



SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W Estab. 2011

Preliminary

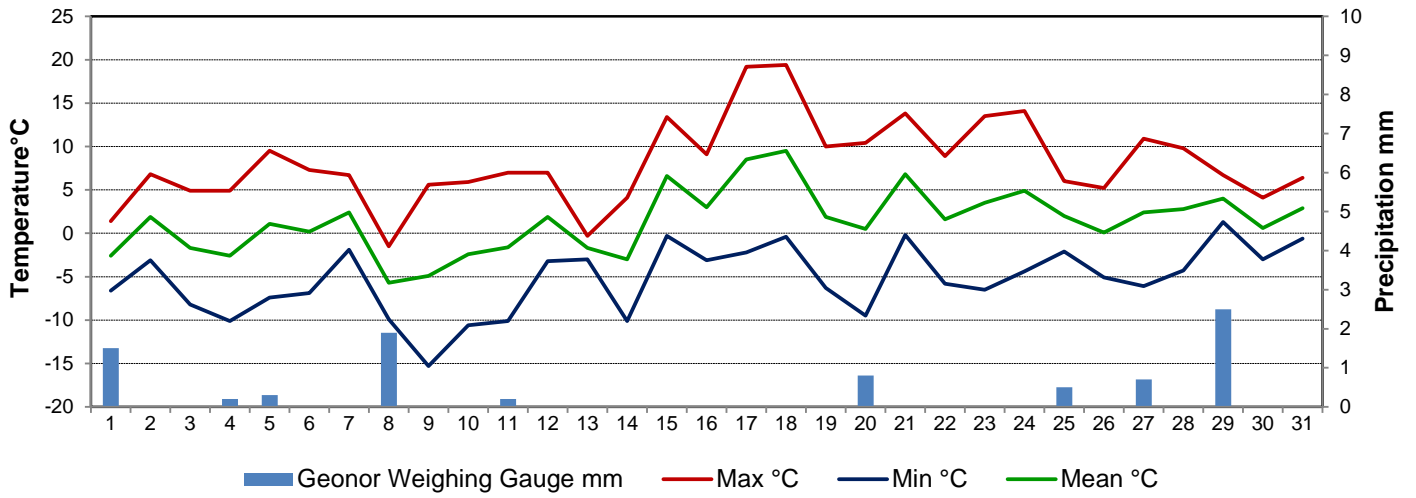
October 2018

Day	Temperature			Degree-days			Precipitation			Relative Humidity		Station Pressure <i>corrected to sea level</i>	
	Max	Min	Mean	Growing	Heating	Cooling	Geonor Weighing Gauge	Tipping Bucket	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	mm	cm	%	%	mbar	mbar
1	1.4	-6.6	-2.6	0.0	20.6	0.0	1.5	0.8	0	100	86	1020	1014
2	6.8	-3.1	1.9	0.0	16.1	0.0	0.0	0.0	0	100	44	1016	1009
3	4.9	-8.2	-1.7	0.0	19.7	0.0	0.0	0.0	0	94	51	1019	1008
4	4.9	-10.1	-2.6	0.0	20.6	0.0	0.2	0.0	0	97	46	1020	1015
5	9.5	-7.4	1.1	0.0	16.9	0.0	0.3	0.0	0	99	40	1015	1012
6	7.3	-6.9	0.2	0.0	17.8	0.0	0.0	0.0	0	98	51	1019	1015
7	6.7	-1.9	2.4	0.0	15.6	0.0	0.0	0.0	0	88	65	1023	1018
8	-1.5	-9.9	-5.7	0.0	23.7	0.0	1.9	1.4	0	98	80	1026	1023
9	5.6	-15.3	-4.9	0.0	22.9	0.0	0.0	0.4	0	96	36	1029	1026
10	5.9	-10.6	-2.4	0.0	20.4	0.0	0.0		0	97	47	1028	1020
11	7.0	-10.1	-1.6	0.0	19.6	0.0	0.2		0	97	42	1020	1010
12	7.0	-3.2	1.9	0.0	16.1	0.0	0.0		0	90	56	1009	998
13	-0.3	-3.0	-1.7	0.0	19.7	0.0	0.0		0	76	58	1021	1007
14	4.1	-10.1	-3.0	0.0	21.0	0.0	0.0		0	94	47	1022	1012
15	13.4	-0.3	6.6	1.6	11.4	0.0	0.0		0	78	34	1015	1005
16	9.1	-3.1	3.0	0.0	15.0	0.0	0.0		0	92	41	1021	1016
17	19.2	-2.2	8.5	3.5	9.5	0.0	0.0		0	97	25	1021	1010
18	19.4	-0.4	9.5	4.5	8.5	0.0	0.0		0	81	24	1013	1007
19	10.0	-6.3	1.9	0.0	16.1	0.0	0.0		0	90	33	1025	1013
20	10.4	-9.5	0.5	0.0	17.5	0.0	0.8		0	96	38	1025	1009
21	13.8	-0.2	6.8	1.8	11.2	0.0	0.0		0	71	30	1017	1012
22	8.9	-5.8	1.6	0.0	16.4	0.0	0.0		0	96	34	1024	1018
23	13.5	-6.5	3.5	0.0	14.5	0.0	0.0		0	97	28	1023	1013
24	14.1	-4.4	4.9	0.0	13.1	0.0	0.0		0	93	40	1013	1008
25	6.0	-2.1	2.0	0.0	16.0	0.0	0.5		0	97	73	1009	1007
26	5.2	-5.1	0.1	0.0	17.9	0.0	0.0		0	100	83	1007	1003
27	10.9	-6.1	2.4	0.0	15.6	0.0	0.7		0	100	48	1010	1002
28	9.8	-4.3	2.8	0.0	15.2	0.0	0.0		0	98	55	1014	1007
29	6.7	1.3	4.0	0.0	14.0	0.0	2.5		0	98	59	1006	1001
30	4.1	-3.0	0.6	0.0	17.4	0.0	0.0		0	100	83	1012	1006
31	6.4	-0.6	2.9	0.0	15.1	0.0	0.0		0	100	72	1012	1006
Total				11.4	515.1	0.0	8.6						
Avg	8.1	-5.3	1.4	Fall maintenance 10 Oct 2018 (capped tipping bucket, empty and re-charge all-season precipitation gauge (Geonor), swap desiccant from the solar radiation instruments, replaced batteries) 23 Oct 2018 (New datalogger program installed)			312.3	Cumulative ppt					
Extreme	19.4	-15.3					2.5		0	100	24	1029	998
Date	18	9					29		1	18	9	12	

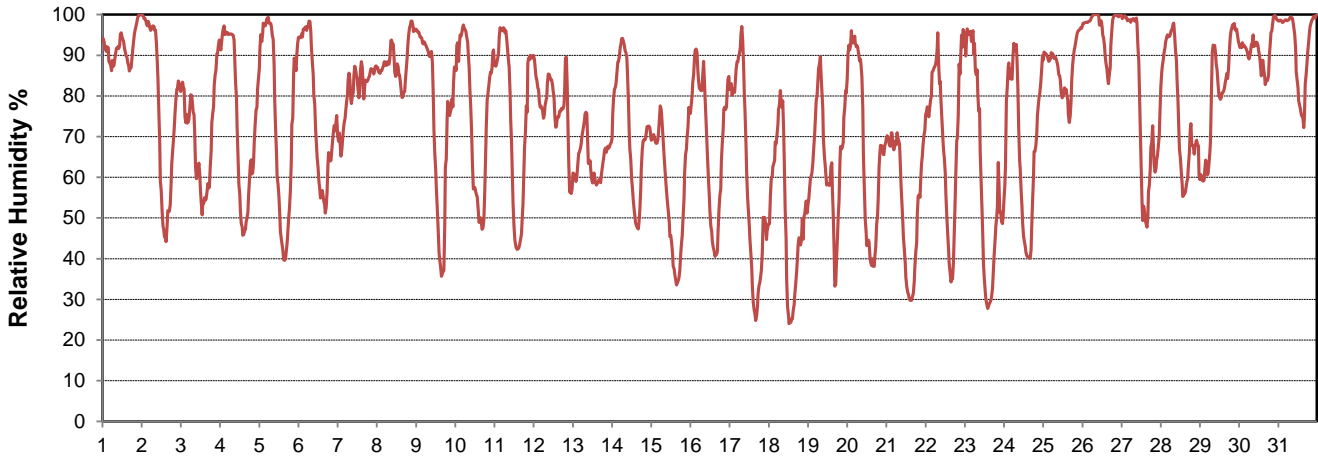
SRC proudly recognizes the following CRS supporters:



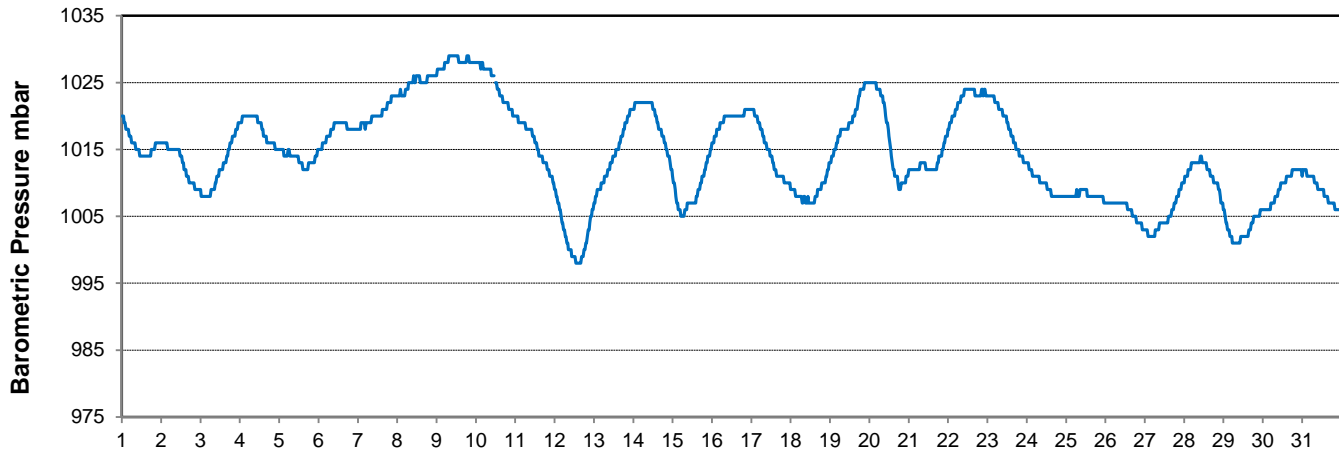
Temperature and Precipitation for October 2018



Relative Humidity for October 2018



Barometric Pressure Corrected to Sea Level for October 2018





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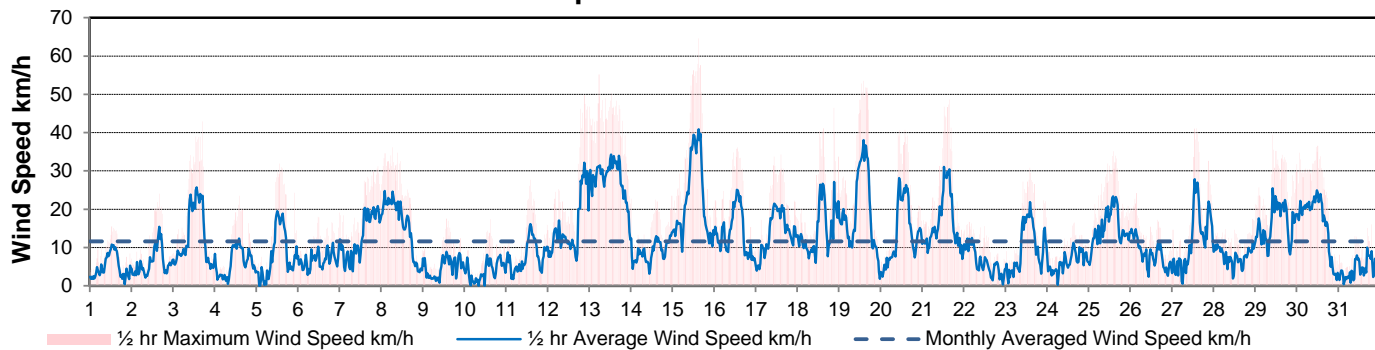
Preliminary **October 2018**

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	Global	Diffuse
	km/h			°C	°C	°C	°C	°C	°C	°C	°C	hours	MJ/m ²	MJ/m ²
1	15.5	ENE	12:35	-0.5	3.0	4.0	5.5	7.5	9.0	9.0	7.5	0.0	3.3	3.0
2	24.1	NW	16:04	-1.0	3.5	4.0	5.0	7.0	8.5	9.0	7.5	4.2	9.1	4.0
3	42.9	NNW	17:02	-1.5	3.5	4.0	5.5	7.0	8.5	9.0	7.5	4.8	8.0	4.0
4	23.5	ESE	14:09	-4.0	2.0	3.0	4.5	6.5	8.5	9.0	7.5	4.3	7.5	5.4
5	31.9	SW	13:42	-2.0	2.0	3.0	4.5	6.5	8.0	9.0	7.5	8.6	11.8	2.5
6	18.0	ENE	11:39	-3.0	2.0	2.5	4.0	6.0	8.0	8.5	7.5	7.6	10.1	4.2
7	31.2	NE	22:19	4.5	3.5	3.5	4.5	6.0	7.5	8.5	7.5	1.5	5.2	4.5
8	36.1	ENE	6:42	-4.0	3.0	3.5	4.5	6.0	7.5	8.5	7.5	1.6	5.3	4.5
9	17.6	NNE	13:46	-9.0	1.5	2.5	4.0	6.0	7.5	8.5	7.5	9.7	12.0	1.6
10	17.4	NE	15:24	-6.0	1.0	1.5	3.5	5.5	7.5	8.0	7.5	9.6	12.0	1.4
11	27.7	WNW	14:08	-5.0	1.0	1.5	3.0	5.0	7.0	8.0	7.5	9.5	11.7	1.4
12	49.8	N	21:19	1.0	1.0	1.5	2.5	5.0	7.0	8.0	7.5	0.5	3.8	3.1
13	55.2	NNW	5:33	-2.0	1.5	2.0	3.0	4.5	6.5	8.0	7.5	0.0	3.6	3.3
14	23.5	SSW	23:59	-6.0	1.0	1.5	2.5	4.5	6.5	8.0	7.5	7.9	10.6	1.4
15	64.6	NNW	15:09	6.0	1.5	1.5	2.5	4.5	6.5	7.5	7.5	8.6	9.7	2.0
16	36.1	NNW	13:34	-0.5	2.0	2.0	3.0	4.5	6.5	7.5	7.5	8.4	9.6	1.6
17	34.3	SW	14:44	3.5	2.0	2.0	3.0	4.5	6.0	7.5	7.5	9.3	9.4	1.4
18	46.4	WNW	21:03	1.0	2.5	3.0	3.5	4.5	6.0	7.5	7.5	5.9	7.4	2.6
19	53.6	NW	14:16	2.0	3.0	3.5	4.0	4.5	6.0	7.0	7.5	7.6	7.7	2.5
20	40.7	S	14:00	-5.5	1.5	2.0	3.5	5.0	6.0	7.0	7.5	5.7	7.9	3.7
21	48.6	WNW	15:50	2.5	1.5	2.0	3.0	4.5	6.0	7.0	7.5	9.0	8.8	1.1
22	16.7	NW	3:22	-5.0	1.5	2.0	3.0	4.5	6.0	7.0	7.5	9.0	9.0	1.1
23	30.9	S	14:04	-4.0	1.0	1.5	2.5	4.5	6.0	7.0	7.5	8.6	8.5	1.7
24	16.5	ENE	15:41	-2.5	1.0	1.5	2.5	4.0	6.0	7.0	7.5	8.7	7.7	2.4
25	35.1	E	14:19	0.0	1.5	1.5	2.5	4.0	5.5	7.0	7.5	2.9	4.0	3.4
26	24.2	ENE	3:37	0.5	2.0	2.0	2.5	4.0	5.5	6.5	7.5	1.2	2.3	2.1
27	41.1	WNW	14:29	-2.5	1.0	1.5	2.5	4.0	5.5	6.5	7.5	4.5	5.5	4.4
28	17.5	E	22:53	-3.0	1.5	2.0	2.5	4.0	5.5	6.5	7.5	6.5	6.5	3.1
29	39.5	WSW	10:23	2.0	2.5	2.5	3.0	4.0	5.5	6.5	7.0	0.5	1.9	1.7
30	36.5	NW	12:08	0.0	2.5	2.5	3.0	4.0	5.5	6.5	7.0	0.7	3.6	3.3
31	16.0	SE	19:12	0.5	2.5	2.5	3.0	4.0	5.5	6.5	7.0	0.5	7.3	6.5
Total												167.4	230.8	88.9
Mean				-1.4	2.0	2.4	3.4	5.0	6.7	7.4	7.5			
Extreme	64.6	NNW	15:09	Fall maintenance 10 Oct 2018 (capped tipping bucket, empty and re-charge all-season precipitation gauge (Geonor), swap dessicant from the solar radiation instruments, replaced batteries) 23 Oct 2018 (New datalogger program installed)										
Date	15													

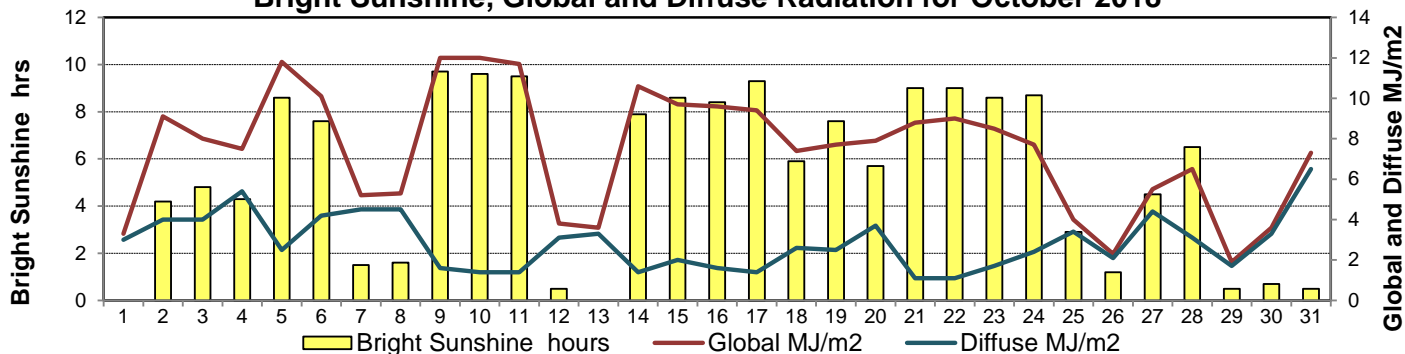
GLOSSARY OF TERMS

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 October 2018

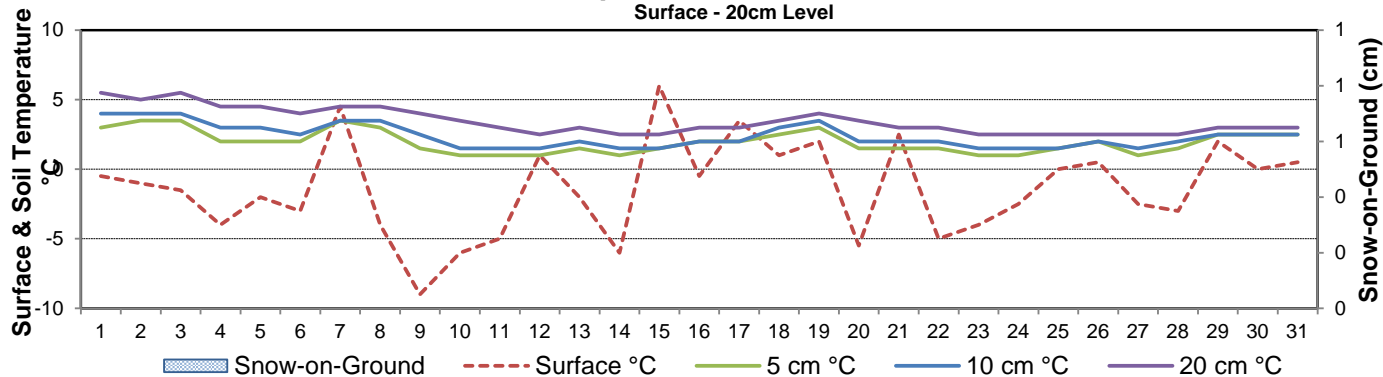


Bright Sunshine, Global and Diffuse Radiation for October 2018



Soil Temperatures for October 2018

Surface - 20cm Level



Soil Temperatures for October 2018

50 - 300cm Level

