The Cryosphere Discussions

The Cryosphere Discuss., referee comment RC1
https://doi.org/10.5194/tc-2021-220-RC1, 2021
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Comment on tc-2021-220

Anonymous Referee #1

Referee comment on "Radar sounding survey over Devon Ice Cap indicates the potential for a diverse hypersaline subglacial hydrological environment" by Anja Rutishauser et al., The Cryosphere Discuss., https://doi.org/10.5194/tc-2021-220-RC1, 2021

This is an interesting and well-written paper, and I believe it will make a great addition to this journal. I have identified a few minor issues that I have noted below, but pending these, I believe that the article is suitable for publication.

Line 163: why only 100 times? Usually several thousand times are chosen

Figure 3: Is there a reason that the 25m RMSD contour line is highlighted? If so, state in the caption or main text.

Line 290: Could these anomalies not be further pockets of brine?

Figure 4: How was the extent of the hypothesized brine network chosen? There are many isolated anomalies (orange in Fig. 4e) within the location of the Ocb outcrop that are not identified as brine networks. How/why was this discrimination made?

Table 1 caption. ‘brackets’ should be ‘parantheses’