Northeast Regional Climate Center Mid-Atlantic Climate

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AUGUST 2013

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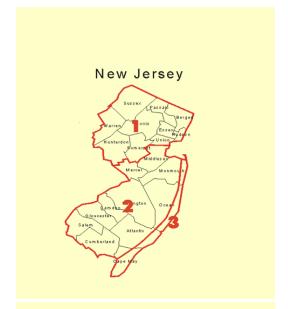
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CLIMATE DIVISION MAPS



New Jersey Climate Divisions

- 1 Northern
- 2 Southern
- 3 Coastal



Maryland

Delaware Climate Divisions

- 1 Northern
- 2 Southern

Maryland Climate Divisions

- 1 Southern Eastern Shore
- 2 Central Eastern Shore
- 3 Lower Southern
- 4 Upper Southern
- 5 Northern Eastern Shore
- 6 Northern Central
- 7 Appalachian Mountain
- 8 Allegheny Plateau

AUGUST WEATHER HIGHLIGHTS

After four consecutive warmer-than-normal months, the Mid-Atlantic returned to cooler-than-normal conditions in August. The average temperature of 72.2 degrees, -1.7 degrees, made it the coolest August in five years. The three states and their divisions experienced below-average August temperatures with state departures of -1.4 degrees in Delaware, -1.6 degrees in New Jersey, and -1.9 degrees in Maryland. The highest temperature of the region was 95 degrees, which was recorded at Baltimore's Maryland Science Center on the 31st. Also for four consecutive months, Deep Creek Lake, MD, was one of the cool spots. That site along with Oakland, MD, dropped to 36 degrees on the 16th or 17th.

The Mid-Atlantic remained wetter-than-normal during August. The region's monthly rain total of 4.69 inches was 118 percent of normal. New Jersey wrapped up August at 107 percent of normal while Delaware finished the month at 114 percent of normal. Maryland received 126 percent of normal, with three of its eight divisions ranking this August among their top 20 wettest and one of its divisions ranking this August among its top 20 driest. Maryland was the site of the region's greatest monthly and daily rainfall. Deep Creek Lake received 9.67 inches of rain in August and Salisbury-Wicomico County Airport received 5.32 inches of rain on the 1st.

An EF-0 tornado and straight-line winds damaged trees in Harford County, MD, on the 13th. On the same day, an EF-0 tornado touched down in Ocean County, NJ. The tornado downed trees and power lines and damaged several churches. Heavy rain flooded roadways while strong winds caused structural and tree damage and left thousands without power. More flash flooding occurred in New Jersey on the 22nd. Several lanes of Interstate 295 were blocked by water causing a 10-mile backup in Burlington County. On the 24th three waterspouts were spotted on the Chesapeake Bay in Maryland. While heavy rain was localized in New Jersey, it created some problems for farmers that received excess. Vegetable growers battled weeds, insects, and diseases throughout the month, with farmers in Burlington County forced to abandon some of their fields. Farmers in Monmouth County reported some vegetable crops had poor root development due to excess moisture.

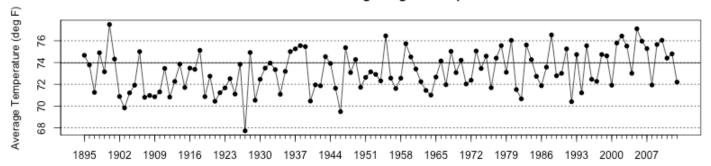
Daily Low Maximum Temperature Records (°F)

Station	Date	New	<u>Previous</u>
Washington National, DC	6	74	74 in 2004

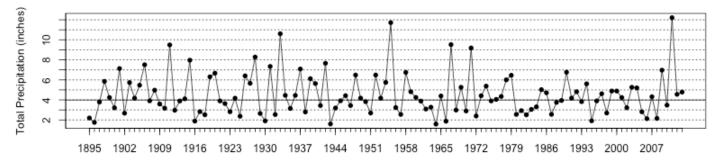
Daily Minimum Temperature Records (°F)

Station	Date	New	Previous
Baltimore, MD	16	53	54 in 1979

Mid Atlantic Average August Temperatures



Mid Atlantic August Precipitation Totals



The 2013 values depicted on these graphs are based on preliminary data.

A Cool Summer Month: August 2013 A Warm and Wet Summer of 2013

Dr. David A. Robinson, New Jersey State Climatologist NJ Agricultural Experiment Station, Rutgers University

August Overview

After two warm and wet months to start off the summer of 2013, August provided an about face in the temperature department. The 71.6° statewide mean is 1.8° below the 1981-2010 average and ranks as the 41st coolest August since statewide records commenced in 1895. It was only 0.1° warmer than this past June. Precipitation averaged 4.50″, which is 0.29″ above normal and makes this the 51st wettest of the past 119 Augusts.

Temperature

What a change from July. There were only four afternoons when the temperature was 90° or higher somewhere in the state, compared with 18 in July. The warmest it got was 93° at Harrison (Hudson County) on the 21st and only nine stations reached 90° at some point during the month, compared to most of the 50 NJWxNet stations reaching that mark in July.

The 9th saw Pomona (Atlantic) and Cape May (Cape May) reach 90°. Not until the 20th was 90° achieved again, with Harrison up to 92°, Newark (Essex) 91°, and New Brunswick (Middlesex) 90°. Along with Harrison's 93° on the 21st, Ringwood (Passaic) maxed out at 91° and 90° was reached at New Brunswick, Hawthorne (Passaic), and Red Lion (Burlington). This was the warmest day of the month, with seven stations making it to 89° and the mildest location, Harvey Cedars (Ocean), at 80°. The 27th saw maximums of 90° at New Brunswick, Newark, and Cape May Courthouse (Cape May).

There were nine August mornings with low temperatures in the 40°s at one or more locations. Early in the month, Walpack (Sussex) fell to 49° on the 4th, 44° on the 5th, and 47° on the 6th. Pequest (Warren) was 47° on both the 5th and 6th. The 14th-17th was the next period with cool sleeping weather. Walpack dropped to 46° on the 14th and High Point and High Point Monument (Sussex) reached 49°. The 15th was the coolest morning of the month across NJ. Pequest fell to 43° and Walpack to 44°. A total of nine stations in the northwest hills and valleys were in the 40°s, with seven west-central NJ locations at 50°. Harvey Cedars was mildest at 62°. Pequest and Walpack were 46° on the 16th, Pequest 48°, and three stations at 49° on the 17th. The final two 40° mornings of the month were the 24th with 47° at Walpack and 49° in Pequest, and the 25th with these two stations at 44° and five others in the 40°s.

Precipitation and storms

As to be expected in a summer month of showers and thunderstorms, while statewide precipitation was near normal, there was a rather wide range of values from place to place. Not the extremes of July (which featured a 12.53" range), but still a 6.22" range. Gloucester County was the wet spot, with the following top station totals: Pitman 8.88", Franklin Township 8.11", Washington Township 7.33", and Clayton 7.25". Hillsborough (Somerset) at 7.21" was the wettest location outside of Gloucester. On the dry side, Millstone (Monmouth) only saw 2.66", Pennsville (Salem) 2.77", Middle Township (Cape May) 2.82", Atlantic City Marina (Atlantic) 2.85", and Pomona 2.93".

Rainfall exceeded an inch at one or more locations on seven days and 3.00" or more on four of these days. The first was a cool, rainy day experienced across NJ on August 1st. A statewide half-inch or more fell, with thunder rumbling in spots. The southwest corner of the state saw the most, which was often the case this month. Woodstown (Salem) caught 1.68", Woolwich (Gloucester) 1.67", and two East Greenwich (Gloucester) gauges 1.62" and 1.50". Most of the 14 CoCoRaHS stations that received more than an inch were in the southwest up into the central region.

The 7th brought scattered areas of a half-inch or more to the southern half of NJ, with less in the north. Lavallette (Ocean) received 1.35", Pine Beach (Ocean) 1.20", and Medford Township (Burlington) 1.01". Off and on showers and thunderstorms on the 8th-9th deposited heavy rain in the far northwest. High Point and High Point Monument (Sussex) received 6.16" and 5.23", respectively, over the period, with the vast majority falling early on the 9th. Sussex (Sussex) saw 3.69" and Wantage (Sussex) 2.85". Four reports from Blairstown (Warren) were submitted for this event, with like totals of 2.20", 2.08", 2.08", and 2.07". Flash flooding of roads and streams was common. The heavy totals in the northwest tapered rather quickly to less than an inch once past central sections and were less than 0.25" along the coast.

The most widespread heavy event of the month occurred on the 13th, mostly from sunrise to noon. The strongest of the storms produced damaging winds and flash flooding in southern portions, particularly from southwestern counties over to Ocean County and up into eastern Monmouth, with over 2" falling in many locations. The second NJ tornado of 2013 struck Manahawkin (Ocean) shortly after 10AM. This EF0 storm with 75-85 mph winds knocked down numerous trees and damaged some roofs along its two-mile long, 50-100 yard wide path. Fortunately there were no injuries. Other tree, power line, and roof damage occurred elsewhere in Ocean County as well as in Salem, Gloucester, Atlantic, and Burlington counties. Six locations had more than 4", including Winslow Township (Camden) 4.68", Washington Township (Gloucester) 4.50" and 4.09", Monroe Township (Gloucester) 4.28", Clayton (Gloucester) 4.14", and Ocean Township (Monmouth) 4.11". Twelve gauges caught 3.00"-3.99", 28 2.00"-2.99"" and 90 1.00"-1.99". The far northwest and Cape May County received only 0.10" or so.

Isolated heavy downpours during the morning and mid day hours of the 22nd deposited flooding rain on portions of central NJ. Peapack-Gladstone (Somerset) was deluged with 5.85". This necessitated at least one water rescue on a country road and washed out NJ Transit tracks in one location. Hillsborough (Somerset) received 3.52", Califon (Hunterdon) 3.18", Lebanon (Hunterdon) 3.15", and Bridgewater (Somerset) 3.02". Most central areas saw over an inch, which tapered to a half inch to the northeast. Areas in the northwest and scattered southern areas had less than 0.10". Some tree damage occurred in Gloucester County.

In what was otherwise a gorgeous "top ten" weekend throughout the Garden State, an isolated portion of eastern Ocean County received a pre-dawn dousing on the 24th. Lavallette picked up a quick 1.00", Point Pleasant 0.88", and Point Pleasant Beach 0.62".

The final stormy event of the month on the 28th brought multiple rounds of thunder and drenching rain to (where else?) southwestern counties as well as east into Cumberland, Cape May, and Atlantic counties. Two inches or more fell in some locations, including Vineland (Cumberland) 3.81", Estell Manor (Atlantic) 3.69", Franklin Township (Gloucester) 3.67", and Pittman (Gloucester) 3.23". Localized flash flooding resulted. Over an inch fell in the Delaware Valley up to Warren County, little to none in Ocean and Monmouth counties, and a few tenths elsewhere.

While stronger winds certainly occurred in scattered locations, only three of the 50 NJWxNet stations received a wind gust exceeding 40 mph during August. This included 43 mph at Cream Ridge (Monmouth) on the 1st and 45 mph and 44 mph gusts at Oswego Lake (Burlington) and Harvey Cedars (Ocean), respectively, on the 13th. This day was the windiest of the month, with many stations gusting into the 20-30 mph range and Hammonton (Atlantic) peaking at 38 mph and Clayton (Gloucester) 33 mph. The highest barometric pressure of the month was in the low to mid 30.40"s on the 25th. Lowest pressure was observed on the 13th, falling to the mid 29.60"s.

Summer 2013 Overview

Precipitation

Summer rainfall averaged 19.93" around the state. This is 7.18" above the 1981-2010 normal and ranks as the 2nd wettest on record (Table 1). Three of the seven wettest summers have been in the past five years. No other years in the top 10 fall closer than six years apart.

Rank	Year	Summer Prcp
1	2011	24.25"
2	2013	19.93"
3	1928	19.67"
4	1938	19.64"
5	1903	19.50"
6	1975	19.29"
7	2009	19.07"
8	1897	18.55"
9	1945	17.98"
10	1967	17.94"

Table 1. The ten wettest summers (June-August) across New Jersey since 1895.

Not surprisingly, every portion of the state was above normal. The southwestern counties of Salem, Gloucester, and Camden were wettest with 20"-24" on average, which is 11"-12" above normal. Totals in Cumberland, Burlington, Mercer, Hunterdon, Somerset, Middlesex and Monmouth counties were 19"-22", which is 6"-8" above normal. Bergen and Passaic counties had the lowest totals of about 16", which is 3" above normal. The remaining nine counties were 3.5"-6" above average. Of course individual stations were more extreme, with Mt. Holly (Burlington) swamped with 28.60", followed by Franklin Township (Gloucester) 28.40", Woolwich Township (Gloucester) 27.01", Pittsgrove (Salem) 26.63", Lebanon (Hunterdon) 25.47", Lawrence Township (Mercer) 25.99", Franklin Township (Hunterdon) 25.25", and two Ewing stations each, rather amazingly, both at 25.18".

Temperature

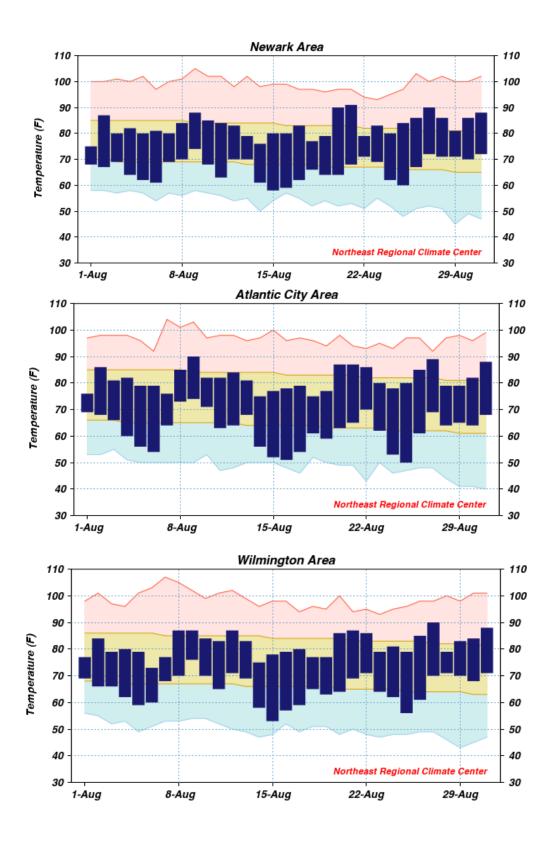
While not as warm as the past three summers, 2013 averaged 73.8°, which is 0.9° above the 1981-2010 average. This ranks 2013, along with three other summers, as the 14th warmest. Or looked at another way, only eleven summers have been warmer, and eight of these have occurred since 1999.

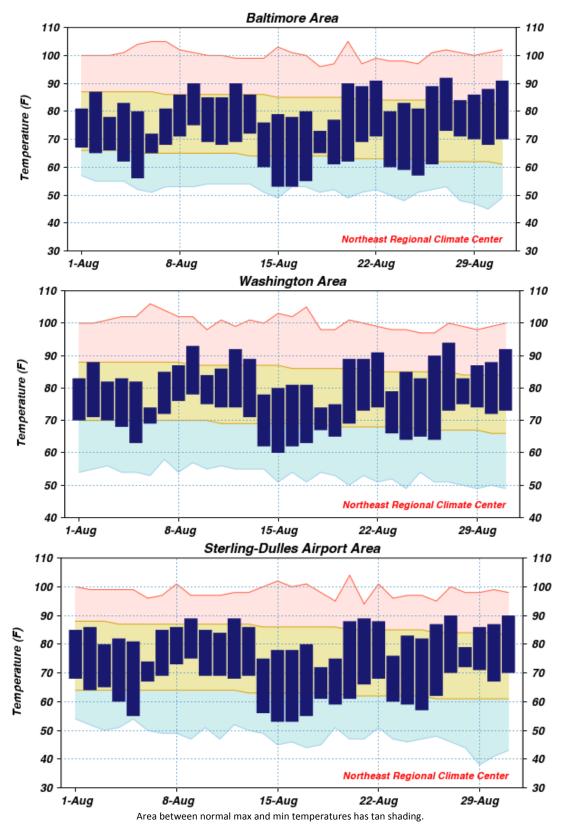
Rank	Year	Summer Avg Temp
1	2010	76.2°
2	2005	75.6°
3	2011	75.2°
4	1949	74.6°
5	1999	74.5°
6	2002	74.4°
6	2012	74.4°
8	2006	74.3°
9	1955	74.1°
10	2008	74.0°
11	1900	73.9°
12	1943	73.8°
12	1973	73.8°
12	1988	73.8°
12	2013	73.8°

Table 2. The 15 warmest summers (June-August) across New Jersey since.

As New Jersey continues to recover from Sandy, particular attention was paid to weather conditions that might help or hinder day trips to the shore, as many weekly rental properties were not available. Weekdays in June had a fair bit of rain, including a soaking from Tropical Storm Andrea. This was the wettest June on record, however after a dry but cool Memorial Day weekend, June weekends were warm and rain free. The four day 4th of July weekend was hot and dry. Most other July weekends were warm to hot and mainly dry. July was the 5th warmest on record, in large part due to many warm nights. August was cooler, but again, most weekends were dry with temperatures in the upper 70s to low 80s. Thus the overall appraisal must be that summer weather, particularly on the weekends, was a boon to shore activities.

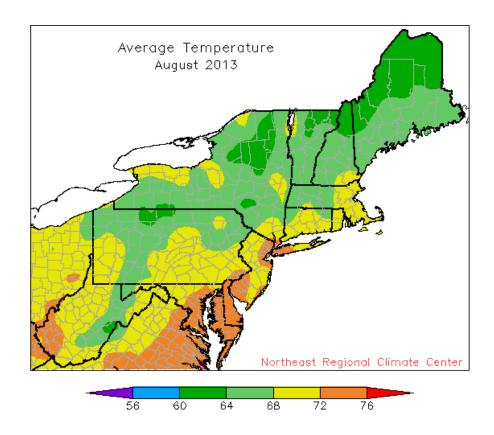
DAILY AVERAGE TEMPERATURES AND THE 30-YEAR NORMAL

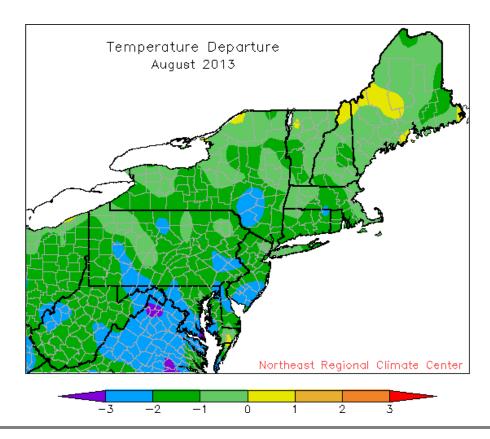




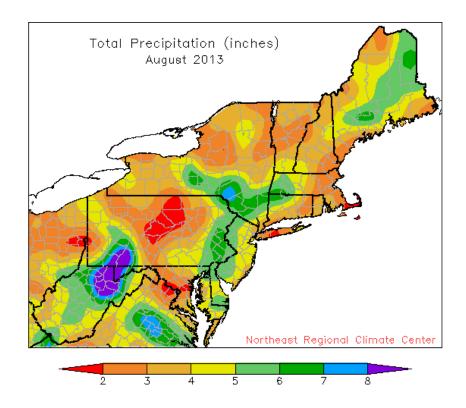
Red line connects record high temperatures. Light blue line connects record low temperatures.

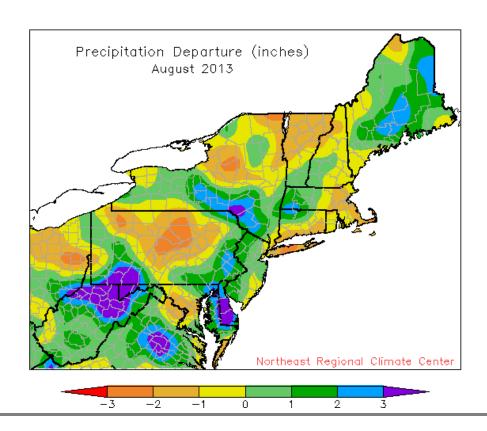
MONTHLY TEMPERATURE MAPS





MONTHLY PRECIPITATION MAPS





PRELIMINARY MONTHLY SUMMARIZED DATA AUGUST 2013

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STATION		NTHLY				XTREM		NUMBI	sr (YS		LY TOTA		EXTREMES		WFALL
	AVG	AVG	MON	DEPRT			MON DAY	MAX		MIN		MON	DEPRT		DLY DAY	MON	DLY DAY
	MAX	MIN	AVG		MAX		MIN	90+ 1	70-	65+	50-	TOT		0.1+	MAX	TOT	MAX
-DE: NORTHERN-																	
WILMINGTON NEW CAS	81.7	65.3	73.5	-1.7	90	27	53 15	1	0	18	0	5.22	1.97	6	3.10 13	0	
-DIVISION-			73.5	-1.4								5.22	1.75				
-DE: SOUTHERN-																	
DOVER	82.4	65.4	73.9	-2.2	89	9	55 16	0	0	17	0					0	
-DIVISION-				-1.5													
211121011			,,,,	1.0													
-STATE-			72 0	-1.4								1 15	-3.10			0	
-SIAIE-			73.0	-1.4								1.13	-3.10			0	
-MD: SOUTHEASTERN-									_		_			_			
SALISBURY WICOMICO			75.4	0.5	91		54 16	3		23	0	7.30	2.87	6	5.32 1	0	
SALISBURY 2N	81.9	65.6	73.7		89	9	52 16	0	0	19	0	6.26		8	2.28 1	NM	
-DIVISION-			74.6	-1.0								6.78	2.13				
-MD: CENTRAL EAST-																	
ROYAL OAK 2 SSW	82.8	65.5	74.2	-2.7	92	9	53 16	1	0	19	0	2.84	-1.43	6	0.60 1	0	
-DIVISION-			74.2	-2.3								2.84	-1.28				
			_										_				
-MD: LOWER SOUTHE-					1			1									
MECHANICSVILLE 5 N	70 2	62.6	70.9	-2.8	89	10	53 17+	0	٥	13	0	6.99	3.11	8	3.95 10	0	
												0.99	3.11	0	3.95 10	_	
SOLOMONS	82.0		75.5		93		61 15	1	0	27	0	1				NM	
ST INIGOES WEBSTE*	81.3	65.6			91	9	53 16	1								NM	
-DIVISION-			73.3	-1.9								6.99	3.06				
-MD: UPPER SOUTHE-																	
BALTIMORE WASH INT	83.6	64.9	74.2	-0.9	92	27	53 16+	6	0	19	0	1.14	-2.15	3	0.38 1	0	
BELTSVILLE	82.0	65.1	73.5	-2.3	90	10	53 15	1	0	19	0		-0.13	5	1.29 14	0	
DALECARLIA RSVR *	82.4		73.8		93		55 15	_	•		•	0.11	0.10	J	1123 11	0	
									^	1.0		1.06	1 47		0 46 12		
LAUREL 3 W	83.9	66.3		-2.0	92		56 15	6		19	0		-1.47	6	0.46 13	NM	
MD SCI CTR BALTIMO	86.6	71.6	79.1	0.1	95		65 15+	11	0	31	0	1.67	-1.72	5	0.47 1	NM	
NATL ARBORETUM DC*	85.0	66.4	75.7	-2.3	93	28+	55 18									NM	
OXON HILL	82.6	65.5	74.0	-2.9	91	28+	56 16	4	0	18	0	2.08	-1.54	6	0.63 2	0	
UPPER MARLBORO 3 *	82.5	63.7	73.1	-2.0	90	28	53 16+									NM	
-DIVISION-			74.8	-1.2								2.00	-1.59				
-MD: NORTHEASTERN-																	
STEVENSVILLE	82.0	67.4	74.7	-1.5	90	10	55 17	1	0	24	0	2.50		5	0.65 2	0	
-DIVISION-				-0.9				_			-		-0.88	_		-	
-DIVISION-			/4./	-0.9								2.30	-0.00				
WD WODEWERN GEN																	
-MD: NORTHERN CEN-											_			_			
ABERDEEN PHILLIPS	81.5	64.6	73.0	-2.3	89	28	57 25+	0		16	0	6.69	2.93	5	2.44 7	0	
BRIGHTON DAM	80.4	61.7	71.1		87	28	51 15	0	0	11	0	2.63		7	0.94 29	0	
CONOWINGO DAM	79.3	62.4	70.8	-5.7	86	23	54 16	0	1	13	0	7.38	3.47	9	2.70 29	NM	
CYLBURN	79.3	64.7	72.0	-0.9	87	10	55 16+	0	2	16	0					NM	
DAMASCUS 3 SSW		63.0			85	27	52 15	0		15	0	2.10	-2.19	7	0.47 8	0	
EMMITSBURG 2 SE		59.8			89		48 17+			9			-1.04	6	1.00 13	0	
MILLERS 4 NE				-1.5	88		48 15	0		9		5.33	1.61		3.14 8	0	
	00.3	00.0			00	J 1	40 13	"	U	9	2			**	3.14 6	1	
-DIVISION-			/1.3	-2.6	1			1				4.41	0.84				
					1			1									
-MD: APPALACHIAN -					1			1									
CUMBERLAND 2				-2.5	91	31	50 16+	2		9	2	5.08	1.91	8	0.92 28	NM	
FROSTBURG 2	74.9	56.4	65.7	-2.1	84	31	46 15	0	4	2	4	5.64	2.04	11	0.89 13	NM	
SHARPSBURG 5 S	80.9	59.3	70.1	-2.7	88	31	48 16+	0	1	8	3					NM	
WILLIAMSPORT *	81.8	61.8	71.8	-2.3	88	13	50 16	1								0	
-DIVISION-				-1.6								5.36	2.20				
.=====												3.50					
-MD: ALLEGHENY PL-					1			1									
	75 7	E = ^	6= =	1 4	25	o	45 1 <i>6</i>		,	2	1.0	0.40	A 71	1.2	2 00 20	0	
OAKLAND 1 SE		55.2			85		45 16	0	4	2	10	8.49	4.71		2.08 29		
SAVAGE RIVER DAM *				-2.4	82		48 17+					5.95	2.62		1.67 13	NM	
SINES DEEP CREEK	74.4	53.7	64.0		82	8	45 17+	0		0		9.67		13	3.04 29	NM	
KITZMILLER 1 W	77.9	58.5	68.2		86	31	48 15	0	2	5	4					NM	
-DIVISION-			66.1	-1.8								8.04	4.36				
-STATE-			72.3	-1.9	1			1				4.76	1.00			0	
					1			1				1			1		

	TEMPERATURE	(F)		PRECIPITATION (INCHES)					
STATION	MONTHLY AVERAGES	EXTREMES	NUMBER OF DAYS	MONTHLY TOTALS	EXTREMES	SNOWFALL			
	AVG AVG MON DEPRT	MON DAY MON DAY	MAX MIN	MON DEPRT DAYS	DLY DAY	MON DLY DAY			
	MAX MIN AVG	MAX MIN	90+ 70- 65+ 50-	TOT 0.1+	MAX	TOT MAX			
BOONTON 1 SE	81.3 60.9 71.1 -1.2	89 22 52 16+	0 0 11 0	4.54 0.54 8	0.83 9	0			
BOUND BROOK 2 W				5.48 1.45 8	1.23 22	0			
CANOE BROOK	80.7 61.9 71.3 -1.5	88 22 52 15	0 0 11 0	4.15 -0.27 6	1.27 23	NM			
CRANFORD	80.8 65.3 73.0 -0.5	86 21 56 15	0 0 19 0	3.93 0.14 7	0.93 2	NM			
FLEMINGTON 5 NNW	80.5 60.1 70.3 -1.8	87 28+ 49 15	0 1 9 1	5.54 1.87 8	1.42 23	0			
HARRISON	82.7 65.3 74.0 -2.1	93 22 57 15	2 0 20 0	3.52 -0.66 6	0.91 2	NM			
LAMBERTVILLE				4.73 0.67 8	1.29 13	NM			
NEWARK INTL AP	82.8 66.5 74.7 -1.1	91 21 58 15	3 0 19 0	4.57 0.87 6	1.34 28	0			
PHILLIPSBURG EAST*	79.9 60.6 70.3 -1.8	88 28 53 26+				0			
POTTERSVILLE 2 NNW	78.7 61.5 70.1	86 2 54 15	0 1 9 0	6.96 2.72 10	3.30 23	NM			
RINGWOOD	82.9 58.5 70.7	91 22 48 15	2 0 3 3			NM			
SUSSEX 2 NW	79.8 59.3 69.5 0.1	87 10 50 25	0 1 7 1			0			
WERTSVILLE 4 NE	79.9 60.6 70.3 -1.8	87 22 51 15	0 1 9 0	4.26 0.15 6	1.18 14	0			
RIEGELSVILLE				6.30 12	1.21 29	0			
TOCKS ISLAND	77.8 59.6 68.7	84 28 51 15	0 1 8 0			NM			
-DIVISION-	71.2 -0.7			4.68 0.54					
-NJ: SOUTHERN-									
ATLANTIC CITY INTL	81.4 62.5 72.0 -2.4	90 9 50 25	1 0 12 1	2.93 -1.18 5	1.28 13	0			
ESTELL MANOR	80.4 62.0 71.2 -2.7	88 10 50 25+	0 0 12 2	6.63 1.91 8	2.74 29	0			
FREEHOLD MARLBORO	81.7 61.6 71.6 -2.2	89 22 48 15	0 0 12 1	3.02 -1.08 5	0.86 14	0			
HAMMONTON 1 NE	81.9 62.9 72.4 -2.1	89 10 52 26+	0 0 14 0	4.36 0.12 6	2.33 14	0			
HIGHTSTOWN 2 W	81.8 60.5 71.1 -1.9	89 22 49 15	0 0 8 1	4.56 0.32 6	1.92 14	NM			
INDIAN MILLS	81.5 61.8 71.6 -1.7	87 27+ 48 25+	0 0 12 2	4.53 -0.34 5	2.62 13	0			
MILLVILLE MUNI AP*	81.3 61.9 71.6 -2.3	88 9 50 25		4.95 0.99 9	1.38 28	NM			
NEW BRUNSWICK 3 SE	82.9 62.1 72.5 -1.2	91 21 51 15	3 0 12 0	4.53 0.38 6	1.79 23	0			
SEABROOK FARMS	82.1 64.6 73.4	90 10 54 14	1 0 20 0	4.95 8	1.30 14	0			
SOMERDALE 4 SW	79.2 62.3 70.7	86 22+ 50 16	0 0 11 1	5.54 1.58 6	2.29 13	0			
ATSION	79.7 60.8 70.2	87 22 51 28+	0 0 10 0	4.93 6	2.98 14	0			
TRENTON MERCER CO	80.6 63.7 72.1 -1.8	88 21 54 25+	0 0 16 0	3.93 -0.17 5	1.68 13	0			
PHILADELPHIA MT HO	81.0 63.4 72.2	89 22 53 25+	0 0 15 0	3.15 6	0.89 29	0			
-DIVISION-	71.7 -2.1			4.46 0.16					
-NJ: COASTAL-									
ATLANTIC CITY	77.2 68.6 72.9 -2.1	87 28 63 26+	0 0 26 0	2.85 -1.07 4	1.26 14	NM			
CAPE MAY 2 NW	81.7 65.5 73.6 -1.5	90 9 54 25+	1 0 22 0	2.96 -0.66 5	1.21 1	0			
LONG BRANCH OAKHUR	79.9 63.7 71.8 -1.4	88 28 55 16+	0 0 15 0	7.09 2.07 6	4.08 14	NM			
-DIVISION-	72.8 -1.6			4.30 0.20					
-STATE-	71.6 -1.6			4.53 0.30		0			

PRELIMINARY MONTHLY DEGREE DATA AUGUST 2013

STATION	HEATIN	G DEGR	EE DAYS	(BASE 65)	COOLI	NG DEG	REE DAYS	(BASE 65)	GROWI	NG DEG	REE DAY	S (BASE 50)
	MONTH	MONTH	SEASON	SEASON	MONTH	MONTH	SEASON	SEASON	MONTH	MONTH	SEASON	SEASON
-DE: NORTHERN-												
WILMINGTON NEW CAST	0	-2	0	-2	270	-46	1085	92	735	-45	2967	104
-DE: SOUTHERN-												
DOVER	0	-1	0	-1	282	-63	1127	19	747	-62	3037	-18
-MD: SOUTHEASTERN SHORE-												
SALISBURY WICOMICO	0	-1	0	-2	333	25	1363	380	798	26	3315	436
SALISBURY 2N	0				279				744			
-MD: CENTRAL EASTERN SHORE-	_	_		_								
ROYAL OAK 2 SSW	0	-1	0	-1	292	- 78			757	- 77		
MD - LOWED COMMUNICAL												
-MD: LOWER SOUTHERN- MECHANICSVILLE 5 NE	4	1	4	1	194	- 79	908	20	655	-80	2779	-20
SOLOMONS	0	0	0	0	332	-79 -85	200	20	797	-85	2113	-20
		v	v	Ÿ	552	55			',,,	03		
-MD: UPPER SOUTHERN-												
BALTIMORE WASH INTL	0	-1	0	-1	292	-24	1145	135	757	-23	3044	144
BELTSVILLE	2	0	2	0	274	-62	1086	19	737	-63	2973	6
LAUREL 3 W	0	-1	0	-1	317	-59	1216	20	782	-58	3135	-28
MD SCI CTR BALTIMOR	0	0	0	0	445	13	1674	278	910	13	3769	351
OXON HILL	0	0	0	0	289	-80	1172	-17	754	-80	3094	-99
-MD: NORTHEASTERN SHORE-												
STEVENSVILLE	0	0	0	0	308	-39	1186	135	773	-39	3090	119
-MD: NORTHERN CENTRAL-												
ABERDEEN PHILLIPS F	0	-1	0	-1	255	-65			720	-64		
BRIGHTON DAM	0		0		197				662			
CONOWINGO DAM	2	1	2	1	193	-165			656	-165	2600	-415
CYLBURN	1	-3	1	-6	225	-23	915	134	689	-21	2760	135
DAMASCUS 3 SSW	3	-2	3	-3	187	-65			649	-64		
EMMITSBURG 2 SE	8	2			198	-48			655	-50		
MILLERS 4 NE	7	1	7	0	189	-34	798	94	647	-35	2633	133
-MD: APPALACHIAN MOUNTAIN-		_		_								
CUMBERLAND 2	4	2	4	2	257	-67	1025	0	718	-69	2917	-46
FROSTBURG 2	47	15	10	ć	73	-46			491	-61		
SHARPSBURG 5 S	12	7	12	6	178	-67			631	-74		
-MD: ALLEGHENY PLATEAU-												
OAKLAND 1 SE	51	14	70	10	73	-25	375	75	487	-39	1975	135
SINES DEEP CREEK	66	14	, ,	10	45	-23	5,5	. 3	444	-33	2213	100
KITZMILLER 1 W	23		25		129		570		571		2322	
-NJ: NORTHERN-												
BOONTON 1 SE	2	-4	3	-5	198	-34			661	-30		
CANOE BROOK	2	-4	2	-6	205	-43			668	-39		
CRANFORD	0	-4	0	- 5	256	-10			721	-6		
FLEMINGTON 5 NNW	4	-4			176	-52			637	-48		
HARRISON	0	-1	0	-1	287	-58	1139	98	752	-57	2952	60
NEWARK INTL AP	0	-1	0	-1	307	-29	1171	137	772	-28	3014	127
POTTERSVILLE 2 NNW	1		1		166				630		2486	
RINGWOOD	4		5		 191				652			

STATION	HEATING DEGREE DAYS (BAS	COOLING DEGREE DAYS (BASE 65)	GROWING DEGREE DAYS (BASE 50)
	MONTH MONTH SEASON SEASO	MONTH MONTH SEASON SEASON	MONTH MONTH SEASON SEASON
SUSSEX 2 NW	7 -13 7 -23	156 0 743 254	614 13 2432 348
WERTSVILLE 4 NE	3 -3 5 -3	173 –51	635 -48
TOCKS ISLAND	7 8	126 652	584 2362
-NJ: SOUTHERN-			
ATLANTIC CITY INTL	0 -3 0 -3	222 -73 956 47	687 -71 2716 9
ESTELL MANOR	5 3 5 2	202 -74 901 48	662 -77 2707 50
FREEHOLD MARLBORO	4 1 4 0	218 -58	679 –59 2703 57
HAMMONTON 1 NE	0 -2 0 -3	237 –59	702 –57
HIGHTSTOWN 2 W	3 -3 3 -5	201 –51 892 96	663 -48 2629 67
INDIAN MILLS	1 -3 1 -4	214 -46 942 118	678 -43 2777 140
NEW BRUNSWICK 3 SE	1 -2 1 -3	243 -30 976 142	707 –28 2744 142
SEABROOK FARMS	0 0	267	732
SOMERDALE 4 SW	1 1	186 887	650 2688
ATSION	3 3	175	637
TRENTON MERCER CO A	0 -3 0 -3	228 -51 950 94	693 -48 2748 102
PHILADELPHIA MT HOL	1 1	230	694 2827
-NJ: COASTAL-			
ATLANTIC CITY	0 -1 0 -1	254 -55 805 -42	719 -54 2567 -53
CAPE MAY 2 NW	0 -1 0 -1	273 -41 929 26	738 -40 2754 34
LONG BRANCH OAKHURS	0 -3 4 0	218 -40	683 -38 2547 92

The heating season begins July 1 and ends June 30. The cooling season begins January 1 and ends December 31.

The growing season begins March 1 and ends October 31. All departures are calculated from the 1981 - 2010 mean.

These data are considered preliminary, published data from the National Climatic Data Center may differ somewhat from the values shown here.

NORTHEAST REGIONAL CLIMATE CENTER MID-ATLANTIC CLIMATE

Northeast Regional Climate Center

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