

MONTHLY WEATHER DATA AND OBS - WESTMONT 1W PA

FEBRUARY 2010

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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	27	15	20			3	
2	34	14	28	0.01	0.1	3	
3	32	25	25	0.05	1.0	3	S
4	32	20	26			3	
5	31	24	25	1.22	17.0	3	
6	27	12	12	0.70	9.5	26	
7	22	1	13	T	0.3	26	
8	24	10	12	0.01	0.6	24	
9	28	8	23	0.30	2.0	21	
10	24	9	19	0.98	11.5	25	
11	23	18	19	0.20	2.0	33	
12	25	18	19	0.07	1.7	33	
13	22	14	18	0.08	1.8	31	
14	23	18	18	0.12	1.6	30	
15	26	10	18	0.30	3.8	29	
16	22	13	20	0.18	3.1	29	
17	24	20	24	0.16	3.5	30	S,G
18	30	24	26	0.36	2.2	31	S
19	32	24	25	T	T	30	
20	35	19	28			28	
21	41	25	34			26	
22	38	31	31	0.12	0.5	25	F,S,G
23	33	28	28	0.07	0.1	24	F,S
24	37	23	25	0.01	T	22	S
25	27	16	16	0.08	1.5	21	
26	24	16	20	0.53	11.3	25	DW
27	29	20	26	0.43	6.0	29	
28	30	25	29	0.54	5.2	32	S
AVG/SUM	28.6	17.9	22.4	6.52	86.3	23.0	<<-Mean
EXT	41	1	34(21)	1.22	17.0	33	
Date	21	7	12(8*)	5	5	12*	

*=Also occurred on earlier dates

Miscellaneous Stats

Mean Monthly Temperature: 23.3 °F (-4.8 °F)

Year precipitation to date: 11.13" (+3.90")

Season snowfall to date: 162.5"

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

DETAILED OBSERVATION NOTES

- 1: Partly to mostly cloudy. Strong NW winds shortly after midnight subsided overnight.
- 2: *Groundhog sees his shadow - 6 more weeks of winter! lol* Cold low 14 F this morning with a quick rebound in temperatures by midday - high reached 34 F, partly to mostly cloudy in the morning and thickening in the evening with very light snow beginning around 10pm (0.1" snow, 0.01" precip).
- 3: Flurries overnight as for the 2nd time in 4-5 days a moderate to heavy snow storm has just barely missed us to the south. Light to occasionally moderate snow showers with intermittent breaks and some sunshine. Windy with NW winds gusting to 30 mph at times. 1.0" of snow fell (1.1" for the storm). This storm took an almost identical track as Saturday's storm, nearly all of it barely passing south.
- 4: The apparent calm before the storm, mostly sunny during the day with high clouds slowly building and thickening by nightfall. Nearly complete overcast by midnight.

INCREDIBLE SNOW STORM AND BLIZZARD

- 5: Overcast with light steady snow commencing at noon and continuing through the afternoon, moderate at times. Snow became very heavy after 7pm with snowfall rates consistently 2 to 3 inches per hour. Blizzard conditions quickly developed by late evening with winds shifting from S to NE and gusting to 25 mph blowing a lot of snow around. 8.0" by 8:30pm, 12.5" by 10pm, 15.0" by 11pm & 17.0" by midnight with heavy snow and blowing snow continuing. I have never seen such an extended period of intense snowfall rates since the record-setting Blizzard of 1996. The liquid meltdown was 1.22".
- 6: Very heavy snow shortly after midnight began slowly tapering to moderate then lighter snows by daybreak. From 7pm last night to 1am this morning, 16" fell - in only 6 hours! Very impressive... Another 8.0" (0.56" water) fell midnight-7am with light snow continuing. 25" of snow in the past 19 hours and 26" of snow measured on the ground. Amazing! Light to moderate snow continued through the morning hours, tapering to very light snow/flurries after noon. 26.5" storm total in 2 hours - this is the most snow I have ever measured in such a short period of time and rivals the great blizzards of 1996 & 2003. Liquid equivalent of the snow was 1.92" (9.5" snow - 0.70" water - today). Skies cleared rapidly during the afternoon and were clear after sunset with falling temps, calm winds.
- 7: Very cold overnight with a low of 1 F early this morning and flurries/light snow developing again. Variably cloudy & chilly but with little wind, occasional flurries. Partly to mostly cloudy after sunset with spits of snow continuing. Very light accumulations (0.3" snow - only a trace of water).
- 8: Light snow (0.6") overnight with lows not as cold as expected but still chilly, low 10 F. Flurries this morning ended and gave way to partly cloudy skies. Clear after sunset.

ANOTHER BIG SNOW - COLD - WINDY - BLOWING SNOW & BLIZZARD CONDITIONS

- 9: Overcast with light snow beginning around 11am. Occasional snow through the day and evening but most of it light and very intermittent - only 2.0" by midnight, surprisingly high water content 0.30".
- 10: Light snow overnight, becoming moderate to occasionally heavy and becoming windy with temperatures falling rapidly in the early morning hours. 4.0" new snow since midnight (0.30" water) by 7am with a good bit of blowing & drifting. Steady, moderate snows through the day, windy & blustery, light snows after dark and continued windy with winds shifting to the W to NW. 11.0" new snow (0.91" of water) by 10pm. 11.5" (0.98" water) daily snow by midnight. Storm total now 13.5". Temperatures gradually rose throughout the afternoon & evening hours, reaching 19 F by midnight. Gusts 30+ mph.
- 11: Light snow overnight (0.5" additional - 0.08" water) w/ gusty WNW winds. Temps steady around 18-19. Very light snow/flurries, occasional light-moderate snow showers through the day & breezy. Total snowfall for today 2.0" with .20" water equivalent. 33" snow on ground at 7am new station record.
- 12: Light snow overnight (another 1.5" by 7am). 33" of snow on ground continues to tie station record and now 45.5" has fallen this month, also a new station record (records commenced Aug. 1, 2004). Season total now 121.7". Mostly cloudy with scattered flurries & continued breezy at times.

- 13: Flurries overnight, variably cloudy with flurries during the day then some moderate to briefly heavier snow showers from late afternoon - early evening, then lighter steadier snows through mid-night with a daily total of 1.8" snow. Gusty W winds, chilly and & blustery.
- 14: Light snow overnight (0.9") and continuing intermittently through the day with breezy/gusty West winds. Snow total today was 1.6".

MORE SNOW/SOME ICE/THEN WINDY

- 15: Fair skies and chilly early this morning low 10 F then becoming overcast with snow commencing around noon. Snow was moderate for the first few hours, then light to moderate after 4pm. tapering to only scattered flurries by 10pm. Total by then 3.8".
- 16: A break in the storm overnight with clouds breaking at times and temperatures dipping to 13 F as dry slot moved in. Light snow resumed before daybreak with another 1.0" falling by 9am. Breezy with W winds gusting 25+ mph and flurries/light snow all day and evening with another 1.5" by 8pm. 3.1" total snow by midnight.
- 17: Light snow and snow showers overnight, another 2.3" by 8am. Occasional light to moderate snow showers during the afternoon & early evening, breezy. An unusual event late this evening as snow mixed in with freezing drizzle and small ice pellets (sleet), due to warm air advection from the NORTH in the mid layers of the atmosphere. A thin coating, almost like rime ice, on most surfaces.
- 18: Light mix of snow, sleet and freezing drizzle continued overnight. Only 0.9" accumulation but .20" of water, as of 9am. Windy, with WNW winds gusting 35+ mph. Very light mix continuing, tapering off in the afternoon, then redeveloping as moderate snow showers by mid-evening. Continued windy with a lot of blowing and drifting snow. 2.2" new snow today, .36" melted precip.
- 19: Snow ended early overnight - trace. Mostly cloudy during the morning, becoming partly cloudy during the afternoon. Continued windy with winds shifting to the WSW. First day since 7th without precip.
- 20: Clear overnight and a little colder, then sunny during the day and slightly milder with some snow melt. Breezy early with winds diminishing by evening. A very unusual sight with what appeared to be a lenticular cloud over Johnstown late this evening with the moon out - quite surreal.
- 21: Partly to mostly cloudy and milder today with a high of 41 F. Breezy at times. Temperatures remained above freezing this evening and didn't drop much due to cloud cover. Still 34 @ midnight.
- 22: Overcast and breezy this morning with winds shifting to S, somewhat mild. Temperatures began to fall during the afternoon with a brief burst of snow and sleet at mid-afternoon, ending, then resuming by early evening as light snow/sleet, changing to freezing drizzle. Winds shifted to SW. Temperature steady at 31 from 5:30pm all the way through midnight. 0.12" precip, 0.5" snow/ice.
- 23: Freezing drizzle/drizzle overnight with temperatures hovering right around freezing, and light fog. Another .04" precip (negligible ice accumulation) overnight, overcast & calm. Light snow and sleet resumed late this evening.
- 24: Light snow/sleet mix ended shortly after midnight. Only a trace of snow/ice and .01" precip. Partly cloudy skies with light NW winds through the day, slightly milder.

MORE HEAVY SNOW - HIGH WINDS - BLIZZARD CONDITIONS

- 25: Mostly cloudy overnight with very light snow developing early this morning, a couple brief afternoon squalls then a few peaks of sun; light steady snow this evening and becoming very windy with NW gusts up to 45 mph. A lot of blowing snow at times. 1.5" of snow measured at midnight.
- 26: Moderate to occasionally heavy snow overnight and very windy with major blowing and drifting. WNW winds sustained 20-30 mph gusting near 45 mph. An additional 4.0" snow fell from midnight-9am, 2.5" more by 2pm (storm total 8.0"). Steady light to moderate snow through the day and evening with the winds gradually diminishing. Day snow total by midnight 11.3", storm total 12.8". Snow was quite dry and fluffy, melting down to only 0.61" of precipitation.
- 27: Light snow ended overnight, remained overcast with steady temperatures around 20, light snow resumed early this morning with low cloud cover. Steady light to moderate snow all day and breezy with W

winds 10-15 mph occasionally gusting ~ 25 mph. A surprising 6.0" more snow fell today, bring the month's snow total to a whopping 81.1", with more snow forecasted the next several days. Amazing...
28: Light to occasionally moderate snow continued overnight, tapering to fine flurries by morning. Another 3.5" of snow by 7am. Light intermittent snow through the day, mixing with fine sleet this evening. Day's total 5.2" by midnight, bring the grand monthly total to an incredible 86.3 inches! The storm total thus far has been 24.0 inches, the 3rd snow storm to dump over 20", this month. Also, another 0.54" of water equivalent (melted snow) fell today, as the snow has become more dense and also had sleet mixing in towards the end. This brings the monthly precipitation total to a whopping 6.52 inches, the year total to 11.13" and the winter season total to an impressive 17.08", and our snow/cold season 162.5" (161.0" for the winter months of December, January and February) with more possible moderate to heavy snow events forecasted to occur to begin March/Spring. This could be the snowiest, and certainly will be one of the top 5 snowiest, seasons ever recorded. Wow.

MONTHLY SUMMARY

February 2010 was a winter month that will not soon be forgotten by many. The month featured three Nor' Easters, two of them within a week, and relentless snow, wind and cold. The three big Nor' Easters all dumped over 20 inches of snow, and several other light to moderate snow events brought the month's total to a staggering 86.3 inches, probably the snowiest month ever on record, for sure within the top 5. Unlike most of January's snow, which was mostly dry and fluffy, most of February's snow had a relatively high water content. 6.52" of precipitation was recorded, virtually all of that from melted snow. ALL of the month's precipitation was frozen - very unusual. The 26.5" of snow that fell in 24 hours from the midday hours of the 5th-6th was the most snow I've ever seen in a 24-hour period. 16" fell in only 6 hours - nearly 3"/hour. The only other time I saw sustained snowfall rates so intense for so long was during the incredible Blizzard of 1996 in LaVale, when, in one hour, I recorded 5 inches of snow. The other big snows occurred from the 9th-11th with 15.5", and more light snows behind the system, and during the final four days, when 2 feet (24.0") fell from another Nor' Easter. An average of 23.0" of snow was on the ground, undoubtedly a record. From the 6th on, that average was 27.4 inches. 22 of 28 days had measurable precipitation or snowfall. Sleet was also observed on 7 days. Obviously, February precipitation and snowfall stats were quite impressive - a month headed straight for the record books.

Temperatures continued well below normal. While there was a lack of extremes, temperatures were consistently cold - remarkably consistent. Only 6 days climbed above freezing, with a monthly extreme max of 41 F, one of the coldest extreme max temperatures I have ever recorded, and all 28 days of the short (but seemingly endless) month had sub-freezing min temperatures. Surprisingly, there were no sub-zero readings. In fact, we have had no sub-zero temperatures all winter, despite the persistent cold weather pattern. From Feb. 3-19, 17 consecutive days, temperatures failed to rise above freezing.

Here is a brief recap of the precipitation and snow stats for the winter (DJF) months of 2009-2010:

December: 31.6" of snow, 5.95" of precip

January: 43.1" of snow, 4.61" of precip

February: 86.3" of snow, 6.52" of precip

Winter total 161.0" of snow, 17.08" of precip (6.52" above normal).

This cold season's snow total after February was 162.5" - very impressive to say the least.

Finally, here is a brief recap of the temperature stats for the winter (DJF) of 2009-2010:

December mean temp/max/min: 25.9/32.7/19.1 (-3.9 F). Extremes: 50/2 (3rd/24th)

January mean temp/max/min: 22.6/28.0/17.3 (-3.0 F). Extremes: 47/2 (25th/3rd)

February mean temp/max/min: 23.3/28.6/17.9 (-4.8 F). Extremes: 41/1 (21st/7th)

Winter mean temp: 23.9/29.8/18.1 (-3.9 F). Extremes: 50 (Dec. 3), 1 (Feb. 7)

It goes without saying that this has been quite an amazing winter season!