



SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

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

Preliminary **September 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	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	28.5	21.8	12.9	8.9	20.7	15.3	15.7	0.0	2.7	0.0	0.0	0	99	56	1006	1001
2	26.7	20.7	13.1	8.6	19.9	14.4	14.9	0.0	1.9	0.0	0.0	0	89	40	1006	1000
3	23.3	20.0	6.7	8.6	15.0	14.2	10.0	3.0	0.0	0.0	0.0	0	100	45	1008	1000
4	18.3	18.3	5.7	6.8	12.0	12.5	7.0	6.0	0.0	0.0	0.0	0	95	55	1013	1001
5	18.4	20.6	3.5	6.9	11.0	13.6	6.0	7.0	0.0	0.0	0.0	-	95	38	1019	1013
6	22.4	19.8	4.2	6.2	13.3	12.5	8.3	4.7	0.0	0.9	1.0	0	96	47	1016	1010
7	21.2	20.5	1.3	6.5	11.3	13.0	6.3	6.7	0.0	0.0	0.0	-	100	45	1017	1011
8	23.2	19.4	0.0	6.0	11.6	12.6	6.6	6.4	0.0	0.0	0.0	0	100	36	1022	1017
9	24.5	19.1	0.8	6.9	12.7	13.2	7.7	5.3	0.0	0.0	0.0	-	100	32	1025	1022
10	21.1	19.0	5.4	6.0	13.3	12.3	8.3	4.7	0.0	0.0	0.0	0	99	44	1025	1024
11	20.5	18.6	1.1	5.6	10.8	12.4	5.8	7.2	0.0	0.0	0.0	-	100	42	1025	1019
12	25.5	19.3	8.0	4.9	16.8	11.3	11.8	1.2	0.0	0.0	0.0	0	87	35	1019	1006
13	25.0	17.3	10.8	4.1	17.9	10.5	12.9	0.1	0.0	0.0	0.0	-	87	41	1010	1007
14	15.3	17.7	6.5	3.7	10.9	11.0	5.9	7.1	0.0	0.5	0.4	-	91	53	1015	1010
15	18.3	17.3	3.7	4.8	11.0	10.8	6.0	7.0	0.0	0.0	0.0	-	99	59	1018	1015
16	26.5	17.2	0.5	4.5	13.5	10.8	8.5	4.5	0.0	0.0	0.0	-	100	30	1017	1010
17	30.9	16.5	5.0	3.8	18.0	10.5	13.0	0.0	0.0	0.0	0.0	-	90	20	1010	999
18	26.3	18.5	11.6	4.1	19.0	11.2	14.0	0.0	1.0	0.0	0.0	-	80	28	1003	999
19	19.0	18.0	3.0	4.7	11.0	11.6	6.0	7.0	0.0	0.0	0.0	-	98	37	1009	1003
20	19.9	18.3	-0.3	4.0	9.8	10.7	4.8	8.2	0.0	0.0	0.0	-	100	34	1018	1009
21	23.2	17.4	-0.7	3.0	11.3	10.1	6.3	6.7	0.0	0.0	0.0	-	100	30	1022	1018
22	23.3	18.5	-0.5	3.2	11.4	10.6	6.4	6.6	0.0	0.0	0.0	-	100	28	1021	1018
23	24.1	17.1	4.2	4.4	14.2	10.6	9.2	3.8	0.0	0.0	0.0	-	95	48	1018	1013
24	21.4	17.6	7.9	4.9	14.7	11.5	9.7	3.3	0.0	0.0	0.0	-	99	61	1014	1012
25	26.2	18.9	4.7	5.6	15.5	12.0	10.5	2.5	0.0	0.0	0.0	-	100	29	1017	1013
26	27.8	18.3	15.5	3.9	21.7	10.8	16.7	0.0	3.7	0.0	0.0	-	79	34	1016	1009
27	23.6	16.5	6.6	2.7	15.1	9.3	10.1	2.9	0.0	0.0	0.0	-	87	30	1009	1006
28	19.7	15.8	6.8	1.5	13.3	8.5	8.3	4.7	0.0	0.0	0.0	-	93	47	1007	1004
29	18.6	17.1	5.5	3.0	12.1	10.1	7.1	5.9	0.0	0.2	0.2	-	98	49	1013	1008
30	12.0	16.1	3.4	3.6	7.7	9.3	2.7	10.3	0.0	1.9	2.2	-	100	71	1021	1013
Total							266.5	132.8	9.3	3.5	3.8		Extreme / Date	Extreme / Date	Extreme / Date	Extreme / Date
Avg	22.5	18.4	5.2	5.1	13.9	11.6	Monthly 2012 - 2021 Average			28.3	2012-2021 Average					
Extreme	30.9	33.8	-0.7	-7.3			202.6	196.3	3.5	204.5	2023 Cumulative ppt		100	20	1025	999
Date	17	08/2011	21	30/2018						323.6	Cumulative Average		3	17	9	17

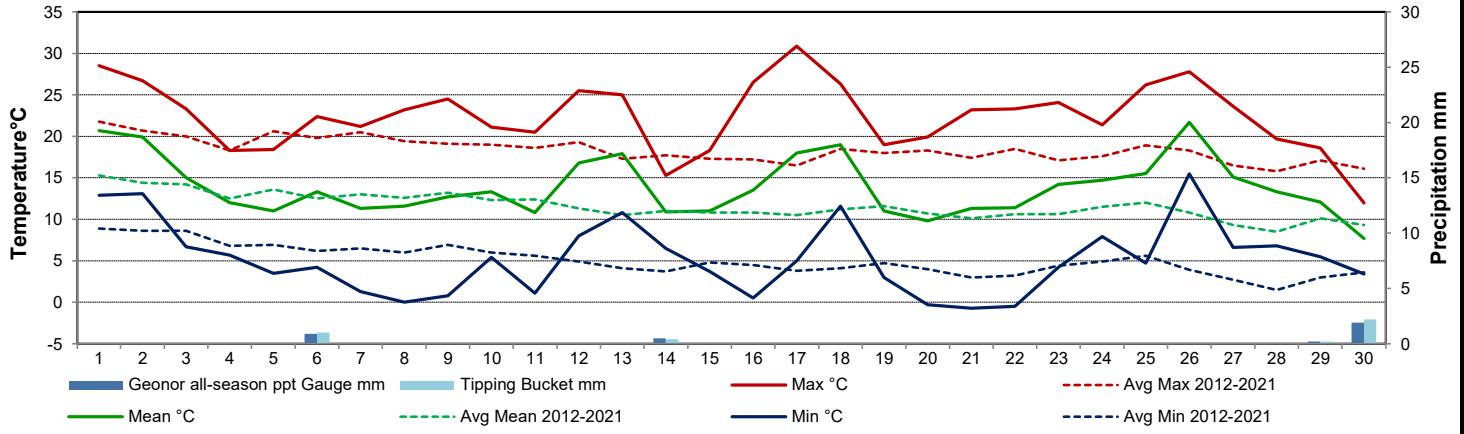
Note: Red numbers indicate manual calculation; Red cell indicate data not available

-air temperature did not go below zero on September 8. The first day when air temperature went below zero was September 20.

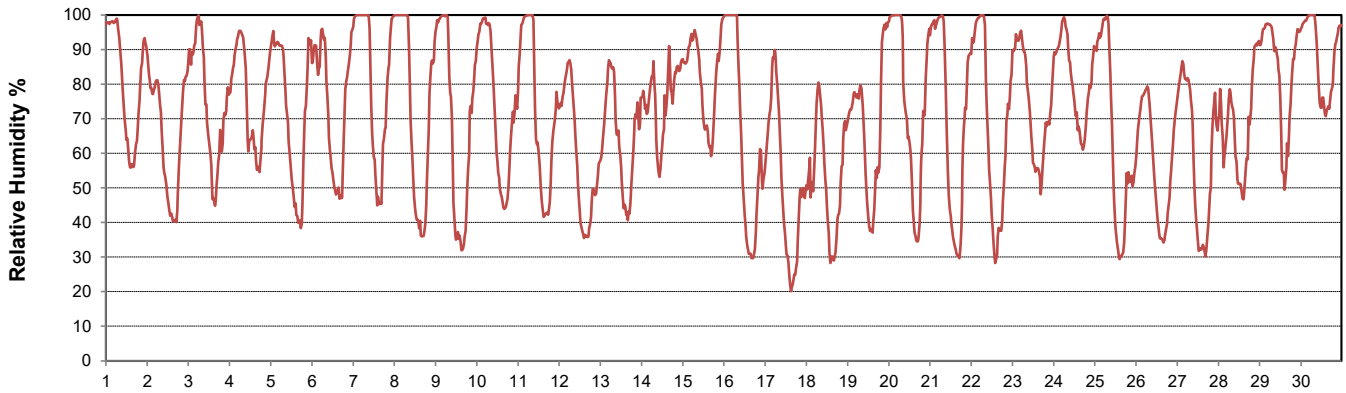
SRC proudly recognizes the following CRS supporters:



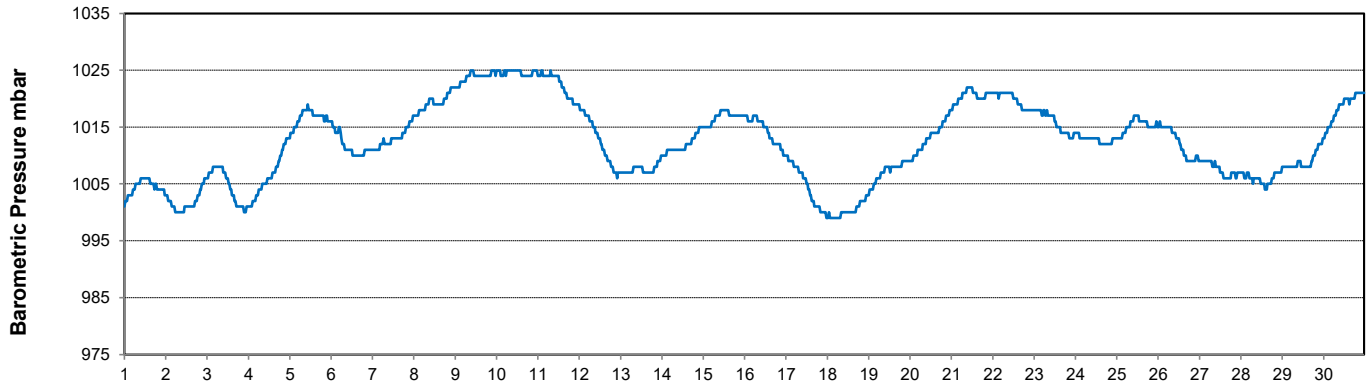
Temperature and Precipitation for September 2023



Relative Humidity for September 2023



Barometric Pressure Corrected to Sea Level for September 2023





SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

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

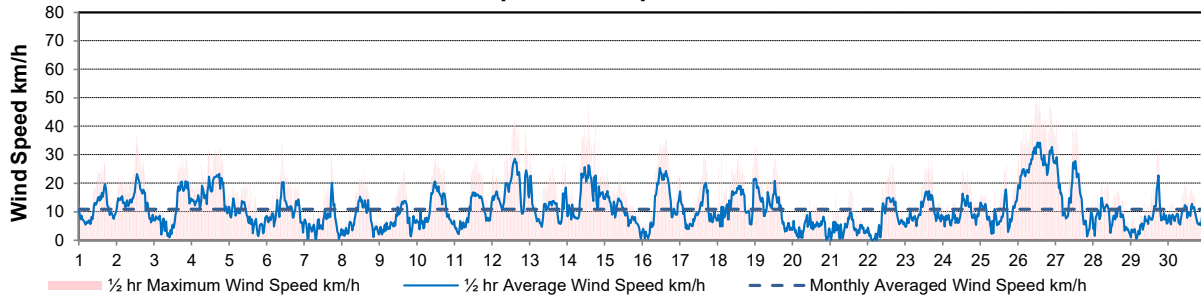
Preliminary **September 2023**

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	27.2	WSW	16:27	10.7	17.0	15.5	16.0	16.0	15.5	13.0	11.5	7.5	10.8	13.7	79.1	16.1	6.8	
2	36.9	W	13:17	14.2	18.0	16.0	17.0	16.0	15.5	13.0	11.5	7.5	11.7	13.6	86.1	15.1	6.7	
3	30.7	ENE	20:25	10.6	11.5	14.5	15.5	16.0	15.5	13.0	11.5	7.5	3.4	13.5	25.1	9.1	7.1	
4	32.5	NW	17:32	16.9	12.5	14.5	15.5	15.5	15.5	13.0	11.5	7.5	5.2	13.5	38.7	10.7	8.0	
5	21.0	NW	11:12	8.3	10.0	13.0	14.0	14.5	15.0	13.0	11.5	7.5	10.8	13.4	80.7	16.9	4.6	
6	34.1	S	9:39	10.6	11.0	12.0	13.0	13.5	14.5	13.0	11.5	7.5	9.7	13.3	72.8	15.0	6.2	
7	31.4	N	17:14	6.3	9.5	12.0	13.0	13.5	14.0	13.0	11.5	8.0	6.9	13.3	52.1	13.0	7.7	
8	23.6	NNW	14:48	7.4	9.5	10.5	12.0	13.0	14.0	13.0	11.5	8.0	11.1	13.2	84.2	16.2	4.6	
9	24.4	W	15:53	7.3	10.5	10.5	12.0	13.0	13.5	13.0	11.5	8.0	8.5	13.1	64.8	14.2	5.2	
10	28.5	E	11:37	11.1	11.0	11.5	12.5	13.0	13.5	12.5	11.5	8.0	10.8	13.0	82.8	16.6	4.5	
11	28.0	SSE	13:27	9.7	10.0	10.5	11.5	12.5	13.5	12.5	11.5	8.0	10.1	13.0	77.8	17.1	2.8	
12	41.9	S	14:47	17.9	12.5	11.0	12.0	12.5	13.5	12.5	11.5	8.0	10.2	12.9	79.0	14.8	4.5	
13	31.9	SSW	0:50	11.2	15.0	12.5	13.5	13.0	13.5	12.5	11.5	8.0	8.4	12.8	65.4	12.3	6.4	
14	46.6	NW	13:39	15.7	12.0	12.5	13.0	13.5	13.5	12.0	11.5	8.0	3.3	12.8	25.8	5.6	4.3	
15	24.6	NW	1:50	9.9	10.5	11.5	12.5	12.5	13.5	12.0	11.5	8.0	4.4	12.7	34.6	9.0	7.2	
16	35.4	S	14:53	12.7	12.0	10.0	11.0	12.0	13.0	12.0	11.0	8.0	11.6	12.6	91.8	15.8	3.3	
17	29.1	S	15:21	10.1	12.0	10.5	11.5	12.5	13.0	12.0	11.0	8.0	11.8	12.6	93.9	15.7	2.7	
18	32.5	NNW	23:34	12.8	14.0	12.5	13.0	13.0	13.0	12.0	11.0	8.0	10.6	12.5	84.8	14.0	4.3	
19	32.9	NW	0:32	11.7	10.0	12.0	13.0	13.0	13.5	12.0	11.0	8.0	5.6	12.4	45.1	8.6	4.9	
20	14.9	SSW	11:12	4.6	7.5	9.5	10.5	12.0	13.0	12.0	11.0	8.0	7.5	12.4	60.7	9.9	4.6	
21	17.7	NE	13:20	4.4	5.5	9.0	10.0	11.5	12.5	12.0	11.0	8.0	10.9	12.3	88.7	14.3	2.5	
22	26.8	ESE	16:17	7.4	8.5	8.5	9.5	11.0	12.5	12.0	11.0	8.0	11.4	12.2	93.3	14.3	2.8	
23	27.7	ESE	14:33	10.3	12.0	10.0	10.5	11.0	12.5	11.5	11.0	8.0	6.0	12.2	49.4	10.0	5.3	
24	25.0	SSE	12:38	9.4	12.5	11.5	12.0	12.0	12.5	11.5	11.0	8.0	2.9	12.1	24.0	6.5	5.0	
25	26.5	S	16:30	9.2	11.0	11.0	11.5	12.0	12.5	11.5	11.0	8.0	9.9	12.0	82.4	12.9	2.7	
26	49.0	SSE	14:26	27.5	18.0	13.0	13.0	12.5	12.5	11.5	11.0	8.0	11.2	11.9	93.8	14.0	2.3	
27	42.7	S	0:37	14.1	13.5	13.0	13.5	13.5	13.0	11.5	11.0	8.0	8.8	11.9	74.1	13.1	2.1	
28	20.5	WSW	9:06	7.9	13.0	12.0	12.5	12.5	13.0	11.5	11.0	8.5	4.9	11.8	41.5	9.1	3.9	
29	31.7	NW	17:26	7.7	10.5	11.5	12.0	12.5	13.0	11.5	11.0	8.5	5.5	11.7	46.8	9.1	4.9	
30	19.5	N	10:44	8.8	8.0	10.0	11.0	12.0	13.0	11.5	11.0	8.5	3.2	11.7	27.4	4.8	3.8	
Total													247.1	380.0	65.0	373.8	141.7	
Mean				10.9	11.6	11.7	12.6	13.0	13.6	12.2	11.3	8.0						
Extreme	49.0	SSE	14:26															
Date	26																	

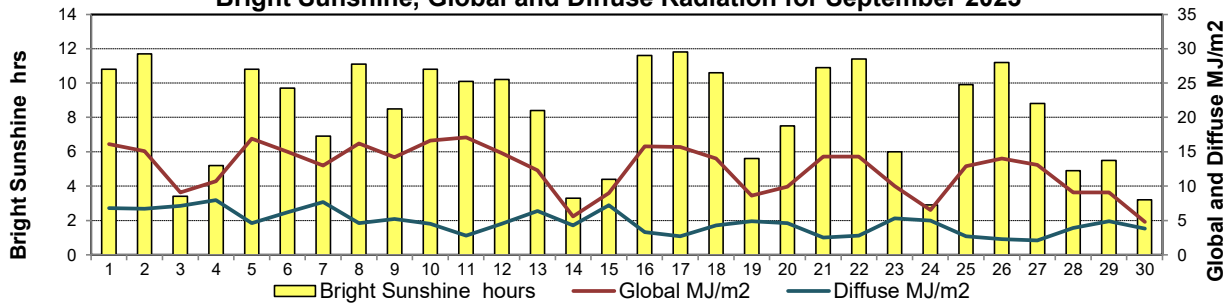
GLOSSARY OF TERMS

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	Relative Humidity The ratio of the air's water vapour content of its water vapour capacity which changes with temperature.
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 September 2023

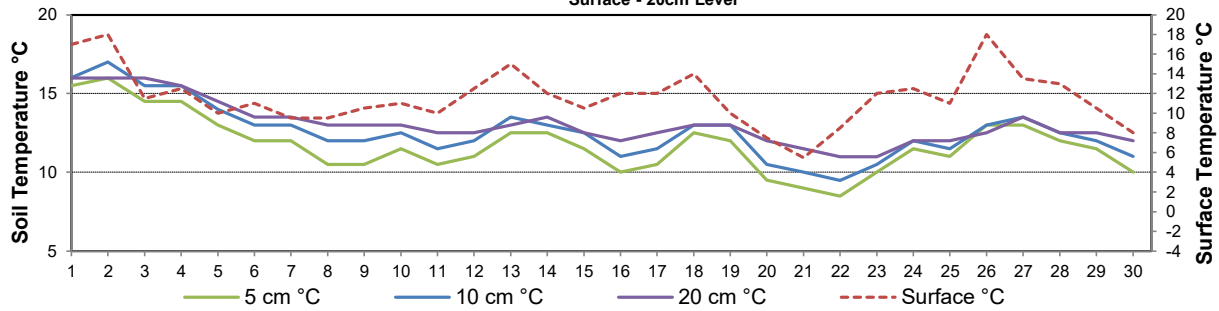


Bright Sunshine, Global and Diffuse Radiation for September 2023



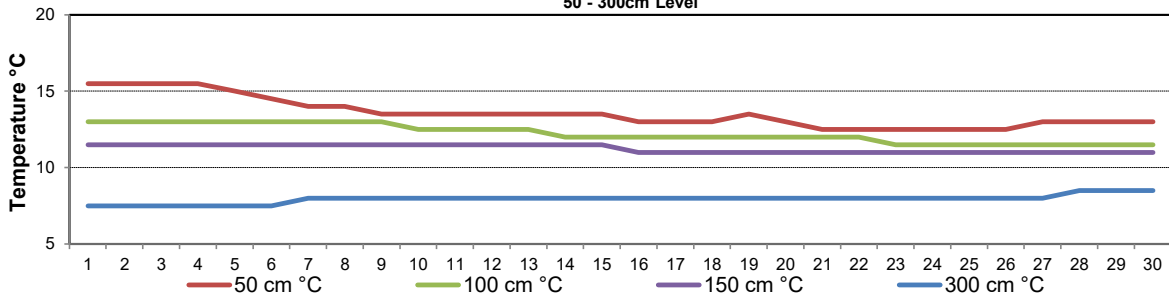
Soil Temperatures for September 2023

Surface - 20cm Level

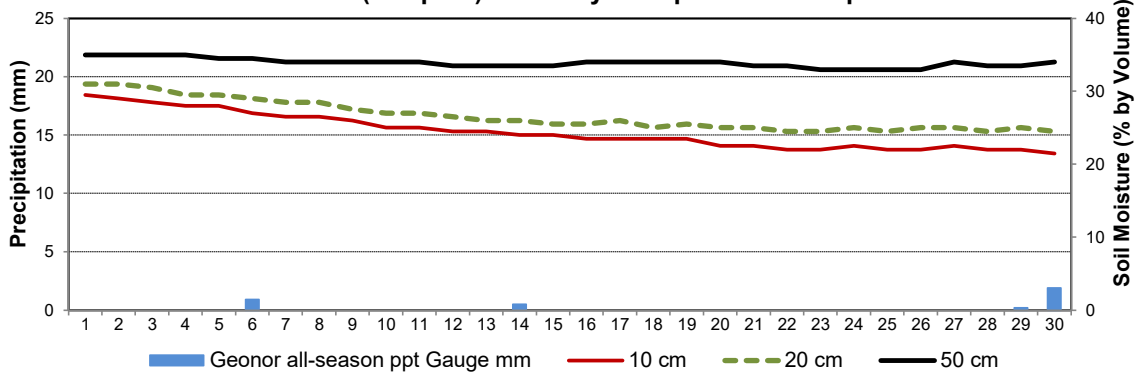


Soil Temperatures for September 2023

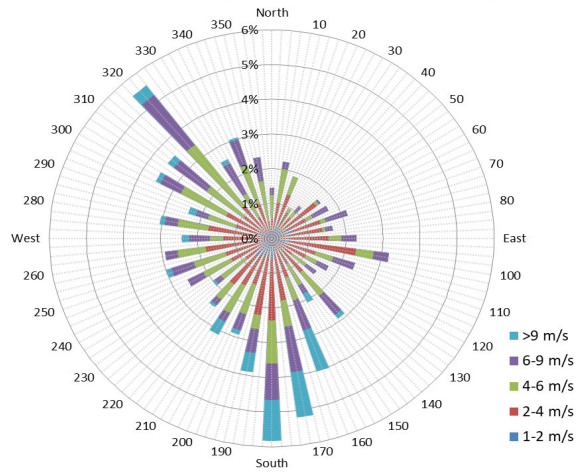
50 - 300cm Level



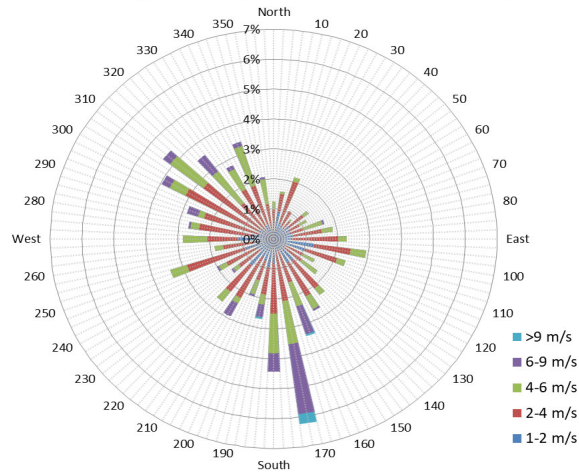
9 am Soil Moisture (3 depths) and Daily Precipitation for September 2023



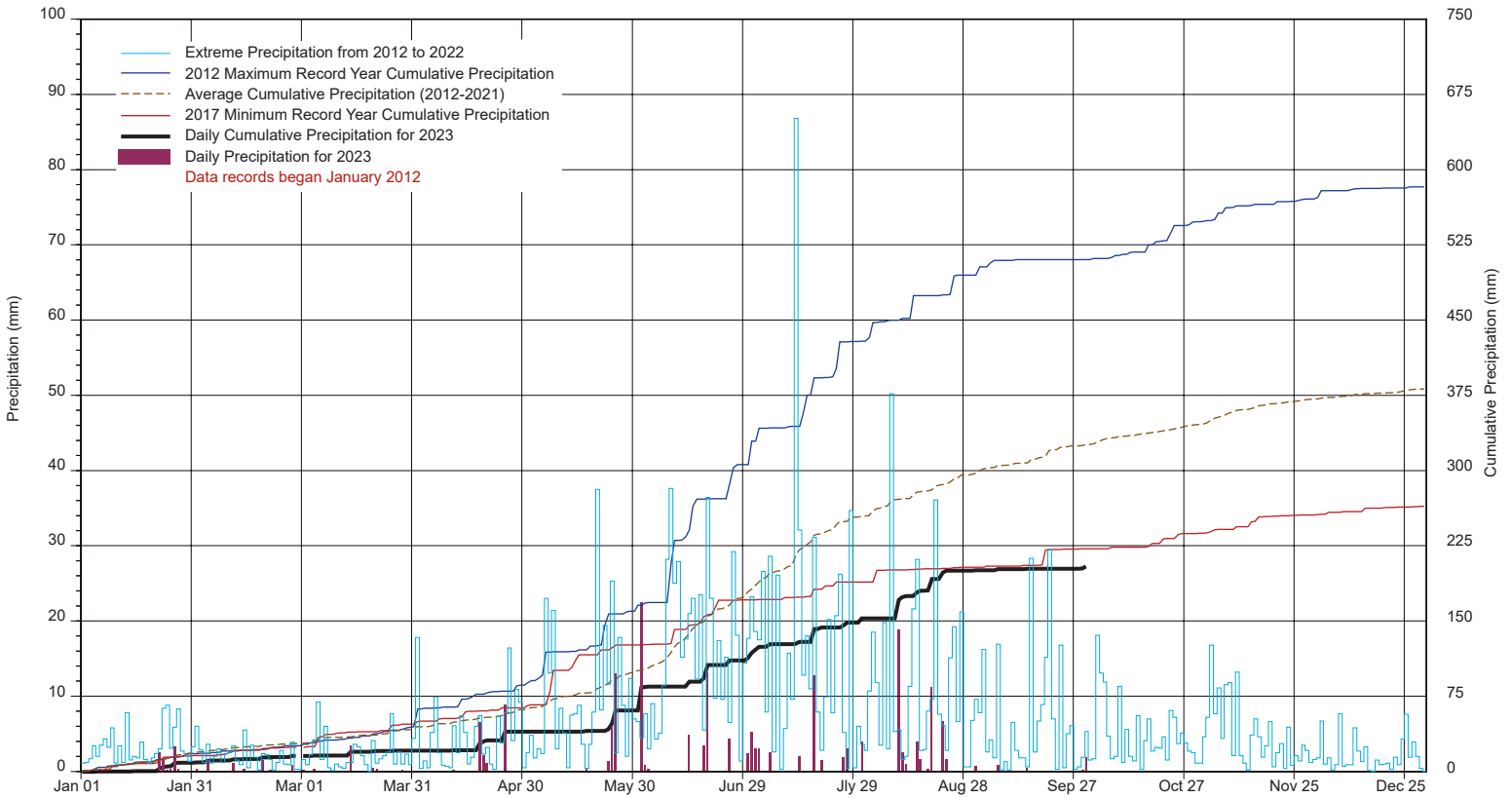
1/2 hr Maximum Wind Speed and Direction CLC Sept 2023



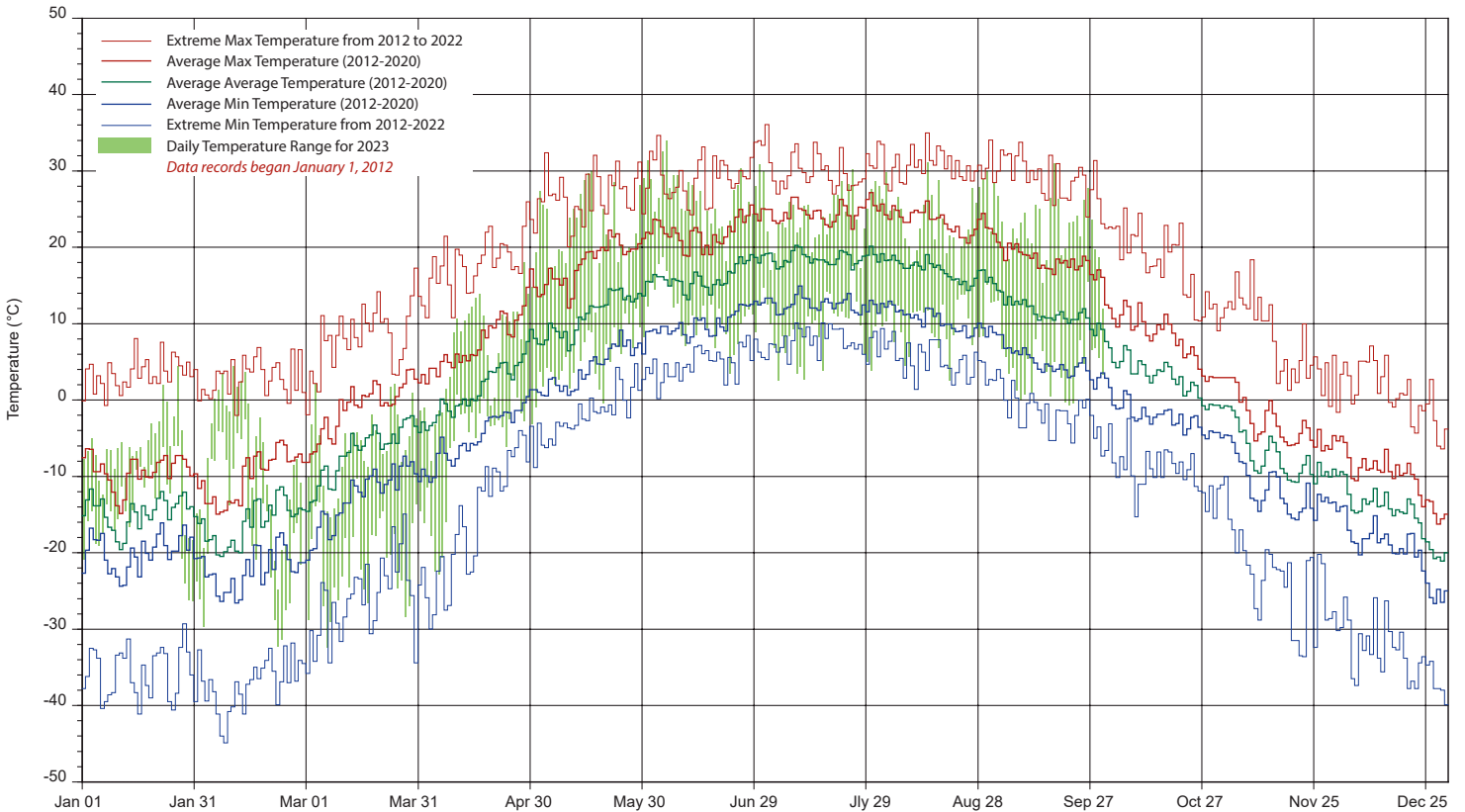
10 minute Average Wind Speed and Direction CLC Sept 2023



SRC's CLIMATE REFERENCE STATION at the Conservation Learning Centre 2023 PRECIPITATION AND AVERAGE



2023 TEMPERATURES AND AVERAGES



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