



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

CONTINUED ABOVE NORMAL PRECIPITATION AND BELOW NORMAL TEMPERATURES

November saw the continuation of the cooler than normal temperatures and above normal precipitation. With the frequent drought relieving rains the longest stretch of rain free days at most stations was only four days. Snowfall this month was below normal. East of Garrett County measurable snow fell in Carroll, Washington, and Baltimore Counties during the last week of the month.

The 1st started out generally frosty. It became mostly cloudy, and blustery as a cold front moved across the region bringing with it scattered light rain measuring a few hundreds of an inch. Temperatures remained below normal until the 9th. Rains moved into the region on the afternoon of the 5th and ended the morning of the 6th. Amounts averaged around three quarters of an inch.

The warmest temperatures of the month were pulled into the region ahead of a storm which moved northeast through the mid-west on the 10th and the 11th. Temperatures rose into the 60's and lower 70's on the 10th. **Greg Keefer of Hagerstown 1E** reported a morning low of 63 on the 11th. The most significant severe weather outbreak of the year struck the southeast and Ohio Valley on the 10th killing 35 people (preliminary report). This system, while not severe in our area, moved into the region on the 11th. Portions of the region were under a tornado watch but none were reported. The months only thunder was reported by many observers the morning of the 11th. Rainfall totals of one inch plus were common from the 11th through the 13th. St. Marys County reported the greatest amounts. **John Zyla of Ridge** reported 1.92", **Floyd Abell of Hollywood** 1.90", and **Mike Van Wie of Oraville** 1.68".

The sun returned on the 14th and the 15th along with mild temperatures. Then the heaviest rains of the

month moved into the region early on the 16th and lasted into the 17th as temperatures generally remained in the 40's. Rainfall amounts of two (2) inches or more were common. Amounts of over 2.25" were reported by the following ACON observers: **Rich Giannola of JHU/APL** 2.84", **Gary Gallaher of Bear 2 SW DE** 2.77", **Dan Hanson of Millersville 1 SE** 2.45", **Lynn Albright of Fallston 2 NW** 2.35", **Joe Terry of Forest Glen** 2.34", **Jeff Stoudt of Laurel 2 E** 2.32", **Stan Rossen of Glenmont 1 NNE** 2.32", **Bill Hudelson of South Bowie** 2.28", **Rich Giannola of Olney 1 S** 2.27", and **Al Kreinik of Parkton 5 SW** 2.26". **Ralph Hartsock of Westminster 4 SSE** and **Bobby Miller of Millers 4 NE** reported a "Trace" of snow late on the 17th.

A storm system brought some rains with it on the 21st & 22nd. Amounts from this event were quite variable. Amounts of less than 1/10th of an inch fell in the Baltimore-Washington region while upwards of 1" or more fell on portions of Southern Delaware and Maryland's Eastern Shore. The heaviest snowfall of for the month of 3.5" was observed by Rebecca Harvey of Eagle Rock.

Another storm system brought light rains of generally less than a quarter of an inch on the 26th and 27th.

Thanksgiving (the 28th) was cold and windy. Many stations reported minimum temperatures in the upper teens and lower 20's which were the coldest of the month. Afternoon temperatures rose only into the mid 30's to lower 40's under partly sunny skies. **Rebecca Harvey of Eagle Rock** reported the coldest Thanksgiving temperatures: a maximum of 24 (obs. time 8AM on the 29th) after a minimum of 12.

The last day of the month brought some light rain showers totaling only a few hundreds of an inch. Snow flurries / showers were reported by some ACON observers in Garrett, Carroll, Washington, Montgomery, and Howard counties.

EXTREMES REPORTED BY

ACON OBSERVERS

MAXIMUM TEMPERATURE

Ridge	76
Jug Bay Wetlands	75
Hollywood	75

MINIMUM TEMPERATURE

Eagle Rock	12
Westminster 5 SSE	17
Oraville	17

WARMEST AVG. TEMP.

Ridge	48.8
Baltimore 2 SE	48.0

COLDEST AVG. TEMP.

Eagle Rock	36.2
Westminster 5 SSE	40.1

MAXIMUM PRECIPITATION

Bear 2 SW DE	5.49
Laurel JHU/APL	5.36

MINIMUM PRECIPITATION

Hagerstown 1 E	3.63
Newark Pearson Hall	3.68

SNOW / SLEET

Eagle Rock	8.7
Smithsburg 2 NE	1.5

Member News

Al Kreinik of Parkton 5 SW underwent successful heart bypass surgery on December 17. He is now recuperating at the home of **Bobby Miller of Millers 4NE** until he is able to return home.

New Station

A new station has been added this month. Dean Dey of the University of Delaware Research and Education Center near Georgetown has set up a station at the Warrington Farm in Harbeson which is 11.75 miles ENE of the U of D Ed Center and 6 miles ESE of the Georgetown Airport.

OBSERVER COMMENTS FOR NOVEMBER 2002

Jim Canavan of Wilmington 4 NNE

11th -- Thunder

Gary Gallaher of Bear 2 SW, DE

Second consecutive month with good drought relieving rains. The longest period where temperatures averaged above normal was three (3) days (10th - 12th). Thunder occurred on the morning of the 11th.

Al Kreinik of Parkton 5 SW

Fall stats: Avg Max 64.3, Avg Min 43.9, Avg Temp 54.1, Precip 15.50 (+3.85).

10th -- Highest temperature and obs temp of the month.

11th -- Distant lightning @ 6 AM.

21st -- Heavy AM fog.

30th -- Squall line with 59 MPH winds.

Marty Sharrow of Owings Mills

1st -- Frosty followed by partly cloudy and blustery.

8th -- Frosty start-- then sunshine and warmer.

17th -- Overcast, rainy, fog at times.

26th -- Increased clouds with spotty light precipitation.

Joe Manfre of Baltimore 2SE

28th -- Thanksgiving - Partly cloudy, windy, and cold.

Ralph Hartsock of Westminster 4 SSE

16th -- Rain all day - heavier late afternoon and night.

23rd -- Very windy, 42 MPH, and cold.

26th -- Mixed light snow, rain, and sleet.

30th -- PM showers - windy and turning colder with flurries.

Greg Klein of Westminster 5 SSE

27th -- One inch of snow in the early morning hours.

Bobby Miller of Millers 4 NE

Fall stats: Avg Max 63.4, Avg Min 46.6, Avg Temp 55.0 (+0.2), Precip 15.79 (+4.60)

Fourth straight month with above normal precipitation.

10th -- Tropical evening, breezy.

11th -- Distant lightning south at 6 AM. Morning showers.

17th-18th -- Precipitation re-develops as rain mixed with snow at 10:30 PM then all snow @11:30 PM melting upon contact with the ground.

30th -- Evening snow squall 0.3" at 8PM. Strong winds to 47 MPH from the west.

Lynn Albright of Fallston 2 NW

30th -- Snow showers with no accumulation.

Rich Giannola of JHU/APL OF Laurel

15th -- Right sundog 7:40 AM.

19th -- Right sundog through a contrail 7:40 AM.

Rich Giannola of Olney 1 S

12th -- Rainy day

22nd -- AM drizzle and fog.

Rob Cohen of Potomac 4 N

11th -- Thunder at 6 AM.

26th -- Rain shower mixed with sleet at 3 PM.

30th -- Brief light flurry at 9:30 PM.

Stan Rossen of Glenmont 1 NNE

30th -- Ice pellets (sleet) 0118Z-0126Z.

Kevin Shaw of Gaithersburg 2 WNW

A wetter and cooler than normal month. Large amount of days with maximum less than 50, actually half of the days.

26th -- Ice pellets.

Joe Terry of Forest Glen

Another wet month to help alleviate the long term drought. Chilly start and end to the month, otherwise mild.

16th & 17th -- Quite a storm: 48 hours of near continuous rain.

Bill Hudelson of South Bowie

1st -- Heavy frost 0700 hours. Light rain showers 1430-1530.

11th --Thunderstorm 0715 & 0920 hours. Tornado watch.

20th -- Heavy frost and light fog 0700.

Floyd Abell of Hollywood

2nd -- Fair, breezy at times.

11th -- Morning showers, tornado watch.

30th -- Variable clouds, afternoon showers, evening sprinkles.

John Zyla of Ridge

11th -- Thunder at 10:45 AM with heavy downpour.

27th -- First frost of the season.

Greg Keefer of Hagerstown 1 E

11th -- Warm overnight low of 63 degrees. Showers and some thunder and lightning early this morning.

26th -- Became cloudy today a few spits of sleet, rain, and snow late this afternoon. Periods of light wet snow began this evening 7 PM. Snow became briefly moderate late this evening with 0.3" on ground by midnight.

30th -- Mild morning with a high of 51. Then strong cold front came through with strong west winds gusting to 40 MPH and falling temps this afternoon with a few light rain showers. Strong winds continued this evening with some snow showers at times.

Jim Vaughn of Smithsburg 2 NE

Fourth consecutive month with above average rainfall. The last time this happened, March—June 1998. Eight (8) days with wind gusts of 40 MPH or higher. Three (3) days with wind gusts of 50 MPH or higher. Fifth greatest November snowfall of 1.5". Record 15.3" in 1995.

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
NOVEMBER 2002 SUMMARY

OBSERVER	STATION	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 CAL	DATE	DAYS >=.01"	DAYS >=1"	YEAR	TOTAL	MAX CAL		DATE	SEA-SON
<u>New Castle, Delaware</u>																									
Canavan, Jim	Wilmington 4 NNE	50.5	35.6	43.1	68	10+	19	28+	0	0	11				4.56	1.05	16	11	1	37.06M	0.0	0.0		0.0	2400
Gallaher, Gary	Bear 2 SW	52.7	33.6	43.2	72	10	19	28	0	0	19	45	NNW	6	5.49	1.76	16	15	2	38.11	0.0	0.0		0.0	2400
Wilmington NWS ASOS	New Castle Co. Apt.	52.2	35.0	43.6	72	10	22	28	0	0	13	44	NW	6	4.48	1.32	16	14	1	35.29	T	T	27	T	2400
U of D DE Climatologist	Newark Pearson Hall	52.5	37.3	44.9	71	10	26	29	0	0	4	36		23	3.68	0.96	17	12	0	30.76M					2400
<u>Sussex, Delaware</u>																									
Georgetown NWS ASOS	Sussex Co. Airport	55.9	37.7	46.8	75	10	21	29	0	0	7	45	WNW	30	6.26	1.65	17	10	3	43.25					2400
U of D Research & Ed Ctr	Georgetown	55.2	37.1	46.2	73	10+	23	29	0	0	8				5.29	1.66	16	14	1	38.54					2400
UofD Warrington Farm	Harbeson	55.7	36.1	45.9	76	10	20	29	0	0	11				5.88	1.61	16	12	1	5.88					2400
<u>Anne Arundel, Maryland</u>																									
Baltimore NWS ASOS	BWI Airport	53.8	34.9	44.4	73	10	22	28	0	0	14	40	W	23	3.78	1.61	16	10	1	34.34	0.0	0.0		0.0	2400
Bryant, Dave	St. Margarets	53.5	38.5	46.0	66	10+	25	28	0	0	4				4.84	1.67	16	10	1	38.53	0.0	0.0		0.0	0700-P 1700-T
Hanson, Dan	Millersville 1 SE	55.0	34.9	45.0	74	10	19	28	0	0	14	41	W	23	4.88	1.84	16	11	1	40.03	0.0	0.0		0.0	2400
Jug Bay Wetlands	Lothian	55.6	34.3	45.0	75	11	19	27	0	0	15				4.77	1.36	17	13	1	38.65					0900
Stoudt, Jeff	Laurel 2 E	-	-	-	-	-	-	-	-	-	-				4.46	2.32	16-17	11	1	39.33	0.0	0.0		0.0	2400
<u>Baltimore, Maryland</u>																									
Kreinik, Al	Parkton 5 SW	51.8	32.7	42.3	69	10	19	28+	0	0	18	59	NW	30	4.49	1.64	16	11	1	38.65	0.5	0.5	27	0.5	2200
Sharrow, Marty	Owings Mills 2 SE	49.7	33.4	41.6	67	10	20	28	0	0	15	41		23	4.83	1.60	16	11	2	34.97	T	T	28	T	2400
<u>Baltimore City, Maryland</u>																									
Manfre, Joe	Baltimore 2 SE	54.3	41.6	48.0	73	10	28	29	0	0	1				3.97	1.70	16	12	1	39.09	0.0	0.0		0.0	1800
Maryland Science Ctr	Baltimore Inner Harbor	53.9	40.1	47.0	73	10	29	28+	0	0	3				3.50	1.52	16	9	1	34.23					2400
<u>Carroll, Maryland</u>																									
Close Jr, Herb	Manchester 1 SW	51.0	35.6	43.3	70	10	19	28	0	1	9	42		23	3.99	0.92	16	15	0	37.09	1.8	1.3	27	1.8	2100
Hartsock, Ralph	Westminster 4 SSE	50.3	34.3	42.3	70	10	18	28	0	0	10				3.99	0.90	16	14	0	36.99	0.5	0.5	27	0.5	2100
Klein, Greg	Westminster 5 SSE	47.4	32.7	40.1	66	10+	17	28	0	0	17				4.23	1.05	16	12	2	37.24	1.0	1.0	27	1.0	2200
Miller, Bobby	Millers 4 NE	50.8	35.4	43.1	70	10	20	28	0	0	11	47	W	30	4.04	0.99	17	10	0	37.83	1.3	1.3	27	1.3	1800
<u>Charles, Maryland</u>																									
Brumback, Marty	Bryans Head 2 ESE																			5.87M					2400
<u>Garrett, Maryland</u>																									
Harvey, Rebecca	Eagle Rock	44.5	27.8	36.2	70	11	12	28+	0	5	24				3.83	0.88	6	15	0	47.08	8.7	3.5	23	9.0	0800
<u>Harford, Maryland</u>																									
Albright, Lynn	Fallston 2 NW	52.6	32.9	42.8	70	11	18	29	0	0	17				4.43	1.51	16	10	1	43.14	T	T	30	T	2400
<u>Howard, Maryland</u>																									
Giannola, Rich	Laurel JHU / APL	53.0	36.9	45.0	70	10	24	28	0	0	8	46	WSW	23	5.36	2.13	16	11	1	43.13	0.0	0.0		0.0	2400

**ACON MD /DE / DC
NOVEMBER 2002 SUMMARY**

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		AVG MAX	AVG MIN	MEAN	MAX	DAY	MIN	DAY	MAX >=90	MAX <=32	MIN <=32	GUST	DIR	DAY	TOTAL	MAX CAL	DATE	DAYS >=.01"	DAYS >=1"	YEAR	TOTAL	MAX CAL		DATE	SEA-SON
<u>Montgomery, Maryland</u>																									
Cohen, Rob	Potomac 4 N	53.0	36.0	44.5	72	10	24	28	0	0	12				5.08	1.40	16	13	1	42.87	0.0	0.0	0.0	2100	
Giannola, Rich	Olney 1 S	53.0	36.4	44.7	70	10	21	30	0	0	9				4.45	2.27	16-17	9	1	36.93	0.0	0.0	0.0	2400	
Rossen, Stan	Glenmont 1 NNE	54.4	35.1	44.8	72	10	21	28	0	0	14				4.64	1.65	16	10	1	38.08	T	T	30	T	2400
Scafide, Tony	Bethesda	53.5	36.0	44.8	72	10	23	28	0	0	9	23		22	3.75	1.49	16	15	1	35.73	0.0	0.0	0.0	2400	
Shaw, Kevin	Gaithersburg 2 WNW	51.6	32.9	42.3	70	10	19	28	0	0	18				4.83	1.45	16	11	1	39.74	T	T	27	T	2400
Terry, Joe	Forest Glen	54.4	36.3	45.4	73	10	23	28	0	0	9	34	W	30	4.59	1.71	16	10	1	36.98	0.0	0.0	0.0	2400	
Wash Gas Light	Rockville 1 NE	52.7	35.7	44.2	72	10	24	28	0	0	9				4.58	1.62	16	10	1	35.63	T	T	26	T	2400
<u>Prince Georges, Maryland</u>																									
Hudelson, Bill	South Bowie	52.8	36.1	44.5	73	10	21	28	0	0	12	37	NW	23	4.58	1.60	16	11	1	35.14	0.0	0.0	0.0	2400	
Smith, Brian	Oxon Hill	55.4	38.5	47.0	73	10	26	29	0	0	6				4.77	1.20	16	14	2	33.07	0.0	0.0	0.0	2300	
<u>St. Marys, Maryland</u>																									
Abell, Floyd	Hollywood	56.4	37.6	47.0	75	10	21	29	0	0	10	36		23	4.87	0.99	16	13	0	33.95	0.0	0.0	0.0	2400	
Van Wie, Michael	Oraville	55.5	36.1	45.8	74	10	17	29	0	0	12	46		6	4.58	1.08	12	14	1	26.39M	0.0	0.0	0.0	2400	
Zyla, John	Ridge	57.1	40.4	48.8	76	10	25	29	0	0	3	33	N	30	4.71	0.92	16	10	0	38.59	0.0	0.0	0.0	2400	
<u>Washington, Maryland</u>																									
Keefer, Greg	Hagerstown 1 E	51.5	34.2	42.9	71	10	19	28	0	0	13	40	W	30	3.63	0.71	12	11	0	36.04	0.5	0.3	26	0.5	2400
Vaughn, Jim	Smithsburg 2 NE	51.5	35.7	43.6	70	10+	20	28	0	1	10	53	E	16	4.53	0.84	12	14	0	36.69	1.5	1.2	26	1.8	2000
<u>Wicomico, Maryland</u>																									
Salisbury NWS ASOS	Wicomico Co. Apt	56.1	35.0	45.6	75	10	16	29	0	0	17	45	WNW	30	5.80	1.36	16	12	1	45.18	0.0	0.0	0.0	2400	
<u>York, Pennsylvania</u>																									
Rickell, Robert	Hanover 2 S, PA																			36.95M			T	M	2100
<u>Arlington, Virginia</u>																									
Wash National NWS	National Airport	54.7	39.5	47.1	73	10	27	28+	0	0	3	40	WNW	30	4.34	1.64	16	10	1	29.88	0.0	0.0	0.0	2400	
<u>Loudon, Virginia</u>																									
Wash Dulles NWS ASOS	Dulles Airport	53.5	34.7	44.1	72	10	21	28	0	0	13	23	W	30	4.14	1.44	16	13	1	34.57	0.0	0.0	0.0	2400	
SECTION AVERAGE		53.1	35.8	44.4											4.57										

NOTES:

M = MISSING DATA

> = INCLUDED IN NEXT DAYS DATA

GARY GALLAHER 01/09/03

**ACON MD / DE / DC
NOVEMBER 2002 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	51	45	46	51	48	52	49	57	61	68	68	58	48	51	56	46	43	45	50	55	54	52	52	50	55	45	40	40	35	45		50.5	2400	
CANAVAN	29	29	27	45	33	39	39	30	39	39	63	52	45	33	39	42	41	38	28	31	33	40	32	30	30	36	33	19	19	34		35.6	EST	
BEAR 2 SW, DE	52	48	51	52	49	53	52	59	64	72	69	57	51	58	60	49	43	49	52	59	54	54	46	55	60	48	40	38	40	47		52.7	2400	
GALLAHER	27	29	25	30	29	44	32	30	32	47	57	50	32	29	35	43	41	31	24	29	29	41	36	30	29	39	26	19	26	37		33.6	EST	
WILMINGTON, DE	52	48	49	52	49	54	52	59	63	72	68	58	51	57	59	49	43	49	51	56	53	52	45	53	58	48	40	38	40	47		52.2	2400	
NWS NEW CASTLE CO APT	32	32	30	36	30	43	34	31	35	49	55	49	37	33	37	42	40	34	27	32	31	41	35	33	31	37	25	22	26	31		35.0	EST	
U of D DE Climatologist	52	47	53	52	48	53	52	58	63	71	69	59	51	58	60	49	44	49	52	58	54	53	45	55	59	47	39	38	41	46		52.5	2400	
Newark Pearson Hall	32	33	34	36	36	44	37	34	38	51	60	49	38	35	40	42	40	35	30	34	35	41	36	36	33	39	30	27	26	37		37.3	EST	
GEORGETOWN, DE	53	48	52	50	55	57	55	59	67	75	74	58	51	63	60	58	54	51	56	58	59	60	47	57	66	49	46	38	48	54		55.9	2400	
NWS SUSSEX CO APT	35	31	32	36	32	44	35	35	44	56	57	50	41	34	45	50	42	33	29	34	36	41	36	33	34	40	30	24	21	40		37.7	EST	
GEORGETOWN, DE	53	48	52	51	54	57	53	59	66	73	73	58	50	59	59	58	54	50	56	58	59	59	46	56	65	48	44	38	47	54		55.2	2400	
U OF D RES & ED CTR	33	31	30	35	31	44	35	35	47	56	57	50	39	33	46	49	41	32	28	32	35	41	36	33	33	38	28	25	23	39		37.1	EST	
HARBESON, DE	53	47	51	50	55	60	53	60	67	76	74	58	50	59	61	58	54	50	57	58	58	60	45	56	65	48	48	38	46	53		55.7	2400	
UofD WARRINGTON FARM	32	29	30	34	30	42	34	33	45	56	56	49	38	32	44	47	41	30	27	32	34	40	34	31	32	38	29	24	20	39		36.1	EST	
BALTIMORE	53	49	52	55	49	57	52	61	64	73	70	61	50	61	61	51	46	49	52	59	51	50	45	57	61	46	42	40	46	51		53.8	2400	
NWS BWI APT	32	30	28	35	32	44	33	32	32	45	58	50	33	33	37	46	39	34	27	29	31	40	37	31	30	39	27	22	27	35		34.9	EST	
ST MARGARETS	53	49	51	54	50	56	53	57	62	66	66	61	51	58	59	51	47	49	54	57	57	53	48	57	56	47	45	39	43	55		53.5	1700	
BRYANT	36	33	34	40	39	45	39	38	44	52	59	49	39	37	42	47	39	34	31	34	40	39	36	33	38	40	31	25	26	35		38.5	EST	
MILLERSVILLE 1SE	54	50	54	56	51	58	54	64	67	74	70	59	51	64	62	52	47	51	55	59	53	52	47	59	63	46	41	40	45	52		55.0	2400	
HANSON	32	30	28	34	33	45	35	32	37	50	58	49	33	31	36	46	39	31	27	29	32	40	37	30	29	39	28	19	24	35		34.9	EST	
LOTHIAN	47	55	51	55	57	53	58	56	64	M	75	68	56	52	63	64	52	M	53	57	61	54	53	46	M	65	42	42	M	47		55.6	0900	
JUG BAY	30	29	27	31	32	36	41	32	40	M	55	55	48	30	39	43	41	38	26	28	32	41	37	22	M	28	19	20	M	26		34.3	EST	
LAUREL 2 E	***PRECIPITATION ONLY STATION***																																	
STOUDT																																		
PARKTON 5SW	52	48	52	53	47	52	53	62	65	69	68	55	49	61	63	47	43	48	47	60	46	48	44	56	62	46	38	35	39	47		51.8	2200	
KREINIK	27	29	26	29	30	42	31	31	33	51	50	47	34	32	33	43	37	32	24	28	29	39	36	27	28	35	28	19	19	31		32.7	EST	
OWINGS MILLS 2SE	48	44	48	51	47	51	49	57	59	67	66	55	47	56	57	48	44	44	48	53	56	48	41	53	57	43	37	35	37	46		49.7	2400	
SHARROW	30	28	27	32	32	40	38	32	34	47	54	46	34	33	35	42	36	31	26	30	33	36	33	30	30	35	26	20	21	30		33.4	EST	
BALTIMORE 2SE	54	50	52	55	50	55	53	63	64	73	70	62	57	62	60	52	47	50	54	59	50	51	45	58	61	47	41	39	44	52		54.3	1800	
MANFRE	37	36	38	42	41	41	46	39	42	53	64	51	46	42	43	47	41	40	36	38	40	49	38	38	40	41	36	34	28	41		41.6	EST	
BALT INNER HARBOR	54	49	52	55	51	55	53	63	63	73	69	62	51	62	59	52	47	50	54	58	51	52	45	57	57	48	41	39	44	51		53.9	2400	
MD SCIENCE CENTER	37	35	36	42	41	41	41	38	42	53	62	51	42	40	43	47	40	39	35	37	41	41	39	37	39	39	32	29	29	36		40.1	EST	
MANCHESTER 1SW	50	46	51	51	45	51	52	62	66	70	67	57	47	60	61	48	41	45	45	60	45	48	43	55	63	43	37	32	42	47		51.0	2100	
CLOSE	33	28	30	36	35	41	36	34	42	51	56	46	37	36	43	41	34	33	29	36	37	36	32	34	38	32	25	19	26	32		35.6	EST	
WESTMINSTER 4 SSE	50	44	47	52	48	53	50	57	62	70	69	54	50	55	59	47	44	44	48	54	48	48	40	52	58	45	39	37	38	48		50.3	2100	
HARTSOCK	33	29	30	33	32	40	37	34	35	52	52	46	36	35	34	44	36	33	27	30	33	37	33	30	32	33	27	18	25	34		34.3	EST	
WESTMINSTER 5 SSE	46	42	44	50	47	50	46	55	60	66	66	54	46	53	56	45	40	40	44	51	44	45	37	50	55	41	35	33	35	46		47.4	2200	
KLEIN	31	26	29	32	33	38	34	32	36	47	54	45	35	34	40	34	31	25	32	42	35	31	28	32	31	24	17	22	28	28		32.7	EST	
MILLERS 4NE	49	46	50	48	46	50	50	62	66	70	67	58	47	59	59	48	45	45	45	59	46	48	41	54	61	50	37	33	39	47		50.8	1800	
MILLER	32	30	30	32	33	39	40	32	38	50	58	47	41	35	35	45	36	34	27	32	35	39	33	32	33	33	31	20	24	35		35.4	EST	
BRYANS ROAD 2 ESE																																		2400
BRUMBACK																																		EST
EAGLE ROCK	34	30	38	46	39	50	45	38	60	64	70	66	44	42	56	54	42	40	36	44	58	48	32	39	46	51	30	28	24	42		44.5	0800	
HARVEY	30	18	20	24	28	30	30	28	34	44	50	42	30	32	32	40	40	20	20	22	32	20	22	20	32	28	20	12	12	22		27.8	EST	
FALLSTON 2 NW	53	47	51	55	51	55	54	55	62	68	70	56	54	60	61	48	44	48	51	58	52	51	45	55	60	48	41	39	40	47		52.6	2400	
ALBRIGHT	30	26	27	37	30	43	30	30	41	48	53	48	34	33	34	42	38	31	24	28	30	38	29	27	28	35	26	20	18	30		32.9	EST	
LAUREL JHU / APL	51	48	52	54	49	53	49	61	64	70	69	58	48	62	63	49	45	48	51	61	49	50	44	58	64	45	39	39	45	51		53.0	2400	
GIANNOLA	34	31	32	36	34	43	38	38	38	56	57	48	40	41	38	45	37	35	28	32	35	38	36	35	32	37	29	24	27	34		36.9	EST	

ACON MD / DE / DC
NOVEMBER 2002 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		
POTOMAC 4N COHEN	50	49	50	54	50	52	48	61	64	72	69	58	49	60	61	50	47	48	50	58	50	49	44	57	61	49	41	40	46	52		53.0	2100		
OLNEY 1 S GIANNOLA	30	32	28	34	34	44	38	31	37	54	58	49	38	32	36	46	39	36	28	30	34	40	36	30	32	39	30	24	27	34		36.0	EST		
GLENMONT 1NNE ROSSEN	51	50	53	52	48	51	49	63	62	70	68	56	43	63	61	50	46	47	51	58	48	49	43	56	61	45	40	>	>	51		53.0	2400		
BETHESDA SCAFIDE	32	32	30	38	35	43	36	34	40	55	56	48	35	34	38	45	37	35	29	32	36	38	35	29	32	37	27	>	>	21		36.4	EST		
GAIHERSBURG 2WNW SHAW	52	52	55	57	49	54	50	64	65	72	69	57	50	64	64	50	47	51	52	62	49	51	47	59	63	46	41	41	46	52		54.4	2400		
FOREST GLEN TERRY	31	30	29	36	34	44	34	32	38	54	56	49	34	32	35	46	39	33	28	29	32	40	36	30	29	39	27	21	26	31		35.1	EST		
BETHESDA SCAFIDE	52	49	50	54	50	53	49	59	62	72	69	59	50	62	61	52	48	48	53	59	51	51	44	58	62	48	42	40	46	54		53.5	2400		
GAITHERSBURG 2WNW SHAW	31	32	30	38	36	43	37	35	41	54	57	47	35	32	37	45	37	34	29	30	36	39	35	31	33	38	27	23	26	34		36.0	EST		
FOREST GLEN TERRY	50	48	50	53	49	51	48	60	61	70	68	54	48	60	58	49	43	47	48	57	47	49	44	57	60	45	41	39	43	50		51.6	2400		
ROCKVILLE 1NE WASH GAS LIGHT	27	28	26	34	31	42	36	29	32	53	54	47	32	29	33	41	36	31	26	26	31	38	34	26	29	35	27	19	24	32		32.9	EST		
SOUTH BOWIE HUDELSON	54	51	54	56	50	55	50	62	65	73	69	57	50	64	61	50	46	51	52	61	50	51	47	59	63	46	44	41	47	52		54.4	2400		
OXON HILL SMITH	31	30	29	39	35	44	35	34	41	56	57	48	35	33	37	46	38	34	30	31	38	39	36	31	34	38	28	23	26	34		36.3	EST		
ROCKVILLE 1NE WASH GAS LIGHT	53	50	50	51	55	50	51	47	63	72	68	58	48	62	64	51	45	48	51	61	50	51	42	57	63	44	41	39	45	52		52.7	2400		
SOUTH BOWIE HUDELSON	31	30	30	34	33	33	43	34	34	55	58	48	39	35	37	45	37	35	27	29	34	39	36	34	32	37	28	24	28	33		35.7	EST		
OXON HILL SMITH	54	47	50	54	50	54	50	58	64	73	68	58	50	58	58	50	48	48	53	57	51	52	44	54	59	48	41	38	43	53		52.8	2400		
HOLLYWOOD ABELL	32	31	29	35	34	42	34	33	40	54	58	50	35	32	45	46	40	32	27	30	35	40	36	30	31	40	30	21	26	36		36.1	EST		
ORAVILLE VAN WIE	54	50	53	54	51	55	51	63	67	73	72	64	51	62	62	52	50	51	55	60	53	53	47	59	60	51	42	42	48	56		55.4	2300		
HOLLYWOOD ABELL	32	35	33	37	37	43	41	34	44	58	62	49	43	34	41	49	40	39	29	32	38	41	37	31	34	40	33	27	26	35		38.5	EST		
ORAVILLE VAN WIE	55	51	55	53	51	58	53	63	70	75	70	60	52	62	63	54	52	53	56	60	59	56	49	60	65	49	44	39	49	57		56.4	2359		
RIDGE ZYLA	32	29	30	41	37	45	36	35	50	58	60	50	34	32	47	41	41	31	30	34	38	45	37	32	36	37	27	25	21	38		37.6	EST		
HAGERSTOWN 1E KEEFER	56	49	52	54	51	58	54	61	69	74	69	60	52	58	61	53	50	53	56	60	59	56	47	57	62	49	43	39	48	55		55.5	2400		
SMITHSBURG 2 NE VAUGHN	30	28	28	40	34	45	32	32	47	55	56	48	33	30	44	49	40	31	29	34	38	45	36	28	34	37	26	23	17	35		36.1	EST		
HAGERSTOWN 1E KEEFER	58	51	52	56	53	56	65	70	76	70	62	52	63	63	63	56	52	54	59	58	58	55	51	60	64	49	44	42	50	57		57.1	2400		
SMITHSBURG 2 NE VAUGHN	36	35	39	40	41	42	38	45	52	62	60	50	35	36	48	51	38	37	36	38	45	39	37	40	43	38	31	27	25	35		40.4	EST		
HAGERSTOWN 1E KEEFER	49	51	51	50	47	49	46	65	67	71	69	52	50	63	61	51	44	46	43	59	46	49	43	57	57	43	39	34	42	51		51.5	2400		
SMITHSBURG 2 NE VAUGHN	31	27	27	38	34	42	33	33	37	52	48	47	32	30	34	42	38	35	29	27	36	38	33	32	29	33	29	19	30	32		34.2	EST		
SALISBURY NWS WICOMICO CO APT	47	47	51	49	46	49	50	63	68	70	70	54	48	60	60	55	43	44	44	58	48	49	40	55	59	51	36	32	48	52		51.5	2000		
HANOVER 2 S, PA RICKELL	32	28	31	39	34	40	38	36	41	56	50	45	38	35	39	42	36	33	31	30	43	36	33	34	33	31	27	20	28	32		35.7	EST		
WASH NATIONAL NWS ASOS	53	49	52	51	57	63	54	59	67	75	74	61	50	58	61	58	57	50	56	57	60	59	46	57	65	51	44	38	48	53		56.1	2400		
WASH DULLES NWS ASOS	30	28	27	30	28	44	30	29	48	53	56	50	38	31	44	47	42	29	26	29	34	41	32	28	30	40	29	20	16	40		35.0	EST		
WASH NATIONAL NWS ASOS																																			2100
WASH DULLES NWS ASOS	56	50	53	56	51	55	51	62	65	73	70	60	51	61	60	52	48	50	53	59	52	52	47	58	59	49	43	41	48	55		54.7	2400		
WASH DULLES NWS ASOS	34	36	35	43	39	46	39	37	44	54	56	50	40	37	44	48	40	39	35	36	41	41	38	34	36	41	31	27	27	36		39.5	EST		
WASH DULLES NWS ASOS	53	50	52	56	50	53	49	63	66	72	69	56	51	62	61	51	46	48	50	59	48	49	45	58	61	46	41	39	46	55		53.5	2400		
WASH DULLES NWS ASOS	29	29	28	38	34	44	34	30	38	54	55	49	33	30	37	46	39	32	27	27	33	40	36	28	29	36	29	21	23	33		34.7	EST		

ACON MD / DE / DC
NOVEMBER 2002 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	0.04				0.25	0.46					0.28	0.85	0.13			1.05	0.90		T		0.12	0.18					0.30				4.56	2400 EDT	
BEAR 2 SW, DE GALLAHER	0.08				0.56	0.17					0.44	0.83	0.08			1.76	1.01	0.03	0.01		0.07	0.17				0.03	0.24		0.01		5.49	2400 EDT	
WILMINGTON, DE NWS NEW CASTLE CO APT	0.01				0.47	0.20					0.35	0.80	0.07			1.32	0.75	0.01	T		0.14	0.12				0.04	0.19 T		0.01		4.48	2400 EST	
U of D DE Climatologist Newark Pearson Hall					0.37	0.09					0.23	0.61	0.03			0.89	0.96	0.02			0.10	0.19				0.06	0.13				3.68	2400 EDT	
GEORGETOWN, DE NWS SUSSEX CO APT				T	0.34	0.66				T	0.37	1.03	0.15		T	1.25	1.65		T		0.62	0.11					0.08		T		6.26	2400 EST	
GEORGETOWN, DE U OF D RES & ED CTR	0.01			0.02	0.44	0.21					0.34	0.93	0.25			1.66	0.67	0.01			0.55	0.12					0.05		0.03		5.29	2400 EST	
HARBESON, DE UoD WARRINGTON FARM				0.01	0.43	0.28					0.32	0.97	0.29			1.61	0.83				0.86	0.19					0.05		0.04		5.88	2400 EST	
BWI NWS ASOS	T			T	0.64	0.10	T			T	0.30	0.58	T		T	1.61	0.44	T	T		T	0.01	T			0.03	0.03		0.04		3.78	2400 EST	
ST MARGARETS BRYANT					0.94						0.38	0.86			0.26	1.67	0.60		0.02		0.03						0.06		0.02		4.84	0700 EST	
MILLERSVILLE 1SE HANSON					0.78	0.18					0.60	0.74	0.01			1.84	0.61	0.01									0.03	0.03		0.05		4.88	2400 EDT
LOTHIAN JUG BAY	0.02	T	T		0.01	0.82	0.01	0.01			0.50	0.14	0.87	0.01		0.33	1.36	0.61		T		T					0.08				4.77	0900 EDT	
LAUREL 2 E STOUDT	T			T	0.81	0.11					0.40	0.65	T			>	2.32	0.01	0.01		T	0.01					0.04	0.04		0.06		4.46	2400 EST
PARKTON 5SW KREINK	T				0.32	0.22					0.41	0.68				1.64	0.62	0.07	T		0.32	0.07					0.02	0.12 0.5		T		4.49	2200 EDT
OWINGS MILLS 2SE SHARROW	T				0.54	0.09				T	1.06	0.63				1.60	0.62	0.05	T		0.08	0.02	T				T	0.13 T		0.01		4.83	2400 EDT
BALTIMORE 2SE MANFRE	T				0.66	0.06				T	0.31	0.56				1.70	0.50		0.01		0.01	0.01					0.01	0.11		0.03		3.97	1800 EDT
BALT INNER HARBOR MD SCIENCE CENTER					0.51						0.33	0.51				1.52	0.48					0.02					0.07	0.04		0.02		3.50	2400 EST
MANCHESTER 1SW CLOSE	0.01				0.40	0.07	0.01			T	0.29	0.72	T			0.92	0.90 0.1	0.10 T	0.01		0.36	0.04 T					0.05 0.2	0.10 1.3		0.01 0.2		3.99	2100 EDT
WESTMINSTER 4 SSE HARTSOCK	0.01				0.22	0.37	0.01			T	0.26	0.55				0.90	0.82 T	0.24	0.03		0.40	0.03					T	0.11 0.5		0.04		3.99	2100 EDT
WESTMINSTER 5 SSE KLEIN	0.01				0.53						0.25	0.70				1.05	1.04	0.10	0.02		0.39	0.02					0.10 1.0		0.02		4.23	2200 EDT	
MILLERS 4NE MILLER	T				0.02	0.41				T	0.29	0.70	T			0.45	0.99	0.56 T	T		0.32	0.12					T	0.18 1.3		T		4.04	1800 EDT
BRYANS ROAD 2 ESE BRUMBACK																																	2400 EDT
EAGLE ROCK HARVEY	0.06 0.2			T	T	0.88 T	0.20 0.5	0.01		T	0.10	0.08	0.77			0.01	0.77	0.22 2.0		0.20		0.02	0.25 3.5			T	0.25 2.0	0.01 0.5	T	T		3.83	800 EDT
FALLSTON 2 NW ALBRIGHT	0.02				0.51	0.12			T	T	0.42	0.88				1.51	0.84	0.02	T	T	0.04	0.07				T				T		4.43	2400 EDT
LAUREL JHU / APL GIANNOLA	T				0.84	0.11					0.50	0.87				2.13	0.71	0.01	T		T	0.01					0.08	0.04		0.06		5.36	2400 EDT

ACON MD / DE / DC
NOVEMBER 2002 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
POTOMAC 4N COHEN					0.47	0.53				T	0.65	0.61	0.02			1.40	0.84	0.13	0.03		0.10	0.02				T	0.16			0.12	5.08	2100	
																															0.0	EDT	
OLNEY 1 S GIANNOLA	T				>	0.74				0.01	0.58	0.61				>	2.27		0.02		0.08	T				>	0.08			0.06	4.45	2400	
																															0.0	EDT	
GLENMONT 1NNE ROSSEN	T				0.76	0.07				T	0.73	0.63	T		T	1.65	0.67	T	T		0.02	T	T			0.03	0.01			0.07	4.64	2400	
																														T	T	EDT	
BETHESDA SCAFIDE	0.01				0.76	0.14					0.11	0.29		0.01		1.49	0.76	0.01	0.01	0.01	0.03					0.02	0.04			0.06	3.75	2400	
																															0.0	EDT	
GAITHERSBURG 2WNW SHAW					0.77	T				0.02	0.68	0.67				1.45	0.77		0.03		0.24	0.01				0.12				0.07	4.83	2400	
																										T				T	EDT		
FOREST GLEN TERRY	0.02				0.82	0.09					0.54	0.71				1.71	0.63	T			T					0.04	0.01			0.02	4.59	2400	
																															0.0	EDT	
ROCKVILLE 1NE WASH GAS LIGHT	T					0.84	T			T	0.71	0.58	T			1.62	0.66		0.02		0.02	T				0.06	0.02			0.05	4.58	2400	
																										T					0.0	EDT	
SOUTH BOWIE HUDELSON	0.01				0.64	0.26					0.52	0.72	0.03			1.60	0.68		T		T	T				0.01	0.05			0.06	4.58	2400	
																															0.0	EDT	
OXON HILL SMITH	0.01			T	0.27	0.64					0.66	0.73	0.02		T	1.20	1.02		0.01		0.01	0.01				0.01	0.03			0.15	4.77	2300	
																															0.0	EDT	
HOLLYWOOD ABELL	0.01			0.03	0.72	0.14					0.81	0.96	0.13			0.99	0.95				0.06	0.01					0.03			0.03	4.87	2359	
																															0.0	EDT	
ORAVILLE VAN WIE	0.01			0.04	0.74	0.17					0.49	1.08	0.11			0.95	0.83				0.06	0.01				0.01	0.03			0.05	4.58	2400	
																															0.0	EDT	
RIDGE ZYLA				0.04	0.55	0.22				T	0.66	0.88	0.38			0.92	0.68		T		0.36	0.02								T	4.71	2400	
																															0.0	EDT	
HAGERSTOWN 1E KEEFER					0.69	0.03	T			T	0.29	0.71				0.60	0.52		0.03		0.59	0.01	T			0.12	0.04			T	3.63	2400	
																			T			T	T			0.3	0.2			T	0.5	EDT	
SMITHSBURG 2 NE VAUGHN	0.02				0.63	0.35				T	0.45	0.84				0.41	0.83		0.05	0.01	0.66	0.02				0.14	0.04			0.08	4.53	2000	
																						T				1.2	0.3			T	1.5	EDT	
SALISBURY NWS WICOMICO CO APT				0.06	0.38	0.62				T	0.29	0.96	0.33			1.36	0.70				0.85	0.23					0.01			0.01	5.80	2400	
																															0.0	EST	
HANOVER 2 S, PA RICKELL																																	2100
																																EDT	
WASH NATIONAL NWS ASOS	T			T	0.69	0.13	T				0.60	0.67	T		T	1.64	0.53	T	T		0.01	T				0.01	0.01			0.05	4.34	2400	
																															0.0	EST	
WASH DULLES NWS ASOS	T				0.76	0.04				0.01	0.53	0.54			T	1.44	0.60		0.01		0.13	0.01				0.02	0.01			0.04	4.14	2400	
																															0.0	EST	