



SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W Estab. 2011

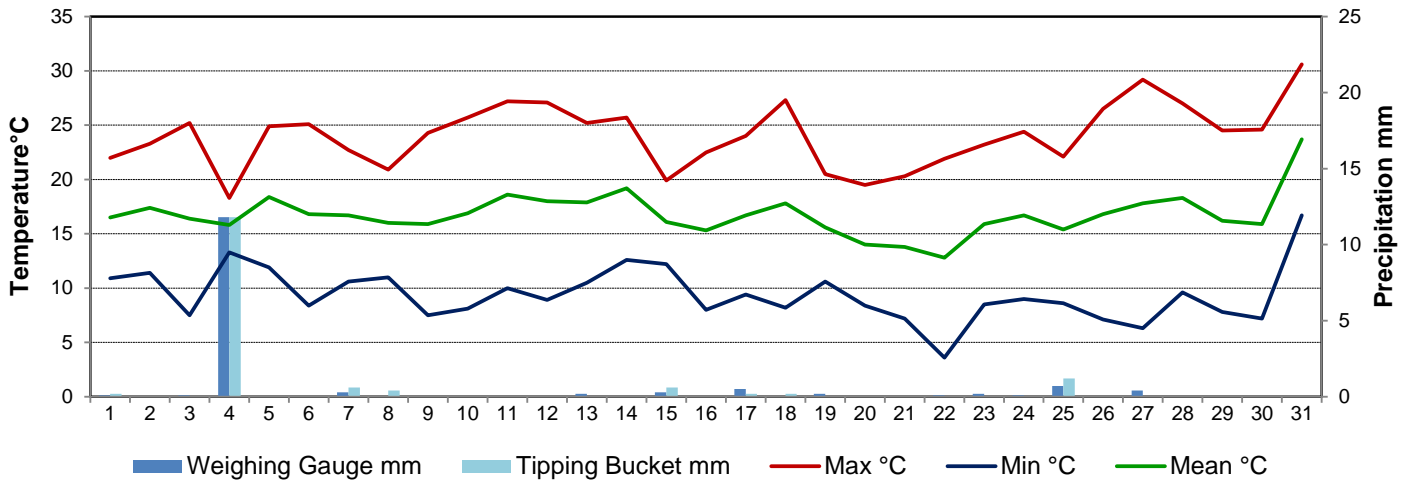
Preliminary **August 2017**

| Day | Temperature | | | Degree-days | | | Precipitation | | | Relative Humidity | | Station Pressure <i>corrected to sea level</i> | |
|---------|-------------|------------|-------------|-------------|-----------|-----------|----------------|----------------|-------|-------------------|--------------|---|--------------|
| | Max | Min | Mean | Growing | Heating | Cooling | Weighing Gauge | Tipping Bucket | Notes | Max ½ hr Avg | Min ½ hr Avg | Max ½ hr Avg | Min ½ hr Avg |
| | °C | °C | °C | 5°C base | 18°C base | 18°C base | mm | mm | | % | % | mbar | mbar |
| 1 | 22.0 | 10.9 | 16.5 | 11.5 | 1.5 | 0.0 | 0.1 | 0.2 | | 88 | 51 | 1024 | 1021 |
| 2 | 23.3 | 11.4 | 17.4 | 12.4 | 0.6 | 0.0 | 0.0 | 0.0 | | 90 | 40 | 1026 | 1023 |
| 3 | 25.2 | 7.5 | 16.4 | 11.4 | 1.6 | 0.0 | 0.1 | 0.0 | | 94 | 30 | 1023 | 1017 |
| 4 | 18.3 | 13.3 | 15.8 | 10.8 | 2.2 | 0.0 | 11.8 | 11.8 | | 88 | 69 | 1017 | 1015 |
| 5 | 24.9 | 11.9 | 18.4 | 13.4 | 0.0 | 0.4 | 0.0 | 0.0 | | 91 | 37 | 1018 | 1016 |
| 6 | 25.1 | 8.4 | 16.8 | 11.8 | 1.2 | 0.0 | 0.0 | 0.0 | | 94 | 40 | 1018 | 1016 |
| 7 | 22.7 | 10.6 | 16.7 | 11.7 | 1.3 | 0.0 | 0.3 | 0.6 | | 94 | 59 | 1018 | 1017 |
| 8 | 20.9 | 11.0 | 16.0 | 11.0 | 2.0 | 0.0 | 0.0 | 0.4 | | 92 | 48 | 1018 | 1017 |
| 9 | 24.3 | 7.5 | 15.9 | 10.9 | 2.1 | 0.0 | 0.0 | 0.0 | | 93 | 36 | 1020 | 1018 |
| 10 | 25.7 | 8.1 | 16.9 | 11.9 | 1.1 | 0.0 | 0.0 | 0.0 | | 93 | 38 | 1020 | 1017 |
| 11 | 27.2 | 10.0 | 18.6 | 13.6 | 0.0 | 0.6 | 0.0 | 0.0 | | 92 | 32 | 1018 | 1017 |
| 12 | 27.1 | 8.9 | 18.0 | 13.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 94 | 32 | 1018 | 1014 |
| 13 | 25.2 | 10.5 | 17.9 | 12.9 | 0.1 | 0.0 | 0.2 | 0.0 | | 92 | 37 | 1014 | 1009 |
| 14 | 25.7 | 12.6 | 19.2 | 14.2 | 0.0 | 1.2 | 0.0 | 0.0 | | 84 | 36 | 1009 | 1008 |
| 15 | 19.9 | 12.2 | 16.1 | 11.1 | 1.9 | 0.0 | 0.3 | 0.6 | | 89 | 49 | 1008 | 1006 |
| 16 | 22.5 | 8.0 | 15.3 | 10.3 | 2.7 | 0.0 | 0.0 | 0.0 | | 89 | 37 | 1010 | 1008 |
| 17 | 24.0 | 9.4 | 16.7 | 11.7 | 1.3 | 0.0 | 0.5 | 0.2 | | 90 | 42 | 1010 | 1009 |
| 18 | 27.3 | 8.2 | 17.8 | 12.8 | 0.2 | 0.0 | 0.0 | 0.2 | | 93 | 31 | 1011 | 1004 |
| 19 | 20.5 | 10.6 | 15.6 | 10.6 | 2.4 | 0.0 | 0.2 | 0.0 | | 83 | 35 | 1010 | 1001 |
| 20 | 19.5 | 8.4 | 14.0 | 9.0 | 4.0 | 0.0 | 0.0 | 0.0 | | 80 | 34 | 1012 | 1010 |
| 21 | 20.3 | 7.2 | 13.8 | 8.8 | 4.2 | 0.0 | 0.0 | 0.0 | | 84 | 33 | 1017 | 1012 |
| 22 | 21.9 | 3.6 | 12.8 | 7.8 | 5.2 | 0.0 | 0.1 | 0.0 | | 93 | 38 | 1018 | 1014 |
| 23 | 23.2 | 8.5 | 15.9 | 10.9 | 2.1 | 0.0 | 0.2 | 0.0 | | 91 | 37 | 1016 | 1014 |
| 24 | 24.4 | 9.0 | 16.7 | 11.7 | 1.3 | 0.0 | 0.1 | 0.0 | | 90 | 42 | 1015 | 1006 |
| 25 | 22.1 | 8.6 | 15.4 | 10.4 | 2.6 | 0.0 | 0.7 | 1.2 | | 88 | 30 | 1014 | 1004 |
| 26 | 26.5 | 7.1 | 16.8 | 11.8 | 1.2 | 0.0 | 0.0 | 0.0 | | 90 | 21 | 1017 | 1014 |
| 27 | 29.2 | 6.3 | 17.8 | 12.8 | 0.2 | 0.0 | 0.4 | 0.0 | | 93 | 22 | 1018 | 1014 |
| 28 | 27.0 | 9.6 | 18.3 | 13.3 | 0.0 | 0.3 | 0.0 | 0.0 | | 90 | 35 | 1016 | 1014 |
| 29 | 24.5 | 7.8 | 16.2 | 11.2 | 1.8 | 0.0 | 0.0 | 0.0 | | 93 | 23 | 1020 | 1016 |
| 30 | 24.6 | 7.2 | 15.9 | 10.9 | 2.1 | 0.0 | 0.0 | 0.0 | | 86 | 29 | 1020 | 1010 |
| 31 | 30.6 | 16.7 | 23.7 | 18.7 | 0.0 | 5.7 | 0.0 | 0.0 | | 75 | 29 | 1009 | 1002 |
| Total | | | | 364.3 | 46.9 | 8.2 | 15.0 | 15.2 | | | | | |
| Avg | 24.1 | 9.4 | 16.8 | | | | 203.7 | Cumulative ppt | | | | | |
| Extreme | 30.6 | 3.6 | | | | | 11.8 | 11.8 | | 94 | 21 | 1026 | 1001 |
| Date | 31 | 22 | | | | | 4 | 4 | | 3 | 26 | 2 | 19 |

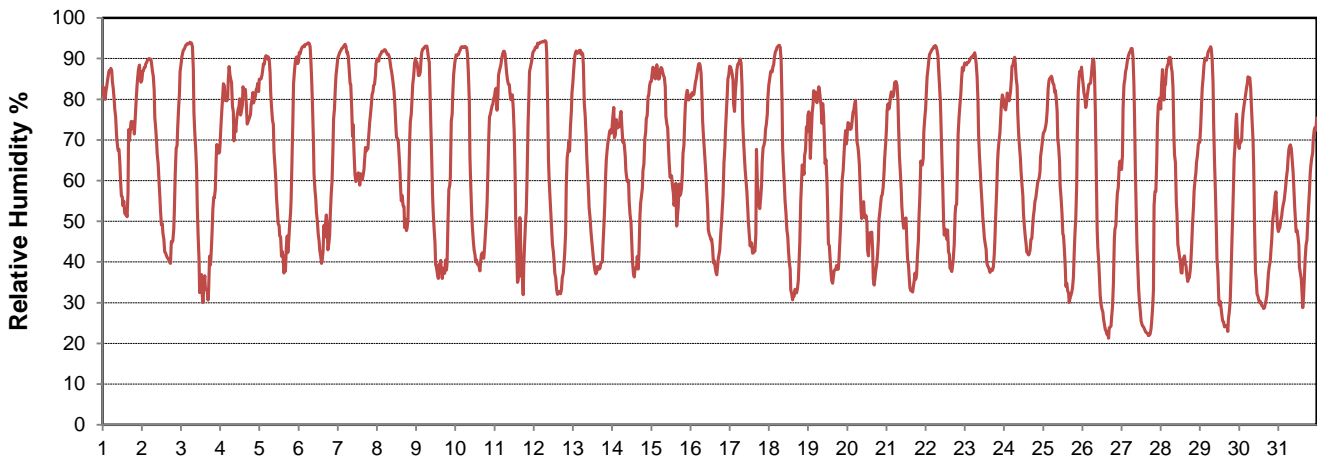
SRC proudly recognizes the following CRS supporters:



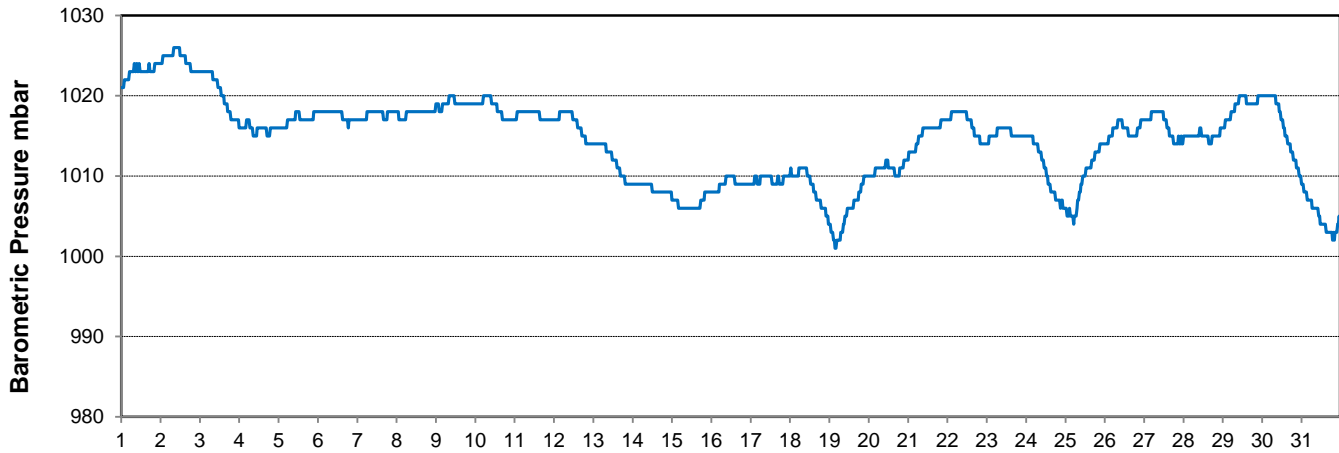
Temperature and Precipitation for August 2017



Relative Humidity for August 2017



Barometric Pressure Corrected to Sea Level for August 2017





SRC CLIMATE REFERENCE STATION DAILY DATA REPORT

CONSERVATION LEARNING CENTRE

Saskatchewan 53.03°N 105.77°W Estab. 2011

Preliminary

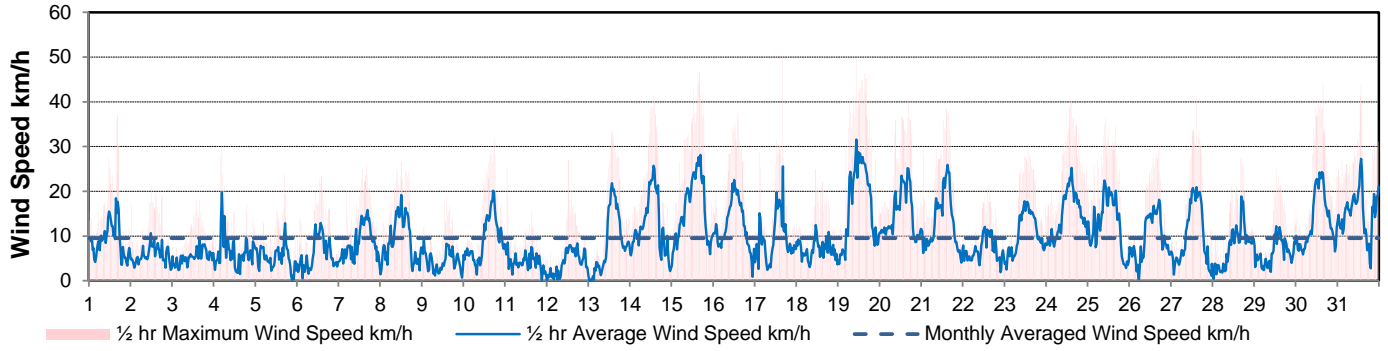
August 2017

| Day | Wind Gust | | | Soil Temperatures at 0900hrs | | | | | | | | Soil Moisture | Radiation | | |
|---------|-----------|-----------|-------|------------------------------|------|-------|-------|-------|--------|--------|--------|---------------|---|-------------------|-------------------|
| | Max | Direction | Time | Surface | 5 cm | 10 cm | 20 cm | 50 cm | 100 cm | 150 cm | 300 cm | 0900hrs | Bright Sunshine | Global | Diffuse |
| | km/h | | | °C | °C | °C | °C | °C | °C | °C | °C | % | hours | MJ/m ² | MJ/m ² |
| 1 | 37.0 | NNE | 16:48 | 18.5 | 16.0 | 16.5 | 16.5 | 15.0 | 12.0 | 10.0 | 5.5 | 24 | 9.0 | 19.2 | 8.0 |
| 2 | 21.2 | ENE | 12:17 | 17.0 | 16.0 | 16.0 | 16.0 | 15.0 | 12.0 | 10.0 | 5.5 | 24 | 13.7 | 24.7 | 4.9 |
| 3 | 18.2 | ESE | 14:25 | 16.5 | 15.5 | 15.5 | 16.0 | 15.0 | 12.5 | 10.0 | 6.0 | 23 | 13.2 | 22.2 | 6.2 |
| 4 | 30.4 | WNW | 4:37 | 16.0 | 16.0 | 16.0 | 16.0 | 15.0 | 12.5 | 10.0 | 6.0 | 29 | 0.0 | 3.8 | 3.3 |
| 5 | 23.8 | ENE | 16:55 | 17.0 | 15.0 | 15.0 | 15.5 | 14.5 | 12.5 | 10.0 | 5.5 | 29 | 13.3 | 24.3 | 4.8 |
| 6 | 23.4 | SW | 14:08 | 17.0 | 15.5 | 15.5 | 16.0 | 14.5 | 12.5 | 10.0 | 6.0 | 28 | 12.6 | 22.0 | 4.8 |
| 7 | 26.1 | NE | 16:26 | 18.5 | 16.0 | 16.0 | 16.0 | 14.5 | 12.5 | 10.5 | 6.0 | 27 | 9.1 | 19.0 | 7.8 |
| 8 | 26.7 | ENE | 12:08 | 15.5 | 16.5 | 16.5 | 16.0 | 14.5 | 12.5 | 10.0 | 5.5 | 27 | 5.5 | 12.9 | 7.7 |
| 9 | 18.9 | NW | 14:15 | 15.5 | 14.5 | 15.0 | 15.5 | 15.0 | 12.5 | 10.5 | 6.0 | 26 | 14.1 | 23.8 | 4.2 |
| 10 | 31.6 | S | 17:39 | 16.0 | 15.0 | 15.0 | 15.5 | 14.5 | 12.5 | 10.5 | 6.0 | 26 | 12.3 | 21.9 | 5.3 |
| 11 | 25.4 | NW | 1:25 | 15.0 | 15.5 | 15.5 | 16.0 | 14.5 | 12.5 | 10.5 | 6.0 | 25 | 7.4 | 14.4 | 5.8 |
| 12 | 27.0 | S | 12:48 | 16.5 | 15.0 | 15.0 | 15.5 | 14.5 | 12.5 | 10.5 | 6.5 | 25 | 14.1 | 24.2 | 3.3 |
| 13 | 33.5 | SSE | 13:49 | 17.5 | 15.5 | 15.5 | 16.0 | 14.5 | 12.5 | 10.5 | 6.5 | 24 | 14.3 | 23.7 | 3.1 |
| 14 | 41.5 | S | 13:33 | 20.0 | 15.5 | 16.0 | 16.0 | 14.5 | 12.5 | 10.5 | 6.5 | 23 | 9.9 | 19.0 | 6.8 |
| 15 | 46.6 | SSW | 15:23 | 17.5 | 16.0 | 16.0 | 15.5 | 14.5 | 12.0 | 10.5 | 6.0 | 23 | 8.3 | 18.6 | 6.8 |
| 16 | 37.3 | WNW | 14:08 | 15.5 | 14.5 | 14.5 | 15.5 | 14.5 | 12.5 | 10.5 | 6.0 | 22 | 13.1 | 21.8 | 4.5 |
| 17 | 50.6 | NW | 16:23 | 15.5 | 14.5 | 15.0 | 15.5 | 14.5 | 12.5 | 11.0 | 6.5 | 22 | 12.6 | 20.3 | 5.4 |
| 18 | 25.0 | W | 11:04 | 17.5 | 14.5 | 14.5 | 15.5 | 14.5 | 12.5 | 11.0 | 6.5 | 22 | 13.5 | 22.5 | 2.7 |
| 19 | 49.6 | NW | 10:33 | 17.0 | 15.0 | 15.5 | 15.5 | 14.5 | 12.5 | 11.0 | 6.5 | 21 | 11.1 | 20.9 | 6.1 |
| 20 | 40.2 | SW | 16:34 | 16.5 | 14.0 | 14.5 | 15.0 | 14.5 | 12.5 | 11.0 | 6.5 | 21 | 7.9 | 13.6 | 7.1 |
| 21 | 38.4 | NW | 14:33 | 14.0 | 13.0 | 13.5 | 14.5 | 14.0 | 12.5 | 11.0 | 6.5 | 20 | 13.8 | 20.4 | 2.8 |
| 22 | 20.8 | S | 15:25 | 11.0 | 12.5 | 13.0 | 14.0 | 14.0 | 12.5 | 11.0 | 6.5 | 20 | 3.4 | 10.9 | 9.0 |
| 23 | 30.7 | E | 13:51 | 14.5 | 13.0 | 13.5 | 14.0 | 13.5 | 12.5 | 11.0 | 7.0 | 20 | 13.5 | 21.7 | 2.6 |
| 24 | 40.8 | ESE | 14:06 | 14.5 | 13.5 | 14.0 | 14.5 | 13.5 | 12.5 | 11.0 | 6.5 | 19 | 11.0 | 19.1 | 4.8 |
| 25 | 36.3 | W | 10:01 | 17.5 | 16.0 | 15.5 | 14.5 | 13.5 | 12.0 | 10.5 | 6.5 | 19 | 11.4 | 20.0 | 3.7 |
| 26 | 30.6 | NW | 17:01 | 16.0 | 13.5 | 14.0 | 14.5 | 14.0 | 12.5 | 11.0 | 7.0 | 19 | 12.0 | 21.0 | 2.6 |
| 27 | 41.5 | SW | 14:44 | 17.0 | 13.0 | 13.5 | 14.5 | 14.0 | 12.5 | 11.0 | 7.0 | 19 | 12.9 | 20.8 | 2.5 |
| 28 | 27.2 | NW | 16:36 | 18.0 | 14.0 | 14.0 | 14.5 | 14.0 | 12.5 | 11.0 | 7.0 | 18 | 11.7 | 18.3 | 5.8 |
| 29 | 25.5 | NE | 12:32 | 15.0 | 13.5 | 14.0 | 15.0 | 14.0 | 12.5 | 11.0 | 7.0 | 18 | 13.3 | 20.5 | 2.2 |
| 30 | 44.5 | SE | 15:30 | 13.5 | 13.5 | 13.5 | 14.5 | 14.0 | 12.5 | 11.0 | 7.0 | 18 | 9.5 | 16.7 | 5.7 |
| 31 | 43.6 | SSW | 13:48 | 20.0 | 14.5 | 14.5 | 14.5 | 13.5 | 12.5 | 11.0 | 7.0 | 17 | 7.8 | 13.1 | 6.6 |
| Total | | | | | | | | | | | | | 335.3 | 595.3 | 156.9 |
| Mean | | | | 16.4 | 14.7 | 14.9 | 15.3 | 14.3 | 12.4 | 10.6 | 6.3 | 22.5 | | | |
| Extreme | 50.6 | NW | 16:23 | | | | | | | | | | Partial Solar Eclipse 21 Aug 2017 (10:30-13:00) | | |
| Date | 17 | | | | | | | | | | | | | | |

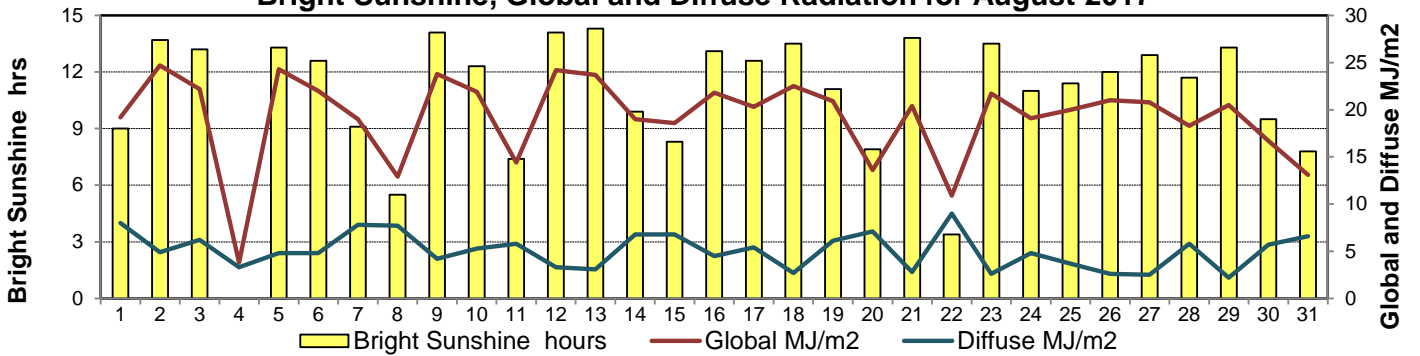
GLOSSARY OF TERMS

| | |
|---|--|
| Degree-days | Radiation |
| T _m 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 (T _m -5°C); if T _m ≤ 5°C then GDD = 0 | |
| Heating (18°C-T _m); if T _m ≥ 18°C then HDD = 0 | Diffuse is radiation reaching the earth's surface after having been scattered from the direct solar beam |
| Cooling (T _m -18°C); if T _m ≤ 18°C then CDD = 0 | Global is the sum of the direct solar and diffuse radiation |
| T Trace of Precipitation | Relative Humidity The ratio of the air's water vapour content to its water vapour capacity which changes with temperature. |
| SOG Depth of snow-on-the-ground | |
| 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 August 2017

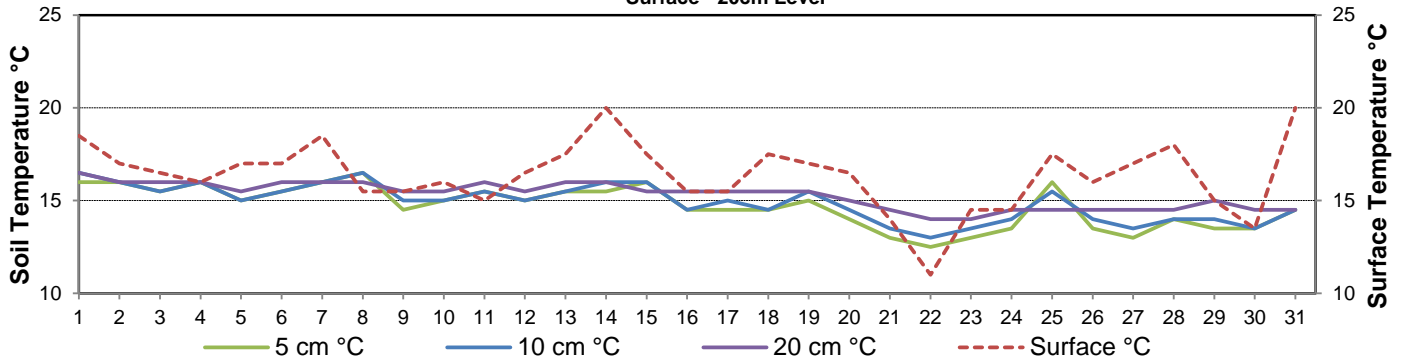


Bright Sunshine, Global and Diffuse Radiation for August 2017



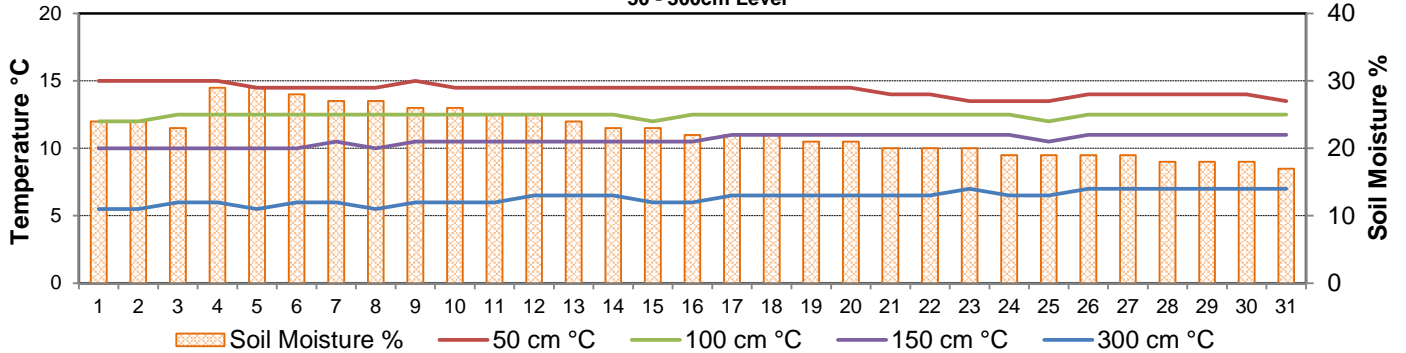
Soil Temperatures for August 2017

Surface - 20cm Level



Soil Temperatures for August 2017

50 - 300cm Level



Partial Solar Eclipse Day at Conservation Learning Centre CRS (21 Aug 2017)

