

## ***Interactive comment on “Brief communication: Vehicle routing problem and UAV application in the post-earthquake scenario” by Marco Cannioto et al.***

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We thank the reviewer for taking time to read our paper and to give us his/her comments. The reviewer points out the omission of the UAVs' travel time in our paper. In our case-study the surveying time over each target site can be considered equal, even though the different areal extension of the sites, because the aim of the survey is just to perform a fast visual inspection in the immediate post-earthquake in order to verify the state of damage of the buildings. At notable flying height (i.e. >50 m, the minimum ground distance for a safe survey in an urban area), the overflight above a site could be even neglected considering the optical characteristics of the UAV camera. We do

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not intend to perform photogrammetric images for 3D reconstruction and damage assessment whose execution would be obviously dependent on the size of the building. In our case the damage assessment, at first step assessed by means of the accelerometric sensors installed at each site, is then verified by a rapid image comparison between the archived images and the observed scenario, rather than a time-consuming (tens-of-hours to days) 3D reconstruction. However if different survey times should be considered, this could be easily addressed considering in the travel time between two sites, the surveying time over the second one. In the final version of the manuscript we will better indicate the objectives of the UAV mission (surveying as fast as possible) and make clearer our assumptions.

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