

CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

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GENERAL SUMMARY

This October was mild with monthly rainfall well above normal. It was not a wet month, however; since heavy rains during the 1st-2d and 30th-31st produced nearly the monthly totals. Dry weather prevailed between the two heavy rain periods. The weather was cold during the 1st-5th, 13-18th, 23d-25th, and 29th-31st; otherwise, it was mild or warm, except very warm on the 7th, 9th and 10th. Monthly sunshine was 5% below normal.

A tornado occurred at 7 p.m. of the 21st, moving from southwest to northeast over a path one-quarter to one-half mile wide and 10 miles long, in the vicinity of Mt. Carmel Road, west of Hereford, in upper Baltimore County. One home and many barns, sheds, and outbuildings were wrecked; several homes were damaged; 1 person was injured; 1 horse, 1 cow, and some poultry were killed; many trees were uprooted; limbs were torn off other trees; and corn shocks were scattered. The property loss was \$50,000 to \$75,000.

Grasses and pastures were mostly good during the first decade, but deteriorated under prolonged dryness to mostly poor during the third decade.

During the first decade cutting and housing tobacco ended. During the second decade cutting and shocking late corn ended and digging late potatoes became rather general in the central and eastern divisions; harvesting tomatoes, sugar corn, and gardens, and haying ended over the section; and stripping early tobacco began. During the third decade digging late potatoes in western Maryland ended; digging sweet potatoes ended over the section, except on the central and southern Eastern Shore; sowing grains ended, except on the extreme southern Eastern Shore; barley that came up in the first decade was excellent; and early sown wheat and rye were good stands. Picking late apples, late peaches, and Keiffer pears, harvesting late truck crops, threshing and combining soy beans, and husking corn were in progress during the month.—J. B., jr.

TEMPERATURE

The monthly mean for the section, 57.0°, is 0.9° above normal. The highest monthly mean was 62.4° at Crisfield; the lowest, 49.4°, at Mt. Savage Summit and Oakland. The highest temperature, 94°, occurred at Great Falls on the 9th; the lowest, 15°, at Oakland on the 15th. The greatest local monthly range was 67° at Hancock; the least, 49°, at Crisfield and Delaware Breakwater. The greatest daily range was 50° at Western Port on the 19th.

PRECIPITATION

The monthly average for the section, 4.81 inches, is 1.79 inches above normal. The greatest monthly amount was 7.02 inches at Oxford; the least, 1.57 inches, at Mt. Savage Summit. The greatest 24-hour rainfall was 2.85 inches at Oxford on the 1st-2d. The monthly average snowfall for the section, a trace, is 0.1 inch below normal. The greatest 24-hour snowfall was 1.5 inches at Oakland on the 31st. The average number of days with 0.01 inch or more of precipitation, 9, is 2 above normal.

MISCELLANEOUS PHENOMENA (WITH DATES)

Eclipse of the moon.—Night 27-28. *Fogs.*—1 to 14, 16, 17, 19 to 22, 25 to 28, 30, 31.
Frost, first general killing of the season.—Garrett and Washington Counties, 13; Allegany County, 15; north-central and southern Maryland, 15, except near Chesapeake Bay, 16; Eastern Shore, 16. *Hail, light.*—Chewsville, College Park, Lutherville, Oakland and State Sanatorium, 21; Baltimore and Chestertown, 24. *Lightning* shattered a flag-pole and damaged a warehouse cornice in Baltimore and stunned 6 persons in a home at Lansdowne on the 21st. *Sleet, light.*—Chewsville and Williamsport, 24.
Sunlog.—Princess Anne, 24. *Thunderstorms.*—1, 9, 21, 22, 25.
Wild geese flying south.—Ferry Landing, 24. *Winds, high.*—2, 14, 17, 21, 22, 28.

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	Date	Average hourly velocity	Maximum velocity	Direction	Date	7:30 a. m.			1:30 p. m.	7:30 p. m.
Aberdeen, Md.	30.51	18	29.53	28	9.1	38	n.	28	88	..	78	..	299
Annapolis, Md.	30.54	18	29.52	31	7.5	87	..	77	..	232
Baltimore, Md.	30.55	18	29.55	31	9.4	38	n.w.	28	84	55	71	67	327
Elkins, W. Va.	30.51	15	29.60	28	5.5	27	w.	28	89	51	70	63	372
Harrisburg, Pa.	30.51	18	29.51	28	7.1	31	n.w.	28	80	55	68	49	314
Norfolk, Va.	30.50	18	29.48	31	9.4	26	n.	28	89	58	72	60	129
Philadelphia, Pa. ...	30.52	18	29.46	31	12.0	34	n.w.	28	79	55	64	54	264
Pittsburgh, Pa.	30.49	15	29.57	28	11.0	34	w.	28	78	47	56	55	297
Washington, D. C. ...	30.53	18	29.56	28	5.6	27	n.w.	28	81	54	68	56	255

COMPARATIVE DATA FOR OCTOBER

Year	FOR MARYLAND					FOR DELAWARE					
	Temperature			Precipitation		Temperature			Precipitation		
	Mean	Highest	Lowest	Average	Average snowfall with .01 in. or more	Mean	Highest	Lowest	Average	Average snowfall with .01 in. or more	
1895.....	50.7	82	4	1.93	T.	4	51.9	80	27	2.85	T.
1896.....	52.4	85	16	1.44	T.	5	54.0	84	28	3.16	0.0
1897.....	56.6	91	20	2.94	0.0	8	57.8	90	30	5.90	0.0
1898.....	56.8	89	17	4.87	T.	10	58.8	88	31	4.18	0.0
1899.....	57.1	88	15	2.60	0.0	5	58.3	83	29	3.61	0.0
1900.....	60.6	91	21	2.03	0.0	6	60.8	85	31	3.09	0.0
1901.....	54.8	92	16	1.14	T.	4	55.8	82	30	1.59	0.0
1902.....	57.2	89	17	5.72	T.	7	57.8	84	27	4.89	T.
1903.....	56.5	89	20	4.06	T.	7	57.6	86	31	6.23	T.
1904.....	53.6	91	14	2.60	T.	3	53.8	90	26	2.78	0.0
1905.....	56.5	93	20	2.80	T.	6	57.8	89	31	2.05	0.0
1906.....	55.3	82	12	5.17	0.1	14	57.3	81	28	4.47	0.0
1907.....	51.1	83	15	2.34	T.	6	52.1	82	27	2.92	0.0
1908.....	57.3	90	15	2.34	0.0	6	59.2	88	33	1.81	0.0
1909.....	51.5	86	19	1.79	T.	6	58.2	82	27	5.36	0.0
1910.....	58.8	92	15	3.21	0.1	7	59.3	83	33	2.83	0.0
1911.....	56.2	85	23	3.47	T.	10	57.3	83	33	2.02	0.0
1912.....	57.9	93	18	1.54	T.	7	60.0	96	33	2.02	0.0
1913.....	57.9	92	13	4.85	0.1	11	59.5	80	30	4.67	0.0
1914.....	59.1	93	19	1.73	T.	6	60.6	87	28	1.77	0.0
1915.....	57.7	88	19	3.85	T.	9	59.4	87	30	4.08	0.0
1916.....	55.4	91	19	1.45	T.	5	57.0	89	29	1.53	0.0
1917.....	50.7	87	18	5.66	1.1	10	52.4	83	21	6.99	0.0
1918.....	59.6	89	21	1.43	0.0	6	59.4	85	29	0.89	0.0
1919.....	62.3	96	27	3.31	0.0	11	63.3	93	35	2.72	0.0
1920.....	60.2	91	25	0.84	0.1	3	61.0	86	34	1.07	0.0
1921.....	55.7	85	20	1.09	T.	5	56.8	82	31	1.00	0.0
1922.....	58.3	94	15	1.93	0.0	6	59.3	89	28	1.41	0.0
1923.....	54.8	90	18	2.39	T.	6	56.0	82	30	3.58	0.0
1924.....	55.9	88	15	0.40	0.0	2	56.8	84	30	0.89	0.0
1925.....	50.9	85	16	5.49	3.4	15	53.0	87	25	4.56	1.7
1926.....	55.8	94	21	3.40	0.1	10	56.8	91	26	2.46	0.0
1927.....	58.6	98	24	6.00	0.6	9	59.3	94	36	4.85	0.0
1928.....	57.7	90	13	1.02	T.	5	58.6	88	25	1.13	0.0
1929.....	53.4	85	23	5.58	0.1	9	55.0	80	28	4.33	0.0
1930.....	53.9	89	7	0.74	0.1	5	54.9	86	23	1.45	0.0
1931.....	59.1	91	22	1.69	T.	6	60.8	90	33	2.61	0.0
1932.....	56.5	88	22	6.85	0.1	9	58.6	85	30	6.70	0.0
1933.....	54.7	91	16	2.03	T.	6	56.8	85	26	1.37	0.0
1934.....	54.6	85	15	1.25	0.1	4	55.2	79	28	2.08	T.
1935.....	56.0	88	17	2.75	0.1	4	58.2	84	30	2.92	0.0
1936.....	57.6	85	16	3.24	T.	8	58.8	83	23	3.27	0.0
1937.....	53.4	87	14	7.23	0.1	13	55.5	82	26	5.47	T.
1938.....	56.5	92	19	1.75	0.0	7	58.1	86	33	2.33	0.0
1939.....	56.8	94	15	4.83	T.	9	58.7	92	27	4.63	0.0
Period.....	55.9	98	4	3.02	0.1	7	57.5	96	21	3.05	T.

Climatological Data for October 1939

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 (Clear, Partly cloudy, Cloudy), Prevailing direction of wind, OBSERVERS.

The departures from normal temperatures are computed from the averages of the entire period for stations having 10 or more years of record. Departures of precipitation with 15 years or more of record are computed from a normal or "standard mean", adjusted to a uniform 35-year period; for stations of 10 to 14 years the means for the period of record are used. Data in italics determined from surrounding stations. T. Precipitation is less than 0.01 inch rain or melted snow.

Odessa, Del. - Weekly evaporation values, stated as cubic centimeters of water lost from white spherical atmometers in 1939: May 1-8, 419.8; May 8-15, 339.8; May 15-22, 274.3; May 22-29, 244.3; May 29-June 5, 278.3; June 5-12, 367.8; June 12-19, 279.2; June 19-26, 266.8; June 26-July 3, 240.8; July 3-10, 227.2; July 10-17, 328.8; July 17-24, 171.8; July 24-31, 181.2; July 31-Aug. 7, 242.0; Aug. 7-14, 317.0; Aug. 14-21, 138.7; Aug. 21-28, 192.7; Aug. 28-Sept. 4, 168.7; Sept. 4-11, 235.7; Sept. 11-18, 226.2; Sept. 18-25, 194.0; Sept. 25-Oct. 2, 137.8. Observations by Isaac G. Cleaver. - University of Delaware, Agricultural Experiment Station, L. A. Stearns, Entomologist.

Daily Precipitation for October 1939

Table with columns for Stations, Drainage basin, Day of month (1-31), and Total. Rows list various stations like Aberdeen, Annapolis, Baltimore, etc., with their respective precipitation data for each day.

Except as otherwise indicated, observations are generally made late in afternoon, near sunset, and precipitation recorded is for the 24 hours ending at time of observation.
* First-order Weather Bureau station: precipitation is for the 24-hour period, midnight to midnight.
† Precipitation is for 24-hour period, midnight to midnight.
‡ Precipitation is for 24-hour period, 9:30 p.m. to 9:30 p.m.
§ Precipitation is measured in the morning; amount then recorded is for the preceding 24 hours.
¶ Precipitation is measured with recording gage.
** Precipitation is included in the next measurement.
T, Trace, or precipitation is less than .01 inch.
§§ Two miles northwest of Frostburg.
§§§ Municipal Building.
§§§§ Porter Reservoir.

Daily Temperatures for October 1939

Table with columns for Stations, Day of month (1-31), and Mean. Rows list stations like Bridgeville, Delaware Breakwater, Delaware City, etc., with their maximum and minimum temperatures for each day.

Daily Temperatures for October 1939-Continued

Table with columns for Stations, 31 days, and Mean. Rows list various Maryland locations such as Aberdeen, Annapolis, Baltimore, etc., with corresponding temperature data for each day.

§§ Instruments are read in morning; maximum temperature then read is charged to preceding day, on which it almost always occurs. Temperatures at Aberdeen, Annapolis, Baltimore, Conowingo Dam, Dundalk, Sines, and Washington are from midnight to midnight; other stations, except Cheltenham and Cumberland, are on 24-hour period ending late in afternoon, near sunset, except 9:30 p.m. at Princess Anne. (WFO, Richmond, Va., 1-26-40-1,050)