



# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

## CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W Estab. 2011

Preliminary

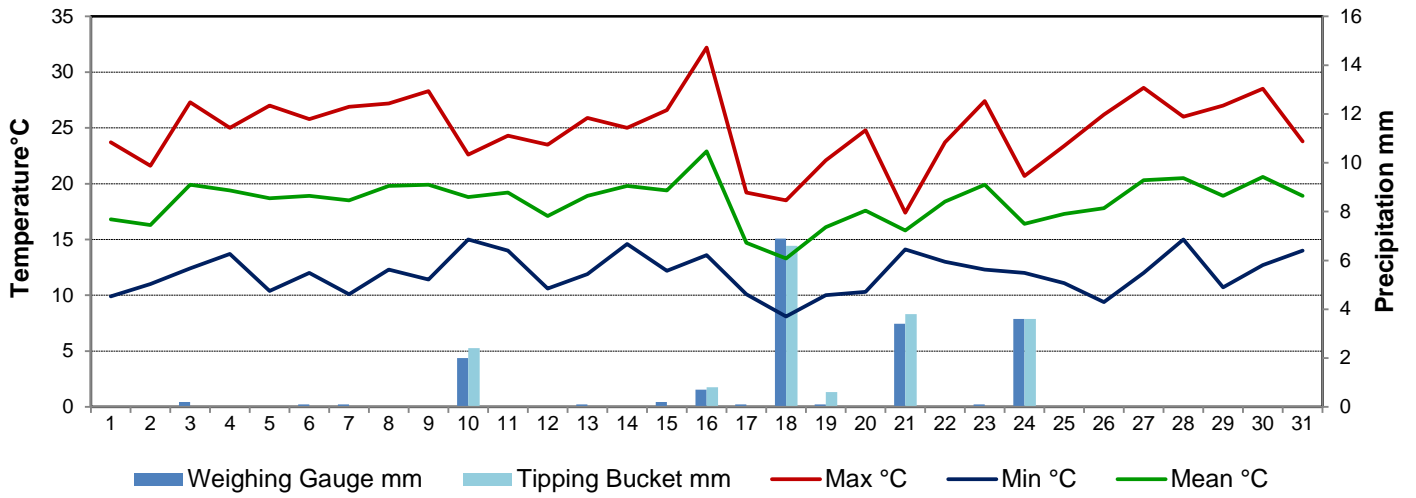
July 2017

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	23.7	9.9	16.8	11.8	1.2	0.0	0.0	0.0		91	39	1014	1011
2	21.6	11.0	16.3	11.3	1.7	0.0	0.0	0.0		88	54	1016	1013
3	27.3	12.4	19.9	14.9	0.0	1.9	0.2	0.0		90	46	1013	1003
4	25.0	13.7	19.4	14.4	0.0	1.4	0.0	0.0		92	25	1014	1007
5	27.0	10.4	18.7	13.7	0.0	0.7	0.0	0.0		91	25	1016	1012
6	25.8	12.0	18.9	13.9	0.0	0.9	0.1	0.0		90	35	1021	1016
7	26.9	10.1	18.5	13.5	0.0	0.5	0.1	0.0		94	33	1021	1016
8	27.2	12.3	19.8	14.8	0.0	1.8	0.0	0.0		94	33	1017	1012
9	28.3	11.4	19.9	14.9	0.0	1.9	0.0	0.0		92	33	1014	1010
10	22.6	15.0	18.8	13.8	0.0	0.8	2.0	2.4		90	64	1010	1005
11	24.3	14.0	19.2	14.2	0.0	1.2	0.0	0.0		90	44	1016	1006
12	23.5	10.6	17.1	12.1	0.9	0.0	0.0	0.0		94	43	1019	1017
13	25.9	11.9	18.9	13.9	0.0	0.9	0.1	0.0		89	50	1018	1010
14	25.0	14.6	19.8	14.8	0.0	1.8	0.0	0.0		90	49	1020	1009
15	26.6	12.2	19.4	14.4	0.0	1.4	0.2	0.0		94	47	1022	1012
16	32.2	13.6	22.9	17.9	0.0	4.9	0.7	0.8		79	27	1012	998
17	19.2	10.1	14.7	9.7	3.3	0.0	0.1	0.0		79	44	1012	1007
18	18.5	8.1	13.3	8.3	4.7	0.0	6.9	6.6		93	40	1017	1012
19	22.1	10.0	16.1	11.1	1.9	0.0	0.1	0.6		95	46	1014	1011
20	24.8	10.3	17.6	12.6	0.4	0.0	0.0	0.0		93	51	1013	1010
21	17.4	14.1	15.8	10.8	2.2	0.0	3.4	3.8		92	76	1011	1008
22	23.7	13.0	18.4	13.4	0.0	0.4	0.0	0.0		92	41	1015	1011
23	27.4	12.3	19.9	14.9	0.0	1.9	0.1	0.0		93	43	1014	1005
24	20.7	12.0	16.4	11.4	1.6	0.0	3.6	3.6		90	44	1005	999
25	23.4	11.1	17.3	12.3	0.7	0.0	0.0	0.0		88	45	1016	1003
26	26.2	9.4	17.8	12.8	0.2	0.0	0.0	0.0		94	38	1018	1016
27	28.6	12.0	20.3	15.3	0.0	2.3	0.0	0.0		94	40	1016	1010
28	26.0	15.0	20.5	15.5	0.0	2.5	0.0	0.0		83	36	1014	1009
29	27.0	10.7	18.9	13.9	0.0	0.9	0.0	0.0		89	37	1017	1014
30	28.5	12.7	20.6	15.6	0.0	2.6	0.0	0.0		93	50	1018	1011
31	23.8	14.0	18.9	13.9	0.0	0.9	0.0	0.0		93	34	1021	1013
Total				415.8	18.8	31.6	17.6	17.8					
Avg	24.8	11.9	18.4				188.7	Cumulative ppt					
Extreme	32.2	8.1					6.9	6.6		95	25	1022	998
Date	16	18					18	18		19	4	15	16

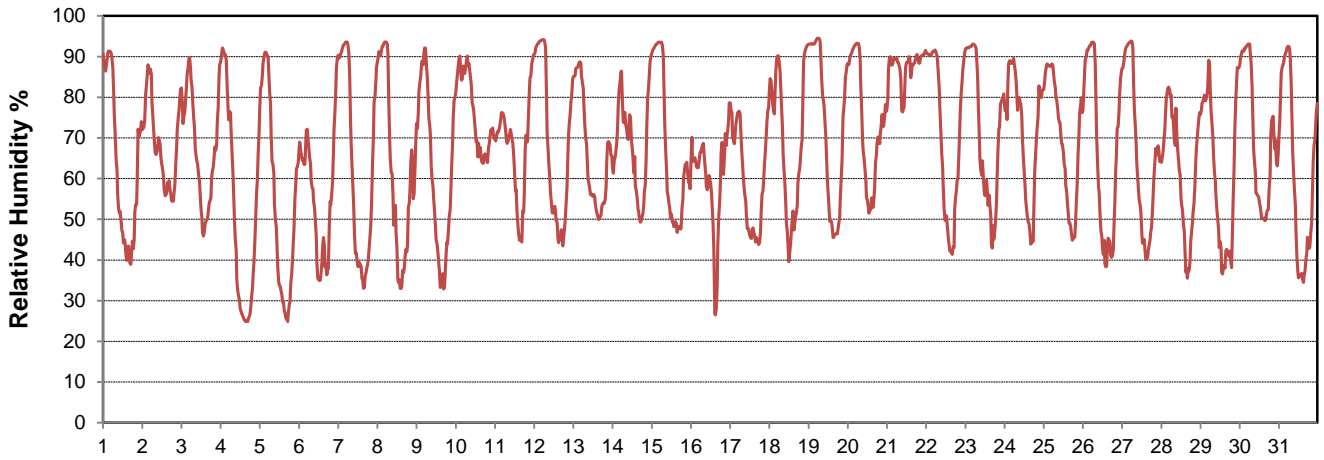
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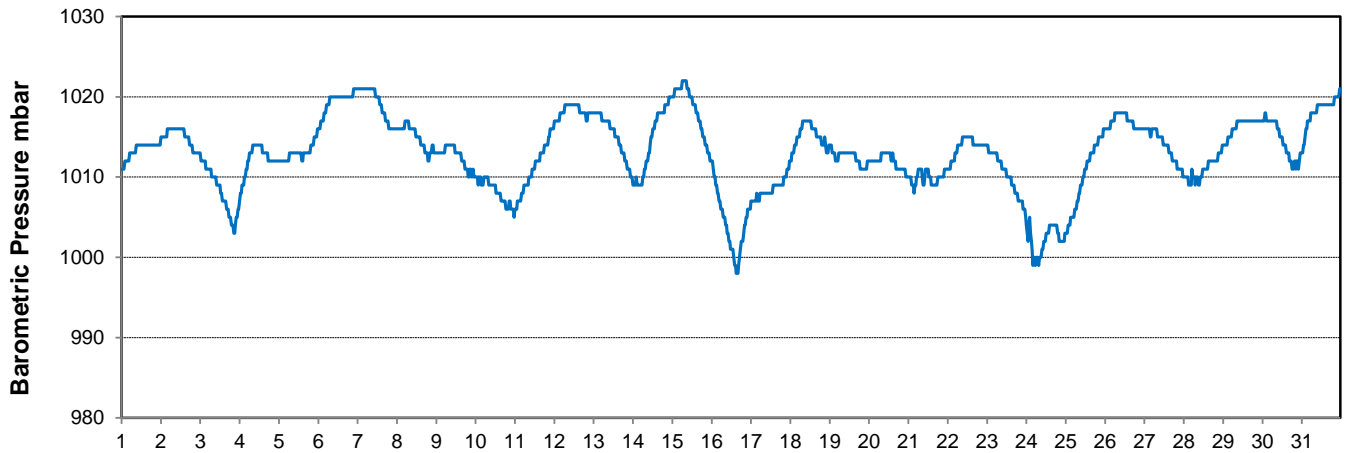
### Temperature and Precipitation for July 2017



### Relative Humidity for July 2017



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





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Preliminary

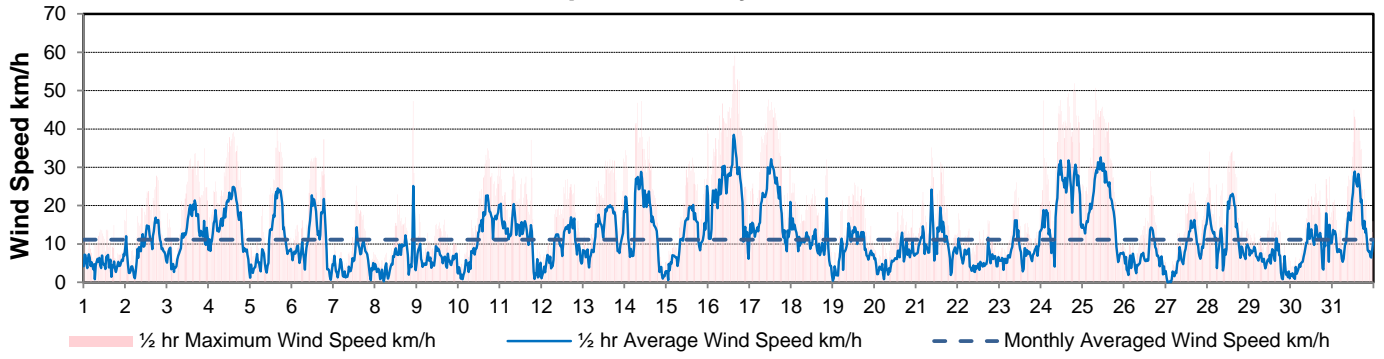
July 2017

Day	Wind Gust			Soil Temperatures at 0900hrs								Soil Moisture	Radiation		
	Max	Direction	Time	Surface	5 cm	10 cm	20 cm	50 cm	100 cm	150 cm	300 cm	0900hrs	Bright Sunshine	Global	Diffuse
	km/h			°C	°C	°C	°C	°C	°C	°C	°C	%	hours	MJ/m <sup>2</sup>	MJ/m <sup>2</sup>
1	16.2	SSE	23:55	16.5	13.5	13.0	13.0	11.0	9.0	7.0	4.0	34	14.8	26.2	8.5
2	27.8	ESE	18:17	17.0	14.0	14.0	13.0	11.5	9.0	7.0	4.0	33	5.9	14.4	12.4
3	34.9	N	21:50	20.0	14.0	13.5	13.0	11.5	9.0	7.0	4.0	33	13.8	28.1	9.5
4	39.2	W	14:41	19.5	15.0	15.0	14.0	11.5	9.0	7.0	4.0	33	16.3	30.3	10.4
5	40.1	NW	15:51	19.0	15.0	15.0	14.0	12.0	9.5	7.0	4.0	32	14.4	26.9	12.7
6	37.3	NE	18:42	20.0	15.0	15.0	14.5	12.5	9.5	7.5	4.5	32	14.5	25.7	10.2
7	25.2	NNW	13:41	19.0	15.0	14.5	14.5	12.5	9.5	7.5	4.5	31	14.6	29.1	11.2
8	47.3	N	22:00	20.5	15.5	15.5	15.0	12.5	9.5	7.5	4.5	31	12.2	23.4	14.1
9	17.9	N	1:56	19.0	16.0	16.0	15.5	13.0	10.0	7.5	4.5	30	15.4	25.9	13.8
10	34.9	E	17:23	19.0	16.5	16.5	16.0	13.0	10.0	7.5	4.5	30	2.5	11.8	9.9
11	37.1	ESE	18:22	17.0	16.5	16.5	15.5	13.0	10.0	8.0	4.5	30	5.2	16.3	13.4
12	27.0	SSW	15:27	18.5	15.5	15.5	15.0	13.0	10.0	8.0	4.5	30	14.3	27.2	14.7
13	32.3	SSE	23:49	19.5	16.0	15.5	15.5	13.0	10.0	8.0	4.5	29	14.4	27.0	14.5
14	47.3	NNW	9:52	19.0	16.5	16.5	16.0	13.5	10.5	8.0	4.5	28	11.6	21.6	15.9
15	40.8	SSE	23:41	20.5	16.0	16.0	15.5	13.5	10.5	8.0	4.5	28	14.0	25.3	13.2
16	59.1	SSW	15:31	22.5	17.5	17.5	16.5	13.5	10.5	8.5	4.5	27	10.6	22.5	15.0
17	47.6	W	11:09	16.5	16.0	16.5	16.5	14.0	11.0	8.5	4.5	27	12.2	23.8	13.3
18	32.0	NNE	20:30	14.5	15.0	15.5	15.5	14.0	11.0	8.5	5.0	26	7.6	18.6	8.2
19	26.0	NW	12:51	13.5	15.0	15.0	15.0	13.5	11.0	8.5	5.0	28	13.3	26.7	17.6
20	19.3	ENE	16:09	17.0	15.5	15.5	15.5	14.0	11.0	9.0	5.0	27	9.7	20.0	12.7
21	35.2	NE	9:26	15.5	16.5	16.5	16.0	13.5	11.0	8.5	4.5	27	1.0	5.7	4.4
22	18.0	NNE	0:51	17.0	15.5	14.5	14.5	13.0	10.5	8.5	4.0	27	12.9	26.1	18.7
23	26.1	S	10:07	20.5	16.5	16.0	15.5	13.5	11.0	8.5	4.5	27	10.5	20.8	18.2
24	51.9	WSW	19:32	20.0	17.5	17.5	16.5	14.0	11.0	9.0	5.0	26	10.7	22.9	19.8
25	50.7	NW	7:58	17.5	16.0	16.0	16.0	14.0	11.0	9.0	4.5	26	10.7	22.3	20.1
26	29.1	SE	15:18	18.5	15.5	15.5	16.0	14.5	11.5	9.5	5.0	26	13.5	25.0	17.6
27	26.0	SSE	16:22	20.0	16.0	16.0	16.0	14.5	12.0	9.5	5.5	26	14.7	26.4	19.2
28	34.3	NNW	14:39	22.0	17.5	17.5	17.0	14.5	12.0	9.5	5.5	26	13.3	23.9	19.2
29	23.1	N	15:51	21.0	16.5	17.0	16.5	15.0	12.0	9.5	5.5	25	14.4	23.4	10.3
30	27.6	NNW	22:39	21.0	17.0	17.0	16.5	15.0	12.0	9.5	5.5	25	12.2	23.4	5.4
31	45.0	WNW	12:53	20.0	17.5	18.0	17.5	15.0	12.0	10.0	5.5	24	14.4	24.5	10.7
Total													365.6	715.2	414.8
Mean				18.7	15.8	15.8	15.4	13.3	10.5	8.3	4.6	29			
Extreme	59.1	SSW	15:31										Diffuse auto shade ring was misaligned (July 17- 28)		
Date	16														

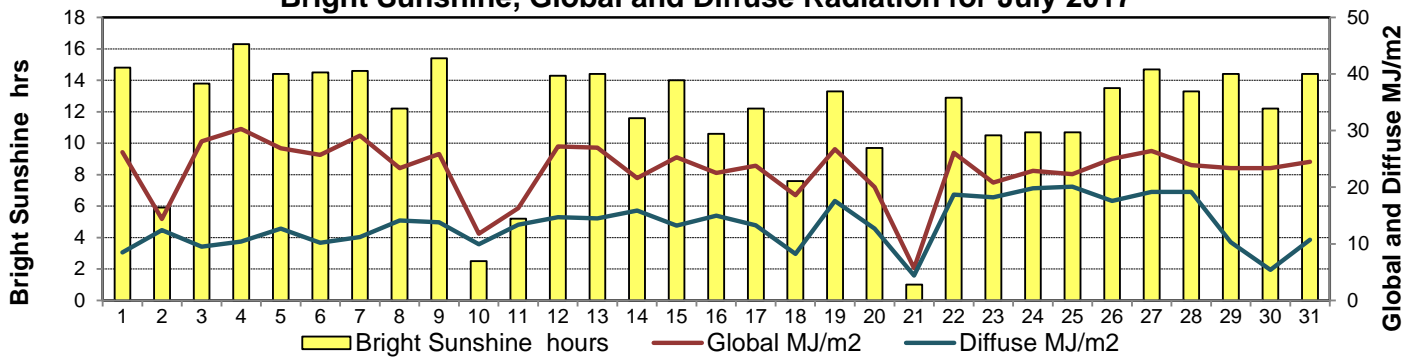
### GLOSSARY OF TERMS

<b>Degree-days</b>	<b>Radiation</b>
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	
Cooling (Tm-18°C); if Tm ≤ 18°C then CDD = 0	Diffuse is radiation reaching the earth's surface after having been scattered from the direct solar beam
T Trace of Precipitation	Global is the sum of the direct solar and diffuse radiation
<b>SOG</b> Depth of snow-on-the-ground	
<b>Red Cell</b> no data available	<b>Relative Humidity</b> The ratio of the air's water vapour content to its water vapour capacity which changes with temperature.
Red Number manual calculation	<b>Air Pressure</b> The force exerted by the weight of a column of air above a given point
	<b>Wind Gust</b> The daily highest instantaneous value recorded irrespective of direction and/or duration

### Wind Speed for July 2017

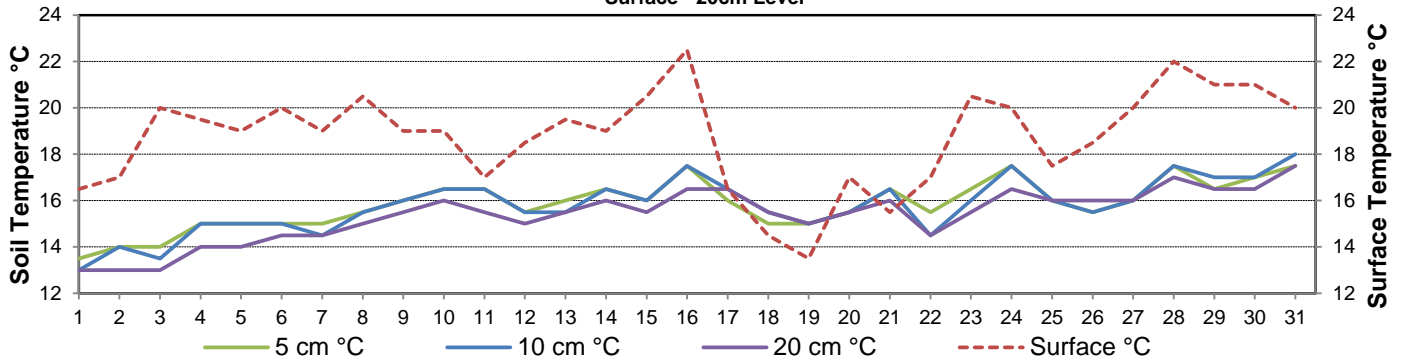


### Bright Sunshine, Global and Diffuse Radiation for July 2017



### Soil Temperatures for July 2017

Surface - 20cm Level



### Soil Temperatures for July 2017

50 - 300cm Level

