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 ±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 |  |