



SRC CLIMATE REFERENCE STATION DAILY DATA REPORT



SASKATOON STATION 4057180

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

Preliminary **MARCH 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	-24.3	-4.8	-34.2	-14.3	-29.3	-9.6	0.0	47.3	0.0	0.0		13	70	57	1034	1032
2	-19.1	-4.5	-30.2	-15.3	-24.7	-10.0	0.0	42.7	0.0	0.0		13	71	48	1032	1026
3	-14.8	-4.3	-25.3	-14.3	-20.1	-9.3	0.0	38.1	0.0	0.0		13	81	61	1026	1019
4	-14.3	-4.6	-26.0	-14.2	-20.2	-9.5	0.0	38.2	0.0	0.0		13	86	69	1019	1018
5	-11.6	-5.0	-15.4	-14.2	-13.5	-9.6	0.0	31.5	0.0	0.7		15	89	76	1017	1011
6	-12.4	-5.2	-20.2	-14.7	-16.3	-10.0	0.0	34.3	0.0	2.0		12	90	85	1018	1009
7	-10.7	-4.1	-25.0	-15.1	-17.9	-9.6	0.0	35.9	0.0	0.4		15	87	69	1023	1018
8	0.1	-4.2	-18.6	-14.7	-9.3	-9.5	0.0	27.3	0.0	0.0		15	94	64	1019	1000
9	5.8	-2.1	-9.3	-12.0	-1.8	-7.1	0.0	19.8	0.0	0.0		15	96	63	1001	997
10	4.6	-1.0	-3.0	-11.5	0.8	-6.3	0.0	17.2	0.0	0.0		14	84	61	1012	1001
11	2.7	-1.2	-7.2	-11.5	-2.3	-6.4	0.0	20.3	0.0	0.0	Trace	13	97	65	1019	1013
12	6.4	-0.6	-4.2	-9.9	1.1	-5.3	0.0	16.9	0.0	0.0		13	86	58	1015	1003
13	3.8	-0.6	-0.1	-9.6	1.9	-5.1	0.0	16.1	0.0	0.0	Trace	6	88	62	1006	1000
14	0.7	-0.9	-8.7	-10.9	-4.0	-5.9	0.0	22.0	0.0	0.0	SOG=5cm	1	95	79	1015	1007
15	-4.5	0.0	-12.9	-9.5	-8.7	-4.8	0.0	26.7	0.0	0.0		1	91	76	1024	1014
16	6.8	-0.2	-6.6	-9.7	0.1	-5.0	0.0	17.9	0.0	0.0		1	90	66	1014	1000
17	4.9	0.0	-2.6	-8.9	1.2	-4.5	0.0	16.8	0.0	0.0		0	97	66	1007	997
18	5.2	0.6	-6.0	-8.9	-0.4	-4.2	0.0	18.4	0.0	1.2	SOG = 0	-	97	56	1013	1008
19	5.4	1.2	-4.6	-8.3	0.4	-3.6	0.0	17.6	0.0	0.0		0	88	46	1012	1008
20	2.4	1.6	-9.7	-8.3	-3.7	-3.3	0.0	21.7	0.0	0.0		1	88	72	1023	1006
21	-9.6	1.5	-17.5	-7.0	-13.6	-2.8	0.0	31.6	0.0	0.0		1	73	59	1032	1023
22	-8.9	2.5	-18.2	-6.8	-13.6	-2.2	0.0	31.6	0.0	0.0		0	82	58	1033	1029
23	-4.1	2.9	-17.0	-7.4	-10.6	-2.2	0.0	28.6	0.0	0.2		1	86	48	1029	1023
24	-8.2	1.6	-13.8	-6.8	-11.0	-2.6	0.0	29.0	0.0	0.0		0	72	53	1030	1024
25	-2.6	2.3	-15.6	-8.0	-9.1	-2.9	0.0	27.1	0.0	0.0		0	83	41	1027	1009
26	-4.4	3.5	-10.4	-6.7	-7.4	-1.6	0.0	25.4	0.0	0.4	Snow Gauge	0	91	62	1010	1006
27	-5.8	4.1	-13.8	-5.1	-9.8	-0.5	0.0	27.8	0.0	0.0	SOG = 0	0	83	42	1016	1010
28	-2.0	4.7	-14.9	-5.3	-8.5	-0.3	0.0	26.5	0.0	0.0		1	87	42	1018	1011
29	-0.9	4.9	-8.3	-4.9	-4.6	0.0	0.0	22.6	0.0	0.0		1	97	74	1010	1002
30	-3.8	6.3	-18.5	-4.0	-11.2	1.1	0.0	29.2	0.0	0.0	Trace	0	90	60	1026	1008
31	-9.7	6.8	-21.4	-4.3	-15.6	1.3	0.0	33.6	0.0	0.0		1	78	51	1027	1020
Total							0.0	839.7	0.0	4.9			Extreme / Date	Extreme / Date	Extreme / Date	Extreme / Date
Avg	-4.0	0.0	-14.2	-9.7	-9.1	-4.9	1981-2010 Normal			13.8	Normal					
Extreme Date	6.8		-34.2				3.0	708.8	0.0	21.9	Cumulative		97	41	1034	997
	16		1							38.6	Cumulative No		11	25	1	9

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

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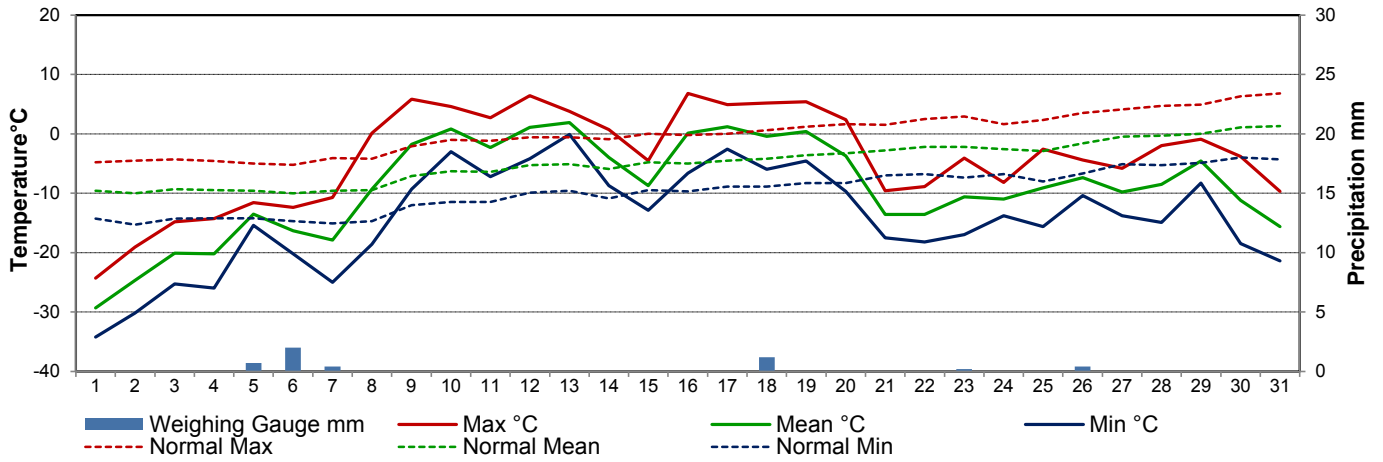


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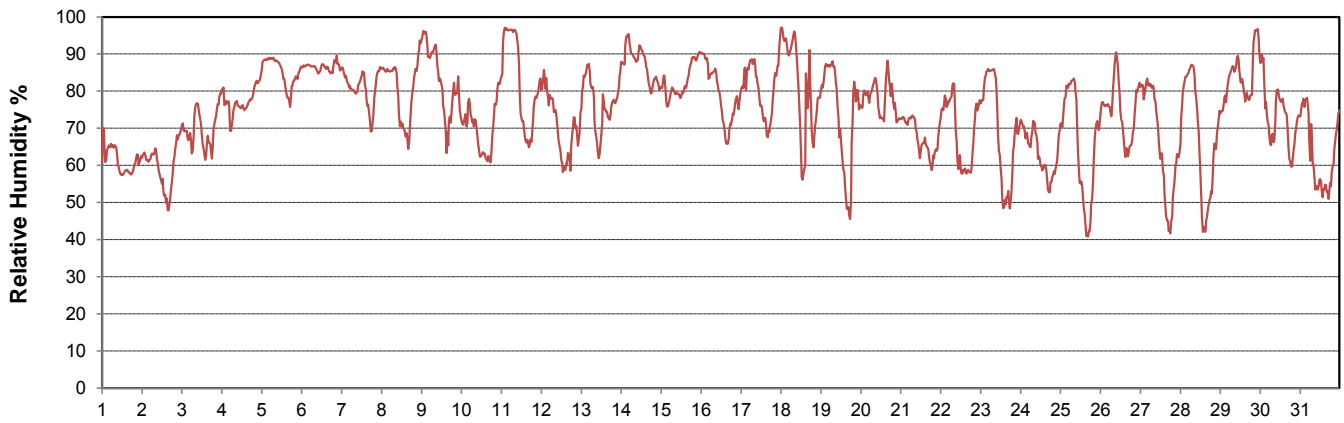
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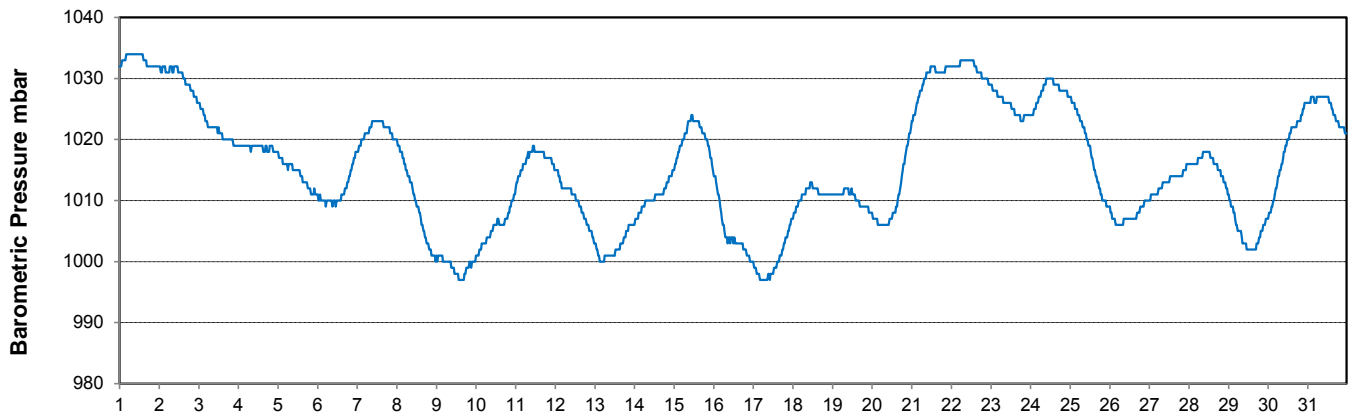
Temperature and Precipitation for March 2014



Relative Humidity for March 2014



Barometric Pressure Corrected to Sea Level for March 2014





SRC CLIMATE REFERENCE STATION DAILY DATA REPORT



SASKATOON STATION 4057180

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

Preliminary MARCH 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
	km/h			°C	°C	°C	°C	°C	°C	°C	°C	%	hours	hours		MJ/m ²	MJ/m ²
1	34.7	WNW	18:06	-20.0	-6.5	-6.0	-5.0	-2.0	1.0	2.0	4.5	not available	10.6	10.9	97.1	12.0	1.8
2	19.8	W	3:00	-18.5	-7.0	-6.5	-5.0	-2.0	1.0	2.0	4.5	available	10.0	11.0	91.0	11.8	1.7
3	18.4	ENE	16:06	-14.5	-7.0	-6.5	-5.5	-2.0	1.0	2.0	4.5		8.6	11.1	77.8	10.3	5.9
4	27.5	ESE	15:27	-13.5	-7.0	-6.5	-5.5	-2.0	0.5	2.0	4.5		0.1	11.1	0.9	6.9	5.9
5	21.3	NE	15:50	-10.5	-6.5	-6.0	-5.0	-2.0	0.5	2.0	4.5		5.9	11.2	52.7	10.7	5.6
6	23.9	NNE	16:39	-9.0	-6.0	-5.5	-5.0	-2.5	0.5	2.0	4.5		2.4	11.3	21.3	7.0	5.8
7	22.4	SW	15:58	-13.0	-5.5	-5.0	-4.5	-2.5	0.5	2.0	4.5		10.5	11.3	92.7	11.5	5.2
8	24.7	SSW	14:33	-10.5	-5.5	-5.0	-4.5	-2.0	0.5	2.0	4.5		8.0	11.4	70.2	11.3	5.6
9	27.2	SE	10:49	-6.5	-5.0	-4.5	-4.0	-2.0	0.5	2.0	4.5		8.5	11.5	74.2	11.5	5.8
10	30.9	WNW	14:25	-3.0	-4.5	-4.0	-4.0	-2.0	0.5	2.5	5.0		11.1	11.5	96.3	13.1	1.9
11	21.6	W	16:34	-3.0	-4.0	-3.5	-3.5	-2.0	0.5	2.0	4.5		10.0	11.6	86.2	12.8	5.1
12	36.8	WSW	12:25	-3.0	-3.5	-3.0	-3.0	-1.5	0.5	2.5	5.0		11.3	11.7	96.9	13.1	2.6
13	53.0	NW	17:19	0.0	-2.5	-2.5	-2.5	-1.5	0.5	2.0	5.0		6.4	11.7	54.6	10.0	4.7
14	29.6	SE	13:03	-5.5	-1.0	-1.0	-1.5	-1.0	0.5	2.0	4.5		0.0	11.8	0.0	6.4	5.5
15	33.7	SE	8:52	-12.5	-1.0	-1.0	-1.5	-1.0	0.5	2.0	4.5		2.7	11.9	22.7	8.7	6.5
16	38.5	S	4:38	-0.5	-1.0	-1.0	-1.0	-0.5	0.5	3.0	6.5		6.2	11.9	52.0	11.1	4.2
17	29.1	NNW	23:13	-1.0	-0.5	-0.5	-1.0	-0.5	0.5	2.5	5.0		9.4	12.0	78.3	11.8	6.0
18	32.8	NW	16:21	-4.5	0.0	0.0	-0.5	-0.5	0.5	2.5	5.0		8.6	12.1	71.3	13.2	3.9
19	26.0	SE	23:52	-3.0	0.0	0.0	-0.5	-0.5	0.5	2.0	4.5		11.1	12.1	91.4	16.0	2.0
20	57.5	N	21:33	-1.5	0.0	0.0	-0.5	-0.5	0.5	2.0	4.5		5.2	12.2	42.6	10.0	4.9
21	48.2	N	1:38	-16.5	0.0	0.0	0.0	-0.5	0.5	2.0	4.0		11.9	12.3	97.0	16.2	2.2
22	31.9	WNW	15:00	-14.5	0.0	0.0	0.0	-0.5	0.5	1.5	4.0		11.8	12.3	95.6	17.0	3.8
23	36.8	WNW	17:07	-14.0	-0.5	0.0	-0.5	-0.5	0.5	1.5	4.0		10.5	12.4	84.6	16.0	6.3
24	47.3	NW	13:08	-13.0	-1.5	-0.5	-0.5	0.0	1.0	2.0	4.0		11.9	12.5	95.4	16.5	8.4
25	32.2	SW	11:57	-12.5	-2.0	-1.5	-1.0	0.0	1.0	2.0	4.0		10.8	12.5	86.1	14.9	11.2
26	32.3	NNE	14:02	-8.0	-2.0	-1.5	-1.0	0.0	1.0	2.0	4.0		8.3	12.6	65.8	15.3	13.0
27	22.3	NNE	13:42	-11.0	-2.0	-1.5	-1.0	0.0	1.0	2.0	4.0		11.8	12.7	93.1	14.3	9.8
28	32.5	WSW	14:24	-11.0	-2.5	-2.0	-1.5	0.0	1.0	2.0	4.0		12.1	12.8	94.9	18.7	2.4
29	24.1	SE	5:48	-6.0	-2.5	-2.0	-1.5	0.0	1.0	2.0	4.0		1.5	12.8	11.7	9.1	7.3
30	46.1	NE	4:07	-12.5	-2.0	-1.5	-1.0	0.0	1.0	2.0	4.0		6.1	12.9	47.4	12.4	8.0
31	33.6	SE	9:10	-15.5	-3.0	-2.0	-1.5	0.0	1.0	2.0	4.0		10.2	13.0	78.8	15.7	9.2
Total													253.5	369.98	68.5	385.3	172.2
Mean				-9.3	-3.0	-2.6	-2.4	-1.0	0.7	2.1	4.5		1981-2010 Normal for Radiation				
Extreme	57.5	N	21:33	1971- 2000 Normal for Soil Temperatures									182.0	369.4	49.3	371.9	162.6
Date	20				-3.1	-2.8	-2.4	-1.5	-0.4	0.6	2.7		No. of Bright Sunshine days = 30				

Note: Red numbers indicate manual calculation

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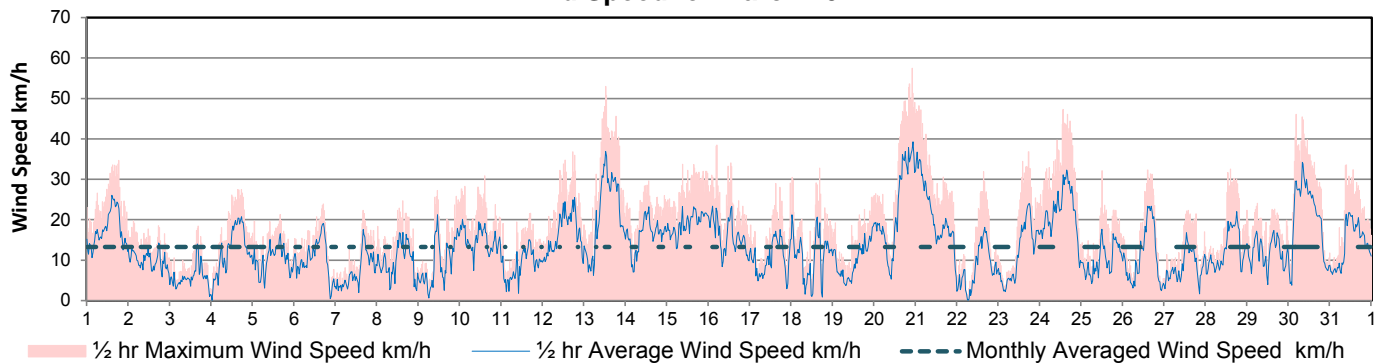


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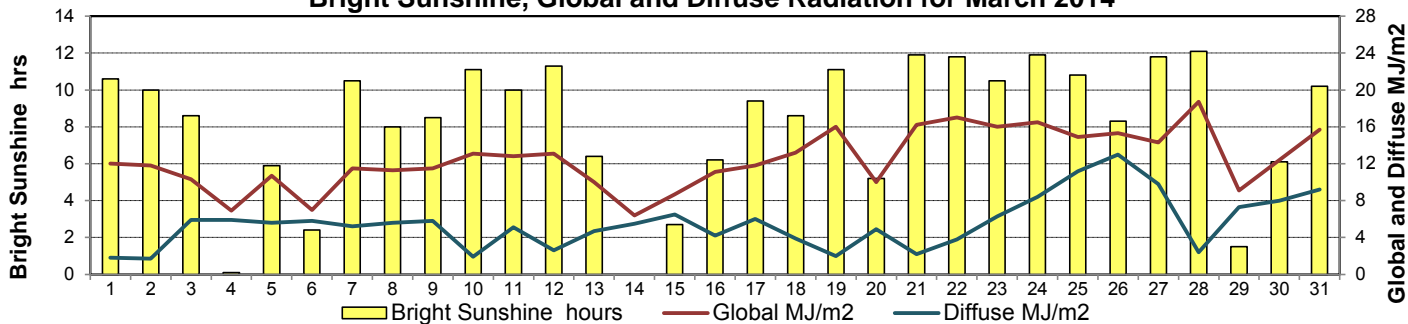
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Wind Speed for March 2014

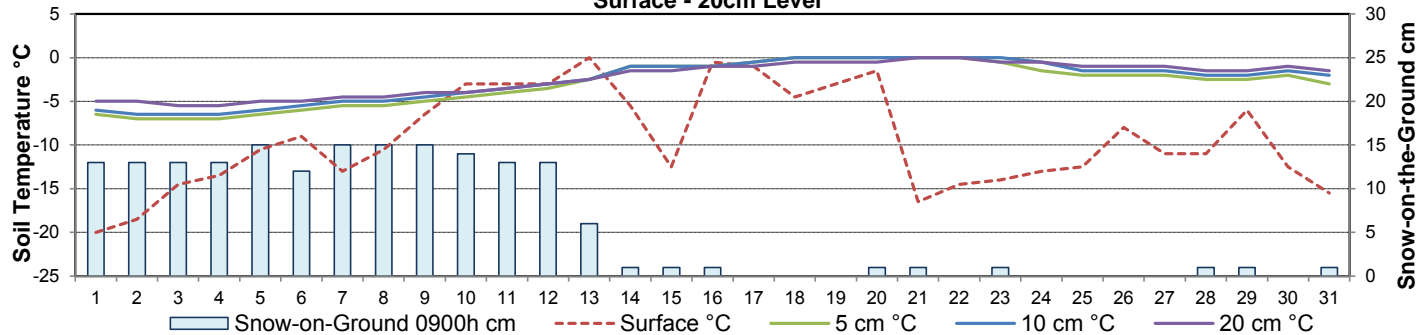


Bright Sunshine, Global and Diffuse Radiation for March 2014



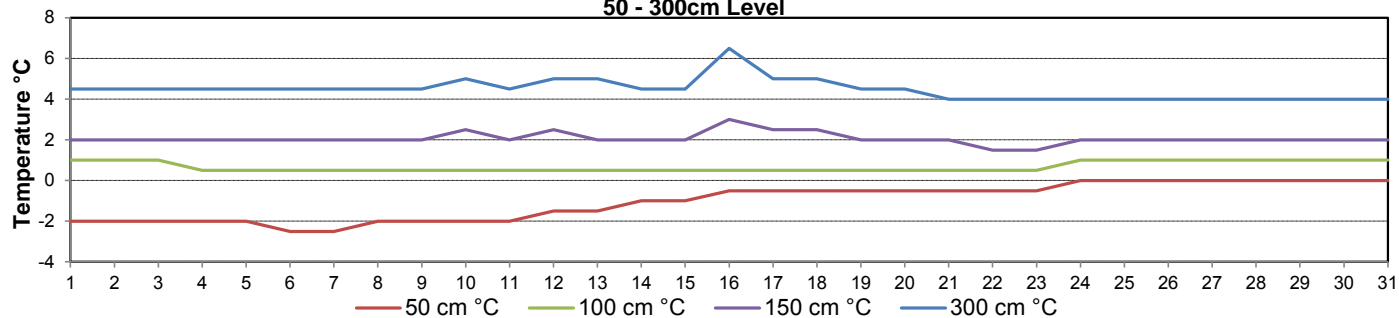
Soil Temperatures for March 2014

Surface - 20cm Level



Soil Temperatures for March 2014

50 - 300cm Level





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

Preliminary **MARCH 2014**

Extreme Records for March

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
22.8	23/1910	SE	20.0 23/1993	59.0	1927	SE	57.1 1967	93 W	18/1959	89 / W	8/1977	248.7	2013	31	1996*
-43.3	14/1897	SM	-38.9 02/1972	0.0	1915*	SE*	0.8 2010					102.8	1983	18	1983

**1975 forward * more than one

Notable Events for CRS Saskatoon - March						Saskatoon Area Stations			Glossary	
Element	Type	Day	New Record	Old Record	Year	SM	NWMP	c. 1892-1901	T	Trace of precipitation
Temperature	Lowest Daily Max	1	-24.3	-24	1991	SE	Eby	1901-1941	Normal	30 year average beginning with the decade
	Lowest Monthly Max	1	-24.3	-24	1/1991	US	Univ. of Sask.	1915-1964	SOG	Depth of snow-on-the-ground in cm
	Extreme Daily Min	1	-34.2	-32.5	1991	S	Saskatoon	1941-1942	na	not available
	Lowest Daily Mean	1	-29.3	-28.3	1991	SA	Saskatoon A	1942 -	Degree-days	
Bright Sunshine	Greatest no. of hours/ Month		253.5	248.7	2013	NRC	Nat. Res. Council	1952-1966	Tm	Mean Temperature
	Most no. of days >= 5 hrs		26	24	1970	SRC	Sask. Res. Council	1963-	Growing	(Tm-5°C); if Tm ≤ 5°C then GDD = 0
	Most no. of days >=10 hrs		15	14	2013	SWT	S'toon Water Treatment Plant	1974 -	Heating	(18°C-Tm); if Tm ≤ 18°C then HDD = 0
Mar. 14	Geese back at the site Many spots have the grass showing through Two out of three snow stakes have no snow					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
Mar. 18	All snow stakes bare					S2	Saskatoon 2	1977-1990	Did you Know? The optimistic viewpoint of March "coming in like a lion and going out like a lamb" has not been misplaced according to our records of the last 51 years. If negative temperatures are considered lion-like and positive temperatures lamb-like then comparing March 1 st to March 31 st , the adage holds true for 24 times. The month "coming in like a lion and going out like a lion" is true 25 times out of 51 and the rarest conditions when March comes in like a lamb and goes out like lamb or goes out like a lion has happened on one occasion for each.	
						K	S'toon Kernen Farm	1993-2004		
						KCS	S'toon Kernen Farm CS	1996-		
						RCS	Environment Canada	2008-		
						SF	Sutherland Forestry	1943-1970		

Summary

The bright, cold, dry March gave many people reasons to continue complaining about the weather. The monthly average temperatures were 4.0°C (max) and 4.5°C (min) below normal. Temperatures ranged from a high of 6.8° to a low of -34.2°. Twenty daily mean temperatures did not rise above their normals. On March 1st and 2nd, minimum temperatures slipped to below -30°C. Heating degree-days were 18% above normal. With the snow cover dissipating and the geese returning during the mid-month warm spell, people foolishly began putting away winter jackets and discarding mittens and toques only to retrieve them for the return of the sub normal temperatures that closed the month. Low precipitation, 35% of normal, did allow snow shovels to be left in garages and not at the 'ready' by the front doors. For those who ignore winter temperatures, it was invigorating to be out in the record number of bright sunshine hours and moderate breezy conditions.



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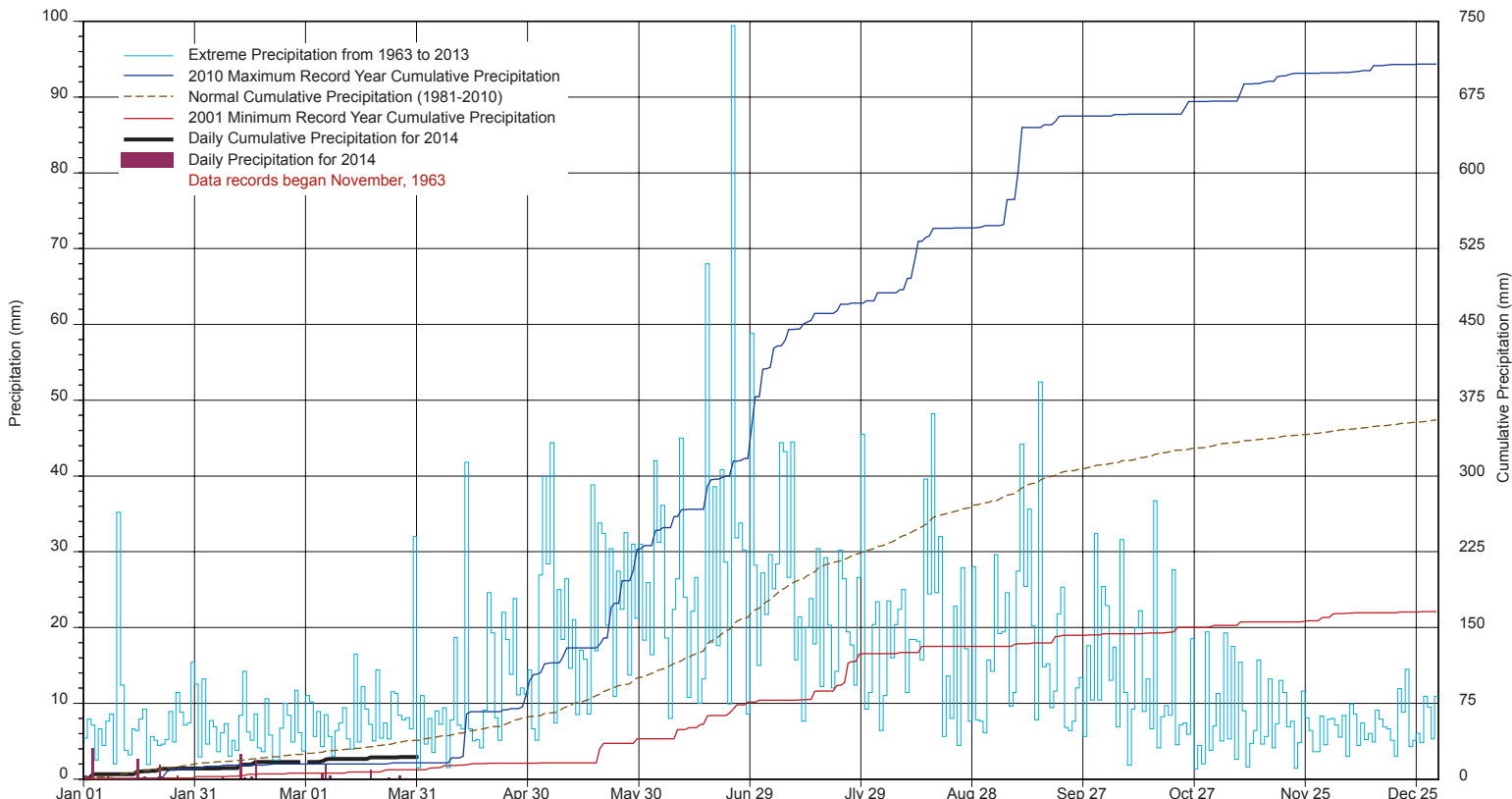


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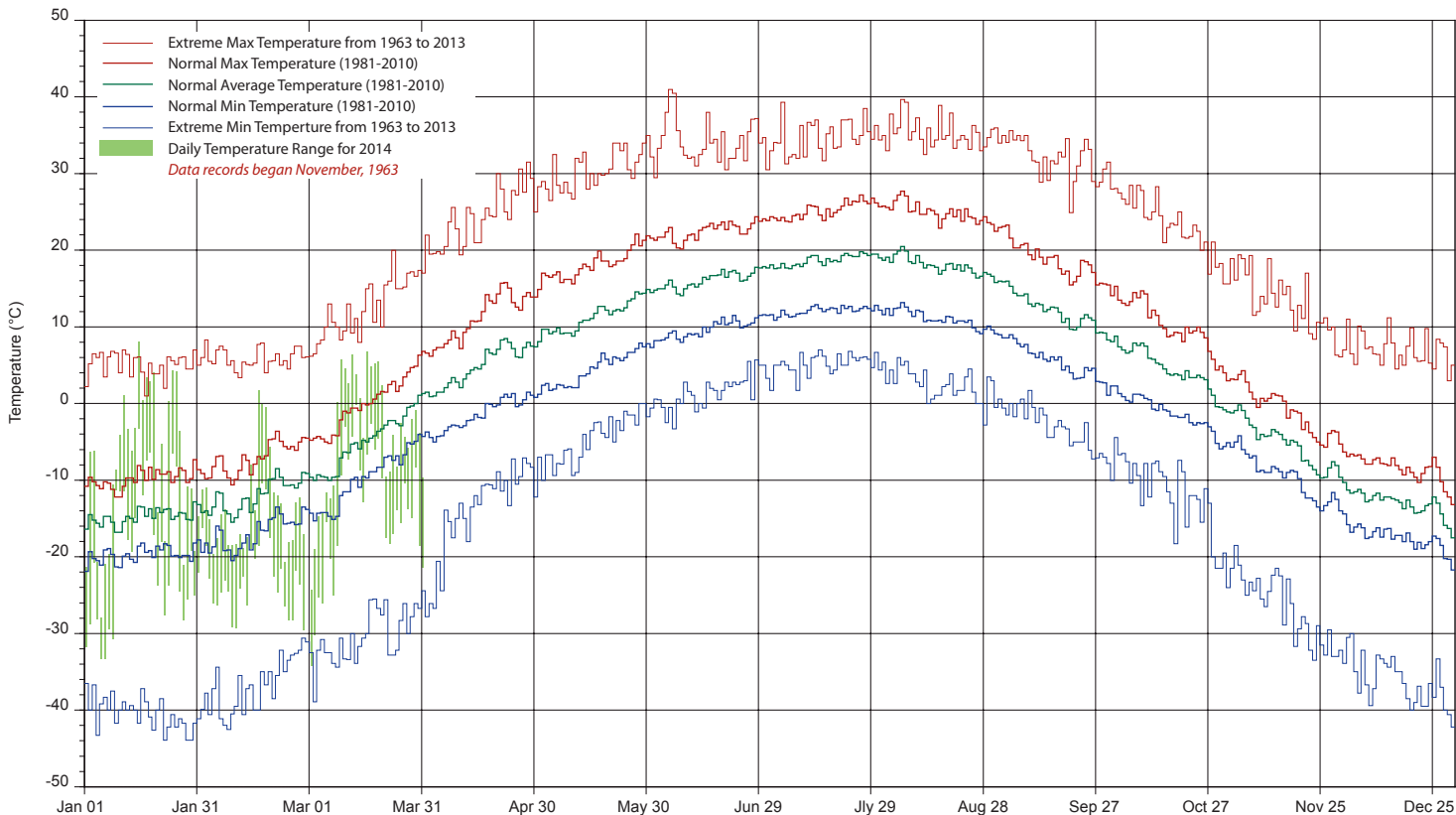
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2014 TEMPERATURES AND NORMALS



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