**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

**September 2022**

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

 TEMPERATURES

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

 1 89 61 61

 2 86 55 65

 3 89 61 73

 **4** **93** 67 **74**

 5 86 **70** 71 0.61 Showers PM, few brief downpours

 6 77 69 69 **1.53** Frequent rain, some heavy till 0800, then light

 7 71 66 66 0.08 Light rain afternoon

 8 83 62 62

 9 85 57 62

10 84 56 70

**11** 70 66 67 0.82 Periods of rain, drizzle

12 85 67 71 0.03 (T-)showers in vicinity after 1500, only light

13 82 64 64 T Sprinkle before 0100 12th) Daybreak fog

14 80 58 66

15 76 53 53

16 79 48 58

17 83 54 67

**18** 86 60 71

19 86 62 66 0.04 TS NW-N ~1310; showers mid afternoon

20 83 61 61

21 85 56 71

22 74 56 56 0.12 Mostly light rain dawn till early afternoon

23 67 49 50

24 71 46 59

**25** 69 55 59 0.62 T-showers early afternoon, post-dusk

26 77 57 59

27 70 52 54

28 70 **44** 54

29 68 49 **49**

30 **63** 45 55 T Very light rain after 2000

31 -- -- --

SUM 2382 1760 3.85 0.0 0

MONTHLY STATISTICS

Average Monthly Temperature (Dep): 68.2 (+0.9)

Average Maximum Temperature (Dep): 78.9 (+1.1)

Average Minimum Temperature (Dep): 57.3 (+0.4)

Extreme Daily High Max Temp (Dep): 93 (+3) on 4th (record 97 on 02 Sep 2010)

Extreme Daily High Minimum Temp: 70 on 5th (record 76 on 09 Sep 2016)+

Extreme Daily Low Min Temp (Dep): 44 (+1) on 28th (record 35 on 29 Sep 2000)

Extreme Daily Low Maximum Temp: 63 on 30th (record 53 on 28 Sep 1984)

Heating Degree Days (Season): 46 (46)

Cooling Degree Days (Season): 147 (1311)

+ Most recent of more than one occurrence

 -- more --

Total Monthly Precipitation (Dep): 3.85 (-1.41)

Total Annual Pcpn through Month: 34.62 (-5.63)

Greatest Calendar Day Pcpn: 1.53 on 6th (record 5.95 on 19 Sep 1999)

Greatest Floating 24-Hour Pcpn: 2.14 on 5th-6th (rec 6.83 on 30-01 S-O 2010)

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 Sep 0000)

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

Maximum Depth of Snow/Ice: 0 on

Days with Hail: 0

Days with Thunder (Dep): 3 (-0)

Highest Wind Gust (MPH): 21 on 23rd

Maximum Barometric Pressure: 30.40 on 29th

Minimum Barometric Pressure: 29.59 on 25th

HIGHLIGHTS

The temperature trend changed abruptly exactly at the autumnal equinox, which was evening of the 22nd. Although climatological summer (the 92-day period of the year which are the warmest on average) ended on the 5th, summery weather dominated till the equinox when the running average was about 3 degrees warmer than normal. Then fall temperatures dominated after the equinox, offset much of the earlier temperature excess, and dragged down the final average to 68.2 (+0.9). Throughout the month, no day flaunted a large departure warmer or cooler than normal. Furthermore, the month’s extremes of 93 and 44 were typical. During this September, two long warm streaks ended. The high of 77 on the 6th was the first day since 24 June, 74 days earlier, which failed to warm to at least 80. Later, the high of 67 on the 23rd snapped a similar streak of at least 70 which began 137 days earlier on 9 May. Officially, Reading PA (RDG) sported the same streaks and were historical records which were previously 61 days during summer 2016 and 133 days during 1970. Further, the RDG final average temperature was a similar 67.9 with extremes of 93 and 46. Last September (2021) at Reading 4 SW was even warmer on average at 69.0 with extremes of 89 and 48.

A much-needed soaking began Labor Day (5th) evening with heavy showers which continued into Tuesday the 6th and delivered 2.14” all within 24 hours and with no thunder. This accounted for 56 percent of the entire month’s total of 3.85 (-1.41) as the remainder of September produced only a few light to moderate rainfalls and long dry periods. Therefore, the soaking brought only short-term relief from drought which worsened drastically during a very dry August, and then worsened further later this September. At month’s end, precipitation deficiencies stood at 5.53 for year 2022 and 12.09 for the last 365 days, which corresponds with the 2021-2022 rain year. Three thunderstorms, average for September, were either weak or only in vicinity. September rainfall totals in Berks County ranged mainly within 3 to 6 inches with the majority 4-point-something, including 4.60 at RDG. Last September was much wetter at 9.09, bolstered largely by 5.56 from tropical rainstorm Ida.

RANKINGS AND EXTREMES FOR THIS MONTH (SEPTEMBER)

Avg Temp 68.2 – 12th (2-way) warmest of 39 (63.7 in 2000 to 71.2 in 2005)

Precip 3.85 – 16th driest of 40 (0.83 in 2005 to 13.56 in 1999)

Snowfall 0.0 – Snow was never observed here during September.

Rain year, October 2021 through September 2022, brought total precipitation of 40.70 inches, much below the 1991-2020 normal of 52.79 and within 5 inches of the least 12-month running total during 40 years of record.