**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 2020**

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

TEMPERATURES

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

1 77 64 71 0.01 Light rain late afternoon

2 83 70 **76** 0.16 Lgt rain, drizzle AM; gentle t-shower nightfall

3 84 70 70 0.59 Afternoon sprinkles; early evening t-shower

4 85 65 65

5 80 54 66

**6** 84 57 64

7 84 62 66

8 **86** 60 68 Morning dense fog till 0800

9 **86** 66 74 0.12 Showers after 2230

10 80 **73** 74 0.50 Showers at times through mid afternoon

11 77 68 68 T Feeble sprinkles before dawn

12 74 57 57

**13** 81 53 70 T Few drops, little drizzle briefly at times

14 76 54 55 Morning low temp 66

15 68 46 48

16 73 44 54

17 75 52 63

18 75 49 49 Morning low temp 59

19 **66** 40 **42**

**20** **66** **37** **42**

21 68 **37 42**

22 76 38 58

23 84 53 58

24 75 55 58

25 79 54 57

26 68 57 67 0.40 Brief hvy shower ~0735; o/w periods of lgt rain

**27** 76 66 70 0.06 Drizzle ~1700; shower late evening

28 83 66 70 T Sprinkles long before dawn

29 82 57 57 **2.16** Rain after 1600, steady & fqtly hvy after dusk

30 71 55 60 0.42 Light to moderate rain before dawn

31 -- -- --

SUM 2322 1670 4.42 0.0 0

MONTHLY STATISTICS

Average Monthly Temperature (Dep): 66.7 (+0.1)

Average Maximum Temperature (Dep): 77.4 (+0.4)

Average Minimum Temperature (Dep): 56.0 (-0.3)

Extreme Daily High Max Temp (Dep): 86 (-4) on 8,9th (record 97 on 02 Sep 2010)

Extreme Daily High Minimum Temp: 73 on 10th (record 76 on 09 Sep 2016)+

Extreme Daily Low Min Temp (Dep): 37 (-5) on 20,21st (record 35 on 29 Sep 2000)

Extreme Daily Low Maximum Temp: 66 on 19th, 20th (record 53 on 28 Sep 1984)

Heating Degree Days (Season): 67 (67)

Cooling Degree Days (Season): 125 (1294)

+ Most recent of more than one occurrence

-- more --

Total Monthly Precipitation (Dep): 4.42 (-0.70)

Total Annual Pcpn through Month: 42.12 (+3.01)

Greatest Calendar Day Pcpn: 2.16 on 29th (record 5.95 on 19 Sep 1999)

Greatest Floating 24-Hour Pcpn: 2.58 on 29-30th (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): 19 on 30th

Maximum Barometric Pressure: 30.61 on 21st

Minimum Barometric Pressure: 29.51 on 30th

HIGHLIGHTS

A stretch of mainly dry days, interrupted by only a few light to moderate rainfalls, that began after the first week of August continued through almost all of September. Rain developed late afternoon of the 29th as only occasional sprinkles, then became steady and frequently heavy to briefly intense after dusk, then light to moderate on the 30th till dawn. The amount of 2.58” within 12 hours surpassed the 2.49” of the previous 52 days and was the major contributor to the monthly total of 4.42 (-0.70). Brief downpours of over an inch not too far away on the 3rd and 10th were isolated. Moderately dry grounds for most of this September improved to favorably moist by month’s end. Absorbative thirsty soils minimized flooding the widespread 1.75 to 2.75 inches of rain in a rather short period usually would cause. Rains of 0.40 and 0.06 on the 26th and 27th respectively, after 15 consecutive days of no or sub-measurable rain, helped to prep the soils for that absorption. Last September (2019) was mainly dry following heavy thunderstorms on Labor Day (2nd) with a total of only 2.20. September total rainfall in Berks County ranged mainly from 3 to 5¼ inches but were slightly less far west and isolated spots NE, and as much as 6.86 at Alleghenyville in Brecknock Township, 6 miles S of Reading 4 SW. Officially, Reading (RDG) had exactly 4.00.

Typical late summer weather dominated September 2020.  While no day was hot, medium warmth was consistent with 13 days warming to at least 80, the highest 86 on the 8th and 9th.  This monthly high was the coolest September highest since a highest of 84 during September 2009 and the first sub-90 September highest since 2011. Abnormally cool weather was absent through the first 14 days, allowing a significant excess in temperature to accrue.  Then the following seven days were abnormally cool, enough to erase the excess, and then some.  The return to warmer, including 84 on the 23rd, resulted in a normal final average temperature of 66.7 (67.0 at RDG), but was still the coolest September since 2013, which averaged 65.6. While daily high temperatures averaged slightly above normal, average daily lows averaged slightly subnormal. Three consecutive lows in the upper 30s, with isolated light frosts, marked the first occurrence of any sub-40 temperature in September since 35 on 29 September 2000. Slow-moving high pressure system from northern Canada brought this abnormally cool weather and a very abnormal for September high barometer of 30.61 in\*Hg, as well as playing a major role in the aforementioned long dry streak. September 2019 was warmer with average of 69.3.

RANKINGS AND EXTREMES FOR THIS MONTH (SEPTEMBER)

Avg Temp 66.7 – 19th warmest of 37 (63.7 in 2000 to 71.2 in 2005)

Precip 4.42 – 21st driest of 38 (0.83 in 2005 to 13.56 in 1999)

Snowfall 0.0 – Snow was never observed here during September.