

Interactive comment on “UAV survey method to Monitoring and analysing geological hazards: The Case study of mud volcano of Villaggio Santa Barbara, Caltanissetta (Sicily)” by Fabio Brighenti et al.

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Reply to Reviewer 2 RC2

UAV survey method to Monitoring and analysing geological hazards: The Case study of mud volcano of Villaggio Santa Barbara, Caltanissetta (Sicily)

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A pdf file of the reviewed manuscript is attached as supplement file. The changes in

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the text are marked with green for rephrasing, reorganised and new parts added, and with yellow the changes suggested by the referees.

The list of references in the introduction section must be updated with recentmost researches (2018-2020), they are many.

Reply: We have followed the suggestion. The bibliography has been improved, including papers from 2018 to 2021.

The text regarding the GCP in the section must be moved to the methods.

Reply: The text concerning GCPs has been moved to the methods chapter.

Figure 1 show the orthomosaic resulting from photogrammetry processing. It can be moved to the results section. A geological introduction to the area is mandatory.

Reply: We have substituted Figure 1 with an aerial photo of the study area. The geological introduction is present in the text.

Report the reference system in all figures.

Reply: The reference system has been added to all figures.

There is a lack of references in the methods as well as there is a lack of details regarding the processing. I suggest reading recentmost papers focusing on the methodology.

Reply: The chapter of methodology was improved and clarified through rephrasing and the addition of the Results chapter. The bibliography has been enhanced.

It has been generated a DSM (Digital surface model) not a DEM.

Reply: The acronym DEM is not present in the paper.

Conclusion must be rewritten removing the lines listing several references that can be added to the introduction section. Conclusions must address the main results from the present work.

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Reply: The conclusion has been rewritten. The paragraph with the long list of references has been moved to the Introduction chapter.

Please also note the supplement to this comment:
<https://nhess.copernicus.org/preprints/nhess-2020-378/nhess-2020-378-SC2-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2020-378>, 2020.