

APPENDIX A

Table A1. Location of glaciers and number of years (n Yr) with B_s data during 1946-2016

Glacier	State No	n Yr	Glacier	State No	n Yr	Glacier	State No	n Yr
Hintereisferner	Austria 1	45	Thjorsarjokull	Iceland 3	11	Kozelskiy	Russia 2	21
Vernagtferner	Austria 2	50	Caeser	Italy 1	14	IGAN	Russia 3	22
Devon NW	Canada 1	41	Ciardoney	Italy 2	24	Obrucheva	Russia 4	22
South I.C.	Canada 2	41	Fontana B.	Italy 3	25	Vavilova	Russia 5	10
Meighen	Canada 3	44	Shumskiy	Kazakhstan	25	Djankuat	Russia 6	30
Drambuie	Canada 4	25	Abramov	Kirghizstan 1	28	Garabashi	Russia 7	12
Ward	Canada 5	16	Kara-Batkak	Kirghizstan 2	34	Marmaglaciaren	Sweden 1	14
Helm	Canada 6	13	Golubina	Kirghizstan 3	23	Riukojietna	Sweden 2	17
Place	Canada 7	21	Aalfotbreen	Norway 1	53	Storglaciaren	Sweden 3	57
Sentinel	Canada 8	24	Austdallsbreen	Norway 2	28	Rabots	Sweden 4	12
Zavisha	Canada 9	10	Hahsebreen	Norway 3	30	Gries	Swiss 1	55
Peyto	Canada 10	28	Hellstugubreen	Norway 4	54	Silvretta	Swiss 2	57
Ram River	Canada 11	10	Engabreen	Norway 5	46	Basodino	Swiss 3	19
Echaurren	Chile 1	25	Langfjordjoekelen	Norway 6	25	Eklutna	USA 1	11
Urumchi No 1 S.	China 1	16	Nigardsbreen	Norway 7	54	Gulkana	USA 2	49
Urumchi No1 E.	China 2	14	Rabots Glaciaer	Norway 8	30	Wolverine	USA 3	49
Urumchi No1 W.	China 3	18	Riukojietna	Norway 9	24			
Sarennes	France 1	68	Storbreen	Norway 10	56			
Blagnipujokull	Iceland 1	11	Rembesdalskaaka	Norway 11	53			
Satujokull	Iceland 2	12	Malyi Aktru	Russia 1	44			

Index State No – corresponds to the subscription of the abscissa axis in the Fig. 1.

Table A2. Spatial and temporal change of glacier summer balance B_s in mm, averaged by ten-years

Glacier	State	1946-55	1956-65	1966-75	1976-85	1986-95	1996-2005	2006-2015
Hintereisferner	Austria	-897	-1229	-1073	-1306	-1769	-1508	—
Vernagtferner	Austria	—	—	-901	-1066	-1564	-1492	-1707
Devon NW	Canada	—	-176	-182	-138	-166	-354	—
South I.C.	Canada	—	-110	-348	-261	-418	-503	—
Meighen	Canada	—	-465	-185	-182	-297	-340	—
Drambuie	Canada	—	—	—	-433	-529	-688	—
Ward	Canada	—	-166	-123	-217	—	—	—
Helm	Canada	—	—	—	-2765	-3062	—	—
Place	Canada	—	-2233	-2407	-2549	-3006	—	—
Sentinel	Canada	—	—	-3128	-2906	-2893	—	—
Zavisha	Canada	—	—	—	-1888	—	—	—
Peyto	Canada	—	—	-1794	-1666	-1763	—	—
Ram River	Canada	—	—	-1288	—	—	—	—
Echaurren	Chile	—	—	—	-2672	-2949	-2300	—
Urumchi No 1 S.	China	—	—	—	—	—	-562	-813
Urumchi No1 E.	China	—	—	—	—	—	-611	-914
Urumchi No1 W.	China	—	—	—	—	—	-888	-631
Sarennes	France	-2363	-1947	-1794	-2222	-3032	-3314	-4083
Blagnipujokull	Iceland	—	—	—	—	-2003	-2098	—
Satujokull	Iceland	—	—	—	—	-1813	-1995	—
Thjorsarjokull	Iceland	—	—	—	—	-1834	-2455	—
Careser	Italy	—	—	-1240	-1312	—	—	—
Ciardoney	Italy	—	—	—	—	-2170	-2355	-2109
Fontana B.	Italy	—	—	—	—	-1744	-2002	-2154
Shumskiy	Kazakhstan	—	—	-618	-764	-905	—	—
Abramov	Kirghizstan	—	—	-1551	-2140	-1777	—	—
Kara-Batkak	Kirgizstan	—	-835	-860	-1286	-1202	—	—
Golubina	Kirgizstan	—	—	-762	-974	-1080	—	—
Aalfotbreen	Norway	—	-2886	-3514	-3181	-3325	-4349	-4106
Austdallsbreen	Norway	—	—	—	—	-2170	-2831	-2755
Hahsebreen	Norway	—	—	—	—	-3316	-4246	-4371
Hellstugubreen	Norway	—	-971	-1431	-1531	-1225	-1654	-1844

Engabreen	Norway	—	—	-2393	-2191	-2141	-2567	-3042
Langfjordjoekelen	Norway	—	—	—	—	-2660	-3288	-3011
Nigardsbreen	Norway	—	-1029	-2053	-2312	-1890	-2366	-2412
Rabots Glaciaer	Norway	—	—	—	-1493	-1441	-1739	-1736
Riukojietna	Norway	—	—	—	—	-1400	-2225	-1823
Storbreen	Norway	—	-1467	-1605	-1728	-1492	-1999	-2170
Rembesdalskaaka	Norway	—	-1619	-1885	-2138	-1682	-2474	-2661
M.Aktru	Russia	—	-1348	-1125	-558	-761	-878	-620
Kozelskiy	Russia	—	—	-3263	-3677	-3739	—	—
IGAN	Russia	—	-2365	-2158	-3283	—	—	—
Obrucheva	Russia	—	-2890	-2485	-3763	—	—	—
Vavilova	Russia	—	—	-330	-362	-213	—	—
Djankuat	Russia	—	—	-2446	-2367	-2475	-2496	—
Garabashi	Russia	—	—	—	-840	-1087	—	—
Marmaglaciaren	Sweden	—	—	—	—	-1213	-1523	—
Riukojietna	Sweden	—	—	—	—	-1486	-2279	—
Storglaciaren	Sweden	-1993	-1652	-1732	-1525	-1484	-1886	—
Rabots	Sweden	—	—	—	-1040	-827	-1647	—
Gries	Swiss	—	-1549	-1398	-1470	-2204	-2476	-2819
Silvretta	Swiss	—	-1261	-942	-939	-1829	-1832	-2293
Basodino	Swiss	—	—	—	—	-1624	-2391	-2365
Eklutna	USA	—	—	—	—	-1808	—	-2153
Gulkana	USA	—	—	-1410	-1454	-1723	-2119	-2014
Wolverine	USA	—	—	-2098	-2272	-2786	-2940	-3071

Source of data: (Dyurgerov and Meier 2005; Fluctuations of Glaciers Database 2017); — means absence of result.