

Table 1: Surface mass balance measurements (in m w.e.) along the K-transect at 67°N. Distances are presented in kilometres from the western ice margin. Values at S4 are recalculated to a height of 383 m. a.s.l. Bold values are outside the  $2\sigma$  interval with respect to the 20 year mean (1990-2010) and standard deviation.

	Site 4 383 (m a.s.l.) 3 km	Site 5 490 (m a.s.l.) 6 km	SHR 710 (m a.s.l.) 14 km	Site 6 1010 (m a.s.l.) 37 km	Site 7 1110 (m a.s.l.) 52 km	Site 8 1260 (m a.s.l.) 63 km	Site 9 1520 (m a.s.l.) 91 km	Site 10 1850 (m a.s.l.) 143 km
1990-1991	-4.23	-3.64	-3.20	-2.77	-1.75	-1.47	-0.26	
1991-1992	-2.14	-2.03	-1.52	-1.02	-0.30	0.08	0.46	
1992-1993	-3.05	-3.04	-2.71	-1.54	-1.60	-0.14	0.23	
1993-1994	-3.58	-3.49	-3.08	-1.37	-1.06	-0.45	0.10	
1994-1995	-4.41	-4.00	-3.52	-1.70	-1.78	-1.09	-0.05	0.01
1995-1996	-4.04	-2.87	-1.95	-0.93	-0.47	-0.03	0.40	0.49
1996-1997	-4.40	-3.87	-3.30	-2.84	-1.64	-0.88	-0.02	0.27
1997-1998	-4.08	-4.08	-3.22	-1.59	-1.57	-0.97	-0.01	0.29
1998-1999	-4.55	-3.77	-3.35	-1.46	-1.30	-0.86	-0.17	0.06
1999-2000	-4.17	-3.31	-2.70	-1.26	-1.05	-0.51	-0.06	0.26
2000-2001	-4.58	-3.66	-3.16	-1.03	-0.98	-0.49	0.16	0.57
2001-2002	-4.23	-3.29	-2.95	-1.30	-1.55	-0.93	0.17	0.29

2002-2003	-5.04	-3.89	-3.29	-1.97	-1.77	-1.07	-0.53	0.11
2003-2004	-4.68	-3.99	-3.53	-1.47	-1.73	-0.66	0.01	0.45
2004-2005	-4.28	-3.63	-3.24	-1.28	-1.57	-0.17	0.08	0.45
2005-2006	-4.17	-3.70	-2.97	-1.50	-1.13	-0.23	0.08	0.39
2006-2007	-4.7	-4.19	-3.55	-2.00	-2.30	-1.16	-0.68	0.04
2007-2008	-4.29	-4.10	-3.54	-1.48	-1.36	-0.44	0.02	0.21
2008-2009	-3.97	-3.38	-2.84	-1.34	-1.47	-0.22	0.23	0.20
2009-2010	-5.9	-5.12	-4.39	-2.95	-2.99	-1.93	-1.01	0.20
Mean 90-10	-4.22	-3.65	-3.10	-1.58	-1.45	-0.64	-0.03	0.27
standard deviation	0.76	0.63	0.62	0.54	0.60	0.50	0.36	0.17
2010-2011	-3.81	-4.23	-3.21	-2.08	-1.59	-1.89	-0.84	