

Interactive comment on “A decade of detailed observations (2008–2018) in steep bedrock permafrost at Matterhorn Hörnligrat (Zermatt, CH)” by Samuel Weber et al.

Anonymous Referee #2

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Journal: ESSD Title: A decade of detailed observations (2008–2018) in steep bedrock permafrost at Matterhorn Hörnligrat (Zermatt, CH) Author(s): Samuel Weber et al. MS No.: essd-2019-14 MS Type: Research article

Dear Editors,

This is very excellent manuscript since it showcases comprehensive and state-of-the-arts data sets recording thermal, hydraulic and kinematic dynamics of permafrost underlying alpine bedrock cliffs where few observations have been conducted in the world due to its harsh environments. Manuscript is also written very well with perfect information of technological and geographical settings, and data quality, accordingly I strongly

C1

recommend it to be published ESSD after minor revisions.

There are two points that I would like to comment for further revisions. 1. '6. Example of data use' : In this section, the authors only listed some publications (phD thesis, etc.,) based on this data sets. I recommend to describe here more scientifically, e.g., what was new scientific findings from simultaneous monitoring of rock fracture with AE, GNSS, resistivity, temperature and meteorological measurements? Such comprehensive monitoring is absolutely impossible in another mountains. Short reviews would be useful for the readers working out of Alps.

2. The manuscript length would be shorten. There are some redundant writing in the manuscript, for instance, early parts of '2.1 Research interest at this site', it would be merged with "2. Site description". Please check more for other parts, too.

Best Regards.

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C2