

# MONTHLY WEATHER DATA AND OBS - WESTMONT 1.1W PA

JULY 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	73	45	55				
2	79	45	58				
3	85	49	66				
4	87	55	70				
5	92	61	72				
6	93	64	73				
7	94	64	73				
8	96	63	73				
9	88	65	66	0.60			F,T
10	85	62	65				
11	87	54	66				
12	81	59	67	0.09			T
13	80	62	65	0.72			
14	83	62	70	0.74			F
15	86	63	69				F
16	83	63	71	0.19			T
17	86	64	72				
18	89	68	72	0.12			T
19	84	66	67	0.62			F,T
20	80	64	71	0.19			F
21	85	67	67	0.54			T
22	88	66	69				F
23	89	69	79				T
24	90	71	73	0.08			
25	82	65	65	0.51			F,T
26	85	59	62				
27	87	57	68				
28	87	60	77				
29	84	63	63	1.16			F,T
30	80	55	64				
31	81	55	66	0.01			
<b>AVG/SUM</b>	<b>85.5</b>	<b>60.8</b>	<b>68.2</b>	<b>5.57</b>	<b>0.0</b>	<b>-</b>	
EXT	96	45	79/55	1.16	0.0	-	
Date	8	2*	23/1	29	-	-	

\*=-Also occurred on earlier dates

### Miscellaneous Stats

**Mean Monthly Temperature: 73.1 °F (+2.4°F)**

Year precipitation to date: 35.25" (+6.06"); Monthly Precipitation Departure: +0.46" (5.57" vs. 5.11")

Season snowfall to date: 0.0"

Number of days with: Fog 8, Sleet 0, Glaze 0, Thunder 9, Hail 0, Damaging Wind 0

## DETAILED OBSERVATION NOTES

### FAIR - DRY - COOL - THEN BECOMING HOT

- 1: Cool AM low 45 F and partly to mostly sunny & pleasantly cool with low humidity and light NW winds.
- 2: Cool again low 45 F for the 3rd consecutive morning. Clear/sunny/dry with near calm NW winds.
- 3: Cool AM low 49 F then sunny & warm high 85 F but very low humidity bottoming out at 25%. Light W to NW winds.
- 4: Not as cool low 55 and warm and sunny again with a little more but still low humidity (36% min). Very warm high 87 F with light W to NW breezes again. Mild, beautiful evening for fireworks.

### RECORD HEAT - DRY

- 5: Fair and hazy this morning, mostly sunny with passing clouds and unpleasantly hot with a high of 92 F and a heat index of 95 F. Near calm W winds. 92 is the highest reading at this station since records commenced August, 2004.
- 6: Fair and hazy with passing mid-level clouds & near calm W winds. High 93 F again breaks station record set just yesterday along with a record high heat index of 98. Very sultry "dog-like" day.
- 7: Hazy, hot & humid with yet another record broken 94.3 F at 3:20pm max heat index was 99 F. Near calm/variable winds. Another exceptionally sultry summer day.
- 8: The broken record pattern of excessive heat continues. Partly to mostly sunny, VERY HOT high 96 F now breaks all of the previous 3 day's record. Winds again near calm from NW. Heat index of 101.

### FINALLY SOME RAIN

- 9: Warm & humid high 88 F heat index 93 F. Very intense line of storms blew up on the east side of town, bringing thunder and strong SSW breezes but not a drop of rain. 1+ inch of rain fell along and east of Route 219 with still nothing here until 6:30 when another line of very heavy rain and storms inched east, weakening but dropping some needed rain showers from 6:30-10:15pm .60" fell. Some nearby areas were really hammered by heavy rains, including my old hometown of LaVale, MD, where 2.71" was recorded by current ACON observer Scott Lohr.
- 10: Partly to mostly sunny, light N winds, much lower humidity made today's 85 feel cool compared to the sultry conditions as of late. Nice day for mid-summer.
- 11: A pleasantly cool low of 54 F followed by a mostly sunny, warm day but again it was comfortable as humidity was again very low and there were light W breezes most of the day.
- 12: Partly to mostly cloudy with a brief thundershower at 1:15pm lasting about 20 minutes .09" fell. Partly cloudy this afternoon, light to moderate SW to S breezes.

### SOAKING RAINS

- 13: Cloudy, warm and humid with two brief showers 10-10:30am and periods of rain developing by 6pm becoming heavy very late this evening around 11:30pm .72" fell by midnight. Light SE winds.
- 14: Heavy rain midnight-2am then lighter rain ended by 4am another .74" fell, 18-hour total 1.46". This was a much needed soaking rain. Although some locally heavier amounts 2+" fell nearby and flash flood warnings were in effect early, no major flooding was observed due to dry ground. Sky became partly cloudy after patchy AM fog, remained humid with light West winds.

### VERY WARM - HUMID - SCATTERED SHOWERS & STORMS

- 15: Early fog, Mostly sunny, warm & humid high 86 F with light WNW breezes.
- 16: Variable clouds, warm & humid with a brief thunderstorm at 1:20pm, rain only lasted 10 minutes, heavier rain fell 2-3 miles north & south of this station (the heavier parts of the cell split, as usual). Light W winds. Mild & muggy this evening with more storms missing to the north.
- 17: Mostly sunny, very warm & humid with light W breezes. Nearly continuous "heat" lightning from strong storms to our north late this evening.
- 18: Two hours of continuous lightning & thunder from strong storms over the northern half of the county from midnight-2am. A very brief downpour at 2:05am dropped .12" of rain in 3 minutes. Fair skies, very warm and humid high 89 F heat index hit 95.
- 19: A brief but heavy thundershower at daybreak (5:30am) .34" in less than 10 minutes. Partly cloudy, warm and very humid high 84 F heat index 90 F. More rain showers this evening 7:30-9 pm brought the day's total to .62". Patchy fog, calm winds, cooler, still humid evening.

- 20: Fog developed overnight, a brief downpour shortly after 7am with .19" in 5 minutes. Variably cloudy, not as warm but still very humid & muggy. Katydid heard for 1st time this evening.
- 21: Mostly cloudy, gradually becoming partly cloudy, warm and very humid with occasional breezes from the west, high 85 F heat index 93. A strong thunderstorm skirted the north & east sides of town 7-8pm but missed this station entirely with only a trace of rain. Finally a couple of good showers late this evening dropped some briefly heavy rains .54" fell.
- 22: Partly cloudy & humid this morning. Gradually becoming mostly sunny, humidity finally dropped off by late afternoon with light NW breezes, a fair and pleasant evening.

#### EXTREME HUMIDITY & HEAT - FREAK LIGHTNING STRIKE

- 23: Hot, extremely humid, partly to mostly sunny, high only 89 but a heat index of 102 made it feel very oppressive. At 6:15pm a freak lightning "bolt from the blue" cracked directly overhead, even though the storm was 10 miles to the north and the sky was almost clear! Still very warm 79 F at midnight with a heat index of 83! Strong WSW breezes and distant lightning to the NW.
- 24: Big line of thunderstorms fell apart, as usual, right when it finally got here at 3am with only .02" of rain and no thunder. Still warm low 71 F. Again very hot and extremely humid high 90 and a heat index again hitting 102. Partly to mostly sunny. Some lightning to north late this evening, a couple brief showers around 11:30pm, storms again weakened as they approached.

#### STRONG STORM - THEN MORE PLEASANT

- 25: Warm and humid again overnight low 69 F. Mostly cloudy this morning, intense but quick-moving storm at 11:45am dropped .35" of rain in 10 minutes along with some very close/sharp lightning. A few more showers through 2:30pm then clearing skies total .51" of rain. Some areas to our north reported wind damage and large hail, and very heavy rain fell just south of town.
- 26: Fair and cooler overnight, beautiful warm sunny day with much lower humidity and light N winds.
- 27: Fair and pleasantly cool overnight, sunny early then variably cloudy (mostly high clouds) and light SW breezes. Very warm high 87 F with moderate humidity, summer conditions still strong.
- 28: Fair to partly cloudy with light WSW breezes and very warm and humid again high 87 F heat index 94 F. Warm humid evening with fair skies, temp at midnight still 77 F with heat index of 80.

#### STRONG STORMS CLOSE LIGHTNING - THEN CLEARING

- 29: A brief but intense thunderstorm at 2:30am with heavy downpours, one extremely close lightning strike appeared to arc over the house and hit two trees in the woods only 100 feet away! The thunder was at the same time, one of the most spectacular close lightning strikes I've ever seen. 0.48" rain fell in <15 minutes. Another storm with heavy downpours 8-8:30am dropped another 0.68" rain in a half-hour for a daily total of 1.16". Fog formed briefly then skies cleared quickly to partly cloudy, still warm temps but lower humidity and gentle W to NW winds. Clear and calm this evening with much more rapid cooling than previous evenings.

#### COOLER - NICE

- 30: A nice overnight low 55 F, sunny AM, partly cloudy PM, low humidity & light N winds high 80 F.
- 31: Again pleasantly cool overnight low 55 F w/ fair skies. Mostly sunny AM with low humidity, light W/variable breezes, increasing PM clouds with a few brief light showers.

### MONTHLY SUMMARY

July 2010 will be remembered for its relentless heat and humidity. This was a complete reversal from last year, which had one of the coolest July's on record. After a deceptively cool and calm start, temperatures quickly climbed into the 90s from the 5th-8th, with the 96-degree reading on the 8th setting a station record. Record heat indices of 102 were set on the 23rd and 24th. This was one of the hottest, if not the hottest July and month on record. While min temperatures were actually slightly below normal, skewed down by some cool nights very early in the month, daytime highs were nearly 6 degrees above normal. Combined with high humidity, it was an uncomfortably hot weather month. Temperatures were remarkably consistent, with every day from the 3rd onwards in the 80s or 90s. Only the first two days failed to reach 80. 5 days hit 90+, which is unusual for this part of Johnstown. Valley locations to our south & east were really baking, with many stations consistently in the 90s and reaching 100+ on several occasions. Some areas flirted with all-time records on multiple dates. So far, the summer of 2010 appears to be on pace to

become one of the hottest, if not the hottest summer on record. This follows one of the warmest springs on record, continuing the huge reversal from an incredibly snowy, near record-cold winter. July was our 5th consecutive month with above normal temperatures. The 29-day (and still ongoing) streak of max temperatures 80 or higher is absolutely unreal for this location.

The month began very dry with near-drought conditions developing, but from the 9th on, showers and thunderstorms were frequent, as warm and cold fronts rippled through the area every few days. Most rain amounts were modest, but 7 days had over a half-inch of rain. The most substantial event was on the 13th-14th, when 1.46" fell in 18 hours. The heaviest calendar day rain was on the 29th, when a cold front brought jarring early morning thunderstorms. Lightning seemed to almost directly hit this location on multiple occasions, including a strike within 100 feet of the Davis station on the 29th. Precipitation, as is typical for summer months, was very hit-or-miss, varying wildly in the region. Some areas had hardly any rain and reported drought conditions, while other areas were dumped on repeatedly. Nearly 9 inches fell just to our NW in Indiana, and the 13th-14th rain event dumped over 4" in parts of Bedford Co. to our SE. As was the case in June, precipitation was about a half-inch above average. This was the 3rd consecutive above-average precipitation month. Fog was noted on 8 days and thunder on 9 days. No hail or damaging winds were observed, although a few locations nearby, particularly to the north, were hit by scattered severe thunderstorms.