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**Glacier change in Norway since the 1960s – an overview of mass balance, area, length and surface elevation changes**

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Table S1

Overview of mass balance measurements in Norway referred to in this paper.

ID and Code refers to the inventory (Andreassen and others, 2012).

Other attributes are taken from a detailed map of the glacier used for the calculations. See also Table 1 for other maps of the glacier.

ID	Glacier	Code	Lat., Long.	Area (km <sup>2</sup> )	El min-El max (m a.s.l.)	Period(s)	Map year	No. of years
26	Svartfjelljøkelen	SVJ	70°14', 21°57'	2.7	500-1080	1978-1979	1966	2
54	Langfjordjøkelen	LAJ	70°10', 21°45'	2.6	338-1043	1989-93, 1996-2018	2018	28
596	Blåisen	BLI	68°20', 17°51'	2.2	860-1204	1963-1968	1959	6
675	Storsteinsfjellbreen	STB	68°13', 17°54'	5.4	992-1871	1964-68, 1991-95	2010	10
703	Cainhavarre		68°06', 17°59'	0.7	1214-1538	1965-1968	1960	4
941	Rundvassbreen	BLÅ	67°17', 16°03'	10.8	853-1527	2002-04, 2011-17	2017	10
1084	Tretten-null-tobreen	SVV	66°43', 14°01'	4.3	580-1260	1985-1986	1968	2
1092	Storglombreen	SVV	66°40', 13°59'	62.4	520-1580	1985-88, 2000-05	1968	10
1094	Engabreen	SVV	66°40', 13°45'	36.2	111-1544	1970-2018	2016	49
1135	Svartsheibreen	SVV	66°33', 13°46'	5.7	765-1424	1988-1994	1995	7
1144	Høgtuvbreen	HØG	66°27', 13°38'	2.6	588-1162	1971-1977	1972	7
1280	Trollbergdalsbreen		66°42', 14°26'	1.8	907-1369	1970-75, 1990-94	1998	11
1434	Charles Rabot Bre		66°00', 14°21'	1.1	1090-1760	1970-1973	1965	4
1438	Austre Okstindbre	OKB	66°00', 14°17'	14.0	730-1750	1987-1996	1962	10
2078	Ålfofbreen	ÅLB	61°45', 5°38'	4.0	890-1368	1963-2018	2010	56
2085	Hansebreen	ÅLB	61°44', 5°40'	2.8	927-1310	1986-2018	2010	33
2146	Jostefonnn	JOF	61°25', 6°33'	3.8	960-1622	1996-2000	1993	5
2297	Nigardsbreen	JOB	61°42', 7°08'	46.6	330-1952	1962-2018	2013	57
2320	Tunsbergdalsbreen	JOB	61°36', 7°02'	52.2	536-1942	1966-1972	1964	7
2352	Store Supphellebreen	JOB	61°31', 6°48'	12.0	80-1740	1964-67, 73-75, 79-82	1966	11
2474	Vesledalsbreen	JOB	61°50', 7°16'	4.1	1126-1745	1967-1972	1966	6
2478	Austdalsbreen	JOB	61°45', 7°20'	10.6	1197-1747	1988-2018	2009	31
2514	Harbardsbreen	HAB	61°41', 7°40'	13.2	1242-1978	1997-2001	1996	5
2519	Spørteggbreen	SPB	61°36', 7°28'	27.9	1260-1770	1988-1991	1988	4
2632	Tverråbreen		61°35', 8°17'	5.9	1415-2200	1962-1963		2
2636	Storbreen		61°34', 8°08'	5.1	1400-2102	1949-2018	2009	70
2743	Gråsubreen	GGG	61°39', 8°37'	2.1	1833-2284	1962-2018	2009	57
2768	Hellstugubreen	HMB	61°34', 8°26'	2.9	1482-2229	1962-2018	2009	57
2769	Austre Memurubre		61°33', 8°29'	8.7	1627-2277	1968-1972	1966	5
2770	Blåbreen		61°33', 8°34'	3.6	1550-2150	1962-1963	1961	2
2772	Vestre Memurubre	HMB	61°31', 8°27'	9.2	1565-2270	1968-1972	1966	5
2919	Omnsbreen	OMN	60°39', 7°28'	1.5	1460-1570	1966-1970	1969	5
2964	Midtdalsbreen	HAJ	60°33', 7°26'	6.7	1380-1862	2000-2001	1995	2
2968	Rembesdalskåka	HAJ	60°32', 7°22'	17.3	1066-1854	1963-2018	2010	56
3119	Midtre Folgefonna	MFF	60°08', 6°28'	8.6	1100-1570	1970-1971	1959	2
3126	Blåbreen	SFF	60°05', 6°26'	2.3	1060-1602	1963-1968	1959	6
3127	Gråfjellsbrea	SFF	60°04', 6°24'	8.1	1049-1647	64-68, 74-75, 2003-13	2013	18
3128	Breidablikkbrea	SFF	60°03', 6°22'	3.2	1232-1648	1963-68, 2003-13	2013	17
3129	Ruklebreen	SFF	60°04', 6°26'	1.8	1603-1235	1964-1968	1959	5
3133	Bondhusbrea	SFF	60°02', 6°20'	10.7	477-1636	1977-1981	1979	5
3137	Blomsterskardsbreen	SFF	59°58', 6°19'	45.7	850-1640	1970-1977	1959	8
3137	Svelgjabreen	SFF	59°58', 6°18'	22.3	829-1634	2007-2017	2017	11
3141	Blomstølskardsbreen	SFF	59°59', 6°21'	22.5	1011-1634	2007-2017	2017	11
43				517.9	80-2284	1962-2018		719

Table S2 Length change measurements for the period 1959 to 2018. Lm: last measurement (when still active, but not measured in 2018). Area (A), length (L) and slope (Sl) from the inventory (Andreassen and others, 2012b). 1990 Adv.: whether an advance occurred in the 1990s. Some records have been extended with positions from maps. Period(s) and n are the period and number of length change observations in field.

Ac	ID	Name	A (km <sup>2</sup> )	L (km)	Sl. (deg)	1960'-1982 (m)	1982-2000 (m)	2000-2018 (m)	2008-2018 (m)	1960'-2018 (m)	Remark m: maps	1990 Adv	Period(s)	n
1	54	Langfjordjøkelen	3.5	4.1	13	-397	-469	-567	-299	-1433	m1966-1994-2008	0	1998-	20
1	205	Koppangsbreen	4.1	3.5	15	-261	-123	-334	-204	-718	m1952-1978-1985-1998	0	1998-	16
1	257	Sydbreen	4.3	5.0	14				-115			0	2007-	11
1	288	Steindalsbreen	5.1	4.7	15	-242	-173	-325	-164	-740		0	1965-	27
1	675	Storsteinsfjellbreen	6.0	5.1	12				-163	-561	m1960-1993-2006/2010-1	0	2006-	10
1	941	Rundvassbreen	11.1	6.1	5	-116	-123	-351	-161	-590	m1961-1998-2011	0	2011-	6
1	1094	Engabreen	36.0	9.8	6	53	50	-526	-279	-423		1	1903-	86
1	1272	Skjelåtindbreen	3.1	3.7	14							0	2014-	1
1	1280	Trollbergdalsbreen	1.7	2.4	9				-96		lm2016	0	2010-	4
1	1438	Austre Okstindbreen	14.1	7.4	9				-176		lm2016	1	1908-44, 2006-	26
1	1439	Corneliussenbreen	3.0	2.9	17				-92		lm2016	1	2006-	8
1	1804	Trollkyrkjebreen	1.0	1.5	14				-89			0	1945-74, 2008-	21
0	2266	Lodalsbreen	9.3	6.3	15	-875				-1695	lm 1970, m1966-1994-200	0	1899-1970	68
0	2273	Bødalsbreen	8.4	6.6	10			-924	-750			1	1900-53, 1996-	64
1	2289	Fåbergstølsbreen	20.3	10.8	9	-1296	4	-381		-1673		1	1899-	113
0	2296	Kjenndalsbreen	19.1	7.0	8							1	1900-52, 1996-	56
1	2297	Nigardsbreen	42.0	11.0	8	-926	239	-498	-447	-1185		1	1899-	108
1	2298	Haugabreen	10.0	6.3	13							1	1933-41, 2013-	13
1	2301	Brenndalsbreen	20.8	7.7	17			-784	-340			1	1900-62, 1996-	81
1	2308	Tuftebreen	6.8	7.1	11				-197	-197		1	2007-	11
0	2316	Briksdalsbreen	11.7	6.6	9	137	238	-764	-344	-389		1	1900-2015	115
0	2318	Bergsetbreen	11.2	5.2	11							1	1899-2006	55
0	2320	Tunsbergdalsbreen	47.6	19.7	7							0	1900-76	62
1	2327	Austerdalsbreen	19.9	8.6	10	-321	31	-434	-344	-724		1	1905-19, 1933-	98
0	2349	Bøyabreen	13.9	6.7	8							1	1899-2014 1899-1967, 1977-	67
0	2352	Store Supphellebre	12.9	8.8	9							1	83, 1992-2014	83
1	2355	Vetle Supphellebreen	7.3	5.3	14							1	1899-1944, 2011-	43
1	2430	Mårådalsbreen Heimste	3.0	3.2	12				-102			0	2002-	5
1	2480	Stigaholtbreen	12.5	8.6	8	-427	-44	-222	-98	-693		1	1903-	112
1	2597	Juvfonne	0.2	0.5	17				-99	-118	m1966-2011	0	2010-	6
1	2608	Styggebreen	4.9	4.3	13				-56	-366	m1966-2011	0	1951-63, 2013-	16

1	2614	Storjuvbreen	4.5	4.5	11			-114	-105	-218	m1966-2011	1	1901-12, 1933-63, 1997-	58
1	2636	Storbreen	5.2	2.8	14	-200	-25	-160	-100	-385		0	1902-	80
1	2638	Leirbreen	4.8	3.7	12	-129	-96	-235	-194	-460		0	1909-	59
1	2643	Bøverbreen	6.8	5.2	8			-180	-148	-265	m1966-2004	1	1903-76, 1997-	45
1	2680	Styggedalsbreen	2.0	3.3	23	-105	-49	-143	-76	-297		1	1901-	97
1	2717	Mjølkedalsbreen	3.2	3.3	12		-90	-294	-215			0	1978-	23
1	2734	Koldedalsbreen	0.8	1.1	17		-200	-425	-172			0	1978-	14
1	2768	Hellstugubreen	2.8	3.4	13	-298	-159	-178	-115	-635		0	1901-	79
0	2803	Slettmarkbreen	1.1	1.7	18							1	1902-58	27
1	2964	Midtdalsbreen	6.8	4.7	8		34	-218	-104	-400	m1961-1995	1	1982-	36
1	2968	Rembesdalskåka	17.4	8.6	4	-252	136	-371	-74	-487		1	1917-	43
1	3117	Botnabrea	5.0	2.7	9	-103	-38	-124	-60	-265	lm2017	1	1996-	15
1	3127	Gråfjellsbrea	8.8	5.1	6	-232	-320	-838	-521	-1390	m1959-1997-2007	0	2002-	14
0	3128	Breidablikkbrea	3.6	4.0	7	-116	-104	-45		-265	m1959-2007-2013	0	2002-06	4
1	3131	Buerbreen	14.4	6.6	8	-5	165	-328	-134	-168		1	1900-	71
1	3133	Bondhusbrea	10.9	6.8	5	-7	144	-337	-104	-200		1	1902-	86
1	3137	Svelgjabreen	22.7	11.3	4	-63	-52	-56	-169	-171	m1959-1995-2007	0	2007-	10
1	3141	Blomstølskardsbreen	23.1	10.2	5			-54	-48	-52	m1959-1995	1	1994-	19
		Mean	10.3	5.8	10.9	-281	-43	-352	-188	-572	Advances	27	1899-2018	45
39	49	Total observed	519			22	24	29	37	30	Total observed	49		2192
					m/a	-15.6	-2.4	-19.6	-18.8	-11.9				

Table S3. Surface elevation changes from the '1960s' to the '2010s. IDs, region number (reg) and main code (main) from the glacier inventory (Andreassen and others, 2012). dh - levation difference, Bgeod - geodetic balance,  $\sigma$  - uncertainty

ID	Name	Main	Reg	n	Mapping date	Mapping date	Areal	Area2	dh	dh	$\sigma$	Bgeod
					year 1	year 2	km <sup>2</sup>	km <sup>2</sup>	m	m/a	m/a	m w.e. pa
49	Langfjordjøkelen	LAF	2	52	1966-07-11	2008-09-09	1.00	0.71	-15.7	-0.30	0.04	-0.26
50		LAF	2	52	1966-07-11	2008-09-09	0.67	0.58	-18.1	-0.35	0.04	-0.30
51		LAF	2	52	1966-07-11	2008-09-09	1.18	0.91	-19.0	0.00	0.04	-0.31
53		LAF	2	52	1966-07-11	2008-09-09	1.28	1.23	-18.7	-0.36	0.04	-0.31
54	Langfjordjøkelen	LAF	2	52	1966-07-11	2008-09-09	4.49	3.33	-43.0	-0.83	0.04	-0.70
55		LAF	2	52	1966-07-11	2008-09-09	0.42	0.30	-21.9	-0.42	0.04	-0.36
56		LAF	2	52	1966-07-11	2008-09-09	0.80	0.61	-32.5	-0.62	0.04	-0.53
152			3	58	1952-07-31	2010-10-02	0.19	0.14	-5.0	0.00	0.09	-0.07
153			3	58	1952-07-31	2010-10-02	0.16	0.10	-5.3	-0.09	0.09	-0.08
155			3	58	1952-07-31	2010-10-02	0.39	0.30	-5.2	-0.09	0.09	-0.08
157			3	58	1952-07-31	2010-10-02	1.31	0.92	-25.7	-0.44	0.09	-0.38
158	Noammerjiekki		3	58	1952-07-31	2010-10-02	2.84	2.13	-36.6	-0.63	0.09	-0.54
200	Strupbreen	SKB	4	58	1952-07-31	2010-10-02	10.25	9.18	-31.4	-0.54	0.09	-0.46
205	Koppangsbreen	SKB	4	58	1952-07-31	2010-10-02	4.06	3.26	-37.7	-0.65	0.09	-0.55
206		SKB	4	58	1952-07-31	2010-10-02	0.59	0.56	-21.1	-0.36	0.09	-0.31
233	Fornesbreen	FOB	5	58	1952-07-31	2010-10-02	6.57	5.67	2.9	0.05	0.09	0.04
234			5	58	1952-07-31	2010-10-02	1.08	0.87	-22.8	-0.39	0.09	-0.33
235	Fugldalsbreen	VFR	5	58	1952-07-31	2010-10-02	2.70	2.35	-14.3	-0.25	0.09	-0.21
393			6	58	1952-07-31	2010-10-02	1.79	1.86	-13.1	-0.23	0.09	-0.19
396			6	58	1952-07-31	2010-10-02	0.54	0.31	-36.5	-0.63	0.09	-0.53
397			6	58	1952-07-31	2010-10-02	0.11	0.09	-4.7	-0.08	0.09	-0.07
398	Gjømmerdalsbreen		6	58	1952-07-31	2010-10-02	4.31	3.32	-15.1	-0.26	0.09	-0.22
675	Storsteinsfjellbreen	STB	9	50	1960-09-18	2010-10-02	6.21	5.45	-13.5	-0.27	0.04	-0.23
941	Rundvassbreen	BLÅ	12	50	1961-08-27	2011-09-18	13.99	12.74	-15.8	-0.32	0.04	-0.27
949	Blåmannsisen	BLÅ	12	50	1961-08-27	2011-09-18	8.06	7.70	-5.8	-0.12	0.04	-0.10
957	Blåmannsisen	BLÅ	12	50	1961-08-27	2011-09-18	18.21	18.31	-0.8	-0.02	0.04	-0.01
960	Blåmannsisen	BLÅ	12	50	1961-08-27	2011-09-18	4.71	3.33	-34.2	-0.68	0.04	-0.58
950	Blåmannsisen	BLÅ	12	50	1961-08-27	2011-09-18	42.80	38.26	-19.3	-0.39	0.04	-0.33
1092	Storglombreen	SVV	14	40	1968-08-25	2008-09-02	60.47	59.29	-5.1	-0.13	0.08	-0.11
1094	Engabreen	SVV	14	48	1968-08-25	2016-08-16	37.51	36.25	-9.8	-0.20	0.06	-0.17
1097	Fonndalsbreen	SVV	14	48	1968-08-25	2016-08-16	13.18	12.44	-12.9	-0.27	0.06	-0.23
1135	Svartisheibreen	SVV	14	48	1968-08-25	2016-08-16	5.99	4.72	-24.6	-0.51	0.06	-0.44
2078	Ålfotbreen	ÅLF	24	42	1968-08-05	2010-09-02	4.49	3.98	-10.7	-0.25	0.05	-0.22
2085	Hansebreen	ÅLF	24	42	1968-08-05	2010-09-02	3.42	2.75	-14.8	-0.35	0.05	-0.30
2141	Jostefonni	JOF	25	45	1966-07-21	2011-09-17	1.74	1.21	-13.5	-0.30	0.04	-0.26

2142	Jostefonni	JOF	25	45	1966-07-21	2011-09-17	1.35	1.18	-13.9	-0.31	0.04	-0.26
2143	Jostefonni	JOF	25	45	1966-07-21	2011-09-17	1.47	1.24	-24.0	-0.53	0.04	-0.45
2145	Jostefonni	JOF	25	45	1966-07-21	2011-09-17	1.83	1.64	-17.6	-0.39	0.04	-0.33
2146	Jostefonni	JOF	25	45	1966-07-21	2011-09-17	1.61	1.20	-25.8	-0.57	0.04	-0.49
2147	Jostefonni	JOF	25	45	1966-07-21	2011-09-17	1.41	1.15	-6.7	-0.15	0.04	-0.13
2148	Vetleljordbreen	JOF	25	45	1966-07-21	2011-09-17	2.37	1.81	-32.8	-0.73	0.04	-0.62
2149	Jostefonni	JOF	25	45	1966-07-21	2011-09-17	0.29	0.23	-7.9	-0.18	0.04	-0.15
2150	Jostefonni	JOF	25	45	1966-07-21	2011-09-17	0.31	0.26	-8.3	-0.19	0.04	-0.16
2152	Jostefonni	JOF	25	45	1966-07-21	2011-09-17	0.23	0.18	-9.5	-0.21	0.04	-0.18
2297	Nigardsbreen	JOB	26	49	1964-09-02	2013-09-10	48.31	46.61	-2.2	-0.04	0.04	-0.04
2320	Tunsbergdalsbreen	JOB	26	49	1964-09-02	2013-09-10	52.21	48.46	-40.5	-0.83	0.04	-0.70
2478	Austdalsbreen	JOB	27	43	1966-07-21	2009-10-17	11.86	10.63	-17.4	-0.40	0.05	-0.34
2514	Harbardsbreen	HAB	27	44	1966-07-19	2010-09-29	14.02	11.11	-29.9	-0.68	0.05	-0.58
2515	Harbardsbreen	HAB	27	44	1966-07-19	2010-09-29	2.15	1.69	-31.3	-0.71	0.05	-0.60
2516	Harbardsbreen	HAB	27	44	1966-07-19	2010-09-29	4.56	4.26	-12.5	-0.28	0.05	-0.24
2519	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	1.59	1.26	-7.8	-0.17	0.07	-0.15
2520	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	3.06	2.49	-18.4	-0.41	0.07	-0.35
2522	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	2.56	2.09	-9.9	-0.22	0.07	-0.19
2524	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	1.17	0.76	-56.7	-1.26	0.07	-1.07
2525	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	7.59	7.01	-9.1	-0.20	0.07	-0.17
2527	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	6.71	5.97	-14.9	-0.33	0.07	-0.28
2528	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	1.97	1.60	-20.5	-0.45	0.07	-0.39
2530	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	1.55	1.42	-11.7	-0.26	0.07	-0.22
2531	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	0.55	0.36	-40.1	-0.89	0.07	-0.76
2532	Spørteggbreen	SPB	27	45	1966-07-19	2011-09-17	2.44	1.70	-40.4	-0.90	0.07	-0.76
2597	Juvfonne		28	45	1966-07-19	2011-09-17	0.45	0.13	-5.7	-0.13	0.04	-0.11
2598	Kjelen		28	45	1966-07-19	2011-09-17	0.24	0.15	-39.0	-0.87	0.04	-0.74
2599			28	45	1966-07-19	2011-09-17	0.63	0.33	-2.4	-0.05	0.04	-0.04
2600	Storgrovbrean		28	45	1966-07-19	2011-09-17	0.77	0.64	-1.0	-0.02	0.04	-0.02
2601	Vesljuvbrean		28	45	1966-07-19	2011-09-17	1.16	0.76	-1.8	-0.04	0.04	-0.03
2602			28	45	1966-07-19	2011-09-17	0.22	0.07	-3.5	-0.08	0.04	-0.07
2606	Heimre Illåbrean		28	45	1966-07-19	2011-09-17	1.92	1.72	-14.5	-0.32	0.04	-0.27
2607	Dumhøbrean		28	45	1966-07-19	2011-09-17	1.24	0.72	-3.7	-0.08	0.04	-0.07
2608	Styggebrean		28	45	1966-07-19	2011-09-17	5.53	4.91	-7.2	-0.16	0.04	-0.14
2614	Storjuvbrean		28	45	1966-07-19	2011-09-17	4.82	4.52	-5.4	-0.12	0.04	-0.10
2617			28	45	1966-07-19	2011-09-17	0.18	0.08	-2.6	-0.06	0.04	-0.05
2622	Svellnosbrean		28	45	1966-07-19	2011-09-17	5.16	4.91	-3.7	-0.08	0.04	-0.07
2624	Nørdre Illåbrean		28	45	1966-07-19	2011-09-17	3.65	3.05	-18.2	-0.41	0.04	-0.34
2625			28	45	1966-07-19	2011-09-17	0.71	0.55	-12.1	-0.27	0.04	-0.23

2628			28	45	1966-07-19	2011-09-17	0.99	0.62	-0.6	-0.01	0.04	-0.01
2632	Tverråbreen		28	45	1966-07-19	2011-09-17	5.84	5.18	-14.1	-0.31	0.04	-0.27
2634	Søre Illåbreen		28	45	1966-07-19	2011-09-17	5.32	4.54	-17.6	-0.39	0.04	-0.33
2635	Bukkeholsbreen		28	45	1966-07-19	2011-09-17	3.23	2.84	-5.8	-0.13	0.04	-0.11
2636	Storbreen		28	43	1966-07-19	2009-10-17	5.62	5.16	-9.7	-0.23	0.05	-0.19
2637			28	43	1966-07-19	2009-10-17	0.39	0.13	-11.0	-0.25	0.05	-0.22
2743	Gråsubreen	GGG	29	43	1966-07-21	2009-10-17	2.69	2.13	-9.7	-0.23	0.05	-0.19
2746			29	43	1966-07-21	2009-10-17	0.78	0.64	-2.0	-0.05	0.05	-0.04
2757	Veobreen		29	43	1966-07-21	2009-10-17	8.07	7.08	-13.4	-0.31	0.05	-0.27
2758			29	43	1966-07-21	2009-10-17	1.08	0.92	-11.0	-0.26	0.05	-0.22
2759	Djevlebreen		29	43	1966-07-21	2009-10-17	0.23	0.18	-8.8	-0.21	0.05	-0.17
2760			29	43	1966-07-21	2009-10-17	0.64	0.57	-3.8	-0.09	0.05	-0.07
2765			29	43	1966-07-21	2009-10-17	0.30	0.17	-20.7	-0.48	0.05	-0.41
2766			29	43	1966-07-21	2009-10-17	1.25	0.65	-27.8	-0.65	0.05	-0.55
2767			29	43	1966-07-21	2009-10-17	0.26	0.19	-6.8	-0.16	0.05	-0.13
2768	Hellstugubreen	HMB	29	43	1966-07-21	2009-10-17	3.36	2.91	-15.8	-0.37	0.05	-0.31
2769	Austre Memurubreen		29	43	1966-07-21	2009-10-17	7.32	5.91	-17.5	-0.41	0.05	-0.35
2772	Vestre Memurubreen	HMB	29	43	1966-07-21	2009-10-17	9.12	8.57	-9.3	-0.22	0.05	-0.18
2773			29	43	1966-07-21	2009-10-17	0.14	0.11	-6.8	-0.16	0.05	-0.13
2774			29	43	1966-07-21	2009-10-17	0.22	0.20	-5.6	-0.13	0.05	-0.11
2776			29	43	1966-07-21	2009-10-17	0.11	0.07	-4.8	-0.11	0.05	-0.09
2960		HAJ	33	49	1961-08-31	2010-09-30	1.81	1.59	-10.5	-0.21	0.06	-0.18
2962	Ramnabergbreen	HAJ	33	49	1961-08-31	2010-09-30	12.11	9.33	-30.6	-0.62	0.06	-0.53
2963		HAJ	33	49	1961-08-31	2010-09-30	3.24	2.77	-17.9	-0.36	0.06	-0.31
2964	Midtdalsbreen	HAJ	33	49	1961-08-31	2010-09-30	7.23	6.58	-10.1	-0.21	0.06	-0.17
2966	Blåisen	HAJ	33	49	1961-08-31	2010-09-30	6.85	6.33	-6.0	-0.12	0.06	-0.10
2968	Rembesdalskåka	HAJ	33	49	1961-08-31	2010-09-30	17.64	17.33	-5.6	-0.11	0.06	-0.10
2969		HAJ	33	49	1961-08-31	2010-09-30	0.84	0.70	-14.5	-0.30	0.06	-0.25
2970	Torsteinsfonna	HAJ	33	49	1961-08-31	2010-09-30	2.33	1.44	-22.8	-0.47	0.06	-0.40
2971	Austre Leirebottsskåka	HAJ	33	49	1961-08-31	2010-09-30	6.98	6.55	-8.5	-0.17	0.06	-0.15
2972		HAJ	33	49	1961-08-31	2010-09-30	1.20	1.09	-11.8	-0.24	0.06	-0.20
2973		HAJ	33	49	1961-08-31	2010-09-30	3.83	3.27	-12.2	-0.25	0.06	-0.21
2974	Vestre Leirbottsskåka	HAJ	33	49	1961-08-31	2010-09-30	8.46	7.75	-12.2	-0.25	0.06	-0.21
2975		HAJ	33	49	1961-08-31	2010-09-30	4.34	3.75	-17.9	-0.37	0.06	-0.31
3113		NFF	36	54	1959-08-10	2013-09-20	5.82	5.22	-27.5	-0.51	0.06	-0.43
3114		NFF	36	54	1959-08-10	2013-09-20	4.64	4.38	-6.4	-0.12	0.06	-0.10
3115	Juklavassbrea	NFF	36	54	1959-08-10	2013-09-20	6.07	5.20	-24.2	-0.45	0.06	-0.38
3116	Dettebrea	NFF	36	54	1959-08-10	2013-09-20	5.75	5.55	-0.1	0.00	0.06	0.00
3117	Botnabrea	NFF	36	54	1959-08-10	2013-09-20	6.08	4.62	-25.9	-0.48	0.06	-0.41

3119		MFF	36	54	1959-08-10	2013-09-20	3.40	2.53	-12.1	-0.22	0.06	-0.19
3120		MFF	36	54	1959-08-10	2013-09-20	4.20	2.34	-28.6	-0.53	0.06	-0.45
3121		MFF	36	54	1959-08-10	2013-09-20	4.65	3.15	-31.2	-0.58	0.06	-0.49
3122		MFF	36	54	1959-08-10	2013-09-20	0.95	0.66	-35.9	-0.66	0.06	-0.56
3124		SFF	36	54	1959-08-10	2013-09-20	1.71	1.08	-33.1	-0.61	0.06	-0.52
3125		SFF	36	54	1959-08-10	2013-09-20	5.44	3.94	-38.0	-0.70	0.06	-0.60
3126		SFF	36	54	1959-08-10	2013-09-20	2.54	1.74	-39.8	-0.74	0.06	-0.63
3127	Gråfjellsbrea	SFF	36	54	1959-08-10	2013-09-20	9.89	8.11	-41.0	-0.76	0.06	-0.65
3128	Breidablikkbrea	SFF	36	54	1959-08-10	2013-09-20	3.92	3.25	-39.6	-0.73	0.06	-0.62
3129	Ruklebreen	SFF	36	54	1959-08-10	2013-09-20	4.36	3.93	-24.0	-0.45	0.06	-0.38
3130	Brufossbrea	SFF	36	54	1959-08-10	2013-09-20	7.97	7.32	-19.1	-0.35	0.06	-0.30
3131	Buerbreen	SFF	36	54	1959-08-10	2013-09-20	14.73	14.32	-5.4	-0.10	0.06	-0.08
3132	Pyttabrea	SFF	36	54	1959-08-10	2013-09-20	5.96	4.97	-17.1	-0.32	0.06	-0.27
3133	Bondhusbrea	SFF	36	54	1959-08-10	2013-09-20	10.97	10.79	-13.1	-0.24	0.06	-0.21
3134		SFF	36	54	1959-08-10	2013-09-20	3.95	3.23	-22.0	-0.41	0.06	-0.35
3135		SFF	36	54	1959-08-10	2013-09-20	7.68	7.56	-2.3	-0.04	0.06	-0.04
3136		SFF	36	54	1959-08-10	2013-09-20	11.95	10.91	-19.6	-0.36	0.06	-0.31
3137	Svelgjabreen	SFF	36	54	1959-08-10	2013-09-20	22.81	22.49	-6.9	-0.13	0.06	-0.11
3138	Møsevassbrea	SFF	36	54	1959-08-10	2013-09-20	17.21	15.75	-23.2	-0.43	0.06	-0.37
3139		SFF	36	54	1959-08-10	2013-09-20	7.69	6.98	-18.2	-0.34	0.06	-0.29
3140		SFF	36	54	1959-08-10	2013-09-20	1.01	0.91	-35.5	-0.66	0.06	-0.56
3141	Blomstølskardsbreen	SFF	36	54	1959-08-10	2013-09-20	23.66	22.69	-4.1	-0.08	0.06	-0.06
3142	Sauanutbreen	SFF	36	54	1959-08-10	2013-09-20	8.88	7.01	-33.6	-0.62	0.06	-0.53
3143		SFF	36	54	1959-08-10	2013-09-20	1.93	1.62	-22.5	-0.42	0.06	-0.35
<b>137</b>					<b>1960s</b>	<b>2010s</b>	<b>817.0</b>	<b>733.5</b>	<b>-16.8</b>	<b>-0.34</b>	<b>0.06</b>	<b>-0.29</b>



Table S4. Glacier to glacier correlation of annual centred mass balance 1989-2018 – 10 glaciers

Ålf-Ålfotbreen, Han-Hansebreen, Nig, Nigardsbreen, Aus-Austdalsbreen, Sto-Storbreen, Hel-Hellstugubreen, Grå-Gråsubreen, Eng-Engabreen and Lan-Langfjordjøkelen.

	Ålf	Han	Nig	Aus	Rem	Sto	Hel	Grå	Eng	Lan
Ålfotbreen	-	0.96	0.88	0.93	0.93	0.86	0.80	0.74	0.81	0.59
Hansebreen	0.96	-	0.80	0.89	0.86	0.80	0.74	0.70	0.82	0.67
Nigardsbreen	0.88	0.80	-	0.93	0.93	0.90	0.89	0.82	0.80	0.49
Austdalsbreen	0.93	0.89	0.93	-	0.93	0.91	0.84	0.77	0.85	0.60
Rembesdalskåka	0.93	0.86	0.93	0.93	-	0.91	0.86	0.80	0.81	0.56
Storbreen	0.86	0.80	0.90	0.91	0.91	-	0.91	0.93	0.71	0.49
Hellstugubreen	0.80	0.74	0.89	0.84	0.86	0.91	-	0.96	0.66	0.43
Gråsubreen	0.74	0.70	0.82	0.77	0.80	0.93	0.96	-	0.59	0.41
Engabreen	0.81	0.82	0.80	0.85	0.81	0.71	0.66	0.59	-	0.76
Langfjordjøkelen	0.59	0.67	0.49	0.60	0.56	0.49	0.43	0.41	0.76	-