**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 2020**

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

 TEMPERATURES

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

 1 87 65 70 Moderate shower 1.5 mile E ~1300

 2 93 66 73

 3 96 69 71 0.11 Early eve TSTM complex, missed downpours

 4 91 68 73 Typical Independence Day weather

 **5** 95 70 76

 6 **98** 69 69 0.56 TSTM complex early eve, dusk

 7 86 69 76

 8 90 72 73 1.09 Cb N-NE early aft; heavy TSTM late afternoon

 9 93 73 76

10 **76** 72 73 1.67 TS Fay (Wrn edge); all-day rain, heavy late aft

11 89 69 74 T Sprinkles in area mid afternoon

**12** 89 67 69 **1.70** Eve TSTMs,1.00 in 14 min ending 1744

13 86 66 **68**

14 87 **62** **68**

15 90 64 72

16 83 69 71 T Feeble drops at times during evening

17 90 70 70 T Sprinkle before dawn

18 93 65 74

**19** 97 69 **84** T Few drops ~1825

20 96 **75** 75 Early morning low temp 81

21 94 70 74 0.12 TSTM during dusk, rain much heavier nearby S-SE

22 93 72 72 0.73 Late aft TSTM then light rain into early eve

23 90 72 79 0.19 Light rain mid-morning, showers mid afternoon

24 86 72 73 0.17 Showers, distant thunder predawn; sprinkles PM

25 91 71 77 Foggy (1/8 mile) at daybreak, gone by 0800

**26** 93 73 74

27 95 68 83

28 92 74 74

29 92 68 76

30 93 69 76 T Distant lightning, sprinkle late evening

31 86 71 71 0.03 Light rain briefly at times AM, early PM

SUM 2810 2149 6.37 0.0 0

MONTHLY STATISTICS

Average Monthly Temperature (Dep): 80.0 (+4.0)

Average Maximum Temperature (Dep): 90.6 (+4.0)

Average Minimum Temperature (Dep): 69.3 (+3.9)

Extreme Daily High Max Temp (Dep): 98 (+2) on 6th (record 105 on 22 Jul 2011)

Extreme Daily High Minimum Temp: 75 on 20th (record 82 on 05 Jul 1999)

Extreme Daily Low Min Temp (Dep): 62 (+7) on 1st (record 49 on 01 Jul 1988)+

Extreme Daily Low Maximum Temp: 76 on 10th (record 65 on 24 Jul 1997)+

Heating Degree Days (Season): 0 (0)

Cooling Degree Days (Season): 470 (791)

+ Most recent of more than one occurrence

 -- more --

Total Monthly Precipitation (Dep): 6.37 (+0.94)

Total Annual Pcpn through Month: 30.06 (+0.06)

Greatest Calendar Day Pcpn: 1.70 on 12th (record 5.12 12 Jul 2004)

Greatest Floating 24-Hour Pcpn: 1.70 on 12th-12th (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: 0 on

Days with Hail: 0

Days with Thunder (Dep): 7 (-1)

Highest Wind Gust (MPH): 23 on 21st, 22nd

Maximum Barometric Pressure: 30.27 on 16th

Minimum Barometric Pressure: 29.63 on 11th

HIGHLIGHTS

Very warm to hot days with oppressive humidity (dew points mostly in the 70s to around 80) persisted from beginning to end, nearly non-stop this July, resulting in an average temperature of 80.0, good for third hottest July in 37 years behind 80.6 in 1999 and 81.1 in 2011. Twenty-one days heated to at least 90 (max 98) to tie 1999 and 2011 for most 90 or above in July and any month. Officially for Reading (RDG), the count was a new record 22 (max 99), contributing to an average of 80.2, third hottest in 123 years to 2011 (80.4) and 1955 (81.5). One day failed to warm to 80 (76 on 10th)), only because of dawn-to-dusk timing of steady rain. Only one other day failed to warm to at least 86 (30°C). Further, only seven days cooled below 68 (20°C), lowest 62. The persistence of oppressive conditions caused high cooling demand as gauged by 470 cooling degree days, a value more typical of a mid-south location. Last July (2019) at Reading 4 SW also was toasty with average of 78.6 and extremes of 61/97.

Like June, rainfall was front-end loaded, with 5.13 of the total 6.37 falling by the 12th, including 5.01 from four separate (fair weather in between) storm systems every other day within a seven-day period ending on the 12th. The system on the 10th was an all-day steady rain (1.67) from near the western edge of coastal TS Fay. The others were from thunderstorms, each locally very heavy somewhere in the Reading area, but especially early evening of the 12th at Reading 4 SW which slightly topped Fay’s rainfall with 1.70, including 1.00 in 14 minutes. A month total of 6.37 should seem to be sufficient to rule out minor drought. However, two long dry periods after the 12th, accompanied by persistent heat and desiccating sunshine, dried top soils enough to turn some grasses brown and slightly stress vegetation. Light to moderate showers and thundershowers totaling 1.21 from 21st to 24th brought temporary relief. Outside of general rain from TS Fay, the character of showers and thunderstorm downpours was scattered throughout Berks County and resulted in a wide range of monthly rainfall totals from 3 to 9 inches. The heavier amounts were concentrated, but not limited to, Reading’s northern suburbs and interior eastern Berks County. RDG’s July total was 7.48. July 2019 in Berks County was frequently wet with moderate to severe flooding numerous places; Reading 4 SW collected 7.30.

RANKINGS AND EXTREMES FOR THIS MONTH (JULY)

Avg Temp 80.0 – 3rd warmest of 37 (71.9 in 2000 to 81.1 in 2011)

Precip 6.37 – 15th wettest of 38 (0.29 in 1999 to 15.54 in 2004)

Snowfall 0.0 – Snow was never observed here during July.