**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

**December 2023**

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

 TEMPERATURES \*

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

1. 44 30 44 0.28 Rain late AM to late eve; foggy late

 2 56 44 48 T Foggy AM; light rain toward midnight

 **3** 52 47 47 0.59 Rain/drizzle/fog mostly AM except shower ~1921

 4 50 36 37

 5 45 31 39

 6 43 33 33 T T Minor flurries at times 7 to 11 AM

 7 38 27 37 0.05 0.4 0 Snow 0745 to noontime; coating gone by 1300

8 54 29 33 Fog patches predawn

 9 52 32 38

**10** **60** 38 44 1.95 Rain daybreak; heavy at times after 1600

11 46 34 36 0.49 0.1 0 Rain till dawn, ended mixed with slush

12 46 27 34

13 46 25 23

14 43 **24** 29

15 57 25 33

16 57 29 49

**17** 53 43 **53** 1.40 Ocnl light rain, drizzle dawn to dusk, then…

18 56 38 38 **2.08** …soaking rain overnight to 1000; few drops PM

19 41 31 31 0.01 0.1 0 Snow shower predawn, brief slight coating

20 46 26 35

21 46 28 **28**

22 **33** 25 31

23 45 31 40

**24** 47 39 42 0.01 Little rain predawn, dusk

25 53 37 38 Mostly cloudy, little sun; sprinkles to S

26 47 38 45 0.01 Sprinkles at times

27 52 44 52 1.81 Rain, mostly after dusk

28 55 **49** 49 0.06 Persistent drizzle, some light rain

29 54 36 36

30 46 33 37

**31** 45 37 38 0.01 Light rain well after dusk

SUM 1508 1046 8.75 0.6 0 \* Snow pack depth at midnight

MONTHLY STATISTICS

Average Monthly Temperature (Dep): 41.2 (+4.9)

Average Maximum Temperature (Dep): 48.6 (+4.6)

Average Minimum Temperature (Dep): 33.7 (+5.1)

Extreme Daily High Max Temp (Dep): 60 (-2) on 10th (record 77 on 29 Dec 1984)

Extreme Daily High Minimum Temp: 49 on 28th (record 60 on 22 Dec 2013)

Extreme Daily Low Min Temp (Dep): 24 (+10) on 14th (record -2 on 24 Dec 1989)

Extreme Daily Low Maximum Temp: 33 on 22nd (record 16 on 24 Dec 2022)+

Heating Degree Days (Season): 734 (1657)

Cooling Degree Days (Season): 0 (1142)

+ Most recent of more than one occurrence

 -- more --

Total Monthly Precipitation (Dep): 8.75 (+4.50)

Total Annual Pcpn through Month: 54.06 (+1.27)

Greatest Calendar Day Pcpn: 2.08 on 18th (record 3.27 on 12 Dec 1983)

Greatest Floating 24-Hour Pcpn: 3.48 on 17-18th (rec 3.90 on 04-05 Dec 1993)

Total Monthly Snowfall (Dep): 0.6 (-3.6)

Total Season Snowfall (Dep): 0.7 (-4.2)

Greatest Calendar Day Snowfall: 0.4 on 7th (record 8.5 on 05 Dec 2005)

Greatest Floating 24-Hour Snowfl: 0.4 on 7th-7th (rec 10.0 on 27-28 Dec 1990)

Maximum Depth of Snow/Ice: T on 7th

Days with Hail: 0

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

Highest Wind Gust (MPH): 25 on 19th

Maximum Barometric Pressure: 30.73 on 14th

Minimum Barometric Pressure: 29.13 on 18th

HIGHLIGHTS

December 2023 became progressively wetter after much-needed rains of late November and ultimately wiped away the last vestiges of areal drought that prevailed during year 2023. December precipitation, which amounted to 8.75” (+4.50), ultimately rallied past the whole-year 1991-2020 30-year average of 52.79” to 54.06”, clinched by a soaking of 1.81” on the 27th. However, that storm played “third fiddle” to 24-hour drenchings of 2.44” on 10th-11th and 3.48” on 17th-18th, the latter of which placed third greatest 24-hour precipitation during December in 41 years, tops 3.90” during 4th-5th December 1993. Besides, the final 8.75” placed third wettest December, slightly behind 8.89” (1996) but distant to 11.76” (1983). These rainstorms caused some moderate, but mostly only minor flooding in Berks County. Only a little of all this precipitation fell as snow which totaled 0.6” from three separate scattered coatings (pavements wet), each of which melted within a few hours after snow ended. The greatest was 0.4” morning of the 7th. December 2022 was rather wet at 5.29”, which included the melt of 0.5” of snow. December precipitation in Berks County totaled mainly within the range of 7 to 10 inches and included 7.70” officially for Reading (RDG) PA.

Besides wet, this December was mainly mild and resulted in a mean temperature of 41.2 °F (+4.9), which was only 2.4 degrees cooler than November. Arctic air incursions were absent, and cloudiness dominated, which prevented much cooling during most nights. This dominance resulted in the average of the daily lows (33.7/+5.1) to be slightly more anomalous that the daily highs average (48.6/+4.6). However, a few-days stretch of fair weather, including clear and calm nights, permitted frost formation five consecutive early mornings during the middle week of the month. This month’s coolest of 24 occurred early on the 14th and marked second least cool December low to 25 in 1984 and 2015. The month’s warmest of 60 occurred during the first copious rainstorm on the 10th. The 24 was 10 degrees above, and the 60 was 2 below typical December extremes. The 15 freezing lows were fewer than the 20 of November which contained many clear, calm nights. These included a coolest high of 33 on 22nd, only one of two daily highs below 40. Further, mid-month featured extremes of barometric pressure. The highest of 30.73 in\*Hg accompanied the low temperature of 24 on the 14th, and then was followed by a precipitous fall to 29.13 in\*Hg by early morning the 18th amidst heavy rain. Highest winds of 24 to 25 mph also occurred near this time. December 2022 was cooler at 35.6 with extremes of 5/62. Officially, RDG averaged 41.5 with extremes also 24/60.

RANKINGS AND EXTREMES FOR THIS MONTH (DECEMBER)

Avg Temp 41.2 – 5th warmest of 40 (23.8 in 1989 to 47.5 in 2015)

Precip 8.75 – 3rd wettest of 41 (0.65 in 1998 to 11.76 in 1983)

Snowfall 0.6 – 15th least (3-way) of 41 (T in 9 years to 17.3 in 1995)

The cooling year ended 31 December with 1142 cooling degree days (CDD), less than 2022’s 1320 and about the same as the 39-year average of 1140 CCD. The first CDD accrued on 6 April (2), and the last accrual was on 28 October (4). July contributed most at 425. And there were no very anomalous contributions by any month.