Dear Editor,

The paper "Evaluating the Potential of PPK direct Georeferencing for UAV-SfM Photogrammetry and Precise Topographic Mapping" fits the scope of the journal and I consider that the paper is very interesting for the Earth Surface Dynamics' readership. Moreover, it is a well-written paper, with very interesting results and rigorous validations. However, some minor revisions and comments must be fixed before the final publication:

Comment 1:

Introduction (section 1) and Discussion (section 4.2): There is a very recent publication where it is compared the accuracy of different PPK approaches and other positioning alternatives, using DLSR cameras (10.1016/j.jag.2018.10.018). This could be in the introduction and in the discussion, since this research follows a similar workflow.

Comment 2:

P6 (section 2.3.2): Why did you not post-processed the static GNSS measurements?

Comment 3:

P7 (section 2.4.2): What was the interpolation method used in the DSM generation (TIN, bilineal, bicubic)?

Comment 4:

P8 (section 2.5.2): How did you extracted the image coordinates? Could you detail the process (visually, number of iterations,…)?

Comment 5:

P10 (section 3.3) and Discussion (section 4.1): The authors explain and numerically detail the accuracy of several positioning procedures, but it would be interesting to compare them with a standard (e.g. ASPRS http://www.asprs.org/a/society/divisions/pad/Accuracy/Comments_NGTOC_Rev5_V1.docx), especially regarding the vegetated and non-vegetated terrain.

Comment 6:

P5 (section 2.3.1): Finally, the authors set the trigger interval in seconds, but they do not detail the rover velocity. Then, if the *v* is specified the reader could know how many meters lag between image captions and, if the GNSS rate is given, the distance between GNSS records.

Kind regards,

Dr. Joan-Cristian Padró Garcia.