial pattern of the landslide, or at least the disturbed vegetation should be clearly discernable. Therefore, it may be more suitable to use the spatial patter of the NDVI ratio to indicate the morphology of this imminent landslide.   | methods??        | We have added additional details to both the description of the NDVI methodology section, the results and the discussion. Indeed, some information about the processes on the slope are discernible in the patterns of NDVI changes. We are generating a new figure to show this and discuss these findings in both the results and discussion sections.  |
| Coherence between two SAR images may also be influenced by their temporal interval. Longer intervals may lead to image incoherence. How to elimiate the influence of time on the derive SAR coherence?   |                  | Thank you for this comment. Because we use the ratio between the surrounding hillslope and the slide, both of which are equally affected by coherence loss due to the variable temporal baselines, this effect is effect is eliminated automatically.   |
| <b>Specific comments</b>   |                  |   |
| --> used   | Line 79          | Thanks for catching that, we've corrected it accordingly.   |
| eliminate repetition   | Line 98 and 100  | Thank you, we have eliminated this unnecessary information.   |
| Describe temporal resolution of the data and any processing procedures   |                  | We have added the following information to the manuscript: <i>GHCND data provide daily total cumulative precipitation and minimum and maximum air temperature. The Big Sur Station station is located 53 km north-west of Mud Creek at 61 m asl. Data is available from <a href="https://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USC00040790/detail">https://www.ncdc.noaa.gov/cdo-web/datasets/GHCND/stations/GHCND:USC00040790/detail</a> and was used without any additional processing.</i> |
| Citation format error  | Line 187         | Thanks for catching that, we've corrected it accordingly.   |
| Can you indicate the dates of images used to calculate Fig. 3  | Fig. 3           | The images in Fig. 3 are simply meant to illustrate the way the image selection based on a coherence threshold works, and therefore do not represent any specific point in time. We have added this information to the figure caption:<br><i>All images were computed from ascending data, and and do not represent any specific time during the time series.</i>   |