

Supplementary file for: Hasholt B., van As D. & Knudsen N.T. 2016. Historical ablation rates on south-east Greenland glaciers measured in the 1933 warm summer. *Polar Research* 35.

Correspondence: Bent Hasholt, University of Copenhagen, Department of Geosciences and Natural Resource Management, Øster Voldgade 10, DK-1350 Copenhagen, Denmark. E-mail:

bh@ign.ku.dk

Supplementary Table S1. Ablation rates (ARs), positive degree-day totals and degree-day factors at Milthers' locations in 1933 and at Mittivakkat Glacier in 1996-2012. Stakes labelled with an asterisk experienced melt-out, so these readings are minimum values. Measurements known to have been taken at snow- or sediment-covered ice are labelled "snow" and "sed", respectively. Note that values are not converted to water equivalent because of an unknown 1933 ice density.

Stake	Start date	End date	Ablation (mm ice eq.)	ARs (mm ice eq. d ⁻¹)	PDD total (°C)	DDF (mm ice eq. d ⁻¹ °C ⁻¹)
Glacier 5						
5	29/7/1933	4/8/1933	270	43.2	50.8	5.3
5	4/8/1933	10/8/1933	240	39.5	46.1	5.2
5	10/8/1933	20/8/1933	380	39.1	77.0	4.9
5	20/8/1933	7/9/1933	530	29.1	126.0	4.2
6	29/7/1933	4/8/1933	265	42.2	50.8	5.2
6	4/8/1933	10/8/1933	205	33.7	46.1	4.4
6	10/8/1933	20/8/1933	380	39.1	77.0	4.9
6	20/8/1933	7/9/1933	410	22.5	126.0	3.3
Glacier 6						
a	30/7/1933	5/8/1933	235	40.3	46.8	5.0
a	5/8/1933	19/8/1933	530	37.5	111.3	4.8
a	19/8/1933	7/9/1933	430	22.8	131.0	3.3
b (snow)	30/7/1933	5/8/1933	182	31.2	46.8	3.9
b	5/8/1933	19/8/1933	338	23.9	111.3	3.0
b	19/8/1933	7/9/1933	385	20.2	131.0	2.9
c	30/7/1933	5/8/1933	256	43.9	46.8	5.5
c	5/8/1933	19/8/1933	529	37.0	111.3	4.8
c	19/8/1933	7/9/1933	400	21.2	131.0	3.1
Glacier 7 (Mittivakkat)						
5*	27/7/1933	8/8/1933	550	45.2	94.1	5.8
5	8/8/1933	18/8/1933	270	26.8	78.8	3.4
5*	18/8/1933	6/9/1933	280	14.7	135.0	2.1
6*	27/7/1933	8/8/1933	550	45.2	94.1	5.8
6	8/8/1933	18/8/1933	155	15.4	78.8	2.0

6*	18/8/1933	6/9/1933	395	20.8	135.0	2.9
7*	27/7/1933	8/8/1933	550	45.2	94.1	5.8
7	8/8/1933	18/8/1933	140	13.9	78.8	1.8
7*	18/8/1933	6/9/1933	410	21.6	135.0	3.0
8*	27/7/1933	8/8/1933	550	45.2	94.1	5.8
8	8/8/1933	18/8/1933	255	25.3	78.8	3.2
8*	18/8/1933	6/9/1933	295	15.5	135.0	2.2

Glacier 8

4	24/8/1933	29/8/1933	120	24.3	37.5	3.2
5	24/8/1933	29/8/1933	186	37.7	37.5	5.0
6	24/8/1933	29/8/1933	135	27.3	37.5	3.6

Mittivakkat Glacier (7)

40	6/8/1996	14/8/1996	360	45.0	45.8	7.9
41	6/8/1996	14/8/1996	350	43.8	45.8	7.6
42	6/8/1996	14/8/1996	390	48.8	45.8	8.5
40	3/8/1997	16/8/1997	660	50.7	99.9	6.6
41	3/8/1997	16/8/1997	610	46.9	99.9	6.1
42	3/8/1997	16/8/1997	550	42.3	99.9	5.5
3 ice screws	6/8/1998	14/8/1998	265	33.0	61.2	4.3
40	12/8/1998	15/8/1998	190	63.3	32.4	5.9
31	15/8/1998	22/8/1998	260	37.1	43.4	6.0
40	11/8/1999	22/8/1999	300	27.2	56.3	5.3
41	11/8/1999	19/8/1999	290	36.3	37.3	7.8
40	16/8/2000	26/8/2000	520	52.0	53.8	9.7
41	16/8/2000	26/8/2000	420	42.0	53.8	7.8
42	16/8/2000	26/8/2000	440	46.0	53.8	8.2
40	2/8/2007	6/8/2007	230	57.5	34.1	6.7
41	2/8/2007	6/8/2007	210	52.5	34.1	6.2
40	3/8/2008	14/8/2008	500	45.5	73.6	6.8
41	3/8/2008	14/8/2008	410	37.2	73.6	5.6
42	3/8/2008	14/8/2008	430	39.1	73.6	5.8
3 ice screws	23/7/2009	31/7/2009	280	35.0	64.3	4.4
3 ice screws (sed)	23/7/2009	31/7/2009	360	45.0	64.3	5.6
3 ice screws (sed)	6/8/2010	13/8/2010	336	48.0	68.5	4.9
41	2/6/2012	12/8/2012	1400	19.7	414.6	3.4
42	2/6/2012	12/8/2012	1670	23.5	414.6	4.0
