

Dear Editor Podolskiy,

We apologize for overlooking the attachment with your comments and specific suggested changes. In the latest submitted version, we believe that we have addressed the remaining issues. Below we give a summary of the changes that have been made based on the comments in the attachment. Please let us know if we overlooked any of the issues, and we thank you again for your attention to detail.

Line 100: “After data was collected” was changed to “After data were collected”

Line 110: “km hr<sup>-1</sup>” was changed to “km h<sup>-1</sup>”

Line 121: We added two references which use an assumption of uniform englacial attenuation.

Line 125: We clarified how MacGregor et al. (2015) calculated the englacial attenuation from radar reflections, and added an additional citation.

Line 193: “due to for example” was changed to “due to, for example,”

Line 220: The variable  $V_p$  was changed to italics for consistency.

Line 246: We changed “depress the freezing temperature of water by -12° C to -14° C” to “depress the freezing temperature of water by 12° C to 14° C”

Line 269: a comma was added after e.g.

Line 285. “We, therefore” -> “We, therefore,”

Line 297: The comma was removed from Bell et al., (2014)

Figure 4A: The variable  $C_R$  was changed to  $c_R$  in the x-axis label.

Figure 4B: The font size was increased in the legend for easier readability.

Figure 6 caption: There was a mistake in the description of Fig. 6B. All of the profiles shown have a surface temperature of  $-22^{\circ}\text{C}$ , and it is the heat flux and accumulation rate that are changed. The updated caption has been corrected.

Data availability: We have now added a link to access the active source seismic data, which is stored on the Digital Repository at the University of Maryland (DRUM).

Author contributions: There was a mistake in the initials of one of the coauthors. "AG" was changed to "AM".