



SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

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

Preliminary **September 2024**

Day	Temperature (HMP155A)						Degree-days			Precipitation			Relative Humidity (HMP115A)		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	27.2	21.8	4.2	8.9	15.7	15.3	10.7	2.3	0.0	0.0	0.0	0	94	29	1021	1012
2	30.7	20.7	7.7	8.6	19.2	14.4	14.2	0.0	1.2	0.0	0.0	0	93	27	1012	1008
3	24.6	20.0	7.9	8.6	16.3	14.2	11.3	1.7	0.0	0.0	0.0	0	96	45	1014	1007
4	17.3	18.3	3.3	6.8	10.3	12.5	5.3	7.7	0.0	0.0	0.0	0	95	46	1025	1014
5	20.6	20.6	0.5	6.9	10.6	13.6	5.6	7.4	0.0	0.0	0.0	0	98	29	1026	1024
6	25.0	19.8	-2.1	6.2	11.5	12.5	6.5	6.5	0.0	0.0	0.0	0	98	30	1025	1014
7	30.5	20.5	6.9	6.5	18.7	13.0	13.7	0.0	0.7	0.0	0.0	-	82	28	1014	1010
8	29.0	19.4	4.6	6.0	16.8	12.6	11.8	1.2	0.0	0.0	0.0	0	97	28	1011	1007
9	33.8	19.1	3.5	6.9	18.7	13.2	13.7	0.0	0.7	0.0	0.0	0	98	13	1007	999
10	19.0	19.0	1.7	6.0	10.4	12.3	5.4	7.6	0.0	0.0	0.0	0	87	34	1013	1005
11	20.3	18.6	1.3	5.6	10.8	12.4	5.8	7.2	0.0	0.0	0.0	0	95	35	1015	1010
12	13.9	19.3	9.2	4.9	11.6	11.3	6.6	6.4	0.0	1.0	0.8	0	97	67	1011	1001
13	14.7	17.3	9.2	4.1	12.0	10.5	7.0	6.0	0.0	2.9	3.4	0	99	74	1001	999
14	21.6	17.7	3.6	3.7	12.6	11.0	7.6	5.4	0.0	0.0	0.0	0	96	39	1006	1001
15	21.5	17.3	3.7	4.8	12.6	10.8	7.6	5.4	0.0	0.0	0.0	0	97	48	1013	1005
16	21.0	17.2	3.7	4.5	12.4	10.8	7.4	5.6	0.0	0.0	0.0	0	98	41	1013	1009
17	21.8	16.5	3.4	3.8	12.6	10.5	7.6	5.4	0.0	0.0	0.0	0	97	61	1009	1005
18	20.2	18.5	11.1	4.1	15.7	11.2	10.7	2.3	0.0	7.7	8.0	0	97	64	1006	999
19	15.5	18.0	3.7	4.7	9.6	11.6	4.6	8.4	0.0	1.6	2.0	0	98	52	1002	998
20	16.4	18.3	1.1	4.0	8.8	10.7	3.8	9.2	0.0	0.0	0.0	0	95	37	1011	1003
21	15.1	17.4	-1.0	3.0	7.1	10.1	2.1	10.9	0.0	0.0	0.0	0	95	39	1017	1011
22	17.1	18.5	-0.4	3.2	8.4	10.6	3.4	9.6	0.0	0.0	0.0	0	94	44	1016	1005
23	16.7	17.1	5.8	4.4	11.3	10.6	6.3	6.7	0.0	1.0	1.0	0	96	64	1006	1004
24	26.4	17.6	6.2	4.9	16.3	11.5	11.3	1.7	0.0	0.0	0.0	0	94	32	1006	1004
25	31.2	18.9	3.6	5.6	17.4	12.0	12.4	0.6	0.0	0.0	0.0	0	98	26	1006	995
26	22.6	18.3	4.6	3.9	13.6	10.8	8.6	4.4	0.0	0.3	0.0	0	78	43	1009	995
27	22.4	16.5	-1.2	2.7	10.6	9.3	5.6	7.4	0.0	0.0	0.0	0	88	25	1012	1004
28	21.0	15.8	-2.7	1.5	9.2	8.5	4.2	8.8	0.0	0.0	0.0	0	96	24	1020	1013
29	24.3	17.1	2.7	3.0	13.5	10.1	8.5	4.5	0.0	0.0	0.0	-	83	35	1013	995
30	12.0	16.1	1.2	3.6	6.6	9.3	1.6	11.4	0.0	10.9	12.2	0	96	36	1016	998
Total							230.9	161.7	2.6	25.4	27.4		Extreme / Date	Extreme / Date	Extreme / Date	Extreme / Date
Avg	21.8	18.4	3.6	5.1	12.7	11.6	Monthly 2012 - 2021 Average			28.3	2012-2021 Average					
Extreme	33.8	33.8	-2.7	-7.3			202.6	196.3	3.5	330.5	2024 Cumulative ppt		99	13	1026	995
Date	9	08/2011	28	30/2018						323.6	Cumulative Average		13	9	5	25

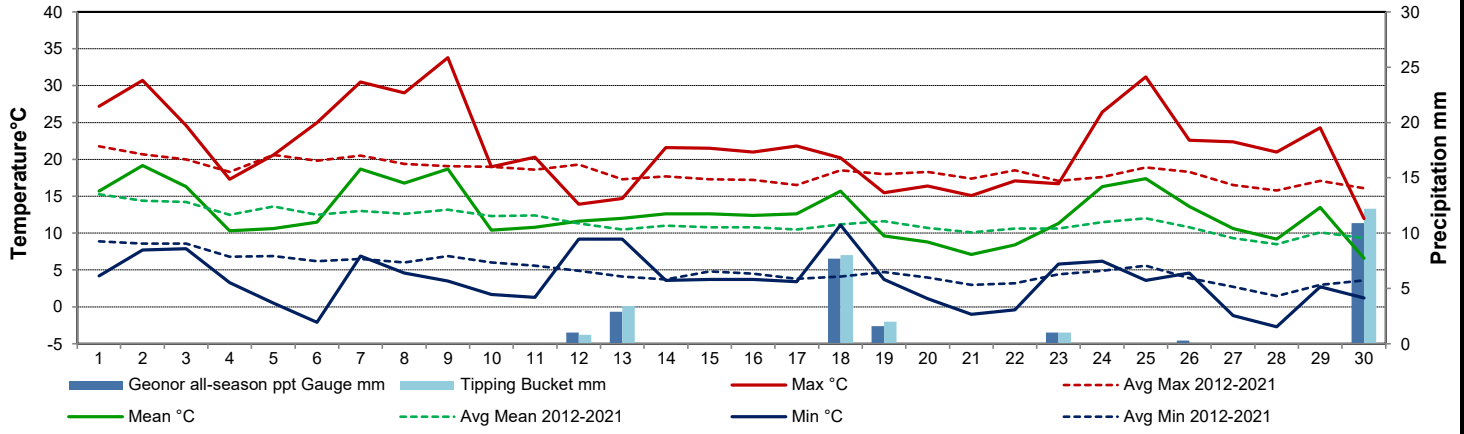
Note: Red numbers indicate manual calculation; Red cell indicate data not available

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

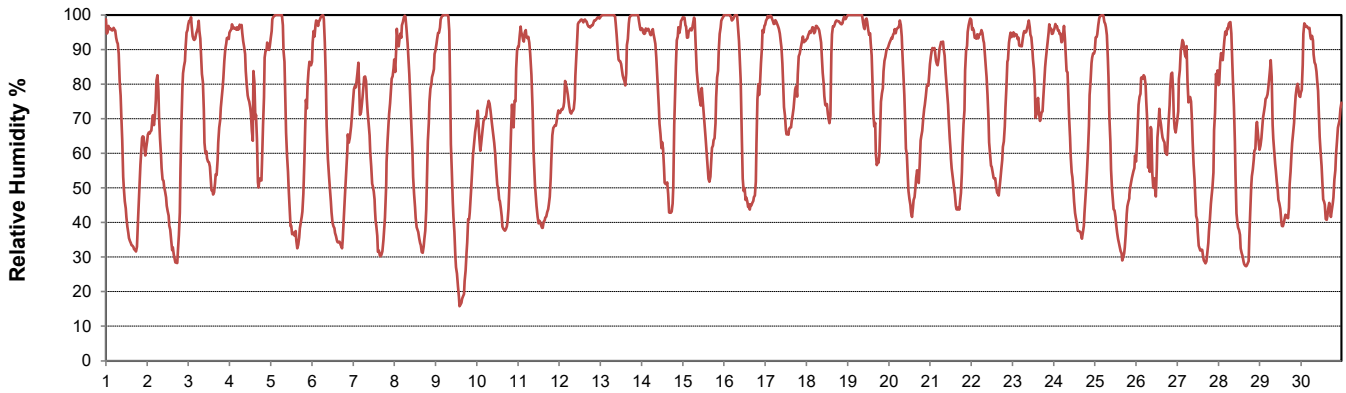
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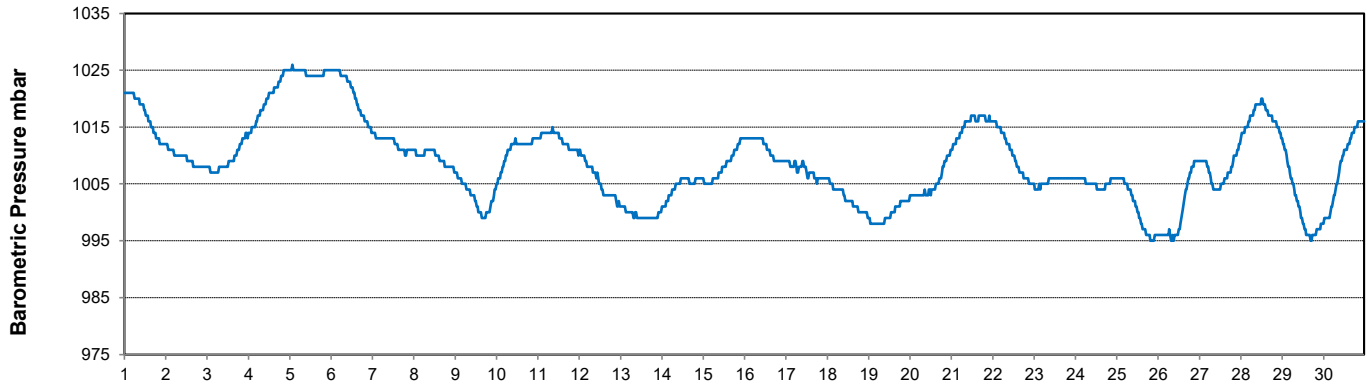
Temperature and Precipitation for September 2024



Relative Humidity for September 2024



Barometric Pressure Corrected to Sea Level for September 2024





SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

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

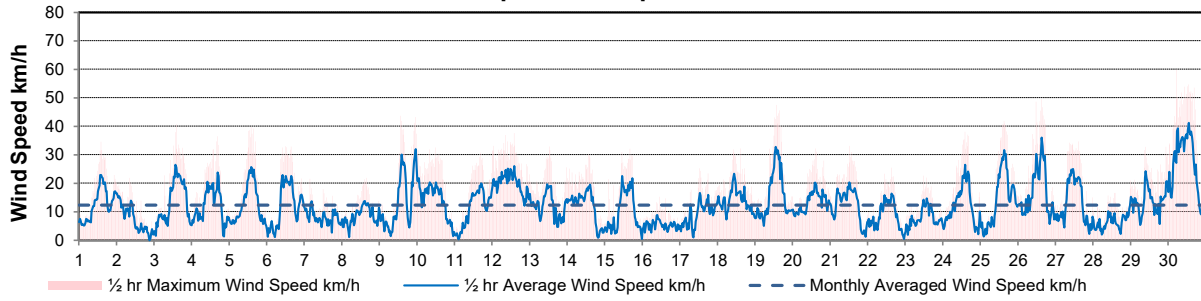
Preliminary **September 2024**

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	34.6	SSW	14:10	12.5	13.5	12.5	14.5	14.0	15.0	13.0	11.5	7.5	10.0	13.6	73.5	17.7	2.9	
2	21.8	SW	8:58	7.4	18.5	14.0	15.5	15.0	15.0	13.0	11.5	7.5	12.9	13.5	95.3	18.8	2.3	
3	40.7	NNE	14:00	13.4	17.0	14.5	16.0	15.0	15.0	13.0	11.5	7.5	10.5	13.5	78.0	15.7	7.0	
4	36.4	NW	16:45	12.1	13.0	14.5	16.5	15.0	15.0	13.0	11.5	7.5	4.1	13.4	30.6	10.4	6.7	
5	39.7	NW	14:02	12.5	12.0	11.0	13.5	14.0	15.0	13.0	11.5	7.5	11.5	13.3	86.3	17.7	3.8	
6	33.0	S	12:15	12.3	12.0	10.5	13.0	13.5	14.5	13.0	11.5	7.5	12.5	13.3	94.3	17.9	2.9	
7	21.5	SW	3:57	8.1	14.0	12.5	14.5	13.5	14.0	13.0	11.5	7.5	11.6	13.2	87.9	15.6	5.1	
8	21.8	E	15:55	8.8	13.5	13.0	15.0	14.5	14.5	13.0	11.5	7.5	11.5	13.1	87.6	15.8	4.9	
9	43.7	S	13:56	13.4	13.0	12.5	14.5	14.5	14.5	13.0	11.5	7.5	10.1	13.1	77.3	15.8	4.1	
10	32.5	NW	12:07	14.0	12.0	14.0	16.0	15.0	14.5	12.5	11.5	7.5	11.9	13.0	91.6	17.3	2.9	
11	30.8	SE	16:53	11.2	11.5	12.0	14.0	14.0	14.5	13.0	11.5	7.5	8.6	12.9	66.6	13.3	7.1	
12	37.5	E	14:15	19.9	14.0	13.5	14.5	14.0	14.5	12.5	11.5	7.5	0.1	12.9	0.8	2.0	1.9	
13	32.9	S	12:52	12.3	14.5	14.0	14.5	13.5	14.0	12.0	11.0	7.0	0.2	12.8	1.6	3.1	2.9	
14	30.2	SW	13:33	12.1	12.0	12.5	13.5	13.5	14.0	12.0	11.0	7.0	10.8	12.7	84.9	14.4	4.2	
15	32.1	WNW	16:16	10.0	13.0	11.5	13.0	13.5	14.0	12.5	11.5	7.5	11.2	12.7	88.5	15.7	3.1	
16	15.2	SSW	11:18	5.3	11.5	11.5	13.0	13.5	14.0	12.5	11.5	8.0	5.3	12.6	42.1	10.0	5.9	
17	25.2	ENE	12:54	9.3	12.0	12.0	13.0	13.0	13.5	12.5	11.5	8.0	4.5	12.5	36.0	9.6	4.8	
18	32.1	E	14:34	14.3	16.0	14.0	15.0	14.0	13.5	12.5	11.0	7.5	0.0	12.4	0.0	4.2	3.9	
19	47.4	NW	13:38	15.5	15.5	14.5	15.0	14.0	14.0	12.0	11.0	7.5	4.2	12.4	34.0	6.0	3.7	
20	32.1	NNE	14:58	13.4	8.5	9.0	11.0	13.0	13.5	12.5	11.5	8.0	8.4	12.3	68.2	11.2	5.5	
21	33.0	NW	12:27	12.4	9.0	10.0	11.0	12.0	13.0	12.5	11.0	8.0	10.8	12.2	88.2	15.0	2.3	
22	25.4	S	15:13	8.6	9.5	9.0	10.0	11.5	13.0	12.0	11.0	8.0	1.0	12.2	8.2	7.1	6.3	
23	22.7	NW	11:39	8.1	11.0	11.0	11.5	12.0	12.5	12.0	11.0	8.0	0.9	12.1	7.4	6.3	5.3	
24	38.1	WNW	14:14	12.2	14.0	11.0	11.5	12.0	12.5	12.0	11.0	8.0	9.9	12.0	82.3	13.3	2.2	
25	41.8	S	15:26	14.3	15.0	10.5	11.5	12.5	12.5	12.0	11.0	8.0	11.3	12.0	94.5	13.6	2.2	
26	49.5	WNW	15:12	16.6	17.5	13.0	13.5	13.5	13.0	12.0	11.0	8.0	3.9	11.9	32.8	6.9	3.9	
27	34.6	WSW	14:39	13.2	12.0	9.0	10.5	12.0	13.0	12.0	11.0	8.0	11.0	11.8	93.1	13.7	1.6	
28	18.1	ENE	23:58	6.7	8.5	8.0	9.5	11.5	12.5	12.0	11.0	8.0	11.1	11.8	94.5	13.5	1.4	
29	32.7	NW	22:51	14.2	16.0	9.5	10.0	11.5	12.5	12.0	11.0	8.0	7.3	11.7	62.4	10.6	3.7	
30	59.9	NNW	5:53	26.5	7.5	10.0	11.0	12.0	12.5	11.5	11.0	8.0	6.6	11.6	56.8	10.5	3.8	
Total													233.7	378.4	61.8	362.7	118.3	
Mean				12.4	12.9	11.8	13.2	13.4	13.8	12.5	11.3	7.7						
Extreme	59.9	NNW	5:53															
Date	30				Extreme low "surface temp" on Sept 6 was +0.8C @06:00													

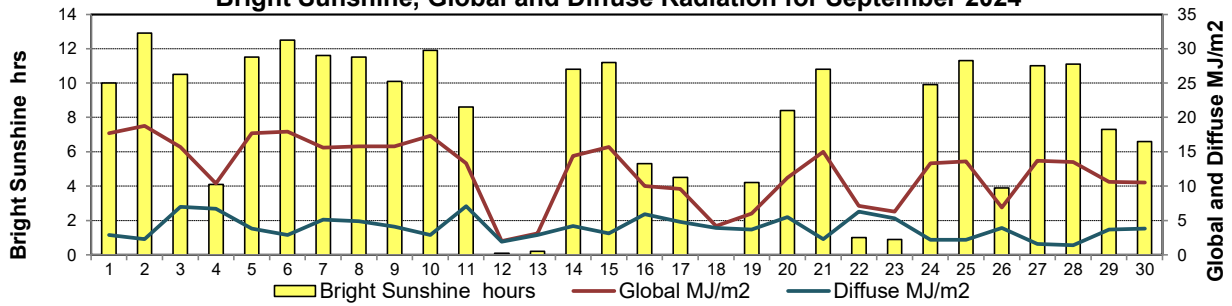
GLOSSARY OF TERMS

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 2024

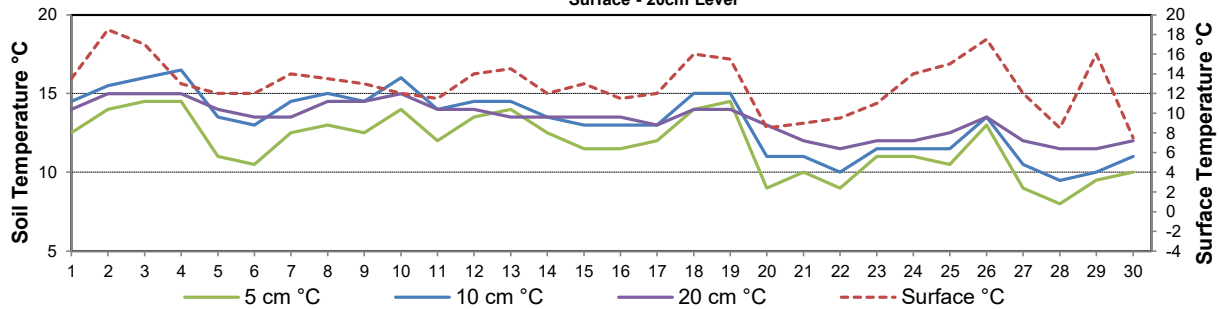


Bright Sunshine, Global and Diffuse Radiation for September 2024



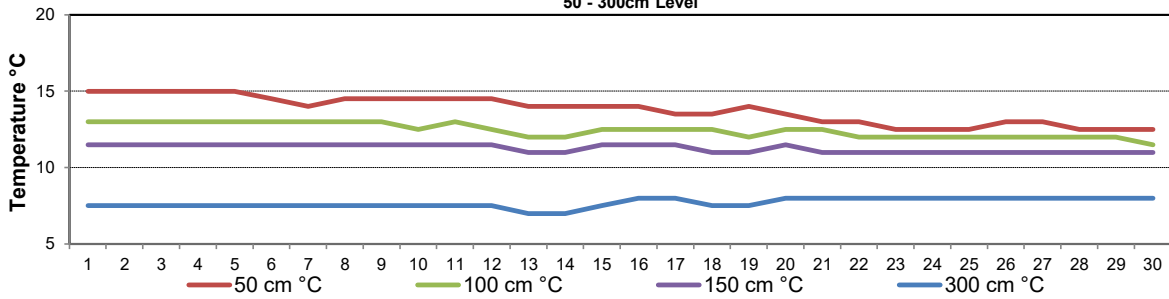
Soil Temperatures for September 2024

Surface - 20cm Level



Soil Temperatures for September 2024

50 - 300cm Level





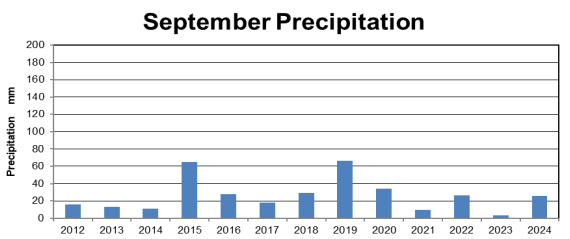
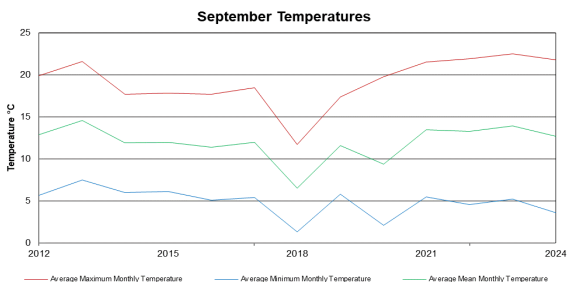
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CONSERVATION LEARNING CENTRE

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

September 2024

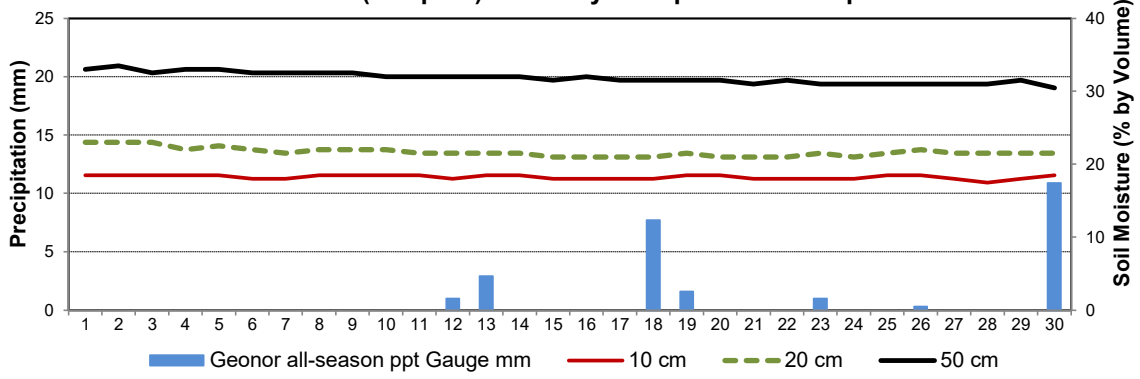
Day	2 meter Wind Speed			Soil Moisture at 0900 hrs (rounded to the 0.5%)		
	Daily Average	Max ½ hr Avg	½ hr Extreme Max	10 cm	20 cm	50 cm
	km/h	km/h	km/h	% by volume (soil type is Clay Loam)		
1	7.0	17.6	26.4	18.5	23.0	33.0
2	3.0	11.0	17.4	18.5	23.0	33.5
3	7.0	18.4	27.9	18.5	23.0	32.5
4	7.0	17.3	25.6	18.5	22.0	33.0
5	7.0	19.2	30.0	18.5	22.5	33.0
6	7.0	17.3	26.8	18.0	22.0	32.5
7	2.0	9.3	15.6	18.0	21.5	32.5
8	3.0	9.9	16.8	18.5	22.0	32.5
9	7.0	23.4	31.6	18.5	22.0	32.5
10	10.0	15.7	24.7	18.5	22.0	32.0
11	6.0	12.0	21.2	18.5	21.5	32.0
12	14.0	19.2	27.5	18.0	21.5	32.0
13	7.0	13.2	22.2	18.5	21.5	32.0
14	8.0	15.2	25.0	18.5	21.5	32.0
15	6.0	17.6	24.5	18.0	21.0	31.5
16	1.0	7.3	11.4	18.0	21.0	32.0
17	5.0	12.4	20.0	18.0	21.0	31.5
18	9.0	16.5	22.0	18.0	21.0	31.5
19	9.0	24.1	35.4	18.5	21.5	31.5
20	7.0	15.0	24.8	18.5	21.0	31.5
21	8.0	15.5	24.7	18.0	21.0	31.0
22	4.0	11.8	19.7	18.0	21.0	31.5
23	3.0	11.9	17.6	18.0	21.5	31.0
24	7.0	20.7	30.2	18.0	21.0	31.0
25	8.0	22.8	31.4	18.5	21.5	31.0
26	10.0	27.5	41.7	18.5	22.0	31.0
27	8.0	19.8	29.3	18.0	21.5	31.0
28	2.0	7.8	14.3	17.5	21.5	31.0
29	9.0	18.2	25.2	18.0	21.5	31.5
30	19.0	31.7	44.6	18.5	21.5	30.5
31						
Total						
Mean				18	22	31.8
Extreme	19.0	31.7	44.6	18.5	23	33.5
Date	11.5	11.5	11.5	14.5	14.5	15



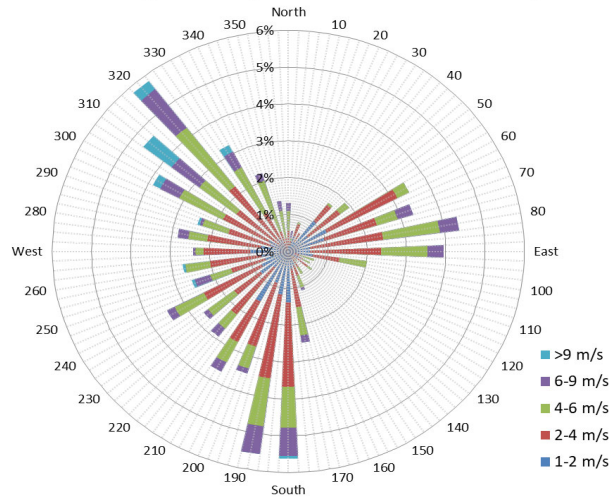
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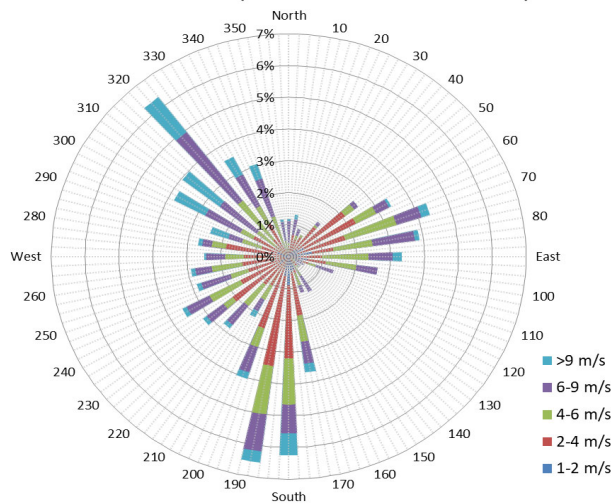
9 am Soil Moisture (3 depths) and Daily Precipitation for September 2024



10 minute Average Wind Speed and Direction CLC Sept 2024

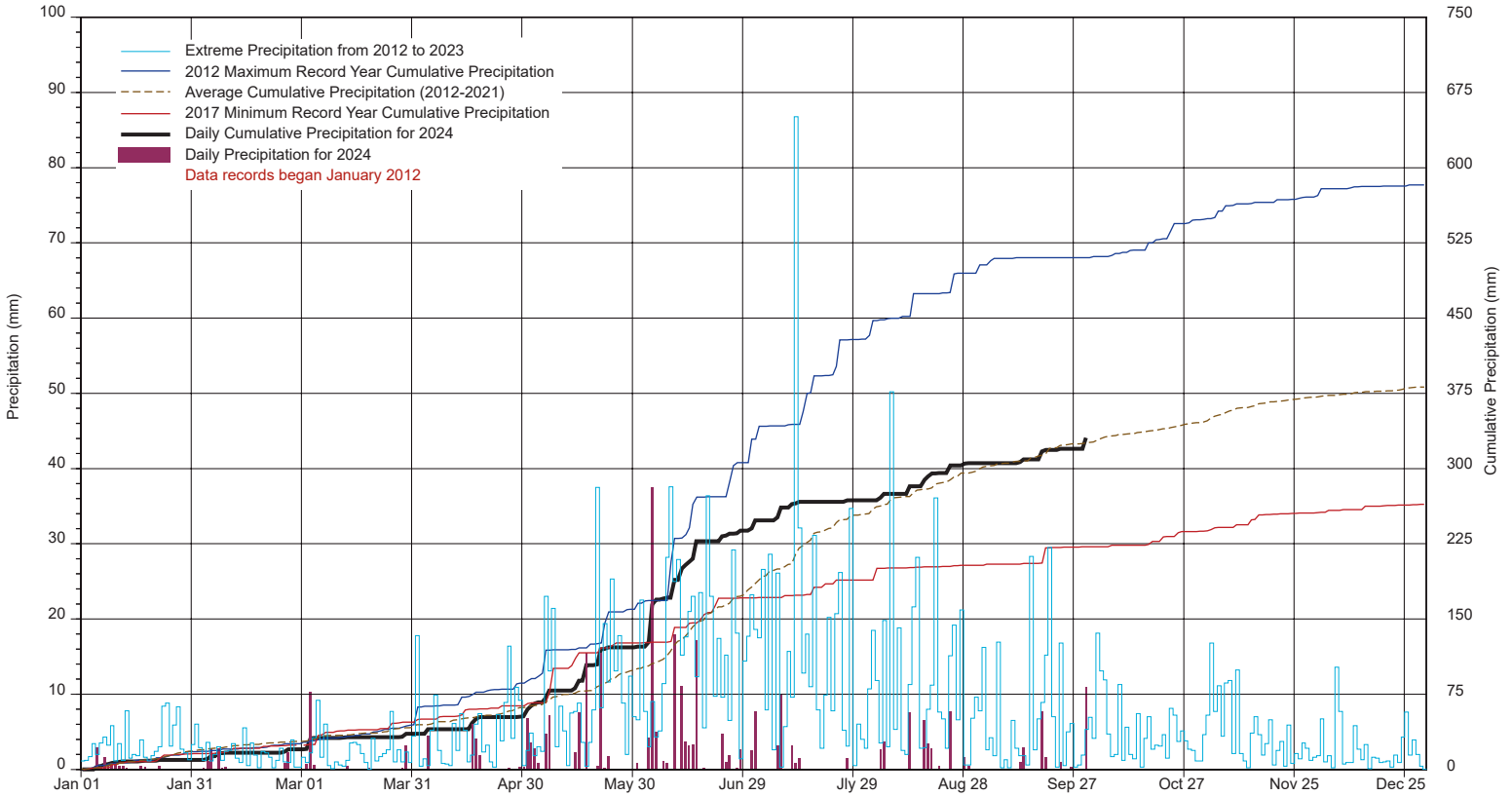


1/2 hr Maximum Wind Speed and Direction CLC Sept 2024

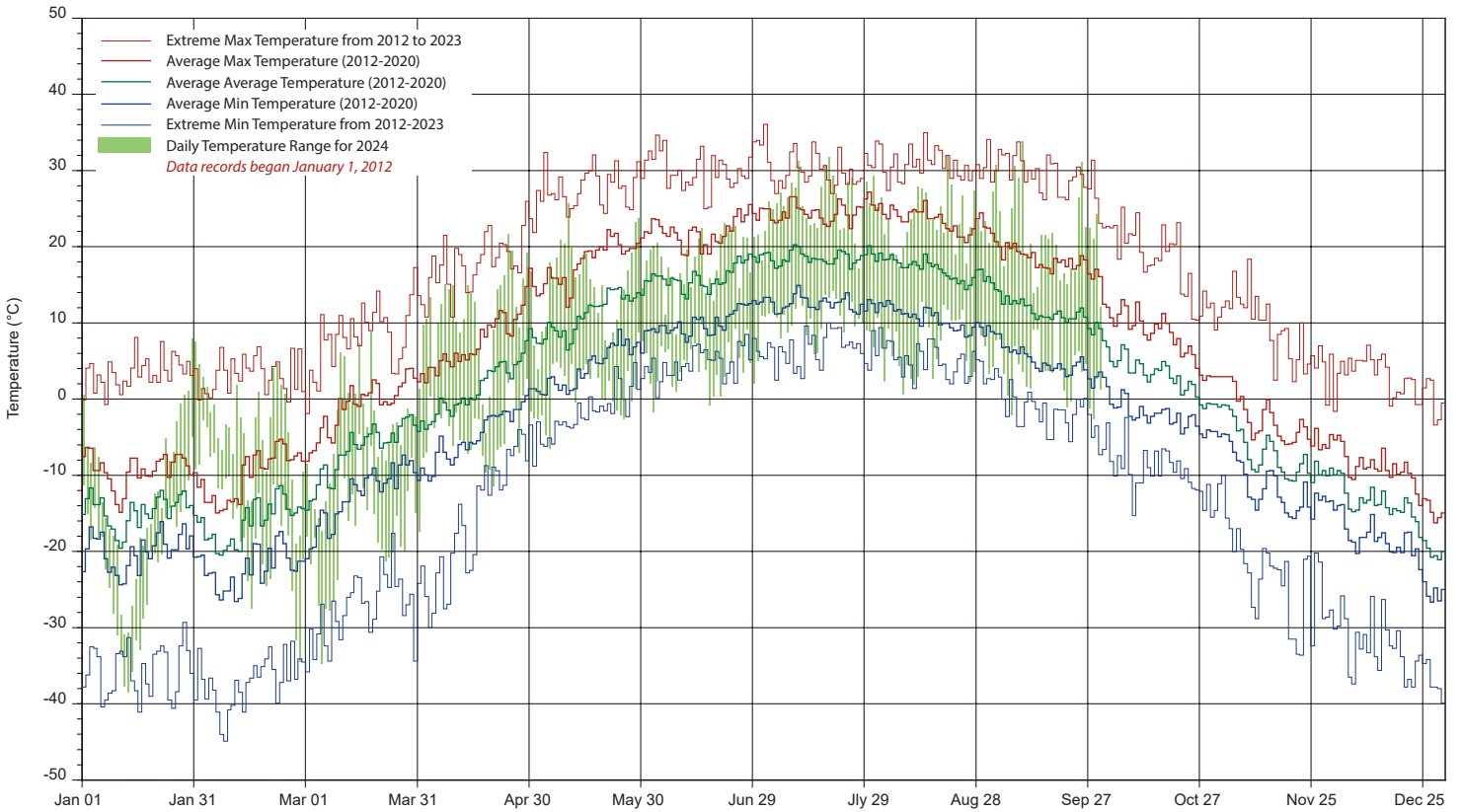


SRC's CLIMATE REFERENCE STATION at the Conservation Learning Centre

2024 PRECIPITATION AND AVERAGE



2024 TEMPERATURES AND AVERAGES



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