

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

# CLIMATOLOGICAL DATA

MARYLAND AND DELAWARE

AUGUST 1957  
Volume LXI No. 8



ASHEVILLE: 1957

## WEATHER SUMMARY

## GENERAL

The 1957 dry spell which reached severe proportions over most of Maryland and Delaware virtually came to an end east of the Appalachian Mountains with generous rains on the 25th.

Division average precipitation ranged from 0.28 inch above the long-term mean or 105% of the long-term mean in the Lower Southern Maryland Division to 3.24 inches below the long-term mean or 44% of the long-term mean in the Southern Delaware Division. Except for the Southern Eastern Shore and Lower Southern Maryland Divisions precipitation averaged generally more than two inches below the long-term mean with departures increasing northward and westward. Although the Appalachian Mountain Division precipitation averaged 2.89 inches below the long-term mean it was only 26% of the long-term mean. The greatest monthly precipitation in Maryland, 7.02 inches, occurred at Owings Ferry Landing; in Delaware, 5.17 inches, at Middletown 2 S. The least precipitation in Maryland occurred at Cumberland Police Barracks, 0.73 inch; in Delaware at Bridgeville 1 NW, 1.67 inches.

Division average temperatures over Maryland and Delaware ranged from 0.6° below the long-term mean in the Appalachian Mountain Division to 2.5° below the long-term mean in Upper Southern Maryland. The highest temperature in Maryland, 104°, occurred at Laurel 3 W on the 3rd; in Delaware, 99°, at Dover on the 4th. The lowest temperatures were 36° in Maryland at Oakland 1 SE on the 6th and 47° in Delaware at Newark University Farm on the 24th.

## WEATHER DETAILS

A cold front passage on the morning of the 4th was accompanied by scattered thunderstorms and rain showers.

An extensive High which overspread the entire eastern United States brought cooler weather on the 5th, 6th, 7th, and 8th. Temperatures rose to several degrees above normal on the 9th. Scattered light rain showers on the 9th and 10th were associated with a weak Low pressure trough and a cold frontal system over Pennsylvania.

A cold front on the afternoon of the 12th moved southward over the area accompanied by scattered thunderstorms, rain showers, and hail. Cooler weather on the 13th from a Canadian air mass overspread the area. Temperatures rose from below normal on the 14th to well above normal on the 16th with some scattered rain showers on the 15th in southern portions. A cold front moved southward over the area again on the afternoon of the 16th followed by cooler weather on the 17th.

Light to moderate rains, associated with a Low over the Georgia area, spread northeastward over southern portions of Maryland and Delaware early on the 19th. As another Low developed off the North Carolina coast, moderate to heavy rains drenched Southern Maryland and the lower Delmar Peninsula bringing partial relief to drought stricken farmers. However, only light, scattered amounts obtained in western Maryland and northern portions of Maryland and Delaware. As this Low moved northeastward, strong winds whipped the Maryland and Delaware coastal area during the afternoon of the 19th. Rains ended in eastern portions on the evening of the 20th as the Low moved northeastward to a point several hundred miles off the Maryland-Delaware coast.

Some very light scattered showers occurred on the 21st. A prolonged period of cool weather from the 17th to 25th ended with generous rainfalls over the area. About noon on the 24th, rain, associated with a Low off the South Carolina coast, began in southern portions of Maryland and spread slowly northward and westward as this Low moved into eastern North Carolina. Moderate rains continued generally over the Piedmont and Coastal Plain areas until the night of the 25th when a Low moved north-northeastward over the Delmar Peninsula. In some Southern Maryland and Delmar Peninsula districts over two and one-half inches of precipitation occurred. In northern Maryland counties, however, amounts decreased to 0.50 to 1.25 inches with only very light amounts in western Maryland districts.

A cold front moved southward over the area late on the 27th followed by below normal temperatures on the 28th

and 29th. Widely scattered light rain showers and thunderstorms late on the 30th and early on the 31st were associated with another frontal system which moved over Maryland and Delaware from the north. Temperatures on the 30th and 31st were well above normal.

## WEATHER EFFECTS

The persistent dry spell of previous months tightened its grip over most of Maryland and Delaware during the first 24 days of the month. The dryness became progressively worse especially in northern-central Maryland, lower Southern Maryland counties, and the Delmar Peninsula.

Scattered thunderstorms and rain showers brought locally heavy amounts of precipitation to some Calvert County, Saint Mary's County, and Harford County districts with scattered moderate amounts in some southern Delmar Peninsula areas. In general vegetable yields and prospects for field corn and tobacco continued to deteriorate. Many corn fields intended for grain were used for silage or abandoned. Hay and pasture crops made practically no growth with many pastures reported completely dried up. Deep-rooted alfalfa in northern central Maryland, however, was not hurt as much as other hay crops, but many fields did not make a third cutting. Damage to tomatoes due to dryness was severe particularly on the lower half of the Delmar Peninsula. Tomatoes were unusually small and blossom end rot was unusually serious. By the 24th most field corn and sweet corn in the two-state area and about one-half of the Southern Maryland tobacco was too far advanced to be benefited by rains. Hot, dry weather was detrimental for crop growth and favorable for build-up in insect populations.

Generous rains on the 24th and 25th over most of the area east of the mountains generally alleviated the persistent dry conditions and greatly benefited soybeans, sweet potatoes, hay, pastures, and some late-planted corn. Rains also enabled farmers to plant small grains and seed permanent pastures and alfalfa. Rainfall and cooler weather was favorable for reducing spider mites in soybeans.

The general lack of adequate soil moisture in Washington and Allegany Counties reduced the size of apples and peaches in non-irrigated orchards. Below normal temperatures during the last half of August slowed maturity of peaches.

Except for corn, most crops east of the mountains were benefited by the rains. The most striking response to the rains was observed in soybeans, late vegetables on the Delmar Peninsula, and tobacco in Southern Maryland. Pastures improved considerably and prospects for alfalfa and lespedeza hay were better. Alfalfa in some northern sections was even expected to make a fourth cutting.

## DESTRUCTIVE STORMS

The cold front which moved southward over the area on the afternoon of the 12th was accompanied by scattered severe thunderstorms and locally heavy amounts of hail. In the Baltimore City and Baltimore County area strong winds downed trees and some power lines in scattered districts of metropolitan Baltimore. Lightning damaged a dwelling in Dundalk. Hail the size of chestnuts was reported in some sections of Dundalk and nearby Fort Holabird. A severe hailstorm which lasted about 20 minutes lashed the Easton area about 5:00 p.m. EST. Hailstones ranged from pea size to as large as chicken eggs. Some farmers reported heavy crop damage from hail. At Ocean City a severe rainstorm in the late afternoon was preceded by a heavy fall of hail.

On the 25th a sudden windstorm like an immature twister swept a 1,000-yard path through the Hills Point, Dorchester County, area ripping roofs from small buildings and uprooting trees. About half of the dwellings in this community suffered minor damage. The windlash came during a severe rainstorm.

## FLOODS

None.

Howard H. Engelbrecht, State Climatologist  
U. S. Weather Bureau  
Baltimore, Maryland



# CLIMATOLOGICAL DATA

MARYLAND AND DELAWARE  
AUGUST 1957

TABLE 2 - CONTINUED

Station	Temperature											Precipitation											
	Average Maximum	Average Minimum	Average	Departure From Long Term Means	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Long Term Means	Greatest Day	Date	Snow, Sleet			No. of Days		
										90° or Above	80° or Below	70° or Below	60° or Below					Total	Max. Depth on Ground	Date	10 or More	50 or More	100 or More
BETHESDA NAT INST HLTH	85.9	60.4	73.2		98	3	48	24	2	10	0	0	0	1.61		1.54	25	.0	0		1	1	1
BOYDS 2 NW	84.8	59.6	72.2		93	12+	51	24	0	8	0	0	0	1.44		.99	25	.0	0		2	1	0
CONOWINGO DAM	84.2	59.8	72.0		97	3	49	6+	1	6	0	0	0	1.61		.75	25	.0	0		3	1	0
CONOWINGO POLICE BRKS	84.6	59.2	71.9		96	3	48	6	1	5	0	0	0	1.49		.59	25	.0	0		4	1	0
DUNDALK	84.9	63.2	74.1		98	3	52	6	0	7	0	0	0	2.28		.92	12	.0	0		5	2	0
ELKTON	86.5	59.8	73.2	- 1.3	97	3	48	6+	0	9	0	0	0	3.06	- 2.07	1.43	25	.0	0		3	2	2
EMMITTSBURG 2 SE	88.1	55.7	71.9		97	3	40	7	5	13	0	0	0	1.63		.65	25	.0	0		5	1	0
FREDERICK POLICE BRKS	86.8	61.8M	74.3M		96	3	51	24	0	11	0	0	0	1.43		1.13	25	.0	0		2	1	1
FREDERICK WB AIRPORT	85.0	59.2	72.1	- 2.5	97	3	49	24	3	10	0	0	0	1.99	- 2.04	1.20	25	.0	0		4	1	1
MIDDLE RIVER 1 N	83.8M	58.5M	71.2M		93	3	47	6+	4	5	0	0	0	2.09		.71	10	.0	0		4	2	0
PARKTON 2 SW	82.1	57.9	70.0		95	3	46	6	14	2	0	0	0	1.06		.63	25	.0	0		3	1	0
PIKESVILLE POLICE BRKS	84.0M	63.1M	73.6M		95	3	53	24	1	9	0	0	0	1.71		.92	25	.0	0		3	1	0
RANDALLSTOWN POL BRKS	85.3	60.7	73.0		98	3	50	6	0	9	0	0	0	1.51		.81	25	.0	0		3	1	0
ROCKVILLE	86.9	65.4	76.2		97	3	53	24	0	10	0	0	0	2.33		.87	25	.0	0		6	1	0
TAKOMA PARK MISS AVE	84.2M	62.0M	73.1M		94	3	52	24	0	3	0	0	0	3.17		1.56	25	.0	0		6	2	1
TOWSON	86.0	60.0	73.0		98	3	49	24	0	9	0	0	0	1.54	- 3.11	.47	5	.0	0		4	0	0
UNIONVILLE	85.9	56.9	71.4		99	3	44	6	7	11	0	0	0	.99		.63	25	.0	0		2	1	0
VIERS HILL	86.4M	58.7M	72.6M		98	3	49	24	0	10	0	0	0	3.09		1.71	25	.0	0		6	2	1
WATERLOO POLICE BRKS	84.8	60.0	72.4		95	3	48	24	0	11	0	0	0	2.56		1.13	25	.0	0		4	2	1
WESTMINSTER	84.2	58.7	71.5	- 1.7	96	3	48	6	2	9	0	0	0	1.72	- 3.36	1.27	26	.0	0		3	1	1
WOODSTOCK	85.9	57.8	71.9	- 1.6	97	3	46	24	3	9	0	0	0	1.58	- 2.79	.89	25	.0	0		2	1	0
DIVISION			72.7	- 1.1										1.87	- 2.88			.0					
APPALACHIAN MOUNTAIN																							
CHEWSVILLE BRIDGEPORT	87.1	57.9	72.5	.2	98	3	46	6	2	11	0	0	0	1.30	- 2.91	.45	4	.0	0		4	0	0
CLEAR SPRING	86.7	58.8	73.8		99	3	45	6	4	14	0	0	0	.78		.36	4	.0	0		3	0	0
CUMBERLAND	86.1	57.2	71.7		96	3	46	6	3	8	0	0	0	.77		.57	5	.0	0		1	1	0
CUMBERLAND POLICE BRKS		54.1	M				42	6						.73		.57	4	.0	0		2	1	0
FROSTBURG	81.6	55.2	68.4	- 1.6	91	29	44	18	20	3	0	0	0	1.24	- 2.91	.92	4	.0	0		2	1	0
HAGERSTOWN	87.3	57.3	72.3		98	3	48	6+	1	11	0	0	0	1.29		.35	25	.0	0		5	0	0
HANCOCK FRUIT LAB	85.8	53.7	69.8		97	4	41	24	14	9	0	0	0	1.06	- 2.34	.68	4	.0	0		2	1	0
KEDDYVILLE	90.1	58.8	74.5	.1	100	3+	47	6	0	17	0	0	0	1.10	- 3.03	.34	25	.0	0		4	0	0
PICARDY	85.3	56.8	71.1		95	3	45	6	0	11	0	0	0	.93	- 3.10	.84	4	.0	0		1	1	0
WESTERN PORT	87.8	58.0	72.9	.2	97	3+	46	24	1	10	0	0	0	1.16	- 3.08	.63	4	.0	0		3	1	0
DIVISION			71.9	- .6										1.04	- 2.89			.0					
ALLEGHENY PLATEAU																							
BITTINGER 2 NW	77.5	52.4	65.0		86	3+	40	6	64	0	0	0	0	1.78		1.05	4	.0	0		4	1	1
NEW GERMANY	79.0	50.5	64.8		89	30	38	18	63	0	0	0	0	1.21		.60	4	.0	0		3	2	0
OAKLAND 1 SE	80.1	51.5	65.8	- 1.1	89	3	36	6	50	0	0	0	0	1.71	- 2.82	.80	4	.0	0		5	1	0
SAVAGE RIVER DAM	81.4	52.2	66.8		90	4+	42	21	33	3	0	0	0	1.50		.76	4	.0	0		5	1	0
SINES DEEP CREEK	79.3M	49.2M	64.3M	- 1.7	89	4	39	7	66	0	0	0	0	1.53	- 2.94	.76	4	.0	0		2	2	0
DIVISION			65.3	- 1.4										1.55	- 2.90			.0					
DELAWARE																							
NORTHERN																							
MIDDLETOWN 2 S	86.1	62.1	74.1		98	3	48	24	0	9	0	0	0	5.17		4.20	25	.0	0		4	1	1
NEWARK UNIVERSITY FARM	86.5	60.3	73.4		96	3	47	24	1	8	0	0	0	2.72		1.37	26	.0	0		4	2	1
WILMGTON N CASTLE NBAP	84.3	62.0	73.2	- .6	97	3	51	6	0	7	0	0	0	2.61	- 2.67	2.33	25	.0	0		2	1	1
WILMINGTON PORTER RESVR	82.7	62.0	72.4		95	3	52	24	0	3	0	0	0	2.04	- 3.48	1.80	25	.0	0		1	1	1
DIVISION			73.3	- .9										3.14	- 2.20			.0					
SOUTHERN																							
BRIDGEVILLE 1 NW	84.7	61.5	73.1	- 1.3	96	3	49	24	3	8	0	0	0	1.67	- 3.98	.93	19	.0	0		4	1	0
DOVER	87.0	62.0	74.5	- .9	99	4	52	24	0	11	0	0	0	2.85	- 2.90	1.20	25	.0	0		6	2	1
GEORGETOWN 5 SW	85.9M	61.4M	73.7M		98	3	48	24	3	10	0	0	0	2.30		1.20	19	.0	0		5	1	1
LEWES	82.3	63.4	72.9		93	3	51	24	2	5	0	0	0	2.42		1.04	19	.0	0		5	2	1
MILFORD	85.1M	61.8M	73.5M		96	3	49	24	3	9	0	0	0	2.54		.91	19	.0	0		4	3	0
SELBYVILLE	84.2	60.7	72.5		96	1	48	14	2	7	0	0	0	3.22		1.50	19	.0	0		6	2	1
DIVISION			73.4	- 1.5										2.50	- 3.24			.0					

See Reference Notes Following Station Index











# EVAPORATION AND WIND

MARYLAND AND DELAWARE  
AUGUST 1957

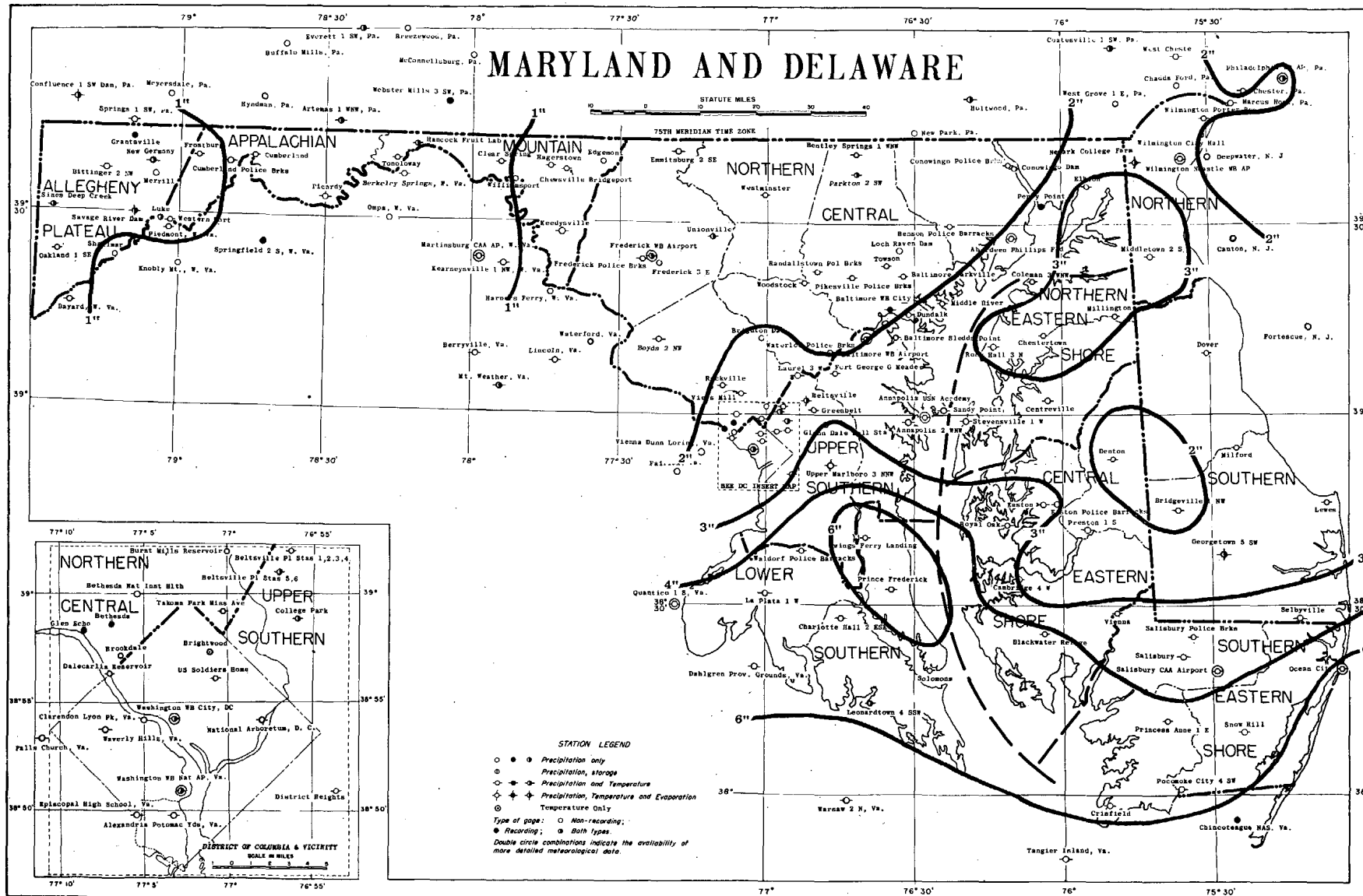
Table 6

Station		Day of month																															Total or Avg.	
		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		
BELTSVILLE, MD.	EVAP	.14	.47	.40	.10	-	.35	.36	.32	.07	.14	.15	.28	.38	.30	.20	.27	.31	.28	*	*	.58	.16	.20	.23	.12	-	.05	.30	.19	.26	.40	B7.49	
	WIND	.42	.44	.24	.20	.25	.72	.36	.57	.12	.21	.47	.28	.79	.41	.50	.30	.70	.31	.51	.42	.15	.43	.57	.43	.29	100	.65	.48	.27	.31	.35	1315	
	MAX MIN	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	- -	
SAVAGE RIVER DAM, MD.	EVAP	.14	.35	.25	.24	.17	.24	.23	.18	.17	.13	.17	.14	.27	.29	.22	.16	.18	.33	.26	.09	.16	.14	.25	.24	.21	.09	.06	.24	.15	.25	.26	6.26	
	WIND	.42	.38	.24	.29	.33	.57	.31	.30	.16	.39	.55	.27	.42	.28	.18	.20	.54	.32	.25	0	.68	.18	.33	.31	.35	.31	.52	.63	.28	.29	.38	1066	
	MAX MIN	.85 .60	.90 .58	.91 .62	.91 .62	.84 .52	.85 .51	.80 .53	.83 .57	.87 .53	.84 .60	.84 .61	.90 .61	.82 .57	.86 .55	.92 .56	.88 .68	.85 .59	.88 .50	.88 .51	.88 .65	.77 .52	.81 .52	.83 .65	.85 .65	.80 .52	.65 .52	.71 .55	.82 .56	.82 .53	.82 .43	.88 .60	.87 .62	83.5 56.5
UPPER MARLBORO 3 NNW, MD.	EVAP	.21	.32	.28	.32	.15	.31	.14	.39	.21	.16	.11	.16	.44	.25	.22	.12	.33	.17	.22	.02	.17	.22	.17	.24	.12	.06	.41	.26	.20	.16	.33	8.87	
	WIND	.4	.5	.3	.7	.7	.18	.11	.15	.3	.5	.10	.5	.42	.14	.18	.4	.19	.6	.27	.12	0	.16	.9	.11	.3	.15	.4	.11	.3	.4	.314	314	
	MAX MIN	.93 .68	.95 .65	.94 .67	.95 .73	.86 .67	.87 .56	.86 .58	.87 .58	.86 .58	.85 .66	.84 .70	.84 .63	.94 .71	.92 .60	.88 .56	.88 .68	.91 .69	.82 .62	.84 .58	.86 .62	.87 .61	.81 .61	.86 .61	.87 .56	.86 .55	.73 .64	.69 .61	.80 .66	.89 .61	.89 .62	.85 .65	.92 .71	85.4 83.3
GEORGETOWN 5 SW, DEL.	EVAP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.11	.16	.07	.20	.01	.10	.20	.12	.18	.14	-	-	
	WIND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.20	.14	.29	.35	.27	.29	.69	.29	.36	.22	.29	.17	-
NEWARK UNI FARM, DEL.	EVAP	.16	.29	.29	.21	.28	.26	.47	.05	.14	.09	.20	.36	.18	.21	.21	.17	.29	.41	.00	.16	.38	.06	.14	.17	.19	.17	.21	.23	.27	.07	.12	6.44	
	WIND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	.10	.11	.16	.07	.20	.01	.10	.20	.12	.18	.14	-	-
	MAX MIN	.94 .69	.95 .68	.97 .69	.96 .77	.86 .71	.87 .59	.88 .61	.88 .61	.88 .69	.86 .73	.85 .65	.92 .72	.90 .61	.90 .61	.90 .70	.95 .74	.89 .67	.81 .64	.81 .64	.84 .63	.90 .66	.90 .65	.88 .58	.86 .58	.80 .67	.76 .74	.89 .67	.87 .62	.84 .65	.89 .68	.90 .74	88.2 66.5	

## SUPPLEMENTAL DATA

Station	Wind direction		Wind speed m. p. h.				Relative humidity averages - percent				Number of days with precipitation						Percent of possible sunshine	Average sky cover sunrise to sunset	
	Prevailing	Percent of time from prevailing	Average	Fastest mile	Direction of fastest mile	Date of fastest mile	1:00 a EST	7:00 a EST	1:00 p EST	7:00 p EST	Trace	.01-.09	.10-.49	.50-.99	1.00-1.99	2.00 and over			Total
ABERDEEN PHILLIPS FIELD, MD.	-	-	-	-	-	-	84	83	59	71	3	1	4	1	1	0	10	-	-
ANNAPOLIS USN ACADEMY, MD.	-	-	-	-	-	-	76	77	57	64	5	3	3	0	1	0	12	-	-
BALTIMORE WB AIRPORT, MD.	WNW	10	10.7	31	N	4	77	78	48	61	6	1	3	0	1	0	11	59	5.7
FREDERICK WB AIRPORT, MD.	-	-	-	-	-	-	-	-	-	-	3	1	3	0	1	0	8	-	-
WASHINGTON WB CITY	NW†	13†	5.7	21	N	4	71†	74†	47†	54†	2	3	2	0	1	0	8	63†	5.2†
WILMINGTON WB AIRPORT, DEL.	N	15	9.4	-	-	-	77	77	45	57	5	3	1	0	0	1	10	-	5.6

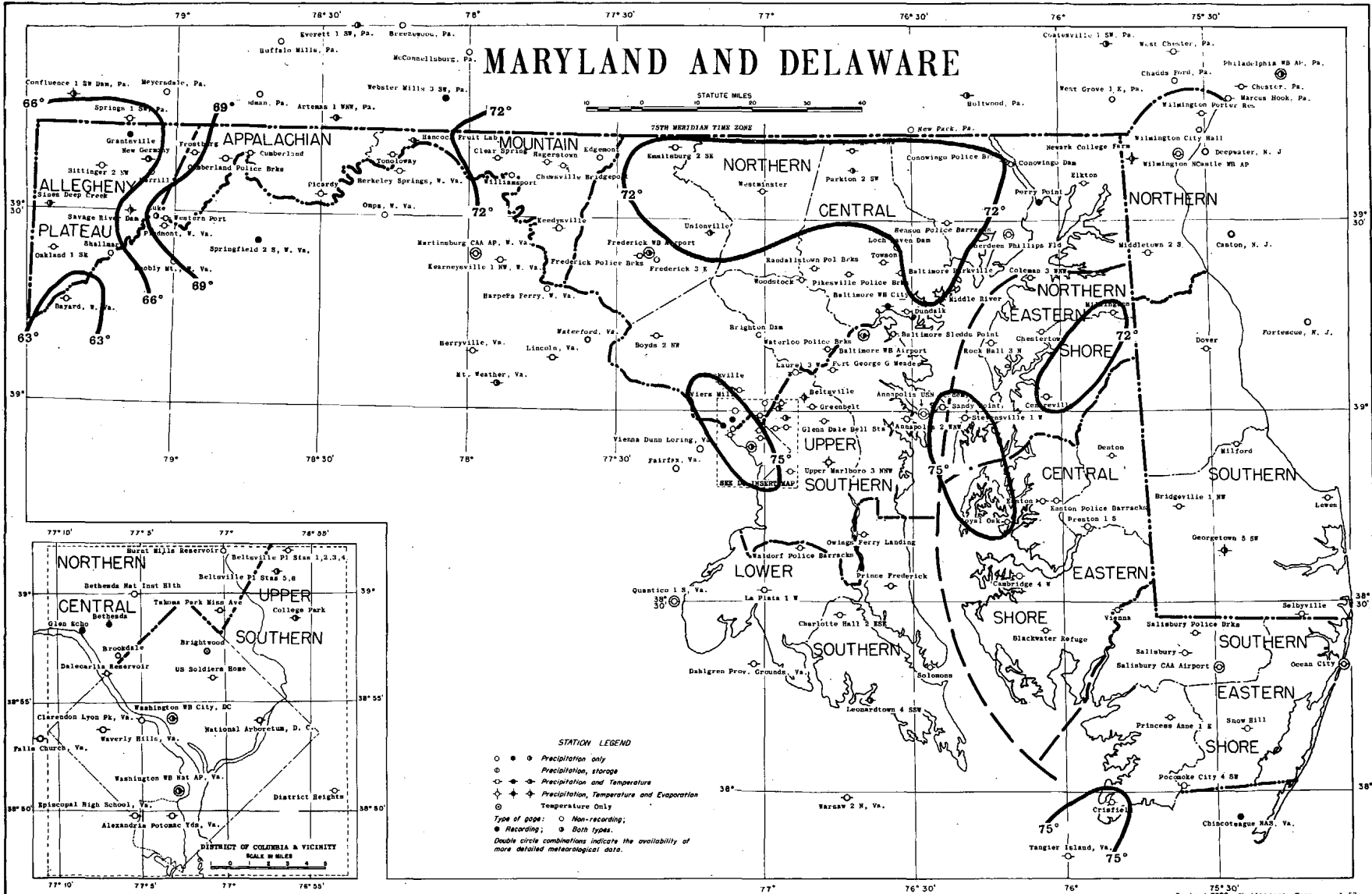
† Airport Data



TOTAL PRECIPITATION

MARYLAND AND DELAWARE  
AUGUST 1957

Isolines are drawn through points of approximately equal values. Hourly precipitation data from recorder substations will be available in the publication "Hourly Precipitation Data".



AVERAGE TEMPERATURE

MARYLAND AND DELAWARE  
AUGUST 1957

Isotherms are drawn through points of approximately equal values. Hourly precipitation data from recorder substations will be available in the publication "Hourly Precipitation Data".

- 107 -

