



# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

## CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W Estab. 2011

Preliminary

**January 2017**

Day	Temperature			Degree-days			Precipitation			Relative Humidity		Station Pressure <i>corrected to sea level</i>	
	Max	Min	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	°C	°C	5°C base	18°C base	18°C base	mm		cm	%	%	mbar	mbar
1	-9.1	-24.9	-17.0	0.0	35.0	0.0	0.0		5	82	58	1022	1007
2	-19.8	-30.5	-25.2	0.0	43.2	0.0	0.3		5	79	68	1029	1022
3	-18.9	-28.4	-23.7	0.0	41.7	0.0	0.9		5	80	72	1030	1020
4	-16.9	-20.2	-18.6	0.0	36.6	0.0	0.3		5	79	66	1021	1018
5	-14.6	-19.6	-17.1	0.0	35.1	0.0	0.1		5	82	74	1020	1015
6	-14.1	-22.9	-18.5	0.0	36.5	0.0	0.0		5	82	55	1027	1017
7	-15.1	-29.1	-22.1	0.0	40.1	0.0	0.2		5	79	67	1030	1020
8	-16.2	-30.7	-23.5	0.0	41.5	0.0	0.0		5	79	61	1025	1020
9	-20.4	-30.6	-25.5	0.0	43.5	0.0	3.1		5	80	73	1020	1003
10	-19.6	-31.4	-25.5	0.0	43.5	0.0	0.0		7	80	63	1007	1003
11	-15.6	-33.1	-24.4	0.0	42.4	0.0	1.9		8	85	69	1007	992
12	-27.1	-33.8	-30.5	0.0	48.5	0.0	0.0		4	69	57	1023	1008
13	-15.1	-31.3	-23.2	0.0	41.2	0.0	0.6		5	77	59	1021	1016
14	-6.6	-19.2	-12.9	0.0	30.9	0.0	0.0		4	83	59	1021	1010
15	-2.1	-11.4	-6.8	0.0	24.8	0.0	0.0		4	90	63	1011	1007
16	-2.2	-12.9	-7.6	0.0	25.6	0.0	0.5		4	92	65	1013	1003
17	4.4	-5.1	-0.4	0.0	18.4	0.0	0.0		4	90	60	1002	994
18	5.3	-5.1	0.1	0.0	17.9	0.0	0.0		4	92	63	996	989
19	1.6	-6.9	-2.7	0.0	20.7	0.0	0.0		4	94	82	993	990
20	1.5	-4.5	-1.5	0.0	19.5	0.0	0.1		4	93	78	993	991
21	-2.4	-6.2	-4.3	0.0	22.3	0.0	0.7		4	95	87	1002	993
22	-3.4	-8.3	-5.9	0.0	23.9	0.0	3.0		5	91	84	1008	1002
23	-8.2	-11.1	-9.7	0.0	27.7	0.0	2.4		11	89	80	1010	1007
24	-11.0	-17.2	-14.1	0.0	32.1	0.0	0.1		12	88	73	1016	1010
25	-6.6	-22.2	-14.4	0.0	32.4	0.0	0.0		12	88	64	1017	1016
26	-4.1	-20.6	-12.4	0.0	30.4	0.0	0.8		12	92	65	1016	1012
27	3.2	-13.5	-5.2	0.0	23.2	0.0	0.2		11	93	58	1015	1013
28	3.3	-5.0	-0.9	0.0	18.9	0.0	0.0		11	93	64	1014	1011
29	5.0	-10.5	-2.8	0.0	20.8	0.0	0.2		11	94	57	1011	1000
30	3.1	-6.0	-1.5	0.0	19.5	0.0	0.1		11	84	54	1007	999
31	-2.5	-22.3	-12.4	0.0	30.4	0.0	0.1		10	78	55	1022	1008
<b>Total</b>				0.0	968.2	0.0	15.6						
<b>Avg</b>	<b>-7.9</b>	<b>-18.5</b>	<b>-13.2</b>				15.6	<b>Cumulative ppt</b>					
<b>Extreme</b>	5.3	-33.8					3.1		12	95	54	1030	989
<b>Date</b>	18	12					9		24	21	30	3	18

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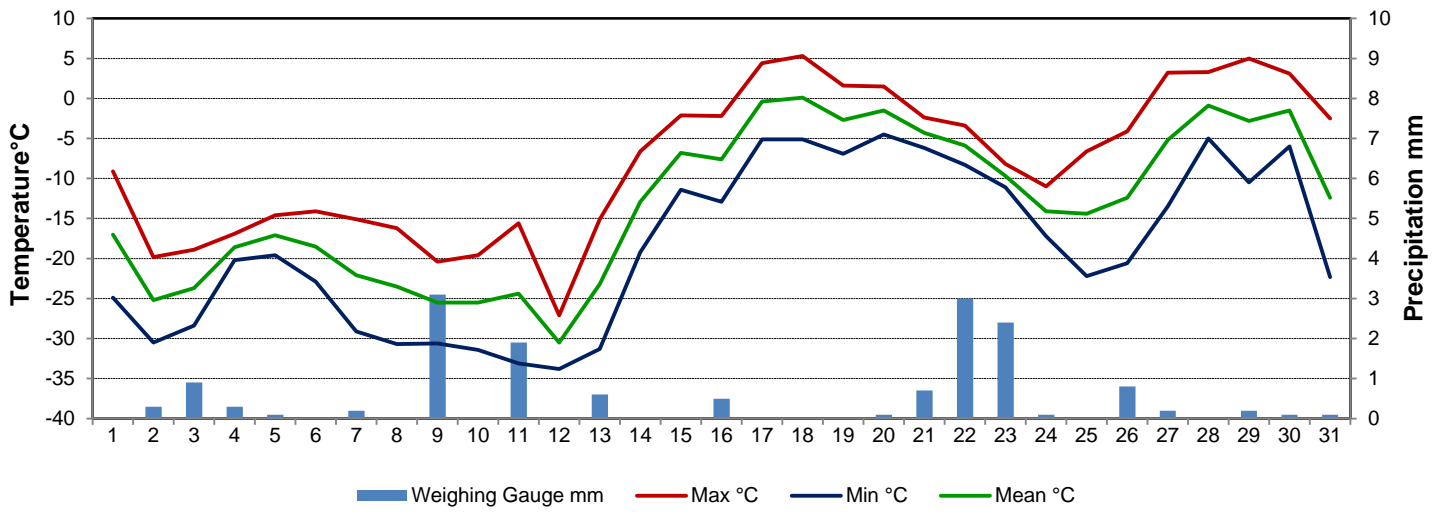
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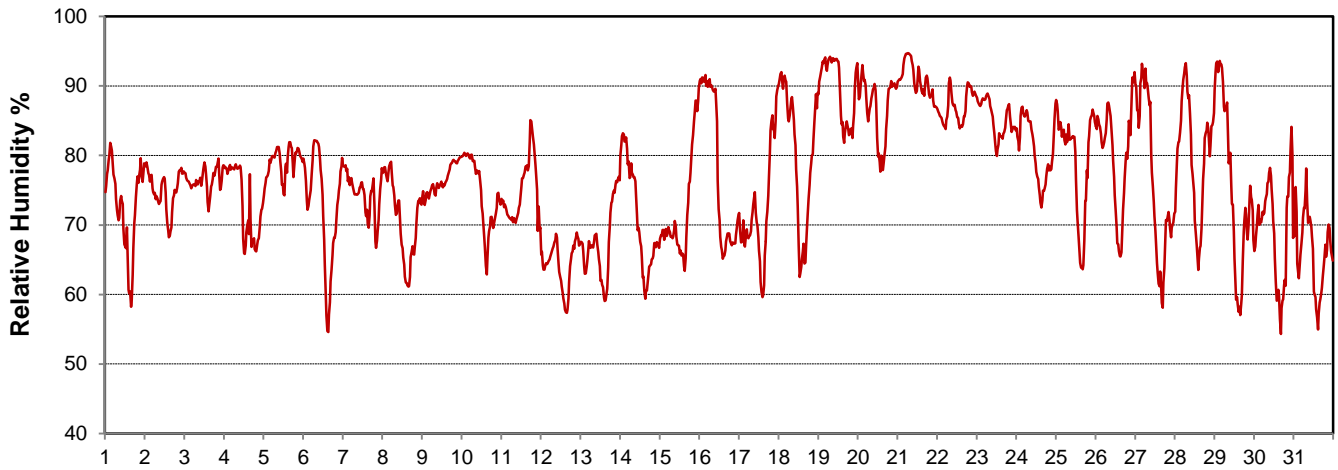
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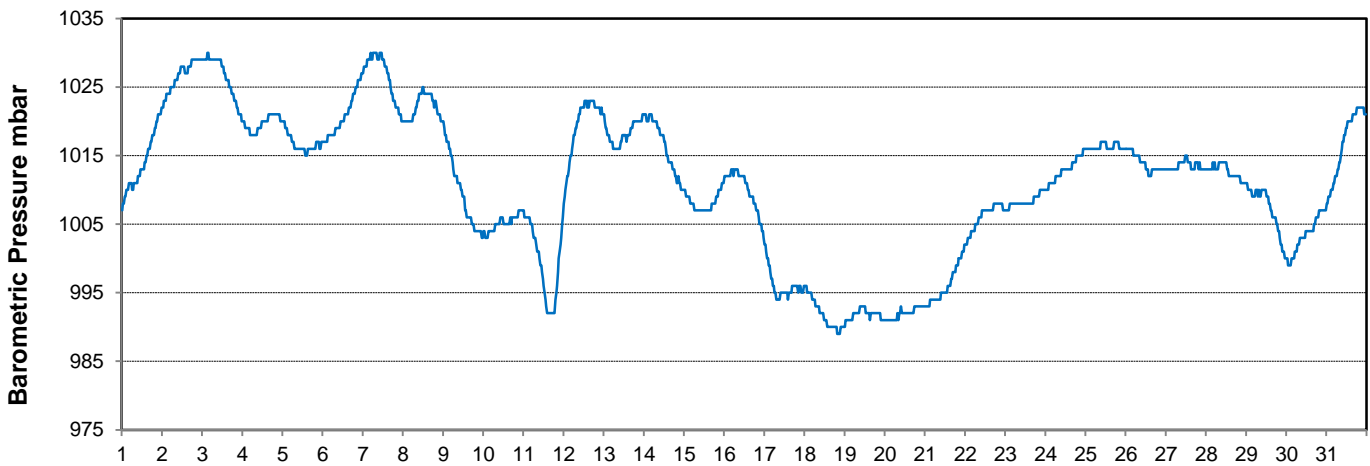
### Temperature and Precipitation for January 2017



### Relative Humidity for January 2017



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





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Preliminary

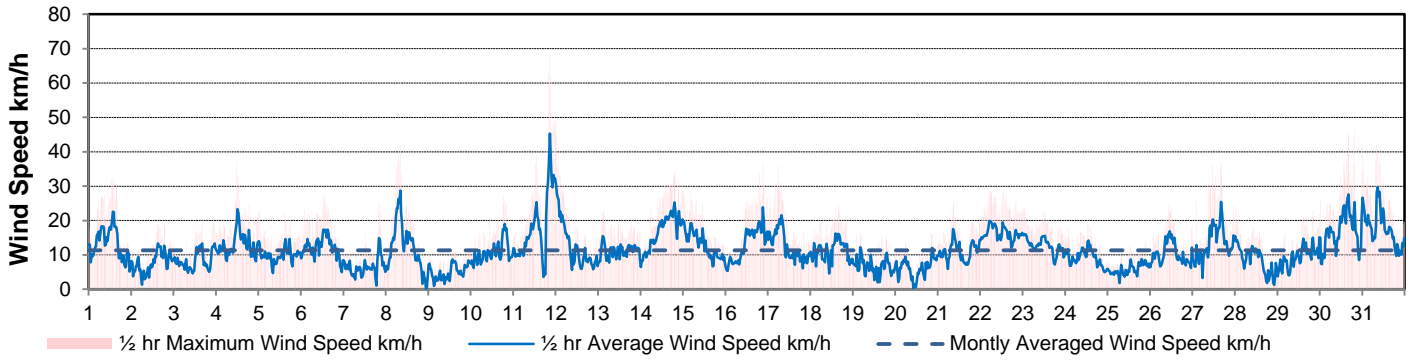
January 2017

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	32.5	NNW	14:16	-11.5	-2.5	-2.0	-1.5	0.0	2.0	3.5	6.5	13	2.4	3.2	1.5
2	19.1	NW	15:15	-28.0	-3.5	-3.0	-2.0	0.0	2.0	4.0	6.5	13	5.7	5.3	0.9
3	20.9	WNW	16:08	-26.0	-4.0	-3.5	-2.5	0.0	2.0	3.5	6.5	12	2.9	4.3	1.8
4	37.1	NNE	11:53	-17.0	-4.0	-3.5	-2.5	0.0	2.0	3.5	6.5	12	1.0	2.7	2.1
5	22.9	WNW	0:20	-16.0	-4.0	-3.5	-2.5	0.0	2.0	3.5	6.5	12	1.3	2.6	2.1
6	27.5	WNW	13:35	-20.0	-3.5	-3.0	-2.5	0.0	2.0	3.5	6.5	12	4.3	5.2	0.9
7	25.0	SW	20:16	-27.0	-4.5	-4.0	-3.0	0.0	2.0	3.5	6.5	12	3.0	4.4	1.9
8	42.5	NNE	8:13	-19.0	-4.0	-4.0	-3.0	-0.5	2.0	3.5	6.5	12	4.8	4.1	0.9
9	12.0	NW	23:29	-22.0	-5.0	-4.5	-3.5	-0.5	1.5	3.5	6.0	12	0.0	1.8	1.7
10	27.1	NW	18:59	-23.5	-4.0	-3.5	-3.0	-0.5	1.5	3.5	6.0	12	5.0	2.6	0.8
11	68.4	N	20:38	-31.0	-4.0	-4.0	-3.0	-0.5	1.5	3.5	6.0	11	1.4	2.5	1.9
12	49.1	NNW	0:13	-28.0	-5.0	-4.5	-3.0	-0.5	1.5	3.0	6.0	11	7.3	4.8	1.0
13	22.6	S	3:19	-22.5	-5.0	-5.0	-3.5	-1.0	1.5	3.0	6.0	11	7.1	4.5	0.9
14	34.8	SW	19:34	-14.5	-4.5	-4.0	-3.0	-1.0	1.5	3.0	6.0	11	3.9	4.5	2.7
15	28.4	SW	0:24	-7.0	-3.5	-3.5	-3.0	-1.0	1.5	3.0	6.0	12	1.6	3.4	2.5
16	36.5	SW	21:28	-12.0	-3.0	-3.0	-2.5	-1.0	1.5	3.0	6.0	12	3.1	4.6	2.4
17	36.1	SSW	5:33	-3.0	-2.5	-2.5	-2.0	-1.0	1.0	3.0	6.0	12	5.3	4.3	1.5
18	25.1	SW	15:56	-2.5	-2.0	-2.0	-2.0	-1.0	1.0	3.0	6.0	12	3.1	3.5	2.3
19	16.2	SW	4:26	-5.5	-2.0	-2.0	-1.5	-0.5	1.0	3.0	6.0	12	0.0	1.8	1.6
20	16.2	NNE	20:58	-2.0	-2.0	-2.0	-1.5	-0.5	1.0	2.5	5.5	12	1.3	3.4	2.5
21	25.2	NE	8:42	-3.0	-1.5	-1.5	-1.5	-1.0	1.0	2.5	5.5	13	0.0	1.7	1.6
22	28.4	NNW	5:53	-5.0	-1.5	-1.5	-1.5	-1.0	1.0	2.5	5.0	13	0.0	2.3	2.1
23	23.7	NNW	1:18	-6.0	-1.5	-1.5	-1.5	-1.0	1.0	2.5	5.0	13	0.0	3.0	2.8
24	19.2	NW	13:20	-9.5	-1.5	-1.5	-1.0	-0.5	1.0	2.5	5.5	13	0.0	3.5	3.3
25	13.7	WSW	21:30	-17.0	-1.5	-1.5	-1.0	-0.5	1.0	2.5	5.5	13	7.9	6.3	1.3
26	24.8	SW	10:30	-13.0	-2.0	-1.5	-1.5	-0.5	1.0	2.5	5.5	12	6.8	5.7	1.3
27	36.3	W	16:04	-8.5	-2.0	-1.5	-1.5	-0.5	1.0	2.5	5.5	12	6.0	6.8	1.9
28	23.9	WNW	0:07	-7.5	-1.5	-1.5	-1.5	-0.5	1.0	2.5	5.5	13	3.5	5.1	2.7
29	23.0	SW	20:20	-5.0	-1.5	-1.5	-1.0	-0.5	1.0	2.5	5.5	13	6.3	5.9	1.9
30	46.2	NNW	19:38	-0.5	-1.0	-1.0	-1.0	-0.5	1.0	2.5	5.5	13	1.0	4.7	4.0
31	42.3	NNW	0:12	-13.0	-1.0	-1.0	-1.0	-0.5	1.0	2.5	5.5	13	7.6	11.4	5.1
Total													103.6	129.9	61.9
Mean				-13.7	-2.9	-2.7	-2.1	-0.5	1.4	3.0	5.9	12			
Extreme	68.4	N	20:38												
Date	11														

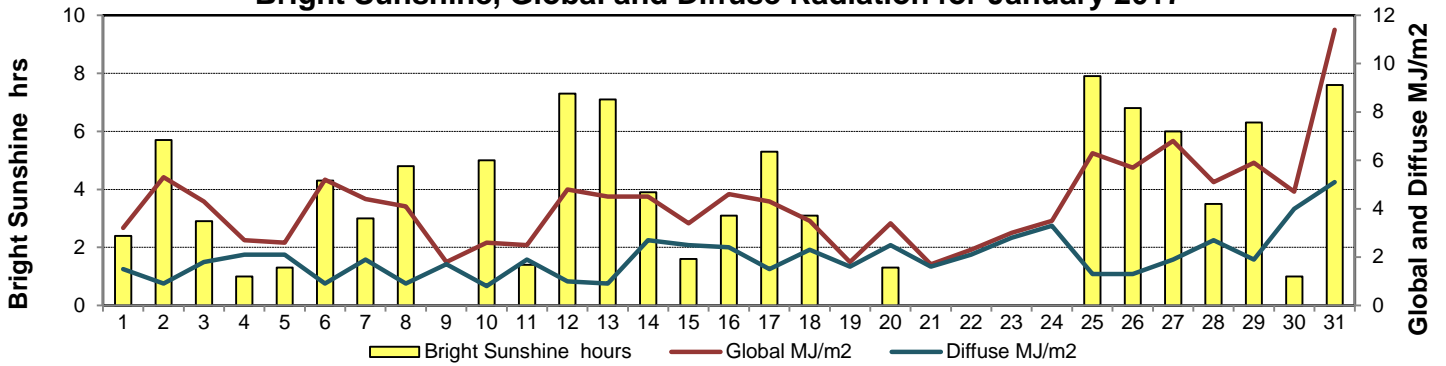
### GLOSSARY OF TERMS

<b>Degree-days</b>	<b>Radiation</b>
T <sub>m</sub> Mean Temperature	Bright Sunshine The unobstructed direct radiation from the sun, as opposed to the shading of a location by clouds or by other atmospheric obstructions.
Growing (T <sub>m</sub> -5°C); if T <sub>m</sub> ≤ 5°C then GDD = 0	
Heating (18°C-T <sub>m</sub> ); if T <sub>m</sub> ≥ 18°C then HDD = 0	Diffuse Radiation reaching the earth's surface after having been scattered from the direct solar beam
Cooling (T <sub>m</sub> -18°C); if T <sub>m</sub> ≤ 18°C then CDD = 0	Global 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
<b>Red Number</b> Manual calculation	<b>Wind Gust</b> The daily highest instantaneous value recorded irrespective of direction and/or duration

### Wind Speed for January 2017

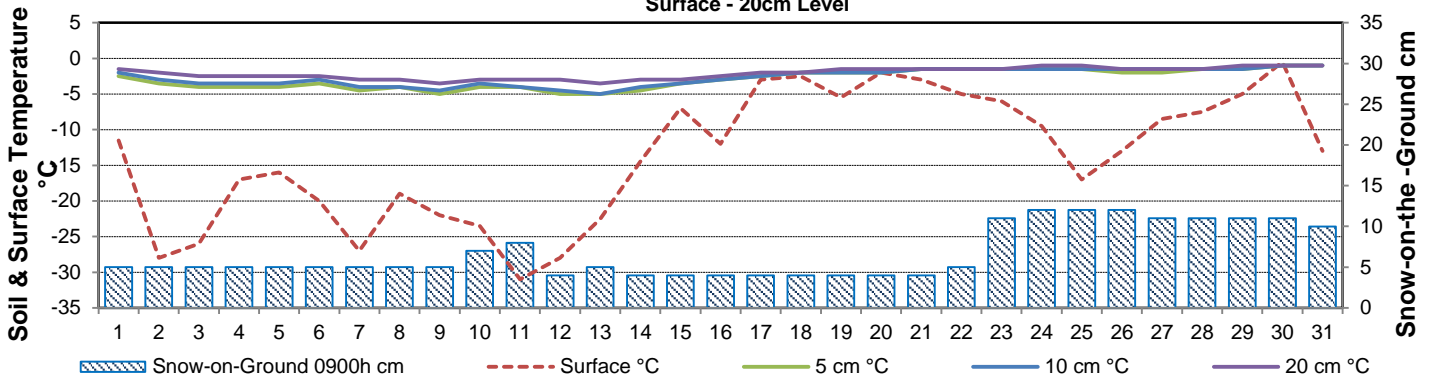


### Bright Sunshine, Global and Diffuse Radiation for January 2017



### Soil Temperatures for January 2017

Surface - 20cm Level



### Soil Temperatures for January 2017

50 - 300cm Level

