

We thank Kelly et al. for suggesting we consider their newly published and recalculated data during the revision of our manuscript.

In particular, Kelly et al. comment that our new dataset sets up a 'stratigraphic inversion' with their newly published dataset from inner Scoresby Sund, and remark that ice 'recession to inboard of these moraines occurred by at least ~14 ka' – implying that ice must have retreated from our field sites at the outer coast and the fjord mouth to Kelly et al. (2025) field sites prior to ~14 ka.

In this comment on our manuscript, Kelly et al. seem to be suggesting that their chronology is at odds with our new dataset showing the outer coast was deglaciating around 14.1 ± 0.3 ka at Rathbone Island and ice was on its way up Scoresby Sund, passing Kap Brewster, around 13.2 ± 0.7 ka.

Although Kelly et al. (2025) write in their manuscript that deglaciation of landscapes beyond their outer moraines in inner Scoresby Sund 'occurred by ~14.0 ka', their own data (7 ages from boulders outboard the outer MLS moraines at Holger Danskes Briller and Kjove Land, excluding one 71 ka outlier) average 13.0 ± 0.8 ka.

This age (13.0 ± 0.8 ka) is consistent with their other peak ^{10}Be ages for the outer moraines (13.4, 13.7, 12.2 ka, no error ranges reported) deposited by mountain glaciers, and ice sheet outlets. We note that these three age assignments average 13.1 ± 0.7 ka, and agree with their radiocarbon-based age assignments of ~12.8 cal ka BP, and 'shortly before 12.80 and 12.65 cal ka BP.'

Given the above, and our age of 13.2 ± 0.7 ka at Kap Brewster and Uunarteq, we find no evidence supporting a 'stratigraphic inversion' between these datasets. In fact, the Kelly et al. (2025) dataset and our new coastal ^{10}Be constraints presented here, combined, suggest that Scoresby Sund retreated rapidly after deglaciation of Rathbone Island at 14.1 ± 0.3 ka and Kap Brewster at 13.2 ± 0.7 ka.