Reviewer 5	Location	Answer
General comments		
This manuscript introduces an interesting method for the early detection of landslides using time series of radar coherence ratio, intensity ratio and NDVI ratio. This manuscript is well arranged and the results from this case are sound However, in my mind, two issues should be highlighted, **the** first is what the basic theory is behind the coherence lost, intensity lost and even NDVI lost with respect to the surface deformation. The Second is whether you can give the thresholds for the coherence ratio intensity ratio and NDVI ratio as the precursory information to early warning the failure of slope? Actually, the coherence lost and intensity lost are mainly due to the large surface deformation. In other words, surface deformation can give us much direct information with respect to the failure of landslide. In a word, to which extent, this strategy can be referred for the similar landslides application?		Thank you for your suggestions. We have added additional details with regard to what causes the changes to coherence, NDVI and intensity and discuss these more in depth in the discussion. You pose many excellent questions that we have tried to better address in the discussion but will also remain open questions for future research. We have expanded on this both in the discussion and the conclusions.
1. Besides, once the time series of displacement shows an accelerating trend, we should take more attention and take special measures if applicable to prevent the hazard. Actually, it is very hard to forecast the failure of landslide if only satellite InSAR data are considered.		Agreed, will include this point in the discussion.
2. Taking NDVI as an idicator may not work when landslide occurs in area with barn vegetation cover. The heavy vegetation is a big problem for SAR processing. So how does NDVI can be applied regarding the landslide detection and monitoring?		We now address the issue of differeing vegetation covers in the discussion.
Specific comments		
The description of the Mud Creek landslide is not clear, please add a description about the scope of the landslide, such as length, width, thickness etc., which can also be depicted in Fig. 1 to an enlarged map of landslide.	study site	We have added the following information to the study site description: *The failure initiated at to 337 m above sea level, was 490 m long, and involved roughly 3 million m3 of earth and rock (Warrick et al.,, 2019).*
--> used	Line 79	Thanks for catching this typo, we have corrected accordingly!
the numbers of numbers of ascending and descending SAR images are 35 and 42, respectively. So what do the numbers 51 and 64 in lines 97-98 mean?	lines 97-98	An unfortunate error in Table 1 likely led to this confusion. There are 51 raw images from the ascending track (track number 42) and 63 raw images from the descending track (track number 35). We corrected all the numbers in the text and table. Thank you for making us aware of the mix up.
In Fig 5b, in April 2017, the time series of deformation marked by Pentagram appeared rebound, is there any unwrapping error?	Fig. 5b	Yes, because of the high displacement rates during spring of 2017 (and the low coherence), there are a number of unwrapping errors, which make it hard to retrieve the full displacement. We have discussed this in the text more explicitly.
the deformed area is similar to the low coherence area pattern, and the NDVI ratio lost in the meantime. So how can you conclude the coherence loss was due to slope movement rather than vegetation variation. More analysis on this aspect is necessary.	Fig. 5	Indeed, we cannot fully disentagle the different factors driving low coherence. However, we believe that the additional datasets can shed some light on this, including an additional analysis of evolution of the spatial pattern of NDVI.
The amplitude ratio of the ascending orbit is relatively discrete, and the descending orbit is concentrated. What is the reason?	Fig. 7	This is likely due to a combination of the effects of foreshortening as well as incidence angle. We will normalize the amplitude for incidenca angle and re-analyze our findings.

Table 1. this table is in "radar data" section but information about optical imates is alsow shown. I advise authors to move this part to section 3.2	table 1	We did not want to split this three-line table into two tables and have therefore moved it to the overarching methods section (section 3).