

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

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In Cooperation with Maryland State Weather Service

# CLIMATOLOGICAL DATA

## MARYLAND AND DELAWARE SECTION

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### GENERAL SUMMARY

February was very mild, being 6.4° warmer than normal. Precipitation was light and snowfall very light. There was much pleasant weather and an abundance of sunshine. Relative humidity averaged normal. Frequency of light and dense fogs was great. Periods of dense fog interrupted fishing, oystering, shipping, and air transportation. There were no damaging winds.

Frequent alternations of temperature marked the first half of the month. The 1st, 6-8th, and 11th were cold, while the 2d-5th, 9-10th, and 12-14th were mild. A cold wave followed during the 15-17th, producing minimum temperatures decidedly below zero on the 16th and slightly below zero on the 17th in the Allegheny Mountain region and close to zero on these dates in other divisions. The minimum of 20° below zero at Oakland on the 16th was the lowest February temperature recorded in the section since 1914 and the lowest for the year since 1925. A change to warmer on the 18th developed into a long period of unseasonably warm weather from the 19th to the 26th, with a mean temperature 20° above normal. Temperatures were lower, yet slightly above normal on the 27-28th. Maximum temperatures on the 25th were the highest of record for so early in the year and exceeded by 5° to 10° previous highest temperatures recorded in February, except in the Allegheny Mountain region.

Monthly precipitation averaged two-thirds of normal and was mostly in the form of rain. Totals were between 1 and 2 inches, except 2 to 3 inches over the northeastern portion of the section and slightly above 3 inches in the Allegheny Mountain region and at Stevensville.

Rainfall was moderately heavy over the section on the 4-5th and heavy generally over the eastern half of the section on the 13-14th.

Monthly snowfall averaged two-fifths of normal. Totals were between 1 and 3 inches, except less than 1 inch in eastern Allegany and western Washington Counties, 3 to 5 inches over the central Eastern Shore, and 3 (at the foothills) to 10 inches (in the highlands) in the Allegheny Mountain region.

Light snow was general over the section on the 15th. Light snow also fell in the Allegheny Mountain region at night of the 4th and on 8th, 9th, 10th, 13th, and 17th, and in western and north-central Maryland on the 6th.

Drift ice from the tributaries in upper Chesapeake Bay during the last week of January and the first half of this month was a hindrance to small boats. However, at no time this winter was the upper bay frozen over.

Winter grains were green and in good to excellent condition when the heavy snowfall of January 30 disappeared during the first week. The snowfall of the 15th protected them from the very low temperatures of the 16th and 17th. Under the unseasonably warm weather of the third decade, wheat, rye, and barley made great headway, while grasses and pastures greened nicely and became fair to good. Activities were cutting and hauling wood, logs, and ties, hauling and spreading manure

and fertilizer, fencing, repairing, cleaning, plowing, pruning, making hotbeds, and stripping tobacco.—*J. B., jr.*

### PRESSURE

The monthly mean sea-level pressure at Washington was 30.12; at Baltimore and Aberdeen, 30.11 inches. The highest at Washington was 30.59; at Baltimore, 30.61; at Aberdeen, 30.62 inches—all on the 17th. The lowest at Washington was 29.58; at Baltimore, 29.57; at Aberdeen, 29.66 inches—all on the 4th.

### TEMPERATURE

The monthly mean for the section, 39.4°, is 6.4° above normal. The highest monthly mean was 43.8°, at Salisbury; the lowest, 34.4°, at Sines. The highest temperature, 85°, occurred at Newburg on the 25th; the lowest, -20°, at Oakland on the 16th. The greatest local monthly range was 90°, at Oakland; the least, 69°, at Solomons. The greatest daily range was 49°, at College Park on the 20th and at Oakland on the 9th.

### PRECIPITATION

The monthly average for the section, 2.06 inches, is 0.98 inch below normal. The greatest monthly amount was 3.36 inches at Stevensville; the least, 1.14 inches, at Princess Anne. The greatest 24-hour amount was 2.28 inches, at Stevensville on the 13-14th. The monthly average snowfall for the section, 2.9 inches, is 4.5 inches below normal. The greatest monthly snowfall was 9.7 inches, at Grantsville; the least, 0.2 inch, at Picardy. The number of days with 0.01 inch or more of precipitation, 9, is normal.

### RELATIVE HUMIDITY

The average percentages were: Washington, D. C., 8 a. m., 73; 12 noon, 54; 8 p. m., 56. Baltimore, Md., 8 a. m., 74; 12 noon, 57; 8 p. m., 65. Aberdeen, Md., 8 a. m., 81; 4 p. m., 66. Philadelphia, Pa., 8 a. m., 65; 12 noon, 53; 8 p. m., 62.

### WIND

(By 3-cup anemometer, except 4-cup at Aberdeen, Md.)

The prevailing wind direction for the section was northwest. The total movement at Washington was 3,677; at Baltimore, 5,685; at Aberdeen, 4,358 miles. The maximum velocity at Washington was 28 miles from the northwest on the 13th; at Baltimore, 32 miles from the southwest on the 10th; at Aberdeen, 30 miles from the west on the 10th and from the northwest on the 16th.

### SUNSHINE AND CLOUDINESS

At Washington 61 per cent of the possible sunshine was recorded; at Baltimore, 57 per cent; at Aberdeen, 52 per cent. For the whole section the average number of clear days was 13; partly cloudy, 6; cloudy, 9.

### MISCELLANEOUS PHENOMENA (WITH DATES)

*Fogs, dense.*—Eastern portion of section, 4; eastern and central portions of section, 13, 23; Aberdeen, 22; entire section, 24.

*Hail, light.*—Easton, 13; Grantsville, 24.

*Sleet, light.*—Allegheny Mountain region, 4, 6, 7; Fallston, night 13.

*Thunderstorms.*—Central and southern Eastern Shore, 13; western half of section and Aberdeen, 24; eastern Washington County and Millsboro, 25; southern Maryland and central Eastern Shore, 26.

*Winds, high.*—Westerly: Entire section, 10, 13, 14, night 15-16, and 25; Allegheny Mountain region, 26.

(Continued on page 6)

Climatological Data for February, 1930

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.

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 sections. T. Precipitation is less than 0.01 inch rain or melted snow.

Reference letters; a, b, c, appearing in the table indicate number of days missing: For example, b represents two days, etc. Post office addresses of these stations are as follows: Of Bell, Glenndale; of Coleman, Worton; of Fallston, Bagley; of Ferry Landing, Owings; of Great Falls, Bethesda; of Pleasant Hill, Owings Mills; of Public Landing, Snow Hill. †Also on other dates. \*Custom House, Gay and Water Streets. \*\*Weather Bureau Building, 24th and M Streets.

(Continued from page 5) SIGNS OF SPRING

Frogs, first croaking of.—College Park, 25; Ferry Landing, 25; Millsboro, 25; Newburg, 20; Princesse Anne, 22. Geese, wild, flying north.—Ferry Landing, 25. Maples in bloom.—Millington, 25. Robin, first.—Boyd's, 14; Clear Spring, 19; Fallston, 4. Woodpecker, first.—Clear Spring, 20.

ERRATA

January, 1930.—Page 2: Bell, departure of temperature from normal, published +0.7, should be +1.1; departure of precipitation from normal, published -0.08, should be -0.10. Boyd's, departure of temperature from normal, published +0.2, should be +1.3. Clear Spring, departure of precipitation, published -1.23, should be -1.24.

Daily Precipitation for February, 1930

Stations	Watersheds	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**	Atlantic					.38	T	T	T						1.40		.10							.02	.02		.38	T						2.30
Annapolis	do			.37	.18	T	T	T						.60	.24	.20	.10							.02	.03		.16	.01					1.88	
Baltimore**	do	T		.66	.06	.02	T	T	T					1.02	.01	.20										.38	T						2.38	
Bell	do			.46	.19	T	T	T						.58	.11	.09	.05							.01	T		.21						1.70	
Boys	do			.80		T	T	T						.25	.15																		1.61	
Cambridge (near)	do			.35	.27	T	T	T						.42	T	.80								T		*	*	*	.17				1.61	
Cecilton	do																																	1.93
Cheltenham	do			.66	.20	T	T	T						.45	.30	.10	.10						.02	T		*	*	.10					1.25	
Chewsville	do			.25	.05	T	T	.01	T					.28	.08	.20	.03						.12	.04	*	.02	*	.37	T				1.62	
Clear Spring	do			.40	.10	T	T	T	T					.29	.05	.20							.12	.05	*	*	.39	T	.10				2.60	
Coleman	do			.83	.24	T	T	T	T					1.12	.15	*	.25						.02	T	.02	T	.12						1.80	
College Park	do			.57	.20	T	T	T						.62	.10	.07	.10						.02	T	T		.12						1.69	
Crisfield	do																																	2.40
Cumberland	do	T	T	T	T	.83		.02	T	T	.07	T		.03	.01	.01	.20					.08	.08	.37	.03	.01							1.76	
Darlington	do			.30	*	T	T	T						1.40	.20	.05							*	*	.08	.37	T						2.80	
Easton	do			.38	.19	T	T	T	.02					.40	.31	.04	.26						T	.09	.08	.10	T						1.82	
Elkton	do			.30	.23	T	T	T	T					1.49	.15	.04	.70						T	*	*	.58	T						2.15	
Emmitsburg	do			*	.72	T	T	T	T					.28	.10	*	.15						.03	.02	*	.52	T						1.61	
Fallston	do			T	.30	.26	T	.01	T					.98	.04	.15	.08						.01	T	.02	.32	T						3.08	
Ferry Landing	do			.65	.11	T	T	T	T					.47	.16	.07	.08						.04	T	.04	.23	T						1.81	
Frederick	do			.44	.15	T	T	T	T					.51	*	.33	.07						.04	T	.04	.23	T						1.61	
Friendsville	Ohio			*	1.10	T	*	T	T			.39		.30	T	.30	.07						.12	.14	.15	.58	T						1.58	
Frostburg	Atlantic		T	.43	.30	.03	T	T	T			.18		.07	T	.24							*	.09	.15	.09	T						3.05	
Grantsville	Ohio	.08	.06	.54	.20	.06	T	.02	T	.05	.24			.27	T	.25							.09	.56	.13	.43	.13						1.69	
Great Falls	Atlantic			.83		T	T	T	T					.10	.44		.12						T	*	*	.29	.10						1.19	
Hancock (Tonoloway)	do			.40	.32	T	T	T	T					.05	.02	.04							.02	.07	.07	.20	T						1.53	
Keedysville	do			.37	.11	T	T	T	T					.44	.08	.13	T						.08	.05	*	.27	T						2.01	
Laurel	do			.49	.22	T	T	T	T					.81	.08	.12	.10						T	T	.19								2.31	
Lutherville	do		T	.40	.27	T	T	.01	T					.93	.16	.12	.03						.02	*	*	.36	.01						1.87	
Maryland Line	do		T	.35	.45	T	T	T	T					.75	.20	T	.20						T	T	.40	T							3.09	
Mechanicsville	do			1.56		T	T	T	T					.37	.15	T	.15						T	T	.45	T							1.15	
Millington	do			.20	.30	T	T	T	T					.95	.24	.05	.20						T	.05	.05	.36	T						2.82	
Newburg	do			.68	.28	T	T	T	T					.15	.44	T	.09						T	T	.06	.02	.20	.05						1.97
Oakland	Ohio	.08	.06	.48	.35	.03	.02	.04	T	.15				.18	T	.16							.18	.10	.42	.55	.20	.05						1.14
Pleasant Hill	Atlantic			.62	.20	T	T	T	T					.05	T	.03							.04	.12	.01	.05	T						2.27	
Pocomoke City	do		T	.50	.20	T	T	T	T					1.50	.12	.02							.12	*	.15	.33							1.97	
Princess Anne	do			.50	.06	T	T	T	T					1.02			.02						.12	*	.15	.33							2.38	
Public Landing	do			.59	.15	T	T	T	T					.22	.12	.18							.22	*	.06	.04								1.86
Ridgely	do			.36	.16	T	T	.12	T					.38	.30	.10	.18						.22	*	.06	.04								2.27
Rock Hall	do			*	.50	T	T	T	T					*	1.10	.20	.10						T	.17	T	.02	.02						1.48	
Salisbury	do			.80	.02	T	T	T	T					.12	.27	T	.20						T	.05	T	.02	.02						3.15	
Sines**	Ohio	T	.05	.11	.74		*	.06	.10	.46	.08			.20	T	.10							.20	.36	.10	.62	.02						1.89	
Solomons	Atlantic			.52	.10	T	T	T	T					.05	.27	T	.33						T	.02	T	.06	.04						2.37	
State Sanatorium	do			.42	.31	.02	T	T	T					.51	.09	.17	.03						T	.13	.10	.58	.01							3.36
Stevensville	do			.40	.20	T	.01	T	T					2.26	.02	.27	.02						.10	T	T	.08	T						1.97	
Takoma	do			.93		T	T	T	T					*	.64	*	.10						T	.02	T	.02	.08						2.24	
Towson	do		T	.50	.21	T	T	T	T					.80	.13	*	.15						*	.02	T	.43	T						1.64	
Western Port	do		T	.02	.60	.25	T	T	T	.16				.08	T	.15							*	.08	.18	.05	.07						2.29	
Westminster	do			.43	.36	T	T	.03	T					.66	.18	.20	.20						.04	.02	.06	.30	T						1.98	
Woodstock	do			T	*	.71	T	T	T					.72	.10	*	.10						T	T	.04	.28	.03							1.64
<i>District of Columbia</i>																																		
Washington***	Atlantic		T		.72	.05	T	T						.64		.12								.01	.04		.06						1.64	
<i>Delaware</i>																																		
Bridgeville	Atlantic			.27	.28	T	T	T	T					.22	.57	T	.40							T	.02	.05	.06	T					1.87	
Delaware City	do			.10	.20	T	T	T	T					*	1.30	*	.12						T	*	.08	.35	.15						2.30	
Dover	do			.21	.49	T	T	T	T					.53	*	.38							T	.02	*	.16	T						1.79	
Milford	do			.22	.31	T	T	.08	T					.37	.28	.05	.23						T	*	.02	.13	.02							1.71
Millsboro	do			.30	.05	T	T	.01	T	.16				.18	.29	.01	.28						*	.01	.06	.01	.44	T					1.64	
Wilmington	do			.30	.20	T	T	T	T					1.64	.24	*	.15						.02	.02	*	*	.38						2.95	

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. \*\*\*Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight. \*\*Precipitation is for 24-hour period, midnight to midnight. |||Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. \*Precipitation included in the next following measurement. T, Trace, or less than 0.01 inch. Data in italics determined from surrounding stations.

COMPARATIVE DATA FOR MARYLAND AND DELAWARE FOR FEBRUARY

Year	Temperature				Precipitation						Year	Temperature				Precipitation							
	Mean	Departure from the normal	Highest	Lowest	Average	Departure from the normal	Greatest local	Least local	Greatest in 24 hours	Snowfall		Number of days with 0.01 inch or more	Mean	Departure from the normal	Highest	Lowest	Average	Departure from the normal	Greatest local	Least local	Greatest in 24 hours	Snowfall	Number of days with 0.01 inch or more
1895	24.5	-8.5	67	-18	1.26	-1.78	2.14	0.39	1.15	11.1	5	1913	34.4	+1.4	73	0	1.49	-1.55	2.59	0.61	1.20	2.1	7
1896	34.6	+1.6	66	-12	5.41	+2.37	7.43	2.40	3.80	2.8	9	1914	28.7	-4.3	68	-28	2.78	-0.26	4.23	1.78	1.35	14.1	9
1897	34.8	+1.8	63	0	5.43	+2.39	9.17	3.53	2.70	7.3	10	1915	37.5	+4.5	72	-6	4.36	+1.32	7.12	1.78	2.65	2.2	8
1898	33.7	+0.7	70	-6	1.66	-1.38	3.21	0.70	1.92	1.8	5	1916	32.1	-0.9	69	-11	3.31	+0.27	5.71	2.16	1.88	7.5	9
1899	26.2	-6.8	67	-26	5.38	+2.34	8.85	2.															

Daily Temperatures for February, 1930

Table with columns for Stations, days 1-31, and Mean. Rows list various locations in Maryland and Delaware with their corresponding temperature data for each day.

a, b, c, etc., indicate, respectively, 1, 2, 3, etc., days missing from record. § Instruments are read in morning; maximum temperature then read is charged to preceding day, in which it almost always occurs. Temperatures at Aberdeen, Baltimore, and Washington are from midnight to midnight; other stations, except Cumberland, are for 24-hour period ending late in afternoon, near sunset. Data in italics determined from surrounding stations.