

**Table S2**

Site 1; SV-NW, Magdalenafjorden

Elevation [m a.s.l.]	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	Perenctiles of elevation change					Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]		
					5th	10th	25th	75th	90th							
					[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]							
25	0.62	16%	-1.71	1.04	-2.54	-2.43	-2.09	-1.35	-1.12	-0.99	-1.74	0.53	-1060	655	-1.52	0.90
75	1.33	42%	-1.42	0.38	-2.34	-2.12	-1.73	-1.11	-0.88	-0.79	-1.47	0.49	-1889	538	-1.26	0.31
125	1.97	43%	-0.96	0.31	-1.72	-1.50	-1.26	-0.77	-0.58	-0.51	-1.03	0.38	-1891	637	-0.86	0.26
175	2.64	36%	-0.76	0.30	-1.20	-1.11	-0.91	-0.63	-0.43	-0.37	-0.77	0.25	-2000	828	-0.67	0.26
225	3.62	34%	-0.51	0.27	-0.91	-0.78	-0.64	-0.39	-0.30	-0.25	-0.53	0.20	-1845	999	-0.45	0.23
275	3.88	43%	-0.28	0.22	-0.62	-0.54	-0.39	-0.17	-0.03	0.04	-0.29	0.21	-1083	860	-0.25	0.19
325	3.91	49%	-0.20	0.20	-0.52	-0.42	-0.30	-0.09	0.03	0.09	-0.20	0.20	-783	771	-0.18	0.17
375	3.61	45%	-0.16	0.22	-0.47	-0.39	-0.27	-0.05	0.05	0.11	-0.16	0.19	-571	795	-0.14	0.19
425	2.53	41%	-0.08	0.28	-0.47	-0.35	-0.20	0.02	0.14	0.21	-0.11	0.29	-214	707	-0.08	0.25
475	1.59	37%	-0.01	0.38	-0.55	-0.39	-0.14	0.12	0.27	0.38	-0.05	0.37	-21	612	-0.01	0.34
525	0.81	31%	0.15	0.60	-0.26	-0.04	0.07	0.23	0.33	0.40	0.07	0.72	121	489	0.08	0.34
575	0.29	22%	0.23	1.26	0.00	0.08	0.16	0.32	0.45	1.26	0.30	0.93	67	371	0.13	0.71
625	0.09	0%	0.23	2.53									21	235	0.13	1.40
675	0.04	0%	0.23	2.53									10	111	0.13	1.40
725	0.01	0%	0.23	2.53									2	26	0.13	1.40
<b>Overall</b>	<b>26.95</b>	<b>40%</b>	<b>-0.41</b>	<b>0.09</b>									<b>-11135</b>	<b>2468</b>	<b>-0.37</b>	<b>0.08</b>

**Table S3**  
**Site 2; SV-NW, Fordlandsundet**

Elevation [m a.s.l.]	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	Perenctiles of elevation change									Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
					5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]						
25	0.15	0%	-2.14	0.80										-278	127	-1.60	0.68	
75	1.22	51%	-1.80	0.40	-2.77	-2.56	-2.20	-1.40	-1.21	-1.11	-1.83	0.54	-2186	533	-1.60	0.32		
125	3.55	51%	-1.42	0.23	-2.71	-2.44	-1.94	-1.04	-0.87	-0.81	-1.54	0.61	-5041	963	-1.26	0.18		
175	5.21	56%	-1.14	0.18	-2.76	-2.51	-1.91	-0.86	-0.68	-0.56	-1.40	0.71	-5929	1094	-1.01	0.13		
225	6.25	71%	-1.18	0.13	-2.15	-1.97	-1.62	-0.58	-0.42	-0.30	-1.14	0.62	-7379	1092	-1.05	0.09		
275	8.31	79%	-0.86	0.10	-1.66	-1.48	-1.15	-0.48	-0.27	-0.18	-0.85	0.46	-7124	1092	-0.76	0.07		
325	9.57	84%	-0.69	0.09	-1.28	-1.14	-0.91	-0.32	-0.15	-0.07	-0.65	0.39	-6584	1049	-0.61	0.06		
375	10.46	85%	-0.54	0.08	-1.05	-0.97	-0.82	-0.21	-0.05	0.02	-0.52	0.37	-5689	1017	-0.48	0.06		
425	8.58	69%	-0.34	0.11	-1.07	-0.99	-0.66	-0.05	0.14	0.25	-0.37	0.42	-2937	1013	-0.30	0.09		
475	6.94	43%	-0.19	0.19	-0.97	-0.78	-0.38	-0.04	0.22	0.33	-0.23	0.38	-1336	1329	-0.17	0.17		
525	5.08	31%	-0.05	0.29	-0.61	-0.48	-0.24	0.25	0.40	0.48	-0.03	0.39	-247	1452	-0.04	0.25		
575	3.55	21%	-0.05	0.43	-0.56	-0.43	-0.22	0.15	0.40	0.55	-0.04	0.39	-182	1545	-0.05	0.39		
625	1.98	23%	0.05	0.55	-0.49	-0.35	-0.11	0.18	0.27	0.35	0.02	0.31	108	1085	0.03	0.30		
675	0.81	8%	0.19	1.53	-0.56	-0.33	-0.08	0.41	0.66	0.82	0.16	0.43	155	1249	0.10	0.85		
725	0.35	0%	0.19	3.07									66	1065	0.10	1.70		
775	0.18	0%	0.19	3.07									35	565	0.10	1.70		
825	0.15	0%	0.19	3.07									29	474	0.10	1.70		
875	0.01	0%	0.19	3.07									2	28	0.10	1.70		
<b>Overall</b>	<b>72.35</b>	<b>62%</b>	<b>-0.62</b>	<b>0.06</b>									<b>-44518</b>	<b>4318</b>	<b>-0.55</b>	<b>0.05</b>		

Table S4

Site 3; SV-W, Prins Karls Forland

Elevation [m a.s.l.]	Perenctiles of elevation change													Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]					
	[m a.s.l.]	[%]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]						
25	0.30	0%	-2.64	0.65									-792	210	-2.35	0.45		
75	1.83	66%	-2.64	0.32	-3.32	-3.17	-2.93	-2.36	-2.10	-1.92	-2.62	0.45	-4828	764	-2.35	0.24		
125	2.39	87%	-2.04	0.21	-2.71	-2.58	-2.30	-1.83	-1.63	-1.51	-2.07	0.37	-4872	699	-1.82	0.15		
175	3.00	71%	-1.59	0.24	-2.19	-2.03	-1.76	-1.41	-1.22	-1.11	-1.60	0.32	-4779	853	-1.42	0.18		
225	2.49	60%	-1.23	0.31	-1.82	-1.70	-1.52	-1.03	-0.92	-0.86	-1.28	0.31	-3070	825	-1.10	0.25		
275	1.76	56%	-1.23	0.39	-1.65	-1.59	-1.43	-0.95	-0.80	-0.75	-1.21	0.30	-2172	720	-1.10	0.32		
325	1.12	32%	-1.15	0.75	-1.51	-1.45	-1.34	-0.99	-0.81	-0.70	-1.13	0.27	-1289	852	-1.02	0.64		
375	0.62	25%	-0.98	1.18	-1.27	-1.17	-1.08	-0.86	-0.67	-0.54	-0.95	0.21	-612	736	-0.88	1.03		
425	0.40	34%	-0.83	1.20	-1.13	-1.07	-0.93	-0.59	-0.33	-0.17	-0.75	0.32	-336	487	-0.74	1.05		
475	0.31	57%	-0.79	0.92	-1.14	-1.03	-0.89	-0.69	-0.57	-0.35	-0.77	0.28	-243	282	-0.71	0.80		
525	0.46	66%	-0.73	0.65	-0.89	-0.86	-0.80	-0.67	-0.59	-0.52	-0.72	0.12	-340	302	-0.65	0.56		
575	0.15	39%	-0.63	1.78	-0.88	-0.77	-0.70	-0.56	-0.51	-0.47	-0.64	0.16	-97	272	-0.56	1.57		
625	0.05	0%	-0.63	3.56									-31	175	-0.56	3.16		
675	0.01	0%	-0.63	3.56									-6	33	-0.56	3.16		
Overall	14.89	61%	-1.58	0.16									-23466	2197	-1.40	0.14		

Table S5

Site 4; SV-W, Gronfjorden

Elevation [m a.s.l.]	Percentiles of elevation change													Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]		
25	0.12	92%	-3.37	1.21	-3.81	-3.66	-3.53	-3.21	-3.08	-2.98	-3.38	0.34	-404	151	-3.00	1.01		
75	1.12	100%	-2.97	0.35	-3.54	-3.41	-3.20	-2.76	-2.58	-2.48	-2.99	0.37	-3335	516	-2.64	0.25		
125	2.06	96%	-2.45	0.28	-3.25	-3.01	-2.69	-2.25	-2.07	-1.95	-2.50	0.42	-5038	762	-2.18	0.20		
175	3.72	92%	-1.97	0.22	-2.51	-2.36	-2.16	-1.79	-1.63	-1.50	-1.98	0.32	-7316	1091	-1.75	0.15		
225	6.09	97%	-1.56	0.16	-2.03	-1.92	-1.74	-1.40	-1.25	-1.14	-1.57	0.29	-9524	1363	-1.39	0.11		
275	9.55	97%	-1.27	0.13	-1.69	-1.59	-1.44	-1.11	-0.95	-0.85	-1.27	0.26	-12152	1714	-1.13	0.09		
325	9.67	100%	-1.04	0.12	-1.49	-1.38	-1.22	-0.86	-0.69	-0.59	-1.04	0.28	-10101	1534	-0.93	0.09		
375	7.96	94%	-0.83	0.15	-1.32	-1.20	-1.02	-0.66	-0.48	-0.35	-0.83	0.30	-6631	1334	-0.74	0.11		
425	6.46	88%	-0.71	0.18	-1.18	-1.07	-0.89	-0.52	-0.35	-0.23	-0.70	0.31	-4564	1228	-0.63	0.14		
475	3.46	69%	-0.55	0.32	-1.10	-0.98	-0.75	-0.38	-0.19	-0.03	-0.56	0.34	-1914	1123	-0.49	0.27		
525	1.46	66%	-0.43	0.52	-0.96	-0.81	-0.60	-0.24	0.01	0.22	-0.41	0.34	-621	754	-0.38	0.45		
575	0.81	40%	-0.37	1.05	-0.86	-0.71	-0.54	-0.19	0.08	0.28	-0.34	0.37	-303	855	-0.33	0.93		
625	0.23	51%	-0.22	1.64	-0.61	-0.49	-0.36	-0.09	0.11	0.27	-0.19	0.39	-52	379	-0.20	1.45		
675	0.04	0%	-0.22	3.27									-9	137	-0.20	2.91		
725	0.01	0%	-0.22	3.27									-2	23	-0.20	2.91		
775	0.00	0%	-0.22	3.27									0	7	-0.20	2.91		
<b>Overall</b>	<b>52.76</b>	<b>92%</b>	<b>-1.17</b>	<b>0.09</b>									<b>-61966</b>	<b>3901</b>	<b>-1.05</b>	<b>0.08</b>		







**Table S9**  
**Site 8; SV-E; Edgeoya South**

<b>Elevation</b>	<b>Total area</b>	<b>Surveyed area</b>	<b>Median elevation change</b>	<b>Uncertainty of median elevation change</b>	Perenctiles of elevation change							<b>Standard deviation</b>	<b>Volume change rate</b>	<b>Uncertainty of volume change rate</b>	<b>Mass balance</b>	<b>Uncertainty of mass balance</b>
					<b>5th</b>	<b>10th</b>	<b>25th</b>	<b>75th</b>	<b>90th</b>	<b>95th</b>	<b>Mean</b>					
[m a.s.l.]	[km <sup>2</sup> ]	[%]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	[m w.e. a <sup>-1</sup> ]	[m w.e. a <sup>-1</sup> ]
75	0.35	77%	-3.35	0.41	-3.70	-3.66	-3.59	-2.93	-2.54	-2.36	-3.22	0.44	-1187	189	-2.98	0.30
125	1.25	66%	-2.60	0.26	-3.35	-3.18	-2.92	-2.14	-1.59	-1.24	-2.48	0.63	-3245	461	-2.32	0.18
175	3.60	93%	-2.24	0.10	-2.77	-2.65	-2.46	-2.00	-1.69	-1.40	-2.19	0.42	-8038	885	-1.99	0.05
225	5.20	88%	-1.89	0.09	-2.36	-2.27	-2.11	-1.68	-1.38	-1.15	-1.86	0.37	-9839	1095	-1.68	0.04
275	8.45	98%	-1.66	0.06	-2.10	-1.98	-1.81	-1.49	-1.19	-0.96	-1.62	0.34	-14059	1503	-1.48	0.02
325	8.34	95%	-1.39	0.07	-1.76	-1.69	-1.56	-1.18	-0.97	-0.78	-1.35	0.30	-11632	1286	-1.24	0.03
375	6.56	95%	-1.14	0.07	-1.52	-1.44	-1.30	-0.98	-0.84	-0.70	-1.13	0.25	-7466	893	-1.01	0.04
425	4.35	100%	-0.97	0.08	-1.26	-1.16	-1.06	-0.89	-0.73	-0.61	-0.96	0.20	-4239	553	-0.87	0.05
475	0.51	100%	-0.98	0.21	-1.22	-1.18	-1.10	-0.87	-0.79	-0.72	-0.98	0.16	-499	119	-0.87	0.17
<b>Overall</b>	<b>38.61</b>	<b>95%</b>	<b>-1.56</b>	<b>0.09</b>									<b>-60204</b>	<b>2695</b>	<b>-1.39</b>	<b>0.08</b>

Table S10

Site 9; SV-E; Edgeoya North

Elevation [m a.s.l.]	Percentiles of elevation change												Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]						
75	0.09	0%	-2.04	0.83								-188	79	-1.82	0.67		
125	0.67	64%	-2.04	0.42	-2.35	-2.28	-2.15	-1.92	-1.76	-1.56	-2.01	0.28	-1375	312	-1.82	0.33	
175	2.43	77%	-1.73	0.18	-2.15	-2.05	-1.88	-1.55	-1.33	-1.23	-1.71	0.29	-4208	609	-1.54	0.13	
225	4.34	78%	-1.34	0.13	-1.88	-1.73	-1.52	-1.09	-0.78	-0.56	-1.29	0.39	-5794	820	-1.19	0.09	
275	7.78	71%	-1.14	0.11	-1.59	-1.51	-1.33	-0.95	-0.73	-0.59	-1.13	0.32	-8880	1231	-1.02	0.07	
325	15.70	69%	-0.93	0.08	-1.30	-1.19	-1.05	-0.81	-0.65	-0.56	-0.93	0.22	-14618	1924	-0.83	0.05	
375	25.92	65%	-0.79	0.07	-1.15	-1.06	-0.93	-0.65	-0.47	-0.38	-0.78	0.23	-20564	2675	-0.71	0.04	
425	15.33	88%	-0.61	0.06	-0.95	-0.87	-0.76	-0.39	-0.29	-0.23	-0.59	0.24	-9285	1325	-0.54	0.04	
475	8.33	55%	-0.61	0.14	-0.78	-0.74	-0.68	-0.54	-0.49	-0.46	-0.61	0.10	-5074	1237	-0.54	0.11	
525	4.17	18%	-0.55	0.42	-0.68	-0.65	-0.61	-0.50	-0.46	-0.45	-0.56	0.07	-2291	1751	-0.49	0.36	
575	0.85	0%	0.00	0.83									-467	709	-0.49	0.73	
<b>Overall</b>	<b>85.60</b>	<b>68%</b>	<b>-0.85</b>	<b>0.06</b>									<b>-72743</b>	<b>4514</b>	<b>-0.76</b>	<b>0.06</b>	

**Table S11**  
Site 10; SV-E; Bjørnsundet

Elevation [m a.s.l.]	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	Percentiles of elevation change					Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]	
					5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]							
25	0.68	69%	-1.66	0.35	-2.04	-1.99	-1.88	-1.55	-1.47	-1.41	-1.69	0.23	-1131	265	-1.48	0.28
75	0.89	100%	-1.41	0.18	-1.81	-1.69	-1.55	-1.27	-1.16	-1.10	-1.42	0.21	-1249	205	-1.26	0.14
125	0.66	100%	-0.97	0.23	-1.31	-1.18	-1.06	-0.86	-0.74	-0.67	-0.97	0.18	-633	162	-0.86	0.18
175	1.10	86%	-0.61	0.22	-1.13	-1.01	-0.82	-0.41	-0.25	-0.17	-0.62	0.29	-673	247	-0.54	0.18
225	2.10	95%	-0.57	0.14	-0.91	-0.83	-0.70	-0.41	-0.26	-0.18	-0.56	0.22	-1200	314	-0.51	0.11
275	1.19	87%	-0.46	0.21	-0.92	-0.80	-0.62	-0.36	-0.29	-0.25	-0.51	0.20	-554	252	-0.41	0.17
325	1.20	95%	-0.37	0.18	-0.54	-0.51	-0.45	-0.25	-0.14	-0.08	-0.35	0.14	-438	224	-0.33	0.16
375	1.68	92%	-0.23	0.16	-0.40	-0.37	-0.31	-0.16	-0.10	-0.07	-0.23	0.10	-391	271	-0.21	0.14
425	1.59	100%	-0.21	0.15	-0.42	-0.38	-0.30	-0.13	-0.09	-0.06	-0.22	0.11	-337	235	-0.19	0.13
475	0.71	100%	-0.24	0.21	-0.37	-0.34	-0.30	-0.18	-0.13	-0.10	-0.24	0.08	-171	153	-0.21	0.19
<b>Overall</b>	<b>11.79</b>	<b>94%</b>	<b>-0.58</b>	<b>0.07</b>									<b>-6778</b>	<b>751</b>	<b>-0.51</b>	<b>0.06</b>











Table S17

Site 16; SV-N; Primatesfjella

Elevation [m a.s.l.]	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	Percentiles of elevation change									Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
					5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]					
25	0.13	100%	-0.47	0.54	-1.65	-1.30	-0.84	-0.08	0.17	0.32	-0.52	0.64	-63	72	-0.42	0.47		
75	0.70	74%	-0.55	0.41	-1.64	-1.48	-0.98	-0.33	-0.09	0.01	-0.66	0.51	-386	286	-0.49	0.35		
125	1.56	61%	-0.33	0.33	-1.30	-1.11	-0.62	-0.14	-0.05	0.02	-0.44	0.41	-522	517	-0.30	0.29		
175	2.57	75%	-0.19	0.21	-0.78	-0.60	-0.37	0.05	0.16	0.21	-0.19	0.34	-482	538	-0.17	0.18		
225	4.08	83%	-0.04	0.15	-0.46	-0.35	-0.20	0.14	0.29	0.36	-0.04	0.25	-171	600	-0.04	0.13		
275	5.00	75%	0.07	0.15	-0.30	-0.21	-0.06	0.28	0.45	0.52	0.10	0.25	349	748	0.04	0.09		
325	5.95	67%	0.20	0.15	-0.20	-0.12	0.03	0.38	0.54	0.63	0.21	0.27	1173	918	0.11	0.09		
375	7.01	74%	0.21	0.13	-0.13	-0.01	0.09	0.43	0.60	0.73	0.26	0.28	1502	914	0.12	0.08		
425	6.30	66%	0.38	0.15	-0.03	0.04	0.16	0.57	0.71	0.83	0.37	0.28	2376	984	0.21	0.10		
475	7.79	51%	0.42	0.17	0.01	0.11	0.24	0.56	0.65	0.70	0.39	0.25	3268	1380	0.23	0.12		
525	7.37	58%	0.50	0.16	0.09	0.16	0.33	0.64	0.75	0.81	0.47	0.25	3653	1224	0.27	0.11		
575	5.54	45%	0.49	0.23	0.05	0.24	0.42	0.58	0.70	0.80	0.49	0.31	2733	1286	0.27	0.15		
625	3.33	30%	0.49	0.39	-0.04	0.08	0.35	0.60	0.68	0.75	0.46	0.45	1621	1318	0.27	0.24		
675	1.60	34%	0.34	0.52	-0.13	-0.04	0.13	0.48	0.61	0.70	0.28	0.59	549	830	0.19	0.30		
725	1.15	51%	0.28	0.45	-0.10	-0.04	0.09	0.55	0.86	0.94	0.34	0.35	319	519	0.15	0.26		
775	0.72	69%	0.23	0.43	-0.11	-0.06	0.06	0.43	0.70	0.81	0.27	0.28	167	309	0.13	0.25		
825	0.37	91%	0.25	0.43	0.02	0.06	0.16	0.32	0.39	0.46	0.25	0.15	91	160	0.13	0.25		
875	0.03	0%	0.25	0.87									7	11	0.13	0.49		
<b>Overall</b>	<b>61.20</b>	<b>62%</b>	<b>0.26</b>	<b>0.06</b>									<b>16182</b>	<b>3476</b>	<b>0.14</b>	<b>0.03</b>		

**Table S18**  
**Site 17; SV-N; Andree Land**

Elevation	Total area	Surveyed area	Median elevation change	Uncertainty of median elevation change	Percentiles of elevation change								Standard deviation	Volume change rate	Uncertainty of volume change rate	Mass balance	Uncertainty of mass balance
					5th	10th	25th	75th	90th	95th	Mean						
					[m a.s.l.]	[km <sup>2</sup> ]	[%]	[m a <sup>-1</sup> ]									
75	0.10	84%	-0.90	0.79	-1.19	-1.13	-1.01	-0.65	-0.42	-0.33	-0.83	0.28	-88	78	-0.80	0.68	
125	0.67	95%	-0.78	0.26	-1.28	-1.17	-1.00	-0.59	-0.48	-0.42	-0.82	0.33	-525	181	-0.69	0.21	
175	1.97	96%	-0.47	0.15	-0.97	-0.86	-0.67	-0.37	-0.28	-0.20	-0.53	0.25	-935	304	-0.42	0.12	
225	4.17	81%	-0.32	0.13	-0.70	-0.61	-0.48	-0.22	-0.13	-0.06	-0.36	0.23	-1328	546	-0.28	0.11	
275	6.64	80%	-0.19	0.10	-0.53	-0.44	-0.30	-0.09	0.00	0.05	-0.21	0.19	-1293	685	-0.17	0.09	
325	7.93	75%	-0.07	0.10	-0.43	-0.32	-0.17	0.03	0.11	0.18	-0.09	0.20	-530	798	-0.06	0.09	
375	10.01	70%	0.03	0.10	-0.35	-0.26	-0.10	0.14	0.25	0.33	0.01	0.23	266	960	0.01	0.05	
425	11.49	60%	0.09	0.10	-0.25	-0.17	-0.04	0.22	0.34	0.43	0.09	0.22	984	1203	0.05	0.06	
475	12.11	59%	0.13	0.10	-0.17	-0.08	0.04	0.22	0.33	0.41	0.13	0.19	1624	1254	0.07	0.06	
525	11.10	57%	0.16	0.11	-0.18	-0.07	0.07	0.25	0.36	0.44	0.15	0.20	1775	1241	0.09	0.07	
575	10.75	53%	0.14	0.12	-0.18	-0.08	0.05	0.24	0.37	0.44	0.14	0.21	1457	1298	0.07	0.07	
625	9.85	52%	0.18	0.13	-0.10	-0.01	0.09	0.27	0.38	0.45	0.18	0.18	1786	1259	0.10	0.08	
675	7.81	40%	0.23	0.18	-0.11	-0.01	0.11	0.35	0.46	0.58	0.23	0.28	1789	1399	0.13	0.11	
725	5.72	35%	0.24	0.23	-0.15	-0.02	0.12	0.37	0.49	0.55	0.24	0.28	1373	1311	0.13	0.14	
775	4.36	27%	0.26	0.31	-0.05	0.04	0.15	0.40	0.50	0.54	0.26	0.39	1135	1376	0.14	0.19	
825	2.86	24%	0.28	0.41	-0.06	0.02	0.15	0.39	0.48	0.60	0.30	0.54	799	1178	0.15	0.24	
875	1.78	19%	0.12	0.61	-0.27	-0.16	-0.02	0.31	0.45	0.55	0.13	0.27	207	1084	0.06	0.34	
925	1.23	39%	0.11	0.45	-0.19	-0.12	0.00	0.23	0.46	0.58	0.14	0.24	132	559	0.06	0.25	
975	0.96	33%	0.13	0.58	-0.17	-0.11	0.01	0.30	0.49	0.58	0.17	0.26	122	553	0.07	0.32	
1025	0.37	31%	0.07	0.98	-0.24	-0.14	-0.02	0.17	0.30	0.36	0.07	0.18	25	364	0.04	0.54	
1075	0.16	52%	0.10	1.01	-0.17	-0.10	0.01	0.15	0.19	0.25	0.07	0.14	17	160	0.06	0.56	
1125	0.05	0%	0.10	2.02									5	91	0.06	1.12	
<b>Overall</b>	<b>112.08</b>	<b>57%</b>	<b>0.08</b>	<b>0.04</b>									<b>8798</b>	<b>4382</b>	<b>0.03</b>	<b>0.02</b>	

Table S19

Site 18; SV-N; Laponiahalvoya

Elevation [m a.s.l.]	Percentiles of elevation change															Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]	
	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	Percentiles of elevation change					Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]					
					5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]									
25	0.15	68.84%	-0.65	0.72	-0.95	-0.90	-0.78	-0.43	-0.23	-0.15	-0.60	0.27	-95	106	-0.58	0.63		
75	0.87	50.32%	-0.74	0.39	-1.06	-1.01	-0.92	-0.57	-0.45	-0.37	-0.74	0.23	-646	348	-0.66	0.34		
125	2.70	28.69%	-0.49	0.34	-0.78	-0.72	-0.63	-0.27	-0.05	0.05	-0.44	0.26	-1325	925	-0.44	0.29		
175	1.70	64.70%	-0.32	0.22	-0.67	-0.60	-0.47	-0.17	-0.01	0.10	-0.32	0.24	-544	386	-0.28	0.19		
225	1.65	48.74%	-0.24	0.29	-0.63	-0.53	-0.37	-0.14	-0.05	0.02	-0.26	0.20	-393	486	-0.21	0.26		
275	1.66	47.72%	-0.11	0.30	-0.38	-0.30	-0.21	-0.02	0.06	0.11	-0.12	0.16	-185	494	-0.10	0.26		
325	1.35	25.00%	0.05	0.52	-0.29	-0.17	-0.05	0.18	0.33	0.42	0.05	0.27	62	708	0.03	0.29		
375	1.41	28.69%	0.10	0.47	-0.12	-0.08	0.00	0.22	0.39	0.48	0.13	0.18	144	661	0.06	0.26		
425	1.47	70.77%	0.09	0.22	-0.11	-0.05	0.02	0.16	0.22	0.28	0.09	0.14	131	324	0.05	0.13		
475	0.53	31.80%	0.19	0.71	0.05	0.08	0.14	0.25	0.33	0.43	0.21	0.12	104	380	0.11	0.40		
525	0.57	18.30%	0.21	0.98	-0.08	0.03	0.14	0.28	0.35	0.40	0.19	0.15	116	556	0.11	0.55		
575	0.36	29.77%	0.06	0.90	-0.09	-0.07	-0.01	0.15	0.26	0.30	0.08	0.12	21	326	0.03	0.50		
<b>Overall</b>	<b>14.42</b>	<b>43%</b>	<b>-0.18</b>	<b>0.12</b>									<b>-2609</b>	<b>1794</b>	<b>-0.17</b>	<b>0.09</b>		

Table S20

Site 19; SV-N; Plathalvoya

Elevation	Total area [m a.s.l.]	Surveyed area [km <sup>2</sup> ]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	Percentiles of elevation change					Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]		
					5th	10th	25th	75th	90th							
					[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]	[m a <sup>-1</sup> ]							
25	0.39	91%	-0.84	0.46	-1.09	-1.03	-0.93	-0.75	-0.67	-0.63	-0.84	0.15	-329	185	-0.75	0.40
75	0.82	77%	-0.57	0.39	-0.83	-0.77	-0.67	-0.48	-0.40	-0.34	-0.58	0.16	-467	326	-0.51	0.34
125	1.52	84%	-0.35	0.26	-0.60	-0.55	-0.45	-0.27	-0.20	-0.16	-0.36	0.14	-532	399	-0.31	0.22
175	3.13	91%	-0.24	0.16	-0.46	-0.40	-0.32	-0.13	0.00	0.08	-0.22	0.16	-741	521	-0.21	0.14
225	1.22	76%	0.00	0.33	-0.27	-0.21	-0.11	0.09	0.19	0.27	-0.01	0.16	-4	400	0.00	0.29
275	1.30	63%	0.10	0.39	-0.06	-0.02	0.06	0.16	0.25	0.34	0.11	0.14	125	502	0.05	0.22
325	2.16	54%	0.12	0.34	-0.04	0.00	0.06	0.18	0.28	0.38	0.13	0.13	253	743	0.06	0.19
375	0.50	20%	0.15	1.43	-0.03	0.01	0.07	0.29	0.40	0.45	0.18	0.15	77	713	0.09	0.80
425	0.30	0%	0.15	2.87									46	860	0.09	1.58
475	0.03	0%	0.15	2.87									5	85	0.09	1.58
<b>Overall</b>	<b>11.37</b>	<b>72%</b>	<b>-0.14</b>	<b>0.15</b>									<b>-1567</b>	<b>1671</b>	<b>-0.14</b>	<b>0.10</b>

**Table S21**

Site 20; NZ-S; Yuzhny Island

Elevation [m a.s.l.]	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	Percentiles of elevation change						Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
					5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]						
175	0.02	0%	-2.99	1.49								-64		33	-2.66	1.27
225	0.33	0%	-2.99	1.49								-988		504	-2.66	1.27
275	0.55	40%	-2.99	0.75	-3.43	-3.30	-3.14	-2.86	-2.78	-2.72	-3.01	0.21	-1634	440	-2.66	0.61
325	1.30	58%	-2.70	0.36	-3.38	-3.17	-2.89	-2.54	-2.43	-2.38	-2.75	0.33	-3515	587	-2.40	0.27
375	3.03	49%	-2.22	0.27	-2.69	-2.57	-2.38	-2.08	-1.96	-1.90	-2.25	0.25	-6711	1062	-1.97	0.20
425	4.87	40%	-1.80	0.25	-2.43	-2.21	-1.95	-1.66	-1.55	-1.48	-1.84	0.27	-8776	1516	-1.60	0.19
475	6.59	47%	-1.52	0.19	-1.97	-1.86	-1.70	-1.35	-1.23	-1.16	-1.54	0.25	-10029	1604	-1.35	0.14
525	5.00	54%	-1.26	0.19	-1.66	-1.56	-1.39	-1.11	-0.91	-0.78	-1.25	0.26	-6278	1155	-1.12	0.15
575	5.37	58%	-1.17	0.18	-1.55	-1.48	-1.33	-1.02	-0.82	-0.71	-1.16	0.25	-6283	1134	-1.04	0.13
625	5.78	62%	-1.06	0.16	-1.42	-1.35	-1.22	-0.85	-0.66	-0.56	-1.03	0.27	-6120	1113	-0.94	0.12
675	7.58	66%	-0.83	0.13	-1.25	-1.13	-0.98	-0.68	-0.51	-0.38	-0.83	0.25	-6297	1187	-0.74	0.10
725	6.28	71%	-0.80	0.14	-1.21	-1.12	-0.97	-0.60	-0.41	-0.29	-0.78	0.28	-5022	985	-0.71	0.10
775	2.87	34%	-0.55	0.37	-1.25	-1.14	-0.90	-0.36	-0.18	-0.08	-0.62	0.36	-1582	1064	-0.49	0.32
825	1.80	20%	-0.54	0.67	-1.18	-1.09	-0.74	-0.35	-0.11	0.16	-0.54	0.40	-974	1208	-0.48	0.58
875	0.98	20%	-0.53	0.89	-0.81	-0.75	-0.66	-0.38	-0.21	0.03	-0.49	0.25	-519	873	-0.47	0.78
925	0.32	14%	-0.37	1.92	-0.61	-0.54	-0.47	-0.31	-0.24	-0.21	-0.39	0.12	-118	608	-0.33	1.70
975	0.12	0%	-0.37	3.84								-46		476	-0.33	3.41
1025	0.05	0%	-0.37	3.84								-20		209	-0.33	3.41
1075	0.04	0%	-0.37	3.84								-14		146	-0.33	3.41
1125	0.00	0%	-0.37	3.84								-2		16	-0.33	3.41
<b>Overall</b>	<b>52.87</b>	<b>53%</b>	<b>-1.23</b>	<b>0.09</b>								-64993		4129	<b>-1.09</b>	<b>0.08</b>

**Table S22**  
Site 21; NZ-S; Rusanov Valley

Elevation [m a.s.l.]	Percentiles of elevation change														Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]						
125	0.06	0%	-2.57	2.47									-158	153	-2.29	2.15		
175	0.15	55%	-2.57	0.71	-3.04	-2.97	-2.79	-2.34	-2.14	-2.03	-2.55	0.33	-384	112	-2.29	0.58		
225	0.46	0%	-2.36	2.22									-1080	1024	-2.10	1.85		
275	1.33	8%	-2.15	0.81	-3.63	-3.57	-3.22	-1.93	-1.81	-1.69	-2.39	0.82	-2850	1114	-1.91	0.68		
325	2.35	14%	-1.66	0.45	-2.48	-2.35	-2.04	-1.41	-1.25	-1.19	-1.75	0.46	-3890	1136	-1.47	0.37		
375	3.83	29%	-1.69	0.22	-2.18	-2.09	-1.93	-1.38	-0.94	-0.72	-1.61	0.44	-6450	1073	-1.50	0.17		
425	7.07	46%	-1.53	0.12	-1.87	-1.81	-1.69	-1.19	-0.89	-0.64	-1.43	0.38	-10802	1366	-1.36	0.07		
475	9.39	58%	-1.34	0.08	-1.64	-1.58	-1.47	-1.18	-0.65	-0.53	-1.26	0.33	-12589	1487	-1.19	0.05		
525	7.69	46%	-1.19	0.11	-1.51	-1.44	-1.33	-0.86	-0.47	-0.35	-1.05	0.43	-9157	1267	-1.06	0.08		
575	5.95	37%	-1.12	0.15	-1.35	-1.32	-1.26	-0.90	-0.75	-0.63	-1.06	0.24	-6677	1125	-1.00	0.11		
625	4.23	34%	-0.77	0.19	-1.20	-1.09	-0.89	-0.69	-0.62	-0.57	-0.80	0.20	-3269	880	-0.69	0.16		
675	2.29	56%	-0.73	0.18	-1.01	-0.95	-0.82	-0.65	-0.56	-0.20	-0.72	0.20	-1661	437	-0.65	0.14		
725	1.25	24%	-0.78	0.45	-1.03	-0.95	-0.86	-0.67	-0.32	-0.15	-0.72	0.24	-972	569	-0.69	0.38		
775	0.67	10%	-0.36	1.04	-0.72	-0.67	-0.53	-0.17	-0.07	-0.01	-0.35	0.23	-239	698	-0.32	0.92		
825	0.48	0%	-0.36	2.08									-171	999	-0.32	1.84		
875	0.28	0%	-0.36	2.08									-98	574	-0.32	1.84		
925	0.16	0%	-0.36	2.08									-57	334	-0.32	1.84		
975	0.02	0%	-0.36	2.08									-6	36	-0.32	1.84		
<b>Overall</b>	<b>47.65</b>	<b>40%</b>	<b>-1.27</b>	<b>0.09</b>									<b>-60511</b>	<b>3864</b>	<b>-1.13</b>	<b>0.08</b>		





Table S25

Site 24; NZ-N; Borzov Bay

Elevation [m a.s.l.]	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	Percentiles of elevation change							Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
					5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]					
75	0.02	0%	-1.76	1.70								-29	28	-1.56	1.48	
125	0.12	80%	-1.76	0.85	-1.97	-1.93	-1.86	-1.64	-1.52	-1.44	-1.73	0.17	-214	106	-1.56	0.72
175	0.19	90%	-1.75	0.59	-1.95	-1.90	-1.83	-1.67	-1.57	-1.51	-1.74	0.15	-324	114	-1.56	0.49
225	0.43	83%	-1.60	0.44	-2.57	-2.51	-2.37	-1.42	-1.33	-1.26	-1.83	0.50	-688	200	-1.42	0.36
275	0.64	88%	-1.41	0.33	-2.39	-2.27	-1.97	-1.16	-0.96	-0.82	-1.52	0.52	-904	231	-1.26	0.27
325	1.16	91%	-1.20	0.23	-1.93	-1.80	-1.40	-1.06	-0.93	-0.86	-1.27	0.32	-1392	305	-1.07	0.18
375	1.51	99%	-1.03	0.18	-1.30	-1.22	-1.12	-0.93	-0.79	-0.70	-1.02	0.18	-1552	318	-0.91	0.14
425	2.27	92%	-0.76	0.16	-0.95	-0.91	-0.85	-0.64	-0.50	-0.44	-0.73	0.17	-1722	412	-0.68	0.13
475	2.37	96%	-0.62	0.15	-1.11	-0.97	-0.75	-0.41	-0.27	-0.21	-0.61	0.26	-1469	390	-0.55	0.12
525	1.87	97%	-0.50	0.17	-0.93	-0.74	-0.64	-0.35	-0.21	-0.15	-0.50	0.24	-930	328	-0.44	0.14
575	1.01	95%	-0.41	0.24	-1.04	-0.94	-0.57	-0.27	-0.15	-0.07	-0.46	0.29	-413	244	-0.36	0.20
625	0.45	95%	-0.33	0.35	-0.79	-0.61	-0.43	-0.23	-0.14	-0.08	-0.35	0.20	-150	160	-0.29	0.31
<b>Overall</b>	<b>12.03</b>	<b>94%</b>	<b>-0.81</b>	<b>0.08</b>									<b>-9787</b>	<b>910</b>	<b>-0.72</b>	<b>0.07</b>

Table S26

Site 25; NZ-N; Inostrantsev Bay

Elevation [m a.s.l.]	Percentiles of elevation change														Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]			
125	0.12	88%	-2.53	0.46	-3.19	-3.10	-2.83	-2.33	-2.05	-1.77	-2.53	0.44	-293	61	-2.25	0.36			
175	0.21	99%	-2.01	0.29	-3.04	-2.77	-2.34	-1.77	-1.55	-1.37	-2.07	0.47	-421	74	-1.79	0.22			
225	0.39	90%	-1.36	0.24	-1.84	-1.74	-1.58	-1.16	-0.93	-0.78	-1.35	0.32	-535	109	-1.21	0.19			
275	0.67	89%	-1.22	0.19	-1.56	-1.48	-1.36	-1.07	-0.92	-0.83	-1.21	0.23	-821	151	-1.08	0.14			
325	0.81	91%	-0.77	0.17	-1.16	-1.09	-0.93	-0.61	-0.45	-0.31	-0.76	0.26	-619	147	-0.68	0.13			
375	1.02	90%	-0.53	0.15	-0.94	-0.82	-0.68	-0.37	-0.26	-0.19	-0.53	0.24	-546	163	-0.48	0.12			
425	1.11	93%	-0.32	0.14	-0.89	-0.74	-0.54	-0.22	-0.14	-0.08	-0.39	0.26	-361	159	-0.29	0.12			
475	1.14	90%	-0.35	0.14	-0.71	-0.65	-0.50	-0.19	-0.06	0.01	-0.34	0.24	-397	168	-0.31	0.12			
525	1.30	94%	-0.30	0.13	-0.54	-0.49	-0.41	-0.18	-0.03	0.07	-0.28	0.20	-394	168	-0.27	0.11			
575	1.09	98%	-0.30	0.13	-0.60	-0.52	-0.41	-0.15	0.01	0.10	-0.28	0.22	-325	145	-0.26	0.11			
625	1.27	100%	-0.24	0.12	-0.52	-0.47	-0.38	-0.07	0.03	0.10	-0.23	0.20	-303	152	-0.21	0.10			
675	0.84	100%	-0.09	0.14	-0.48	-0.44	-0.27	0.04	0.15	0.22	-0.12	0.22	-77	121	-0.08	0.12			
725	0.41	90%	-0.12	0.24	-0.40	-0.33	-0.21	0.01	0.28	0.37	-0.08	0.22	-48	98	-0.10	0.21			
775	0.20	49%	-0.12	0.64	-0.44	-0.38	-0.20	-0.06	-0.01	0.04	-0.15	0.14	-24	127	-0.11	0.57			
<b>Overall</b>	<b>10.58</b>	<b>93%</b>	<b>-0.49</b>	<b>0.05</b>									<b>-5162</b>	<b>508</b>	<b>-0.43</b>	<b>0.04</b>			

Table S27

Site 26; FJ-SW; Prince George Island

Elevation [m a.s.l.]	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	Percentiles of elevation change							Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
					5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]					
25	0.05	85%	-0.69	0.74	-0.94	-0.88	-0.81	-0.61	-0.47	-0.33	-0.68	0.17	-35	37	-0.62	0.65
75	1.89	87%	-0.42	0.12	-0.75	-0.68	-0.56	-0.30	-0.20	-0.15	-0.43	0.18	-801	234	-0.38	0.09
125	6.73	90%	-0.41	0.06	-0.73	-0.68	-0.58	-0.32	-0.25	-0.22	-0.45	0.16	-2778	483	-0.37	0.04
175	4.76	100%	-0.37	0.06	-0.57	-0.50	-0.43	-0.31	-0.25	-0.22	-0.37	0.10	-1752	333	-0.33	0.05
225	3.00	100%	-0.30	0.07	-0.41	-0.39	-0.35	-0.26	-0.22	-0.20	-0.30	0.06	-913	241	-0.27	0.06
275	3.31	100%	-0.19	0.07	-0.29	-0.27	-0.23	-0.15	-0.11	-0.09	-0.19	0.06	-620	243	-0.17	0.06
325	1.33	98%	-0.17	0.12	-0.26	-0.24	-0.21	-0.14	-0.11	-0.09	-0.18	0.05	-231	159	-0.16	0.10
<b>Overall</b>	<b>21.06</b>	<b>98%</b>	<b>-0.34</b>	<b>0.04</b>									<b>-7130</b>	<b>737</b>	<b>-0.30</b>	<b>0.03</b>

Table S28

Site 27; FJ-SW; Markham Sound

Elevation	Percentiles of elevation change													Standard deviation	Volume change rate	Uncertainty of volume change rate	Mass balance	Uncertainty of mass balance	
	Total area	Surveyed area	Median elevation change	Uncertainty of median elevation change	5th		10th		25th		75th		90th		95th				
					[m a.s.l.]	[km <sup>2</sup> ]	[%]	[m a <sup>-1</sup> ]	[m w.e. a <sup>-1</sup> ]	[m w.e. a <sup>-1</sup> ]									
25	2.94	79%	-0.72	0.11	-0.95	-0.90	-0.80	-0.65	-0.53	-0.44	-0.71	0.15	-2107	388	-0.64	0.08			
75	3.82	96%	-0.62	0.08	-0.84	-0.79	-0.72	-0.54	-0.43	-0.34	-0.62	0.15	-2382	374	-0.56	0.05			
125	4.12	93%	-0.58	0.08	-0.74	-0.71	-0.65	-0.47	-0.36	-0.29	-0.55	0.15	-2373	393	-0.51	0.06			
175	4.43	89%	-0.49	0.08	-0.68	-0.63	-0.57	-0.38	-0.28	-0.22	-0.47	0.15	-2193	407	-0.44	0.06			
225	2.53	61%	-0.31	0.16	-0.48	-0.44	-0.37	-0.24	-0.15	-0.09	-0.30	0.13	-779	399	-0.27	0.13			
275	2.99	76%	-0.31	0.11	-0.52	-0.48	-0.41	-0.18	-0.06	0.02	-0.29	0.17	-937	353	-0.28	0.10			
325	2.90	80%	-0.33	0.11	-0.50	-0.45	-0.38	-0.25	-0.16	-0.11	-0.31	0.15	-944	329	-0.29	0.09			
375	2.38	80%	-0.31	0.12	-0.54	-0.49	-0.38	-0.24	-0.17	-0.12	-0.31	0.13	-741	296	-0.28	0.10			
425	0.63	89%	-0.23	0.20	-0.35	-0.32	-0.27	-0.18	-0.15	-0.13	-0.23	0.07	-143	130	-0.20	0.18			
<b>Overall</b>	<b>26.74</b>	<b>84%</b>	<b>-0.47</b>	<b>0.04</b>									<b>-12599</b>	<b>1052</b>	<b>-0.42</b>	<b>0.04</b>			

Table S29

Site 28; FJ-NE; Wilczek Island

Elevation [m a.s.l.]	Percentiles of elevation change														Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	5th	10th	25th	75th	90th	95th	Mean	Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]			
					[m a <sup>-1</sup> ]														
75	0.15	63%	-0.36	1.04	-0.49	-0.47	-0.42	-0.28	-0.19	-0.17	-0.35	0.11	-53	154	-0.32	0.92			
125	0.88	88%	-0.42	0.30	-0.57	-0.54	-0.49	-0.34	-0.25	-0.19	-0.41	0.12	-373	264	-0.38	0.26			
175	0.90	87%	-0.36	0.30	-0.52	-0.49	-0.44	-0.25	-0.09	0.01	-0.32	0.16	-323	269	-0.32	0.26			
225	1.00	75%	-0.25	0.33	-0.45	-0.41	-0.34	-0.14	-0.05	0.03	-0.23	0.15	-248	334	-0.22	0.29			
275	1.42	80%	-0.14	0.26	-0.33	-0.30	-0.23	-0.06	0.02	0.09	-0.14	0.13	-199	371	-0.12	0.23			
325	1.27	65%	-0.14	0.34	-0.28	-0.24	-0.19	-0.09	0.00	0.09	-0.13	0.12	-183	437	-0.13	0.30			
375	1.56	64%	-0.12	0.32	-0.24	-0.21	-0.17	-0.07	-0.01	0.07	-0.11	0.11	-180	492	-0.10	0.28			
425	1.88	72%	-0.07	0.26	-0.22	-0.19	-0.14	0.02	0.10	0.15	-0.06	0.11	-125	482	-0.06	0.23			
475	0.77	92%	0.01	0.30	-0.09	-0.07	-0.03	0.05	0.09	0.11	0.01	0.06	8	229	0.01	0.16			
525	0.06	100%	-0.05	0.83	-0.16	-0.13	-0.09	-0.01	0.03	0.06	-0.05	0.06	-3	47	-0.04	0.74			
<b>Overall</b>	<b>9.90</b>	<b>76%</b>	<b>-0.17</b>	<b>0.11</b>									<b>-1678</b>	<b>1066</b>	<b>-0.15</b>	<b>0.09</b>			

Table S30

Site 29; FJ-NE; Jackson Island

Elevation [m a.s.l.]	Perenctiles of elevation change														Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]
	Total area [km <sup>2</sup> ]	Surveyed area [%]	Median elevation change [m a <sup>-1</sup> ]	Uncertainty of median elevation change [m a <sup>-1</sup> ]	5th [m a <sup>-1</sup> ]	10th [m a <sup>-1</sup> ]	25th [m a <sup>-1</sup> ]	75th [m a <sup>-1</sup> ]	90th [m a <sup>-1</sup> ]	95th [m a <sup>-1</sup> ]	Mean [m a <sup>-1</sup> ]	Standard deviation [m a <sup>-1</sup> ]	Volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Uncertainty of volume change rate [10 <sup>3</sup> m <sup>3</sup> a <sup>-1</sup> ]	Mass balance [m w.e. a <sup>-1</sup> ]	Uncertainty of mass balance [m w.e. a <sup>-1</sup> ]			
25	1.38	50%	-0.19	0.52	-0.44	-0.38	-0.29	-0.07	0.11	0.27	-0.16	0.20	-266	715	-0.17	0.46			
75	3.67	39%	-0.19	0.38	-0.42	-0.38	-0.30	0.03	0.20	0.25	-0.13	0.23	-710	1397	-0.17	0.33			
125	5.51	79%	0.05	0.17	-0.23	-0.17	-0.07	0.15	0.21	0.25	0.03	0.15	269	916	0.03	0.09			
175	4.09	87%	0.09	0.17	-0.16	-0.11	-0.01	0.17	0.23	0.26	0.08	0.13	385	699	0.05	0.10			
225	1.37	81%	-0.04	0.32	-0.19	-0.16	-0.11	0.10	0.27	0.33	0.01	0.16	-55	442	-0.04	0.29			
275	1.37	81%	-0.05	0.32	-0.22	-0.19	-0.14	0.11	0.19	0.24	-0.02	0.16	-71	442	-0.05	0.29			
325	1.07	97%	-0.08	0.29	-0.21	-0.19	-0.14	0.05	0.14	0.18	-0.05	0.13	-84	309	-0.07	0.26			
375	0.72	100%	0.01	0.34	-0.15	-0.12	-0.07	0.14	0.20	0.23	0.03	0.12	8	241	0.01	0.19			
425	0.37	87%	0.01	0.57	-0.11	-0.09	-0.04	0.05	0.10	0.13	0.01	0.08	3	211	0.00	0.31			
475	0.01	0%	0.01	1.13									0	12	0.00	0.62			
Overall	19.55	73%	-0.03	0.11									-521	2092	-0.04	0.09			