

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CHARLES F. MARVIN, Chief

In Cooperation with Maryland State Weather Service

CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

JOHN R. WEEKS, Meteorologist and Section Director

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GENERAL SUMMARY

February was mild and dry, and was the eighth month of drought. The mean temperature, though about 3° higher than normal, still was about 3° lower than in February, 1930. Monthly precipitation was the least in February since 1925. Monthly sunshine was normal. Relative humidity averaged 5 per cent below normal. Precipitation periods were at the close of the first and second decades. Little snow fell over the section to eastward of the Allegheny Mountains. There was an absence of stormy weather. Northwest winds were frequent, but not outstandingly strong or damaging in character. A prevalence of open-winter weather was very favorable for outdoor work.

Mild weather during the month was interrupted briefly by moderate cold on the 1st, 3d, 7th, 10-11th, and 14-15th. No zero temperatures were recorded. The mean temperature of the second half of the month was 5° to 7° above normal, despite easterly winds prevailing during 16-20th and from northwest thereafter.

Monthly precipitation, mostly as rain, averaged 54 per cent of normal. Monthly totals were between 1.2 and 2 inches, except slightly above 2 inches in the Clear Spring district and between 2 and 3.3 inches in the Allegheny Mountain region. Daily amounts were light, except moderate over the southern third of the Eastern Shore on the 14th and over the central and eastern divisions on the 17th; on the 9th they were moderate over the southern and central portions of the section and moderate to heavy over the northern third.

Monthly snowfall averaged one-tenth of normal. Monthly totals were 0.2 inch in eastern Washington County, 0.2 inch in the southern portion to 1 to 1.5 inches in the northern portion of north-central Maryland, 0.5 to 1 inch generally in St. Marys, Calvert, Dorchester, Talbot, and Caroline Counties, and 0.2 to 0.5 inch in central and northern portions of Delaware; elsewhere to eastward of the Allegheny Mountains there was a trace. In the Allegheny Mountain region monthly snowfall increased rapidly westward up the slope from a trace at the foothills to between 6 and 7 inches in the highlands.

Light snow fell in Carroll, Howard, and Baltimore Counties in early morning of the 1st; in eastern Washington County and north-central Maryland in late afternoon of the 7th; in St. Marys, Calvert, Dorchester, Talbot, and Caroline Counties, and central and northern Delaware at night of the 9th; and in the Allegheny Mountain region on the 9th, 10th, 14th, 19th, 20th, and 21st.

During the second half of the month grains and grasses greened somewhat under favorable weather conditions, and tree-fruit buds were swelling on the southern Eastern Shore. Some tobacco beds were seeded and some peas and early vegetables were planted locally in eastern and central divisions during the last week. General activities included cutting wood, plowing, stripping tobacco, making tobacco beds, clearing land, pruning, spraying, repairing farm implements and machinery, and caring for and feeding livestock. Water supply continued very low.—*J. B., jr.*

PRESSURE

The monthly mean sea-level pressure at Washington, D. C., was 30.07; at Baltimore and Aberdeen, 30.05 inches. The highest at Washington, D. C., was 30.44 inches on the 3d; at Baltimore and Aberdeen, 30.44 inches—both on the 7th. The lowest at Washington, D. C., was 29.65; at Baltimore, 29.66; at Aberdeen, 29.64 inches—all on the 9th.

TEMPERATURE

The monthly mean for the section, 36.6°, is 2.6° above normal. The highest monthly mean was 39.6° at Baltimore; the lowest, 30.6°, at Grantsville and Sines. The highest temperature, 65°, occurred at Princess Anne on the 9th; the lowest, 7°, at Oakland on the 3d. The greatest local monthly range was 53° at Oakland; the least, 36°, at Stevensville. The greatest daily range was 45° at Sines on the 28th.

PRECIPITATION

The monthly average for the section, 1.67 inches, is 1.41 inches below normal. The greatest monthly amount was 3.31 inches at Sines; the least, 1.21 inches, at Great Falls. The greatest 24-hour amount was 1.15 inches at Oakland on the 9th. The monthly average snowfall for the section, 0.7 inch, is 6.6 inches below normal. The greatest monthly snowfall was 7.0 inches at Grantsville. The greatest 24-hour snowfall was 3.0 inches at Friendsville, Grantsville, and Sines on the 9th. The number of days with 0.01 inch or more of precipitation, 8, is 1 below normal.

RELATIVE HUMIDITY

The average percentages were: Washington, D. C., 8 a. m., 69; 12 noon, 50; 8 p. m., 54. Baltimore, Md., 8 a. m., 68; 12 noon, 53; 8 p. m., 58. Aberdeen, Md., 8 a. m., 72; 4 p. m., 53. Philadelphia, Pa., 8 a. m., 64; 12 noon, 50; 8 p. m., 55.

WIND

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

The prevailing direction for the section was northwest. The total movement at Washington, D. C., was 4,016; at Baltimore, 6,088; at Aberdeen, 4,806 miles. The maximum velocity at Washington, D. C., was 25 miles; at Baltimore, 30 miles; at Aberdeen, 33 miles—all from the northwest on the 14th.

SUNSHINE AND CLOUDINESS

At Washington, D. C., 52 per cent of the possible sunshine was recorded; at Baltimore, 58 per cent; at Aberdeen, 59 per cent. For the whole section the average number of clear days was 13; partly cloudy, 5; cloudy, 10.

MISCELLANEOUS PHENOMENA (WITH DATES)

- Blue bird, first.*—Grantsville, 25.
- Corona, lunar.*—Grantsville, 2.
- Fogs, dense.*—Grantsville, 3; Annapolis, Darlington, Delaware City, and Woodstock, 8; Aberdeen, Cecilton, Easton, Fallston, Ferry Landing, and on the coast, 8, 9; Solomons, 7, 8, 17, 18; Boyds and Millsboro, 8, 19, 20; La Plata, 9, 17, 18, 19, 20; Chesapeake Bay, 17, 18; State Sanatorium, 17, 18, 19, 20; Princess Anne and Sines, 18; Mechanicsville, 18, 19; Westminster, 19, 20.
- Geese, wild, flock of about 50 flying northeast.*—Ferry Landing, 28.
- Glaze, light.*—Allegheny Mountain region, 7.
- Halos, lunar.*—Baltimore and Ferry Landing, 28; Washington, D. C., 1, 2, 27.
- Halos, solar.*—Baltimore, 23, 24; Grantsville, 16.
- Sleet, light.*—Northern portion of section, 7; Ferry Landing, 14; Blue Ridge Mountain region, 16; Fallston, 19; Oakland, 21.
- Winds, high.*—Over section: Northwest, 10, 14, 15; southwest, 13. Northern Eastern Shore: Northwest, 21, 22, 26. Also on the coast: South, 9; southeast, 17; northwest, 11, 21, 22, 26.

Climatological Data for February, 1931

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 Ball, Glendale; 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.

DR. WILLIAM H. MARSH, COOPERATIVE OBSERVER AT SOLOMONS, MD.

It is with sincere regret that we announce the resignation of Dr. William H. Marsh, veteran cooperative observer of the Maryland and Delaware section, of Solomons, Md., due to retirement from professional life and change of residence. Doctor Marsh was the oldest cooperative observer of the section, both in age and length of service. He is 80 years old. He rendered excellent service for a period of 39 years, without interruption, from January 1, 1892 to December 31, 1930. Doctor Marsh was one of the five graduates of the class of 1876 of the Medical School of the University of Maryland. - J. B., jr.

ERRATA

December, 1930.—Page 47: Table of daily precipitation, name Newburg should be omitted; names Laurel to Millington, inclusive, dropped one line each; name La Plata inserted between Keadysville and Laurel (lines of figures remaining as printed).

January, 1931.—Page 3: Table of daily precipitation, just same change as above.

Daily Precipitation for February, 1931

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									.05	.19	.82									.05	.03	T.	.67	T.	.01	T.	T.							1.80		
Annapolis	do	T.								.15	.44	.27									.07	.07	T.	.58	.09	T.	.04	T.	T.						1.55		
Baltimore***	do	.04								.07	.09	.60									.02	.02	T.	.49	.01	T.	T.	T.	T.						1.41		
Bell	do	T.								.20	.45	.17									.05	.05	T.	.49	.05	T.	.07	T.	T.						1.48		
Boysds	do	T.								.02	.16	.65	.04								T.	.07	T.	.40	.02	T.	.06	T.	T.						1.53		
Cambridge (near)	do	T.								.09	.28	.36									.36	.36	T.	.50	.11	T.	.11	T.	T.						1.70		
Cecilton	do	T.								.18	.77	.24									.16	.16	T.	.43	.08	T.	.10	T.	T.						2.00		
Cheltenham	do	T.								.16	.43	.32									.16	.16	T.	.43	.08	T.	.10	T.	T.						1.62		
Chesville	do	T.								.08	.02	.76	T.								.05	.05	T.	.30	.12	T.	.67	T.	.25	T.					1.62		
Clear Spring	do	T.								.11	.03	T.									T.	T.	.11	.08	T.	.35	.35	T.	.13	.08	T.	.12			2.20		
Coleman	do	T.								.14	.58	.15									T.	*	T.	.70	T.	.05	T.	T.							1.62		
College Park	do	T.								.21	.60	.12									.11	.11	T.	.88	.05	T.	.02	T.							1.62		
Crisfield	do									.02	.21	.60	.12																							1.62	
Cumberland	do	T.								.12	.65	.33									.13	.13	T.	.22	.10	T.	T.	T.							1.55		
Darlington	do									.05	*	1.05									.12	.12	T.	.60	.07	T.	T.	T.							1.89		
Easton	do	T.								.12	.18	.21									.22	.22	T.	.50	.10	T.	.05	T.	T.							1.38	
Elkton	do									.08	.78	.18									.15	.15	T.	.60	T.	.04	T.	T.								1.83	
Emmitsburg	do	T.								.17	.88	T.									T.	T.	.20	.17	T.	.23	.05	T.	T.							1.70	
Fallston	do	T.								.13	.73	.03									.07	.07	T.	.58	.11	T.	.02	T.	T.							1.67	
Ferry Landing	do	T.								.10	.40	.22									.05	.05	T.	.46	.13	T.	T.	T.								1.36	
Frederick	do	T.								.08	.05	.72	T.								.14	.14	T.	.33	.01	T.	.11	T.	.01	T.						1.46	
Friendsville	Ohio	T.								.32	.12	1.00	.10								.30	.30	T.	.20	.15	T.	.11	T.	.05	T.						2.55	
Frontsburg	Atlantic	T.								.11	.50	.55	T.								.08	.08	T.	.35	.11	T.	T.	T.								1.70	
Grantsville	Ohio	T.								.24	.07	.85	.12								.23	.23	T.	.18	.09	T.	.05	T.	T.	.08	T.					2.06	
Great Falls	Atlantic	T.								.12	.16	.53									.02	.02	T.	.33	.02	T.	T.	T.								1.21	
Hancock(Tonoloway)	do	T.								.11	.01	T.									T.	T.	.35	.16	T.	.12	.04	T.	.03	T.						1.91	
Hancock(City)	do	T.								.07	.90	.72									.02	.02	T.	.35	.15	T.	.04	T.	.21	T.					1.97		
Keadysville	do	T.								.02	.08	.45	.35								.13	.13	T.	.23	.03	T.	.06	T.	.03	T.						1.42	
La Plata	do	T.								.08	.45	.35									.13	.13	T.	.23	.03	T.	.06	T.	.03	T.						1.39	
Laurel	do	T.								.23	.52	.19									.19	.19	T.	.38	.01	T.	.03	T.								1.51	
Luthersville	do	T.								.02	.12	.70	.03								.15	.15	T.	.38	.01	T.	.03	T.								1.38	
Maryland Line	do	.02								.12	*	.85									.10	.10	T.	.58	T.	.08	.03	T.	T.							1.76	
Mechanicville	do	T.								* .50	*										.35	.35	T.	.40	.10	T.	T.	T.								1.55	
Millington	do	T.								.07	.78	.30									.16	.16	T.	.32	.27	T.	.06	T.	T.							1.96	
Oakland	Ohio	T.								.29	.20	1.15	.10								.28	.28	T.	.25	.14	T.	.05	T.	.06	T.						2.83	
Picardy	Atlantic	T.								.04	1.00	T.									.02	.02	T.	.29	.19	T.	.03	T.	.10	T.						1.67	
Pleasant Hill	do	.05								*	*	1.00									.10	.10	T.	.32	.10	T.	.03	T.	.05	T.						1.65	
Pocomoke City	do									.10	.06	.14									.40	.40	T.	.30	.07	T.	.15	T.	T.							1.22	
Princess Anne	do	T.								.30	.03										.04	.04	T.	.23	.16	T.	.03	T.	T.							1.41	
Ridgely	do									.12	.36	.20									.21	.21	T.	.52	.05	T.	.02	T.	T.							1.48	
Rock Hall	do	T.								.15	.54	.30									.17	.17	T.	.66	.02	T.	.17	T.	T.							2.01	
Salisbury	do	T.								.10	.30										.52	.52	T.	.30	.15	T.	.07	T.	T.							1.44	
Sines**	Ohio	T.								.22	.40	.89	.03								.55	.55	T.	.26	.21	T.	.04	T.	.11	T.	.02					44	3.31
Solomons	Atlantic	T.								.20	.40	.50									.42	.42	T.	.46	.07	T.	T.	T.								1.75	
State Sanatorium	do	T.								.02	*	.80	T.								.32	.32	T.	.32	.10	T.	.20	T.	.07	T.						1.51	
Stevensville	do	T.								.07	.10	.90									.48	.48	T.	.49	T.	T.	T.	T.								1.94	
Takoma	do	T.								.10	.16	.52									.10	.10	T.	.18	.13	T.	.05	T.	.01	T.	.03	T.				1.28	
Towson	do	.02								.10	.16	.52									*	*	T.	.59	.05	T.	.01	T.	T.							1.57	
Western Port	do	T.								.13	.08	.96	T.								.13	.13	T.	.18	.08	T.	.08	T.	T.							1.72	
Westminster	do	.05								.12	.31	.04									.18	.18	T.	.36	.04	T.	.03	T.	.01	T.						1.69	
Woodstock	do	.02								.18	.73	.05									.17	.17	T.	.35	*	.04	.01	T.								1.55	
<i>District of Columbia</i>																																					
Washington***	Atlantic									.07	.12	.67									T.	.06	T.	.32	.02	T.	T.									1.36	
<i>Delaware</i>																																					
Bridgeville	Atlantic									.10	.34	.15									.28	.28	T.	.30	.11	T.	.05	T.	T.							1.33	
Delaware City	do									.10	.60	.30									T.	.10	T.	.20	.35	T.	.10	T.	T.							1.65	
Dover	do									.09	.47	.12									.20	.20	T.	.35	.22	T.	.01	T.	T.								1.46
Millford	do									.06	.42	.21									.30	.30	T.	.42	.07	T.	.03	T.	T.								1.51
Willsboro	do									.25	.10	.25									.42	.42	T.	.23	.23	T.	.06	T.	T.								1.54
Williamington	do									.02	.04	.72	.30								T.	.07	T.	.20	.35	T.	.02	T.	T.								1.72

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 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					Number of days with 0.01 inch or more
	Mean	Departure from the normal	Highest	Lowest	Average	Depart														

Daily Temperatures in February, 1931

Table with columns for Stations, days 1-31, and Mean. Rows list various locations in Maryland and Delaware, such as Aberdeen, Annapolis, Baltimore, etc., with their respective daily temperature readings.

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, Sines, and Washington are from midnight to midnight; other stations, except Cumberland and Takoma, are for 24-hour period ending late in afternoon, near sunset. Data in italics determined from surrounding stations. (WB-5-8-31-300)