



SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W Estab. 2011

Preliminary **December 2014**

Day	Temperature			Degree-days			Precipitation			Relative Humidity		Station Pressure <i>corrected to sea level</i>	
	Max	Min	Mean	Growing	Heating	Cooling	Weighing Gauge	Comments	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	-16.2	-27.7	-22.0	0.0	40.0	0.0	0.0			80	62	1022	1009
2	-10.9	-30.1	-20.5	0.0	38.5	0.0	0.0			84	69	1015	1008
3	-7.9	-29.8	-18.9	0.0	36.9	0.0	0.0	Manual SOG	17	85	75	1016	1006
4	-6.9	-13.1	-10.0	0.0	28.0	0.0	0.6			91	67	1014	1006
5	-6.8	-17.0	-11.9	0.0	29.9	0.0	0.0			93	78	1025	1014
6	-8.1	-14.0	-11.1	0.0	29.1	0.0	0.0			92	88	1026	1014
7	-8.0	-11.0	-9.5	0.0	27.5	0.0	0.6			92	82	1021	1012
8	-8.4	-19.3	-13.9	0.0	31.9	0.0	0.0			91	77	1024	1015
9	2.6	-10.5	-4.0	0.0	22.0	0.0	0.0			91	72	1014	1000
10	5.0	-0.1	2.5	0.0	15.5	0.0	0.0			86	62	1006	999
11	7.1	0.5	3.8	0.0	14.2	0.0	0.0			87	63	1003	997
12	5.2	-3.9	0.7	0.0	17.3	0.0	0.0			95	66	1004	998
13	0.3	-4.6	-2.2	0.0	20.2	0.0	0.0			96	89	1015	1004
14	-1.7	-3.6	-2.7	0.0	20.7	0.0	1.3			94	82	1022	1015
15	-2.8	-7.3	-5.1	0.0	23.1	0.0	0.0			89	81	1025	1022
16	-5.5	-7.0	-6.3	0.0	24.3	0.0	0.0			85	78	1025	1020
17	-6.9	-8.7	-7.8	0.0	25.8	0.0	0.0			89	81	1020	1014
18	-6.1	-8.5	-7.3	0.0	25.3	0.0	0.2			94	86	1014	1010
19	-7.4	-9.6	-8.5	0.0	26.5	0.0	0.0			93	92	1012	1011
20	-6.3	-9.5	-7.9	0.0	25.9	0.0	0.3			94	92	1010	1002
21	-4.2	-7.0	-5.6	0.0	23.6	0.0	0.0			95	94	1001	996
22	-5.1	-6.4	-5.8	0.0	23.8	0.0	0.0			95	94	1015	1001
23	-4.3	-7.9	-6.1	0.0	24.1	0.0	0.2	Manual SOG	11	95	93	1017	1007
24	-3.5	-6.8	-5.2	0.0	23.2	0.0	0.9		9	95	92	1006	996
25	-5.3	-25.6	-15.5	0.0	33.5	0.0	0.3		11	92	71	1019	1001
26	-12.9	-30.4	-21.7	0.0	39.7	0.0	0.3		10	88	75	1020	1016
27	-14.6	-33.0	-23.8	0.0	41.8	0.0	0.0		10	85	69	1021	1015
28	-23.2	-33.5	-28.4	0.0	46.4	0.0	0.0		10	78	71	1036	1021
29	-21.5	-29.1	-25.3	0.0	43.3	0.0	0.0		11	80	72	1042	1036
30	-11.5	-26.8	-19.2	0.0	37.2	0.0	0.0		11	80	70	1042	1015
31	-3.8	-11.5	-7.7	0.0	25.7	0.0	0.0		11	89	68	1016	1007
Total				0.0	884.9	0.0	4.7						
Avg	-6.4	-14.6	-10.5				450.2	Cumulative ppt 2014					
Extreme	7.1	-33.5					1.3		17	96	62	1042	996
Date	11	28					14			13	1	29	21
Site Extreme	2.7	-39.9					15.1	Snow depth sensor is malfunctioning and was removed from site Dec 4, 2014 for assessment. New snow depth sensor installed Dec 23, 2014. Wind sensor is hoar-frosted over (may be affecting wind speeds (21 to 24, Dec 2014))					
Date	27/2013	31/2013					2013						

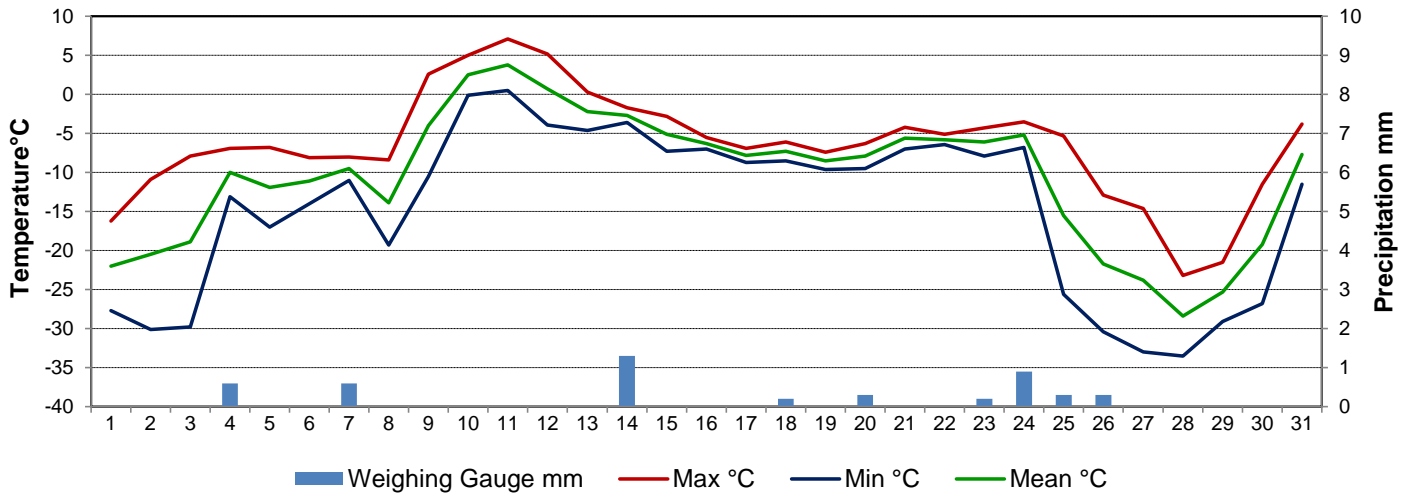


Agriculture and Agri-Food Canada

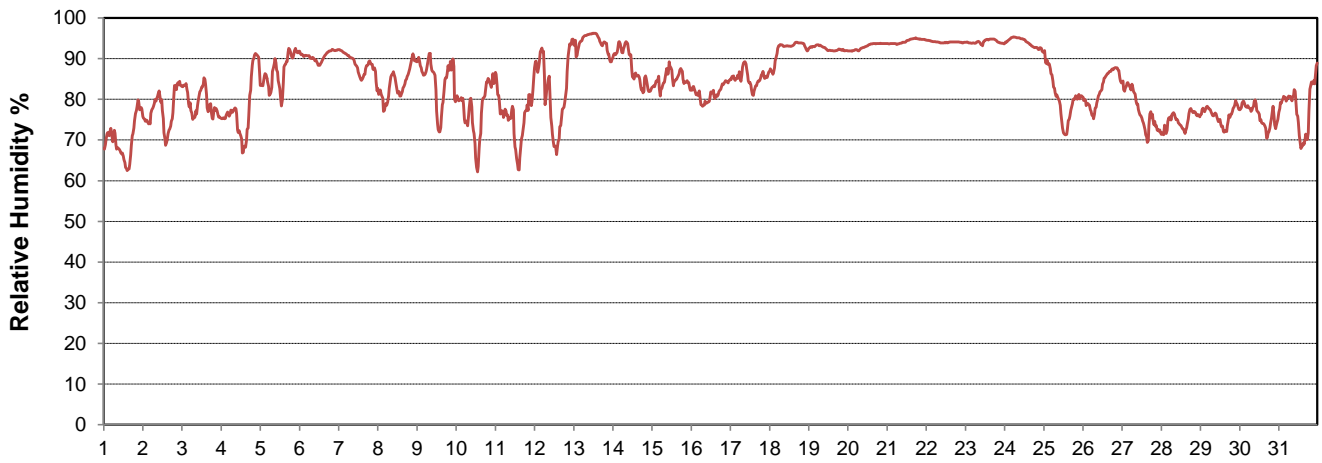
Agriculture et Agroalimentaire Canada



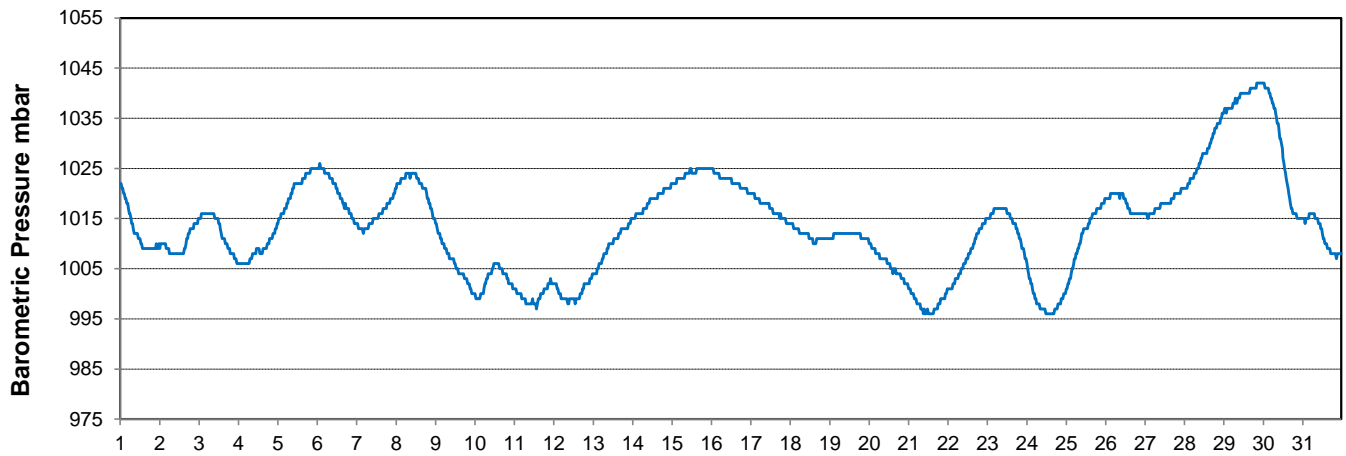
Temperature and Precipitation for December 2014



Relative Humidity for December 2014



Barometric Pressure Corrected to Sea Level for December 2014





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CONSERVATION LEARNING CENTRE

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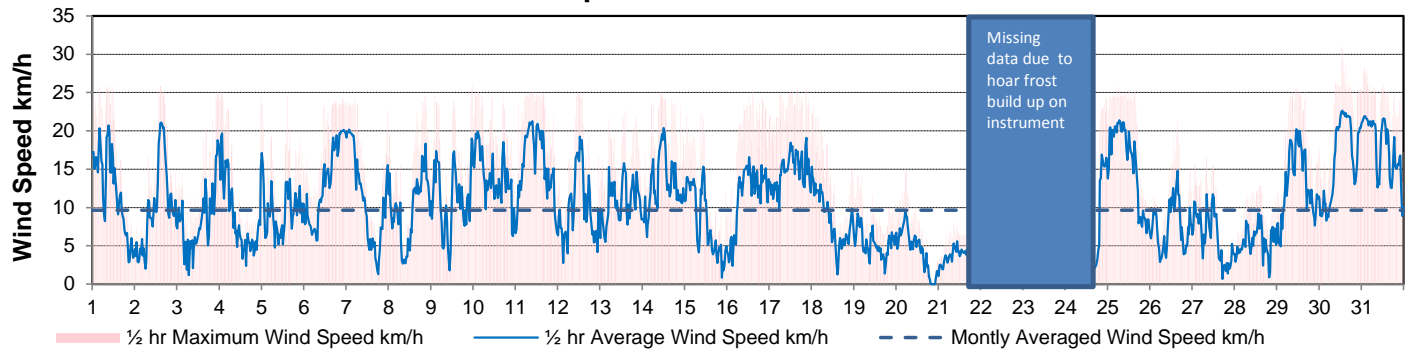
Preliminary **December 2014**

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 ²	MJ/m ²
1	26.0	SSW	9:28	-20.0	-1.5	-1.0	0.0	2.0	4.0	5.5	7.5	17	0.0	3.4	2.4
2	25.9	NW	14:36	-18.0	-1.5	-1.0	0.0	1.5	4.0	5.5	7.5	17	0.8	3.8	1.5
3	25.0	SSW	23:23	-14.5	-1.5	-1.0	0.0	1.5	4.0	5.5	7.5	17	0.0	2.2	2.0
4	25.0	SSW	1:41	-10.5	-1.0	-1.0	-0.5	1.5	3.5	5.5	7.5	18	1.0	3.0	2.5
5	24.6	SW	14:36	-8.0	-1.0	-1.0	-0.5	1.5	3.5	5.0	7.5	18	1.5	2.4	2.0
6	24.2	E	22:29	-5.0	-1.0	-1.0	-0.5	1.0	3.5	5.0	7.0	18	0.0	1.7	1.6
7	24.2	ENE	5:20	-5.0	-1.0	-1.0	-0.5	1.0	3.0	5.0	7.0	18	0.0	1.9	1.7
8	24.7	S	21:29	-7.5	-1.0	-0.5	-0.5	1.0	3.5	5.0	7.0	19	0.1	2.0	1.9
9	26.0	SSW	23:32	-8.0	-1.0	-1.0	-0.5	1.0	3.0	4.5	6.5	19	1.2	3.2	1.4
10	25.4	SW	2:48	-1.0	-1.0	-1.5	-1.0	0.0	2.5	4.0	6.0	20	2.2	3.3	0.7
11	25.3	SSW	10:00	2.0	-0.5	-0.5	-0.5	1.0	3.0	4.5	7.0	22	0.0	2.4	1.3
12	24.9	SW	11:23	-2.0	-0.5	-0.5	0.0	1.0	3.0	4.5	7.0	24	0.8	2.7	1.4
13	22.7	NE	14:38	-2.0	-0.5	-0.5	0.0	1.0	3.0	4.5	7.0	24	0.0	0.8	0.7
14	25.1	NW	10:10	-2.5	-1.0	-1.0	-1.0	0.0	2.5	4.0	6.0	24	0.0	1.4	1.3
15	22.4	N	9:20	-4.5	-1.0	-1.0	-1.0	0.0	2.0	3.5	5.5	24	0.0	1.3	1.2
16	25.5	SSW	14:38	-5.5	-1.0	-1.5	-1.0	-0.5	2.0	3.5	5.0	24	0.0	1.7	1.7
17	25.6	S	15:45	-7.0	-1.5	-1.5	-1.5	-0.5	2.0	3.5	5.0	24	0.0	1.7	1.7
18	23.4	SSW	1:08	-7.0	-1.5	-1.5	-1.0	0.0	2.0	3.5	5.0	23	0.0	1.1	1.1
19	14.2	WNW	2:15	-7.0	-1.5	-1.5	-1.0	0.0	2.0	3.5	5.0	23	0.0	1.2	1.2
20	15.0	E	5:30	-6.0	-1.0	-1.5	-1.0	0.0	2.0	3.5	5.5	22	0.0	1.2	1.1
21		SE	10:54	-5.5	-1.5	-1.5	-1.5	0.0	2.0	3.5	5.0	22	0.0	0.9	0.9
22		NE	1:54	-5.5	-1.5	-2.0	-1.5	-0.5	2.0	3.0	5.0	22	0.0	0.8	0.8
23		SW	13:13	-5.0	-1.5	-2.0	-1.5	-0.5	2.0	3.0	4.5	22	0.0	1.2	1.1
24	24.3	NNW	23:26	-3.0	-1.5	-2.0	-1.5	-0.5	1.5	3.0	4.5	22	0.0	1.2	1.2
25	26.0	NW	5:53	-17.0	-0.5	-1.0	-0.5	0.5	2.5	3.5	5.5	22	4.4	2.5	0.9
26	21.5	SW	15:50	-19.5	-1.0	-0.5	0.0	1.0	2.5	4.0	6.5	20	0.0	1.7	1.6
27	16.5	NE	8:10	-14.5	-1.0	-0.5	0.0	1.0	2.5	4.0	6.5	19	5.1	2.6	0.8
28	12.9	NW	14:56	-21.0	-1.5	-1.0	0.0	1.0	2.5	4.0	6.5	17	4.9	2.8	0.9
29	25.6	WNW	11:38	-24.0	-1.5	-1.0	0.0	1.0	2.5	4.0	6.5	16	1.3	2.7	2.0
30	31.1	SW	12:53	-23.0	-1.5	-1.0	-0.5	1.0	2.5	4.0	6.5	15	0.3	2.0	1.8
31	28.2	NW	1:54	-7.5	-1.5	-1.5	-0.5	0.5	2.5	3.5	6.0	16	1.6	4.7	3.9
Total													25.2	65.5	46.3
Mean				-9.2	-1.2	-1.1	-0.6	0.6	2.7	4.1	6.2	20.3			
Extreme	31.1	SW	12:53												
Date	30	Max wind speeds missing (Dec 21-23) due to heavy frost													
Site Extreme															

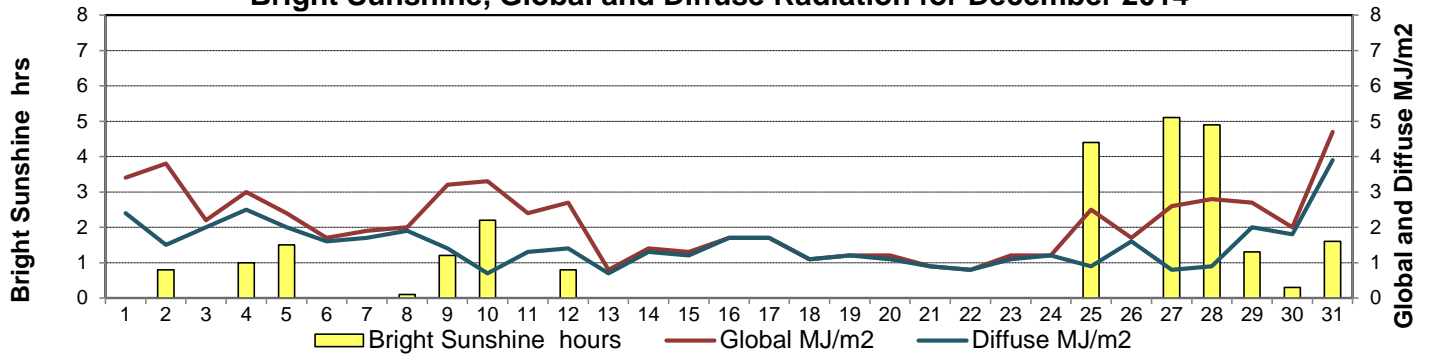
GLOSSARY OF TERMS

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

Wind Speed for December 2014

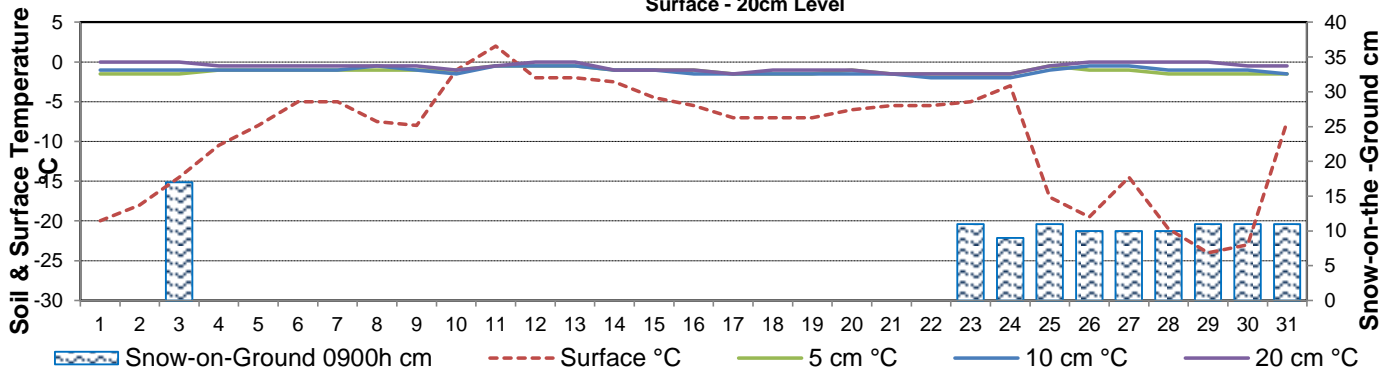


Bright Sunshine, Global and Diffuse Radiation for December 2014



Soil Temperatures for December 2014

Surface - 20cm Level



Soil Temperatures for December 2014

50 - 300cm Level

