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U. S. DEPARTMENT OF AGRICULTURE.

REPORT FOR MAY, 1900.

GEORGIA SECTION

OF THE

CLIMATE AND CROP SERVICE

OF THE

WEATHER BUREAU.

PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.

UNDER DIRECTION OF
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CHIEF OF WEATHER BUREAU

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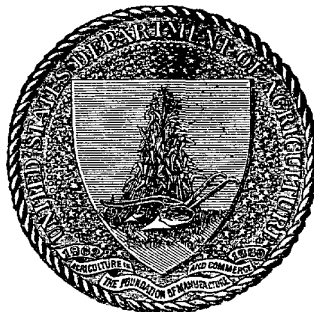
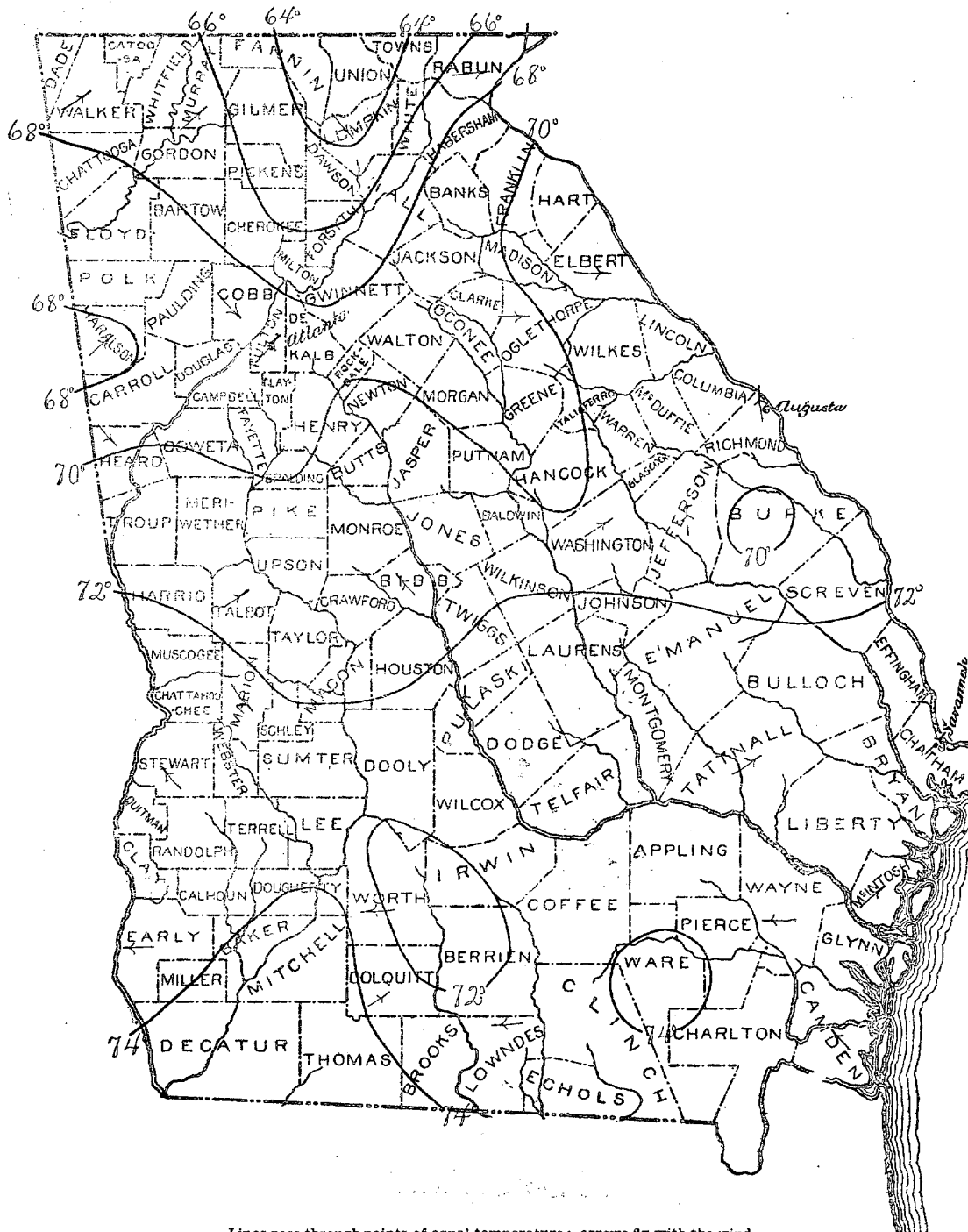


Chart I. Monthly mean isotherms and prevailing winds, May, 1900.



Lines pass through points of equal temperature; arrows fly with the wind.

U. S. DEPARTMENT OF AGRICULTURE,
CLIMATE AND CROP SERVICE

OF THE
WEATHER BUREAU.
 CENTRAL OFFICE: WASHINGTON, D. C.

GEORGIA SECTION,
 J. B. MARBURY, Section Director,
 ATLANTA, GA.

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No. 5.

WEATHER AND CROP CONDITIONS FOR MAY.

The prevalence of cool nights during the entire month, and conditions bordering on a drought during the second decade, were unfavorable features of the weather. The latter condition was overcome during the third decade, when copious showers occasioned a marked improvement in crops. Low temperatures were registered on several mornings, mainly on the 10th and 11th. Light frosts formed in the mountain districts, and on low lands in the central counties, without material damage. Cotton made slow growth, owing to the cool nights, but at the end of the month the plants, while unseasonably small, were healthy, and the stands were as a rule good. Chopping was about completed in the south by the 25th; in the middle section by the close of the month, and was progressing rapidly in the northern counties. Late cotton suffered at first from lack of moisture, but later in the month it began coming up nicely. There was some complaint of damage by lice. Corn was plowed the second time in many counties, and ears appeared in some fields in the far south by the 25th; the general condition of the crop was regarded as satisfactory. Wheat rust occurred in many sections, but the yield of this crop was reported as almost uniformly excellent at harvesting, which began in favored localities about the 23rd, and became general in all but the northern counties by the 28th. Early sown oats harvested well. White potatoes were damaged considerably by bugs; large shipments of the new crop were made. Quantities of sweet potato slips were set, and thrived. Small shipments of early peaches were made on the 21st and 22d, and a large output of a fine quality of fruit is expected. Apples suffered severely from blight, and but little is expected of them. Minor crops, vegetables, berries, etc., prospered. At the close of the month nearly all crops were small for the season, but the general situation showed marked gains and flattering prospects.

The mean temperature of the month, 70.8 degrees was practically normal. The extremes in mean temperature during the past nine years, in May, are 69.3 degrees, in 1897, and 76.0 degrees, in 1896. The maximum temperature, 96 degrees, was the lowest recorded in this month; the highest temperature recorded in any May since 1892, was 103 degrees, in 1898. The minimum temperature, 32 degrees,

was lower than usual, and was the lowest recorded in this month, with one exception, 31 degrees, in 1895. The rainfall was below the normal, except over scattered localities, but the average for the State was considerably higher than that of the past three Mays. The unequal distribution of precipitation was a marked feature. Another feature of the weather was the small amount of cloudiness, there being an average of but 5 cloudy days, as against 14 clear and 12 partly cloudy. Thunderstorms were of frequent occurrence, and a large proportion of the month's precipitation resulted from such storms.

Local meteorological events during the month were a severe wind storm which passed over Atlanta and vicinity on the 3rd, and a disastrous hail storm which visited Gwinnett County on the 2nd. At Atlanta, the wind attained a five-minute velocity of 56 miles per hour, and for one minute registered a velocity of 63 miles per hour. The city was enveloped in clouds of dust, and the temperature fell from 75 to 62 degrees in a few moments. The hail storm in Gwinnett County was a remarkable phenomenon. The average size of the stones was probably about two inches in diameter. Crops were beaten to the earth, fruit torn from the trees, and forest trees stripped of their foliage. A peculiar feature of the storm was that the hail stones were washed into drifts by a heavy rain. Some of these drifts measured 10 feet high, according to report and it was thought that they would remain on the ground for a month or longer.

SOLAR ECLIPSE OF MAY 28.

The solar eclipse of the 28th was a momentous event, for the observation of which vast preparations had been made many months in advance. In Georgia, the principal stations of observation were located at Barnesville, Thomasston, Griffin, Washington and Indian Springs, where scientists gathered from far and wide to observe the spectacle. On Sunday, the 27th, the Chief of Weather Bureau was pleased to announce in an unqualified statement that the conditions of sky, temperature and wind would be of the best possible, and his prediction was splendidly verified. In the path of totality, the eclipse was an awe inspiring sight, and data of great value were obtained. Several voluntary observers, crop correspondents, etc., cooperated with the Weather Bureau in securing observations of the shadow waves, and at Weather Bureau stations frequent observations of the several meteorological elements were made during the day.

NOTES AND COMMENTS.

The publication of the voluntary reports of Mr. R. M. Hoskinson, Waycross, is begun in this issue, also the reports of the river station at Carlton, Madison County, Augusta Section.

The rainfall station at Palham, and the special river station at Reynolds, have been closed. A special river station will be established at Woodbury, Meriwether County, on the Flint.

CLIMATOLOGY OF THE MONTH.

ATMOSPHERIC PRESSURE.

The mean pressure for the month was 30.02 inches; highest recorded, 30.28 inches at Macon and Savannah, on the 11th; lowest, 29.67 inches, at Augusta, on the 19th.

TEMPERATURE (DEGREES FAHRENHEIT).

The monthly mean, 70.8 was 0.2 below normal, and 4.4 below the mean of the corresponding month of 1899.

By sections the mean was: Northern, 67.9; Middle 71.2; Southern 73.3.

The highest monthly mean was 75.6, at Albany.

The lowest monthly mean was 63.0, at Dahlonega.

The highest temperature recorded during the month was 96, at Waycross, No. 2, on the 25th.

The lowest temperature recorded during the month was 32, at Diamond, on the 10th.

Absolute range for the month, 64.

The greatest local monthly range was 57, at Diamond.

The least local monthly range was 35, at Hawkinsville.

The greatest daily range was 47, at Mauzy, on the 5th.

PRECIPITATION (INCHES AND HUNDRETHS.)

The average for the State, 2.46, was 0.82 below normal, and 0.70 below the average of the corresponding month of 1899.

By sections the average was: Northern, 2.93; Middle, 2.29; Southern, 2.15.

The greatest amount for the month was 5.44 at Elberton.

The least amount for the month was 0.51, at Morgan.

The greatest amount in any 24 consecutive hours was 3.60, at Elberton, on the 23rd.

WIND AND WEATHER.

Southwesterly winds prevailed during the month.

The maximum velocity was 56 miles per hour from the northwest at Atlanta, on the 3rd.

The average hourly velocity at stations having self-recording instruments was as follows: Atlanta, 9.5 miles; Augusta, 6.0 miles; Savannah, 7.4 miles; Macon, 5.8 miles; Jacksonville, Fla., 7.8 miles; Chattanooga, Tenn., 6.4 miles.

Average number of clear days, 14; partly cloudy, 12; cloudy, 5; with .01 inch or more precipitation, 8.

MISCELLANEOUS PHENOMENA (WITH DATES).

Fog.—Dahlonega, 24; Jesup, 17; Mauzy, 7, 9.

Frost, light.—Adairsville, Dahlonega, Ramsey, 11; Covington, Point Peter, 10.

Hail.—Americus, Quitman, 1; Chattanooga, Tenn., 25; Dahlonega, 2; Lost Mountain, 29; Mauzy, 20.

Heavy precipitation.—Adairsville, 28, 2.62 in 6 hours; Allentown, 18, 0.63 in 20 minutes; Fleming, 23, 2.55 in 22 minutes; Elberton, 23, 3.60 in 7 hours.

Halos, solar.—Allentown, Macon, 21; Chattanooga, Tenn., 7; Savannah, 28.

High winds.—Atlanta, 3, 9; Dahlonega, 17; Quitman, 19 (severe).

Thunderstorms.—Adairsville, 28; Allentown, 2, 3, 18, 19, 23; Americus, 1; Atlanta, 1, 3, 18, 19, 29; Augusta, 1, 2, 9,

18; Chattanooga, Tenn., 3, 8, 18, 25, 29; Clayton, 2; Dahlonega, 2, 18; Eastman, 18; Fleming, 3, 17, 23, 25; Fitzgerald, 18, 23, 24; Jacksonville, Fla., 1, 2, 3, 18, 19, 20, 23, 24; Lost Mountain, 1, 3, 18, 19, 25, 29; Macon, 1, 2, 18, 19, Poulan, 18, 23; Savannah, 1, 18, 20, 23, 24, 25; Tallapoosa, 18, 23; Valona, 9, 18; Waycross, 1, 18, 25; White Oak, 18, 20.

Smoke.—Dahlonega, 1, 13, 14, 15.

Solar Corona.—Statesboro, 28.

Lightning casualties.—Residence of W. H. Wheaton, at Griffin, struck by lightning on the 1st, and considerably damaged. James Harris, struck and killed, near Logansville, on the 18th. Mrs. M. V. Lee, of Atlanta, struck, on the 29th, but recovered; house badly damaged.

REMARKS BY OBSERVERS.

N. F. Buff, Hawkinsville.—Rainfall for the month very light.

R. M. Hoskinson, Waycross.—Fine growing weather all the month: no unusual phenomena.

A. W. J. Wood, Harrison.—Month noted for its very uniform temperatures and rather cool nights.

W. H. Hutto, White Oak.—The eclipse was beautiful here, about 90 per cent of the sun's face was covered.

J. H. M. O'Sullivan, Allentown.—This month's seasons have been good for all farm work and products.

A. W. Latimer, Lumpkin.—An exceptionally favorable month for cultivating crops and harvesting grain.

J. W. Frederick, Marshallville.—Temperature below normal; cool nights; east winds. Fruit outlook good.

John Axtell, Fleming.—The heavy rains on the 23d and 25th made lowlands too wet to work until the last of the month.

A. J. Fleming, Blakely.—The solar eclipse was almost total. Crops are doing fairly well. Some fields of cotton will be abandoned.

H. L. Brewton, Bellville.—This month has been favorable for cultivating crops. The nights have been too cool for cotton to grow much.

P. T. McCutchen, Franklin.—The eclipse was not quite total at this place, but it was a remarkable phenomenon and created great interest.

COMPARATIVE TEMPERATURE AND PRECIPITATION DATA FOR MAY DURING THE PAST NINE YEARS.

Year.	Mean temperature.	Maximum temperature.	Minimum temperature.	Average precipitation.
1892	72.1	100	36	2.2
1893	70.5	100	38	2.5
1894	71.4	98	35	2.5
1895	69.8	102	31	4.2
1896	76.0	101	47	2.5
1897	69.3	98	34	1.5
1898	74.0	103	35	1.1
1899	75.2	101	41	1.8
1900	70.8	96	32	2.5

The normal temperature for May is 71.0; average precipitation, 3.23.

Chart II. Total Precipitation, May, 1900.

