



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU,

CO-OPERATING WITH THE

MARYLAND STATE WEATHER SERVICE

Established by an Act of the General Assembly of the State of Maryland, 1892,
and Maintained in Connection with



The Johns Hopkins University and the Maryland Agricultural College.
CENTRAL OFFICE, JOHNS HOPKINS UNIVERSITY, BALTIMORE, MD.

PROF. WM. B. CLARK,
JOHNS HOPKINS UNIVERSITY,
Director.

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Secretary and Treasurer.

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U. S. WEATHER BUREAU,
Meteorologist in Charge.

VOL. V, No. 1.

MONTHLY REPORT.

MAY, 1895.

Contains Review for the Month of April.

Stations Established and Inspected during April.

A number of new meteorological and display stations were established in April, and from the interest manifested by those becoming acquainted with, or taking part in the work, we may reasonably expect our State Weather Service to attain a much greater degree of usefulness during the present year than in any year of its past.

At the beginning of the month observations were begun at St. Charles College, near Ellicott City, Howard county, and the initial report, which was received among the very first of the completed monthly forms for April, is a model of excellence. It is signed by Rev. H. M. Chapuis, per H. O'Brien.

The next station to be added to the list was Laurel, Md. This city was visited, on the 13th, by an observer from the central office, who was fortunate in securing as meteorological observer, Dr. T. M. Baldwin, editor of "The Laurel Democrat." The reports from Laurel are particularly desired, not only on account of the prominence of the place, but, also, because of the situation, midway between the Baltimore and Washington stations. Comparisons of data will be interesting.

On the 18th a meteorological station was established (by a central office observer) at Oldtown, Allegany county, with Dr. H. C. Shipley as observer. This will be an important station, as it divides the distance between Cumberland and Hancock, thus forming the completing link in the chain of stations extending from western Garrett county to Delaware bay. Dr.

Shipley is a busy physician with a large country practice, but he has secured an assistant who will attend to the observations in his absence.

On the 19th a call was made upon Dr. J. S. Diehl, the observer at Hancock, Washington county. His instrument shelter is neat, efficient and properly placed at an elevation of about 8 feet above sod. His method of utilizing the rain-gauge crate as a support for the gauge is an excellent one. He removed the screws securing the side pieces to one of the hexagonal boards, and taking out the gauge, lowered the board two-thirds of the distance to the bottom of the crate, fastening it there with the screws. This makes a very good support, as can readily be seen, and the adoption of the method is suggested to other observers receiving gauges in the ordinary shipping crates.

The same day—the 19th—the place of Mr. E. G. Kinsell, who resides a short distance east of Green Spring Furnace, Washington county, was visited with the hope that he might be induced to take up meteorological work in connection with the U. S. Weather Bureau and Maryland State Weather Service. Observations were taken by him for the Smithsonian Institution in 1872-3, and the results of these observations are on file at this office. They have been used in the construction of climatic tables and charts, and it is desired to add to them. Word has been received from Mr. Kinsell that he will act as observer.

A station was established at Hagerstown, Washington county, on the 20th, with Prof. C. E. Carl, Asst. Principal of the City High School, as

observer. The importance of Hagerstown as one of the largest of Maryland's cities, and the fact that it is a central point in the beautiful and fertile Cumberland Valley, led to its selection as a meteorological and display station immediately after the establishment of the State Weather Service. Nearly two years ago, in response to a strongly endorsed application, instruments were sent to Hagerstown; but as their manipulation was not understood they were put to no actual use until transferred to the present observer. Prof. Carl's connection with the High School makes this the 10th educational institution to co-operate with the Maryland State Weather Service.

Mr. Charles Feldman, formerly observer at Edgemont, but now residing in Hagerstown, was seen by the observer from the central office, on the 20th. He stated that observations would be resumed at his place, near Edgemont, by May 1st. The data to be furnished by him will be valuable, as the station is situated in one of the important mountain peach districts.

At Frederick, on the 21st, a call was made upon Mr. McClintock Young, whose interest in the State Weather Service since its small beginning with only ten observers is remembered and appreciated. He not only furnished the instruments being used by himself, but those, also, in the possession of the Woman's College of Frederick. Mr. Young uses in connection with his rain-gauge a device of his own which effectually prevents the bottom of the gauge from bulging, or being otherwise damaged, during freezing weather. As a description of the device has been promised, no details, which would necessarily be incomplete, will be entered here. Being one of the foremost American inventors, a paper from him will be of especial interest to readers of the MONTHLY REPORT.

The station at New Market, Frederick county, was visited on the 22nd. It is expected that Miss M. D. Hopkins will resume observations about June 1st. The reports received from her were always models of clearness, accuracy and neatness, and they have been much missed during the past winter and spring months.

As for display stations, considerable improvement has been made in Eastern Maryland. The forecasts, and the cold wave and frost warnings, formerly telegraphed to Mr. L. W. Gunby, Salisbury, are now sent (by Mr. Gunby's permission) directly to Mr. A. J. Benjamin, Superintendent of the Baltimore, Chesapeake & Atlantic Railway Company. From Salisbury Mr. Benjamin telegraphs the forecasts, etc., without expense to the government, to the railway stations along his lines, where they are posted for the benefit of employees and the general public. Mr. Gunby continues to display the weather signal

flags at Salisbury. Mr. Benjamin has in view, also, the equipment of the larger places along the Baltimore, Chesapeake & Atlantic R. R., not already on the list of display stations, with weather signal flags.

Miscellaneous Notes.

Any voluntary observer having a box in his possession, in which thermometers were sent, will confer a favor upon this office by returning it. Paste the face of a franked envelope (addressed Observer, Weather Bureau, Baltimore, Md.) upon the box, and mail. The box will be used in forwarding thermometers to a newly established station.

Review of the Month—April.

WEATHER.

During the first twenty-six days of the month there occurred four well defined periods of rainfall. The first period included the 1st and 2nd and was due to a storm which, originating in Kansas on March 31st, was central near the western extremity of Lake Erie on the morning of April 1st. Thence it moved southeast to the Maryland and Virginia coast, where it remained, nearly stationary, during the 2nd. Its observed subsequent course was northeast.

The second period extended from the 7th to the 9th, but was only general on the 8th. It was caused by a slow-moving depression which was first observed on the 4th, in Alberta, north of Montana. This storm first traveled southeast to Kansas, and then curving northward reached the lower lake region on the 8th. On the evening of the same day it was central near Washington, and its observed course, thereafter, was northeast.

The third period was not so general as the preceding ones, and less rain fell. It occurred on the 13th, and scattered showers were also reported on the two succeeding days. This rain was plainly due to a storm that followed the often described path, across the Lake region and down the St. Lawrence Valley.

The fourth period occurred on the 22nd and was the lightest rain-storm of the month. It, also, was caused by a low area that passed from west to east across the Lake region and then down the St. Lawrence Valley.

Besides the periods mentioned, rain fell generally on the last four days of the month. A high area that was observed in British Columbia, the 24th, reached the St. Lawrence Valley on the 27th and, overlapping a low area to the southwest, caused northeasterly winds and rain

in Maryland and adjacent states. The high area passed east to the New England coast and remained there, being reinforced on the 30th by another high area from the northwest. As a result, northeasterly winds, with rains continued.

The eighteen days of generally fair weather were due of course to the high areas, or anti-cyclones, which alternated with the storms or cyclones. All the anti-cyclones of April were fair weather producers except the two that joined forces in the New England states at the last of the month. These were a cause in the production of the rains, for reasons already given.

The high temperature periods of the month occurred about the 9th, 13th, 20th, and 25th. They corresponded closely with the transition of the low areas.

Temperature (degrees).—Monthly mean (for entire territory covered), 52.3, being .6 above the normal; highest monthly mean, 58.2, at Bel Alton; lowest monthly mean, 45.0, at Deer Park; highest temperature, 89, at Bel Alton, Hancock, Pope's Creek, and Wilmington, Del., on the 25th; lowest temperature, 18, at Sunnyside, on the 11th; greatest local monthly range, 64, at Hancock; least local monthly range, 42, at Solomon's; monthly mean range, 53.5; monthly mean maximum, 63.0; monthly mean minimum, 42.3.

Precipitation (in inches).—Average, 4.97, being 1.13 above the normal; greatest amount, 9.28, at Garrison; least amount, 1.15, at West-ernport.

Wind.—Prevailing direction, northeast. Total movement in miles, Philadelphia, Pa., 8341; Baltimore, Md., 6208; Washington, D. C., 6258; Norfolk, Va., 7104.

Thunderstorms.—At Bachman's Valley, on the 2nd; at Burkittsville, on the 2nd; at Charlotte Hall, on the 2nd, 13th; at Cherryfields, on the 1st, 13th; at Denton on the 2nd; at Frederick, on the 13th; at Garrison, on the 13th, 26th; at Glyndon, on the 13th, 26th; at Jewell, on the 2nd, 13th; at Millsboro, on the 14th, 27th; at Mardela Springs, on the 2nd, 6th, 13th, 14th, 22nd, 27th; at Milford, Del., on the 2nd, 27th; at Mt. St. Mary's, on the 2nd; at Oakland, on the 1st, 13th; at Princess Anne, on the 2nd, 14th; at Pope's Creek, on the 13th, 14th, 26th; at Pocomoke City, on the 14th, 22nd; at Sharpsburg, on the 2nd; at Solomon's, on the 1st, 2nd, 13th, 14th, 22nd; at Sunnyside, on the 2nd, 8th, 13th; at Seaford, Del., on the 1st, 2nd; at Westminster, on the 2nd, 26th; at Wilmington, Del., on the 1st; at Woodstock, on the 1st, 13th, 26th.

Hail.—At Bachman's Valley, on the 2nd; at Burkittsville, on the 2nd, 23rd; at Charlotte

Hall, on the 13th, 14th; at Deer Park, on the 13th; at Frederick, on the 13th; at Garrison, on the 3rd; at Grantsville, on the 13th; at Millsboro, Del., on the 14th; at Mardela Springs, on the 2nd, 15th; at Oakland, on the 13th; at Pope's Creek, on the 13th; at Solomon's, on the 13th; at Westminster, on the 2nd.

Frost, killing.—At Bachman's Valley, on the 2nd, 3rd, 11th, 12th, 13th, 18th, 19th; at Denton, on the 12th, 18th; at Easton, on the 12th; at Fallston, on the 12th; at Millsboro, on the 12th; at Mardela Springs, on the 4th, 18th, 19th, 20th; at Newark, Del., on the 12th; at Princess Anne, on the 12th; at Pocomoke City, on the 3rd, 4th, 5th, 12th, 18th, 19th; at Sharpsburg, on the 11th, 14th, 18th, 19th.

Auroras.—At Burkittsville, on the 10th; at Princess Anne, on the 2nd, 14th; at Millsboro, Del., on the 11th, 12th, 17th, 19th.

Fogs, dense.—At Burkittsville, on the 28th; at Jewell, on the 30th; at Millsboro, Del., on the 29th, 30th.

Meteor.—At Jewell, on the 18th.

Halo, lunar.—At Woodstock College, on the 1st.

CROPS.

Week ending April 9th.

The late spring retarded farm work and the growth of crops, but was favorable to fruit which, on account of its slow development, now stands in but little danger from frost. Grain and grass have improved, and oats and clover are being sown. Early truck planting is in progress and corn ground is being prepared.

Week ending April 15th.

Rainy weather retarded farming operations. Wheat, rye, grass, and barley made decided improvement. Tobacco plants and early vegetables look well. Peaches are in bloom and the fruit prospects, generally, are bright. No damage from hail or frost has been reported.

Week ending April 22nd.

The temperature and rainfall were below the normal. Garden truck and crops generally improved. Wheat, oats, and rye are promising. Tobacco plants are plentiful and healthy. Fruit trees are blooming and the prospects throughout the state are that they will yield abundantly.

Week ending April 29th.

Frequent and timely rains improved all vegetation. Wheat promises a heavy crop, and tobacco plants continue to flourish. Corn and potato planting and the seeding of oats rapidly progress. Grass is much improved, and vegetables are growing well. The most encouraging reports as to the fruit prospects have been received from all sections.

DAILY PRECIPITATION FOR APRIL, 1895.

| STATIONS. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | Tot | |
|---------------------|-----|-----|------|---|-----|------|------|------|------|-----|----|-----|-----|------|-----|-----|----|-----|-----|----|----|-----|-----|-----|----|-----|------|------|------|-------|------|------|
| Sunnyside | .16 | .56 | T | | | | .35 | .74 | .94 | .25 | | + | .51 | .43 | .10 | T | T | | | | | .26 | | | | .09 | .13 | T | .08 | .09 | 4.69 | |
| Oakland | .28 | .29 | | T | | | .31 | .52 | .86 | | | .01 | .62 | .20 | .02 | | | | | | | .14 | | | | T | .14 | T | .08 | .10 | 3.58 | |
| Deer Park | .02 | .40 | | | | | | .85 | .73 | .13 | | | .70 | .12 | .10 | | | | | | | | | | | | | | .10 | .05 | 3.20 | |
| Grantsville | .27 | .20 | | | | | .60 | .90 | 1.10 | | | .10 | .60 | .05 | | | | | | | | .10 | | | | | .09 | .07 | .10 | | 4.18 | |
| Westport | T | .20 | | | | | .25 | .70 | | | | | | | | | | | | | | | | | | | | | | T | 1.15 | |
| Boettcherv. | | .10 | | | .20 | | | .60 | .50 | | | | .10 | T | | | | | | | | | | | | | + | .50 | .10 | .30 | 2.40 | |
| Cumb. (a) | | .20 | | | | | | .72 | | | | | | | | | | | | | | | | | | | | .37 | + | .34 | 1.63 | |
| Cumb. (b) | | .20 | | | | | .56 | .19 | | | | | | | | | | | | | | | | | | .04 | .30 | | .34 | | 1.63 | |
| Hancock | | .37 | | | | | + | .40 | | | | | .17 | | | | | | | | | | | | | | | | | .77 | 1.71 | |
| Sharpsburg | .02 | .65 | | | | | + | .47 | .10 | | | | .15 | T | T | | | | | | | .05 | | | | | .35 | .34 | .38 | .45 | 2.96 | |
| Burk'tsville | .05 | .82 | | | | | | .63 | .20 | .01 | | | .22 | | .01 | | | | | | | .09 | | | | | .40 | .30 | .26 | .47 | 3.46 | |
| Mt. St. Mary's Col. | T | .42 | | | | | + | 1.06 | .29 | | | | .20 | T | .01 | | | | | | | .04 | | | | | .26 | 1.16 | .30 | .35 | 4.09 | |
| Fred'k. (a) | .28 | .28 | | | | | + | 1.48 | | | | | .39 | | | | | | | | | .10 | | | | | + | + | + | 1.78 | 4.69 | |
| Woman's Col. | .60 | | | | | | | 1.40 | .65 | | | | .39 | | | | | | | | | .12 | | | | | + | 1.01 | + | .80 | 4.97 | |
| Taneytown | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bach. V'y | T | .45 | | | | | T | 1.95 | | | | | .60 | | T | | | | | | | .09 | | | | .01 | 1.30 | 1.05 | .60 | .40 | 6.45 | |
| W'stminstr | | .79 | | | | | | 1.93 | | | | | .39 | | | | | | | | | .09 | | | | | .65 | + | + | .65 | 5.45 | |
| Glyndon | .07 | .43 | .06 | | | | + | 2.40 | .07 | | | | .56 | | T | | | | | | | .07 | | | | | 2.02 | 1.28 | .30 | .34 | 7.60 | |
| Garrison | .18 | .65 | | | | | | 2.20 | .26 | | | | .72 | | T | | | | | | | .13 | | | | T | 2.15 | 1.35 | 1.20 | .44 | 9.28 | |
| Woodst. Col. | | T | .22 | | | | + | .45 | | | | | + | .40 | | | | | | | | T | | | | T | + | .50 | + | .43 | 2.00 | |
| Baltimore | .16 | .39 | .14 | | | | | 2.28 | .11 | T | | | .70 | | | | | | | | | .09 | | | | T | 1.58 | .76 | .37 | .86 | 7.42 | |
| St. Chas. Col. | .13 | .52 | | | | | | 1.57 | | | | | .72 | | | | | | | | | .11 | | | | | 2.00 | .76 | .70 | .74 | 7.25 | |
| Great Falls | .30 | ... | .33 | | | | | .95 | .75 | | | | .18 | | | | | | | | | ... | | | | | 2.00 | .10 | .65 | 5.26 | | |
| Falls'n Sch. | + | .73 | | | | | | 2.75 | .16 | | | | .78 | | | | | | | | | .08 | | | | | 1.32 | 1.91 | .25 | .54 | 8.52 | |
| Dar'g'n Aca'y | .13 | .48 | | | | | | 2.40 | | | | | .89 | | | | | | | | | ... | | | | | 2.08 | .06 | .47 | .17 | 6.68 | |
| Annapolis | .33 | .10 | | | | | | 2.08 | .12 | | | | .72 | | | | | | | | | ... | | | | | 1.42 | .71 | .22 | .83 | 6.63 | |
| Jewell | T | .65 | | | | | | 3.00 | | | | | .60 | T | | | | | | | | T | | | | | .75 | .25 | .85 | .15 | 6.25 | |
| Dist. R., D.C. | .07 | .14 | .24 | | | | | .90 | .75 | | | | .14 | .60 | | | | | | | | ... | | | | | 1.30 | .30 | .75 | 5.19 | | |
| Rec. R., D.C. | .08 | .11 | .45 | | | | | .92 | .90 | | | | .16 | .50 | | | | | | | | ... | | | | | 1.45 | .10 | .65 | 5.32 | | |
| Wash., D.C. | .05 | .24 | .16 | | | | T | 1.68 | .09 | .01 | | | .77 | .01 | T | | | | | | | ... | | | | | .84 | 1.17 | .68 | .51 | 6.26 | |
| Md. Agr. Col. | .10 | ... | .33 | | | | | 2.06 | .17 | | | | .48 | T | | T | | | | | | ... | | | | | .93 | .80 | .45 | .52 | 5.84 | |
| Laurel | | | | | | | | | | | | | | | | | | | | | | T | | | | | 1.90 | T | 1.10 | *3.00 | | |
| Up. Marl. | | .53 | .20 | | | | | 1.80 | .20 | | | | .57 | .01 | T | | | | | | | ... | | | | | .48 | .68 | .40 | .38 | 5.32 | |
| La Plata | | .40 | | | | | | .70 | 2.00 | | | .10 | .45 | + | .50 | | | | | | | ... | | | | | 1.10 | .10 | .70 | .45 | 6.50 | |
| Bel Alton | | | .45 | | | | .80 | 1.80 | | | | | .40 | .50 | | | | | | | | ... | | | | | .80 | .50 | .30 | .40 | 5.95 | |
| Pope's Cr'k | | | | | | 1.50 | 1.30 | | | | | | .35 | .55 | | | | | | | | ... | | | | | + | .90 | .70 | .25 | 5.55 | |
| Solomon's | .11 | .32 | .25 | | | | | 1.85 | T | | | | .25 | T | T | | | | | | | .08 | | | | | .05 | 1.25 | .60 | .76 | 5.52 | |
| Charl. Hall Sch. | | .21 | .47 | | | | | 3.67 | | | | | .48 | | .12 | | | | | | | ... | | | | | T | .80 | .40 | .44 | 6.65 | |
| Cherryfields | .09 | .13 | .42 | | | | | .49 | .57 | .03 | | | ... | .21 | T | .04 | | | | | | ... | | | | | T | 1.88 | .12 | .52 | 4.51 | |
| Chestert'n. | T | .60 | | | | | | 2.19 | | | | | .55 | | | | | | | | | .02 | | | | | 1.95 | .05 | .50 | .23 | 6.09 | |
| Denton | T | T | 1.04 | T | | | | 1.71 | .15 | | | | .38 | | | | | | | | | T | | | | | ... | .38 | .57 | .36 | 4.59 | |
| Easton | .84 | + | | | | | | T | | | | | .45 | .04 | | | | | | | | .03 | | | | | + | + | .60 | .50 | .24 | 2.70 |
| Mardela Sp. | .02 | + | 1.28 | | | | | + | 2.10 | | | | ... | .36 | .08 | | | | | | | .03 | | | | | + | + | + | 2.54 | 6.35 | |
| Princess An. | .15 | .35 | .37 | | | | | 1.40 | | | | | ... | .27 | .97 | .08 | | | | | | .04 | | | | | ... | .83 | .09 | .99 | 5.58 | |
| Poc'm'k Cit. | .22 | + | .88 | | | | | 1.10 | .45 | | | | .15 | 1.10 | .06 | | | | | | | .10 | | | | | 1.59 | .67 | .25 | .87 | 7.44 | |
| Wilm't. Del. | .11 | .09 | .24 | | | | | + | 1.82 | | | | .53 | .01 | | T | | | | | | .05 | | | | | + | 1.19 | .41 | .44 | 4.89 | |
| Newark Col Del. | .11 | .29 | + | | | | | 1.83 | .53 | | | | .70 | | | | | | | | | .05 | | | | | ... | .48 | .45 | .14 | .22 | 4.80 |
| Dover, Del. | + | + | .96 | | | | | 2.32 | | | | | .45 | ... | | | | | | | | ... | | | | | + | + | + | 1.67 | 5.40 | |
| Milford, Del. | .30 | .02 | .49 | | | | | + | 2.08 | | | | .38 | T | | | | | | | | T | | | | | ... | + | + | + | 1.09 | 5.38 |
| Seaford, Del. | .14 | .10 | 1.23 | | | | | + | 1.75 | | | | .27 | .62 | ... | | | | | | | T | | | | | ... | T | .81 | + | 1.75 | 6.17 |
| Millsb'o, Del. | .05 | .65 | .46 | | | | | ... | 1.65 | .14 | | | ... | .10 | | | | | | | | .04 | | | | | ... | .90 | .57 | .28 | .87 | 5.71 |
| B'dsn't, Va. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Norfolk, Va. | .02 | .52 | .56 | | | | | .68 | .04 | | | | .06 | .36 | .02 | | | .16 | .01 | | | ... | .08 | .15 | | | ... | .12 | 1.50 | .97 | .82 | 6.07 |
| Warsaw, Va. | | | .52 | | | | | 2.03 | .16 | | | | .28 | .07 | | | | | | | | ... | ... | | | | ... | .15 | + | + | 2.05 | 5.22 |
| Phila. Pa. | .11 | .18 | .17 | | | T | | 2.18 | 1.11 | | | | .49 | | | T | | | | | | .07 | | | | | ... | .64 | .36 | .52 | .31 | 6.14 |

NOTE.—"T" indicates a trace of rain or melted snow. † Dates on which rain fell, but not measured until next observation.
* Record incomplete.

MAP OF MARYLAND AND DELAWARE

SHOWING
THE PRECIPITATION
AND
LINES OF MEAN TEMPERATURES
FOR APRIL, 1895.

Scale of Shades:



0 TO 2 INCHES.
2 TO 4 "
OVER 4 "

First figures indicate temperature.
Second " " precipitation.

Apr. '95.

SCALE OF MILES.

THE PHILADELPHIA GEOGRAPHIC CO. NEW YORK

J. H. Forbert.

Meteorological and Weather Signal Display Stations of the Maryland State Weather Service.

| Stations. | County. | Meteorological Observer. | Displayman. |
|-------------------------------|-----------------|---|---|
| Annapolis | Anne Arundel | J. E. Abbott. | W. M. Abbott. |
| Appleton | Cecil | | W. C. Henderson. |
| Bachman's Valley | Carroll | J. M. Myers. | |
| Baltimore | | G. N. Wilson. Associate Editor of Weekly Reports. A. T. Brewer. Associate Editor of Monthly Reports. J. H. Donaldson. F. S. Coale. | |
| Bel Air | Harford | | N. N. Nock. |
| Bel Alton | Charles | Walter Cox. | |
| Boethelville | Allegany | F. F. Brown. | |
| Bradshaw | Baltimore | | B. F. Taylor. |
| Buckeystown | Frederick | | A. W. Nicodemus. |
| Burkittsville | Frederick | J. P. Slifer. | |
| Cambridge | Dorchester | | Samuel Lehman. |
| Charlotte Hall School | St. Mary's | J. Francis Coad. | |
| Cherryfields | St. Mary's | J. Edwin Coad. | |
| Chestertown | Kent | Hon. M. deK. Smith. | |
| Cumberland | Allegany | Howard Shriver. E. T. Shriver. | |
| Darlington Academy | Harford | Prof. A. F. Galbreath. | |
| Deer Park | Garrett | S. P. Specht. | |
| Delaware City, Del. | New Castle | | W. E. Reybold. |
| Denton | Caroline | F. C. Ramsdell. | |
| Dickerson | Montgomery | | W. H. Dickerson. |
| Distributing Reservoir, D. C. | | Maj. J. G. D. Knight. | |
| Dover, Del. | Kent | Jno. S. Jester. | Philip Burnet. |
| Easton | Talbot | Henry Shreve. | Henry Shreve. |
| Fallston School | Harford | G. G. Curtiss, A. M. | |
| Flintstone | Allegany | | N. T. Downes. |
| Frederick | Frederick | McClintock Young. | "The News." |
| Woman's College | Frederick | Miss W. A. Lantz. | |
| Frederica, Del. | Kent | | Miss E. V. Newnom. Miss L. T. Frazier. Walter Dorsey. |
| Garey P. O. | Howard | | |
| Garrison | Baltimore | A. W. Nyce. | |
| Glyndon | Baltimore | J. E. Henry | J. J. Dyer. |
| Grantsville | Garrett | J. S. Miller | T. H. Bittinger. |
| Great Falls | Montgomery | Maj. J. G. D. Knight. | |
| Hampstead | Carroll | | H. H. Meals. |
| Hancock | Washington | Dr. J. S. Diehl. | |
| Hartly, Del. | Kent | | Miss C. A. Forde. |
| Havre de Grace | Harford | | W. S. McCombs. |
| Johns Hopkins Hospital | | W. L. Woods. | |
| Kenton, Del. | Kent | | W. S. Arthurs. |
| Kirkwood, Del. | New Castle | J. S. Carnagy. | |
| La Plata | Charles | J. S. Turner | J. S. Turner. |
| Laurel | Prince George's | Dr. T. M. Baldwin. | |
| Laurel, Del. | Sussex | | E. D. C. Hegeman. |
| Leonading | Allegany | | J. J. Robinson. |
| Mardela Springs | Wicomico | A. E. Acworth | L. A. Wilson. |
| Marshall Hall | Charles | F. H. Deal. | |
| Maryland Agricultural College | Prince George's | Prof. J. H. Patterson. | |
| McDonogh School | Baltimore | H. Norwig. | |
| Middletown | Frederick | | G. C. Rhoderick, Jr. |
| Milford, Del. | Kent | J. Y. Foulk | J. Y. Foulk. |
| Millsboro, Del. | Sussex | Rev. L. W. Wells. | |
| Mt. St. Mary's College | Frederick | J. A. Mitchell, Ph. D. | Jos. H. Martin. |
| Newark College, Del. | New Castle | Prof. Wm. H. Bishop. | |
| Oakland | Garrett | J. Lee McComas, M. D. | J. L. McComas, M. D. |
| Odenton | Anne Arundel | | E. B. Watts. |
| Princess Anne | Somerset | Jas. R. Stewart. | L. F. Wilson. |
| Pocomoke City | Worcester | R. M. Stevenson | E. M. Stevenson. |
| Pope's Creek | Charles | George Dent. | |
| Receiving Reservoir, D. C. | | Maj. J. G. D. Knight. | |
| Rising Sun | Cecil | | Dr. L. R. Kirk. |
| Salisbury | Wicomico | | L. W. Gunby. |
| Seaford, Del. | Sussex | H. L. Wallace | H. L. Wallace. |
| Sharpsburg | Washington | E. L. Hiberger. | |
| Smyrna, Del. | Kent | | A. D. Yocum. |
| Snow Hill | Worcester | | Furnell & Vincent. |
| Solomon's | Calvert | W. H. Marsh, M. D. | |
| †Sparrow's Point | Baltimore | | Md. Steel Co. |
| St. Charles College | Howard | Rev. H. M. Chapuis, S. S. | |
| Sunnyside | Garrett | John G. Knauer. | |
| Sykesville | Carroll | J. B. Perrie. | J. S. Hyatt. |
| Upper Marlboro | Prince George's | S. W. Beall. | |
| Washington, D. C. | Allegany | Prof. O. H. Bruce. | |
| Western Port | Howard | | Postmaster. |
| West Friendship | Carroll | Prof. Roland Watts. | |
| Westminster | Somerset | | E. D. Long. |
| Westover | New Castle | F. C. D. McKay | Wm. Lawton. |
| Wilmington, Del. | Frederick | | G. F. Smith. |
| Woodsboro | Baltimore | T. J. A. Freeman, S. J. | |
| Woodstock College | Northampton | C. R. Moore. | |
| *Birdanest, Va. | Norfolk | Jas. J. Gray. | |
| *Norfolk, Va. | Richmond | C. H. Constable. | |
| *Warsaw, Va. | | | |

*Stations of the Virginia State Weather Service. †Whistle signals only.

MONTHLY SUMMARY OF REPORTS FOR APRIL, 1895.

| STATIONS. | COUNTIES. | Altitude above sea in ft. | Latitude. | Longitude. | TEMPERATURE. | | | | | | | | | | Total Precipitation. | Total Snow-fall. | Clear Days. | Fair Days. | Cloudy Days. | Rainy Days. (0.1 in. or more) | Prevailing Winds. |
|----------------------------|-------------------|---------------------------|-----------|------------|---------------|--------------|--------------|---------|--------|---------|---------------|----------------|-------|-----|----------------------|------------------|-------------|------------|--------------|-------------------------------|-------------------|
| | | | | | Monthly Mean. | Mean of Max. | Mean of Min. | Max. | | Min. | | Monthly Range. | | | | | | | | | |
| | | | | | | | | Degrees | Date. | Degrees | Date. | | | | | | | | | | |
| WESTERN MARYLAND. | | | | | | | | | | | | | | | | | | | | | |
| Sunnyside..... | Garrett..... | 2440 | 39°20' | 79°21' | 47.0 | 54.5 | 39.5 | 79 | 25 | 18 | 11 | 61 | 4.69 | 5.5 | 13 | 6 | 11 | 13 | S. W. | | |
| Oakland..... | Garrett..... | 2380 | 39 24 | 79 18 | 46.0 | 56.0 | 35.9 | 76 | 25 | 22 | 11 | 54 | 3.58 | ... | 11 | 12 | 7 | 13 | S. W. | | |
| Deer Park..... | Garrett..... | 2457 | 39 25 | 79 13 | 45.0 | 58.2 | 31.8 | 80 | 26 | 20 | 19 | 60 | 3.20 | ... | ... | ... | ... | ... | ... | | |
| Grantsville..... | Garrett..... | ... | 39 45 | 79 10 | 46.2 | 55.4 | 36.9 | 76 | 25 | 22 | 11 | 54 | 4.18 | ... | 13 | 4 | 13 | 12 | S. W. | | |
| Westernport..... | Alleghany..... | ... | 39 28 | 78 2 | 50.4 | 61.3 | 39.5 | 81 | 26 | 27 | 10 | 54 | 1.15 | ... | ... | ... | ... | ... | ... | | |
| Boettcherville 1*..... | Alleghany..... | ... | 39 39 | 78 48 | 52.1 | ... | ... | 86 | 25, 26 | 32 | 5, 11, 14, 19 | 54 | 2.40 | ... | ... | ... | ... | ... | ... | | |
| Cumberland (a)..... | Alleghany..... | 650 | 39 39 | 78 46 | 52.9 | 62.2 | 43.6 | 79 | 19 | 32 | 10 | 47 | 1.63 | ... | ... | ... | ... | ... | E. | | |
| Cumberland (b)..... | Alleghany..... | 700 | 39 39 | 78 45 | 52.0 | 60.2 | 43.8 | 83 | 25 | 32 | 11 | 51 | 1.63 | ... | 14 | 7 | 9 | 6 | ... | | |
| Hancock..... | Washington..... | ... | 39 40 | 78 10 | 52.6 | 65.4 | 39.7 | 89 | 25 | 25 | 11 | 84 | 1.71 | ... | 13 | 8 | 9 | 8 | W. | | |
| Sharpsburg..... | Washington..... | ... | 39 25 | 77 45 | 52.4 | 62.8 | 42.1 | 87 | 25 | 30 | 11, 18 | 57 | 2.96 | ... | 12 | 6 | 12 | 11 | N. W. | | |
| NORTHERN-CENTRAL MD. | | | | | | | | | | | | | | | | | | | | | |
| Burkittsville..... | Frederick..... | ... | 39 25 | 77 35 | 52.5 | 62.0 | 43.0 | 85 | 25 | 32 | 11, 18 | 53 | 3.46 | ... | 10 | 10 | 10 | 12 | W. | | |
| Mt. St. Mary's Col. 1..... | Frederick..... | 720 | 39 43 | 77 20 | 52.6 | ... | 43.5 | *84 | 25 | 29 | 4 | 55 | 4.09 | ... | 4 | 13 | 13 | 10 | N. | | |
| Frederick..... | Frederick..... | 280 | 39 24 | 77 18 | a52.4 | b62.2 | a42.6 | 85 | 25 | 32 | 4, 11 | 53 | 4.69 | ... | ... | ... | ... | ... | ... | | |
| Woman's College..... | Frederick..... | 280 | 39 24 | 77 18 | 53.1 | 63.2 | 43.0 | 84 | 25 | 33 | 4 | 51 | 4.97 | ... | 15 | 9 | 6 | 8 | N. W. | | |
| Taneytown..... | Carroll..... | ... | 39 40 | 77 9 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | |
| Bachman's Val. 1*..... | Carroll..... | ... | 39 37 | 76 55 | 49.8 | ... | ... | 84 | 25, 26 | 28 | 4 | 56 | 6.45 | ... | 15 | 5 | 10 | 9 | S. E. | | |
| Western Md. Col. | Carroll..... | ... | 39 25 | 77 0 | 54.4 | 65.8 | 41.7 | 84 | 26 | 30 | 4, 11, 12 | 54 | 5.45 | ... | 13 | 6 | 11 | 8 | N. W. | | |
| Glyndon..... | Baltimore..... | 650 | 39 27 | 76 45 | 51.6 | 62.6 | 40.5 | 84 | 25, 26 | 25 | 19 | 59 | 7.60 | ... | 19 | 2 | 9 | 11 | N. E. | | |
| Garrison..... | Baltimore..... | ... | 39 23 | 76 49 | 50.6 | 60.9 | 40.6 | 85 | 25 | 28 | 4, 12 | 57 | 9.28 | ... | 14 | 6 | 10 | 10 | W. | | |
| McDonogh School..... | Baltimore..... | 535 | 39 23 | 76 44 | c51.1 | c59.1 | c43.1 | 80 | 25, 26 | 32 | 4, 11 | 48 | ... | ... | ... | ... | ... | ... | ... | | |
| Woodstock Col. | Baltimore..... | 392 | 39 20 | 76 49 | 51.4 | 62.0 | 40.9 | 85 | 25 | 27 | 15 | 58 | 2.00 | ... | 8 | 10 | 12 | 6 | N. W. | | |
| Baltimore..... | Baltimore..... | 179 | 39 17 | 76 36 | 52.8 | 60.7 | 44.9 | 86 | 25 | 34 | 4 | 52 | 7.42 | ... | 10 | 12 | 8 | 11 | S. E. | | |
| Johns Hopkins Hos..... | Howard..... | ... | 39 17 | 76 36 | 52.0 | 61.1 | 42.9 | 86 | 25 | 33 | 11 | 53 | ... | ... | ... | ... | ... | ... | ... | | |
| St. Charles College..... | Howard..... | 300 | 39 16 | 76 44 | 53.8 | 59.7 | 46.0 | 80 | 25, 26 | 35 | 5 | 45 | 7.25 | ... | 17 | ... | 13 | 9 | N. W. | | |
| Great Falls 1*..... | Montgomery..... | ... | 39 0 | 77 14 | 53.9 | ... | ... | 84 | 26 | 33 | 4 | 51 | 5.28 | ... | ... | ... | ... | ... | ... | | |
| Fallston School 1*..... | Harford..... | 450 | 39 31 | 76 24 | 51.0 | ... | ... | 82 | 25 | 33 | 4 | 49 | 8.52 | ... | 8 | 11 | 11 | 12 | E. | | |
| Darlington Acad'y..... | Harford..... | 300 | 39 39 | 76 14 | 50.4 | 60.4 | 40.4 | 85 | 25 | 28 | 4 | 57 | 6.68 | ... | 18 | 5 | 7 | 8 | ... | | |
| SOUTHERN MARYLAND. | | | | | | | | | | | | | | | | | | | | | |
| Annapolis..... | Anne Arund'l..... | 20 | 39 58 | 76 30 | 53.6 | 62.0 | 45.1 | 84 | 25 | 34 | 3, 4 | 50 | 6.63 | ... | 17 | ... | 13 | 8 | S. E. | | |
| Jewell..... | Anne Arund'l..... | ... | 38 44 | 76 36 | 53.6 | 62.9 | 44.3 | 85 | 25, 26 | 32 | 4 | 53 | 6.25 | ... | 18 | 4 | 8 | 7 | N. E. | | |
| Dist. Res., D. C. 1*..... | ... | ... | 38 52 | 77 0 | 54.6 | ... | ... | 80 | 26 | 36 | 3 | 44 | 5.19 | ... | ... | ... | ... | ... | ... | | |
| Rec. Res., D. C. 1*..... | ... | ... | 38 52 | 77 0 | 53.8 | ... | ... | 82 | 26 | 35 | 3, 4 | 47 | 5.82 | ... | ... | ... | ... | ... | ... | | |
| Washington, D. C. | ... | 112 | 38 52 | 77 0 | 53.8 | 62.7 | 44.8 | 86 | 25 | 33 | 12 | 53 | 6.26 | ... | 11 | 8 | 11 | 13 | N. E. | | |
| Md. Agricultural Col..... | Pr. George's..... | ... | 38 58 | 76 56 | b51.7 | b62.8 | b40.6 | 85 | 25 | 26 | 4 | 59 | 5.84 | ... | ... | ... | ... | ... | ... | | |
| Laurel..... | Pr. George's..... | ... | 39 5 | 76 45 | o54.6 | o66.0 | o43.1 | 86 | 26 | 34 | 19 | 52 | o3.00 | ... | ... | ... | ... | ... | ... | | |
| Upper Marlboro..... | Pr. George's..... | ... | 38 47 | 76 45 | 52.8 | 63.5 | 42.0 | 88 | 26 | 30 | 4, 12 | 58 | 5.32 | ... | 15 | 17 | 8 | 11 | S. E. | | |
| Marshall Hall..... | Charles..... | ... | 38 42 | 77 8 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | |
| La Plata..... | Charles..... | ... | 38 32 | 77 0 | 55.6 | 65.1 | 46.2 | 85 | 25, 26 | 30 | 11 | 55 | 6.50 | ... | ... | ... | ... | ... | ... | | |
| Bel Alton..... | Charles..... | ... | 38 26 | 77 1 | 58.2 | 70.5 | 45.8 | 89 | 25 | 32 | 11 | 57 | 5.95 | ... | ... | ... | ... | ... | ... | | |
| Pope's Creek..... | Charles..... | ... | 38 22 | 77 1 | 53.4 | 63.7 | 43.2 | 89 | 25 | 29 | 11 | 60 | 5.55 | ... | ... | ... | ... | ... | ... | | |
| Solomon's..... | Calvert..... | 20 | 38 19 | 76 27 | 53.9 | 62.2 | 45.7 | 77 | 20, 25 | 35 | 4 | 42 | 5.52 | ... | 6 | 7 | 17 | 10 | S. E. | | |
| Charlotte Hall Sch'l..... | St. Mary's..... | ... | 38 28 | 76 48 | 54.2 | 64.8 | 43.7 | 87 | 25 | 29 | 4, 12 | 58 | 6.65 | ... | 11 | 15 | 4 | 9 | N. E. | | |
| Cherryfields 1..... | St. Mary's..... | ... | 38 11 | 76 24 | 52.9 | ... | ... | ... | ... | ... | ... | ... | 4.51 | ... | 9 | 12 | 9 | 12 | N. E. | | |
| EASTERN MD. AND DELAWARE. | | | | | | | | | | | | | | | | | | | | | |
| Chestertown..... | Kent..... | 80 | 39 13 | 76 4 | 51.9 | 61.2 | 42.6 | 81 | 25 | 31 | 12 | 50 | 6.09 | ... | 14 | 9 | 7 | 8 | S. | | |
| Denton 1..... | Caroline..... | 42 | 38 47 | 75 41 | 54.8 | 65.9 | 43.7 | 87 | 25 | 28 | 12 | 59 | 4.59 | † | ... | ... | ... | ... | ... | | |
| Easton..... | Talbot..... | 35 | 38 42 | 76 6 | 53.7 | 63.5 | 43.9 | 84 | 25 | 30 | 12 | 54 | 2.70 | ... | 11 | 4 | 15 | 8 | N. W. | | |
| Mardela Spr..... | Wicomico..... | 25 | 38 30 | 75 39 | 53.4 | 62.6 | 44.2 | 82 | 26 | 27 | 12 | 55 | 6.35 | ... | 8 | 12 | 10 | 11 | S. E. | | |
| Princess Anne..... | Somerset..... | ... | 38 10 | 75 35 | 54.1 | 64.8 | 43.4 | 83 | 25, 26 | 27 | 12 | 56 | 5.58 | ... | 10 | 12 | 8 | 12 | S. W. | | |
| Pocomoke City..... | Worcester..... | 37 | 38 5 | 75 38 | 55.3 | 64.2 | 46.4 | 84 | 26 | 32 | 12 | 52 | 7.44 | ... | 12 | 12 | 6 | 12 | N. E. | | |
| Wilmington, Del..... | Newcastle..... | 115 | 39 44 | 75 33 | 54.0 | 64.4 | 43.7 | 89 | 25 | 31 | 5 | 58 | 4.89 | ... | 11 | 11 | 8 | 12 | S. E. | | |
| Delaware College..... | Newcastle..... | ... | 39 40 | 75 37 | a49.7 | 59.4 | 40.0 | 84 | 25 | 30 | 11 | 54 | 4.80 | ... | 11 | 3 | 16 | 10 | N. W. | | |
| Kirkwood, Del. 1..... | Newcastle..... | ... | 39 35 | 75 41 | 48.3 | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | ... | | |
| Dover, Del..... | Kent..... | 40 | 39 10 | 75 30 | 52.7 | 61.7 | 43.7 | 85 | 25, 26 | 32 | 4, 12 | 53 | 5.40 | ... | 16 | 4 | 10 | 9 | E. | | |
| Milford, Del..... | Kent..... | ... | 38 45 | 75 25 | 53.8 | 63.4 | 44.3 | 85 | 25 | 30 | 12 | 55 | 5.38 | ... | 19 | 0 | 11 | 9 | W. | | |
| Seaford, Del..... | Sussex..... | ... | 38 40 | 75 35 | 53.5 | 64.4 | 42.6 | 84 | 25, 26 | 28 | 12 | 56 | 6.17 | ... | ... | ... | ... | ... | ... | | |
| Millsboro, Del..... | Sussex..... | ... | 38 44 | 75 15 | 52.9 | 62.7 | 43.1 | 86 | 25 | 28 | 12 | 58 | 5.71 | ... | 17 | 6 | 7 | 10 | N. E. | | |
| † VIRGINIA. | | | | | | | | | | | | | | | | | | | | | |
| Norfolk..... | Richmond..... | ... | ... | ... | 57.7 | 66.1 | 49.3 | 84 | 25 | 39 | 4 | 45 | 6.07 | ... | 18 | 7 | 5 | 16 | N. E. | | |
| Warsaw..... | Richmond..... | ... | ... | ... | 55.0 | 65.4 | 44.5 | 87 | 25 | 28 | 4, 12 | 59 | 5.22 | ... | 8 | 12 | 10 | 7 | E. | | |
| † PENNSYLVANIA. | | | | | | | | | | | | | | | | | | | | | |
| Philadelphia..... | ... | ... | ... | ... | 51.6 | 60.2 | 43.1 | 84 | 25 | 32 | 11 | 52 | 6.14 | ... | 11 | 3 | 16 | 11 | N. E. | | |
| AVERAGES | | | | | | | | | | | | | | | | | | | | | |
| Western Maryland..... | ... | ... | ... | ... | 49.7 | 62.9 | 39.2 | ... | ... | ... | ... | 55.8 | 2.71 | ... | 12.7 | 7.2 | 10.2 | 10.6 | S. W. | | |
| Northern-Cent'l Md..... | ... | ... | ... | ... | 52.2 | 62.0 | 42.7 | ... | ... | ... | ... | 50.7 | 5.94 | ... | 12.7 | 7.4 | 10.0 | 9.4 | N. W. | | |
| Southern Maryland..... | ... | ... | ... | ... | 54.0 | 64.0 | 44.0 | ... | ... | ... | ... | 52.9 | 5.80 | ... | 12.4 | 7.6 | 10.0 | 10.0 | N. E. | | |
| East. Md. and Del..... | ... | ... | ... | ... | 53.2 | 62.9 | 43.4 | ... | ... | ... | ... | 54.6 | 5.43 | ... | 12.9 | 7.3 | 9.7 | 10.1 | N. E. | | |
| Entire territory..... | ... | ... | ... | ... | 52.3 | 63.0 | 42.3 | ... | ... | ... | ... | 53.5 | 4.97 | ... | 12.9 | 7.4 | 10.0 | 10.0 | N. E. | | |

* Extremes of temperature from observed readings of dry thermometer. A numeral following the name of a station indicates the hours of observation from which the mean temperature was obtained, thus:

† Mean of 7 a. m. + 2 p. m. + 9 p. m. + 4. * Mean of 8 a. m. + 3 p. m. + 2. † Mean of 7 a. m. + 2 p. m. + 2.