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Interactive comment on "Intercomparison of photogrammetric platforms for spatially continuous snow depth mapping" *by* Lucie Anne Eberhard et al.

Edward Bair (Referee)

nbair@eri.ucsb.edu

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In "Intercomparison of photogrammetric platforms for spatially continuous snow depth mapping" several different photogrammetric approaches are tested in a sparsely vegetated study area in Switzerland. This manuscript is a thorough and useful comparison of state of the art photogrammetric tools for snow depth mapping. It does somewhat read like a commercial for the eBee+ UAS, however the authors have stated no conflicting interests and have demonstrated the eBee's advantages over the other platforms. I would recommend this manuscript for publication subject to a few minor changes.

1) The vegetation issues are discussed, but a solution is not presented. I suggest iden-

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tification of these regions and spatial interpolation may be the best approach, but there are other solutions. Note that negative snow depths can occur in glacierized areas or areas with persistent snow cover as well with snow on/off differencing approaches.

2) There are numerous grammatical and stylistic errors. I suggest an English language service be used prior to publication.

3) The manual validation effort is impressive in scope but seems unnecessary. It seems to me that the resources used could have been better used on snow-covered and snow-free lidar flights, perhaps along with the Ultracam. And why weren't any forested areas sampled manually?

4) I don't agree that the Ultracam showed robust enough performance, especially in forested areas, to be called ground truth.

Other minor critiques are attached as an annotated PDF.

If the authors have any questions, I encourage them to contact me at nbair@eri.ucsb.edu.

Ned Bair 2020-08-06

Please also note the supplement to this comment:
https://tc.copernicus.org/preprints/tc-2020-93/tc-2020-93-RC2-supplement.pdf

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