

METEOROLOGY

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Palmer Station is Station 89061 in the World Meteorological Organization (WMO) Worldwide Network. Automated surface synoptic observations are made 8 times each day and emailed to the National Atmospheric and Oceanographic Administration (NOAA) for entry into the Global Telecommunication System (GTS).

The Palmer Automatic Weather Station (PAWS) is a collection of sensors, computers, and software that records the meteorological data and generates synoptic reports. PAWS began recording data in September of 2015. It was a replacement for the Palmer Meteorological Observing System (PalMOS) that was taken down in November 2017. The PAWS sensors and data acquisition hardware are located on a ridge in the backyard at -64.774130° -64.047440° at an elevation of 38.3 meters above sea level using the World Geodetic System-84. In addition to the synoptic and METAR reporting, PAWS also archives the current conditions at one-minute intervals and displays both raw data and graphs of the sensor data on our local intranet.

The Research Associate acts as Chief Weather Observer on station, measuring, compiling and distributing all meteorological data. Snow accumulation is physically observed by taking an average of five accumulation stakes found near the PAWS system. All weather data is archived locally and forwarded once per month to the University of Wisconsin on the first day of each month for archiving and further distribution.

The local weather station (PAWS) operated well throughout the month. All three remote AWS sites require maintenance so their functionality this season were sporadic at best. One minute weather data is archived on the AMRC website: <http://amrc.ssec.wisc.edu/data/ftp/pub/palmer/>

Monthly Weather Synopsis

June was windier and rainier than usual. Wind speeds averaged 15.8 knots, compared to the 10-year June average of 11.5 knots. The peak wind speed was 69 knots on June 8. 122.9 mm of rainfall fell in June, the greatest since 1993. The average temperature was 28°F.

Palmer Monthly Met summary for June, 2022

Temperature
Average: -2.2 °C / 28 °F
Maximum: 5.1 °C / 41.18 °F on 8 Jun 09:52
Minimum: -7.6 °C / 18.32 °F on 18 Jun 03:47
Air Pressure
Average: 980.9 mb
Maximum: 1002.7 mb on 23 Jun 16:52
Minimum: 944.5 mb on 4 Jun 11:30
Wind
Average: 15.8 knots / 18.2 mph
Peak (5 Sec Gust): 69 knots / 80 mph on 8 Jun 11:06 from NNE (31 deg)
Prevailing Direction for Month: NNE
Surface
Total Rainfall: 122.9 mm / 4.84 in
Total Snowfall: 44 cm / 17.2 in
Greatest Depth at Snow Stake: 50 cm / 19.5 in
WMO Sea Ice Observation: 6-10 bergs, bergy bits, growlers, grease, shuga, pancake ice, and brash ice
Average Sea Surface Temperature: -0.86 °C / 30.4 °F