

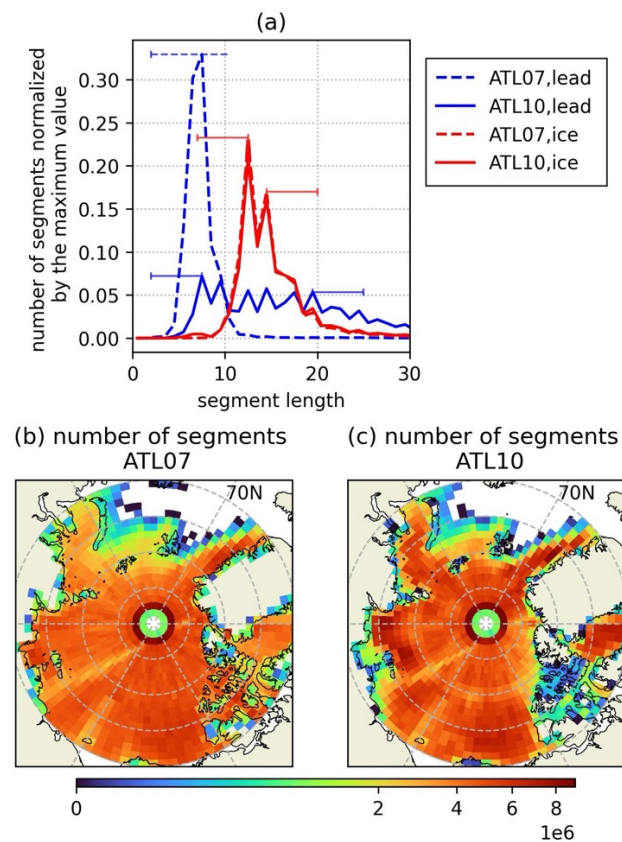
Response to Corrections

Private Note from Referee #1:

We thank the referee for their comments to improve our manuscript. We detail the revisions made to address their comments in the following point-to-point response. Line and figure numbers refer to the revised manuscript.

Figure 2 (Previously Figure 1) - still has a problem with the overlapping legend box in (a)

We have moved legend outside of panel (a) of Figure 2 and rearranged the panel positions. The updated figure is shown below.



Line 260 - Sentinel-2 is misspelled

Changed.

Line 299 - I thank the authors for updating this paragraph but I would like to see a little more here; I appreciate a quantitative comparison is not the aim but I think it's important to note that the ATL07 lead fraction reported in this study is substantially lower than those by MODIS/CS2/Envisat. While this is attributable to their different lead detection techniques I

think it's necessary to at least mention. There was also recently a paper published on IS2/CS2 lead and floe detection in the Arctic by Tilling et al. (2026) which would be useful to reference here.

Tilling, R., Egido, A., Harbeck, J., Kurtz, N., Petty, A., Ridout, A., et al. (2026). Lead and floe detection from CryoSat-2 radar and ICESat-2 laser altimetry. *Earth and Space Science*, 13, e2025EA004399. <https://doi.org/10.1029/2025EA004399>

We have added a sentence to the end of this paragraph as suggested: “We note that lead fraction reported here from ATL07 is likely substantially lower than those derived from the satellites mentioned above \citep[e.g.,][Tilling2026], because ATL07 lead detection algorithm identifies only reliable specular leads.”