

# CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

G. N. BRANCATO

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## GENERAL SUMMARY

This was the wettest November of record for the State of Maryland and the Section as a whole, exceeding the previous records made in 1907. For Delaware, the average precipitation was slightly higher than that of Maryland, but it was the fourth wettest November, being greater in amount in 1907, 1920 and 1932. Practically all the precipitation was rain as the only measurable snow was reported from Garrett and western Allegany counties. The rain was a continuation of a wet spell which began October 28th, ending a month-long dry period. Precipitation departures from the normal were greatest in northern Delaware, and southern and northeastern Maryland. Distribution of the precipitation through the month was excellent with most of it falling on the 3d-4th, 8th, 11-12th, 15-16th, and 22d-24th.

This was the coldest November since 1939 but was only 1.8° below normal. There were no unusual warm or cold periods during the month. The first 13 days were near or above normal with the highest readings of the month near the 5th. From the 14th through the 20th, temperatures were near or below normal. The last 10 days were changeable but, in practically all cases, produced the month's lowest readings. Except for above normal averages at Crisfield, Washington, Germantown and the two Baltimore stations, all places were below normal. The greatest departures were in sections of Garrett and Allegany counties and the lower Eastern Shore of Maryland.

Wind velocities were about 30% above the usual November average. Highest velocities were on the 3d, 8th, 12th, 17th, and 25th. Sunshine was slightly below normal.

The rainy period, which began in late October, restored soil moisture and started flow in small streams. It also provided a period of accelerated seeding of winter grains, the sowing of which had been delayed by a month-long dry period. At the end of the month, winter grains and grasses were fair to good and improving. The usual farm operations were progressing.

## TEMPERATURE

The monthly mean temperature for the section was 43.5 degrees, 1.8 degrees below normal. The highest monthly mean temperature was 51.3 degrees at Crisfield, Maryland, and the lowest was 35.0 degrees at Sines, Maryland. The highest temperature, 70 degrees, occurred at Lewes, Delaware, on the 4th; the lowest, 5 degrees, at Oakland, Maryland, on the 30th. The greatest local monthly range was 51 degrees at Hancock, Maryland, where a maximum of 63 degrees was reported on the 5th, and a minimum of 12 degrees on the 30th. The least monthly range was 34 degrees at Annapolis, Maryland, where a maximum temperature of 62 degrees was reported on the 3d, 4th, and 6th, and a minimum temperature of 28 degrees on the 30th.

## PRECIPITATION

The monthly average for the section was 5.43 inches, which was 2.80 inches above normal. The greatest amount of precipitation for the month

was 8.11 inches at Wilmington, Delaware. Hancock, Maryland, reported the least amount for the month with 3.20 inches. The greatest 24-hour rainfall was 3.55 inches and was recorded at Solomons, Maryland on the 3d. The snowfall average of 0.1 inch over the Section was 0.9 inch below normal. The greatest monthly snowfall was 2.4 inches at Oakland, Maryland, and the least amount was a Trace over the Section east of the Allegheny Mountains. The greatest 24-hour amount, 1.0 inch, fell at Oakland and Sines, Maryland, on the 28th.

## PRESSURE, HUMIDITY, SUNSHINE, WIND, DEGREE DAYS

Stations	Atmospheric pressure reduced to sea level			Wind			Mean relative humidity			Percentage of sunshine	Heating degree days (base 65°)		
	Highest	Date	Lowest	Average hourly velocity	Maximum velocity	Direction	7:30 a. m.	1:30 p. m.	7:30 p. m.				
Aberdeen, Md. ....	30.44	21	29.24	24	.....	.....	.....	83	70	81	.....	667	
Annapolis, Md. ....	30.53	21	29.34	24	9.6	.....	.....	77	61	68	.....	570	
Baltimore, Md. ....	30.55	21	29.31	24	10.4	38	w.	24	72	56	61	48	561
Elkins, W. Va. ....	30.54	30	29.31	24	8.5	39	w.	24	81	61	74	27	768
Harrisburg, Pa. ....	30.57	21	29.34	24	8.3	30	nw.	24	75	60	66	46	708
Norfolk, Va. ....	30.51	21	29.43	24	11.6	39	se.	3	81	69	72	42	407
Philadelphia, Pa. ....	30.55	21	29.29	24	8.4	26	ne.	3	79	57	69	53	598
Pittsburgh, Pa. ....	30.51	21	29.30	24	10.9	41	w.	24	77	65	67	22	699
Washington, D. C. ....	30.57	21	29.36	24	7.7	31	n.	8	84	64	72	48	558

## COMPARATIVE DATA FOR NOVEMBER

Year	FOR MARYLAND						FOR DELAWARE					
	Temperature			Precipitation			Temperature			Precipitation		
	Mean	Highest	Lowest	Average	Average snowfall	No. of days with .01 in. or more	Mean	Highest	Lowest	Average	Average snowfall	No. of days with .01 in. or more
1895.....	45.6	86	0	1.64	0.1	7	47.9	78	24	1.94	T.	8
1896.....	49.1	78	12	3.07	2.2	12	51.6	78	25	3.18	1.7	10
1897.....	45.0	78	5	4.76	0.2	12	46.6	72	21	3.78	T.	13
1898.....	42.8	73	6	3.82	5.5	11	44.2	73	22	4.58	5.5	12
1899.....	44.9	73	12	2.02	T.	6	45.0	66	22	2.15	0.0	6
1900.....	47.5	81	4	3.00	1.0	8	49.9	66	22	2.50	T.	6
1901.....	39.1	74	4	2.72	2.3	8	40.6	76	17	2.20	1.2	4
1902.....	50.8	80	11	3.12	0.3	5	52.2	80	27	3.06	0.0	7
1903.....	40.9	82	1	1.17	0.8	5	42.5	79	12	1.36	0.1	5
1904.....	41.9	72	11	1.62	2.2	4	42.2	67	18	2.17	0.1	6
1905.....	43.2	77	10	1.30	0.1	6	44.8	73	14	1.09	T.	5
1906.....	45.2	78	15	1.43	1.0	5	46.0	75	22	1.99	0.4	6
1907.....	42.8	70	10	5.27	1.0	11	45.2	70	22	5.78	0.1	12
1908.....	44.5	76	3	0.95	4.2	3	45.9	76	20	1.31	0.1	3
1909.....	49.1	85	11	1.16	1.0	6	49.6	79	23	2.12	1.2	7
1910.....	40.9	76	2	2.05	3.5	8	42.1	74	18	2.44	0.2	6
1911.....	42.3	82	6	3.99	0.5	10	44.7	72	20	5.31	0.0	11
1912.....	46.1	79	10	2.04	1.2	5	47.8	78	14	2.74	3.0	5
1913.....	47.0	87	10	2.19	1.2	7	48.8	79	27	1.54	T.	6
1914.....	44.2	82	0	2.64	0.1	7	45.8	80	15	1.06	T.	4
1915.....	44.8	79	14	1.46	T.	9	46.6	76	19	0.92	T.	8
1916.....	44.9	83	9	2.18	0.1	8	45.4	74	15	2.28	T.	8
1917.....	41.2	76	1	0.60	1.9	4	41.5	70	15	0.49	1.6	3
1918.....	44.9	74	13	1.47	0.1	6	45.4	71	17	1.27	0.0	4
1919.....	45.5	81	11	3.29	0.1	11	46.6	78	20	3.85	0.0	10
1920.....	44.4	76	3	3.82	0.8	10	46.3	75	16	5.88	0.0	10
1921.....	46.7	82	15	4.34	0.1	13	48.4	81	25	3.98	T.	13
1922.....	46.2	75	14	0.65	0.5	5	47.0	74	23	0.82	T.	3
1923.....	43.9	68	12	2.60	0.2	9	45.0	67	21	2.85	0.0	7
1924.....	44.4	79	10	1.79	1.8	5	46.2	79	16	2.13	0.3	6
1925.....	42.9	74	6	3.11	0.3	10	45.0	74	20	3.04	0.2	9
1926.....	43.0	78	7	4.45	0.1	8	44.9	75	19	3.70	T.	8
1927.....	49.7	79	9	2.78	0.3	8	51.2	79	22	3.44	T.	10
1928.....	47.0	80	13	1.89	1.3	8	48.3	79	21	1.72	T.	9
1929.....	45.8	85	7	2.62	1.8	11	48.0	82	11	2.62	1.4	12
1930.....	44.6	75	16	1.19	0.8	9	46.8	74	8	2.04	T.	9
1931.....	51.6	80	16	0.95	0.9	6	52.9	79	23	0.86	0.1	5
1932.....	43.2	72	2	5.22	T.	9	45.7	70	18	5.50	T.	9
1933.....	42.5	81	8	1.38	2.0	7	44.2	75	10	1.63	0.2	5
1934.....	47.8	80	10	3.56	0.2	10	49.1	76	20	3.65	T.	9
1935.....	48.4	86	9	4.32	0.8	12	50.4	80	23	5.34	1.1	15
1936.....	43.0	82	4	1.02	0.7	6	44.8	80	15	0.93	T.	6
1937.....	44.2	79	3	3.43	0.6	7	46.2	71	19	3.61	T.	11
1938.....	47.7	85	8	2.77	6.6	10	49.8	81	8	2.95	6.3	8
1939.....	45.4	75	12	1.35	1.4	5	43.9	71	23	1.36	T.	6
1940.....	45.4	77	14	5.14	T.	10	46.5	75	20	4.66	T.	9
1941.....	47.8	75	11	1.77	T.	5	49.0	76	20	2.28	T.	6
1942.....	46.7	81	11	2.34	0.1	10	48.2	77	16	2.84	T.	9
1943.....	44.0	76	10	3.03	0.4	6	45.1	75	19	2.96	T.	5
1944.....	45.0	78	8	3.36	0.8	8	45.9	75	20	5.07	T.	8
1945.....	47.5	80	12	4.21	0.4	12	49.3	81	19	4.11	0.1	18
1946.....	49.7	82	15	1.33	T.	7	50.2	79	19	2.02	0.0	7
1947.....	43.4	69	5	5.42	0.1	11	44.2	70	20	5.47	0.0	11
Period ...	45.2	87	-16	2.61	1.1	8	46.7	82	8	2.81	0.5	8

Climatological Data for November 1947

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

All departures from normal are computed from the averages of the entire period for stations having 10 or more years of record, except that for First-Order Weather Bureau Stations they are based on adopted normals. The normal may be found by adding the departures when minus (-) or subtracting when plus (+). T. Trace or 0.005 inch or less rain or melted snow. † Recording gage. ‡ Data interpolated. § Elevations are of ground above mean sea level.

¶ Post addresses of these stations are as follows: Of Bell, Glendale; of Blackwater, Cambridge; of Charlotte Hall, Mechanicsville; of Coleman, Worton; of Edgemont, Smithsburg; of Ferry Landing, Owings; of Great Falls, Bethesda; of Picardy, Paw Paw, W. Va.; of Prettyboy Dam, Parkton; of Sines, Oakland; of Takoma Park No. 2, Silver Spring; of Tonoloway, Hancock. \* Custom House, Gay and Water Sts. \*\* Weather Bureau Building, 24th and M Sts. † Also on other dates. ‡ Municipal Building. § For Reservoir. ¶ Water Pumping Station. †† University Farm. Figures and letters following station indicate distance and direction of the observation point from the City Post Office. ††† 1.8 miles west.

Thermometers are read in morning; maximum temperature then read is charged to preceding day, on which it almost always occurs. Temperatures at Aberdeen, Annapolis, Baltimore, Baltimore Airport, Frederick Airport, Sines, Washington, and Wilmington are from midnight to midnight; at Ocean City and Snow Hill the thermometers are read at 1:30 a. m., the extremes are charged to the preceding day; at other stations temperatures are for a 24-hour period ending in late afternoon or near sunset, except 11 p. m. at Chestertown. † Data interpolated.

Daily Precipitation for November 1947

Table with columns for Stations, Drainage basin, Day of month (1-31), and Total. Rows list various Maryland and Delaware stations with their precipitation data for November 1947.

Except as otherwise indicated, amounts are for 24-hours ending late in afternoon. 1Midnight to midnight; recording gage. 2Measured in the morning; for the preceding 24-hours. 3Data for 24-hours ending at 1:30 a. m. of following day. T. Trace or 0.005 inch or less. \*Included in next measurement. ITALICS Data interpolated. §First-order Weather Bureau station. ¶Water Pumping Station. ¶¶University Farm. ¶¶¶Municipal Building. ¶¶¶¶Porter Reservoir. 4Midnight to midnight

Daily Temperatures for November 1947

Table with columns for Stations (Delaware), Day of month (1-31), and Mean. Rows list Delaware stations with their maximum and minimum temperatures for November 1947.

Daily Temperatures for November 1947-Continued

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

See page 42 for explanation of reference marks.