

MAR 3 1898

U. S. DEPARTMENT OF AGRICULTURE.

ANNUAL SUMMARY. 1898.

MARYLAND AND DELAWARE SECTION

OF THE

CLIMATE AND CROP SERVICE

OF THE

WEATHER BUREAU.

IN COOPERATION WITH THE

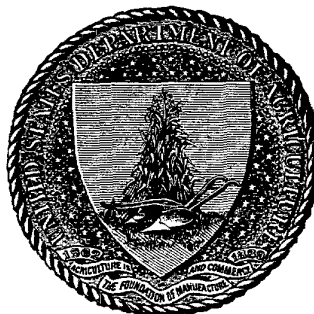
MARYLAND STATE WEATHER SERVICE.

(Prof. Wm. B. Clark, Director; Prof. Milton Whitney, Secretary and Treasurer.)

PREPARED UNDER DIRECTION OF  
WILLIS L. MOORE,  
CHIEF OF WEATHER BUREAU.

BY

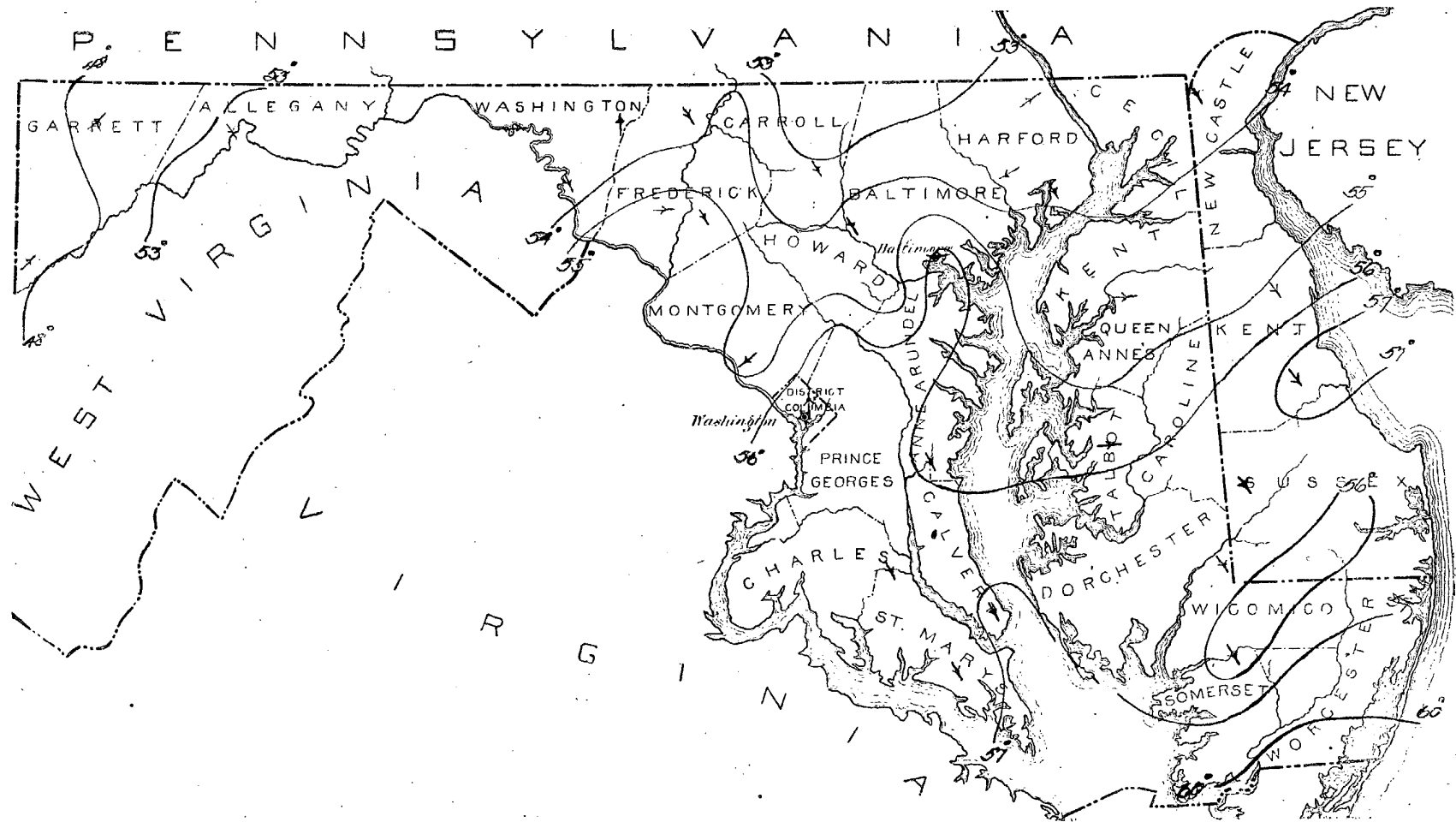
F. J. WALZ,  
SECTION DIRECTOR.



BALTIMORE, MD.:  
WEATHER BUREAU OFFICE.  
JOHNS HOPKINS UNIVERSITY.

1898.

ANNUAL MEAN ISOTHERMS AND PREVAILING WINDS, 1898. -



U. S. DEPARTMENT OF AGRICULTURE,  
**CLIMATE AND CROP SERVICE**  
 OF THE  
**WEATHER BUREAU.**

CENTRAL OFFICE: WASHINGTON, D. C.

**CLIMATOLOGY OF THE YEAR 1898.**

The annual mean temperature for 1898 for Maryland and Delaware was 54.9°. This compared with the generally accepted normal for the two States was about 1.2° in excess.

The annual means for the local stations ranged from 60° in Worcester County to 47° in the southwestern part of Garrett County. This gives an absolute range of 13°, but for the greater part of the territory the range was not over 4°, that is, from 53° to 57°. In the extreme southeast there was a sharp rise southward from 57° to 60°, while to the westward of Allegany County there was a rapid decrease, and the mountain stations of Garrett County registered annual mean temperatures about 5° lower than elsewhere reported in the Section. The mean temperatures of the northern-central counties were between 53° and 54°, which represent about the normal conditions for the Section considered as a whole.

The lowest temperatures of the year occurred on February 1st to 4th, and on December 14th and 15th. No other cold wave periods approached these in severity, but those of April 4th to 7th and 28th were noteworthy owing to their unseasonableness and consequent injurious effects upon crop growth.

High temperatures were universally reported on July 2d to 4th, and a hot wave scarcely second in importance prevailed during the first week in September. Much suffering was experienced during these two periods in both city and country, and a number of deaths were directly due to the excessive heat.

Reference to the table of killing frosts given elsewhere shows that their earliest formation in autumn was in September, at Sunnyside on the 12th, and at Deer Park on the 29th. A more general deposit in October affected exposed places on the 16th and 17th, and the section was completely covered on the 26th and 28th of the same month, with the exception of a very few points. In the spring the eastern and southern counties had their final freeze in early April. On May 9th killing frosts occurred in portions of Garrett, Frederick, and Carroll counties, and on May 18th, Deer Park reported the last for the season.

The annual mean precipitation was 42.11 inches. This is 3.5 inches below the normal, and 2.5 inches less than fell in 1897. Rain, hail, snow, and sleet combined to furnish the totals given, and these various forms of precipitation appeared in all sections. The greatest annual measurements were obtained in Garrett County and the northern portions of Carroll and Harford counties. The least annual falls occurred in Montgomery County and generally in southern and southeastern Maryland. The annual snow depths ranged from 2 and 4 inches along the shores of the lower Chesapeake to nearly 2 feet in the plateau region of northern-central Maryland, and, increasing westward, reached a maximum depth of 8 feet in the mountains of Garrett County. The relation of elevation to snow depth is interest-

ingly brought out through a study of the year's record in this Section. A glance at the climatological table shows that at an elevation of about 700 feet above sea-level the annual snow depths were 20 to 24 inches; at 1,000 feet they were 27 inches; at 2,400 feet they had increased to 80 inches; and at Deer Park where the greatest elevation of 2,457 feet is obtained, there will also be found recorded the greatest annual snow depth, 95 inches.

The precipitation was unevenly distributed throughout the year. The greatest deficiency was in February. Two well defined dry spells occurred during the crop season, one extending from June 1st to July 19th, the other from August 15th to about the same date in September. The greatest local monthly fall occurred in May, 12.29 inches, the least, only a sprinkle, in June. The greatest monthly excess of precipitation was in August, and the next greatest in October.

The most severe storm of the year, and in fact the only one doing any material damage, occurred on the 4th of December. It was especially violent in Baltimore and vicinity, where about 200 houses were unroofed and a general loss of at least \$100,000 sustained. During the height of the storm the wind reached a velocity of 60 miles, which was maintained for four minutes. Other severe Atlantic storms that prevailed during the fall and winter months expended their force along the coast north of the Chesapeake or else did damage at points south, while shipping in the harbors of Maryland suffered no injury.

The year was not favorable to agriculture. The season at the beginning was forward and promising, but the cold wave of April 4th to 7th, ruined fruit prospects and injured young wheat. Wheat was again damaged by severe weather on April 28th, and later, together with all other field products, suffered injury from prolonged drought periods that prevailed during critical periods of crop development and maturity. Scarcely any crop gave average returns, and late plantings were especially short in yields. The only exception was the hay crop, which was large, and saved in fine condition.

\* \* \*

**ANNUAL SUMMARY.**

**ATMOSPHERIC PRESSURE—IN INCHES AND HUNDREDTHS.**

Annual mean at Washington, D. C., 30.08; at Baltimore, 30.07; average, 30.08; highest, 30.66, at Baltimore, on March 26th; lowest, 29.24, at Baltimore, on December 4th.

**TEMPERATURE—IN DEGREES FAHRENHEIT.**

The annual mean (entire territory), 54.9°, was 1.2° above the normal.

The highest annual mean was 60.1°, at Pocomoke City.

The lowest annual mean was 47.5°, at Sunnyside.

The highest temperature recorded during the year was 109°, at Boettcherville, on July 3d.

The lowest temperature recorded during the year was —20°, at Deer Park, on December 15th.

The annual range of temperature, within the sectional limits, was 129°.

The greatest local annual range was 114°, at Deer Park.

The least local annual range was 84°, at Princess Anne.

The greatest local daily range in the year was 55°, at Taneytown, on May 9th.

The least local daily range in the year was 0, at several stations and on a number of dates.

#### PRECIPITATION—IN INCHES AND HUNDREDTHS.

The annual average (entire territory), 42.11, was 3.52 above the normal.

The greatest annual amount was 65.77, at Sunnyside.

The least annual amount was 32.59, at Great Falls.

The greatest local monthly fall was 12.29, at Bachman's Valley, in May.

The least local monthly fall was a trace, at Receiving Reservoir, in June.

The greatest fall in twenty-four hours was 5.93, at Distributing Reservoir, on August 13th.

The average number of rainy days for the year was 109.

#### WIND.

The prevailing wind direction for the year was from the northwest.

The total annual wind movement was 46,958 miles at Baltimore, and 56,844 miles at Washington, D. C.

The maximum wind velocity for the year was 54 miles per hour from the east, at Baltimore, on December 4th.

#### MISCELLANEOUS.

The average number of clear days, 164.

The average number of partly cloudy days, 100.

The average number of cloudy days, 101.

The sunshine received during the year at Baltimore was 66 per cent. of the possible amount.

Thunderstorms occurred in every month.

Hail fell in every month except August and October.

Sleet fell in January, February, March, April, November, and December.

Solar halos were seen in every month except June and October.

Lunar halos were observed in every month but July.

Lunar coronæ were observed in January to March, and September to December.

Auroral displays were witnessed in January, February, March, April, June, July, and September.

Solar coronæ was seen in June and December.

A slight earthquake shock was felt in Washington, D. C., on November 25th, 3 hours 10 minutes and 30 seconds p. m.

Mock suns, in February, June, and July.

\* \* \*

#### CLIMATE AND CROP REVIEW BY MONTHS.

January was comparatively warm, with precipitation somewhat above the average. There was not much protection afforded to winter growth by snow, but owing to the mild weather conditions the absence of snow covering was not particularly felt.

February temperatures were about normal, yet the month as a whole was the coldest of the year. Precipitation was deficient, and but very little of it occurred in the form of snow. Some damage resulted to grain and grasses by successive freezing and thawing, but no great amount.

March gave temperatures much above the average, together with abundant and well distributed precipitation. There was more snowfall over the principal wheat growing counties than in February. Mild, wet weather in this month forced vegetation two to three weeks ahead of the season. Wheat, rye, grass, and clover were much in advance of their usual growth, and were generally in excellent condition.

The month of April proved to be one of the worst of the year for crops. Especially unfavorable conditions prevailed at its beginning; cold northwest winds set in at the close of March, and severe cold weather prevailed from April 4th to 7th, with a snow storm on the 5th. Ice formed generally during this period, frosts were of daily occurrence, and temperatures were below freezing in all portions of Maryland and Delaware. Vegetation rallied somewhat toward the middle of April, but a general storm, with cold northwest winds, snow, and frost, occurred on the 28th and placed crops in jeopardy for the second time during the month. The result of this freezing not only added to the damage already sustained by the fruit, but also endangered the wheat to a great extent. The snow enveloped the young stalks and clung to them all night, and according to some careful observers the subsequent shortage of the wheat crop was largely due to the severe weather experienced at this time. The close of the month found oats mostly sown. Corn ground was broken and some fields planted. Potatoes and gardens were generally planted also, and tobacco plants were plentiful and thriving.

The weather conditions for May were not particularly unfavorable to crops, although a hail storm did considerable injury over the interior counties on the 16th, and a heavy storm with excess of rain was reported on the 19th. Transplanting of tobacco and farming operations in general were delayed by wet weather during the first part of the month. Grain, grasses, and minor crops grew well toward the close, and corn planting was about finished.

June was a dry month. The absence of moisture was not unfavorable at first, but drought conditions soon supervened and by the close of the month considerable damage had been done by the dry weather.

July opened with a continuation of the dry weather. From the 1st to the 4th an extremely hot spell prevailed. On the latter date much needed showers fell, and a general rainfall on the 19th afforded great relief to growing crops which had suffered from the long continued drought, especially in the southern counties. The last two weeks of the month were warm, with ample rainfall. Wheat harvest was nearly completed by the first of the month, and threshing was well over by the 18th; the yield averaged 12 to 15 bushels to the acre, being poorest in the southern, and best in the northern counties. Corn was improved by the late rains, but early potatoes had been cut short, and not over half a crop of tobacco had been planted. Fruit yields were poor. As the month closed oats were being harvested, with short yields.

August, while warm, had no marked hot waves. The abundant rainfall was of benefit to vegetation, although received too late to overcome the damage resulting from the preceding drought.

September was very hot during the first week, and the greater part of the month was quite dry, especially in the eastern and southern counties. A hardened soil in all sections interfered with fall plowing. Drought conditions were relieved to some extent by good rains on the 23d and 24th, and the preparation of wheat ground, so long delayed, was again pushed forward. Corn cutting made rapid advance during the dry weather; the fodder was saved in fine condition, but the yield of corn was short. Light yields were obtained from late vegetables. Early tobacco was cut and housed; late tobacco short.

The early part of October was warm and fairly dry, the latter part cool and wet. Wheat was about all in by the middle of the month. Good stands were reported later, although the fly had made some inroad in the fields soon before the cool weather. Corn shucking was nearly completed.

November and December gave an excess of precipitation, but the temperatures were below normal. The snow covering was hardly sufficient at all times during December, but on the whole the conditions were generally favorable for wheat during both months.

## Climatological data for the year 1898.

Stations.	Counties.	Elevation, feet.	Temperature (degrees Fahrenheit).						Precipitation (inches).						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 rainy days.	Number clear days.	Number partly cloudy days.		Number cloudy days.
WESTERN MARYLAND.																				
Boettcherville	Allegany	700	8	53.2	109	July 3	0	Dec. 15	8	38.06	6.63	Oct.	0.70	Feb.	20.5	92				
Cumberland	Allegany	722	39	57.4	103	July 3	9	Feb. 2	39	41.33	6.92	Oct.	1.15	Feb.	23.8	103				
Deer Park	Garrett	2,457	7	47.8	94	July 3	-20	Dec. 15	7	53.12	7.69	Jan.	1.87	Sept.	95.0	108				
Grantsville	Garrett	2,400	5	48.6	94	July 3	-5	Feb. 2	5	55.52	8.93	Aug.	1.51	Sept.	80.5	127	100	119	146	SW.
Green Spring Fur	Washington	500	6	53.6	104	July 3	-1	Feb. 4	6	39.07	6.27	Aug.	0.76	June	16.2	121	200	97	68	NW.
Sharpsburg	Washington	450	4	53.6	102	July 3	-5	Dec. 15	4	39.94	6.67	Oct.	0.97	Sept.	21.3	123	177	98	90	W.
Smithsburg	Washington	750	2		103	July 3	-1	Feb. 3	2		7.82	Aug.	0.51	Sept.						SW.
Sunnyside	Garrett	2,440	6	47.5	93	July 3	-17	Dec. 15	6	65.77	8.95	Jan.	2.33	June	92.5	176	124	60	181	SW.
Westernport	Allegany	1,000	4	53.0	107	July 3	-1	Feb. 1	4	42.90	7.60	Feb.	0.76	Feb.	27.0	123				
Entire Section				52.8	109	July 3	-20	Dec. 15		45.05	8.95	Jan.	0.51	Sept.	40.8	112	153	103	109	SW.
NORTHERN-CEN. MD.																				
Bachman's Valley	Carroll	860	5	52.4	103	July 3	2	Feb. 4	5	57.49	12.29	May	0.86	June	30.0	95	236	51	78	NW.
Baltimore	Baltimore	123	64	56.3	104	July 3	10	Feb. 2	64	36.46	6.09	Aug.	1.06	June	18.2	125	141	116	108	NW.
Baltimore J. H. Hos.	Baltimore	124	4	55.1	104	July 3	7	Feb. 2	4	39.16	6.34	Aug.	1.16	June		134	179	67	119	W.
Darlington Academy	Harford	300	9	53.8	98	July 3	1	Feb. 4	9	50.99	10.39	Aug.	1.62	June	23.5	98	178	112	75	NE.
Fallston School	Harford	450	30	53.4	95	July 3	3	Feb. 2	30	46.86	9.35	Aug.	1.59	Feb.	26.7	152	61	234	70	SW.
Frederick	Frederick	250	26	55.3	104	July 3	3	Dec. 15	26	38.93	6.34	Aug.	0.74	June	18.5	115	157	124	84	W.
Great Falls	Montgomery	150	10	54.9	100	July 3	3	Feb. 5	10	32.59	5.57	Aug.	0.53	June		88				NE.
Mt. St. Mary's College	Frederick	720	38	53.6	102	July 2	2	Feb. 4	38	42.92	8.92	Aug.	1.17	Sept.	26.9	119	129	132	104	NW.
New Market	Frederick	550	15	55.1	105	July 3	2	Feb. 4	15	39.38	5.80	Aug.	0.63	June	19.4	120	128	159	78	NW.
St. Charles College	Howard	300	4	54.0	101	July 3	1	Feb. 4	4	43.61	6.15	Aug.	1.33	Sept.	17.8	129	119	118	128	W.
Taneytown	Carroll	495	6	54.4	103	July 3	2	Dec. 14	6	47.17	8.42	Aug.	1.22	June	27.7	141	155	104	106	NW.
Van Bibber	Harford	20	3	54.0	97	July 3	4	Feb. 2	3	47.70	8.16	Aug.	1.30	June		140	184	73	108	NW.
Woodstock College	Baltimore	392	29	54.4	102	July 2	2	Feb. 4	29	36.80	6.03	Aug.	1.31	Feb.	14.2	101				NW.
Entire Section				54.4	105	July 2	1	Feb. 4		42.25	12.29	May	0.53	June	23.4	118	160	104	101	NW.
SOUTHERN MARYLAND.																				
Charlotte Hall School	St. Mary's	167	5	56.3	102	July 3	2	Feb. 2	5	36.94	4.98	May	1.10	Feb.	7.7	96	160	141	64	NW.
Cherryfields	St. Mary's	20	5	56.3					5	43.38	7.64	July	1.45	Feb.	2.0	121	126	176	63	NW.
Distribut'g Reservoir	Dist. of Columbia	120	8	56.8					8	33.20	8.97	Aug.	0.05	June		94				
Jewell	Anne Arundel	165	11	55.4	99	July 2	5	Feb. 2	11	40.69	4.35	Dec.	1.55	Feb.	4.0	87	206	78	81	NW.
Laurel	Prince George's	150	4	56.1	104	July 2	2	Feb. 4	4	35.09	7.20	Aug.	0.65	June		76	103	175	87	
Md. Agricultural Col.	Prince George's	170	7	56.7	105	July 2	4	Dec. 15	7	34.10	6.08	Aug.	0.35	June		78				
Receiving Reservoir	Dist. of Columbia	160	8	56.2					8	36.76	10.61	Aug.	T.	June		96				
Solomon's	Calvert	20	7	57.8	99	July 2	11	Feb. 2	7	43.51	7.88	Aug.	1.72	June	5.9	125	120	67	178	NW.
Washington, D. C.	Dist. of Columbia	112	28	56.1	101	July 2	2	Feb. 4	28	37.72	8.76	Aug.	0.89	Sept.	15.4	128	150	115	100	S.
Entire Section				56.5	105	July 2	2	Feb. 2 & 4		37.52	10.61	Aug.	T.	June	12.3	99	153	120	92	NW.
EASTERN MARYLAND.																				
Easton	Talbot	35	9	55.5	101	July 2	10	Feb. 2	9	36.99	4.98	Aug.	1.32	Sept.	4.0	124	205	73	87	SW.
Mardela Springs	Wicomico	25	11	55.7	98	July 2	9	Feb. 4	11	40.18	5.50	Aug.	1.24	Jan.	6.7	95	168	125	72	NW.
Pocomoke City	Worcester	37	5	60.1	101	July 2	12	Feb. 2	5	40.18	5.50	Aug.	1.24	Jan.	6.7	95	168	125	72	Var.
Princess Anne	Somerset	20	24	55.9	95	July 2	11	Feb. 4	24	42.72	8.39	Aug.	1.40	Feb.	5.5	122	87	209	69	NW.
Entire Section				56.1	102	July 2	2	Feb. 4		42.11	8.39	Aug.	1.17	June	11.0	106	169	101	95	NW.
DELAWARE.																				
Dover	Kent	40	22	55.1	99	July 3	6	Feb. 2	22	42.73	5.37	May	2.07	June		103	179	90	96	NW.
Milford	Kent	20	19	57.9	99	July 3	10	Feb. 3	19	39.14	4.77	Aug.	1.68	Feb.		93	240	18	107	NW.
Millsboro	Sussex	23	6	55.7	98	July 4	6	Dec. 15	6	46.67	6.99	July	1.24	Feb.		117	182	86	97	Var.
Newark (Del. Coll.)	Newcastle	136	5	53.6	98	July 3	0	Feb. 4	5	49.18	7.02	Aug.	2.48	Mar.	17.7	116	170	83	112	NW.
Seaford	Sussex	40	8	56.2	98	July 2	11	Feb. 2	8	42.92	4.63	May	1.81	Feb.	8.2	106	191	17	157	NW.
Entire Section				55.7	99	July 3	0	Feb. 4		44.11	7.02	Aug.	1.68	Feb.	10.7	108	193	58	114	NW.
Entire Territory				54.9	109	July 3	-20	Dec. 15		42.11	12.29	May	T.	June	21.6	109	164	100	101	NW.

NOTE.—A number of stations having incomplete annual records are omitted from the body of this table, but all obtainable reports have been considered in the entries of averages and extremes.

## TABLE OF KILLING FROSTS.

Stations.	Last in spring.	First in autumn.	Stations.	Last in spring.	First in autumn.	Stations.	Last in spring.	First in autumn.
Annapolis	April 2	Oct. 17	Fallston	April 8	Oct. 13	Princess Anne	April 12	Oct. 17
Bachman's Valley	May 9	Oct. 17	Grantsville	May 9	Oct. 13	Queenstown	Nov. 20	Oct. 20
Baltimore	April 6	Oct. 28	Green Spring Furnace	April 6	Oct. 28	Rock Hall	Oct. 28	Oct. 28
Boettcherville	Oct. 28	Oct. 28	Hancock	Oct. 28	Oct. 28	St. Charles College	Oct. 24	Oct. 24
Boonsboro	Oct. 31	Oct. 31	Jewell	April 6	Oct. 28	Sandy Point	Nov. 26	Oct. 26
Charlotte Hall	April 6	Oct. 16	Laurel	April 4	Oct. 28	Seaford, Del.	April 4	Oct. 28
Chase	Nov. 25	Oct. 16	Mardela Springs	April 7	Oct. 16	Sharpsburg	April 9	Oct. 17
Cherryfields	Oct. 26	Oct. 26	Md. Agr. College	Oct. 28	Oct. 28	Smithsburg	May 9	Oct. 24
Chestertown	Oct. 26	Oct. 26	McDonogh	April 20	Oct. 28	Solomons	April 28	Oct. 28
Chewsville	Oct. 26	Oct. 26	Millsboro, Del.	April 28	Oct. 28	Sunnyside	May 9	Sept. 12
Clear Spring	Oct. 26	Oct. 26	Mt. St. Mary's College	Oct. 28	Oct. 28	Taneytown	April 7	Oct. 28
Darlington	Oct. 26	Oct. 26	Newark, Del.	Oct. 28	Oct. 28	Washington, D. C.	April 6	Oct. 24
Deer Park	May 18	Sept. 29	New Market	May 9	Oct. 24	Western Md. College	Oct. 27	Oct. 27
Denton	April 7	Oct. 17	Pocomoke City	April 4	Oct. 13	Woodstock	Nov. 2	Nov. 2

Monthly and annual mean temperatures for the year 1898, with departures from the normal.

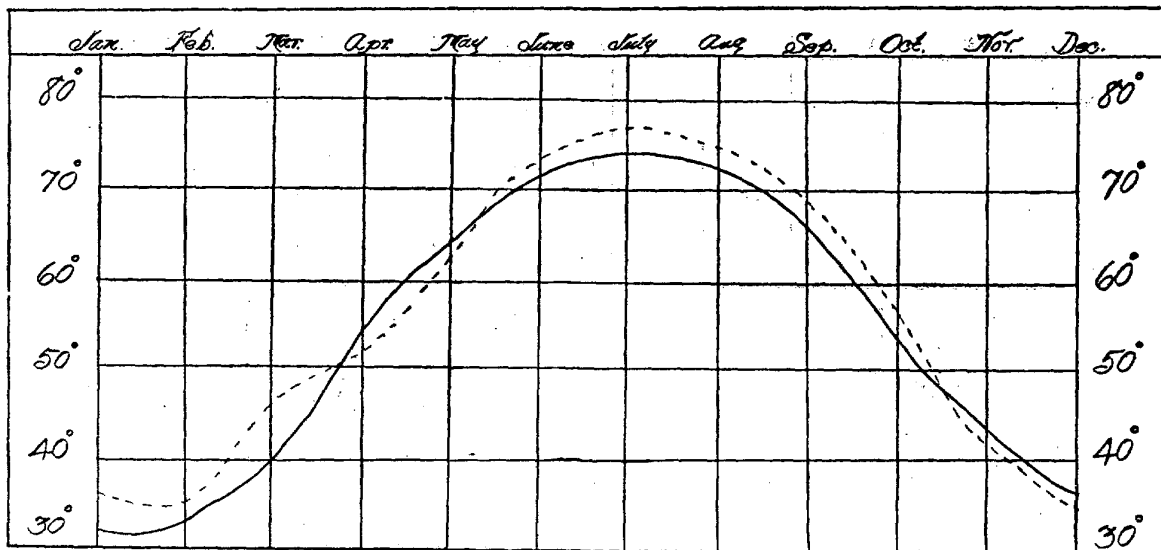
	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.		Annual.	
Stations.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.	Temperature.	Departure.
WESTERN MARYLAND.																										
Boettcherville .....	33.8	+6.3	31.2	+0.2	46.0	+7.2	46.8	-3.8	63.4	+1.7	71.2	+0.2	76.8	+3.7	74.4	+3.5	67.4	+2.8	55.2	+4.1	40.9	-0.1	31.9	-3.6	53.2	+1.8
Cheherville .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77.0	.....	74.6	.....	67.8	.....	54.6	.....	42.1	.....	32.1	.....	.....	.....
Clear Spring .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77.6	.....	74.4	.....	68.7	.....	53.0	.....	38.6	.....	31.3	.....	.....	.....
Cumberland .....	39.3	+5.2	37.0	+0.6	50.4	+9.7	52.6	-3.0	68.0	-2.8	73.1	+0.8	80.4	+4.7	76.8	+2.0	70.0	+1.1	58.6	+3.4	46.0	+0.3	36.5	-2.1	57.4	+1.7
Deer Park .....	30.4	+5.2	26.8	-0.8	42.3	+9.5	40.8	-5.8	57.8	-0.4	63.9	-0.7	69.0	+3.2	67.0	+2.2	60.6	+0.2	50.2	+4.1	37.5	-0.6	26.7	-2.1	47.8	+1.2
Grantsville .....	30.8	+6.7	27.9	+2.7	42.3	+7.7	42.0	-5.8	59.4	+2.4	65.5	+0.9	69.8	+1.7	69.0	+2.4	62.6	-0.6	50.0	+1.0	36.8	-3.3	26.8	-5.0	48.6	+0.9
Green Spring Furnace .....	33.8	+5.7	31.0	-0.8	47.0	+9.7	48.7	-3.7	64.4	+0.7	72.8	+0.4	78.7	+3.0	70.0	-5.8	68.0	+0.1	55.4	+4.1	41.8	+0.1	32.2	-0.4	53.6	+1.1
Hagerstown .....	35.4	+4.1	33.4	-1.9	50.1	+11.2	50.0	-5.4	63.0	-1.7	72.4	.....	77.8	.....	75.8	.....	68.0	.....	55.6	+3.3	41.9	.....	31.9	.....	.....	.....
Hancock .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72.4	.....	77.8	.....	75.8	.....	68.0	.....	41.9	.....	31.9	.....	.....	.....
Sharpsburg .....	33.4	+5.2	31.2	+1.4	46.6	+7.3	47.4	-5.9	61.9	-1.2	71.0	+1.0	77.2	+3.4	74.4	+1.4	69.6	+2.2	56.2	+4.3	42.6	-1.6	31.9	-2.5	53.6	+1.2
Smithsburg 1 .....	33.7	.....	31.5	.....	46.6	.....	48.0	.....	62.0	.....	71.0	.....	77.4	.....	72.0	.....	68.2	.....	55.6	.....	41.8	.....	32.5	.....	.....	.....
Smithsburg 2 .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78.1	.....	74.4	.....	69.9	.....	56.4	.....	41.8	.....	32.4	.....	.....	.....
Sunnyside .....	31.0	+8.0	26.2	+1.8	43.8	+9.2	40.6	-6.0	57.8	+2.3	64.4	0.0	69.0	+1.9	66.5	+1.4	60.9	-0.3	48.0	+0.4	35.8	-1.9	26.5	-4.4	47.5	+1.0
Westernport .....	33.8	+7.5	30.2	+1.8	44.8	+8.7	48.0	-4.1	63.8	+1.3	73.2	+2.5	77.0	+3.3	73.4	+1.9	67.2	+0.3	53.7	+3.5	40.4	-1.2	30.4	.....	.....	+2.0
Average .....	33.5	+6.0	30.6	+0.6	45.9	+8.9	50.5	-4.8	62.2	+0.3	69.8	+0.6	75.8	+3.1	72.5	+1.3	66.9	+0.6	54.3	+3.1	40.7	-1.3	31.1	-3.1	52.8	+1.3
NORTHERN-CENTRAL MD.																										
Bachman's Valley .....	32.0	+3.9	31.2	+2.6	45.4	+7.0	46.2	-4.2	61.0	-1.4	70.2	+0.3	76.8	+2.9	73.6	+1.8	67.0	+2.4	53.6	+2.7	40.4	-1.1	31.4	-0.6	52.4	+1.4
Baltimore .....	37.0	+2.8	35.2	-1.0	48.6	+7.0	51.2	-1.8	63.9	-0.4	73.8	+0.4	78.7	+1.5	77.4	+2.4	71.4	+3.5	58.0	+1.1	44.6	-1.0	36.2	-1.3	56.3	+1.1
Baltimore J. H. Hosp'l .....	35.7	+5.0	33.0	+1.4	46.4	+6.1	50.0	-3.3	63.0	-0.4	72.6	+2.5	78.4	+2.9	76.4	+1.5	70.7	+1.5	57.5	+2.9	43.2	-2.5	33.8	-2.6	55.1	+1.2
Chase .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79.4	.....	74.9	.....	68.9	.....	57.0	.....	41.3	.....	33.0	.....	.....	.....
Darlington Academy .....	34.4	+5.4	33.0	+3.3	47.4	+8.1	49.3	-1.9	61.2	-1.0	71.1	+0.6	76.4	+1.8	74.3	+1.5	67.7	+1.1	55.8	+2.7	42.1	-1.4	33.1	-2.4	53.8	+1.5
Fallston School .....	33.9	+3.6	33.0	+0.6	46.4	+8.3	48.8	-1.2	60.5	-0.8	69.8	-0.2	75.5	+1.6	73.3	+1.6	67.6	+2.4	56.0	+1.8	42.0	-0.7	33.8	-0.2	53.4	+1.4
Frederick .....	35.5	+3.8	34.0	+2.2	48.4	+8.1	49.6	-1.5	63.8	+0.8	73.1	+1.3	79.4	+2.6	76.4	+3.1	69.8	+3.4	57.0	+2.5	42.0	-0.7	34.0	-1.3	55.3	+1.9
Great Falls .....	35.4	+5.0	32.8	-2.6	47.4	+6.1	49.9	-4.0	64.4	-0.4	72.2	+0.2	77.2	+1.2	76.2	+1.2	69.6	+1.3	57.3	+2.9	42.8	-1.4	34.0	-2.3	54.9	+0.5
Mt. St. Mary's College .....	33.2	+3.3	30.8	-1.8	45.8	+7.5	48.9	-2.3	62.6	+1.9	71.6	+1.8	77.6	+2.4	73.7	+1.3	69.2	+4.5	55.4	+1.8	41.6	-0.7	32.6	-0.5	53.6	+1.6
New Market .....	33.2	+3.0	31.1	+1.0	47.0	+8.0	51.1	+0.4	64.2	+1.0	73.6	+0.4	79.7	+2.7	75.6	+2.2	70.2	+4.6	56.6	+2.1	42.5	-0.3	33.2	-1.4	55.1	+2.0
St. Charles College .....	35.2	+2.8	32.6	-6.2	46.5	+5.6	50.1	-5.0	61.1	-4.0	71.1	-1.1	77.1	+4.3	74.3	-3.3	68.8	-0.8	55.9	+1.5	41.9	-4.6	33.6	-2.5	54.0	-1.1
Taneytown .....	34.0	.....	31.6	.....	48.1	.....	51.0	.....	65.7	.....	72.8	.....	77.9	.....	74.8	.....	69.6	.....	56.0	.....	40.1	.....	31.1	.....	54.4	.....
Van Bibber .....	34.0	+3.8	32.6	-0.6	45.6	+7.2	49.8	-3.8	62.1	-2.3	72.2	+3.0	77.2	+0.7	75.4	+1.9	68.6	+2.4	55.6	+2.0	41.6	-3.6	34.9	-1.9	54.0	+0.7
Western Md. College .....	34.2	+4.3	34.2	+2.7	48.9	+7.8	50.3	-5.6	66.6	+0.9	71.2	.....	77.0	.....	74.0	.....	68.0	.....	56.0	+0.4	41.7	-7.2	.....	.....	.....	.....
Woodstock College .....	34.9	+3.4	32.1	-0.8	47.0	+8.3	49.6	-1.6	63.5	+1.2	72.8	+2.0	78.1	+3.7	75.3	+3.7	68.4	+3.5	54.8	+1.8	42.0	+0.2	34.2	+0.7	54.4	+2.2
Average .....	34.5	+3.9	32.9	-0.1	47.1	+7.3	49.7	-2.8	63.1	-0.5	72.0	+0.8	77.8	+2.4	75.1	+1.6	69.1	+2.5	56.2	+2.0	42.0	-1.9	33.4	-1.3	54.4	+1.2
SOUTHERN MARYLAND.																										
Annapolis .....	38.4	+4.4	36.4	+0.8	50.3	+8.6	52.8	-0.3	67.2	+3.5	76.8	+2.7	78.6	+0.1	80.3	+3.7	71.2	+1.8	58.6	+1.3	43.8	-2.5	.....	.....	.....	.....
Charlotte Hall School .....	38.3	+4.5	35.6	+0.9	49.0	+4.5	51.2	-3.0	64.8	-0.5	73.0	+0.7	78.1	+2.1	76.4	+0.7	71.5	-0.3	58.3	+2.3	45.1	-2.3	34.2	-4.8	59.3	+0.4
Cherryfields .....	37.6	+3.3	34.4	+0.3	47.6	+4.0	50.2	-3.0	62.6	-1.9	72.4	-0.1	77.5	+0.9	74.6	+2.6	72.2	+1.7	60.6	+3.2	45.9	-1.2	37.0	-1.2	56.3	+0.8
Distributing Reservoir .....	36.7	+5.6	34.2	+0.1	49.0	+7.1	51.6	-2.8	65.6	+0.5	76.0	+0.5	79.1	+2.2	77.2	+1.3	71.0	+2.4	58.6	+3.1	44.4	-1.0	37.9	+1.5	56.8	+1.8
Jewell .....	37.0	+3.0	35.0	-0.6	49.0	+7.9	50.8	-4.5	62.5	-2.1	71.1	-2.5	76.7	+0.9	75.8	+0.7	70.0	+0.6	57.8	+3.1	43.7	-3.1	35.0	-3.2	55.4	0.0
Laurel .....	35.8	.....	33.2	-3.0	46.9	+5.5	50.0	-4.0	63.2	-0.1	72.0	+1.5	78.1	+3.8	77.8	+3.9	74.4	+6.5	59.8	+6.6	45.7	-0.8	36.8	+0.4	56.1	.....
Md. Agricultural Coll. ....	37.8	+4.4	36.2	+1.8	49.4	+6.0	51.6	-1.9	64.7	+2.1	73.8	+2.5	79.2	+5.7	77.0	+3.8	71.6	+3.0	58.4	+3.9	45.0	-1.2	36.0	-3.6	56.7	+2.2
Receiving Reservoir .....	36.6	+5.5	34.7	-0.1	48.6	+7.0	50.6	-3.4	65.5	+0.7	75.0	+1.3	77.9	+1.0	77.3	+1.9	71.0	+4.4	58.3	+3.1	44.1	-1.0	35.6	-0.7	56.2	+1.6
Solomon's .....	38.3	+4.7	36.4	+0.8	48.4	+5.6	51.8	-1.8	64.0	-1.1	74.0	-0.1	79.0	+1.0	79.8	+1.9	74.4	+2.4	61.7	+1.8	47.3	-1.5	37.9	-1.4	57.8	+1.1
Washington, D. C. ....	36.6	+3.4	35.0	-0.8	48.8	+7.5	50.9	-2.1	64.4	+0.5	73.5	+0.3	78.8	+2.0	76.9	+2.3	71.0	+3.2	57.8	+1.6	44.0	-0.5	35.6	-0.6	56.1	+1.4
Average .....	37.3	+4.3	35.0	0.0	48.7	+6.4	51.2	-2.7	64.4	+0.2	73.8	+0.8	78.3	+2.1	77.6	+2.2	71.8	+2.6	59.0	+3.0	44.9	-1.5	36.2	-1.5	56.5	+1.3
EASTERN MARYLAND.																										
Chestertown .....	.....	.....	33.8	+1.2	47.8	+6.4	49.2	-2.2	62.6	-0.3	71.0	-0.4	77.6	+1.8	76.0	+2.0	69.6	+1.9	58.5	+3.4	43.2	-2.8	35.6	-0.3	.....	.....
Coleman .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78.6	.....	76.1	.....	70.7	.....	58.5	.....	43.7	.....	35.9	.....	.....	.....
Denton .....	.....	.....	35.4	+1.7	48.0	+6.9	49.2	-4.3	61.7	-1.8	70.0	+3.5	78.6	+3.0	76.0	+2.4	73.1	+0.8	60.0	.....	45.0	.....	35.2	.....	.....	.....
Easton .....	36.0	+3.4	34.3	-0.7	47.2	+4.2	49.2	-5.2	62.4	-2.1	72.3	+0.3	78.4	+3.4	77.6	+2.9	71.5	+2.9	59.0	+2.7	43.2	-2.6	35.2	-2.5	55.5	+1.5
Mardela Springs .....	36.9	+1.4	37.3	+0.9	49.4	+7.7	49.5	+4.2	62.0	-1.4	69.6	-2.8	75.6	+0.7	74.0	+1.4	68.0	+0.6	57.8	+3.1	44.4	-1.0	37.5	-1.1	.....	.....
Pocomoke City .....	43.0	+5.5	40.4	+3.4	52.8	+5.4	53.5	-2.9	65.4	-1.2	73.4	-0.5	79.4	+1.4	80.1	+3.6	73.3	+1.3	64.2	+4.8	50.6	-2.3	44.6	+1.6	60.1	+1.7
Port Deposit .....	34.0	.....	33.4	.....	45.9	.....	49.0	.....	59.6	.....	71.0	.....	77.6	.....	77.2	.....	7									

Monthly maximum temperatures for the year 1898, with dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.	Maximum.	Date.
<b>WESTERN MARYLAND.</b>																								
Boettcherville .....	64	13	65	10	84	19	80	17	92	19	98	30	109	3	98	31	99	1	82	1	65	11	58	29
Chewsville .....													103	2	97	2	95	2	88	2	66	9	62	31
Clear Spring 2 .....													105	4	93	2	95	1	81	4	65	9	64	30
Cumberland .....	59	8	66	10	84	19	81	17	90	19	92	30	103	3	93	24	95	1	84	3	68	5	58	29
Deer Park .....	72	15	67	11	75	19	73	17	83	21	88	11	94	3	89	31	96	1	77	7	66	4	58	30
Grantsville .....	59	8	60	12	82	19	80	17	89	20	97	25	104	3	95	31	94	2	82	3	66	5	63	30
Hagerstown .....	59	16	62	12	82	19	80	16	89	20							92	7	88	4	67	5	62	30
Hancock .....											93	25	103	3	97	24	95	4	81	3	67	4	61	30
Sharpsburg .....	57	8	60	12	78	19	78	17	85	19	96	25	102	3	92	24	95	3	82	3	66	10	64	30
Smithsburg 1 .....	54	8	68	9			79	23	85	20	97	25	103	3	93	3	95	3	85	3			62	30
Smithsburg 2 .....													103	3	93	3	94	2	85	3	65	5	64	30
Sunnyside .....	61	12	64	11	75	19	73	17	83	21	87	11	93	3	88	31	88	1	77	4	68	4	59	30
Westernport .....	65	12	66	10	81	19	79	18	91	20	100	30	107	3	96	31	94	1	81	11	68	5	63	29
<b>NORTHERN-CENTRAL MD.</b>																								
Bachman's Valley .....	53	8	58	10	76	19	77	23	87	20	100	25	103	3	91	31	95	3	82	4	64	10	60	30
Baltimore .....	60	8	65	12	77	19	81	17	92	20	98	25	104	3	95	31	97	3	84	4	67	10	66	30
Baltimore J. H. Hosp'l ..	60	8	65	12	73	17	81	15	92	20	99	25	104	3	95	8	98	3	85	4	67	10	67	30
Chase .....													98	3	92	8	96	2	89	1	63	10	65	30
Darlington Academy .....	58	13	62	12	75	19	76	17	89	20	93	25	98	3	90	8	91	2	81	4	63	10	60	30
Fallston School .....	55	13	61	12	74	19	76	17	86	20	92	25	95	3	88	31	91	3	80	3	61	2	61	30
Frederick .....	60	13	63	12	75	19	79	17	86	20	92	25	104	3	94	3	96	3	82	3	66	10	66	30
Great Falls .....	61	10	64	13	78	20	80	18	92	21	97	26	100	3	93	4	95	4	84	4	67	11	66	31
Mt. St. Mary's College ..	61	12	62	12	74	19	77	17	88	20	96	25	102	3	92	31	95	3	82	4	64	10	59	30
New Market .....	57	12	61	11	79	19	79	16	88	19	99	25	105	2	95	31	96	3	84	3	66	2	60	30
St. Charles College .....	57	13	65	12	78	19	80	17	89	20	96	25	101	3	93	24	95	3	82	4	66	9	66	30
Taneytown .....	57	8	63	11	80	19	83	13	96	1	98	25	103	3	92	3	94	3	85	4	65	10	58	30
Van Bibber .....	56	13	62	12	72	19	77	17	88	20	95	25	97	3	94	4	95	3	84	3	62	10	58	30
Western Md. College .....	58	12	62	9	82	19	78	23	90	20	97	25	103	3					82	4	64	9		
Woodstock College .....	60	12	61	10	78	19	80	17	88	20	95	25	102	2	92	31	94	1	80	4	67	10	66	30
<b>SOUTHERN MARYLAND.</b>																								
Annapolis .....	61	13	63	12	76	19	80	17	89	20	95	25	95	2	94	8	98	6	85	2	65	10		
Charlotte Hall School ..	66	13	70	12	81	19	86	17	94	20	98	25	102	3	97	3	99	3	88	3	74	9	61	29
Jewell .....	60	13	66	12	78	19	82	17	91	20	95	25	99	2	93	31	95	3	83	3	68	9	68	30
Laurel .....	60	13	61	10	72	19	80	17	92	20	99	25	104	2	98	31	100	3	85	3	67	3	67	30
Md. Agricultural Col. ....	61	8	68	11	77	19	83	17	92	20	98	25	105	2	96	3	98	3	85	3	69	9	61	30
Solomon's .....	60	13	63	12	75	19	82	18	91	20	96	26	99	2	94	25	94	1	83	1	70	9	65	30
Washington, D. C. ....	63	13	67	12	78	19	83	17	91	20	97	25	101	2	93	3	95	3	83	3	69	10	68	30
<b>EASTERN MARYLAND.</b>																								
Chestertown .....			61	12	79	17	75	17	88	20	91	26	97	2	90	3	90	3	83	3	67	10	62	30
Coleman .....																			86	4	66	10	63	30
Denton .....			67	13	78	19	80	17	89	20	98	25	102	2	93	31	95	3	87					
Easton .....	63	13	63	11	71	12	81	17	89	20	96	25	101	2	95	8	96	3	87					
Mardela Springs .....	68	20	67	11	77	19	78	17	90	20	91	13	98	2	95									
Pocomoke City .....	69	20	70	15	77	23	80	18	91	20	98	26	101	2	95	2	94	3	90	4	78	5	70	4
Port Deposit .....	58	8	64	12	72	19	77	17	83	21	95	27					96	4	82	4	62	2	56	30
Princess Anne .....	68	20	66	11	75	19	80	18	86	20	93	26					91	3	83	4	70	10	63	22
Queenstown .....													99	2	92	3	95	3	85	3	68	10	62	30
Rock Hall 1 .....													100	2	92	8	96	3	85	3	65	9		
Rock Hall 2 .....													99	2	91	2	94	3	85	3	66	11	62	30
<b>DELAWARE.</b>																								
Dover .....	60	13	63	12	78	19	81	17	90	20	94	28	99	3	93	8	94	3	82	4	67	9	68	30
Milford .....	66	13	65	11	77	19	81	17	96	20	95	25	99	3	95	8	97	2	88	4	72	11	65	30
Millsboro .....	65	14	64	16	75	20	82	18	92	21	97	27	98	4	94	9	94	4	82	4	73	11	65	31
Newark (Del. College) ..	56	13	61	12	73	19	76	17	89	20	94	25	98	3	91	31	94	3	84	4	65	10	58	30
Seaford .....	65	13	65	11	72	19	81	17	90	20	95	26	98	2	92	3	94	1	84	3	70	10	66	30

CURVES OF TEMPERATURE FOR THE SECTION.

[Dotted lines represent averages for 1898. Solid lines show normals based on all available records of previous years.]

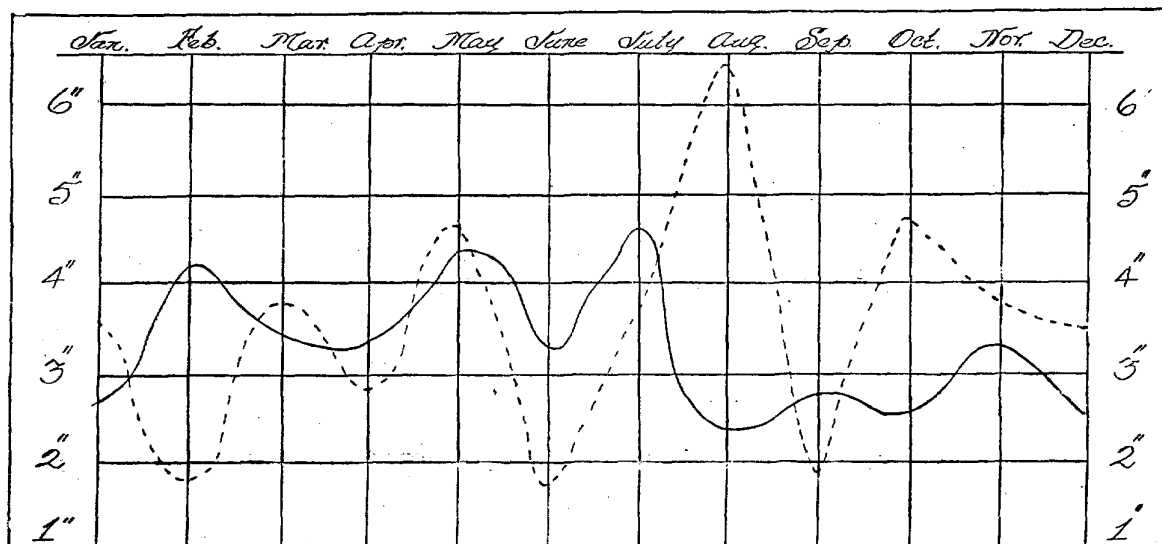


## Monthly minimum temperatures for the year 1898, with dates.

Stations.	January.		February.		March.		April.		May.		June.		July.		August.		September.		October.		November.		December.	
	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.	Minimum.	Date.
<b>WESTERN MARYLAND.</b>																								
Boettcherville.....	14	4	2	2	16	2	20	3	30	9	44	22	40	11	50	5	34	12	24	28	14	28	0	15
Chewsville.....													47	11	54	22	36	12	24	28	17	26	11	14
Clear Spring 2.....													50	11	53	27	43	26	26	28	19	26	4	15
Cumberland.....	13	31	9	2	24	1	30	3	42	9	51	22	55	11	57	28	47	12	34	28	27	26	14	31
Deer Park.....	2	30	9	2	7	1	6	6	25	9	35	24	32	11	46	26	29	12	18	28	6	28	20	15
Greentown.....	1	30	5	2	10	1	12	6	29	9	40	23	37	11	47	27	34	12	19	28	9	28	1	15
Green Spring Furnace.	13	2	1	4	17	1	17	6	36	9	48	20	47	11	52	28	41	12	26	28	21	27	1	15
Hagerstown.....	13	6	3	2	22	1	20	6	34	9							40	12	26	28	25	25	4	14
Hancock.....											46	23	46	11	59	6	40	12	26	28	21	26	4	15
Sharpsburg.....	15	2	3	2	21	1	20	6	33	9	46	23	48	11	54	28	41	12	27	28	21	27	5	15
Smithsburg 1.....	13	2	1	3			19	6	32	9	42	23	49	11	55	28	40	11	25	28			4	14
Smithsburg 2.....													53	11	58	19	42	11	27	28	19	25	5	14
Sunnyside.....	3	2	9	2	9	1	8	6	25	9	36	22	33	11	48	6	29	12	17	28	4	28	17	15
Westernport.....	8	31	1	1	20	1	19	5	32	8	41	23	42	10	53	27	40	11	26	27	18	26	3	14
<b>NORTHERN-CENTRAL MD.</b>																								
Bachman's Valley.....	12	2	2	4	20	1	17	6	31	9	41	22	46	11	51	28	38	12	24	28	17	28	4	14
Baltimore.....	17	2	10	2	27	1	26	6	40	9	55	23	57	11	59	28	52	11	34	28	24	27	14	14
Baltimore J. H. Hosp'l.	14	2	7	2	25	1	23	6	38	9	52	24	55	11	56	29	49	12	30	28	24	28	12	15
Chase.....													55	10	53	28	42	12	27	28	19	28	5	15
Darlington Academy.....	13	2	1	4	24	1	20	6	38	9	50	23	53	11	59	21	48	11	31	27	23	26	9	14
Fallston School.....	13	2	3	2	22	1	19	6	36	9	48	23	52	11	55	28	47	11	30	28	20	28	8	14
Frederick.....	17	2	5	4	25	6	25	4	33	9	47	22	52	11	54	28	41	12	28	28	23	27	3	15
Great Falls.....	11	2	3	5	19	1	22	4	34	9	47	23	48	11	54	28	44	12	27	29	23	27	5	14
Mt. St. Mary's College.....	9	31	2	4	26	1	21	6	38	9	52	23	55	12	55	28	48	11	27	28	20	27	7	14
New Market.....	13	2	2	4	21	1	21	6	33	9	45	23	53	12	52	28	40	12	26	28	20	27	10	14
St. Charles College.....	10	3	1	4	20	1	21	6	32	9	48	24	51	11	53	28	45	12	28	28	19	28	6	15
Taneytown.....	14	2	3	4	22	1	20	6	34	9	46	23	48	11	50	28	42	12	27	28	18	29	2	14
Van Bibber.....	13	1	4	2	24	1	23	5	38	8	52	22	53	10	56	26	49	20	32	27	22	27	13	14
Western Md. College.....	8	31	3	1	28	2	22	5	34	7	50	22							34	24	19	27		
Woodstock College.....	14	2	2	4	22	1	22	6	34	9	50	23	51	11	52	28	42	12	29	28	23	27	5	15
<b>SOUTHERN MARYLAND.</b>																								
Annapolis.....	19	2	7	2	28	2	24	5	40	9	53	23	58	11	61	14	51	12	35	28	25	28		
Charlotte Hall School.....	19	2	2	2	21	1	25	4	37	9	48	22	49	11	55	28	40	12	28	28	23	27	10	14
Jewell.....	15	2	5	2	23	1	23	6	38	9	49	23	53	12	57	28	45	12	28	28	21	27	10	14
Laurel.....	14	3	2	4	20	1	23	4	34	9	47	23	52	11	60	6	52	12	35	28	27	25	8	15
Md. Agricultural Col.....	16	4	11	4	25	6	24	6	35	9	48	22	48	11	54	28	41	12	27	28	28	25	4	15
Solomon's.....	19	2	11	2	27	1	28	6	41	9	55	6	62	11	66	28	52	12	36	28	26	27	17	14
Washington, D. C.....	17	4	2	4	25	1	26	6	36	9	53	23	54	11	57	28	48	12	30	28	22	26	12	14
<b>EASTERN MARYLAND.</b>																								
Chestertown.....			9	2	24	1	25	6	37	9	50	23	54	11	57	28	49	21	31	28	25	25	16	14
Coleman.....													55	11	56	28	50	21	33	28	24	28	15	14
Denton.....			7	4	25	6	25	6	39	9	52	6	55	12			43	12						
Easton.....	17	2	10	2	24	1	26	4	38	9	51	6	54	11	57	28	43	12	30	28	26	26	13	15
Mardela Springs.....	16	2	9	4	22	1	24	4	40	9	44	19	52	14					29	28	24	26	11	14
Pocomoke City.....	17	2	12	2	25	1	27	6	40	9	53	7	59	11	64	6	49	12	34	28	27	27	16	15
Port Deposit.....	12	2	2	4	22	1	23	6	36	8	48	1					49	28	31	28	26	26	13	15
Princess Anne.....	17	2	11	4	23	2	25	4	38	10	50	1	54	11	57	6	41	12	31	28	23	26	12	15
Queenstown.....													51	8	56	27	45	11	30	27	25	25	16	13
Rock Hall 1.....													49	12	57	28	49	12	31	28	26	26	17	14
Rock Hall 2.....													49	11	54	28	43	12	32	28	24	26	11	14
<b>DELAWARE.</b>																								
Dover.....	15	2	6	2	23	1	23	6	39	9	51	6	55	11	59	28	50	12	33	28	22	27	9	14
Milford.....	18	2	10	3	27	2	26	4	42	9	54	23	60	11	62	20	48	12	34	28	23	25	17	14
Millsboro.....	15	2	10	2	22	2	23	4	38	10	52	6	59	11	59	21	44	12	32	28	24	26	6	15
Newark (Del. College).....	13	2	0	4	23	1	21	6	37	9	49	23	51	11	53	28	45	21	31	28	22	27	12	14
Seaford.....	16	2	11	2	23	1	26	6	40	9	52	23	57	11	55	6	50	28	32	28	25	27	13	15

## CURVES OF PRECIPITATION FOR THE SECTION.

[Dotted line represents average for 1898. Solid line shows normal based on all available records of previous years.]

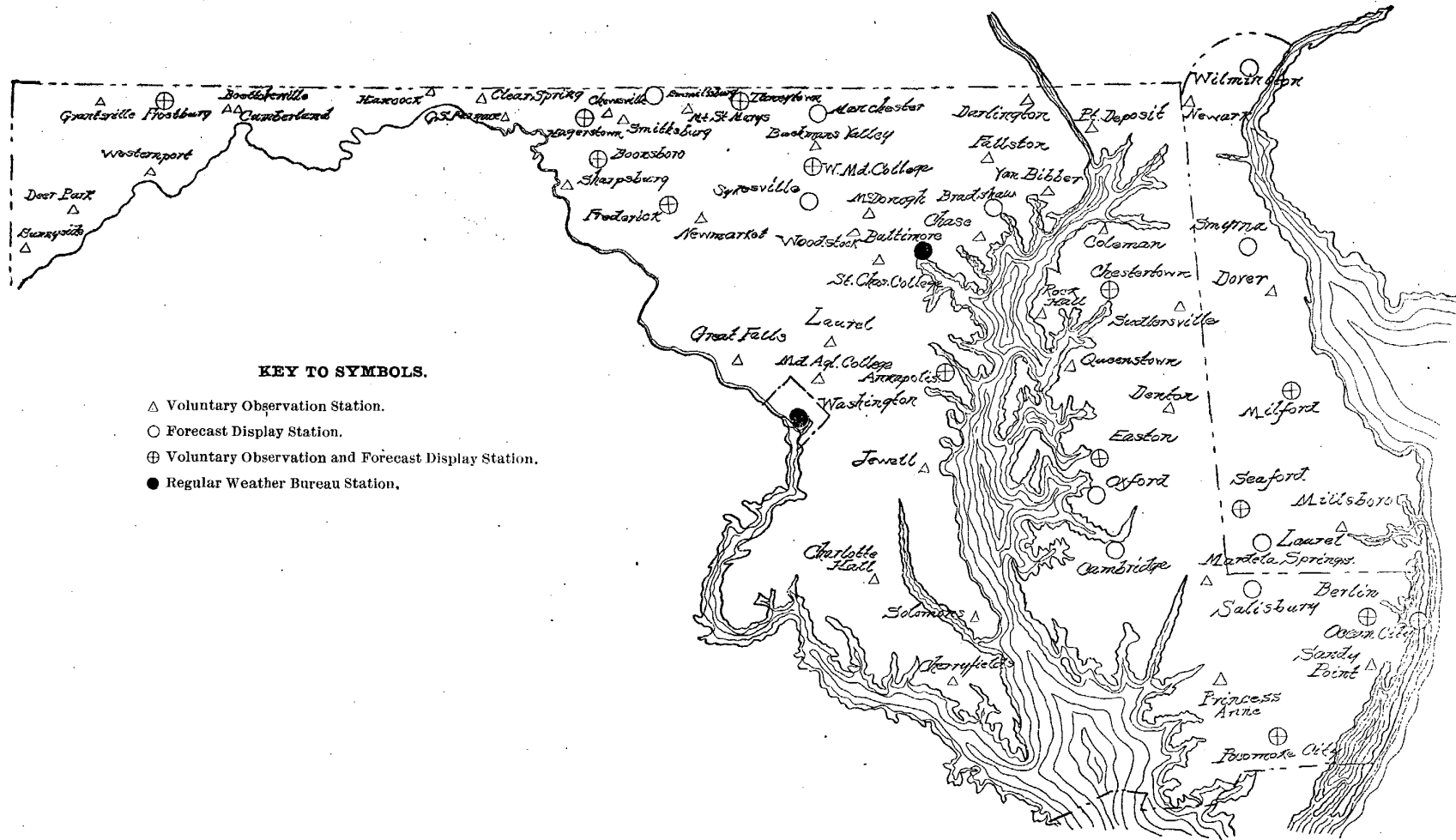




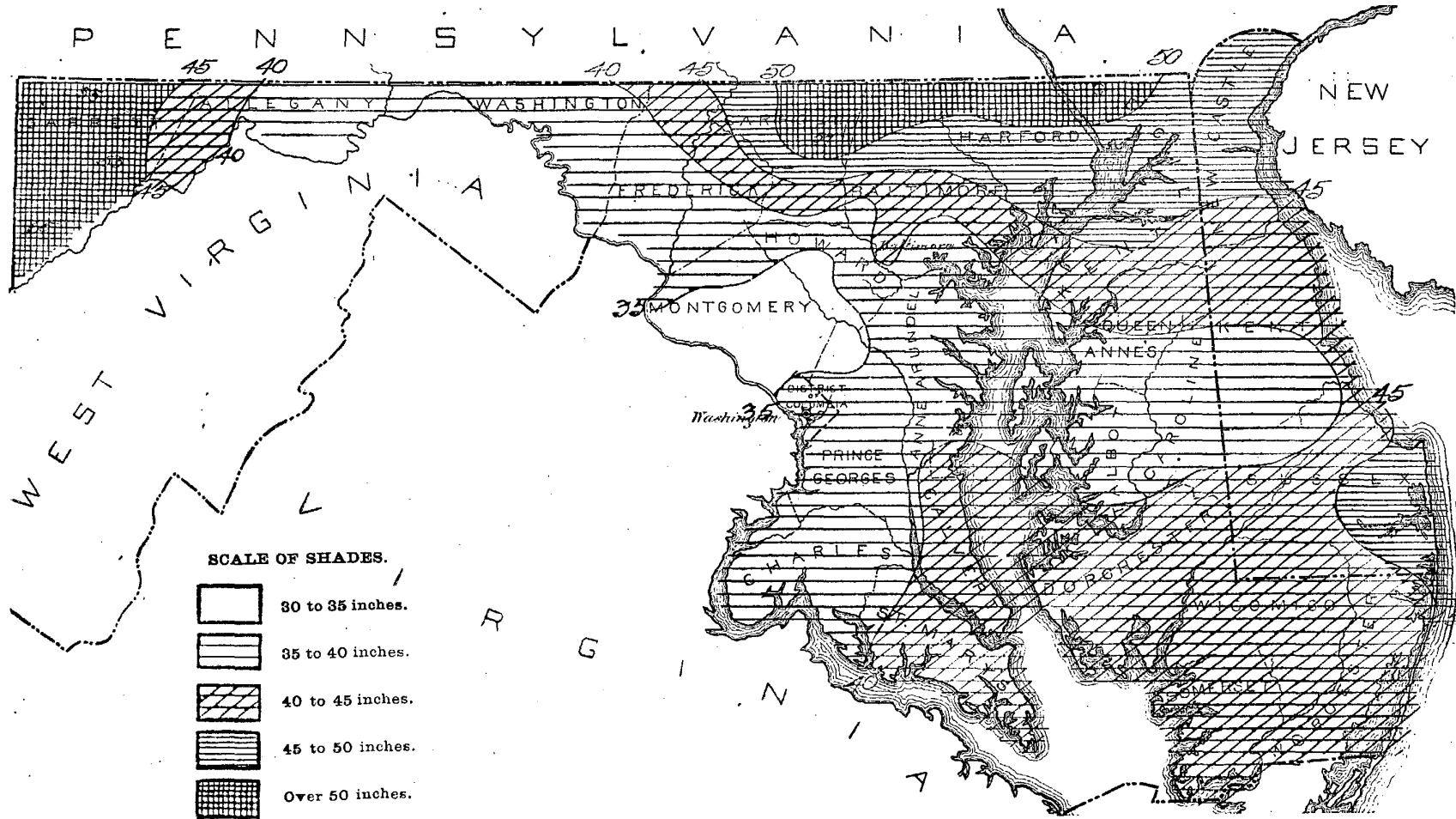
Monthly and annual precipitation for the year 1898, with departures from the normal.

	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.
WESTERN MARYLAND.																										
Boettcherville .....	3.77	+1.34	0.70	-2.59	6.46	+3.93	2.55	-0.28	3.87	-0.56	1.90	-2.32	2.15	-1.25	5.15	+2.83	1.61	-1.27	6.63	+4.86	1.42	-1.31	1.85	-0.58	38.06	+2.80
Chewsville .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.81	.....	6.23	.....	0.82	.....	5.85	.....	3.11	.....	3.80	.....	.....	.....
Clear Spring .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.42	.....	6.53	.....	0.77	.....	4.93	.....	2.92	.....	4.70	.....	.....	.....
Cumberland .....	4.57	+2.34	1.15	-2.09	5.58	+3.26	2.45	-0.16	4.21	+0.17	1.66	-2.05	1.50	-1.48	6.17	+3.97	1.33	-0.94	6.92	+5.42	2.34	-0.19	3.45	+1.51	41.33	+9.76
Deer Park .....	7.69	+4.85	3.21	+0.32	5.69	+1.90	4.25	+1.58	5.76	+1.72	3.36	-0.55	3.76	+4.06	7.01	+4.34	1.87	-0.77	4.47	+2.96	2.06	-0.75	3.99	+0.91	33.12	+12.45
Frostburg .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4.24	.....	7.05	.....	1.95	.....	8.28	.....	2.62	.....	2.75	.....	.....	.....
Grantsville .....	6.53	+2.80	2.06	-2.56	6.98	+3.07	3.42	+0.04	3.94	+0.54	3.07	-1.12	7.77	+0.77	8.93	+6.97	1.51	-1.62	5.34	+3.51	3.24	+0.02	2.73	-0.56	55.52	+11.86
Green Spring Furnace .....	3.44	+0.33	1.25	-1.94	3.95	+1.16	1.34	-0.85	4.98	+1.85	0.76	-2.25	3.42	-0.49	6.27	+3.94	1.15	-1.93	5.99	+4.54	2.59	-0.46	3.93	+2.11	39.07	+6.31
Hagerstown .....	3.99	+1.00	1.10	-2.29	3.89	-0.22	0.57	-1.56	2.30	-0.31	.....	.....	.....	.....	.....	.....	1.18	-0.69	4.88	+3.79	2.73	-0.65	2.93	-0.58	.....	.....
Hancock .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.48	.....	4.99	.....	0.05	.....	.....	.....	.....	.....	.....	.....	.....	.....
Sharpsburg .....	3.40	+0.67	1.24	-2.49	3.37	+0.44	1.48	-0.68	6.05	+2.94	1.23	-2.77	4.21	+0.70	4.78	+2.43	0.97	-1.27	6.67	+5.51	3.22	+0.73	3.32	+1.10	39.94	+7.31
Smithsburg .....	3.52	.....	1.49	.....	.....	.....	0.63	.....	4.63	.....	0.58	.....	1.56	.....	7.82	.....	0.51	.....	5.08	.....	.....	.....	4.75	.....	.....	.....
Smithsburg 2 .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.29	.....	7.50	.....	0.68	.....	6.79	.....	3.85	.....	6.26	.....	.....	.....
Sunnyside .....	8.95	+5.63	2.65	-2.81	8.34	+4.95	5.05	+1.07	6.74	+1.82	2.33	-2.88	5.56	-0.74	7.66	+4.86	2.92	-0.17	6.39	+3.64	4.27	-0.01	4.31	+0.38	65.77	+14.84
Westernport .....	4.73	+2.61	0.76	-1.91	4.93	+2.72	3.32	+1.16	3.97	+1.25	2.18	-0.12	4.54	+0.34	7.60	+5.75	1.76	-0.85	5.23	+4.03	1.93	-0.48	1.95	+0.27	42.90	+14.77
Average .....	5.06	+2.40	1.56	-2.04	5.47	+2.26	2.57	+0.04	4.64	+1.05	1.96	-1.76	3.48	-0.78	6.69	+4.39	1.34	-1.06	6.00	+4.26	2.77	-0.34	3.51	+0.76	45.05	+9.18
NORTHERN-CENTRAL MD.																										
Bachman's Valley .....	3.74	+1.48	1.91	-2.38	4.75	+0.65	4.87	+1.15	12.29	+6.72	0.86	-2.54	4.62	+0.80	4.98	+1.41	1.83	-2.13	6.10	+3.18	5.52	+1.38	6.02	+3.24	57.49	+12.96
Baltimore .....	2.99	-0.34	1.32	-2.18	2.58	-1.52	1.84	-1.59	3.86	+0.08	1.06	-2.96	3.51	-1.19	6.09	+2.04	1.56	-2.32	3.97	+0.99	4.34	+1.31	3.34	+0.19	36.46	-7.49
Baltimore J. H. Hos .....	3.13	.....	1.64	.....	3.03	.....	2.32	.....	4.16	.....	1.16	.....	2.61	.....	6.34	.....	1.64	.....	4.52	.....	4.66	.....	3.95	.....	39.16	.....
Chase .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.70	.....	5.19	.....	2.00	.....	4.02	.....	4.96	.....	3.84	.....	.....	.....
Darlington Academy .....	3.54	+0.54	1.73	-1.83	2.69	-0.28	2.73	-0.62	4.55	0.00	1.62	-2.03	6.27	+2.27	10.39	+7.89	3.23	-0.43	4.59	+1.57	5.62	+1.99	4.03	+1.47	50.99	+10.54
Fallston School .....	3.40	+0.27	1.59	-2.71	3.14	-0.12	2.52	-1.70	4.60	-1.35	1.82	-1.74	3.33	-1.15	9.35	+5.82	2.51	-0.61	5.09	+1.94	5.44	+1.32	4.07	+1.48	46.86	+1.45
Frederick .....	4.05	+1.37	1.49	-2.30	3.40	+0.39	1.53	-1.61	5.10	+2.38	0.74	-2.24	1.64	-1.91	6.34	+4.66	1.37	-2.05	5.82	+3.84	3.99	+0.83	3.46	+0.92	38.93	+4.28
Great Falls .....	2.95	-0.39	1.12	-2.11	2.94	+0.02	2.10	-0.81	3.55	-0.78	0.53	-2.15	2.48	-0.69	5.57	+3.89	1.33	-0.83	4.29	+2.29	5.00	+0.02	2.86	+0.20	32.59	-0.56
Mt. St. Mary's College .....	3.78	+1.26	1.41	-1.97	3.68	+0.29	1.43	-1.10	4.04	-0.24	1.95	-1.60	3.17	-1.04	8.92	+6.29	1.17	-2.54	5.98	+3.55	3.75	+0.07	3.04	+0.86	42.92	+3.83
New Market .....	3.14	+0.68	1.97	-2.29	3.29	-0.23	2.59	-0.04	5.20	+0.40	0.63	-2.53	2.41	-1.87	5.80	+3.45	1.28	-1.84	4.98	+2.78	4.70	+1.09	3.39	+1.20	39.38	+0.80
St. Charles College .....	3.29	+0.68	1.37	-2.78	3.17	+0.44	2.90	-0.84	3.77	-0.38	1.60	-1.71	3.73	-0.41	6.15	+3.82	1.33	-1.87	5.98	+4.15	5.00	+1.73	5.32	+3.01	43.61	+5.84
Spencerville .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.31	.....	4.92	.....	1.28	.....	3.69	.....	3.68	.....	.....	.....	.....	.....
Taneytown .....	4.29	+2.41	1.86	-2.04	3.73	+0.48	1.89	-1.44	5.55	+0.55	1.22	-1.97	6.30	+2.09	8.42	+6.35	1.98	-1.64	4.67	+2.38	3.90	-0.16	3.36	+1.08	47.17	+8.09
Van Bibber .....	2.90	+0.84	2.20	-3.33	3.43	-0.30	3.12	+0.70	5.89	+1.73	1.30	-1.40	3.37	-2.49	8.16	+5.34	2.62	-0.11	5.07	+1.93	5.49	+0.73	4.15	+1.48	47.70	+5.12
Western Md. College .....	4.06	+1.30	1.62	-2.69	4.06	+0.75	2.86	-0.39	4.67	+0.62	.....	.....	.....	.....	.....	.....	.....	.....	4.11	+2.22	4.21	+0.01	.....	.....	.....	.....
Woodstock College .....	2.28	-0.40	1.31	-2.43	2.48	-0.69	1.87	-1.13	4.46	+0.16	1.80	-1.14	3.15	-0.79	6.03	+3.52	1.55	-1.33	4.21	+1.48	3.79	+0.36	3.87	+1.45	36.80	-0.94
Average .....	3.39	+0.81	1.61	-2.39	3.31	-0.01	2.47	-0.72	4.89	+0.76	1.20	-2.00	3.51	-0.53	6.84	+4.54	1.78	-1.48	4.82	+2.48	4.50	+0.82	3.93	+1.40	42.25	+3.68
SOUTHERN MARYLAND.																										
Annapolis .....	2.37	+0.15	1.40	-4.68	1.44	-2.06	1.11	-2.45	3.28	-0.83	0.88	-1.54	3.17	-2.11	2.81	+0.46	1.35	-1.00	8.13	+5.97	4.69	+1.73	.....	.....	.....	.....
Charlottesville .....	3.30	+0.62	1.70	-2.58	4.33	+1.47	3.42	-0.10	4.98	+1.24	1.76	-0.89	4.27	+0.39	4.00	+1.91	1.69	+0.03	2.96	-0.47	2.40	+0.37	2.73	+0.82	36.94	+2.81
Cherryfields .....	1.62	-0.39	1.45	-2.55	4.47	+1.44	3.48	+0.62	4.49	+0.29	2.95	+0.33	7.64	+2.60	6.56	+4.00	2.31	+0.09	3.29	-0.65	2.29	-1.13	2.83	+0.37	43.38	+4.42
Distributing Reservoir .....	3.31	+0.85	1.37	-2.06	1.99	-1.29	2.05	-1.09	3.35	-0.70	0.05	-0.91	3.21	-1.61	8.97	+7.50	0.93	-1.45	3.63	+1.73	2.48	-0.40	2.76	+0.38	33.20	-0.05
Jewell .....	2.47	-0.53	1.55	-1.85	3.79	-0.55	3.51	+0.09	4.23	-0.62	2.87	-1.10	3.57	-3.23	4.17	+1.58	2.98	+0.60	3.93	+1.08	3.57	+0.52	4.35	+1.51	40.69	-2.50
Laurel .....	3.30	+0.63	0.92	-3.21	2.54	-0.36	2.07	-1.28	4.70	+0.62	0.65	-2.75	1.72	-4.11	7.20	+4.64	0.98	-1.75	3.68	+1.19	2.97	-0.13	4.39	+2.61	35.09	-3.90
Md. Agricultural Coll .....	3.87	+1.47	1.35	-2.68	2.23	-0.65	2.24	-1.17	3.38	-0.95	0.35	-2.85	2.11	-1.30	6.68	+3.32	0.56	-1.79	3.33	+0.89	4.18	+1.67	4.11	+1.99	34.10	-2.05
Receiving Reservoir .....	3.70	+0.90	1.42	-1.91	2.30	-0.71	2.04	-1.17	3.38	-1.26	1.22	-2.07	2.49	-1.30	10.61	+8.45	0.90	-1.47	4.08	+2.00	2.86	-0.30	2.86	+0.44	36.76	+0.70
Solomon's .....	2.54	-0.67	1.86	-2.46	4.24	+1.28	3.68	+0.75	4.61	+0.78	1.72	-1.89	4.69	+0.61	7.88	+5.46	2.88	+1.09	3.87	-0.41	3.25	+0.35	3.29	+0.80	43.51	+5.79
Washington, D. C. ....	3.54	+0.04	1.64	-1.73	2.52	-1.64	2.35	-0.98	3.60	-0.33	1.33	-2.67	2.86	-1.73	8.76	+4.78	0.89	-2.82	3.54	+0.46	3.12	+0.31	3.56	+0.57	37.72	-5.74
Average .....	3.00	+0.37	1.41	-2.57	2.98	-0.44	2.60	-0.73	4.00	-0.19	1.23	-1.82	3.48	-1.24	6.70	+4.21	1.56	-0.85	3.94	+1.18	3.18	+0.30	3.44	+1.03	37.52	-0.75
EASTERN MARYLAND.																										
Chestertown .....	.....	.....	1.97	-1.65	2.69	-0.56	2.77	-0.83	5.78	+1.68	1.17	-3.41	.....	-1.63	7.62	+4.35	3.11	-0.07	3.74	+0.65	5.10	+2.20	5.98	+3.41	.....	.....
Coleman .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.34	.....	2.27	.....	5.36	.....	4.49	.....	5.28	.....	.....	.....
Denton .....	.....	.....	2.63	-1.78	4.68	+0.45	3.04	-0.15	.....	.....	1.83	-1.99	5.75	+2.47	.....	.....	2									

CHART SHOWING OBSERVATION AND FORECAST DISPLAY STATIONS.



# TOTAL PRECIPITATION, 1898.



## VOLUNTARY OBSERVERS.

Stations.	Observers.	Stations.	Observers.	Stations.	Observers.
MARYLAND.		MARYLAND—continued.		MARYLAND—continued.	
Annapolis	J. E. Abbott.	Frederick	McClintock Young.	Smithsburg 1	J. L. Miller.
Bachman's Valley	J. M. Myers.	Frostburg	G. G. Townsend.	Smithsburg 2	Dr. D. W. Crowther.
Baltimore	U. S. Weather Bureau.	Grantsville	J. S. Miller.	Solomons	W. H. Marsh, M. D.
Baltimore, J. H. Hospital	W. L. Woods.	Great Falls	Washington Aqueduct.	Sudlersville	J. S. Barwick.
Berlin	Dr. J. E. Dirickson.	Green Spring Furnace	R. G. Kinsell.	Sunnyside	J. G. Knauer.
Boettcherville	F. F. Brown.	Hagerstown	Prof. C. E. Carl.	Taneytown	Prof. H. Meier.
Boonsboro 1	C. E. Huntzberry.	Hancock	J. D. Stotlemeyer.	Van Bibber	H. A. Wroth.
Boonsboro 2	S. L. Ford.	Jewell	J. Plummer.	Westernport	Prof. O. H. Bruce.
Charlotte Hall	Prof. J. F. Coad.	Laurel	Dr. T. M. Baldwin.	Western Md. College	Dr. Cleveland Abbe, Jr.
Chase	J. W. Crouch.	McDonogh	S. H. Moore.	Woodstock	T. J. A. Freeman, S. J.
Cherryfields	Col. J. E. Coad.	Md. Agricultural Coll.	Prof. H. J. Patterson.	DELAWARE.	
Chestertown	Hon. M. DeK. Smith.	Mardela Springs	A. E. Acworth.	Dover	A. A. Bateman.
Chewsville	E. I. Oswald.	Mt. St. Mary's College	J. A. Mitchell, Ph. D.	Milford	J. Y. Foulk.
Clear Spring 1	W. E. Loose, Jr.	New Market	Dr. H. H. Hopkins.	Millsboro	Rev. L. W. Wells.
Clear Spring 2	W. W. Frantz.	Pocomoke City	R. M. Stevenson.	Newark	Prof. W. H. Bishop.
Coleman	J. S. Harris.	Port Deposit	J. I. France.	Seaford	W. T. Wallace.
Cumberland	Howard Shriver.	Princess Anne	J. R. Stewart.	DISTRICT OF COLUMBIA.	
Darlington	Prof. A. F. Galbreath.	Queenstown	Dr. W. K. Carroll.	Distributing Reservoir	Washington Aqueduct.
Deer Park	S. P. Specht.	Rock Hall 1	C. N. Satterfield.	Receiving Reservoir	Washington Aqueduct.
Denton	F. C. Ramsdell.	Rock Hall 2	I. L. Leary.	Washington	U. S. Weather Bureau.
Easton	Henry Shreve.	St. Charles College	Rev. G. L. Harig.		
Flintstone	G. G. Curtis, A. M.	Sandy Point	J. B. Dirickson.		
	N. T. Downs.	Sharpsburg	R. L. Hiberger.		

## FORECAST DISPLAYMEN.

[Figures in parenthesis indicate number of post-offices or addresses supplied with forecasts from distributing centers.]

Stations.	Displaymen.	Stations.	Displaymen.	Stations.	Displaymen.
MARYLAND.		MARYLAND—continued.		DELAWARE.	
Annapolis (16)†	W. M. Abbott.	Hagerstown	Ira W. Hays.	Laurel	Sussex Countian.
Baltimore (950)	U. S. Weather Bureau.	Manchester	C. J. H. Ganter.	Milford	J. Y. Foulk.
Baltimore, Anchorage†	T. Hanson.	Middlestown	G. C. Rhoderick, Jr.	Seaford	W. T. Wallace.
Baltimore	B. H. Shinn, B. & Lehigh R. R.	Oakland	Dr. J. L. McComas.	Smyrna (4)	A. E. Jardine.
Baltimore	B. H. Griswold, Western Md. R. R.	Ocean City	Capt. J. J. Demton.	Wilmington	Chief Operator, W. & N. R. R.
Berlin	L. L. Dirickson, Jr.	Oxford	H. S. Matthews.	DISTRICT OF COLUMBIA.	
Boonsboro (8)	C. E. Huntzberry.	Pocomoke City	R. M. Stevenson.	Washington (208)	U. S. Weather Bureau.
Bradshaw (4)	B. F. Taylor.	Salisbury	A. J. Benjamin, Baltimore.	NEW YORK.	
Cambridge	Samuel Leman.	Salisbury (14)	Miss M. D. Ellegood, P. M.	New York City (1)	U. S. Weather Bureau.
Chestertown	C. S. Smith.	Snow Hill	Purnell & Vincent.	PENNSYLVANIA.	
Easton	Dr. T. A. Councell.	Sykesville (11)	A. Hepner, P. M.	Philadelphia (34)	U. S. Weather Bureau.
Emmitsburg	Dr. J. A. Mitchell.	Taneytown (9)	Prof. H. Meier.		
Frederick (31)	G. S. DeGrange, P. M.	Westminster (14)	N. I. Gorsuch & Son.		
Frostburg (43)	Jno. Davis, P. M.	Westover	E. D. Long.		

† Wind signal display stations.

## CLIMATE AND CROP CORRESPONDENTS.

Correspondents.	Stations.	Correspondents.	Stations.	Correspondents.	Stations.
Abbott, J. E.	Annapolis.	Dove, E.	Rockville.	Miller, H. H.	Sandy Spring.
Acworth, A. E.	Mardela Springs.	Downs, N. T.	Flintstone.	Miller, J. A.	Keedysville.
Adams, H. C.	Mechanicsville.	Dutrow, R. C.	Adamstown.	Miller, J. L.	Smithsburg.
Addison, C. G.	Springfield.	Duttera, A.	Taneytown.	Miller, J. S.	Grantsville.
Adkins, J. J.	Wango.	Eckert, W. H.	Copperville.	Mitchell, Dr. J. A.	Mt. St. Mary's.
Albaugh, J. H.	Libertytown.	Ellison, J. F.	Lake Shore.	Moore, S. H.	McDonogh.
Allen, J. R.	Rising Sun.	Finkbine, W. B.	Annapolis.	Moore, J. J.	Bel Air.
Allibone, T. M.	Allibone.	Foulk, J. Y.	Milford, Del.	Neelson, J. B.	St. George, Del.
Amos, J. F.	Waterbury.	Frantz, W. W.	Clear Spring.	Nichols, C. E.	Nichols.
Andrews, J. B.	Hurlock.	Friel, Capt. D.	Queenstown.	Nichols, R. G.	Chestertown.
Bailey, J. F.	Harris Lot.	Gall, C. M.	Thurmont.	Oswald, E. J.	Chewsville.
Balderston, George.	Colora.	Gnagey, J. E.	Accident.	Patterson, Prof. H. J.	College Park.
Barry, J. A.	Brumms.	Hamilton, B. F.	Newark, Del.	Phelps, Dr. F. P.	Mt. Holly.
Bassford, T. J.	Plum Point.	Hamilton, C. R.	Flintville.	Posey, A. B.	Doncaster.
Bateman, A. A.	Dover, Del.	Harig, Rev. G. L.	Pine Orchard.	Price, F. T.	Cent Island.
Bay, A. S.	Emmorton.	Harris, J. S.	Coleman.	Ramsdell, F. C.	Denton.
Beall, A. L.	Collington.	Hatch, S. S.	Crownsville.	Rice, D. H.	Towson.
Beavin, G. F.	Crownsville.	Hays, A. H.	Parkton.	Richardson, Dr. H.	Great Mills.
Bennett, S. J.	Vienna.	Hendrickson, M. C.	Dickens.	Roe, F. P.	Greensboro.
Benson, E. T.	Royal Oak.	Hess, N. R.	Harney.	Rouzer, J. H.	Thurmont.
Benzinger, A. M.	Woodstock.	Hochstetler, W. A.	Cove.	Royer, P.	Keyser.
Bishop, Prof. W. H.	Newark, Del.	Holden, G. F.	Milford, Del.	Silver, A. P.	Glenville.
Bixler, E. C.	Westminster.	Holzappel, H., Jr.	Hagerstown.	Smith, F. O.	Dunkirk.
Blackiston, J. F.	White Plains.	Hopkins, Dr. H. H.	New Market.	Smith, J.	Linwood.
Bragamir, D.	Pisgah.	Huntzberry, C. E.	Boonsboro.	Snowden, F.	Ashton.
Brashears, L.	Murkirk.	Huyett, M. H.	Duyett.	Speers, S. P.	Earleigh Heights.
Broham, C. W.	Salem.	Israel, P. H.	Devilsconville.	Stewart, R.	Jewell.
Brown, E. B.	Seaford, Del.	Jackson, C. S.	Dailsville.	Stokes, Dr. S. A.	Cornersville.
Brown, F. F.	Cumberland.	Jackson, W. B.	Hockessin, Del.	Sullivan, W.	Farmington, Del.
Carlin, Dr. J. S.	Slidell.	Jenkins, J. J.	Port Tobacco.	Sweet, W. W.	Swanton.
Carr, G. W.	Clarksville.	Jump, W. F.	Cordova.	Taylor, B. F.	Bradshaw.
Carroll, Dr. W. K.	Queenstown.	Kelly, W. T.	Preston.	Thomas, W. B.	Malcolm.
Carsins, E. E.	Aberdeen.	Kennedy, A.	St. Mary's City.	Thompson, W. J.	Scarbore.
Chapman, W. B.	La Plata.	Key, J. B.	Chaplico.	Tydings, J. H. A.	St. Margarets.
Collins, J. R. D.	Aireys.	Kinsell, E. G.	Green Spring Furnace.	Waller, J. A.	Hebron.
Corbin, T. R.	Corbin.	Knauer, J. G.	Sunnyside.	Walls, S. H.	Sudlersville.
Coulbourn, Ira N.	Marion Station.	Late, J. W.	Rocky Ridge.	Welch, E. O.	Bristol.
Coulbourn, W. H.	Salisbury.	Lee, A. J.	Mt. Lake Park.	Welch, W. H.	Church Hill.
Cox, S., Jr.	Bel Air.	Leister, I. Dickson	Fluksburg.	Weller, H. A.	Graceham.
Crowther, Dr. D. W.	Smithsburg.	Lohr, P. P.	Bittinger.	Wells, Rev. L. W.	Millsboro, Del.
Curtiss, Prof. G. G.	Bagley.	Loose, W. E., Jr.	Clear Spring.	Williams, P. F.	Doncaster.
Davis, W. S.	Clements.	Maitland, T. L.	Sudley.	Willis, W.	St. Michaels.
Daymude, J. F.	Boys.	Marsh, Dr. W. H.	Solomons.	Witherow, W. W.	Taneytown.
Dickerson, W. H.	Dickerson.	McAvoy, Hugh.	Clarkson.	Witmer, D. J.	Beaver Creek.
Dirickson, J. B.	Berlin.	McDaniel, J. E.	McDaniel.	Wolf, G.	Kump.
Donaldson, R. T.	Patuxent.	Meier, Prof. H.	Taneytown.	Wroth, H. A.	Van Bibber.