



# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

## CONSERVATION LEARNING CENTRE

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

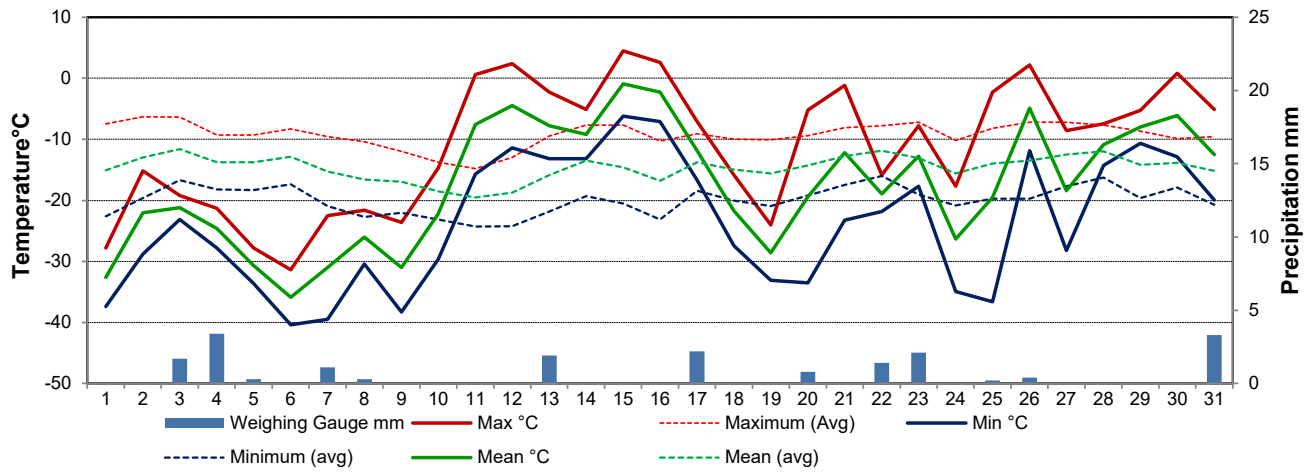
Preliminary **January 2022**

Day	Temperature						Degree-days			Precipitation			Relative Humidity		Station Pressure <i>corrected to sea level</i>	
	Max	Avg Max	Min	Avg Min	Mean	Avg 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	2012-2021	°C	2012-2021	°C	2012-2021	5°C base	18°C base	18°C base	mm		cm	%	%	mbar	mbar
1	-27.8	-7.5	-37.4	-22.6	-32.6	-15.1	0.0	50.6	0.0	0.0		38	80	69	1016	1008
2	-15.2	-6.3	-28.8	-19.6	-22.0	-13.0	0.0	40.0	0.0	0.0		39	85	75	1015	1003
3	-19.2	-6.4	-23.1	-16.7	-21.2	-11.6	0.0	39.2	0.0	1.7		38	84	78	1020	1014
4	-21.3	-9.3	-27.8	-18.2	-24.6	-13.8	0.0	42.6	0.0	3.4		35	84	79	1027	1014
5	-27.8	-9.3	-33.6	-18.3	-30.7	-13.8	0.0	48.7	0.0	0.3		41	79	70	1031	1027
6	-31.4	-8.3	-40.4	-17.4	-35.9	-12.9	0.0	53.9	0.0	0.0		40	78	69	1030	1013
7	-22.5	-9.6	-39.5	-20.9	-31.0	-15.3	0.0	49.0	0.0	1.1		41	84	74	1012	992
8	-21.6	-10.4	-30.4	-22.7	-26.0	-16.6	0.0	44.0	0.0	0.3		40	84	69	1023	995
9	-23.6	-12.0	-38.3	-22.0	-31.0	-17.0	0.0	49.0	0.0	0.0		41	79	62	1031	1024
10	-14.7	-13.8	-29.6	-23.1	-22.2	-18.5	0.0	40.2	0.0	0.0		40	85	71	1030	1006
11	0.6	-14.8	-15.7	-24.3	-7.6	-19.5	0.0	25.6	0.0	0.0		41	93	75	1010	1005
12	2.4	-13.0	-11.4	-24.2	-4.5	-18.7	0.0	22.5	0.0	0.0		41	94	77	1014	1006
13	-2.3	-9.5	-13.2	-21.8	-7.8	-15.9	0.0	25.8	0.0	1.9		41	98	92	1020	1014
14	-5.1	-7.7	-13.2	-19.3	-9.2	-13.5	0.0	27.2	0.0	0.0		42	97	92	1030	1020
15	4.5	-7.7	-6.2	-20.5	-0.9	-14.6	0.0	18.9	0.0	0.0		50	97	72	1019	1003
16	2.6	-10.3	-7.1	-23.1	-2.3	-16.8	0.0	20.3	0.0	0.0		49	99	77	1011	1007
17	-7.1	-9.1	-16.7	-18.4	-11.9	-13.8	0.0	29.9	0.0	2.2		48	93	86	1009	1000
18	-15.9	-10.0	-27.4	-20.0	-21.7	-15.0	0.0	39.7	0.0	0.0		61	85	73	1030	1003
19	-24.0	-10.1	-33.1	-20.9	-28.6	-15.6	0.0	46.6	0.0	0.0		54	81	65	1034	1028
20	-5.2	-9.4	-33.5	-19.2	-19.4	-14.3	0.0	37.4	0.0	0.8		54	93	79	1028	996
21	-1.2	-8.1	-23.2	-17.5	-12.2	-12.8	0.0	30.2	0.0	0.0		47	93	69	1022	997
22	-15.9	-7.8	-21.8	-16.0	-18.9	-11.9	0.0	36.9	0.0	1.4		46	88	70	1020	1014
23	-7.8	-7.2	-17.7	-19.0	-12.8	-13.1	0.0	30.8	0.0	2.1		48	93	85	1016	1002
24	-17.7	-10.2	-34.9	-20.8	-26.3	-15.6	0.0	44.3	0.0	0.0		49	89	73	1026	1016
25	-2.3	-8.2	-36.6	-19.7	-19.5	-14.0	0.0	37.5	0.0	0.2		49	89	77	1027	995
26	2.2	-7.2	-11.9	-19.7	-4.9	-13.5	0.0	22.9	0.0	0.4		54	92	73	1020	992
27	-8.6	-7.2	-28.2	-17.7	-18.4	-12.5	0.0	36.4	0.0	0.0		53	91	79	1027	1020
28	-7.5	-7.7	-14.3	-16.3	-10.9	-12.0	0.0	28.9	0.0	0.0		55	94	81	1020	1007
29	-5.3	-8.7	-10.7	-19.6	-8.0	-14.2	0.0	26.0	0.0	0.0		53	96	79	1017	1009
30	0.8	-9.9	-12.9	-17.9	-6.1	-13.9	0.0	24.1	0.0	0.0		52	95	70	1010	1002
31	-5.1	-9.6	-19.9	-20.7	-12.5	-15.2	0.0	30.5	0.0	3.3		52	95	76	1014	993
Total							0.0	1099.6	0.0	19.1			Extreme / Date	Extreme / Date	Extreme / Date	Extreme / Date
Avg	-11.1	-9.2	-23.8	-19.9	-17.5	-14.6	2012 - 2021 Average				17.9	2012-2021 Average				
Extreme	4.5	8.1	-40.4	-41.1			0.0	1011.6	0.0	19.1	Cumulative ppt		99	62	1034	992
Date	15	2014	6	2020						17.9	Cumulative Average		16	9	19	7

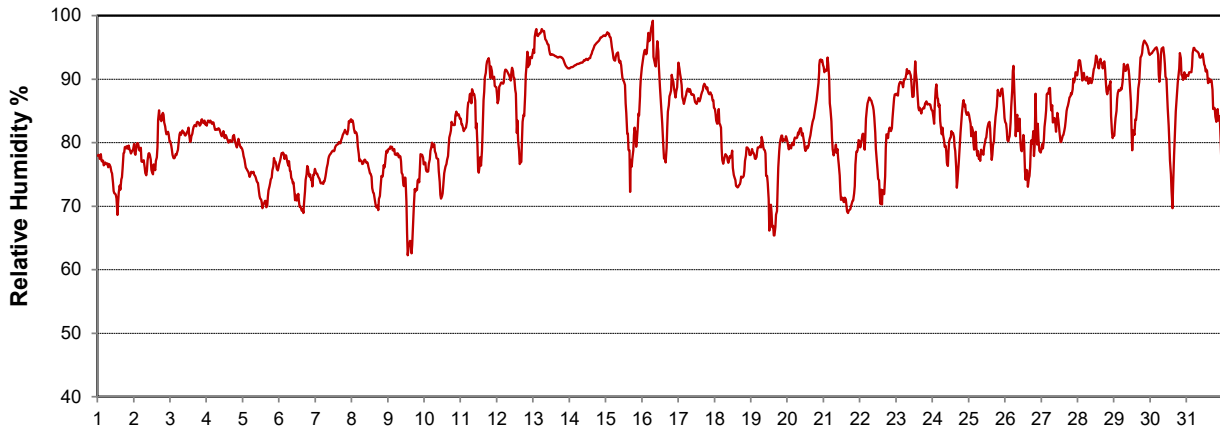
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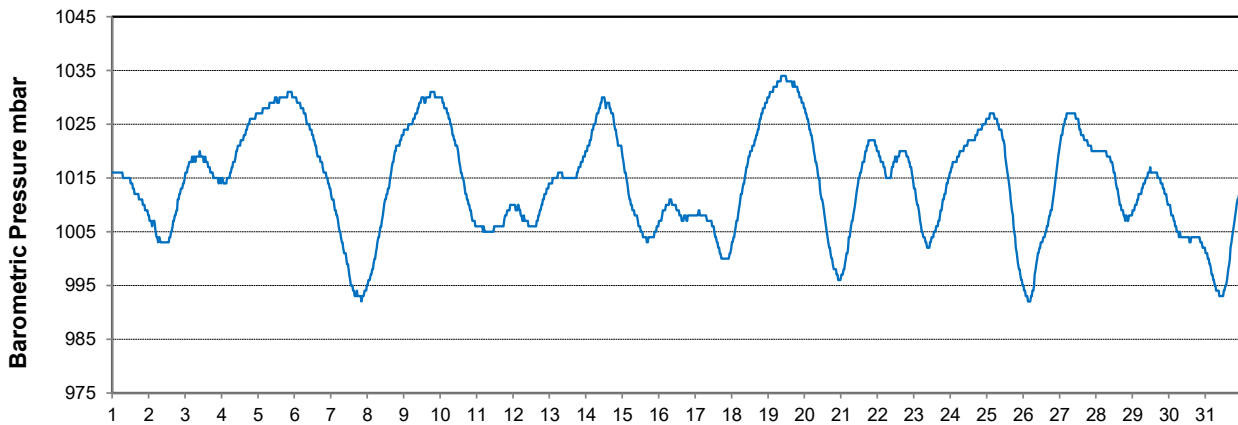
### Temperature and Precipitation for January 2022



### Relative Humidity for January 2022



### Barometric Pressure Corrected to Sea Level for January 2022





# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

## CONSERVATION LEARNING CENTRE

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

Preliminary

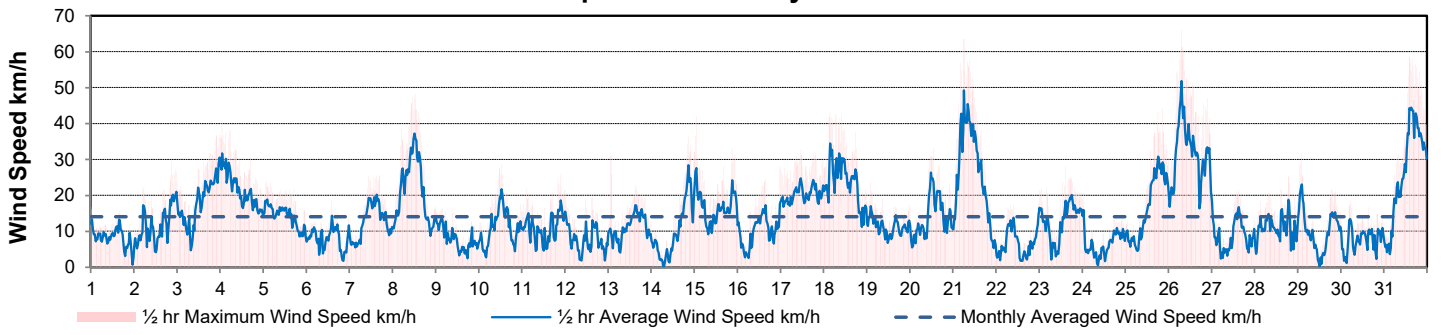
January 2022

Day	Wind Gust			Wind Speed (10 meters)	Soil Temperatures at 0900hrs								Radiation				
													Bright Sunshine	Possible	% Possible	Global	Diffuse
	Max	Direction	Time	Daily Average	Surface	5 cm	10 cm	20 cm	50 cm	100 cm	150 cm	300 cm	hours	hours		MJ/m <sup>2</sup>	MJ/m <sup>2</sup>
km/h			km/h	°C	°C	°C	°C	°C	°C	°C	°C						
1	16.8	WSW	0:40	-2.3	-20.0	-2.0	-1.5	-1.0	0.5	2.0	3.5	6.0	6.9	7.7	89.8	5.4	1.4
2	29.5	NW	21:20	-2.4	-13.0	-2.0	-2.0	-1.0	0.5	2.0	3.5	6.0	0.0	7.7	0.0	2.4	2.3
3	36.9	ENE	23:40	-2.2	-10.5	-2.0	-2.0	-1.0	0.5	2.0	3.5	6.0	0.0	7.7	0.0	2.0	2.0
4	40.8	NE	1:14	-2.1	-14.5	-2.0	-1.5	-1.0	0.5	2.0	3.5	6.0	0.0	7.8	0.0	1.9	1.9
5	23.8	NW	4:14	-2.3	-18.0	-2.0	-1.5	-1.0	0.5	2.0	3.5	6.0	5.3	7.8	68.1	3.1	2.1
6	18.4	SSW	14:20	-2.6	-21.5	-2.0	-1.5	-1.0	0.5	2.0	3.5	6.0	7.1	7.8	90.9	5.0	1.2
7	25.5	E	16:36	-2.9	-18.0	-2.5	-2.0	-1.0	0.5	2.0	3.5	6.0	0.3	7.8	3.8	2.5	2.4
8	48.3	NW	12:41	-2.8	-14.5	-2.5	-2.0	-1.0	0.0	2.0	3.5	6.0	4.3	7.9	54.6	3.9	1.8
9	17.2	W	0:09	-2.8	-13.5	-2.5	-2.0	-1.5	0.0	2.0	3.5	6.0	7.0	7.9	88.5	5.3	1.4
10	28.6	S	12:53	-3.1	-12.5	-2.5	-2.5	-1.5	0.0	1.5	3.0	6.0	0.9	7.9	11.3	2.9	2.7
11	25.7	E	21:34	-2.8	-8.5	-2.5	-2.5	-1.5	0.0	1.5	3.0	5.5	2.9	8.0	36.3	3.2	2.6
12	21.3	E	0:25	-2.2	-5.5	-2.5	-2.0	-1.5	0.0	1.5	3.0	5.5	3.9	8.0	48.6	3.6	1.6
13	31.0	NE	1:59	-1.8	-4.0	-2.0	-2.0	-1.5	0.0	1.5	3.0	5.5	0.0	8.1	0.0	1.6	1.6
14	36.2	SW	20:54	-1.6	-5.5	-1.5	-1.5	-1.0	0.0	1.5	3.0	5.5	0.0	8.1	0.0	2.5	2.4
15	42.0	SSW	1:08	-1.5	-4.5	-1.5	-1.5	-1.0	0.0	1.5	3.0	5.5	1.1	8.1	13.5	2.5	2.3
16	27.4	E	23:37	-1.3	-2.0	-1.5	-1.5	-1.0	0.0	1.5	3.0	5.5	2.4	8.2	29.3	3.3	2.4
17	32.4	ESE	11:08	-1.1	-4.0	-1.0	-1.0	-1.0	0.0	1.5	3.0	5.5	0.0	8.2	0.0	2.2	2.2
18	43.1	N	3:37	-1.1	-8.0	-1.0	-1.0	-1.0	0.0	1.5	3.0	5.5	3.5	8.3	42.3	3.8	2.4
19	23.8	NW	2:19	-1.2	-11.5	-1.0	-1.0	-0.5	0.0	1.5	3.0	5.5	7.7	8.3	92.5	6.2	1.2
20	33.1	S	13:03	-1.6	-13.5	-1.5	-1.0	-1.0	0.0	1.5	3.0	5.5	3.8	8.4	45.4	4.3	3.1
21	63.5	NW	6:19	-1.9	-6.5	-1.5	-1.5	-1.0	0.0	1.5	3.0	5.5	6.9	8.4	81.9	5.3	1.2
22	17.8	S	23:59	-1.8	-9.0	-1.5	-1.5	-1.0	0.0	1.5	3.0	5.5	7.1	8.5	83.8	2.0	1.0
23	28.0	NNE	14:44	-1.7	-7.5	-1.5	-1.5	-1.0	0.0	1.5	2.5	5.5	0.0	8.5	0.0	2.5	2.5
24	20.6	NNE	0:42	-1.6	-8.0	-1.5	-1.5	-1.0	0.0	1.5	2.5	5.5	7.1	8.6	82.8	6.6	1.8
25	44.0	SW	20:59	-1.7	-11.5	-1.5	-1.5	-1.0	0.0	1.5	2.5	5.5	5.3	8.6	61.4	5.4	3.0
26	65.9	NNW	7:28	-1.9	-4.0	-2.0	-1.5	-1.0	0.0	1.5	2.5	5.0	2.9	8.7	33.4	3.8	2.7
27	25.5	NNE	0:24	-1.7	-6.5	-2.0	-1.5	-1.0	0.0	1.5	2.5	5.0	1.3	8.7	14.9	4.2	3.7
28	25.5	SW	18:53	-1.5	-6.5	-1.5	-1.5	-1.0	-1.0	1.5	2.5	5.0	0.1	8.8	1.1	3.8	3.6
29	31.6	NW	2:17	-1.4	-6.0	-1.5	-1.5	-1.0	-1.0	1.0	2.5	5.0	0.0	8.9	0.0	3.7	3.6
30	18.7	S	5:36	-1.3	-5.0	-1.5	-1.5	-1.0	0.0	1.0	2.5	5.0	5.1	8.9	57.2	5.4	2.3
31	58.4	NNE	14:27	-1.2	-4.5	-1.5	-1.5	-1.0	-1.0	1.0	2.5	5.0	0.0	9.0	0.0	3.0	2.9
Total													92.9	255.3	36.4	113.3	69.3
Mean				-1.9	-9.6	-1.8	-1.6	-1.1	0.0	1.6	3.0	5.6					
Extreme	65.9	NNW	7:28														
Date	26																

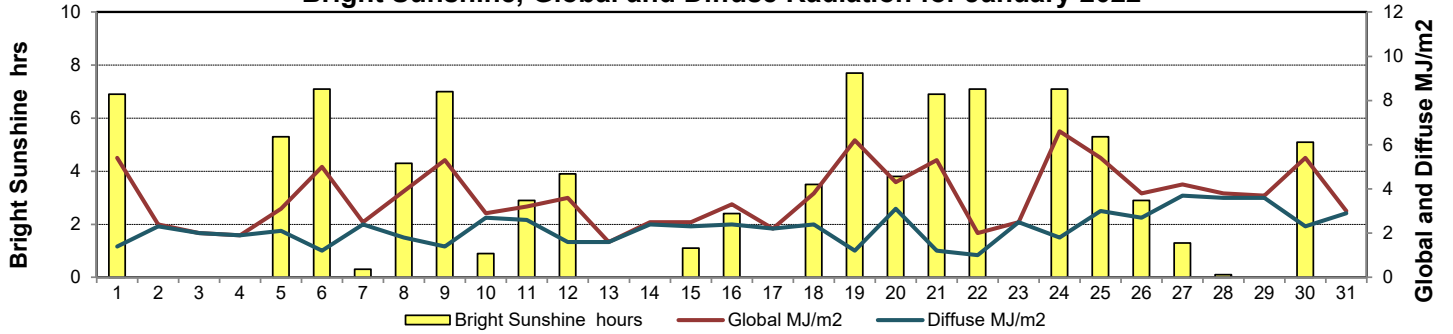
### GLOSSARY OF TERMS

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

### Wind Speed for January 2022

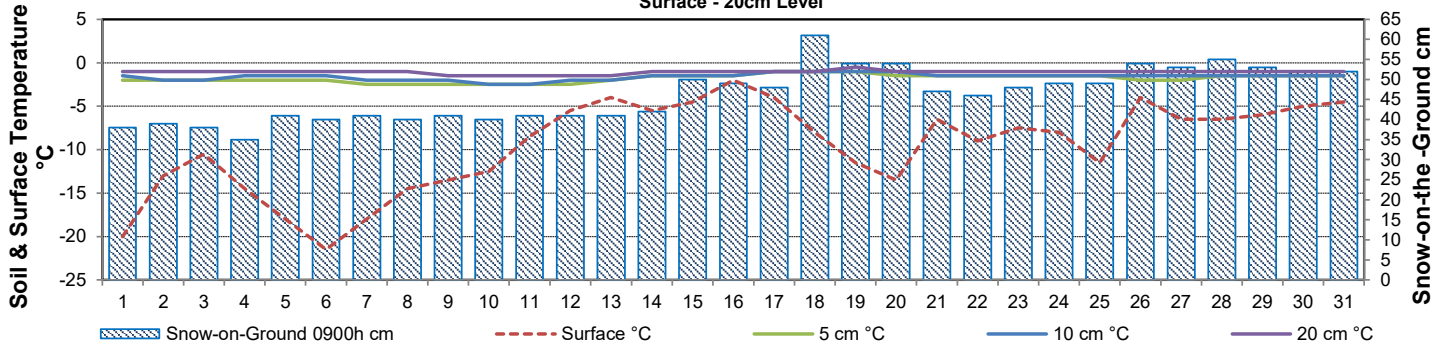


### Bright Sunshine, Global and Diffuse Radiation for January 2022



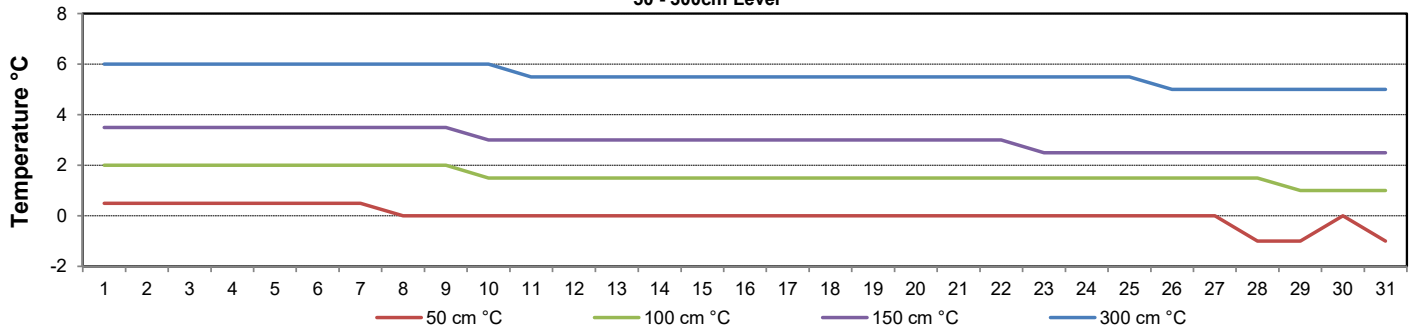
### Soil Temperatures for January 2022

Surface - 20cm Level



### Soil Temperatures for January 2022

50 - 300cm Level





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## CONSERVATION LEARNING CENTRE

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

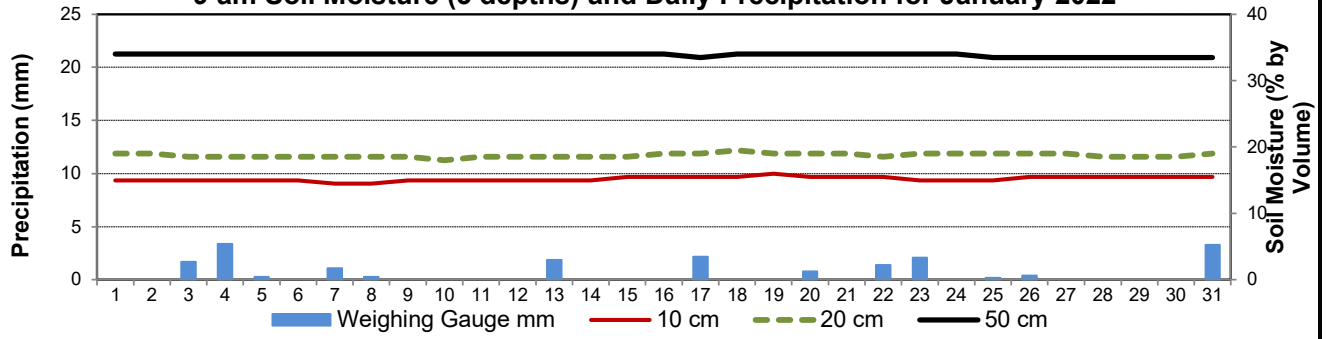
Preliminary **January 2022**

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	10.9	14.7	15.0	19.0	34.0																
2	10.0	17.1	24.1	15.0	19.0	34.0																
3	15.0	25.6	31.6	15.0	18.5	34.0																
4	17.0	26.6	32.9	15.0	18.5	34.0																
5	12.0	15.7	19.5	15.0	18.5	34.0																
6	5.0	13.2	16.2	15.0	18.5	34.0																
7	11.0	17.4	24.1	14.5	18.5	34.0																
8	17.0	28.9	38.9	14.5	18.5	34.0																
9	5.0	8.7	11.2	15.0	18.5	34.0																
10	9.0	18.2	25.0	15.0	18.0	34.0																
11	9.0	16.0	21.0	15.0	18.5	34.0																
12	6.0	13.4	18.9	15.0	18.5	34.0																
13	9.0	14.1	19.9	15.0	18.5	34.0																
14	9.0	24.7	33.1	15.0	18.5	34.0																
15	14.0	23.3	34.3	15.5	18.5	34.0																
16	8.0	14.3	22.0	15.5	19.0	34.0																
17	17.0	20.7	27.5	15.5	19.0	33.5																
18	19.0	28.2	36.0	15.5	19.5	34.0																
19	9.0	13.9	19.9	16.0	19.0	34.0																
20	11.0	22.0	27.9	15.5	19.0	34.0																
21	21.0	39.1	51.0	15.5	19.0	34.0																
22	5.0	12.6	15.4	15.5	18.5	34.0																
23	11.0	16.5	22.0	15.0	19.0	34.0																
24	3.0	13.5	17.6	15.0	19.0	34.0																
25	12.0	26.1	35.4	15.0	19.0	33.5																
26	25.0	40.8	55.2	15.5	19.0	33.5																
27	6.0	14.9	19.9	15.5	19.0	33.5																
28	9.0	16.7	22.4	15.5	18.5	33.5																
29	8.0	17.8	23.7	15.5	18.5	33.5																
30	6.0	11.7	16.0	15.5	18.5	33.5																
31	22.0	2.0	48.0	15.5	19.0	33.5																
Total																						
Mean				15	19	33.9																
Extreme	25.0	40.8	55.2	16	19.5	34																

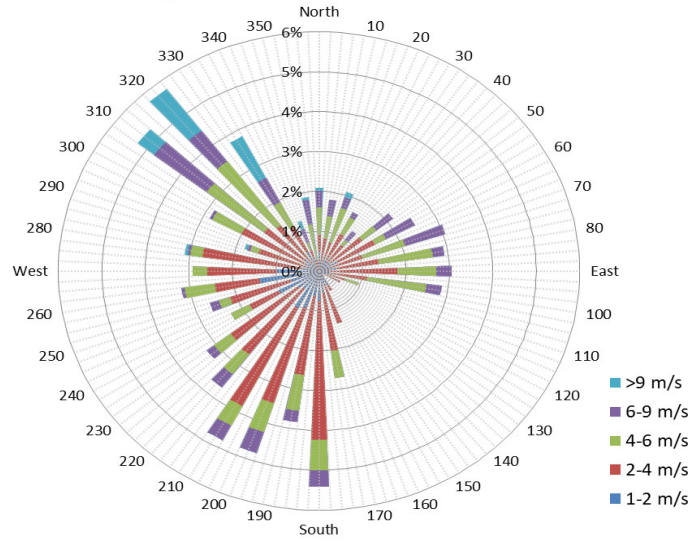
**SRC proudly recognizes the following CRS supporters:**



### 9 am Soil Moisture (3 depths) and Daily Precipitation for January 2022



### 10 minute Average Wind Speed and Direction CLC Jan 2022



### 1/2 hr Maximum Wind Speed and Direction CLC Jan 2022

