

Earth Syst. Sci. Data Discuss., referee comment RC2
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Comment on essd-2022-357

Marc Adams (Referee)

Referee comment on "Weekly High Resolution Multispectral and Thermal UAS Mapping of an Alpine Catchment During Summer Snowmelt, Niwot Ridge, Colorado" by Oliver Wigmore and Noah Paul Molotch, Earth Syst. Sci. Data Discuss., <https://doi.org/10.5194/essd-2022-357-RC2>, 2023

Publisher's note: a new supplement was added to this comment on 7 March 2023.

In this contribution a series of seven datasets is presented, collected almost weekly during the 2017 melt season in the Colorado Rockies at around 3,500 m ASL. RGB, NIR and TIR imagery was collected over a 40 ha study site using a custom-built multi-rotor system. All imagery was processed using SfM-photogrammetry to generate corresponding orthorectified mosaics. These are complemented by an NDVI mosaic generated from radiometrically calibrated imagery. Extensive and robust ground control and error handling ensured cm-level georeferencing. The site, data collection and processing, as well as accuracy and challenges are very well described and documented. Overall, the manuscript is clearly structured, succinct and very well written - a joy to read! Figures and Tables are well presented and organised, captions are clearly written and comprehensible.

For specific and technical comments, please refer to the attached PDF.

Please also note the supplement to this comment:

<https://essd.copernicus.org/preprints/essd-2022-357/essd-2022-357-RC2-supplement.pdf>