Natural Hazards
and Earth System
Sciences

Discussions

Interactive comment on "Incorporating multi-source remote sensing in the detection of earthquake-damaged buildings based on logistic regression modelling" *by* Qiang Li et al.

Anonymous Referee #1

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The work proposes to detect earthquake-damaged buildings using multi-source remote sensing data. The proposed work integrates the use of data acquired using multispectracal sensors, SAR and LiDAR.

The written content of the paper is quite comprehensible even if the text should be revised by a mother tongue. The paper is technically fair and the topic is relevant for the journal.

However, the following points need to be clarified and eventually revised:

Abstract: page 1 line 10 - different "modes" should be changed with different "types" as it is more appropriate page 1 line 22 - "which is be regarded" change to "which is

regarded" page 1 line 28 - by features do you mean data sources?

2. Study case and datasets page 4 row 21-22 - what type of sensor did you used? what is the date and time of the acquisition? page 4 row 24 - the authors mention to use a 0.5 m image but at page 7 row 1 the resolution changes to 0.2. Please clarify page 4 row 27 - please provide date and time of the acquisition

3.Seismic characteristics of multi-source remote sensing images page 5 row 19 - "the square nature of the structure", is not clear, do you mean the "ground projection"?

4.1 Data processing page 7 row 5 - please cite in an appropriate way Google maps (here you can find a hint:http://writeanswers.royalroads.ca/faq/199225)

4.1 Data processing page 7 row 21 - please explain better what do you mean by geometric feature

4.4 Model element determination page 8 row 26-27 - is this an empiric assumption?

5.1 Features statistics and analysis page 9 row 17 - all images are resampled to 1 m. What is the method used?(nearest neighbour)

5.3 Results and verification page 11 row 27-30 - the authors state that "the moultisource remote sensing image is better than the results of other combinations" but soon after you say that the "combined SAR image and optical image is the best". It's not clear which method is more accurate.

5.3 Results and verification page 12 row 10 - please pin point the building in the image or write it's geographical coordinates

Figure 2 please mention the date and time stamp of each image (hear or in the text)

Figure 3 please mention the geographical coordinates of the building

Figure 4 please mention the geographical coordinates of the building

Figure 8 (f) ELE parameter is missing

Figure 9 parameter BR and ELE are never mentioned in the text or in the other figures

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