

Table S1. Values with errors shown in Figure 4. EXEM and BOYM are data from the weighing bucket gauge. FRLM and HOEM are data from the ultrasonic distance ranger. Errors are based on 0.5 mm w.e. error for each snowfall.

Snow Year	Spring				Summer				Fall			
	EXEM	FRLM	HOEM	BOYM	EXEM	FRLM	HOEM	BOYM	EXEM	FRLM	HOEM	BOYM
1994								0 ± 0				1.4 ± 1
1995								0 ± 0				0 ± 0
1996				0 ± 0				1.1 ± 0.5				0 ± 0
1997				1 ± 1				0 ± 0				4.4 ± 1
1998								0 ± 0				2.1 ± 1.5
1999				0.7 ± 0.5				0 ± 0	4.3 ± 1.5			2.5 ± 1
2000	3.7 ± 2.5			2 ± 1.5	1.3 ± 1			0 ± 0	10.3 ± 5			2.5 ± 1.5
2001	9.6 ± 2			3 ± 1.5	0 ± 0			0 ± 0	0 ± 0			1.2 ± 1
2002	0 ± 0			4.6 ± 1.5	0 ± 0	0 ± 0		2.4 ± 0.5	3.3 ± 1.5	0 ± 0		1.8 ± 1
2003	8.7 ± 2.5	5.3 ± 3.5		1.4 ± 0.5	5.5 ± 3	0.9 ± 1.5		0 ± 0	8.6 ± 3	0 ± 0		0.8 ± 0.5
2004	4.7 ± 1	9.3 ± 5.5		0 ± 0	2.7 ± 1	0.7 ± 0.5		2.2 ± 1	0 ± 0	1 ± 1		3.4 ± 2
2005	0 ± 0	1.5 ± 1.5		0 ± 0	0 ± 0	0 ± 0		0 ± 0	0 ± 0	13.7 ± 8.5		8.4 ± 3
2006	0 ± 0	0 ± 0		1.7 ± 1	0 ± 0	0 ± 0		0 ± 0	8.6 ± 2.5	18.8 ± 11.5	0 ± 0	5.2 ± 1.5
2007	7.1 ± 3	21.2 ± 9.5	0 ± 0	4.9 ± 2	2.1 ± 1	0 ± 0	1.9 ± 1	9.4 ± 1	2.4 ± 1.5	3.8 ± 3.5	0 ± 0	0 ± 0
2008	4 ± 2	1.2 ± 1	0 ± 0	0 ± 0	1.4 ± 1	0 ± 0	0 ± 0	0 ± 0	6.4 ± 2	8.8 ± 5	2 ± 1	5 ± 2
2009	9.6 ± 3.5	11.8 ± 7	1.5 ± 1	1 ± 0.5	0 ± 0	4 ± 1	0 ± 0	2.8 ± 1	0 ± 0	1.2 ± 1	2.9 ± 2	0.6 ± 0.5
2010	0 ± 0	5.8 ± 2.5	1.4 ± 1	1.5 ± 1	2.2 ± 1.5	0.4 ± 0.5	0.5 ± 0.5		11.5 ± 2.5	3.6 ± 1	0.9 ± 0.5	
2011	7.5 ± 4	5.2 ± 2.5	1.3 ± 0.5		0 ± 0	0 ± 0	2.8 ± 1.5		2.3 ± 1	2.7 ± 1.5		2.4 ± 0.5
2012	5.2 ± 2	3.7 ± 3		2.4 ± 1.5	0.6 ± 0.5	0 ± 0	3.7 ± 1	1.8 ± 1	4.5 ± 2	0.6 ± 0.5	3.2 ± 1.5	2.1 ± 1
2013	4.4 ± 1	1.6 ± 1	3.6 ± 1.5	4.2 ± 1	0 ± 0	0 ± 0	0 ± 0		1.4 ± 1		0.9 ± 0.5	
2014	4.1 ± 1.5		1.7 ± 1		0 ± 0	0 ± 0		0 ± 0	0.5 ± 0.5	4.1 ± 4.5	0.5 ± 0.5	0.7 ± 0.5
2015	3.5 ± 1	2.7 ± 3	1 ± 0.5	1.1 ± 0.5	0 ± 0	0 ± 0	0 ± 0	0 ± 0	3.3 ± 1	0 ± 0	1.6 ± 1	0 ± 0
2016	0.5 ± 0.5		6.1 ± 3.5		0 ± 0	1.9 ± 1	0 ± 0	0 ± 0	3 ± 1.5	0.7 ± 0.5	0 ± 0	0 ± 0
2017	5.8 ± 1	1.2 ± 1	0 ± 0	3.5 ± 2	2.1 ± 0.5	0 ± 0	1.7 ± 0.5		2.3 ± 1	7.1 ± 8	1.2 ± 1	1.2 ± 0.5

Table S2. Snow accumulation errors from this study. Error based on  $\pm 0.5$  mm w.e. for each daily measurement.

Calendar Year	EXEM weighing gauge	FRLM ultrasonic	HOEM weighing gauge	HOEM ultrasonic	BOYM weighing gauge	BOYM ultrasonic
1996					0.5	
1997					2	
1998						
1999					2	
2000	2.5				3.5	
2001	8.5				3.5	
2002					3	
2003	2				1	1
2004	8.5	10			3	
2005					3	
2006		17			2.5	
2007	2.5	18			3	
2008	7	13.5		1	2	0.5
2009	5.5	9		3.5	2	
2010		4		2	1	
2011	4	6	0.5	2		
2012	7	4.5			4	
2013	5	1	2	2	1	
2014	2.5		2	1.5		
2015	2		0.5	2.5	1	0.5
2016	3			3.5	0.5	
2017	2	9			3	