

MONTHLY WEATHER DATA AND OBS - WESTMONT 1.1W PA

JANUARY 2009

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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	24	13	18	T	T	1	
2	35	18	26	0.04	0.5	1	
3	28	18	20			T	
4	47	20	44	0.14	T	T	F,G
5	44	24	24	0.01		0	
6	26	24	26	0.77	0.4	0	F,S,G
7	33	24	24	0.47	0.9	1	F,G
8	24	16	16	0.08	2.1	1	
9	23	15	20	0.05	0.7	3	
10	26	20	26	0.53	1.5	3	F,S,G
11	29	17	17	0.06	1.0	4	F
12	22	18	20	0.04	1.0	4	
13	30	15	15	0.08	1.3	4	
14	17	8	14	0.16	3.8	5	
15	11	2	2	0.18	5.2	12	
16	3	-7	-3	0.05	0.8	12	
17	11	-8	11	0.17	2.2	12	
18	28	11	18	0.32	5.3	14	
19	20	13	13	0.03	1.2	16	
20	20	8	8	0.08	2.8	17	
21	14	5	11	0.03	1.5	17	
22	32	11	26			16	
23	45	25	29			14	
24	29	8	8	T	0.1	7	
25	14	5	10	0.06	0.8	7	
26	21	10	15	T	T	7	
27	22	14	18	0.28	2.5	8	
28	32	18	18	1.96	4.0	9	F,S,G
29	23	14	20	0.05	1.8	8	
30	20	12	12	0.11	2.7	9	
31	22	6	22	0.03	1.0	10	

AVG/SUM	25.0	12.8	17.7	5.78	45.1	7.2	<--Mean
EXT	47	-8	-	1.96	5.3	17	
Date	4	17	-	28	18	21*	

*=-Also occurred on earlier dates

Miscellaneous Stats

Mean Monthly Temperature: 18.9 F

Year precipitation to date: 5.78"

Season snowfall to date: 74.1"

Number of days with: Fog 6, Sleet 3, Glaze 5, Thunder 0, Hail 0, Damaging Wind 0

DETAILED OBSERVATION NOTES

- 1: Cold overnight with snow flurries ending and winds diminishing. Partly cloudy early becoming mostly sunny with light & variable winds.
- 2: A period of light snow this morning commencing pre-dawn and ending at 10am. Partial clearing with milder temperatures this afternoon & light W winds.
- 3: Mostly sunny to clear with light NE then NW winds.
- 4: Clear overnight becoming cloudy by daybreak. PM light freezing rain and drizzle with fog and temperatures rising through the day reaching 47 by 10:30pm.
- 5: Drizzle ending, temperatures dropping overnight with gusty W winds to 30 mph. Clearing by mid-afternoon with thin clouds after sunset (large ring around moon).

MAJOR ICE STORM

- 6: Overcast & cold with temperatures steady in the mid 20s all day. Sleet began midday and changed to steady freezing rain by sunset with 1/4" ice on everything by 6pm and freezing rain continuing all evening. Winds from SE at 10-15 mph. About 0.4" of sleet & ice accumulation by midnight w/ very treacherous conditions outside!
- 7: Light rain and freezing rain continued with a solid 3/8" to 1/2" of ice on everything with significant tree damage and trees bent severely due to the weight of the ice. Strong W winds developed mid-afternoon with a brief warm-up above freezing knocking much of the ice off the trees. Storm total precip 1.17". Light snow began about 5pm and continued on and off through midnight with strong W winds continuing.
- 8: Cold, gusty W winds and light snow all day. Just over 2" accumulation by midnight.
- 9: Light snow & flurries overnight. Continued breezy with occasional W wind gusts to 30 mph. Very fine light snow continued through the evening hours.

MORE ICE

- 10: Light snow (1/2") overnight. Overcast with light SSW winds. Moderate snow began abruptly at 12:30pm and changed to heavy sleet by 1:30pm with another 1/2" to 3/4" of ice/snow accumulation before a change-over to freezing rain at 2:30pm which continued on and off tapering to drizzle by midnight. About 1.5" snow/ice and 0.53" melted precipitation with about 0.25" glaze accumulating on everything.
- 11: Breezy with occasional WNW gusts 35+ mph and light intermittent snow all day with steadily falling temperatures. 1" of new snow.
- 12: Steady light snow ending by 10am another 1" fell. A period of sunshine early this afternoon with mostly cloudy skies following and occasional flurries. Light W wind.
- 13: Weak sun this morning becoming overcast with light snow beginning at 12:30pm and continuing on and off with a brief period of moderate to heavy snow at 5pm. Winds WSW shifting to W and increasing to 10-15mph with gusts over 20. 1.3" new snow.

HEAVY (BUT LIGHT) SNOW

- 14: Light snow overnight. Partly cloudy this morning with increasing clouds during the late morning. Steady snow began this afternoon by 1:30pm with light winds and snow moderate at times through the evening with just short of 4" new snow by midnight.
- 15: Overnight snow heavy at times another 5" by 7am. Became partly cloudy by mid-morning with gusty NW winds. A few light PM snow showers with another 1/4" snow. The storm total accumulation was heavy with 9" but the snow itself was very light and fluffy melting down to only 0.34" of water. Became very cold and blusty with temperatures falling to a chilly 2 F by midnight.

ARCTIC COLD!

- 16: Gusty W winds overnight with light snow (another 3/4"). VERY cold today with a low this morning of -7 F and a high of only 3 F. Brief peaks of sun this morning then overcast with occasional very fine snow. Brisk W winds 20+ mph at times created dangerous cold wind chills below -30 F. Temperature dropped to -3 by midnight.
- 17: Extremely cold -8 F this morning. Coldest reading since we moved in in late July

2004. Mostly cloudy skies and calm winds. Mostly cloudy with snow developing again this afternoon. Light NW winds with temperatures slowly rising through the day but still very, very cold. 2.2" snow accumulation by midnight.

MORE HEAVY SNOW

18: Snow of variable intensity continued on and off all day with winds shifting to S/SW and slowly warming temperatures continuing. Heaviest snow came in a squall at 4:30 pm with 0.5" in 15 minutes. Another 5.3" snow fell today for a storm total of 7.5" but this one was wetter than the last one with 0.49" water equivalent.

19: Light fluffy Lake Erie snow overnight (1" new snow by 7am). Light WNW winds. Mostly cloudy skies through the day with occasional flurries or light snow showers.

SNOW/COLD

20: Overnight snow with another 2.5" falling since yesterday's measurement. Cold with light N winds and variably to mostly cloudy skies with occasional snow showers. Another 2.8" of snow today and this was very dry melting to only .08" water. Snow depth this morning 16.5 inches.

21: Overnight snow of 1.5" (very dry again only .03" water) tapering to flurries and ending by 7:45am. Cold low 5 F. Snow depth reached a season-high 17" and was perhaps deeper in some areas due to blowing and drifting. Light NW winds and partly cloudy to mostly sunny skies.

22: Slight warming overnight and breezy. W winds shifting to SW and occasionally gusting to 25 mph. A rare clear/sunny day with only a few clouds and near 100% sun.

23: Mostly sunny and mild high 45 F with gusty SW winds and significant snow melt. This was the first day since the 7th with above freezing temperatures, breaking the streak of 15 consecutive freezing to sub-freezing max temperatures.

24: Another cold front passed through overnight with a dusting of snow and strong NW winds gusting 30+ mph and falling temperatures all day from 29 to 8. Partly to variably cloudy with flurries and blustery. Winds shifting to N late.

25: Cold low 5 F this morning and high only 14 F with overcast skies and occasional light snow showers with about 0.8" accumulation.

26: Very light snow this morning, light dusting. Again overcast with light NNW winds.

HEAVY SNOW/ICE STORM

27: Overnight snow of 1.3" snow. Snow line was just S of us most of the day with light to moderate snow resuming during the evening bringing the day's total to 2.5". A bit wetter snow this time .28" melted precip.

28: Overnight moderate to heavy snow changed to freezing rain with another .76" of water equivalent. Significant glaze again on all surfaces. Patchy fog with SW/SSW winds. Moderate to heavy rain this afternoon with temperatures near freezing but rain warm enough to avoid any further significant ice/glaze accumulation which would have been devastating as we had some downpours at times. Rain mixed with and changed to snow with strong winds 25-40 mph developing and shifting to W. Another 2.5" of snow/ice fell for a daily total of 4" snow/ice and 1.96" of melted precipitation (storm total 6.5" snow/ice and 2.24" melted precipitation as of midnight).

29: Overnight light/fluffy snow 1" new snow since midnight. Light snow through AM hours and remained mostly cloudy with light W winds the remainder of the day. Total 1.8" snow only 0.05" water equivalent.

30: Overnight light snow. Snow became heavy at times with strong winds and near white-out conditions from 11:30-12:15. Winds shifted from SW to W and gusted over 40 mph. Light snow showers continued all day and evening with falling temperatures and strong winds continuing. 2.7" snow (.11" water). Lots of blowing & drifting snow.

31: Overnight light snow another 1" fell. Snow tapered to flurries and ended by 11am. Cold low of 6 F this morning. Temperatures slowly warmed the day with strong breezes from SW and skies clearing to mostly sunny. Temperature warmed to 22 F by midnight.

MONTHLY SUMMARY

January was a cold month with a nearly constant parade of winter storms. It was the 2nd coldest month since we began keeping records in August 2004. The arctic outbreak at mid-month was one of the most significant since the record outbreak of January 1994, and the -8 reading on the 17th was the coldest since we began record keeping in Westmont. Only 5 days reached above freezing all month, and only 1 after the 7th, when a heavy ice storm struck the region. There were no minimum temperatures above 25 all month. The cold was therefore quite persistent, with only a few brief and minor warm-ups. While the precipitation pattern and totals were very similar to Jan. 2007 (see below), this month was dramatically colder with a mean temperature of only 18.9 F (Jan. 2007 was nearly 10 degrees warmer with a mean temperature of 28.6 F). Only the second half of that month had temperatures similar to this month; the first half was very mild, and there were no major Arctic outbreaks as there were in this month.

The precipitation pattern was much like 2 years ago (Jan. 2007) with a W to NW wind flow, along with several Alberta Clippers and a couple of nasty ice storms. This resulted in nearly constant precipitation, much of it in the form of lake-effect and orographic snows except for the ice storms, which brought significant gulf moisture and actually accounted for most of the month's precipitation, which totaled 5.78 inches, just .01 higher than Jan. 2007 (5.77"). Snowfall totaled 45.1", compared to 39.2" two years ago. 25 days had measurable precipitation, compared to a record 27 two years ago. The major difference was that Jan. 2007 was very mild the first half with nearly all the precipitation falling as rain, then seasonably cold the second half with nearly all snow, and no significant ice storms as in this month. The worst ice storms were on the 6th-7th and 28th, with sleet and/or glaze also noted on the 4th and 10th. Predictably, it was also a windy month, but not excessively so. To sum it up, January was cold, icy and snowy. The 45.1" snow/ice total was also the highest monthly total since we began record keeping in 2004.