



SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W 451m asl Estab. 2011

Preliminary October 2024

Day	Temperature (HMP155A)						Degree-days			Precipitation			Relative Humidity (HMP115A)		Station Pressure <i>corrected to sea level</i>	
	Max	Avg Max	Min	Avg Min	Mean	Avg Mean	Growing	Heating	Cooling	Geonor all-season ppt Gauge	Tipping Bucket	Snow-on-Ground 0900h	Max ½ hr Avg	Min ½ hr Avg	Max ½ hr Avg	Min ½ hr Avg
	°C	2012-2021	°C	2012-2021	°C	2012-2021	5°C base	18°C base	18°C base	mm	mm	cm	%	%	mbar	mbar
1	12.2	12.5	-1.4	2.9	5.4	7.7	0.4	12.6	0.0	0.0	0.0	0	81	44	1016	1002
2	8.5	12.1	-3.7	1.7	2.4	6.9	0.0	15.6	0.0	0.0	0.0	0	87	40	1013	1003
3	6.4	10.7	-5.3	-0.6	0.6	5.0	0.0	17.4	0.0	0.0	0.0	0	86	38	1017	1013
4	14.4	9.6	-7.5	-1.1	3.5	4.3	0.0	14.5	0.0	0.0	0.0	0	95	37	1016	992
5	7.9	11.2	-0.3	-1.0	3.8	5.1	0.0	14.2	0.0	15.4	17.2	0	95	66	1016	990
6	16.9	13.1	-3.7	1.3	6.6	7.2	1.6	11.4	0.0	0.0	0.0	0	97	32	1017	1016
7	18.8	12.3	-4.9	0.8	7.0	6.6	2.0	11.0	0.0	0.0	0.0	0	98	34	1017	1010
8	21.6	9.2	-3.4	-2.2	9.1	3.5	4.1	8.9	0.0	0.0	0.0	0	98	34	1010	1004
9	18.5	9.7	-1.3	-2.7	8.6	3.5	3.6	9.4	0.0	0.0	0.0	0	95	39	1011	1005
10	13.5	12.8	-2.0	-2.4	5.8	5.2	0.8	12.2	0.0	0.8	1.0	0	89	40	1021	1011
11	11.9	10.3	-5.7	-0.9	3.1	4.7	0.0	14.9	0.0	1.1	1.4	0	97	48	1022	1018
12	10.4	8.5	-2.3	-2.1	4.1	3.2	0.0	13.9	0.0	0.1	0.4	0	98	55	1025	1017
13	10.1	7.8	-8.6	-3.1	0.8	2.3	0.0	17.2	0.0	0.0	0.0	0	96	40	1027	1021
14	12.1	8.7	-6.3	-2.2	2.9	3.3	0.0	15.1	0.0	0.0	0.0	0	93	37	1020	1017
15	12.5	9.9	-2.4	-1.8	5.1	4.0	0.1	12.9	0.0	0.0	0.0	0	89	45	1017	1012
16	12.1	9.3	-3.4	-1.8	4.4	3.8	0.0	13.6	0.0	0.0	0.0	0	94	50	1012	995
17	11.5	11.3	-0.5	-1.3	5.5	5.0	0.5	12.5	0.0	0.0	0.0	0	92	35	1008	995
18	11.7	10.0	-4.2	-1.2	3.8	4.4	0.0	14.2	0.0	0.0	0.0	0	84	32	1018	1008
19	15.5	8.8	1.6	-3.2	8.6	2.8	3.6	9.4	0.0	0.0	0.0	0	61	26	1010	1003
20	11.6	7.2	0.0	-3.0	5.8	2.1	0.8	12.2	0.0	0.0	0.0	0	86	53	1012	1003
21	8.2	8.0	-1.9	-1.8	3.2	3.1	0.0	14.8	0.0	0.0	0.0	0	88	63	1014	1001
22	0.1	5.6	-8.0	-4.5	-4.0	0.6	0.0	22.0	0.0	0.0	0.0	0	87	64	1017	1012
23	9.9	6.1	-6.0	-3.7	2.0	1.2	0.0	16.0	0.0	0.0	0.0	0	91	35	1012	1009
24	8.9	7.0	-4.7	-2.2	2.1	2.4	0.0	15.9	0.0	0.9	0.8	0	92	40	1015	1009
25	8.3	5.9	-9.5	-2.0	-0.6	2.0	0.0	18.6	0.0	0.0	0.0	0	87	30	1023	1015
26	9.1	4.1	-11.1	-3.5	-1.0	0.3	0.0	19.0	0.0	0.0	0.0	0	93	28	1023	1015
27	7.6	3.2	-4.6	-4.5	1.5	-0.7	0.0	16.5	0.0	0.0	0.0	0	73	53	1015	993
28	7.2	2.5	-3.8	-5.0	1.7	-1.2	0.0	16.3	0.0	0.0	0.0	0	89	56	1006	992
29	2.7	3.1	-10.9	-4.0	-4.1	-0.5	0.0	22.1	0.0	0.0	0.0	0	94	56	1014	1006
30	5.2	3.0	-11.6	-4.2	-3.2	-0.6	0.0	21.2	0.0	0.0	0.0	0	94	58	1015	1014
31	1.3	3.0	-8.3	-4.2	-3.5	-0.6	0.0	21.5	0.0	0.0	0.0	0	93	69	1015	1014
Total							17.5	467.0	0.0	18.3	20.8		Extreme / Date	Extreme / Date	Extreme / Date	Extreme / Date
Avg	10.5	8.3	-4.7	-2.1	2.9	3.1	Monthly 2012 - 2021 Average			20.0	2012-2021 Average					
Extreme	21.6	25.2	-11.6	-15.5			37.4	461.4	0	348.8	2024 Cumulative ppt		98	26	1027	990
Date	8	2021	30	2019						343.6	Cumulative Average		7	19	13	5

Note: Red numbers indicate manual calculation; Red cell indicate data not available

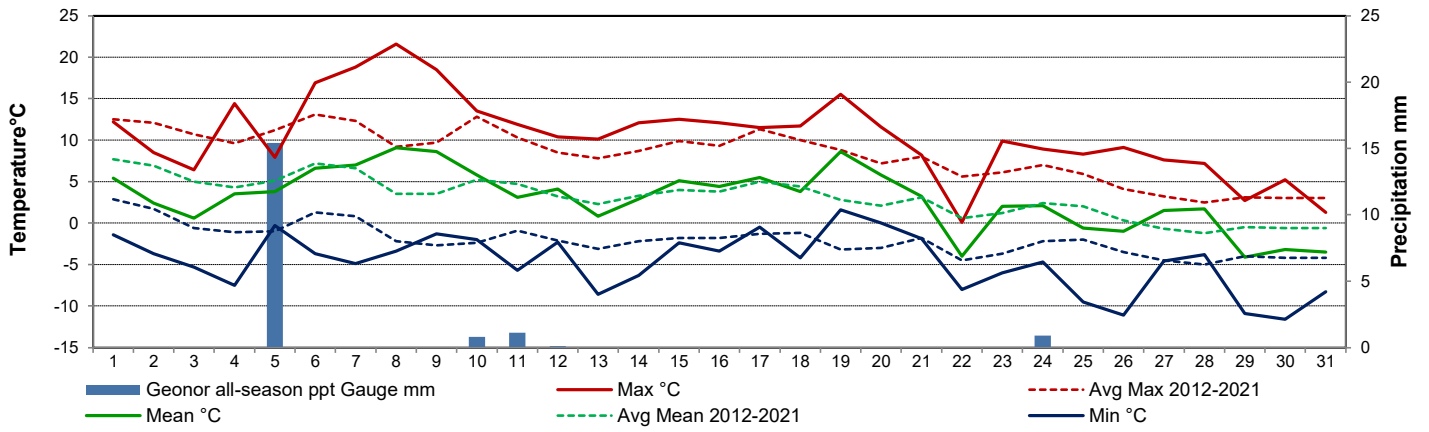
Precipitation is measured precipitation. It has not been corrected for wind speed.

Oct 31 Fall maintenance including calibration of tipping bucket; 10 cm soil moisture replaced; replaced snow depth screen; fall maintenance on Geonor; replaced desiccant; capped tipping bucket; checked solar panels and batteries

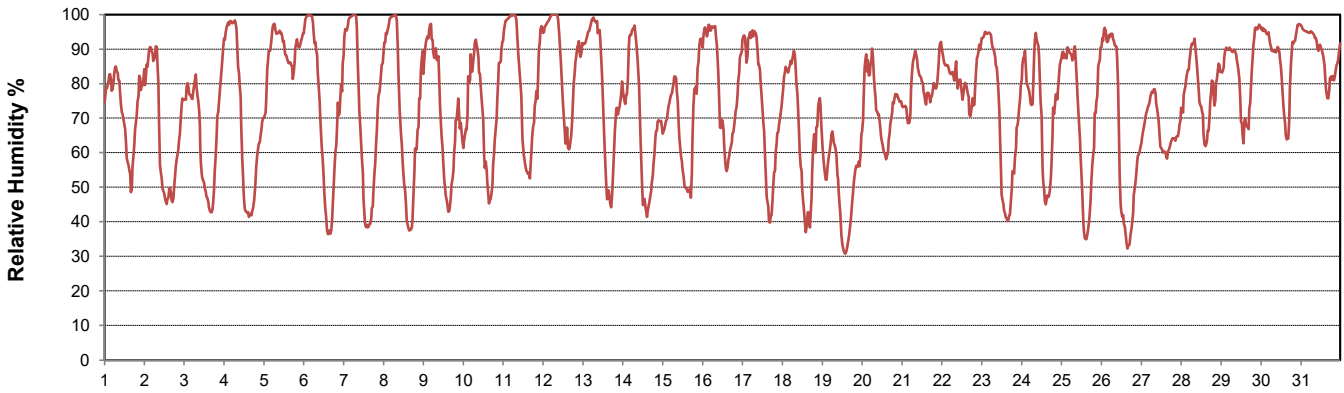
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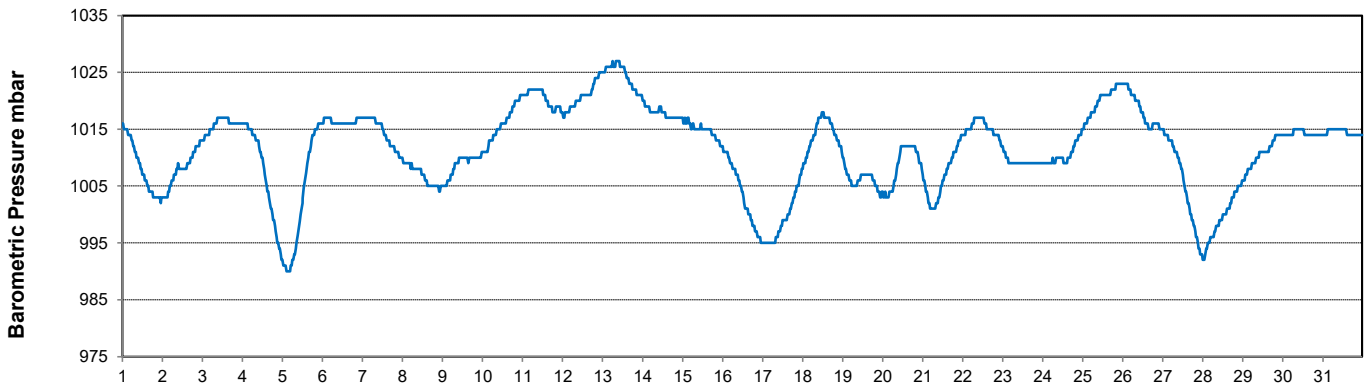
Temperature and Precipitation for October 2024



Relative Humidity for October 2024



Barometric Pressure Corrected to Sea Level for October 2024





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CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W 451m asl Estab. 2011

Preliminary

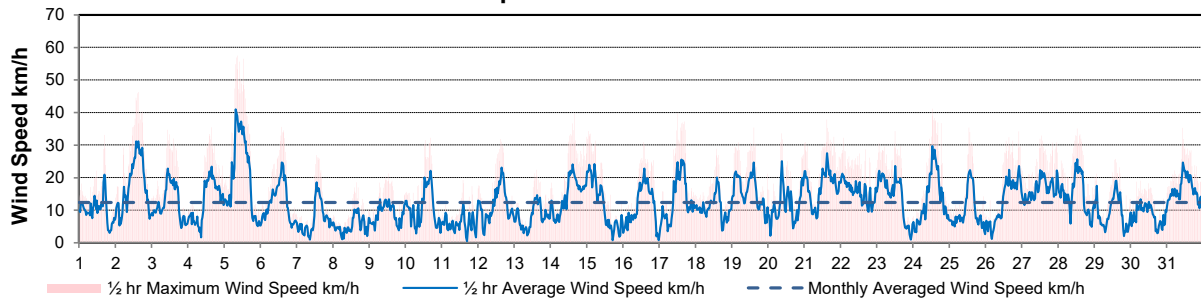
October 2024

Day	Wind Gust (10 meter)			Wind Speed (10 meters)	Soil Temperatures at 0900hrs								Radiation				
	Max	Direction	Time	Daily Average	Surface	5 cm	10 cm	20 cm	50 cm	100 cm	150 cm	300 cm	Bright Sunshine	Possible	% Possible	Global	Diffuse
	km/h			km/h	°C	°C	°C	°C	°C	°C	°C	°C	hours	hours		MJ/m ²	MJ/m ²
1	33.1	W	16:43	9.9	3.5	6.0	7.5	10.0	12.0	11.5	11.0	8.0	1.4	11.6	12.1	5.8	4.8
2	46.2	NW	15:05	17.8	4.5	7.0	8.5	9.5	11.5	11.5	11.0	8.0	8.7	11.5	75.8	11.2	2.8
3	34.6	NW	10:58	12.3	1.0	4.5	6.0	8.5	11.0	11.5	11.0	8.0	9.1	11.4	79.8	11.9	3.3
4	35.5	SE	15:47	12.9	1.5	3.0	4.5	7.5	10.0	11.0	11.0	8.0	6.8	11.3	60.0	9.0	5.3
5	57.4	NW	9:21	20.4	4.0	7.0	7.5	8.0	9.5	11.0	10.5	8.0	0.8	11.3	7.1	2.6	2.3
6	35.5	W	14:07	12.6	4.5	4.0	5.0	7.0	9.5	10.5	10.5	8.0	9.6	11.2	85.7	11.3	1.7
7	26.8	SSE	13:26	7.2	3.0	4.0	5.0	7.0	9.0	10.5	10.5	8.0	9.9	11.1	88.9	10.3	3.2
8	18.5	S	15:30	5.2	4.5	4.5	6.0	7.5	9.0	10.0	10.5	8.0	10.4	11.1	93.9	11.1	1.3
9	21.2	N	12:59	8.8	8.5	5.5	6.5	8.0	9.0	10.0	10.5	8.0	8.0	11.0	72.7	9.8	2.2
10	32.2	NW	16:32	10.7	7.5	7.5	8.0	8.5	9.5	10.0	10.0	8.0	6.3	10.9	57.6	8.5	3.5
11	19.2	WSW	14:24	6.0	0.5	4.0	5.5	7.5	9.5	9.5	10.0	8.0	6.0	10.9	55.2	7.1	4.6
12	31.8	NNW	15:27	11.6	4.5	5.5	6.5	8.0	9.0	9.5	10.0	8.0	6.2	10.8	57.5	8.3	3.4
13	22.3	SSW	14:59	8.1	-2.5	3.0	4.5	7.0	9.0	9.5	10.0	8.0	7.0	10.7	65.2	8.2	3.5
14	39.6	SE	16:06	14.6	1.0	3.0	4.0	6.5	8.5	9.5	10.0	8.0	10.0	10.7	93.8	9.4	3.1
15	34.2	SE	1:00	11.3	5.0	4.5	5.5	6.5	8.0	9.0	9.5	8.0	9.5	10.6	89.7	9.0	3.1
16	31.0	E	13:53	11.2	3.0	4.0	5.0	6.5	8.0	9.0	9.5	8.0	1.8	10.5	17.1	5.2	4.5
17	39.7	W	12:07	13.2	5.5	5.5	6.0	7.0	8.0	9.0	9.5	8.0	4.5	10.5	43.0	5.9	3.8
18	28.9	WSW	14:17	10.8	1.0	3.0	4.0	6.0	8.0	9.0	9.5	8.0	9.7	10.4	93.4	9.1	1.6
19	35.3	WSW	14:31	15.9	5.0	3.5	4.5	6.0	7.5	9.0	9.5	8.0	7.1	10.3	68.8	8.2	2.1
20	33.6	NW	9:02	11.4	7.5	4.5	5.5	6.5	7.5	8.5	9.5	8.0	8.1	10.3	79.0	7.8	3.3
21	37.8	NW	15:13	17.1	5.0	6.0	6.5	7.0	7.5	8.5	9.0	8.0	0.0	10.2	0.0	3.1	3.0
22	32.2	NNW	2:01	15.4	-2.0	4.0	5.0	6.5	8.0	8.5	9.0	8.0	0.0	10.1	0.0	2.1	2.0
23	34.2	NW	12:15	14.2	-1.0	2.0	3.0	5.0	7.5	8.5	9.0	8.0	7.4	10.1	73.6	8.1	1.7
24	41.1	W	12:58	13.5	3.5	3.0	3.5	5.0	7.0	8.0	9.0	8.0	6.1	10.0	61.1	6.8	2.5
25	35.3	NW	13:28	9.6	-4.0	1.0	2.5	4.5	7.0	8.0	9.0	8.0	9.4	9.9	94.8	8.5	1.4
26	34.1	E	22:23	12.8	-3.5	0.0	1.0	3.5	6.5	8.0	9.0	8.0	2.9	9.9	29.4	5.2	3.9
27	32.8	ESE	13:09	16.6	-1.0	1.5	2.0	3.5	6.0	7.5	8.5	8.0	1.4	9.8	14.3	4.2	3.6
28	35.0	NW	12:37	14.6	2.0	3.0	3.5	4.0	6.0	7.5	8.5	8.0	4.1	9.7	42.1	5.8	3.1
29	25.7	NW	14:14	9.3	0.5	2.0	2.5	4.0	6.0	7.5	8.5	8.0	0.0	9.7	0.0	2.3	2.2
30	19.1	SW	6:35	8.4	-3.0	0.0	1.0	3.0	5.5	7.0	8.5	8.0	3.9	9.6	40.6	4.6	2.8
31	35.2	E	10:58	16.6	-5.0	0.0	0.5	2.5	5.5	7.0	8.0	8.0	4.4	9.5	46.1	4.8	2.9
Total													180.5	326.4	55.3	225.2	92.5
Mean				12.3	2.1	3.7	4.7	6.4	8.2	9.2	9.5	8.0					
Extreme	57.4	NW	9:21														
Date	5																

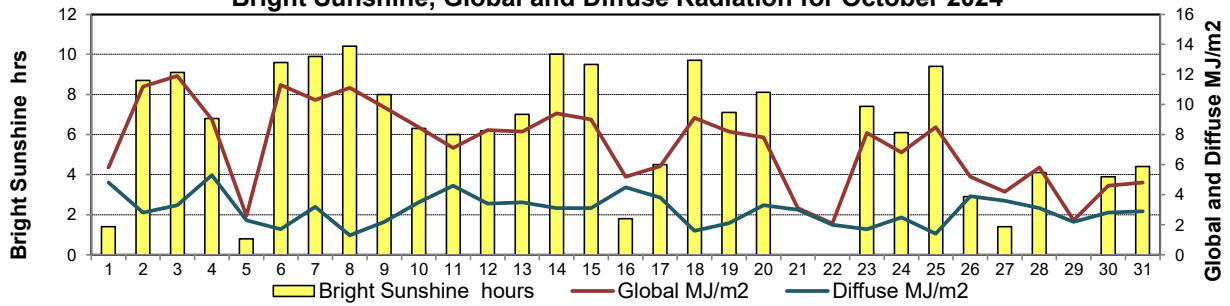
GLOSSARY OF TERMS

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

Wind Speed for October 2024

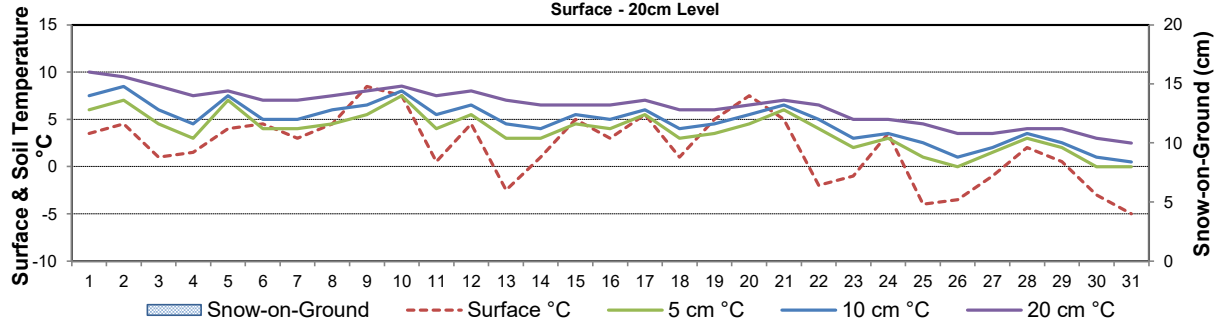


Bright Sunshine, Global and Diffuse Radiation for October 2024



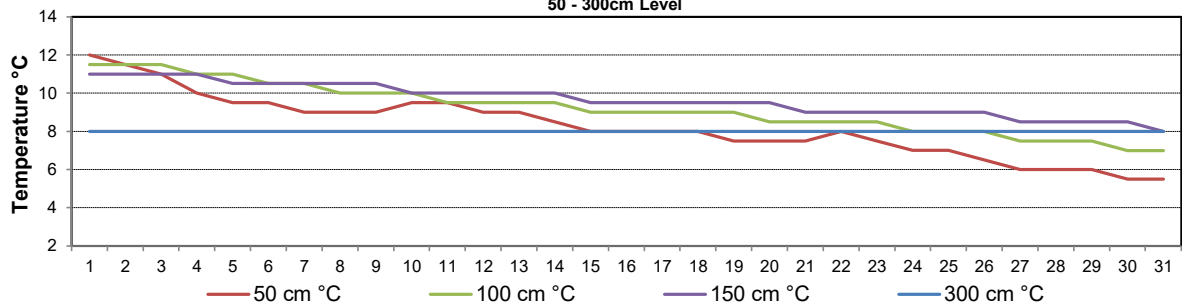
Soil Temperatures for October 2024

Surface - 20cm Level



Soil Temperatures for October 2024

50 - 300cm Level





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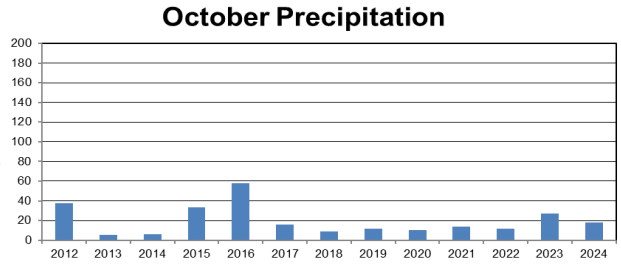
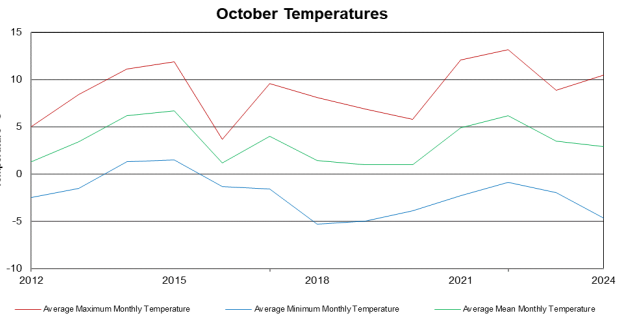
CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W 451m asl Estab. 2011

Preliminary

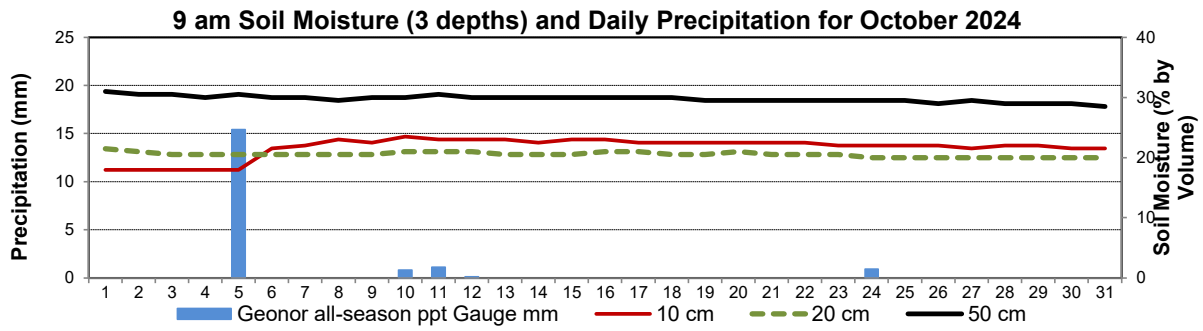
October 2024

Day	2 meter Wind Speed			Soil Moisture at 0900 hrs (rounded to the 0.5%)														
	Daily Average	Max ½ hr Avg	½ hr Extreme Max	10 cm	20 cm	50 cm												
	km/h	km/h	km/h	% by volume (soil type is Clay Loam)														
1	6.0	15.8	24.3	18.0	21.5	31.0												
2	12.0	24.1	38.7	18.0	21.0	30.5												
3	7.0	17.2	26.2	18.0	20.5	30.5												
4	7.0	13.9	26.2	18.0	20.5	30.0												
5	14.0	30.8	42.1	18.0	20.5	30.5												
6	7.0	19.1	28.5	21.5	20.5	30.0												
7	3.0	13.5	22.2	22.0	20.5	30.0												
8	1.0	7.4	14.5	23.0	20.5	29.5												
9	4.0	10.5	18.3	22.5	20.5	30.0												
10	5.0	17.0	24.8	23.5	21.0	30.0												
11	1.0	9.9	15.4	23.0	21.0	30.5												
12	6.0	17.3	24.1	23.0	21.0	30.0												
13	3.0	12.0	19.3	23.0	20.5	30.0												
14	8.0	15.0	25.6	22.5	20.5	30.0												
15	7.0	16.0	27.5	23.0	20.5	30.0												
16	6.0	16.3	23.3	23.0	21.0	30.0												
17	7.0	19.7	31.2	22.5	21.0	30.0												
18	5.0	16.0	22.9	22.5	20.5	30.0												
19	11.0	18.4	30.2	22.5	20.5	29.5												
20	6.0	18.9	26.4	22.5	21.0	29.5												
21	11.0	20.8	27.0	22.5	20.5	29.5												
22	12.0	16.0	23.9	22.5	20.5	29.5												
23	10.0	18.0	26.8	22.0	20.5	29.5												
24	8.0	22.9	32.3	22.0	20.0	29.5												
25	4.0	17.5	27.5	22.0	20.0	29.5												
26	7.0	17.0	25.2	22.0	20.0	29.0												
27	11.0	15.5	22.5	21.5	20.0	29.5												
28	10.0	19.7	27.2	22.0	20.0	29.0												
29	5.0	15.1	21.0	22.0	20.0	29.0												
30	4.0	10.8	15.8	21.5	20.0	29.0												
31	11.0	8.0	28.0	21.5	20.0	28.5												
Total																		
Mean				22	21	29.8												
Extreme	14.0	30.8	42.1	23.5	21.5	31												
Date	7.5	7.5	7.5	8.5	9.5	9.5												

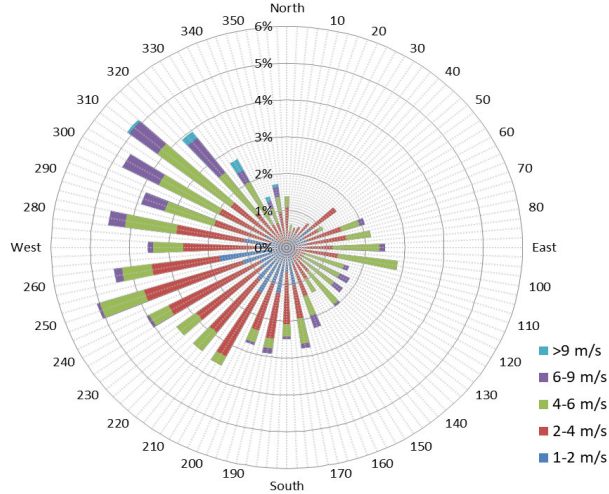


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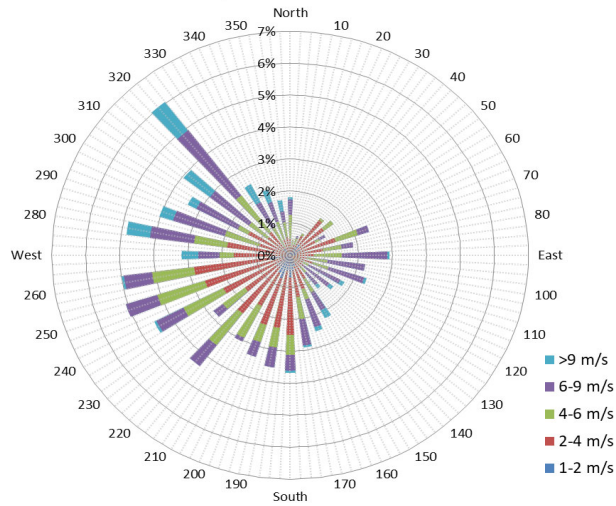




10 minute Average Wind Speed and Direction CLC October 2024

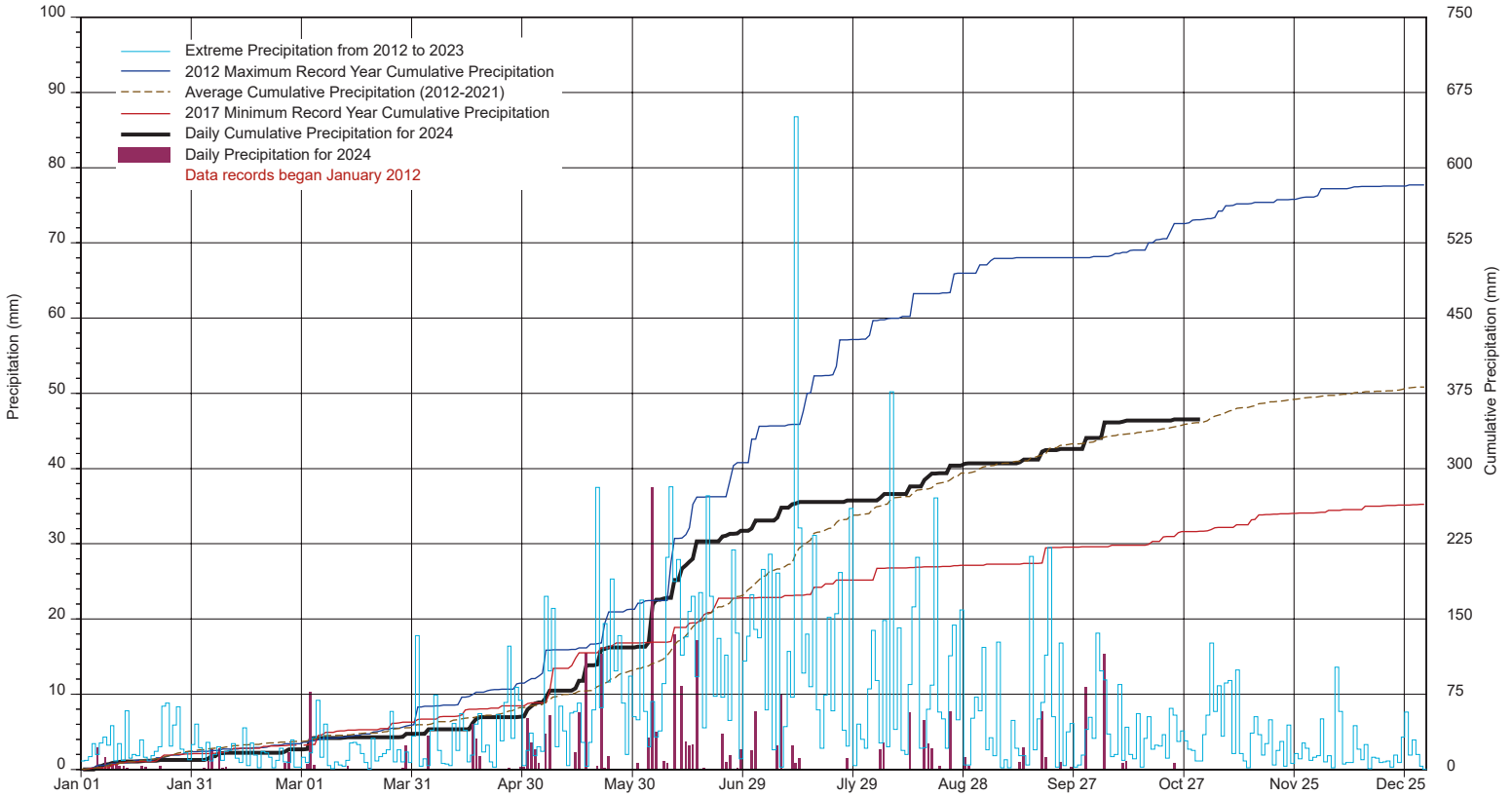


1/2 hr Maximum Wind Speed and Direction CLC October 2024

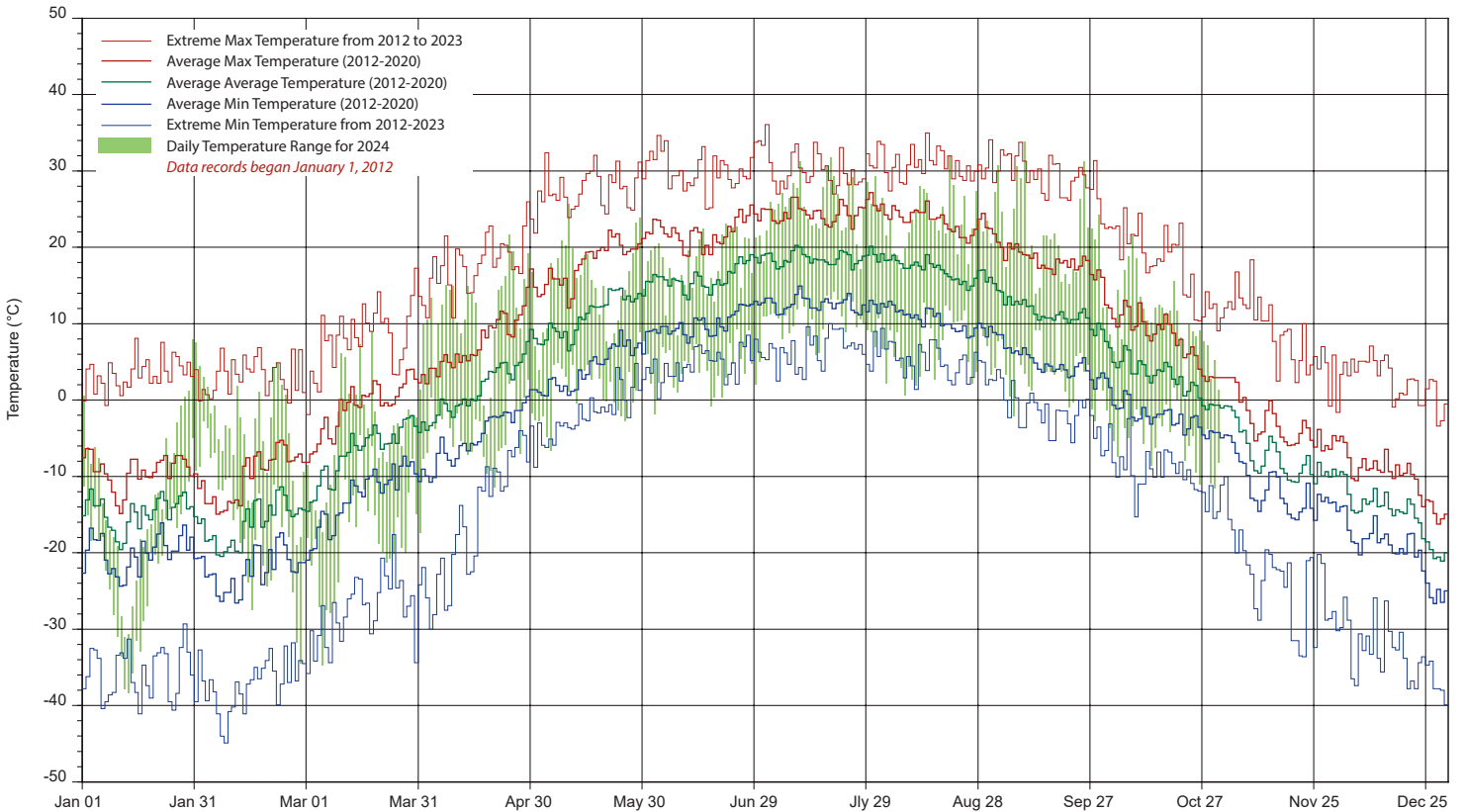


SRC's CLIMATE REFERENCE STATION at the Conservation Learning Centre

2024 PRECIPITATION AND AVERAGE



2024 TEMPERATURES AND AVERAGES



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