**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 2024**

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

TEMPERATURES \*

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

1. 41 23 23

2 41 18 31

3 41 25 27

4 40 21 40 T T Very light rain, slush late evening

5 41 29 29 0.08 0.1 0 Light rain AM > snow ~1300, squall 1330-1345

6 37 28 29

7 37 29 36

**8** 59 33 33

9 44 31 44 0.32 Rain 0900-1500; foggy late eve and much of 10th

10 51 **44** 51 0.16 Rain/drizzle after 1600; faint thunder late eve

11 62 37 37 **1.71** Rain till mid-evening, heaviest 1500 hour

12 40 23 23

13 35 20 20

14 37 15 22

**15** 36 20 34 0.08 0.1 T Light snow > mix (PL) > rain after dusk

16 45 34 45 0.51 Frequent drizzle, ocnl rain, foggy at times

17 57 34 34 0.02 Drizzle, fog AM, clearing PM

18 53 29 43 0.18 Light rain between 1400 and 2300

19 44 32 32

20 35 30 33 0.12 **1.2** **1** Light snow mostly PM, pavements mostly wet

21 33 20 20 T T T Feeble flakes few minutes

**22** **26** 13 **13** T

23 30 **8** 27 T

24 37 23 33 0.02 0.2 T Light snow predawn to daybreak

25 40 31 31 0

26 34 24 24

27 45 21 38 0.02 Light rain from 2300 and afterward

28 44 37 42 0.52 Fqt rain till 1000 then drizzle, some rain, fog

**29** **65** 42 **60** 0.26 Fog early; showers before 0800, late evening…

30 60 37 37 T …till shortly past midnight

31 58 29 44 0.43 Rain, embedded t-showers 1910-2210

SUM 1348 840 4.43 1.6 1 \* Snow pack depth at midnight

MONTHLY STATISTICS

Average Monthly Temperature (Dep): 35.3 (-1.0)

Average Maximum Temperature (Dep): 43.5 (-0.5)

Average Minimum Temperature (Dep): 27.1 (-1.5)

Extreme Daily High Max Temp (Dep): 65 (+3) on 29th (record 77 on 29 Dec 1984)

Extreme Daily High Minimum Temp: 44 on 10th (record 60 on 22 Dec 2013)

Extreme Daily Low Min Temp (Dep): 8 (-6) on 23rd (record -2 on 24 Dec 1989)

Extreme Daily Low Maximum Temp: 26 on 22nd (record 16 on 24 Dec 2022)+

Heating Degree Days (Season): 912 (1624)

Cooling Degree Days (Season): 0 (1411)

+ Most recent of more than one occurrence

-- more --

Total Monthly Precipitation (Dep): 4.43 (+0.18)

Total Annual Pcpn through Month: 46.68 (-6.11)

Greatest Calendar Day Pcpn: 1.71 on 11th (record 3.27 on 12 Dec 1983)

Greatest Floating 24-Hour Pcpn: 1.80 on 10-11th (rec 3.90 on 04-05 Dec 1993)

Total Monthly Snowfall (Dep): 1.6 (-2.6)

Total Season Snowfall (Dep): 1.6 (-3.3)

Greatest Calendar Day Snowfall: 1.2 on 20th (record 8.5 on 05 Dec 2005)

Greatest Floating 24-Hour Snowfl: 1.2 on 20th-20th (rec 10.0 on 27-28 Dec 1990)

Maximum Depth of Snow/Ice: 1 on 20th

Days with Hail: 0

Days with Thunder (Dep): 2 (+2)

Highest Wind Gust (MPH): 30 on 5th

Maximum Barometric Pressure: 30.97 on 14th

Minimum Barometric Pressure: 29.40 on 11th

HIGHLIGHTS

December 2024 continued the chilly pattern which began at Thanksgiving. Colder than average dominated till near end of the month and allowed only brief periods of moderation. The monthly running average temperature sank to 3 degrees below normal by the 27th. Then a late-month rally of mildness brought the final average to 35.3°F which is 1.0 degree subnormal. Warmth peaked on the 29th with a high of 65. While cold was king, a low of 8 was observed early on the 23rd, which came after a high of 26 the previous day and was followed by a high of 30 the same day. These were the only two daily highs not above freezing. This cold snap between the winter solstice and Christmas Eve was coldest in two years when a brief cold wave centered on Christmas Eve 2022 was slightly colder. Christmas Day this year brought seasonable temperatures with low/high of 31/40. A typical lowest barometer with sea level pressure (SLP) of 29.40 in\*Hg on the 11th rebounded robustly all the way to a very high SLP of 30.97 in\*Hg on the 14th which became highest during the 42 years of record at Reading 4 SW. The all-time highest SLP in the Eastern Pennsylvania region occurred on 13 February 1981 with peak SLP between 31.05 and 31.10 in\*Hg. December 2023 averaged milder at 41.2°F with extremes of 24/60. Officially for Reading PA (RDG) the final average also was 35.3 with the same extremes of 8/65 as at Reading 4 SW.

December 2024 seemed quite wet having followed 3½ months of meager precipitation. Actually, it finished with only a high-end normal total precipitation of 4.43” (+0.23) and was keyed by a soaking of 1.71” on the 11th, the far greater part of 1.80 in 24 hours that spanned the 10th-11th. These became the greatest such amounts since the second week of August and was helpful is alleviating the prevailing severe drought. A few more storms of this magnitude would be needed to eliminate the drought. The 4.43” of precipitation included the melt of 1.6” of snow (-2.6) which was keyed by 1.2” on the 20th. Its remnants vanished before Christmas morning. December 2023 was much rainier at 8.75”. December 2024 precipitation totals in Berks County ranged from 3.5 to 5.0 inches and included the melt of 1 to 4 inches of snow, greatest north. Officially, RDG was near the bottom at 3.50”. Lastly, thunder rumbled on two different days this December. The only December with more days with thunder was 1983 with three. Rumbling was rather gentle with both occurrences.

RANKINGS AND EXTREMES FOR THIS MONTH (DECEMBER)

Avg Temp 35.3 – 14th coolest of 41 (23.8 in 1989 to 47.5 in 2015)

Precip 4.43 – 17th wettest of 42 (0.65 in 1998 to 11.76 in 1983)

Snowfall 1.6 – 23rd least of 42 (T in 9 years to 17.3 in 1995)

The cooling year ended 31 December with 1411 cooling degree days (CDD), much more than 2023’s 1142 and the 40-year average of 1147 CCD. The first CDD accrued on 15 April (5), and the last accrued on 6 November (8). July contributed most at 458. Fifteen (15) CDD accrued after 12 October despite only 3 earlier in October. The 9 in Nov tied with 2022 for most CDD in November. June’s 340 became a new most during that month (prev. 320/2010).