

## ***Interactive comment on “Terrain changes from images acquired on opportunistic flights by SFM photogrammetry” by Luc Girod et al.***

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The authors address the use of opportunistic flights to acquire aerial images of a glacier and the surrounding periglacial environment to reconstruct DEMs. Having done so at two different dates, Difference of DEMs is considered to assess geomorphological changes and glacier evolution, and compare their result to classical in-situ ablation stake mass balance estimates. The only sentence I find questionable is p.7 top paragraph last 3 lines, where the use of a helicopter to reach remote glaciers is an opportunity "to hitchhike on these flights", which is a bit surprising for a site selected for its proximity to Ny Alesund at walking distance. p.19: Artic -> Arctic Since the authors were kind enough to exploit opensource software for SfM processing, would they mind sharing the procedure used to generate Fig. 3 ? Is this generated by systematically sweeping the time offset ? what option in which micmac tool is used, and what indica-

tor is used as the residual ? Is this the topic discussed in the MicMac documentation section 13.3.4 Embedded GPS Conversion: OriConvert and the Delay option ? Being a bit surprised by the low resolution of the DEM with respect to the expected flight altitude (2 and 1 m, p.10), and considering that only the central 2500x2500 pixels are kept, what GoPro recording mode was selected and what was the field of view ? What could have been the achievable pixel size when the helicopter was flying at 1500 m altitude ? Could selecting a low enough resolution, in which only the usable pixels are recorded, have solved some of the SD card latency issues ?

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[Interactive comment on The Cryosphere Discuss.](#), doi:10.5194/tc-2016-228, 2016.

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