Spatially heterogeneous effect of the climate warming on the Arctic land ice

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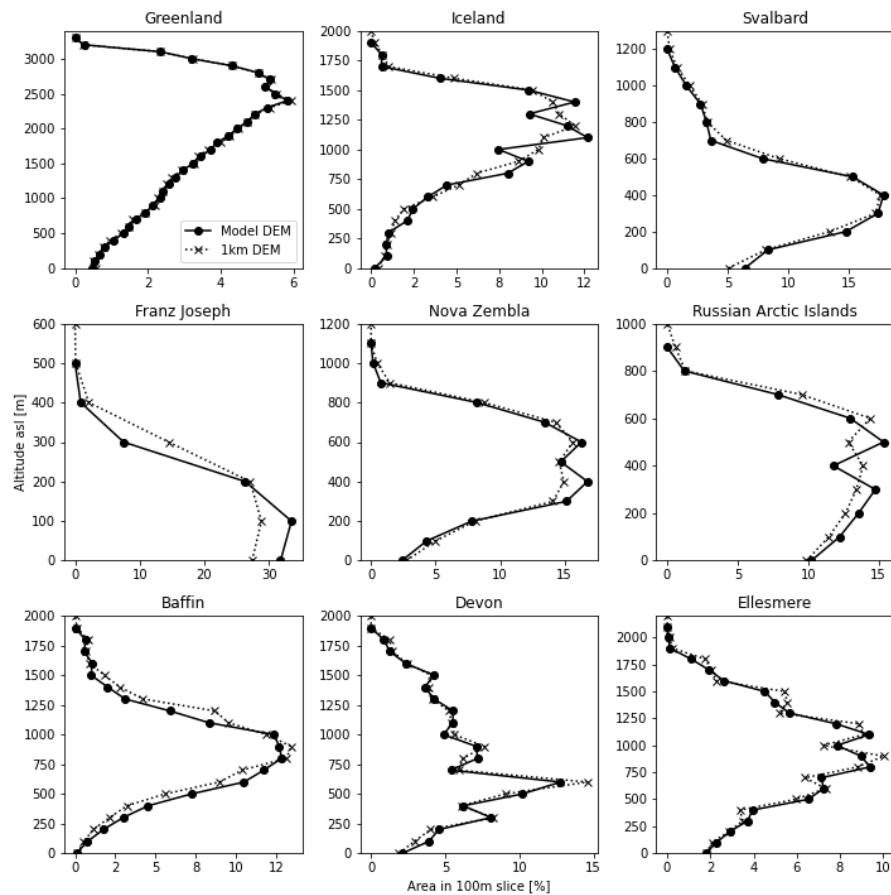
Figure S1. Comparison of the hypsometry of the land ice from the model grids (6 km resolution, in dots, solid line) and of a 1km grid in the same georeferencing system (x marks, dotted line). Both DEMs come from ETOPO01.

Variable	Sub Domain	Mean Observed	Bias	CRMSE	r
P2m [hPa]	Greenland	1006.96	3.35	1.60	0.99
	Russia	1013.75	-4.35	2.15	0.98
	Svalbard	1008.87	0.51	2.45	0.98
	Iceland	1006.46	-5.13	0.95	1.00
	Canada	1005.68	-4.74	2.75	0.96
T2m [°C]	Greenland	-7.49	-1.24	3.07	0.95
	Russia	-10.74	-1.72	3.33	0.96
	Svalbard	-4.58	-2.48	3.59	0.92
	Iceland	4.13	-0.33	1.68	0.96
	Canada	-13.49	0.14	3.33	0.98

Table S1. Evaluation results for the pre-International Geophysical Year period (1950 - 1956)
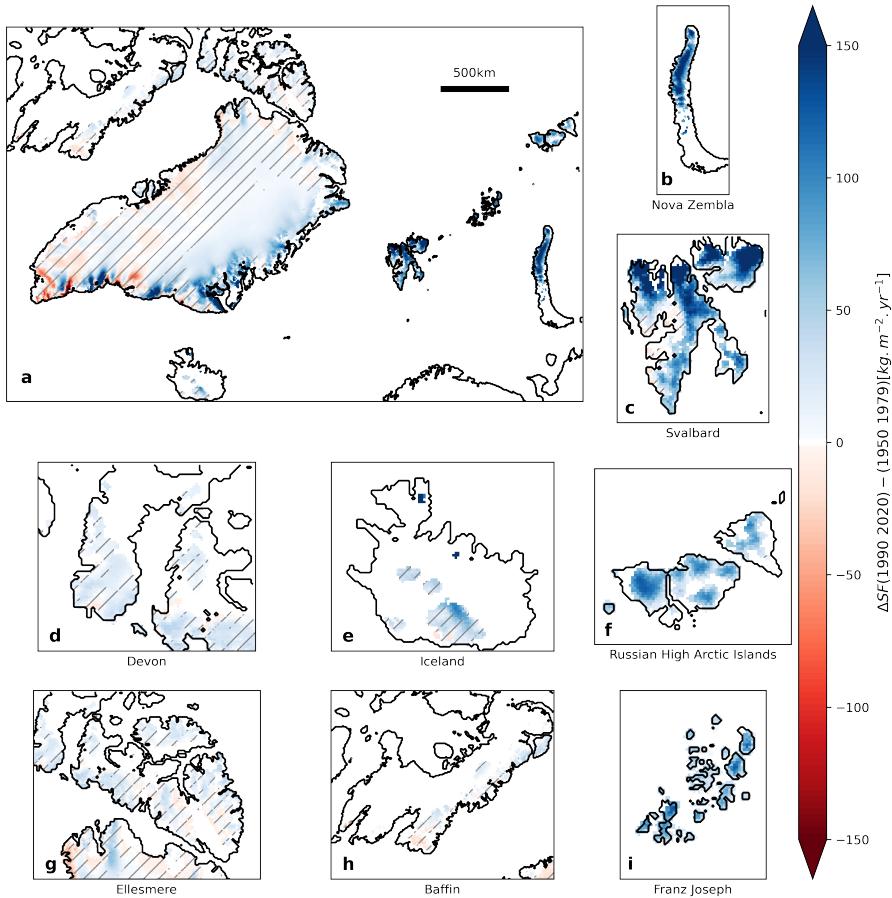
Figure S2. Annual SF anomalies between the (1990-2020) and (1950-1979) periods over (a) the whole Arctic, (b) Nova Zembla, (c) Svalbard, (d) Devon, (e) Iceland, (f) Russian High Arctic Islands, (g) Ellesmere, (h) Baffin and (i) Franz Joseph land. Hashed areas denote where the anomaly has a low significance value regarding its variance (using Student's t-test with 90% p-value