

CLIMATOLOGICAL DATA.

MARYLAND AND DELAWARE SECTION.

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No. 13.

GENERAL SUMMARY.

The year 1921 was the warmest of record. The mean annual temperature, 56.6° , is 2.9° above normal, and exceeds by 0.5° the mean temperature of the previous warmest year, namely, 56.1° , in 1913. For the section, as a whole, precipitation was deficient. The snowfall averaged about two-thirds of the normal. The percentage of sunshine was normal.

The period from December, 1920, to April, 1921, inclusive, was warmer than any similar period of record, with a mean temperature 5.6° above normal. June and July were warm and September was markedly warm. November and December were mild. May, August, and October were cool. With the exception of May, September, and November, which were wet, the months of the year were deficient in precipitation. The summer months were marked by drought and were unfavorable for plant growth, except in western Maryland.

The annual precipitation averaged about 5 inches above normal in western Maryland, with amounts ranging from 34.5 inches in eastern Washington County to 54.1 inches in the Allegany Mountain highlands. Over the remainder of the section the annual precipitation averaged about 7 inches below normal, with amounts ranging from 28.9 inches on the Atlantic coast of Maryland to 40.7 inches in northern Carroll County. The annual snowfall ranged from 4 inches at the extreme southern border to 50.5 inches in the Allegany Mountain highlands.

The season of safe plant growth was 191 days for the section, as a whole, or 6 days more than the normal length. This period varied for different portions of the section, as follows: 145 days in Garrett County, 184 days in Allegany and Washington Counties and the Piedmont Plateau, 185 days in southern Maryland and on the Eastern Shore, and 220 days in the Chesapeake Bay region.

The fruit crop was killed by the freezes of March 29-30 and April 11-12. Corn, rye, oats, tomatoes, and sugar-corn were good crops over the entire section. Other crop yields were good in western Maryland, but were cut short by the summer droughts over other divisions of the section.—*J.B., jr.*

SUMMARY BY MONTHS.

January was mild, with an average precipitation about two-thirds of the normal, a markedly light snowfall, and a normal amount of sunshine. Winter grains and grass were green in the southern counties and brown in the northern. Husking of corn remained unfinished.

February was markedly mild, with but slightly deficient precipitation, a snowfall above normal, and much cloudiness. One-half to two-thirds of the monthly precipitation occurred during the "northeaster" of the 19-20th, which caused heavy rains and light snows in the Coastal Plain and heavy snows to the westward. Lowest temperatures of the month followed, with a minimum of -15° at Oakland on the 21st. Winter grains were green and in good condition in the southern counties; in the northern counties they were snow-covered after the 20th. Husking of corn was completed, much plowing was done, and in the southern counties fruit-tree buds were swelling.

March was unusually warm, but terminated with a cold

wave. It was the warmest March of record, with a mean temperature 11.3° above the normal. Precipitation averaged two-thirds of the normal. Snowfall was the least of record for March, and occurred only in Garrett County and in extreme northern Delaware. Plant growth and farming operations made exceedingly rapid progress. Winter grains and grass improved and were in good to excellent condition. Fruit-trees, except apple in northern counties, were in full bloom in the third decade, which was nearly 30 days ahead of normal. Planting of peas, early potatoes, truck, and gardens and sowing of oats began during the first half of the month. The freeze of the 29-30th killed cherry, plum, and apricot blossoms; 90 to 95 per cent of peach, 75 to 90 per cent of pear, and 50 to 75 per cent of early apple blossoms; and about 75 per cent of early strawberries. Wheat, alfalfa, and clover were damaged slightly. Peas, gardens, and truck that were up were blighted. Loss of fruit was estimated at several million dollars for the entire section.

This April was the warmest of record, with a mean temperature of 5.5° above normal. The monthly precipitation and monthly snowfall were slightly below normal. Freezing temperatures on the 11-12th killed fruit blossoms that had escaped the freeze of March 29-30; 80 to 90 per cent of late apples, which were in full bloom during the first decade; and about 50 per cent of late strawberries. Wheat, alfalfa, and clover were damaged slightly. Peas, early potatoes, and vegetables were blighted. Crops did well during the second half of the month. Rye was heading, and pastures were good to excellent.

May was cool and decidedly wet. Monthly amounts of rainfall varied from five-sixths of the normal in New Castle and Kent Counties in Delaware to two and one-half times the normal in the Blue Ridge and Allegany Mountain regions. Wheat and rye headed, the former not filling well. Pastures were good to excellent. Corn planting, greatly delayed, made rapid progress during the third decade, and was finished, except in the southern counties. The termination of a warm period, 19th-23d, was marked by a sharp fall in temperature, showers, local thunder-storms, and strong wind gusts. Three of the thunder-storms were attended by heavy and destructive hail. The first passed southward over eastern Washington County and its attendant wind gust did considerable damage to property; the second moved southeastward from northwestern Kent (Md.) County to southeastern Caroline County; and the third passed southward over central Garrett County and caused flooding rains. The paths of hail varied from 1 to 6 miles, and the hail-stones were as large as hens' eggs. Loss in crops was estimated at nearly \$300,000.

June was warm, sunny, and dry. The first decade was cool. A hot wave of unusual length marked the third decade. Except in western Maryland, the month was characterized by a severe drought. In western Maryland oats headed well, and corn and early potatoes made good growth and were in good to excellent condition; elsewhere over the section oats headed short, corn was in good condition generally and, except for retarded growth, passed through the drought without injury, but early potatoes were injured by the drought and deteriorated. Wheat and rye ripened, and harvesting began. Peas and strawberries were harvested; both crops were light. Transplanting of tomato, sweet potato, and tobacco plants, begun in May, was terminated by the dry weather, and all suffered from lack of rain.

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Climatological Data for the Year 1921.

Stations.	Counties.	Elevation, feet.	Temperature, degrees Fahrenheit.						Precipitation, in inches.						Number of rainy days.	Sky.			Prevailing direction of wind.	
			Length of record, years.	Annual mean.	Highest.	Date.	Lowest.	Date.	Length of record, years.	Total for the year.	Greatest monthly.	Month.	Least monthly.	Month.		Total snowfall.	Number of clear days.	Number of partly cloudy days.		Number of cloudy days.
Maryland.																				
Aberdeen	Harford	80	3	55.4	94	June 24*	9	Jan. 19	3	34.92	4.38	July	1.10	Oct.	16.9	120	110	117	188	sw.
Annapolis	Anne Arundel	45	56		97	July 23	8	Jan. 19	50		5.40	May	0.71	Oct.						nw.
Baltimore (U. S. W. B.)		115	51	58.2	96	Sept. 2	10	Jan. 19	51	37.72	5.99	May	1.61	Oct.	16.0	127	127	112	126	s.
Baltimore (Lake Montebello).		200	11		96	July 4	9	Jan. 19	13		5.63	July	1.27	Oct.						sw.
Bell II	Prince Georges	151	1	57.0	97	June 22*	5	Jan. 19	1	41.71	8.08	July	0.94	Oct.		102	158	115	92	se.
Boys	Montgomery	424	3	57.0	99	Sept. 2	7	Jan. 19	2		4.00	Nov.	0.95	Oct.		95	180	104	81	w.
Cambridge	Dorchester	25	24		102	June 28	11	Jan. 19	24		4.30	May	0.77	June	97					sw.
Cecilton	Cecil	85	3	56.6	97	June 28	8	Jan. 19	8	37.94	7.42	July	0.91	Oct.		122	153	75	137	sw.
Cheltenham	Prince Georges	230	21	58.1	98	June 28	8	Jan. 19	21	36.72	5.72	May	1.10	Oct.	10.1	111	164	92	109	sw.
Chesapeake City	Cecil	17							2	36.51	5.76	Sept.	0.68	Oct.	18.2	98	191	80	94	s.
Chewsville	Washington	580	24	54.7	95	July 4*	7	Feb. 21	24	36.95	6.62	Sept.	0.87	Oct.	31.4	120	176	115	74	se.
Clear Spring	do.	500			93	July 25*			22		6.16	May	1.05	Jan.						
Coleman II	Kent	80	20	57.8	96	June 24	9	Jan. 19	22	38.11	5.34	July	0.95	Oct.	16.2	102	189	86	90	sw.
College Park	Prince Georges	170	34	57.1	98	Sept. 2	6	Jan. 19	35	34.12	6.29	May	1.15	Oct.		108	199	84	82	nw.
Crisfield	Somerset	5	3	59.8	92	June 24*	12	Jan. 19	3	38.01	4.65	July	0.95	Oct.		96	108	162	95	sw.
Cumberland	Allegany	623	37	56.2	100	June 28	3	Feb. 21	48	36.48	6.44	Sept.	1.07	Oct.		113	173	112	80	
Darlington	Harford	300	31		95	June 24*	6	Jan. 19	30		4.85	Aug.	1.10	Oct.	20.5	101				sw.
Denton	Caroline	42	28		99	June 28			30		5.55	Sept.	0.97	June	15.5					w.
Easton	Talbot	35	31	58.2	95	June 24*	10	Jan. 19	31	31.13	4.07	July	1.09	Oct.	8.8	95	201	85	79	sw.
Emmitsburg	Frederick	720	53	55.7	94	July 8*	5	Jan. 19	53		8.11	May	1.05	Oct.	31.0	108	205	83	77	sw.
Fallston II	Harford	450	52	55.6	95	July 28	5	Jan. 19	52	38.55	5.38	Aug.	1.16	Oct.	18.7	123	143	156	66	sw.
Ferry Landing II	Calvert	45	5	58.2	99	June 28	10	Jan. 19*	5	41.14	8.80	July	0.10	June	7.5	97	152	101	112	nw.
Frederick	Frederick	275	47	57.3	101	July 27	7	Feb. 21	47	34.17	6.96	May	0.62	Oct.	26.4	123	198	54	113	sw.
Freeland	Baltimore	681	2		95	June 22*	6	Jan. 19	2		6.10	July	1.15	Oct.	24.9	110	197	82	86	w.
Friendsville	Garrett	1,501	3	52.9	89	July 8*	8	Feb. 21	8		7.63	Sept.	1.26	Oct.		140	104	129	132	wt.
Frostburg	Allegany	1,929	17	53.8	94	July 7	9	Feb. 21	20	42.48	5.29	Sept.	2.10	Jan.		115	210	96	59	w.
Grantsville	Garrett	2,351	28		89	July 7			28		8.89	May	0.93	Oct.						w.
Great Falls II	Montgomery	200	31	56.8	97	Sept. 2	6	Jan. 19	32	35.98	6.95	May	0.64	Oct.	17.5	113	136	139	90	sw.
Hancock	Washington	455	10		96	June 13*	2	Feb. 21	11		5.84	May	0.99	Oct.						
Keedysville	do.	400	18	56.7	100	July 8	7	Feb. 21	18	34.46	6.11	Aug.	0.51	Oct.		115	193	95	77	s.
La Plata	Charles	180	5	58.4	98	June 28	10	Jan. 19	5	39.08	6.30	May	1.39	Aug.		92	189	86	90	w.
Laurel	Prince Georges	320	22		97	July 28*			22		7.02	May	0.89	Oct.						
Oakland	Garrett	2,461	22	50.8	89	July 7	15	Feb. 21	22	54.12	7.56	May	2.62	Oct.	50.5	172	99	169	97	w.
Princess Anne	Somerset	17	46	57.5	94	June 28*	11	Jan. 19	28	33.39	4.38	May	0.80	June	7.5	91	121	161	83	sw.
Public Landing II	Worcester	10	6	57.9	95	Aug. 31	11	Jan. 19*	6	28.89	4.01	Dec.	0.12	June		89	193	98	74	s.
Riderwood	Baltimore	370	2	55.4	96	June 24	7	Jan. 19	2	39.13	6.11	May	1.04	Oct.	15.9	127	170	109	86	s.
Rock Hall	Kent	25	6		96	July 27			6				0.85	Oct.						
Salisbury	Wicomico	23	16		99	June 28	10	Jan. 19	16		4.14	May	0.26	Sept.	12.2					w.
Solomons	Calvert	20	30	59.9	97	June 24	14	Jan. 19*	30	34.88	6.90	July	1.55	Oct.	5.7	105	70	116	179	se.
State Sanatorium	Frederick	1,460	13		95	July 28	2	Jan. 19	13		8.44	May								
Sudlersville	Queen Annes	65	24	57.0	98	July 4	9	Jan. 19	24	35.97	5.24	Sept.	0.73	Oct.	16.5	125	200	65	100	w.
Takoma	Montgomery	320	23	56.5	93	June 28	9	Jan. 19	23	32.01	5.20	May	0.97	Oct.		106	135	131	99	
Western Port	Allegany	1,000	28	55.8	96	July 7	1	Feb. 21	28	45.63	6.24	May	1.75	Oct.	33.8	105				
Westminster	Carroll	770	12	55.3	96	June 22*	4	Jan. 19	12	40.70	8.53	May	0.67	Oct.	23.4	119	164	100	101	
Woodstock	Baltimore	392	51	56.4	99	June 22*	4	Jan. 19	51	38.33	6.49	May	0.74	Oct.		115	142	101	102	nw.
District of Columbia.																				
Washington (U.S.W.B.)		112	51	58.0	96	June 28	11	Jan. 19	51	36.18	5.77	May	1.10	Aug.	12.1	118	126	103	136	n.
Delaware.																				
Delaware City	New Castle	10	35	57.0	95	June 28	9	Jan. 19	31		5.08	Aug.	1.06	Oct.		93	205	84	76	sw.
Dover	Kent	34	32	58.0	99	June 28	8	Jan. 19	31	34.33	4.54	Nov.	0.85	Oct.	19.1	129	223	74	68	sw.
Millford	do.	20	39	57.9	99	June 28	10	Jan. 19*	39	35.26	4.79	Apr.	1.12	Oct.	18.2	116	190	106	69	nw.
Millsboro	Sussex	20	29	57.6	100	June 28	7	Jan. 19	29	34.42	4.57	May	0.70	Sept.		100	217	77	71	se.
Seaford	do.	40	30	57.9	99	June 28	9	Jan. 19	30	32.12	4.98	May	1.07	June	16.5	108	192	78	95	s.
Wilmington	New Castle	86	28	56.0	94	June 23*	4	Jan. 19	28	36.89	6.45	Aug.	0.68	Oct.		105	202	61	102	w.
For Maryland and District of Columbia.				56.5	102	June 28	15	Feb. 21		38.06	8.80	July	0.10	June	20.5	114	164	104	97	sw.
For Delaware.				57.4	100	June 28	4	Jan. 19		35.02	6.45	Aug.	0.68	Oct.	17.2	110	204	80	81	sw.
For entire section				56.6	102	June 28	15	Feb. 21		37.72	8.80	July	0.10	June	20.5	114	168	102	95	sw.

* Also on other dates.

† Post-office addresses of these stations are as follows: Of Bell, Glendale; of Coleman, Worton; of Fallston, Bagley; of Ferry Landing, Dunkirk; of Great Falls, Bethesda; of Public Landing, Snow Hill.

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July was warm, and deficient of rainfall. Warm, humid, and showery weather during the first half of the month was exceptionally favorable for plant growth, while the dry, sunshiny weather of the second half favored the maturing and harvesting of crops. Corn improved, made rapid growth, tasseled, and was in good to excellent condition. Early potatoes matured and were dug; the yield was light. Oats ripened and were harvested. Harvesting of wheat and rye was finished, and thrashing of these grains and of oats was in

progress. The yield of wheat was poor to fair; of rye, good; and of oats, fair to good.

August was cool, and was characterized by clear, dry, sunshiny, and exceptionally pleasant weather. The rainfall was well above normal in the northern border counties, and markedly deficient over the southern half of the section. Corn was in good to excellent condition, and eared well. During the third decade corn and sweet potatoes matured rapidly, and late potatoes bloomed; in the southern counties

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Monthly and Annual Precipitation for the Year 1921, with Departures from the Normal.

	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
Stations.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.	Precipitation.	Departure.
Maryland.																										
Aberdeen.....	2.07	.....	2.51	.....	2.10	.....	2.04	.....	3.55	.....	4.28	.....	4.38	.....	4.30	.....	3.57	.....	1.10	.....	3.29	.....	1.73	.....	34.92	.....
Annapolis.....	2.05	-1.37	3.36	-0.11	.....	.....	2.45	-1.21	5.40	+1.15	.....	.....	1.38	-3.35	1.32	-2.68	1.32	-2.68	0.71	-2.67	4.45	+1.46	2.15	-1.54	.....	.....
Baltimore (U. S. W. B.).....	2.05	-1.17	2.85	-0.68	2.60	-1.28	2.59	-0.68	5.99	+2.49	1.97	-1.87	4.93	+0.11	3.49	-0.73	3.19	-0.66	1.61	-1.41	4.37	+1.45	2.08	-1.00	37.72	-6.46
Baltimore (Lake Monte- bello).....	2.13	-1.07	3.08	-0.40	2.44	.....	2.91	-0.73	5.37	+1.77	.....	.....	5.63	+1.02	4.16	-0.34	2.97	-0.05	1.27	-1.73	4.99	+2.36	2.19	-1.39	.....	.....
Bell.....	2.56	.....	2.93	.....	2.15	.....	2.63	.....	7.95	.....	1.94	.....	8.08	.....	1.59	.....	2.22	.....	0.94	.....	6.59	.....	2.13	.....	41.71	.....
Boys.....	.....	.....	.....	.....	.....	.....	2.41	.....	5.81	.....	3.18	.....	3.28	.....	3.07	.....	1.22	.....	0.95	.....	4.00	.....	2.15	.....	.....	.....
Cambridge.....	2.76	-0.24	3.54	+0.03	3.30	-0.30	3.51	-0.10	4.30	+0.77	0.77	-3.30	2.41	-2.37	2.03	-2.90	2.02	-1.01	1.20	-2.39	3.52	+0.82	.....	.....	.....	.....
Cecilton.....	2.12	.....	2.84	.....	1.83	.....	3.51	.....	3.27	.....	2.27	.....	7.42	.....	4.34	.....	3.18	.....	0.91	.....	4.16	.....	1.79	.....	37.94	.....
Cheltenham.....	2.52	-0.63	3.10	-0.10	2.47	-1.13	4.27	+0.25	5.72	+2.51	2.20	-2.86	2.71	-1.94	2.84	-1.56	1.73	-1.36	1.10	-1.86	5.91	+3.58	2.15	-1.49	36.72	-6.13
Chesapeake City.....	2.13	.....	2.84	.....	1.98	.....	3.14	.....	3.04	.....	2.33	.....	4.00	.....	4.84	.....	5.76	.....	0.68	.....	4.05	.....	1.72	.....	36.51	.....
Chewsville.....	1.45	-1.52	2.08	-0.31	1.92	-1.04	2.40	-0.44	5.31	+2.00	1.99	-2.07	3.18	-0.72	6.12	+2.26	6.62	+3.89	0.87	-1.66	2.57	+0.69	2.44	-0.40	36.95	+0.68
Clear Spring.....	1.05	-2.23	2.21	-0.65	1.98	-1.61	3.26	-0.20	6.16	+2.52	3.37	-0.92	4.32	+0.13	5.79	+1.24	3.55	+0.15	1.12	-1.65	3.98	+1.87	.....	.....	.....	.....
Coleman.....	2.43	-1.00	2.77	-0.37	1.79	-2.21	3.07	-0.49	3.91	-0.53	4.98	+1.48	5.34	+0.88	3.07	-1.80	3.82	+0.42	0.95	-1.93	4.06	+1.99	1.93	-2.11	38.11	-5.21
College Park.....	2.17	-0.65	2.57	-0.90	2.64	-0.98	2.94	-0.59	6.29	+2.46	2.21	-1.91	3.68	-0.76	1.60	-2.32	1.70	-1.96	1.15	-1.95	5.27	+2.77	1.90	-1.19	34.12	-7.08
Crisfield.....	2.75	.....	3.73	.....	3.45	.....	3.95	.....	4.21	.....	1.64	.....	4.66	.....	4.92	.....	0.88	.....	0.95	.....	3.15	.....	3.42	.....	38.01	.....
Cumberland.....	1.66	-0.78	2.05	-0.50	1.87	-1.14	2.50	-0.19	4.56	+1.11	3.07	-0.96	3.32	+0.16	3.35	-0.20	6.44	+3.77	1.07	-1.32	3.66	+1.51	2.93	+0.36	36.48	+1.82
Darlington.....	2.08	-1.26	2.47	-0.86	2.11	-1.36	2.63	-0.67	3.32	-0.16	3.38	-0.16	4.48	-0.14	4.85	-0.18	2.40	-1.24	1.10	-2.09	4.46	+1.66	.....	.....	.....	.....
Denton.....	.....	.....	3.11	-0.09	3.71	+0.23	4.13	+0.30	4.22	+0.68	0.97	-2.88	1.36	-3.02	2.47	-2.25	5.55	+2.67	1.10	-2.26	3.96	+1.55	2.14	-1.10	.....	.....
Easton.....	2.61	-0.26	3.00	-0.10	3.53	-0.03	3.43	+0.18	3.56	+0.13	1.23	-2.65	4.07	-0.32	1.34	-3.05	1.59	-1.43	1.09	-2.17	3.83	+1.22	1.85	-1.22	31.13	-9.70
Emmitsburg.....	1.54	-1.78	2.60	-0.60	.....	.....	3.92	+0.63	8.11	+4.02	2.22	-1.88	3.52	-0.54	4.31	+0.27	4.81	+0.93	1.05	-2.53	5.19	+1.84	2.72	-0.51	.....	.....
Fallston.....	2.06	-1.81	2.61	-0.69	1.80	-2.29	3.65	+0.13	4.93	+1.13	2.11	-1.98	4.09	-0.45	5.38	+0.48	3.44	-0.68	1.16	-2.30	5.18	+1.95	2.14	-1.57	38.55	-7.58
Ferry Landing.....	2.22	.....	3.87	.....	2.34	.....	4.02	.....	5.80	.....	0.10	.....	8.80	.....	3.21	.....	2.43	.....	0.96	.....	5.29	.....	2.10	.....	41.14	.....
Frederick.....	1.50	-1.70	2.38	-0.64	2.16	-1.08	3.00	-0.39	6.96	+3.20	2.48	-1.96	1.06	-3.08	5.53	+1.86	2.21	-1.04	0.62	-2.02	3.69	+1.12	2.58	-0.57	34.17	-6.30
Freeland.....	2.25	.....	1.97	.....	1.97	.....	3.33	.....	4.38	.....	3.49	.....	6.10	.....	3.67	.....	3.72	.....	1.15	.....	5.55	.....	3.23	.....	.....	.....
Friendsville.....	3.20	.....	4.11	.....	3.38	.....	1.85	.....	4.97	.....	2.48	.....	.....	.....	3.11	.....	7.63	.....	1.26	.....	3.93	.....	3.79	.....	.....	.....
Frostburg.....	2.10	-1.50	3.32	+0.59	2.23	-1.57	2.58	-1.18	4.35	+0.25	4.17	-0.76	3.63	-0.80	4.96	+0.54	5.29	+2.15	2.15	-0.86	4.51	+2.19	3.19	+0.16	42.48	+0.59
Grantsville.....	3.01	-0.62	.....	.....	3.19	-0.79	3.22	-0.39	8.69	+6.21	6.49	+2.22	3.58	-0.80	5.78	+1.70	7.42	+4.70	0.93	-1.80	4.99	+2.39	8.85	+0.43	.....	.....
Great Falls.....	1.99	-1.81	2.38	-0.38	1.97	-1.28	2.87	-0.11	6.95	+3.75	3.51	-0.48	4.81	-0.70	2.39	-1.41	2.27	-0.81	0.64	-2.06	4.99	+2.12	2.07	-1.06	55.98	-2.36
Hancock.....	.....	.....	2.02	.....	2.65	.....	3.12	.....	5.84	.....	5.78	.....	4.59	.....	4.74	.....	5.47	.....	0.91	.....	4.46	.....	4.41	.....	.....	.....
Keedysville.....	1.55	-1.45	2.05	-0.56	1.46	-1.48	2.69	-0.46	6.07	+2.95	1.28	-2.84	2.53	-1.41	6.11	+1.51	4.71	+1.95	0.51	-2.42	3.19	+1.82	2.27	-0.80	34.46	+3.68
La Plata.....	3.50	.....	2.81	.....	2.01	.....	3.86	.....	6.30	.....	2.09	.....	4.92	.....	1.89	.....	4.04	.....	1.40	.....	4.76	.....	2.00	.....	39.08	.....
Laurel.....	.....	.....	.....	.....	.....	.....	7.02	+3.57	1.46	-2.69	3.99	-1.40	3.05	-1.74	.....	.....	1.40	-1.87	0.89	-2.13	4.66	+2.28	1.80	-1.93	.....	.....
Oakland.....	4.15	-0.09	2.94	-0.20	2.97	-0.88	3.21	-0.81	7.56	+3.12	4.19	-0.43	3.95	-0.76	6.07	+1.91	5.72	+2.70	2.62	-0.66	5.44	+2.99	5.30	+1.55	54.12	+8.44
Princess Anne.....	2.42	-0.67	3.56	+0.10	2.85	-0.89	3.82	+0.48	3.38	+1.30	0.80	-3.07	3.42	-1.02	3.60	-1.53	1.32	-1.46	0.28	-2.06	2.78	+0.93	3.16	+0.01	33.39	-0.43
Public Landing.....	2.69	.....	3.82	.....	1.58	.....	2.55	.....	3.46	.....	0.12	.....	2.97	.....	2.33	.....	1.43	.....	0.71	.....	2.92	.....	4.01	.....	28.89	.....
Riderwood.....	2.06	.....	2.46	.....	1.89	.....	3.58	.....	6.11	.....	2.62	.....	4.76	.....	4.13	.....	2.57	.....	1.04	.....	5.77	.....	2.14	.....	39.13	.....
Rock Hall.....	.....	.....	.....	.....	.....	.....	4.02	+0.63	4.14	+0.58	1.15	-2.83	3.92	-0.58	2.62	-2.81	0.26	-2.99	1.18	-2.34	4.07	+1.50	2.50	-1.04	.....	.....
Salisbury.....	2.77	+0.02	2.89	+0.14	2.05	-1.20	3.34	+0.41	3.39	+0.31	0.55	-2.77	6.90	+2.73	3.91	+0.07	1.80	-0.81	1.55	-1.18	3.22	+1.22	2.51	-0.22	34.88	-1.28
Solomons.....	1.98	-1.39	2.20	-0.70	.....	.....	.....	.....	8.44	+5.01	3.20	-1.57	4.00	0.00	6.40	+0.85	5.60	+1.75	.....	.....	4.06	+1.81	.....	.....	.....	.....
State Sanatorium.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sudlersville.....	2.25	-1.05	2.94	-0.32	2.49	-1.51	3.95	+0.34	3.73	+0.24	1.18	-2.67	3.22	-1.50	4.19	-0.33	5.24	+1.64	0.73	-2.41	4.03	+1.89	2.02	-1.89	35.97	-8.07
Takoma.....	2.11	-1.19	2.30	-0.83	2.51	-1.19	3.31	-0.22	5.20	+1.38	1.35	-3.16	4.32	-0.35	1.45	-3.04	2.00	-1.36	0.97	-1.76	4.99	+2.30	2.10	-1.74	32.01	-11.16
Western Port.....	2.44	-0.04	2.64	-0.41	2.03	-0.77	1.89	-0.65	6.24	+2.84	3.31	-0.89	5.87	+2.08	4.65	+1.15	6.00	+3.50	1.75	-0.51	4.76	+3.08	4.05	+1.83	45.63	+11.41
Westminster.....	1.69	-1.14	2.72	-0.47	2.22	-1.26	2.54	-0.33	6.53	+4.46	4.40	-0.90	3.21	-1.84	5.17	+0.24	3.55	+0.08	0.87	-2.48	4.88	+1.61	6.22	-0.51	40.70	-1.24
Woodstock.....	1.57	-1.81	2.66	-0.50	2.32	-1.40	3.51	+0.39	6.49	+2.88	1.27	-2.55	6.29	+2.25	3.56	-1.05	2.58	-0.47	0.74	-1.57	5.29	+3.18	2.05	-1.18	38.33	-1.94
District of Columbia.																										
Washington (U. S. W. B.) ..	2.80	-1.07	2.29	-1.13	2.76	-1.09	2.93	-0.92	5.77	+1.94	3.45	-0.73	4.79	+0.14	1.10	-3.30	3.29	-0.90	1.85	-1.74	4.15	+1.44	1.95	-1.21	36.13	-7.37
Delaware.																										
Delaware City.....	1.96	-0.94	2.95	-0.35	.....	.....	.....	.....	.....	.....	4.16	+0.36	3.36	-0.30	5.08	+1.35	3.56	+0.39	1.06	-1.48	3.50	+1.36	1.65	-2.16	.....	.....
Dover.....	2.24	-1.00	3.23	-0.07	2.39	-1.76	3.98	+0.52	2.70	-0.89	2.6															

Monthly and Annual Mean Temperatures for the Year 1921, with Departures from the Normal.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
Maryland.																										
Aberdeen	34.0		36.4		52.3		56.2		61.1		71.7		77.6		71.1		71.4		54.4		44.7		34.0		55.4	
Annapolis	37.6	+3.4	40.0	+5.5	56.0	+12.2	59.4	+5.8	64.2	-1.4	75.2	+1.7	80.2	+2.9	74.1	-0.4	74.8	+5.2	58.4	+0.3	49.6	+2.4	38.1	+0.9	58.2	+3.1
Baltimore (U. S. W. B.)	37.0	+3.6	39.0	+4.4	54.6	+12.7	58.6	+5.6	63.1	-1.1	75.0	+2.0	80.2	+2.9	73.9	-0.8	74.5	+5.9	57.8	+0.3	49.1	+2.3	37.2	+0.3	58.1	+3.5
Baltimore (Lake Monte-bello).	35.4	+3.0	38.0	+5.2	53.6	+11.7	58.4	+5.6	62.0	-1.0			78.8	+3.0	72.2	-1.7	72.7	+4.3	56.5	+0.3	46.6	+1.6	35.5	+0.8		
Bell	35.0		37.6		55.7		59.0		61.9		73.4		78.4		71.7		73.5		55.0		47.2		35.6		57.0	
Boys	35.4 ^a		37.9		54.2		58.9		61.8 ^f		73.4 ^b		78.8		71.7		73.8		56.0		46.1		36.1		57.0	
Cambridge	39.2	+4.1	40.1	+4.5	56.6	+12.2	60.5	+5.3	63.8	-2.4			78.2		73.8	-2.6	73.8		58.0	-1.6	46.6		35.4		56.6	
Cecilton	35.3		37.7		54.0		58.2		61.4		72.2		78.2		71.4		72.4		56.5		48.3	+3.6	37.3	+2.9	58.1	+3.5
Cheltenham	37.0	+2.8	39.7	+5.9	56.5	+13.2	59.0	+5.1	62.0	-1.3	73.1	+2.6	78.9	+3.4	72.4	-1.1	74.6	+6.9	57.1	-0.4	48.8	+3.6	37.8	+2.9	58.1	+3.5
Chewsville	32.9	+2.3	35.2	+5.6	51.4	+10.3	57.0	+6.3	59.8	-1.5	71.6	+2.4	77.0	+3.2	69.2	-3.1	70.8	+5.0	54.2	-0.8	43.8	+1.1	34.0	+1.9	54.7	+2.7
Coleman	36.0 ^f	+3.0	38.0 ^a	+5.4	54.2	+11.1	58.5	+5.3	62.2 ^c	-1.8	74.4 ^b	+2.9	79.3	+3.1	74.0 ^b	-0.6	73.9	+4.8	58.1	-0.4	48.4 ^d	+2.2	36.2 ^h	+0.5	57.8	+3.0
College Park	35.4	+2.1	38.4	+4.6	54.9	+12.6	59.0	+6.2	62.0	-0.8	72.6	+1.7	78.3	+8.2	71.7	-2.3	73.8	+6.3	55.2	-1.1	47.2	+2.9	36.8	+1.1	57.1	+3.0
Crisfield	40.2		41.8		55.2		59.6		63.2		73.7		79.4		74.7		76.4		60.3		52.1		40.6		59.8	
Cumberland	34.4	+3.4	36.2	+3.5	51.6	+12.1	57.9	+6.1	62.0	-0.8	72.8	+2.6	78.4	+4.5	70.4	-1.6	72.4	+7.4	56.2	+1.9	45.6	+2.1	36.0	+2.3	56.2	+3.5
Darlington	34.4	+3.6	36.8	+5.8	52.3	+11.3	57.8	+6.2	61.8	-0.4	71.0	+1.2	77.6	+3.2	70.9	-1.6										
Denton			38.6	+5.1	55.6	+12.2	59.1	+5.9	61.8	-1.6	72.8	+1.7	79.8	+3.0					55.6	-2.1	48.0	+2.2	36.0	+0.7		
Easton	38.8	+3.9	39.6	+5.7	55.4	+11.6	58.8	+5.4	61.6	-2.1	73.0	+2.1	79.0	+2.9	73.2	-1.1	74.8	+6.5	57.6	-0.3	49.3	+1.6	37.6	+1.0	58.2	+3.1
Emmitsburg	33.8	+3.2	36.4	+4.7	51.8	+11.8	58.2	+6.5	61.4	-0.6	72.7	+2.9	77.7	+2.5	71.0 ^f	-1.7	71.4	+6.3	55.6	+0.6	44.6	+1.7	33.2	+0.2	55.7	+3.2
Fallston	34.4	+3.5	36.2	+4.8	52.3	+11.3	58.0	+7.4	61.2	-0.2	71.1	+1.6	76.7	+2.6	70.2	-1.9	71.3	+5.6	55.4	+0.2	45.4	+2.0	34.4	+0.7	55.6	+3.2
Ferry Landing	37.4		39.0		56.1		59.2		62.3		74.0		79.4		72.8 ^g		74.6		57.3		48.2		38.4		58.2	
Frederick	34.6	+2.6	37.6	+5.0	53.8	+12.0	60.2	+7.6	63.4	-0.1	74.9	+3.2	80.6	+4.4	72.6	-1.3	74.0	+6.9	55.9	+0.2	46.1	+2.2	36.0	+1.5	57.3	+3.5
Freeland																										
Friendsville	38.7		39.1		50.2		54.3		57.6		67.6		72.6		68.4		69.4		52.5		43.2		32.6		52.9	
Frostburg	39.1	+3.4	34.4	+5.3	49.4	+10.8	55.2	+5.2	59.7	-1.7	70.4	+2.9	74.4	+2.6	68.2	-2.2	69.9	+5.6	54.1	-0.9	43.8	+1.8	33.5	+2.4	53.8	+3.0
Grantsville	30.3	+3.3			47.3	+11.0	51.6	+5.7	56.2	-1.8	65.2	+1.5	70.6	+2.6	65.0	-1.6	65.1	+4.0	49.2	-1.3	42.6	+3.6	31.4	+2.8		
Great Falls	34.8	+3.0	37.7	+5.7	53.8	+11.1	59.3	+6.3	62.0 ^h	-1.9	72.3	+1.0	78.4	+2.9	71.4 ^a	-2.6	73.1	+5.2	55.6	-0.2	46.8	+2.9	36.7	+2.8	56.8 ²	+3.0
Hancock			36.9		51.8		57.2		61.2		71.3		76.8		69.4		71.9		53.5		45.3		34.8			
Kedysville	33.8	+1.8	37.7	+6.3	53.6	+11.3	59.2	+6.1	62.2	-1.2	74.1	+3.4	79.5	+4.2	71.4	-2.2	72.8	+5.7	55.2	-1.2	45.8	+2.2	35.6	+2.6	56.7	+3.2
La Plata	38.2		40.0		56.4		59.8		61.4		73.4		78.4		73.7		74.4		57.6		49.2		38.7		58.4	
Laurel									61.1	-2.2	72.2	+1.3	78.1	+2.8	71.5	-1.9	73.2	+7.5	54.2	-0.5	46.6	+2.4	35.6	+2.0		
Oakland	31.1	+3.0	31.6	+5.0	47.6	+11.3	50.7	+4.8	54.8	-1.2	65.3	+1.8	69.7	+3.0	63.7	-2.0	65.7	+5.3	48.8	-0.8	42.7	+5.1	31.4	+2.5	50.3	+3.2
Princess Anne	38.5	+1.5	39.8	+3.1	55.0	+9.5	58.0	+3.6	60.2	-3.0	71.3	+0.2	77.4	+1.2	71.5	-3.2	74.0	+5.3	57.5	-0.3	49.4	+2.1	37.1	-1.5	57.5	+1.6
Public Landing	39.8		40.6		54.0		56.8		60.3		70.8		77.6		73.0		74.3		57.9		50.6		39.0		57.9	
Riderwood	34.0 ^a		36.4		52.6		57.4		62.0		72.6		77.5		69.4		70.5		53.4		45.0		33.5		55.4	
Rockhall															73.2		72.4		57.2		48.7		37.2			
Salisbury			40.3	+3.7			59.5	+5.1	62.5	-1.7	74.2	+2.8	79.0	+2.3	72.8 ^b	-3.1	75.2	+6.5	57.8	-1.1	50.7	+4.2	38.6	+1.0		
Solomons	39.6	+4.2	40.6	+5.7	56.0	+11.9	59.9	+5.9	63.3	-1.9	75.2	+2.0	79.8	+1.6	76.0	-1.2	76.6	+5.2	60.0	-0.5	51.4	+2.9	40.6	+2.3	59.9	+3.2
State Sanatorium	38.0	+3.2	33.5	-8.8			56.5	+5.4	61.1	-0.6	72.7	+3.8	76.1	-2.7	69.0	-2.2	70.7	+6.1			44.0	+1.2				
Sudlersville	36.0	+2.3	38.0	+5.4	55.2	+12.2	58.8	+5.6	62.0	-1.6	72.4	+1.5	78.6	+2.4	71.6	-2.4	72.5	+4.5	55.6	-2.1	47.8	+2.5	36.6	+0.2	57.0	+2.5
Takoma	35.1	+2.9	37.8	+5.2	53.7	+11.2	58.4	+5.8	61.1	-1.9	72.6	+2.8	78.0	+3.3	70.8	-2.2	72.8	+6.1	55.5	-0.8	46.0	+1.6	36.2	+2.4	56.5	+8.0
Western Port	34.9	+4.4	36.6	+6.1	51.8	+10.1	57.6	+6.2	61.0	-1.2	71.8	+2.7	76.5	+3.2	69.8	-2.0	72.2	+6.1	55.0	+0.2	45.2	+2.6	38.6	+4.2	55.8	+3.6
Westminster	33.7	+2.6	36.0	+5.3	52.2	+10.5	57.7	+4.6	61.0	-2.0	72.2	+1.2	77.4	+2.4	69.8	-2.2	71.0	+5.2	54.6	-0.3	44.8	+1.7	33.2	+0.2	55.3	+2.4
Woodstock	34.8	+2.9	37.0	+5.0	54.4	+13.4	59.3	+7.1	62.0	-1.2	72.6	+1.8	77.5	+2.4	69.9	-2.8	72.0	+6.7	55.2	-1.7	47.0	+2.7	35.0	+0.7	56.4	+3.0
District of Columbia.																										
Washington (U. S. W. B.)	36.6	+3.7	39.0	+4.5	55.5	+13.3	59.2	+6.1	62.3	-1.9	74.2	+1.5	79.3	+2.5	72.8	-1.7	74.4	+6.3	57.0	+0.4	47.5	+2.5	37.9	+1.8	58.0	+3.3
Delaware.																										
Delaware City	36.0	+3.6	37.8	+5.2	53.7	+12.1	58.4	+6.4	62.2	-1.3	72.4	+0.5	78.2	+1.4	72.4	-2.6	72.8	+4.6	56.6	-1.2	47.2	+1.5	35.9	+0.1	57.0	+2.6
Dover	37.6	+2.8	38.0	+4.1	56.4	+14.1	59.0	+5.8	61.9	-1.7	73.2	+1.0	79.5	+2.8	73.0	-1.7	74.0	+5.8	57.4	+0.1	48.9	+3.6	36.6	+0.2	58.0	+3.1
Milford	38.6	+3.4	39.4	+4.7	56.1	+13.9	59.3	+6.0	61.6	-1.8	73.8	+0.9	78.3	+1.6	72.3	-2.7	73.2	+5.2	56.7	-0.7	49.6	+2.5	37.0	-0.5	57.9	+2.7
Millsboro	38.2	+3.2	38.9	+4.6	54.3	+10.6	58.2	+5.6	60.8	-2.3	72.3	+1.5	78.4	+2.2	72.4	-2.2	74.4	+5.9	56.7	-1.2	49.4	+3.1	36.8	-0.3	57.6	+2.6
Seaford	38.0	+3.3	39.0	+4.9	55.8	+12.1	59.8	+5.8	61.6	-1.9	72.9	+2.0	78.6	+2.6	72.3	-2.1	74.4	+6.2	57.2	-0.1	49.3	+3.3	37.2	+0.3	57.9	+3.0
Wilmington	34.2	+1.4	36.4	+4.5	51.6	+9.3	57.2	+4.3	62.0	-1.8	72.2	+0.7	77.7	+0.9	71.3	-3.3	71.7	+3.5	56.4	-1.0	45.8	+0.4	35.4	+0.6	56.0	+1.6
For Maryland and District of Columbia.	35.5	+3.1	37.7	+5.0	53.6	+11.3	58.0	+5.5	61.3	-1.5	72.3	+2.4	77.6	+2.7	71.2	-2.2	72.6	+5.3	55.7	-0.5	46.7	+2.0	36.1	+1.7	56.5	+2.9
For Delaware.	37.1	+3.0	38.2	+4.7	54.6	+11.5	58.5																			

KILLING FROSTS, 1921.

Stations.	Last in spring.	First in autumn.	Stations.	Last in spring.	First in autumn.	Stations.	Last in spring.	First in autumn.
<i>Maryland.</i>			<i>Maryland—Continued.</i>			<i>Maryland—Continued.</i>		
Aberdeen	Apr. 12	Nov. 6	Frederick	Apr. 12	Oct. 13	Sudlersville	Apr. 12	Oct. 14
Annapolis	Apr. 2	Nov. 11	Freeland	Apr. 12	Oct. 13	Takoma	Apr. 12	Oct. 14
Baltimore	Apr. 2	Nov. 11	Friendsville	May 17	Oct. 9	Western Port	Apr. 12*	Oct. 13†
Bell	Apr. 12	Oct. 13	Frostburg	Apr. 12*	Oct. 9†	Westminster	Apr. 12	Oct. 13
Boys	Apr. 12	Oct. 13	Grantsville	May 17	Oct. 9	Woodstock	Apr. 12	Oct. 13
Cambridge	Apr. 2	Nov. 6	Great Falls	Apr. 12	Oct. 14	<i>District of Columbia.</i>		
Cecilton	Apr. 12	Nov. 6	Hancock	Apr. 12	Oct. 9	Washington	Apr. 2	Oct. 14
Cheltenham	Apr. 12	Oct. 14	Keedysville	Apr. 12	Oct. 13	<i>Delaware.</i>		
Cheswille	Apr. 12	Oct. 13	La Plata	Apr. 12	Oct. 14	Delaware City	Apr. 12	Nov. 6
Coleman	Apr. 2	Nov. 11	Laurel	Apr. 12	Oct. 9	Dover	Apr. 12	Oct. 14
College Park	Apr. 12	Oct. 9	Oakland	May 18	Oct. 7	Millford	Apr. 12	Oct. 14
Crisfield	Apr. 2	Nov. 11	Princess Anne	Apr. 12	Oct. 14	Millsboro	Apr. 12	Oct. 14
Cumberland	Apr. 12*	Oct. 14†	Public Landing	Apr. 12	Oct. 14	Seaford	Apr. 12	Oct. 14
Darlington	Apr. 12	Oct. 13	Riderwood	Apr. 12	Oct. 9	Wilmington	Apr. 12	Nov. 6
Denton	Apr. 12	Oct. 14	Rock Hall	Apr. 2	Nov. 11			
Easton	Apr. 12	Nov. 6	Salisbury	Apr. 12	Oct. 14			
Emmitsburg	Apr. 12	Nov. 6	Solomons	Apr. 2	Nov. 11			
Fallston	Apr. 12	Oct. 13	State Sanatorium	Apr. 19*	Oct. 26†			
Ferry Landing	Apr. 12	Oct. 14						

*No record of frost, the date of last temperature of 32° or lower.

†No record of frost, the date of first temperature of 32° or lower.

COMPARATIVE DATA FOR MARYLAND AND DELAWARE.

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.....	52.6	-1.1	102	-18	84.47	-7.49	42.07	14.42	4.80	29.9	94	1909.....	54.0	+0.3	99	-5	37.47	-4.49	50.45	28.30	3.80	30.0	105
1896.....	54.0	+0.3	103	-18	37.11	-4.85	64.94	30.18	4.50	23.0	92	1910.....	53.8	+0.1	99	-15	37.42	-4.54	52.45	26.74	7.19	34.8	109
1897.....	53.6	-0.1	102	-12	44.97	+3.01	63.85	32.56	14.75	18.4	109	1911.....	54.9	+1.2	106	-5	43.61	+1.65	55.58	33.62	7.35	23.2	119
1898.....	54.9	+1.2	109	-20	42.11	+0.15	65.77	32.59	5.93	21.6	109	1912.....	53.3	-0.4	102	-40	43.42	+1.46	52.68	35.50	6.07	32.2	112
1899.....	53.5	-0.2	102	-26	40.84	-1.12	51.38	28.69	5.35	40.3	98	1913.....	56.1	+2.4	102	-6	38.98	-2.99	48.96	25.41	4.05	6.1	108
1900.....	55.0	+1.3	106	-15	36.66	-5.30	52.19	28.21	5.53	26.8	98	1914.....	53.4	-0.3	102	-21	35.97	-5.99	43.32	29.35	8.81	37.2	98
1901.....	52.6	-1.1	106	-15	45.08	+3.12	70.87	34.63	5.45	18.7	99	1915.....	54.1	+0.4	103	-6	43.58	+1.62	59.39	26.82	5.11	23.1	107
1902.....	53.6	-0.1	104	-17	42.20	+7.24	61.38	33.75	6.00	33.3	105	1916.....	53.2	-0.5	101	-11	40.47	-1.49	49.72	26.14	6.00	28.5	112
1903.....	53.3	-0.4	100	-12	46.94	+4.98	78.72	36.58	6.00	17.9	106	1917.....	51.3	-2.4	102	-32	40.65	-1.31	54.22	27.17	4.52	35.7	110
1904.....	51.2	-2.5	102	-20	36.49	-5.47	50.26	25.72	5.90	41.8	96	1918.....	53.8	+0.1	109	-30	37.96	-4.00	46.95	28.88	4.50	31.4	98
1905.....	53.3	-0.4	104	-20	43.84	+1.88	64.64	31.88	4.65	36.1	106	1919.....	54.9	+1.2	105	-19	47.62	+5.66	60.84	30.69	9.02	11.9	114
1906.....	54.6	+0.9	101	-15	48.01	+6.05	62.92	36.10	8.66	20.7	123	1920.....	53.3	-0.4	98	-10	44.95	+2.99	56.29	32.49	4.30	20.0	113
1907.....	52.2	-1.5	99	-29	48.86	+6.90	66.59	37.55	5.00	34.6	121	1921.....	55.6	+2.9	102	-15	37.72	-4.24	54.12	28.89	5.60	20.5	114
1908.....	54.1	+0.4	102	-21	40.01	-1.95	52.50	31.63	7.93	32.5	101	1922.....											

Condensed Summary Climatological Data, 1921.

Months.	Temperature.				Precipitation.						
	Mean.	Departure from the normal.	Maximum.	Minimum.	Average.	Departure from the normal.	Greatest local.	Least local.	Greatest in 24 hours.	Snowfall.	Number of days with 0.01 inch or more.
January.....	35.7	+ 3.1	70	- 5	2.29	-1.02	4.15	1.05	2.19	1.4	8
February.....	37.8	+ 5.0	77	-15	2.92	-0.35	4.11	2.02	2.20	9.6	10
March.....	53.7	+11.3	91	14	2.39	-1.25	3.71	1.46	2.02	0.1	11
April.....	58.1	+ 5.5	92	16	3.18	-0.16	4.79	1.85	2.24	1.0	10
May.....	61.3	+ 1.6	93	27	5.29	+1.73	8.69	2.70	3.63	T.	13
June.....	72.4	+ 2.2	102	34	2.50	-1.54	6.49	0.10	3.09	0.0	7
July.....	77.7	+ 2.6	101	45	4.22	-0.23	8.30	1.06	5.60	0.0	10
August.....	71.3	+ 2.2	98	37	3.71	-0.73	6.45	1.10	2.90	0.0	8
September.....	72.6	+ 6.8	99	37	3.33	+0.23	7.63	0.26	3.95	0.0	9
October.....	55.9	+ 0.5	85	20	1.08	-1.79	2.62	0.51	1.55	T.	5
November.....	46.9	+ 2.0	82	15	4.30	+1.76	6.59	2.57	2.10	0.1	18
December.....	36.2	+ 1.6	70	2	2.51	-0.89	5.30	1.65	1.72	8.3	10
Year.....	56.6	+ 2.9	102	-15	37.72	-4.24	54.12	23.89	5.60	20.5	114

Map Showing Climatological and Display Stations in Maryland and Delaware.

