Comment on tc-2022-183
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Community comment on "Progress of the RADIX fast access drilling system" by Jakob Schwander et al., The Cryosphere Discuss., https://doi.org/10.5194/tc-2022-183-CC1, 2022

Very interesting paper. I really appreciated the clarity of explanation, the global approach to describe the process of evolution of the development of the prototype from the beginning to the last tests. The "RADIX" story is really very pleasant to read and technically very interesting. All photos and schematic are useful and clear.

The problems encountered during the different testing seasons and the improvements to the drilling probe to solve these problems are described in details.

I really encourage to publish this paper, with very minor suggestions:

Page 2: for viscosity, I advise to use both cST unit (which commonly used) and maybe to also have it in m2/s (which is the USI)

Page 3: for those who haven’t read the last RADIX paper, it might be useful to have a schematic of the drilling bit itself

Page 17: line 316 you are mentioning PE cuttings, but it is not completely clear were these chips are coming from? Are these cutting produced by the drill head (and cutters) while lowering it in the casing?

Page 17: after the Egrip season it is not completely clear to me how you solve the problem of drilling fluid leakage on the drilling tool motor, Page 18, line 340: it had been? Do you mean it had been?

Page 18: is it possible to get the brand or reference of the new Li battery?