**Reading 4 SW**; Berks County, PA; Lat 40.316251, Lon -75.988661, Elev 320 feet ASL

CoCoRaHS ID: PA-BR-2, Reading 3.5 SW; CWOP ID: FW1703 Observation time: 2359 EST

Observer in Charge: Jeffrey R. Stoudt

Period of Record: Precipitation/Snow - January 1983, Temperatures - June 1984

**July 2022**

DAILY DETAILS (Sundays, monthly extremes in **bold**)

 TEMPERATURES

DAY MAX MIN OBS PCPN SNOW DEPTH REMARKS (all times are military EST)

 1 92 67 77 0.91 Hail 1”dia TSTMs in area early-mid aft’n; hail 1302-1312

 2 90 74 74 0.01 Spray 1300 hour; small TSTM S-E 1800 hr (0.01)

 **3** 89 66 **66**

 4 87 **57** 74

 5 89 74 76 0.01 Occasional sprinkles early-mid afternoon

 6 89 74 76 T Few drops early afternoon

 7 85 71 71 0.03 Light rain long before dawn

 8 89 67 72 0.30 Rain after 2030

 9 82 67 67 0.06 Occasional light rain, drizzle till daybreak

**10** 87 60 67

11 87 60 71

12 92 67 74 0.01 Weak part of TSTM complex late afternoon

13 91 68 72 Heavy showers W to N at dusk

14 90 66 69

15 89 64 71 / Light rain aft’n; rain, very heavy at times…

16 85 67 68 **1.17** | …some thunder, post dusk

**17** 84 68 71 0.26 Light rain before dawn; post-dusk T-shower

18 88 71 74 0.31 Sct T-showers around at times; no direct hit

19 92 72 79

20 94 69 80

21 94 **76** 81

22 95 71 80 0.07 Showers in area 1500 hour

23 **96** 72 76

**24** **96** 70 **83**

25 91 **76** 76 0.01 Sprinkles during midday

26 82 69 70

27 88 68 74 0.97 Heavy thundershowers 2300 hour

28 88 71 72 1.12 Early fog; TSTMs around aft-eve; few downpours

29 **81** 68 70 0.05 Occasional light rain daylight

30 89 65 68

**31** 88 63 **66** 0.50 Occasional rain after 1700, mostly after dusk

SUM 2754 2112 5.79 0.0 0

MONTHLY STATISTICS

Average Monthly Temperature (Dep): 78.5 (+1.9)

Average Maximum Temperature (Dep): 88.8 (+1.9)

Average Minimum Temperature (Dep): 68.1 (+1.8)

Extreme Daily High Max Temp (Dep): 96 (-0) on 23,24 (record 105 on 22 Jul 2011)

Extreme Daily High Minimum Temp: 76 on 21st, 25th (record 82 on 05 Jul 1999)

Extreme Daily Low Min Temp (Dep): 57 (+2) on 4th (record 49 on 01 Jul 1988)+

Extreme Daily Low Maximum Temp: 81 on 29th (record 65 on 24 Jul 1997)+

Heating Degree Days (Season): 0 (0)

Cooling Degree Days (Season): 426 (746)

+ Most recent of more than one occurrence

 -- more --

Total Monthly Precipitation (Dep): 5.79 (+0.52)

Total Annual Pcpn through Month: 30.32 (-0.01)

Greatest Calendar Day Pcpn: 1.17 on 16th (record 5.12 12 Jul 2004)

Greatest Floating 24-Hour Pcpn: 2.09 on 27th-28th (rec 5.12 12-12 Jul 2004)

Total Monthly Snowfall (Dep): 0.0 (-0.0)

Total Season Snowfall (Dep): 0.0 (-0.0)

Greatest Calendar Day Snowfall: 0.0 on (record 0.0 on 00 Jul 0000)

Greatest Floating 24-Hour Snowfl: 0.0 on (rec 0.0 on 00-00 Jul 0000)

Maximum Depth of Snow/Ice: T on 1st (hail)

Days with Hail: 1

Days with Thunder (Dep): 8 (-0)

Highest Wind Gust (MPH): 26 on 1st

Maximum Barometric Pressure: 30.19 on 4th

Minimum Barometric Pressure: 29.61 on 21st

HIGHLIGHTS

July 2022 at Reading 4 SW began with some excitement. An isolated thunderstorm cell popped just SW of Reading 4 SW early afternoon of the 1st, overspread the station, and stormed the neighborhood with several minutes of windswept torrential rain and hail which ranged to quarter size (1” diameter). Few other cells in vicinity later were much less intense. The 0.91” of rain this first day got this July off to a strong start. But then substantial rains became infrequent as most of the several opportunities for significant rainfall did not materialize. The month contained two long periods of paltry rainfall. However, thunderstorm rainfall totaling 1.75” during 16th, 17th, 18th brought temporary relief between the two low-rain periods. The second dry period from 19th through much of the 27th was accompanied mainly by desiccating heat. Then heavy thundershowers developed late evening of the 27th with almost an inch of rain and much needed relief. More heavy thunderstorms late day of the 28th brought an additional 1.12” and resulted in the month’s greatest 24-hour amount of 2.09”. Light rain (0.05”) on the 29th when added resulted in a virtually exactly normal July total of 5.29” (+0.02). Rainfall (no thunder) during the final few hours of this July added a bonus 0.50”. July rainfall totals in Berks County ranged from 2.5 to 7.5 inches. Most places W and NW of Reading were near the low end (<4”) including 2.84” officially for Reading (RDG). Most of the higher-end totals (>6”) occurred 2 to 5 miles S and SE of Reading 4 SW. Last July (2021) was rainier with County totals up to 9”, including 6.95” at Reading 4 SW.

Heat of this July was moderately above normal on average (78.5/+1.9), bolstered by 12 days which heated to at least 90; seven of those days were consecutive from 19th to 25th inclusive with maxima of 96 on 23rd, 24th, and were otherwise scattered. Cool weather was scarce with only one daily low below 60, 57 on the 4th. Further, all 31 days warmed to at least 81, and eleven days failed to cool below 70. The averages of the daily highs and lows contributed equally to the warm anomaly. Although the month high of 96 is typical, it was the consistency of warm to moderately hot days and near-lack of cool temperatures that made this July moderately hot on average. July 2021 averaged near normal in temperature at 76.7. RDG was slightly warmer this July at 79.0, including also 12 days of 90 or above and peaking at 97.

RANKINGS AND EXTREMES FOR THIS MONTH (JULY)

Avg Temp 78.5 – 10th warmest of 39 (71.9 in 2000 to 81.1 in 2011)

Precip 5.79 – 17th wettest of 40 (0.29 in 1999 to 15.54 in 2004)

Snowfall 0.0 – Snow was never observed here during July.