Dear Editor Kenny Matsuoka,

Thank you for getting back to us quickly after returning from your fieldwork. We are happy to hear that you find our revised manuscript improved and ready to be accepted by TC. We have taken care of the technical corrections and are uploading a final revised version of the manuscript. All new changes to the text are now marked in green and we have included a short reply to your comments below.

Thank you again for your help in further improving the manuscript.

Kind regards,

Pascal Bohleber, on behalf of all co-authors

Response to comments by the editor/ technical corrections

Dear authors,

Thank you for submitting the revised manuscript timely and for being patient while I deployed to a field camp in Antarctica. The new supplement figure (all radargrams) constitutes strong evidence of author's argument, and editing in this stage clarified many issues. So I am happy to accept this manuscript with technical corrections.

- In conclusion, the authors argue that the ice stratigraphy is preserved at least in the top 30 m, which is supported by radar data. Separately, the authors mention that chemical and isotope records may be disturbed in the top 10 m at the very end of discussion (Section 3.3). I judge that both statements are valid but request a more synthesized statement in the conclusion, such as "Macroscopic coherence of the radar data infers uninterrupted ice in the top 30 m, but abundant melt water could potentially collapse chemical and isotope records in the top 10 m."

We have changed the wording of the respective sentence and now provide the requested synthesis statement in the conclusion.

Changes to manuscript:

- Page 10, Line 21-23: "For the central former drilling area, the radar profiles reveal macroscopic coherent, uninterrupted ice layering for at least the upper 30 m, and demonstrate abundant melt water in the top 10 m. The latter finding suggests that the upper part of future chemical and isotopic ice core records could potentially be corrupted by meltwater."

- In table 2, show area in the unit of 10^6 m^2 only to justifiable significant digits.

Changed accordingly.

- Regarding minor points #14 and #15, the main source of confusion is, I believe, that the manuscript does not distinguish (1) radar reflector and (2) ice layer that is bounded by two adjacent reflectors. Convergence of two radar reflectors make a single narrowing ice layer. Please revise the relevant text.

We have revised the text to make this more clear.

Changes to manuscript:

- Page 8, Lines 31-32: "The GPR profiles towards the western end are the only case in which adjacent IRH (representing boundaries to a layer of ice) are found merging together."

- Be more specific in the data availability; I.e. “ice thickness along all radar profiles are available at…”

Changed accordingly.

- Clarify non-lat/lon coordinates in Figures 1, 6, 7, and 9 (is it UTM? If so, specify the zone).

Changed accordingly. It is UTM 37M.

- In the supplement figure, does a gray curve show the outline of the cliff? Clarify it in the caption.

Changed accordingly. Yes, the grey curve shows the outline of the cliff.

Thank you for submitting your work in the journal The Cryosphere

Kenny Matsuoka
TC/TCD Editor