



# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

## CONSERVATION LEARNING CENTRE

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

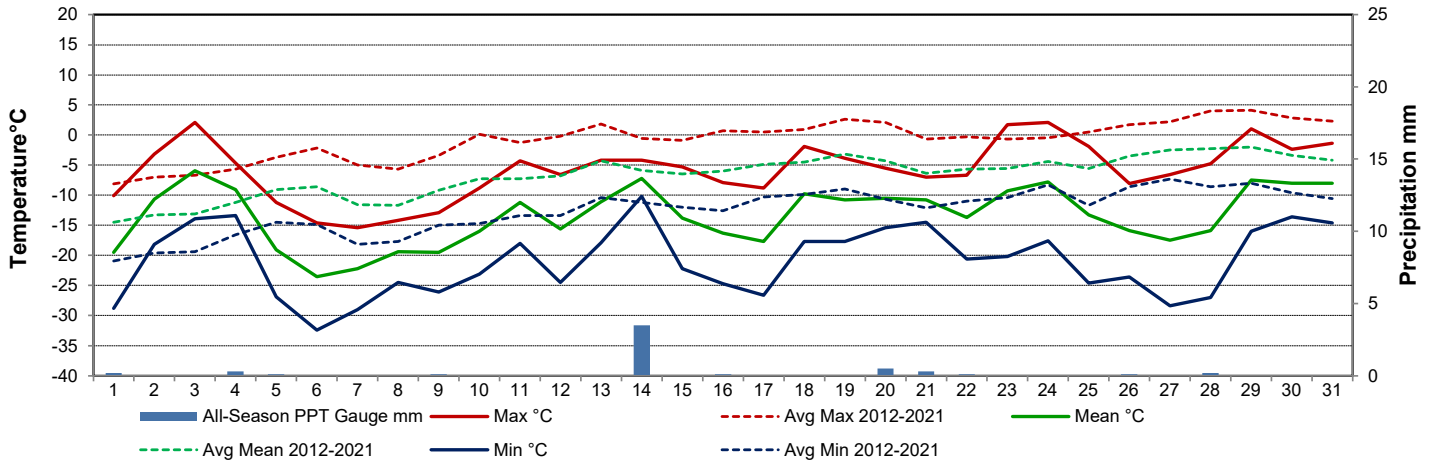
Preliminary **March 2023**

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	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	-10.1	-8.1	-28.8	-20.9	-19.5	-14.5	0.0	37.5	0.0	0.2		44	89	71	1016	1003
2	-3.2	-7.0	-18.2	-19.6	-10.7	-13.3	0.0	28.7	0.0	0.0		48	94	78	1003	990
3	2.1	-6.7	-13.9	-19.4	-5.9	-13.1	0.0	23.9	0.0	0.0		47	96	59	1001	991
4	-4.7	-5.7	-13.4	-16.6	-9.1	-11.2	0.0	27.1	0.0	0.3		47	93	61	1016	1001
5	-11.2	-3.7	-26.9	-14.5	-19.1	-9.1	0.0	37.1	0.0	0.1		47	88	56	1030	1016
6	-14.6	-2.2	-32.4	-14.9	-23.5	-8.6	0.0	41.5	0.0	0.0		46	84	57	1035	1030
7	-15.4	-5.0	-29.0	-18.2	-22.2	-11.6	0.0	40.2	0.0	0.0		47	85	70	1036	1034
8	-14.2	-5.7	-24.5	-17.7	-19.4	-11.7	0.0	37.4	0.0	0.0		47	85	63	1038	1036
9	-12.9	-3.4	-26.1	-15.0	-19.5	-9.2	0.0	37.5	0.0	0.1		47	86	72	1037	1028
10	-8.8	0.1	-23.1	-14.7	-16.0	-7.3	0.0	34.0	0.0	0.0		47	86	77	1027	1017
11	-4.3	-1.3	-18.0	-13.4	-11.2	-7.3	0.0	29.2	0.0	0.0		44	90	69	1025	1017
12	-6.6	-0.2	-24.5	-13.4	-15.6	-6.8	0.0	33.6	0.0	0.0		43	91	59	1026	1022
13	-4.2	1.8	-17.9	-10.4	-11.1	-4.3	0.0	29.1	0.0	0.0		44	86	70	1022	1003
14	-4.2	-0.6	-10.2	-11.2	-7.2	-5.9	0.0	25.2	0.0	3.5		44	90	77	1004	995
15	-5.3	-0.9	-22.2	-12.0	-13.8	-6.5	0.0	31.8	0.0	0.0		46	93	59	1018	1004
16	-7.9	0.7	-24.7	-12.6	-16.3	-6.0	0.0	34.3	0.0	0.1		46	91	52	1025	1018
17	-8.8	0.5	-26.6	-10.3	-17.7	-4.9	0.0	35.7	0.0	0.0		45	90	51	1028	1025
18	-1.9	0.9	-17.7	-9.9	-9.8	-4.5	0.0	27.8	0.0	0.0		46	93	63	1026	1012
19	-3.9	2.6	-17.7	-9.0	-10.8	-3.2	0.0	28.8	0.0	0.0		46	94	80	1017	1012
20	-5.5	2.1	-15.4	-10.7	-10.5	-4.3	0.0	28.5	0.0	0.5		46	93	75	1017	1014
21	-7.0	-0.7	-14.5	-12.1	-10.8	-6.4	0.0	28.8	0.0	0.3		53	93	77	1014	1012
22	-6.7	-0.3	-20.6	-11.0	-13.7	-5.7	0.0	31.7	0.0	0.1		52	92	73	1014	1009
23	1.7	-0.7	-20.2	-10.4	-9.3	-5.6	0.0	27.3	0.0	0.0		52	95	59	1009	1003
24	2.1	-0.5	-17.6	-8.3	-7.8	-4.4	0.0	25.8	0.0	0.0		51	95	36	1014	1005
25	-1.9	0.5	-24.6	-11.7	-13.3	-5.6	0.0	31.3	0.0	0.0		51	90	58	1015	1013
26	-8.1	1.7	-23.6	-8.6	-15.9	-3.5	0.0	33.9	0.0	0.1		51	95	59	1027	1014
27	-6.6	2.2	-28.4	-7.3	-17.5	-2.5	0.0	35.5	0.0	0.0		51	88	40	1028	1024
28	-4.8	4.0	-27.0	-8.6	-15.9	-2.3	0.0	33.9	0.0	0.2		50	88	37	1024	1019
29	1.0	4.1	-16.0	-8.0	-7.5	-2.0	0.0	25.5	0.0	0.0		51	92	61	1019	1009
30	-2.4	2.8	-13.6	-9.6	-8.0	-3.4	0.0	26.0	0.0	0.0		51	93	67	1013	1011
31	-1.4	2.3	-14.6	-10.6	-8.0	-4.2	0.0	26.0	0.0	0.0		51	96	74	1012	1006
Total							0.0	974.6	0.0	5.5						
Avg	-5.8	-1.2	-21.0	-13.0	-13.4	-7.1	Monthly 2012 - 2021 Average			14.1	2012-2021 Average					
Extreme	2.1	17.3	-32.4	-35.8			1.1	740.4	0.0	21.1	2023 Cumulative ppt		96	36	1038	990
Date	3	2012	6	2014						41.8	Cumulative Average		3	24	8	2

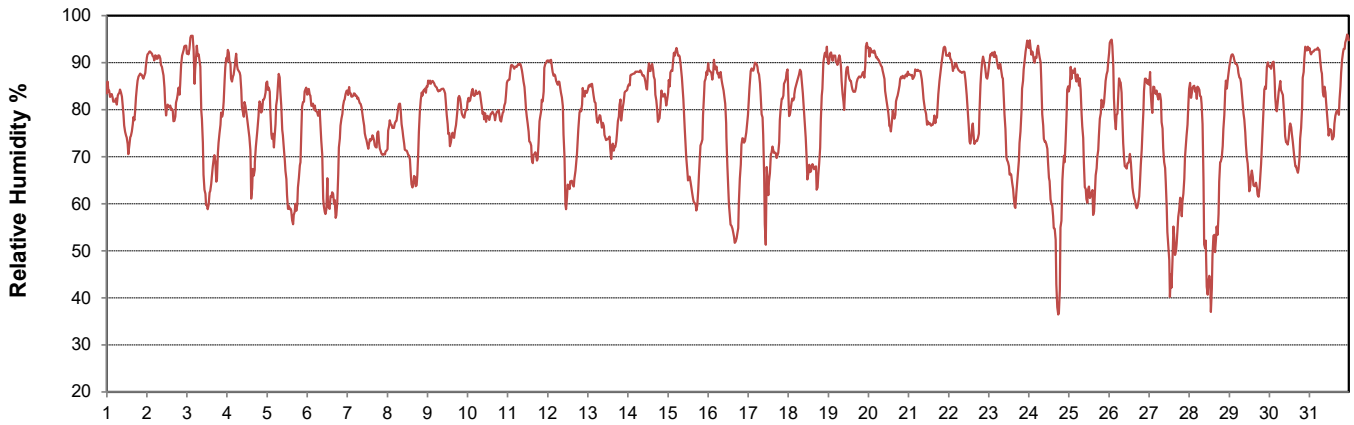
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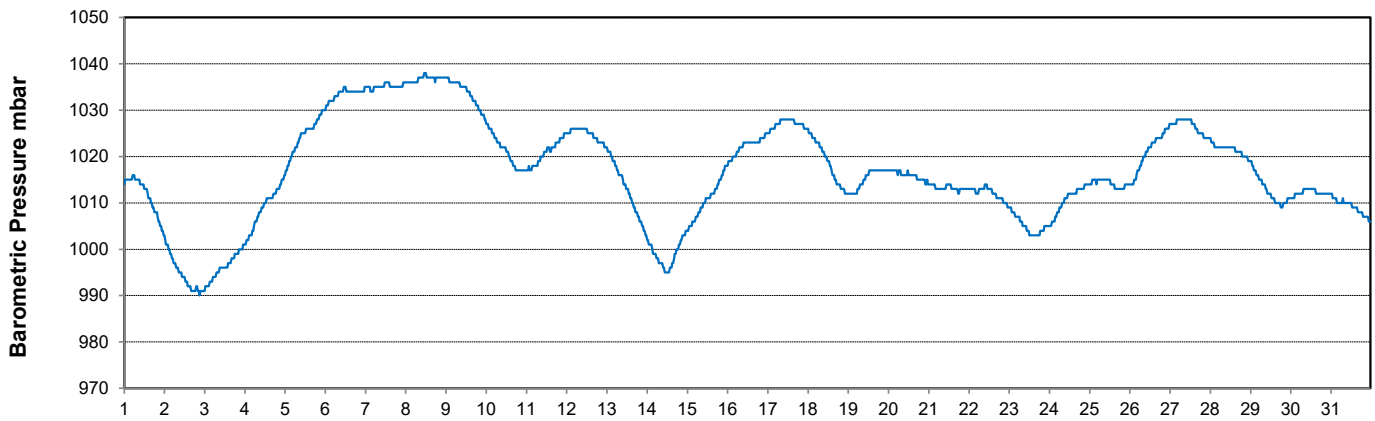
### Temperature and Precipitation for March 2023



### Relative Humidity for March 2023



### Barometric Pressure Corrected to Sea Level for March 2023





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## CONSERVATION LEARNING CENTRE

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

Preliminary

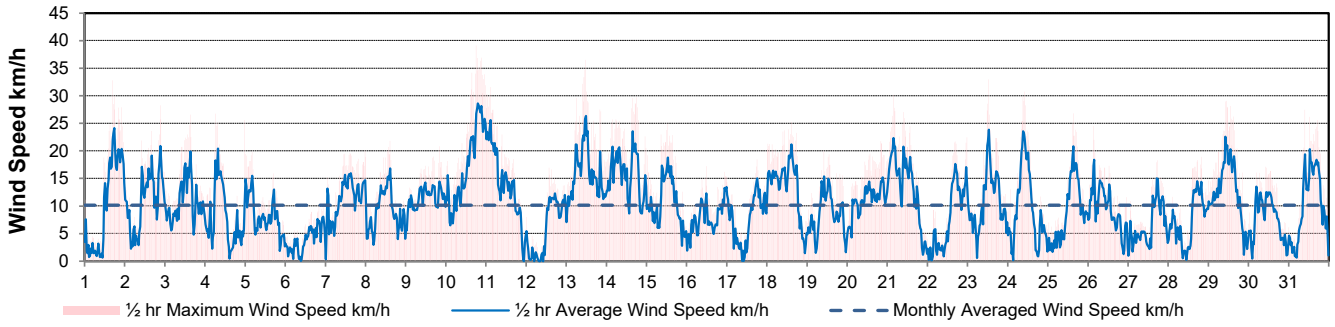
**March 2023**

Day	Wind Gust			Wind Speed (10 meters) Daily Average	Soil Temperatures at 0900hrs								Radiation				
	Max	Direction	Time		Surface	5 cm	10 cm	20 cm	50 cm	100 cm	150 cm	300 cm	Bright Sunshine	Bright Sunshine Possible	% Possible	Global	Diffuse
	km/h				°C	°C	°C	°C	°C	°C	°C	°C	hours	hours		MJ/m <sup>2</sup>	MJ/m <sup>2</sup>
1	32.7	S	16:55	10.0	-12.5	-2.5	-2.5	-2.0	-0.5	0.5	2.0	4.5	4.8	10.9	44.2	10.3	7.2
2	28.2	SSW	21:11	10.9	-9.5	-2.5	-2.5	-2.0	-0.5	0.5	2.0	4.5	4.3	10.9	39.4	9.7	7.2
3	26.6	NW	15:07	10.9	-8.0	-2.5	-2.5	-2.0	-0.5	0.5	1.5	4.5	8.6	11.0	78.3	12.9	3.4
4	26.7	NNE	6:07	8.1	-6.5	-2.5	-2.5	-2.0	-0.5	0.5	1.5	4.5	0.0	11.1	0.0	8.2	7.8
5	19.8	N	4:10	8.4	-9.5	-2.0	-2.0	-2.0	-0.5	0.5	1.5	4.5	10.7	11.1	96.1	14.0	2.7
6	10.4	ENE	22:41	3.9	-14.0	-2.0	-2.0	-1.5	-0.5	0.5	1.5	4.5	10.8	11.2	96.4	14.2	3.3
7	20.0	E	23:53	11.5	-13.5	-2.5	-2.0	-2.0	-0.5	0.5	1.5	4.0	8.5	11.3	75.4	11.6	8.0
8	21.8	E	14:53	8.8	-12.0	-2.5	-2.5	-2.0	-1.0	0.5	1.5	4.0	10.6	11.3	93.5	14.3	3.1
9	20.8	ESE	20:09	11.3	-13.0	-2.5	-2.5	-2.0	-1.0	0.5	1.5	4.0	7.1	11.4	62.2	13.5	5.6
10	39.1	ENE	18:06	17.3	-11.0	-2.5	-2.5	-2.0	-0.5	0.5	1.5	4.0	9.1	11.5	79.3	12.9	5.1
11	31.5	ENE	2:31	14.0	-9.0	-2.5	-2.5	-2.0	-0.5	0.5	1.5	4.0	8.5	11.6	73.6	13.5	6.9
12	16.9	S	13:56	5.9	-14.0	-2.5	-2.5	-2.0	-1.0	0.5	1.5	4.0	10.8	11.6	92.9	16.2	2.8
13	36.5	S	11:52	15.9	-10.5	-2.5	-2.5	-2.0	-0.5	0.5	1.5	4.0	6.2	11.7	53.0	11.7	8.3
14	29.7	NW	18:00	15.8	-6.5	-2.5	-2.5	-2.0	-1.0	0.5	1.5	4.0	2.7	11.8	23.0	9.2	7.9
15	24.9	NW	12:34	10.5	-7.5	-2.0	-2.0	-2.0	-0.5	0.5	1.5	4.0	11.3	11.8	95.5	16.3	3.5
16	17.2	NNW	11:35	8.0	-9.5	-2.0	-2.0	-1.5	-1.0	0.5	1.5	4.0	11.3	11.9	95.0	16.8	6.1
17	18.4	S	18:04	7.4	-10.5	-2.0	-2.0	-1.5	-0.5	0.5	1.5	4.0	11.4	12.0	95.2	17.8	3.2
18	25.2	S	14:43	13.6	-11.0	-2.0	-2.0	-1.5	-1.0	0.5	1.5	4.0	11.6	12.0	96.3	17.0	3.5
19	19.9	ENE	10:29	8.5	-9.0	-2.0	-2.0	-2.0	-1.0	0.5	1.5	4.0	2.5	12.1	20.6	10.8	9.0
20	21.8	SSE	20:13	11.1	-6.5	-2.0	-2.0	-2.0	-1.5	0.5	1.5	4.0	2.2	12.2	18.1	12.1	9.9
21	30.2	S	4:00	13.1	-6.5	-2.0	-2.0	-1.5	-1.5	0.5	1.5	4.0	9.3	12.3	75.9	15.9	10.8
22	22.4	SSW	23:30	7.6	-8.5	-2.0	-2.0	-1.5	-1.5	0.5	1.5	4.0	9.1	12.3	73.9	16.2	5.2
23	32.9	SSW	12:44	10.9	-9.5	-2.0	-2.0	-1.5	-1.5	0.5	1.5	4.0	11.8	12.4	95.2	18.4	3.6
24	30.7	NNE	10:12	9.4	-7.5	-2.0	-2.0	-1.5	-1.5	0.5	1.5	4.0	10.4	12.5	83.5	17.9	4.3
25	26.8	SSW	15:07	8.7	-11.0	-2.0	-2.0	-1.5	-0.5	0.5	1.5	4.0	10.0	12.5	79.8	17.6	5.3
26	24.4	N	3:25	9.3	-10.0	-2.0	-2.0	-1.5	-2.0	0.5	1.5	4.0	12.2	12.6	96.8	20.1	3.4
27	18.2	S	17:32	6.6	-13.5	-2.0	-2.0	-1.5	-1.0	0.5	1.5	4.0	12.2	12.7	96.3	20.0	3.4
28	18.9	SW	19:48	7.3	-13.0	-2.0	-2.0	-1.5	-1.0	0.5	1.5	4.0	11.2	12.7	87.9	19.7	3.5
29	29.1	SSW	10:40	12.6	-11.5	-2.0	-2.0	-1.5	-1.0	0.5	1.5	4.0	9.5	12.8	74.2	16.7	10.7
30	17.1	E	10:21	7.7	-5.5	-2.0	-2.0	-1.5	-1.5	0.5	1.5	4.0	10.0	12.9	77.6	18.7	6.3
31	27.4	S	9:36	10.0	-6.0	-2.0	-2.0	-1.5	-1.5	0.5	1.5	4.0	10.9	13.0	84.2	19.9	5.7
Total													269.6	368.9	73.1	464.1	176.7
Mean					-9.9	-2.2	-2.2	-1.8	-0.9	0.5	1.5	4.1					
Extreme	39.1	ENE	18:06														
Date	10																

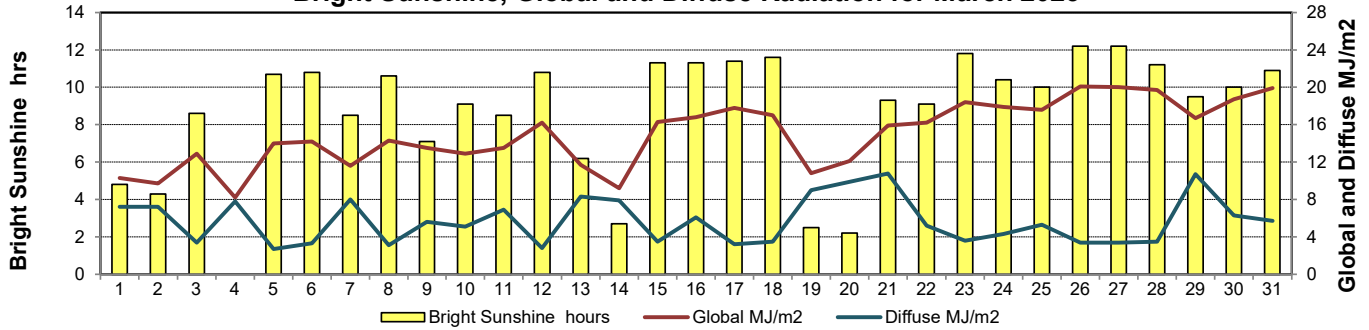
### GLOSSARY OF TERMS

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

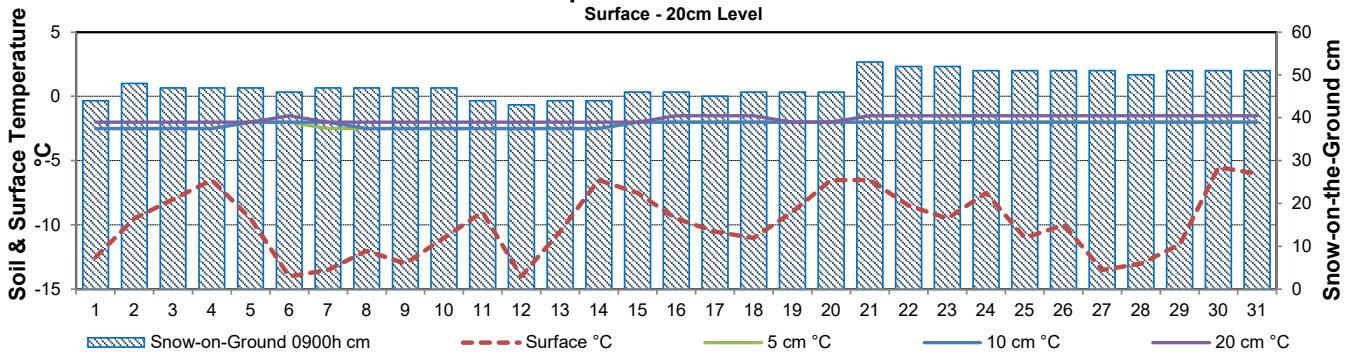
### Wind Speed for March 2023



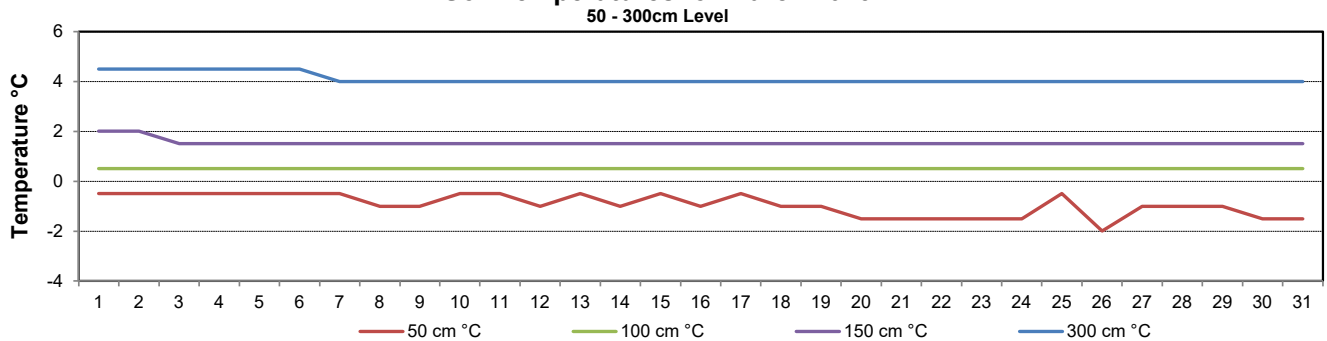
### Bright Sunshine, Global and Diffuse Radiation for March 2023



### Soil Temperatures for March 2023



### Soil Temperatures for March 2023





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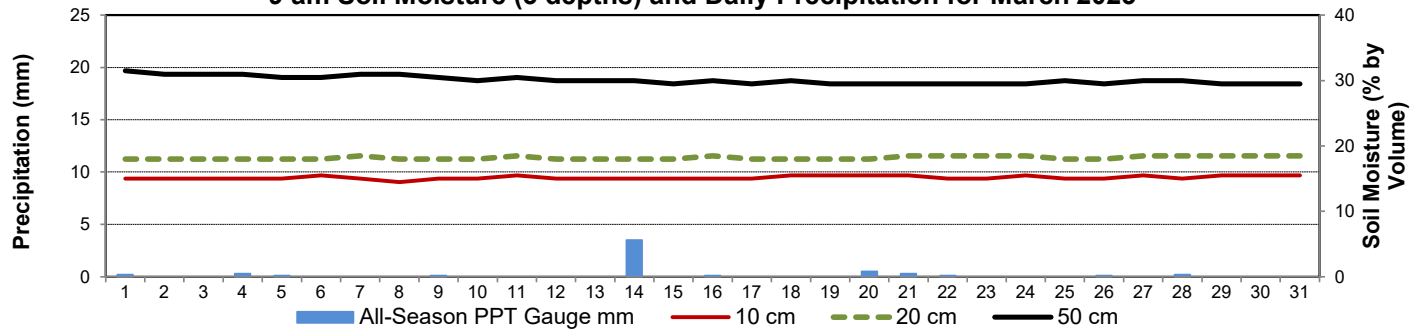
**March 2023**

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)			<b>Temperature</b>											
1	8.0	20.7	27.2	15.0	18.0	31.5	March 2023 had the lowest minimum and average temperatures for SRC CRS CLC period of record (2012-2023)											
2	9.0	18.2	23.9	15.0	18.0	31.0												
3	9.0	16.4	21.8	15.0	18.0	31.0	Record number of days (31) with Minimum Daily temperatures was <= -10° C											
4	7.0	16.5	21.0	15.0	18.0	31.0	Record number of days (17) with Minimum Daily temperatures was <= -20° C											
5	7.0	12.4	16.8	15.0	18.0	30.5	<b>Precipitation</b>											
6	3.0	7.1	9.3	15.5	18.0	30.5												
7	9.0	15.0	18.7	15.0	18.5	31.0	March 2023 was the 2nd driest March in the last 12 years (2019 = 2.5mm)											
8	7.0	14.8	19.3	14.5	18.0	31.0												
9	9.0	13.5	17.2	15.0	18.0	30.5												
10	15.0	24.9	32.7	15.0	18.0	30.0												
11	11.0	22.5	27.3	15.5	18.5	30.5												
12	5.0	10.8	15.4	15.0	18.0	30.0												
13	11.0	22.3	31.2	15.0	18.0	30.0												
14	14.0	19.7	26.8	15.0	18.0	30.0												
15	8.0	15.8	20.6	15.0	18.0	29.5												
16	6.0	11.0	13.7	15.0	18.5	30.0												
17	6.0	12.1	14.9	15.0	18.0	29.5												
18	12.0	18.5	21.6	15.5	18.0	30.0												
19	7.0	13.9	19.1	15.5	18.0	29.5												
20	8.0	11.1	17.6	15.5	18.0	29.5												
21	11.0	19.2	26.4	15.5	18.5	29.5												
22	6.0	15.5	20.6	15.0	18.5	29.5												
23	9.0	20.7	27.3	15.0	18.5	29.5												
24	7.0	19.2	24.5	15.5	18.5	29.5												
25	8.0	18.7	24.7	15.0	18.0	30.0												
26	7.0	14.6	19.9	15.0	18.0	29.5												
27	5.0	13.1	16.0	15.5	18.5	30.0												
28	6.0	13.1	17.0	15.0	18.5	30.0												
29	11.0	20.0	25.6	15.5	18.5	29.5												
30	6.0	12.0	16.4	15.5	18.5	29.5												
31	8.0	3.0	24.0	15.5	18.5	29.5												
Total																		
Mean				15	18	30.1												
Extreme	15.0	24.9	32.7	15.5	18.5	31.5												

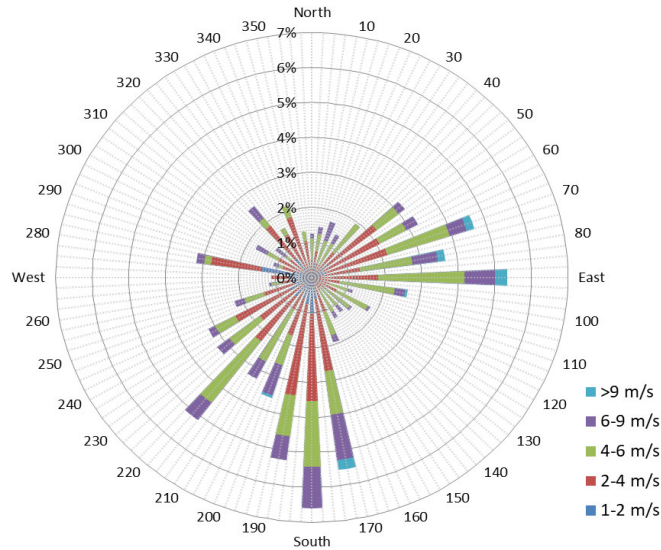
**SRC proudly recognizes the following CRS supporters:**



### 9 am Soil Moisture (3 depths) and Daily Precipitation for March 2023



### 1/2 hr Maximum Wind Speed and Direction CLC Mar 2023



### 10 minute Average Wind Speed and Direction CLC Mar 2023

