

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

in Cooperation with Maryland State Weather Service

# CLIMATOLOGICAL DATA

15 MARYLAND AND DELAWARE SECTION  
**J. R. WEEKS**  
 PRICE: 5 CENTS A COPY; 50 CENTS A YEAR  
 VOL. XL BALTIMORE, MD., NOVEMBER, 1935 No. 11

**GENERAL SUMMARY**

This November was mild and wet. It was the mildest November since 1931 and the wettest November since 1932. The first general freeze of the season occurred during the 23d-24th. Cloudiness was unusually plentiful. An overcast sky, without any sunshine, prevailed from the 12th to the 17th, inclusive. Sunshine was pronouncedly deficient, being more than 20 per cent below normal and the least of record in November. The average number of clear days was the least of record and the average number of cloudy days was the greatest of record in November. Relative humidity averaged 5 per cent above normal.

The feature of the month was the northeast storm of the 17th, which caused exceptionally heavy rain over the Eastern Shore and over the eastern portion of north-central Maryland.

Monthly precipitation averaged about normal in western Maryland, with totals mostly between 2 and 3 inches; averaged one and nine-tenths times the normal in north-central and southern Maryland, with totals mostly between 4 and 6 inches; and averaged twice the normal over the Eastern Shore, with totals mostly between 5 and 6.5 inches. The average for the section was one and seven-tenths times the normal.

Light snow fell over western Maryland on the 15th, 16th, 22d, and 30th; over the entire section on the 17th and 23d; and over extreme western Maryland on the 26th and 29th.

The snowfall of the 17th interrupted the steady rain of that day. Most of the snow melted as it fell upon the warm, wet ground and other surfaces. However, in eastern Washington County and in north-central Maryland, the snowflakes were large and fell heavily for several hours during the afternoon, and produced a heavy slush of about 1 inch, except 2 to 3 inches in the northern Blue Ridge Mountain region; had the ground been dry and cold the snow depth over this area would have been 5 to 6 inches.

Grains and grasses improved during the first decade. Grains became good to excellent and grasses became good during the second decade, and continued so to the close of the month. Grains, grasses, and late crops made good growth. Barley advanced well ahead of normal. Late sown grains came up to good stands. Digging sweet potatoes and late potatoes and picking late apples ended. Harvesting late crops, husking corn, plowing, hauling and spreading manure, cutting and hauling wood, hauling fodder, stripping tobacco, and making repairs were in progress. Sowing grains over the southern portion of the section ended during the first decade, except over the extreme southern Eastern Shore during the third decade. — J. B., jr.

**TEMPERATURE**

The monthly mean for the section, 48.7°, is 3.6° above normal. The highest monthly mean was 53.0° at Crisfield; the lowest, 39.9° at Sines. The highest temperature, 86°, occurred at Hancock on the 5th; the lowest, 9°, at Sines on the 24th and 25th. The greatest local monthly range was 72° at Hancock; the least, 47°, at Crisfield and Stevensville. The greatest daily range was 41° at Oakland on the 4th and 27th.

**PRECIPITATION**

The monthly average for the section, 4.43 inches, is 1.88 inches above normal. The greatest monthly amount was 6.53 inches at Elkton; the least, 2.02 inches at Frostburg. The greatest 24-hour amount was 3.80 inches at Millsboro on the

16-17th. The monthly average snowfall for the section, 0.8 inch, is 0.2 inch below normal. The greatest monthly snowfall was 4.0 inches at State Sanatorium. The average number of days with .01 inch or more of precipitation, 12, is 5 above normal.

**MISCELLANEOUS PHENOMENA (WITH DATES)**

*Fogs, light.*—1 to 5, 7, 8, 10 to 13, 15 to 17, 20 to 22, 26 to 29.  
*Fogs, dense.*—2, 3, 11, 12, 13, 14, 15, 16, 17, 22, 27, 28.  
*Gales.*—On the Coast: Northeast, 17; northwest, 17, 18.  
*Halos, Lunar.*—5, 6, 9, 11, 14. *Halos, Solar.*—27.  
*Rainbow.*—Baltimore, 7.  
*Sheet, light.*—Western Maryland, 7; central and eastern divisions, 17; north-central Maryland, night 22-23.  
*Thunderstorm.*—Kent County (Md.), 13.  
*Winds, high.*—Entire Section: southerly, 5, 27, 28, 29; northeast, 17; northwest, 17, 18, 22, 23, 24. Eastern Shore and on the Coast: northeast, 1, 16.

**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
Aberdeen, Md. ....	30.12	30.42	24	29.65	28	12.1	42	ne.	17	87	76	76
Annapolis, Md. ....	30.10	30.42	24	29.63	28	10.9	28	ne.	17	81	69	88
Baltimore, Md. ....	30.12	30.45	24	29.65	28	11.3	30	nw.	18	77	64	71
Elkton, W. Va. ....	30.17	30.65	24	29.71	28	5.9	21	nw.	17	89	64	76
Harrisburg, Pa. ....	30.12	30.48	24	29.64	28	8.0	21	ne.	17	72	65	70
Norfolk, Va. ....	30.10	30.43	25	29.66	28	11.5	31	nw.	18	85	70	81
Philadelphia, Pa. ....	30.12	30.41	24	29.62	28	14.0	45	n.	17	79	67	74
Pittsburgh, Pa. ....	30.12	30.62	24	29.66	28	10.1	23	sw.	28	86	72	78
Washington, D. C. ....	30.11	30.46	24	29.64	28	7.6	23	nw.	18	80	63	71

**COMPARATIVE DATA FOR MARYLAND AND DELAWARE FOR NOVEMBER**

Year	Temperature				Precipitation				Number of days				
	Mean	Departure	Highest	Lowest	Average	Departure	Greatest	Least	Average snowfall	With 0.1 in. or more precipita. n	Clear	Partly c'ly	Cloudy
1895....	45.9	+0.8	81	0	1.41	-1.14	3.51	0.34	0.2	8	13	6	11
1896....	49.4	+4.3	78	12	3.08	+0.53	6.92	1.08	2.1	7	12	8	9
1897....	45.0	-0.1	80	8	4.69	+2.14	8.43	1.59	0.2	12	12	9	9
1898....	42.9	-2.2	78	6	3.89	+1.34	5.62	1.42	5.5	11	12	7	11
1899....	44.9	-0.2	75	12	2.03	-0.52	3.65	1.63	T.	17	7	6	8
1900....	47.7	+2.6	81	4	2.97	+0.42	6.52	1.08	1.0	6	12	10	8
1901....	39.2	-5.9	76	4	2.68	+0.13	5.20	1.43	2.2	12	8	10	10
1902....	50.9	+5.8	80	11	3.11	+0.56	5.40	1.84	0.3	12	8	10	10
1903....	41.0	-4.1	82	1	1.19	-1.36	2.60	0.56	0.2	14	10	6	8
1904....	41.9	-3.2	72	11	1.68	-0.87	2.86	0.26	2.3	4	13	9	8
1905....	43.3	-1.8	77	10	1.28	-1.27	3.40	1.16	0.1	6	14	9	9
1906....	45.3	+0.2	78	15	1.50	-1.05	2.95	0.65	0.9	5	16	7	7
1907....	43.1	-2.0	70	10	5.38	+2.78	8.45	3.30	0.9	11	11	8	11
1908....	44.7	-0.4	77	3	0.99	-1.56	1.90	0.37	3.7	3	17	8	6
1909....	49.2	+4.1	85	11	1.28	-1.27	2.87	0.21	1.0	6	15	9	6
1910....	40.2	-4.9	76	2	2.09	-0.46	4.72	0.67	3.1	7	11	12	7
1911....	42.6	-2.5	82	6	4.13	+1.58	8.85	1.87	0.4	10	12	9	9
1912....	46.3	+1.2	79	10	2.13	-0.42	3.80	0.68	1.5	6	16	8	6
1913....	47.3	+2.2	87	10	2.10	-0.45	4.38	0.69	1.0	7	14	6	10
1914....	44.5	-0.6	82	0	2.03	-0.52	3.43	1.04	0.1	3	17	8	5
1915....	45.0	-0.1	79	14	1.38	-1.17	3.19	1.44	T.	6	16	9	5
1916....	45.0	-0.1	79	9	2.19	-0.36	4.60	1.03	0.1	3	16	6	9
1917....	41.3	-3.8	76	1	0.58	-1.97	1.33	0.07	1.7	4	17	6	7
1918....	44.9	-0.2	74	13	1.44	-1.11	3.18	0.31	0.1	5	15	7	8
1919....	45.7	+0.6	81	11	3.30	+0.75	4.72	1.67	0.1	11	14	7	9
1920....	44.7	-0.4	76	3	4.09	+1.54	7.88	2.69	0.7	10	10	5	15
1921....	46.9	+1.8	82	15	4.30	+1.75	6.59	2.57	0.1	13	9	8	13
1922....	46.3	+1.2	75	14	0.66	-1.89	1.27	0.40	1.4	5	15	7	8
1923....	44.0	-1.1	68	12	2.63	+0.08	4.38	1.65	0.2	9	12	7	11
1924....	44.7	-0.4	79	10	1.84	-0.71	2.79	1.22	1.6	5	12	9	9
1925....	43.2	-1.9	74	6	3.10	+0.55	4.84	2.22	0.3	10	12	8	10
1926....	43.3	-1.8	78	7	4.36	+1.81	7.54	2.19	0.1	8	11	9	10
1927....	49.9	+4.8	89	9	2.85	+0.30	5.20	1.54	0.3	9	9	11	10
1928....	47.1	+2.0	80	15	1.88	-0.67	4.23	1.04	1.2	8	9	10	11
1929....	46.1	+1.0	85	7	2.62	+0.07	5.14	1.65	1.8	11	8	9	13
1930....	44.9	-0.2	75	16	1.28	-1.27	2.72	0.48	0.5	9	11	5	14
1931....	51.8	+6.7	80	16	0.94	-1.61	2.48	0.34	0.8	6	11	10	9
1932....	43.5	-1.6	72	2	5.25	+2.70	7.85	1.95	T.	9	13	9	8
1933....	42.7	-2.4	81	8	1.41	-1.14	3.62	0.73	1.8	7	11	7	12
1934....	48.0	+2.9	80	10	3.57	+1.02	4.94	2.11	0.2	10	11	7	12
1935....	48.7	+3.6	86	9	4.43	+1.88	6.53	2.02	0.8	12	7	8	15
Period.	45.1	.....	87	-16	2.55	.....	8.85	0.07	1.0	7	13	8	9

Climatological Data, November, 1935

Stations	Counties	Elevation, feet	Length of record, years	Temperature, in degrees Fahr.					Precipitation, in inches				Number of days			Prevailing direction of wind	Observers			
				Mean	Departure from the normal	Highest	Date	Lowest	Date	Greatest daily range	Total	Departure from the normal	Greatest in 24 hours	Total snowfall (unmelted)	With precip., 0.01 in. or more			Clear	Partly cloudy	Cloudy
<i>Maryland</i>																				
Aberdeen	Harford	30	17	49.0	+4.2	76	5	27	24	27	4.18	+1.81	1.95	T.	10	6	8	16	n.	U. S. Army.
Annapolis	Anne Arundel	45	70	50.9	+4.0	79	5	29	24	22	5.06	+2.18	1.72	0.1	11	7	7	16	n.	U. S. Navy.
Baltimore	Prince Georges	115	68	50.4	+4.1	79	5	28	24	25	5.63	+3.07	2.53	1.2	11	7	4	19	n.	U. S. Weather Bureau.
Bell	Prince Georges	151	15	49.4	.....	79	5	19	25	35	5.07	+2.30	1.85	T.	13	5	9	13	nw.	Bureau Plant Industry.
Boys	Montgomery	375	16	47.3	+2.4	78	5	24	27	33	4.33	+0.43	0.66	0.5	13	8	9	13	nw.	Ralph F. Staley.
Cambridge (near)	Dorchester	25	42	51.7	+4.1	76	5	28	25	30	4.94	+2.31	2.00	T.	12	7	9	14	nw.	Matt Harding.
Cecil	Cecil	85	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Cheltenham	Prince Georges	230	35	49.0	+3.2	79	5	23	24	23	4.87	+2.39	1.44	T.	11	5	6	19	n.	U. S. Magnetic Obs'ry.
Chesville	Washington	530	38	45.8	+2.9	77	5	16	24	29	3.27	+1.24	0.78	1.2	11	10	8	12	nw.	D. Paul Oswald.
Clear Spring	do.	600	38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Anna Bevan Cohill.
Coleman	Kent	90	38	49.7	+3.3	79	5	26	24	23	5.59	+3.09	2.65	T.	10	6	9	15	nw.	Walter B. Harris.
College Park	Prince Georges	87	48	50.3	+5.6	78	5	25	24	22	4.74	+2.22	1.28	T.	12	6	6	18	nw.	Prof. Thos. H. White.
Crisfield	Somerset	5	16	53.0	+3.0	75	5	28	24	26	5.14	+2.56	2.20	T.	13	3	13	14	nw.	A. B. Cochrane.
Cumberland	Allegany	623	63	46.5	+3.9	82	5	20	25	36	2.77	+0.64	1.70	T.	8	12	7	11	nw.	W. R. E. King.
Darlington	Harford	300	45	47.8	+4.0	77	5	25	27	28	5.24	+2.48	2.20	0.5	9	6	7	17	nw.	Fred. C. Jones.
Dundalk	Baltimore	12	1	49.0	.....	79	5	27	24	29	5.71	.....	1.86	1.3	11	7	5	18	n.	U. S. Airway Station.
Easton	Talbot	32	45	50.8	+4.3	77	5	27	24	30	5.29	+2.72	2.00	T.	13	7	9	14	n.	Clement E. Bray.
Elkton	Cecil	28	9	48.7	+3.9	77	5	24	27	30	6.53	+0.79	3.62	T.	10	7	7	16	n.	H. W. Bouchelle.
Emmitsburg	Frederick	720	67	47.1	+3.9	76	5	28	24	29	4.00	+0.79	1.00	3.0	11	10	7	13	n.	Mt. St. Mary's College.
Fallston	Harford	450	66	47.8	+4.2	77	5	24	24	22	5.88	+2.72	3.13	1.5	14	6	6	18	n.	Miss Dora Curtiss.
Ferry Landing	Calvert	110	19	51.2	+4.5	79	5	24	24	29	4.80	+2.14	1.66	T.	16	4	12	14	nw.	Thos. J. Bourne.
Frederick	Frederick	325	61	48.8	+4.6	78	12	22	24	28	3.74	+1.21	0.96	1.2	12	10	7	13	nw.	August T. Brust.
Friensburg	Garrett	1,501	17	42.6	+2.0	75	4	10	24	36	2.50	-0.55	0.55	3.5	11	9	5	16	nw.	Joab J. Friend.
Frostburg	Allegany	1,929	34	43.6	+1.8	72	15	15	24	36	2.02	-0.48	0.87	T.	8	10	8	12	w.	F. T. Lewis.
Grantsville	Garrett	2,351	42	40.4	+1.5	73	4	10	24	35	2.74	-0.01	0.62	3.6	11	9	5	16	nw.	Floyd J. Miller.
Great Falls	Montgomery	200	46	48.2	+3.9	78	5	24	24	32	3.94	+1.72	1.40	T.	10	6	8	16	nw.	Chas. E. Sullivan.
Hancock (Tonoloway)	Washington	455	25	46.3	+2.8	86	5	14	24	37	2.71	+0.39	1.15	T.	9	13	6	11	nw.	American Fruit Growers.
Hancock (City)	do.	421	11	.....	.....	.....	.....	.....	.....	.....	2.26	-0.06	1.15	T.	9	.....	.....	.....	.....	Marvin K. Murray.
Keedysville	do.	400	31	47.5	+3.4	81	5	16	25	32	3.28	+1.22	0.86	1.2	12	10	8	12	nw.	J. A. Miller.
La Plata	Charles	120	21	51.0	+4.3	78	5	23	24	28	4.98	+2.38	1.89	T.	14	6	7	17	n.	Walter M. Page.
Laurel	Prince Georges	190	41	49.3	+4.6	77	5	25	24	26	4.70	+2.26	1.56	T.	14	5	6	19	nw.	Evan G. Chaney.
Luthersville	Baltimore	340	9	47.8	.....	78	5	23	24	32	5.37	.....	2.05	1.0	10	6	6	18	nw.	Clarence J. Thomson, Jr.
Maryland Line	do.	840	11	47.4	+2.9	78	5	22	24	24	4.27	+1.14	1.23	1.0	9	8	4	18	nw.	Chester L. Fulton.
Mechanicsville	St. Marys	165	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Millington	Kent	27	38	50.8	+5.2	77	5	23	25	31	6.05	+3.51	2.70	T.	12	7	7	16	n.	Henry L. Hignman.
Oakland	Garrett	2,461	36	42.7	+4.6	76	4	10	24	41	2.68	-0.07	0.62	3.8	17	9	5	16	w.	R. E. Weber.
Parkton	Baltimore	780	5	47.0	.....	77	5	23	24	26	4.89	.....	1.60	1.0	9	.....	.....	.....	.....	C. W. Hendrix.
Picardy	Allegany	900	9	46.8	.....	81	5	15	24	31	2.41	.....	1.01	T.	8	13	6	11	nw.	American Fruit Growers.
Pleasant Hill	Baltimore	660	11	.....	.....	.....	.....	.....	.....	.....	3.82	+0.98	1.15	1.0	11	7	5	18	nw.	J. E. Henry.
Princess Anne	Somerset	17	60	51.6	+4.2	79	12	25	25	31	3.87	+1.49	1.41	T.	10	2	14	14	nw.	James R. Stewart.
Ridgely	Caroline	57	45	51.3	+5.2	78	5	26	25	30	5.88	+3.31	2.90	1.0	12	6	9	15	nw.	Albert White.
Rock Hall	Kent	25	21	51.1	+4.5	76	5	27	24	30	5.57	+2.83	2.60	T.	9	8	7	15	n.	Charles Judefind.
Salisbury	Wicomico	23	30	52.4	+5.1	79	12	23	24	30	4.26	+1.54	1.20	T.	11	6	10	14	nw.	Homestead Dairy Farms.
Sines (Deep Creek)	Garrett	2,040	8	39.9	.....	74	4	9	24	39	2.36	.....	0.76	3.4	16	9	5	16	nw.	C. E. MacMurray.
Snow Hill	Worcester	20	5	51.6	.....	78	15	26	24	32	5.70	.....	2.30	T.	12	4	12	14	nw.	Richard Leake.
Solomons	Calvert	20	44	52.6	+3.9	77	5	27	24	21	4.60	+2.66	1.38	T.	15	4	10	16	nw.	Chesapeake Biological L'b.
State Sanatorium	Frederick	1,460	27	45.7	+2.5	75	5	19	24	26	4.61	+2.10	1.10	4.0	13	10	6	14	n.	Dr. V. P. Cullen.
Stevensville	Queen Annes	12	9	51.2	.....	75	5	28	27	29	5.30	.....	2.20	T.	9	7	9	14	n.	T. R. Price.
Takoma	Montgomery	320	37	51.0	+6.1	80	5	23	24	28	.....	.....	1.20	T.	11	5	6	19	n.	Guy L. Seaman.
Towson	Baltimore	475	24	.....	.....	.....	.....	.....	.....	.....	5.38	+2.92	2.10	1.0	9	.....	.....	.....	.....	Charles E. Prince.
Western Port	Allegany	1,000	42	47.7	+3.5	84	5	19	25	39	2.43	+0.50	1.07	T.	11	.....	.....	.....	.....	Norris Bruce.
Westminster	Carrroll	770	26	47.2	+2.4	78	5	22	24	26	4.18	+1.43	1.03	1.5	11	9	9	12	nw.	Harry J. Mathias.
Woodstock	Baltimore	415	66	47.6	+4.2	79	5	22	27	32	3.68	+0.93	1.32	1.0	11	6	6	18	nw.	Woodstock College.
<i>Dist. of Columbia</i>																				
Washington**		112	65	50.2	+5.0	79	5	24	24	25	4.03	+1.66	1.15	T.	13	6	5	19	nw.	U. S. Weather Bureau.
<i>Delaware</i>																				
Bridgeville	Sussex	45	45	51.0	+4.3	77	15	25	24	32	3.86	+1.34	1.65	2.0	15	7	9	14	n.	William M. Ray.
Delaware City	New Castle	12	49	49.8	+3.9	75	5	27	24	32	5.22	+2.85	2.30	1.0	12	7	7	16	nw.	James F. Maden.
Dover	Kent	84	46	50.4	+4.6	75	5	25	24	26	4.31	+1.72	2.30	1.0	13	6	9	15	nw.	Arthur G. Livingston.
Milford	Sussex	20	53	50.9	+3.6	78	12	24	25	29	5.36	+2.43	2.98	1.0	16	6	10	14	nw.	Chas. J. Holzmueller.
Millsboro	do.	20	43	51.6	+4.9	80	12	25	25	34	6.52	+3.88	3.80	1.0	17	7	9	14	nw.	Wm. T. Moore.
Wilmington	New Castle	86	42	.....	.....	.....	.....	.....	.....	.....	6.25	+3.38	3.35	0.8	14	7	7	16	nw.	Street Department.
Wilmington	do.	260	24	49.0	+3.6	75	5	23	24	22	6.25	+3.38	3.33	0.8	14	7	7	16	nw.	Water Department.
<i>Means and extremes:</i>																				
For Maryland and District of Columbia				48.4	+3.6	86	5	9	24	41	4.32	+1.80	3.62	0.8	11	7	8	15	nw.	
For Delaware				50.4	+3.7	80	12	23	24	34	5.34	+2.60	3.80	1.1	15	7	8	15	nw.	
For entire section				48.7	+3.6	86	5	9	24	41	4.43	+1.88	3.80	0.8	12	7	8	15	nw.	

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 Picardy, Paw Paw, W. Va.; of Pleasant Hill, Owings Mills; of Sines, Oakland. \*Custom House, Gay and Water Sts. \*\*Weather Bureau Building, 24th and M Sts.  
 †Also on other dates. §§Prettyboy Dam. §§§Municipal Building. §§§§Porter Reservoir.



Daily Temperatures for November, 1935

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

§§ Instruments are read in morning; maximum temperature then read is charged to preceding day, on which it almost always occurs. Temperatures at Aberdeen, Annapolis, Baltimore, Dundalk, Sines, and Washington are from midnight to midnight; other stations, except Cumberland and Cheltenham, are for 24-hour period ending late in afternoon, near sunset.