

Interactive comment on “Field survey report and satellite image interpretation of the 2013 Super Typhoon Haiyan in the Philippines” by E. Mas et al.

Anonymous Referee #2

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General comments

This paper describes the authors' investigation to identify the extent of damages from the satellite images and attempts to validate the method of their visual inspection by comparison of the site investigation. The attempt is potentially meaningful and useful particularly during a disaster-relief work. However, at this stage, the manuscript seems to fail in describing details of their methodologies, and also it is unclear whether the methodology was really confirmed or not. The authors should further refine the paper, including the points such as mentioned below.

Major comments: #1 Roofs could be blown by either strong winds or storm surges. The authors should mention most likely mechanisms to cause the roofs destroyed.

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#2 How was the damage defined if a house was damaged by storm surge, while its roof was intact? If there exist a number of houses with structural damage, but without any visible damage in roof, visual inspection based on satellite images doesn't seem to work to estimate actual extent of damage in the affected area.

#3 Though the authors concluded “the damage was confirmed qualitatively through field survey observations”, it is lack in substance and conviction. More detailed analysis needs to be added to ascertain this most important conclusion.

#4 The common roof type to be seen in the Philippines should be explained. If concrete roof is commonly used, the visual inspection may not be effective.

#5 Both the results of visual inspection and damaged (or non-damaged) houses should be compared in the same figure. For instance, Figs 3 and 4 can be merged into a single figure.

#6 Indeed, visual inspection is straightforward. However, still the authors should more carefully describe the procedure how to distinguish either damage or not. The authors may include some photos to exemplify the separation.

#7 Though the authors carried out a field survey and measured storm surge inundation (Fig.7), it seems that the result was not substantially utilized in interpreting the building damage. It may be possible to somehow correlate between these two things.

Minor corrections:

#1 Page 3743 Line 5: Eight regions –IV, V, VI, VIII, X, XI, XIII should be deleted unless the regions are indicated on map.

#2 Fig.2: Date when these satellite images taken should be included.

#3 Fig.2 (B): As the cloud covering the photo decrease visibility, it is hard to realize what this photo tries to indicate. Thus, I recommend to use another photo with more visibility or more focus a region of special interest (e.g. downtown area).

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#4 Fig.3: Better to use two colors with more contrast, rather than red and orange.

#5 Fig.13: Is "surface wave" correct term?

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