

MONTHLY WEATHER DATA AND OBS - WESTMONT 1.1W PA

MAY 2010

OBSERVER NATE MULLINS

Special Observations: F=fog, T=thunder, H=hail,
S=sleet, G=glaze, DW=damaging winds
Observation time for this station is midnight.

Date	Temperature, °F			Precipitation, In.			Special Obs.
	24-hour Max	Min	At Obs	Liquid Rain Equiv	Solid Snow/Ice	7am Snow Depth	
1	84	52	70	T			
2	70	61	62	0.56			F
3	73	60	60	0.39			F
4	69	52	54	0.08			H
5	80	44	61				
6	70	49	49	0.15			T
7	73	39	58				
8	71	37	37	0.94			T,DW
9	47	33	35	0.16	T		
10	58	31	40				
11	43	34	43	1.36	T		F,S,T
12	58	43	49	0.31			F,T
13	54	46	52	0.03			F
14	79	52	59	0.68			F,T,H,DW
15	69	47	53				F
16	75	47	55				
17	55	46	47	1.37			F
18	50	46	46	0.23			F
19	64	45	50				
20	84	46	58				
21	78	49	64				
22	64	57	58	0.95			F
23	74	57	59	0.08			F
24	73	57	59	0.02			
25	81	56	64				
26	89	55	71				
27	89	59	69				
28	87	58	60	0.16			F,T
29	84	59	65				F
30	90	53	65				
31	84	57	65	0.16			T
AVG/SUM	71.6	49.3	56.0	7.63	T	-	
EXT	90	31	71/35	1.37	T	-	
Date	30	10	26/09	17	11*	-	

* = Also occurred on earlier dates

Miscellaneous Stats

Mean Monthly Temperature: 60.4 °F (+1.7 °F)

Year precipitation to date: 24.24" (+5.02"); Monthly precipitation departure: 7.63" vs. 4.31" (+3.32")

Season snowfall to date: 163.7"

Number of days with: Fog 13, Sleet 1, Glaze 0, Thunder 7, Hail 2, Damaging Winds 2

DETAILED OBSERVATION NOTES

VERY WARM

1: Very warm and mostly sunny with a slight increase in humidity and becoming cloudy around 7pm with a few sprinkles. Warm & actually a bit muggy overnight as humidities increased.

SHOWERY

2: Mild low 61 F this morning. Not much of a temperature rebound as the clouds did not break, which resulted in the lack of thunderstorms or extended periods of heavy rain. A few showers in the early PM hours and again late this evening were heavy at times, dropping a total of .56" of rain.

3: Light rain showers overnight. A shower from 9:30-10am with a brief downpour. 0.39" of rain by 10 am. Clouds began breaking in the early afternoon, yielding to a fair, calm & pleasant evening.

4: Variable clouds and breezy and despite low humidities we had a brief localized shower with pea-sized hail at 1:35pm. Moderate breezes (gusts to 20) from the west all day. Fair evening.

5: Clear & seasonably cool overnight low 44 F then mostly sunny, warm and breezy with WSW gusts 20+ mph and a high of 80 F.

6: A thunderstorm early this morning around 5:15am, .15" fell. Skies cleared during the morning yielding a mostly sunny and seasonable afternoon with low humidities and strong W breezes.

7: Clear and cool early, then increasing high clouds. Mostly cloudy with very weak sun, gradually clearing in the PM hours then partly cloudy after sunset. Seasonably mild, strong south breezes.

WINDY - HEAVY RAIN - BECOMING VERY CHILLY - LATE SEASON SNOWFLAKES

8: A warming trend overnight to an early high of 71 at 3am, breezy with a thunderstorm at 4am and heavy rain continuing through 6:30am .83" fell in the 2 1/2 hour period with winds increasing and temperatures falling again. Very windy all day with sustained west winds 15-25 mph and gusts 45+ with some minor tree damage and scattered power outages throughout town. A downburst with wind gusts to 69 mph was reported just to our north from last night's storm. Mostly cloudy, more rain showers late this evening for a daily total of .94". Temps dropped to a chilly 37 by midnight.

9: Light rain showers actually mixed with some wet snowflakes in the predawn hours and even turned to all snow showers (no accumulation - warm ground and slightly above freezing air temps) shortly after daybreak. A more March-like day than nearing mid-May, with rapid clearing by mid-morning but chilly blustery conditions all day with gusty NW winds, finally subsiding after sunset.

10: Clear and not as cold as expected, but still with a mild freeze and frost, low 31 F. Sunny and pleasant during the afternoon with light WNW breezes and a high of 58.

RAIN - SLEET - THUNDER - FOG - VERY COOL

11: Another cool night but no frost as clouds moved in. Low 34 F. Steady, moderate to occasionally heavy cold rain commenced about 10am and was actually mixed with sleet at its onset. A high of 43 at 10am then temperatures dropped into the mid 30s...again exceptionally cold for May. Rain became more showery after 2pm, heavy at times, one of them mixing again with sleet at 3:45pm and producing some thunder. It's unusual to get winter precipitation mixed with thunder and quite rare for mid-May. Winds increased from the SSW by mid-afternoon with gusts 20+, then diminished quickly by early during the evening with patchy fog developing. 1.36" total daily rainfall,

12: A thunderstorm at 1am with a brief downpour, .23" rain in 5 minutes. Foggy overnight with temps rising into the 50s by daybreak. Overcast & humid with temps remaining in the 50s all day. A very brief shower at 4pm and a few more light ones this evening, 0.31" total daily rainfall.

13: Cool but humid and hazy with steady temps in the low 50s and patchy drizzle, light S breezes.

SEVERE THUNDERSTORMS - DAMAGING WINDS - LARGE HAIL

14: Warming overnight and through the morning hours with light fog and a few sprinkles. SW breezes 20+ mph at times. Variably cloudy, much warmer and humid, loud thunder to N at 3pm. A severe thunderstorm struck at 3:40 with strong winds, dime-sized hail, very intense frequent lightning and brief torrential downpours. Streets flooded, trees and limbs snapped and power briefly went out in many areas. Hail fell all over town and was quarter to golf ball size in some places! Another gusty storm at 7:45pm dumped .26" in only 5 minutes with a peak rain rate of 6.62"/hr. Total rainfall .68". The humid high of 79 felt very warm compared to the cool weather of late.

- 15: Foggy overnight, with otherwise clearing skies and cooler low 47 F. Mostly sunny skies with light NW breezes and pleasant temps high 69 F. Partly cloudy and calm in the evening.
- 16: Fair and seasonably cool overnight low 47 again. Sunny with light SW winds, increasing clouds during the late afternoon and evening hours - overcast by sunset.

RAINY - COOL

- 17: Steady light to moderate rain commenced around daybreak and continued all day, moderate to heavy at times in the afternoon hours with occasional showers continuing into the evening 1.37" total rain fell. Breezy with gusts 20+ mph from the SSE. Cool with daytime temps in the upper 40s.
- 18: Continued cool with light rain showers overnight and a heavier shower this morning from about 10:40-11:40am. Heavy overcast the rest of the day but only some occasional light drizzle.
- 19: Cloudy & cool overnight and through the morning, then rapid clearing in the late afternoon with temperatures climbing into the 60s for a surprisingly pleasant evening.

WARM - FAIR

- 20: Fair to partly cloudy overnight and early this morning, becoming mostly sunny & warm high 84 F, though it was a very pleasant 84 as the humidity was low, bottoming out at a dry 29% at 2:30pm. Light WSW breezes. Some cirrus late this evening made for a very nice sunset.
- 21: Sunny, clear this morning with rapid warming until high then mid level clouds moved in during the early PM hours. Warm high 78 with moderate breezes from the SW shifting to SSE this evening.

RAINY

- 22: Overcast with mild temperatures early but little rebound due to persistent clouds, rain showers and patchy fog. Rain was heavy at times this afternoon and evening, especially from 7:30-8pm, abruptly tapering off but a healthy .95" of soaking rain fell today from 9am-8pm, bringing our month's total to 7.21 inches. Winds were light from SSW with patchy fog developing this evening.
- 23: Dense fog this morning, with skies breaking and variable clouds by 11:30am. Very brief downpour about 3:20pm (.07"). Another light shower at 6pm. Seasonably mild pleasant evening.
- 24: Mostly cloudy with light variable winds and a brief shower ~ 1:15pm. Variably to mostly cloudy and somewhat hazy through the day and evening.
- 25: Partly sunny/partly cloudy with light variable winds again, mainly from the S. A warm, pleasant late spring day with flowers in full bloom, and the ground very lush from all the recent rain.

RECORD HEAT

- 26: Partly sunny this morning with light variable winds and very warm record high 89 F, peak heat index was 90. Skies becoming fair in the afternoon & evening, remained warm still 78 at 7:30pm.
- 27: Fair overnight with a low of 59 then another hot one high 89 F again with a heat index of 90. Light NW winds, partly sunny, a bit hazy.
- 28: Fair and pleasant early, becoming very warm again high 87 F and humid. A cooling thundershower popped up at 3pm dropping .16" rain by 3:30pm and a 20-degree temperature drop in that time. Areas just to our east and south along Allegheny Mountain were hardest hit with flash floods, large hail up to golf ball size & locally damaging winds, including Frostburg/Mt. Savage, MD.
- 29: Partly to mostly sunny and warm, high 84 F. Light SW breezes.
- 30: A little cooler overnight low 53 F but a hot sunny day, another record high 90 F, light SW winds. Virtually no clouds in the sky all day and low humidities.
- 31: Clear early then becoming variably to mostly cloudy with a thunderstorm at 4pm, thunder lasted over an hour but the wind and rain was brief, only .14" fell. Storm was not severe despite the warning. Areas east of town however were hit again with wind damage, heavy rain & large hail. Another area of strong to severe storms went to the west. A brief shower around 11:30pm.

MONTHLY SUMMARY

May was a very active and changeable weather month, with many weather systems bringing moderate to heavy rainfall events, and quite variable temperatures. Mother Nature seemed to throw a bit of everything at us, including several thunderstorms, some of which were severe, with multiple instances of damaging winds and hail, lots of rain and fog, freezing temperatures and frost between episodes of summer-like heat and even a bit of winter precipitation, with late season snow flakes and sleet (with thunderstorms, for good measure) only two days apart. To say May's weather was very fickle would be an understatement.

While May's temperatures, overall, were above average, May was the coolest month of the warm Spring 2010 season, with respect to normal. Min temps were slightly above normal (49.3 vs 48.4) with moderately above normal max temps (71.6 vs 69.0). The month began with record or near-record heat. A high of 84 on the 1st was the warmest reading until the 20th. Low to mid 90s were recorded at some lower elevations, setting records at many stations. The first week, in general, was mild, with the month's first of many significant precipitation events of .95" falling on the 2nd-3rd. This was the same system that produced severe, training thunderstorms that repeatedly hammered the same areas in the Cumberland River Valley for 2 days, resulting in historical and deadly flooding that ravaged cities such as Nashville, TN, the Music City, which was under water for days. Many locals compared that event to the 1977 Johnstown flood, which was also caused by severe training thunderstorms that dumped tremendous amounts of rain over the same areas again and again.

The second week was the coolest and also the wettest, with 5 consecutive days (9th-13th) in the 40s and 50s. This period included thunderstorms with damaging winds on the 8th, snow showers on the 9th, a frost and freeze on the 10th (low 31 F), heavy rain, sleet and thunderstorms on the 11th-12th and the month's most severe storm on the 14th. This storm rivaled the April 16th storm 4 weeks prior. Although both storms produced damaging winds and hail, the May 14 storm was known more for its hail, which hit every part of town (dime-size here), and was quarter to golf ball size in a few localized spots. A total of 3.48" of rain fell during the second week, from the 8th-14th. May 2010, with a precip total of 7.63", was the 3rd wettest month since station records began in August, 2004. The wettest month was August 2007 with 10.48", and the 2nd wettest was December 2008 with 8.80".

The following 10 days saw two more significant rain events, on the 17th-18th (1.60") and the 22nd (0.95"). While low temperatures were seasonable and quite consistent, high temperatures ranged from 50 on the 18th to 84 just two days later on the 20th.

Summer made an early arrival the final week, which was by far the warmest, and pushed temperatures back above normal for the 3rd consecutive month. All of the final 7 days were in the 80s, with more record heat, including the season's first 90-degree reading on the 30th. Nighttime lows were in the mid to upper 50s each day. Two fronts brought scattered severe storms on the 28th and 31st. Both times we missed the damaging winds, flooding downpours & large hail that pummeled areas just east of town along Allegheny Mtn. (Babcock Ridge). Fellow ACON observer Greg Latta of Frostburg MD described the 28th storm as "the most severe storm to hit his station" since he began observing in Oct. 1997. He reported damage from high winds and quarter-sized hail, along with 2.21" of rain, which caused flash flooding in the Frostburg & Mt. Savage areas. The storm also hit LaVale/Cumberland hard. The nearby severe storms on the 31st wrapped up a very active and exciting weather month, May 2010.