



# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT CONSERVATION LEARNING CENTRE

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

Preliminary **January 2024**

Day	Temperature (HMP155A)						Degree-days			Precipitation			Relative Humidity (HMP115A)		Station Pressure corrected to sea level	
	Max	Avg Max	Min	Avg Min	Mean	Avg Mean	Growing	Heating	Cooling	Geonor all-season ppt Gauge	Notes:	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		cm	%	%	mbar	mbar
1	0.5	-7.5	-11.4	-22.6	-5.5	-15.1	0.0	23.5	0.0	0.0		2	92	65	1017	1009
2	-6.2	-6.3	-15.1	-19.6	-10.7	-13.0	0.0	28.7	0.0	0.0		2	85	66	1022	1017
3	-8.4	-6.4	-18.5	-16.7	-13.5	-11.6	0.0	31.5	0.0	0.0		2	87	73	1022	1015
4	-6.3	-9.3	-14.2	-18.2	-10.3	-13.8	0.0	28.3	0.0	0.0		2	90	77	1015	1010
5	-7.6	-9.3	-18.2	-18.3	-12.9	-13.8	0.0	30.9	0.0	2.9		2	89	80	1014	1012
6	-13.6	-8.3	-18.0	-17.4	-15.8	-12.9	0.0	33.8	0.0	0.3		6	87	82	1012	1008
7	-15.7	-9.6	-22.3	-20.9	-19.0	-15.3	0.0	37.0	0.0	1.6		9	84	72	1020	1012
8	-17.1	-10.4	-24.8	-22.7	-21.0	-16.6	0.0	39.0	0.0	0.4		8	80	71	1020	1008
9	-18.0	-12.0	-28.2	-22.0	-23.1	-17.0	0.0	41.1	0.0	0.9		8	81	75	1008	996
10	-19.2	-13.8	-31.0	-23.1	-25.1	-18.5	0.0	43.1	0.0	0.6		7	78	69	1015	997
11	-28.4	-14.8	-33.6	-24.3	-31.0	-19.5	0.0	49.0	0.0	0.5		7	71	61	1026	1015
12	-31.0	-13.0	-37.8	-24.2	-34.4	-18.7	0.0	52.4	0.0	0.5		7	68	56	1027	1025
13	-30.7	-9.5	-38.5	-21.8	-34.6	-15.9	0.0	52.6	0.0	0.2		7	67	60	1028	1026
14	-27.1	-7.7	-35.8	-19.3	-31.5	-13.5	0.0	49.5	0.0	0.0		7	71	61	1027	1025
15	-23.7	-7.7	-31.6	-20.5	-27.7	-14.6	0.0	45.7	0.0	0.0		7	75	59	1028	1017
16	-18.2	-10.3	-32.9	-23.1	-25.6	-16.8	0.0	43.6	0.0	0.0		7	70	52	1017	1004
17	-19.3	-9.1	-28.9	-18.4	-24.1	-13.8	0.0	42.1	0.0	0.4		5	77	57	1019	1005
18	-17.0	-10.0	-27.0	-20.0	-22.0	-15.0	0.0	40.0	0.0	0.3		6	76	67	1030	1019
19	-16.4	-10.1	-19.9	-20.9	-18.2	-15.6	0.0	36.2	0.0	0.1		6	85	75	1032	1024
20	-12.4	-9.4	-20.2	-19.2	-16.3	-14.3	0.0	34.3	0.0	0.0		6	81	60	1023	1005
21	-12.2	-8.1	-21.5	-17.5	-16.9	-12.8	0.0	34.9	0.0	0.0		6	84	64	1014	1005
22	-14.4	-7.8	-20.4	-16.0	-17.4	-11.9	0.0	35.4	0.0	0.4		6	78	70	1020	1014
23	-5.1	-7.2	-15.6	-19.0	-10.4	-13.1	0.0	28.4	0.0	0.0		6	92	76	1014	1005
24	-8.2	-10.2	-14.3	-20.8	-11.3	-15.6	0.0	29.3	0.0	0.0		6	93	84	1013	1008
25	-7.0	-8.2	-13.5	-19.7	-10.3	-14.0	0.0	28.3	0.0	0.0		6	92	89	1012	1008
26	-2.9	-7.2	-16.7	-19.7	-9.8	-13.5	0.0	27.8	0.0	0.0		6	92	70	1016	1010
27	-0.7	-7.2	-14.9	-17.7	-7.8	-12.5	0.0	25.8	0.0	0.0		6	92	69	1016	1011
28	0.5	-7.7	-12.2	-16.3	-5.9	-12.0	0.0	23.9	0.0	0.0		6	92	71	1013	1009
29	1.1	-8.7	-10.7	-19.6	-4.8	-14.2	0.0	22.8	0.0	0.0		6	93	64	1018	1010
30	7.9	-9.9	-5.0	-17.9	1.5	-13.9	0.0	16.5	0.0	0.0		6	94	57	1010	1001
31	7.5	-9.6	-9.3	-20.7	-0.9	-15.2	0.0	18.9	0.0	0.0		4	93	47	1011	1007
Total							0.0	1074.3	0.0	9.1			Extreme / Date	Extreme / Date	Extreme / Date	Extreme / Date
Avg	-11.9	-9.2	-21.4	-19.9	-16.7	-14.6	2012 - 2021 Average			17.9	2012-2021 Average					
Extreme	7.9	8.1	-38.5	-41.1			0.0	1011.6	0.0	9.1	Cumulative ppt		94	47	1032	996
Date	30	2014	13	2020						17.9	Cumulative Average		30	31	19	9

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

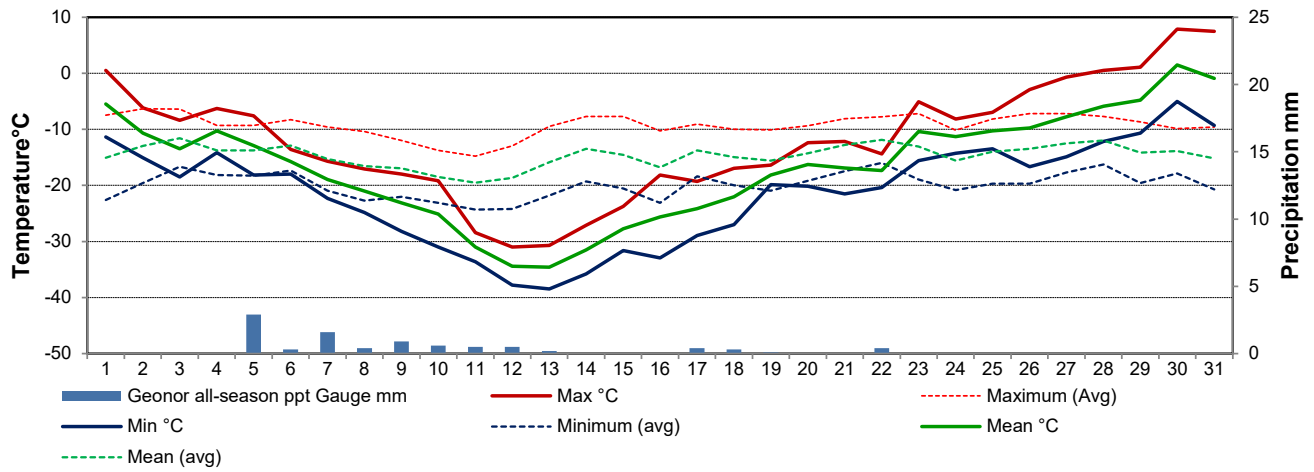
Precipitation is measured precipitation. It has not been corrected for wind speed.

Jan 31 non-continuous snowpack

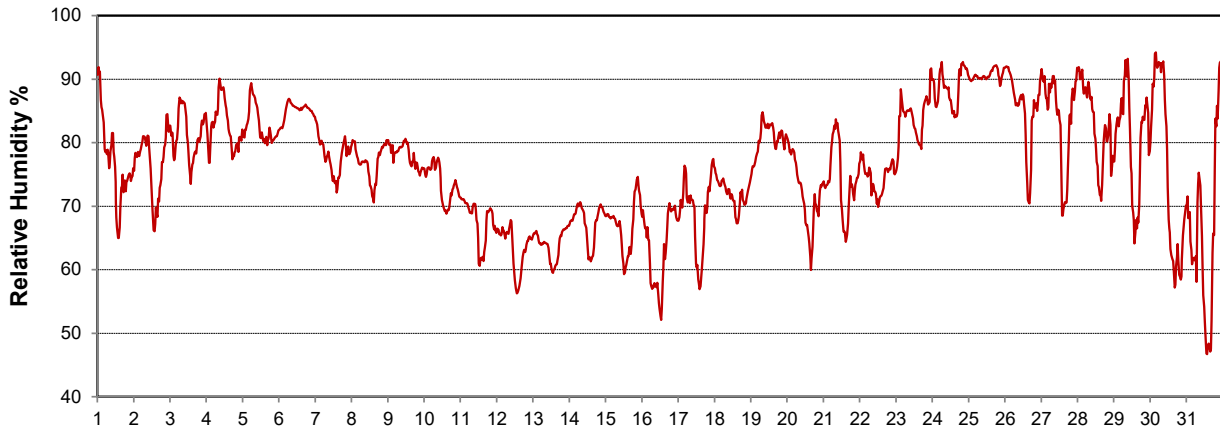
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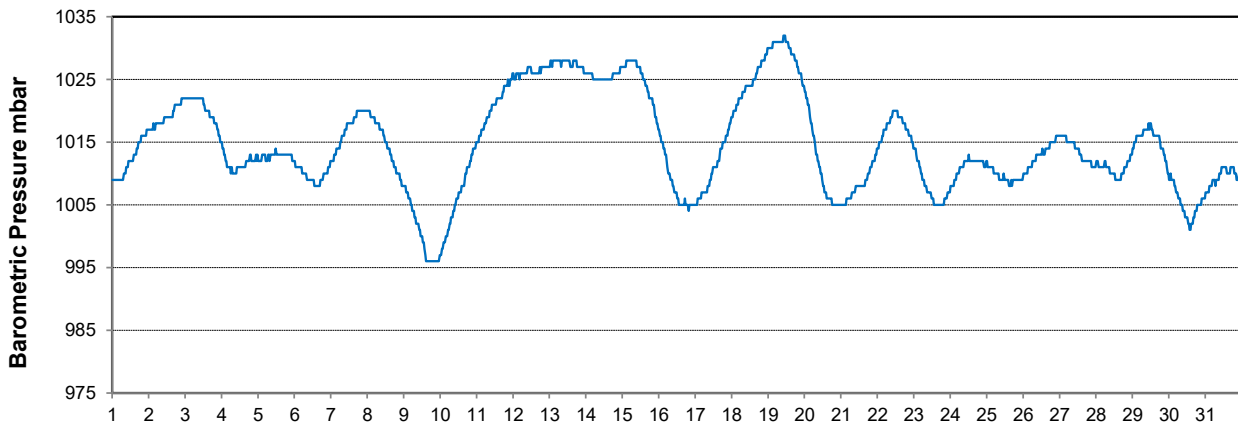
### Temperature and Precipitation for January 2024



### Relative Humidity for January 2024



### Barometric Pressure Corrected to Sea Level for January 2024





# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT CONSERVATION LEARNING CENTRE

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

Preliminary

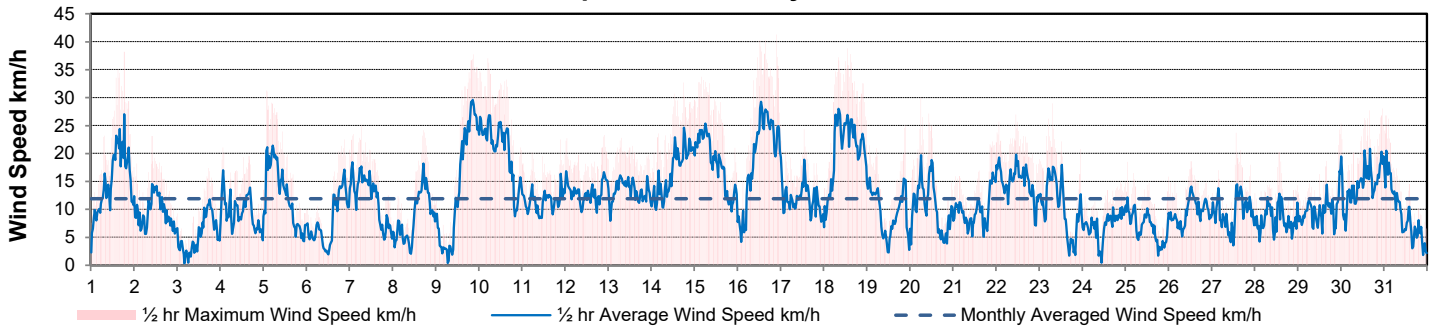
January 2024

Day	Wind Gust			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 <sup>2</sup>	MJ/m <sup>2</sup>
1	38.2	NNW	18:40	15.0	-3.0	-5.5	-5.5	-4.5	-2.5	0.5	3.0	6.0	4.7	7.7	61.3	3.1	0.9
2	23.1	NNW	10:20	9.5	-6.5	-4.5	-4.5	-3.5	-2.5	0.5	2.5	6.0	0.0	7.7	0.0	1.4	1.4
3	17.4	SSE	17:43	5.3	-12.0	-5.5	-5.5	-4.0	-2.0	0.5	2.5	6.0	0.1	7.7	1.3	2.0	1.9
4	21.0	SSW	1:59	9.5	-9.0	-6.0	-5.5	-4.0	-2.0	0.5	2.5	6.0	0.0	7.7	0.0	1.1	1.0
5	31.2	E	1:58	12.5	-12.0	-5.5	-5.0	-4.0	-2.5	0.5	2.5	6.0	0.1	7.8	1.3	1.6	1.6
6	22.5	E	21:18	7.9	-13.5	-5.0	-5.0	-4.0	-2.5	0.5	2.5	5.5	0.0	7.8	0.0	1.5	1.4
7	25.1	ENE	6:41	12.0	-16.0	-5.0	-4.5	-4.0	-2.5	0.5	2.5	5.5	0.1	7.8	1.3	2.3	2.2
8	24.2	S	17:05	8.8	-19.0	-5.5	-5.0	-4.0	-2.5	0.5	2.5	5.5	1.2	7.9	15.3	2.4	2.2
9	37.7	NE	21:21	14.1	-18.0	-6.0	-5.5	-4.0	-2.5	0.5	2.5	5.5	0.0	7.9	0.0	1.7	1.6
10	37.0	N	5:23	20.6	-21.5	-7.0	-6.5	-4.5	-2.5	0.5	2.0	5.5	0.0	7.9	0.0	2.2	2.1
11	22.5	NNE	21:44	11.5	-27.5	-9.5	-8.5	-6.0	-3.0	0.5	2.0	5.5	3.6	8.0	45.2	3.3	2.4
12	23.3	NW	22:19	13.0	-32.5	-11.0	-10.0	-7.0	-3.5	0.5	2.0	5.5	6.2	8.0	77.5	3.8	1.5
13	22.7	NW	7:53	13.2	-34.0	-12.5	-11.5	-8.5	-4.5	0.0	2.0	5.5	6.2	8.0	77.1	3.5	2.4
14	32.7	WNW	18:21	16.7	-30.0	-13.0	-12.0	-9.0	-5.5	0.0	2.0	5.5	7.2	8.1	89.1	4.6	1.3
15	33.7	NW	4:28	18.2	-29.0	-13.0	-12.0	-9.5	-6.0	0.0	2.0	5.5	7.5	8.1	92.4	5.0	1.1
16	41.3	NW	21:51	19.6	-24.5	-13.0	-12.0	-9.5	-6.0	0.0	2.0	5.5	0.0	8.2	0.0	2.2	2.2
17	25.1	NW	0:08	12.0	-21.0	-11.5	-11.0	-9.0	-6.5	0.0	2.0	5.5	4.9	8.2	59.7	4.1	1.6
18	38.8	NW	13:11	20.6	-22.5	-12.0	-11.0	-9.0	-6.0	0.0	2.0	5.5	0.0	8.3	0.0	2.9	2.8
19	25.0	SSW	21:38	9.4	-16.5	-10.5	-10.0	-8.5	-6.0	-0.5	2.0	5.0	0.0	8.3	0.0	2.6	2.4
20	30.0	S	6:21	10.3	-16.5	-9.5	-9.5	-7.5	-6.0	-0.5	1.5	5.0	1.3	8.4	15.6	3.2	2.8
21	22.1	NNE	22:29	10.0	-18.5	-9.0	-8.5	-7.0	-5.5	-0.5	1.5	5.0	5.2	8.4	61.9	4.7	2.8
22	26.9	E	11:20	14.9	-17.5	-8.5	-8.5	-7.0	-5.0	-1.0	1.5	5.0	0.0	8.5	0.0	3.0	2.9
23	29.0	SSE	7:46	10.3	-9.5	-8.0	-8.0	-6.5	-5.0	-1.0	1.5	5.0	0.0	8.5	0.0	2.9	2.8
24	14.9	SSE	21:28	7.2	-10.5	-7.0	-7.0	-6.0	-4.5	-1.0	1.5	5.0	0.0	8.6	0.0	3.0	2.9
25	18.5	S	1:20	7.0	-9.0	-6.5	-6.0	-5.5	-4.5	-1.0	1.5	5.0	0.0	8.6	0.0	2.8	2.7
26	18.6	SW	12:42	9.5	-13.5	-6.0	-6.0	-5.0	-4.0	-1.0	1.5	5.0	6.4	8.7	73.9	5.7	1.8
27	23.7	SW	13:45	9.5	-13.0	-6.5	-6.5	-5.0	-4.0	-1.0	1.5	5.0	1.8	8.7	20.7	3.8	3.1
28	20.3	SW	13:38	8.2	-8.5	-6.0	-6.0	-5.0	-3.5	-1.0	1.0	5.0	6.0	8.8	68.4	5.1	2.4
29	24.2	S	23:14	9.7	-8.5	-6.0	-5.5	-4.5	-3.5	-1.0	1.0	5.0	7.1	8.8	80.4	6.3	2.1
30	28.0	SW	23:05	14.5	-2.5	-4.5	-4.5	-4.5	-3.5	-1.0	1.0	5.0	4.9	8.9	55.1	5.0	3.2
31	26.8	WSW	1:24	8.9	-2.0	-2.5	-3.0	-3.0	-3.0	-1.0	1.0	4.5	8.2	8.9	91.7	5.8	1.0
Total													82.7	254.6	32.5	102.6	64.5
Mean				11.9	-16.0	-7.8	-7.4	-5.9	-4.0	-0.2	1.9	5.4					
Extreme	41.3	NW	21:51														
Date	16																

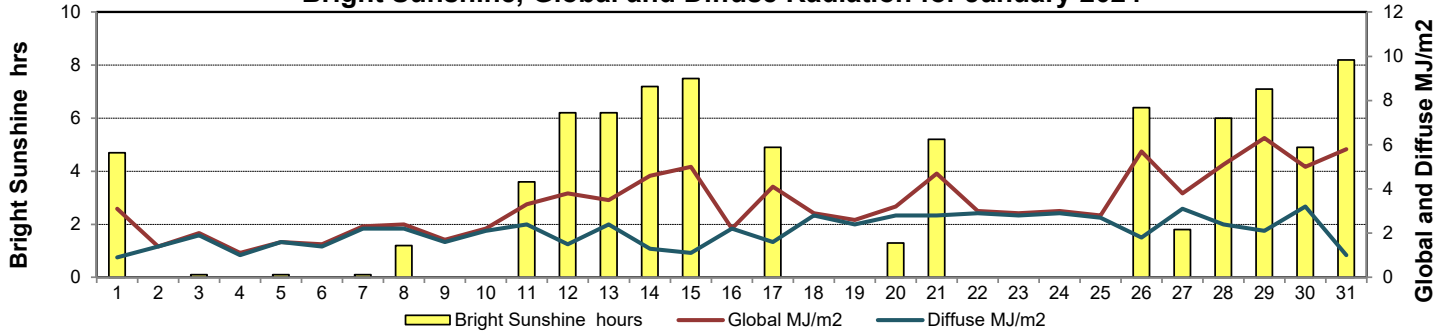
### GLOSSARY OF TERMS

Degree-days	Radiation
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	Relative Humidity The ratio of the air's water vapour content to 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 January 2024

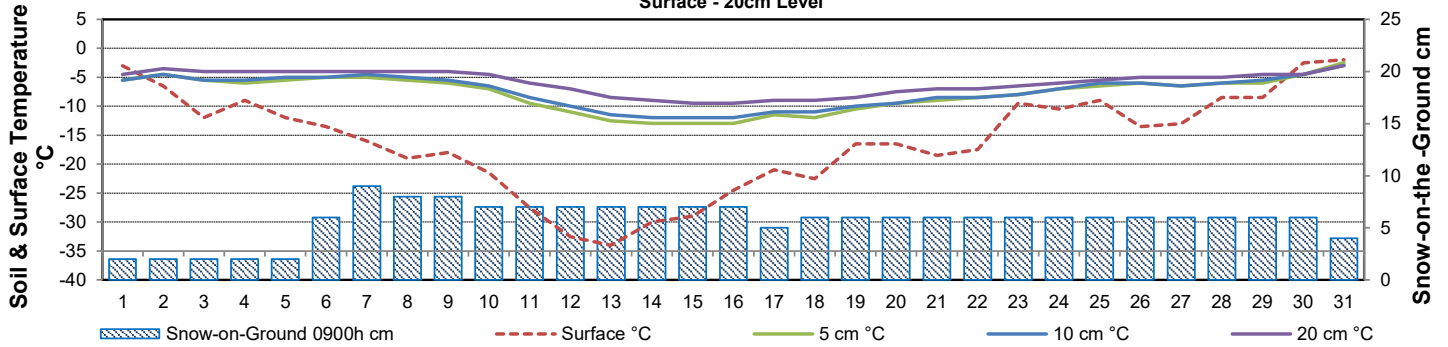


### Bright Sunshine, Global and Diffuse Radiation for January 2024



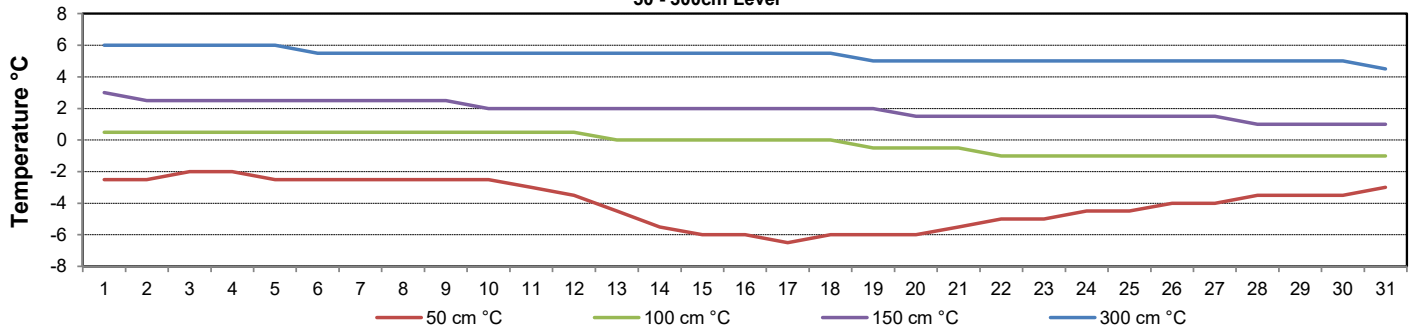
### Soil Temperatures for January 2024

Surface - 20cm Level



### Soil Temperatures for January 2024

50 - 300cm Level





# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

## CONSERVATION LEARNING CENTRE

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

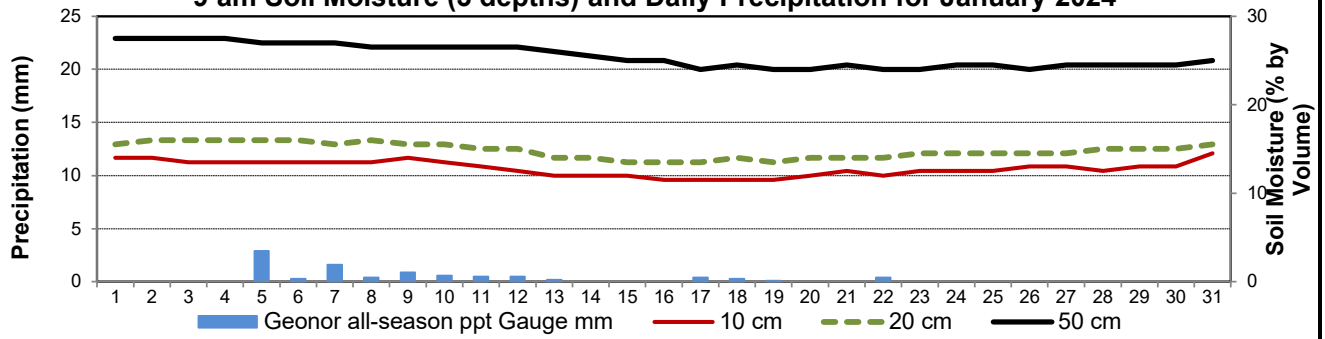
Preliminary **January 2024**

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	11.0	20.3	32.3	14.0	15.5	27.5															
2	8.0	11.8	17.4	14.0	16.0	27.5															
3	3.0	8.5	13.1	13.5	16.0	27.5															
4	7.0	12.5	17.7	13.5	16.0	27.5															
5	10.0	16.8	25.4	13.5	16.0	27.0															
6	7.0	13.5	18.1	13.5	16.0	27.0															
7	10.0	14.3	18.9	13.5	15.5	27.0															
8	7.0	14.0	20.8	13.5	16.0	26.5															
9	10.0	22.0	29.8	14.0	15.5	26.5															
10	16.0	21.4	29.8	13.5	15.5	26.5															
11	10.0	13.4	18.3	13.0	15.0	26.5															
12	11.0	14.3	19.5	12.5	15.0	26.5															
13	11.0	13.0	18.3	12.0	14.0	26.0															
14	13.0	18.6	25.6	12.0	14.0	25.5															
15	14.0	19.5	27.9	12.0	13.5	25.0															
16	15.0	22.5	32.3	11.5	13.5	25.0															
17	9.0	15.7	21.0	11.5	13.5	24.0															
18	16.0	21.5	30.2	11.5	14.0	24.5															
19	8.0	12.5	20.8	11.5	13.5	24.0															
20	8.0	14.9	23.7	12.0	14.0	24.0															
21	8.0	12.9	17.9	12.5	14.0	24.5															
22	12.0	16.2	22.4	12.0	14.0	24.0															
23	8.0	14.6	20.8	12.5	14.5	24.0															
24	6.0	8.6	13.1	12.5	14.5	24.5															
25	5.0	10.5	15.4	12.5	14.5	24.5															
26	7.0	11.9	16.6	13.0	14.5	24.0															
27	7.0	12.4	22.2	13.0	14.5	24.5															
28	6.0	11.4	16.6	12.5	15.0	24.5															
29	7.0	12.7	22.7	13.0	15.0	24.5															
30	11.0	16.1	23.1	13.0	15.0	24.5															
31	4.0	3.0	23.0	14.5	15.5	25.0															
Total																					
Mean				13	15	25.5															
Extreme	16.0	22.5	32.3	14.5	16	27.5															

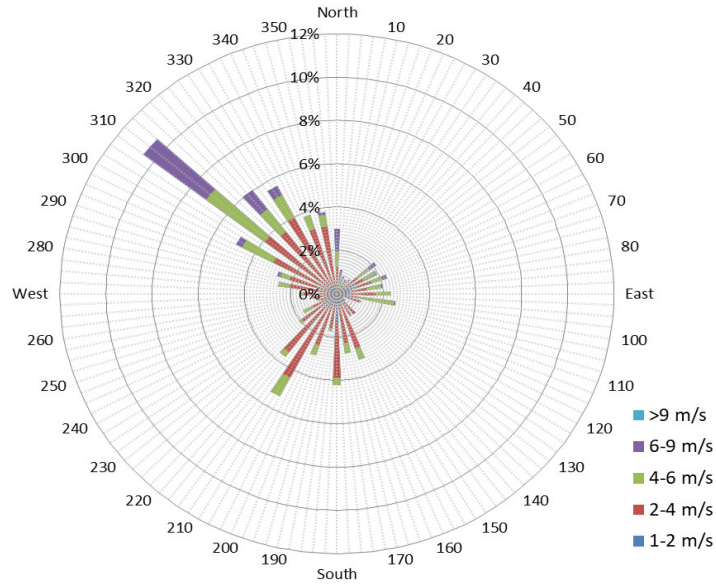
**SRC proudly recognizes the following CRS supporters:**



### 9 am Soil Moisture (3 depths) and Daily Precipitation for January 2024



### 10 minute Average Wind Speed and Direction CLC Jan 2024



### 1/2 hr Maximum Wind Speed and Direction CLC Jan 2024

