

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU  
IN COOPERATION WITH MARYLAND STATE WEATHER SERVICE

# CLIMATOLOGICAL DATA

15

MARYLAND AND DELAWARE SECTION

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## GENERAL SUMMARY

With the exception of October, 1919, this was the warmest October of record. The average temperature for October, 1919, was 62.4° which is 0.5° warmer than the current month. Paradoxically, the first day of the month was the coldest over most of the section with temperatures dropping to the higher-30's, or low-40's near the larger water areas, to the lower-30's and higher-20's in Piedmont and interior Del-Mar areas, and to the lower-20's west of the Blue Ridge, and below 20° in portions of Garrett County. The rest of the month was normal or warmer. From the 16th through the 23d and from the 26th through the 29th, temperatures averaged from 12 to 15° above normal.

While this was a dry month, it was not particularly so for October. In Delaware, it was the driest October since 1941. Except for general rains of 1 to 2½ inches in southern Delaware and southeastern Maryland on the 8th, only light rain fell on the Maryland-Delaware section between September 25 and October 23th. Scattered light rain fell on other areas on the 8th. Rains were fairly general from the 16th to the 19th but were too light to relieve the dry soil conditions. The last four days brought an end to the dry soil and low streams and well conditions which had developed. Slightly over ¾ of the month's rainfall fell from the 28th to the 31st. For the first time since 1941, no snow was reported at any station during this October.

October's warm, dry weather was ideal for harvesting the corn crop. The unusual cold of the first day killed tender vegetation and damaged some hardier plants. Soils became dry, except in southern Delaware and southeastern Maryland, holding up the seeding and germination of winter grains in most areas. The rains of the last four days, however, started an improvement in seeded grains and increased activity in fields which had not been sown. The end of the month found the corn harvest nearing completion. Pastures were fair to poor due to freezing temperatures on the first and later dry weather.

## TEMPERATURE

The monthly mean temperature for the section was 61.9 degrees, 5.5 degrees above normal. The highest monthly mean temperature, was 68.2 degrees at Crisfield, Maryland, and the lowest was 54.6 degrees at Sines, Maryland. The highest temperature, 94 degrees, occurred at Keedysville, Maryland, on the 23d; the lowest, 17 degrees, at Oakland, Maryland, on the 1st. The greatest local monthly range was 69 degrees at Keedysville, Maryland, where a maximum of 94 degrees was reported on the 23d, and a minimum of 25 degrees on the 1st; also at Oakland, Maryland, where a maximum of 86 degrees was reported on the 22d and a minimum of 17 degrees on the 1st. The least monthly range was 37 degrees at Oxford, Maryland. Oxford, Maryland had extreme maximum temperature of 79 degrees on the 19th and 23d, and extreme minimum temperature of 42 degrees on the 1st.

## PRECIPITATION

The monthly average for the section was 1.52 inches, which was 1.51 inches below the normal. The greatest amount of precipitation for the month was 3.24 inches at Snow Hill, Mary-

land. Western Port, Maryland, reported the least amount for the month with 0.73 inch. The greatest 24-hour rainfall was 2.58 inches, and was recorded at Crisfield, Maryland, on the 8th.

## EVAPORATION STATION: Beltsville, Md. (Elevation, 120 feet)

U.S. Bureau Dairying Industry, Joseph B. Shepherd, in charge

(Evaporation Tank: 10 inches deep, 48 inches in diameter)

Precipitation, 1.69; evaporation, 3.431; average daily wind movement, 15.3.

## 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.	30.40	24	29.69	29	6.8	25	sw	28	84	59	75	58	152
Annapolis, Md.	30.45	24	29.71	29	6.8	25	sw	28	84	59	75	58	91
Baltimore, Md.	30.51	24	29.79	29	7.9	25	sw	28	84	54	69	58	82
Elkins, W. Va.	30.54	1	29.88	28	4.9	20	w.	28	94	49	72	48	232
Harrisburg, Pa.	30.53	24	29.78	19	5.5	16	s.	4	83	47	64	68	139
Norfolk, Va.	30.46	1	29.81	29	9.4	23	ne.	24	90	63	83	52	38
Philadelphia, Pa.	30.53	24	29.75	19	6.5	20	ne.	31	88	52	74	70	90
Pittsburgh, Pa.	30.52	1	29.82	18	7.8	26	w.	28	83	47	56	51	97
Washington, D. C.	30.53	24	29.81	19	5.6	18	ne.	31	91	61	76	66	73

## COMPARATIVE DATA FOR OCTOBER

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	50.7	82	4	1.93	T.	4	51.9	80	27	2.85	T.	4
1896	52.4	85	16	1.44	T.	5	54.0	84	28	3.16	0.0	5
1897	56.6	91	20	2.94	0.0	8	57.8	90	30	5.90	0.0	10
1898	56.8	89	17	4.87	T.	10	55.8	88	31	4.18	0.0	9
1899	57.1	88	15	2.60	0.0	5	58.3	83	29	3.61	0.0	5
1900	60.6	91	21	2.03	0.0	6	60.8	85	31	3.09	0.0	5
1901	54.8	92	16	1.14	T.	4	55.8	82	30	1.59	0.0	3
1902	57.2	89	17	5.72	T.	7	57.8	84	27	4.89	T.	6
1903	56.5	89	20	4.06	T.	7	57.6	86	31	6.23	T.	8
1904	58.6	91	14	2.60	T.	3	58.8	90	26	2.78	0.0	4
1905	56.5	83	20	2.80	T.	6	57.8	89	31	2.05	0.0	5
1906	58.3	82	12	5.17	0.1	14	57.3	81	28	4.47	0.0	12
1907	51.1	83	15	2.34	T.	6	59.2	82	27	2.92	0.0	5
1908	57.3	90	15	2.34	0.0	6	57.2	88	33	1.81	0.0	6
1909	51.5	86	19	1.79	T.	6	53.2	82	25	1.22	0.0	5
1910	58.8	92	15	3.21	0.1	7	59.8	88	27	5.39	0.0	6
1911	56.2	85	23	3.47	T.	10	57.3	83	33	2.83	0.0	3
1912	57.9	93	18	1.54	T.	4	60.0	96	33	2.02	0.0	3
1913	57.9	92	13	4.55	0.1	11	59.5	80	30	4.67	0.0	10
1914	59.1	93	19	1.73	T.	6	60.6	87	26	1.77	0.0	4
1915	57.7	88	19	3.85	T.	9	59.4	87	30	4.08	0.0	8
1916	55.4	91	19	1.95	T.	5	57.0	89	29	1.53	0.0	4
1917	60.7	87	13	5.66	1.1	10	52.4	83	21	6.99	0.0	10
1918	59.6	89	21	1.43	0.0	5	59.4	85	29	0.89	0.0	4
1919	62.3	95	27	3.31	0.0	11	63.8	93	35	2.72	0.0	8
1920	60.2	91	25	0.84	0.1	3	61.0	86	34	1.07	0.0	2
1921	55.7	85	20	1.09	T.	5	56.8	82	31	1.00	0.0	4
1922	58.3	94	15	1.93	0.0	6	59.3	89	28	1.41	0.0	7
1923	54.8	90	18	2.39	T.	6	56.0	82	30	3.58	0.0	5
1924	55.9	88	15	0.40	0.0	2	56.8	84	30	0.89	0.0	2
1925	50.9	85	16	5.49	3.4	15	53.0	87	25	4.56	1.7	14
1926	55.8	94	21	3.40	0.1	10	56.8	91	26	2.46	0.0	9
1927	58.6	95	24	6.00	0.6	9	59.3	94	26	4.85	0.0	9
1928	57.7	90	13	1.02	T.	5	56.8	88	25	1.13	0.0	5
1929	59.4	85	23	5.58	0.1	9	55.0	80	28	4.33	0.0	8
1930	53.9	89	27	0.74	0.1	6	54.9	86	23	1.45	0.0	6
1931	59.1	91	22	1.89	T.	6	60.8	90	33	2.61	0.0	5
1932	56.5	85	22	6.35	0.1	9	58.6	85	30	6.70	0.0	8
1933	54.7	91	16	2.02	T.	6	56.8	85	26	1.27	0.0	6
1934	54.6	85	15	1.25	0.1	4	55.2	79	28	2.08	T.	5
1935	56.0	88	17	2.75	0.1	8	57.2	84	30	2.92	0.0	8
1936	57.6	85	16	3.24	T.	8	58.8	83	23	3.27	0.0	7
1937	53.4	87	14	7.29	0.1	13	55.5	82	26	5.47	T.	11
1938	56.5	92	19	1.75	0.0	7	58.1	86	33	2.33	0.0	7
1939	56.8	94	15	4.83	T.	9	58.7	92	27	4.63	0.0	6
1940	53.1	86	20	2.35	2.2	9	53.6	83	23	2.25	1.6	6
1941	61.8	99	20	1.63	0.0	7	63.0	97	24	1.58	0.0	6
1942	57.8	87	14	6.77	T.	11	58.6	82	24	4.96	0.0	11
1943	54.2	86	19	5.08	T.	9	55.1	82	30	6.21	0.0	10
1944	54.3	89	17	3.52	T.	9	55.6	87	25	2.62	0.0	8
1945	55.4	85	23	1.43	T.	7	56.0	84	28	2.64	0.0	9
1946	59.3	90	24	2.85	T.	10	59.5	86	33	3.10	0.0	9
1947	61.8	94	17	1.47	0.0	5	62.6	88	27	1.87	0.0	6
Period	56.3	99	4	3.01	0.2	7	57.5	97	21	3.11	0.1	7

Climatological Data for October 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), Number of days (With precip., Clear, Partly cloudy, Cloudy), 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 (+). Trace or 0.005 inch or less rain or melted snow. † Recording gage. ‡ Interpolated. § Elevation is of ground above mean sea level. ¶ Post addresses of these stations are as follows: Of Ball, Glendale, of Blackwater, Cambridge, of Charlotte Hall, Mechanicsville, of Coisman, Worton; of Edgemont, Smithburg; 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, §§§ Porter 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. † Interpolated.

Daily Precipitation for October 1947

Stations	Drainage basin	Day of month																															Total			
		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				
<i>Maryland</i>																																				
Aberdeen <sup>4</sup>	Atlantic								T								T	.05	.11													.90	.06	1.02		
Annapolis <sup>1</sup>	do								.07								T	.16														.55	T	.18	0.96	
Baltimore <sup>1</sup>	do								T								T	.06	.13	.02												.94	T	.05	1.20	
Baltimore Airport <sup>4</sup>	do								.04								T	.04	.40	.31												1.07	T	.06	1.92	
Bell	do								.04									.01	.16	T											.27	.55	.04	1.07		
Beltville	do								.02									.01	.03	.46											1.12	T	.04	1.69		
Blackwater	do								1.08																							T	.12	.05	1.13	
Cambridge	do								.64										.06												.04	.65	.05	1.44		
Charlotte Hall	do								.30			T						.05													.56	.70		1.62		
Cheltenham <sup>2</sup>	do						.02	.01	.09	T								.01	.17	T					.02						1.10	T	.04	1.43		
Chestertown	do								.19									.07													1.37	.02	T	.09	1.68	
Chewsville	do																	.02	.15	T											.98	.06	.18	1.46		
Clear Spring	do																	.12	T												.09	.08	.18	1.02		
Coleman	do										.08								.14	.03											.56	1.14		2.05		
College Park	do										T							.01	.29	.01											.92	.41	.08	1.72		
Conowingo Dam <sup>2</sup>	do								T									.01	.05												.87		.15	1.08		
Crisfield	do								2.58		T							.85														T		.15	3.43	
Cumberland <sup>2</sup>	do									T			.02	T																	.58	.15	.05	.06	0.86	
Easton	do								.46																						.23	1.00	T		1.69	
Edgemont <sup>2</sup>	do																														1.03	.36	.18	.18	1.89	
Elkton	do																	.04													.73	1.46			2.23	
Emmitsburg	do																														.70	1.10	T	.04	0.90	
Fallston	do																	.18													1.44	T	.04	.11	1.73	
Ferry Landing	do								.24									.35													.51	.40	T	.04	1.46	
Fort George & Meade	do																	.02	.11	.02											1.00	.60			1.75	
Frederick	do					.01												.06	.10	.02											.88	.02	.11	.04	1.24	
Frederick Airport <sup>4</sup>	do																	.06	.04	.01											.91	.17	.02	.02	1.23	
Frostburg	do								.01									.04	T												.77	.04	.10	T	.04	0.98
Germantown	do																														.68	T		.06	0.74	
Great Falls <sup>2</sup>	do																														.78				0.78	
Hancock No. 1 <sup>2</sup>	do																														.18	.63	.02	.12	1.03	
Hancock No. 2 <sup>2</sup>	do																	T	T	.10	T										.12	.74	.02	.10	1.08	
Huntingtown	do								.26									.04	.51												.74	.66			2.21	
Keedysville	do																	.02	.03	.01											.72	.06	.12	.03	0.99	
La Plata	do																	.10														1.10			1.20	
Luke <sup>2</sup>	do																														.65	.08	.01	.02	0.79	
Maryland Line	do																														2.50	T		.13	2.63	
Millington	do								.16									T	.03												.31	.43	.08		0.96	
Oakland	Ohio								T	T								.03	.02	.09	.02	.01								.68	.20	.25	.05	1.35		
Oxford	Atlantic								.50									T	.54												.21	.43	.06	.14	1.74	
Perry Point	do								.03									T	.12	.10											.32	.73	.08	.18	1.38	
Picardy	do																														.91	.01	.08		1.03	
Prettyboy Dam	do																	.05													2.30	T	.18		2.53	
Ridgely	do								.38									.06													.07	.90		.05	1.46	
Rock Hall	do																	T	.07	T											.39	1.94			2.40	
Salisbury	do								1.80									.03	.20	T											.03				2.06	
Smes <sup>2</sup>	Ohio																	.04	.10		.03										1.04	.05	.17	.03	1.46	
Snow Hill <sup>3</sup>	Atlantic								2.54			.08					.18	.33	T												T	.11			3.24	
Solomons	do								.75			T	.02	T			.01	.01	.01												.70	.09	.05		1.64	
State Sanatorium	do																	.03	.08												1.00	.17	.19	.08	1.56	
Takoma Park No. 1	do																														*	1.05	.09	.14	1.14	
Takoma Park No. 2	do																														*	.90	.07	.07	0.97	
Tonoloway	do																	.09	.21	T											.90		.16		1.36	
Towson <sup>2</sup>	do																																			1.13
Unionville	do																	.01													.90	.16		.06	1.13	
Western Port	do																														.70	.02	.01		0.73	
Westminster <sup>2</sup>	do																	.04	.02												.82		.10		0.98	
Williamsport <sup>2</sup>	do																	.03	.01	.03	.01										T	1.39	.05	.16	1.68	
Woodstock	do								T									.05	.09	.01											1.50	.06	.02	.16	1.89	
Washington, D. C. 1	do																	T	.03	T											1.25	T	.03	.11	1.31	
<i>Delaware</i>																																				
Bridgeville	Atlantic								1.01									.04	.31												T	.32		.08	1.76	
Delaware City	do								.02									.02	.05	.09											.04	1.00		.04	1.81	
Dover	do								.02	.34								.02	.11	.03											.15	.60	T	.06	1.33	
Georgetown	do								1.04	T								.49														.04				1.51
Lewes	do								1.59									.06	.03												.10	.11		.07	1.97	
Millsboro	do																																			

Daily Temperatures for October 1947-Continued

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

See page 38 for explanation of reference marks.