

U. S. DEPARTMENT OF COMMERCE

LUTHER H. HODGES, Secretary

WEATHER BUREAU

F. W. REICHELDERFER, Chief

# CLIMATOLOGICAL DATA

MARYLAND AND DELAWARE

APRIL 1963

Volume 67 No. 4



ASHEVILLE: 1963

TEMPERATURE AND PRECIPITATION EXTREMES

Highest Temperature: 92° on the 20+ at Waldorf Police Brks., Md.

Lowest Temperature: 18° on the 6th at Oakland 1 SE, Md.

Greatest Total Precipitation: 3.23 inches at Bittinger 2 NW, Md.

Least Total Precipitation: 0.01 inch at Crisfield Hammock Pt., Md.

Greatest One-Day Precipitation: 1.33 inches on the 30th at Emmitsburg 2 SE and Shallmar, Md.

Greatest Reported Total Snowfall: Trace at 6 Stations in Md.

Greatest Reported Depth of Snow on Ground: Trace on the 23d at Bittinger 2 NW, Md.

SPECIAL WEATHER SUMMARY

After the coldest winter for 27 years, since 1935-36, April set new record maximum temperatures on the 2d and 3d. At Baltimore, the 89° maximum temperature on the 3d exceeded the previous 90-year record for the date by 9°. However, a cold front crossed the area during the morning of the 4th bringing much cooler temperatures and strong, drying, west-northwest winds. Widespread minor damage was done by the wind. Much more damage was done indirectly as winds with gusts to 60-70 m. p. h. fanned sparks and small fires into large ones. About 200 fires burned several hundred acres of grass, brush, and forest, as well as homes, barns, and other buildings. Blowing sand and topsoil temporarily closed roads in several areas, particularly in Delaware. During the first 17 days of the month 600 fires were reported to State Foresters. This does not include those fought by city and county firefighters.

Again on the 20th strong winds continued the drying process of the past 4 weeks and fanned fires which burned several thousand acres as well as several buildings. The

largest was in the Gambrills area in Anne Arundel County.

On the 23d, passage of a cold front during the afternoon again was followed by strong winds. One man was killed near Piscataway and six other persons were injured in various localities by falling limbs and trees. Ten men were injured as two apartment buildings under construction at Riverdale, Maryland, collapsed in the wind. For the third time during the month, widespread minor damage was caused by the wind. Fire damage was small because of showers during the previous night.

With strong winds highlighting the month, it is surprising to note that the average wind at Baltimore was nearly 10 percent below the average.

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WBAS Friendship Int'l AP  
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# CLIMATOLOGICAL DATA

MARYLAND AND DELAWARE  
APRIL 1963

CONTINUED

Station	Temperature											Precipitation															
	Average Maximum	Average Minimum	Average	Departure From Normal	Highest	Date	Lowest	Date	Degree Days	No. of Days				Total	Departure From Normal	Greatest Day	Date	Snow, Sleet			No. of Days						
										90° or Above	32° or Below	Min.						Total	Departure From Normal	Greatest Day	Date	Total	Max. Depth on Ground	Date	1.0 or More	.50 or More	1.00 or More
												37° or Below	32° or Below														
<b>ALLEGHENY PLATEAU</b>																											
BITTINGER 2 NW	58.6	35.1	46.9		80	19	20	10	536	0	0	16	0	3.23		.75	23	T	T	23	9	2	0				
OAKLAND 1 SE	60.3	33.5	46.9	- 0.3	80	19	18	6	534	0	0	16	0	3.05	- 1.09	1.12	23	T	O		6	3	1				
SAVAGE RIVER DAM	61.0	36.6	48.8		85	20	21	10	488	0	0	13	0	2.00		.62	23	T	O		6	1	0				
SINES DEEP CREEK	59.8M	33.0M	46.4M	0.2	82	20	22	17	552	0	0		0		- 4.15	.70	23	.O	O								
DIVISION			47.3	0.7										2.76	- 1.24			T									
<b>DELAWARE</b>																											
<b>NORTHERN</b>																											
NEWARK UNIVERSITY FARM	66.6	39.7	53.2		85	3	28	8+	350	0	0	5	0	.93		.48	30	.0	O		4	0	0				
WILMGTN NCASTLE WB AP	64.3	40.8	52.6	0.5	86	3	29	8	370	0	0	2	0	1.12	- 2.21	.73	30	.0	O		3	1	0				
WILMINGTON PORTER RESVR	63.0	42.2	52.6		85	3	32	8	369	0	0	1	0	1.85	- 1.89	1.25	30	.0	O		3	1	1				
DIVISION			52.8	0.5										1.30	- 2.26			.O									
<b>SOUTHERN</b>																											
BRIDGEVILLE 1 NW	68.0	42.1	55.1	1.5	88	19	30	15	319	0	0	3	0	1.16	- 2.27	.49	23	.0	O		3	0	0				
DOVER	67.6	42.1	54.9	0.8	86	3	31	16	308	0	0	1	0	.48	- 2.94	.18	30	.0	O		2	0	0				
GEORGETOWN 5 SW	67.1	41.6	54.4		86	3	28	6	340	0	0	4	0	2.01		.85	23	.0	O		4	2	0				
LEWES 1 SW	63.9	44.3	54.1		87	3+	35	6	347	0	0	0	0	1.71		1.01	30	.0	O		3	1	1				
MILFORD 3 WNW	67.1M	41.6M	54.4M		85	3	29	6	330	0	0	6	0	.84		.45	23	.0	O		2	0	0				
SELBYVILLE	65.5	41.4	53.5		87	3	31	16+	352	0	0	5	0	1.42		.60	23	.0	O		4	1	0				
DIVISION			54.4	0.7										1.27	- 2.23			.O									

See Reference Notes Following Station Index

DAILY PRECIPITATION

MARYLAND AND DELAWARE APRIL 1963

Table with columns: Station, Total, Day of Month (1-31). Rows list stations like BALTIMORE WB AIRPORT, BELTSVILLE, etc., with precipitation data and totals.

See reference notes following Station Index.





# SNOWFALL AND SNOW ON GROUND

MARYLAND AND DELAWARE  
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Station		Day of month																																		
		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				
MARYLAND																																				
BITTINGER 2 NW	SNOWFALL SN ON GND																																			
OAKLAND 1 SE	SNOWFALL SN ON GND																																			
SAVAGE RIVER DAM	SNOWFALL SN ON GND																																			

# EVAPORATION AND WIND

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				
SAVAGE RIVER DAM, MD.	EVAP	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	WIND	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	MAX	80	53	80	82	77	64	69	70	69	58	62	67	80	80	81	81	84	72	93	88	85	86	73	75	64	75	76	77	82	66					
	MIN	44	48	51	61	39	38	41	40	43	38	39	40	39	36	40	39	40	46	44	40	52	59	53	43	45	47	50	49	49	50					
UPPER MARLBORO 3 NNW, MD	EVAP	-	.02	.19	.28	.38	.19	.15	.10	.05	.13	.18	.25	.23	.20	.23	.22	.18	.05	.17	.23	.49	.16	.28	.21	.16	.19	.22	.18	.21	.09					
	WIND	-	1	12	35	102	28	12	8	12	25	39	69	51	33	29	22	15	6	21	54	49	54	20	59	44	21	19	14	12	82					
	MAX	80	53	80	82	77	64	69	70	69	58	62	67	80	80	81	81	84	72	93	88	85	86	73	75	64	75	76	77	82	66					
	MIN	44	48	51	61	39	38	41	40	43	38	39	40	39	36	40	39	40	46	44	40	52	59	53	43	45	47	50	49	49	50					
GEORGETOWN 5 SW, DEL.	EVAP	-	.04	.21	.48	.32	.13	.09	.20	.08	.20	.25	.24	.25	.28	.23	.24	.11	.13	.23	.62	.26	.29	.13	.33	.24	.21	.20	.24	.21	.05					
	WIND	-	50	34	137	222	29	20	61	43	159	194	125	96	100	80	56	50	67	53	155	62	74	64	233	98	69	45	57	51	82					
	MAX	80	53	80	82	77	64	69	70	69	58	62	67	80	80	81	81	84	72	93	88	85	86	73	75	64	75	76	77	82	66					
	MIN	44	48	51	61	39	38	41	40	43	38	39	40	39	36	40	39	40	46	44	40	52	59	53	43	45	47	50	49	49	50					

# 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.M. EST	7,00 A.M. EST	1,00 P.M. EST	7,00 P.M. EST	Trace	.01-.09	.10-.49	.50-.99	1.00-1.99	2.00 and over		
BALTIMORE WB AIRPORT, MD.	WNW	21	10.6	56	NW	23	60	64	38	46	2	5	3	0	1	11	75	5.0
FREDERICK WB AIRPORT, MD.	-	-	-	-	-	-	-	-	47	-	2	1	6	0	0	9	-	-
WASHINGTON WB CITY, D. C.	NW†	18†	9.9†	52†	NW†	23†	53†	56†	36†	38†	0	4	4	0	0	8	69†	5.3†
WILMINGTON-N CASTLE WB AIRPORT DEL.	WNW	25	11.4	45††	WNW	4	62	65	39	48	6	4	2	1	0	13	-	5.8

† AIRPORT DATA

See reference notes following Station Index.





REFERENCE NOTES

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

Figures and letters following the station name, such as 12 SSW, indicate distance in miles and direction from the post office.

Delayed data and corrections will be carried only in the June and December issues of this bulletin.

Monthly and seasonal snowfall and heating degree days for the 12 months ending with the preceding June data will be carried in the July issue of this bulletin.

Stations appearing in the Index, but for which data are not listed in the tables, are either missing or received too late to be included in this issue.

Divisions, as used in "Climatological Data" Table and on the maps, became effective with data for October 1956.

Unless otherwise indicated, dimensional units used in this bulletin are: Temperature in °F, precipitation and evaporation in inches and wind movement in miles. Monthly degree day totals are the sums of the negative departures of average daily temperatures from 65° F.

Evaporation is measured in the standard Weather Bureau type pan of 4-foot diameter unless otherwise shown by footnote following the "Evaporation and Wind" Table. Max and Min in "Evaporation and Wind" Table refer to extremes of temperature of water in pan as recorded during 24 hours ending at time of observation.

Normals for all stations are climatological standard normals based on the period 1931-1960.

Water equivalent values published in the "Snowfall and Snow on Ground" Table are the water equivalent of snow, sleet, or ice on the ground. Samples for obtaining measurements are taken from different points for successive observations; consequently occasional drifting and other causes of local variability in the snowpack may result in apparent inconsistencies in the record.

Entries of snowfall in the "Climatological Data" Table and the "Snowfall and Snow on Ground" Table, and in the "Seasonal Snowfall" Table include snow and sleet. Entries of snow on ground include snow, sleet, and ice.

Data in the "Extremes" Table; "Daily Precipitation" Table; "Daily Temperature" Table; and "Evaporation and Wind" Table; and snowfall in the "Snowfall and Snow on Ground" Table, when published, are for the 24 hours ending at time of observation. The Station Index shows observation times in local standard time. During the summer months some observers take the observations on daylight saving time.

Snow on ground in the "Snowfall and Snow on Ground" Table is at observation time for all except Weather Bureau and FAA stations. For these stations snow on ground values are at 7:00 a.m., E.S.T.

In the Station Index the letters C, G, H, and J in the "Special" column under the heading "Observation Time and Tables", indicate the following:

- C Recording Rain Gage Station. Hourly precipitation values are processed for special purposes, and are published later in "Hourly Precipitation Data" Bulletin.
- G "Soil Temperature" Table.
- H "Snowfall and Snow on Ground" Table. Omission of data in any month indicates no snowfall and/or snow on ground in that month.
- J "Supplemental Data" Table.

OTHER REFERENCE NOTES

No record in the "Climatological Data" Table and the "Daily Temperature" Table is indicated by no entry.

Interpolated values for monthly precipitation totals may be found in the annual issue of this publication.

- No record in the "Supplemental Data" Table; "Daily Precipitation" Table; "Evaporation and Wind" Table; "Snowfall and Snow on Ground" Table; and the Station Index.
- + And also on an earlier date or dates.
- ++ Fastest observed one minute wind speed. This station is not equipped with automatic wind instruments.
- \* Amount included in following measurement, time distribution unknown.
- # Thermometers are generally exposed in a shelter located a few feet above sod-covered ground; however, the reference indicates that the thermometers are exposed in a shelter located on the roof of a building.
- // Gage is equipped with a windshield.
- AE This entry in time of observation column in Station Index means after rain.
- B Adjusted to a full month.
- D Water equivalent of snowfall wholly or partly estimated, using a ratio of 1 inch water equivalent to every 10 inches of new snowfall.
- M One or more days of record missing; if average value is entered, less than 10 days record is missing. See "Daily Temperature" Table for detailed daily record. Degree day data, if carried for this station, have been adjusted to represent the value for a full month.
- R Amounts from recording gage. (These amounts are essentially accurate but may vary slightly from the amounts to be published later in Hourly Precipitation Data.)
- SS This entry in time of observation column in Station Index means observation made near sunset.
- T Trace, an amount too small to measure.
- V Includes total for previous month.
- X Observation time is 1:00 a.m., E.S.T. of the following day.
- VAR This entry in time of observation column in Station Index means variable.

General weather conditions in the U. S. for each month are described in the publications MONTHLY WEATHER REVIEW, MONTHLY CLIMATOLOGICAL DATA-NATIONAL SUMMARY, and STORM DATA, all of which may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

Information concerning the history of changes in locations, elevations, exposure, etc., of substations through 1955 may be found in the publication "Substation History" for this state. That publication may be obtained from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. for 25 cents. Similar information for regular Weather Bureau stations may be found in the 1961 annual issue of Local Climatological Data for the respective stations, obtained as indicated above, price 15 cents.

Subscription Price: 20 cents per copy, monthly and annual; \$2.50 per year. (Yearly subscription includes the Annual Summary). Checks and money orders should be made payable to the Superintendent of Documents. Remittance and correspondence regarding subscriptions should be sent to the Superintendent of Documents, Government Printing Office, Washington 25, D. C.

# MARYLAND AND DELAWARE

