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Natural Hazards and Earth System Sciences
Discussions

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

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This reviewer has two major comments on the manuscript.

The first comment is about GCPs. The difference between the manual procedure and the semi-automatic procedure (as proposed in this study) lies in the digitization of landslide features first interpreted on airphotos (Fig. 2). To digitize them, the semi-automatic procedure requires ortho-rectification, which, in turn, requires GCPs. The selection of GCPs is therefore a crucial step in the semi-automatic procedure. The authors recognize this and correctly point out that "The time for the ortho-rectification of the scanned APs depended largely on the difficulty of identifying adequate GCPs on the images. . ." (392-394). GCPs can influence the semi-automatic procedure in two

ways. First, GCPs can introduce distortions in the size and shape of digitized landslides; this fact must be considered in (1) making the assumption that the observed mismatches are errors introduced by the visual transfer (Lines 350-354), and (2) analyzing the mismatch between the inventories resulting from the two procedures (Section 4). Second, as many who have struggled with the selection of GCPs in the past can tell, it is a time-consuming process. This reviewer is not sure whether this is considered in the comparison of time needed by the two procedures (Section 5). In short, the importance of GCPs and the difficulty of selecting GCPs should be emphasized in the manuscript.

The second comment is about the length of the manuscript. As the manuscript deals with a technical issue, it should be written more like a technical note, shorter and more direct.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 3, 4189, 2015.