

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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In Cooperation with Maryland State Weather Service

# CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION  
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### GENERAL SUMMARY

July was 1° cooler than normal. The first and last days were hot; there also were other hot days. The coolest day was the 3d. Lowest temperatures occurred on the 4th; they were the lowest of record for July at many points in north-central and southern Maryland. Heat periods were 1st-2d, 5-10th, 17-25th, and 29th-31st. Cool spells were 3d-4th, 11-16th, and 26-28th.

Rainfall averaged one and one-fourth times the normal, the greatest in July since 1926. It was unevenly distributed through the month and over the section. Most of the rain fell at the beginning and near the close of the month. The intervening dry period was interrupted occasionally by local thundershowers. Monthly totals were 4 to 6 inches, except 2.6 to 4 inches in Allegany and western Washington Counties and 6 to 8.5 inches in southern Maryland and the southern third of the Eastern Shore.

Monthly sunshine was normal. Clear sky and abundant sunshine periods were 4-8th, 18-19th, 21st-24th, and 29th-31st.

Relative humidity averaged slightly below normal. The 11-16th, however, was rather damp, and the 20-25th was humid.

Strong thundergusts of 2d and 9th broke and uprooted some trees and damaged some property locally. The northeast storm of 2-3d grounded some sloops and pleasure craft on the shores of Chesapeake Bay; also flattened corn and other tall plants, damaging some.

Growing crops, pastures, and grasses were mostly good to excellent early in the month. The prolonged dry spell caused crops to deteriorate to fair to good and pastures and grasses to poor to fair, but all improved after the timely rains of the last week. Threshing of wheat and rye and harvesting and threshing of oats were in progress, except in the Allegheny Mountain region, where wheat and rye were harvested during the second and third weeks and oats had not ripened. Yields of wheat and oats were fair to good; of rye, poor to fair. Haying also was in progress. Early potatoes were being dug, with poor to good yields. Truck crops and early varieties of tomatoes, sugar corn, apples, peaches, pears, and cantaloupes were being harvested. Tree fruits were poor to fair. Corn grew rapidly. Sweet potatoes vined heavily. Late tomatoes were blooming and fruiting. Late potatoes, late corn, and very late tomatoes were being cultivated. At the close of the month: early corn was earing or in ear in the eastern and central divisions and in tassel in western Maryland, and late potatoes were blooming in the Allegheny Mountain region and in southern Maryland. — J. B., jr.

### TEMPERATURE

The monthly mean for the section, 74.1°, is 1.1° below normal. The highest monthly mean was 77.2° at Baltimore and Solomons; the lowest, 65.4°, at Sines. The highest temperature, 102°, occurred at Cumberland on the 23d; the lowest, 37°, at Oakland on the 4th. The greatest local monthly range was 55° at Oakland; the least, 41°, at Crisfield. The greatest daily range was 42° at Hancock on the 6th, 7th, 18th, and 19th.

### PRECIPITATION

The monthly average for the section, 5.36 inches, is 1.12 inches above normal. The greatest monthly amount was 8.45 inches at Solomons; the least, 2.65 inches, at Hancock (Tonoloway). The greatest 24-hour amount was 5.90 inches at Snow Hill on

the 26-27th. The average number of days with 0.01 inch or more of precipitation, 8, is 2 below normal.

### MISCELLANEOUS PHENOMENA (WITH DATES)

- Corona, lunar. — Parkton, 4, 9, 10.
- Fogs, light. — 11 to 22; 24 to 30.
- Fogs, dense. — 14, 15, 18, 20 to 22, 25, 26, 28, 29.
- Hail, light. — Coleman, 2; Cumberland, 31; Friendsville, 20; La Plata, 25.
- Halos, solar. — 10, 18, 19, 20, 27.
- Rainbows. — La Plata, 2.
- Thundergusts, high. — Northwest, 2, 9.
- Thunderstorms. — 1, 2, 9 to 11, 15 to 17, 19, 20 to 25, 31.
- Winds, high. — Northeast, 2-3.

### PRESSURE, HUMIDITY, SUNSHINE AND WIND

Stations	Atmospheric pressure reduced to sea level				Wind†				Mean relative humidity			Percentage of sunshine	
	Average	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	Local n'n		8 p. m.
Aberdeen, Md.	30.02	30.33	4	29.70	1	5.6	26	ne	3	80	64	76	65
Baltimore Md.	30.01	30.35	4	29.71	1	9.5	33	nw	2	69	53	63	65
Elkins, W. Va.	30.06	30.43	4	29.82	2	4.4	18	se	2	58	54	74	60
Harrisburg, Pa.	30.00	30.38	4	29.70	1	6.4	34	nw	2	73	52	59	67
Norfolk, Va.	30.03	30.39	4	29.80	1	9.9	36	ne	3	83	62	75	67
Philadelphia, Pa.	30.02	30.35	4	29.71	1	11.1	36	ne	3	74	54	62	67
Pittsburgh, Pa.	30.04	30.44	4	29.79	15	8.0	41	nw	22	71	46	52	70
Washington, D. C.	30.01	30.35	4	29.72	1	5.8	31	nw	2	77	57	66	62

†Velocity of wind in miles per hour by 4-cup anemometer.

### COMPARATIVE DATA FOR MARYLAND AND DELAWARE FOR JULY

Year	Temperature				Precipitation				Number of days				
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest	Least	Average snowfall	With .01 in. or more precipitation	Clear	Partly cly	Cloudy
1895...	71.4	-3.8	102	32	3.29	-0.95	7.68	0.81	0.0	8	14	11	6
1896...	76.0	+0.8	99	40	5.22	+0.98	15.27	2.34	0.0	13	11	12	7
1897...	75.6	+0.4	102	41	6.94	+2.70	19.90	2.78	0.0	13	13	11	7
1898...	77.5	+2.3	109	32	3.65	-0.59	7.77	1.31	0.0	9	13	12	6
1899...	75.7	+0.5	100	37	3.69	-0.55	8.37	0.97	0.0	10	15	10	6
1900...	77.3	+2.1	106	35	3.20	-1.04	6.13	1.25	0.0	8	17	11	6
1901...	78.8	+3.6	106	40	5.43	+1.19	10.81	2.11	0.0	11	13	12	6
1902...	75.8	+0.6	104	43	3.72	-0.52	7.53	1.77	0.0	10	13	12	6
1903...	75.1	-0.1	100	36	5.48	+1.24	8.85	3.56	0.0	11	17	9	5
1904...	73.5	-1.7	102	35	5.28	+1.04	8.32	1.93	0.0	12	12	13	6
1905...	75.3	+0.1	101	42	7.38	+3.14	14.70	2.86	0.0	14	12	12	7
1906...	74.0	-1.2	96	42	5.20	+0.96	11.56	1.64	0.0	12	10	15	6
1907...	74.7	-0.5	99	39	3.94	-0.30	7.83	1.62	0.0	9	16	13	6
1908...	76.6	+1.4	102	38	4.88	+0.64	9.53	1.42	0.0	11	13	13	5
1909...	73.0	-2.2	99	32	1.64	-2.60	4.92	0.20	0.0	5	16	11	4
1910...	76.0	+0.8	97	42	2.56	-1.58	6.88	0.63	0.0	8	17	10	4
1911...	77.0	+1.8	106	38	2.70	-1.54	6.07	0.04	0.0	7	18	10	3
1912...	74.3	-0.9	99	43	5.28	+1.04	13.26	2.19	0.0	11	14	10	7
1913...	75.9	+0.7	102	38	2.77	-1.47	6.80	0.53	0.0	9	16	11	7
1914...	74.4	-0.8	101	35	3.10	-1.14	7.38	1.28	0.0	10	13	12	4
1915...	74.5	-0.7	103	36	3.27	-0.97	6.10	1.29	0.0	11	13	13	5
1916...	76.0	+0.8	100	42	5.32	+1.28	9.97	1.70	0.0	10	13	11	7
1917...	74.9	-0.3	102	45	6.36	+2.12	14.76	3.22	0.0	14	11	12	8
1918...	72.6	-2.6	99	38	3.05	-1.19	5.40	0.60	0.0	8	16	10	5
1919...	75.6	+0.4	105	41	7.89	+3.65	15.06	5.26	0.0	12	15	7	9
1920...	73.0	-2.2	98	37	4.68	+0.44	7.96	2.33	0.0	9	17	10	4
1921...	77.7	+2.5	101	45	4.22	-0.02	8.80	1.06	0.0	10	14	11	6
1922...	74.7	-0.5	99	43	5.82	+1.58	11.78	1.83	0.0	12	14	10	10
1923...	73.9	-1.3	101	39	4.61	+0.37	8.87	1.68	0.0	11	14	10	10
1924...	73.0	-2.2	100	42	2.48	-1.76	5.95	0.29	0.0	7	17	9	5
1925...	74.8	-0.4	100	36	5.06	+0.82	8.73	1.88	0.0	10	15	11	8
1926...	74.9	-0.3	107	38	5.85	+1.61	15.20	1.91	0.0	12	14	9	8
1927...	74.2	-1.0	100	39	3.86	-0.38	7.55	1.41	0.0	10	12	12	7
1928...	75.7	+0.5	99	40	4.30	+0.06	8.20	1.29	0.0	10	18	8	5
1929...	74.4	-0.8	102	34	1.71	-2.53	4.49	0.59	0.0	7	17	11	5
1930...	77.1	+2.9	110	38	1.68	-2.66	6.01	0.18	0.0	6	18	11	3
1931...	77.6	+3.4	103	44	4.53	+0.29	8.48	1.95	0.0	12	15	11	11
1932...	74.8	-0.4	99	41	3.03	-1.21	5.93	1.55	0.0	9	17	9	5
1933...	74.1	-1.1	102	37	5.36	+1.12	8.45	2.65	0.0	8	15	9	7
Period.	75.2	.....	110	32	4.24	.....	19.90	0.04	0.0	10	14	11	6

Climatological Data, July, 1933

Table with columns: Stations, Counties, Elevation, Length of record, Temperature (Mean, Departure from normal, Highest, Date, Lowest, Date, Greatest daily range), Precipitation (Total, Departure from normal, Greatest in 24 hours, Total snowfall), Number of days (With precip., Clear, Partly cloudy, Cloudy), Prevailing direction of wind, Observers. Includes sections for Maryland, Dist. of Columbia, and Delaware.

The departures from normal temperature and precipitation are computed only for such stations as have 10 or more years of record, but all complete reports are used in determining section or division means. Data in italics determined from surrounding stations. T. Precipitation is less than 0.01 inch rain or melted snow. Post addresses of these stations are as follows: Of Bell, Glendale; of Coleman, Worton; of Fallston, Bagley; of Ferry Landing, Owings; of Great Falls, Bethesda; of Pleasant Hill, Owings Mills. Also on other dates. \*Custom House, Gay and Water Sts. \*\*Weather Bureau Building, 24th and M Sts. §Pretyboy Dam. §§Drum Point Light Station. §§§Municipal Building. §§§§Porter Reservoir.



Daily Temperatures for July, 1933

Table with columns for Stations, 31 days (1-31), and Mean. Rows list various Maryland and Delaware stations such as Aberdeen, Annapolis, Baltimore, etc., with their respective daily maximum and minimum temperatures.

§§ Instruments are read in morning; maximum temperature then read is charged to preceding day, on which it almost always occurs. Temperatures at Aberdeen, Baltimore, Stues, and Washington are from midnight to midnight; other stations, except Cumberland, are for 24-hour period ending late in afternoon, near sunset. (W. B. Richmond, Va. 8 30 33-980)