Northeast Regional Climate Center

Mid-Atlantic Climate

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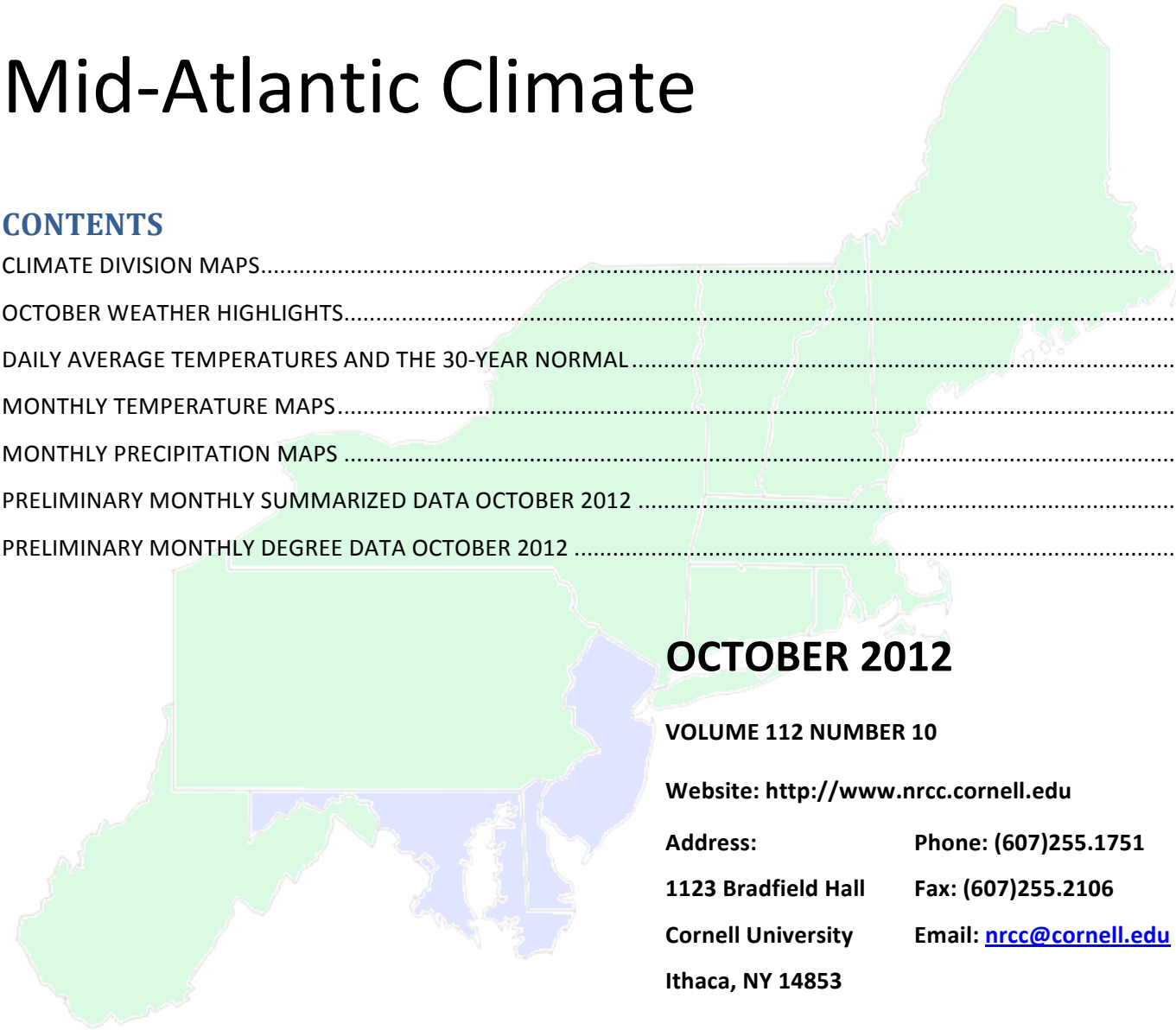

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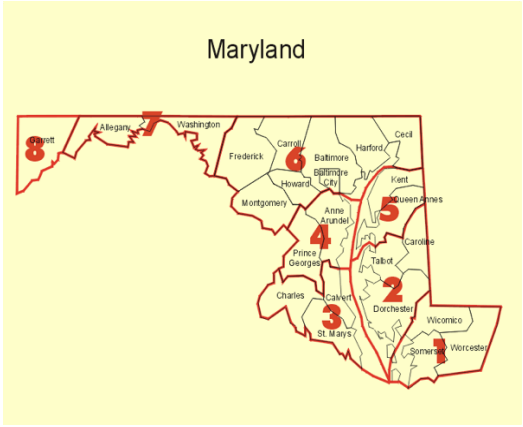
CLIMATE DIVISION MAPS

New Jersey Climate Divisions

1 Northern
2 Southern
3 Coastal

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

OCTOBER WEATHER HIGHLIGHTS

With an average temperature of 57.2 degrees, the Mid-Atlantic region was 1.5 degrees above average for October 2012. Departures among the states were 1.0 degree above average in Maryland, 1.9 degrees above average in Delaware (20th warmest on record) and 2.7 degrees above average in New Jersey (25th warmest on record). Located in Maryland's Southeastern Shore, Snow Hill topped out at 88 degrees on the 3rd. Oakland, MD, dropped down to 26 degrees on the 12th while Hightstown, NJ, cooled to that temperature on the 13th.

Daily Low Maximum Temperature Records (°F)

Station	Date	New	Previous
Washington Dulles, DC	7	52	54 in 2006
Baltimore, MD	8	54	54 in 1885
Washington Dulles, DC	8	51	56 in 2000

Daily Minimum Temperature Records (°F)

Station	Date	New	Previous
Washington Dulles, DC	13	30	30 in 1988
Newark, NJ	13	34	36 in 1934

Superstorm Sandy dumped heavy rain on the Mid-Atlantic at the end of the month helping to make it the 2nd wettest October in the region since 1895. The regional record stands at 9.40 inches, set in 2005. The Mid-Atlantic received 7.51 inches of precipitation, or 206 percent of normal. Both Maryland (251 percent of normal) and Delaware (249 percent of normal) had their wettest Octobers on record, while New Jersey (138 percent of normal) had its 20th. Five out of eight divisions in Maryland and one out of two divisions in Delaware saw their wettest October on record, as well. A list of rankings is below. One division, Northern New Jersey, was below average for precipitation at 97 percent of normal. Millers, MD, reported the greatest monthly precipitation with 12.09 inches while Cape May, NJ, reported the greatest daily rainfall, 8.9 inches, on the 29th. Oakland, MD, was the site of the greatest monthly and daily snowfall receiving 24 inches for the month, 19 inches of which fell on the 30th.

Climate Division	Rank (wettest since 1895)
Maryland	
--Northeastern Shore	1st
--Central Eastern Shore	1st
--Southeastern Shore	1st
--North Central	1st
--Lower Southern	2nd
--Western Plateau	10th
--Appalachian Mtn.	22nd
--Allegheny Plateau	34th
Delaware	
--Southern	1st
--Northern	3rd
New Jersey	
--Coastal	3rd
--Southern	15th
--Northern	44th

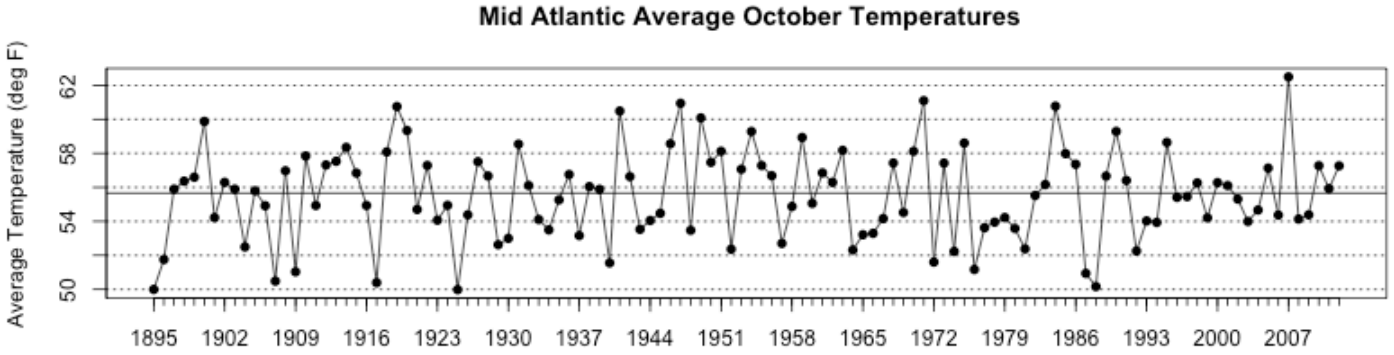
Daily Precipitation Records (inches)

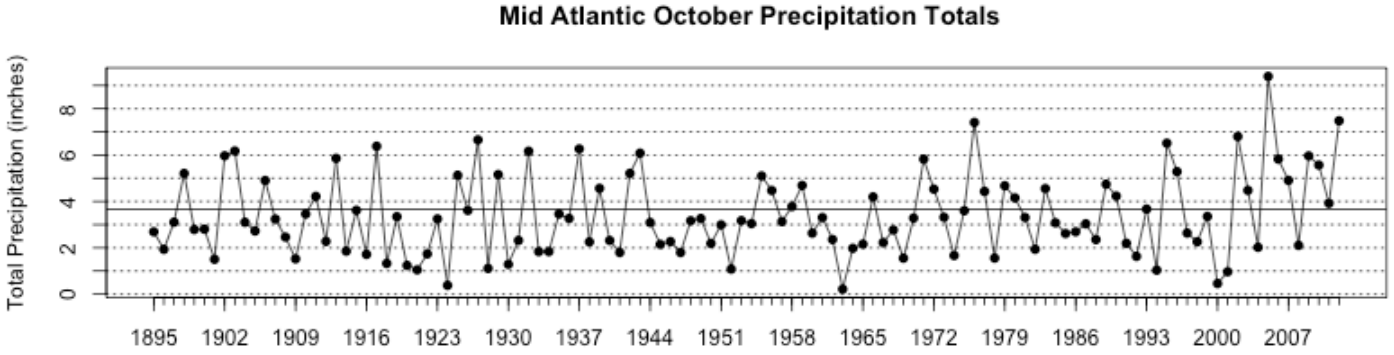
Station	Date	New	Previous
Washington Dulles, DC	2	2.35	1.18 in 1973
Wilmington, DE	29	3.79	2.56 in 1953
Washington National, DC	29	3.85	2.69 in 1885
Washington Dulles, DC	29	4.25	1.03 in 2011
Atlantic City, NJ	29	4.79	2.33 in 1908
Baltimore, MD	29	5.51	1.51 in 1973
Washington Dulles, DC	30	1.00	0.57 in 1993

At the end of the month, Sandy pummeled the Northeast, especially New Jersey. Several top five water level records were set in Maryland and Delaware and record-high water levels were set up and down New Jersey's coast. For example, water levels in Raritan Bay at Keansburg reached 16.87 feet besting the old record by almost 6 feet while the water level in the Shrewsbury River at Sea Bright reached 15.16 feet beating the old record by over 5 feet. Sandy's wind gusts, up to 90 mph in New Jersey and up to 75 mph in Maryland and Delaware, knocked down trees and power lines. According to the Department of Energy website, around 2.6 million people across New Jersey and another 355,000 people in Maryland and Delaware were without power during the height of Sandy. Newark airport was closed while flight operations at National, Dulles, and Baltimore/Washington (BWI) airports were close to zero. Over 8,700 flights were cancelled between the four airports. Dozens of roads across the Mid-Atlantic were closed including a 35-mile stretch of New Jersey's Garden State Parkway, Delaware's coastal highway Route 1, and the Chesapeake Bay Bridge in Maryland. It's estimated that around 72,000 buildings were damaged in New Jersey. The cost of Sandy in New Jersey is an estimated $37 billion dollars according to the *Washington Post*'s website.

All-Time Minimum Pressure (mb)

Station	Date	New	Previous
Baltimore	10/29	964.4	965.9 on 3/13/1993





The 2012 values depicted on these graphs are based on preliminary data.

Sandy Strikes
October 2012 Report

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

Sandy, a category 1 hurricane as it approached the New Jersey coast during the daytime hours of the 29th and a post-tropical cyclone as it came ashore near Atlantic City (Atlantic County) that evening, dealt the state a punishing blow. It brought hurricane-force wind gusts to coastal and inland sections, close to a foot of rain in the far south, a state record low barometric pressure, and a record storm surge along the coast and in adjacent water bodies. Additional information on Sandy can be found later in this report, and a more complete analysis will be provided on an upcoming website from the state climate office.

Statewide, the month averaged 57.1°, which is 2.3° above average. This ranks as the 20th warmest October since statewide records commenced in 1895. It marks the 21st consecutive month with temperatures equal to (June 2012) or warmer than (all other months since February 2011) average. The first ten months of this year have averaged 58.9°, or 3.1° above the 1981-2010 average. This keeps 2012 on pace to be the Garden State's warmest year on record (Table 1).

Rank	Year	Jan-Oct Avg. Temp.
1	**2012**	**58.9°**
2	1998	58.2°
2	2010	58.2°
4	2002	58.0°
5	1949	57.7°
6	1991	57.3°
7	2011	57.2°
7	2006	57.2°
9	1990	56.9°
10	1953	56.8°

Table 1. The ten warmest January to October intervals across New Jersey since 1895.

October started off with a warm week, particularly in the southern half of NJ. West Cape May (Cape May) reached 76° on the 2nd, with five other stations at 75°. The 2nd saw 17 of the 55 stations in the NJ Weather and Climate Network reach at least 80°,

with Piney Hollow (Gloucester) taking top honors for the day and the month at 86°. Oswego Lake (Burlington) and Upper Deerfield (Cumberland) reached 85°, while High Point Monument (Sussex) was the cool spot at 67°. Dennis Township (Cape May) and West Cape May got to 80° on the 4th. The 5th was the warmest day of October across the state, as 27 stations reached the 80°s, with Mansfield (Burlington) on top at 83°. The warm spell ended on the 6th, with Upper Deerfield at 83° and Clayton (Gloucester) and Sicklerville (Camden) at 82°.

Red Lion (Burlington) and Clayton rose to 75° on the 14th, Toms River (Ocean) reached 76° on the 15th, and Piney Hollow 76° on the 19th, when seven other stations hit 75°. Piney Hollow reached 75° on the 23rd, while on the 24th Upper Deerfield was 80° and Greenwich (Salem) 79°.

The first freezing temperature of the season was observed at Basking Ridge (Somerset) on the 8th when the thermometer fell to 32°. In Sussex County, Walpack and High Point fell to 26° and 29°, respectively, on the 12th. The first widespread freeze of the season on the 13th came climatologically just about on time. Walpack chilled to 22° and Kingwood (Hunterdon) to 24°, and 19 other stations dropped to the freezing mark or below. Meanwhile, seven near-coastal stations remained between 50° and 57° that morning, the warmest being West Cape May. Walpack fell to 32° on the 16th, Pequest (Warren) and Basking Ridge to 28° on the 17th, and four stations dropped to 31° on the 18th. The last freeze of October occurred on the 22nd, when Walpack and Pequest each reached 31°, with no other station colder than 36°.

October was not a particularly windy month, at least until Sandy arrived! More on the big storm later, but on the 12th and 16th, gusts reached 43 mph at High Point Monument, marking the only plus 40 mph wind until the 28th. More on the lowest pressure later too, while the 13th brought the highest pressure of the month at approximately 30.50"-30.55".

Statewide October precipitation averaged 6.26". This is 2.33" above average and makes it the 14th wettest of the past 118 years. Cape May County and the northern Highlands were wettest, with Stone Harbor (14.92"), Wildwood Crest (13.53"), and Middle Township (12.96") tops in the south and West Milford (10.36") leading the north. 33 CoCoRaHS stations of the over 150 with complete or close to complete observations for rainy days (most missing daily reports were dry ones) had greater than 7.00" for the month, with 74 between 5.00" and 6.99". The east central and northeast areas were driest, with Bloomfield (Essex) receiving 3.04", two South Plainfield (Middlesex) stations at 3.32" and 3.54", and Woodbridge (Middlesex) at 3.69".

Six events during October dropped more than an inch of rain at one or more locations. The first storm occurred between middays on the 2nd and 3rd. Of the 225 CoCoRaHS reports, 15 exceeded 2.00", led by the northwest communities of Jefferson Township (Morris) with 2.97", and in Warren County, Oxford Township (2.93") and White Township (2.90").

The second half of the 4th brought as much as 1.15" to West Milford, 0.79" to Oakland (Bergen), and 0.70" to Hardyston (Sussex), but little south of I-80. The afternoon of the 9th to midday on the 10th saw coastal and east central areas receive 2.38" in Brick Township (Ocean) and 2.15" at Ocean Township (Monmouth), with little falling elsewhere. On the 15th, the region along and north of Route 1 and along the southeast coast received as much as 1.13" in Pennington (Mercer) and 0.84" in East Brunswick (Middlesex), with little elsewhere. The predawn hours of the 19th brought heavy rain to northwest NJ, followed by heavy midday rain in Somerset and Morris counties. Top amounts included 2.79" in Denville (Morris), 2.74" at West Milford, and 2.61" in Morris Township. Little fell south of Middlesex, Mercer, and northern Burlington counties.

As then Hurricane Sandy moved rather slowly to the northeast off the southeast US coast during the weekend of the 27th-28th, preparations were already underway along the Mid-Atlantic coast for a land falling storm late Monday the 29th or early on the 30th. As odd as it seemed, a storm appearing as if it was heading out into the north Atlantic was forecast to make a turn to the northwest and come ashore, bringing with it severe coastal flooding, strong winds at the coast and inland, and heavy rain with inland flooding. Of course, the consequences of such a storm on lives, property, transportation, communication, and the electric power grid were on the minds of emergency management officials, many stakeholders and the public, and preparations picked up in earnest.

The forecast was for Sandy to make landfall as a post-tropical cyclone, during a transition from a warm-core tropical system to a cold-core extratropical storm. Not that this nomenclature mattered too much, as it had become quite certain that this hybrid system was going to maintain a great deal of its hurricane strength, while blossoming in geographic extent. It took a unique combination of meteorological features to bring post-tropical cyclone Sandy onshore about 5 miles southwest of Atlantic City at around 8 PM EDT on the 29th. First was the tropical system that originated in the Caribbean Sea over a week earlier. While late in the season, Sandy developed in an area that was a climatologically common one for tropical storms at this time of year. So too was its track to the north over Jamaica, Cuba and Bahamas, with the slow turn to the northeast not uncommon. However the next ingredient to this potent recipe was climatologically unusual, that being a blocking high-pressure system sitting over the North Atlantic east of the Canadian Maritimes. The block, along with a central Atlantic area of low pressure, were both preventing Sandy's northeastward progress and suggested that the storm would turn and track to the northwest.

The 3rd ingredient was a vigorous early cold season dip in the jet stream, a trough that was advancing from central North America toward the East Coast. The system had been strong enough to deposit an unseasonable early season snow cover across the Canadian prairies. As the U-shaped trough began to approach the coast it felt the influence of the blocking high and began to assume a negative tilt, with the central axis of this inverted trough angled back to the northwest. This placed the energetic jet stream near advancing Sandy and also helped pull the storm toward the coast. Such was the case that the NJ coast was in the cross hairs of this rogue storm. Adding insult to injury was the arrival of the storm when the moon was full, thus tides astronomically high. Also, as fate would have it, the storm made landfall close to high tide on the evening of the 29th.

The result was a storm that caused damage that equaled or surpassed the worst coastal battering on record. The storm surge along the northern coast exceeded the previous record at Sandy Hook by over 3 feet. Sandy falls alongside the nor'easter of March 1962 and the hurricane of September 1944 as NJ's most destructive coastal storms of the past century. It is likely that inland winds had never been as strong or of a multi-hour duration in the modern era across central and northern areas; perhaps not since an 1821 hurricane ravaged the region. While precipitation was not excessive over most of the state, the far southern coastal region had a deluge that statistically happens once every 200 years.

The result of Sandy's rampage was devastation to homes and infrastructure along portions of the northern and central coast, thousands of trees falling on homes, automobiles, and power lines across the state, leading to unprecedented damage to the power grid, the loss of power to over 75% of customers, and record disruptions of transportation and communications. Of course all of this pales in comparison to the tragic loss of approximately two dozen lives, the result of falling trees, floodwaters, and other storm-related causes.

While meteorological numbers do not begin to tell the entire story of Sandy, it is worthwhile to document a few. In terms of rainfall, Cape May County took top honors. From the morning of the 28th through the early afternoon of the 30th, Stone Harbor led the way with 12.71", followed by 11.91" and 11.70" at two Wildwood Crest locations, 9.53" in West Cape May, 8.97" at Dennis Township, and 8.41" in Lower Township. Totals fell off to the north, with some Bergen County locations receiving less than 1.00", including Oakland (0.75"), Tenafly (0.83"), and North Arlington (0.84"). Of the over 100 rainfall reports from around NJ, seven were between 7.00-7.99", eight from 5.00-5.99", and ten from 4.00-4.99".

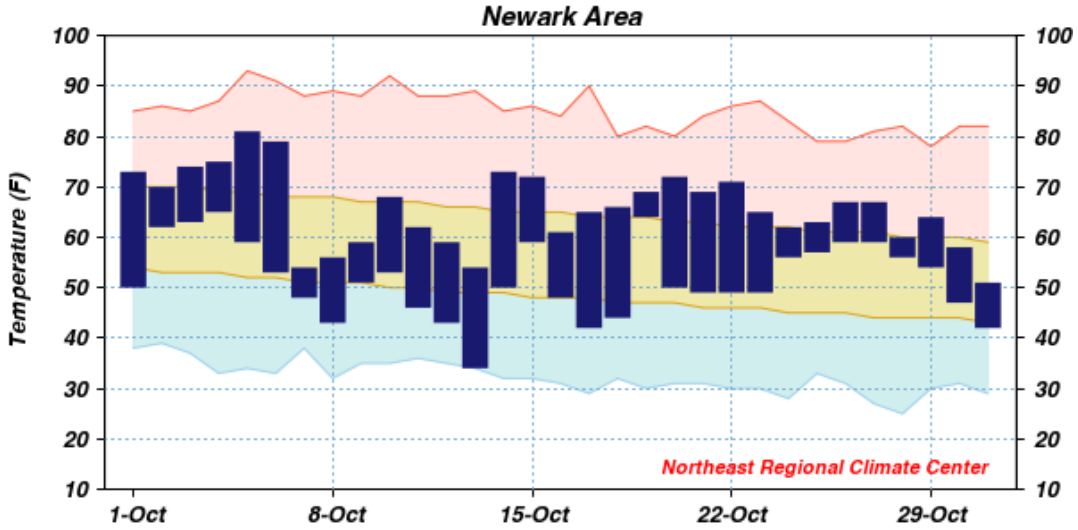
The National Hurricane Center reported a pressure reading of 27.94" at landfall. This equals the lowest pressure of any system coming ashore north of Cape Hatteras on the Atlantic coast, which was first observed during the devastating and deadly 1938 Long Island/New England hurricane. The lowest pressure observed at a station was 27.98" at the Atlantic City Marina, followed by 28.00" at the NWS Atlantic City Airport station in Pomona. Whichever value to be deemed lowest for Sandy greatly surpasses the previous state record minimum pressure, which was 28.36" in Long Branch (Monmouth) during a nor'easter on March 6, 1932. In fact, during the evening of the 29th, all of southern NJ exceeded the previous record.

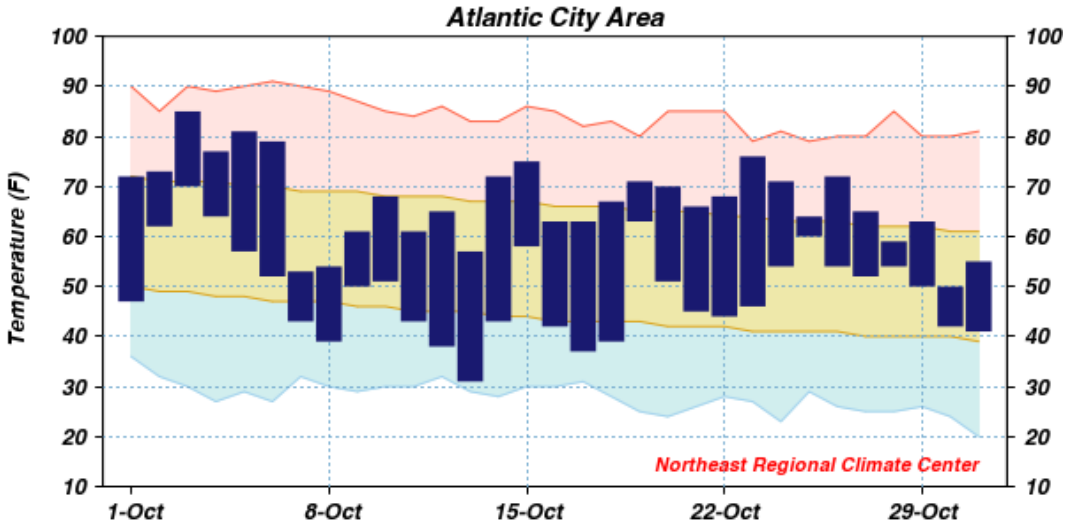
One of the more vexing issues in the post-Sandy analysis is determining how fast sustained winds (averaged over at least a minute) and gusts (generally considered 2 second observations) reached during the storm. Issues to consider when evaluating an observation include instrumentation characteristics and location. There are a variety of anemometers deployed at stations around NJ, most of which have not been subject to calibration since they were installed, which in some cases is a number of years ago. Thus one should immediately be suspicious of observations that greatly exceed others in a given area. Anemometer siting is a major issue, as widely exposed or highly elevated instruments will record winds of greater intensity than those in more sheltered locations. Anemometers mounted 10 feet off the ground will tend to have lower gusts than those at 30 feet, and there may be enhancement of winds due to the funneling effects provided by structures when instruments are placed on a rooftop or between buildings. The ONJSC continues to evaluate all Sandy wind reports, and at this point can only report with some confidence that sustained winds were well over tropical storm force (39 mph) at coastal locations and at exposed inland locations in northern and central NJ. Gusts exceeded hurricane force (74 mph) at many coastal locations and at some exposed inland sites.

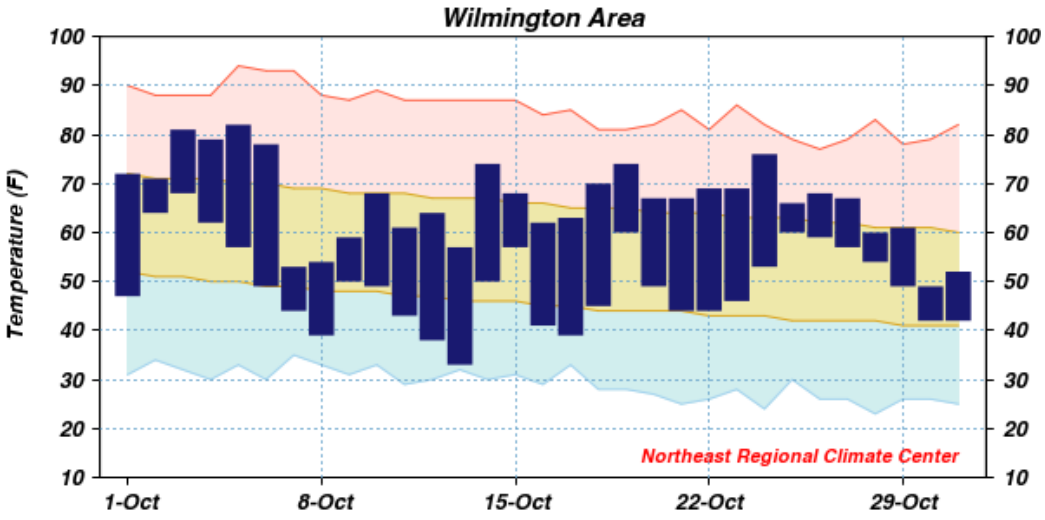
Within the NJ Weather and Climate Network (NJWxNet), Sea Girt (Monmouth) and High Point Monument (Sussex) had top gusts of 79 mph on the 29th. Five other NJWxNet stations gusted over 70 mph, nine between 60-69 mph, ten from 50-59 mph, and 17 from 40-49 mph. The lowest gust was 26 mph atop a 10-foot tripod at Cherry Hill (Camden). This site is in a wooded park at this southwest NJ location, the area of NJ where Sandy's winds were least strong. Other wind observations that were measured with quality instruments in well-situated locations include gusts as high as 88 mph at Tuckerton (Ocean) and 87 mph at Sandy Hook (Monmouth). Airport stations at Newark (Essex), Sussex (Sussex), Teterboro (Bergen), Lakehurst (Ocean), and Caldwell (Essex) achieved maximum gusts between 70 and 78 mph. As Sandy approached on the 28th, Harvey Cedars (Ocean) gusted to 49 mph, and as she departed early on the 30th High Point Monument reached 64 mph, Sea Girt 61 mph, and Wantage (Sussex) 60 mph.

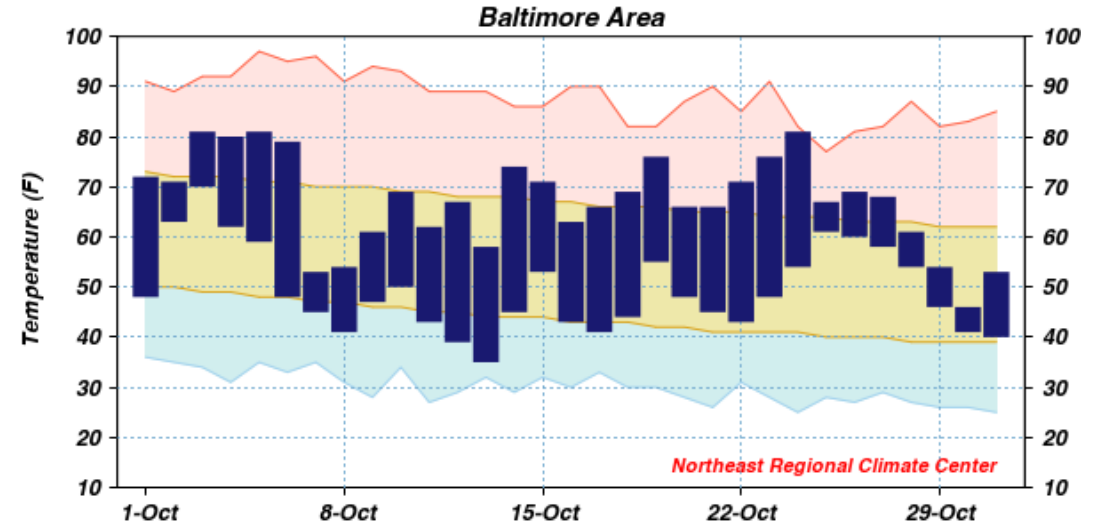
That Sandy arrived on the same day as last year's record shattering October snowstorm in central and northern NJ adds a sobering and quite remarkable footnote to the events surrounding October 29, 2012.

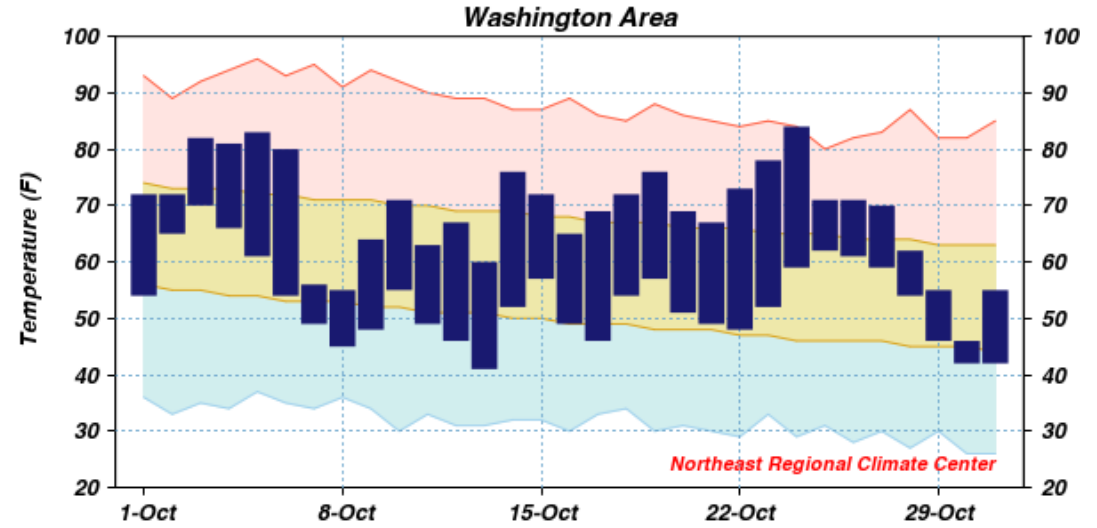
DAILY AVERAGE TEMPERATURES AND THE 30-YEAR NORMAL

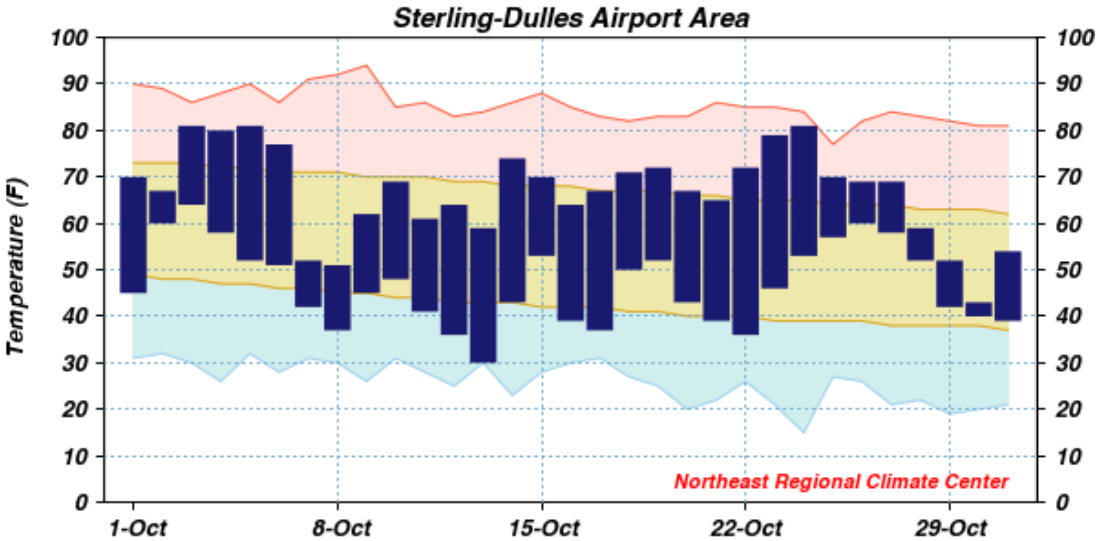






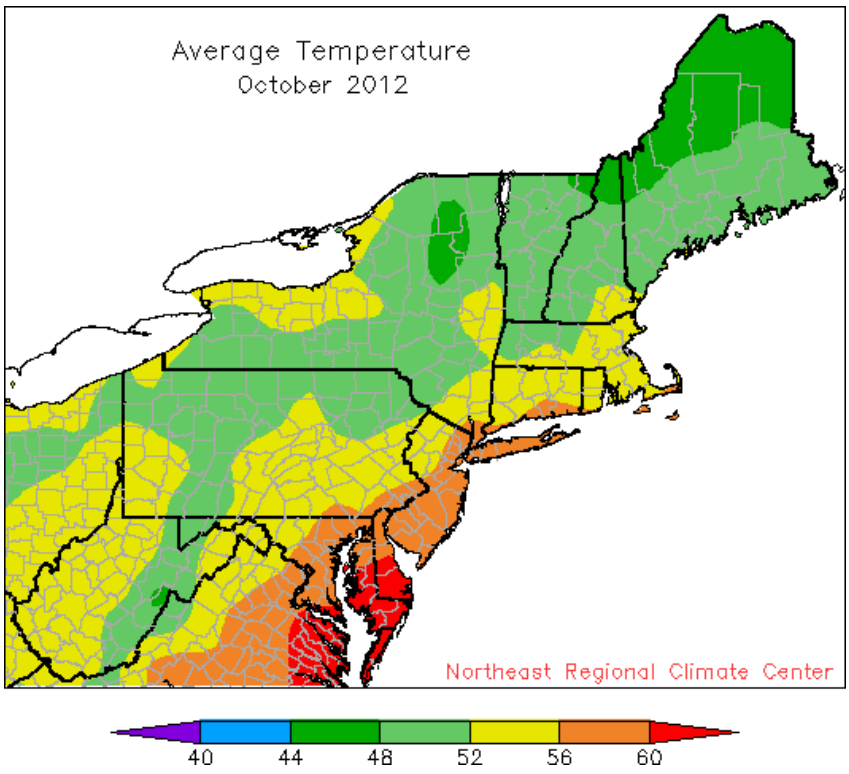


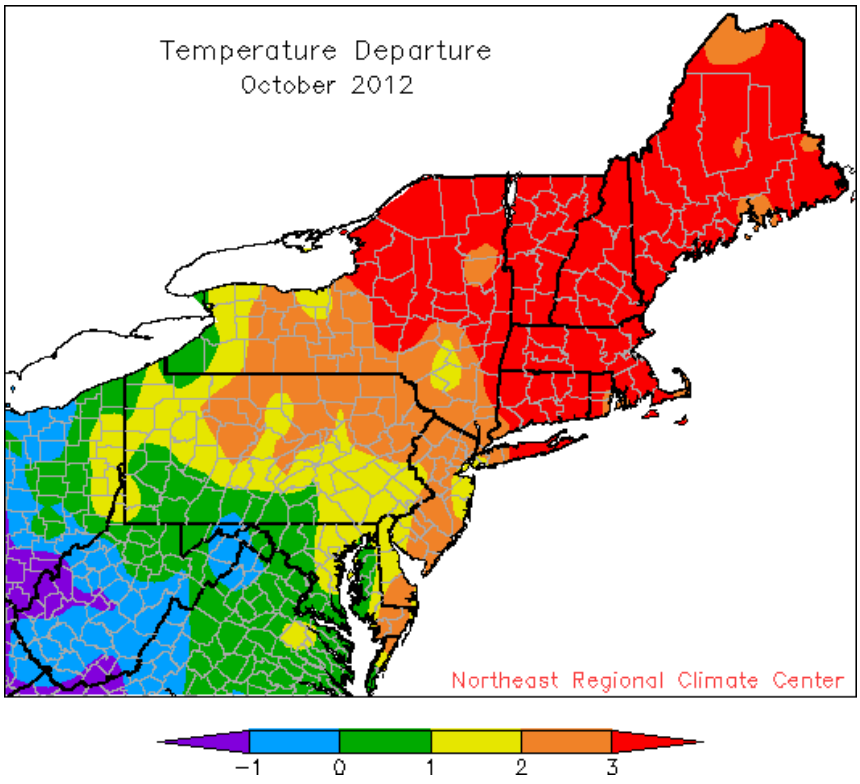




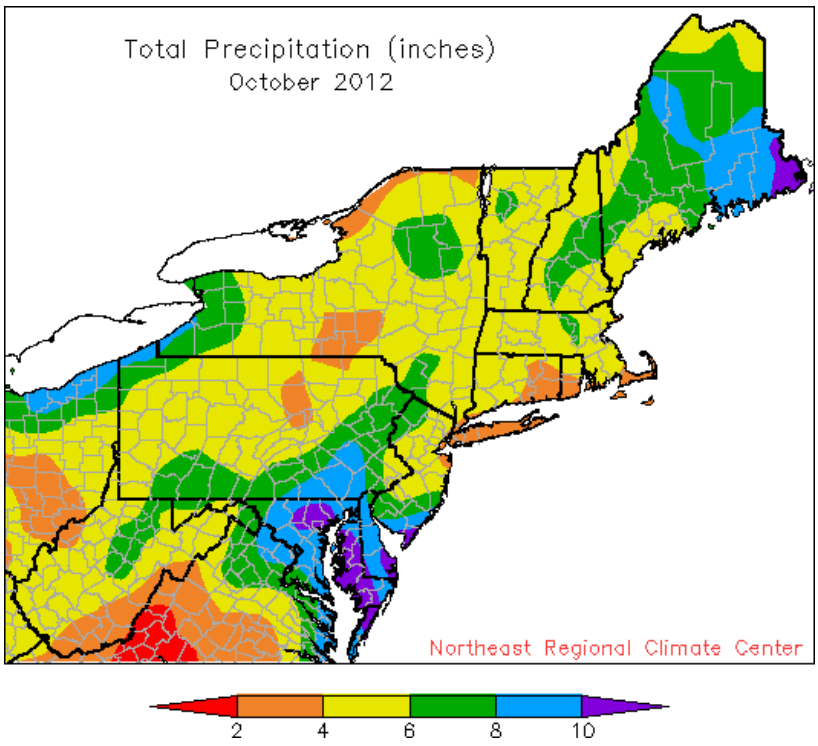
Area between normal max and min temperatures has tan shading.
Red line connects record high temperatures.
Light blue line connects record low temperatures.

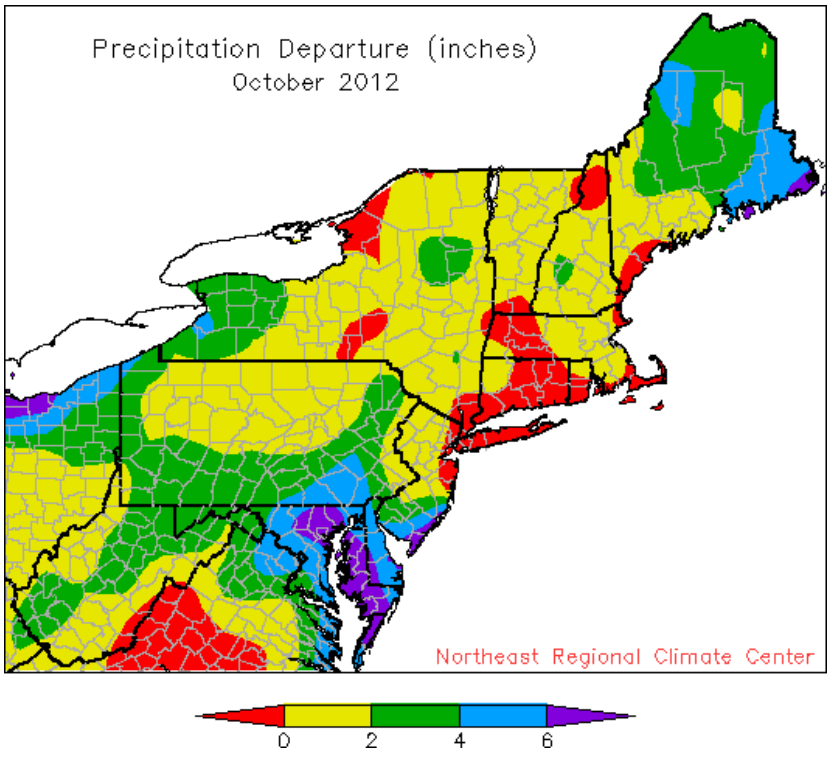
MONTHLY TEMPERATURE MAPS





MONTHLY PRECIPITATION MAPS





PRELIMINARY MONTHLY SUMMARIZED DATA OCTOBER 2012

STATION	TEMPERATURE (F)												PRECIPITATION (INCHES)						
	MONTHLY AVERAGES				EXTREMES				NUMBER OF DAYS				MONTHLY TOTALS			EXTREMES		SNOWFALL	
	AVG MAX	AVG MIN	MON AVG	DEPRT	MON MAX	DAY	MON MIN	DAY	MAX 90+	70-	MIN 65+	50-	MON TOT	DEPRT	DAYS 0.1+	DLY MAX	DAY	MON TOT	DLY MAX	DAY
-DE: NORTHERN-																				
BEAR 2 SW	66.3	47.8	57.0	2.1	81	5	30	13	0	21	1	18	8.36	4.85	6	5.27	29	0		
WILMINGTON NEW CAS	66.5	49.5	58.0	1.8	82	5	33	13	0	22	1	20	6.25	2.83	8	3.79	29	0		
-DIVISION-			57.5	1.4									7.31	3.70				0		
-DE: SOUTHERN-																				
DOVER	68.6	51.4	60.0	1.3	84	3	39	31+	0	17	2	17						NM		
-DIVISION-			60.0	2.1									9.48	5.86						
-STATE-			59.4	1.9									9.00	5.38				0		
-MD: SOUTHEASTERN-																				
SALISBURY WICOMICO	71.2	51.5	61.3	4.1	87	3	35	13	0	15	3	16	9.23	5.74	7	5.80	29			
SNOW HILL 4 N	72.2	49.4	60.8	1.7	88	3	32	13	0	14	2	18	10.67	7.14	10	6.50	29	NM		
-DIVISION-			61.1	2.3									9.95	6.59						
-MD: CENTRAL EAST-																				
ROYAL OAK 2 SSW	68.8	50.9	59.8	0.2	83	3	33	13	0	18	2	18	10.39	6.67	8	5.43	29	0		
-DIVISION-			59.8	0.9									10.39	6.91				0		
-MD: LOWER SOUTHE-																				
MECHANICSVILLE 5 N	65.7	46.9	56.3	0.7	80	4	35	14+	0	22	2	22	8.28	4.58	7	5.18	30			
SOLOMONS	68.3	53.9	61.1	-0.3	84	4	39	30	0	17	2	10	10.28		5	3.88	30	NM		
-DIVISION-			58.7	1.6									9.28	5.66						
-MD: UPPER SOUTHE-																				
BALTIMORE WASH INT	67.3	49.3	58.3	2.2	81	24+	35	13	0	19	1	20	8.92	5.59	7	5.51	29	0		
BELTSVILLE	67.2	48.4	57.8	1.4	82	25+	32	13	0	20	1	19	8.33	4.66	9	5.15	30	0		
LAUREL 3 W	67.3	50.5	58.9	0.8	82	24	35	13	0	18	2	19	10.60	6.62	6	5.86	29	NM		
MD SCI CTR BALTIMO	70.0	55.2	62.6	2.5	85	5+	44	31+	0	15	4	9	9.36	6.31	7	6.08	29	NM		
NATL ARBORETUM DC*	71.2	49.3	60.2	1.7	85	6	34	14										NM		
OXON HILL	68.3	49.2	58.8	0.9	82	4	36	14+	0	18	2	20	6.80	3.08	5	5.79	31			
UPPER MARLBORO 3 N	68.7	46.5	57.6	1.2	84	25	31	13	0	18	2	23	8.35	4.75	8	5.65	30	NM		
-DIVISION-			59.2	2.3									8.73	5.07				0		
-MD: NORTHEASTERN-																				
STEVENSVILLE	68.1	51.5	59.8	0.5	82	6+	33	13	0	19	3	11	8.75		7	5.32	30	0		
-DIVISION-			59.8	2.6									8.75	5.21				0		
-MD: NORTHERN CEN-																				
ABERDEEN PHILLIPS	66.6	47.8	57.2	0.8	82	6	33	14+	0	19	2	21						0		
BRIGHTON DAM *	66.3	45.8	56.0		78	25+	30	13												
DAMASCUS 3 SSW	63.0	47.9	55.5	0.7	77	23+	31	13	0	24	0	18	10.84	7.12	7	5.45	29			
EMMITSBURG 2 SE	63.7	44.5	54.1	0.1	78	25	29	14+	0	25	0	23	7.59	4.21	9	3.10	30	0		
FREDERICK 2 NNE	65.9	46.0	55.9	0.1	81	4	32	13	0	23	0	23	8.07	4.54	8	4.34	30	NM		
MILLERS 4 NE	65.1	47.9	56.5	2.3	79	24	28	13	0	23	1	18	12.09	8.34	7	4.05	29	0		
SMITHSBURG *	62.4	42.6	52.5	-1.2	76	25+	33	13					8.34	5.10	9	5.20	29	0		
-DIVISION-			55.4	-0.0									9.39	5.74				0		
-MD: APPALACHIAN -																				
CUMBERLAND 2 *	66.1	42.8	54.5	-1.5	83	25	29	14+										NM		
FROSTBURG 2	60.1	41.1	50.6	0.6	75	26+	28	14+	0	24	0	26	4.90	1.86	9	2.61	30			
SHARPSBURG 5 S	65.2	43.3	54.3	-0.3	79	25+	28	14	0	23	0	23						NM		
WILLIAMSPORT *	65.4	44.0	54.7	0.1	80	25+	30	14+												
-DIVISION-			53.5	0.5									4.90	2.00						
-MD: ALLEGHENY PL-																				
OAKLAND 1 SE	61.1	37.6	49.3	-0.1	78	26	26	12	0	23	0	29	3.98	0.83	9	1.00	30	24.0	19.0	30
SINES DEEP CREEK *	59.9	37.9	48.9		72	24+	27	14+										NM		
KITZMILLER 1 W	62.4	41.0	51.7		77	26+	28	14+	0	22	0	28						NM		
-DIVISION-			50.0	0.2									3.98	1.06				24		
-STATE-			57.1	1.0									8.70	5.23				1.6		
-NJ: NORTHERN-																				
BELVIDERE BRG *	62.7	43.9	53.3	0.5	78	6	28	14+										0		
BOONTON 1 SE *	64.5	47.0	56.0	3.1	80	6	29	13					5.06	0.56	9	1.66	20	0		

STATION	TEMPERATURE (F)												PRECIPITATION (INCHES)					
	MONTHLY AVERAGES				EXTREMES				NUMBER OF DAYS				MONTHLY TOTALS			EXTREMES		SNOWFALL	
	AVG MAX	AVG MIN	MON AVG	DEPRT	MON MAX	DAY	MON MIN	DAY	MAX 90+	70-	MIN 65+	50-	MON TOT	DEPRT	DAYS 0.1+	DLY MAX	DAY	MON TOT	DLY MAX DAY
BOUND BROOK 2 W													6.67	2.63	8	3.20	20	NM	
CANISTEAR RESERVOI																		0	
CANOE BROOK	64.6	46.5	55.6	2.4	79	6	30	13	0	26	0	20	4.03	-0.62	7	1.23	30	0	
CHARLOTTEBURG RSV*	61.7	45.8	53.9	1.9	77	6	27	13											
CHATHAM 2 W	65.5	45.5	55.5	2.0	83	6	30	14+	0	24	0	21							
CRANFORD	66.6	46.8	56.7	2.3	80	6	28	13	0	22	0	20	3.59	-0.77	8	1.10	30	0	
FLEMINGTON 5 NNW	64.1	45.8	54.9	2.1	79	6	28	13	0	26	0	21	3.93	-0.55	5	1.54	30		
HARRISON	65.3	50.1	57.7	1.1	80	6	33	13	0	23	0	15	3.56	-0.32	6	1.17	30	NM	
LAMBERTVILLE													4.75	0.74	7	2.10	30	NM	
NEWARK INTL AP	65.8	51.7	58.8	2.2	81	5	34	13	0	22	1	16	3.65	0.05	8	0.87	19	0	
NEW MILFORD													4.14	0.14	8	1.07	3	NM	
OAK RIDGE																		0	
PHILLIPSBURG EAST*	64.2	46.3	55.3	2.8	79	6	30	14+											
POTTERSVILLE 2 NNW	61.7	47.2	54.5		78	6	33	13	0	27	0	21	4.93	0.31	9	1.28	30	NM	
RINGWOOD	64.6	45.4	55.0		82	6	27	14+	0	24	0	20						NM	
SUSSEX 2 NW	62.7	45.4	54.0	3.7	77	6	29	14+	0	29	0	20						0	
WAYNE	65.5	48.8	57.1		78	6	32	13	0	26	0	19	4.79		8	1.15	30	0	
WERTSVILLE 4 NE	63.6	46.4	55.0	2.2	79	6	29	13	0	27	0	20	4.71	0.68	7	1.82	30	NM	
WOODCLIFF LAKE													4.60	0.21	9	1.25	19	NM	
RIEGELSVILLE																		0	
TOCKS ISLAND	62.3	45.8	54.0		78	6	30	13	0	29	0	20						NM	
-DIVISION-			55.5	2.8									4.25	-0.11				0	
-NJ: SOUTHERN-																			
ATLANTIC CITY INTL	67.0	49.1	58.0	1.9	85	3	31	13	0	19	1	17	8.09	4.67	9	4.79	29	0	
ESTELL MANOR	68.5	45.9	57.2	2.4	86	4	30	13	0	18	2	20	8.25	4.32	7	4.64	30		
FREEHOLD MARLBORO*	66.9	47.1	57.0	2.2	81	7	31	14										NM	
HAMMONTON 1 NE	67.5	47.8	57.6	2.3	84	4	33	14	0	19	1	21	7.19	3.61	8	3.90	30	0	
HIGHTSTOWN 2 W	66.1	45.1	55.6	1.3	81	6	26	13	0	22	0	20	4.72	1.07	8	2.37	30	0	
INDIAN MILLS	67.4	47.8	57.6	2.6	83	3	27	13	0	19	2	18	6.71	2.91	8	3.08	29	0	
MILLVILLE MUNI AP	67.2	47.5	57.3	2.1	84	3	29	13	0	19	1	18	7.24	3.74	8	5.07	29	NM	
MOORESTOWN	67.5	50.7	59.1	2.8	81	4+	38	17	0	21	2	16	4.47	0.68	6	2.02	29	NM	
NEW BRUNSWICK 3 SE	66.6	46.7	56.7	2.3	82	6	28	13	0	21	0	20	4.50	0.70	9	1.61	30	0	
SOMERDALE 4 SW	63.9	45.8	54.8		79	4	29	13	0	24	1	23	5.33	1.75	5	2.47	30	NM	
ATSION *	68.4	46.1	57.2		83	5+	31	14+										NM	
TRENTON MERCER CO	64.4	49.1	56.7	2.1	80	5	30	13	0	23	0	18	4.36	0.18	6	1.75	29	NM	
PHILADELPHIA MT HO	66.3	47.5	56.9		82	4	31	13	0	21	1	20	4.30		6	1.86	30	0	
-DIVISION-			57.1	1.8									5.92	2.23				0	
-NJ: COASTAL-																			
BRANT BEACH HVN *	66.6	55.1	60.8	2.6	78	6	41	13										NM	
CAPE MAY 2 NW	68.1	53.4	60.7	2.2	83	3	37	13	0	19	2	12	11.98	8.28	6	8.90	29	0	
LONG BRANCH OAKHUR	65.2	49.1	57.1	1.1	79	7+	39	18+	0	22	1	20	2.65	-1.77	5	1.48	10	NM	
-DIVISION-			59.5	1.9									7.32	3.76				0	
-STATE-			56.7	2.1									5.41	1.48				0	

*= One to four days of missing temperature data + = This value also occurred on one or more previous dates this month.
All means are for the years 1981-2010. NM = Snowfall is not measured.
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 OCTOBER 2012

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-												
BEAR 2 SW	259	-64	319	-61	23	13	1246	227	249	63	3877	461
WILMINGTON NEW CAST	234	-58	275	-69	26	8	1387	242	273	56	4087	473
-DE: SOUTHERN-												
DOVER	197	-29	230	-29	49	17	1532	219	329	43	4327	395
-MD: SOUTHEASTERN SHORE-												
SALISBURY WICOMICO	175	-90	194	-119	70	45	1732	582	364	117	4627	955
SNOW HILL 4 N	183	-37	216	-39	61	25			348	52		
-MD: CENTRAL EASTERN SHORE-												
ROYAL OAK 2 SSW	199	-4	223	-9	48	13	1665	245	326	19	4598	472
-MD: LOWER SOUTHERN-												
MECHANICSVILLE 5 NE	279	-29	349	-28	19	4			231	26		
SOLOMONS	153	2	160	-3	40	2	1748	188	363	7	4725	391
-MD: UPPER SOUTHERN-												
BALTIMORE WASH INTL	228	-66	256	-91	28	10	1569	406	280	63	4401	751
BELTSVILLE	240	-46	282	-55	24	4	1433	196	271	44	4200	455
LAUREL 3 W	218	-23	234	-43	34	6	1662	270	300	29	4559	541
MD SCI CTR BALTIMOR	127	-64	128	-81	62	23			403	82		
OXON HILL	210	-36	239	-35	26	2	1598	217	294	37	4468	429
UPPER MARLBORO 3 NN	250	-39	287	-59	27	6	1514	319	267	41	4297	592
-MD: NORTHEASTERN SHORE-												
STEVENSVILLE	193	-8	214	-4	42	20	1511	285	320	28	4336	487
-MD: NORTHERN CENTRAL-												
ABERDEEN PHILLIPS F	256	-32			23	3			254	29		
DAMASCUS 3 SSW	300	-26	372	-34	12	2			216	29		
EMMITSBURG 2 SE	334	-19	429	-17	6	-5	972	113	180	10	3501	335
FREDERICK 2 NNE	289	-10			14	2			219	10		
MILLERS 4 NE	270	-76	342	-95	14	4	1073	278	238	62	3771	647
-MD: APPALACHIAN MOUNTAIN-												
FROSTBURG 2	439	-29	615	-61	0	-3	550	143	124	18	2813	428
SHARPSBURG 5 S	331	-2	419	6	7	-5			186	1	3558	335
-MD: ALLEGHENY PLATEAU-												
OAKLAND 1 SE	478	-7			0	-1			96	4		
KITZMILLER 1 W	408		553		3				141			
-NJ: NORTHERN-												
CANOE BROOK	287	-88	342	-125	4	-5			203	47		
CHATHAM 2 W	290	-74			4	-2			202	46		
CRANFORD	255	-82			6	-4			232	54		
FLEMINGTON 5 NNW	307	-78	375	-114	2	-6			193	42		
HARRISON	227	-51			10	-8			262	38		
NEWARK INTL AP	207	-69	227	-94	19	2	1450	259	286	57	4210	548
POTTERSVILLE 2 NNW	323		395		3		755		175		3239	
RINGWOOD	304		386		5				196			
SUSSEX 2 NW	332	-127	463	-174	0	-3			166	60		
WAYNE	244				8				240			
WERTSVILLE 4 NE	303	-81			4	-2			197	53		

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
TOCKS ISLAND	335		435		2		834		161		3243	
-NJ: SOUTHERN-												
ATLANTIC CITY INTL	238	-58	286	-72	31	11	1218	164	275	56	3850	408
ESTELL MANOR	261	-67	322	-77	24	12	1202	230	246	59	3785	451
HAMMONTON 1 NE	245	-73	286	-99	24	8	1318	248	257	55	3962	502
HIGHTSTOWN 2 W	291	-53			7	-5			213	33		
INDIAN MILLS	248	-77	304	-101	26	11			266	69	3851	533
MILLVILLE MUNI AP	256	-64			26	10			259	61		
MOORESTOWN	205	-82			30	13			299	75		
NEW BRUNSWICK 3 SE	260	-79	301	-113	10	-2	1206	253	235	55	3817	548
SOMERDALE 4 SW	318		396		10		1244		188		3735	
TRENTON MERCER CO A	261	-71	307	-90	15	5	1234	269	245	66	3958	645
PHILADELPHIA MT HOL	257		308		15		1268		245		3893	
-NJ: COASTAL-												
CAPE MAY 2 NW	168	-59	189	-71	44	19	1365	278	344	69	4125	553
LONG BRANCH OAKHURS	246	-45	282	-70	12	0			235	26		

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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