



# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

## CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W Estab. 2011

Preliminary

October 2015

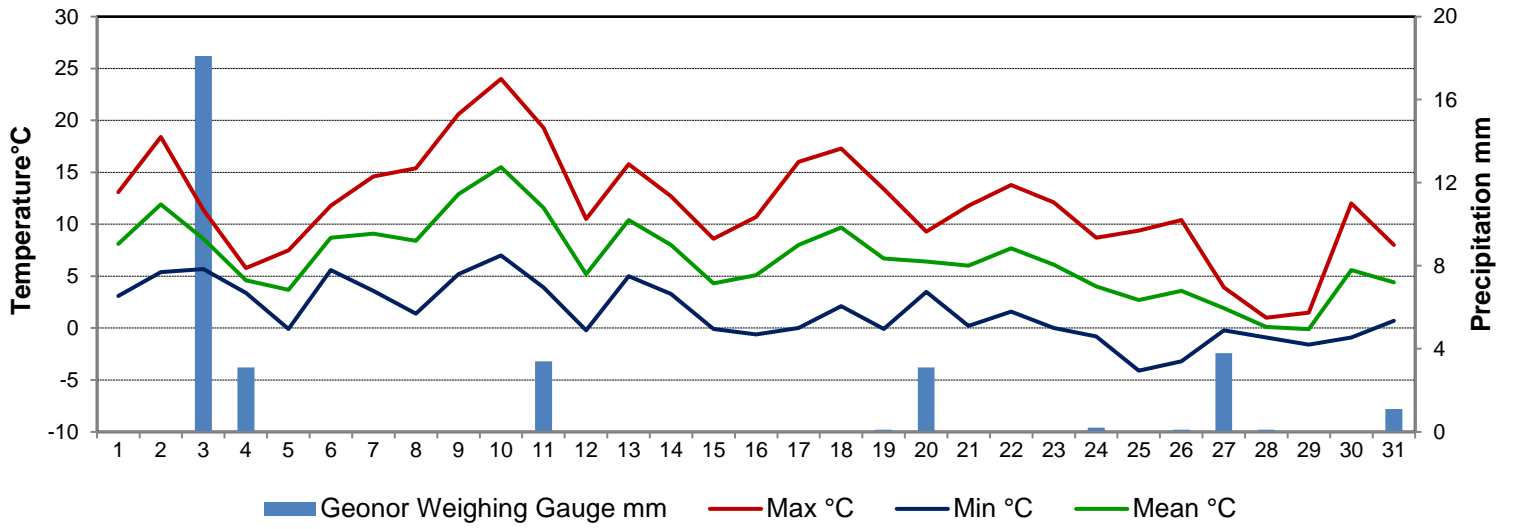
Day	Temperature			Degree-days			Precipitation			Relative Humidity		Station Pressure <i>corrected to sea level</i>	
	Max	Min	Mean	Growing	Heating	Cooling	Geonor Weighing Gauge	Notes	Snow-on-Ground 0900h	Max ½ hr Avg	Min ½ hr Avg	Max ½ hr Avg	Min ½ hr Avg
	°C	°C	°C	5°C base	18°C base	18°C base	mm		cm	%	%	mbar	mbar
1	13.1	3.1	8.1	3.1	9.9	0.0	0.0		0	96	80	1022	1018
2	18.4	5.4	11.9	6.9	6.1	0.0	0.0		0	96	46	1021	1016
3	11.4	5.7	8.6	3.6	9.4	0.0	18.1		0	94	71	1021	1018
4	5.8	3.4	4.6	0.0	13.4	0.0	3.1		0	94	89	1020	1016
5	7.5	-0.1	3.7	0.0	14.3	0.0	0.0		0	93	57	1017	1015
6	11.8	5.6	8.7	3.7	9.3	0.0	0.0		0	91	42	1022	1016
7	14.6	3.6	9.1	4.1	8.9	0.0	0.0		0	91	49	1016	1011
8	15.4	1.4	8.4	3.4	9.6	0.0	0.0		0	91	32	1020	1014
9	20.6	5.2	12.9	7.9	5.1	0.0	0.0		0	81	45	1018	999
10	24.0	7.0	15.5	10.5	2.5	0.0	0.0		0	88	32	999	991
11	19.3	3.9	11.6	6.6	6.4	0.0	3.4		0	88	45	1006	984
12	10.5	-0.2	5.2	0.2	12.8	0.0	0.0		0	90	52	1012	1006
13	15.8	5.0	10.4	5.4	7.6	0.0	0.0		0	86	29	1010	1007
14	12.7	3.3	8.0	3.0	10.0	0.0	0.0		0	73	35	1018	1010
15	8.6	-0.1	4.3	0.0	13.7	0.0	0.0		0	85	51	1027	1018
16	10.7	-0.6	5.1	0.1	12.9	0.0	0.0		0	90	47	1027	1025
17	16.0	0.0	8.0	3.0	10.0	0.0	0.0		0	82	32	1025	1009
18	17.3	2.1	9.7	4.7	8.3	0.0	0.0		0	79	38	1009	1003
19	13.4	-0.1	6.7	1.7	11.3	0.0	0.1		0	93	53	1012	1008
20	9.3	3.5	6.4	1.4	11.6	0.0	3.1		0	92	68	1015	1009
21	11.8	0.2	6.0	1.0	12.0	0.0	0.0		0	84	44	1017	1014
22	13.8	1.6	7.7	2.7	10.3	0.0	0.0		0	87	57	1013	1009
23	12.1	0.0	6.1	1.1	11.9	0.0	0.0		0	87	40	1014	1012
24	8.7	-0.8	4.0	0.0	14.0	0.0	0.2		0	91	58	1020	1012
25	9.4	-4.1	2.7	0.0	15.3	0.0	0.0		0	95	60	1023	1020
26	10.4	-3.2	3.6	0.0	14.4	0.0	0.1		0	95	48	1023	1014
27	3.9	-0.2	1.9	0.0	16.1	0.0	3.8		0	92	76	1013	1006
28	1.0	-0.9	0.1	0.0	17.9	0.0	0.1		0	86	73	1013	1008
29	1.5	-1.6	-0.1	0.0	18.1	0.0	0.0		0	89	73	1012	1000
30	12.0	-0.9	5.6	0.6	12.4	0.0	0.0		0	90	47	1000	991
31	8.0	0.7	4.4	0.0	13.6	0.0	1.1		0	93	67	1000	991
Total				74.7	349.1	0.0	33.1	0					
Avg	11.9	1.5	6.7				468.4	Cumulative ppt					
Extreme	24.0	-4.1					18.1	0.0	0	96	29	1027	984
Date	10	25					3			1	13	15	11

Fall scheduled maintenance took place 6 Oct 2015. (desiccant replacement, checking and realigning of auto-diffuse ring as required, tipping bucket capped, winter maintenance on Geonor, placement of cement block under snow depth sensor and sensor re-leveled, re-calibrated global pyranometer installed and program changed accordingly)

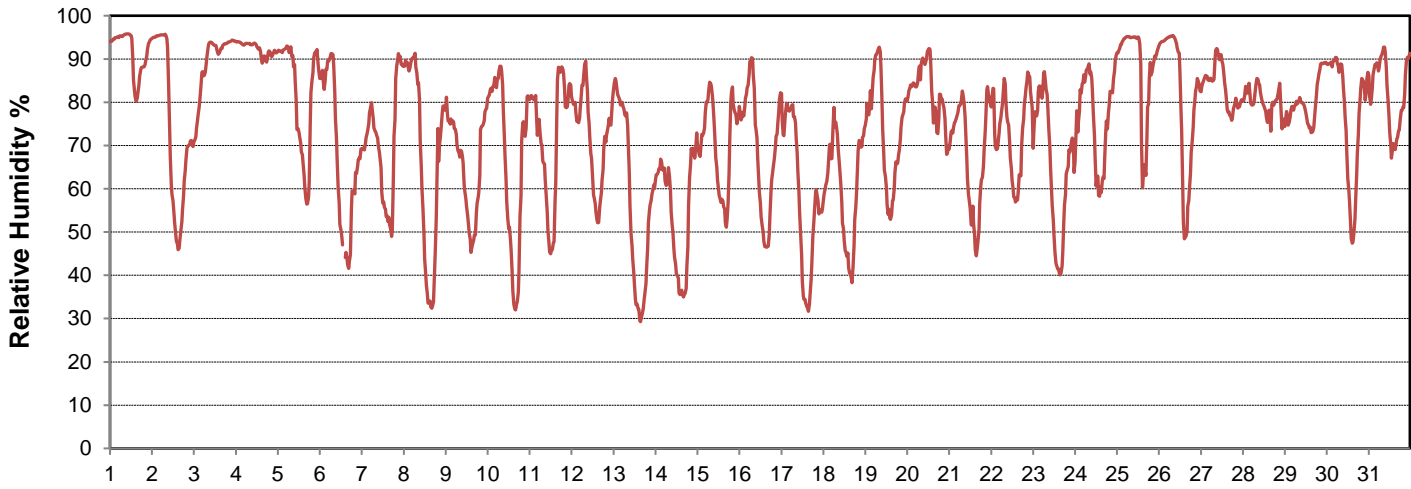
**SRC proudly recognizes the following CRS supporters:**



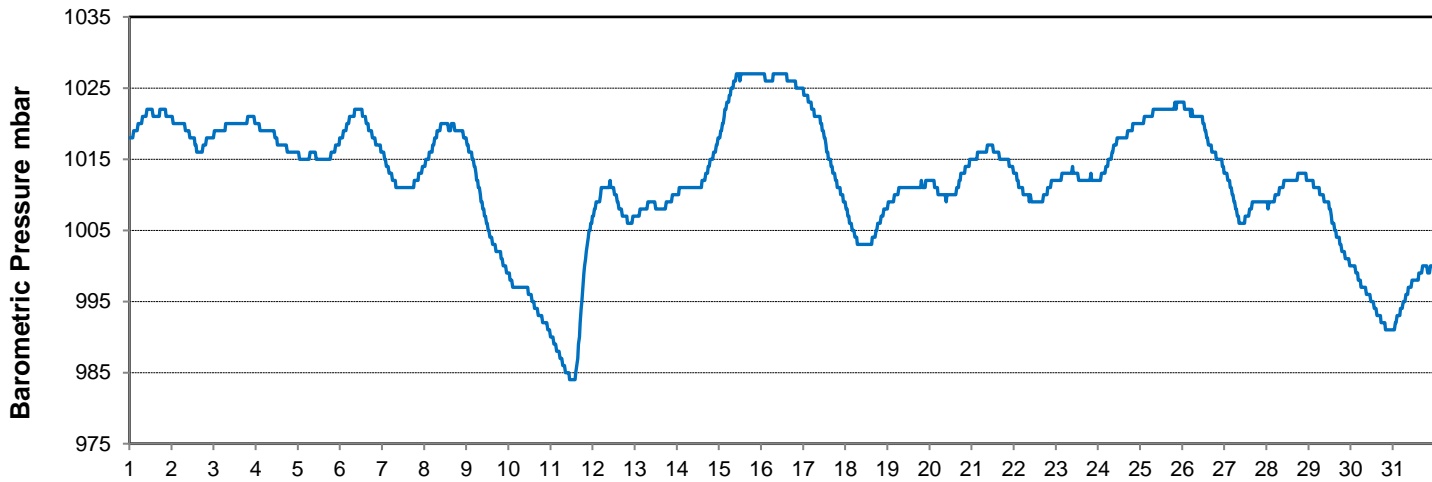
### Temperature and Precipitation for October 2015



### Relative Humidity for October 2015



### Barometric Pressure Corrected to Sea Level for October 2015





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Preliminary

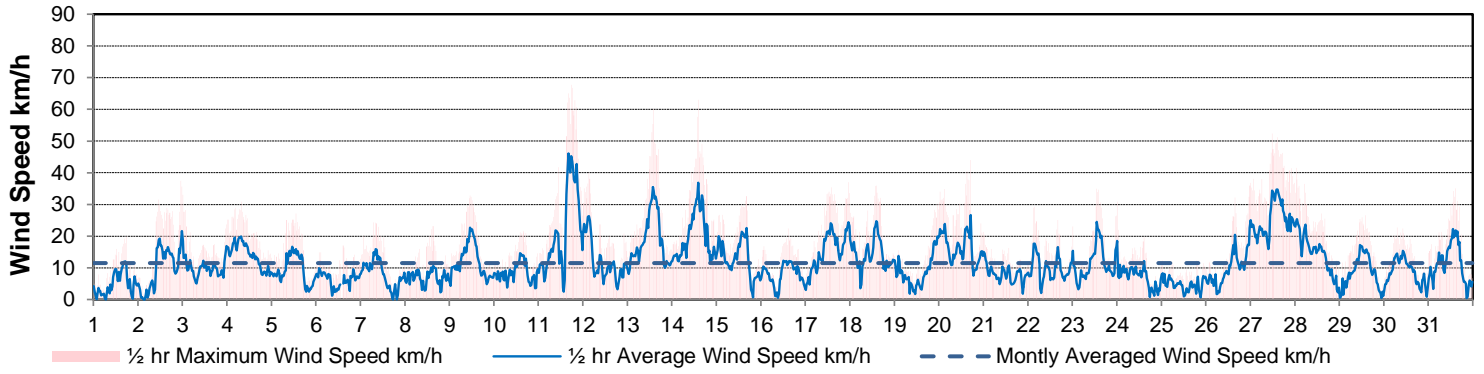
October 2015

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	Global	Diffuse
	km/h			°C	°C	°C	°C	°C	°C	°C	°C	%	hours	MJ/m <sup>2</sup>	MJ/m <sup>2</sup>
1	20.0	E	17:32	8.0	9.5	10.0	11.0	11.5	11.5	11.5	8.5	38	0.0	5.5	5.1
2	37.5	S	23:17	7.0	10.0	10.5	11.0	11.5	11.5	11.0	8.5	38	6.2	8.9	4.4
3	33.1	S	0:01	8.5	11.0	11.0	11.0	11.0	11.5	11.0	8.5	39	0.0	1.7	1.5
4	30.9	NNW	7:33	4.0	9.5	9.0	9.5	10.0	10.5	10.5	7.5	42	0.0	2.1	2.0
5	27.1	WSW	13:14	3.5	9.0	8.5	9.5	10.0	10.5	10.5	7.5	41	4.0	6.7	4.0
6	17.1	SSW	14:42	0.5	7.5	8.0	9.5	10.5	11.0	11.0	8.0	40	3.2	8.0	1.0
7	24.3	E	7:16	6.0	8.5	9.0	9.5	10.5	11.0	11.0	9.0	40	7.1	9.7	2.8
8	23.1	WNW	15:04	4.5	8.0	8.5	9.5	10.5	11.0	11.0	9.0	40	10.6	12.2	1.2
9	32.9	SW	11:29	10.0	8.5	9.0	9.5	10.0	11.0	11.0	8.5	40	6.6	9.5	2.8
10	21.7	WSW	15:55	8.5	9.5	9.5	10.0	10.0	10.5	11.0	9.0	40	6.3	8.1	3.6
11	67.8	N	17:37	12.0	9.5	9.5	10.0	10.0	10.5	10.5	8.5	40	3.4	6.6	2.7
12	40.0	NW	3:00	2.0	9.0	9.5	10.0	10.0	10.5	10.5	8.5	40	7.8	10.9	1.7
13	60.2	WNW	14:09	6.5	8.5	9.0	9.5	10.0	10.5	10.5	8.5	40	10.4	11.1	1.4
14	63.0	W	14:00	5.0	8.0	8.5	9.5	10.0	10.5	10.5	9.0	39	9.6	10.7	1.6
15	32.7	NW	16:19	2.5	7.5	8.0	9.0	10.0	10.5	10.5	9.0	39	5.3	6.9	3.8
16	22.4	ENE	14:57	3.0	7.0	7.5	8.5	9.5	10.5	10.5	9.0	39	9.8	10.1	1.5
17	37.0	S	23:12	3.0	6.5	7.0	8.0	9.5	10.0	10.5	8.5	39	10.2	10.1	1.2
18	35.9	NW	14:04	5.0	7.0	7.5	8.0	9.0	10.0	10.0	8.5	38	9.4	9.0	2.7
19	30.3	ENE	23:26	2.0	6.5	7.0	8.0	9.0	10.0	10.0	9.0	39	3.9	5.7	3.8
20	44.0	NW	17:10	7.5	7.5	7.5	8.0	8.5	9.5	10.0	8.5	38	0.7	1.8	1.6
21	21.3	W	0:06	0.5	6.5	7.0	8.0	9.0	9.5	10.0	8.5	38	9.8	8.8	1.2
22	29.3	S	3:59	4.5	6.5	7.0	7.5	8.5	9.5	10.0	8.5	38	8.1	8.1	2.8
23	35.0	NW	13:24	1.0	6.0	6.5	7.5	8.5	9.5	10.0	8.5	38	9.5	9.0	1.1
24	30.9	W	0:09	1.0	6.0	6.5	7.0	8.5	9.5	10.0	8.5	38	5.8	7.6	2.9
25	12.3	SW	19:25	-1.5	5.5	6.0	7.0	8.0	9.5	9.5	8.5	38	5.4	6.2	2.2
26	35.9	S	23:57	-1.0	5.0	5.5	6.5	8.0	9.0	9.5	8.5	38	7.9	6.8	3.0
27	52.3	NNW	11:50	4.0	5.5	5.5	6.0	7.5	8.5	9.5	8.5	38	0.0	2.4	2.2
28	41.5	NW	0:54	0.0	5.0	5.0	5.5	7.0	8.5	9.0	8.0	38	0.0	1.7	1.6
29	26.6	S	14:26	0.0	5.0	5.0	5.5	7.0	8.5	9.0	8.0	38	0.0	2.3	2.2
30	22.8	SW	7:03	-0.5	4.5	4.5	5.0	6.5	8.0	9.0	8.0	38	8.1	7.4	1.1
31	35.1	NW	14:36	4.0	5.5	5.5	6.0	7.0	8.5	9.0	8.5	38	4.1	13.5	3.3
Total													173.2	229.1	74.0
Mean				3.9	7.4	7.7	8.4	9.2	10.0	10.1	8.5	38.9			
Extreme	67.8	N	17:37												
Date	11														

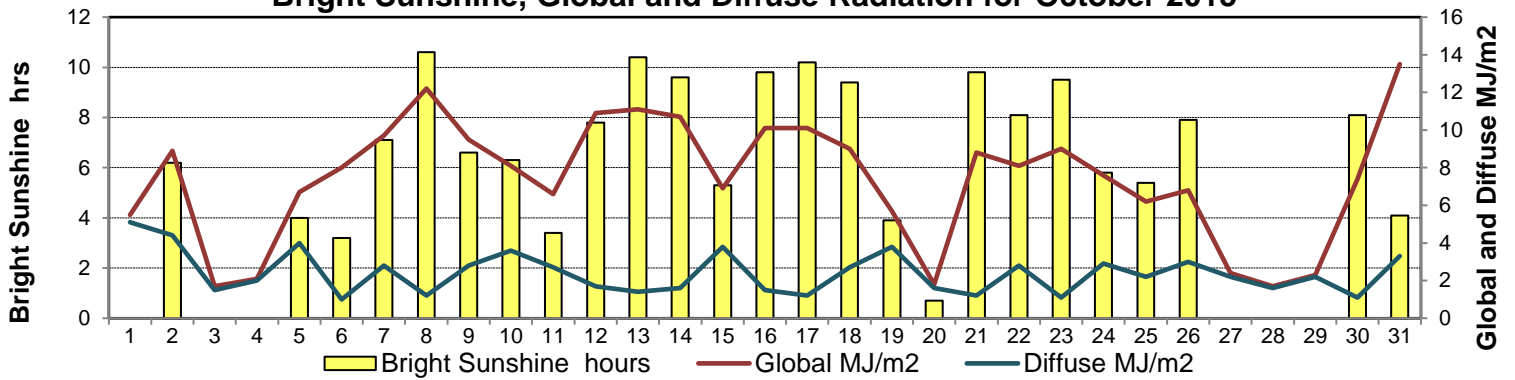
### GLOSSARY OF TERMS

<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	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	<b>Relative Humidity</b> The ratio of the air's water vapour content to its water vapour capacity which changes with temperature.
<b>SOG</b> Depth of snow-on-the-ground	
<b>Red Cell</b> no data available	<b>Air Pressure</b> The force exerted by the weight of a column of air above a given point
Red Number manual calculation	<b>Wind Gust</b> The daily highest instantaneous value recorded irrespective of direction and/or duration

### Wind Speed for October 2015

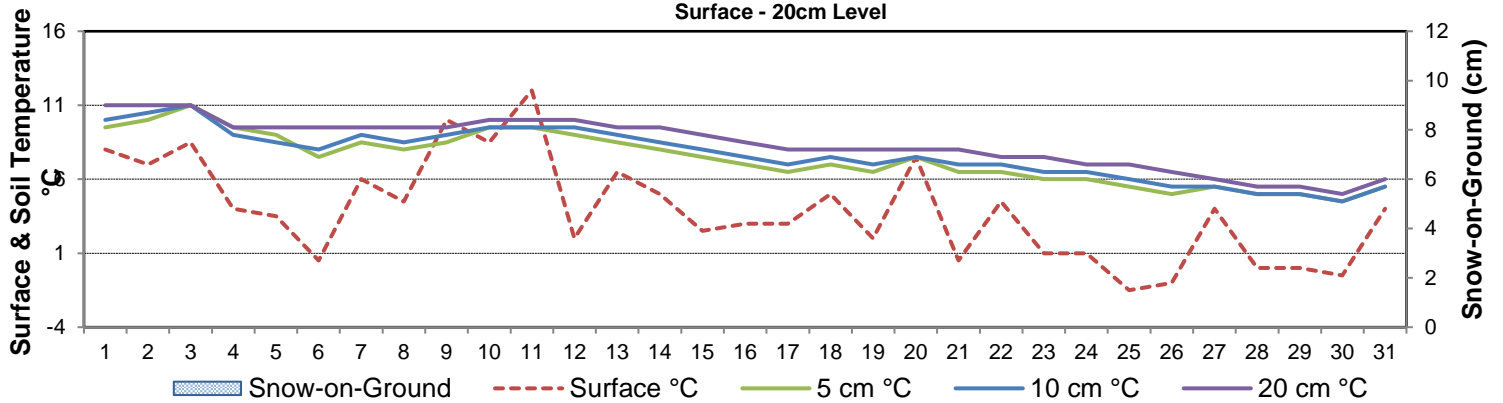


### Bright Sunshine, Global and Diffuse Radiation for October 2015



### Soil Temperatures for October 2015

Surface - 20cm Level



### Soil Temperatures for October 2015

50 - 300cm Level

