Interactive comment on “The burying and grazing effects of Plateau pika on alpine grassland are small: A pilot study in a semi-arid basin on the Qinghai-Tibetan Plateau” by Shuhua Yi et al.

Anonymous Referee #2

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Review of “The burying and grazing effects of Plateau pika on alpine grassland are small: A pilot study in a semi-arid basin on the Qinghai-Tibetan Plateau” by Shuhua Yi and others

In this manuscript, the authors are trying to show the advantages of the UAV remote sensing for evaluation of plant biomass. Presented data and descriptions include important information. The aim and concept of the study presented in this manuscript is interesting. However, there are several weaknesses before considering a publication as an original article in Biogeosciences. I hope following comments will help the authors to improve the contents and discussions.

1. Relationship between title and main contents of the text: As the authors themselves
said in the final sentence of the introductory section, their aim is not to describe the effects of pika activity on grassland degradation. But, the title is telling the conclusion of this question. This kind discrepancy was fatal for the article. In general, “abstract” is describing the essence of the main text, and “title” is expressing the essence of the abstract, meaning the “conclusion”. The aim of this manuscript in accordance to the line 18-21 is to show the effectiveness of the aerial photos taken by the UAV for investigation of vegetative conditions. The title should be changed to fit the main point of this manuscript. Also the parts of the abstract and concluding section should be revised to match the aim and conclusion.

2. Methodology of the image processing for identification of green fractions of plots: The authors used the aerial photo data of R, G and B signals for estimating green fraction area of each plot using fairly conventional technique based n trial and error threshold. At least, the authors had to consider to use vegetation indices that have been commonly (almost universally) used, such as NDVI.

3. Individual points: P3, L13-15: This sentence was unreasonable. Rapid development of lightweight UAVs has been made by multiple demands. Usage for remote sensing is just one of those demands. P3, L18-21: If the test in the aim 1) could not provide the favorable results, the authors could not execute the analysis in aim 2). In this case, they could not reach the conclusion described in the title and abstract. Namely, “if so” in between 1) and 2) is unnecessary.

P4, L9-10 and Figure 2: The method or techniques for obtaining the values of vegetation cover should be explained in the text.

P7, L6: “2.6.1” => “2.6.2”