General comments

The new version of the manuscript has been greatly improved, with an elaborate discussion in section 3.7 and a concise conclusion. By adding paragraph 3.7, the implications of the analyses are illustrated and placed into context. I suggest moving the newly added paragraph 3.6 to supplementary materials, given its methodical/technical character. I have noted my specific suggestions per section below.

Specific comments per section

Line 1: The word “because” is out of place. I would rephrase as: “In BIAs deep ice outcrops, allowing for the cost-effective collection of large-sized old ice samples at the surface.”

Line 46: I do not understand what is meant by “deposited”. Also, in the current formulation it seems like ice is exposed on the surface everywhere. Please consider a formulation like “In BIAs, old ice is exposed on the surface. Normally, ice forms through the compaction of snow, and flows directly towards the margin of the ice sheet. However, in some areas, (basal) topographic obstacles redirect the flow of the ice towards the surface, resulting in so-called blue ice areas. In these BIAs, surface snow is ablated by ….”

Line 139: Dust lines are very beautifully visible in Google Earth indeed!

Line 255: “due to” → “because of”

Line 274: please add “(subsurface)” before “crevasses, cavities…”

Line 277: “, which is a method of interpolation that provides unbiased prediction at unsampled areas (Oliver and Webster, 1990).” can be removed

Figure 3a: Thank you for clarifying how the data is interpolated. As there is still no reference to or analysis of the data shown in panel a, I would suggest swapping the panel with figure S1 of the supplementary materials (so Fig. S1 becomes Figure 3a, and Figure 3a becomes Figure S1).

Line 304: So, the interpolation is conducted to increase the resolution of the data? (Please specify the motivation in the text)

Line 330: Interesting, and nice overview in Table 2.

Line 368: “which is in line with our observation of ~0.05 ‰ offset between core #23 and horizontal measurements at a depth of > 1.95 m (Fig. A2).” I do not see this offset in Figure 2A. For me it looks like the values of the core #23 fluctuate around the horizontal measurements (with indeed a value of approx. 0.05 ‰, but in my understanding an offset is something constant (so all values would be too low or too high). Possible correction: “which is within the same order of magnitude of the differences observed between core #23 and horizontal measurements at a depth of > 1.95 m (Fig. A2).”

Line 369: I do not understand to what age difference is referred (difference between ..?) and how that explains an offset.

Line 421: By interpolating data no new information is added, so it does not per definition avoid a bias. I'd suggest to remove: "to avoid bias in the spline curve of the …" and just state that the horizontal resolution of the data has been increased through linear interpolation at 5 m intervals.

Line 445: The comparison to the vertical ice core resolution undersells your results: please emphasize that the ice is available in large quantities at the surface (in contrast to TALDICE).

Line 447: In the previous version a different number was mentioned (156 yr/m) – is this correct?

Table 2/Conclusion: "Larsen Glacier" is not the same area as the "Larsen BIA". Please change all occurrences to "Larsen BIA" to avoid ambiguity.

Section 3.6: Although it is always valuable to discuss uncertainties, the added paragraph is mostly describing a rather complicated method, without discussing implications of the estimated uncertainties. I'd suggest moving the paragraph to supplementary materials and indicating the estimated uncertainties in the main text/figures. Moreover, the description of the used method should be clarified/simplified.

Section 3.7: very nice addition to the paper!!

Line 528: "deposition site" means "upstream accumulation area"?

Line 535: Not only the tie points would be incorrect but matching the two records would not be very sensible. However, given the good match this seems not to be the case: maybe reformulate to something like: "Given the reliable results in matching the collected samples to existing ice core data (ref to figure/paragraph), the δ18Oice features used for the matching are likely climatic in origin and are not strongly influenced by local effects (such as sublimation intensity, and accumulation controls by surface slope)."