**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 2024**

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

TEMPERATURES

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

**1** **90** **71** **73** 0.01 Shower between 0945 and 1000

2 81 60 60

3 76 49 53

4 81 48 56

5 82 49 60

6 83 59 69

7 75 54 56 **0.45** Rain/drizzle midday > mid-aft; hvy shower ~1210

**8** 73 50 **50**

9 79 **46** 61

10 83 53 57

11 85 52 61

12 84 55 61

13 86 57 61

14 89 56 64

**15** 86 57 61

16 80 52 61

17 82 61 69

18 80 66 67 0.01 Occasional light rain, drizzle AM

19 88 62 62

20 88 57 67

21 84 66 68 T Brief drizzle ~0730; distant LTG W at midnight

**22** 82 64 65 0.01 Light rain wee hours

23 **65** 59 59 0.23 Light rain or drizzle late AM onward

24 69 59 62 T Brief light rain at 0900

25 66 60 65 0.22 Frequent drizzle, occasional rain

26 77 65 70 0.14 Ditto till mid-afternoon; fog very late evening

27 71 65 65 0.13 Early fog; freq drizzle, occasional light rain

28 71 63 63 0.16 Drizzle or light rain into evening

**29** **65** 62 63 0.01 Occasional drizzle

30 72 61 63 0.01 Sprinkles at times, mostly after dusk

31 -- -- --

SUM 2373 1738 1.38 0.0 0

MONTHLY STATISTICS

Average Monthly Temperature (Dep): 68.5 (+1.2)

Average Maximum Temperature (Dep): 79.1 (+1.3)

Average Minimum Temperature (Dep): 57.9 (+1.0)

Extreme Daily High Max Temp (Dep): 90 (-0) on 1st (record 97 on 07 Sep 2023)+

Extreme Daily High Minimum Temp: 71 on 1st (record 76 on 09 Sep 2016)+

Extreme Daily Low Min Temp (Dep): 46 (+4) on 9th (record 35 on 29 Sep 2000)

Extreme Daily Low Maximum Temp: 65 on 23rd, 29th (record 53 on 28 Sep 1984)

Heating Degree Days (Season): 14 (18)

Cooling Degree Days (Season): 128 (1391)

+ Most recent of more than one occurrence

-- more --

Total Monthly Precipitation (Dep): 1.38 (-3.88)

Total Annual Pcpn through Month: 39.93 (-0.32)

Greatest Calendar Day Pcpn: 0.45 on 7th (record 5.95 on 19 Sep 1999)

Greatest Floating 24-Hour Pcpn: 0.45 on 7th-7th (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): 0 (-3)

Highest Wind Gust (MPH): 17 on 8th

Maximum Barometric Pressure: 30.41 on 4th

Minimum Barometric Pressure: 29.81 on 7th

HIGHLIGHTS

This September was dominated by two contrasting long-duration weather patterns of which the abrupt switch occurred at the autumnal equinox. This late summer brought day after day of mainly sunny days and clear nights interrupted only briefly by a few hours of rain on the 7th which amounted to a modest 0.45” but ended as the greatest rain of the month. Early fall, even beyond month end, brought mainly dense overcast with persistent drizzle or occasional rain during which days were gloomy with almost no sunshine. The earlier fair weather began quite warm with the month’s highest of 90 and warmest daily low which was 71. Mild to cool temperatures prevailed from 2nd to 10th during which the month’s lowest of 46 occurred early on the 9th. Warmer weather followed until the change to gloomy. The clear skies allowed comfortably cool overnight temperatures even after very warm days. Conversely, the persistent dense overcast prevented much range between daily highs and lows. A range of only 3 degrees, 62 to 65, marked the 29th. That 65, and also on the 23rd, became the coolest daily highs of the month. No unusually cool or warm temperature occurred this September. And the final average temperature of 68.5 (+1.2) consisted of averages of daily highs and lows of nearly equal anomaly. September 2023 brought nearly same average temperatures of 68.3/78.7/58.0 despite much different trends and included extremes of 97/47. Officially for Reading PA (RDG), the average for September 2024 was close at 68.6 with highest/lowest of 89/47.

September total rainfall of 1.38” became fourth driest of 42. The frequent drizzle and occasional light rain after the equinox brought small daily amounts totaling only 0.92” over nine days. Thunder was absent this September for only the second September during last 42 years. A thunderstorm to NW-W late evening of 21st was too distant to be audible at Reading 4 SW. September 2023 was much wetter with total of 8.81” and consisted of numerous thunderstorms and a long-duration soaking. September rainfall totals within Berks County varied narrowly mainly within 1.0 to 1.5 inches, including 1.08 at RDG. However, some places in western and north-central Berks saw slightly over 2.0 inches. That is where that aforementioned thunderstorm with localized downpour prowled.

RANKINGS AND EXTREMES FOR THIS MONTH (SEPTEMBER)

Avg Temp 68.5 – 11th warmest of 41 (63.7 in 2000 to 71.2 in 2005)

Precip 1.38 – 4th driest of 42 (0.83 in 2005 to 13.56 in 1999)

Snowfall 0.0 – Snow was never observed here during September.

Rain year, October 2023 through September 2024, brought total precipitation of 53.52 inches, which is 0.73 above the 1991-2020 average of 52.79 and almost the same as 53.80 of the 2022-2023 rain year. December, January, March and August were significantly excessive while October and September were quite deficient.