



SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

SASKATOON STATION 4057180

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

Preliminary **FEBRUARY 2014**

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	-11.2	-9.1	-16.2	-19.4	-13.7	-14.2	0.0	31.7	0.0	0.0		13	81	69	1017	1012
2	-11.0	-9.8	-18.6	-18.2	-14.8	-14.0	0.0	32.8	0.0	0.0		13	83	68	1018	1011
3	-15.1	-9.7	-22.8	-19.5	-19.0	-14.6	0.0	37.0	0.0	0.0		13	80	65	1029	1019
4	-19.7	-8.2	-26.1	-18.7	-22.9	-13.5	0.0	40.9	0.0	0.0		13	82	67	1039	1030
5	-17.6	-6.9	-26.3	-16.0	-22.0	-11.5	0.0	40.0	0.0	0.0		14	83	73	1039	1031
6	-14.4	-6.8	-24.6	-16.5	-19.5	-11.7	0.0	37.5	0.0	0.0		13	75	58	1031	1009
7	-13.9	-8.8	-23.1	-19.2	-18.5	-14.0	0.0	36.5	0.0	0.3		13	85	55	1016	1009
8	-18.5	-9.7	-24.5	-19.1	-21.5	-14.4	0.0	39.5	0.0	0.0		13	85	64	1028	1016
9	-18.5	-10.6	-29.2	-20.5	-23.9	-15.5	0.0	41.9	0.0	0.0		13	78	60	1029	1026
10	-18.3	-9.9	-29.3	-19.8	-23.8	-14.9	0.0	41.8	0.0	0.0		13	82	62	1026	1011
11	-17.1	-8.7	-24.1	-18.9	-20.6	-13.8	0.0	38.6	0.0	0.0		13	82	66	1019	1007
12	-18.9	-6.7	-22.6	-18.2	-20.8	-12.4	0.0	38.8	0.0	3.3		13	83	73	1018	997
13	-17.4	-7.4	-26.3	-17.1	-21.9	-12.3	0.0	39.9	0.0	0.2		13	80	74	1010	1005
14	-8.0	-9.3	-18.9	-19.1	-13.5	-14.2	0.0	31.5	0.0	0.0		13	89	64	1012	1004
15	-13.9	-7.9	-20.2	-18.3	-17.1	-13.1	0.0	35.1	0.0	0.3		13	86	73	1017	1005
16	1.7	-6.9	-18.6	-15.4	-8.5	-11.1	0.0	26.5	0.0	2.4		13	90	75	1008	989
17	-0.1	-7.2	-10.4	-16.5	-5.3	-11.8	0.0	23.3	0.0	0.0		13	90	60	999	989
18	-0.4	-6.8	-11.1	-16.6	-5.8	-11.7	0.0	23.8	0.0	0.0		13	94	58	1003	995
19	-5.7	-4.7	-17.6	-15.1	-11.7	-9.9	0.0	29.7	0.0	0.0	SOG = 20cm	13	94	76	1009	997
20	-11.7	-4.6	-22.6	-14.9	-17.2	-9.8	0.0	35.2	0.0	0.0		12	85	59	1012	1009
21	-12.0	-3.6	-24.6	-13.5	-18.3	-8.5	0.0	36.3	0.0	0.0		12	85	69	1016	1010
22	-13.0	-4.9	-21.5	-14.4	-17.3	-9.6	0.0	35.3	0.0	0.0		12	87	68	1026	1016
23	-20.6	-5.6	-26.4	-15.7	-23.5	-10.7	0.0	41.5	0.0	0.0		12	78	63	1030	1026
24	-18.1	-5.9	-28.2	-15.6	-23.2	-10.7	0.0	41.2	0.0	0.0		13	75	62	1028	1025
25	-17.9	-5.6	-28.3	-15.5	-23.1	-10.6	0.0	41.1	0.0	0.0		12	80	62	1033	1017
26	-12.9	-6.1	-21.7	-15.8	-17.3	-11.0	0.0	35.3	0.0	0.0	SOG = 18cm	13	79	52	1018	1013
27	-12.3	-5.0	-23.6	-15.7	-18.0	-10.4	0.0	36.0	0.0	0.0		13	83	54	1017	1002
28	-17.1	-4.4	-29.5	-13.5	-23.3	-9.0	0.0	41.3	0.0	0.0		13	72	47	1032	1009
Total							0.0	1010.0	0.0	6.5			Extreme / Date	Extreme / Date	Extreme / Date	Extreme / Date
Avg	-13.3	-7.1	-22.7	-16.9	-18.1	-12.0	1981-2010 Normal			9.3	Normal					
Extreme Date	1.7		-29.5				0.0	848.2	0.0	17.0	Cumulative		94	47	1039	989
	16		28							24.8	Cum. Normal		18	28	4	16

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

SRC proudly recognizes the following CRS supporters:

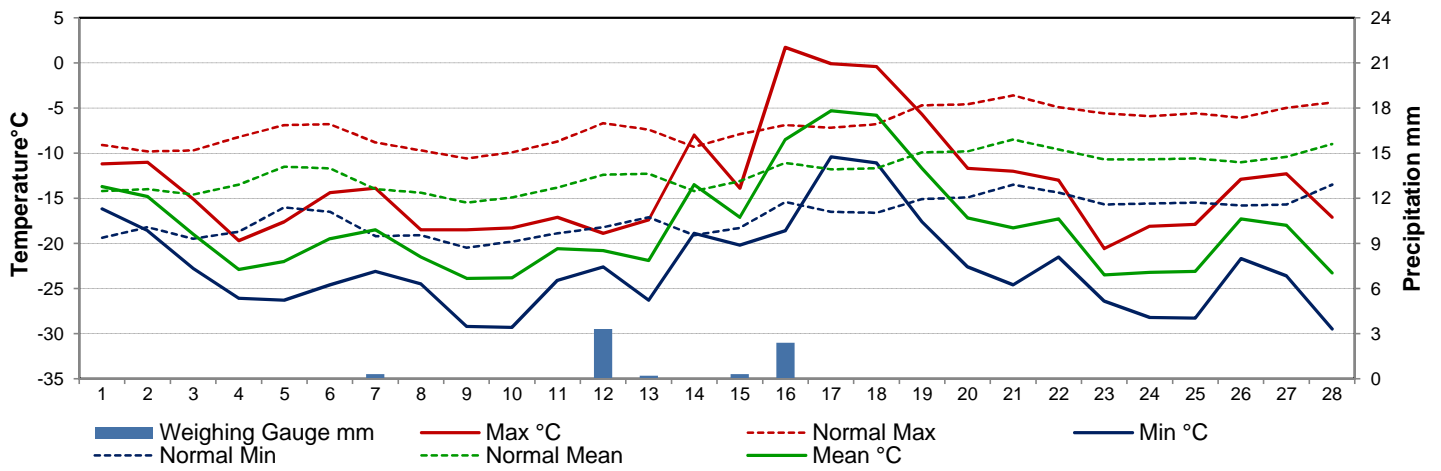


Agriculture and Agri-Food Canada

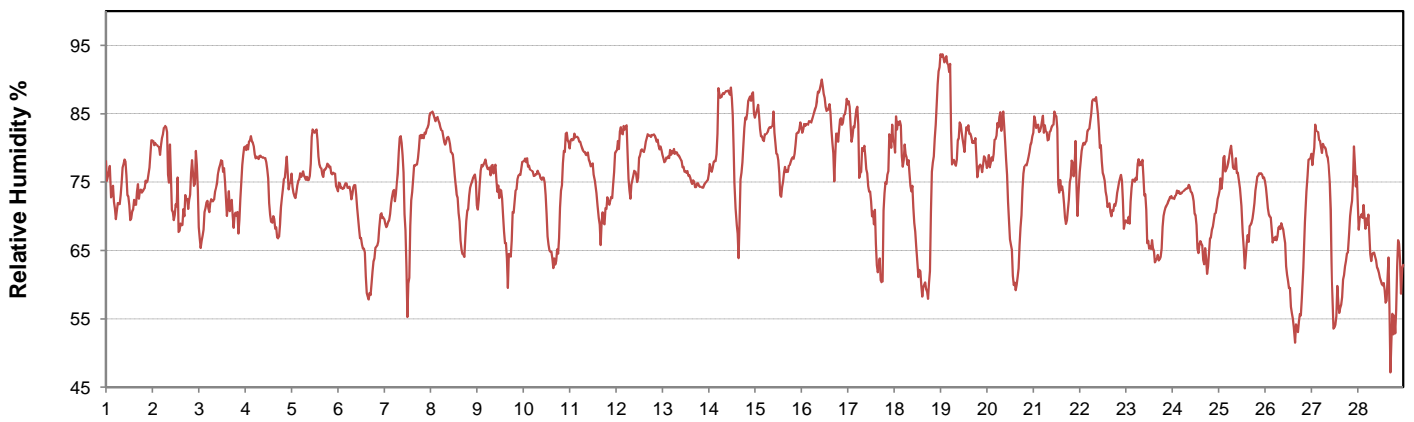
Agriculture et Agroalimentaire Canada



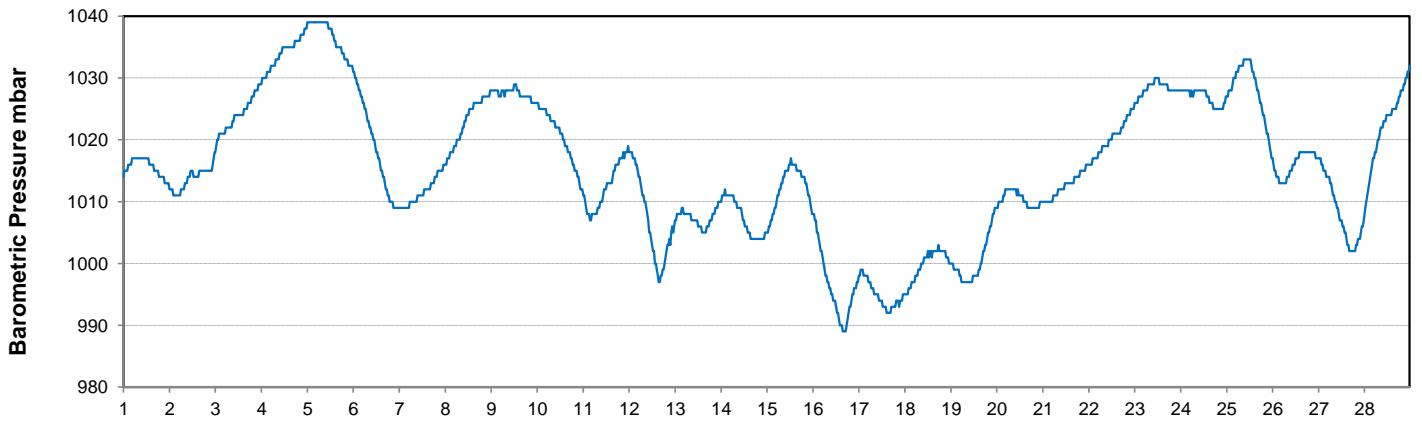
Temperature and Precipitation for February 2014



Relative Humidity for February 2014



Barometric Pressure Corrected to Sea Level for February 2014





SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

SASKATOON STATION 4057180

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

Preliminary **FEBRUARY 2014**

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	Diffuse
	km/h			°C	°C	°C	°C	°C	°C	°C	°C		%	hours	hours		MJ/m ²	MJ/m ²
1	32.0	WNW	16:45	-15.5	-4.5	-4.0	-3.0	-0.5	2.0	3.5	5.5	not available	0.0	9.1	0.0	3.2	2.8	
2	51.1	N	23:00	-12.5	-4.5	-4.0	-3.0	-0.5	2.0	3.5	5.5		0.0	9.2	0.0	2.7	2.4	
3	37.8	NNW	0:00	-18.0	-4.0	-3.5	-3.0	-0.5	2.0	3.5	5.5		0.9	9.3	9.7	4.2	3.6	
4	24.2	NW	15:25	-21.0	-4.5	-4.0	-3.0	-0.5	2.0	3.0	5.5		5.3	9.3	56.9	6.1	3.0	
5	43.2	WNW	14:08	-22.5	-5.0	-4.5	-3.5	-0.5	2.0	3.0	5.5		0.5	9.4	5.3	4.2	3.7	
6	42.6	WSW	16:35	-16.0	-5.0	-4.5	-3.5	-1.0	2.0	3.0	5.5		9.1	9.4	96.4	7.4	1.8	
7	21.9	WSW	0:04	-14.5	-5.5	-4.5	-4.0	-1.0	2.0	3.0	5.5		5.0	9.5	52.6	6.4	2.7	
8	24.3	NNW	15:08	-13.0	-5.5	-5.0	-4.0	-1.0	2.0	3.0	5.0		8.3	9.6	86.8	8.2	2.3	
9	15.9	SSW	21:45	-15.5	-5.5	-5.0	-4.0	-1.0	1.5	3.0	5.0		9.1	9.6	94.6	9.1	2.0	
10	16.6	S	14:16	-16.5	-6.0	-5.5	-4.0	-1.0	1.5	3.0	5.0		9.2	9.7	94.9	8.5	2.8	
11	26.0	NW	15:28	-14.5	-6.5	-5.5	-4.5	-1.5	1.5	3.0	5.0		5.3	9.8	54.4	6.7	3.4	
12	48.0	E	9:14	-13.5	-6.0	-5.5	-4.5	-1.5	1.5	3.0	5.0		0.0	9.8	0.0	2.6	2.3	
13	27.5	SE	14:35	-14.5	-6.0	-5.5	-4.5	-1.5	1.5	3.0	5.0		3.4	9.9	34.4	6.4	4.5	
14	31.5	NE	23:20	-12.0	-6.0	-5.5	-4.5	-1.5	1.5	3.0	5.0		6.7	9.9	67.4	6.1	2.4	
15	32.2	NE	0:28	-11.5	-5.5	-5.0	-4.5	-1.5	1.5	2.5	5.0		6.9	10.0	69.0	7.9	3.0	
16	54.3	SE	8:08	-12.5	-5.0	-5.0	-4.0	-1.5	1.5	2.5	5.0		5.1	10.1	50.6	6.6	3.4	
17	28.1	WSW	5:24	-8.0	-5.0	-4.5	-4.0	-1.5	1.5	2.5	5.0		7.8	10.1	77.0	8.8	3.6	
18	29.3	W	11:44	-8.0	-4.5	-4.0	-3.5	-1.5	1.0	2.5	5.0		9.0	10.2	88.2	9.1	1.9	
19	49.8	NE	14:37	-7.0	-4.0	-4.0	-3.5	-1.5	1.0	2.5	5.0		0.0	10.3	0.0	5.1	4.4	
20	22.7	NNE	1:12	-11.0	-4.0	-4.0	-3.5	-1.5	1.0	2.5	5.0		9.7	10.3	93.9	11.0	2.0	
21	22.1	N	22:42	-12.5	-4.5	-4.0	-3.5	-1.5	1.0	2.5	5.0		5.5	10.4	52.9	7.4	4.0	
22	26.4	NW	18:26	-10.0	-4.5	-4.0	-3.5	-1.5	1.0	2.5	5.0		8.1	10.5	77.4	8.6	4.7	
23	32.4	WNW	16:04	-13.5	-4.5	-4.5	-3.5	-1.5	1.0	2.5	4.5		10.2	10.5	97.0	11.2	2.8	
24	35.9	WSW	15:00	-16.0	-5.0	-4.5	-4.0	-1.5	1.0	2.5	4.5		10.3	10.6	97.3	12.2	2.1	
25	32.0	WSW	20:19	-15.5	-5.5	-5.0	-4.0	-1.5	1.0	2.5	4.5		10.3	10.7	96.6	12.1	2.5	
26	34.8	NW	6:06	-14.5	-6.0	-5.5	-4.5	-1.5	1.0	2.5	4.5		10.5	10.7	97.9	11.3	1.5	
27	63.1	NNW	23:24	-14.5	-6.0	-5.5	-4.5	-1.5	1.0	2.5	4.5		7.1	10.8	65.8	9.5	5.4	
28	53.6	N	0:38	-16.0	-6.0	-5.5	-4.5	-2.0	1.0	2.0	4.5		8.2	10.9	75.5	10.4	3.3	
Total													171.5	279.46	61.4	213.0	84.3	
Mean				-13.9	-5.2	-4.7	-3.9	-1.3	1.4	2.8	5.0		1981-2010 Normal for Radiation					
Extreme	63.1	NNW	23:24	1971- 2000 Normal for Soil Temperatures									132.6	281.1	47.2	213.0	104.0	
Date	27				-7.0	-6.7	-6.1	-3.5	-0.8	0.8	3.4		No. of Bright Sunshine days = 24					

Note: Red numbers indicate manual calculation

SRC proudly recognizes the following CRS supporters:

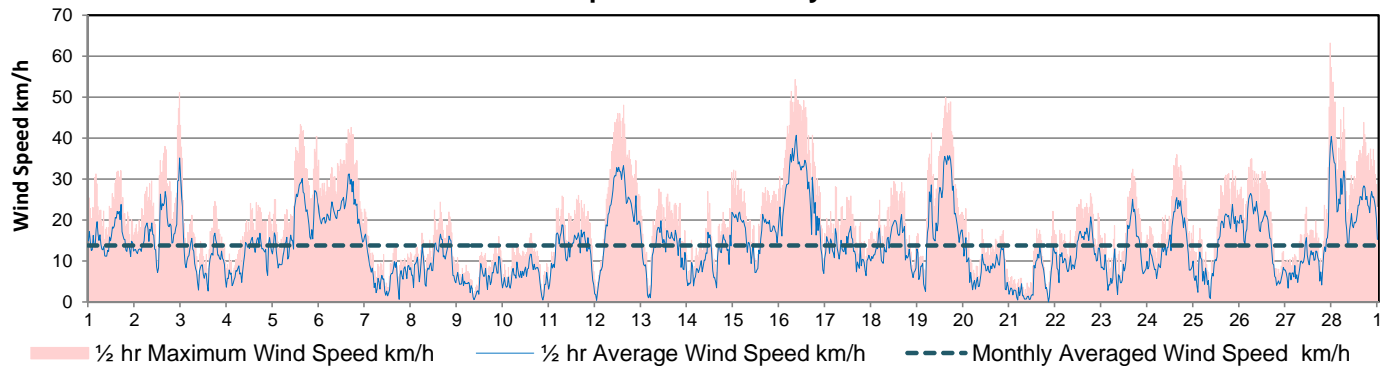


Agriculture and Agri-Food Canada

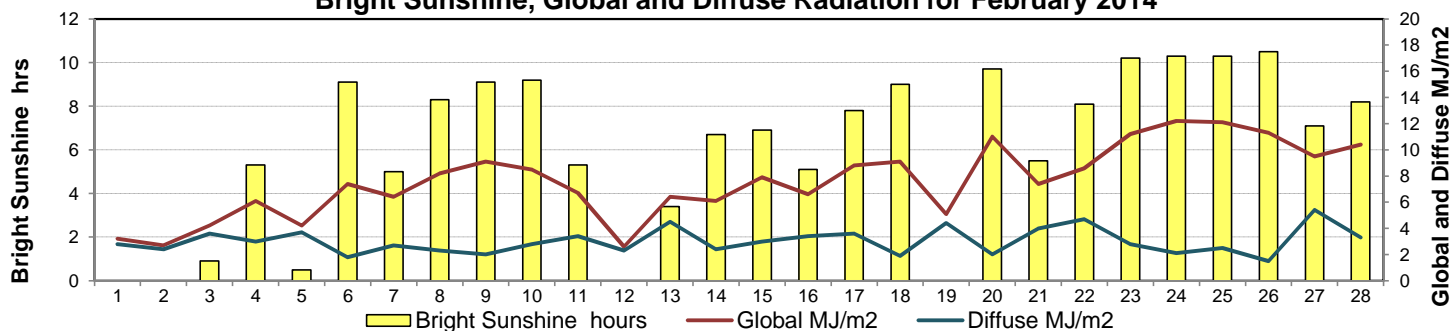
Agriculture et Agroalimentaire Canada



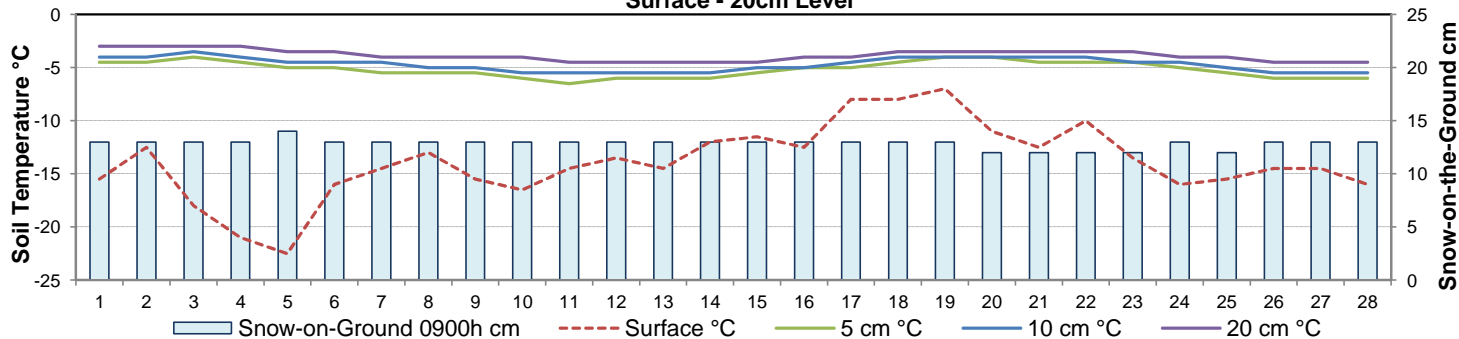
Wind Speed for February 2014



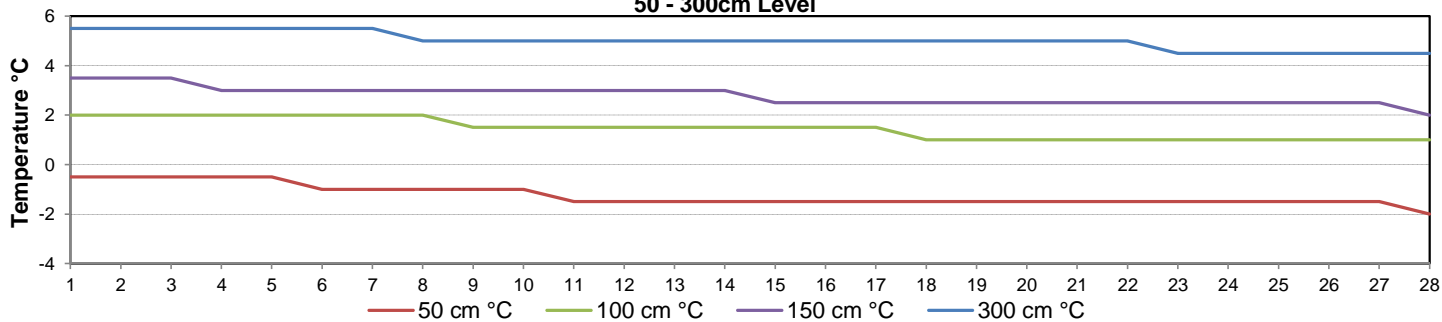
Bright Sunshine, Global and Diffuse Radiation for February 2014



Soil Temperatures for February 2014
Surface - 20cm Level



Soil Temperatures for February 2014
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 FEBRUARY 2014

Extreme Records for February

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 Area	Date	S'toon CRS**	Date	Hours	Year	No. of Days	Year
12.8	19/1931	SE	8.3	02/2005	43.7	1924	SE	40.2	1979	106 ^N	22/1988	82.3 ^{NNW}	10/2004	189.9	1980	28	1978&84
-50.0	01/1893	SM	-42.5	08/1994	0.0	multiply sites			1.9	2012				57.6	1983	17	1983&98

**1975 forward * more than one year

Notable Events for CRS Saskatoon - February						Saskatoon Area Stations			Glossary			
Element	Type	Day	New Record	Old Record	Year	SM	NWMP	c. 1892-1901	T	Trace of precipitation		
Temperature	Mean	28	-23.3	-23.3	1995	SE	Eby	1901-1941	Normal	30 year average beginning with the decade		
		Wind	Near Gale	2	51.1km/h	N	---	US	Univ. of Sask.	1915-1964	SOG	Depth of snow-on-the-ground in cm
				16	54.3km/h	SE	---	S	Saskatoon	1941-1942	na	not available
Wind Chill	-30 to -39	22 days	63.1	NNW	---	SA	Saskatoon A	1942 -	Degree-days			
		28				53.6km/h	N	---	NRC	Nat. Res. Council	1952-1966	Tm
Wind Chill	-40 to -49	2 days				SRC	Sask. Res. Council	1963-	Growing	(Tm-5°C); if Tm ≤ 5°C then GDD = 0		
		2 days				SWT	S'toon Water Treatment Plant	1974 -	Heating	(18°C-Tm); if Tm ≤ 18°C then HDD = 0		
						SC	S'toon Central Ave	1974-1989	Cooling	(Tm-18°C); if Tm ≥ 18°C then CDD = 0		
						S1	Saskatoon 1	1976-1978	Extreme Cooling	(Tm-24°C); if Tm ≥ 24°C then CDD = 0		
						S2	Saskatoon 2	1977-1990	Did you Know?			
						K	S'toon Kernen Farm	1993-2004	Canada is blessed with several winter weather prognosticators who predict the possibility of an early spring (or not) on February 2 nd .			
						KCS	S'toon Kernen Farm CS	1996-	<ul style="list-style-type: none"> •Shubenacadie Sam - Nova Scotia •Warton Willie - Owen Sound, Ontario •Winnipeg Willow - Fort Whyte, Manitoba Imposters: •Sutton Sammy - Sutton West, Ontario •Manitoba Merv - Oak Hammock Marsh (hand puppet) •Balzac Billy - Calgary Alberta 			
						RCS	Environment Canada	2008-				

Summary

February was unseasonably cold with average monthly temperatures well below normal. The maximum was 6.2°C; the minimum 5.8°C and the mean temperature 6.1°C below normal values. It could have been worse if the slight thaw around the 17th had not occurred. Curiously, there were no record minimum temperatures set. Predictably, heating degree-days were high at 19% above normal. With the wind occasionally reaching Near Gale (50-61km/h), extreme wind chill values became the hot topic 'du jour'. Twenty-four out of twenty-eight days had wind chill values exceeding -30C. Snowfall was 70% of normal depressing the yearly cumulative precipitation total further below normal to 68.5%. Frost was recorded by the soil temperature sensors at the 50cm level. The 100cm level probes were recording 1°C by month's end.

- Shubenacadie Sam - Nova Scotia
- Warton Willie - Owen Sound, Ontario
- Winnipeg Willow - Fort Whyte, Manitoba
- Imposters:
- Sutton Sammy - Sutton West, Ontario
- Manitoba Merv - Oak Hammock Marsh (hand puppet)
- Balzac Billy - Calgary Alberta

All, except Warton Willie, predicted an early spring.



SRC proudly recognizes the following CRS supporters:

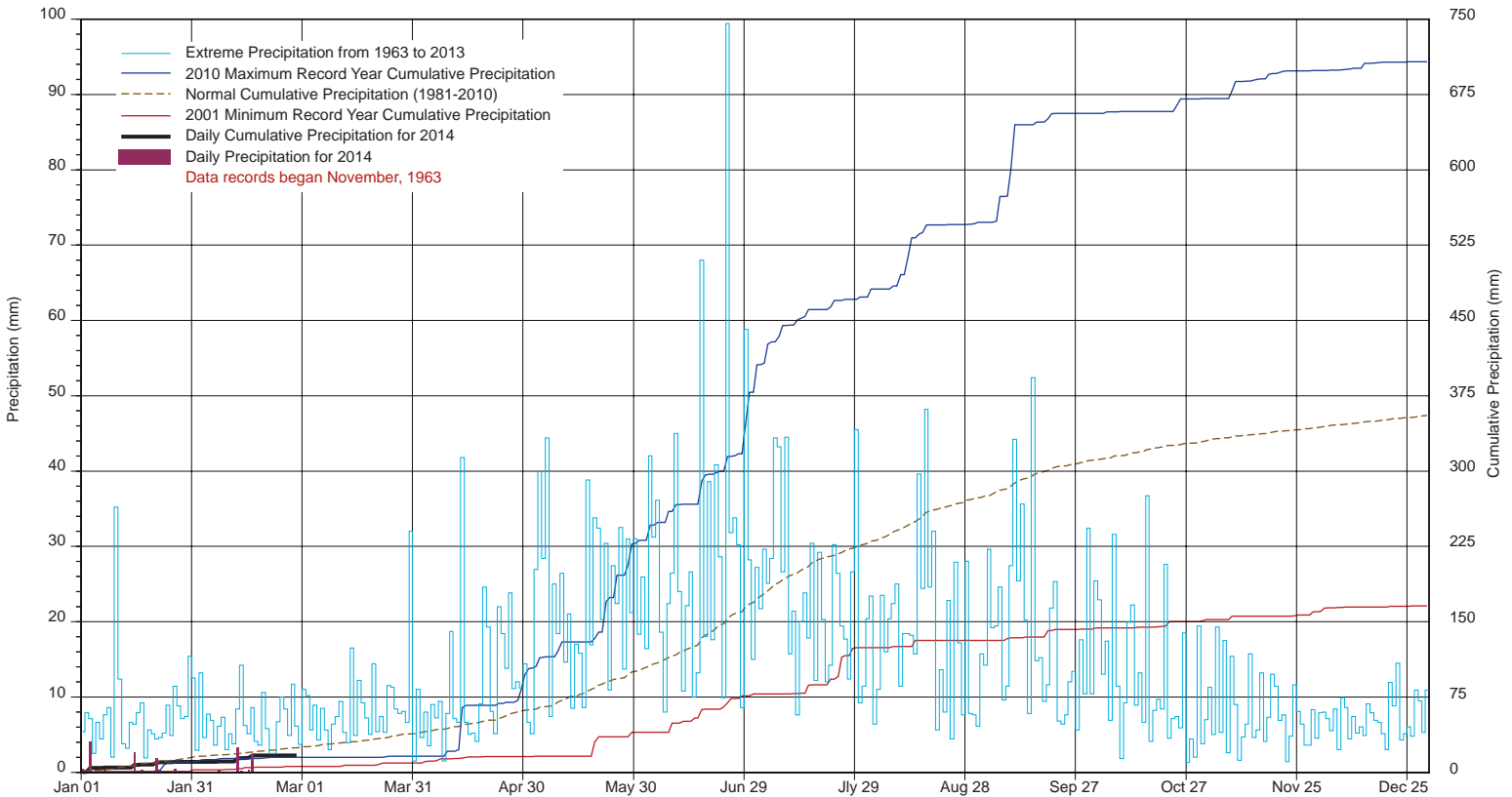


Agriculture and Agri-Food Canada

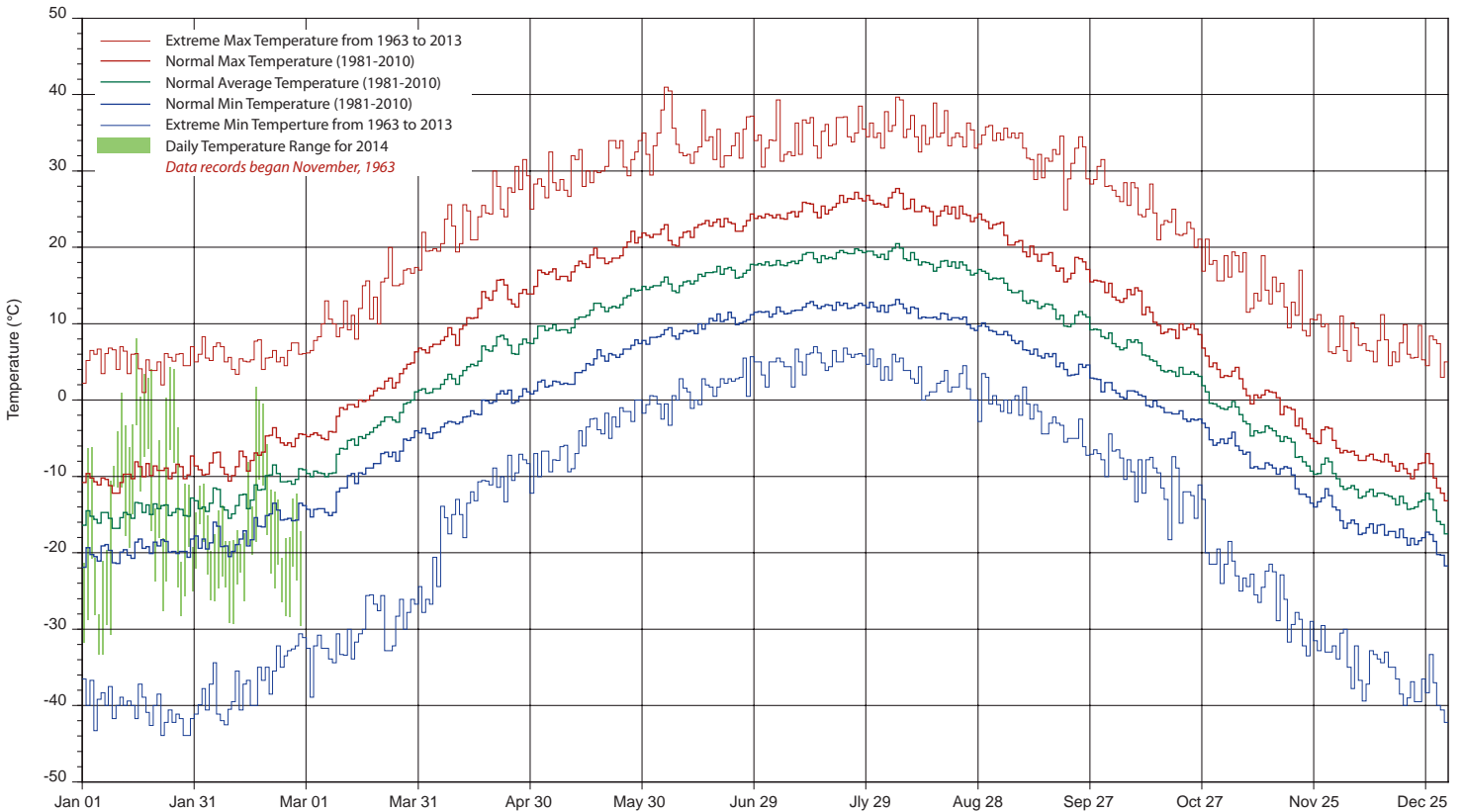
Agriculture et Agroalimentaire Canada



SASKATCHEWAN RESEARCH COUNCIL SASKATOON CLIMATE REFERENCE STATION 2014 PRECIPITATION AND NORMALS



2014 TEMPERATURES AND NORMALS



SRC proudly recognizes the following CRS supporters:



Agriculture and
Agri-Food Canada

Agriculture et
Agroalimentaire Canada

