

## ***Interactive comment on “Pre-disaster mapping with drones: an urban case study in Victoria, BC, Canada” by Maja Kucharczyk and Chris H. Hugenholtz***

### **Anonymous Referee #1**

Received and published: 9 February 2019

**GENERAL COMMENTS** The manuscript presents an interesting study about the potential of terrain elevation data sets and façade images generated from unmanned aerial vehicles (UAVs, also known as drones) to support post-disaster rescue decision making. The study has also a strong practical relevance.

In my opinion, a discussion on the applicability of the proposed data acquisition methods in different conditions from those in Victoria (Canada), e.g. different types of buildings or different city layouts, and also the limitations related to building destruction and weather conditions can impose on the fly-ability of UAVs, should be included in the manuscript.

C1

In general, the manuscript is well written and clear, and the figures and tables are informative and of good quality. Below I suggest a few minor points that the authors may consider to improve the quality of the manuscript

**SPECIFIC COMMENTS** Page 1, Lines 14-15. This sentence should be rephrased/improved as it is too general and not completely correct, as it ignores many factors that may minimise the impact of natural hazards in cities (increased quality of construction, alarm systems, proximity to rescue services, ...).

Page 3, Line 4: according to many guidelines the % symbol should not be preceded by a space. This happens in many other parts of the manuscript. Please consider to revise

Page 3, Line 5: "... report... conducted...". I believe reports do not conduct assessments. Perhaps "present". Please consider to adjust the sentence.

Page 5, Line 2: "GNSS" all acronyms should be defined when they are used for the 1st time in the text to avoid ambiguity. Is GNSS the acronym for "Global Navigation Satellite System"? Please check other acronyms that are not defined in the manuscript.

Page 6, Line 13: a reference to the software should be added.

Page 6, Line 16: "to" seems to be missing in the sentence

Page 8, Line 1: a "that" seems to be missing in this sentence

Page 8, Line 24: "was assessed going forward"? what do the authors mean with this? Please consider to rephrase the sentence.

Page 9, Line 27: "single story building" instead?

Page 9, Line 32: should read "... sub-meter LoDs..." instead of sub-decimeter?

Page 10, Line 25: "... but achieve a fraction of time...". This part of the sentence is not clear. Please revise.

C2

Figure 2: the font of the 3D point density images legend/scale is very small and difficult to read.

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Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2018-318>, 2018.