



# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

## SASKATOON STATION 4057180

52°09' N 106°36' W 497 m asl Estab. 1963

Preliminary **JANUARY 2017**

Day	Temperature						Degree-days			Precipitation			Relative Humidity		Station Pressure (sea level)	
	Max	Normal Max	Min	Normal Min	Mean	Normal Mean	Growing	Heating	Cooling	Weighing Gauge	Notes	Snow-on-Ground 0900h	Max ½ hr Avg	Min ½ hr Avg	Max ½ hr Avg	Min ½ hr Avg
	°C	1981-2010	°C	1981-2010	°C	1981-2010	5°C base	18°C base	18°C base	mm		cm	%	%	mbar	mbar
1	-9.9	-10.8	-23.1	-21.9	-16.5	-16.4	0.0	34.5	0.0	0.0		11	91	71	1022	1009
2	-16.8	-9.6	-29.0	-19.3	-22.9	-14.5	0.0	40.9	0.0	0.2	light snow	10	82	76	1030	1023
3	-18.7	-10.2	-30.5	-20.2	-24.6	-15.2	0.0	42.6	0.0	0.4	light snow	10	83	73	1031	1022
4	-15.6	-10.7	-20.4	-20.5	-18.0	-15.6	0.0	36.0	0.0	0.1	manual snow depth 11 cm	11	83	70	1022	1019
5	-12.7	-11.1	-19.5	-21.1	-16.1	-16.1	0.0	34.1	0.0	0.1	light snow	11	88	76	1022	1016
6	-15.3	-10.2	-23.6	-19.1	-19.5	-14.7	0.0	37.5	0.0	0.0		10	87	76	1029	1018
7	-15.3	-10.4	-27.6	-18.9	-21.5	-14.7	0.0	39.5	0.0	0.1	light snow	10	86	72	1030	1021
8	-16.4	-11.2	-28.3	-19.7	-22.4	-15.5	0.0	40.4	0.0	0.2	light snow	10	84	69	1025	1020
9	-18.1	-12.2	-25.6	-21.3	-21.9	-16.8	0.0	39.9	0.0	1.3	light snow	10	82	78	1020	1004
10	-18.5	-12.2	-27.6	-21.4	-23.1	-16.8	0.0	41.1	0.0	0.1	light snow	12	82	76	1009	1004
11	-8.6	-10.8	-30.7	-19.9	-19.7	-15.4	0.0	37.7	0.0	0.5	light snow	12	91	70	1009	993
12	-24.9	-9.7	-31.6	-19.6	-28.3	-14.7	0.0	46.3	0.0	0.0		11	71	54	1024	1010
13	-11.4	-9.7	-26.9	-20.3	-19.2	-15.0	0.0	37.2	0.0	0.0		11	79	65	1023	1017
14	-5.4	-10.3	-16.0	-20.7	-10.7	-15.5	0.0	28.7	0.0	0.0		11	81	60	1023	1013
15	-1.2	-8.1	-7.6	-18.6	-4.4	-13.4	0.0	22.4	0.0	0.0		11	85	66	1013	1009
16	-0.2	-8.7	-8.8	-18.2	-4.5	-13.5	0.0	22.5	0.0	0.0		11	86	61	1015	1005
17	4.7	-10.0	-4.6	-19.4	0.1	-14.7	0.0	17.9	0.0	0.0		11	84	61	1014	996
18	7.5	-8.3	-0.4	-19.2	3.6	-13.7	0.0	14.4	0.0	0.0	discontinuous snowpack	11	88	60	997	991
19	4.7	-9.9	-1.6	-20.1	1.6	-15.0	0.0	16.4	0.0	0.0	manual snow	9	91	77	994	991
20	3.2	-8.6	-2.1	-18.6	0.6	-13.6	0.0	17.4	0.0	0.0	depth 4 cm	9	95	81	993	992
21	-1.2	-9.2	-3.0	-19.1	-2.1	-14.2	0.0	20.1	0.0	0.8	light snow	9	97	90	1002	993
22	-2.5	-9.2	-8.5	-18.3	-5.5	-13.8	0.0	23.5	0.0	1.8	light snow	9	93	81	1009	1003
23	-8.4	-8.9	-11.0	-18.5	-9.7	-13.7	0.0	27.7	0.0	0.7	light snow	10	87	83	1011	1008
24	-10.6	-10.3	-14.8	-19.9	-12.7	-15.1	0.0	30.7	0.0	0.6	light snow	12	88	74	1017	1011
25	-8.6	-9.5	-16.0	-19.8	-12.3	-14.7	0.0	30.3	0.0	0.0	manual snow	12	89	69	1019	1017
26	-4.7	-8.4	-16.2	-20.1	-10.5	-14.2	0.0	28.5	0.0	0.1		11	91	74	1019	1015
27	2.5	-8.7	-6.8	-19.8	-2.2	-14.3	0.0	20.2	0.0	0.0		11	89	66	1017	1015
28	3.2	-10.3	-2.6	-19.8	0.3	-15.1	0.0	17.7	0.0	0.1	light rain	11	85	68	1017	1012
29	5.7	-9.8	-3.0	-20.6	1.4	-15.2	0.0	16.6	0.0	0.0		8	84	60	1012	1001
30	2.2	-7.3	-1.2	-18.2	0.5	-12.8	0.0	17.5	0.0	1.1	light rain / snow	9	92	73	1009	1001
31	-1.2	-8.6	-18.7	-17.8	-10.0	-13.2	0.0	28.0	0.0	0.3	light snow	9	80	57	1024	1010
Total							0.0	908.2	0.0	8.5			Extreme / Date	Extreme / Date	Extreme / Date	Extreme / Date
Avg	-6.9	-9.8	-15.7	-19.7	-11.3	-14.7	1981-2010 Normal			15.5	Normal					
Extreme Date	7.5		-31.6				0.0	1015.1	0.0	8.5	Cumulative		97	54	1031	991
Date	18		12							15.5	Cumulative Normal		21	12	3	18

Note: Red numbers indicate manual calculation; Red cell indicate data not available

**SRC proudly recognizes the following CRS supporters:**



Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada

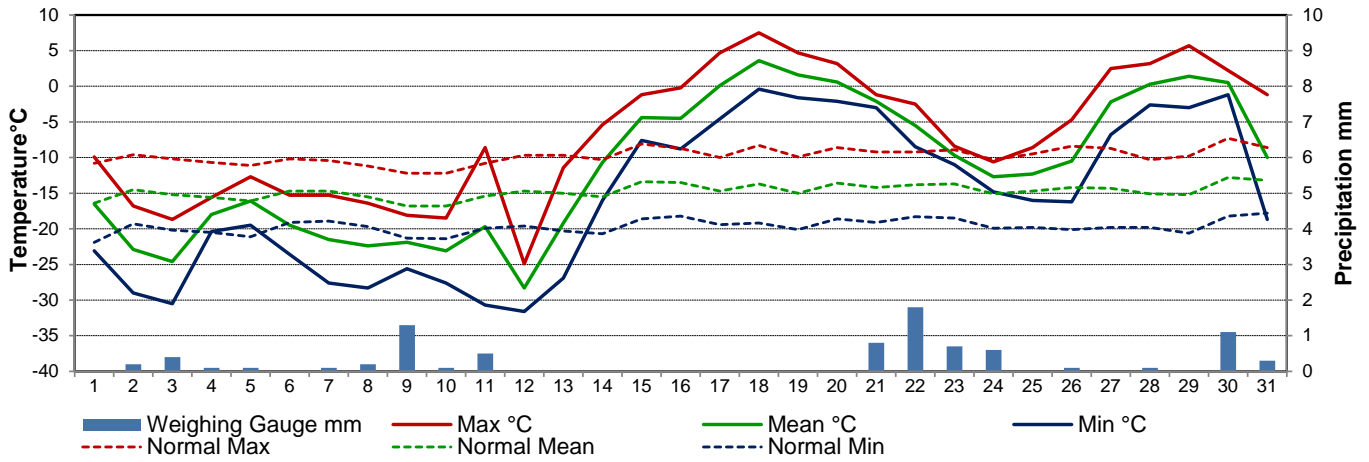


UNIVERSITY OF SASKATCHEWAN

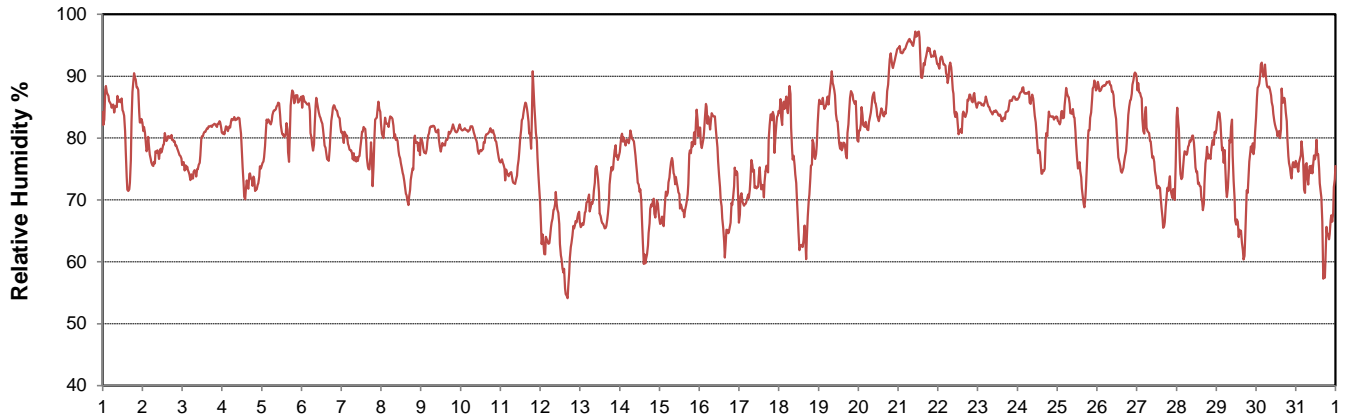


CAMPBELL SCIENTIFIC WHEN MEASUREMENTS MATTER

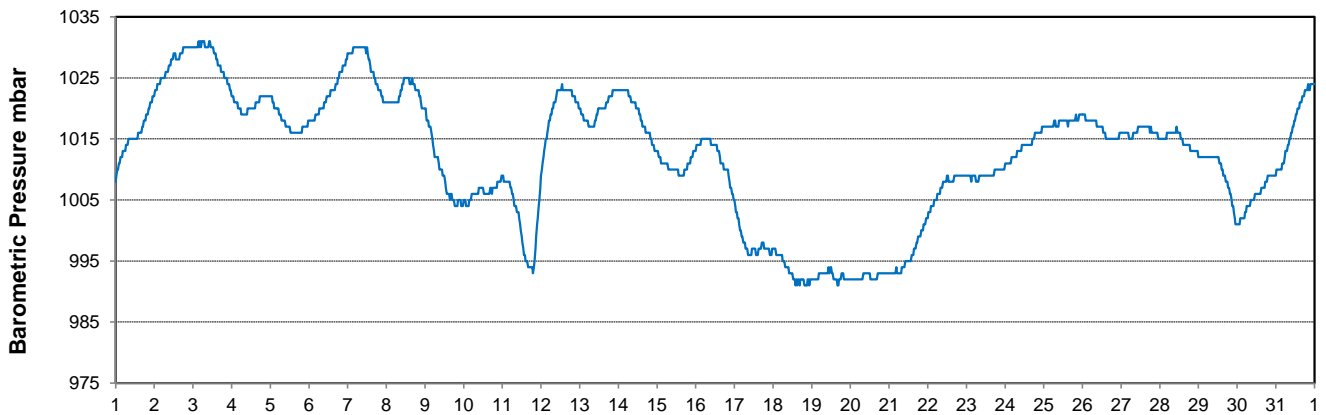
### Temperature and Precipitation for January 2017



### Relative Humidity for January 2017



### Barometric Pressure Corrected to Sea Level for January 2017





SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

**SASKATOON STATION 4057180**

52°09' N 106°36' W 497 m asl Estab. 1963

Preliminary **JANUARY 2017**

Day	Wind Gust			Soil Temperatures at 0900hrs								Soil Moisture 30 cm	Radiation				
	Max	Direction	Time	Surface	5 cm	10 cm	20 cm	50 cm	100 cm	150 cm	300 cm		0900hrs	Bright Sunshine	Possible	% Possible	Global
	km/h			°C	°C	°C	°C	°C	°C	°C	°C	%	hours	hours		MJ/m <sup>2</sup>	MJ/m <sup>2</sup>
1	23.9	NNW	16:33	-18.5	-4.5	-4.0	-3.5	-2.0	1.0	3.0	6.5	9	3.9	7.8	49.7	4.2	1.7
2	12.4	WNW	15:24	-27.0	-5.0	-4.5	-4.0	-2.0	1.0	3.0	6.5	9	6.3	7.9	80.2	4.7	1.0
3	24.1	WSW	23:30	-32.0	-6.0	-5.5	-4.5	-2.0	1.0	3.0	6.5	9	1.6	7.9	20.3	2.2	1.4
4	35.9	N	13:07	-17.5	-6.0	-5.5	-4.5	-2.5	1.0	3.0	6.5	9	0.1	7.9	1.3	2.6	2.2
5	21.7	NW	2:09	-16.0	-5.5	-5.0	-4.5	-2.5	1.0	3.0	6.5	9	5.5	7.9	69.3	3.4	1.5
6	26.5	WNW	13:41	-24.0	-5.5	-5.0	-4.5	-2.5	1.0	3.0	6.0	9	7.4	8.0	93.0	6.2	1.1
7	21.1	SE	14:39	-29.5	-6.5	-5.5	-5.0	-2.5	1.0	2.5	6.0	9	4.7	8.0	58.8	4.2	1.5
8	33.3	NNE	8:40	-18.5	-6.0	-5.5	-5.0	-2.5	1.0	2.5	6.0	9	2.1	8.0	26.2	3.6	2.2
9	21.2	NE	8:43	-21.0	-6.5	-6.0	-5.0	-2.5	1.0	2.5	6.0	9	0.0	8.1	0.0	2.1	1.7
10	24.2	WNW	1:06	-26.0	-6.0	-5.5	-5.0	-2.5	1.0	2.5	6.0	9	4.3	8.1	53.2	4.5	1.8
11	77.3	NNW	19:47	-31.0	-6.5	-6.0	-5.0	-2.5	0.5	2.5	6.0	9	1.2	8.1	14.8	3.0	2.0
12	55.7	NW	0:05	-29.5	-6.5	-6.0	-5.0	-2.5	0.5	2.5	6.0	9	7.7	8.2	94.2	5.0	1.1
13	26.5	SSE	0:26	-23.0	-7.0	-6.5	-5.5	-3.0	0.5	2.5	6.0	9	7.6	8.2	92.7	4.6	0.8
14	35.1	SW	21:12	-15.5	-6.5	-6.0	-5.5	-3.0	0.5	2.5	5.5	9	6.0	8.2	72.8	4.3	1.5
15	28.0	SW	0:23	-8.5	-5.5	-5.5	-5.0	-3.0	0.5	2.5	5.5	9	1.5	8.3	18.1	3.3	2.4
16	35.3	SW	15:02	-10.0	-5.0	-4.5	-4.5	-2.5	0.5	2.0	5.5	9	5.6	8.3	67.2	4.3	2.0
17	28.0	S	3:20	-3.0	-4.5	-4.0	-4.0	-2.5	0.5	2.0	5.5	9	4.6	8.4	55.0	3.1	1.6
18	37.8	SW	16:28	2.0	-4.0	-3.5	-3.5	-2.5	0.5	2.0	5.5	9	5.1	8.4	60.6	3.9	2.1
19	21.0	SSW	9:34	0.0	-3.0	-3.0	-3.0	-2.0	0.5	2.0	5.5	10	0.0	8.5	0.0	1.3	1.1
20	19.5	S	2:51	0.0	-2.5	-2.0	-2.5	-2.0	0.5	2.0	5.5	11	0.0	8.5	0.0	2.6	2.1
21	26.2	NNE	6:32	-3.0	-2.0	-1.5	-2.0	-1.5	0.5	2.0	5.5	11	0.0	8.6	0.0	1.3	1.1
22	38.8	NNW	7:05	-4.5	-2.0	-1.5	-1.5	-1.5	0.5	2.0	5.0	11	0.0	8.6	0.0	2.5	2.1
23	24.2	NNW	2:21	-10.0	-2.0	-2.0	-1.5	-1.0	0.5	2.0	5.0	11	0.0	8.7	0.0	2.9	2.4
24	19.5	NNW	10:58	-13.5	-2.5	-2.0	-2.0	-1.0	0.5	2.0	5.0	10	5.7	8.7	65.4	4.6	2.2
25	19.8	W	20:22	-13.5	-2.5	-2.5	-2.0	-1.0	0.5	2.0	5.0	10	8.3	8.8	94.7	4.2	1.6
26	32.4	WSW	15:18	-13.0	-3.0	-2.5	-2.5	-1.0	0.5	2.0	5.0	10	7.6	8.8	86.3	5.5	1.5
27	42.8	WNW	13:51	-2.5	-3.0	-2.5	-2.5	-1.0	0.5	2.0	5.0	10	7.2	8.9	81.2	4.2	1.2
28	30.3	WNW	3:37	-3.0	-2.5	-2.0	-2.0	-1.0	0.5	2.0	5.0	10	2.6	8.9	29.1	4.0	2.7
29	28.7	WSW	15:39	-6.5	-2.0	-2.0	-2.0	-1.0	0.5	2.0	5.0	10	7.7	9.0	85.7	4.7	2.0
30	46.8	WNW	12:46	1.0	-1.5	-1.5	-1.5	-1.0	0.5	2.0	5.0	11	1.0	9.0	11.1	3.4	2.6
31	44.7	NNE	11:30	-10.0	-1.0	-1.0	-1.0	-1.0	0.5	2.0	5.0	11	4.2	9.1	46.2	4.6	2.3
Total													119.5	259.7	46.0	115.0	54.5
Mean				-13.8	-4.3	-3.9	-3.5	-2.0	0.7	2.3	5.6	9.5	1981-2010 Normal for Radiation				
Extreme	77.3	NNW	19:47	1971- 2000 Normal for Soil Temperatures									101.0	259.0	39.0	126.9	68.7
Date	11			-8.4	-8.0	-7.1	-3.5	-0.1	1.7	4.6		No. of Bright Sunshine days = 25					

Note: Red numbers indicate manual calculation

**SRC proudly recognizes the following CRS supporters:**



Agriculture and Agri-Food Canada

Agriculture et Agroalimentaire Canada

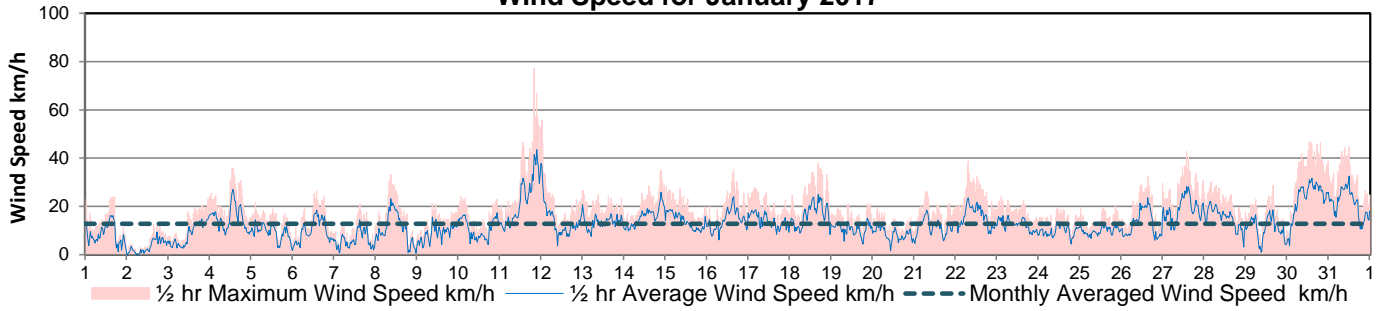


UNIVERSITY OF SASKATCHEWAN

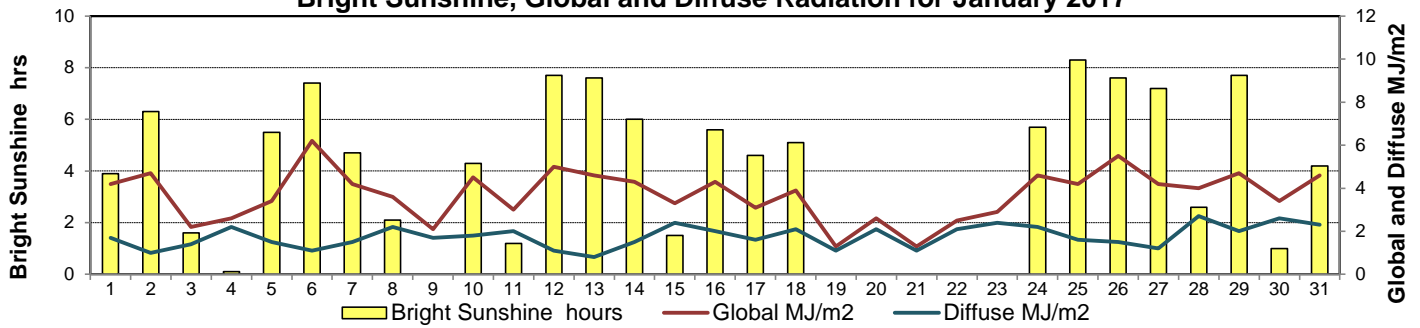


CAMPBELL SCIENTIFIC WHEN MEASUREMENTS MATTER

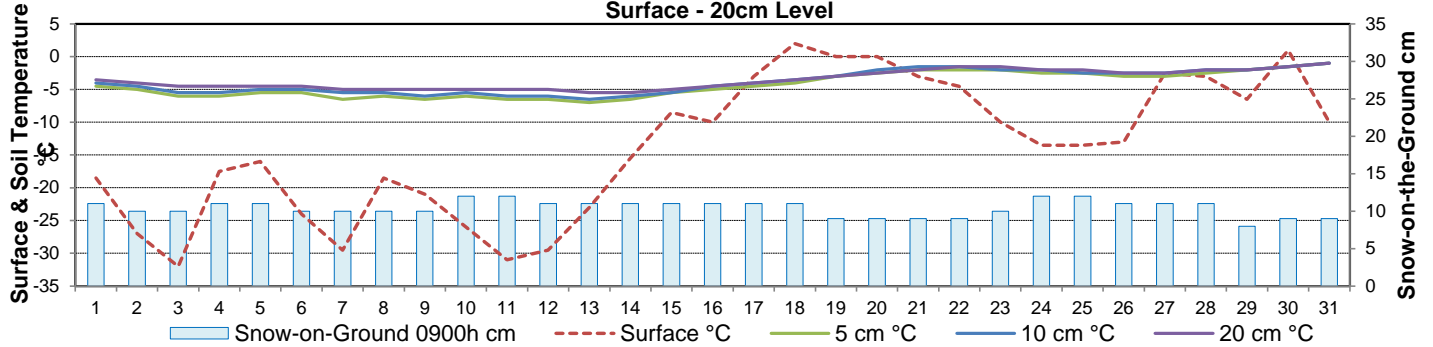
**Wind Speed for January 2017**



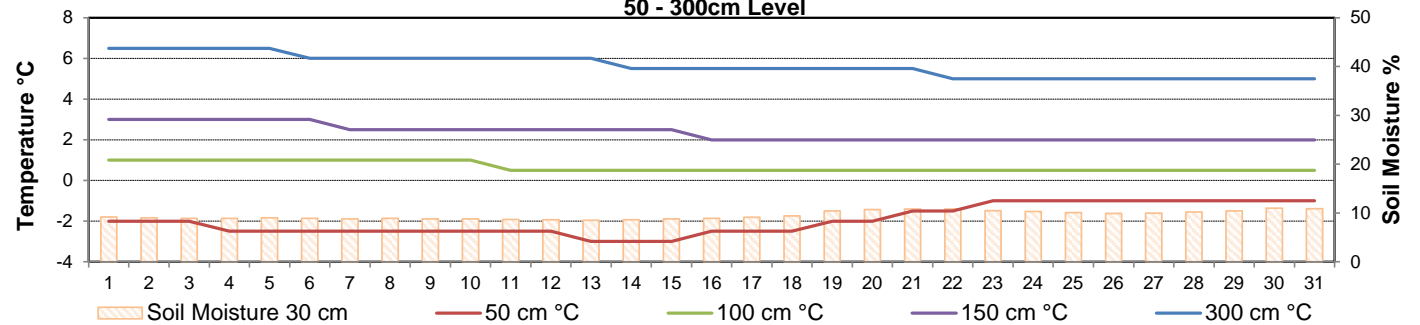
**Bright Sunshine, Global and Diffuse Radiation for January 2017**



**Soil Temperatures for January 2017  
Surface - 20cm Level**



**Soil Temperatures for January 2017  
50 - 300cm Level**





**SRC CLIMATE REFERENCE STATION DAILY DATA REPORT**

**SASKATOON STATION 4057180**

52°09' N 106°36' W 497 m asl Estab. 1963

Preliminary **JANUARY 2017**

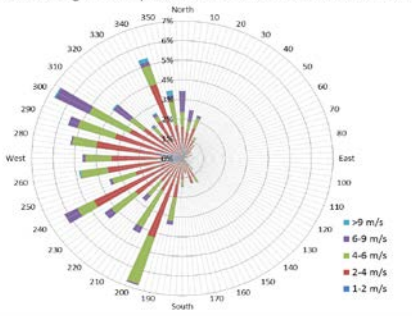
**Extreme Records for January**

Max/Min Temperature °C				Precipitation - Monthly mm				Wind Monthly km/h				CRS Bright Sunshine - Monthly			
S'toon Area	Date	Site	S'toon CRS Date	S'toon Area	Date	Site	S'toon CRS Date	S'toon Airport	Date	S'toon CRS**	Date	Hours	Year	No. of Days	Year
11.0	23/1980	SWT	8.1 15/2014	66.1	1911	SE	48.6 1969	111	11 <sup>W</sup> 1986	109	1986	146.9	1979	30	1993
-48.9	31/1893	SM	-43.9 *29/1969	0.0	2001, '89*'12	SWT SC SE	2.6 2001					45.5	2004	15	1995

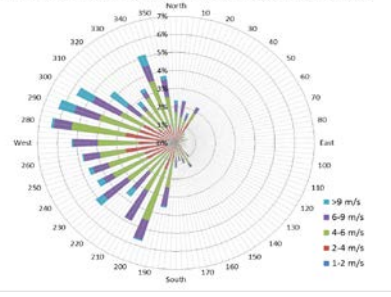
\*\*1975 forward \* more than one year

Notable Events for CRS Saskatoon - January						Saskatoon Area Stations			Glossary		
Element	Type	Day	New Record	Old Record	Year	Station	Location	Period	Symbol	Description	
Temperature	Highest Maximum Daily	17	4.7	3.4	2014	SM	NWMP	c. 1892-1901	T	Trace of precipitation	
		18	7.5	5.3	2009	SE	Eby	1901-1941	Normal	30 year average beginning with the decade	
		19	4.7	4.1	2014	US	Univ. of Sask.	1915-1964	SOG	Depth of snow-on-the-ground in cm	
		29	5.7	4.5	1989	S	Saskatoon	1941-1942	na	not available	
		28	5.7	4.5	1989	SA	Saskatoon A	1942 -	<b>Degree-days</b>		
	Highest Minimum Daily	18	-0.4	-1.5	2009	NRC	Nat. Res. Council	1952-1966	Tm	Mean Temperature	
		19	-1.6	-5.3	2015	SRC	Sask. Res. Council	1963-	Growing	(Tm-5°C); if Tm ≤ 5°C then GDD = 0	
		21	-3.0	-3.3	1968	SWT	S'toon Water Treatment Plant	1974 -	Heating	(18°C-Tm); if Tm ≤ 18°C then HDD = 0	
		28	-2.6	-5.5	1984	SC	S'toon Central Ave	1974-1989	Cooling	(Tm-18°C); if Tm ≥ 18°C then CDD = 0	
		28	-2.6	-5.5	1984	SC	S'toon Central Ave	1974-1989	Extreme Cooling	(Tm-24°C); if Tm ≥ 24°C then CDD = 0	
	Highest Average Daily	17	0.1	-0.3	2015	S1	Saskatoon 1	1976-1978	equipment maintenance 9 Jan 2017 updated datalogger operating system installed 13 Jan 2017		
		18	3.6	1.9	2009	S2	Saskatoon 2	1977-1990			
		19	1.6	-2.3	2015	K	S'toon Kernen Farm	1993-2004			
		28	0.3	-0.5	1984	KCS	S'toon Kernen Farm CS	1996-			
		29	1.4	1.3	1989	RCS	Environment Canada	2008-			
Least No. of days ≤ -2°	28	29	1993	SF	Sutherland Forestry	1943-1970					

10 minute Average Wind Speed and Direction Saskatoon Jan 2017



1/2 hr Maximum Wind Speed and Direction Saskatoon Jan 2017



FYI, yes, these wind roses look a little odd but they are correct. They speak to the dominant weather patterns (and their tracks) Saskatoon had during January (Environment Canada personal communication 2 Feb 2017)

**SRC proudly recognizes the following CRS supporters:**

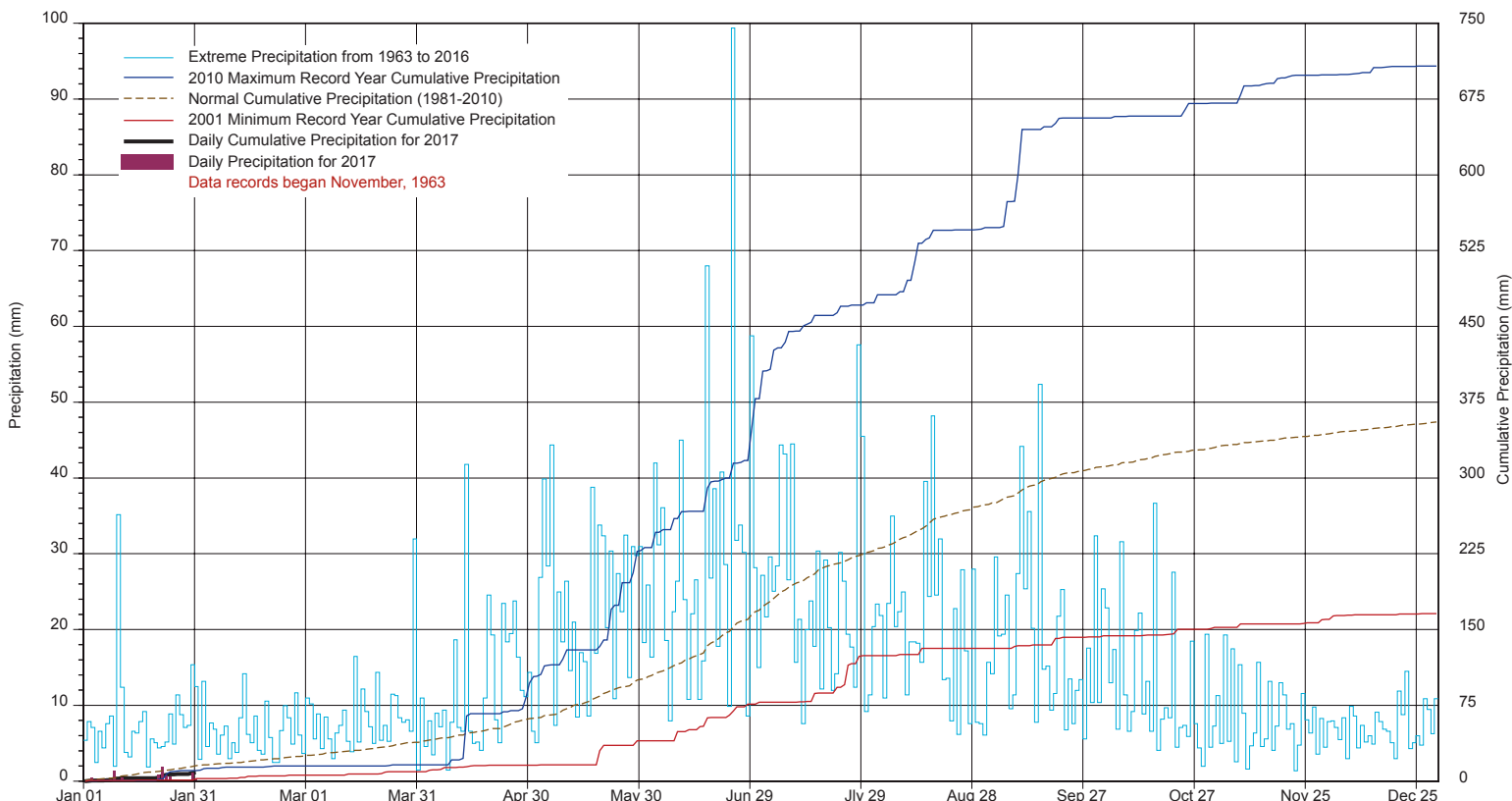


Agriculture and Agri-Food Canada

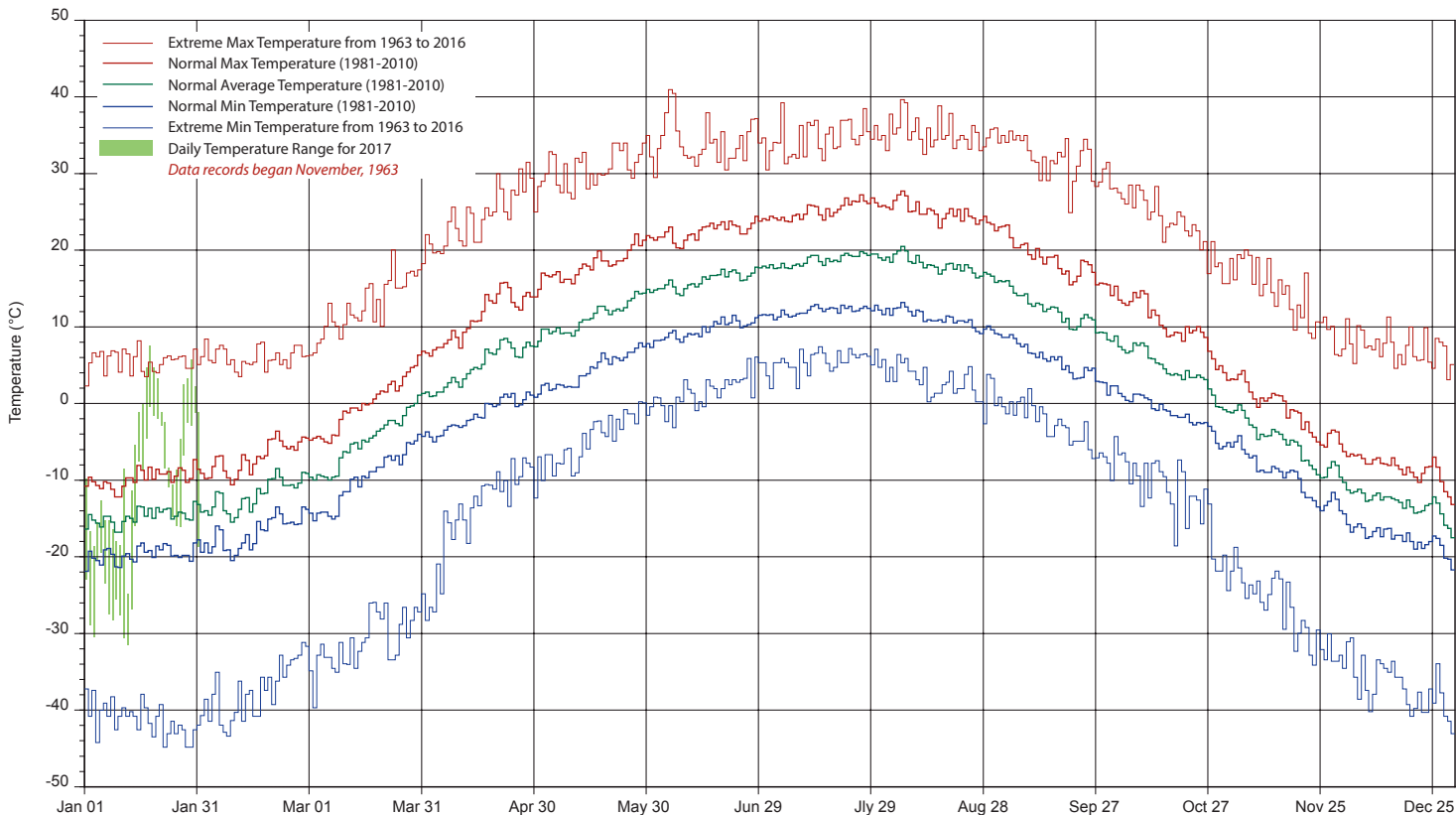
Agriculture et Agroalimentaire Canada



# SASKATCHEWAN RESEARCH COUNCIL SASKATOON CLIMATE REFERENCE STATION 2017 PRECIPITATION AND NORMALS



## 2017 TEMPERATURES AND NORMALS



SRC proudly recongnizes the following CRS supporters:

