# Northeast Regional Climate Center Mid-Atlantic Climate

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#### **JUNE 2013**

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Website: http://www.nrcc.cornell.edu

Address: Phone: (607)255.1751

1123 Bradfield Hall Fax: (607)255.2106

Email: nrcc@cornell.edu **Cornell University** 

Ithaca, NY 14853

#### NRCC Staff:

Dr. Arthur DeGaetano Director Mr. William Noon

**Computer Analyst** 

#### State Climatologists:

**David Legates** 210 Newark Hall Department of Geography Newark, DE 19716 302-831-2294

Mr. Keith Eggleston Regional Climatologist Ms. Jessica Rennells Assistant Climatologist Mrs. Samantha Borisoff **Assistant Climatologist** Ms. Tara Fardellone **Publication Design** 

Mrs. Pamela Vitale Administrative Assistant

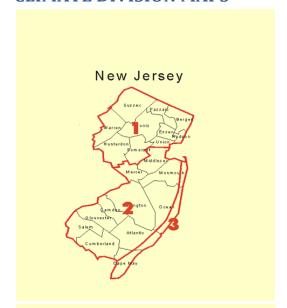
#### Konstantin Y. Vinnikkov

Dept of Atmospheric and Oceanic Sci. Department of Geography University of Maryland College Park, MD 20742 301-405-5382

#### **David Robinson**

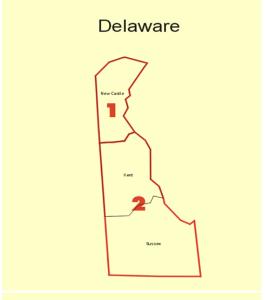
**Rutgers University** Piscataway, NJ 08854 732-445-4741

#### **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 Southeastern Shore
- 2 Central Eastern Shore
- 3 Lower Southern
- 4 Upper Southern
- 5 Northeastern Shore
- 6 Northern Central
- 7 Appalachian Mountain
- 8 Allegheny Plateau

#### **JUNE WEATHER HIGHLIGHTS**

The Mid-Atlantic continued to be warmer than normal in June. The region's average temperature of 72.3 degrees, 1.2 degrees above normal, made it the 16<sup>th</sup> warmest June on record. New Jersey had the greatest departure, +1.5 degrees, making it the 16<sup>th</sup> warmest June for the state. Its Northern and Southern divisions also ranked the month among their top 20 warmest. Maryland had a departure of +1.0 degree above normal, making it the state's 17<sup>th</sup> warmest June, and Delaware also had a departure of +1.0 degree. Five of Maryland's eight divisions and both of Delaware's divisions ranked this June among their top 20 warmest. The region's highest temperature was 97 degrees. Harrison and Wayne, both located in New Jersey's Northern division, reached that temperature on the 25<sup>th</sup>. The lowest temperature was 41 degrees. Deep Creek Lake, located in Maryland's Allegheny Plateau, reported that temperature on the 5<sup>th</sup>.

The Mid-Atlantic's string of dry months came to an end in June. Receiving 8.57 inches of rain, 219 percent of normal, it was the 3<sup>rd</sup> wettest June since 1895. Delaware, with 273 percent of normal precipitation, and New Jersey, with 241 percent of normal, had their wettest June since recordkeeping began. With 191 percent of normal precipitation, Maryland reported its 3<sup>rd</sup> wettest June. Ranks for the divisions are below. The region's greatest monthly rainfall was 14.81 inches in Indian Mills, New Jersey, while the greatest daily rainfall was 5.07 inches in Damascus, Maryland.

#### Climate Division Rank (wettest since 1895)

Delaware	
Northern	<b>1</b> <sup>st</sup>
Southern	1 <sup>st</sup>
New Jersey	
Coastal	1 <sup>st</sup>
Southern	1 <sup>st</sup>
Northern	3 <sup>rd</sup>
Maryland	
Southeastern Shore	2 <sup>nd</sup>
Central Eastern Shore	3 <sup>rd</sup>
Lower Southern	4 <sup>th</sup>
Upper Southern	4 <sup>th</sup>
North Central	4 <sup>th</sup>
Northeastern Shore	5 <sup>th</sup>

A slow-moving low and the remnants of Tropical Storm Andrea dumped rain on the region from June 6-8. On the 7<sup>th</sup>, parts of Caroline County received up to 5.52" and Newark, NJ, and Wilmington, DE, broke daily precipitation records. Wilmington's total of 3.36" for the day contributed its record-setting June total of 13.66". Severe thunderstorms on the 10<sup>th</sup> spawned four EF-0 tornadoes in Maryland and an EF-0 tornado in Delaware. The Maryland tornadoes touched down in Baltimore City, Baltimore County, Howard County, and St. Mary's County while the Delaware tornado touched down in New Castle County. The tornadoes, along with straightline winds, downed trees and damaged homes and various structures. In addition, rain from the storms caused flash flooding in several Maryland counties. Another round of severe storms on the 13<sup>th</sup> generated three EF-0 tornadoes in Maryland: one in St. Mary's County, one in Montgomery County, and another in Calvert County. The tornadoes primarily downed trees, some of which fell on buildings and cars. Some of the storms also packed baseball-size hail (reported in St. Mary's County, MD) and wind gusts to 68 mph (reported in Sussex County, DE, and Queen Anne's County, MD). The storms snarled traffic on the ground and in the air as delays of up to one hour and forty-five minutes occurred at Reagan and Dulles airports. A low-end derecho on the same day may have caused tsunami-like waves along the coast. The derecho moved across the region in the morning and in the afternoon, several tide gauges recorded water fluctuations. From June 27-30, a wet, unsettled weather pattern over the Northeast caused daily torrential downpours. On the 28<sup>th</sup>, Reagan Airport, D.C., picked up 2.69" of rain in 3.5 hours. Flash flooding was reported in parts of the region. Also, funnel clouds were observed in New Castle County, DE, and Cecil County, MD. In Maryland on the 30<sup>th</sup>, a funnel cloud was spotted in St. Mary's County and a waterspout touched down in the Severn River. Flash flooding was reported in parts of New Jersey and Delaware. The heavy rain throughout the month caused issues for farmers in parts of New Jersey. By mid-month, farmers reported wind and rain damage to spinach, strawberries, and barley and wheat fields with several field crops requiring replanting. The precipitation also slowed or stopped the planting of summer vegetables and soybeans. By the start of July, some fruits and vegetables showed signs of disease. In Monmouth County, squash and spinach losses due to excessive rain were reported and sweet corn planting was behind schedule.

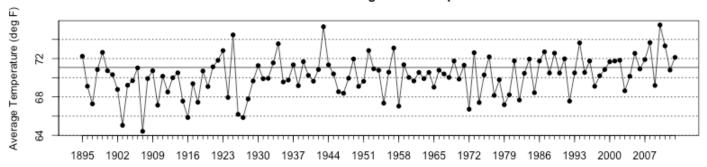
#### **Daily Precipitation Records (inches)**

Station	Date	New	Previous
Wilmington, DE	7	3.36	1.78 in 1916
Newark, NJ	7	3.71	1.11 in 1931
Washington National, DC	10	2.77	2.27 in 1945
Atlantic City, NJ	13	1.38	1.29 in 1953
Wilmington, DE	30	1.75	1.40 in 1902

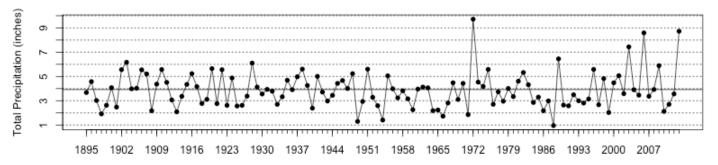
#### **Monthly Precipitation Records (inches)**

Station	New	<u>Previous</u>
Wilmington, DE	13.66	9.90 in 2003

#### Mid Atlantic Average June Temperatures



#### Mid Atlantic June Precipitation Totals



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

## Record Wet: June 2013 Summary and Mid-Year Recap

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

#### **June Overview**

Rain, rain, and more rain was the theme for New Jersey weather in June 2013. When all was said and done, statewide average precipitation totaled 9.57", a record for any June back to 1895 (Table 1). Temperatures were above average too. The average of 71.3° was 1.2° above the 1981-2010 mean and ranked as the 19<sup>th</sup> warmest June. These averages are derived from an evaluation of several dozen long-term National Weather Service Cooperative Observing (Coop) stations situated throughout the state.

More on thermal conditions later in this report, but first back to the precipitation. The 9.57" total was 5.55" above the 4.02" average. Tropical Storm Andrea brought the most abundant rain of the month, but there were 13 days during the month when an inch or more accumulated at one or more locations. A point of information is warranted here. While over an inch fell in some locations on the afternoon of the 30<sup>th</sup>, most Coop observers had already reported for the day, as had Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) observers. Most take measurements close to 7 AM, with the historic rule being that the morning observation "ends" that particular calendar day. Thus any rain after that time on the last day of a month is reported on the 1<sup>st</sup> of the following month. While this practice can be debated, one can only compare June 2013 with previous Junes by following suit.

No location in the state was spared the wet conditions, with the southwest, west central, and northern coast being wettest and the far south and portions of the northeast least wet. Taking top honors was Pittsgrove (Salem County) with 13.07", followed by Franklin Township (Gloucester) at 13.00", Washington Township (Gloucester) 12.63", Belmar (Monmouth) 12.62", Medford Lakes (Burlington) 12.46, and both Tabernacle (Burlington) and Ewing Township (Mercer) with 12.43". Some 15 of the approximately 200 CoCoRaHS stations across the state caught between 12.00" and 13.07" and 60 stations came in with 10.00"-11.99". The Coop network historical database shows top June individual station honors staying with Pottersville (Morris) back in 1972 with 15.53".

The least amount of June rainfall was observed in Wildwood Crest (Cape May) with 4.79", followed by Middle Township (Cape May) with 5.39", North Haledon (Passaic) at 5.95", Cranford (Union) 6.38", Montclair (Essex) 6.47", Roxbury Township (Morris) 6.92", and Estell Manor (Atlantic) 6.95". All of these totals are one to several inches above average.

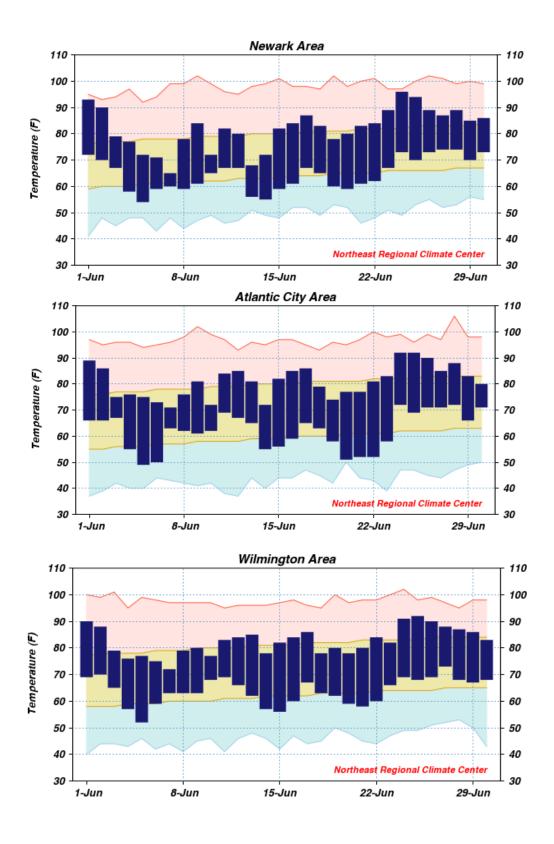
Rank	Year	June Prcp
1	2013	9.57"
2	2003	8.61"
3	1972	8.41"
4	1938	7.73"
5	1903	7.52"
6	2006	7.42"
7	2009	6.79"
8	1928	6.61"
9	1902	6.43"
10	1975	6.38"

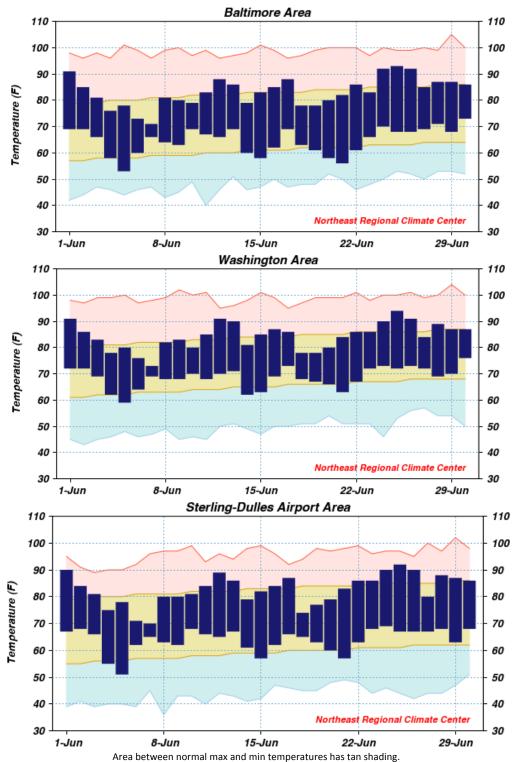
Table 1. The ten wettest Junes across New Jersey since 1895.

The late May-early June heat wave was broken from the afternoon of the 2<sup>nd</sup> into the PM hours of the 3<sup>rd</sup> by showers that deposited as much as 2.01" in Hamilton (Mercer) and 1.95" at New Brunswick (Middlesex). The heaviest rain was in northern Cape May County and in the vicinity of I-195 in central NJ. Only a few tenths fell in the northwest. Trees were reported down in Pittsgrove (Gloucester) and hail up to a half inch in diameter was observed in Toms River (Ocean) and Jackson (Ocean).

As Tropical Storm Andrea made her way up the East Coast rain began in southern areas during the evening of the 6<sup>th</sup> and encompassed the entire state during the 7<sup>th</sup>, finally tapering off very early on the 8<sup>th</sup>. Four stations out of approximately 200 CoCoRaHS stations reporting saw more than 5" of rainfall. They included Toms River (Ocean) at 7.72", Bedminster (Somerset) 5.53", Ocean Township (Monmouth) 5.15", and Rumson (Monmouth) 5.02". 52 stations reported between 4.00"-4.99", 104 between 3.00"-3.99", 51 from 2.00"-2.99" and only 6 under 2.00", the least being received at the Cape May and Middle Township stations in Cape May County. Storm totals are mapped in Figure 1 and show the wettest locations to be along the northern coast and in Mercer and Somerset counties with over 4". South and west Cape May, eastern Cumberland and western Atlantic counties saw the least, generally in the 1-2" range. Street, stream, and minor river flooding occurred, being most pronounced along the Millstone River within the Raritan basin of central NJ. Wind was not an issue during this event, with peak gusts most in the 20-30 mph range, with only a few stations gusting into the 30s mph, including Wantage (Sussex) at 33 mph and Harvey Cedars (Ocean) at 32 mph.

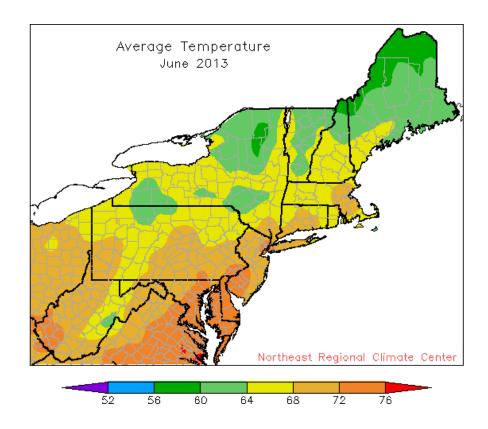
#### DAILY AVERAGE TEMPERATURES AND THE 30-YEAR NORMAL

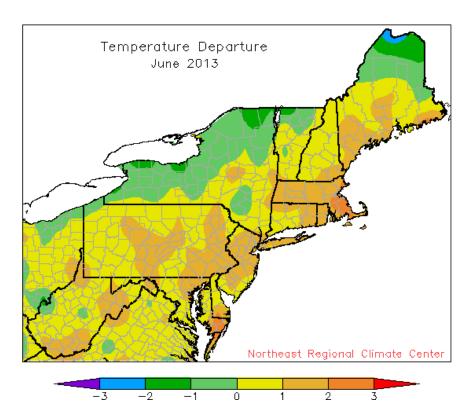




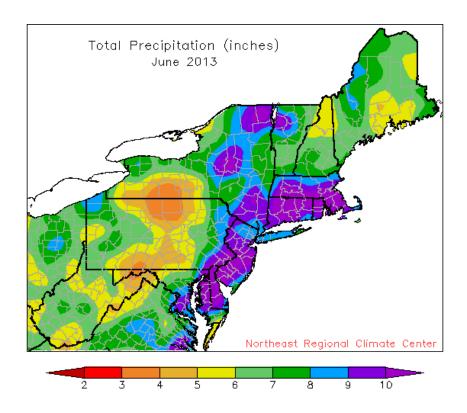
Red line connects record high temperatures.
Light blue line connects record low temperatures.

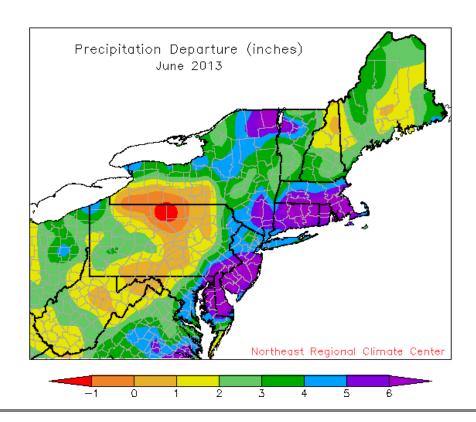
#### **MONTHLY TEMPERATURE MAPS**





#### **MONTHLY PRECIPITATION MAPS**





### PRELIMINARY MONTHLY SUMMARIZED DATA JUNE 2013

STATION	100	MITHER TY		PERATURE	1				NUMBER OF DAVE			MONTEN		PITATION (INCHES)					
SIAIION	MONTHLY AVERAGES			EXTREMES			NUMBER OF DAYS			MONTHLY TOTALS				EXTREMES SNOWFALL					
	AVG AVG MON DEPRT			DEPRT	MON DAY MON DAY			MAX	_	MIN		MON	DEPRT			DAY	MON	DLY DAY	
	MAX	MIN	AVG		MAX		MIN		90+	70-	65+	50-	TOT		0.1+	MAX		TOT	MAX
-DE: NORTHERN-					1				1										
WILMINGTON NEW CAS	82.5	63.9	73.2	1.0	92	25	52	5	4	0	15	0	13.66	9.78	12	3.36	7	0	
WILMNGTON PORTER R	81.5	63.5	72.5	0.8	90	26+	55	14	4	1	15	0	12.22	8.03	16	3.47	7	0	
-DIVISION-			72.8	0.8									12.94	8.91					
-DE: SOUTHERN-																			
DOVER	82.7	64.3	73.5	0.2	92	26+	50	6	4	1	16	1						NM	
-DIVISION-			73.5	1.0									9.84	6.03					
-STATE-			73.3	1.0									10.52	6.66				0	
-MD: SOUTHEASTERN-																			
SALISBURY WICOMICO	85.2	66.5	75.8	3.8	93	28+	54	6+	8	0	19	0	9.92	6.21	9	2.29	28	0	
SNOW HILL 4 N		64.8		1.2		25+	52		6	0	17	0	6.45	2.98	9	2.20		NM	
SALISBURY 2N	1	65.6			90			21+	1	0	20	0	8.96	2.50	10	1.78		NM	
	03.1	05.0		2.4	90	20	53	21	*	U	20	-		4 00	10	1.70	23	141-1	
-DIVISION-			75.0	2.4									8.44	4.82					
-MD: CENTRAL EAST-																			
ROYAL OAK 2 SSW	83.8	65.1	74.5	0.0	91	26+	54	21	5	0	18	0	9.23	5.37	12	2.65	7	0	
-DIVISION-			74.5	0.6									9.23	5.26					
-MD: LOWER SOUTHE-																			
MECHANICSVILLE 5 N	81.3	62.6	72.0	0.7	89	27+	51	6+	0	0	14	0	7.09	3.02	11	1.44	7	0	
SOLOMONS	83.1	69.1	76.1	0.6	92	26	59	14	6	0	26	0						NM	
-DIVISION-			74.0	1.6									7.09	3.11					
-MD: UPPER SOUTHE-																			
BALTIMORE WASH INT	83.2	64.7	73.9	1.5	93	25	53	5	4	0	17	0	7.81	4.35	9	2.25	7	0	
BELTSVILLE			73.7	0.8	92		52		5	0	17	0	7.60	3.90	11	1.90		0	
DALECARLIA RSVR	82.3		73.9	-0.2	94			21+	3	0	19	0	8.40	4.19	11	1.90		0	
LAUREL 3 W	83.6		74.4	0.6	92	25	56	5	5	0	16	0	5.76	1.53	10	2.26	7	NM	
MD SCI CTR BALTIMO	86.5	70.9	78.7	2.6	96	25+	63	14	9	0	29	0	8.68	5.41	10	3.22	10	NM	
NATL ARBORETUM DC*	85.4	66.8	76.1	1.0	94	26	55	5					8.76	4.68	11	1.86	11	0	
OXON HILL	83.5	65.3	74.4	0.0	91	26+	54	5	4	0	21	0	10.92	6.56	10	2.31	29	0	
UPPER MARLBORO 3 N	83.8	64.2	74.0	1.3	92	27+	51	5	5	0	18	0	9.06	4.99	12	1.65	3	NM	
-DIVISION-			74.9	1.6									8.37	4.39					
-MD: NORTHEASTERN-																			
STEVENSVILLE	82 4	66.8	74 6	0.9	90	26+	59	21+	2	٥	20	0	8.58		11	1.87	8	0	
-DIVISION-	02.4	00.0	74.6	1.9	30	201	33	211		v	20	Ü	8.58	4.71	11	1.07	Ü		
-MD: NORTHERN CEN-																			
ABERDEEN PHILLIPS		64.6		1.3	92		52		3		16	0						0	
BRIGHTON DAM	80.8	62.1	71.4		90	25	51	5	1	2	11	0	8.03		11	1.45	11	0	
CONOWINGO DAM	80.9	61.5	71.2	-2.5	90	29+	52	6+	2	1	10	0	8.74	4.56	12	1.77	8	NM	
CYLBURN	80.2	64.2	72.2	2.1	89	25	53	5	0	1	16	0						NM	
DAMASCUS 3 SSW		62.3		0.3		25+	51		0	2	11	0	9.94	5.80	9	5.07	10	0	
EMMITSBURG 2 SE		61.4		0.8		26+	50		0	2	9	1		-0.05	9	0.75		0	
MILLERS 4 NE		60.5		1.1	89		48		0		7	1	5.64		9	1.36		0	
DIVISION-	00.4	00.5	70.5	0.1	69	24	40	J		1	,	1	7.24	2.25 3.37	J	1.36	10		
-MD: APPALACHIAN -		_	_	_	1				1			_					_	l .	
CUMBERLAND 2		61.2			95		49		7	1	9	2	3.96	0.68	8	1.28		NM	
FROSTBURG 2	75.4	57.1	66.3	1.2	87	1	43	4	0	5	1	3	4.22	0.22	10	0.96	28	NM	
SHARPSBURG 5 S	81.6	59.9	70.8	0.6	90	26+	47	5+	2	2	3	2						NM	
VILLIAMSPORT *	83.5	61.3	72.4	1.9	94	26	51	6+										0	
DIVISION-			70.5	1.4									4.09	0.56					
-MD: ALLEGHENY PL-	76 1	56 0	66 1	2 0	0.5	211	42	4	_	4	0	6	6 27	1 05	10	1 25	20	_	
DAKLAND 1 SE		56.8		2.0		24+	42		0	4	0	ь	6.37	1.95	10	1.25	29	0	
SAVAGE RIVER DAM *		57.5		0.7	87		44											NM	
SINES DEEP CREEK	74.6	53.8	64.2		86	2	41	5	0	10	0	7	4.98		13	1.00	28	NM	
KITZMILLER 1 W	78.3	59.5	68.9		90	1	48	5	1	2	3	2						NM	
-DIVISION-			66.6	1.4									5.67	1.36					
-STATE-			72.6	1.0									7.41	3.54				0	
	1		12.0	1.0	1				<u> </u>				7.41	J.J4				U	

	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				
-NJ: NORTHERN-										
BELVIDERE BRG *	79.0 56.4 67.8 -0.5	90 25 44 7+	1 4	8.59 4.29 9	2.10 8	0				
BOONTON 1 SE *	81.2 60.7 71.0 1.7	93 25 51 6				0				
BOUND BROOK 2 W				8.75 4.65 10	2.68 8	NM				
CANOE BROOK	82.2 61.7 72.0 2.5	93 25 49 5	4 3 12 1	6.91 2.21 9	1.25 8	0				
CHARLOTTEBURG RSV*	77.8 58.0 67.8 0.2	91 1 46 5	1 4			NM				
CRANFORD	81.7 64.8 73.3 3.2	93 26 55 14	6 3 14 0	8.68 4.29 10	2.86 8	0				
FLEMINGTON 5 NNW	81.5 60.1 70.8 2.0	92 25+ 47 5	4 3 8 1	10.84 6.20 11	2.72 8	NM				
HARRISON	82.7 64.7 73.7 1.2	97 25 53 14	6 3 17 0	9.63 5.76 10	3.99 7	0				
LAMBERTVILLE				9.83 5.22 10	2.75 8	NM				
NEWARK INTL AP	82.0 64.6 73.3 0.9	96 24 54 5	4 2 16 0	8.74 4.72 11	3.71 7	0				
PHILLIPSBURG EAST*	80.7 60.5 70.6 0.9	93 25 52 5				NM				
POTTERSVILLE 2 NNW	79.6 60.3 70.0	90 18+ 52 5	2 4 9 0	10.09 5.15 10	2.16 8	NM				
RINGWOOD	82.5 57.8 70.2	96 25 44 5	5 3 5 4			NM				
SUSSEX 2 NW	80.4 58.2 69.3 2.9	93 25 44 6+	4 4 6 4			0				
WAYNE	82.8 64.0 73.4	97 25 52 5	7 3 14 0	8.13 9	2.76 8	0				
WERTSVILLE 4 NE	80.4 60.8 70.6 2.3	91 25 49 5	1 3 10 1	9.41 4.96 9	2.82 8	NM				
TOCKS ISLAND	79.2 58.8 69.0	90 25+ 45 5	2 4 6 3			NM				
-DIVISION-	70.9 2.1			9.00 4.50						
-NJ: SOUTHERN-										
ATLANTIC CITY INTL	81.0 62.1 71.5 0.6	92 25+ 49 5	3 0 14 2	7.53 4.42 9	2.70 7	0				
ESTELL MANOR	81.7 61.5 71.6 1.2	90 27+ 47 5	3 0 12 2	7.98 4.29 10	1.94 19	NM				
FREEHOLD MARLBORO	82.1 61.6 71.8 1.4	94 1 48 5	7 2 12 2	7.36 3.38 10	2.70 8	NM				
HAMMONTON 1 NE	83.7 62.2 73.0 1.3	92 27+ 49 6	7 0 12 1	10.28 6.22 13	2.45 19	0				
HIGHTSTOWN 2 W	82.6 59.6 71.1 1.1	94 1 45 5	7 1 10 1	10.65 6.25 11	3.41 8	0				
INDIAN MILLS	82.2 61.3 71.8 1.4	90 25+ 44 5	2 1 12 1	14.81 10.85 17	3.64 18	0				
MILLVILLE MUNI AP	82.1 62.2 72.2 1.6	92 25 49 5	3 0 14 2	8.80 5.67 13	2.04 7	NM				
NEW BRUNSWICK 3 SE	81.9 61.3 71.6 1.2	94 25 47 5	4 3 11 1	10.04 5.63 12	3.17 8	0				
SEABROOK FARMS *	82.9 62.9 72.9	92 27+ 50 6		11.80 14	4.05 8	0				
SOMERDALE 4 SW	83.1 60.9 72.0	94 2 48 5	7 1 10 1	13.02 9.02 13	3.53 8	NM				
ATSION	82.6 61.3 71.9	92 1 46 5	5 0 11 1	9.46 15	2.03 19	NM				
TRENTON MERCER CO	81.1 62.5 71.8 1.3	92 24 50 5	3 1 12 1	10.16 5.75 10	3.51 7	NM				
PHILADELPHIA MT HO	82.8 62.6 72.7	93 1 50 5	5 0 13 1	9.73 10	3.35 8	0				
-DIVISION-	72.0 1.2			10.12 6.34						
-NJ: COASTAL-										
ATLANTIC CITY	74.6 65.8 70.2 0.2	88 26 56 15	0 7 18 0	8.70 6.02 9	2.37 19	0				
CAPE MAY 2 NW	79.3 63.3 71.3 0.3	90 25 53 6	1 1 13 0	7.29 3.92 11	1.46 7	0				
LONG BRANCH OAKHUR	78.8 62.2 70.5 1.3	92 25 53 5	2 6 10 0	12.07 8.59 9	4.69 8	NM				
-DIVISION-	70.7 0.7			9.35 6.18						
-STATE-	71.5 1.5			9.65 5.65		0				

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

#### PRELIMINARY MONTHLY DEGREE DATA JUNE 2013

STATION	HEATING DEGREE DAYS (BASE 65)	COOLING DEGREE DAYS (BASE 65)	GROWING DEGREE DAYS (BASE 50)						
	MONTH MONTH SEASON SEASON	MONTH MONTH SEASON SEASON	MONTH MONTH SEASON SEASON						
-DE: NORTHERN-									
WILMINGTON NEW CAST	0 -15 4620 -199	253 22 360 50	703 37 1312 61						
WILMNGTON PORTER RS	0 -17	233 15	683 32						
-DE: SOUTHERN-									
DOVER	1 -11 4327 56	263 2 395 26	712 13 1375 -12						
-MD: SOUTHEASTERN SHORE-									
SALISBURY WICOMICO	0 -19 3862 -579	333 106 524 213	783 125 1546 268						
SNOW HILL 4 N	0 -12	304 34	754 46						
SALISBURY 2N	0	283 446	733 1460						
-MD: CENTRAL EASTERN SHORE-	2 7	201	741						
ROYAL OAK 2 SSW	0 -7	291 1	741 8						
-MD: LOWER SOUTHERN-									
MECHANICSVILLE 5 NE	6 -13 4697 56	222 14 333 44	666 27 1278 4						
SOLOMONS	0 -2	341 24	791 26						
-MD: UPPER SOUTHERN-									
BALTIMORE WASH INTL	0 -15 4486 -278	277 39 408 86	727 54 1377 94						
BELTSVILLE	1 -13 4564 -163	272 19 393 43	721 33 1352 31						
DALECARLIA RSVR	0 -11 4463 65	274 -11 417 -2	724 0 1395 -87						
LAUREL 3 W	0 -11 4339 -138	288 14 438 41	738 24 1427 -8						
MD SCI CTR BALTIMOR	0 –5	420 83 650 174	870 89 1815 247						
OXON HILL	0 -7 4295 26	290 2 436 28	740 10 1428 -54						
UPPER MARLBORO 3 NN	1 -16 4566 -90	279 31 418 68	728 47 1364 32						
-MD: NORTHEASTERN SHORE-									
STEVENSVILLE	0 -6 4257 -73	295 30 412 75	745 36 1386 59						
-MD: NORTHERN CENTRAL-									
ABERDEEN PHILLIPS F	1 -14	264 34	713 49						
BRIGHTON DAM	3	202	649						
CONOWINGO DAM	1 -8	194 -76	643 -68 1115 -207						
CYLBURN	3 –23	224 47 319 75	671 70 1235 71						
DAMASCUS 3 SSW	7 -16	183 -4	626 13						
EMMITSBURG 2 SE	3 -22 5273 -123	181 10 244 25	628 33 1105 26						
MILLERS 4 NE	6 -22 4987 -359	175 13 272 54	619 36 1184 93						
-MD: APPALACHIAN MOUNTAIN-									
-MD: APPALACHIAN MOUNTAIN- CUMBERLAND 2	2 -11	236 -3 363 26	684 8 1329 -18						
FROSTBURG 2	43 -35 6437 -75	88 7 129 25	495 41 874 75						
SHARPSBURG 5 S	6 -16	186 8	630 24						
-MD: ALLEGHENY PLATEAU-									
OAKLAND 1 SE	39 -43	90 27 121 47	501 69 861 117						
SINES DEEP CREEK	62	43	431						
KITZMILLER 1 W	15 5841	142 197	577 1044						
-NJ: NORTHERN-									
CANOE BROOK	9 –26	229 59 288 68	670 85 1105 79						
CRANFORD	6 –22	262 80 347 114	706 102 1293 209						
FLEMINGTON 5 NNW	14 -24 5404 -298	195 44 266 71	631 67 1099 103						

STATION	HEATI	NG DEGI	REE DAYS	5 (BASE 65)	COOLIN	(BASE 65)	GROWING DEGREE DAYS (BASE 50)					
	MONTH	MONTH	SEASON	SEASON	MONTH	SEASON	MONTH MONTH SEASON SEASON					
HARRISON	10	-3			279	42	357	38	719	46	1240	-2
NEWARK INTL AP	8	-9	4639	-233	265	26	365	50	707	35	1278	39
POTTERSVILLE 2 NNW	19				174				605		1058	
RINGWOOD	22				183				611			
SUSSEX 2 NW	26	-35			165	60	212	79	589	95	978	150
WAYNE	12				270		341		708		1220	
WERTSVILLE 4 NE	16	-29			190	45			624	73		
TOCKS ISLAND	24		5661		153		201		579		989	
-NJ: SOUTHERN-												
ATLANTIC CITY INTL	8	-19	4838	-67	211	8	305	38	653	26	1135	-2
ESTELL MANOR	8	-22	4854	-201	214	23	296	35	656	46	1177	38
FREEHOLD MARLBORO	15	-15			227	35			662	50	1141	26
HAMMONTON 1 NE	0	-22			245	24			695	46		
HIGHTSTOWN 2 W	16	-16			206	24	276	35	640	40	1086	1
INDIAN MILLS	3	-23	4835	-261	216	28	316	61	663	51	1222	79
MILLVILLE MUNI AP	1	-25			224	32			673	57		
NEW BRUNSWICK 3 SE	15	-12	5037	-235	220	31	288	46	655	43	1127	43
SOMERDALE 4 SW	4		5318		222		301		668		1173	
ATSION	3				218				665			
TRENTON MERCER CO A	4	-20	4953	-207	218	28	308	61	664	48	1176	66
PHILADELPHIA MT HOL	2				241				689		1235	
-NJ: COASTAL-												
ATLANTIC CITY	4	-17	4301	-155	167	-4	189	-19	613	13	1010	-42
CAPE MAY 2 NW	1	-16	4288	-195	201	6	263	18	650	22	1158	25
LONG BRANCH OAKHURS	14	-19			184	23			620	43	986	8

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.

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# NORTHEAST REGIONAL CLIMATE CENTER MID-ATLANTIC CLIMATE

Northeast Regional Climate Center

1123 Bradfield Hall Cornell University Ithaca, NY 14853-1901