**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 2023**

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

TEMPERATURES

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

1 79 52 57

2 86 53 71

**3** 92 63 72

4 95 **70** **76**

5 95 69 75

6 96 **70** 73

7 **97** 69 69 0.79 VCTS late aft’n to mid eve, brief downpours

8 90 67 71 0.15 VCTS, light to moderate rain evening

9 90 67 67 **1.98** VCTS late aft’n; intense TSTM dusk-early night

**10** 82 67 68 1.07 Rain at times; TSTM w/ brief torrent late aft’n

11 82 66 66 0.57 Rain wee hours; VCTS mid-afternoon, downpour

12 86 60 70 0.08 TS approaching toward midnight

13 83 59 59 0.87 Heavy TS till 0100; sprinkles till forenoon

14 77 58 58

15 77 52 57

16 78 51 54

**17** 71 50 64 0.47 Occasional rain, mostly light, PM

18 75 57 57 0.07 Little drizzle AM; shower 1305-1335

19 74 52 52

20 78 49 54

21 76 50 53

22 74 49 61

23 61 56 60 1.03 Rain, mostly predawn to mid-afternoon

**24** 63 59 60 1.43 Rain much of calendar day, mostly daylight

25 66 57 57 0.14 Occasional drizzle or light rain

26 **60** 56 57 0.04 Periods of drizzle

27 69 49 **49**

28 65 **47** 60 T Few drops after dusk

29 68 57 61 0.08 Drizzle, light rain AM

30 75 59 59 0.04 Light rain before dawn

31 -- -- --

SUM 2360 1740 8.81 0.0 0

MONTHLY STATISTICS

Average Monthly Temperature (Dep): 68.3 (+1.0)

Average Maximum Temperature (Dep): 78.7 (+0.9)

Average Minimum Temperature (Dep): 58.0 (+1.1)

Extreme Daily High Max Temp (Dep): 97 (+7) on 7th (record 97 on 04 Sep 2010)$

Extreme Daily High Minimum Temp: 70 on 4th, 6th (record 76 on 09 Sep 2016)+

Extreme Daily Low Min Temp (Dep): 47 (+5) on 28th (record 35 on 29 Sep 2000)

Extreme Daily Low Maximum Temp: 60 on 26th (record 53 on 28 Sep 1984)

Heating Degree Days (Season): 49 (49)

Cooling Degree Days (Season): 157 (1107)

+ Most recent of more than one occurrence

$ Tied record

-- more --

Total Monthly Precipitation (Dep): 8.81 (+3.55)

Total Annual Pcpn through Month: 40.48 (+0.23)

Greatest Calendar Day Pcpn: 1.98 on 9th (record 5.95 on 19 Sep 1999)

Greatest Floating 24-Hour Pcpn: 2.83 on 9th-10th (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): 7 (+4)

Highest Wind Gust (MPH): 29 on 7th

Maximum Barometric Pressure: 30.37 on 26th, 27th

Minimum Barometric Pressure: 29.72 on 7th

HIGHLIGHTS

This September was bi-polar temperature-wise. After a cool start, temperatures trended upward. Every day from the 3rd through 13th averaged above normal and was keyed by seven consecutive days with highs in the 90s from 3rd through 9th, including a highest of 97 on the 7th. That 97 tied hottest September temperature during 40 years of record. However, corresponding low temperatures were not so unusual and included two lows of only 70. Afterward, temperatures trended cooler gradually, not sinking to below normal until the 15th. Then every day averaged below normal through the 28th. The cool spell was bolstered by persistently gloomy skies and prevailing northeasterly flow. These factors caused seven consecutive days with highs in the 60s, including 60 on the 26th. The daily lows were not so anomalous but included a 47 on the 28th and two 49s. But these really cool highs under dense overcast likely resulted in a feel considerably cooler than it really was. The initial coolness and later warming at month’s end bucked the dominant patterns of the respective halves. The hefty temperature excess that accrued during the first half was nearly offset during the second half but finished slightly above average at 68.3 (+1.0). Temperatures last September (2022) averaged almost the same at 68.2 with extremes of 93 and 46. Officially for Reading PA (RDG), this September averaged 68.5 with extremes of 98 and 49 and included two new date record highs during the heat wave.

Rainfall was excessive totaling 8.81” (+3.55), good for 9th wettest of 41, and came mostly during two long wet spells. The first began on the 7th immediately after the peak heat. Thunderstorms, some very strong, prowled the vicinity at times for nearly seven days during which Reading 4 SW collected 5.51”, even as much as 2.83 within 24 hours beginning at dusk of the 9th from multiple downpours, including 1” within 15 minutes. The second brought prolonged light to moderate rain most of the 23rd and 24th (2.46) then infrequent light rain or drizzle five more days (0.30), all with cool temperatures. September 2022 was much less rainy with 3.85”. Monthly rainfalls in Berks County ranged from as little as 4.5” to over 10” with the number of and duration of thunderstorm downpours accounting for much of the variability. An area 2 to 5 miles S and SW of Reading 4 SW contained several reports of 10 to 11 inches plus one dubious but plausible total of 13.60 right where radar estimation was greatest. RDG collected 5.64 this September.

RANKINGS AND EXTREMES FOR THIS MONTH (SEPTEMBER)

Avg Temp 68.3 – 13th warmest of 40 (63.7 in 2000 to 71.2 in 2005)

Precip 8.81 – 9th wettest of 41 (0.83 in 2005 to 13.56 in 1999)

Snowfall 0.0 – Snow was never observed here during September.

Rain year, October 2022 through September 2023, brought total precipitation of 53.80 inches, which is 1.01 above the 1991-2020 normal of 52.79. July and September contributed most significantly with 11.25 and 8.81 respectively.