Natural Hazards and Earth System Sciences Discussions

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Comment on nhess-2021-153

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Community 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-CC1, 2021

The Brief communication: "Radar images for monitoring informal urban settlements in vulnerable zones in Lima, Peru" focuses on remote sensing capabilities to fastly locate informal settlements in highly exposed areas. While this is an interesting approach and shows EO capabilities in these domains, I generally suggest to work on two issues: 1) Accuracy assessment of the identified makeshift shelters and 2) a more critical discussion of what remote sensing data can do here – in an ethical sense.

The first sentence of the introduction could be supported by a citation, e.g. from the United Nations world urbanization prospects.

Line 9: must it be the "organization of people" or could it be just one person as well?

Line 11: I would rather write instead of "consisted mainly of informal settlements" something like "was mainly driven by informal urban expansion".

Line 16: Your statement "Frequently, informal settlements occupy unsafe zones against natural hazards." was even proven in a scientific study recently by Müller et al., titled Misperceptions of predominant slum locations?

Line 20 – maybe it would make sense, to mention here additionally a study on urban growth based on EO-data?

Line 23 – that studies in the "informal settlements" domain are still relatively scarce has been documented well by the review of Kuffer in 2016. I suggest to cite her study here.

Figure 1: In my opinion, image 1c (iii) is of high relevance, and needs to be larger. I wonder if figures 1a and 1b are necessary at all?

Line 57 onwards: "It is worth mentioning that the collapse of the light makeshifts built during the

recent invasions may not have represented an effective danger condition to the inhabitants. However, non-engineering masonry houses could have been constructed in the short term if the inhabitants were not removed." – these sentences sound too much as if there has been done something good for the people, which might be true from the

perspective of natural hazards, but not from their perspective of the need for shelter. A differentiated classification should be made here.

Line 80 onwards – is there any chance to provide a quantitative accuracy assessment?

Line 89 “to perform a proper relocation” sounds cynical to me. It should be discussed in a more holistic sense – yes, relocation might be good due to the exposed areas towards natural hazards, but from a social, economic or personal perspective, relocation might be catastrophic, too. So, please discuss this.