

U. S. DEPARTMENT OF AGRICULTURE.

REPORT FOR MAY, 1900.

SOUTH CAROLINA SECTION

OF THE

CLIMATE AND CROP SERVICE

OF THE

WEATHER BUREAU.

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PREPARED UNDER DIRECTION OF

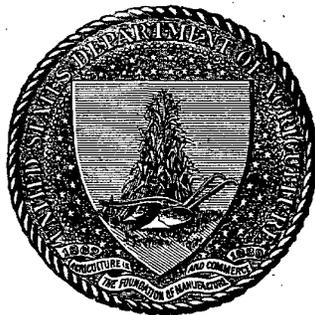
WILLIS L. MOORE,

CHIEF OF WEATHER BUREAU.

BY

J. W. BAUER,

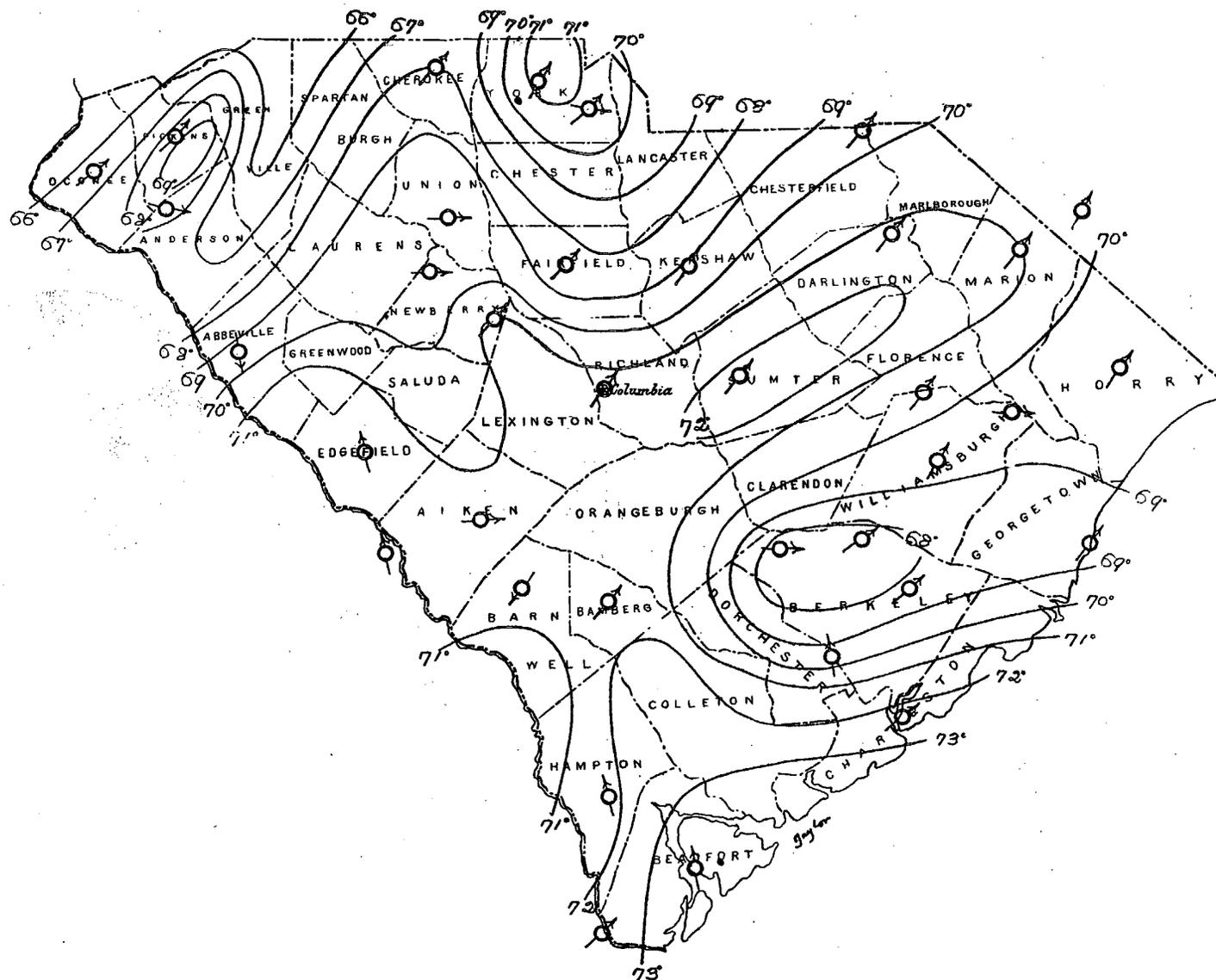
SECTION DIRECTOR.



COLUMBIA, S. C.:
WEATHER BUREAU OFFICE.

MONTHLY MEAN TEMPERATURE AND PREVAILING WINDS FOR MAY, 1900.

(Arrows fly with the wind.)



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

CENTRAL OFFICE: WASHINGTON, D. C.

SOUTH CAROLINA SECTION,
 J. W. BAUER, Section Director,
 COLUMBIA, S. C.

VOL. III. COLUMBIA, S. C., MAY, 1900. No. 5.

CLIMATOLOGY FOR THE MONTH.

Temperature, in Degrees Fahrenheit.

The mean temperature for the month of May, 1900, was 70.2°, which is 1.5° below the normal. The highest local mean was 73.8° at Charleston, and the lowest local mean was 65.9° at Greenville. The highest temperature for the month was 96° at Liberty on the 13th and Yorkville on the 14th. The lowest temperature was 38° at Trial on the 11th, and at Walhalla on the 10th, making the State range 58°. The greatest local range was 56° at Liberty, and the least local range was 29° at Charleston. The mean of the daily maximum temperatures was 81.8°, and of the daily minimum temperatures was 58.5°.

Frosts.—Light frost was reported from Longshore and Santuc on the 11th, and from Shaw's Fork on the 10th. Climate and crop correspondents reported light frost from points in Cherokee, Colleton, Greenville, and Spartanburg counties on the 10th and 11th.

Precipitation, in Inches.

The average precipitation for May, 1900, was 2.37 inches, which is 0.91 below the normal. The greatest local amount for the month was 4.99 inches at Yorkville, and the least local amount was 1.17 at Society Hill. The greatest 24-hourly fall was 2.60 inches at Columbia on the 17-18th. The average number of days with rain was 5, ranging from 2 at Walhalla to 9 at Charleston.

Hail.—Hail was reported from Abbeville on the 3d; Longshore, 18th; Orangeburg and Trenton, 9th; Spartanburg, 4th.

Heavy Rains.—Beaufort, 1.60 inches in 3 hours on the 18th; Columbia, 2.25 inches in 2 hours 5 minutes on the 18th; Calhoun Fall, 1.42 inches in 2 hours on the 18th; Clemson College, 0.77 inch in 1 hour 30 minutes on the 18th; Temperance, 0.83 inch in 1 hour 30 minutes on the 18th.

CLIMATE AND CROPS.

The effect on crops of the prevailing weather during May, 1900, was generally adverse to their rapid, or favorable de-

velopment, chiefly on account of cool nights which retarded their growth, and of lack of moisture to germinate seeds that were planted late in April and during the first decade of May.

There were no unusually high temperatures during the month, and the average of the daily maximum (81.8°) indicates about normal day temperatures, but the average of the daily minimum temperatures (58.8°) also indicates that the night temperatures were lower than usual, and this was most marked from the 9th to the 12th, and during the third decade. The average daily range of temperature for the month was 23.6°. Light frosts occurred on the 10th and 11th, at a few points, doing little or no injury except to tender vegetation.

There was less than the usual amount of precipitation, with the exception of small areas in the north-central and extreme southeastern portions where, at a few places, there was a slight excess. Even at points where there was the least rainfall, the drought was not severe, and only the surface soil became very dry, preventing the rapid germination of seeds, while deep-rooted plants did not, at any time, suffer from lack of moisture. The general rain of the 17-18th supplied enough moisture for the needs of plants for the remainder of the month.

The month was an exceedingly favorable one for the prosecution of farm work.

Destructive insects were numerous. Cut and bud worms destroyed much young corn, especially on bottom lands; Colorado beetles injured white potatoes; grasshoppers infested a few fields of cotton; and by the close of the month worms made their appearance in large numbers on tobacco.

Cotton planting was quite generally finished by the 20th, but germination and growth of late planted seed was slow, and stands were irregular. The condition of early planted cotton was better, but the plants remained undersized.

Corn did well, except on bottom lands where the stands were kept broken by worms, necessitating replanting. Wheat developed into an excellent crop and ripened during the latter part of the month. Oats improved, but not enough so to make the crop noteworthy for its excellence, except in spots.

The weather was generally unfavorable on tobacco, and the plants remained stunted. Rice planting was hindered, early in the month, by high water in the lower rivers, but eventually about the usual area was seeded. Minor crops, gardens and truck made favorable progress. The peach crop continued promising, although considerable dropping was reported. Apple and pear trees blighted badly. Cultivated and wild berries were plentiful. Fields were as a rule well cultivated, and were unusually free from grass and weeds.

ERRATA.

April, 1900, report, page 5, mean temperature at Clemson College, 60.0°, should read 60.4°. Page 5, mean temperature at Greenville, 57.5°, should read 57.6°. Page 5, the total precipitation at Little Mountain, 6.05, should read 6.04.

MISCELLANEOUS PHENOMENA (with dates).

Weather.—The average number of clear days was 19, of partly cloudy days was 7, and of cloudy days was 5.

Winds.—The prevailing direction of wind was from the southwest at 28 stations, from the south and west at 5 stations each, and from the north and northeast at 1 station each.

High Winds.—High winds were reported from Charleston on the 10th; Liberty, 4, 5, 6, 8, 9, 10, 11, 19, 20; Walhalla, 3, 4, 5, 8, 9, 19.

Earthquake.—Summerville 10th, at 6.20 p. m.

Solar Halos.—Charleston, 5, 8, 9, 13, 21; Gillisonville, 18; Santuc, 9, 30, 31; Statesburg, 23.

Lunar Halos.—Blackville, Columbia, Shaw's Fork, Walhalla, 7; Charleston, 1, 13; Gillisonville, 3, 7; Santuc, Society Hill, 7, 8; Statesburg, 5, 8.

Fogs, Dense.—Beaufort, 22; Blackville, Longshore, 1; Camden, 27; Gillisonville, 14, 15, 29; Liberty, 3; Little Mountain, 2; Society Hill, 16; Statesburg, 17.

Thunderstorms.—Beaufort, 2, 9, 17, 18, 20, 23, 25; Blackville, 1, 2, 9, 18; Charleston, 9, 17; Cheraw (2), 1, 3, 9, 17, 18, 24; Clemson College, 2; Columbia, Trial, 9, 18; Gillisonville, 1, 2, 8, 18, 23, 24, 25; Liberty, 18, 24; Longshore, 2, 8, 9, 18; Santuc, 3, 18, 24; Shaw's Fork, 1, 18; Society Hill, Statesburg, 9; Spartanburg, 4; Trenton, 1, 2, 3, 9, 17, 18; Walhalla, 18; Winthrop College, 3, 17, 18, 19; Yorkville, 3, 9, 24.

ECLIPSE OF MAY 28, 1900.

Clear skies, light winds, and an atmosphere nearly free from dust and haze prevailed along the line of totality in South Carolina.

These meteorological conditions underwent but slight change during the event. Observations of the wind direction and estimated force were made on the summit of Little Mountain, S. C. The direction of the wind was from the southwest, at the beginning of totality, but as the obscuration increased the wind became more westerly, so that for a short time before, during, and for a few minutes after totality it was due west; as the obscuration decreased, the wind gradually shifted to the southwest. The force of the wind exhibited a similar change, from merely a light breeze at the time of first contact, to a fresh or brisk wind while it blew from the west; after which it gradually subsided until after the last contact it was again a gentle zephyr.

The temperature gave an inverted range from 7.30 a. m. to 8.44 a. m., that is to say, a fall of 4.8°. After 8.44 a. m. there was a gradual rise which became rapid, as soon as the sun was, half or more, uncovered. On the following day, under nearly like meteorological conditions, the temperature

rose 5.5° from 7.30 to 8.45 a. m. Thus the eclipse effected a change of 10.3°

The shadow bands were not as plainly marked as was expected, and no data could be secured except the direction they moved and the time they occurred.

REMARKS BY OBSERVERS.

Batesburg.—Cool nights during the month retarded the growth of crops.—E. J. Hite.

Cheraw (1).—During the eclipse of the sun on the 28th, the temperature fell rapidly at the time of totality, from 70° to 66°, rising again rapidly as the obscuration passed.—W. R. Godfrey.

Beaufort.—The weather during May was fine, with no extremes of heat or cold. Rainfall on the 25th was excessive, but did damage on lowlands only. Crops generally grew well.—S. M. Benton.

Society Hill.—The eclipse of the sun on the 28th, was nearly total at this place, the unobscured portion appeared as a straight line. The temperature fell 3° during the eclipse.—Maj. J. J. Lucas.

Trenton.—Eclipse of the sun on the 28th. Precipitation 1.00 inch less than the 8-year average for May, and 0.53 inch less than the 7-year average for the first 5 months of the year.—C. A. Long.

Holland.—The planting of cotton was finished about the 12th, two weeks later than usual. Wheat and oats are the best crops in years, both were ready to harvest on the 31st. Fruit of all kinds very fine.—Dr. J. W. Earle.

Santuc.—The first portion of the month was dry, and crops made slow growth, but during the latter half, they did better. Planting operations were later than usual. Worms were very destructive to corn just coming up.—E. W. Jeter.

Liberty.—Wheat fired and rusted during the month. Oats improved wonderfully after the rains of the 17-18th, which also brought up cotton, and by the close of the month fine stands of cotton were general. Birds and worms damaged much corn. The berry crop is fine.—John T. Boggs.

Winthrop College.—6th, peaches as large as hickory nuts; 29th, good stand of wheat; heads are full and just beginning to ripen. Rock Hill proves to have been just outside (north-west) of the path of totality of eclipse of the 28th. Shadow bands were distinctly shown here.—Dr. Cleveland Abbe, Jr.

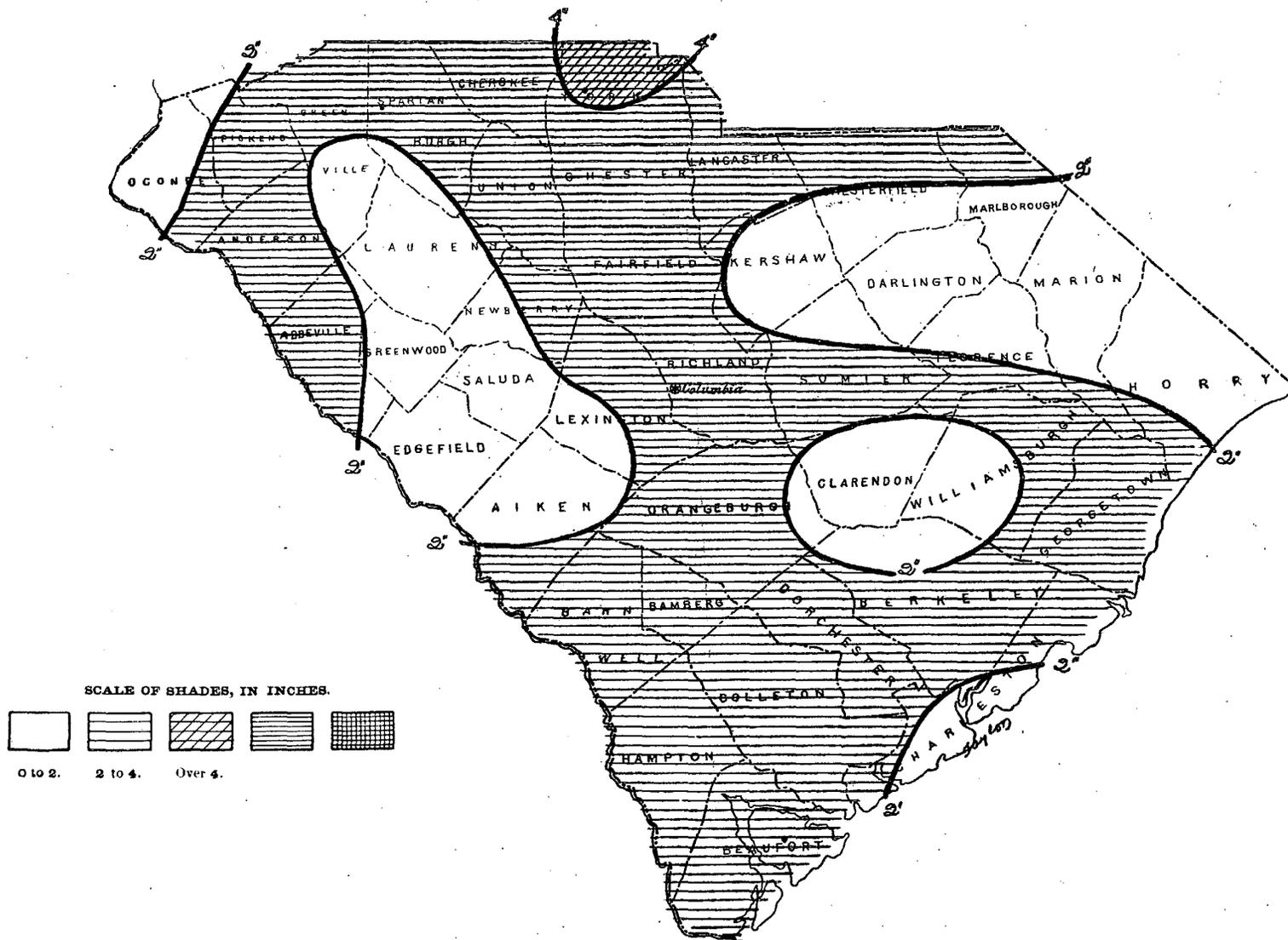
Gillisonville.—During the month, the days were warm and the nights were cool, conditions not favorable for plant growth, and crops grew slowly. The weather favored cultivation, and fields are free from weeds and grass. Peaches did well, but apple and pear trees blighted badly.—Sam P. Saltus.

CLIMATOLOGICAL DATA FOR THE MONTH OF MAY, 1900.

STATIONS.	Counties.	Elevation—feet.	Length of record—years.	Temperature—in degrees Fahrenheit.						Precipitation—in inches.				Sky.			Prevailing direction of wind.	Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, (unmelted.)	Number rainy days.	Number clear days.			Number partly cloudy days.	Number cloudy days.	
Allendale	Barnwell	186	12	70.1	-2.7	87	8	47	11	30	3.02	-0.50	1.10		5	23	1	7	.....	B. F. Wilson.
Angusta, Ga.	Richmond	134	29	71.2	-0.8	88	13	48	11	33	3.01	-1.19	0.59		5	26	5	6	s.	Weather Bureau.	
Batesburg	Lexington	656	12	70.8	-1.0	91	8	49	*10	35	1.71	-2.19	0.70		5	23	6	2	.....	E. J. Hite.
Beaufort	Beaufort	28	14	73.2	-1.0	86	16	51	11	25	3.62	+1.19	1.60		6	21	6	4	s.	S. M. Benton.	
Blackville	Barnwell	293	12	71.4	-2.0	92	7	45	11	35	3.99	-0.74	1.94		6	22	7	2	ne.	G. D. C. Lange.	
Calhoun Falls	Abbeville	354	7								3.04	+0.03	1.42		4	27	0	4	n.	P. J. Pfeiffer.	
Camden	Kershaw	222	34								1.67	-1.45	0.61		5	17	9	5	sw.	B. Ammons.	
Charleston	Charleston	48	31	73.8	+0.8	82	20	59	11	21	1.38	-2.21	0.51		9	15	12	4	sw.	Weather Bureau.	
Charlottesville, N. C.	Mecklenburg	808	22	69.0	0	91	14	44	10	32	2.11	-1.79	0.70		6	14	8	9	sw.	Weather Bureau.	
Cheraw (1)	Chesterfield	114	12	70.0	-1.2	91	15	43	11	39	2.86	-0.18	0.90		7	19	2	10	sw.	W. R. Godfrey.	
Cheraw (2)		108	7								2.21	-1.47	0.70		6	18	9	4	sw.	John H. Pove.	
Clemson College	Oconee	850	9	68.0		92	14	40	11	42	2.12	-0.94	1.25		5	9	19	3	w.	Prof. C. C. Newman.	
Columbia	Richland	336	13	71.6	-0.4	91	13	47	11	39	3.50	-0.36	2.60		5	9	20	6	sw.	Central Office.	
Conway	Horry	49	9								1.42	-1.05	0.52		6	16	6	9	sw.	P. Quattlebaum.	
Darlington	Darlington	175	5								1.19		0.36		6	18	10	3	.....	E. R. McIver.
Edisto	Bamberg	143	7								3.02	-0.57	0.95		5	18	8	5	sw.	Miss Jerry Carter.	
Edingham	Florence	106	8								2.23	-0.25	0.90		5	16	9	6	sw.	A. J. Howard.	
Fairbluff, N. C.	Columbia	73	6								1.73		0.68		5	18	8	5	sw.	I. M. Powell.	
Florence	Florence	156	12	71.0	-1.9	88	*8	46	11	31	1.72	-0.89	0.68		5	18	8	5	sw.	H. K. Gilbert.	
Gaffney	Cherokee		4								2.75		2.10		5	19	8	7	sw.	B. F. Camp.	
Georgetown	Georgetown	12	7	68.8	-3.8	85	*11	48	23	35	2.60	-0.80	1.50		5	18	1	2	sw.	W. T. Turbeville.	
Gillsville	Hanilton		5	71.6	-3.0	94	7	41	11	44	2.55		1.50		5	19	5	7	sw.	Sam P. Salsus.	
Greenville	Greenville	1,000	8	65.9	-2.3	87	16	41	11	45	1.90	-1.44	1.51		4	20	5	6	.....	Mrs. S. A. Crittenden.
Greenwood	Greenwood	671	12	71.0	-0.6	93	*15	47	10	35	1.61	-1.57	0.84		3	23	1	7	.....	M. M. Calhoun.
Horse Cove, N. C.	Macon	3,800	8	62.8	+0.1	81	14	39	4	33	2.28	-2.57	1.09		6	14	9	8	s.	B. C. Hawkins.	
Holland	Anderson		12	67.0	-2.5	88	*15	42	10	40	2.87	-0.52	1.90		3	19	5	7	.....	Dr. J. W. Earle.
Kingstree (1)	Williamsburg	77	12	69.8	-2.7	89	*7	43	11	33	1.50	-2.01	0.68		5	19	6	6	sw.	C. J. Lesesne.	
Kingstree (2)		77	6								1.47		0.67		5	18	8	5	sw.	W. H. Matthews.	
Liberty	Pickens		6	69.2	-2.4	96	*13	40	11	46	2.04		1.10		3	26	0	5	sw.	Jno. T. Boggs.	
Little Mountain	Newberry	711	7	71.4	-1.3	91	*13	47	10	34	2.39	-0.50	1.90		5	17	12	2	sw.	John M. Sease, M. D.	
Longshore	Newberry	530	7	69.8	-1.4	91	*13	44	11	40	2.13	-0.34	1.35		4	17	7	7	w.	W. G. Peterson.	
Pinopolis	Berkeley		7	69.8	-0.9	84	*7	48	11	31	2.60	-1.10	1.33		4	16	9	6	sw.	E. P. Ravenel.	
Raleigh, N. C.	Wake	376	14	68.9	+0.9	93	14	46	10	32	3.12	-2.08	0.87		10	16	12	3	sw.	Weather Bureau.	
St. Georges	Dorchester	109	12	70.2	-2.3	88	7	48	11	31	3.12	-0.03	0.93		6	19	8	4	.....	W. B. Raynor.
St. Matthews	Orangeburg	254	12	71.6	-1.4	90	7	49	11	33	2.75	-0.54	1.02		6	19	5	7	.....	J. S. Wannamaker.
St. Stephens	Berkeley	73	8								1.81	-2.67	0.90		6	18	7	6	sw.	C. T. Shuler.	
Santuc	Union	512	7	69.2	-0.9	93	14	39	11	44	2.06	-0.56	0.91		8	16	11	4	sw.	E. W. Jeter.	
Savannah, Ga.	Chatham	71	31	72.9	-1.1	87	19	57	11	24	2.65	-0.12	1.07		6	17	13	1	sw.	Weather Bureau.	
Shaws Fork	Alken	500	9								1.43		0.80		6	17	13	1	sw.	Geo. H. Atwood.	
Smiths Mills	Williamsburg	62	5								3.25		2.00		6	19	6	6	w.	H. van Kenren.	
Society Hill	Darlington	192	9	71.5	+0.6	88	*8	47	10	31	1.17	-1.87	0.57		5	14	13	4	sw.	J. J. Lucas.	
Spartanburg	Spartanburg	875	9	68.8	-2.0	93	*14	40	11	41	3.17	+0.13	2.32		5	22	3	6	.....	F. P. Robinson.
Statesburg	Sumter	500	20	72.0	+1.0	90	*13	50	11	36	2.46	-1.00	1.13		6	18	7	6	sw.	W. W. Anderson, M. D.	
Summerville	Dorchester		3	69.4		85	*7	45	10	28	2.51		1.16		6	24	4	3	s.	Prof. Jno. Gadsden.	
Temperance	Marion	100	2	71.0		92	*14	42	11	37	2.53		0.83		4	17	12	2	sw.	J. R. Reaves.	
Trenton	Edgefield	620	7	71.9	-1.7	87	*8	52	10	24	1.74	-1.00	0.76		4	17	10	4	w.	C. A. Long.	
Trial	Berkeley		14	67.5	-3.2	87	*7	38	11	40	1.77	-3.29	0.80		5	17	7	7	sw.	Etsell Gaillard.	
Walhalla	Oconee	1,061	10	66.0	-1.6	89	14	38	10	40	1.26		0.86		2	18	12	1	sw.	S. M. Pagan.	
Wilmington, N. C.	New Hanover	52	31	70.0	0	87	28	52	27	31	3.32	-0.69	2.49		7	19	8	4	sw.	Weather Bureau.	
Winnboro	Fairfield	545	11	68.0	-3.8	85	14	47	10	26	2.25	-0.18	1.40		4	26	5	0	sw.	John W. Seigler.	
Winthrop College	York	690	1	69.8		92	*7	45	10	35	2.96		1.77		6	17	5	9	sw.	Prof. Cleve'nd Abbe, jr.	
Yemassee	Beaufort	23	5	73.8		92	*7	47	11	30	3.87		1.30		6	18	7	6	sw.	R. G. Smith.	
Yorkville	York	680	12	71.8	+1.4	96	*14	43	10	39	4.99	+1.84	2.42		5	15	11	5	sw.	J. R. Schorb.	
MEANS—highest, lowest and dates, etc.					70.2	-1.5	96	*13	38	*10	46	2.37	-0.91	2.60		5	19	7	5	sw.	

a, b, c, etc., indicate number of days missing, with values as follows: a 1, b 2, c 3, etc. * On other dates also. † Mean from 7 a. m., 2 and 9 p. m. observations.

TOTAL PRECIPITATION FOR MAY, 1900.



DAILY PRECIPITATION FOR SOUTH CAROLINA, MAY, 1900.

STATIONS.	Day of Month.																															Total.					
	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	31						
Allendale		.07	.07							.18								.98	1.10					.80										3.02			
Augusta, Ga.	.50	.05								.18							.14	.38	.11					.59	.06									2.01			
Batesburg			.05							.70								.23	.43					.30		†								1.71			
Beaufort	†	.08								.27							.12	.88					.67		1.60									3.62			
Blackville	†	.09								.41							.23	1.94					.27	.05										2.99			
Calhoun Falls		.21								.42								1.42					.99											3.04			
Camden	.18									.12								.60	.61				.33	.16										1.67			
Charleston	.01	.10							†	.01							.40	.46	.05				.33	.01	†	.01								1.38			
Charlotte, N. C.		.32	†		†					.30							.03	.70					.18	.58	†									2.11			
Cheraw(1)	.90	.02								.52							.27	.53					.05	.57	†									2.86			
Cheraw(2)	.65			†						.48								.30	.70	†				.05	.03	†								2.21			
Clemson College										.07								.77					.91	.34	.03									2.12			
Columbia			†							.44							.36	2.42					.12	.16										3.50			
Conway		.10	.15							.25								.52	.25					.15											1.42		
Darlington, near			.05							.35							.31	.36					.05	.07											1.19		
Edisto	.02			†						.44								.86	.95					.75											3.02		
Effingham	.10									.25								.90	.75					.22	.01										2.23		
Fairbluff, N. C.				.23						.23								.40	.46					.66	.21										1.73		
Florence										.50								.68	.38					.08	.02	†									1.72		
Gaffney				.12		.02												.06	.25					2.10	.20										2.75		
Georgetown		1.00								.10														1.50											2.60		
Gillisonville		.01	†						.01								.15	1.50					1.88												2.63		
Greenville																		.77	.25					1.51	.09	.05									1.90		
Greenwood										.12								.84						.65												1.61	
Horse Cove, N. C.		.06	†							.03								.73	†				1.09	.21	.16	†									2.28		
Holland										.22								.75						1.90												2.87	
Kingstree(1)		.28								.03								.68	.10					.41												1.50	
Kingstree(2)		.28								.02								.67	.09					.41												1.47	
Liberty										†								.70					1.10	.24	†											2.04	
Little Mountain										.27								.34	1.60					.09	.09											2.39	
Longshore										.40								.01	1.35					.37												2.13	
Pinopolis										.02								.60		1.33				.65												2.60	
Raleigh, N. C.	.75		.11				†	.01		.35	.01						.08	.87	.18	.16				.60												3.12	
St. Georges		.65								.24								.93	.70					.30	.30											3.12	
St. Matthews		.65								.85								.06	1.02					.15	.02											2.75	
St. Stephens	.04	.02								.15								.90	.15					.55												1.81	
Santee			.12							†								.74					.24	.91	.02	.03										2.06	
Savannah, Ga.	†	.17	.29							.02								.99	.08	.02			1.07	†	†	.01										2.65	
Shaws Fork	.17	.13								.06								.07	.80					.20												1.43	
Smiths Mills		.20	.05							.20								.40	.40					2.00													3.25
Society Hill										.27								.23	.57					.07	.03											1.17	
Spartanburg	†			†														.02	.35					2.32	.40	.08										3.17	
Statesburg										.31								.89	1.13					.01	.02	.10										2.46	
Summerville	.31	.01								.06								.35	1.16					.62													2.51
Temperance			†							.35								.72	.83	†					.63												2.53
Trenton										.34								.13	.76					.51													1.74
Trial										.21								.80	.44					.27		.05											1.77
Walhalla		†	†							†								.40						.86	†	†											1.26
Wilmington, N. C.	†	.24	†		†					.27	†							.07	†	†	.20	.01		.04	2.49	†										3.32	
Winnsboro										.25								.40	1.40					.20													2.25
Winthrop College			.04		†					†								.68	1.09	.20	†			.34	.61											2.96	
Yemassee	.20	.45	†		†					†								.62	1.27					1.30												3.87	
Yorkville			†		†					.25								†	2.42	.30				.37	1.05											4.99	

* Precipitation included in that of the following day.

† indicates trace, less than 0. or inch.