

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

In Cooperation with Maryland State Weather Service

# CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION

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VOL. XXXIX BALTIMORE, MD., FEBRUARY, 1934 No. 2

## GENERAL SUMMARY

This was the coldest February of record. The mean temperature, 22.5°, was 11.5° below normal, 2° colder than of the previous coldest February, and within 1° of the coldest January (1918). Departures below normal were greater over eastern and central divisions than over western Maryland. Lowest temperatures of the month, occurring on 9th or 28th, were the lowest of record over the eastern half of the section since February, 1899, and over the western half since January, 1912, except since January, 1925, in the Allegheny Mountain highlands and in extreme eastern Washington County.

This coldest of all Februaries in this section was caused by an unusual frequency of strong high pressure and very low temperature areas from Central Canada overspreading the northeastern portion of the United States.

Precipitation was mostly in the form of snow. Monthly snowfall averaged two and one-half times the normal, and was the greatest since January, 1922, and in February since 1899. Totals were 20 to 30 inches over the northeast portion of the section; 15 to 20 inches in the Blue Ridge Mountain region; 15 to 20 inches over the northern portion and 10 to 15 inches over the southern portion of the southern half of the section; 10 to 20 inches in the Allegheny Mountain region, except 20 to 25 inches in the highlands; and 5 to 10 inches between the Allegheny and Blue Ridge mountains.

Snowfall was heavy over the northeast portion of the section on 1st and 19th; in the Allegheny Mountain region on 13th; over the southeast portion of the section on 25th; and over the northern half of the section on 25-26th.

In addition to snow, there was light rain over the section on 15th and light to moderate rain in afternoon and night of 22; light rain over southern Eastern Shore at night of 11th; moderate rain in southern Maryland and on the Eastern Shore on 19th; and moderate to heavy rain in southern Maryland and in southern and central portions of the Eastern Shore on 1st and 25-26th.

Under strong northwest winds snow drifted on 20th and 26th, (Continued on page 7)

## TEMPERATURE

The monthly mean for the section, 22.5°, is 11.5° below normal. The highest monthly mean was 27.2° at Crisfield and Solomons; the lowest, 15.4°, at Sines. The highest temperature, 60°, occurred at Clear Spring and Hancock on the 15th; the lowest, 25° below zero, at Oakland on the 28th. The greatest local monthly range was 78° at Chewsville; the least, 49°, at Solomons. The greatest daily range was 59° at Sines on the 28th.

## PRECIPITATION

The monthly average for the section, 2.94 inches, is 0.14 inch below normal. The greatest monthly amount was 6.59 inches at Crisfield; the least, 0.55 inch, at Cumberland. The greatest 24-hour amount was 2.30 inches at Crisfield on the 25th. The average monthly snowfall for the section, 18.2 inches, is 10.9 inches above normal. The greatest monthly snowfall was 27.3 inches at Baltimore and Pleasant Hill; the least, 5.7 inches at Cumberland. The average number of days with 0.01 inch or more of precipitation, 9, is normal.

## MISCELLANEOUS PHENOMENA (WITH DATES)

Fogs, light.—1, 12, 13, 15, 18, 19, 22, 25, 26. Dense.—12. Glaze, light (rain freezing upon falling).—Northern portion of section, 15; Allegheny Mountain region, night 22-23. Halos: Lunar.—21, 22, 24, 27, 28. Solar.—8, 21, 24, 28. Sleet, light.—Southern portion of section, 11; eastern and central divisions, 19, 25, 26. Sun-dog.—Chewsville, 21. Wind, high.—Northwest: Over section, 2, 9, 13, 19, 20, 23, 24, 26, 27. Northeast: Over Eastern Shore and on coast, 25-26.

## PRESSURE, HUMIDITY, SUNSHINE AND WIND

Stations	Atmospheric pressure reduced to sea level				Wind				Mean relative humidity			Percentage of sunshine	
	Average	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	8 a. m.	Local n'n		8 p. m.
Aberdeen, Md.	30.19	30.95	28	29.28	13	7.3	32	nw.	23	65	53	61	54
Annapolis, Md.	30.20	30.97	28	29.34	13	9.4	33	nw.	13	62	64	51	51
Baltimore, Md.	30.20	30.95	28	29.29	13	11.1	33	nw.	13	64	50	59	62
Elkins, W. Va.	30.26	30.95	28	29.51	13	6.6	26	w.	12	66	63	63	67
Harrisburg, Pa.	30.19	30.91	28	29.25	13	9.2	30	nw.	13	58	38	43	63
Norfolk, Va.	30.19	30.96	28	29.43	13	13.3	33	nw.	13	78	68	71	57
Philadelphia, Pa.	30.19	30.95	28	29.25	13	13.5	32	nw.	13	57	52	52	60
Pittsburgh, Pa.	30.23	30.97	9	29.37	12	10.2	34	nw.	12	79	65	62	42
Washington, D. C.	30.21	30.97	28	29.32	13	8.3	30	nw.	13	64	51	55	48

\*4 p. m.

## COMPARATIVE DATA FOR MARYLAND AND DELAWARE FOR FEBRUARY

Year	Temperature				Precipitation				Number of days				
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest	Least	Average snowfall	With 0.01 in. or more precipitation	Clear	Partly cly	Cloudy
1895	24.5	-9.5	67	-18	1.26	-1.82	2.14	0.39	11.1	5	15	8	5
1896	34.6	+0.6	66	-12	5.41	+2.33	7.48	2.40	2.8	9	12	7	10
1897	34.8	+0.3	63	-6	5.43	+2.35	9.17	3.53	7.3	10	9	7	12
1898	33.7	-0.3	70	-6	1.66	-1.42	3.21	0.70	1.8	5	15	6	7
1899	26.2	-7.8	67	-26	5.38	+2.30	9.85	2.28	8.4	12	11	5	12
1900	31.8	-2.2	72	-15	4.70	+1.62	9.22	2.28	8.4	9	11	7	10
1901	27.4	-6.6	69	-6	0.73	-2.35	2.39	0.10	3.1	4	16	7	5
1902	27.4	-6.6	68	-17	4.53	+1.45	6.85	2.48	6.4	8	12	6	10
1903	35.7	+1.7	73	-12	4.94	+1.86	8.20	2.74	5.5	10	11	7	10
1904	27.1	-6.9	70	-15	1.79	-1.29	3.42	0.34	3.8	7	12	6	11
1905	25.4	-8.6	53	-20	2.69	-0.39	5.44	0.43	10.1	9	12	7	9
1906	33.2	-0.8	68	-15	2.55	-0.53	6.57	0.46	5.9	7	15	6	7
1907	28.0	-4.0	59	-29	2.38	-0.70	3.55	0.95	15.3	7	13	3	8
1908	29.6	-4.4	68	-15	4.18	+1.70	7.02	1.55	13.4	10	11	10	8
1909	41.8	+7.8	76	4	3.54	+0.73	7.10	1.93	4.5	11	11	8	9
1910	33.2	-0.8	74	-6	2.35	-0.73	4.02	0.57	4.9	9	12	9	7
1911	35.6	+1.6	74	8	1.93	-1.15	3.09	0.98	7.0	9	10	6	12
1912	29.5	-4.5	68	-18	2.53	-0.55	4.32	1.41	1.5	7	14	8	7
1913	34.4	+0.4	73	0	1.49	-1.59	2.59	0.61	2.1	7	14	7	7
1914	28.7	-5.3	68	-28	2.78	-0.30	4.23	1.78	14.1	9	13	6	9
1915	37.5	+3.5	72	-6	4.36	+1.28	7.12	1.78	2.2	8	11	6	11
1916	32.1	-1.9	69	-11	3.31	+0.23	5.71	2.16	7.5	9	10	8	11
1917	31.6	-2.4	76	-18	2.19	-0.89	4.70	1.09	6.7	8	12	8	8
1918	33.5	-0.5	71	-15	1.51	-1.57	5.14	0.58	2.2	6	13	7	8
1919	35.6	+1.6	70	-3	2.44	-0.64	3.42	1.40	2.8	10	14	6	8
1920	31.5	-2.5	62	-5	4.17	+1.69	8.57	1.43	11.8	11	10	7	12
1921	37.8	+3.8	77	-15	2.92	-0.16	4.11	2.02	9.6	10	10	8	10
1922	37.3	+3.3	79	-12	3.18	+0.10	6.35	2.04	7.2	12	9	9	10
1923	30.7	-3.3	70	-6	2.81	-0.27	4.60	2.10	7.1	11	10	7	11
1924	32.4	-1.6	68	-13	3.47	+0.39	4.48	2.09	10.7	9	11	9	9
1925	41.2	+7.2	75	-2	1.62	-1.46	2.66	0.66	0.1	7	12	7	9
1926	34.4	+0.4	68	-5	3.98	+0.90	5.95	2.95	15.7	12	10	6	12
1927	40.0	+6.0	73	15	3.83	+0.75	6.33	2.21	8.0	11	9	9	10
1928	35.5	+1.5	66	0	2.83	-0.25	4.43	1.43	1.2	9	10	9	10
1929	33.0	-1.0	72	1	3.69	+0.61	6.31	0.99	10.7	9	13	6	9
1930	39.4	+5.4	85	-20	2.06	-1.02	3.36	1.14	2.9	9	13	6	9
1931	36.6	+2.6	65	7	1.67	-1.41	3.31	1.21	0.7	8	13	5	10
1932	40.5	+6.5	88	8	2.35	-0.73	3.77	1.44	0.2	8	11	8	10
1933	36.2	+2.2	70	-8	3.01	-0.07	5.38	1.51	7.8	11	13	5	10
1934	22.5	-11.5	60	-25	2.94	-0.14	6.59	0.55	18.2	9	10	8	10
Period.	34.0	.....	88	-29	3.08	.....	9.17	0.10	7.3	9	12	7	9

Climatological Data, February, 1934

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 stations. T. Precipitation is less than 0.01 inch rain or melted snow. Post addresses of these stations are as follows: Of Bell, Glendale, of Coleman, Worton; of Fallston, Bagley; of Ferry Landing, Owings; of Great Falls, Bethesda; of Pleasant Hill, Owings Mills. Also on other dates. \*Custom House, Gay and Water Sts. \*\*Weather Bureau Building, 24th and M Sts. Municipal Building. Porter Reservoir.

ERRATA:

Annual, 1933.—Page 49: Condensed summary of Climatological Data, year should be 1933. January, 1934.—Page 4: Annapolis, maximum temperature on 29th should be 35.

Daily Precipitation for February, 1934

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**	Atlantic	1.42				.05	.01		T.			.02	T.		.01						.57			.23			.41	.42						3.14	
Annapolis**	do.	.93	T.			.10			T.			.10	T.								.85			.22			.78	.68						3.66	
Baltimore***	do.	.85				.18	T.		T.			.04	.01								.67			.32			.66	.55						3.29	
Bell	do.	.42	.32	T.			.06		.02			.02	T.								.53	.22		.01	.22		.55	.64						3.01	
Boysds	do.	.20	.04	T.			.02		.14			T.	T.								.20	T.		.03	.12		.35	.58						1.68	
Cambridge(near)	do.	.70	.30	T.			.20		T.			T.	.30	T.							.50	.30		*	.23		.80	.70						4.03	
Cecilton	do.	.50	.40	T.			.20		T.			T.	.10	T.							.55	.35		T.	.10		.34	.40						2.94	
Cheltenham	do.	.73	.16	.01			.02	.06		.01		T.	.13	.01							.64	.20		.04	.11		.60	.86						3.58	
Chewsville	do.	.10	T.				T.	.08		T.		T.	T.								T.	T.		T.	T.		.32	.33						0.83	
Clear Spring	do.	.07	T.				T.	.10		T.		T.	T.								T.	T.		T.	T.		.40	.29						0.86	
Coleman	do.	.85	.10				T.	.10		T.		T.	.10	T.							.60	.30		T.	.10		.40	.60						3.15	
College Park	do.	.75		T.			T.	.06		.05			.02	T.							.54			.15	.20		.40	.60						3.07	
Crisfield	do.	1.20	.31	T.			T.	.25		T.		.25	T.								.88	.15		T.	.62		2.30	T.						6.59	
Cumberland	do.	T.	T.	T.			T.	T.		T.		T.	T.								T.	T.		T.	T.		.20	.32		.03				6.59	
Darlington	do.	* 1.00					.10		T.			T.	.10								.30	.40		T.	.46		.30	.50						3.16	
Easton	do.	.54	.22	T.			.18	.86		T.		T.	.35	T.							.29	.50		.23	.10		*	.94						4.21	
Elkton	do.	1.00	.10				.05		T.			T.	T.								.70	.15		T.	.05		.40	.40						2.85	
Emmitsburg	do.	.15	.15				T.	.20		T.		T.	.05								T.	.02		T.	T.		.35	.50						1.42	
Fallston	do.	.47	.30				.17		T.			.02	T.								.37	.20		T.	.20		.50	.60						2.83	
Ferry Landing	do.	.44	.35	T.			.05	.08		T.		T.	.12	T.							.60	.20		.10	.05		.75	1.25						3.99	
Frederick	do.	.31	.02	T.			.20		T.			T.	T.								.17	T.		.02	T.		.58	.57						1.90	
Friendsville	Ohio	.02	.03				T.	T.	.05	.10		.10	T.	.75							.05	T.		.05	.10	T.	.50	.30						2.05	
Frostburg	Atlantic	T.	T.				T.	T.	T.	T.		T.	T.	.11							T.	T.		T.	T.		.35	.22						0.68	
Grantsville	Ohio	* .05					T.	T.	.04	.10		T.	T.	1.20							.05	T.		.05	.10	.05	.38	.42						2.44	
Great Falls	Atlantic	.80	T.				.06	T.		.10		T.	.02	T.							.31			.31		.07	.83	.15						2.65	
Hancock (Tonoloway)	do.	.05	T.				.08		T.			T.	T.	T.							T.	T.		T.	T.		.31	.21						0.65	
Hancock (City)	do.	.06	T.				.05		T.			T.	T.	T.							T.	T.		T.	T.		.11	.44	.08					0.74	
Keedysville	do.	.16	T.				T.	.15		T.		T.	T.								T.	T.		.02	T.		.42	.40						1.15	
La Plata	do.	.60	.25	T.	.05	.06	.12	.02		T.		.16	T.								.69	.27		.14	.12		.85	.57						3.93	
Laurel	do.	.70	.11	T.			.04	.07		.03		.04	T.								.40	.15		.12	.23		.50	.52						2.91	
Lutherville	do.	.45	.25				.13		.01			.03	T.								.40	.25		.07	.16		.43	.70						2.88	
Maryland Line	do.	.50	.10				T.	.25		T.		T.	T.								.40	.30		T.	.20		.30	.50						2.55	
Mechanicsville	do.	.60	.30	.02			T.	.10		.15		T.	.10	T.							.70	.30		* .30			.80	.85						4.42	
Millington	do.	.40	.60				T.	.15		T.		T.	.20	T.							.50	.50		T.	.09		.40	.75						3.59	
Oakland	Ohio	.02	.07		.02	.02	T.	.01	.06			.03	.02	.40							.03	.08		.04	.08	T.	.25	.35						1.49	
Picardy	Atlantic	T.	T.				T.	T.	T.			T.	T.								T.	T.		T.	T.		.45	.18						0.63	
Picasant Hill	do.	* .70					T.	.80		.02		T.	.01	T.							.60	.20		.04	.02		.60	.50						2.99	
Pocomoke City	do.																																		
Princess Anne	do.	1.34	T.	T.			.05	.10		T.		.06	T.								.82	.03		.82	T.		2.00	.35						5.19	
Ridgely	do.	.65	.30				T.	.14		T.		.18	T.								.52	.33		T.	.42		.62	.42						3.58	
Rock Hall	do.	.30	.60				T.	.40		T.		.10	T.								.60	.40		T.	.30		.50	.60						3.80	
Salisbury	do.	1.04	.40	T.			T.	.30		.05		T.	.30	T.							.72	.40		T.	.53		1.40	.60						5.74	
Sines**	Ohio	.02	.02		.04	.01	T.	.08		*		.06	.22	.18							.08	T.		.02	T.		.05	.04	T.	.32	.16			1.28	
Snow Hill	Atlantic	* .70	T.				T.	.40		*	.30	T.	.10	T.							.70	.60		T.	.40		*	1.90						5.00	
Solomons	do.	.62	.25	T.			T.	.05		T.		T.	.05	T.							.69	.26		*	.11		.72	1.03						3.84	
State Sanatorium	do.	.10	.45				T.	.25		T.		T.	.05	T.							T.	.02		T.	T.		.50	.40						1.47	
Stevensville	do.	1.10	.35	T.			T.	.20		T.		.10	T.								.50	.40		T.	.20		.80	.50						4.35	
Takoma	do.	* .86	T.				*	.07		.08		.02	T.								.50	.10		*	.38		*	1.24						3.25	
Towson	do.																																		
Western Port	do.	T.	T.				T.	T.	T.	T.		T.	T.	.15							T.	T.		T.	T.		.35	.25						0.77	
Westminster	do.	* .57					T.	.23		T.		T.	T.								* .56			T.	T.		.41	.40						2.17	
Woodstock	do.	.28	.32				T.	.25		T.		.02	T.								.50	.23		T.	.18		.35	.70						2.83	
<i>District of Columbia</i>																																			
Washington***	Atlantic	.82	.01			T.	.09			.02		T.	T.								.56			.31			.89	.50						3.22	
<i>Delaware</i>																																			
Bridgeville	Atlantic	.74	.25				T.	.30		T.		.10	T.								.48	.40		T.	.20		1.30	.70						4.47	
Delaware City	do.	.40	.40				T.	.05		T.		T.	T.								.50	.25		T.	.10		.40	.60						2.70	
Dover	do.	.54	1.00				T.	.20		T.		.15	T.								.40	.50		T.	.18		.60	.80						4.35	
Millford	do.	.53	.70				T.	.15		T.		.25	T.								.40	.48		T.	.20		1.30	.95						4.96	
Millsboro	do.	.80	.60				T.	.30		T.		.10	T.								.60	.50		T.	.50		1.40	.75						5.45	
Wilmington	do.	* .76					T.	.05		T.		T.	.02	T.							.15	.55		T.	.21		*	1.00						2.74	
Wilmington	do.	.45	.45				T.	.10		T.		T.	.05	T.							.42	.30		T.	.21		.30	.55						2.83	

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. T. Trace, or less than 0.01 inch.  
 ||Municipal Building. ||||Porter Reservoir. \*Precipitation included in following measurement.

(Continued from front page)

very badly over the northern Eastern Shore, where roads were blocked for several days.

Precipitation, melted snow and rain, was above normal in southern Maryland and the southern and central portions of the Eastern Shore, and below normal in the other divisions. It was very light in western Maryland.

Daily Temperatures for February, 1934

Table with columns for Stations, days 1-31, and Mean. Rows are categorized by Maryland and Delaware, listing various locations like Aberdeen, Annapolis, Baltimore, etc., with their respective temperature data.

§§ Instruments are read in morning; maximum temperature then read is charged to preceding day, on which it almost always occurs. Temperatures at Aberdeen, Baltimore, Sines, and Washington are from midnight to midnight; other stations, except Cumberland, are for 24-hour period ending late in afternoon, near sunset. (W. B., Richmond, Va., -4-5-34-930)