

# CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

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VOL. LI BALTIMORE, MD., APRIL 1947 No. 4

## GENERAL SUMMARY

Although the temperature for the month averaged slightly more than 2 degrees above normal, there were approximately ten days during the month when temperatures were below normal. The period from the 21st through the 23d averaged about ten degrees below normal. Freezing temperatures or killing frosts were reported from many stations over the section, except the extreme south, on the 1st, 3d or 4th, 8th, 10th, 23d, 28th, and 29th, and locally at northern and western stations on a few additional days. Temperatures much above normal occurred from the 5th to the 8th and on the 11th, 12th, 19th, 24th, and 30th.

The dry weather of the winter months continued through April over most of the section except extreme southern Maryland, lower Eastern Shore, southern Delaware, and a few local areas in central Maryland and northern Delaware. For the most part, deficiencies in rainfall for the month were between 1 and 2 inches. In some portions of Maryland deficiencies for the year to date were in excess of 5 inches with the average for the State as a whole approximately 3 1/4 inches below normal. In Delaware the average deficiency for the year through April was about 2 inches. Several stations on the lower Eastern Shore and southern Delaware recorded over 4 inches of rainfall for April.

Although the rainfall was not generally sufficient to relieve the rather dry condition of the soil over much of the section, it was well distributed throughout the month and was sufficient in general for good growth of crops, grasses, grains, and fruit trees. By the end of the month, rye in some localities was 18 to 30 inches high, wheat was 6 to 12 inches, and oats were mostly up. Ploughing for corn was progressing rapidly. Pastures were generally good to excellent. However, early garden crops were growing slowly, having been retarded by the cool weather the latter part of the month.

## TEMPERATURE

The monthly mean temperature for the section was 54.6 degrees, 2.3 degrees above normal. The highest monthly mean temperature, 58.0 degrees, was reported from Crisfield, Maryland, and the lowest, 49.4 degrees from Sines, Maryland. The highest temperature, 90 degrees, occurred at Cumberland, Maryland, on the 5th; the lowest, 20 degrees, at Bridgeville, Delaware, on the 4th, and at Oakland, Maryland, on the 29th. The greatest local monthly range was 63 degrees at Millsboro, Delaware, where a maximum of 84 degrees was reported on the 6th, and 21 degrees on the 4th. The least monthly range was 44 degrees at Annapolis, Maryland, and Crisfield, Maryland. Annapolis had extreme maximum and minimum temperatures of 81 and 37 degrees on the 6th and 1st, respectively, and Crisfield had extremes of 78 and 34 degrees on the 20th and 4th, respectively.

## PRECIPITATION

The monthly average for the section was 2.81 inches, which was 0.67 inch below the normal. The greatest amount of precipitation for the month was 6.20 inches at Wilmington, Dela-

ware. Cumberland, Maryland, reported the least amount with 1.25 inches. The greatest 24-hour rainfall was 4.49 inches at Wilmington, Delaware, on April 30th and May 1st. The average monthly snowfall for the section was a trace and was 1.1 inches below the normal. The greatest 24-hour and monthly snowfall was a trace recorded at Sines, Maryland, on the 18th.

## 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.	30.43	10	29.63	16	10.9	...	...	...	70	53	64	...	392
Annapolis, Md.	30.50	10	29.72	2	10.9	...	...	...	78	58	70	...	356
Baltimore, Md.	30.48	10	29.56	16	11.9	35	sw.	6	75	52	60	65	302
Elkins, W. Va.	30.59	7	29.57	16	9.4	34	w.	6	78	46	60	54	871
Harrisburg, Pa.	30.47	10	29.57	16	11.3	25	sw.	11	79	60	70	61	393
Norfolk, Va.	30.49	10	29.64	16	9.4	23	w.	7	78	54	64	62	354
Philadelphia, Pa.	30.49	23	29.53	16	12.4	56	w.	6	74	54	56	44	357
Pittsburgh, Pa.	30.45	13	29.51	16	9.1	29	w.	6	74	46	54	70	255
Washington, D. C.	30.50	10	29.57	16	...	...	...	...	...	...	...	...	...

## COMPARATIVE DATA FOR APRIL

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	52.4	89	18	5.17	0.1	9	52.1	89	23	5.39	0.0	10
1896	55.9	97	12	1.42	0.7	6	55.9	89	22	3.16	T.	6
1897	52.1	94	15	2.97	0.1	8	52.8	89	26	1.48	0.0	7
1898	50.3	86	6	2.57	2.4	11	50.1	82	21	3.60	1.8	12
1899	53.1	94	14	1.60	0.3	4	52.3	84	22	1.56	T.	8
1900	52.3	86	16	1.93	0.4	6	53.2	79	24	2.39	T.	6
1901	49.1	90	15	5.74	2.0	11	49.9	81	31	5.12	0.0	9
1902	51.7	102	16	3.38	2.8	8	52.4	90	27	4.25	T.	9
1903	52.4	95	13	4.06	T.	9	52.8	93	25	3.66	T.	9
1904	49.1	87	10	2.47	0.2	9	49.5	84	24	2.40	T.	7
1905	52.6	88	8	2.82	0.6	7	52.7	85	26	3.07	T.	7
1906	54.1	96	10	3.23	T.	7	54.4	89	26	2.85	0.0	7
1907	47.0	87	9	3.37	2.0	10	47.4	83	23	3.38	0.5	11
1908	54.5	90	19	2.30	T.	10	55.3	87	24	3.81	3.6	11
1909	52.6	89	5	3.51	0.9	10	53.7	86	25	4.30	T.	10
1910	55.9	92	20	5.58	0.2	12	57.1	87	28	3.85	0.0	9
1911	48.9	88	0	3.20	-1.5	11	49.7	79	25	3.66	T.	11
1912	54.7	87	21	2.72	T.	12	54.3	83	27	2.83	T.	11
1913	53.9	90	11	4.41	T.	10	55.2	83	29	5.14	T.	10
1914	51.6	89	15	3.89	0.1	10	52.5	85	24	3.38	T.	9
1915	56.9	100	10	1.56	4.5	6	57.8	97	25	2.44	9.3	6
1916	51.4	89	17	3.10	4.3	12	51.5	87	28	2.42	1.1	12
1917	52.4	90	14	2.41	4.0	8	52.4	89	24	2.52	2.6	8
1918	51.0	88	15	5.90	5.7	12	52.3	81	28	4.33	0.2	10
1919	51.7	86	11	3.84	0.1	7	52.4	81	21	3.91	T.	7
1920	50.3	88	12	4.77	0.6	14	52.3	84	26	3.93	T.	10
1921	58.0	92	16	3.13	0.7	10	58.5	83	26	3.61	3.6	12
1922	54.0	93	17	1.84	0.1	9	54.2	88	28	2.32	0.0	9
1923	51.5	88	-8	4.15	-1.1	9	52.0	83	11	4.22	0.1	8
1924	50.0	83	13	4.94	5.8	12	50.4	79	20	5.52	2.4	12
1925	55.2	97	20	2.49	0.2	11	55.3	89	25	2.96	0.0	12
1926	49.9	89	18	1.72	0.5	9	50.8	88	25	1.91	T.	10
1927	49.9	91	18	4.91	1.7	14	50.3	94	28	3.09	1.2	14
1928	49.9	85	14	5.85	4.4	12	50.8	82	23	5.88	0.6	12
1929	55.4	94	25	6.44	0.2	14	56.0	95	32	6.74	0.0	13
1930	50.6	93	18	2.54	0.6	9	50.7	85	25	1.99	T.	8
1931	51.3	84	13	3.05	1.0	9	51.9	78	28	3.31	0.0	9
1932	50.3	84	13	2.13	0.4	8	51.6	80	29	2.52	T.	8
1933	52.3	85	20	5.43	0.1	11	53.1	80	28	5.42	0.0	10
1934	51.9	86	19	2.60	0.2	10	52.0	82	29	3.13	0.0	11
1935	49.9	92	14	3.76	2.3	10	50.9	85	30	3.81	T.	11
1936	49.6	90	11	2.32	0.3	11	51.2	85	28	3.01	T.	12
1937	51.1	94	19	6.52	0.2	12	52.3	88	28	5.19	T.	11
1938	54.8	94	19	1.76	0.2	8	55.3	88	25	1.87	T.	8
1939	51.2	93	16	5.03	0.2	16	52.0	88	27	5.66	T.	15
1940	48.2	84	13	5.92	1.8	13	47.9	80	22	5.69	2.2	15
1941	56.9	97	17	2.94	0.0	5	56.3	91	28	3.19	0.0	6
1942	55.8	96	18	1.12	0.1	4	55.1	91	25	1.08	0.0	4
1943	48.5	86	5	3.20	0.5	11	49.3	84	18	3.46	T.	10
1944	51.9	84	13	4.10	0.9	14	51.2	83	22	4.67	0.9	13
1945	55.2	90	20	3.66	T.	12	55.9	87	26	3.81	0.0	14
1946	53.0	92	16	1.82	T.	8	52.0	87	25	2.27	0.0	9
1947	54.7	90	20	2.65	T.	10	53.8	84	20	3.89	0.0	11
Period ...	52.3	102	-3	3.48	1.1	10	52.7	99	11	3.54	0.5	10

Climatological Data for April 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 (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 (+). T. Trace or 0.005 inch or less rain or melted snow. 1 Recording gage. Italics. 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; of Trappe, Oxford. \*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. ¶¶¶ 1.5 miles west. ¶ Private instruments.

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. Italics. Data interpolated.

Daily Precipitation for April 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		.46		T.	T.				T.	.25			.08		.27		1.30															.26	
Annapolis <sup>1</sup>	do	T.	.49		T.	T.	T.			T.	.40			.02		.82		.56	T.													.28		
Baltimore <sup>1</sup>	do	T.	.47		T.	T.	T.			T.	.19			.02		.37		.97														.23		
Baltimore Airport <sup>4</sup>	do	T.	.69		T.	T.	T.			T.	.50			.01		.84		.25														.38		
Bell	do		.68	.07							.34			.06		.06		.80		.15	.36											.17		
Beltsville	do		.10			.03					.59			.78		*	.10	1.45	.05	.15												.08		
Blackwater	do		.15			.05					.49			1.67		.70	.09	.78	.09													.10		
Cambridge	do		.44	.05		T.					.49			.41		.59	.05	.55	.05													.18		
Charlotte Hall	do		.08	.79							.55			.04		.29	.16	.30	.05													.10		
Cheltenham <sup>2</sup>	do		.69		T.	.03	.02				.57			.03		.37		1.32														.27		
Chestertown	do		.16	T.	T.	T.	.03				.18			T.	.23	.18	.15															.36		
Chewsville	do		.06		T.	.09	.03				.22			T.	.28	.22	T.	.28														.08		
Clear Spring	do		.59								.40			.03		.34	.05	1.26														.40		
Coleman	do		.59	.08							.39			.08		.25	.07	.52														.29		
College Park	do		.07	.32							.39			T.	.04		.17	.22	.72													.17		
Conowingo Dam <sup>1</sup>	do		.31			.16	T.				.39			.04		.44		.78	.10	.34	.08	.32										.21		
Crisfield	do		.12	.11		.06					.08			.01		.78	.10	.34	.08	.32													.20	
Cumberland <sup>2</sup>	do		.23			.05					.55			.81		.45	.10	.67	.05														.17	
Easton	do		.18			.04	.06				.12			.18		.16	.13	.12															.05	
Edgemont <sup>2</sup>	do		.62	.04		.06					.46			.03		.32		1.32															.34	
Elkton	do		.19	.02							.20			.03		.28	.03	.55															.51	
Emmitsburg	do		.37			T.					.18			.03		.22	T.	.72															.39	
Fallston	do		.44	.05		.01					.50			.01		.32	.03	.51	.06														.21	
Ferry Landing	do		.60	.02							.35					.22	T.	.30															.30	
Fort George G. Meade	do		.34	.09	.02						.12			.01	.04		.24	.02	.31														.49	
Frederick	do	T.	.41	.01	T.	T.	.02		.03		.10			.05		.22		.85															.48	
Frederick Airport <sup>4</sup>	do		.30		.04	.03	.03	T.			.03			.03		.29		.40															.01	
Frostburg	do		.37								.11					.27	.07	.87															.45	
German town	do		.05	.29		.02					.17					.09	.18	.02	.02															.38
Great Falls <sup>2</sup>	do		.32			T.					.17			T.	.10	.11	.21	.02															.48	
Hancock No. 1 <sup>2</sup>	do		.35	.04							.62			.11		.85	.07	.53	.07														.11	
Hancock No. 2 <sup>2</sup>	do		.21	.02	T.			.08			.09			T.	.14	.26		.55	.05	T.													.39	
Huntingtown	do		.40								.45			.10		.40	T.	.55	.05	T.													.40	
Keedysville	do		.04	.22							.11			.07		.02	.13																.11	
La Plata	do		.44			.10					.28			.12		.17	.78	.13															.32	
Luke <sup>2</sup>	do		.37			T.					.68			.04		.09	.80	.97															.17	
Maryland Line	do		.52	.12			.12				.23			.02		.50	.65	.68															.10	
Millington	do		.12			.01					.55			1.20		.60	.65	.68															.11	
Oakland	Ohio		.40			T.					.34			.03		.24	.02	1.53															.34	
Oxford	Atlantic		.40			T.					.10			.15		.15	.20																.30	
Perry Point	do		.36			.10					.27			.09		.27	.78																.38	
Picardy	do		.16			.05					.27			.29		.25	.12	.65															.05	
Prettyboy Dam	do		.68			T.					.50			.10		.70	.34	.05	1.00														.47	
Ridgely	do		.10			.03					.65			.85		.64	.10	.97	T.	.23													.16	
Rock Hall	do		.02	.42	.02		.05	.02			.24			.05		.02	.10	.32	T.	.02	T.	.02	T.										.07	
Salisbury	Ohio	.08	.30			.08		.02		.02	.86			1.92	.08	.59	.59	.63	.34														.13	
Sines <sup>1</sup>	Atlantic		.14	.06		.02					.41			.97		.71	.03	.94	.14	.02													.08	
Snow Hill <sup>3</sup>	do		.20	.02	T.						.20			.33		.33	.33	.34															.54	
Solomons	do		.65	.08	T.	T.					.34			.07		.35	.02	.62															.20	
State Sanatorium	do		.48	.06	T.	T.					.93			T.	.05	.29	T.	.51															.28	
Takoma Park, No. 1	do		.80								.10			.08		.10	.18																.43	
Takoma Park, No. 2	do		.34			.01					.18			.05		.25	.25	.57															.23	
Tonoloway	do		.37	T.	T.						.14			.09		.20	.45																.01	
Towson <sup>2</sup>	do		.80								.15			.05		.02		.18															.12	
Unionville	do		.06	.25		.02					.21			.07		.26	.16	.34															.11	
Western Port	do		.01	.20	T.	.01	.01				.17	.01	T.	.31		.19	.21	.02															.19	
Westminster <sup>2</sup>	do		.26	T.	T.						.10			.10		.29	.64																.26	
Williamsport <sup>2</sup>	do	T.	.61	.02	T.						.38			.02	.05	.25	.45	T.															.39	
Woodstock	do		.04			.02					.51			.91		.62	.05	1.24	.04	.02													.37	
Washington, D. C. 1 <sup>1</sup>	do		.64	.06	.02	.08					.70			.02		.10	.18	.49	T.														.23	
<i>Delaware</i>																																		
Bridgeville	Atlantic		.11			.02					.11			.01		.01	.16	.01															.13	
Delaware City	do		.27			.01	.01				.73			.42		.74	.04	1.51	.08															.29
Dover	do		.10			.01					.80			.41		.74	.10	1.60																.31
Georgetown	do		.48			.22					.44			.04		.30	T.	1.23																.40
Lewes	do		.49	.12		.14					.45			.02		.20	.09	1.24																.35
Millsboro	do	T.	.65		.02	.16					.45			T.	.02	.28	.10	1.03																.52
Newark	do	</																																

Daily Temperatures for April 1947--Continued

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

See page 14 for explanation of reference marks.

(WBO, Philadelphia, Pa., 10-10-47-1825)