Interactive comment on “An approach to reduce mapping errors in the production of landslide inventory maps” by M. Santangelo et al.

Anonymous Referee #2

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This work is well structured and properly written as a scientific manuscript, and provides an innovative transfer methodology which, a) reduces the time needed to prepare a LIM and, b) increases the geographical accuracy of the location of landslides. With this respect, the assessment on the accuracy of the ortho-rectification provides confidence on this critical point. For the comparison of the two inventories (i.e. the manual and semi-automatic transfer) the authors propose a modified mapping error index that compares pairs of landslides. Moreover a power law function is proposed that could be useful to estimate the positional error of single landslides in LIMs transferred manually. Based on these relevant achievements this reviewer recommends the publication of this paper after few editing changes/comments are considered.

Comments:

Throughout the text the authors refer to a new procedure for the semi automatic mapping of landslides, even though it is well explained on the text that the semi automatic procedure only applies for the transfer of mapped landslides into a geodatabase. This aspect could be misleading for the readers, since the landslide mapping is based on the visual interpretation of aerial photographs. The same research team has already published semi automatic landslide mapping procedures (Mondini et al. 2011) and in order to avoid the confusion of potential readers I suggest the authors to consider modifying this aspect all throughout the text, and refer to a semi automatic procedure of transferring mapped landslides into a geodatabase.

Abstract. In order to highlight the significance of this work, consider to include some numbers about time efficiency of this method and to better explain why positional accuracy is increased with respect to manual transfer LIM.

Technical corrections:

Line 2. Pag. 4202: consider to remove or explain what “other geomorphological information” means. It seems that only information regarding to landslide is transferred.

Lines 12-13. Pag. 4204: Geocoding, H in Table 3, seems to be applied for both equally. Apparently the difference is in either the manual or automatic vectorization. Therefore I do not understand this sentence about the acceleration factor related to geocoding, should not this be related to the vectorization? Please either explain or modify.

Being not a native speaker consider this possible typos if adequate.

Line 13 Pag. 4192: missing “in” – slope is in the range

Line 6 Pag. 4193: missing “aerial” – an aerial “WILD” camera

Line 11 Pag. 4195: probably erroneous figure numbering, please check.

Line 8 Pag. 4197: include “it” – implemented it in the