Nat. Hazards Earth Syst. Sci. Discuss., 2, C2684–C2685, 2014
www.nat-hazards-earth-syst-sci-discuss.net/2/C2684/2014/

Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "UAV-based urban structural damage assessment using object-based image analysis and semantic reasoning" *by* J. Fernandez Galarreta et al.

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Received and published: 4 December 2014

I had a look at the paper, and I can say that the idea is in fact very good. It makes a lot of sense to mix dense 3D point estimates and OBIA interpretation of roof/facade images for damage interpretation. Since my research is mostly in automatic interpretation, I see this paper as an intermediate step, but I value the potential. If I may suggest, I would add some additional information about the hardware required and the computational cost for the processing of the UAV images.

What is more difficult for me to understand, as this is not written in the paper is which

are the features that allow discriminating between D1-3 and D4-5 damages in 3D point clouds. Besides a list of these features, which is the degree of "fuzziness" that one may tolerate? This decision branch is very early in the procedure and a mistake may be dramatic.

Additionally, at some point it is mentioned that the work was mostly on the 3D data processing than on the 3D interpretation side. I understand this means that the algorithm to extract the cloud is novel, but I do not see it clearly explained, with the stress on its novelty it deserves, anywhere in the paper.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 5603, 2014.