

**U. S. DEPARTMENT OF COMMERCE**  
SINCLAIR WEEKS, Secretary  
**WEATHER BUREAU**  
F. W. REICHELDERFER, Chief

# **CLIMATOLOGICAL DATA**

**MARYLAND AND DELAWARE**

**ANNUAL SUMMARY 1954**

**Volume LVIII No. 13**



## WEATHER SUMMARY

## GENERAL

The visit of hurricane "Hazel" on October 15 climaxed the 1954 weather story for the Maryland-Delaware Section. The storm spread death and destruction along its path, and will not be soon forgotten. All in all, seven lives were lost in Maryland and Delaware in 1954 as a result of weather factors; property damage amounted to \$41,000,000, and crop losses totaled \$860,000.

The year was marked by pronounced temperature fluctuations that saw a particularly cold May following near-record warmth in April, and a spring-and-summer drought which was broken by timely rains in August just in time to prevent agricultural disaster. The only new record set during the year was the Delaware precipitation average for June; the 0.95 inch average for the month replaced the old record low average set in 1949. High temperature records were approached in February and April, and precipitation averages in February were near the record low, but the old records in these instances remained intact. Exceptionally heavy and frequent snowfalls in January made for a snowy month, but this was the only month of the year that could qualify as such.

## TEMPERATURE

The pattern of large-scale fluctuations from month to month which was established during the closing months of 1953 continued until early summer of this year. This variable period was featured by the exceptionally high averages of February and April, being the second warmest April and third warmest February on record for Maryland, the the third warmest February and fourth warmest April on record for Delaware. The intervening months were mostly near the long-term averages, but seemed chilly by comparison with the exceptional warmth of the other months. Averages in May, however, wound up well below the long-term figures to place the month within the coldest quintile for May. The temperature advance of only 3.2° over the April figure for the Section was quite unusual when compared with the 10.4° advance that is experienced on the average. After a warm June, the summer months were more nearly normal. Maximum temperatures reached 100° or higher during each month from June to September in Maryland, but only in July in Delaware. The highest temperature for the year occurred in July in both states, being 105° at six different stations in Maryland on several days of the month, and 103° at Newark College Farm, Del., on the 31st. September and October were warm, October decidedly so, as it was the sixth warmest on record and the warmest since 1949 for both states. The average temperatures for October might have been even higher except for the seasonal advent of cool air during the latter part of the month, drawn southward in the circulation

following the passage of Hurricane "Hazel". This cool weather extended into November, and closed the autumn season with averages below the long-term figures, and a reminder that winter was still ahead. December averages were close to the normal, and were somewhat colder than Decembers of recent years.

Because of the pronounced temperature fluctuations, the annual averages for both states turned out to be closer to the long-term figures than were those of 1953. Delaware averages ranged from 54.3° at Wilmington Porter Reservoir to 57.2° at Dover, while Maryland averages ranged from 47.7° at Bittinger 2 NW to 59.4° at Crisfield. The lowest temperatures for the year occurred in January, being -14° at Oakland, Md., and -2° at Newark College Farm, Del., on the 18th. Sines Deep Creek, Md., in the Garrett County mountains, had the greatest number of days with minimum temperatures of 0° or below: 5. At the other end of the scale, Waldorf Police Brks, Md., took the prize for the greatest number of days with maximum temperatures 90° or higher: 56.

## PRECIPITATION

The year opened on a note of precipitation deficiency. Although this condition was alleviated to some extent by good amounts early in March, the return to smaller totals during April in Maryland and May in Delaware continued through July. The climax was reached in June, when the Delaware average set a new record for the month, breaking the previous record low figure of 1.07 inches set in 1949, and the Maryland average was second only to the record low average of 1.58 inches set in 1898. This dry weather, combined with the usual warmth of the summer, brought about drought conditions which caused considerable concern. The drought was broken by timely rains in August which were frequent and not often heavy, but was re-established in September in Maryland. Precipitation from the offshore passage of hurricane "Edna" eased the drought situation in the Coastal areas in September, and hurricane "Hazel" did the same for the westernmost counties of Maryland in October. Precipitation amounts in November and December were not far distant from the usual figures for that time of the year in both states.

For the year as a whole, precipitation totals in Garrett, Allegany, and the western portion of Washington Counties, Md., were a little above normal, in Sussex County, Del., they were a little below normal, and in the rest of the Section they were appreciably below normal. Of the Maryland stations for which normals have been established, Cumberland had the greatest percentage of normal precipitation, 121%, closely followed by Westernport with 120%. On the other hand, Baltimore WB Airport and Fort George G. Meade tied with only 66% of normal precipitation. Bridge-

## WEATHER SUMMARY (Continued)

ville 1 NW, Del., had the greatest percentage of normal precipitation in that state with 97%, while Newark College Farm, with 73%, had the least. The precipitation totals ranged from 31.67 inches at Newark College Farm to 42.85 inches at Milford in Delaware, and from 26.98 inches at Middle River to 53.87 inches at Oakland 1 SE in Maryland. The greatest daily precipitation amounts were 3.57 inches at Lewes, Del., on September 11, and 5.58 inches at Savage River Dam, Md., on October 16.

### SNOWFALL

January was the month of greatest snowfall in several years. For Maryland, this month had the greatest amount of snow of any month since February 1947, and the greatest January amount since 1940. For Delaware, it was the snowiest month since the heavy falls in January and February 1948. Thereafter, until December, snow was conspicuous by its absence, and was confined principally to the western Garrett County mountains. Snow returned throughout the Section in December, but the only appreciable falls were, again, in the western mountain country, and in southern Delaware. The annual averages for the two states were considerably below the long-term figures, being 14.4 inches for Maryland (57% of the long-term average), and 11.3 inches for Delaware (65% of the long-term average). The snowfalls of January and December were well spaced, and caused little interference with transportation. The greatest reported depths on the ground were 9 inches at Newark College Farm, Del., on January 11, and 14 inches at Bittinger 2 NW, Md., on December 21 and 22. The greatest annual totals were 17.2 inches at Lewes, Del., and 98.8 inches at Bittinger 2 NW, Md.

### UNUSUAL PHENOMENA

The passage of hurricane "Hazel" through the western portion of Maryland on October 15, with its area of destruction blanketing the entire Section, paled all else to insignificance. A description of this storm is contained in the October issues of this publication and of the "Climatological Data, National Summary". Suffice it to say that this storm was responsible for the loss of six lives in Maryland and Delaware, plus an indeterminate number of injuries. Property losses amounted to approximately \$40,000,000 and crop losses to \$360,000 in this Section.

The violence of Nature resulted in one additional death and two reported injuries during the year, all in Delaware in April. Hail was reported in April, May, and July in Maryland, and in April and May in Delaware. Tornadoes occurred in both states in July. Considering all storms aside from "Hazel", property losses ran to \$1,000,000, and crop losses to \$500,000.

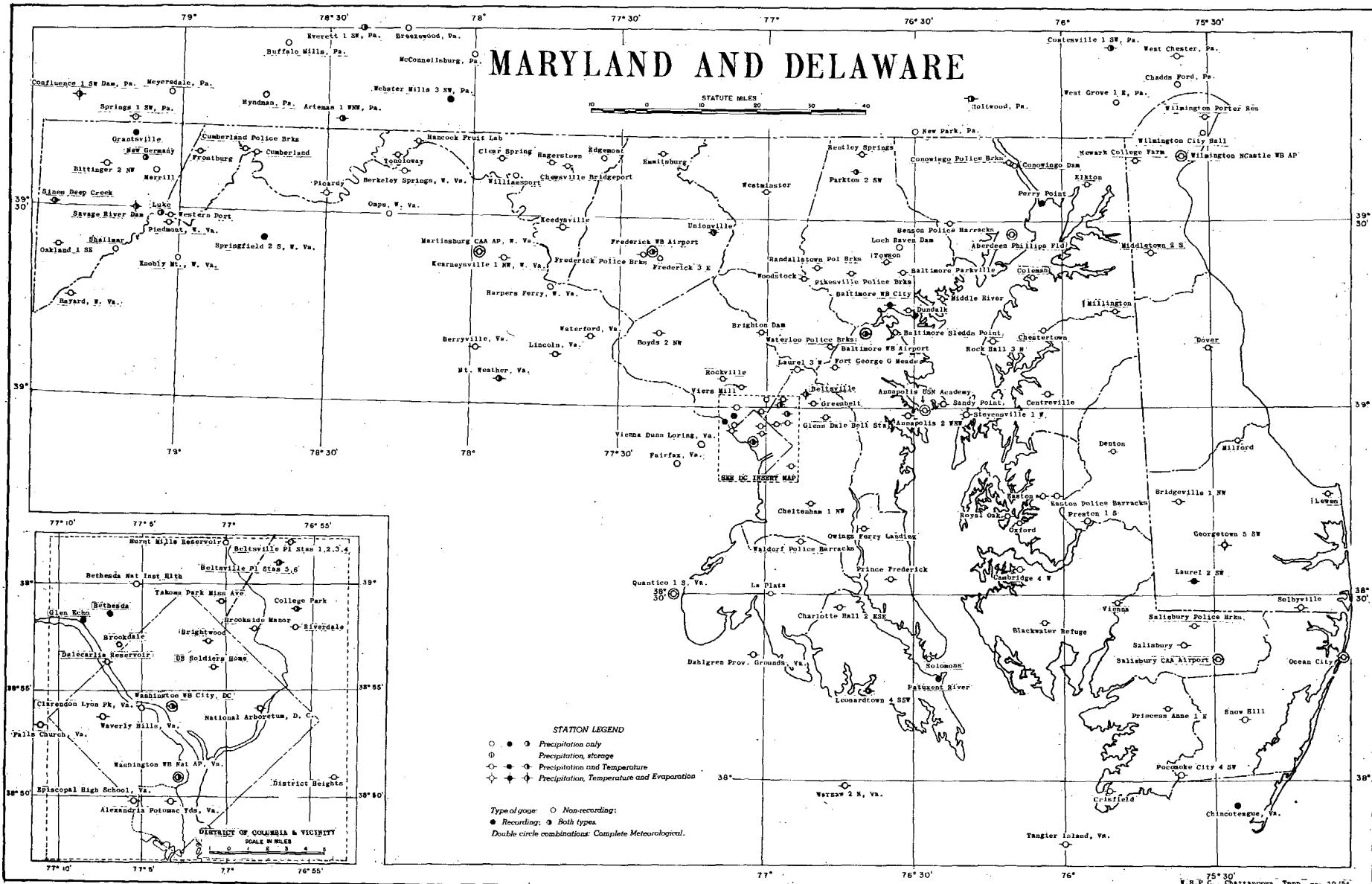
### FLOODS

There was occasional local temporary flooding resulting from heavy showers, but the only floods of consequence were in western Maryland in October associated with hurricane "Hazel". There, floods were at record height for some stations with short periods of record, and at near-record height for others in the upper reaches of the Potomac River.

### CROPS

The excessive warmth of February caused some concern to fruit growers, who feared that the orchards would awaken from their winter dormancy too soon. Pastures and winter grains showed some growth in March, and orchard spraying was started. Crops made good growth in April, with winter and spring grains up to good uniform stands. There was a little frost damage to early strawberries and peaches in April, but the bulk of the crop came through unscathed, and bloomed on schedule. Pastures made remarkable growth in April. The unusually cold weather in May resulted in poor germination of corn and soybeans, and considerable replanting of corn was necessary. Rainfall during the month was light but frequent, and hampered field activities. Pastures, hay, and small grains responded well to the weather of May. Fruit and other truck crops made good growth during the month. Drought began in June, and affected all of Delaware and most of Maryland by the end of the month. Conditions, however, were favorable for the harvest of winter grains. Pasture growth ceased during the month, and hay, truck, and tobacco were adversely affected. June weather, however, was favorable for fruit growers, and the harvest of early varieties began during the month. Drought continued through July, reducing pastures to the poorest condition in 24 years, and all truck and fruit crops took a turn for the worse. Precipitation in August broke the drought, and improved pastures considerably to near normal by the end of the month. Truck crops had their peak harvest during August, and tobacco improved considerably, and cutting became general by the end of the month. September weather conditions were favorable for agriculture; hay making was active, and good progress was made in the harvest of truck and fruit crops. With the exception of the effects of hurricane "Hazel", conditions remained favorable for agriculture in October; the storm rains revived pastures that had deteriorated under dry weather earlier in the month. The corn harvest was completed in November under good weather conditions. The planting of winter grains and cover crops continued during November, and earlier planted grains made good progress. The year closed with small grains and pastures in fair to good condition, with adequate topsoil moisture.

Details of each month's weather may be found in the individual monthly issues of this publication. - Harold S. Lippmann



Hourly precipitation data from recorder stations will be available in the publication "Hourly Precipitation Data".

**AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL**

MARYLAND AND DELAWARE  
1954

Table 1

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual														
	Temperature	Departure																																					
<b>MARYLAND</b>																																							
ABERDEEN PHILLIPS FLD	32.6	+3	39.9	-	6.5	41.5	-	+8	56.1	+4	60.4	-	2.0	71.7	+3	76.2	+6	73.3	-	+5	69.2	+1	59.6	3.4	43.9	-1.6	36.1	1.0											
ANNAPOLIS U S N ACADEM	35.2	+8	42.0	-	7.1	43.3	-	+1	57.2	+4	61.2	-	1.2	73.6M	+4	77.7	+4	75.3	-	+5	72.1	+2	61.3	3.2	46.3	-1.8	37.0	-1.1	57.0	1.4									
ANNAPOLIS 2 WNW	36.0M	-	40.9	-	4.3	43.3M	-		56.7	-	59.9M	-	7.1	75.8	-	74.0	-	70.8	-		59.7M	-	44.7	-	36.7	-	55.8												
BALTIMORE SLEDS PT	35.2	-	42.6M	-	4.5	40.0	-		58.4	-	62.1	-	7.0	78.0	-	75.3	-	71.7	-		62.1	-	49.9	-	36.6	-	57.2												
BALTIMORE WB AIRPORT	33.0	-	1.2	40.9	5.9	41.9	-	+1.3	57.1	+7	60.3	-	2.1	72.4	+2	76.6	+3	73.2	-	+2	70.2	+3	59.6	3.1	43.4	-2.2	35.0	-1.7	55.3	.									
BALTIMORE WB CITY	36.7	+1	44.6	-	7.5	45.5	-	+2	60.2	+5	63.8	-	+1.5	75.2	+9	80.2	+1	76.3	-	+1	73.7	+3	63.2	3.9	47.1	-1.6	37.6	-1.2	58.7	1.6									
BALTIMORE PARKVILLE	M	40.9M	-	42.6M	5.6	58.8	-		56.8	-	60.7M	-	7.2	76.4	-	73.8	-	70.1	-		60.4	-	44.8M	-	M	-	36.8												
BELTSVILLE	31.8	-	1.6	38.9	5.3	41.6	-	+1.0	55.9	+3	59.0	-	+3.1	70.2	+7	74.4	+4	72.2M	-	+1	69.0	+2	59.3	3.9	42.1	-3.3	34.0	-1.1	54.0	.									
BELTSVILLE PLANT STA 1	31.2	38.4	-	41.1	5.5	55.4	-		55.8	-	58.1	-	6.6	71.6	-	68.4	-	65.2	-		59.2	-	42.1	-	33.6	-	53.6												
BELTSVILLE PLANT STA 2	31.1	38.2	-	41.2	5.9	55.1	-		58.5	-	69.7	-	7.3	71.5	-	67.8	-	63.6	-		58.6	-	41.6	-	34.0	-	53.4												
BELTSVILLE PLANT STA 3	32.5	39.7	-	42.5	5.6	56.7	-		59.6	-	61.6	-	7.1	75.0	-	72.5	-	69.0	-		60.0	-	42.9	-	35.0	-	54.7												
BELTSVILLE PLANT STA 4	31.8	39.3	-	41.0	5.6	56.3	-		59.3	-	60.9	-	7.1	75.0	-	72.6	-	66.9	-		60.4	-	42.8	-	35.6	-	54.7												
BELTSVILLE PLANT STA 5	31.4	38.3	-	41.6	5.5	56.5	-		58.6	-	67.7	-	7.1	75.6	-	72.5	-	68.5	-		58.7	-	41.6	-	35.8	-	55.1												
BELTSVILLE PLANT STA 6	32.7	40.0	-	42.9	5.7	57.1	-		60.0	-	67.0	-	7.2	75.6	-	72.9	-	69.6	-		60.5	-	43.3	-	35.3	-	55.1												
BENSON POLICE BARRACKS	32.0	+8	40.0	-	8.2	42.0	-	+1.5	56.2	+9	59.7	-	2.0	71.0M	+1	75.0	+7	73.2	+8	68.6	2.1	58.6	3.4	42.7	-1.4	34.1	-1.1	54.5	1.7										
BENTLEY SPRINGS	30.7	38.5	39.7	42.5	5.6	54.7	58.6M	69.6M	72.6	70.3	66.8M	58.1M	40.4	32.5M	52.6	56.8	3.1	59.2	43.0	36.1	36.1	36.0	40.4	3.6	47.7		37.0	1.4											
BETHESEDA NAT INST HLTH	36.7	42.2	43.5	42.8	5.8	58.4M	61.3	72.5	75.9	72.8	69.6	59.2	43.0	36.1	56.1	53.8	52.6	56.8	59.2	3.1	59.3	43.0	36.1	36.1	36.0	40.4	3.6	47.7											
BITTINGER 2 N W	27.9	33.2	34.1	32.5	5.2	52.5	52.7	64.7	67.1M	65.0	61.7	51.1	34.0	26.1	36.0	56.1	53.8	52.6	56.8	59.2	3.1	59.3	43.0	36.1	36.1	36.0	40.4	3.6	47.7										
BLACKWATER REFUGE	35.3	-	2.1	43.8	6.8	46.2	47.1	51.1	56.2	-	1.6	70.2	+4	75.4	+5	74.3	+1	71.1	+2	64.8	5.5	46.7	-3.3	37.0	-1.1	57.5	1.4												
BOYDS 2 NW	33.6	-																																					
BRIGHTON DAM	33.8	40.2	42.3	43.1	5.7	51.1	59.5	69.4	70.4	73.0	70.9	67.4	46.6	35.0	32.5M	32.5	34.9	35.0	32.5	34.9	35.0	32.5	34.9	35.0	32.5	34.9	35.0	32.5	34.9	35.0									
BRIGHTWOOD DC	34.6	41.7	42.4M	42.7	5.8	58.8M	62.1	74.6M	78.3M	75.1	71.9	61.9	44.7	36.3M	36.3	40.0	41.9	36.3	40.0	41.9	36.3	40.0	41.9	36.3	40.0	41.9	36.3	40.0	41.9										
CAMBRIDGE 4 W	36.6	+5	43.1	6.0	45.3	58.6M	61.9	70.2	77.2M	72.4	67.2	59.2	46.4	36.1	32.5	32.5	34.8	36.1	32.5	34.8	36.1	32.5	34.8	36.1	32.5	34.8	36.1	32.5	34.8	36.1									
CENTREVILLE	35.6	42.3	42.9	44.9	5.7	51.7	61.8	72.4	74.9	74.9	72.7	68.9	44.2	36.0	32.6	32.6	34.9	36.0	32.6	34.9	36.0	32.6	34.9	36.0	32.6	34.9	36.0	32.6	34.9	36.0									
CHARLOTTE HALL 2 ESE	36.9	3.1	44.6	9.5	46.3	46.3	51.3	59.8	57	62.0	-	+3	72.2	+5	76.8	+4	74.5	+7	71.5	+2.5	61.5	3.6	44.9	-2.4	37.3	-1.1	57.3	1.6											
CHELTNHAM 1 NW	34.2	-	4.3	40.6	8.3	42.8	57.7	60.1	64.0	70.4	73.0	76.0	2.7	73.6	-	73.0	-	70.0	-	1.6	61.0	3.9	42.5	-3.6	35.2	-1.8	55.4	.4											
CHESTERTOWN	34.2	1.1	42.0	6.8	43.4	43.4	57.6	62.8	65.2	70.1	74.8	73.1	61.9	44.7	36.3	32.6	32.6	34.8	36.3	32.6	34.8	36.3	32.6	34.8	36.3	32.6	34.8	36.3	32.6	34.8	36.3								
CHESTERVILLE BRIDGEPORT	33.8	-	3.9	39.4	10.8	41.2	57.2	62.4	65.1	70.8	74.4	73.1	61.8	44.7	35.4	32.2	32.2	34.8	35.4	32.2	34.8	35.4	32.2	34.8	35.4	32.2	34.8	35.4	32.2	34.8	35.4								
CLEAR SPRING	33.0	1.0	42.1	6.8	43.4	43.4	57.7	61.8	65.0	70.8	74.4	73.1	61.8	44.7	35.4	32.2	32.2	34.8	35.4	32.2	34.8	35.4	32.2	34.8	35.4	32.2	34.8	35.4	32.2	34.8	35.4								
COLEMAN	34.6M	8	42.4M	8.6	44.8M	1.1	59.2	62.4M	65.2	70.2	74.6	73.3	61.6	44.7	35.4	32.2	32.2	34.8	35.4	32.2	34.8	35.4	32.2	34.8	35.4	32.2	34.8	35.4	32.2	34.8	35.4								
COLLEGE PARK	42.6M	7.8	44.4M	-	+4	58.8	51.6	61.4	-	+1.8	72.7	1.1	76.7	1.0	74.2	-	+2.0	70.8	2.7	59.8	3.4	42.7	-2.7	35.7	-	4.0													
CONDOWINGO DAM	30.9	+9	38.6	7.1	40.9	+3	55.7	51.6	60.1	+2.5	71.6	+9	75.1	+5	72.4	+1	70.8	+1.8	68.3	3.8	42.5	+1.5	35.9	-	55.1	.2	54.0		1.2										
CONDOWINGO POLICE BRKS	32.5M	40.1M	-	42.7	4.7	56.2	60.7	71.7M	-		75.7	-	73.6	-	70.5	-	69.5	-	60.0M	4.8	42.8	+3.4	35.8	-1.1	55.1	1.5	54.0		1.2										
CRISFIELD	37.7	-	4.6	43.8	4.6	45.4	+3	59.3	3.5	65.0	-	+8	75.2	+6	76.9	+6	74.7	+7	73.8	+1.5	64.7	3.4	48.8	+2.1	39.8	-1.1	59.4	1.5	54.0		1.2								
CUMBERLAND	31.4	-	4.0	42.6	10.0	49.8	-		58.6	-	62.6	-	7.5	74.0	-	71.3	-	67.3	-	65.7	1.3	56.5	1.3	55.1	1.5	54.0	1.5	53.5	1.5	53.8		1.5							
CUMBERLAND POLICE BRKS	30.4M	-	4.0	42.6	9.9	49.0	-		59.6	-	62.4M	-	+1.8	72.3	+2	76.2	+1	74.0	+2	71.7	+1	68.7M	3.6	42.4	+2.1	37.3	-1.7	56.8	1.5	55.1	1.5	54.0	1.5	53.5		1.5			
EASTON POLICE BRKS	37.0M	2.0	43.4	8.1	B1	44.7M	+3	59.0M	5.6	62.0	-	+1.8	74.6M	2.1	77.5M	-	71.8M	2.9	62.5	+4.8	43.2	+2	38.1	1.0	55.1	5.4	54.1		1.0										
EKTON	32.0	-	4.6	40.3	1.2	42.6	5.2	56.0	4.2	61.8	-	+2.2	72.5	+7	76.2	+3	74.2	+1	69.2	1.2	59.3	3.6	43.3	+2.5	38.3	4.2	55.2	1.0	54.0		1.0								
FREDERICKSBURG	32.0	-	3.2	39.7	1.4	41.4	5.4	57.0	5.1	61.4	-	+2.1	72.7M	2.5	75.4M	+2	74.6M	+3	71.7M	+4	67.7M	1.4	59.2	3.6	43.4	+3.0	38.3	4.2	55.2	1.0	54.0		1.0						
FREDERICK POLICE BRKS	32.5M	-	1.0	40.2	6.9	43.0	+4	57.9	5.1	62.2M	-	+1.5	73.6	+1	76.5	+1	74.6	+2	72.5	+3	68.5M	4.6	43.1	-2.4	38.1	-	55.8	.4	54.0		1.0								
FREDERICK																																							

AVERAGE TEMPERATURES AND DEPARTURES FROM NORMAL

MARYLAND AND DELAWARE  
1954

Table I—Continued

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual		
	Temperature	Departure																									
<b>DELAWARE</b>																											
BRIDGEVILLE 1 NW	35.4	+0	42.3	6.9	44.3	M	57.3	M	43	61.4	- 1.9	71.7	+2	74.9	- 1.0	72.8	- 1.4	69.0	+4	60.9	3.5	45.3	- 1.5	37.4	+0	56.1	+8
DELAWARE CITY REEDY PT	33.5M	+4	41.2	7.2	43.8	M	58.1	M	43.8	62.1	- 1.6	73.5	1.0	77.4	+8	75.6	+9	70.6	+8	61.9	4.4	45.6	- 9	37.7	+7	57.2	1.8
DOVER	33.5	+3	43.8	8.8	44.8	1.4	57.9	4.7	47	62.1	- 1.6	73.5	1.0	76.2	7.2	70.2	61.9	4.4	45.6	- 9	37.5	56.7					
GEORGETOWN 5 SW	36.0	43.0	44.4	57.6	45.4M	57.2	61.8M	57.6	57.2	60.6M	72.4M	77.6M	74.8M	68.9M													
LAUREL 2 SW	35.9	42.4																									
LEWES	36.1	42.4	43.7	56.9	43.7	56.9	56.9	60.9	56.9	71.0	74.9	72.5	69.3	61.7	61.7	61.7	61.7	61.7	61.7	45.8	37.9	56.1					
MIDDLETON 2 S	32.4	41.1	42.9	7.1	44.9	+2	58.1	4.5	62.3	- 1.8	72.8	+5	76.1	- 7	73.7	- 1.4	68.8	+5	61.2M	3.0	45.5	- 2.1	37.3	+8	56.6	+6	
MILFORD	35.8	- 1.1	42.9																								
MILLSBORO	36.9M	1.0																									
NEWARK COLLEGE FARM	32.2	1.2	39.8	9.8	42.5	1.4	55.4	4.3	50.2	- 1.9	71.6	1.7	76.0	1.0	73.4	+7	68.2	1.8	59.6	4.2	43.0	+7	35.0	1.8	54.8	2.2	
SELBYVILLE																											
WILMINGTON NCASTLE WB AP	31.3	- 2.0	40.6	6.7	41.5	- 1.0	57.3	6.1.3	57.3	60.6	- 2.2	72.0	76.3	74.0	69.5	61.8	65.7	39.1									
WILMINGTON PORTER RESV	31.1	- 1.6	40.1	7.5	41.0	- 1.3	54.7	2.6	59.8	- 3.2	71.1	- 2	75.7	- 1.3	72.2	- 1.8	67.7	- 4.4	59.6	3.6	43.8	- 1.7	35.1	+0	54.8	+2	
STATE AVERAGE	34.3	- 8	41.7	6.8	43.6	+0	56.7	3.9	61.0	- 2.2	72.1	+5	76.1	.0	73.6	- 8	69.1	+6	60.9	2.3	44.7	- 2.0	36.6	+2	55.9	+8	
SECTION AVERAGE	34.1	+3	41.1	7.2	42.8	+3	57.4	4.9	50.6	- 2.2	72.0	1.0	75.9	+5	73.4	+1	69.8	2.1	60.2	3.6	43.8	- 1.6	35.6	+1	55.6	1.4	

## TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL

 MARYLAND AND DELAWARE  
1954

Table 2

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual	
	Precipitation	Departure																								
<b>MARYLAND</b>																										
ABERDEEN PHILLIPS FLD	1.55	-1.60	.53	+2.17	3.64	+.41	1.82	-1.54	2.40	-1.17	.15	+4.43	2.30	-1.90	4.83	+.25	1.71	-1.63	2.61	+.07	2.91	+.10	2.86	+.19	27.37	-12.48
ANNAPOLIS U S N ACADEM	1.62	-1.75	.78	+2.43	4.07	+.37	4.03	-.38	3.42	-.62	.90	+3.13	2.41	-2.00	4.59	+.07	.71	-3.08	2.80	-.36	3.01	+.19	2.76	-.58	31.10	-12.94
ANNAPOLIS 2 WNW	2.89		1.20		4.66		3.99		3.28		.84		2.17		5.20		1.35		3.60		3.31		3.30		E33.85	
BALTIMORE SLEADS PT	.96		1.02		3.24		3.93		2.11		.35		1.40		3.49		1.64		3.24		2.78		2.69		27.05	
BALTIMORE WB AIRPORT	2.02	-1.64	1.21	+1.78	3.96	+.33	2.07	-.65	1.19	-.45	.37	+3.37	1.77	-2.17	4.10	-.28	1.16	-2.30	2.42	-.54	2.72	-.23	27.89	-14.70		
BALTIMORE WB CITY	1.64	-1.82	1.07	-1.92	4.45	-.82	3.04	-.68	2.72	-.29	.37	+3.15	2.18	-1.76	4.34	-.04	1.50	-1.87	3.32	-.05	2.67	-.20	3.04	-.12	1.13	
BALTIMORE PARKVILLE	1.75	1.10	4.35	2.75	2.90		2.22		2.57				5.20		2.21		4.08		3.05		2.92		E35.10			
BELTSVILLE	1.84	-1.45	.85	+1.48	3.59	+.10	3.32	+.18	2.68	-1.61	3.17	-.14	3.26	-1.85	4.86	-.15	1.21	-2.55	3.31	-.10	2.30	-.75	2.62	-.25	32.11	-9.85
BELTSVILLE PLANT STA 1	2.07		.84	3.42	3.29		2.33		2.81		2.27		5.30		1.10		3.38		2.28		2.76		3.19		E31.91	
BELTSVILLE PLANT STA 2	1.70		.89	3.37	3.00		2.05		3.03		2.17		5.38		1.21		3.05		2.19		2.59		3.05		30.65	
BELTSVILLE PLANT STA 3	2.25		.90	3.21	3.45		2.27		3.09		2.51		5.93		1.30		3.08		2.26		2.63		32.88			
BELTSVILLE PLANT STA 4	1.89		.92	3.28	3.27		2.10		3.01		2.29		5.95		1.38		3.06		2.14		2.65		31.74			
BELTSVILLE PLANT STA 5	1.78		.90	3.54	3.44		2.19		3.14		2.36		5.48		1.24		3.45		2.35		2.70		32.63			
BELTSVILLE PLANT STA 6	1.63		1.63	3.49	3.43		2.39		3.21		2.27		5.73		1.21		3.40		2.22		2.72		32.92			
BENSON POLICE BARRACKS	1.09	-1.68	1.58	-1.72	4.35	+.82	2.93	-.68	2.76	-.17	.46	+3.52	2.65	-1.77	5.19	+.32	1.50	-2.45	2.34	-.89	3.13	-.10	3.39	-.05	E32.61	-12.79
BENTLEY SPRINGS	1.34		1.31	3.90	2.50		3.74		2.93		.55		2.23		3.87		1.46		4.22		2.92		3.28		31.32	
BETHESDA NAT INST HLTH	1.78		.97	3.87	3.49		2.17		1.90		2.72		3.05		1.06		3.81		1.64		2.78		33.46			
BITTINGER 2 N W	2.95		1.85	4.76	2.48		3.16		6.07		2.11		9.94		3.58		9.51		2.54		4.14		53.10			
BLACKWATER REFUGE	4.08		.71	1.95	-4.47	3.64	-.08	3.04	1.30	2.61	-.25	2.74	-3.55	4.43	+.91	2.68	-6.63	2.01	+.88	3.31	-.23	2.59	-.84	35.28	-8.96	
BOYDS 2 NW																										
BRIGHTON DAM	1.68		.91	3.01	3.10		3.04		2.8		1.79		4.99		1.53		3.98		1.98		2.92		2.09		29.21	
BRIGHTWOOD DC																										
BROOKDALE	2.57		1.05	4.49	3.56		4.66		2.34		2.65		6.29		1.01		5.44		2.09		3.07		37.97			
BURNT MILLS RESERVOIR	2.48		.82	4.30	3.45		2.80		2.95		2.89		5.91		1.08		4.47		2.26		3.28		37.44			
CAMBRIDGE 4 W	2.37	-1.27	2.04	-1.27	3.54	-.29	4.17	+.56	2.23	-1.40	.64	+3.14	2.08	-4.47	2.48	-2.39	1.99	-1.42	2.50	-.68	3.43	-.14	3.29	-.01	-11.33	
CENTREVILLE	3.20		1.15	3.86	3.26		2.66		1.52		4.34		4.07		1.38		3.31		3.38		2.87		3.40		34.00	
CHARLOTTE HALL 2 ESE	3.25	-+.05	1.16	-1.94	2.45	-.85	2.29	-1.32	3.46	-.21	.68	+1.07	-4.12	4.49	+.73	.85	-2.18	3.70	-.38	2.68	+.05	3.38	+.42	29.46	-11.98	
CHELTENHAM 1 NW	3.65	-.07	1.25	-1.52	3.52	-.13	4.04	-.11	3.10	-.57	3.01	+3.0	5.63	+.70	1.32	-2.07	2.49	-.07	2.43	-.55	3.16	-.06	31.90	-12.16		
CHEWTSVILLE BRIDGEPORT	1.05	-1.65	1.49	-1.68	3.36	-.35	2.04	-1.93	4.92	1.00	1.56	+2.44	1.77	-1.88	5.97	+.71	1.02	-1.62	1.65	+.54	1.89	1.10	3.05	+.44	32.19	-4.62
CLEAR SPRING																										
COLEMAN	2.58		.95	3.82	3.77		2.30		.50		3.01		1.99		1.96		2.45		3.32		2.71		7.33		24.02	
COLLEGE PARK	2.55		.76	.92	-2.10	3.63		1.3		2.77		-1.29		4.20		1.40		2.33		3.43		2.41		E31.02	-11.77	
CONOWINGA DAM	1.62	-1.81	1.26	-1.33	4.28	-.80	3.59	-.88	2.88	-.23	.53	+2.94	-1.27	4.20	+.22	1.40	+2.01	2.38	-.01	2.62	-.49	2.52	-.16	E32.43	-9.36	
CONOWINGA POLICE BRKS	1.28		1.03	3.45	3.62		3.59		1.8		2.60		2.20		2.45		2.05		2.65		2.06		3.40		31.17	-13.80
CRISFIELD	4.44		.78	3.22	-2.18	3.74	-.41	4.04	1.17	2.41	-.16	.34	+3.15	2.60	-2.18	7.25	2.70	1.41	-.08	4.54	-.20	4.37	-.17	E37.67	-3.13	
CUMBERLAND	1.41	-1.08	1.14	-1.20	4.63	1.83	2.10	-.86	2.80	-.65	5.57	1.09	4.09	1.49	5.11	1.03	2.88	1.72	2.62	1.30	3.16	1.09	E42.05	7.41		
CUMBERLAND POLICE BRKS	2.01		1.12		4.88		2.16		3.49		3.46		3.21		3.60		2.80		3.24		2.29		E41.81			
DALECARLIA RESERVOIR D	2.10		1.10		3.91		2.06		2.85		2.00		2.43		5.98		1.18		4.42		1.76		3.12		E35.91	
DENTON	3.32		.05	1.65	-1.38	4.48	+.88	4.90	1.55	3.13	-.58	1.71	-2.10	3.44	+.22	2.79	-.69	3.17	1.11	3.46	+.37	E40.47	-2.05			
DISTRICT HEIGHTS	3.36		.91	3.78	3.63		3.44		2.82		.92		2.25		3.54		.73		4.41		2.39		2.63		31.99	
DUNDALK	2.19		1.10	3.90	3.43		2.00		.80		2.27		3.23		4.39		1.89		3.23		3.11		2.57		30.70	
EDGEMONT	3.53		1.49	4.07	4.45		2.67		1.68		1.83		1.86		3.47		1.99		2.14		3.35		3.34		33.09	
ELKTON	2.26	-1.13	1.38	-1.53	4.22	-.23	4.05	-.61	2.85	-.23	.23	+2.88	1.58	2.78	5.62	2.25	1.79	-1.88	3.52	-.35	4.13		32.76	-12.98		
EMMITSBURG	2.66	-2.61	1.74	-1.27	3.56	-.62	2.98	-.64	6.64	0.15	1.15	1.38	2.92	1.73	5.87	1.70	1.47	-2.22	4.79	1.24	2.39	-.04	22.59	-.23	E33.29	-11.07
FORT GEORGE G MEADE	3.20	-+.53	1.10	-1.69	3.77	-.02	2.97	-1.73	2.18	-2.86	3.1	+2.23	1.74	-2.19	4.30	-.71	1.84	-2.65	3.91	-.57	2.63	-.86	28.88	-.23	E37.53	-15.08
FREDERICK POLICE BRKS	1.79	-1.36	1.03	-1.83	2.87	-.50	3.22	-1.30	3.02	-1.75	3.65	-2.38	3.67	-1.24	5.16	1.29	2.48	-2.26	3.28	1.28	2.53	-.53	31.03	-9.13		
FREDERICK WB AIRPORT	1.10	-1.78	1.41	-1.17	3.40	-.31	3.24	-.26	3.48	-.12	1.45	-2.51	2.73	-.92	5.59	1.56	.99	-2.57	2.85	-.44	1.78	-.07	3.48	-.10	31.10	-9.13
FREDERICK 3 E	1.50		1.51		3.29		3.32		4.61		1.89		3.05		5.48		.96		3.57		1.87		3.77		34.82	
FROSTBURG	2.19	-1.15	.83	-1.76	4.86	1.21	2.12	-.63	2.79	-1.30	5.31	1.55	3.48	2.31	2.81	2.31	1.41	2.87	2.27	2.31	2.43	2.74	3.54			
GLENN DALE BELL STA	2.46	-1.15	1.05	-1.76	4.15	1.71	3.57	1.42	4.05	1.05	1.50	-2.47	1.69	-2.60	3.											

**TOTAL PRECIPITATION AND DEPARTURES FROM NORMAL**

MARYLAND AND DELAWARE  
1954

Table 2—Continued

Station	January		February		March		April		May		June		July		August		September		October		November		December		Annual		
	Precipitation	Departure																									
WATERLOO POLICE BRKS	2.26		1.34		4.00		4.22		3.42		5.19		1.18		4.97		3.68		2.93		4.02		3.40		33.15		
WESTERN PORT	1.20	-1.53	1.95	-1.35	5.98	2.97	1.88	-1.24	2.46	-1.21	5.19	1.20	2.48	-1.23	6.39	2.68	6.96	4.37	2.71	.62	3.60	1.15	E43.45	7.26			
WESTMINSTER	1.98	-1.23	1.46	-1.45	4.05	.28	3.37	-1.08	3.99	.23	4.43	-3.67	3.91	-1.11	5.67	1.07	2.08	-1.67	4.07	.77	2.54	-.48	3.35	1.17	36.91	6.17	
WILLIAMSPORT	1.29	-1.36	1.04	-1.28	3.73	.42	1.89	-1.26	2.17	-1.97	3.37	-1.08	2.57	-1.53	6.25	2.17	2.20	-1.58	4.97	1.42	1.53	-1.20	3.14	-.01	34.4	4.59	
WOODSTOCK	1.59	-1.70	1.24	-1.75	3.50	.03	3.53	.25	2.62	-.90	.27	-3.53	2.07	-1.86	4.41	.27	1.55	-2.02	4.05	.94	2.29	-.99	3.27	.24	30.55	-10.70	
STATE AVERAGE	2.54	-.82	1.26	-1.61	3.87	.26	3.40	-.11	2.88	-.87	1.73	-2.22	2.45	-1.80	5.03	.60	1.87	-1.51	3.76	.78	2.58	-.17	3.10	-.07	34.45	7.54	
<b>DELAWARE</b>																											
BRIDGEVILLE & NW	2.66	-.95	1.65	-1.61	4.34	.53	4.01	.52	3.19	-.03	1.63	-1.90	6.08	.96	5.24	.56	4.63	1.26	1.88	-1.24	3.63	.93	3.34	-.20	42.28	-1.33	
DELAWARE CITY REEDY PTE	1.93		1.20	-1.52	3.44	.15	2.71	-.07	3.31	-.27	1.11	-2.55	1.51	-3.21	5.04	.17	4.01	-.33	2.36	-.54	4.60	1.46	3.30	-.02	37.42	7.02	
DOVER	3.19	-.34	1.49	-1.71	3.75	-.28	3.31	-.27	3.75	-.05	2.52	-.94	4.56	4.77	5.59	1.85	3.93	1.43	3.43	4.01	3.43	4.01	3.43	4.01	34.01		
GEORGETOWN S. SW	3.22		1.41		4.04		3.76		2.52		1.94		2.30		2.92		2.26		4.33		4.38						
LAUREL 2 SW																											
LEWES	3.58		1.24		3.92		5.21		2.16		.42		4.62		5.20		4.50		2.28		4.73		3.58		41.44		
MIDDLETON 2 S	1.51		1.18		4.08		2.66		4.30		.47		1.83		3.44		2.34		2.91		4.31		E 3.52		E32.55		
MILFORD	3.04	-.82	1.57	-1.88	4.12	-.01	4.12	.47	2.37	-1.48	1.08	-2.61	4.19	-.32	6.16	1.12	6.23	2.73	1.62	-1.68	4.05	1.66	3.68	.14	E42.85	-2.68	
MILLSBORO	3.05																										
NEWARK COLLEGE FARM	1.98	-1.17	1.03	-1.95	4.30	.86	2.67	-.78	2.75	-1.86	.56	-3.17	1.48	-3.44	5.04	.69	2.51	-.85	2.47	-.62	3.88	.94	3.00	-.58	E31.67	-11.63	
SELBYVILLE																											
WILMINGTON NCASTLE WB AP	1.71	-1.85	1.82	-1.16	4.03	.42	2.84	-.80	2.38	-1.43	.44	-3.58	1.93	-2.56	5.82	.54	3.39	-.41	2.08	-.91	4.14	1.14	3.14	-.15	33.72	-10.78	
WILMINGTON CITY HALL	2.01	-1.51	1.59	-1.57	3.37	-.22	3.26	-.27	1.81	-1.93	.66	-3.34	1.456	-3.15	7.26	2.33	2.84	-.62	2.17	-.92	4.18	1.09	2.90	-.49	E33.67	-10.60	
WILMINGTON PORTER RESV	2.31	-1.23	1.79	-1.18	4.06	.28	3.84	.02	2.76	-1.02	.72	-3.33	1.18	-3.61	6.41	1.31	2.75	-.87	2.16	-.82	4.34	1.15	2.90	-.40	35.22	-9.70	
STATE AVERAGE	2.58	-1.00	1.43	-1.73	3.93	.07	3.77	.23	2.85	-.84	.95	-2.78	3.06	-1.60	5.11	.27	4.09	-.67	2.23	-.84	4.16	1.15	3.43	-.01	37.59	-6.39	
SECTION AVERAGE	2.54	-.84	1.28	-1.62	3.88	.26	3.43	-.08	2.85	-.88	1.65	-2.27	2.51	-1.78	5.04	.56	2.11	-1.27	3.59	.60	2.74	-.04	3.13	-.07	34.75	7.45	

Table 3

## TEMPERATURE EXTREMES AND FREEZE DATA

Station	Highest Date	Lowest Date	Date	Last spring minimum of						First fall minimum of						Number of days between dates														
				16° or below		20° or below		24° or below		28° or below		32° or below		32° or below		28° or below		24° or below		20° or below										
				Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	Date	Temp.	16° or below								
																						20° or below								
ABERDEEN PHILLIPS FLD	101	7-31	5	1-18	2-13	8	2-13	8	3-5	23	4-4	5	32	11-1	8	28	12-4	4	21	12-7	20	None	- 297	273	218	210				
ANNAPOLIS U S N ACADEMY	97	6-26	15	1-23	1-23	15	1-23	15	3-4	24	3-7	28	4-4	31	12-2	3	32	12-6	2	22	12-21	18	None	- 311	277	274	242			
ANNAPOLIS 2 NW	100	6-26+	5	1-18	2-13	8	3-7	19	4-10	23	4-10	23	10-8	30	11-1	28	11-1	28	13-4	20	12-8	16	298	272	215	205				
BALTIMORE SLEEDS PT	104	7-14+	7	1-18	2-13	16	2-13	16	3-19	24	3-19	24	5-10	31	10-31	32	11-1	28	12-4	20	12-7	15	297	284	260	227				
BALTIMORE WB AIRPORT	102	7-31	6	1-18	2-13	9	2-13	9	3-29	24	4-4	28	4-10	31	10-31	31	11-7	25	12-3	22	12-4	20	12-7	16	297	284	258	217		
BALTIMORE WB CITY	102	7-31	16	1-23	2-13	16	1-23	16	3-5	24	2-22	28	4-4	28	12-3	31	12-6	21	12-6	20	12-21	18	None	- 311	278	256	243			
BALTIMORE PARKVILLE	102	7-31	-	-	2-13	10	2-13	10	3-22	24	4-4	26	4-10	32	10-31	31	11-8	28	12-12	24	12-21	13	311	311	265	218				
BELTSVILLE	102	8-1	3	1-14	2-14	14	3-7	18	4-2	21	4-13	28	5-5	32	10-8	26	11-1	24	11-11	19	12-4	15	293	249	213	178				
BELTSVILLE PLANT STA 1	102	8-1	2	1-12	3-7	16	4-2	19	4-10	23	4-13	25	5-11	31	10-8	27	11-7	23	11-11	19	12-4	16	272	223	211	150				
BELTSVILLE PLANT STA 2	101	8-1	-	1-12	3	7	14	4-2	19	4-10	22	4-13	26	5-11	31	10-8	27	11-1	23	11-11	18	12-4	15	272	223	205	150			
BELTSVILLE PLANT STA 3	102	8-1	4	1-12+	2-13	6	3-7	20	4-2	23	4-13	28	5-8	30	11-1	25	11-7	24	11-11	18	12-4	18	294	249	219	178				
BELTSVILLE PLANT STA 4	102	8-1	18	2-14	3	6	20	3-22	24	4-4	25	4-13	30	10-31	31	11-1	28	12-3	24	12-4	18	272	223	205	150					
BELTSVILLE PLANT STA 5	100	8-1	-	2-12	3-7	14	4-2	20	4-10	21	4-13	26	5-11	31	10-8	26	11-1	24	11-11	19	12-4	16	272	223	205	150				
BELTSVILLE PLANT STA 6	103	8-1	4	1-18	2-13	7	3-5	19	4-22	24	4-10	28	4-13	30	10-8	26	11-1	23	12-4	18	12-21	13	311	274	234	181				
BENSON POLICE BARRACKS	100	7-31	3	1-13+	3-	5	15	3-	7	20	3-	22	23	4-10	28	4-13	32	10-8	32	11-6	28	11-11	22	12-4	18	291	272	234	210	
BENTLEY SPRINGS	100	7-31	-	1-18	3-6	15	3-22	19	4-4	22	4-13	27	5-5	32	10-7	30	21	11-7	22	11-11	18	12-4	12	273	234	217	155			
BETHESDA NAT INST HLTH	103	7-31	7	1-18	2-13	11	3-6	20	3-	7	21	4-2	25	4-13	30	10-8	28	11-7	22	11-11	20	12-7	12	297	250	245	189			
BITTINGER 2 NW	92	7-14	-	5	1-18	3-22	16	4-8	20	4-9	20	5-5	25	5-10	31	10-7	24	10-7	24	10-31	18	11-1	16	224	205	181	150			
BLACKWATER REFURK	95	9-6+	11	1-18	2-13	16	2-13	16	3-7	23	3-18	28	4-10	30	10-8	28	11-7	27	12-4	23	12-8	17	None	- 298	272	238	181			
BOYDS 2 NW	101	7-31	6	1-18	-	-	3-	5	20	3-	7	24	4-4	26	4-10	31	10-8	31	11-1	27	12-3	23	12-4	20	12-21	15	274	271	211	181
BRIGHTON DAM	102	7-14	3	1-12+	3-7	16	3-18	19	4-10	24	4-13	27	5-5	32	10-7	30	21	10-31	31	11-7	20	12-4	13	272	234	204	155			
BRIGHTWOOD DC	102	8-1	11	1-23	2-13	16	2-14	20	3-5	24	4-4	28	4-8	32	11-1	25	12-3	25	12-7	20	12-21	14	311	267	241	211				
CAMBRIDGE 4 W	100	7-31	10	1-18	2-13	13	2-13	13	3-7	23	4-2	28	4-10	30	10-8	28	11-7	24	12-4	22	12-8	16	298	272	183	161				
CENTREVILLE	99	7-31	8	1-18	2-13	10	2-13	10	4-	2	24	4-2	24	4-13	31	10-8	29	11-6	27	11-11	20	12-4	20	304	268	233	178			
CHARLOTTE HALL 2 ESE	101	7-31	7	1-18	2-13	11	3-6	20	3-	7	22	4-4	26	4-10	31	10-8	30	11-1	27	11-11	23	12-4	20	12-7	16	297	273	249	211	
CHILSTONHAM 1 NW	104	8-1	7	1-18	2-13	9	3-7	18	3-	7	18	4-2	22	4-10	27	4-13	32	10-8	28	11-7	24	12-4	19	12-21	15	311	249	245	181	
CHESTERTOWN	102	7-31	9	1-18	2-13	13	2-13	13	3-6	24	3-2	22	4-10	31	11-1	26	12-6	21	12-7	20	12-21	16	311	267	275	205				
CHEWYNSVILLE BRIDGEPORT	105	7-14	-	1-18	2-13	10	3-6	20	4-	2	24	4-4	24	4-14	30	10-8	28	11-1	26	12-6	21	12-7	16	297	275	216	182			
CLEAR SPRING	105	7-14	4	1-18	2-13	10	3-6	20	4-	2	24	4-4	24	4-10	32	10-8	28	11-1	26	12-6	21	12-21	15	311	275	216	211			
COLEMAN	104	7-31	7	1-18	2-13	14	2-13	14	3-5	24	4-4	28	4-10	32	11-7	31	-	-	-	-	-	-	-	-	-	-	-	-		
COLLEGE PARK	104	7-31	-	-	2-13	8	3-7	18	4-	2	22	4-10	26	4-13	30	10-8	27	11-1	22	12-7	20	12-21	15	311	249	245	181			
CONOWINGO DAM	102	7-31	0	1-18	2-13	8	3-6	20	3-	9	23	4-	28	4-8	32	11-6	28	12-6	21	12-7	20	12-21	14	311	273	247	187			
CONOWINGO POLICE BRKS	102	7-31	-	1-18	3-5	15	3-11	20	3-	11	20	4-	25	4-10	30	10-8	30	11-1	27	12-4	19	12-8	15	278	268	245	211			
CRISPFIELD	95	7-20+	14	1-18	2-13	18	2-13	18	3-2	16	2-13	16	3-7	28	4-4	29	12-3	30	12-6	21	12-7	20	12-21	17	296	272	243	217		
CUMBERLAND	104	7-14	0	1-18	2-13	9	3-6	19	4-	2	22	4-10	26	5-	31	10-7	31	11-2	26	12-6	21	12-7	17	31	296	250	213	187		
CUMBERLAND POLICE BRKS	102	7-14	-	1-18	4	2-16	4	2-18	4-5	28	5-9	32	10-7	25	10-7	25	10-8	28	21	11-1	16	12-6	16	280	213	189	155			
DALECARLIA RESERVOIR DC	103	7-31	7	1-18	2-13	13	3-7	20	4-	2	24	4-4	27	4-4	32	11-1	27	12-3	21	12-7	19	12-21	16	311	275	247	210			
DENTON	100	7-31	7	1-18	2-13	7	3-7	19	3-	8	24	4-	26	4-10	30	10-8	29	11-1	26	12-7	19	12-21	16	313	275	245	211			
DISTRICT HEIGHTS	104	7-31	9	1-23	2-13	13	3-7	23	4-	2	24	4-4	27	4-10	32	11-3	32	11-7	24	12-4	19	12-7	17	297	217	204	178			
DUNDALK	102	7-31	12	1-23	4-13	14	3-4	24	3-	22	28	4-	29	4-13	27	10-6	28	11-6	22	12-6	21	12-21	17	None	- 311	277	234	217		
EASTON	100	7-31	13	1-18	2-13	15	2-13	15	3-	7	25	4-	6	22	4-10	31	11-1	32	11-11	28	12-6	22	12-21	18	None	- 311	296	249	211	
EASTON POLICE BRKS	100	7-31	10	1-18	2-13	13	3-21	20	3-	21	20	4-	10	31	10-31	30	11-2	30	12-3	24	12-7	19	12-21	16	311	272	228	204		
ELKTON	102	7-31	0	1-18	2-13	7	3-18	24	4-	2	27	4-13	31	10-8	28	11-7	24	12-4	20	12-21	15	311	294	228	178					
EMMITSBURG	100	7-31	3	1-18	2-13	11	3-6	20	3-	16	24	4-	5	28	4-10	32	11-1	31	12-11	24	12-6	18								

# TEMPERATURE EXTREMES AND FREEZE DATA

MARYLAND AND DELAWARE  
1954

Table 3—Continued

Station	Highest	Date	Lowest	Date	Last spring minimum of					First fall minimum of					Number of days between dates														
					16° or below	20° or below	24° or below	28° or below	32° or below	32° or below	28° or below	24° or below	20° or below	16° or below	16° or below	20° or below	24° or below	28° or below	32° or below										
WATERLOO POLICE BRKS	103	7-31+	5	1-12+	2-13	8	3-5	20	4-2	23	4-4	27	4-13	30	10-8	30	11-1	28	11-7	24	12-6	18	12-21	14	311	277	219	211	178
WESTERN PORT	105	7-14	1	1-18	2-13	8	3-6	18	4-2	21	4-9	28	5-5	31	10-7	31	11-1	22	11-1	22	12-6	15	296	275	213	206	155		
WESTMINSTER	100	7-31	3	1-18	2-13	8	3-6	17	4-2	24	4-4	23	4-10	29	10-8	32	10-31	27	11-7	24	12-3	20	12-6	16	286	272	217	210	181
WOODSTOCK	102	7-31	2	1-18	3-6	16	3-6	16	4-2	21	4-13	28	10-8	27	10-8	27	11-1	24	11-11	17	12-4	14	273	250	213	178	178		
<b>DELAWARE</b>																													
BRIDGEVILLE 1 NW	97	7-3+	8	1-18+	2-13	8	3-7	20	4-2	24	4-2	24	4-2	24	10-8	29	11-8	26	12-3	23	12-6	20	12-8	15	298	274	245	220	189
DELAWARE CITY REEDY PT																													
DOVER	101	7-31	8	1-18	2-13	10	2-13	11	3-6	21	4-4	28	4-10	32	11-1	31	11-11	25	12-4	23	12-7	20	None	-	297	273	221	205	
GEORGETOWN 5 SW	102	7-31	7	1-18+	2-13	7	3-7	20	4-2	23	4-10	27	4-13	31	10-8	30	11-1	27	11-8	24	12-3	20	12-7	15	297	271	220	205	178
LAUREL 2 SW	100	7-31	7	2-13	3-6	16	3-7	19	4-2	24	4-10	28	4-13	31	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LEWES	98	7-31	11	1-18	2-13	12	3-6	19	3-7	24	4-2	27	4-10	31	10-8	32	11-1	28	11-26	24	12-7	16	297	276	264	213	181		
MIDDLETON 2 S	102	7-14+	2	1-18	2-13	10	3-4	18	3-6	23	4-4	27	4-12	31	10-8	30	11-3	28	11-11	23	12-7	14	297	278	250	213	178		
MILFORD	100	7-31	8	1-18+	2-13	8	2-13	8	3-7	22	4-2	28	4-13	32	10-8	29	11-1	28	12-3	24	12-4	18	None	-	294	271	211	178	
NEWARK COLLEGE FARM	103	7-31	-2	1-18	2-13	6	3-6	20	4-2	24	4-10	27	4-13	29	10-8	30	11-6	28	11-11	21	12-4	20	12-21	15	311	273	223	210	178
SELBYVILLE	99	7-2+	-	-	2-13	6	3-6	20	3-7	22	4-2	25	4-13	32	10-8	32	11-1	27	11-27	24	12-4	20	12-7	14	297	273	265	213	178
WILMINGTON N CANTILE WB AP	102	7-31	2	1-18	2-13	9	2-13	9	3-6	23	4-4	27	4-10	32	11-1	32	11-10	28	11-11	24	12-6	20	12-21	15	311	296	250	220	205
WILMINGTON PORTER RESVR	100	7-31	6	1-18	2-13	10	2-13	10	3-22	21	4-4	25	4-5	32	11-1	32	11-11	28	12-3	23	12-6	19	12-21	15	311	296	256	221	210

# TOTAL EVAPORATION AND WIND MOVEMENT

Table 4

Station	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
BELTSVILLE, MD.	EVAP	-	-	-	-	B5.12	B7.12	B8.08	B8.44	B5.64	B4.31	-	-
	DEP	-	-	-	-	-1.04	.66	.95	.25	.90	1.02	-	-
	WIND	-	-	-	-	B1304	B1531	-	B1271	1172	1481	B1213	-
SAVAGE RIVER DAM, MD.	EVAP	-	-	-	-	B5.02	B6.91	-	B5.83	B4.47	B2.76	-	-
	DEP	-	-	-	-	-	-	-	B1570	1270	1364	-	-
	WIND	-	-	-	-	1941	1486	-	-	-	-	-	-
SALISBURY USGS, MD.	EVAP	1.21	2.83	4.23	5.74	5.82	8.67	9.14	-	-	-	-	-
	DEP	-	-	-	-	-	-	-	-	-	-	-	-
	WIND	2204	2012	2518	2318	1420	1378	1180	-	-	-	-	-
GEOGETOWN 5 SW, DEL.	EVAP	-	-	-	-	-	-	-	-	3.57	B1.77	-	-
	DEP	-	-	-	-	-	-	-	-	-	B1297	1014	-
	WIND	-	-	-	-	-	-	-	-	-	-	-	-

### † CHANGES IN STATION NAMES

OLD NAME	DATE
CHARLOTTE HALL 2 ESE, MD.	March 1954
CHILTONHAM 1 NW, MD.	May 1954
COLLEGE PARK, MD.	February 1954
LISBON 1 W, MD.	March 1954
OAKLAND 1 SE, MD.	May 1954
PIKESVILLE POLICE BRKS, MD.	August 1954
PRINCESS ANNE 1 E, MD.	May 1954
WOODSTOCK, MD.	January 1954
BRIDGEVILLE 1 NW, DEL.	October 1954
GEORGETOWN 5 SW, DEL.	May 1954
<b>RELOCATIONS</b>	
ABERDEEN PHILLIPS FLD, MD.	Recording gage moved to Perry Point
BOYDS 2 NW, MD.	All equipment moved 80 feet SE
COLLEGE PARK, MD.	All equipment moved 0.5 mile ENE
DENTON, MD.	All equipment moved 60 feet NW
GRANTSVILLE, MD.	All equipment moved 0.3 mile NE
LA PLATA, MD.	All equipment moved 0.3 mile ENE
PERRY POINT, MD.	8 inch rain gage replaced with recording gage
ROCKVILLE, MD.	All equipment moved 800 feet SSE
WATERLOO POLICE BRKS, MD.	All equipment moved 180 feet W
BRIDGEVILLE 1 NW, DEL.	All equipment moved 1.1 miles N
WILMINGTON PORTER RESERVOIR, DEL.	All equipment moved 800 feet NNE
	March 29, 1954
	May 14, 1954
	February 5, 1954
	September 9, 1954
	April 28, 1954
	October 21, 1954
	March 29, 1954
	April 20, 1954
	October 1, 1954
	October 17, 1954
	October 15, 1954

See reference notes following Station Index.

## STATION INDEX

MARYLAND AND DELAWARE

Station	Index No.	County	Drainage†	Latitude	Longitude	Elevation	Years of record			Opened or closed during yr.	Refer to tables	Station	Index No.	County	Drainage†	Latitude	Longitude	Elevation	Years of record			Opened or closed during yr.	Refer to tables
							Temp.	Precip.	Evap.														
<b>MARYLAND</b>																							
ABERDEEN PHILLIPS FIELD	0015	HARFORD	1 39 28	76 10	62	36	36				1 2 3		MIDDLE RIVER	5916	BALTIMORE	1 39 18	76 25	15	5	5		1 2 3	
ANNAPOLIS US NAVAL ACADEMY	0185	ANNE ARUNDEL	1 38 59	76 29	40	89	89				1 2 3		MILLINGTON	5985	KENT	1 39 15	75 50	27	57	57		1 2 3	C
ANNAPOLIS 2 MNN	0193	ANNE ARUNDEL	1 38 59	76 31	4	4	4				1 2 3		NEW GERMANY	6408	GARRETT	1 39 38	79 07	2490	6	6		1 2 3	
BALTIMORE SLEDS POINT	0460	BALTO CITY	3 39 12	76 34	135	6	6				1 2 3		OAKLAND 1 SE	6620	GARRETT	7 39 24	79 24	240	57	57		1 2 3	
BALTIMORE WB AIRPORT	0465	ANNE ARUNDEL	3 39 11	76 40	20	20				1 2 3	C	OCEAN CITY	6665	WORCESTER	7 38 20	75 05	17	6	6		1 2 3		
BALTIMORE WB CITY	0470	BALTO CITY	3 39 17	76 37	14	84	84				1 2 3	C	ONINGS FERRY LANDING	6770	CALVERT	4 38 42	76 41	120	38	38		1 2 3	
BALTIMORE PARKVILLE	0475	BALTIMORE	1 39 23	76 32	305	7	7				1 2 3		OXFORD	6785	TALBOT	1 39 42	76 10	18	18	18		1 2 3	
BELTSVILLE	0700	PRINCE GEORGE	5 39 02	76 53	120	17	17	14			1 2 3	C	PARKTON 2 SW	6844	BALTIMORE	1 39 38	76 42	600	2	2		1 2 3	C
BELTSVILLE PLT STA 1	0701	PRINCE GEORGE	5 39 02	76 56	160	6	6				1 2 3		PERRY POINT	6880	CECIL	1 39 35	76 04	40	14	14		1 2 3	
BELTSVILLE PLT STA 2	0702	PRINCE GEORGE	5 39 02	76 56	136	6	6				1 2 3		PICARDY	7010	ALLEGANY	5 39 35	78 30	1030	28	28		1 2 3	
BELTSVILLE PLT STA 3	0703	PRINCE GEORGE	5 39 02	76 56	200	6	6				1 2 3		PIKESVILLE POLICE BARRACKS	7015	BALTIMORE	3 39 25	76 43	500	7	7		1 2 3	
BELTSVILLE PLT STA 4	0704	PRINCE GEORGE	5 39 02	76 56	265	6	6				1 2 3		POCOOMIE CITY 4 SW	7140	WORCESTER	1 39 01	75 37	8	6	6		1 2 3	
BELTSVILLE PLT STA 5	0705	PRINCE GEORGE	5 39 02	76 57	100	6	6				1 2 3		PRESTON 5	7310	CAROLINE	1 38 42	75 55	20	6	6		1 2 3	
BELTSVILLE PLT STA 6	0706	PRINCE GEORGE	5 39 01	76 57	165	6	6				1 2 3		ROCK SPRING FREDRICK	7320	FRANCIS	1 39 38	76 42	10	12	12		1 2 3	
BENSON POLICE BARRACKS	0732	HARFORD	1 39 30	76 23	365	7	7				1 2 3		PRINCESS ANNE 1 E	7330	SOMERSET	1 38 12	75 40	17	6	6		1 2 3	
BENTLEY SPRINGS	0737	BALTIMORE	1 39 41	76 41	730	6	6				1 2 3		RANDALLSTOWN POLICE BRKS	7435	BALTIMORE	3 39 23	75 70	625	7	7		1 2 3	
BETHESDA	0742	MONTGOMERY	2 38 58	77 02	122	4	4				1 2 3		BEAVER SPRING GEORGE	7610	KENT	1 38 30	76 56	20	9	9		1 2 3	
BETHESDA NAT INST HEALTH	0800	MONTGOMERY	5 39 00	77 06	310	4	4				1 2 3		ROCK HALL 3 N	7700	MONTGOMERY	3 39 11	77 00	20	40	40		1 2 3	
BITTINGER 2 NW	0881	GARRETT	7 39 37	77 15	20	2					1 2 3		ROYAL OAK	7806	TALBOT	1 39 45	75 11	7	7	7		1 2 3	
BLACKWATER REFUGE	0815	DORCHESTER	3 38 26	76 08	5	14	14				1 2 3		SALISBURY POLICE BRKS	8000	WICOMICO	1 38 22	75 36	10	48	48		1 2 3	
BOYDS 2 NW	1022	MONTGOMERY	5 39 12	77 20	580	2	2				1 2 3		SALISBURY POLICE BRKS	8003	WICOMICO	1 38 25	75 34	42	7	7		1 2 3	
BRIGHTON DAM	1125	MONTGOMERY	4 39 13	77 02	350	6	9				1 2 3		SALISBURY CAA AP	8005	WICOMICO	1 38 20	75 30	52	7	7		1 2 3	
BROOKDALE	1170	MONTGOMERY	5 38 37	77 06	260	9	9				1 2 3		SALISBURY USGS	8007	WICOMICO	1 38 22	75 35	30	5	5		1 2 3	
BRUCKSIDE MANOR	1180	PRINCE GEORGE	5 38 58	76 58	50	9	9				1 2 3		SANDY POINT	8030	ANNE ARUNDEL	1 39 01	75 24	10	3	3		1 2 3	
BURNIT MILLS RESERVOIR	1278	MONTGOMERY	5 39 02	77 00	220	9					2		SAVAGE RIVER DAM	8065	GARRETT	5 39 31	79 08	1455	6	8		1 2 3	
CAMBRIDGE 4 W	1365	DORCHESTER	1 39 34	76 09	5	60	60				1 2 3		SHALLMAR	8191	GARRETT	5 39 23	79 12	1700				1 2 3	
CENTREVILLE	1627	QUEEN ANNES	1 39 02	76 03	55	2	2				1 2 3		SILVER HILL ODS	8289	PRINCE GEORGE	3 39 50	76 57	284	4	4		1 2 3	
CHARLOTTE HALL 2 ESE	1665	ST MARYS	4 38 28	76 45	167	33	33				1 2 3		SINES DEEP CREEK	8315	GARRETT	7 39 31	79 25	2058	30	30		1 2 3	
CHELTHELTON 1 NW	1720	PRINCE GEORGE	4 38 44	76 51	250	54	54				1 2 3		SNOW HILL	8390	WORCESTER	1 39 10	75 24	16	39	39		1 2 3	
CHESTERSTOWN	1750	KENT	1 39 13	76 04	35	49	49				1 2 3		SOLOMONS	8405	CALVERT	1 38 19	76 27	20	63	63		1 2 3	
CHESWINSVILLE BRIDGEPORT	1790	WASHINGTON	5 39 38	77 41	560	57	57				1 2 3		STEVENSVILLE 1 W	8557	QUEEN ANNES	1 38 59	76 20	10	3	3		1 2 3	
CLEAR SPRING	1890	WASHINGTON	5 39 40	77 54	560	55	55				1 2 3		TAKOMA PARK MISS AVE	8725	MONTGOMERY	5 38 59	77 00	230	10	10		1 2 3	
COLMAR	1900	WASHINGTON	5 39 41	77 54	50	57	57				1 2 3		TOWNSDAY	8825	WASHINGTON	5 39 40	78 22	350	40	40		1 2 3	
COURTHOUSE	1995	PRINCE GEORGE	5 39 59	76 56	70	68	68				1 2 3		TOMSON	8877	WASHINGTON	5 39 24	76 36	415	17	17		1 2 3	
CONNINGWOOD DAM	2060	HARFORD	6 39 39	76 10	195	19	19				1 2 3		UNIONVILLE	9030	FREDERICK	5 39 27	77 11	430	15	15		1 2 3	
COPPERHILL POLICE BARRACKS	2092	HARFORD	6 39 39	76 11	195	17	17				1 2 3		VIRENS MILL	9171	FRANCIS	5 39 28	75 50	30	5	5		1 2 3	
CRISFIELD	2200	SOMERSET	5 39 29	75 51	35	35	35				1 2 3		WALDORF POLICE BARRACKS	9195	CHARLES	5 38 39	76 23	210	7	7		1 2 3	
CUMBERLAND	2280	ALLEGANY	5 39 39	76 42	94	84	84				1 2 3		WATERLOO POLICE BARRACKS	9194	HOWARD	5 39 10	76 47	290	7	7		1 2 3	
CUMBERLAND POLICE BARRACKS	2285	ALLEGANY	5 39 39	76 49	880	7	7				1 2 3		WESTERN PORT	9205	ALLEGANY	5 39 20	79 02	1000	61	61		1 2 3	
DENTON	2233	CAROLINE	3 38 53	75 50	20	3	3				1 2 3		WESTMINSTER	9245	CARROLL	1 39 35	77 00	770	45	45		1 2 3	
DISTRICT HEIGHTS	2258	PRINCE GEORGE	4 39 51	76 54	272	9	9				1 2 3		WILLIAMSPORT	9570	WASHINGTON	5 39 37	77 51	360	16	16		1 2 3	
DUNDALK	2260	BALTIMORE	3 39 16	76 31	28	6	6				1 2 3		WOODSTOCK	9750	BALTIMORE	3 39 20	76 53	415	85	85		1 2 3	
EASTON	2265	TALBOT	1 38 46	76 04	28	2	2				1 2 3		DISTRICT OF COLUMBIA										
EASTON POLICE BARRACKS	2700	TALBOT	1 38 46	76 01	60	64	64				1 2 3		BRIGHTWOOD	1135		5 38 57	77 01	260	8		1	3	
EDGEMONT	2770	WASHINGTON	5 39 40	77 33	920	16					2		DALECARLIA RESERVOIR	2325		5 38 56	77 07	146	9	9		1 2 3	
ELKTON	2860	CECIL	1 39 36	75 50	28	28	28				1 2 3		NATIONAL ARBORETUM	6350		5 38 54	76 58	70	9	9		1 2 3	
EMMITSBURG	2905	FREDERICK	5 39 41	77 23	720	88	88				1 2 3		U.S. SOLDIERS HOME	9285		5 38 56	77 02	230	9	9		1 2 3	
FORT GEORGE G MEADE	3230	ANNE ARUNDEL	4 39 57	76 46	195	13	13				1 2 3		WASHINGTON WB CITY	9290		5 38 54	75 53	72	84	84		1 2 3	
FREDERICK POLICE BARRACKS	3348	FREDERICK	5 39 25	77 26	360	7					1 2 3		DELAWARE										
FREDERICK WB AIRPORT	3350	FREDERICK	5 39 25	77 23	294	11	11				1 2 3		BRIDGEVILLE 1 NW	1330	SUSSEX	1 38 45	75 37	50	64	64		1 2 3	
FREDERICK 3 E	3355	FREDERICK	5 39 24	77 22	385	6					1 2 3		DELAWARE CITY REEDY POINT	2625	NEW CASTLE	2 39 14	75 35	10	68	68		MAY 1 2 3	
FROSTBURG	3410	ALLEGANY	5 39 39	76 56	205	55	53				1 2 3		DOVER	2730	KENT	2 39 10	75 32	34	67	66		1 2 3	
GLEN ECHO	3643	MONTGOMERY	5 38 58	76 09	150	13	13				1 2 3		GEORGETOWN 5 SW	3570	SUSSEX	1 38 38	75 28	45	9	9		1 2 3	
GLENN DALE BELL STATION	3675	PRINCE GEORGE	4 39 58	76 48	151	34	34				1 2 3		LAWRENCE	5217	SUSSEX	1 38 32	75 34	33	2	2		1 2 3	
GRANTSVILLE	3795	GARRETT	4 39 32	76 09	2380						1 2 3		LEWES	5220	SUSSEX	2 38 46	75 08	10	10	10		1 2 3	
GREENBELT	3860	PRINCE GEORGE	5 39 02	76 52	200						1 2 3		MIDDLETON 2 S	5252	NEW CASTLE	2 39 25	75 42	60	3	3		1 2 3	
GREENSBURG	3861	PRINCE GEORGE	5 39 02	76 54	100	13	13				1 2 3		MILFORD	5253	NEW CASTLE	2 39 35	75 26	10	59	59		1 2 3	
HANCOCK FRUIT LABORATORY	4030	WASHINGTON	5 39 42	76 11	428	21	21				1 2 3		MILLSBORO	6020	SUSSEX	2 38 35	75 19	20	62	62		FEB 1 2 3	
KEDSYVILLE	4780	WASHINGTON	5 39 29	77 42	420	51	51				1 2 3		NEW COLLEGE FARM	6410	NEW CASTLE	2 39 39	75 46	110	42	42		1 2 3	
LA PLATA	5080	CHARLES	5 38 32	76 58	175	40	40				1 2 3		SELBYVILLE	8269	SUSSEX</td								

1-CHESAPEAKE; 2-COASTAL; 3-PATAPSCO; 4-PATUXENT; 5-POTOMAC; 6-SUSQUEHANNA; 7-YOUGHIOGHENY

#### REFERENCE NOTES

Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in °F; precipitation and evaporation in inches, and wind movement in miles. Evaporation is measured in the standard Weather Bureau type pan of 4 foot diameter unless otherwise shown by footnote following Table 4.

The four digit identification numbers in the Index are assigned on a state basis. There will be no duplication of numbers within a state. Figures and letters following the station name, such as 12345W, indicate identification numbers assigned by the Post Office.

Balanced data and computations will be carried out in the June and December issues of Climatological Data.

- No record.  
+ Also last date (dates) or months.  
- Last included in following measurement.  
B Adjusted to full month.  
C Data for recorder stations denoted by "C" are processed for special purposes and published in Hourly Precipitation Data. Length of record for recorder-only stations may be found in the Annual issue of Monthly Precipitation Data.  
D Daily total.  
E Monthly total.  
M Less than a complete month of record available; if average value is entered, less than 10 days of record are missing; see monthly Climatological Data for detailed daily record.  
R Amounts from recording gauge (These amounts are essentially accurate but may vary slightly from the amounts to be published later in Hourly Precipitation Data).  
T Trace, an amount too small to measure.  
V Includes total for previous month.

Additional information regarding the climate of Maryland and Delaware may be obtained by writing to any Weather Bureau Office or to the State Climatologist at the Weather Bureau Airport Station, Friendship International Airport, Baltimore, Maryland.

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.See Page 178 for Changes in Station Names

NWRC, Asheville, N. C. 428-111