

Interactive comment on “Review article: The use of remotely piloted aircraft systems (RPAS) for natural hazards monitoring and management” by Daniele Giordan et al.

Anonymous Referee #1

Received and published: 26 November 2017

1. Overall This is a review paper relating to the use of RPAS for natural hazard monitoring and management. It particularly focusing on the use of Mini and Micro RPAS for five kinds of disaster, such as landslides, floods, earthquakes, wildfires and volcano activities. However, the topic and discussed disaster types are similar to the following paper just published last year. Thus, I suggest to major revise this manuscript. Detail comments are stated below. ãñ Christopher Gomez and Heather Purdie, 2016, “UAV-based Photogrammetry and Geocomputing for Hazards and Disaster Risk Monitoring – A Review”, *Geoenvironmental Disasters*, Vol.3, No.23. 2. Comments i. The above mentioned article was not referenced, compared or analyzed. It is strongly suggest to include this paper and conduct comparisons to emphasize their different point of view.

C1

ii. The used acronyms are not consistent, RPAS, UAV, UAS, UVS were adopted at different places of the paper. If their definitions have major difference, the authors should define them clearly. If not, using one acronym for the whole paper may be considered. iii. Line 28-31, numbers within () should include unit, such as 380, 22765, etc. iv. Line 48, what is RLS and what are RTK/PPK at Line 95? The first time an acronym appear, its whole name should be explained. On the contrary, the explanation of GCP appear twice in the paper. v. Table 1 specify the classification of Mini/Micro UAV. A reference should be referred. vi. Line 476, “small UAV” is used. What is its definition? vii. Meanwhile, I doubt the definition in Table 1 is correct, as the Max. Flight altitude for Micro UAV is FIXED at 250m and its endurance time is also FIXED at 1h. viii. In this paper, the authors focus on the use of Mini and Micro RPAS only. However, these two kinds of RPAS are not suitable for volcano activities study, because its maximum flight altitude is generally lower than a volcano. For example at Line 422, a fixed-wing UAV can fly over Mt. Etna up to 4000m. This fixed-wing is not belong to the Mini or Micro RPAS. Right? There are other similar case studies that didn’t use Mini or Micro RPAS as well. ix. Line 212, RPAs or RPAS? x. Line 415, two references for Gomez are not found in the list of reference.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2017-339>, 2017.

C2