



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

# CONTINUED COOL AND WET THEN SUMMER BY MONTH'S END

**June 2003** was one of the wettest, coolest Junes. According to the NCDC it was Maryland's 6th coolest and 106th wettest and for Delaware's its 8th coolest and 107th wettest out of past 109. (Time period 1895-2003 (109 years). Wettest = 109, driest = 1; Warmest = 109, Coolest = 1.) ACON observers reported record or near record precipitation. Almost all of the rain fell during the first 22 days. See the Observer Comments section for more details. *Wilmington NWS* broke its record (dates back to 1894) of 8.38" that was set in 1938 with 9.90". *Washington NWS* and *Baltimore NWS* each broke their 1889 record for number of days with measurable rain in May and June by 2 days with 36 days and 35 days respectively.

June began where May left off, i.e. many days with measurable precipitation. **Joe Terry** of **Forest Glen** gave this great brief summary: "The 1st through the 22nd was very cool with only two clear days. Then a dramatic turnaround starting the 23rd with sunny, hot and dry conditions." During the first 22 days there were only five (5) days when rain did not fall at a majority of reporting stations, the 2nd, 6th, 8th, 10th, and 16th.

The 1st was mostly cloudy, cool, and windy as result of a deep low pressure system that passed just north of the Mason Dixon line. Rains returned on the 3rd. The heaviest amounts of over an inch fell from Frederick County westwards. **Greg Keefer** of **Hagerstown 1E** reported the heaviest with 2.66", while **Jim Vaughn** of **Smithsburg 2 NE** reported 2.36". Overcast skies along with light rain and drizzle on the 4th prevented the maximum temperatures to rise past 60 degrees at most ACON stations except in Southern Delaware

and Southeastern portion of Maryland.

Heavy rains fell on the 7th. Amounts were generally in the 1 to 3 inch range. The heaviest rain was observed by David Roth of Montgomery Village 1 SW who reported 3.03". 2 inch plus amounts fell at most stations in Montgomery County Maryland and Sussex County Delaware.

Warmer temperatures along with uncomfortable dew points moved into the region on the 11th, but the showers continued. Maximum temperatures in the mid to upper 80's along with a few 90 and 91 degree readings were observed while minimum temperatures were in the mid 60's to lower 70's. Thunderstorms, some with heavy rain, were scattered on the 12th. **Lynn Albright** of **Fallston 2 NW** reported 2.06" which caused some flash flooding in Harford County. **Lynn Albright** reported more heavy rain and thunderstorms the next day (13th) which dumped an additional 1.55" that caused additional flash flooding.

The next, and last, wet spell of the month occurred from the 17th to the 21st. Maximum temperatures were in the 60's and 70's. Some rain fell on each day. The heaviest fell on the 19th and the 20th. **Rob Cohen** of **Potomac 4N** reported 2.09" on the 19th. Heavy rains caused flash flooding the afternoon of the 20th in New Castle Delaware. Radar estimated that upwards of 5 inches fell. ACON observer **Jim Canavan** of **Wilmington 4 NNE** reported 3.15". *Wilmington NWS* reported 3.58".

The final week of the month was more normal - sunny, warm with hot periods and scattered showers. Finally the sun appeared on the 23rd. **Greg Keefer** of **Hagerstown 1 E** in his daily notes reported that today was the sunniest day in 55 days. The temperature rose to and

### EXTREMES REPORTED BY ACON OBSERVERS

#### MAXIMUM TEMPERATURE

Fallston 1 NW	97
Baltimore 2 SE	96
Millersville 1 SE	95
Jug Bay Wetlands Lothian	95

#### MINIMUM TEMPERATURE

Eagle Rock	39
Frostburg	40
Bear 2 SW DE	41

#### WARMEST AVG. TEMP.

Oxon Hill	72.8
Baltimore 2 SE	72.5
Mont. Village 1 SW	71.5

#### COLDEST AVG. TEMP.

Frostburg	62.1
Eagle Rock	62.3
LaVale	65.5

#### MAXIMUM PRECIPITATION

Fallston 2 NW	9.82
Mont. Village 1 S	9.67
Millersville 1 SE	9.28

#### MINIMUM PRECIPITATION

U of D Harbeson DE	4.22
Hollywood	4.69
U of D Res Ctr Georgetown DE	4.74

above the 90 degree mark at many stations from the 23rd to the 27th. Temperatures rose to the 95 degree mark in portions of the following counties: Anne Arundel, Harford, and Baltimore City. Scattered mostly light showers occurred on the 27th and late on the 30th. The heaviest was 1.35" which fell at **Jug Bay Wetlands** in **Lothian**.

# OBSERVER COMMENTS FOR JUNE 2003

## **Gary Gallaher of Bear 2 SW, DE**

Wettest June with 8.94". Old record 8.50" set in 1972. First June with 3 days with =>1" of precipitation. Old record 2 days. 17 days with =>0.01" tied record set in 1972. The following maximum temperature frequencies were set: Greatest number of days with temperatures in the 60's with 7 and least number of days with temperatures in the 80's with 9. Record low barometric pressure (since 1992) for June of 29.28" on the 1st.

## **Nate Mullins of LaVale**

3rd - Steady soaking rain lasting the entire day.

## **Dave Bryant of St Margarets**

By the 12th much warmer and very humid with dew points 70 to 73 degrees.

## **Dan Hanson of Millersville 1 SE**

Records set this month include the wettest June with 9.28" of rain (old record 8.25" set in 1996), the coolest mean temperature with 69.4 (old record 70.1 set in 1985) and 16 days with rain.

## **Jeff Stoudt of Laurel 2 E**

7th - Rain, heavy at times, mostly daybreak to noon.

11th - Strong evening thunderstorm.

30th - Very noisy thunderstorm W-SW very late evening into predawn of 7/01.

## **Al Kreinik of Parkton 5 SW**

11th - Heavy evening lightning to SW.

## **Joe Manfre of Baltimore 2SE**

1st - Partly cloudy, very windy.

23rd & 24th - Sunny, hot, low humidity.

## **Marty Sharrow of Owings Mills**

9th - Early clouds, them clearing, breezy, and warmer.

26th - Hazy, hot, and humid.

27th - Very warm and humid; cooler at night.

## **Herb Close of Manchester 1 SW**

Second coldest and second wettest June in station history .

## **Ralph Hartsock of Westminster 4 SSE**

2nd - Cold start, sunny and mild.

7th - Heavy rains till 2 PM.

21st - First day of summer, but who would know it. 75 max and 55 min.

## **Greg Klein of Westminster 5 SSE**

Ninth month in a row with below normal temperatures.

## **Bobby Miller of Millers 4 NE**

Wettest June, 6.87", of 22 on record. Old record 6.46" set in 1982. Record low June barometric pressure of 29.31" on the 1st.

11th - Vivid lightning SW-S in evening.

## **Manuel Farfan of Frederick 4 N**

3rd - Overcast all morning with rain most of the day, sometimes moderate to heavy, fog later.

22nd - Rain overnight, periods of sun and warmer.

## **Lynn Albright of Fallston 2 NW**

12th & 13th - Heavy rainfall caused some flash flooding here in Harford Co.

30th - Storms in our area (swift moving, but packed a punch) resulted in numerous trees and wires down, and power outages for our area.

## **Rich Giannola of JHU/APL OF Laurel**

1st - 29.36" - Minimum barometric pressure for the month

## **Rob Cohen of Potomac 4 N**

Wettest June on record (25 years) of 8.44".

30th - Thunderstorm 11PM to 12:30AM of 7/1/03.

## **Rich Giannola of Olney 1 S**

11th - Thunder heard 8:20 PM, winds picked up suddenly at 8:59 PM. TSRA+ began 9:05 PM, ending 10:15 PM.

## **Stan Rossen of Glenmont 1 NNE**

7.32" a new June precipitation record. Old record 7.10" set in 1979.

4th - 58 max temp is the latest maximum below 60 degrees.

## **Kevin Shaw of Gaithersburg 2 WNW**

Cool, wet month, lots of rainy days, but not as many as May. Average maximum temperature of 78.8 was the second coolest for June - coolest 78.3 set in 1982.

4th - Max temp of 58 broke the daily low max of 66 set in 1988, but 2 degrees above the June record low max of 56 set on June 3, 1997.

## **Joe Terry of Forest Glen**

11th - Warmest day since April 16th. Strong evening thunderstorm with some close lightning.

19th - Evening thunderstorm with heavy rain shower-power out for 65 minutes.

24th - Finally two back to back clear days.

## **Bill Hudelson of South Bowie**

3rd - Occasional light rain and drizzle.

27th - Hazy - Thunderstorm 1515 hours with heavy rain.

30th - Scattered cloudy, hazy, hot, thunderstorm NW 2350 hours.

## **Brian Smith of Oxon Hill**

27th - 0535-0552 Venus girdle. Borderline SVR TSRA 1422-1550: rotten tree downed 2 blocks west.

30th - 2300 and later LTG DSNT NW: SVR TS in Montgomery Co. moving SE.

## **Floyd Abell of Hollywood**

5th - Thunderstorm before dawn, then fair day.

19th - AM rain, afternoon sun, late evening rain.

## **John Zyla of Ridge**

Record station rainfall of 7.84". Also the wettest recorded in St. Marys county dating back to 1861.

## **Greg Keefer of Hagerstown 1 E**

7th wettest June with 7.99". Record is 11.57 in 1928.

2nd - 42 degrees very close to record low of 41 for date.

5th - Dense fog overnight and this morning.

23rd - Sunny and very warm with a high of 87. This was the first time we had this much sun in one day in 55 days.

## **Jim Vaughn of Smithsburg 2 NE**

Second wettest June. Two month precipitation (May/June) total the third greatest for any two consecutive month on record.

12th - Funnel cloud 1.5 mile west, 1/4" hail. Wind gust of 56 mph. Minor damage.

**ACON MD/DE/DC**  
**JUNE 2003 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
<i>New Castle, Delaware</i>																								
Canavan, Jim	Wilmington 4 NNE	76.2	60.0	68.1	92	26	45	2	3	0	0				8.81	3.15	20	<u>24.54</u>	15	4	0.0	0.0	<u>51.2</u>	2400
Gallaher, Gary	Bear 2 SW	78.3	59.6	69.0	94	26	41	2	5	0	0	50	SW	12	8.94	2.65	20	29.92	17	3	0.0	0.0	57.3	2400
NWS Wilmington	New Castle Co. Apt.	76.9	60.7	68.8	93	26	45	2	3	0	0	40	SW	12	9.90	3.58	20	28.24	16	3	0.0	0.0	46.0	2400
U of D DE Climatologist	Newark Pearson Hall	77.2	60.7	69.0	94	26	49	2	4	0	0	35		12	7.39	2.40	20	<u>21.88</u>	16	2				2400
<i>Sussex, Delaware</i>																								
NWS Georgetown	Sussex Co. Airport	79.4	62.1	70.8	95	25	50	2	5	0	0	33	WNW	27	4.86	2.74	7	23.37	16	1				2400
U of D Research & Ed Ct	Georgetown	79.2	62.2	70.7	93	25	49	2	5	0	0				4.74	2.54	7	<u>23.55</u>	16	1			26.3	2400
U of D Warrington Farm	Harbeson	79.0	61.2	70.1	94	26	49	2	4	0	0				4.22	2.45	7	<u>21.66</u>	12	1			<u>2.4</u>	2400
<i>Allegany, Maryland</i>																								
Latta, Greg	Frostburg	70.5	53.6	62.1	86	26	40	2	0	0	0				7.25	1.53	4	29.10	15	4	0.0	0.0	92.0	0700
Mullins, Nate	LaVale	75.5	55.4	65.5	90	25	42	2	1	0	0				5.79	1.77	3	28.09	10	2	0.0	0.0	66.3	2400
<i>Anne Arundel, Maryland</i>																								
Bryant, Dave	St. Margarets	77.4	62.2	69.8	92	25+	51	6	4	0	0				6.31	1.99	7	29.95	17	2	0.0	0.0	47.7	2100-P 2400-T
Hanson, Dan	Millersville 1 SE	79.5	59.2	69.4	95	26	44	2	6	0	0	30	WNW+	1+	9.28	2.36		35.82	16	2	0.0	0.0	52.8	2400
Jug Bay Wetlands	Lothian	80.2	59.8	70.0	95	26+	43	2	5	0	0				8.93	1.51	8	31.66	16	4	0.0	0.0	<u>28.2</u>	0900
NWS Baltimore	BWI Airport	78.6	61.0	69.8	93	26	45	2	4	0	0	41	WSW	11	6.96	1.63	7	29.63	15	1	0.0	0.0	58.2	2400
Stoudt, Jeff	Laurel 2 E	-	-	-	-	-	-	-	-	-	-				8.20	1.91	7	33.62	15	2	0.0	0.0	53.1	2400
<i>Baltimore, Maryland</i>																								
Kreinek, Al	Parkton 5 SW	77.8	58.6	68.2	92	25+	41	2	3	0	0	39	WNW	1	6.40	2.28	20	29.05	11	3	0.0	0.0	63.1	2200
Sharrow, Marty	Owings Mills 2 SE	77.8	59.3	68.6	93	26	45	2	4	0	0				6.42	1.46	7	28.72	14	2	0.0	0.0	63.0	2400
<i>Baltimore City, Maryland</i>																								
Manfre, Joe	Baltimore 2 SE	79.8	65.2	72.5	96	26	52	2	6	0	0				8.03	1.73	21	33.25	15	3	0.0	0.0	56.3	1800
Maryland Science Ctr	Baltimore Inner Harbor	79.5	64.3	71.9	95	26	52	2	6	0	0				6.98	1.72	7	30.53	12	2				2400
<i>Carroll, Maryland</i>																								
Close Jr, Herb	Manchester 1 SW	77.2	59.4	68.3	93	26	43	2	2	0	0	32		1	7.17	1.51	7	28.68	16	1	0.0	0.0	70.0	2300
Hartsock, Ralph	Westminster 4 SSE	78.6	59.5	69.1	90	26	45	2	1	0	0				5.71	1.36	7	26.62	15	1	0.0	0.0	63.1	2100
Klein, Greg	Westminster 5 SSE	76.2	58.5	67.4	88	26	45	2	0	0	0				5.91	1.34	7	26.13	15	1	0.0	0.0	68.0	2200
Miller, Bobby	Millers 4 NE	77.4	59.3	68.4	90	25+	46	2	2	0	0	37	NNW	1	6.87	1.54	7	27.68	16	2	0.0	0.0	67.4	1800
<i>Frederick, Maryland</i>																								
Farfan, Manuel	Frederick 4 N	79.0	61.2	70.1	93	24	52	2	3	0	0				6.46	1.60	7	29.83	14	2	0.0	0.0	57.4	2400
<i>Garrett, Maryland</i>																								
Harvey, Rebecca	Eagle Rock	70.8	53.7	62.3	84	26	39	3	0	0	0				7.60	1.62	1	34.67	17	2	0.0	0.0	190.9	0800
<i>Harford, Maryland</i>																								
Albright, Lynn	Fallston 2 NW	81.5	58.6	70.1	97	26	44	2+	10	0	0				9.82	2.06	12	33.14	18	5	0.0	0.0	54.8	2400
<i>Howard, Maryland</i>																								
Giannola, Rich	Laurel JHU / APL	77.5	61.2	69.4	91	26	48	2	2	0	0				6.53	1.93	7	32.44	15	2	0.0	0.0	58.7	2400

**ACON MD/DE/DC**  
**JUNE 2003 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
<i>Montgomery, Maryland</i>																								
Cohen, Rob	Potomac 4 N	77.3	62.4	69.9	90	25+	48	2	2	0	0				8.44	2.09	19	32.25	14	2	0.0	0.0	52.0	2100
Giannola, Rich	Oiney 1 S	75.4	60.6	68.0	91	M	47	2	1	0	0				7.37	1.92	7	31.22	12	3	0.0	0.0	58.9	2400
Roth, David	Montgomery Village 1SW	79.8	63.1	71.5	94	26	48	2	6	0	0	22	1		9.67	3.03	7	32.65	14	3	0.0	0.0	52.5	2400
Rossen, Stan	Glenmont 1 NNE	78.9	60.8	69.9	93	25+	47	2	3	0	0	16	11		7.32	2.59	7	31.64	17	2	0.0	0.0	58.0	2400
Scafide, Tony	Bethesda	79.0	60.7	69.9	94	26	48	2	4	0	0	17	1		9.11	2.39	7	<u>24.08</u>	17	2				2400
Shaw, Kevin	Gaithersburg 2 WNW	78.8	60.0	69.4	94	26	45	2	4	0	0				8.16	2.23	7	30.53	13	2	0.0	0.0	59.0	2400
Terry, Joe	Forest Glen	80.2	61.4	70.8	94	26	46	2	5	0	0	31	WSW+	1+	7.69	2.06	7	33.53	16	2	0.0	0.0	50.9	2400
Wash Gas Light	Rockville 1 NE	77.1	60.5	68.8	91	26	52	4	1	0	0				<u>6.47</u>	2.14	17-19	<u>27.36</u>	11	2	0.0	0.0	57.8	2400
<i>Prince Georges, Maryland</i>																								
Hudelson, Bill	South Bowie	80.0	62.0	71.0	94	25+	50	2	7	0	0	33	NW	1	8.50	1.67	7	36.24	16	3	0.0	0.0	41.0	2400
Smith, Brian	Oxon Hill	82.3	63.2	72.8	94	25+	51	2	5	0	0				7.86	1.80	7	33.67	17	3	0.0	0.0	42.5	2000
<i>St. Marys, Maryland</i>																								
Abell, Floyd	Hollywood	80.2	62.2	71.2	94	25+	48	2+	5	0	0	32		1	4.69	1.31	7	29.69	16	1	0.0	0.0	32.9	2400
Van Wie, Michael	Oraville																						<u>4.1</u>	2400
Zyla, John	Ridge	80.1	64.1	72.1	93	25+	50	2	4	0	0	33	NW	1	7.84	2.64	7	29.80	15	4	0.0	0.0	28.8	2400
<i>Washington, Maryland</i>																								
Keefer, Greg	Hagerstown 1 E	77.3	59.0	68.2	90	25+	42	2	2	0	0	33	NW	1	7.99	2.66	3	30.78	16	2	0.0	0.0	59.3	2400
Vaughn, Jim	Smithsburg 2 NE	79.8	59.3	69.6	92	25	45	2	3	0	0	56	WSW	12	8.14	2.36	3	34.45	18	2	0.0	0.0	68.4	2000
<i>Wicomico, Maryland</i>																								
NWS Salisbury	Wicomico Co. Apt	79.6	59.6	69.6	93	25+	44	3	5	0	0	39	NW	1	4.16	1.27	7	25.35	16	2	0.0	0.0	19.1	2400
Rickell, Robert	Hanover 2 S, PA																	<u>20.80</u>					<u>67.6</u>	2100
<i>Arlington, Virginia</i>																								
NWS Washington Nationz	National Airport	79.0	63.6	71.3	93	26	53	2	4	0	0	46	NW	1	7.87	1.61	19	29.54	16	3	0.0	0.0	40.4	2400
<i>Loudon, Virginia</i>																								
NWS Washington Dulles	Dulles Airport	78.2	60.3	69.3	91	26	45	2	2	0	0	37	NW+	1+	8.34	1.99		31.32	18	3	0.0	0.0	50.1	2400
SECTION AVERAGE		78.2	60.5	69.4											7.33								0.0	

**NOTES:**  
M OR UNDERLINE= MISSING DATA  
> = INCLUDED IN NEXT DAYS DATA

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 8/13/03

**ACON MD / DE / DC  
JUNE 2003 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	31	AVG	OBS TIME	
WILMINGTON 4NNE	60	71	68	56	72	73	62	64	77	82	84	81	83	85	81	74	70	72	74	63	62	71	87	90	91	92	87	82	86	86	76.2	2400		
CANAVAN	53	45	53	50	55	53	56	57	57	61	67	67	69	62	59	48	57	63	62	61	56	59	66	67	71	71	64	67	67	60.0	EDT			
BEAR 2 SW, DE	63	72	67	59	74	72	66	66	79	82	85	86	84	87	82	73	69	77	78	69	69	73	89	92	93	94	91	82	86	90	78.3	2400		
GALLAHER	53	41	48	51	55	48	55	60	59	55	62	68	69	70	68	56	49	59	65	63	61	58	61	60	63	68	68	64	65	67	59.6	EDT		
WILMINGTON, DE	61	71	66	58	74	72	65	64	78	79	84	84	82	86	80	73	67	76	76	68	66	73	88	92	91	93	89	79	83	89	76.9	2400		
NWS NEW CASTLE CO APT	51	45	51	51	56	52	59	59	58	57	63	68	68	69	66	56	53	58	66	63	58	58	61	65	65	72	71	64	68	70	60.7	EST		
U of D DE Climatologist	62	72	66	58	73	72	65	65	78	82	84	85	83	87	83	73	67	77	77	68	66	73	90	94	93	94	M	81	85	90	77.2	2400		
Newark Pearson Hall	54	49	51	51	56	52	58	59	58	61	64	69	68	69	66	57	52	58	67	62	60	M	61	70	68	M	72	65	54	70	60.7	EDT		
GEORGETOWN, DE	63	70	70	71	75	76	73	68	79	82	88	88	85	88	79	69	64	74	77	74	74	77	88	92	95	93	92	79	87	91	79.4	2400		
NWS SUSSEX CO APT	54	50	51	59	58	55	58	58	58	63	64	68	71	72	65	59	56	60	65	62	59	60	60	67	65	72	69	67	66	71	62.1	EST		
GEORGETOWN, DE	64	70	70	72	75	77	74	68	79	80	87	88	85	88	78	69	64	75	76	74	74	73	88	92	93	93	92	80	88	91	79.2	2400		
UofD RESEARCH & ED CTR	56	49	53	59	58	54	59	58	58	62	66	68	71	72	66	59	57	60	67	63	59	60	61	65	64	69	70	67	65	71	62.2	EST		
HARBESON, DE	62	71	71	70	76	77	73	71	79	79	88	89	87	88	77	68	63	74	76	72	74	73	89	91	93	94	93	78	87	89	79.0	2400		
UofD WARRINGTON FARM	55	49	49	58	57	53	58	57	57	61	64	68	70	71	64	58	57	60	63	62	57	58	60	68	64	69	70	66	65	70	61.2	EST		
FROSTBURG	59	60	66	55	55	65	73	61	65	72	76	79	79	73	75	70	71	56	77	77	58	59	74	79	83	86	84	68	78	81	70.5	0700		
LATTA	44	40	43	47	51	49	52	55	49	51	53	58	60	62	62	57	56	54	56	55	50	50	55	56	57	61	62	51	52	59	53.6	EDT		
LAVALA	64	75	55	60	75	75	65	72	76	78	80	84	77	78	74	75	64	78	83	61	70	72	82	87	90	86	75	85	85	85	75.5	2400		
MULLINS	49	42	48	47	48	44	58	60	50	52	58	60	64	62	65	58	56	56	60	58	54	58	52	58	54	60	66	50	58	58	55.4	EDT		
ST MARGARETS	68	72	64	60	76	76	70	66	74	79	83	84	82	85	77	75	67	72	77	67	72	72	87	90	92	92	90	80	84	89	77.4	2400		
BRYANT	56	51	55	56	58	57	61	60	60	60	66	68	69	69	68	62	59	59	59	62	57	59	61	66	67	70	68	66	68	70	62.2	EDT		
MILLERSVILLE 1SE	69	74	64	59	77	77	71	67	82	83	86	87	85	90	77	73	66	75	81	69	74	79	90	93	94	95	89	82	86	92	79.5	2400		
HANSON	52	44	49	53	56	52	57	59	59	56	62	66	68	67	64	58	57	58	64	61	53	57	57	59	61	67	67	62	64	67	59.2	EDT		
LOTHIAN	75	72	75	66	65	79	80	73	68	80	83	90	87	89	82	77	67	74	80	69	73	79	89	94	95	95	93	82	88	80.2	0900			
JUG BAY	61	43	50	58	58	53	53	61	61	57	62	62	M	68	68	61	59	60	62	65	53	57	57	57	57	66	69	62	64	69	59.8	EDT		
BALTIMORE	68	71	64	59	74	75	72	68	80	81	84	86	84	88	78	72	65	77	79	69	73	77	89	91	92	93	89	82	87	91	78.6	2400		
NWS BWI APT	53	45	51	54	56	55	59	60	60	57	64	68	70	68	65	61	58	59	66	60	54	59	59	63	64	72	69	64	67	70	61.0	EST		
LAUREL 2 E																																		
STOUDT																																		
PARKTON 5SW	67	70	65	61	73	72	66	66	80	80	85	85	88	82	77	65	77	80	67	71	76	86	90	92	92	87	81	85	82	77.8	2200			
KREINIK	53	41	49	50	56	49	56	58	59	52	65	67	68	64	67	58	53	59	64	61	59	57	56	61	61	64	65	59	62	64	58.6	EDT		
OWINGS MILLS 2SE	65	70	63	58	71	72	66	67	79	83	83	88	84	88	81	74	67	76	79	67	69	75	86	90	92	93	88	84	87	90	77.8	2400		
SHARROW	53	45	51	50	54	50	57	57	57	63	65	67	65	66	59	55	56	63	58	57	56	57	64	65	69	69	62	65	68	59.3	EDT			
BALTIMORE 2SE	68	73	65	58	75	76	71	68	82	82	85	86	84	86	78	84	66	76	80	70	75	78	91	93	94	96	91	84	88	92	79.8	1800		
MANFRE	58	52	58	54	59	60	60	61	61	64	68	70	71	70	69	69	58	59	67	63	60	60	68	72	74	77	78	71	70	74	65.2	EDT		
BALT INNER HARBOR	69	73	65	60	75	76	71	68	82	82	86	85	84	M	M	84	66	77	80	70	74	78	90	92	94	95	90	82	86	92	79.5	2400		
MD SCIENCE CENTER	58	52	54	54	59	61	60	61	61	64	68	70	71	M	M	61	58	60	66	63	59	61	67	72	74	77	74	70	74	64.3	EST			
MANCHESTER 1SW	63	71	61	57	71	73	64	67	78	81	84	85	83	85	80	70	63	77	81	69	71	76	87	89	92	93	88	80	87	89	77.2	2300		
CLOSE	52	43	52	49	55	55	57	57	59	58	65	65	66	65	67	60	53	56	64	58	56	56	56	62	67	69	66	60	63	70	59.4	EDT		
WESTMINSTER 4 SSE	69	71	66	65	73	76	66	73	79	82	84	89	88	88	77	73	72	76	83	66	75	78	83	85	89	90	88	82	86	86	78.6	2100		
HARTSOCK	53	45	52	50	55	52	57	57	59	54	63	65	67	65	67	60	55	57	65	59	55	56	60	63	65	70	71	59	64	66	59.5	EDT		
WESTMINSTER 5 SSE	63	68	62	58	69	74	64	69	75	79	84	87	84	86	82	73	68	78	81	64	70	71	81	84	87	88	87	80	84	87	76.2	2200		
KLEIN	51	45	52	49	53	55	55	57	56	62	65	65	63	65	57	53	55	61	57	54	55	60	65	67	70	67	59	61	67	58.5	EDT			
MILLERS 4NE	64	70	68	59	70	72	72	67	77	80	83	85	82	83	79	76	70	76	81	77	68	74	85	88	90	90	88	80	84	85	77.4	1800		
MILLER	52	46	53	50	55	51	57	57	58	55	65	67	67	65	66	58	52	57	64	59	57	56	56	66	63	69	68	59	62	68	59.3	EDT		
FREDERICK 4 N	71	73	62	59	75	76	64	70	81	83	87	87	86	85	81	73	64	80	83	68	70	79	90	93	91	92	84	84	90	90	79.0	2400		
FARFAN	57	52	54	52	56	56	59	59	62	57	64	68	69	67	65	63	59	59	66	61	57	57	59	61	62	70	69	60	65	70	61.2	EDT		
EAGLE ROCK	62	59	68	64	60	64	75	66	71	70	74	78	80	72	74	70	70	60	74	74	62	52	72	79	82	84	80	69	79	80	70.8	0800		
HARVEY	40	44	39	48	50	46	50	56	50	52	60	60	62	60	62	56	56	52	60	52	48	48	52	56	60	62	62	50	58	60	53.7	EDT		

**ACON MD / DE / DC**  
**JUNE 2003 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	31	AVG	OBS TIME		
FALLSTON 2 NW	64	75	65	60	77	77	68	70	84	83	90	90	90	91	87	76	73	80	85	67	79	78	89	94	95	97	92	86	90	93		81.5	2400		
ALBRIGHT	50	44	44	51	51	49	55	59	59	53	64	63	64	66	67	58	53	59	64	60	58	57	58	62	62	71	67	62	63	64		58.6	EDT		
LAUREL JHU / APL	65	70	64	58	73	76	69	69	79	81	85	86	86	86	79	71	64	78	81	65	70	74	85	88	90	91	85	82	87	88		77.5	2400		
GIANNOLA	55	48	54	51	56	58	60	58	60	59	63	67	69	67	65	59	57	58	62	59	54	57	63	68	68	73	69	63	65	71		61.2	EDT		
POTOMAC 4N	68	71	64	59	74	76	70	68	80	83	82	84	81	86	75	74	66	74	77	67	68	76	87	88	90	90	86	81	86	88		77.3	2100		
COHEN	54	48	55	54	58	56	64	60	64	59	68	68	71	67	68	63	60	61	67	61	56	60	59	64	64	69	71	66	66	70		62.4	EDT		
OLNEY 1 S	66	71	62	57	73	76	68	68	78	80	82	83	82	85	76	72	63	76	78	65	>	>	>	>	>	>	91	82	87	89		75.4	2400		
GIANNOLA	56	47	55	53	56	57	60	59	61	58	66	67	69	67	68	61	58	58	65	59	>	>	>	>	>	>	55	63	66	70		60.6	EDT		
MONTGOMERY VILLAGE	69	73	65	61	76	77	69	71	82	85	86	88	86	90	79	73	66	78	82	68	71	76	88	92	93	94	89	85	90	91		79.8	2400		
ROTH 1SW	58	48	56	55	59	60	62	61	64	60	68	69	71	69	68	63	60	61	68	62	58	60	59	63	66	70	71	65	68	70		63.1	EDT		
GLENMONT 1NNE	68	74	64	58	77	78	70	69	83	85	83	87	84	88	75	74	66	78	83	67	72	77	86	90	93	93	86	85	87	88		78.9	2400		
ROSSEN	55	47	52	54	57	55	61	59	62	57	65	68	71	67	65	61	59	59	66	58	55	58	58	61	62	68	68	64	65	67		60.8	EST		
BETHESDA	68	73	65	60	75	79	71	71	80	82	83	85	84	87	77	74	67	77	81	68	72	77	89	92	93	94	87	84	88	91		79.0	2400		
SCAFIDE	56	48	55	52	56	58	60	58	61	58	66	66	68	66	67	61	57	58	65	58	54	57	59	64	64	68	69	64	66	67		60.7	EDT		
GAITHERSBURG 2WNW	69	74	64	58	76	80	68	71	80	84	83	86	85	87	77	72	66	79	81	66	69	74	88	90	93	94	87	85	89	90		78.8	2400		
SHAW	55	45	52	52	56	55	60	58	62	56	65	66	65	65	66	62	60	59	66	58	53	56	56	60	62	67	67	63	65	68		60.0	EDT		
FOREST GLEN	69	75	65	59	77	80	70	72	82	84	87	87	86	90	79	75	67	78	84	69	72	78	89	92	93	94	89	84	89	92		80.2	2400		
TERRY	56	46	52	55	57	55	62	59	62	57	67	68	71	67	66	62	58	59	66	59	54	58	59	63	63	70	70	64	66	70		61.4	EDT		
ROCKVILLE 1NE	68	72	65	59	75	79	78	71	81	82	84	86	82	88	M	66	65	78	70	67	70	76	87	M	M	91	M	86	89	89		77.1	2400		
WASH GAS LIGHT	56	57	55	52	56	56	56	58	67	59	M	67	70	67	M	60	58	58	64	58	54	57	71	M	M	M	M	64	66	65		60.5	EDT		
SOUTH BOWIE	68	74	63	58	78	80	70	70	82	83	87	90	86	90	82	76	66	76	81	69	72	78	89	93	94	94	90	81	86	93		80.0	2400		
HUDELSON	55	50	55	56	57	55	61	62	62	59	63	68	71	69	68	61	58	60	66	62	57	60	60	63	64	70	69	66	64	70		62.0	EDT		
OXON HILL	70	75	66	>	>	>	>	>	85	88	89	87	90	80	76	66	78	83	70	71	79	89	92	94	94	89	83	89	93		82.3	2000			
SMITH	59	51	52	>	>	>	>	>	56	74	67	69	67	68	63	59	59	66	61	56	59	62	66	63	69	69	66	65	70		63.2	EDT			
HOLLYWOOD	69	73	70	69	77	79	74	69	81	82	89	88	87	88	77	78	66	73	81	69	69	78	89	92	94	94	92	82	86	92		80.2	2359		
ABELL	55	48	48	61	59	55	63	62	61	61	67	68	71	70	68	63	60	62	67	61	54	58	59	63	64	69	66	66	65	72		62.2	EDT		
ORAVILLE																																			2400
VAN WIE																																			EDT
RIDGE	68	72	69	70	77	79	74	68	79	81	89	88	88	87	78	78	67	76	78	74	72	79	89	91	93	93	93	80	84	89		80.1	2400		
ZYLA	57	50	57	59	60	59	67	62	64	61	70	69	71	69	66	64	60	63	67	59	56	58	62	70	69	73	69	69	73	71		64.1	EDT		
HAGERSTOWN 1E	68	72	61	61	73	76	63	70	78	81	85	84	83	82	78	76	63	78	83	66	69	79	87	89	90	90	82	81	86	85		77.3	2400		
KEEFER	55	42	53	52	54	53	59	57	57	54	64	66	66	66	65	62	58	58	66	59	54	54	55	58	61	67	67	59	64	64		59.0	EDT		
SMITHSBURG 2 NE	66	72	64	63	72	78	68	74	79	85	85	88	87	88	82	62	65	82	87	67	71	79	86	89	92	92	86	84	89	91		79.8	2000		
VAUGHN	51	45	54	51	54	55	59	57	59	55	67	67	67	63	62	61	58	59	67	59	55	55	55	60	62	69	67	58	65	62		59.3	EDT		
SALISBURY	65	70	71	71	76	77	73	69	79	80	87	88	86	86	78	74	67	77	79	75	73	73	86	91	93	93	92	82	86	90		79.6	2400		
NWS WICOMICO CO APT	51	46	44	62	54	50	56	58	58	56	62	67	70	72	60	57	58	61	66	59	58	60	60	62	59	65	65	64	62	66		59.6	EST		
HANOVER 2 S, PA																																			2100
RICKELL																																			EDT
WASH NATIONAL	70	73	65	60	76	80	73	70	80	81	87	85	83	88	78	74	65	75	82	70	71	77	87	90	91	93	89	81	86	91		79.0	2400		
NWS ASOS	58	53	57	57	59	60	62	62	62	62	66	68	70	69	69	63	60	61	68	61	58	61	65	66	66	71	71	67	68	67		63.6	EST		
WASH DULLES	69	72	62	59	75	78	69	73	80	81	85	86	84	87	76	74	64	77	82	69	69	77	87	88	90	91	87	81	86	89		78.2	2400		
NWS ASOS	56	45	53	54	57	57	61	60	62	57	65	67	68	65	64	62	59	59	65	57	55	58	55	59	60	66	67	63	64	68		60.3	EST		

**ACON MD / DE / DC  
JUNE 2003 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	31	TOTAL	OBS TIME
WILMINGTON 4NNE CANAVAN	0.20		0.15	1.27	0.18		1.19	T	0.04		0.13	0.70	0.20	0.33				1.05	0.05	3.15	0.05	0.12										8.81 0.0	2400 EDT
BEAR 2 SW, DE GALLAHER	0.21		0.43	0.58	0.14		1.35	T	0.02		0.10	0.56	1.32	0.30			0.26	0.80	0.12	2.65	0.05	0.02					0.03			T		8.94 0.0	2400 EDT
WILMINGTON, DE NWS NEW CASTLE CO APT	0.05		0.44	0.68	0.19		1.44	0.01	T		0.21	1.38	0.62	0.04			0.36	0.52	0.24	3.58	0.03						0.11	T		T		9.90 0.0	2400 EST
U of D DE Climatologist Newark Pearson Hall	0.14		0.34	0.62	0.09		1.21		0.01		0.12	0.82	0.34	0.29			0.25	0.59	0.13	2.40	0.02	0.02										7.39	2400 EDT
GEORGETOWN, DE NWS SUSSEX CO APT	0.02		0.10	0.29	0.02		2.74		T		0.19	0.04	0.10				0.08	0.07	0.69	0.18	0.21	0.04						0.08	0.01			4.86	2400 EST
GEORGETOWN, DE UoID RESEARCH & ED CTR	0.03		0.06	0.37	0.01		2.54		0.01		0.20	0.03	0.19				0.18	0.04	0.71	0.29	0.03	0.03						0.02				4.74 0.0	2400 EST
HARBESON, DE UoID WARRINGTON FARM	0.02		0.08	0.26	0.04		2.45					0.04	0.10				0.15	0.08	0.77	0.15		0.08										4.22 0.0	2400 EST
FROSTBURG LATTA	1.13		T	1.53	0.10		0.43	0.74	0.11	0.05		T	1.01	0.11	0.16		0.18	0.49		0.17	1.03	0.01										7.25 0.0	0700 EDT
LAVALE MULLINS			1.77	0.09			1.17	0.18	T		T	0.72	0.06	0.10	T		0.44			0.82	0.44											5.79 0.0	2400 EDT
ST MARGARETS BRYANT			0.13	0.14	0.05		1.99		0.04	0.02	0.18	0.61	0.04	0.24			0.14	1.03	0.44	0.95	0.17	0.03					0.11					6.31 0.0	2100 EDT
MILLERSVILLE 1SE HANSON			0.24	0.30	0.09		2.36		0.10		0.97	1.14	0.15	0.75			0.67	0.45	0.76	0.89	0.37	0.01					0.03					9.28 0.0	2400 EDT
LOTHIAN JUG BAY	0.51			0.30	0.09		0.51	1.51	0.18	T		0.18	0.27	0.51	0.02			1.00	0.33	0.85	1.05	0.27						1.35	T			8.93 0.0	0900 EDT
BWI NWS ASOS	T		0.40	0.27	0.05		1.63	T	0.12		0.39	0.25	0.08	0.39	T	T	0.61	0.05	0.98	0.93	0.79	T					T	T		0.02		6.96 0.0	2400 EST
LAUREL 2 E STOUDT	T		0.30	0.29	0.04		1.91	T	0.12		0.59	0.48	0.15	1.20	T	T	0.64	0.16	0.74	0.72	0.84	T					0.02			T		8.20 0.0	2400 EST
PARKTON 5SW KREINIK	0.10		T	1.44	T		1.16		0.19			0.28	0.19	T			T	0.33	0.36	2.28	0.01	0.06								T		6.40 0.0	2200 EDT
OWINGS MILLS 2SE SHARROW	0.01		0.40	0.69	0.03		1.46		0.04		0.08	0.76	0.16	T	T	T	0.10	0.36	0.97	1.18	0.18	T										6.42 0.0	2400 EDT
BALTIMORE 2SE MANFRE			0.49	0.24	0.04		1.65		0.11		0.23	0.64	0.38	0.01	0.01		0.44	0.08	0.83	1.15	1.73	T					T					8.03 0.0	1800 EDT
BALT INNER HARBOR MD SCIENCE CENTER			0.47	0.27	0.02		1.72		0.11		0.24	1.03		M	M		0.50	0.03	0.94	0.91	0.74											6.98 -	2400 EST
MANCHESTER 1SW CLOSE	0.17		0.67	0.84	0.23		1.51		0.25			0.63	0.84	0.03			0.18	0.15	0.24	0.78	0.50	0.08								0.07		7.17 0.0	2300 EDT
WESTMINSTER 4 SSE HARTSOCK	0.08		0.47	0.76	0.16		1.36		0.36			0.35	0.28	0.22			0.05	0.34	0.47	0.64	0.14	0.03										5.71 0.0	2100 EDT
WESTMINSTER 5 SSE KLEIN	0.09		0.58	0.70	0.17		1.34		0.33			0.47	0.17	0.26			0.23	0.16	0.55	0.69	0.14	0.03										5.91 0.0	2200 EDT
MILLERS 4NE MILLER	0.42		0.30	1.25	0.36		1.54	0.01	0.22		T	0.25	0.33	0.40	T		T	0.24	0.07	0.97	0.04	0.34								0.13		6.87 0.0	1800 EDT
FREDERICK 4 N FARFAN	T		1.47	0.79			1.60		0.14			0.44	0.14	0.04			0.26	0.18	0.35	0.86	0.14	0.04								0.01		6.46 0.0	2400 EDT
EAGLE ROCK HARVEY	1.62		0.01	1.08	0.05		0.72	0.38	0.06			0.01	0.65	0.50	0.88	0.01	0.10	0.55		0.70	0.21	0.07					T					7.60 0.0	800 EDT

**ACON MD / DE / DC  
JUNE 2003 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	31	TOTAL	OBS TIME
FALLSTON 2 NW ALBRIGHT	0.10		0.34	1.00	0.11	0.02	1.47		0.05		0.12	2.06	1.55	0.03	T		0.35	0.26	0.19	1.61	0.07	0.05								0.44	9.82 0.0	2400 EDT	
LAUREL JHU / APL GIANNOLA			0.35	0.33	0.06		1.93		0.04		0.28	0.12	0.17	0.21			0.49	0.05	1.46	0.89	0.14					0.01					6.53 0.0	2400 EDT	
POTOMAC 4N COHEN	T		0.53	0.67	0.27		1.62		0.16		0.50	0.98	0.12	0.40	T		0.30	0.32	2.09	0.42	0.06	T									8.44 0.0	2100 EDT	
OLNEY 1 S GIANNOLA	T		>	>	1.22		1.92		0.13		0.42	0.41	0.06	0.33	T		>	0.51	1.64	0.66	>	>	>	>	>	>	0.05		0.02		7.37 0.0	2400 EDT	
MONTGOMERY VILLAGE ROSS			0.83	0.75	0.04		3.03		0.16		0.83	1.12	0.12	0.30			0.55		1.18	0.31	0.05							0.40		9.67 0.0	2400 EDT		
GLENMONT 1NNE ROSSEN			0.52	0.30	0.07		2.59	0.04	0.06		0.42	0.42	0.03	0.26	T		0.52	0.01	1.19	0.65	0.05	T				0.03		0.16		7.32 0.0	2400 EST		
BETHESDA SCAFIDE			0.52	0.28	0.01		2.39		0.13		0.62	0.93	0.11	0.53	0.01		0.58	0.03	1.88	0.76	0.01					0.03		0.29		9.11 0.0	2400 EDT		
GAITHERSBURG 2WNW SHAW			0.83	0.53			2.23		0.03		0.63	1.09	0.13	0.15			0.52		0.90	0.55	0.02							0.55		8.16 0.0	2400 EDT		
FOREST GLEN TERRY			0.52	0.19	0.09		2.06	T	0.09		0.46	0.47	0.05	0.55			0.62	0.05	1.54	0.88	0.02	T				0.04		0.06		7.69 0.0	2400 EDT		
ROCKVILLE 1NE WASH GAS LIGHT	T		0.51	0.64	0.05		1.59				0.45	0.51	0.05	0.10		>	>	>	2.14	0.37	0.06	T						M		6.47 0.0	2400 EDT		
SOUTH BOWIE HUDELSON			0.21	0.09	0.06		1.67	0.02	0.12		0.39	0.43	0.69	0.14			1.09	0.64	1.16	0.94	0.31					0.54				8.50 0.0	2400 EDT		
OXON HILL SMITH	0.01		0.21	0.18	T		1.80	0.01	0.17		0.12	0.52	0.02	0.20	0.02	T	0.81	0.37	1.79	1.12	0.13					0.38				7.86 0.0	2000 EDT		
HOLLYWOOD ABELL			0.08	0.19	0.54		1.31	0.02	0.11		0.10	0.11	0.02	0.74	T		0.22	0.13	0.78	0.16	0.03					0.15				4.69 0.0	2359 EDT		
ORAVILLE VAN WIE																																	2400 EDT
RIDGE ZYLA			0.16	0.25			2.64	0.01	0.10		0.01	T	0.84	1.00	0.01		0.32	0.06	1.06	1.31						0.06	0.01				7.84 0.0	2400 EDT	
HAGERSTOWN 1E KEEFER	0.03		2.66	0.41			1.77	0.16	0.05	T	0.01	0.24	0.74	0.41			0.30		0.09	0.50	0.43	0.02							0.17		7.99 0.0	2400 EDT	
SMITHSBURG 2 NE VAUGHN	0.05		2.36	0.45	0.02		1.54	0.27	0.05	T	0.02	0.61	0.43	0.32			0.27	0.02	0.39	0.71	0.42	0.05						0.16		8.14 0.0	2000 EDT		
SALISBURY NWS WICOMICO CO APT	0.01		0.04	0.45	0.01		1.27		0.01			0.06	0.07	0.02	0.01		0.28	0.17	1.25	0.39	0.01	T				0.11				4.16 0.0	2400 EST		
HANOVER 2 S, PA RICKELL																																	2100 EDT
WASH NATIONAL NWS ASOS	T		0.25	0.29	0.05		1.28	T	0.46		0.26	1.13	0.37	0.02	T		0.76	0.11	1.61	0.65	0.03	T				0.09		0.51		7.87 0.0	2400 EST		
WASH DULLES NWS ASOS	0.01		0.68	0.39	0.03		1.78	0.15	0.03		0.35	1.29	0.27	0.02	0.01	0.01	0.44	0.32	1.99	0.55	T	T				0.02	T	T		8.34 0.0	2400 EST		