



<http://www.jhuapl.edu/weather/education/ACONdata.html>

ATLANTIC COAST OBSERVER NETWORK, MD / DE / DC CHAPTER WITH DATA FROM NEARBY AREAS

ABOVE NORMAL TEMPERATURES GENERALLY DRY BUT A FEW WET SPOTS

June 2011 was another warm, dry summer month similar to 2010. By comparing data from ACON members in DE, MD, and DC areas for 2010 and 2011 June's 2011 temperatures averaged 1.0 degrees cooler and precipitation wise it was 0.06" wetter.

The heat from Memorial Day weekend lasted into June and broke on the 2nd. Mid to upper 90's degree temperatures were common on the 1st. **Joe Manfre** of **Baltimore 2 SE** reported 101°, **Ralph Hartsock** of **Westminster 4 SSE** 99°, and **Dan Hanson** of **Pasadena 2 N** 98°. Record high temperature were set at the NWS stations at Dulles, Washington, and Baltimore.

Pleasant cooler temperatures followed the heat on the 2nd and remained through the 6th. The coolest temperatures of the month occurred on the 4th at the majority of stations. The coolest temperatures were observed by **Dave Lesher** of **Davis 3 SE WV** 40°, **Greg Latta** of **Frostburg 43** and **DEOS** stations at **Townsend 4 W DE** and **Harbeson 8 S DE** which both reported 46°.

The heat began to return on the 7th and peaked on the 8th and 9th when readings hit 100 degrees at few locations. **Jug Bay Wetlands** in **Lothian** reported 100° on the 8th and 101° on the 9th. Other 100° temperatures were observed by the following ACON observers: **Jim Vaughn** of **Smithsburg 3 NE** 100° on the 8th and on the 9th by **Joe Manfre** of **Baltimore 2 SE** 103°, **Dan Hanson** of **Pasadena 2 N** 102°, and **DEOS Harbeson 8 S** 100°. Record maximum temperatures for the month of June were set for the following stations during this period of extreme heat: **Gaithersburg 2 WNW**, **Forest Glen**, and **Glenmont 1 NNE**. See Observer Notes for details.

Thunderstorms brought daily rainfall amounts of over an inch on the 11th by **Herb Close** of **Manchester 1 SW** 1.27",

and on the 12th by **Bobby Miller** of **Millers 4 NE** 1.12". **Wes Gleason** of **Hollywood 3 ENE** reported over an inch from severe thunderstorms on the afternoons of the 11th and 12th. See Observer Notes for more details. The heaviest daily rainfall recorded by **Dave Lesher** of **Davis 3 SE WV** (3.08" on the 11th).

The two F-0 tornadoes which occurred in Belcamp and Street, Harford County MD, on the 14th caused tree damage.

Numerous showers and thunder-showers brought mostly light rains from the 16th to the 24th. Most of the daily amounts were less than half an inch. Over one inch plus amounts were reported by the following ACON observers: **Wes Gleason** of **Hollywood 3 ENE** 1.57" (17th), **John Zyla** of **Ridge**

EXTREMES REPORTED BY

ACON OBSERVERS

MAXIMUM TEMPERATURE

Baltimore 2 SE	103
Pasadena 2 N	102

MINIMUM TEMPERATURE

Davis 3 SE WV	40
Frostburg	43
DEOS Townsend 4 W DE	46
DEOS Harbeson 8 S DE	46

WARMEST AVG. TEMP.

Baltimore 2 SE	80.9
Ridge	77.0

COLDEST AVG. TEMP.

Davis 3 SE WV	63.3
Frostburg	65.6
LaVale	70.9

MAXIMUM PRECIPITATION

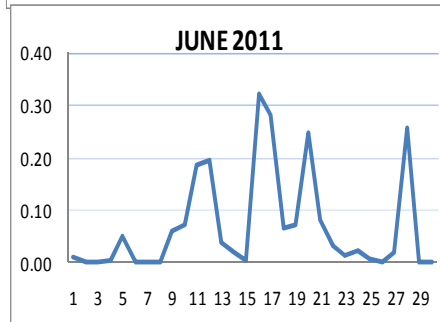
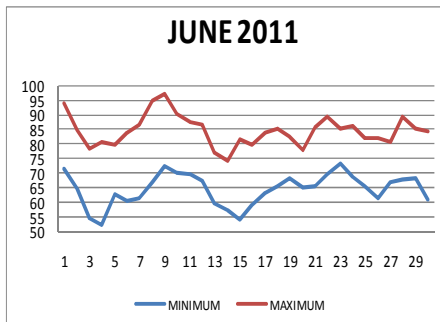
Davis 3 SE WV	9.32
Ridge	5.97
Hollywood 3 ENE	5.49

MINIMUM PRECIPITATION

DEOS Rehoboth Beach	0.96
Laurel JHU/APL	1.01

1.53" (19th) & 1.83" (20th), **Mac Hutto** of **Smithsburg 1.5 SW** 1.08" (16th) and **Dave Lesher** of **Davis 3 SE WV** 1.31" (20th) and 2.32" (20th). The last 1" plus amounts fell in New Castle County Delaware on the 28th. **Gary Gal-laher** of **Bear DE** observed 1.38" and **DEOS Newark AG Farm DE** 1.77".

After the 9th maximum temperatures were generally in the 80's. 90 degree temperatures were rare. The only 90 degree temperatures occurred on the 22nd, 23rd, 28th, and 29th. The month ended sunny with pleasant temperatures and humidity.



ACON MD/DE Network

Daily average temperatures and precipitation based on observation times, not calendar days.

OBSERVER COMMENTS FOR JUNE 2011

Gary Gallaher of Bear 2 SW, DE

Warm temperatures with above normal precipitation. After the 9th there was only one 90° day. The first 10 days were the driest.

9th - Daily record high of 96°

11th - Two thunderstorms brought welcome rains.

28th - Thunderstorm rains brought temporary relief to plants which were showing moisture stress.

Greg Latta of Frostburg

Six days with thunder.

Nate Mullins of LaVale

Above normal temperatures. Despite many days with measurable precipitation, most amounts were light and came from mostly small or brief showers and thunderstorms. Average minimum temperature of 61.2° is the second highest on record behind the record of 64.3° set last year.

28th - Thunderstorm with pea size hail.

Jeff Stoudt of Laurel 2 E

Above normal temperatures which were interrupted only by a few brief and moderate cool-downs and frequent but mostly spotty showers and thunderstorms.

Marty Sharrow of Owings Mills

Temperatures averaged 3.8° above normal. Precipitation was 2.1 inches below normal. Many lawns and fields are starting to show signs of both heat and drought related stress. The ground is very hard.

27th - Hazy sun, hot and humid.

28th - Brilliant sunshine, drier, but warm.

Joe Manfre of Baltimore 2SE

9th - Partly cloudy, very hot, humid, evening thunderstorm with high winds.

30th - Partly cloudy, hot, low humidity.

Ralph Hartsock of Westminster 4 SSE

3rd - Cool start, sunny and nice.

Bobby Miller of Millers 4 NE

Not much action in June, especially after the 17th!

11th - Hazy, evening (after obs time) thunderstorm 0.66"

12th - Afternoon thunderstorm 0.44"

28th - AM mist, fog & haze, PM sun, few TCu/Cb.

Ray Muller of Westminster City

Another very dry month with way above normal temperatures.

Rich Giannola of JHU/APL

Maximum barometric pressure 30.21" on the 3rd.

Minimum barometric pressure 29.72" on the 24th.

Ron Berger of Norbeck 1 SE

1.07" Driest June in 17 years of records.

Rob Cohen of Potomac 4 N

1st, 8th, & 9th - Record maximum temperature each day.

Rich Giannola of Olney 1 S

Driest May & June (3.20") since I began keeping records in 1987. Driest June since 1988 when 0.73" fell.

17th - TS began 4:10 PM, TSRA 4:33-4:40 PM = 0.03" with the sun visible throughout.

Richard Holden of Clarksburg 2 ENE

Seven days with thunder: 4th, 9th, 12th, 16th, 17th, 18th, and 21st.

8th - Obs time temperature (2400 hrs) 79°

9th - AM minimum temperature 76°.

Stan Rossen of Glenmont 1 NNE

9th - Warmest June temperature 99°. Old record maximum temperature 98° set 6/10/2008.

13th - Warmest June day - Average temperature 86.0°. Old record was 84.5°.

23rd - Min temp 75° ties June record set 6/28/2010.

Kevin Shaw of Gaithersburg 2 WNW

The arid conditions were the headline for the month. My 1.08" set a new June record minimum surpassing the 1.09" set in 1988. The anemic amount of 0.30" that fell on the 18th was the least amount for a wettest June day for any year in 33 years of records.

8th - 96° tied June's maximum temperature.

23rd - 74° min tied 6/30/1991 for the warmest June minimum temp.

Joe Terry of Forest Glen

8th - 99° new June record maximum temperature.

16th - First significant rain since late May. Moderate evening t'stm with a rainfall rate of up to 0.28" in 5 minutes.

28th - Second evening thunderstorm with very heavy rain at 1945. 0.34" fell in 5 minutes.

Wes Gleason of Hollywood 3 ENE

11th - Around 5 PM 1.16" of rain fell in about 40 minutes with wind gusts near 50 MPH and sustained winds of 28 MPH for 15 minutes.

12th - Around 3 PM 1.30" of rain fell in about 25 minutes. Penny size hail fell for 15 minutes. East winds 30 to 50 MPH. Numerous trees uprooted, numerous branches down up to 3 inches and lots of leaves down and loss of power.

John Zyla of Ridge

No rain for 12 days between May 23rd & June 5th.

19th - Heavy rain from 6:52AM - 9:30 AM 1.53"

20th - Heavy rain from 3:42 AM - 11:55 AM 1.83"

Max Hutto of Smithsburg 1.5 SW

8th - Mostly sunny, hot, humid, breezy.

11th - Overnight and PM thunderstorms.

16th - AM shower, warm, windy, PM thunderstorm with heavy rain.

Greg Keefer of Hagerstown 1 E

8th - Tied record maximum temperature of 95° set in 2008. The heat index peaked at 106°.

9th - Hazy hot and humid. Nearby thunderstorms during the evening produced some thunder and lightning but no rain fell here. Also had some gusty winds from storms to 31 mph and a little drop in temperature for some relief from heat.

Jim Vaughn of Smithsburg 2 NE

Near record dryness, 1.08". 4th driest June. Record is 0.91" set in 1988.

8th - Daily record high of 100° tied the second hottest June temperature. Record is 101° set 6/15/1994.

Compiled by Gary Gallaher, MD/DE ACON Data Collector and Report Writer, from data received from dedicated observers. Without your observations each month this report will not be possible.

ACON MD / DE / DC
JUNE 2011 SUMMARY

OBSERVER	STATION <i>COUNTY, STATE</i>	TEMPERATURE									PEAK WIND			PRECIPITATION					SNOWFALL				OBS TIME	
		AVG MAX	AVG MIN	MEAN	MAX	DAY	MIN	DAY	MAX >=90	MAX <=32	MIN <=32	GUST	DIR	DAY	TOTAL	MAX DAY	DATE	YEAR	DAYS >=.01"	DAYS >=1"	TOTAL	MAX DAY		DATE
<i>New Castle, Delaware</i>																								
Gallaher, Gary	Bear 2 SW	83.7	62.5	73.1	96	9	47	4	4	0	0	36	N	11	3.95	1.38	28	22.30	10	1	0.0	0.0	27.0	2400
Legates, David	Middletown 6 N	84.6	63.1	73.9	97	9	50	4	6	0	0	25		2	2.13	0.83	28	17.48	11	0				2400
NWS Wilmington	New Castle Co. Apt.	84.2	63.8	74.0	97	8	49	4	3	0	0	48	NW	9	2.49	0.98	28	20.60	11	0	0.0	0.0	27.0	2400
UofDE AG FARM DEOS***	Newark	83.0	63.6	73.3	96	9	50	4	4	0	0	22		2	<u>2.03</u>	<u>1.77</u>	28	<u>15.45</u>	5	1				2400
U of D REC DEOS***	Townsend 4 W	83.5	62.7	73.1	96	9	46	4	4	0	0	24		2	1.72	0.46	11	<u>17.19</u>	9	0				2400
<i>Sussex, Delaware</i>																								
NWS Georgetown	Sussex Co. Airport	84.4	63.3	73.9	97	9	48	4	5	0	0	64	W	29	1.89	0.66	11	15.12	9	0				2400
U of D REC DEOS***	Georgetown 5 SW	84.4	63.6	74.0	97	9	49	4	5	0	0	21		2	1.85	0.62	10	15.20	9	0				2400
U of D REC DEOS***	Harbeson 8 S	85.5	62.7	74.1	100	9	46	4	7	0	0	22		23	1.02	0.47	20	13.80	8	0				2400
U of D DEOS***	Rehoboth Beach Bwk	81.1	68.0	74.6	98	9	61	14+	3	0	0	22		10	0.96	0.46	14	13.67	6	0				2400
<i>Allegany, Maryland</i>																								
Latta, Greg	Frostburg	75.3	55.8	65.6	87	1+	43	3	0	0	0				2.09	0.72	20	30.27	15	0	0.0	0.0	50.1	0700
Mullins, Nate**	LaVale	80.5	61.2	70.9	93	9	49	4	3	0	0				2.23	0.55	19	26.69	13	0	0.0	0.0	26.2	2400
<i>Anne Arundel, Maryland</i>																								
Hanson, Dan	Pasadena 2 N	86.9	64.5	75.7	102	9	51	4	9	0	0	30	W	9	2.16	1.30	12	19.04	8	1	0.0	0.0	12.3	2400
Jug Bay Wetlands	Lothian	87.4	62.5	75.0	101	9	48	3+	10	0	0				1.72	0.50	10	21.62	11	0	0.0	0.0	6.8	1500
NWS Baltimore	BWI Airport	86.5	64.9	75.7	100	9	50	3+	7	0	0	56	WNW	9	3.51	1.96	16	19.79	10	1	0.0	0.0	14.4	2400
Stoudt, Jeff	Laurel 2 E	85.0	67.1	76.1	98	9	55	4	6	0	0				2.03	0.80	16	17.39	7	0	0.0	0.0	13.7	2400
<i>Baltimore, Maryland</i>																								
Muller, Ray	Reisterstown				94	8	54	15							1.13	0.50	17	20.47	9	0	0.0	0.0	5.3	2200
Sharrow, Marty	Owings Mills 2 SE	84.7	63.9	74.3	98	8+	51	4	5	0	0				1.06	0.55	12	21.05	6	0	0.0	0.0	28.1	2400
<i>Baltimore City, Maryland</i>																								
Manfre, Joe	Baltimore 2 SE	89.5	72.2	80.9	103	9	61	15	15	0	0				2.14	0.76	16	17.94	10	0	0.0	0.0	13.9	2400
Maryland Science Ctr	Baltimore Inner Harbor	89.0	72.2	80.6	103	9	61	15	11	0	0				1.04	0.39	10	17.15	8	0				2400
<i>Carroll, Maryland</i>																								
Close Jr, Herb	Manchester 1 SW	82.9	61.2	72.1	95	9	48	3+	3	0	0				2.84	1.27	11	23.19	12	1	0.0	0.0	35.7	2300
Hartsock, Ralph	Westminster 4 SSE	88.0	63.7	75.9	99	1+	51	3	10	0	0	33	WNW	2	1.19	0.44	17	21.82	6	0	0.0	0.0	28.6	1900
Miller, Bobby	Millers 4 NE	82.9	61.0	72.0	94	8	48	4	3	0	0	39		2	1.87	1.12	12	26.38	10	1	0.0	0.0	35.5	1800
<i>Charles, Maryland</i>																								
Brumback, Marty	Bryans Road 2 ESE																	<u>4.97</u>					<u>10.7</u>	2400
<i>Frederick, Maryland</i>																								
Glass, Eric	Emmitsburg 2 SE	82.2	61.3	71.8	93	1	49	4	4	0	0				1.08	0.52	17	23.55	10	0	0.0	0.0	24.0	0700

**ACON MD / DE / DC
JUNE 2011 SUMMARY**

OBSERVER	STATION COUNTY, STATE	TEMPERATURE									PEAK WIND			PRECIPITATION					SNOWFALL			OBS TIME		
		AVG MAX	AVG MIN	MEAN	MAX	DAY	MIN	DAY	MAX >=90	MAX <=32	MIN <=32	GUST	DIR	DAY	TOTAL	MAX DAY	DATE	YEAR	DAYS >=.01"	DAYS >=1"	TOTAL		MAX DAY	DATE
	<u>Howard, Maryland</u>																							
Giannola, Rich	Laurel JHU / APL <u>Montgomery, Maryland</u>	84.0	65.0	74.5	96	9	53	4	6	0	0	39	NW	9	1.01	0.29	9	17.59	8	0	0.0	0.0	18.7	2400
Berger, Ron	Norbeck 1 SE	84.8	64.8	74.8	98	9	51	4	7	0	0				1.07	0.30	17	17.47	10	0	0.0	0.0	15.0	2200
Cohen, Rob	Potomac 4 N	84.1	65.2	74.7	96	9	53	4	5	0	0				1.54	0.64	28	20.28	11	0	0.0	0.0	13.8	2100
Giannola, Rich	Olney 1 S	84.4	64.9	74.7	98	9	53	4+	5	0	0				1.29	0.42	17	17.33	12	0	0.0	0.0	17.2	2400
Holden, Richard	Clarksburg 2 ENE	82.6	63.6	73.1	93	8+	51	15	3	0	0	35	WNW+	2+	1.49	0.49	17	23.12	8	0	0.0	0.0	27.4	2400
Roth, David	Montgomery Village 1SW																<u>12.02</u>					<u>1.9</u>	2400	
Rossen, Stan	Glenmont 1 NNE	85.7	64.7	75.2	99	9	52	4	9	0	0	14		16	1.83	0.50	17	17.76	10	0	0.0	0.0	13.5	2400
Scafide, Tony	Bethesda	83.0	65.7	74.4	94	9	54	4	3	0	0				1.31	0.45	20	<u>13.73</u>	7	0				2400
Shaw, Kevin	Gaithersburg 2 WNW	84.5	64.8	74.7	96	8	52	4	5	0	0	17	SW	2	1.08	0.30	18	19.92	10	0	0.0	0.0	18.0	2400
Terry, Joe	Forest Glen	87.4	65.1	76.3	99	8+	51	4	8	0	0	25	WNW	17	2.31	0.92	16	19.62	7	0	0.0	0.0	15.5	2400
	<u>Prince Georges, Maryland</u>																							
Smith, Brian	Oxon Hill	85.7	66.5	76.1	98	9	54	4	5	0	0				2.84	0.82	11	20.61	10	0	0.0	0.0	14.3	2300
	<u>St. Marys, Maryland</u>																							
Gleason, Wes	Hollywood 3 ENE	83.4	68.5	76.0	95	8+	58	4	4	0	0	<u>28</u>	<u>SW</u>	<u>28</u>	5.49	1.57	17	20.11	11	3	0.0	0.0	<u>5.9</u>	0700/2400
Zyla, John	Ridge	86.0	68.0	77.0	98	8+	60	15	8	0	0	21	SW	9+	5.97	1.83	20	19.91	11	2	0.0	0.0	13.9	2400
	<u>Washington, Maryland</u>																							
Hutto, Max	Smithsburg 1.5 SW	82.8	60.8	71.8	94	8	47	4	3	0	0	27		16	2.28	1.08	16	26.24	10	1	0.0	0.0	26.5	2400
Keefer, Greg	Hagerstown 1 E	83.2	63.4	73.3	95	8+	49	4	4	0	0	35	W	2+	1.91	0.64	11	23.70	13	0	0.0	0.0	23.4	2400
Vaughn, Jim	Smithsburg 2 NE	82.8	62.7	72.8	100	8	49	15	6	0	0	38	S	23	1.30	0.69	16	24.78	10	0	0.0	0.0	28.7	2400
	<u>Wicomico, Maryland</u>																							
NWS Salisbury	Wicomico Co. Apt	87.8	64.1	76.0	100	9	48	4	11	0	0	31	W	2	1.19	0.37	20	12.82	14	0	0.0	0.0	0.0	2400
	<u>Arlington, Virginia</u>																							
NWS Washington	National Airport	87.9	69.6	78.8	102	9	59	15	10	0	0	52	SSW	16	1.68	0.83	16	15.35	10	0	0.0	0.0	10.1	2400
	<u>Loudon, Virginia</u>																							
NWS Washington	Dulles Airport	85.8	64.0	74.9	97	9	48	4	7	0	0	38	WNW	9	1.40	0.58	16	19.04	11	0	0.0	0.0	12.6	2400
Shaffer, Lance	Sterling 4 N																<u>17.75</u>					13.3	2400	
	<u>Tucker, West Virginia</u>																							
Lesher, Dave	Davis 3 SE WV	72.8	53.7	63.3	83	1	40	3	0	0	0				9.32	3.08	11	44.02	16	3	0.0	0.0	214.6	0700
SECTION AVERAGE*		84.5	64.4	74.5											1.98		20.21					19.3		

NOTES:

M OR UNDERLINE = MISSING DATA

> = INCLUDED IN NEXT DAYS DATA

ITALIC = ESTIMATED DATA

+ = FIRST OF SEVERAL OCCURANCES

WINTER TYPE PRECIPITATION FROM STATIONS WITH

TIPPING BUCKET RAIN GAUGE MAY SHOW UNDER CATCH.

ALSO AMOUNTS CAUGHT MAY BE NOTED IN THE FOLLOWING

DAYS AS IT MELTS.

*SECTIONAL AVERAGE DOES NOT INCLUDE DATA FROM WEST VIRGINIA.

**OBSERVER FOR LAVALE IS SCOTT LOHR. DATA COMPILED BY NATE MULLINS.

*** DATA FROM DEOS (DELAWARE ENVIROMENTAL OBSERVING SYSTEM) PERMISSION GRANTED FOR USE OF DATA

*** REC= UNIVERSITY OF DELAWARE RESEARCH AND EDUCATION CENTER

National Weather Service station data listed herein is preliminary and may be subject to change. The data has not been certified and cannot be used in legal actions.
Only reports certified by the National Climatic Data Center in Asheville, NC may be used for these purposes.
Accuracy of Data from ACON Observers not guaranteed.

GARY GALLAHER 1/27/12 Rev 1

ACON MD / DE / DC
JUNE 2011 DAILY TEMPERATURES

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVG	OBS TIME	
BEAR 2 SW, DE GALLAHER	93 68	83 60	77 55	80 47	75 62	84 55	87 59	94 64	96 71	89 70	85 68	82 67	75 58	75 53	83 54	79 58	82 66	85 63	85 63	77 64	85 65	91 69	86 72	87 67	83 64	81 60	81 66	83 64	85 65	83 59	83.7 62.5	2400 EDT	
MIDDLETOWN 6 N LEGATES	93 68	83 61	78 54	80 50	76 63	83 56	88 61	95 66	97 70	90 69	85 68	84 59	75 55	85 54	80 59	84 65	86 65	87 65	79 63	88 68	92 87	88 73	90 67	85 64	82 60	81 60	84 65	85 66	83 59	84.6 63.1	2400 EDT		
WILMINGTON, DE NWS NEW CASTLE CO APT	94 72	83 58	78 52	81 49	75 63	84 57	88 64	96 67	97 72	88 70	84 69	81 66	76 60	76 55	84 53	81 62	82 66	86 65	87 65	77 68	85 70	89 74	86 66	88 74	85 65	82 62	80 67	84 66	85 66	84 60	84.2 63.8	2400 EST	
NEWARK AG FARM, DE U OF DE DEOS	93 69	82 63	77 55	81 50	76 63	82 58	87 59	95 66	96 74	89 71	85 69	80 66	73 61	74 57	82 54	78 61	81 65	85 65	85 65	77 65	84 68	90 72	85 67	86 64	82 61	80 66	79 63	83 68	83 61	82 61	83.0 63.6	2400 EDT	
TOWNSEND 4 W, DE U of D REC DEOS	91 69	82 62	77 50	78 46	75 61	83 56	86 61	92 66	96 72	88 69	85 68	84 67	73 58	74 56	81 52	78 59	85 65	86 64	84 65	76 63	86 63	93 66	87 74	88 68	83 65	81 60	81 64	85 64	84 59	82 59	83.5 62.7	2400 EDT	
GEORGETOWN, DE NWS SUSSEX CO APT	93 67	85 64	78 53	80 48	75 60	82 56	86 60	94 65	97 71	91 69	88 69	86 67	78 60	74 54	81 56	82 56	84 65	88 63	82 66	76 61	83 59	89 67	84 72	87 70	84 67	82 65	84 68	90 67	86 71	83 64	84.4 63.3	2400 EST	
GEORGETOWN, DE U of D REC DEOS	91 69	86 61	78 53	81 49	77 62	82 58	86 61	95 68	97 72	91 70	88 69	86 67	78 60	74 54	81 56	82 56	84 63	88 66	82 66	76 61	83 59	89 67	84 72	87 70	84 66	82 64	84 68	90 67	86 71	83 64	84.4 63.6	2400 EDT	
HARBESON 8 S, DE U of D REC DEOS	95 69	86 62	79 55	82 46	74 59	82 57	88 60	95 65	100 72	89 69	84 69	84 66	78 58	76 53	83 56	83 55	86 66	90 63	81 63	75 58	86 57	94 68	87 72	92 70	88 66	84 65	81 68	91 67	89 61	84 61	85.5 62.7	2400 EDT	
REHOBOTH BEACH BWK U of D DEOS	90 69	86 69	76 63	74 63	69 64	73 62	89 67	86 72	98 72	76 68	77 68	80 69	76 65	74 61	81 61	81 65	85 70	86 69	75 64	73 63	83 70	89 77	88 74	88 70	79 69	79 71	90 71	82 73	76 69	81.1 68.0	2400 EDT		
FROSTBURG LATTA	87 67	87 60	73 43	72 44	80 49	77 54	80 55	86 56	87 67	86 60	81 60	81 61	77 48	66 49	66 45	72 47	71 54	75 56	77 56	72 59	82 64	83 65	73 59	82 64	83 59	76 54	69 54	66 50	66 52	75.3 55.8	0700 EDT		
LAVALE MULLINS**	91 66	77 65	76 52	80 49	83 65	82 57	78 56	92 61	93 70	87 67	85 64	84 66	72 55	70 56	75 51	74 60	81 56	83 62	77 64	76 64	88 68	83 67	80 70	75 66	73 62	74 56	80 62	85 62	80 65	80 55	80.5 61.2	2400 EDT	
PASADENA 2 N HANSON	98 74	88 64	81 56	85 51	82 65	86 62	90 60	97 66	102 72	92 70	87 68	87 59	79 56	76 54	86 58	80 63	86 67	86 70	85 65	79 60	85 74	90 66	88 66	90 66	85 60	85 60	83 69	90 67	88 60	86.9 64.5	2400 EDT		
LOTHIAN JUG BAY	96 71	88 58	82 48	86 48	82 63	84 60	89 59	100 64	101 72	91 69	88 69	90 68	81 57	77 53	85 50	81 56	86 61	90 64	85 69	80 64	86 66	92 68	86 73	90 67	85 62	85 59	84 67	95 66	90 58	89 58	87.4 62.5	0900 EDT	
BALTIMORE NWS BWI APT	98 73	88 64	81 50	82 50	83 66	86 62	90 60	99 68	100 71	91 69	87 71	87 68	78 62	79 57	84 53	81 58	87 64	85 68	85 71	79 67	87 70	91 74	87 69	87 68	83 60	84 68	82 68	91 70	87 60	86 60	86.5 64.9	2400 EST	
LAUREL 2 E STOUDT	94 77	85 64	79 56	82 55	80 64	84 64	89 72	97 77	98 74	90 73	89 71	88 62	76 61	73 52	80 60	84 65	84 70	81 66	79 68	86 71	90 66	86 71	86 69	86 68	82 63	82 63	80 71	90 70	88 64	86 64	85.0 67.1	2400 EST	
REISTERSTOWN MULLER																																	2200 EDT
OWINGS MILLS 2SE SHARROW	94 71	84 64	78 53	80 51	82 60	87 60	88 66	98 75	98 71	91 71	88 71	85 67	76 59	74 58	83 52	77 61	84 61	83 63	78 68	86 65	89 70	87 73	87 70	82 63	82 60	78 66	90 65	86 69	85 60	84.7 63.9	2400 EDT		
BALTIMORE 2SE MANFRE	101 80	89 72	82 64	84 65	85 68	89 69	94 70	101 78	103 81	94 78	93 75	90 71	80 66	79 66	87 61	84 68	90 69	88 73	88 78	83 71	88 71	94 76	91 78	92 76	87 74	89 72	84 75	92 76	91 75	90 71	89.5 72.2	2400 EDT	
BALT INNER HARBOR MD SCIENCE CENTER	100 80	88 72	82 64	84 65	84 68	88 69	93 70	100 77	103 79	94 78	M M	M M	80 66	77 66	86 61	84 68	89 69	89 73	88 78	82 71	88 71	96 76	92 79	92 77	87 74	88 71	83 75	92 76	93 71	90 71	89.0 72.2	2400 EST	
MANCHESTER 1SW CLOSE	92 71	80 61	75 48	M 57	M M	M M	M M	94 70	95 66	89 64	86 63	86 54	72 50	79 48	81 59	82 58	83 64	77 68	85 63	88 64	85 66	80 70	80 63	85 59	84 57	81 63	80 64	87 58	88 58	82 58	82.9 61.2	2300 EDT	
WESTMINSTER 4 SSE HARTSOCK	99 73	83 67	79 51	85 52	84 62	85 60	91 62	98 67	99 72	95 70	94 71	93 66	81 59	78 54	84 51	83 57	87 60	88 65	88 68	87 67	89 69	94 72	90 68	88 65	85 60	85 63	83 66	95 68	86 59	84 59	88.0 63.7	1900 EDT	
MILLERS 4NE MILLER	91 69	87 65	77 51	76 48	80 58	82 57	85 58	94 64	93 70	89 68	87 68	86 65	75 55	74 54	80 50	79 55	80 59	82 62	84 61	77 65	86 64	86 66	84 70	82 65	78 60	79 57	88 63	88 64	86 57	83 57	82.9 61.0	1800 EDT	
BRYANS ROAD 2 ESE BRUMBACK																																	2400 EDT
EMMITSBURG 2 SE GLASS	93 70	90 68	79 54	77 49	77 52	78 58	83 57	83 59	92 63	92 69	89 69	85 65	84 58	74 57	74 50	80 51	78 54	79 61	83 65	82 67	76 67	85 67	85 70	82 67	82 65	77 58	78 63	76 65	89 65	85 57	82.2 61.3	0700 EDT	

**ACON MD / DE / DC
JUNE 2011 DAILY TEMPERATURES**

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	AVG	OBS TIME
LAUREL JHU / APL	95	82	76	80	80	83	87	95	96	92	87	89	74	71	81	78	83	82	83	78	86	90	86	86	81	82	79	91	86	83	84.0	2400
GIANNOLA	73	64	55	53	64	62	61	72	69	70	71	68	59	58	53	57	62	67	70	65	68	69	74	70	67	62	67	68	70	61	65.0	EDT
NORBECK 1 SE	93	86	79	81	79	85	84	97	98	93	90	90	77	74	84	79	84	82	82	77	87	88	83	84	80	83	79	92	87	86	84.8	2200
BERGER	72	66	55	51	63	62	59	68	75	71	72	69	60	58	52	58	63	66	70	65	67	68	75	70	67	60	68	67	68	60	64.8	EDT
POTOMAC 4N	94	86	78	82	81	85	86	95	96	91	88	87	76	72	80	79	82	83	81	76	86	89	86	86	80	81	80	90	85	83	84.1	2100
COHEN	71	65	57	53	61	64	60	67	73	71	73	69	61	59	55	59	63	66	71	66	68	70	74	71	66	60	68	69	66	60	65.2	EDT
OLNEY 1 S	94	85	80	80	81	84	86	95	98	90	88	87	77	75	82	78	83	83	79	77	85	89	84	85	83	81	80	91	87	86	84.4	2400
GIANNOLA	73	64	54	53	62	62	63	67	74	69	72	69	59	57	53	60	63	65	70	64	67	69	74	71	66	60	67	69	69	61	64.9	EDT
CLARKSBURG 2ENE	91	81	75	78	78	82	84	93	93	89	87	86	75	72	80	78	82	80	80	77	86	87	83	84	79	81	79	89	85	84	82.6	2400
HOLDEN	72	62	53	53	60	61	63	69	73	68	69	67	57	56	51	61	62	64	68	64	66	69	71	67	64	60	65	68	67	59	63.6	EST
MONTGOMERY VILLAGE																															2400	
ROTH 1SW																															EDT	
GLENMONT 1NNE	95	87	79	82	81	85	89	96	99	90	90	91	77	72	84	81	86	92	79	78	88	90	85	87	82	82	79	93	87	85	85.7	2400
ROSSEN	71	62	54	52	64	62	60	67	73	71	72	68	61	59	53	58	64	66	70	65	68	69	75	69	66	60	68	68	67	60	64.7	EST
BETHESDA	92	83	77	80	79	83	85	93	94	89	87	86	75	73	79	79	82	82	80	76	84	87	83	84	81	81	79	89	84	82	83.0	2400
SCAFIDE	74	64	57	54	66	63	62	68	74	72	71	69	61	59	56	62	63	67	72	64	67	70	73	70	64	62	67	71	65	62	65.7	EDT
GAITHERSBURG 2WNW	93	84	80	80	82	86	87	96	94	90	88	88	76	73	82	79	83	81	81	79	88	89	84	84	81	83	81	91	87	86	84.5	2400
SHAW	73	65	55	52	63	62	60	67	71	68	72	69	60	59	53	58	62	66	70	66	67	71	74	70	67	60	67	69	69	61	64.8	EDT
FOREST GLEN	96	87	82	84	83	88	88	99	99	94	92	92	80	77	86	84	87	87	83	80	89	91	85	88	84	86	83	94	89	86	87.4	2400
TERRY	74	63	54	51	66	62	61	67	74	72	73	69	61	58	53	59	63	66	72	65	67	69	74	70	67	61	68	69	67	59	65.1	EDT
OXON HILL	94	87	80	83	81	88	87	97	98	93	89	89	78	74	83	79	85	87	82	79	87	89	83	87	82	82	82	93	88	86	85.7	2300
SMITH	73	70	60	54	67	62	62	67	75	70	71	68	63	62	56	61	64	66	72	65	66	70	74	70	70	63	68	70	72	64	66.5	EDT
HOLLYWOOD 3 ENE	91	86	77	79	78	81	85	92	95	88	87	83	75	75	79	78	83	86	M	76	83	88	82	86	83	82	82	91	86	83	83.4	2400
GLEASON	75	71	62	58	69	66	65	70	75	73	70	68	66	62	60	64	68	67	M	65	68	73	77	74	69	68	69	72	73	69	68.5	EDT
RIDGE	95	88	79	84	78	83	88	98	98	91	90	88	77	78	83	81	88	87	78	75	84	91	85	91	87	85	84	93	86	85	86.0	2400
ZYLA	74	71	63	61	67	65	67	72	76	72	69	69	66	62	60	64	69	70	71	63	66	73	75	67	65	67	67	71	71	69	68.0	EDT
SMITHSBURG 1.5 SW	91	80	78	79	82	85	84	94	92	89	86	85	74	72	81	78	81	83	82	79	88	87	83	81	76	79	80	88	83	83	82.8	2400
HUTTO	69	60	48	47	62	58	55	61	67	67	67	62	55	54	48	55	60	63	65	67	67	70	70	65	59	56	63	65	55	60.8	EDT	
HAGERSTOWN 1E	93	80	78	78	82	84	84	95	95	89	87	86	74	73	80	79	81	83	81	79	87	88	84	82	78	80	78	90	85	84	83.2	2400
KEEFER	73	63	54	49	62	60	59	64	72	70	68	65	58	58	50	58	62	64	67	69	68	71	73	68	62	59	65	67	58	63.4	EDT	
SMITHSBURG 2 NE	94	77	74	77	82	82	82	100	97	90	88	85	72	71	80	78	81	83	82	77	90	89	85	80	77	78	79	91	82	82	82.8	2400
VAUGHN	71	63	50	52	62	60	60	65	73	68	67	64	55	56	49	59	61	63	65	67	67	70	72	67	62	59	65	66	58	62.7	EDT	
SALISBURY	93	88	80	84	78	85	88	97	100	95	93	91	83	79	84	86	89	94	81	79	86	93	88	92	87	86	87	93	90	86	87.8	2400
NWS WICOMICO CO APT	68	62	54	48	60	59	58	68	73	70	70	59	54	57	56	68	67	67	60	58	69	74	71	68	66	70	68	68	62	64.1	EST	
WASH NATIONAL	98	88	81	85	82	88	90	99	102	94	93	90	81	78	84	83	88	89	84	80	87	90	86	90	85	86	84	95	89	88	87.9	2400
NWS ASOS	76	69	63	61	70	66	68	72	79	74	74	71	65	64	59	66	64	69	75	67	70	73	76	73	72	67	70	74	74	67	69.6	EST
WASH DULLES	95	86	78	82	81	86	87	96	97	93	90	90	78	76	83	80	85	86	83	78	88	89	83	87	83	85	81	93	88	86	85.8	2400
NWS ASOS	72	67	53	48	66	62	61	64	71	70	71	69	61	53	53	58	62	64	70	67	67	71	73	68	62	56	66	68	59	64.0	EST	
STERLING 4 N																															2400	
SHAFFER																															EDT	
DAVIS 3 SE WV	83	76	72	73	79	75	78	71	83	83	79	77	73	61	60	69	69	72	72	71	71	78	78	72	61	62	67	75	76	69	72.8	0700
LESHER	59	50	40	42	52	52	57	60	64	59	57	58	48	46	44	46	53	53	58	57	57	60	62	57	54	53	54	58	52	48	53.7	EDT

**ACON MD / DE / DC
JUNE 2011 DAILY PRECIPITATION**

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL	OBS TIME	
BEAR 2 SW, DE GALLAHER				T	0.02				0.10		0.84	0.11				0.35	0.61				0.22		0.31	0.01	T		T	1.38			3.95	2400	
MIDDLETOWN 6 N LEGATES									0.37	0.04	0.04	0.05				0.13	0.51				0.06	0.08	0.01		0.01			0.83			2.13	2400	
WILMINGTON, DE NWS NEW CASTLE CO APT	0.05			T	T				0.36	T	0.21	0.04		0.02		0.22	0.42				0.16	T	0.02	0.01		T	T	0.98			2.49	2400	
NEWARK AG FARM, DE U OF DE DEOS	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M	M		0.23	0.01	0.01				0.01	1.77			2.03	2400	
TOWNSEND 4 W, DE U of D REC DEOS					0.35				0.10		0.46	0.19				0.05	0.01				0.04	0.18						0.34			1.72	2400	
GEORGETOWN, DE NWS SUSSEX CO APT					0.01						0.66	0.04		T		0.02	0.47		0.01	0.48		0.19		T			T	0.01			1.89	2400	
GEORGETOWN, DE U of D REC DEOS				0.08	0.02					0.62	0.15	0.03				0.01	0.21				0.49	0.24									1.85	2400	
HARBESON 8 S, DE U of D REC DEOS											0.11		0.05		0.09		0.17		0.01	0.47		0.10			0.02						1.02	2400	
REHOBOTH BEACH BWK U of DE DEOS												0.04		0.46			0.03				0.31		0.10		0.02						0.96	2400	
FROSTBURG LATTA		T			0.27			0.01		0.06		0.02	0.16		T		0.21	0.11	0.04	0.72	0.02	0.07	0.01	0.04	0.01			0.34			2.09	0700	
LAVALE MULLINS**				T	0.11		T		0.06	0.01	0.02	0.22				0.12	0.05		0.55	0.48	0.01	0.05	0.02			T		0.53			2.23	2400	
PASADENA 2N HANSON									0.02				1.30			0.24	0.39	0.11		0.07	0.01							0.02			2.16	2400	
LOTHIAN JUG BAY	0.11	0.02			0.05					0.50	0.16					0.19	0.32	0.01	0.01	0.30								0.05			1.72	0900	
BWI NWS ASOS				T	0.18				0.29	0.16	T	0.39				1.96	T	0.07	T	0.08	0.02	T	T	T		T	0.01	0.35			3.51	2400	
LAUREL 2 E STOUDT	T			T					T	0.03	T	0.30				0.80	T	0.30	T	0.15	0.05	T	T			T	T	0.40			2.03	2400	
REISTERSTOWN MULLER	T				0.10		0.02			0.02		0.07		0.25		0.08	0.50				0.06						0.03				1.13	2200	
OWINGS MILLS 2SE SHARROW				0.01	T				0.07	T	T	0.55				0.01	0.39				T	0.03					T	T			1.06	2400	
BALTIMORE 2SE MANFRE				T	0.05				0.16	0.29	T	0.63				0.76	0.02	0.01		0.05	0.09					T		0.08			2.14	2400	
BALT INNER HARBOR MD SCIENCE CENTER									0.17	0.39	M	M				0.23	0.02	0.01		0.03	0.09							0.10			1.04	2400	
MANCHESTER 1SW CLOSE									0.12	0.13	1.27	0.01				0.19	0.44	0.01		0.01	0.09	T	0.02	0.53		T	T	0.02			2.84	2300	
WESTMINSTER 4 SSE HARTSOCK	T				0.21											0.08	0.44				T	0.36					0.09	0.01			1.19	1900	
MILLERS 4NE MILLER				0.03	0.08	0.01				T		1.12				0.06	0.39				T	0.01	0.02	0.01	0.14	T	T	T	T		1.87	1800	
BRYANS ROAD 2 ESE BRUMBACK																																	2400
EMMITSBURG 2 SE GLASS					0.03	0.01				0.09		0.06					0.52				0.04	0.03	0.09	0.10	0.11						1.08	0630	

**ACON MD / DE / DC
JUNE 2011 DAILY PRECIPITATION**

STATION	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	TOTAL	OBS TIME	
LAUREL JHU / APL GIANNOLA									0.29	0.08						0.23	0.01	0.17		0.15	0.01						T	0.07			1.01 0.0	2400 EDT	
NORBECK 1 SE BERGER				T	0.02				0.01			0.04		T		0.09	0.30	0.20	T	0.28	0.06		T				0.01	0.06			1.07 0.0	2200 EDT	
POTOMAC 4N COHEN									0.03					0.01		0.03	0.13	0.11	0.01	0.32	0.20	0.04				T	0.02	0.64			1.54 0.0	2100 EDT	
OLNEY 1 S GIANNOLA				0.01	0.04				0.01			0.05		T		0.01	0.42	0.39	T	0.20	0.10	0.01	T		T	0.03	0.02			1.29 0.0	2400 EDT		
CLARKSBURG 2ENE HOLDEN									T			0.38		0.01		0.27	0.49	0.10	T	0.20	0.03	0.01	T			T	T	T			1.49 0.0	2400 EST	
MONTGOMERY VILLAGE ROTH 1SW																																2400 EDT	
GLENMONT 1NNE ROSSEN				T	0.01				0.03	T	0.04	T		T		0.42	0.50	0.17	T	0.28	0.03		T	T		T	0.01	0.34			1.83 0.0	2400 EST	
BETHESDA SCAFIDE									0.01							0.29	0.03	0.26		0.45	0.09							0.18			1.31 -	2400 EDT	
GAITHERSBURG 2WNW SHAW									0.09			T		0.03		0.08	0.28	0.30	0.01	0.20	0.06	0.01	T				0.02				1.08 0.0	2400 EDT	
FOREST GLEN TERRY									0.01					T		0.92	0.07	0.19	T	0.42	0.08		T			T	T	0.62			2.31 0.0	2400 EDT	
OXON HILL SMITH	0.04				T					0.09	0.82	0.03		T		0.81	0.77	T	0.01	0.23	0.02		T			T	0.02	T			2.84 0.0	2300 EDT	
HOLLYWOOD 3 ENE GLEASON						0.03						1.34	1.30				1.57	0.01	0.15	0.31	0.55				0.01		0.15	0.00	0.07			5.49 0.0	0700 EDT
RIDGE ZYLA					0.07						0.99	0.04				0.17			1.53	1.83		0.07		0.02	0.06		0.24	0.95			5.97 0.0	2400 EDT	
SMITHSBURG 1.5 SW HUTTO				0.01	0.09						0.62	0.16				1.08				0.07	0.07	0.15	T	0.02			0.01	T			2.28 0.0	2400 EDT	
HAGERSTOWN 1E KEEFER	0.06			0.01	0.22					0.06	0.64	0.22				0.52		0.02		0.07	0.06		0.01			0.01		0.01				1.91 0.0	2400 EDT
SMITHSBURG 2 NE VAUGHN				0.01							0.15	0.01				0.69			0.20	0.05	0.07	0.06		0.05			0.01					1.30 0.0	2400 EDT
SALISBURY NWS WICOMICO CO APT				0.02	0.06	0.03				0.16	0.03					0.02	0.02	0.02	0.20	0.37				T	0.11		0.05	0.09	0.01			1.19 0.0	2400 EST
WASH NATIONAL NWS ASOS	0.16				T				T	0.04	T	0.07		T		0.83	0.20	T	0.01	0.34	0.01	T	T			0.01	0.01	T				1.68 0.0	2400 EST
WASH DULLES NWS ASOS	0.01			T	T				0.01	T	T	0.11				0.58	0.06		0.03	0.43	0.07	0.01	T			0.05	0.04					1.40 0.0	2400 EST
STERLING 4 N SHAFFER																																	2400 EDT
DAVIS 3 SE WV LESHER					0.14					0.47	3.08	0.01	0.01			0.06	0.42	0.22	1.31	2.32	0.04	0.83	T	0.01	T	0.02	0.02	0.36				9.32 0.0	0700 EDT