

Supplementary Information to:

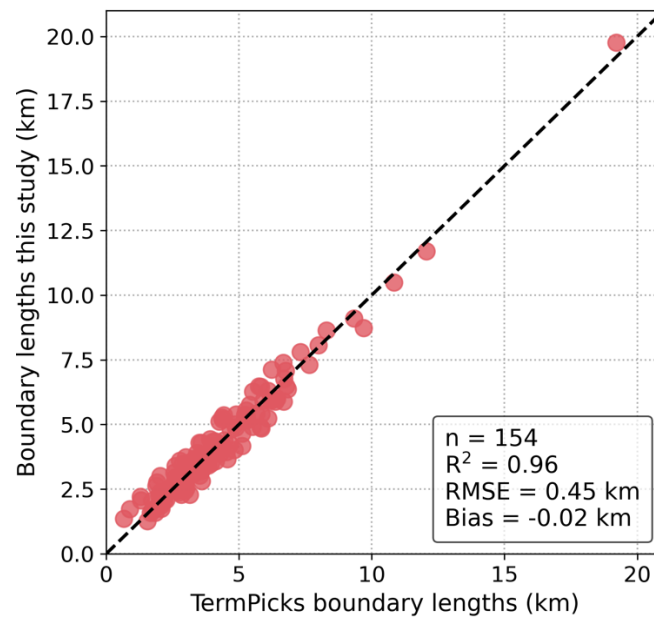
**Retreat of the Greenland Ice Sheet leads to divergent patterns of reconfiguration at its freshwater and oceanic margins**

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**Table S1.** Table showing the marine-terminating glaciers that split from single to multiple calving fronts between 1990-95 and 2019.

Name	Longitude (°)	Latitude (°)	Region	No. calving fronts in 1990-95	No. calving fronts in 2019	Total length in 1990-95 (km)	Total length in 2019 (km)
Unnamed	-25.4	69.2	CE	1	2	2.4	2.9
Unnamed	-26.4	68.8	CE	1	2	3.3	4.2
Sortebræ	-27.0	68.8	CE	1	2	3.8	5.2
Christian IV Gletsjer	-30.0	68.4	CE	1	3	11.2	11.1
Kangerlussuaq Gletsjer	-32.8	68.6	CE	1	3	5.2	13.6
Hutchinson Gletsjer	-32.1	68.1	CE	2	5	11.1	6.2
Unnamed	-40.0	65.2	SE	1	2	3.8	7.9
Apuseeq	-40.2	65.1	SE	1	3	5.4	6.1
Unnamed	-43.1	62.8	SE	1	2	2.3	3.7
Upernavik Isstrøm	-54.3	72.8	CW	1	4	13.9	6.1
Unnamed	-54.5	73.0	CW	1	2	4.9	8.1
Unnamed	-55.1	73.4	CW	1	2	4.2	2.0
Qeqertat Timaanni Sermeq	-62.0	76.3	NW	1	3	12.6	11.6
Innaqqissorsuup Oqquani Sermeq	-62.8	76.4	NW	1	2	8.5	10.8
Yngvar Nielsen Gletsjer	-64.1	76.3	NW	1	2	4.7	6.3
Unnamed	-65.7	76.3	NW	1	2	9.0	9.8
Sermeq	-44.5	60.8	SW	1	2	2.4	1.5
Qalerallit Sermiat	-46.7	61.0	SW	1	2	2.5	4.1
Morell Gletsjer	-62.6	76.3	NW	1	3	3.6	6.2
Nigertiip Apusiia	-36.9	66.4	SE	1	4	3.7	4.9
Kattilertarpia	-38.4	66.0	SE	1	2	1.2	1.2
Unnamed	-38.9	65.6	SE	1	3	1.9	2.1
Unnamed	-61	76.2	NW	1	2	4.0	6.2

**Figure S1.** Comparison between ice-ocean boundary lengths derived by TermPicks (Goliber and others, 2022) and our dataset (n=154). TermPicks boundaries were resampled to 100 m segment length before comparison. The mean length of boundaries in this comparison is 4.1 km meaning that the uncertainty of our boundary lengths is around  $\pm 11\%$ , assuming that the TermPicks are considered ground-truth.



## References

**Goliber S and 22 others** (2022) TermPicks: A century of Greenland glacier terminus data for use in machine learning applications. *The Cryosphere* **16**, 3215–3233. doi:10.5194/tc-16-3215-2022.