



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

## MANY DAYS OF RAINFALL

Temperature wise April 2004 averaged slightly above normal with no periods of extremes. There were a few days with the minimum freezing or below and a couple of days where temperatures rose to the 90 degree mark at the warmest stations. After a winter with below normal precipitation the above normal precipitation was welcome. It was a good month for gardens and yards.

April began with daylong rains of over an inch west of the Chesapeake Bay. The heaviest band extended from Baltimore westwards where amounts were generally in the 1.40" to 2.00" range. Amounts of around an inch fell south of Baltimore except for St Marys County where one and a third inches fell. East of the Chesapeake Bay amounts of one-half inch or less fell. The storm stalled in our region on the 2nd and did not move out until a strong, windy cold front pushed it away on the 4th and 5th. Meanwhile the higher elevations of Western Maryland and West Virginia reported heavy wet snow on the 2nd thru the 5th. **Dave Leshner** of **Davis 3 SE** recorded 30.1" during that period (Kevin you need to move west!) while **Rebecca Harvey** of **Eagle Rock** recorded 15 inches.

Sub freezing temperatures covered the entire region except for one station (Georgetown DE NWS) on the morning of the 5th.

Light rains fell on the 8th and early on the 9th but another period of soaking rains moved into the region on the 11th and lasted through the 14th. The heaviest fell on the 12th. One inch amounts were common on the 12th while 2 inch totals for the 12th & 13th were recorded at 42% of stations reporting this month. The heaviest, 2.80", fell at the **U of D Wallington Farms** south of **Harbeson, DE** while **Greg Keefer** of **Hagerstown 1 E** reported 2.64".

The warmest air of the month moved into the region on the 17th and remained through the 24th. Mid to upper 80's were common on the 18th and 19th with the 19th being the warmest. 90 degree temperatures were observed in the following counties: Anne Arundel, Baltimore, Frederick, Prince Georges, and Montgomery in Maryland and in Arlington and Loudon Counties in Virginia. The warmest was 94 degrees reported by Dan Hanson of **Millersville 1 SE**. Three ACON observers reported back to back 90 degrees days on the 18th and 19th: **Jug Bay Wetland** of **Lothian**, **Stan Rossen** of **Glenmont 1 NNE**, **Joe Terry** of **Forest Glen**, and **Brian Smith** of **Oxon Hill**. During this period the humidity was low but the pollen readings were high.

A stalled cold front on the 25th to 27th brought the last rains of the month. The heaviest amounts fell in Washington County where 2.82" fell at **Smithsburg 2 NE**, 2.58" at **Hagerstown 1 E**, and 2.08" at **Smithsburg 1.5 SW**.

Minimum temperatures in the 30's made its last occurrence this month on the morning of the 28th. Freezing temperatures were observed in portions of Carroll, Washington, Allegany, and Garrett Counties.

### ACON MEMBER REQUESTS CICADA REPORTS

ACON member **John Zyla** from **Ridge**, St. Mary's County, MD has been studying the emergence of the Periodical Cicadas of Brood X and is requesting your assistance in his research. If you have or even if you haven't seen any cicada emergence in your area, please let him know. His e-mail address is: [jzci-cada@hotmail.com](mailto:jzci-cada@hotmail.com). He is planning to map out the emergence for the Mid-

### EXTREMES REPORTED BY ACON OBSERVERS

<u>MAXIMUM TEMPERATURE</u>	
Millersville 1 SE	94
Baltimore 2 SE	93
<u>MINIMUM TEMPERATURE</u>	
Eagle Rock	10
Davis 3 SE WV	12
Frostburg	19
<u>WARMEST AVG. TEMP.</u>	
Oxon Hill	57.9
Baltimore 2 SE	57.3
Ridge	57.0
<u>COLDEST AVG. TEMP.</u>	
Davis 3 SE, WV	44.4
Eagle Rock	46.6
Frostburg	47.2
<u>MAXIMUM PRECIPITATION</u>	
Smithsburg 2 NE	7.86
Hagerstown 1 E	6.81
Millersville 1 SE	6.75
<u>MINIMUM PRECIPITATION</u>	
Laurel JHU/APL	4.05
Oxon Hill	4.55
Jug Bay Wetlands	4.61
<u>MAXIMUM SNOWFALL</u>	
Davis 3 SE WV	31.0
Eagle Rock	15.6
Frostburg	5.4

Atlantic area based on all the reports he has received and will post the map in the near future on his website: [www.cicadas.info](http://www.cicadas.info). Since the ACON members are nicely distributed throughout the region, your assistance would be greatly appreciated!

# OBSERVER COMMENTS FOR APRIL 2004

## **Jim Canavan of Wilmington 4 NNE**

4th - 1/2" wet snow.

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

Ample precipitation spread throughout the month made for excellent garden and grass growing conditions.

## **Nate Mullins of LaVale**

Temperatures were cool during the first half of April and warm the second half. April was the wettest since 1998. Two systems brought over two inches of rainfall, the first of which produced heavy snows on nearby mountain ridges.

1st - Torrential downpours and strong gusty winds. Daily rainfall totaled 2 inches.

2nd - More showers overnight. Rain / snow line just a few hundred feet above station. Several inches fell on top of Piney Mountain just to the west.

20th - Lots of lightning and thunder began around 9 PM but only 0.02" of rain fell.

## **Dave Bryant of St Margarets**

16th - Major weather change from cool and wet to a dryer and much warmer pattern.

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

This April was replete with its showers and prolonged rain to produce a monthly total which was moderately above normal. An early evening thunderstorm on Friday the 23rd which included a 20 minute downpour ended a week of near-summer temperatures. This April had a usual combination of cold and heat; however, the heat out dueled the cold this time.

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

15th—20th - Dry, good time to seed grass!

29th - Clear AM, hazy afternoon, many contrails visible.

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

17th—19th - Sunny warming maximum temperatures from 80 to 93 along with low humidity.

## **Marty Sharrow of Owings Mills**

5th - Killing freeze in AM.

27th - Intermittent light showers.

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

4th - Rain, wet snow, windy colder.

19th - Sunny, hot 86 degrees.

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

1st - Moderate morning rain. Thunder north of station.

19th - Virga at observation (6 PM)

28th - Light frost, moderate in valley.

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

15th - Clear, nice, dry and wonderful day. Perfect weather for me!

19th - Mostly sunny, warm and unpleasant conditions 91 degrees.

## **Rebecca Harvey of Eagle Rock**

12th - Glaze

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

12th - Rain, heavy at times 5-10 PM.

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

13th - Rainbow at 7:40 PM.

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

A rather uneventful month, milder and wetter than normal. Precipitation deficit accumulated over the past three months cut down to 1.65".

12th - 1.52" rain today broke the daily record of 0.87" set in 1995.

19th - 91 degrees broke the daily record of 90 set in 2002.

## **Joe Terry of Forest Glen**

Cold and very wet first half. Very warm and dry most of the second half. Very late first thunderstorm of the year (23rd), in fact first thunderstorm in 5 1/2 months (since November 5th).

5th - Cold, dry air. Minimum dew point only 7 degrees.

13th - Full arc rainbow around sunset, even after sunset due to reflection of base of clouds on horizon.

## **Bill Hudelson of South Bowie**

6th - Solar halo 1500 hours.

12th - Overcast, rain all day, heavy late afternoon and evening.

23rd - Broken overcast, severe thunderstorm watch and warning, but no storm observed here.

29th - Lunar halo 2100 hours.

## **Floyd Abell of Hollywood**

Stations second wettest April.

## **John Zyla of Ridge**

Set a new April precipitation record with 6.02"

## **Max Hutto of Smithsburg 1.5 SW**

26th - Rain all day, sometimes heavy, windy.

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

April 2004 was the third wettest with 6.81" behind 7.26" in 1993 and 7.80" set in 1952.

13th - Rain again between 10 AM and 7 PM. Rain was moderate to heavy at times with an embedded thunderstorm around 11 AM.

16th - Chilly overnight low of 30 degrees with a touch of frost.

19th - partly cloudy and very warm with a high of 89, close to the record of 91 set in 1976.

27th - Dense fog overnight. Strong winds with a brief shower just after 7 PM with NW winds to 43 MPH as a strong cold front came through. Also a spectacular double rainbow at that time.

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

Second wettest April behind 8.24" set in 1993. Average wind of 17.7 mph was the third windiest month on record behind 20.1 mph set in February 2002, and 18.1 mph in January 1978.

12th - 71 MPH wind gust set a new April wind gust. Old record was 68 set on April 1, 1982.

19th - Minimum temperature of 66 broke the monthly record of 63 last occurring on April 20, 2002.

## **Lance Shaffer of Sterling 4 N VA**

17th - First 80 degree day since November 4.

## **Dave Leshner of Davis 3 SE WV**

2nd - 16.2" of snow

5th - 9.4" of snow

### **NOTE TO ACON AND WASHINGTON-BALTIMORE CLIMATE REVIEW MEMBERS:**

When submitting data to either ACON or the WBCR please follow each publications data requirements. All detailed data furnished is not printed but it still required for an analysis of the months events. If you have any questions please contact either Brian Smith for WBCR and Gary Gallaher for ACON.

Thank-you

**ACON MD / DE / DC**  
**APRIL 2004 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	SEA- SON
<i>New Castle, Delaware</i>																									
Canavan, Jim	Wilmington 4 NNE	62.6	43.3	53.0	87	19	28	5	0	0	1				5.11	1.04	26	<u>13.63</u>	13	2	0.5	0.5	4	<u>29.9</u>	2400
Gallaher, Gary	Bear 2 SW	63.6	43.7	53.7	85	18+	31	5	0	0	3	46	NNW	5	5.33	1.09	26	12.76	14	1	T	T	4+	29.7	2400
NWS Wilmington	New Castle Co. Apt.	63.2	44.2	53.7	85	19	31	5+	0	0	2	43	WNW	5	5.61	1.36	26	12.33	14	1	T	T	4+	18.8	2400
U of D DE Climatologist	Newark Pearson Hall																	<u>4.64</u>							2400
<i>Sussex, Delaware</i>																									
NWS Georgetown	Sussex Co. Airport	67.0	46.4	56.7	87	18	34	5+	0	0	0	39	WNW	4	4.51	1.68	12	10.79	13	1					2400
U of D Research & Ed Ctr.	Georgetown	64.6	45.4	55.0	86	18	31	5	0	0	2				4.79	1.44	12	<u>10.87</u>	11	1				8.0	2400
U of D Warrington Farm	Harbeson	63.8	43.9	53.9	85	18	30	6	0	0	2				4.90	1.72	12	<u>11.86</u>	12	2				<u>11.0</u>	2400
<i>Allegany, Maryland</i>																									
Latta, Greg	Frostburg	56.8	37.6	47.2	83	19	19	5	0	0	10				4.92	1.09	2	14.34	13	2	5.4	4.8	2	83.4	0700
Mullins, Nate	LaVale	62.5	41.6	52.1	84	18+	24	5	0	0	5				6.29	2.00	1	15.17	16	2	T	T	4	60.5	2400
<i>Anne Arundel, Maryland</i>																									
Bryant, Dave	St. Margarets	64.7	45.4	55.1	86	19	28	6	0	0	2				5.20	1.27	1	12.97	13	2	0.0	0.0		17.6	2400
Hanson, Dan	Millersville 1 SE	66.9	44.5	55.7	94	19	30	5	1	0	3	42	W	4	6.75	2.08	12	13.32	15	2	0.0	0.0		16.3	2400
Jug Bay Wetlands	Lothian	66.3	45.3	55.8	92	20	29	6	2	0	3				<u>4.61</u>	1.67	13	<u>11.16</u>	14	1	0.0	0.0		<u>7.8</u>	0900
NWS Baltimore	BWI Airport	64.9	44.5	54.7	90	19	29	6	1	0	2	44	WNW	4	5.33	1.32	12	11.72	12	2	0.0	0.0		18.3	2400
Stoudt, Jeff	Laurel 2 E	65.0	46.3	55.7	90	19	30	5+	1	0	2				5.52	1.47	1	13.12	12	2	0.0	0.0		17.6	2400
<i>Baltimore, Maryland</i>																									
Kreinik, Al	Parkton 5 SW	62.8	42.8	52.8	88	19	26	5	0	0	3	45	NNW	4	4.93	1.07	1	12.20	14	1	0.0	0.0		32.1	2200
Sharrow, Marty	Owings Mills 2 SE	64.0	43.2	53.6	92	19	27	5+	1	0	2				6.22	1.78	1	14.72	14	3	T	0.0		30.8	2400
<i>Baltimore City, Maryland</i>																									
Manfre, Joe	Baltimore 2 SE	65.4	49.2	57.3	93	19	32	5	1	0	1				5.40	1.75	1	11.88	13	2	0.0	0.0		19.4	1800
Maryland Science Ctr	Baltimore Inner Harbor	65.1	48.0	56.6	92	19	32	5	1	0	1				5.21	1.48	1	11.52	13	2					2400
<i>Carroll, Maryland</i>																									
Close Jr, Herb	Manchester 1 SW	61.9	43.7	52.8	88	19	25	5	0	0	4				5.83	1.46	1	13.48	16	3	0.0	0.0		37.3	2300
Hartsock, Ralph	Westminster 4 SSE	62.4	42.7	52.6	86	19	25	5	0	0	4	48		5	5.51	1.34	1	12.91	11	1	0.0	0.0		30.5	2100
Klein, Greg	Westminster 5 SSE	<u>57.8</u>	<u>39.3</u>	<u>48.6</u>	83	19	24	6	0	0	4				5.63	1.44	1	13.24	12	2	0.0	0.0		35.5	2200
Miller, Bobby	Millers 4 NE	63.7	43.4	53.6	86	19	25	6	0	0	2				5.39	1.09	26	13.03	15	1	T	T	4	37.5	1800
<i>Frederick, Maryland</i>																									
Farfan, Manuel	Frederick 4 N	65.2	44.4	54.8	91	19	29	5	1	0	1				5.22	1.40	12	13.16	14	2	0.0	0.0		33.8	2400
<i>Garrett, Maryland</i>																									
Harvey, Rebecca	Eagle Rock	56.3	36.8	46.6	80	19	10	5	0	1	15				5.09	1.20	2	18.95	19	2	15.6	8.0	2	154.5	0800
<i>Harford, Maryland</i>																									
Albright, Lynn	Fallston 2 NW	65.3	42.8	54.1	89	19	22	6	0	0	3				5.67	1.02	12	13.52	14	1	0.0	0.0		31.4	2400
<i>Howard, Maryland</i>																									
Giannola, Rich	Laurel JHU / APL	65.1	46.3	55.7	90	20	29	6	1	0	2	50	NW	4	4.05	1.12	12	10.21	11	2	0.0	0.0		22.3	2400

**ACON MD/DE / DC  
APRIL 2004 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	SEA- SON
<i>Montgomery, Maryland</i>																									
Cohen, Rob	Potomac 4 N	66.5	46.5	56.5	91	19	30	5+	1	0	2				5.41	1.15	12	12.42	9	2	0.0	0.0	18.9	2100	
Giannola, Rich	Olney 1 S	66.0	45.4	55.7	89	20	28	6	0	0	3				5.71	2.10	11-13	12.40	11	2	0.0	0.0	22.2	2400	
Roth, David	Montgomery Village 1SW	65.3	46.1	55.7	92	19	29	5	1	0	2	25	5		4.96	1.33	12	10.99	15	1	0.0	0.0	21.2	2400	
Rossen, Stan	Glenmont 1 NNE	66.6	44.6	55.6	92	19	30	5	2	0	2	25	4		4.99	1.38	12	11.93	13	2	0.0	0.0	19.6	2400	
Scafide, Tony	Bethesda																	<u>3.19</u>						2400	
Shaw, Kevin	Gaithersburg 2 WNW	65.5	43.3	54.4	91	19	26	5	1	0	3				5.18	1.52	12	11.76	14	2	T	T	4	25.3	2400
Terry, Joe	Forest Glen	67.0	46.3	56.7	92	19	29	5	2	0	2	39	W	4	4.95	1.50	12	11.96	14	1	0.0	0.0	17.2	2400	
Wash Gas Light	Rockville 1 NE																	<u>5.79</u>						14.7	2400
<i>Prince Georges, Maryland</i>																									
Hudelson, Bill	South Bowie	65.3	46.2	55.8	90	19	30	5	1	0	3	40	NW	4	5.08	1.93	12	12.98	13	1	0.0	0.0	13.9	2400	
Smith, Brian	Oxon Hill	68.5	47.3	57.9	90	18+	30	5	2	0	1				4.55	1.53	12	11.36	13	2	0.0	0.0	<u>13.2</u>	2000	
<i>St. Marys, Maryland</i>																									
Abell, Floyd	Hollywood	66.3	47.3	56.8	87	18+	30	6	0	0	2	41		4	5.96	1.67	12	13.27	12	2	0.0	0.0	7.3	2400	
Van Wie, Michael	Oraville																							2400	
Zyla, John	Ridge	65.6	48.3	57.0	88	19	32	5	0	0	1	35	NE	15	6.02	1.84	12	12.65	13	2	0.0	0.0	5.7	2400	
<i>Washington, Maryland</i>																									
Hutto, Max	Smithsburg 1.5 SW	62.9	43.8	53.4	87	19	27	5	0	0	4	38	WNW	4	5.94	1.55	26	12.59	15	3	0.0	0.0	36.9	2400	
Keefer, Greg	Hagerstown 1 E	62.9	43.4	53.2	89	19	27	5	0	0	5	45	NW	4	6.81	1.88	26	15.04	15	3	T	T	4	36.7	2400
Vaughn, Jim	Smithsburg 2 NE	63.3	44.7	54.0	88	19	25	5	0	0	4	71	E	12	7.86	2.24	26	16.40	16	3	0.0	0.0	43.8	2000	
<i>Wicomico, Maryland</i>																									
NWS Salisbury	Wicomico Co. Apt	64.9	43.1	54.0	86	18	28	6	0	0	6	47	NW	4	5.11	1.34	12	13.27	13	1	0.0	0.0	6.1	2400	
<i>Arlington, Virginia</i>																									
NWS Washington National	National Airport	66.4	48.3	57.4	91	19	31	5	1	0	1	45	WNW	5	3.84	1.18	12	9.56	12	1	0.0	0.0	12.4	2400	
<i>Loudon, Virginia</i>																									
NWS Washington Dulles	Dulles Airport	65.3	44.2	54.8	90	19	28	6	1	0	3	46	W	4	5.05	1.45	12	11.22	14	1	0.0	0.0	27.8	2400	
Shaffer, Lance	Sterling 4 N	65.5	46.3	55.9	90	19	30	5	1	0	2				6.04	1.65	12	11.55	13	2	0.0	0.0	17.4	2400	
<i>Tucker, West Virginia</i>																									
Leshner, Dave	Davis 3 SE WV	53.5	53.5	53.5	79	19	12	5	0	3	12				6.28	1.30	2	24.53	19	1	31.0	16.2	2	197.9	1900
SECTION AVERAGE*		64.3	44.5	54.4											5.39										

\*SECTIONAL AVERAGE DOES NOT INCLUDE  
DATA FROM WEST VIRGINIA

**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 7/16/2004

**ACON MD / DE / DC**  
**APRIL 2004 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 CANAVAN	57	44	50	41	44	54	69	52	63	62	46	49	50	50	60	62	70	85	87	75	73	83	78	69	60	63	67	58	77	80		62.6	2400	
BEAR 2 SW, DE GALLAHER	57	46	51	46	46	56	71	52	63	62	48	48	60	58	61	64	76	85	85	74	67	80	80	69	59	67	67	59	75	77		63.6	2400	
WILMINGTON, DE NWS NEW CASTLE CO APT	56	46	50	46	46	56	71	51	64	61	48	48	61	55	62	64	76	82	85	74	68	79	77	69	58	67	65	58	75	77		63.2	2400	
U of D DE Climatologist Newark Pearson Hall																																		2400
GEORGETOWN, DE NWS SUSSEX CO APT	59	52	66	61	51	64	74	53	65	63	51	49	67	55	62	63	80	87	85	80	67	82	85	72	60	78	67	58	75	78		67.0	2400	
GEORGETOWN, DE UofD RESEARCH & ED CTR	54	48	53	49	46	55	73	55	63	62	51	47	67	57	60	61	78	86	83	79	66	82	84	71	58	77	66	58	74	75		64.6	2400	
HARBESON, DE UofD WARRINGTON FARM	54	48	52	48	46	55	72	52	63	60	50	48	64	55	60	57	79	85	84	77	66	81	83	72	56	77	67	58	74	76		63.8	2400	
FROSTBURG LATTA	39	39	39	50	37	38	52	65	48	54	59	37	37	42	40	56	68	78	83	78	76	76	69	71	68	56	55	54	62	78		56.8	0700	
LAVALE MULLINS	46	52	54	45	52	62	75	51	54	63	48	40	44	46	55	64	80	84	84	78	75	72	75	70	56	59	61	70	79	80		62.5	2400	
ST MARGARETS BRYANT	49	50	53	50	49	60	75	56	66	62	49	47	53	53	63	63	72	82	86	81	74	80	81	72	67	68	70	62	74	75		64.7	2100	
MILLERSVILLE 1SE HANSON	50	48	55	49	49	61	77	55	66	65	50	47	53	51	65	69	81	89	94	82	74	84	84	75	66	71	69	65	82	81		66.9	2400	
LOTHIAN JUG BAY	49	50	49	54	50	50	M	77	55	M	68	51	47	53	53	64	M	85	91	92	84	75	M	89	78	70	74	70	66	79		66.3	0900	
BALTIMORE NWS BWI APT	48	47	53	47	47	59	74	55	64	63	51	47	52	51	62	66	82	87	90	78	73	83	83	71	64	67	65	61	78	78		64.9	2400	
LAUREL 2 E STOUDT	48	46	54	47	47	59	74	54	64	64	53	46	52	50	61	66	81	87	90	79	77	83	83	72	66	66	64	60	78	79		65.0	2400	
PARKTON 5SW KREINIK	44	42	42	34	30	30	48	44	42	42	42	42	43	46	46	37	40	56	65	56	57	60	55	54	53	42	36	44	53		46.3	EST		
OWINGS MILLS 2SE SHARROW	46	44	52	44	45	59	72	58	56	63	50	46	51	48	59	63	79	85	88	75	71	81	80	70	58	63	64	59	77	78		62.8	2200	
BALTIMORE 2SE MANFRE	44	42	40	34	28	26	39	37	41	34	42	41	40	45	42	30	37	51	50	60	52	52	54	53	48	50	45	36	40	50		42.8	EDT	
BALTIMORE 2SE MANFRE	46	44	51	44	44	57	72	56	62	64	51	46	51	48	59	64	82	88	92	77	75	85	83	71	62	63	66	59	80	78		64.0	2400	
BALTIMORE 2SE MANFRE	41	39	39	35	27	27	41	43	42	37	40	40	42	42	41	33	39	53	53	62	51	53	55	52	49	52	44	34	41	50		43.2	EDT	
BALTIMORE 2SE MANFRE	48	48	50	48	49	60	75	58	66	63	52	48	51	52	63	67	80	86	93	78	73	80	84	72	63	67	66	62	81	80		65.4	1800	
BALT INNER HARBOR MD SCIENCE CENTER	44	45	44	40	32	34	52	46	45	47	42	45	43	47	47	43	47	57	61	68	57	58	62	56	56	57	53	40	49	58		49.2	EDT	
BALT INNER HARBOR MD SCIENCE CENTER	49	48	53	48	47	60	75	56	65	62	53	48	54	52	62	66	76	83	92	79	71	79	83	73	62	68	67	62	80	80		65.1	2400	
MANCHESTER 1SW CLOSE	46	44	44	36	32	34	50	46	45	47	43	43	43	47	47	43	47	57	60	59	57	59	56	56	56	56	44	40	48	56		48.0	EST	
MANCHESTER 1SW CLOSE	45	44	50	41	43	58	70	51	63	63	49	43	50	48	58	64	80	84	88	75	71	79	79	70	58	61	61	59	76	77		61.9	2300	
WESTMINSTER 4 SSE HARTSOCK	42	39	40	32	25	27	46	40	40	39	39	39	39	43	40	33	43	64	61	61	52	55	53	49	49	39	32	43	52		43.7	EDT		
WESTMINSTER 4 SSE HARTSOCK	46	43	53	45	42	56	68	57	61	61	50	45	48	55	56	60	77	82	86	76	72	79	80	78	63	61	61	57	75	79		62.4	2100	
WESTMINSTER 5 SSE KLEIN	41	40	38	35	25	27	40	39	38	36	39	40	38	41	37	31	39	54	56	60	59	52	55	53	48	52	46	32	40	49		42.7	EDT	
WESTMINSTER 5 SSE KLEIN	44	43	49	41	40	54	67	53	60	60	47	45	47	47	55	59	75	81	83	73	70	79	M	M	M	M	M	M	M	M		57.8	2200	
MILLERS 4NE MILLER	41	38	38	33	24	26	40	38	37	37	39	39	38	40	37	31	37	57	56	58	49	>	>	>	>	>	>	>	>	>	>		39.3	EDT
MILLERS 4NE MILLER	47	45	52	48	44	57	70	67	61	61	60	45	51	50	58	64	79	83	86	82	74	77	77	72	67	62	61	59	77	76		63.7	1800	
FREDERICK 4 N FARFAN	43	41	40	36	26	25	41	36	41	37	40	41	40	44	40	34	42	56	56	61	51	53	54	53	48	50	44	34	45	51		43.4	EDT	
FREDERICK 4 N FARFAN	49	46	54	45	46	60	73	55	63	67	49	45	48	51	63	69	83	88	91	81	78	82	83	76	64	61	64	65	80	80		65.2	2400	
EAGLE ROCK HARVEY	45	43	41	33	29	33	45	41	40	38	41	41	41	42	44	33	41	52	57	61	54	55	54	51	52	53	42	38	42	50		44.4	EDT	
EAGLE ROCK HARVEY	40	40	34	42	32	34	48	64	64	52	58	38	36	50	38	54	70	70	80	79	74	79	69	68	70	68	52	50	62	74		56.3	0800	
EAGLE ROCK HARVEY	32	26	26	28	10	18	22	34	40	30	32	30	32	30	28	28	40	54	60	52	50	54	52	52	48	48	38	24	34	52		36.8	EDT	

**ACON MD / DE / DC**  
**APRIL 2004 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	51	46	52	47	47	59	73	56	65	66	47	49	54	52	62	72	78	87	89	77	75	82	83	72	67	65	69	61	77	78		65.3	2400		
ALBRIGHT	44	42	38	34	29	22	42	36	37	34	42	41	41	46	37	66	30	49	52	56	52	53	53	46	44	52	40	35	42	50		42.8	EDT		
LAUREL JHU / APL	48	46	52	48	44	59	73	56	63	65	53	46	51	50	60	68	82	88	90	79	77	83	85	71	65	67	65	63	78	78		65.1	2400		
GIANNOLA	45	41	42	35	29	31	49	44	42	42	41	42	42	45	43	40	41	59	66	63	55	57	58	54	53	55	42	37	45	52		46.3	EDT		
POTOMAC 4N	47	47	53	47	47	62	77	62	66	69	56	45	50	49	65	72	85	88	91	83	79	83	84	76	65	64	63	65	78	77		66.5	2100		
COHEN	44	42	42	35	30	30	45	44	41	40	44	43	43	44	41	33	44	54	56	66	69	62	60	57	51	56	45	38	42	54		46.5	EDT		
OLNEY 1 S	47	47	53	47	46	60	75	54	65	>	>	66	50	49	63	67	82	88	89	79	77	84	83	71	64	63	62	62	77	78		66.0	2400		
GIANNOLA	43	41	40	35	28	29	46	42	39	>	>	39	41	43	40	32	43	54	59	63	53	60	56	56	53	54	42	36	48	56		45.4	EDT		
MONTGOMERY VILLAGE	48	47	53	47	47	60	74	54	64	66	54	45	50	50	63	66	84	89	92	79	77	82	83	72	66	62	66	63	80	79		65.3	2400		
ROTH 1SW	44	41	43	37	29	31	45	44	42	39	44	43	43	44	42	33	42	54	58	61	54	61	61	56	54	55	43	38	47	57		46.1	EDT		
GLENMONT 1NNE	48	47	53	49	49	61	77	51	67	69	51	46	50	50	63	68	84	90	92	82	79	85	87	74	66	66	67	65	82	80		66.6	2400		
ROSSEN	44	42	41	35	30	31	44	41	41	38	43	42	43	44	39	33	39	51	55	61	54	56	58	53	51	54	42	37	42	53		44.6	EST		
BETHESDA																																			2400
SCAFIDE																																			EDT
GAITHERSBURG 2WNW	47	47	51	47	48	61	75	55	65	68	50	45	49	48	63	69	84	89	91	80	79	81	83	74	65	62	65	64	81	79		65.5	2400		
SHAW	42	41	40	34	26	27	40	41	38	36	42	41	41	41	38	30	35	52	55	62	53	59	55	56	51	53	41	34	43	53		43.3	EDT		
FOREST GLEN	47	48	55	50	50	62	78	54	67	67	53	46	50	51	66	69	85	90	92	82	78	85	86	75	66	66	67	65	80	79		67.0	2400		
TERRY	44	42	42	36	29	31	47	44	40	48	43	43	43	45	41	34	45	54	59	64	55	58	58	55	55	52	54	42	36	49		46.3	EDT		
ROCKVILLE 1NE																																			2400
WASH GAS LIGHT																																			EDT
SOUTH BOWIE	46	48	53	48	46	58	74	56	64	64	50	44	49	49	61	66	82	87	90	81	75	83	85	74	66	71	69	62	78	80		65.3	2400		
HUDELSON	42	44	42	38	30	32	46	45	42	39	42	42	43	46	43	32	42	58	63	62	56	60	57	52	52	55	44	38	45	54		46.2	EDT		
OXON HILL	48	49	55	49	49	61	77	59	66	66	51	46	M	M	M	M	85	90	90	82	79	86	87	75	69	70	68	65	80	78		68.5	2000		
SMITH	43	42	42	37	30	34	46	47	40	41	43	43	M	M	M	37	M	57	64	60	55	60	59	56	52	56	45	39	46	56		47.3	EDT		
HOLLYWOOD	49	47	53	52	49	60	77	59	66	63	51	47	63	53	62	65	83	87	87	81	71	84	85	73	66	73	68	62	77	75		66.3	2359		
ABELL	44	43	43	44	31	30	41	44	41	39	43	44	45	45	44	36	47	60	66	58	57	64	59	54	51	56	45	39	47	58		47.3	EDT		
ORAVILLE																																			2400
VAN WIE																																			EST
RIDGE	49	46	55	56	52	61	77	57	63	61	50	49	63	53	59	59	82	81	88	80	71	84	82	72	63	75	69	63	73	74		65.6	2400		
ZYLA	43	42	44	39	32	35	51	43	43	42	43	45	46	43	43	38	49	61	70	60	56	63	59	54	53	56	50	40	48	58		48.3	EDT		
SMITHSBURG 1.5 SW	48	46	51	45	44	59	71	53	61	63	52	44	47	49	60	65	81	85	87	73	78	76	79	69	63	59	62	61	78	78		62.9	2400		
HUTTO	43	43	43	32	27	29	42	41	43	38	39	40	41	41	38	31	46	55	61	59	54	55	52	50	50	50	39	33	44	56		43.8	EDT		
HAGERSTOWN 1E	48	47	53	44	45	59	71	52	61	62	51	43	45	49	62	65	81	85	89	75	77	75	78	71	63	59	61	61	78	78		62.9	2400		
KEEFER	43	42	43	32	27	29	42	38	42	38	39	41	40	43	39	30	39	51	59	60	54	55	54	52	51	52	39	32	43	53		43.4	EDT		
SMITHSBURG 2 NE	47	45	52	48	43	58	71	55	62	62	55	43	48	49	59	64	80	85	88	76	76	80	81	70	61	61	64	60	78	77		63.3	2000		
VAUGHN	43	42	42	35	25	29	49	39	42	40	39	40	40	42	36	31	48	57	66	60	56	57	54	54	48	52	36	32	47	60		44.7	EDT		
SALISBURY	53	46	53	49	47	56	72	56	64	62	50	52	66	54	59	61	78	86	83	80	68	82	83	72	63	78	67	58	73	75		64.9	2400		
NWS WICOMICO CO APT	44	38	42	38	31	28	32	40	35	29	41	44	50	44	32	32	37	58	64	54	54	65	49	43	42	55	45	38	40	50		43.1	EST		
WASH NATIONAL	49	49	55	50	49	62	77	56	66	64	53	48	52	53	64	67	84	87	91	81	77	82	82	73	66	69	67	64	78	78		66.4	2400		
NWS ASOS	44	44	43	37	31	35	47	46	42	45	44	45	44	48	45	40	46	57	60	62	57	64	60	58	56	56	44	40	50	58		48.3	EST		
WASH DULLES	47	47	54	47	47	61	75	57	63	64	52	46	49	50	63	68	82	87	90	80	81	82	83	73	65	63	66	63	78	76		65.3	2400		
NWS ASOS	42	39	40	35	30	28	44	39	38	37	42	43	42	45	37	30	41	52	61	51	55	59	56	53	51	54	41	37	37	56		44.2	EST		
STERLING 4 N	47	47	55	48	48	62	76	58	66	66	52	48	49	50	64	68	81	88	90	80	82	79	80	73	65	62	65	62	77	76		65.5	2400		
SHAFFER	45	41	46	37	30	32	46	43	42	42	42	43	43	44	43	35	43	53	54	64	56	58	58	58	53	56	45	39	44	55		46.3	EDT		
DAVIS 3 SE WV	39	35	31	37	24	26	45	56	57	47	53	36	42	53	33	51	66	72	79	77	71	75	66	66	66	70	53	47	58	73		53.5	1900		
LESHER	33	25	26	24	12	13	20	38	36	33	35	31	32	33	26	26	35	51	56	53	51	48	50	45	44	51	36	24	24	48		35.3	EDT		

**ACON MD / DE / DC**  
**APRIL 2004 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	0.14	0.75	0.12	0.55 0.5				0.25			0.14	1.00	0.66								T		0.35		0.04	1.04	0.04	0.03				5.11 0.5	2400 EDT	
BEAR 2 SW, DE GALLAHER	0.62	0.62	0.04	0.43 T	T			0.08	0.06		0.04	0.91	0.59	0.63	0.02								0.17		T	1.09	0.03					5.33 T	2400 EDT	
WILMINGTON, DE NWS NEW CASTLE CO APT	0.19	0.62	0.07	0.46 T	T		T	0.15	0.01		0.05	0.94	0.44	0.87	0.01						T		0.40		T	1.36	0.04					5.61 T	2400 EST	
U of D DE Climatologist Newark Pearson Hall																																-	2400 EST	
GEORGETOWN, DE NWS SUSSEX CO APT	0.41	0.04	0.01	0.09				T	T		0.29	1.68	0.73	0.39	0.15						0.01		0.14			0.51	0.06					4.51 -	2400 EST	
GEORGETOWN, DE UofD RESEARCH & ED CTR	0.35	0.01		0.08							0.45	1.44	0.89	0.45	0.18								0.25			0.58	0.11					4.79 0.0	2400 EST	
HARBESON, DE UofD WARRINGTON FARM	0.25	0.01		0.08							0.41	1.72	1.08	0.44	0.10						0.02		0.17			0.50	0.12					4.90 0.0	2400 EST	
FROSTBURG LATTA	0.17	1.09 4.8	0.23 T	0.12 0.6	T					0.24		0.15	1.08	0.61	T							0.04	T	0.17	0.03		0.77		0.22 T			4.92 5.4	0700 EDT	
LAVALE MULLINS	2.00	0.49	0.01	0.09 T				0.20			0.11	1.26	0.88	0.01						0.02	0.02	0.12	0.04		0.66	0.32	0.06					6.29 T	2400 EDT	
ST MARGARETS BRYANT	1.27	0.40			0.11			0.07			0.07	1.01	0.94	0.30	0.04							0.04		0.51		0.41	0.03					5.20 0.0	2100 EDT	
MILLERSVILLE 1SE HANSON	1.70	0.65	0.03	0.13				0.05	0.05		0.03	2.08	0.36	0.42	0.05						0.02		0.42			0.73	0.03					6.75 0.0	2400 EDT	
LOTHIAN JUG BAY	0.58	0.35	0.21	0.13	0.08		M	0.03			0.01	0.10	1.67	0.31	0.29								M	0.51	T		0.29	0.05				4.61 0.0	0900 EDT	
BWI NWS ASOS	1.21	0.74	0.03	0.11			T	T			T	1.32	0.27	0.15	T						0.01	T	0.66	0.01		0.80	0.02					5.33 0.0	2400 EST	
LAUREL 2 E STOUDT	1.47	0.58	0.03	0.15				0.07			0.02	1.29	0.42	0.11							T	T	0.64		T	0.70	0.04					5.52 0.0	2400 EST	
PARKTON 5SW KREINIK	1.07	0.92	0.19	0.22				0.06	0.22		0.03	0.46	0.82	0.24							0.02		T		0.02	0.63	0.03					4.93 0.0	2200 EDT	
OWINGS MILLS 2SE SHARROW	1.78	1.04	0.04	0.19 T				T	0.05		0.03	1.12	0.62	0.07							0.01		0.35	0.01		0.87	0.04					6.22 T	2400 EDT	
BALTIMORE 2SE MANFRE	1.75	0.66	0.02	0.14			T	T	0.02		T	1.24	0.26	0.16							0.01	0.01	0.48		T	0.64	0.01					5.40 0.0	1800 EDT	
BALT INNER HARBOR MD SCIENCE CENTER	1.48	0.67	0.02	0.13				0.02			0.01	1.28	0.34	0.10								0.01	0.46			0.68	0.01					5.21 -	2400 EST	
MANCHESTER 1SW CLOSE	1.46	0.74	0.02	0.14				0.18	0.05		0.05	1.15	0.54	0.02							0.05	T	0.29	0.03	0.03	1.07	0.01					5.83 0.0	2300 EDT	
WESTMINSTER 4 SSE HARTSOCK	1.34	0.70	0.05	0.17			T		0.16		0.04	0.75	0.86	0.05									0.48			0.91						5.51 0.0	2100 EDT	
WESTMINSTER 5 SSE KLEIN	1.44	0.72	0.02	0.21				0.03	0.13		0.06	0.83	0.68	0.04							0.05	>	>	>	>	>	>	>	>	>	1.42		5.63 0.0	2200 EDT
MILLERS 4NE MILLER	0.87	0.49	0.09	0.24 T				0.04	0.38		0.04	0.66	0.91	0.06	T						0.04	T	T	0.45	0.01	1.09	0.02					5.39 T	1800 EDT	
FREDERICK 4 N FARFAN	1.00	0.55	0.01	0.05			T	0.17			0.10	1.40	0.60	0.01						0.03		T	0.21		0.09	0.99	0.01					5.22 0.0	2400 EDT	
EAGLE ROCK HARVEY	0.15	1.20 8.0	0.11 1.0	0.27 2.0	0.24 4.0			0.03	0.12		0.01 0.1	0.15	0.75	0.52 T	0.03 T						0.01	T	T	0.13	0.02	0.12	1.05	0.05	0.13 0.5			5.09 15.6	800 EDT	

**ACON MD / DE / DC**  
**APRIL 2004 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	0.98	0.85	0.05	0.29			0.01	0.18			0.04	1.02	0.49		0.15						T	T	0.80	0.01		0.78	0.02					5.67	2400
LAUREL JHU / APL GIANNOLA	1.05	0.52	0.01	0.13				T	0.01			1.12	0.17	0.02							0.01		0.43			0.58	T					4.05	2400
POTOMAC 4N COHEN	1.10	0.70		0.10				T	0.02		T	1.15	0.82	0.07							T	T	0.60			0.85						5.41	2100
OLNEY 1 S GIANNOLA	>	1.93	0.05	0.09				0.01			>	>	2.10	0.06							0.02	0.03	0.66		T	0.75	0.01				5.71	2400	
MONTGOMERY VILLAGE ROTH 1SW	0.96	0.65	0.05	0.06					0.02		0.02	1.33	0.60	0.06						0.10	0.10	0.06	0.12			0.77	0.06				4.96	2400	
GLENMONT 1NNE ROSSEN	1.14	0.49	0.03	0.11			T	0.05			0.01	1.38	0.50	0.06						T	T	T	0.48	T	0.03	0.68	0.03				4.99	2400	
BETHESDA SCAFIDE																																	2400
GAITHERSBURG 2WNW SHAW	1.01	0.73	T	T				0.02			0.01	1.52	0.47	0.04						0.13	0.01	0.03	0.21		0.02	0.95	0.03				5.18	2400	
FOREST GLEN TERRY	0.96	0.58	0.03	0.09				0.03	0.01		0.02	1.50	0.50	0.08							0.01		0.35			0.75	0.04				4.95	2400	
ROCKVILLE 1NE WASH GAS LIGHT																																	2400
SOUTH BOWIE HUDELSON	0.97	0.37	0.02	0.10				T	0.03		0.07	1.93	0.26	0.27	0.04							T	0.58				0.33	0.11				5.08	2400
OXON HILL SMITH	1.12	0.29	0.05	0.06			T	0.02	0.02		0.10	1.53	0.20	0.35						T	T		0.32			0.43	0.06				4.55	2000	
HOLLYWOOD ABELL	1.34	0.15	0.03	0.01				T			0.35	1.67	0.66	0.59	0.06						T		0.14			0.95	0.01				5.96	2359	
ORAVILLE VAN WIE																																	2400
RIDGE ZYLA	1.40	0.19	0.07							0.06	0.30	1.84	0.58	0.52	0.05							0.22	0.06			0.52	0.21				6.02	2400	
SMITHSBURG 1.5 SW HUTTO	0.89	0.12	0.03	0.03				0.14	0.01		0.08	1.34	1.02							0.01	0.01		0.17	0.01	0.53	1.55	T				5.94	2400	
HAGERSTOWN 1E KEEFER	0.91	0.15	0.01	0.01				0.18			0.14	1.63	1.01	T						0.02		0.01	0.15	0.01	0.69	1.88	0.01				6.81	2400	
SMITHSBURG 2 NE VAUGHN	1.67	0.21	0.05	0.02				0.16	0.02		0.13	1.61	0.84							0.02		0.02	0.23	0.06	0.56	2.24	0.02				7.86	2000	
SALISBURY NWS WICOMICO CO APT	0.27	0.01	T	0.05			T	T	T	0.10	0.84	1.34	0.93	0.41	0.08						0.01		0.20			0.78	0.09				5.11	2400	
WASH NATIONAL NWS ASOS	0.93	0.29	0.05	0.05			T	0.01	T		0.05	1.18	0.22	0.22						T	T		0.31		T	0.52	0.01				3.84	2400	
WASH DULLES NWS ASOS	0.95	0.66	0.02	0.05			T	0.03			0.01	1.45	0.34	0.01						0.08		T	0.46		0.05	0.93	0.01				5.05	2400	
STERLING 4 N SHAFFER	1.12	0.67	0.11						T		0.06	1.65	0.53	0.28							>	0.09	0.10	0.45		0.05	0.91	0.02			6.04	2400	
DAVIS 3 SE WV LESHER	0.13	1.30	0.21	0.30	0.49	T		0.01	0.24	T	0.01	0.16	0.63	0.57	0.13					T	0.02	T	0.05	0.42	0.44	0.80	0.35	0.02			6.28	1900	
	T	16.2	2.7	1.8	9.4	T					T	T			0.9													T			31.0	EDT	