



# SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

## CONSERVATION LEARNING CENTRE

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

Preliminary **October 2022**

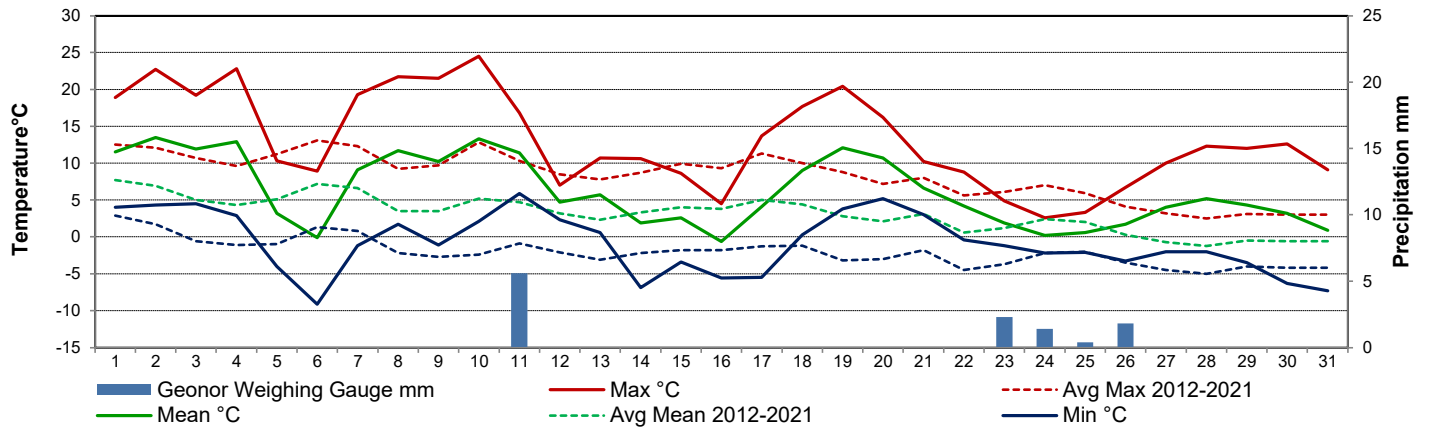
Day	Temperature						Degree-days			Precipitation			Relative Humidity		Station Pressure <i>corrected to sea level</i>	
	Max	Avg Max	Min	Avg Min	Mean	Avg Mean	Growing	Heating	Cooling	Geonor Weighing Gauge	Tipping Bucket	Snow-on-Ground 0900h	Max ½ hr Avg	Min ½ hr Avg	Max ½ hr Avg	Min ½ hr Avg
	°C	2012-2021	°C	2012-2021	°C	2012-2021	5°C base	18°C base	18°C base	mm	mm	cm	%	%	mbar	mbar
1	18.9	12.5	4.0	2.9	11.5	7.7	6.5	6.5	0.0	0.0	0.0	0	97	50	1026	1021
2	22.7	12.1	4.3	1.7	13.5	6.9	8.5	4.5	0.0	0.0	0.0	0	97	43	1021	1015
3	19.2	10.7	4.5	-0.6	11.9	5.0	6.9	6.1	0.0	0.0	0.0	0	100	39	1020	1015
4	22.8	9.6	2.9	-1.1	12.9	4.3	7.9	5.1	0.0	0.0	0.0	0	99	47	1018	1014
5	10.3	11.2	-4.0	-1.0	3.2	5.1	0.0	14.8	0.0	0.0	0.0	0	89	42	1034	1017
6	8.9	13.1	-9.1	1.3	-0.1	7.2	0.0	18.1	0.0	0.0	0.0	0	97	38	1036	1029
7	19.3	12.3	-1.2	0.8	9.1	6.6	4.1	8.9	0.0	0.0	0.0	0	94	40	1029	1020
8	21.7	9.2	1.7	-2.2	11.7	3.5	6.7	6.3	0.0	0.0	0.0	0	99	37	1020	1016
9	21.5	9.7	-1.1	-2.7	10.2	3.5	5.2	7.8	0.0	0.0	0.0	0	100	34	1019	1011
10	24.5	12.8	2.1	-2.4	13.3	5.2	8.3	4.7	0.0	0.0	0.0	0	95	27	1011	991
11	16.8	10.3	5.9	-0.9	11.4	4.7	6.4	6.6	0.0	5.6	4.4	0	94	49	1003	991
12	7.0	8.5	2.3	-2.1	4.7	3.2	0.0	13.3	0.0	0.0	0.0	0	59	27	1013	1003
13	10.7	7.8	0.6	-3.1	5.7	2.3	0.7	12.3	0.0	0.0	0.0	0	54	23	1014	1009
14	10.6	8.7	-6.9	-2.2	1.9	3.3	0.0	16.1	0.0	0.0	0.0	0	92	28	1009	1005
15	8.6	9.9	-3.4	-1.8	2.6	4.0	0.0	15.4	0.0	0.0	0.0	0	84	48	1026	1008
16	4.5	9.3	-5.6	-1.8	-0.6	3.8	0.0	18.6	0.0	0.0	0.0	0	97	52	1028	1024
17	13.7	11.3	-5.5	-1.3	4.1	5.0	0.0	13.9	0.0	0.0	0.0	0	84	32	1024	1019
18	17.7	10.0	0.3	-1.2	9.0	4.4	4.0	9.0	0.0	0.0	0.0	0	79	34	1019	1016
19	20.4	8.8	3.8	-3.2	12.1	2.8	7.1	5.9	0.0	0.0	0.0	0	86	35	1020	1009
20	16.2	7.2	5.2	-3.0	10.7	2.1	5.7	7.3	0.0	0.0	0.0	0	77	41	1008	999
21	10.2	8.0	3.0	-1.8	6.6	3.1	1.6	11.4	0.0	0.0	0.0	0	86	57	1000	997
22	8.8	5.6	-0.4	-4.5	4.2	0.6	0.0	13.8	0.0	0.0	0.0	0	91	54	1011	1000
23	4.9	6.1	-1.2	-3.7	1.9	1.2	0.0	16.1	0.0	2.3	0.0	0	99	55	1016	1011
24	2.6	7.0	-2.2	-2.2	0.2	2.4	0.0	17.8	0.0	1.4	0.0	0	99	80	1014	1003
25	3.3	5.9	-2.1	-2.0	0.6	2.0	0.0	17.4	0.0	0.4	0.0	0	99	79	1009	1003
26	6.7	4.1	-3.3	-3.5	1.7	0.3	0.0	16.3	0.0	1.8	0.0	0	100	76	1008	1003
27	10.0	3.2	-2.0	-4.5	4.0	-0.7	0.0	14.0	0.0	0.0	0.0	0	97	54	1002	998
28	12.3	2.5	-2.0	-5.0	5.2	-1.2	0.2	12.8	0.0	0.0	0.0	0	89	40	1011	1000
29	12.0	3.1	-3.5	-4.0	4.3	-0.5	0.0	13.7	0.0	0.0	0.0	0	93	22	1012	1009
30	12.6	3.0	-6.3	-4.2	3.2	-0.6	0.0	14.8	0.0	0.0	0.0	0	88	43	1011	995
31	9.1	3.0	-7.3	-4.2	0.9	-0.6	0.0	17.1	0.0	0.0	0.0	0	93	42	1006	996
Total							79.8	366.4	0.0	11.5						
Avg	13.2	8.3	-0.9	-2.1	6.2	3.1	Monthly 2012 - 2021 Average			20.0	2012-2021 Average					
Extreme	24.5	25.2	-9.1	-15.5			37.4	461.4	0	283.1	2022 Cumulative ppt		100	22	1036	991
Date	10	2021	6	2019						343.6	Cumulative Average		3	29	6	10

Fall maintenance 19 Oct 2022 including: changed desiccant where needed, removing tipping bucket from site for calibration, replaced all three transducers in all-season ppt gauge with new one, normal fall maintenance on all-season ppt gauge, replaced camera checked batteries and solar panels

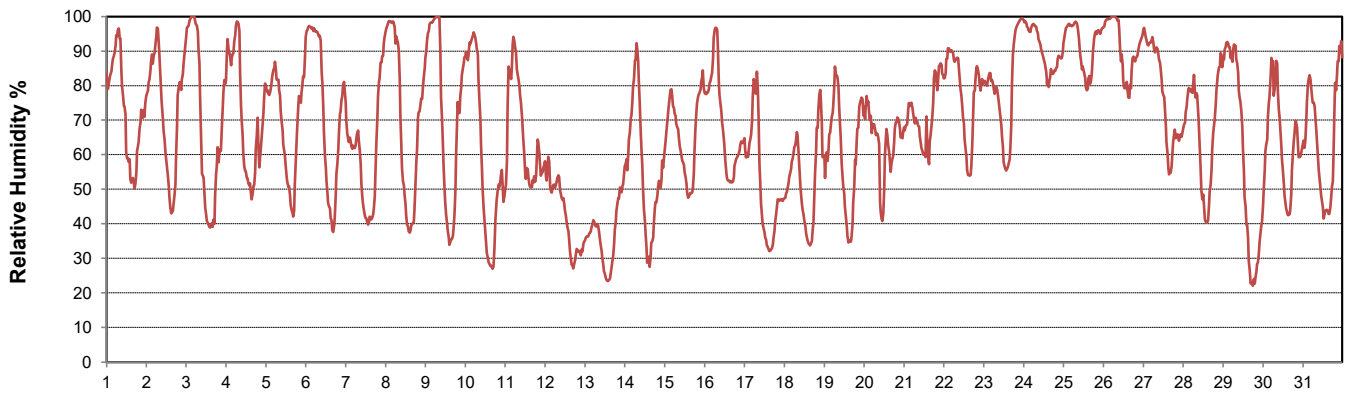
**SRC proudly recognizes the following CRS supporters:**



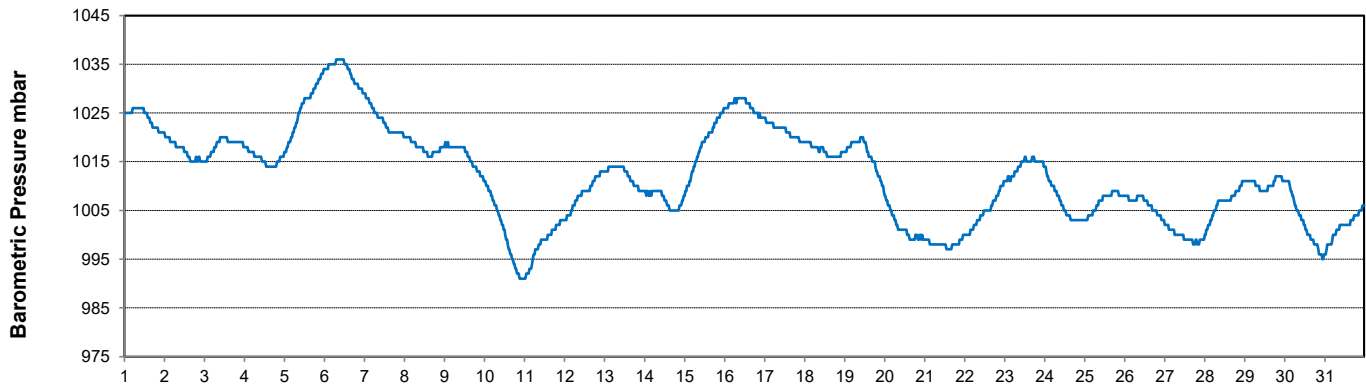
### Temperature and Precipitation for October 2022



### Relative Humidity for October 2022



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





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## CONSERVATION LEARNING CENTRE

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

Preliminary

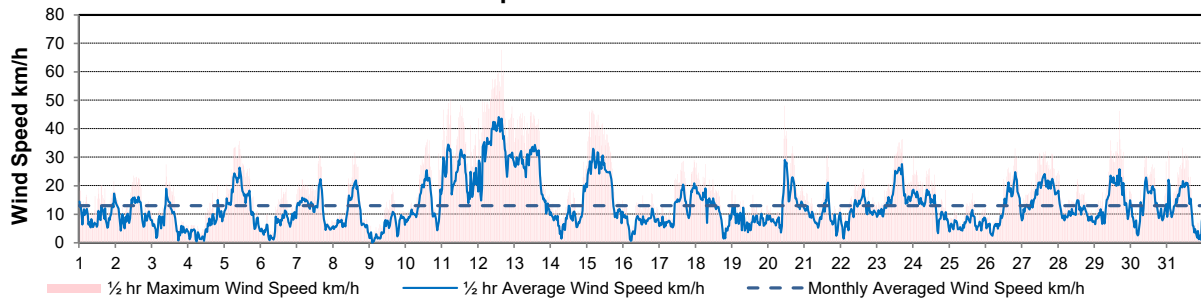
October 2022

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 <sup>2</sup>	MJ/m <sup>2</sup>
1	21.5	S	23:20	9.4	6.0	10.5	11.0	11.5	11.5	11.0	11.0	8.5	9.6	11.6	82.9	11.5	3.8
2	23.5	SSW	12:23	10.6	8.5	9.5	10.0	11.0	11.5	11.0	11.0	8.5	10.9	11.5	94.7	12.7	1.9
3	27.5	NE	9:41	7.5	10.5	9.5	10.0	11.0	11.5	11.0	11.0	8.5	7.7	11.5	67.2	9.9	4.5
4	20.5	NW	19:47	5.5	6.5	9.0	10.0	11.0	11.0	11.0	11.0	8.5	10.1	11.4	88.8	11.0	3.6
5	35.6	NE	10:26	15.3	6.5	9.5	10.0	10.5	11.0	11.0	10.5	8.5	9.4	11.3	83.1	12.5	2.0
6	19.3	S	17:17	6.3	-4.0	5.5	6.5	9.0	11.0	11.0	10.5	8.5	10.3	11.2	91.6	13.5	1.8
7	30.9	NW	15:05	12.3	3.5	5.5	6.5	8.0	10.0	11.0	10.5	8.5	10.3	11.2	92.2	11.5	1.9
8	31.6	NW	14:31	10.1	7.5	6.5	7.0	8.5	10.0	10.5	10.5	8.5	9.9	11.1	89.2	11.3	2.3
9	19.9	SW	15:44	5.3	2.0	6.5	7.5	8.5	9.5	10.5	10.5	8.5	9.5	11.0	86.1	11.0	1.9
10	36.2	SSW	14:31	13.7	7.5	6.5	7.5	8.5	9.5	10.5	10.5	8.5	9.7	11.0	88.4	11.1	1.9
11	50.5	NW	5:30	24.5	6.0	8.5	9.0	9.0	9.5	10.0	10.5	8.5	4.3	10.9	39.4	7.7	3.8
12	67.7	NNW	15:59	33.3	2.5	7.0	7.5	8.5	9.5	10.0	10.5	8.5	9.3	10.8	85.9	11.2	2.0
13	45.8	NW	10:43	25.3	2.0	4.5	5.5	7.5	9.0	10.0	10.0	8.5	10.1	10.8	93.9	11.3	1.5
14	28.4	NW	22:16	9.4	-3.5	4.0	5.0	6.5	8.5	10.0	10.0	8.5	7.5	10.7	70.2	9.1	2.8
15	46.7	NNW	4:00	22.0	2.5	6.0	6.5	7.0	8.5	9.5	10.0	8.5	7.8	10.6	73.4	8.6	3.9
16	17.3	ESE	19:27	7.3	-0.5	4.0	4.5	6.5	8.0	9.5	10.0	8.5	0.4	10.6	3.8	4.5	4.0
17	29.1	S	23:27	12.1	-1.5	4.0	4.5	6.0	8.0	9.5	10.0	8.5	10.0	10.5	95.3	9.9	1.5
18	28.0	S	0:33	12.0	2.5	4.5	5.0	6.0	7.5	9.0	10.0	8.5	9.4	10.4	90.2	9.5	2.1
19	19.2	NW	0:46	7.9	4.0	5.0	5.5	6.5	7.5	9.0	9.5	8.5	9.0	10.4	86.9	8.1	2.2
20	48.0	NNW	11:21	13.9	8.0	6.0	6.0	6.5	7.5	9.0	9.5	8.5	0.1	10.3	1.0	2.4	2.3
21	30.7	WNW	15:47	9.5	5.0	5.5	6.0	6.5	7.5	9.0	9.5	8.5	0.6	10.2	5.9	3.2	3.0
22	25.8	ENE	15:27	10.9	1.5	5.5	6.0	6.5	7.5	8.5	9.5	8.5	4.5	10.2	44.3	6.3	3.9
23	36.4	NE	17:08	16.7	0.5	4.5	5.0	6.0	7.5	8.5	9.5	8.5	0.0	10.1	0.0	3.0	2.9
24	30.2	NNE	0:28	12.9	-1.5	4.5	4.5	5.5	7.0	8.5	9.0	8.5	1.0	10.0	10.0	5.1	4.5
25	17.4	W	15:06	7.0	-1.0	4.0	4.5	5.5	7.0	8.5	9.0	8.5	2.5	10.0	25.1	5.3	4.0
26	33.0	S	19:39	11.7	-3.0	3.5	4.0	5.0	7.0	8.5	9.0	8.5	7.4	9.9	74.8	7.1	3.7
27	32.1	SW	15:32	17.4	0.0	3.0	3.5	5.0	6.5	8.0	9.0	8.5	4.6	9.8	46.8	5.6	2.9
28	25.2	SW	0:12	10.6	-0.5	3.0	3.5	5.0	6.5	8.0	9.0	8.5	6.3	9.8	64.5	6.4	2.7
29	46.2	WNW	16:54	15.3	0.5	2.5	3.0	4.5	5.5	8.0	9.0	8.5	8.8	9.7	90.7	7.1	2.0
30	30.3	SSW	10:17	12.4	-1.0	2.0	2.5	4.0	6.0	7.5	8.5	8.5	8.5	9.6	88.3	7.5	1.3
31	33.3	WNW	10:58	12.5	3.0	2.5	3.0	4.0	4.5	7.5	8.5	8.5	2.9	9.6	30.3	5.5	3.9
Total													212.4	327.5	64.9	260.4	86.5
Mean				12.9	2.6	5.6	6.1	7.3	8.5	9.5	9.7	8.5					
Extreme	67.7	NNW	15:59														
Date	12																

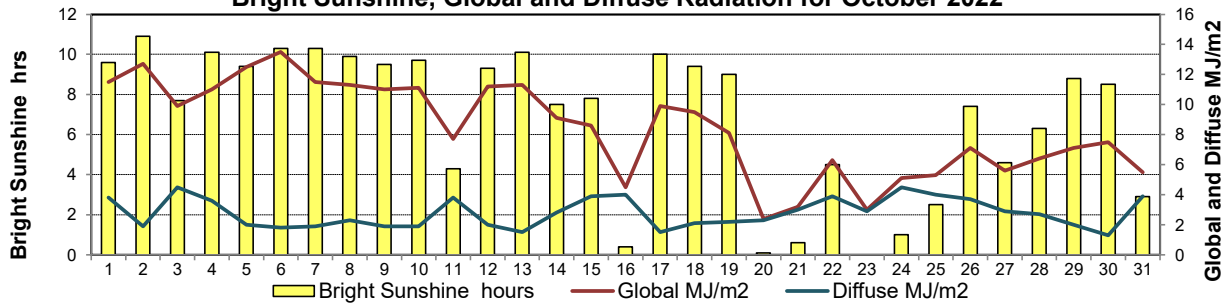
### GLOSSARY OF TERMS

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	<b>Relative Humidity</b> The ratio of the air's water vapour content of 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

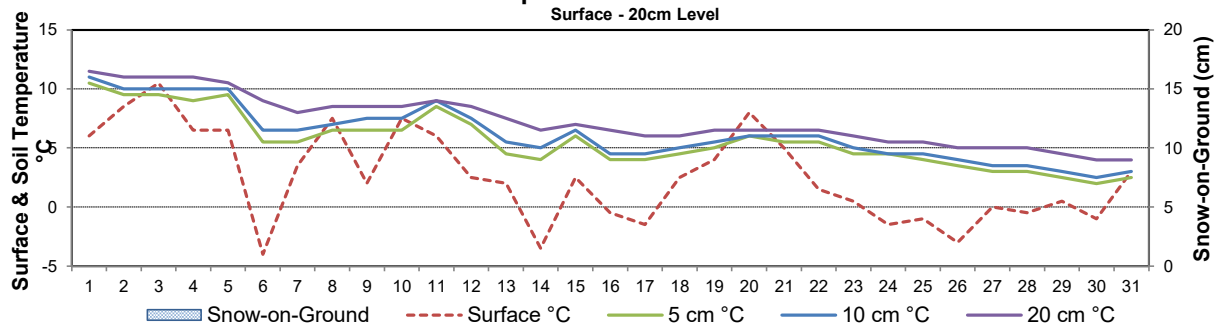
### Wind Speed for October 2022



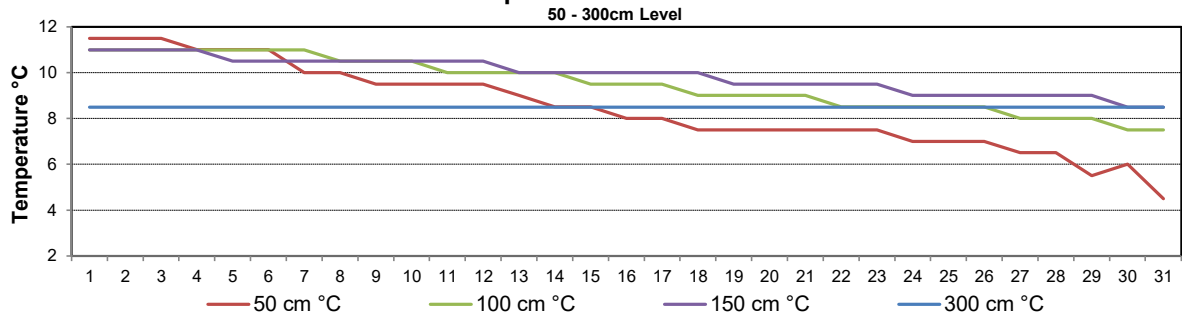
### Bright Sunshine, Global and Diffuse Radiation for October 2022



### Soil Temperatures for October 2022



### Soil Temperatures for October 2022





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

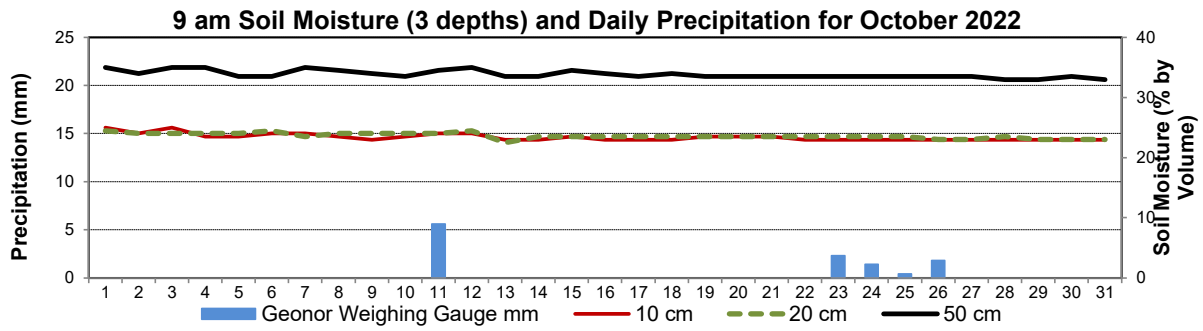
Preliminary

**October 2022**

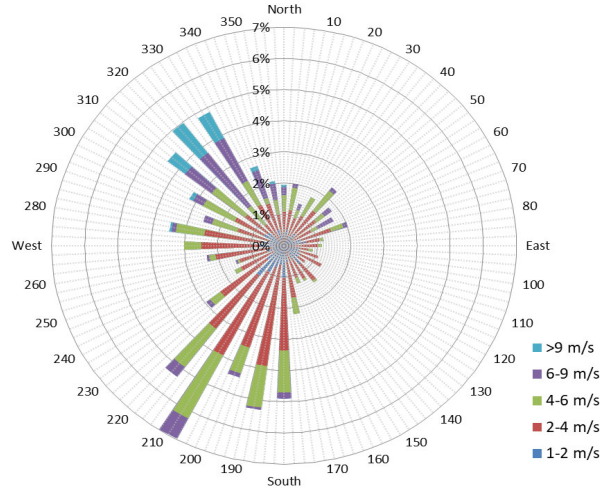
Day	2 meter Wind Speed			Soil Moisture at 0900 hrs (rounded to the 0.5%)																	
	Daily Average	Max ½ hr Avg	½ hr Extreme Max	10 cm	20 cm	50 cm															
	km/h	km/h	km/h	% by volume (soil type is Clay Loam)																	
1	6.0	11.6	16.2	25.0	24.5	35.0															
2	5.0	12.9	20.0	24.0	24.0	34.0															
3	2.0	13.8	19.3	25.0	24.0	35.0															
4	1.0	5.8	13.3	23.5	24.0	35.0															
5	10.0	18.8	29.3	23.5	24.0	33.5															
6	4.0	9.6	16.2	24.0	24.5	33.5															
7	8.0	16.5	23.3	24.0	23.5	35.0															
8	4.0	16.0	23.7	23.5	24.0	34.5															
9	1.0	4.2	15.2	23.0	24.0	34.0															
10	8.0	19.6	28.7	23.5	24.0	33.5															
11	18.0	25.0	36.9	24.0	24.0	34.5															
12	24.0	32.2	48.5	24.0	24.5	35.0															
13	18.0	25.2	36.2	23.0	22.5	33.5															
14	7.0	15.1	22.2	23.0	23.5	33.5															
15	16.0	24.1	35.2	23.5	23.5	34.5															
16	5.0	7.8	14.5	23.0	23.5	34.0															
17	8.0	15.5	22.2	23.0	23.5	33.5															
18	9.0	14.5	20.2	23.0	23.5	34.0															
19	4.0	9.0	14.1	23.5	23.5	33.5															
20	10.0	21.1	31.0	23.5	23.5	33.5															
21	7.0	16.4	24.1	23.5	23.5	33.5															
22	8.0	14.9	20.0	23.0	23.5	33.5															
23	12.0	20.5	27.7	23.0	23.5	33.5															
24	10.0	14.5	22.0	23.0	23.5	33.5															
25	5.0	9.3	14.7	23.0	23.5	33.5															
26	9.0	18.5	25.2	23.0	23.0	33.5															
27	13.0	19.6	27.0	23.0	23.0	33.5															
28	8.0	13.9	19.5	23.0	23.5	33.0															
29	11.0	19.2	34.8	23.0	23.0	33.0															
30	9.0	18.5	25.0	23.0	23.0	33.5															
31	9.0	10.0	27.0	23.0	23.0	33.0															
Total																					
Mean				23	24	33.9															
Extreme	24.0	32.2	48.5	25	24.5	35															
Date	8.5	8.5	8.5	11	11	11															

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

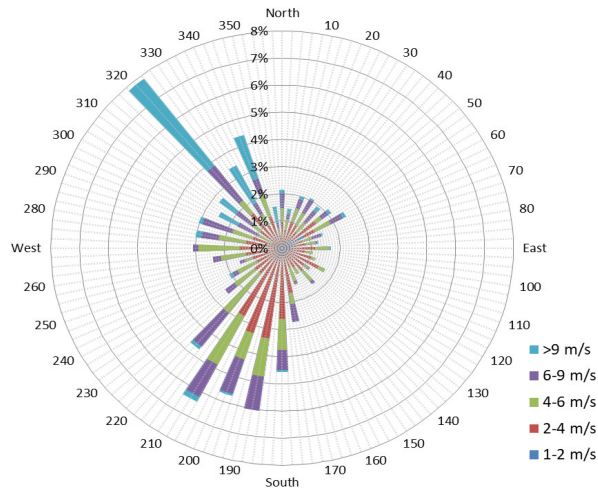




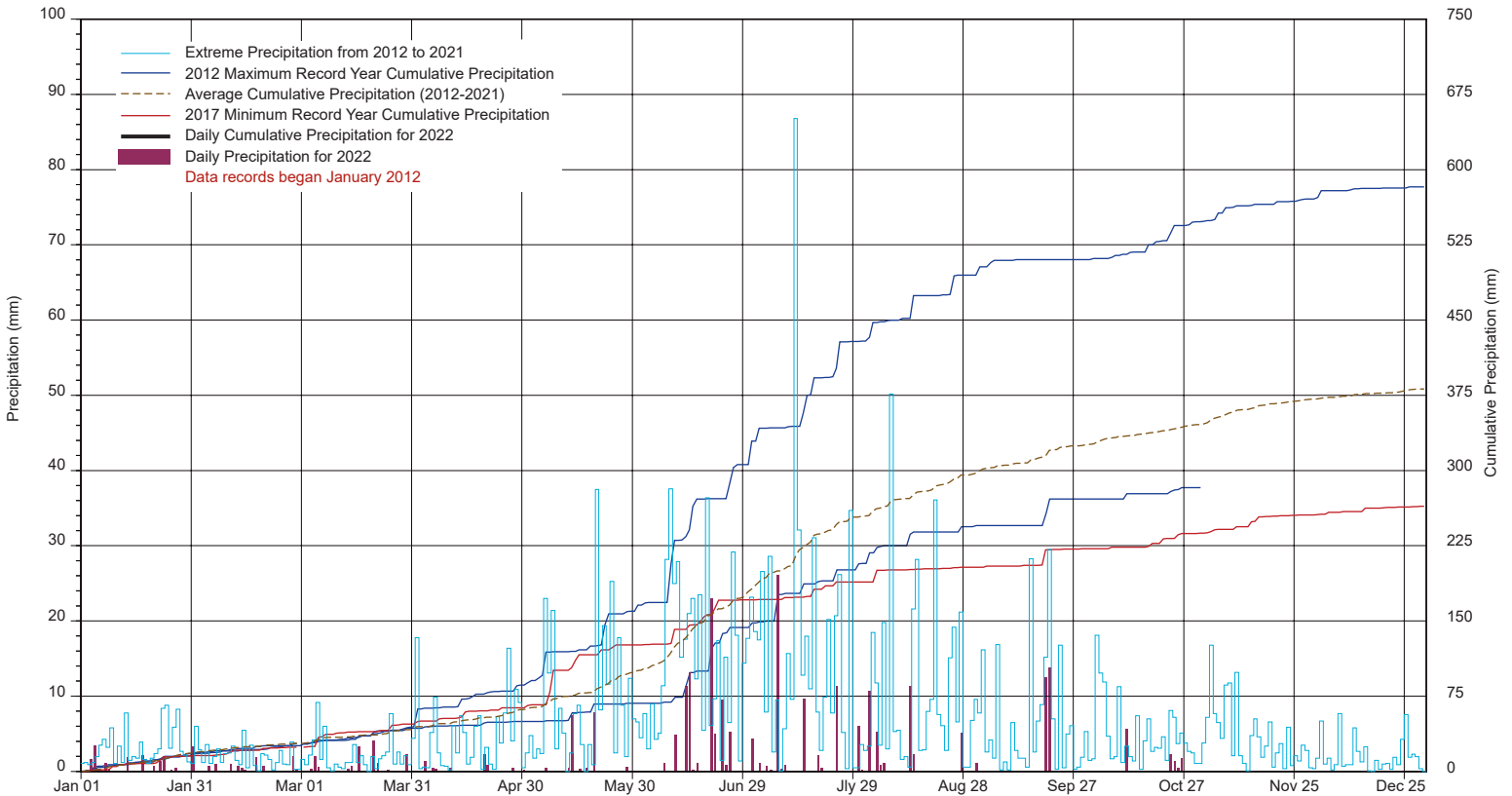
10 minute Average Wind Speed and Direction CLC October 2022



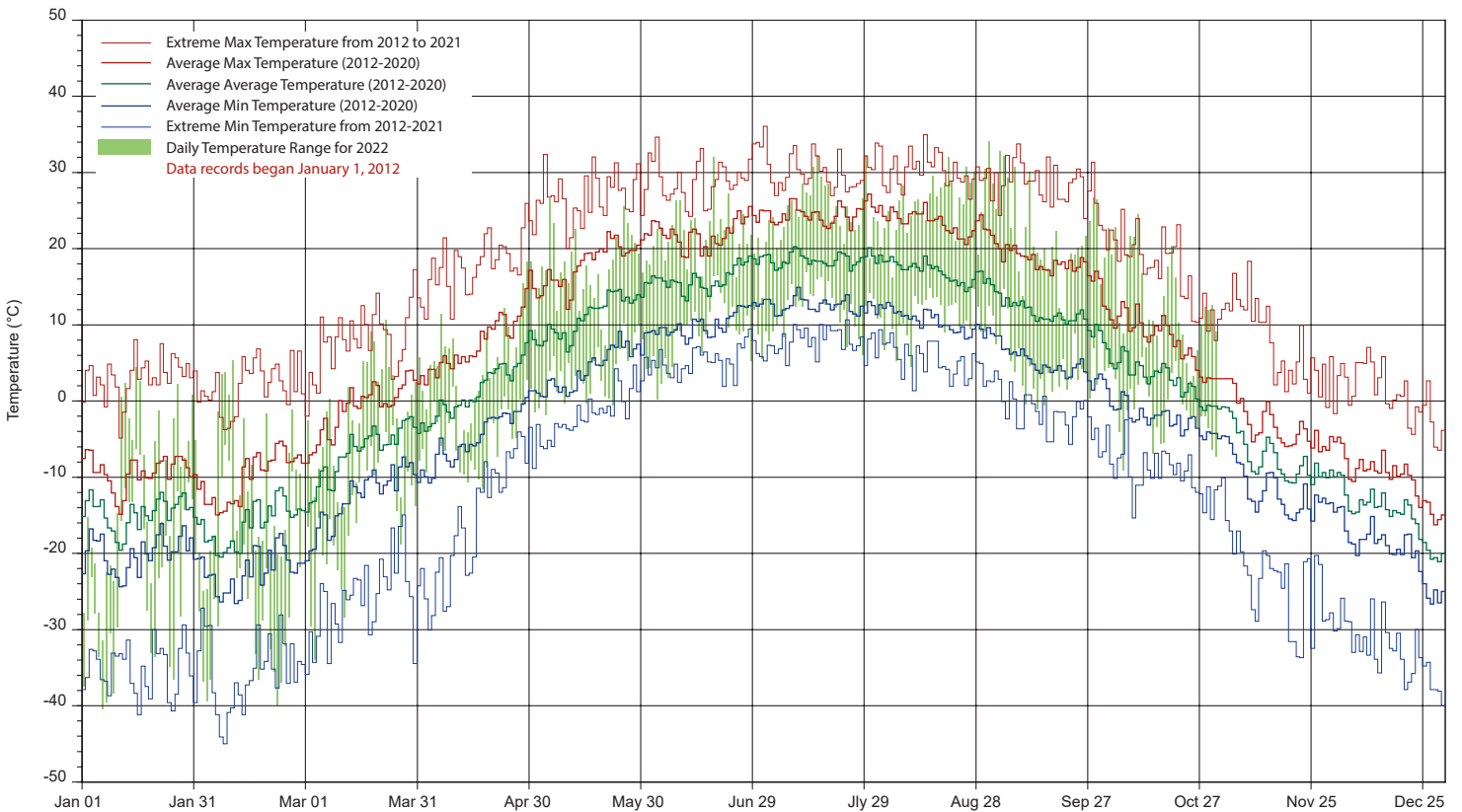
1/2 hr Maximum Wind Speed and Direction CLC October 2022



# SRC's CLIMATE REFERENCE STATION at the Conservation Learning Centre 2022 PRECIPITATION AND AVERAGE



## 2022 TEMPERATURES AND AVERAGES



SRC proudly recognizes the following CRS supporters:

