

Dear Alexander Hager and co-authors,
I am happy to recommend your manuscript for publication in The Cryosphere pending a few technical corrections which I outline below.

Best,
Nanna B. Karlsson, TC Co-editor-in-chief

Thank you for your handling of the manuscript, we are happy to hear you are recommending it for review. We have addressed your technical corrections, which are outlined below.

Best,
Alex

Additional private note (visible to authors and reviewers only):
Technical corrections

In the manuscript and figure captions, the terms line-plume and sheet plume are used. For example, Table 1 uses line-plume, Fig. 2 uses sheet plume in the figure legend but line-plume in the caption. Fig. 6 uses sheet plume in the caption. If the two terms refer to the same phenomenon, please use only one of the terms. If there is a difference between the two, please clarify this.

Line-plume and sheet plume are used synonymously and we agree this is confusing. We have changed all references to a "sheet plume" to "line plume" (lines 257, 299, Figure 6 caption, Figure 2 legend, Figure 4 legend). To be consistent, we have also changed any "line-plume" reference to "line plume" (Lines 127, 129, 246, and 290, as well as Table 1 caption, Figure 2 caption, and the Figure 4 caption).

Fig. 4, caption re. (a): "Horizontal blue and orange rectangles depict ranges of estimated surface heat fluxes..." I see faint orange and blue horizontal rectangles in (a) but the most prominent is a purple rectangle which is not mentioned. Is this a typo?

The purple rectangle was intentionally created from a translucent blue rectangle overlapping a translucent orange rectangle. To fix this, we have removed the translucent fill of these two rectangles and instead use the rectangle outlines.

p. 22, 445-446: Typo, "... which was to prescribed submarine..." -> "... which was to prescribe submarine..."

This typo was fixed.

A note on Greenlandic place names:

The official name of the fjord that Kangiliup Sermia discharges into is Kangilleq (p. 5, line 135-136 and other places). If you would rather avoid introducing this name as you only need it a few times, you could rephrase the sentences where needed.

The official name of Ilulissat Icefjord is Kangiata Sullua. You could mention the official name when introducing Ilulissat Icefjord and then continue using Ilulissat Icefjord for clarity.

“Kangilliup Sermia fjord” was changed to “Kangilleq” on Lines 137 and 142.

“Ilullissat Icefjord” was changed to “Kangiata Sermia” on Lines 17-18, 124, 143, 372, 424, 428, 432, 433, 458, 481, 483-484, 499, 522, and 542, as well as the Figure 5 caption/legend.