



SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W Estab. 2011

Preliminary

July 2019

Day	Temperature			Degree-days			Precipitation			Relative Humidity		Station Pressure <i>corrected to sea level</i>	
	Max	Min	Mean	Growing	Heating	Cooling	Weighing Gauge	Tipping Bucket	Notes	Max ½ hr Avg	Min ½ hr Avg	Max ½ hr Avg	Min ½ hr Avg
	°C	°C	°C	5°C base	18°C base	18°C base	mm	mm		%	%	mbar	mbar
1	28.2	5.9	17.1	12.1	0.9	0.0	2.5	2.0		92	34	1013	1002
2	18.7	5.3	12.0	7.0	6.0	0.0	0.0	0.2		94	56	1011	1007
3	18.4	7.4	12.9	7.9	5.1	0.0	4.9	4.6		99	54	1011	1009
4	21.2	7.3	14.3	9.3	3.7	0.0	0.0	0.2		100	48	1019	1011
5	22.5	6.3	14.4	9.4	3.6	0.0	0.0	0.0		100	41	1025	1019
6	23.9	9.8	16.9	11.9	1.1	0.0	0.1	0.0		95	51	1024	1015
7	27.7	14.5	21.1	16.1	0.0	3.1	1.3	1.4		99	48	1015	1005
8	21.5	13.8	17.7	12.7	0.3	0.0	9.5	8.4		100	72	1012	1005
9	24.7	10.3	17.5	12.5	0.5	0.0	0.0	0.0		94	41	1018	1011
10	23.9	10.5	17.2	12.2	0.8	0.0	1.6	1.6		99	61	1019	1007
11	20.9	12.2	16.6	11.6	1.4	0.0	0.0	0.0		100	66	1011	1005
12	25.8	8.3	17.1	12.1	0.9	0.0	0.2	0.2		100	47	1013	1009
13	28.5	13.4	21.0	16.0	0.0	3.0	0.0	0.0		99	48	1011	1009
14	26.2	14.8	20.5	15.5	0.0	2.5	0.1	0.0		96	54	1011	1006
15	22.7	11.7	17.2	12.2	0.8	0.0	0.0	0.0		96	61	1012	1006
16	21.1	7.8	14.5	9.5	3.5	0.0	0.2	0.0		100	56	1014	1010
17	23.0	13.3	18.2	13.2	0.0	0.2	5.4	5.6		100	69	1009	1001
18	21.5	12.2	16.9	11.9	1.1	0.0	11.0	10.6		100	74	1001	996
19	20.0	11.8	15.9	10.9	2.1	0.0	7.9	8.2		100	77	1008	997
20	22.5	11.1	16.8	11.8	1.2	0.0	0.0	0.0		100	65	1019	1008
21	25.6	9.3	17.5	12.5	0.5	0.0	0.0	0.0		100	54	1023	1019
22	27.1	11.1	19.1	14.1	0.0	1.1	0.1	0.0		100	49	1023	1020
23	28.8	13.3	21.1	16.1	0.0	3.1	0.0	0.0		99	51	1020	1014
24	27.5	16.4	22.0	17.0	0.0	4.0	8.8	8.4		97	71	1014	1000
25	21.2	13.9	17.6	12.6	0.4	0.0	0.0	0.4		95	75	1005	1000
26	25.2	13.6	19.4	14.4	0.0	1.4	0.0	0.0		98	46	1011	1005
27	27.9	11.4	19.7	14.7	0.0	1.7	0.1	0.0		100	54	1012	1000
28	19.1	8.5	13.8	8.8	4.2	0.0	1.2	1.4		98	59	1016	998
29	23.0	4.7	13.9	8.9	4.1	0.0	0.5	0.0		100	48	1018	1014
30	26.8	13.5	20.2	15.2	0.0	2.2	0.5	0.8		94	59	1014	1008
31	24.0	12.7	18.4	13.4	0.0	0.4	2.8	3.4		100	64	1017	1009
Total				383.5	42.2	22.7	58.7	57.4					
Avg	23.8	10.8	17.4				192.6	Cumulative ppt					
Extreme	28.8	4.7					11.0	10.6		100	34	1025	996
Date	23	29					18	18		4	1	5	18

Maintenance 16 July 2019

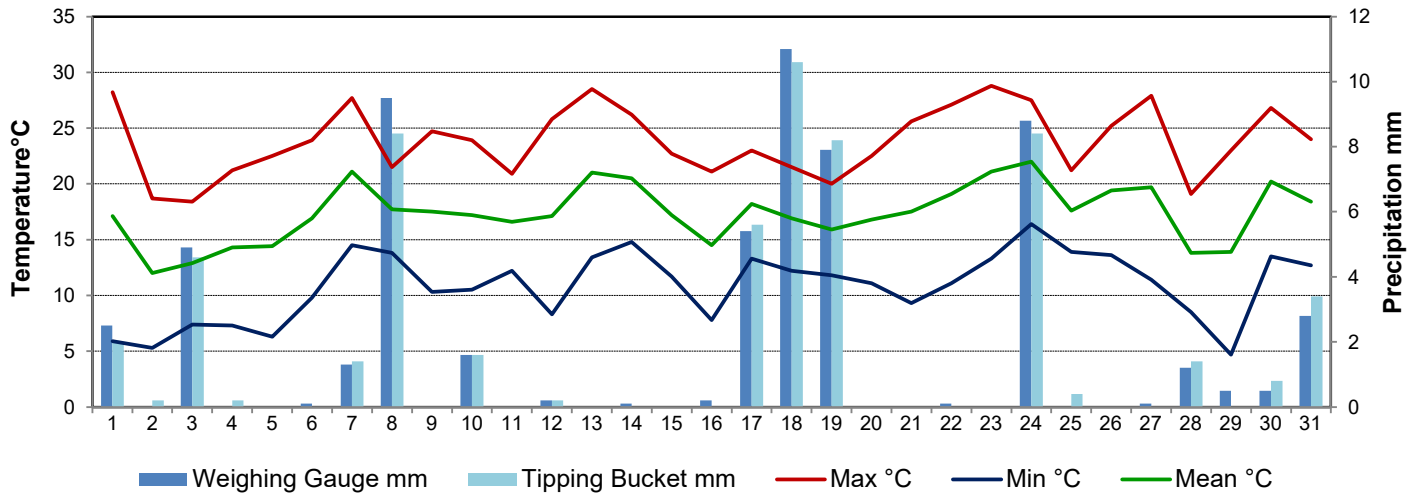
program update 16, 17, 24, 25 July 2019

data logger errors July 26@13:30, July 28@noon

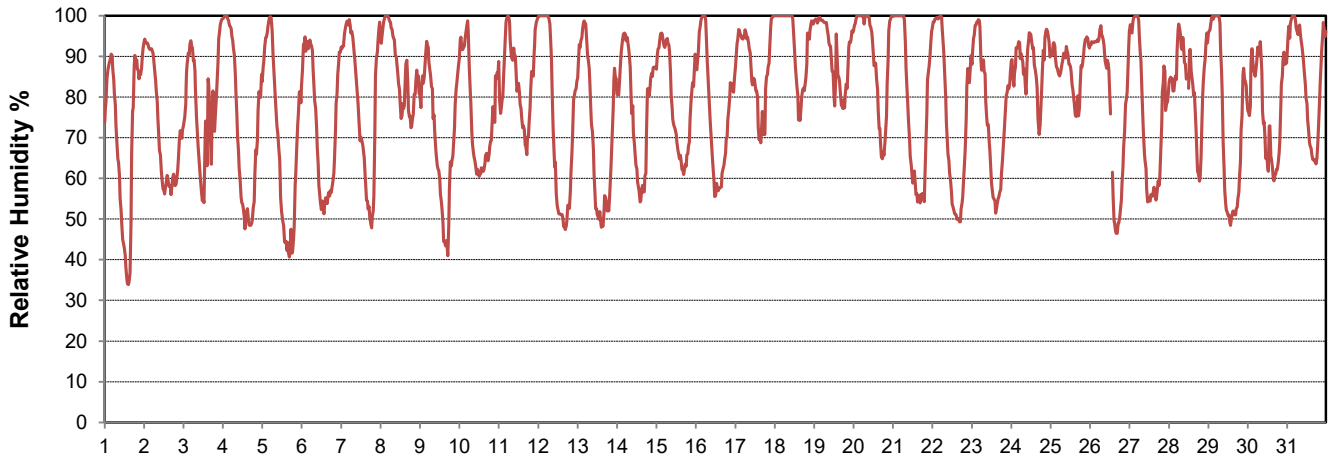
SRC proudly recognizes the following CRS supporters:



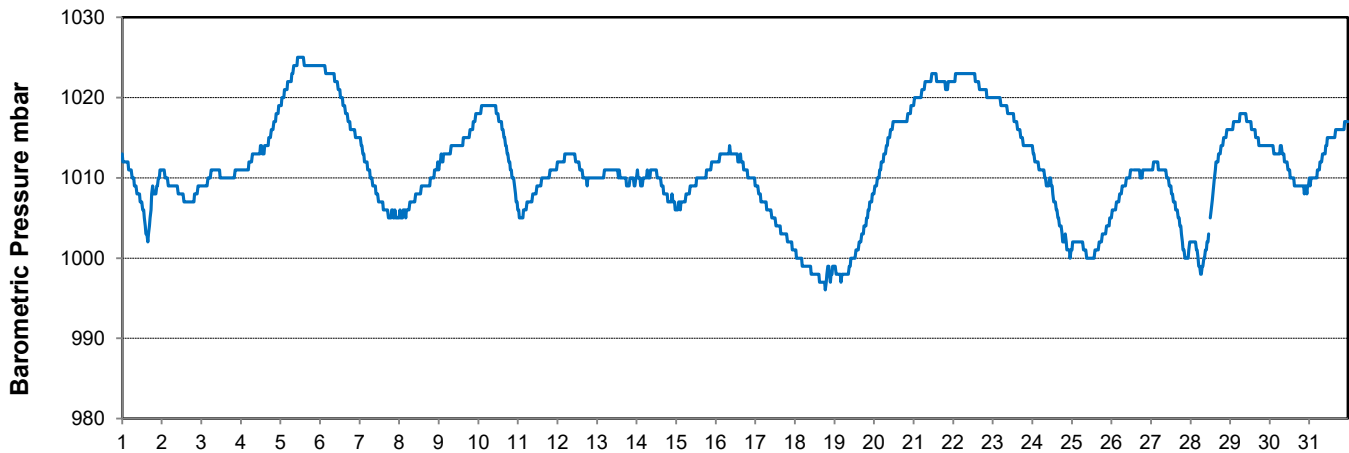
Temperature and Precipitation for July 2019



Relative Humidity for July 2019



Barometric Pressure Corrected to Sea Level for July 2019





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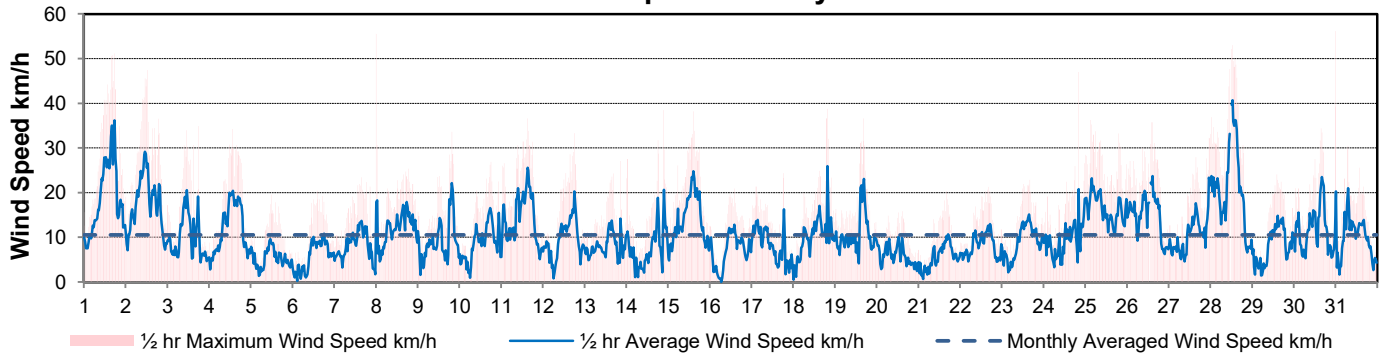
July 2019

Day	Wind Gust			Soil Temperatures at 0900hrs								Radiation				
	Max	Direction	Time	Surface	5 cm	10 cm	20 cm	50 cm	100 cm	150 cm	300 cm	Bright Sunshine	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	51.1	N	17:38	19.5	15.0	15.5	15.0	13.0	10.0	7.0	4.0	11.3	16.8	67.1	24.4	5.6
2	47.4	WNW	12:30	13.5	13.5	14.5	14.5	13.0	10.0	7.0	4.0	6.9	16.8	41.0	14.9	7.7
3	34.9	NW	17:36	15.0	13.5	14.0	14.0	13.0	10.0	7.5	4.0	9.5	16.8	56.5	19.6	9.6
4	34.2	NW	13:50	15.0	13.0	13.5	14.0	12.5	10.0	7.5	4.0	12.1	16.8	72.1	24.5	10.0
5	19.5	NE	11:38	16.0	13.5	14.0	14.0	12.5	10.0	7.5	4.0	13.5	16.8	80.5	24.7	9.5
6	20.4	ESE	14:09	17.5	15.0	15.0	14.5	13.0	10.0	8.0	4.0	10.8	16.7	64.6	24.2	7.4
7	23.4	W	15:34	19.0	16.0	16.5	15.5	13.0	10.0	8.0	4.5	9.9	16.7	59.2	22.8	8.7
8	55.5	NNW	0:23	17.5	17.5	17.5	16.0	13.5	10.5	8.0	4.5	3.6	16.7	21.6	12.8	9.1
9	33.6	NNE	19:43	16.5	15.5	16.0	15.5	13.5	10.5	8.0	4.5	13.8	16.7	82.9	26.7	6.2
10	26.9	SE	18:06	17.0	16.0	16.5	16.0	14.0	10.5	8.0	4.5	11.6	16.6	69.8	22.4	12.7
11	36.6	NW	15:02	18.5	17.5	17.5	16.5	14.0	11.0	8.0	4.5	5.4	16.6	32.6	16.5	9.6
12	33.3	SW	18:17	16.5	15.5	16.5	16.0	14.0	11.0	8.5	4.5	14.9	16.6	90.0	27.8	5.9
13	27.1	NNE	20:42	20.5	17.0	17.5	16.5	14.5	11.0	8.5	4.5	11.2	16.5	67.8	22.0	8.9
14	38.5	NNW	21:22	20.0	18.0	18.0	17.0	14.5	11.5	8.5	4.5	9.7	16.5	58.9	23.9	6.7
15	38.2	NW	14:50	18.0	18.0	18.5	17.5	15.0	11.5	8.5	4.5	11.6	16.4	70.6	24.4	7.4
16	20.9	SE	14:24	17.0	16.5	17.0	17.0	15.0	11.5	9.0	5.0	7.1	16.4	43.3	17.7	8.4
17	24.3	NE	18:29	16.5	17.0	17.5	16.5	15.0	11.5	9.0	5.0	5.5	16.4	33.6	12.5	8.3
18	38.7	WSW	19:39	16.0	17.0	17.5	16.5	15.0	12.0	9.0	5.0	2.7	16.3	16.6	10.3	6.9
19	36.6	NE	16:45	13.5	16.0	16.5	16.0	14.5	11.5	8.5	4.0	5.3	16.3	32.6	11.1	8.6
20	15.8	E	14:55	14.0	15.5	16.0	16.0	14.5	11.5	9.0	4.5	8.0	16.2	49.3	12.8	6.8
21	20.3	SW	16:19	17.5	16.0	16.5	16.0	14.5	12.0	9.5	5.0	15.3	16.2	94.6	21.5	6.6
22	21.3	S	16:15	19.5	16.5	17.0	16.5	15.0	12.0	9.5	5.0	17.0	16.1	105.4	23.4	3.7
23	22.9	S	16:14	19.5	17.5	18.0	17.0	15.0	12.0	9.5	5.0	12.5	16.1	77.7	23.8	5.2
24	47.0	SSW	20:05	21.0	18.5	19.0	18.0	15.5	12.0	9.5	5.0	3.9	16.0	24.3	10.1	5.3
25	36.2	WSW	3:25	14.5	17.0	17.5	16.5	14.5	11.5	9.0	4.0	5.0	16.0	31.3	11.2	8.8
26	35.7	NNW	14:15	17.5	17.5	17.5	16.5	15.0	12.0	9.5	4.5	8.2	15.9	51.5	17.1	5.1
27	32.3	WSW	23:25	20.0	17.0	17.5	17.0	15.5	12.5	10.0	5.5	14.1	15.9	88.8	26.1	4.6
28	56.9	WNW	11:35	15.0	18.0	18.0	17.5	15.5	12.5	9.5	5.0	6.1	15.8	38.5	12.1	8.3
29	24.0	S	14:12	13.5	14.5	15.5	16.0	15.5	12.5	10.0	5.5	13.4	15.8	84.9	25.7	4.8
30	39.2	WSW	23:59	16.0	16.5	17.0	16.5	15.5	13.0	10.0	5.5	8.8	15.7	56.0	18.0	7.5
31	56.1	W	0:02	16.5	17.0	17.5	17.0	15.5	13.0	10.0	5.5	10.7	15.7	68.3	20.7	8.0
Total												299.4	506.7	59.1	605.7	231.9
Mean				17.0	16.2	16.7	16.1	14.3	11.3	8.7	4.6					
Extreme	56.9	WNW	11:35													
Date	28															

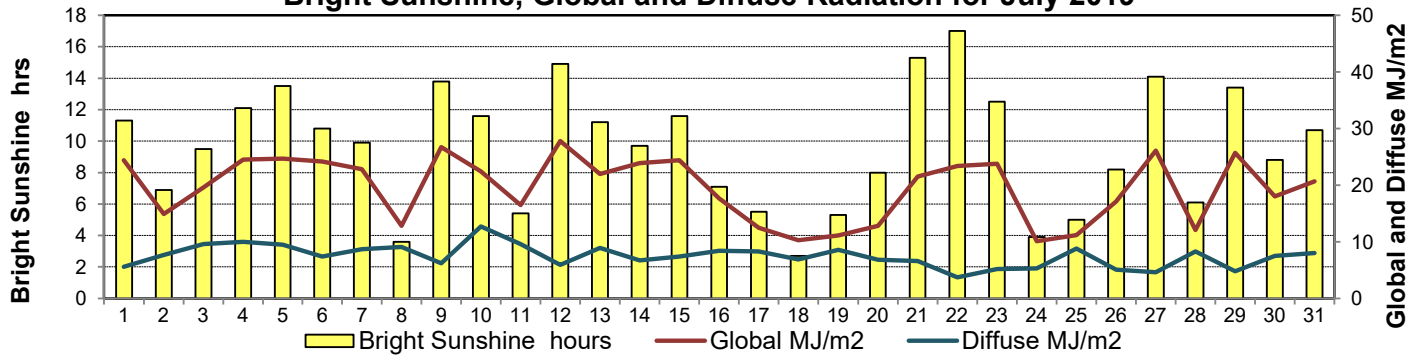
GLOSSARY OF TERMS

Degree-days	Radiation
Tm Mean Temperature	Bright Sunshine is the unobstructed direct radiation from the sun, as opposed to the shading of a location by clouds or by other atmospheric obstructions.
Growing (Tm-5°C); if Tm ≤ 5°C then GDD = 0	
Heating (18°C-Tm); if Tm ≥ 18°C then HDD = 0	Diffuse is radiation reaching the earth's surface after having been scattered from the direct solar beam
Cooling (Tm-18°C); if Tm ≤ 18°C then CDD = 0	Global is the sum of the direct solar and diffuse radiation
T Trace of Precipitation	Relative Humidity The ratio of the air's water vapour content of its water vapour capacity which changes with temperature.
SOG Depth of snow-on-the-ground	
Red Cell no data available	Air Pressure The force exerted by the weight of a column of air above a given point
Red Number manual calculation	Wind Gust The daily highest instantaneous value recorded irrespective of direction and/or duration

Wind Speed for July 2019

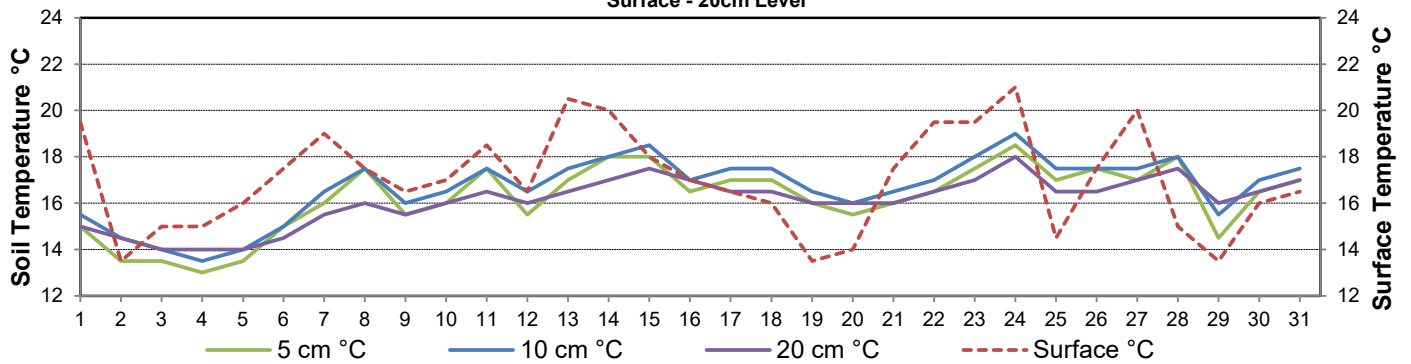


Bright Sunshine, Global and Diffuse Radiation for July 2019



Soil Temperatures for July 2018

Surface - 20cm Level



Soil Temperatures for July 2019

50 - 300cm Level

