

# CLIMATOLOGICAL DATA

## 15 MARYLAND AND DELAWARE SECTION

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### GENERAL SUMMARY

This, a rather windy November, was the first wet November since 1937, with the average monthly precipitation twice the normal. Monthly totals were 4 to 5 inches in western Maryland, except slightly below 4 inches in eastern Garrett and western Allegany Counties and 5 to 6 inches in eastern Washington County, were mostly 5 to 6 inches in north-central and southern Maryland, and were mostly around 5 inches on the Eastern Shore, except 6 to 6.7 inches in Worcester County. The 11-15th was a wet period, with overcast sky.

The monthly mean temperature for Delaware was normal, for eastern and central Maryland it was 1° above normal, and for western Maryland it was 1° below normal. Mild periods were 1st-6th, 10-12th, 18th; 20-24th; and 31st; moderately cold periods were 7-9th, 13-17th, 19th, 25th, and 27-30th. The 26th was cold.

Monthly sunshine was 10% to 15% below normal over the northern half of the section and 5% to 10% below normal southward thereof, and was the least in November since 1935.

Monthly snowfall was below normal. Snow flurries occurred on the 14th and 30th and light snow fell on the 15th and 28th in the Allegheny Mountain region. Snow flurries occurred on the 16th and 29th over the entire section, except there was light snow on the 29th in the Allegheny Mountain and north-central Piedmont regions. Snow flurries occurred on the 17th in the central and eastern divisions and on the 27th in north-central Maryland and over the northern Eastern Shore. Light snow fell over western Maryland on the 26th and 27th.

Barley and early sown wheat and rye were good stands, good color, made growth, and were good to excellent. The late sown wheat and rye came up and did nicely. Grasses, pastures, and meadows were good; clovers were very good. In the first decade sowing grains in the central and eastern divisions was finished and digging late potatoes ended. Activities were plowing, husking corn, butchering, cutting wood, feeding livestock, gathering holly, and making holly wreaths.—*J. B., Jr.*

### TEMPERATURE

The monthly mean for the section, 45.6°, is 0.4° above normal. The highest monthly mean was 49.8° at Crisfield; the lowest, 35.4°, at Mt. Savage Summit. The highest temperature, 77°, occurred at Western Port on the 4th; the lowest, 14°, at Mt. Savage Summit on the 28th. The greatest local monthly range was 57° at Tonoloway; the least, 40°, at Crisfield, Delaware Breakwater, and Oxford. The greatest daily range was 47° at Tonoloway on the 4th.

### PRECIPITATION

The monthly average for the section, 5.07 inches, is 2.51 inches above normal. The greatest monthly amount was 6.70 inches at Snow Hill; the least, 3.35 inches, at Mt. Savage Summit. The greatest 24-hour rainfall was 2.31 inches at Ocean City on the 12-13th. The monthly average snowfall for the section, 0.9 inch, is 0.3 inch below normal. The great-

est 24-hour snowfall was 6.0 inches at Mt. Savage Summit on the 27-28th. The average number of days with 0.01 inch or more of precipitation, 10, is 2 above normal.

### MISCELLANEOUS PHENOMENA (WITH DATES)

Fogs: 1, 2, 4, 9 to 15, 19 to 27.  
Halos, lunar: 9, 19, 20. Halos, solar: 4, 5, 20.  
Sleet, light: 26. Swans flying south: Oxford, 15.  
Winds, high: 2, 6, 7, 8, 11, 12, 16, 17, 25, 27 to 30.

### 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	7:30 a. m.	1:30 p. m.	7:30 p. m.		
Aberdeen, Md.	30.65	19	29.66	27	9.5	26	ne.	78	73	73	..	587
Annapolis, Md.	30.66	19	29.67	27	9.5	..	..	74	72	72	..	502
Baltimore, Md.	30.68	19	29.70	27	11.1	33	sw.	79	55	72	46	498
Elkins, W. Va.	30.61	19	29.70	27	7.2	28	se.	11	80	62	72	707
Harrisburg, Pa.	30.66	19	29.70	27	9.0	28	se.	11	77	59	68	639
Norfolk, Va.	30.64	19	29.67	26	10.5	27	e.	27	85	59	76	365
Philadelphia, Pa.	30.68	19	29.66	27	13.4	38	..	12	80	59	73	558
Pittsburgh, Pa.	30.55	18	29.63	27	12.4	34	nw.	6	64	71	24	645
Washington, D. C.	30.68	19	29.71	27	7.7	27	nw.	6	70	51	51	562

### COMPARATIVE DATA FOR NOVEMBER

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	45.6	86	0	1.64	0.1	7	47.9	78	24	1.94	1.7	8
1896	49.1	78	12	3.07	2.2	7	51.6	78	25	3.18	T.	10
1897	45.0	78	5	4.76	0.2	12	46.6	72	21	3.78	T.	13
1898	42.8	78	6	3.82	5.5	11	44.2	73	22	4.58	5.5	12
1899	44.9	73	12	2.62	T.	6	45.0	66	22	2.15	0.0	6
1900	47.5	81	4	3.00	1.0	8	49.9	76	22	2.59	T.	6
1901	39.1	74	4	2.72	2.3	5	40.6	76	17	2.20	1.2	4
1902	50.8	80	11	3.12	0.3	8	52.2	80	27	3.06	0.0	7
1903	40.9	82	1	1.17	0.8	5	42.5	79	12	1.36	0.1	5
1904	41.9	72	11	1.62	2.2	4	42.2	67	18	2.17	0.1	6
1905	43.2	77	10	1.30	0.1	6	44.8	73	14	1.09	0.4	5
1906	45.2	78	15	1.43	1.0	5	46.0	75	22	1.99	0.6	6
1907	42.8	70	10	5.27	1.0	11	45.2	70	22	5.78	0.1	12
1908	44.5	76	3	0.95	4.2	3	45.9	76	20	1.31	0.1	3
1909	49.1	85	11	1.16	1.0	6	49.6	79	23	2.12	1.2	7
1910	40.9	76	2	2.05	3.5	8	42.1	74	18	2.44	0.2	6
1911	42.3	82	6	3.99	0.5	10	44.7	72	20	5.31	0.0	11
1912	46.1	79	10	2.04	1.2	5	47.8	78	14	2.74	3.0	5
1913	47.0	87	10	2.19	1.2	7	48.8	79	27	1.54	T.	6
1914	44.2	82	0	2.04	0.1	3	46.8	80	15	1.96	T.	3
1915	44.8	79	14	1.46	T.	7	46.6	76	19	0.92	T.	4
1916	44.9	83	9	2.18	0.1	8	45.4	74	15	2.28	T.	8
1917	41.2	76	1	0.60	1.9	4	41.5	70	15	0.49	T.	8
1918	44.9	74	13	1.47	0.1	5	45.4	71	17	1.27	0.0	4
1919	45.5	81	11	3.29	0.1	11	46.6	78	20	3.85	0.0	10
1920	44.4	76	3	3.82	0.8	10	46.3	75	16	5.88	0.0	10
1921	46.7	82	15	4.34	0.1	13	48.4	81	25	3.98	T.	12
1922	46.2	75	14	0.65	0.5	5	47.0	74	23	0.82	T.	8
1923	43.9	68	12	2.60	0.2	9	45.0	67	21	2.85	0.0	7
1924	44.4	79	10	1.79	1.8	5	46.2	79	16	2.13	0.3	6
1925	42.9	74	6	3.11	0.3	10	45.0	74	20	3.04	0.2	9
1926	43.0	78	7	4.45	0.1	8	44.9	75	19	3.70	T.	8
1927	49.7	79	9	2.78	0.3	9	51.2	79	22	3.44	T.	10
1928	47.0	80	13	1.89	1.3	8	48.3	79	21	1.72	T.	9
1929	45.8	85	7	2.62	1.8	11	48.0	82	11	2.62	1.4	12
1930	44.6	75	16	1.19	0.8	9	46.8	74	8	2.04	T.	9
1931	51.6	80	16	0.95	0.9	6	52.9	79	23	0.86	0.1	5
1932	43.2	72	2	5.22	T.	9	45.7	70	13	5.50	T.	9
1933	42.5	81	8	1.38	2.0	7	44.2	75	10	1.63	0.2	5
1934	47.8	80	10	3.56	0.2	10	49.1	76	20	3.65	T.	9
1935	48.4	86	9	4.32	0.8	12	50.4	80	23	5.34	1.1	15
1936	43.0	82	4	1.02	0.7	6	44.8	80	15	0.93	T.	6
1937	44.2	79	3	3.43	0.6	7	46.2	71	19	3.61	T.	8
1938	47.7	85	8	2.77	8.6	10	49.8	81	8	2.95	6.3	11
1939	43.4	75	12	1.93	1.4	5	43.9	71	23	1.86	T.	6
1940	45.4	77	14	5.14	1.1	10	46.5	75	20	4.66	T.	9
Period	45.0	87	-16	2.54	1.2	8	46.5	82	8	2.70	0.5	8

Climatological Data for November 1940

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	26	22	45.6	+0.4	74	22	25	26	32	5.14	+2.71	1.19	T.	12	6	5	19	w.	U. S. Army
Annapolis	Anne Arundel	45	75	48.3	+1.2	76	22	29	26	25	4.47	+1.90	1.25	T.	9	7	12	11	n.w.	U. S. Navy
Baltimore		14	70	48.4	+2.1	76	22	27	26	27	5.99	+3.43	1.98	T.	10	7	7	16	sw.	U. S. Weather Bureau
Bell II	Prince Georges	151	20	45.5	+0.8	75	22	21	19	40	6.10	+3.50	1.26	T.	9	7	10	13	n.w.	Bureau Plant Industry
Cambridge (near)	Dorchester	13	47	47.5	-0.3	75	22	26	29	30	4.50	+1.89	1.15	T.	8	15	4	11	n.w.	Matt Harding
Charlotte Hall	St. Marys	167	19	47.7	+1.2	76	22	23	29	33	5.05	+2.45	1.06	T.	8	12	8	10	n.w.	A. D. V. Burr
Cheltenham	Prince Georges	230	40	46.0	0.0	76	22	24	29	31	6.15	+3.63	1.92	T.	9	9	10	11	n.w.	U. S. Magnetic Obs'y.
Chestertown	Kent	35	35	46.2	+0.7	74	22	23	26	32	4.64	+1.98	1.43	T.	11	10	10	10	n.w.	Thomas W. Eliason, Jr.
Coleman II	Washington	630	43	42.8	-0.2	71	4	21	19	39	5.45	+3.40	1.50	0.7	11	10	12	8	n.w.	D. Paul Oswald
College Park	Kent	80	43	46.8	+0.2	73	22	25	26	30	5.05	+2.51	1.45	T.	8	9	11	10	n.w.	Walter B. Harris
Conowingo Dam	Harford	160	54	46.2	+1.2	75	22	24	19	38	5.47	+3.07	1.13	T.	10	11	10	9	n.w.	Russell G. Brown
Crisfield	Somerset	40	5	44.4	0.0	73	22	23	26	35	5.66		1.61	T.	9	8	6	16	n.w.	Susquehanna Electric Co.
Cumberland	Allegany	623	70	43.3	+0.4	76	4	22	29	41	5.37	+3.03	1.54	T.	8	9	11	10	n.w.	M. B. Thawley
Darlington	Harford	360	50	44.6	+0.7	73	22	22	26	34	6.38	+3.72	1.71	T.	9	8	7	15	n.w.	Fred. C. Jones
Dundalk	Baltimore	12	6	46.6	0.0	75	22	25	26	33	5.39		1.74	T.	10	6	10	14	n.w.	U. S. Airport Station
Easton	Talbot	35	50	47.0	+0.3	73	22	24	26	32	4.75	+2.19	0.96	T.	8	8	14	7	n.w.	Clement K. Bray
Edgemont	Washington	920	2								6.14		1.96	2.0	8				n.w.	Lee G. Harne
Elkton	Cecil	28	14	45.8	0.0	74	22	22	26	36	4.56	+1.77	1.21	T.	8	10	6	14	n.w.	H. W. Bouchele
Emmitsburg	Frederick	720	74	44.8	+1.5	72	4	22	26	31	5.21	+2.62	1.63	0.4	12	10	11	9	n.w.	Mt. St. Mary's Seminary
Fallston II	Harford	450	71	45.6	+1.9	72	22	21	26	30	5.85	+3.10	1.70	T.	10	7	13	10	n.w.	Miss Dora Cortiss
Ferry Landing II	Calvert	120	24	48.2	+1.0	76	22	25	29	34	5.01	+2.62	1.04	T.	9	12	8	10	n.w.	Thos. J. Bourne
Frederick	Frederick	325	71	45.4	+1.0	73	22	22	26	35	5.46	+3.11	1.73	T.	8	13	8	9	n.w.	August T. Brust
Friendsville	Garrett	1,980	22	39.6	-1.1	70	4	17	19	43	4.06	+1.55	1.20	5.0	12	5	7	18	n.w.	Joab J. Friend
Frostburg	Allegany	1,950	39	40.8	-1.1	70	4	19	26	34	4.06	+1.68	1.33	6.0	11	10	7	13	n.w.	Thos. F. Lewis
Georgetown	Cecil	2,320	47	47.0	0.0	72	22	24	26	32	4.74		1.36	T.	8	10	8	12	n.w.	Capt. N. L. Riggin
Great Falls II	Garrett	2,320	47	47.0	0.0	72	22	24	26	32	4.74		1.36	T.	8	10	8	12	n.w.	Floyd J. Miller
Hancock	Montgomery	200	52	45.9	+1.3	75	22	21	26	40	5.04	+2.93	1.43	T.	8	13	8	9	n.w.	John E. Bissett
Huntingtown	Washington	540	16	47.3	0.0	75	22	24	29	29	4.75	+2.79	1.51	2.3	8	7	7	10	n.w.	Marvin K. Murray
Keedysville	Calvert	160	5	47.3	0.0	75	22	24	29	29	4.75	+2.79	1.51	2.3	8	7	7	10	n.w.	Elmer O. Bowen
La Plata	Washington	420	37	44.5	+0.1	73	4	20	26	41	5.94	+3.70	1.71	0.2	12	10	12	8	n.w.	J. A. Miller
Laurel	Prince Georges	300	46	45.8	+0.9	75	22	24	26	29	5.74	+3.28	1.32	T.	12	8	11	11	n.w.	Evans G. Chaney
Leonardtown	St. Marys	50	16	48.0	+1.9	74	22	24	29	33	4.50	+1.80	1.11	T.	10	12	8	10	n.w.	Dr. Eugene C. Peck
Luke	Allegany	950	3								3.66		1.33	3.5	9				n.w.	J. G. Patrick
Lutherville	Baltimore	340	14	44.7	-0.6	74	22	19	26	40	6.20	+3.20	1.45	T.	9	11	9	10	n.w.	Clarence J. Thomson, Jr.
Maryland Line	do	840	16	43.3	-1.0	73	5	19	26	32	5.29	+2.51	1.55	T.	10	11	9	10	w.	Chester L. Fulton
Millington	Kent	27	43	46.5	+0.6	72	22	23	19	35	4.47	+1.82	1.27	T.	8	12	8	10	n.w.	Henry L. Higman
Mt. Savage Summit II	Garrett	2,852	8	35.4	-0.9	66	4	14	28	37	3.35		1.20	13.1	14	4	8	18	n.w.	U. S. Airway Station
Oakland	do	2,420	43	37.5	-0.9	70	4	15	29	44	4.49	+1.67	1.40	7.3	17	5	7	18	n.w.	R. E. Weber
Ocean City	Worcester	10	2	48.6	0.0	73	22	26	19	29	6.25		2.31	T.	9	9	11	10	n.w.	U. S. Airway Station
Oxford	Talbot	10	4	48.7	0.0	68	11	28	26	26	4.42		1.14	T.	8	16	5	9	n.w.	Henry Wilcox
Perryville	Cecil	40	5																n.w.	
Picardy II	Allegany	1,030	14	43.5	-0.7	74	4	21	19	35	4.78	+2.66	1.33	3.0	9	13	6	11	n.w.	American Fruit Growers
Pleasant Hill II	Baltimore	660	16								5.41	+1.95	1.30	0.1	11	13	8	9	n.w.	Walter P. Quintin, Jr.
Pocomoke City	Worcester	37	32	48.3	-0.9	71	16	25	19	35	6.44	+4.09	1.66	T.	9	10	10	10	n.w.	Raymond C. Dryden
Poolesville	Montgomery	460	2	45.7	0.0	73	5	24	6	32	5.65		1.33	T.	10	14	6	10	n.w.	Ralph F. Staley
Prettyboy Dam II	Baltimore	780	10	43.2	-1.3	70	15	19	26	30	5.26	+2.21	1.38	T.	10				n.w.	C. W. Hendrix
Princess Anne	Somerset	17	65	47.4	0.0	75	5	22	29	39	5.17	+2.81	1.37	T.	8	10	10	10	n.w.	James R. Stewart
Ridgely	Caroline	67	60	47.2	+0.8	73	22	24	26	33	4.63	+2.03	0.99	T.	9	9	10	11	n.w.	Albert White
Rock Hall	Kent	20	27																n.w.	
Salisbury	Wicomico	31	35	47.2	-0.5	72	15	20	29	37	4.90	+2.29	1.30	T.	8	16	4	10	n.w.	Brady C. Bounds
Silver Spring	Montgomery	310	2	46.3	0.0	75	22	22	26	33	5.64		1.29	T.	9	12	8	10	n.	O. L. Harvey
Sines (Deep Creek) II	Garrett	2,030	16	38.0	0.0	70	14	18	16	42	4.16	+1.90	1.26	7.5	17	5	7	18	n.w.	C. E. MacMurray
Snow Hill	Worcester	20	25	48.6	+0.7	74	15	21	29	40	6.70	+4.26	1.50	T.	8	10	10	10	n.w.	Richard Leake
Solomons	Calvert	20	49								5.47	+2.73	1.10	T.	8				n.w.	Chesapeake Biological Lab.
State Sanatorium	Frederick	1,460	32	42.0	-1.4	71	5	19	26	33	4.58	+2.59	1.77	T.	11	12	9	9	n.w.	Dr. V. F. Cullen
Stevensville	Queen Annes	12	14								5.17	+2.73	1.10	T.	11	12	9	9	n.w.	P. R. Pricer
Takoma	Montgomery	320	42	47.4	+2.0	75	22	24	26	32	5.57	+3.31	1.32	T.	9	11	10	9	n.w.	Guy L. Seaman
Tonioway II	Washington	550	30	42.6	-1.0	76	4	19	19	47	4.75	+2.79	1.50	2.5	9	15	3	12	n.w.	American Fruit Growers
Towson	Baltimore	475	29								6.13	+3.44	1.60	T.	8	11	13	8	n.w.	S. Elmer Parks
Unionville	Frederick	450	1	43.7	0.0	72	22	20	26	37	5.26	+2.84	1.44	T.	11	13	8	9	n.w.	G. Plitt Von Eiff, Jr.
Western Port	Allegany	1,000	47	44.6	+1.2	77	4	21	26	43	3.86	+1.91	1.33	2.5	11				n.w.	Norris Bruce
Westminster	Carroll	770	31	44.8	0.0	71	22	19	26	29	5.18	+2.93	1.28	0.5	9	11	10	9	n.w.	Harry J. Mathias
Williamsport	Washington	360	2								5.57		1.50	1.2	9				n.w.	R. C. Willson
Woodstock	Baltimore	415	71	44.2	+0.6	72	15	18	26	41	5.43	+2.98	1.36	0.1	11	12	7	11	n.w.	Woodstock College
<i>Dist. of Columbia</i>																				
Washington*		72	70	48.2	+3.0	75	22	28	26	31	5.26	+2.89	1.25	T.	9	9	10	11	n.w.	U. S. Weather Bureau
<i>Delaware</i>																				
Bridgeville	Sussex	45	50	46.3	-0.3	74	22	21	29	40	4.31	+1.87	0.86	T.	8	15	5	10	n.w.	William M. Ray
Delaware Breakwater	do	40	5	48.2	0.0	69	5													



Daily Temperatures for November 1940-Continued

Table with columns for Stations, 1-31, and Mean. Rows list various Maryland locations such as Aberdeen, Annapolis, Baltimore, etc., with their respective temperature readings for each day of the month.

§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, Chestertown, Conowingo Dam, Sines, and Washington are from midnight to midnight; at Mt. Savage Summit and Delaware Breakwater the thermometers are read at 1:30 a. m., the extremes are charged to the preceding day; other stations, except Cheltenham, Cumberland, and Pocomoke City, are for 24-hour period ending late in afternoon, near sunset, except 9:30 p. m. at Princess Anne. (WBO, Richmond, Va., 1-18-41-1,150)