

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC1 https://doi.org/10.5194/nhess-2021-153-RC1, 2021 © Author(s) 2021. This work is distributed under the Creative Commons Attribution 4.0 License.

## Comment on nhess-2021-153

Anonymous Referee #1

Referee comment on "Brief communication: Radar images for monitoring informal urban settlements in vulnerable zones in Lima, Peru" by Luis Moya et al., Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2021-153-RC1, 2021

The title of "Radar images for monitoring informal urban settlements in vulnerable zones in Lima, Peru" would be very useful study to spatially identifying the vulnerable informal settlements from space. However, further explanations would be necessary for fully understanding the proposing technique. The specific comments are shown below.

Line 40 in Page 2

"However" is a bit strange from the context of the paragraph. Please correct it.

Figure 1(c)-(i), -(ii), (d)-(i), -(ii) and Figure 3

Please add north arrows in each figure.

Considering the spatial resolution of Sentinel-1 images as shown in Fig. 1, Pixel size of the extraction results in Fig. 3 seems much larger than the original resolution. Furthermore, there are no misdetection in outer area of the target area. If the author performed further analysis other than thresholding, please describe it.

Line 83-84 in Page 5

The author described "the occupied area in Lomo de Corvina is underestimated" without any evidence. Underestimation must be judged from comparison with other investigation such as field survey or previous studies. Please show some evidence for the underestimation.