CLIMATOLOGICAL DATA FOR JULY, 1913.

DISTRICT NO. 7, LOWER MISSISSIPPI VALLEY.

ISAAC M. CLINE, District Editor.

GENERAL SUMMARY.

Warm weather prevailed generally, except that from the 19th to the 22d maximum temperatures were below 90° over the northern and western portions of the district. The precipitation was unevenly distributed, being heavy in some localities and light in others. There were no well-defined rainy periods, showers occurring every day, except that over the eastern portion of the district the larger portion of the precipitation occurred from the 1st to the 13th and 23d to 31st. Severe drought was prevailing in parts of Oklahoma and the Missouri and Kansas areas at the close of the month.

The following table summarizes the chief features of meteorological interest in the various portions of the district:

States and portions of States lying within District No. 7.	Mean temperature.	Departure from the normal.	Mean precipitation.	Departure from the normal.	Greatest precipitation in 24 hours.	Mean snowfall.	Number of days. With 0.01 inch or more.	Clear.	Partly cloudy.	Cloudy.	Prevailing wind direction.
Colorado	68.9	+0.1	2.28	−0.18	2.12	0	5	17	9	5	sw.
New Mexico	72.1	+0.2	1.42	−1.51	1.73	0	4	18	10	3	sw.
Texas	81.6	+2.0	2.52	−0.91	3.50	0	3	20	7	4	s.
Kansas	82.4	+3.9	1.48	−2.33	2.76	0	5	20	9	2	s.
Oklahoma	83.8	+3.6	2.38	−0.72	7.00	0	4	20	8	3	s.
Missouri	79.6	+3.0	4.10	−1.12	3.36	0	8	17	9	5	s.
Tennessee	80.4	+1.2	4.74	+0.85	2.40	0	8	18	7	6	s.
Arkansas	81.5	+1.6	4.31	+0.35	4.60	0	8	13	14	4	sw.
Mississippi	81.4	+0.7	3.89	−0.66	7.00	0	9	14	10	7	sw.
Louisiana	81.6	−0.2	7.19	+0.57	6.85	0	12	14	8	9	s.

TEMPERATURE.

Mean temperatures ranged from 0.1° to 5.4° above the normal, except that over southeastern Louisiana, the southern portion of the Mississippi area, southwestern Arkansas, the western portion of the New Mexico area, and the northwestern portion of the Colorado area there was a deficiency of from 0.2° to 2.7°. Maximum temperatures of 104°, or higher, were reported from 1 or more, stations in all States or parts of States in the district. Minimum temperatures were generally below 50° over the northern and western portions of the district, and from 50° to 60° over the southeastern portion, except in southern Louisiana where they were from 60° to 65°, generally. The highest temperature recorded, 114°, occurred at Coolidge, Kans., and a maximum reading of 111° was reported from Meeker, Okla. The lowest temperature recorded, 25°, occurred at Westcliffe, Colo., and a minimum reading of 28° was recorded at Elizabethtown, N. Mex. "Hot winds" were reported from parts of Oklahoma and the Texas area.

PRECIPITATION BY DRAINAGE AREAS.

Arkansas River and tributaries.—Less than the normal amount of precipitation occurred over the greater portion of this drainage area, except in Arkansas. Over the headwaters of the Arkansas River in Colorado the average from 38 stations was 2.30 inches, about 0.2 inch below the normal. The average from 43 stations in those portions of the Arkansas Valley proper that lie in Kansas and Oklahoma was 1.66 inches, about 1.9 inches below the normal. Over the headwaters of the Canadian River in New Mexico the average from 37 stations was 1.42 inches, about 1.7 inches below the normal. In those parts of the Canadian Valley that lie in Texas and Oklahoma the average from 29 stations was 2.12 inches, about half an inch below the normal. The average from 21 stations in the Cimarron Valley was 1.74 inches, about 1.3 inches below the normal. Over the Verdigris Valley the average from 10 stations was 2.05 inches, about half the normal amount, and over the Neosho Valley the average from 20 stations was 2.33 inches, about 2 inches below the normal. Below the Oklahoma-Arkansas line the average from 15 stations in the Arkansas Valley proper was 4.36 inches, about 0.5 inch above the normal.

Red River and tributaries.—The precipitation was below the normal over this drainage area, except at a few scattered stations. In those portions of the Red River Valley that lie in New Mexico, Texas, and Oklahoma the average from 47 stations was 2.67 inches, about 0.2 inch below the normal. Below the Texas-Arkansas line the average from 20 stations was 3.23 inches, about 1.5 inches below the normal.

Mississippi River south of St. Louis and small tributaries.—The precipitation was unevenly distributed over this drainage area, being heavy in some localities and comparatively light in others. In the immediate Mississippi Valley the average from 40 stations was 4.70 inches, about 0.2 inch below the normal. The average from 22 stations in the valley of the White was 4.74 inches, about 0.6 inch below the normal. Over the Yazoo Valley the average from 23 stations was 3.75 inches, about 0.3 inch below the normal. The average for the valley of the Big Black was 3.84 inches, about 0.8 inch below the normal. The amounts from 18 stations in the Ouachita Valley averaged 4.52 inches, about 0.2 inch in excess of the normal.

Louisiana coastal plain.—The precipitation was unevenly distributed over this drainage area, being exceptionally heavy in some localities. The average from 36 stations was 9.15 inches, about 1.6 inches above the normal.

RIVERS.

There was a rise in the Arkansas, Cimarron, Canadian, and Washita Rivers in Oklahoma during the early part of the month, but the water fell rapidly and all streams were below the normal stage at the close of the month.

Stages in the lower Arkansas River were unusually low, navigation being suspended at Little Rock during the entire month. The White River was also unusually low.

No material changes occurred in the Red and Ouachita Rivers.

The Mississippi River fell steadily, except that there was a slight rise toward the close of the month.

TABLE 1.—*Climatological data for July, 1913. District No. 7, Lower Mississippi Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	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 of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Colorado.																				
Buena Vista	Chaffee	7,955	13	60.0	+ 0.1	84	5†	35	28	42	1.94	+ 0.39	0.62	0	9	20	3	8	w.	C. A. Short.
Calhan	El Paso	6,700	6	67.2[a]		94	13	42	31	38	1.82		0.48	0	10	23[a]	5[a]	2[a]	se.	H. B. Rice.
Canon City	Fremont	5,343	25	72.8	− 0.5	100	7	50	26†	43	1.60	− 0.21	0.42	0	8	25	3	3	n.	U. S. Weather Bureau.
Colorado Springs	El Paso	6,098	33	66.2	− 1.5	91	7	45	31	39	2.14	− 0.71	0.72	0	9	14	8	9	se.	Ray E. Miller.
Cripple Creek	Teller	9,396	12								4.02	+ 0.53	2.12	0	9					F. G. Willis.
Cuchara Camps	Huerfano	8,200	4								2.96		1.42	0	4	27	1	3	sw.	George A. Mayes.
Eads	Kiowa	4,209	6	84.7		105	13	63	31	32	0.80		0.80	0	1	25	4	2	se.	Mrs. Mattie A. Kerr.
Fairview	Custer	9,500	4								2.30		1.00	0	6	21	10	0	e.	Elizabeth L. Grey.
Fremont Exp. Station	El Paso	8,850	3																	U. S. Forest Service.
Garfield	Chaffee	9,510	3								2.63		0.63	0	10	19	8	4	w.	Lloyd N. Felton.
Hamps	Elbert	5,400	20	68.8		96	7	42	29†	43	2.27	− 0.24	1.50	0	4	18	10	3	s.	W. Hamp.
Hermit Lake	Custer	10,000	3								2.84		0.78	0	9	19	6	6	sw.	John E. Graham.
Hoehne (near)	Las Animas	5,700	21	73.4	+ 2.7	100	4	47	28	41[a]	1.48	− 0.81	0.97	0	6	25	4	2	sw.	S. W. DeBusk.
Holly	Prowers	3,380	18	78.0	− 0.1	105	7	51	28	44	2.67	− 0.17	2.10	0	3	29	0	2	s.	Holly Sugar Co.
La Junta	Otero	4,052									3.36		1.73	0	6	23	7	1	e.	S. M. Miller.
Lake Moraine	El Paso	10,265	19	55.1	+ 1.6	78	4	34	27	30	4.15	− 0.19	2.10	0	12	7	19	5	sw.	Clyde C. McReynolds.
Lamar	Prowers	3,592	23	80.4	+ 2.7	109	13	56	27	49	2.00	− 0.93	1.72	0	3	22	6	3	s.	J. T. Lawless.
Las Animas	Bent	3,899	45	75.9	− 1.2	103	13	53	26†	42	2.44	+ 0.42	1.23	0	6	14	16	1		American Beet Sugar Co.
La Veta Pass	Costilla	9,000	3								1.41		0.43	0	6	9	16	6	w.	Clara M. Wright.
Leadville	Lake	10,248	17	54.2	− 0.8	78	5	30	28	38	3.09	+ 1.66	0.94	0	15	13	8	10	n.	U. S. Weather Bureau.
Limon (near)	Elbert	5,360	6	69.0		98	7	41	31	46	3.26		1.78	0	6	25	2	4	s.	F. L. Palmer.
Madrid	Las Animas	6,361	3								1.60		0.83	0	10					Thomas Sawers.
Marshall Pass	Saguache	10,846	10								1.75	− 0.31	0.20	0	12	10	5	16		W. L. Williams.
Maxey	Baca																			L. H. Alberti.
Monument	El Paso	7,200	2	63.0		90	13	37	31	45[c]	1.67		0.81	0	9	20	9	2	nw.	U. S. Forest Service.
North Lake	Las Animas	8,700	21								2.55	− 0.77	0.60	0	10	21	7	3	nw.	James W. Ingmire.
Pueblo	Pueblo	4,734	25	74.7	+ 0.5	101	13	51	28	44	3.12	+ 1.15	1.28	0	9	17	10	4	nw.	U. S. Weather Bureau.
Rocky Ford (near)	Otero	4,177	24	74.8	+ 0.3	102	13	51	27†	44	2.82	+ 0.18	1.49	0	5	21	10	0	e.	P. K. Blinn.
St. Elmo	Chaffee	9,500	4								1.22		0.26	0	11	14	9	8	sw.	Daniel Clark.
Salida	do	7,035	14	64.2	− 0.8	91	5	36	28	49	1.75	+ 0.06	0.44	0	10	20	7	4	nw.	M. D. L. Buell.
Stonewall	Las Animas	8,000	7								1.54		0.63	0	8	11	5	12	e.	G. A. Storz.
Trinidad	do	5,994	17	71.6	+ 0.9	99	4	46	28	37	1.36	− 1.06	0.82	0	12	5	20	6	sw.	Walter Dearden.
Two Buttes	Baca	4,100	2	77.8		105	13	54	28	39	1.72		1.10	0	2	23	8	0	sw.	N. G. Jones.
Two Buttes Reservoir	do	4,250									2.26		2.02	0	5	16	14	1	s.	Walter J. Krohne.
Victor	Teller	10,100	9	57.0		79	5†	39	12†	33	4.02		1.32	0	8	16	9	6	w.	Fred Jones.
Vilas	Baca	3,935	32								1.60	− 0.35	1.60	0	1	10	13	8	sw.	Miss Esther Caldwell.
Westcliffe	Custer	7,864	19	58.6	− 3.0	90	6	25	28	55	1.34	− 1.22	0.42	0	6	12	9	10	sw.	U. S. Forest Service.
Winfield	Chaffee	9,765	3								2.02		0.35	0	18	4[a]	21[a]	5[a]	w.	John G. Payne.
Woodman Sanatorium	El Paso			67.8		93	7†	41	28	46	2.42		1.55	0	8	18	10	3	se.	Woodman Sanatorium.
Wortman	Lake	11,250	12								2.20	− 1.19	0.40	0	12	0	23	8	nw.	Mrs. Lillie Wortman.
Yoder	El Paso		2								2.69		1.12	0	6	24	1	6	sw.	J. E. Bingham.
New Mexico.																				
Abbott	Mora	5,771	4								1.13		0.28	0	3	19	3	9	e.	Agent E. P. & S. W. R. R.
Albert	Union	4,700	23	77.9	+ 0.8	102	13	56	24	38	0.73	− 1.98	0.73	0	1	22	9	0	w.	Antonio Chavez.
Aurora	Colfax	8,849	4								3.33		1.15	0	16	1	25	5	sw.	Miss J. Lucero.
Bell Ranch	San Miguel	4,500	14	78.3		102	14	54	24	38	1.41	− 1.48	0.68	0	5	19	9	3	sw.	C. M. O'Donel.
Black Lake	Colfax	8,348	4								1.64		0.50	0	11	5	25	1	se.	Ralph T. Martinez.
Cabeza	San Miguel	5,406	4								0.55		0.55	0	1	30	1	0	sw.	Agent E. P. & S. W. R. R.
Campana	do	4,493	4	81.0		106	13†	58	21†	38	0.56		0.46	0	3	18	13	0	sw.	Do.
Chacon	Mora	9,000	4								2.25		1.62	0	5	5	26	0	w.	Alfredo Lucero.
Cimarron (near)	Colfax	6,385	10	67.6		92	4	44	28	43	1.22	− 1.31	0.80	0	5	12	15	4	se.	Capt. William French.
Clayton	Union	5,178	8	74.8		102	13	51	26	41	1.20		0.57	0	5	15	16	0	sw.	Dr. N. E. Charleton.
Clovis	Curry	4,129	2																	John H. Barry.
Cuervo	Guadalupe	4,849	4	79.1		100	3†	56	21†	35	0.15		0.15	0	1	14	7	10	sw.	Agent E. P. & S. W. R. R.
Dawson	Colfax	6,396	4	71.0		98	4†	44	28	48	1.51		0.87	0	6	17	10	4	s.	Do.
Elizabethtown	do	8,465	8	57.4		86	13	28	28	55	2.34		0.60	0	10	14	13	4	nw.	Miss M. Carrington.
Folsom	Union	6,399	13	70.6	+ 2.0	97	13	46	24	38	2.62	− 0.10	1.73	0	6	15	13	3	sw.	David Rope.
Fort Union	Mora	6,835	53	64.3	− 2.7	88	11	38	29	43	0.80	− 3.02	0.25	0	5	25	5	1		M. C. Needham.
Hayden	Union	4,444	3	76.6		100	13†	50	21	37	0.45		0.40	0	2	22	9	0	se.	J. A. Bauer.
Hoosier Ranch	Mora		2								1.49		0.74	0	4	22	9	0	sw.	W. H. Guthman.
Johnson Park	Colfax	6,722	4	67.6		92	13	48	24†	40	1.32		0.67	0	10	18	13	0	sw.	A. J. Meloche, jr.
Johnsons Ranch	Mora	5,784	1								2.53		1.40	0	4	8	23	0		J. W. Johnson.
Kappus	Quay	4,010	2																	Louis O'Brien.
Lake Alice	Colfax	7,160	4																	Jesse Rickman.
Logan	Quay	3,851	7	81.6		108	13	58	24	42	0.10		0.10	0	1	28	3	0	sw.	John B. Reneau.
Lykins (near)	Roosevelt	5,000	3								0.82		0.62	0	2	24	7	0	se.	J. G. Buchanan.
Maxwell (near)	Colfax	5,894	6								0.89		0.48	0	4					Dan N. Jackson.
Melrose	Curry	4,400	5								0.78		0.78	0	1					Dr. B. M. Porter.
Miami Ranch	Colfax	6,000	5	68.3		95	13	43	26†	48	1.70		0.65	0	7	10	20	1	w.	Farmers Development Co.
Mills (near)	Mora	5,985	2								2.21		1.19	0	4	20	5	6	sw.	J. E. LaRue.
Montoya	Quay	4,335	4								0.15		0.15	0	1	22	9	0	sw.	Agent E. P. & S. W.R.R.
Nara Visa	do	4,225	7																	Willard Belknap.
Palo Verde	Mora	5,880	2								2.70		1.52	0	3	18	13	0	se.	G. R. Abernathy.
Pasamonte	Union		4																	J. J. Heringa.
Pleasant View	Mora		2								2.94		1.14	0	4	21	10	0	sw.	R. W. Boulware.
Portales	Roosevelt	4,004	3																	Portales Irrigation Co.
Raton	Colfax	6,660	15	68.0	− 1.2	94	8	46	24†	37	2.02	− 0.37	1.21	0	9	25	2	4	nw.	S. A. Wiseman.
Rociada	San Miguel	8,200	10	62.7	+ 0.8	90	13	29	1	50	2.93	− 0.88	1.25	0	4	17	10	4	w.	John P. Condon.
Rosebud	Union	4,500	2								0.76		0.33	0	3					H. A. Nachtrieb.
Roy	Mora	5,884	4	74.2		98	5†	52	24	38	2.52		1.17	0	4	12	14	5	sw.	Agent E. P. & S. W. R. R.
Roy (near)	do	5,880	2																	Braun Brothers.
St. Vrain (near)	Curry	4,300									1.26		0.86	0	3					S. A. Dow.
San Jon	Quay	4,200	6	79.8		104	14	57	21	38	1.79		1.57	0	2	19	11	1	sw.	Jesse T. White.
Solano	Mora	3,622	4	75.0		94	16†	51	20	37	2.02		0.67	0	5	22	4	5	sw.	F. M. Hughes.
Springer	Colfax	5,857	21	71.6	+ 0.3	98	4	43	25	48	0.75	− 2.04	0.45	0	3	28	3	0	w.	Agent A. T. & S. F. R. R.
Taylor	do	5,661	4	70.8		98	7†	44	25†	48	0.88		0.50	0	2	17	0	14	w.	Agent E. P. &. S. W. R. R.
Texico (near)	Roosevelt	4,038									1.35		1.21	0	4					A. L. King.
Trementina	San Miguel	5,000	5																	Miss Alice Blake.
Tucumcari (near)	Quay	4,194	9	80.4		105	13	54	21	38	0.56		0.38	0	2	28	1	2	sw.	John F. Seaman.
Tucumcari	do	4,194	4																	Agent E. P. & S. W. R. R.
Valley	Union	5,000	8																	Miss M. L. Payne.
Vance (near)	do		2								0.30		0.27	0	3	28	2	1	sw.	C. E. Anderson.
Vermejo Park	Colfax	7,600	10	63.8	+ 1.1	91	12	37	29	48	1.57	− 2.41	0.70	0	5	15	10	6		H. W. Adams.
Wagon Mound (near)	Mora	6,300	4	67.8		92	13†	40	29	47	1.30		0.57	0	8	17	11	3	se.	Guy D. Barnes.

TABLE 1.—*Climatological data for July, 1913. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, 0.01 inch or more.	Sky.			Prevailing wind direction.	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 of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Texas.																				
Amarillo	Potter	3,676	21	78.7	+ 2.6	101	14	58	21	34	1.80	− 1.37	0.83	0	6	26	5	0	s.	U. S. Weather Bureau.
Archer City	Archer		2								0.67		0.45	0	2	30	1	0	s.	Charles H. Thuman.
Arthur City	Lamar	590	21								5.18	+ 0.91	2.25	0	4	19	5	7		C. A. Lowrey.
Bonham	Fannin	566	9	82.9		105	9	68	2†	36	6.82		2.30	0	5	18	9	4	s.	H. M. Norman.
Canadian	Hemphill	2,339	6	81.9		103	14†	58	21	34	0.97		0.83	0	5	27	2	2	s.	R. M. Hibbard.
Childress	Childress	1,869	20																	George Baker.
Chillicothe	Hardeman	1,406	5								1.28		0.87	0	3					C. W. Underwood.
Clarendon	Donley	2,719	8	79.6		100	11	59	21	34	2.16		1.00	0	6	7	23	1	sw.	Whitfield Carhart.
Clarksville	Red River	442	13	85.0[j]	+ 1.9	101	9†	70	16†	27[j]	0.00	− 5.62	0.00	0	0	18[d]	4[d]	5[d]		J. W. O'Neill.
Claude	Armstrong	3,397	10								T.	− 3.32	T.	0	0					Ft. W. & D. C. Ry.
Dalhart	Dallam	3,998	8	78.1		105	13	54	21	38	0.84		0.58	0	4	30	0	1	se.	W. D. Griggs.
Denison	Grayson		13								10.31	+ 5.91	3.50	0	5	16	0	15	s.	J. L. Wilson.
Finley	Bowie		3								1.70		0.70	0	4	22	1	8	s.	Robert L. Smith.
Henrietta	Clay	915	21	87.6	+ 3.9	107	11	67	22	35	0.60	− 1.60	0.55	0	2	26	4	1	s.	C. K. Brown.
Jefferson	Marion										2.40		1.10	0	3	24	3	4	s.	J. C. Kistenmacher.
Memphis	Hall	2,067	8																	Ft. W. & D. C. Ry.
Miami	Roberts	2,743	10	81.4		102	15	56	21	37	2.30	− 1.37	1.90	0	4	26	5	0	s.	J. E. Kinney.
Ochiltree	Ochiltree		5																	S. J. Allen.
Paducah	Cottle										0.87		0.40	0	3	14	16	1	sw.	C. M. Grayum.
Panhandle	Carson	3,450	4								1.75		1.50	0	2	21	6	4		J. Sid O'Keefe.
Paris	Lamar	592	24	82.8	+ 0.4	102	19	69	6†	33	4.44	+ 1.20	1.85	0	6	17	7	7	s.	Robert A. Miller.
Plemons	Hutchinson		6	80.8		106	13	51	21	37	1.83		0.97	0	4	23	4	4	s.	C. S. Solomon.
Quanah	Hardeman	1,563	11	84.2	+ 1.0	107	11†	60	3	41	0.81	− 1.13	0.45	0	3	23	3	5	s.	William H. Crawford.
Ringo Crossing	Hopkins		3								4.86		1.47	0	5	20	2	9	s.	H. J. Palmer.
Romero	Hartley	4,056	3	78.5		105	13†	49	28	44	0.10		0.10	0	1	16	15	0	se.	R. S. Chamberlain.
Sherman	Grayson	745	20	84.4	+ 2.1	99	8	67	21	24	7.82	+ 3.12	2.70	0	4	19	6	6	s.	R. A. Gibbs.
Stratford	Sherman	3,699	1	79.8		105	13	55	21	39	1.60		0.86	0	3	12	17	2	s.	J. W. Elliott.
Tulia	Swisher	3,501	15	78.5	+ 1.8	106	11	55	21	39	3.85	− 0.32	2.81	0	4	16	15	0	se.	Lou Mulhall.
Wellington	Collingsworth		1								0.42		0.22	0	2					J. D. Camp.
Wichita Falls	Wichita	958	21																	J. C. Mytinger.
Winfield	Titus		3								2.71		1.18	0	3	11	19	1	sw.	J. B. Newberry.
Kansas.																				
Alden	Rice	1,684	3	81.6		105	8†	55	21	35	1.51		0.78	0	7	23	7	1	s.	Geo. Klady.
Anthony	Harper	1,329	16	84.2		109	8†	59	22	41	2.17	− 1.38	0.58	0	7	15	13	3	sw.	R. H. Beebe.
Ashland	Clark	1,951	25	81.6	+ 1.8	107	16	57	22	40	1.00	− 2.87	0.47	0	7	18	13	0	s.	C. W. Carson.
Burlington	Coffey	1,010	20	82.0	+ 3.8	106	17	55	21	41	1.08	− 2.85	0.94	0	3	7	24	0	s.	O. E. Sanford.
Chanute	Neosho	940	9	83.9		104	18	60	21†	35	2.89		1.49	0	2	12	14	5	s.	C. W. Brown.
Cimarron	Gray	2,700	1	81.2		108	13	60	21†	38	0.36		0.25	0	3	19[a]	3[a]	2[a]	s.	C. C. Isely.
Coffeyville	Montgomery	747	3																	A. F. Briggs.
Coldwater	Comanche	2,090	16	82.2	+ 3.4	104	8†	58	21	35	0.91	− 2.15	0.34	0	4	26	5	0	s.	J. L. Stanley.
Columbus	Cherokee	898	23	83.2	+ 5.1	107	18	57	21	39	0.76	− 4.36	0.30	0	7	18	11	2	sw.	O. E. Skinner.
Coolidge	Hamilton	3.348	16	78.8	+ 2.0	114	14	54	1†	46	1.70	− 1.25	1.10	0	2	19	9	3	se.	W. R. Padley.
Cottonwood Falls	Chase	1,234	9	82.7		107	8	52	21	42	1.66		0.75	0	4	24	4	3	s.	E. B. Greene.
Council Grove	Morris	1,234	4	82.7		106	16	54	21	41	0.84		0.50	0	5	20	9	2	sw.	J. P. Blackledge.
Cunningham	Kingman	1,680	29	82.6	+ 4.0	105	8†	64	12	35	0.50	− 3.36	0.25	0	2	28	2	1	s.	W. H. Morton.
Dodge City	Ford	2,513	39	80.7	+ 3.0	105	8	61	21	34	0.70	− 2.68	0.26	0	8	19	11	1	s.	U. S. Weather Bureau.
El Dorado	Butler	1,291	11	82.8		105	8	56	21	35	1.04		0.55	0	6	23	6	2	s.	W. Y. Miller.
Ellinwood	Barton	1,790	38	83.5	+ 5.4	110	8	56	21	37	0.65	− 3.23	0.17	0	7	10	21	0	sw.	Martin Musil.
Emporia	Lyon	1,138	32	81.2	+ 3.3	106	16	56	21	39	3.55	− 0.28	2.20	0	7	23	4	4	s.	W. H. Boyles.
Eureka	Greenwood	1,079	17	82.9		107	15†	60	10†	43	1.97	− 2.62	0.72	0	4	20	7	4	sw.	Mrs. T. C. Peffer.
Fall River	do	925	17	83.4	+ 4.9	107	11†	54	21†	43	2.92	− 2.49	1.60	0	6	25	6	0	s.	J. McDaniel.
Fargo	Seward		3								2.38		0.82	0	6	11	20	0	s.	N. B. Swink.
Fredonia	Wilson	975	10	82.4		106	18	55	21	38	2.49		1.78	0	10	21	8	2	s.	B. W. Holmes.
Garden City	Finney	2,836	24	80.4	+ 3.0	110	13	58	20†	43	1.14	− 2.19	0.91	0	3	17	13	1	s.	B. F. Stocks.
Greensburg	Kiowa	2,235	6																	C. C. Raymond.
Grenola	Elk	1,116	25	81.2	+ 3.0	104	11	56	22	42	1.42	− 2.19	0.87	0	5	16	13	2	sw.	W. H. Lawyer.
Howard	do	1,112	6	82.4		105	11	56	22	41	2.79		1.36	0	7	21	8	3	s.	J. W. Eby.
Hugoton	Stevens		9	81.4		110	13	58	1†	38	1.69		0.52	0	6	17	12	2	s.	E. R. Kimzey.
Hutchinson	Reno	1,535	23	83.7	+ 5.4	108	8†	62	10†	36	1.30	− 3.85	0.95	0	3	25	5	1	sw.	Sheridan Ploughe.
Independence	Montgomery	800	39	82.9	+ 2.2	106	18	54	22	44	1.48	− 2.76	0.91	0	4	15	10	6	s.	F. L. Kenoyer.
Iola	Allen	984	7	81.6	+ 3.5	102	18	57	21	37	2.30	− 1.62	0.52	0	8	18	12	1	s.	U. S. Weather Bureau.
Irene	Hamilton	3,440	3	80.6		110	13	56	1†	44	1.12		1.02	0	3	6	21	4	s.	N. M. Herbig.
Jetmore	Hodgeman	2,268	12																	James Aikin.
Kingman	Kingman	1,504	5	83.4		108	8	55	21	40	0.90		0.33	0	5	21	8	2	sw.	B. B. Anawalt.
La Crosse	Rush	2,061	11	83.3	+ 6.3	109	8†	57	19	38	0.98	− 2.10	0.70	0	4	27	4	0	se.	Rodney Torrey.
Lakin	Kearney	2,993	23	79.8	+ 2.6	112	13	56	1†	45	1.12	− 1.23	0.80	0	2	24	7	0	s.	C. H. Longstreth.
Larned	Pawnee	2,090	28	83.2		109	8	59	21	37	0.51	− 2.92	0.18	0	5	26	3	2	s.	H. H. Wolcott.
Lebo	Coffey	1,138	27	82.6	+ 4.7	106	8†	57	21	39	1.58	− 2.69	1.06	0	7	22	7	2	sw.	J. J. Bowman.
Le Roy	do	990	4								3.59		2.76	0	4	18	3	10	s.	F. W. Schmitt.
Liberal	Seward	2,843	6	82.4		108	13†	57	26	34	1.72		0.71	0	6	21	3	7	sw.	Dr. R. T. Nichols.
Macksville	Stafford	2,032	24	82.0	+ 3.4	108	8	54	21	41	0.42	− 3.07	0.19	0	7	18	9	4	sw.	Mrs. Nelia Poling.
McPherson	McPherson	1,495	24	84.1	+ 5.6	111	8	49	21	45	1.25	− 2.58	0.51	0	5	23	4	4	sw.	Ed. F. Haberlein.
Madison	Greenwood	1,074	12	80.6	+ 3.1	105	6	50	21	45	1.26	− 3.95	0.65	0	3	8	23	0	se.	C. A. David.
Marion	Marion	1,310	20	84.4	+ 5.7	109	8	55	21	38	0.69	− 2.95	0.22	0	8	15	16	0	s.	Jerry Forney.
Medicine Lodge	Barber	1,259	20	81.6	+ 1.7	109	8	55	21	41	1.90	− 1.19	0.96	0	5	19	11	1	sw.	S. P. Garrison.
Minneola	Clark	2,558	1								1.44		0.70	0	3	20	11	0	sw.	A. P. Reece.
Mount Hope	Sedgwick	1,410	16								1.07	− 2.47	0.28	0	8	19	11	1	s.	H. N. Renfrew.
Neosho Rapids	Lyon	1,092	8								2.61		1.25	0	7	25	2	4	sw.	W. H. McMullin.
Ness City	Ness	2,260	20								0.56	− 2.84	0.19	0	3					J. K. Barnd.
Newton	Harvey	1,454	16	84.5	+ 5.9	108	8	59	21	40	0.92	− 2.63	0.65	0	4	16	15	0	s.	H. A. Brush.
Norwich	Kingman	1,496	17	83.8	+ 5.0	106	8	57	21	40	1.74	− 1.54	0.67	0	4	25	4	2	s.	N. I. Farris.
Oswego	Labette	899	19	82.0	+ 3.1	102	8†	58	21	33	1.30	− 3.44	0.48	0	5	21	9	1	sw.	Jas. M. Currigan.
Pittsburg	Crawford	934									1.27		0.85	0	4	24	3	4	sw.	A. L. Scott.
Plains	Meade	2,766	3	79.6		108	13	56	27	39	2.53		0.77	0	6	22	9	0		E. J. Henning.
Pratt	Pratt	1,950	18	83.2	+ 4.2	108	8†	57	31	45	0.92	− 2.55	0.52	0	4	13	17	1	s.	T. J. Arnold.
Richfield	Morton		2	80.8	+ 2.5	110	13	56	1	38	1.54	− 3.00	0.78	0	5					M. J. Allen.
Rome	Sumner	1,218	27	83.0	+ 3.9	107	8	53	22	46	2.12	− 1.46	0.90	0	6	23	5	3	s.	D. M. Adams.
Sedan	Chautauqua	834	28	83.4	+ 4.2	109	18	55	22	44	2.27	− 1.26	1.32	0	8	15	12	4	s.	A. Y. Buckles.
Toronto	Woodson	1,040	16	82.6	+ 4.3	107	16†	54	22	46	2.92	− 1.84	1.78	0	5	29	1	1	s.	M. A. Webb.
Ulysses	Grant	3,050	22			110	13	60	1†	45	0.45	− 2.30	0.45	0	1	27[a]	0[a]	3[a]	s.	T. W. Marshall.
Walnut	Crawford	940	11	82.4	+ 4.3	105	18	58	22	40	2.08	− 2.41	1.86	0	2	22[b]	7[b]	0[b]	sw.	R. C. Harlan.
Wellington	Sumner	1,225	17	83.7	+ 4.6	108	8	54	21	43	4.20	+ 0.55	1.39	0	9	18	12	1	s.	E. O. G. Kelly.
Wichita	Sedgwick	1,377	26	82.4	+ 3.4	102	8	64	22	30	1.28	− 2.34	0.75	0	9	20	10	1	s.	U. S. Weather Bureau.
Winfield	Cowley	1,124	19	82.8	+ 3.6	105	8	54	21	40	2.56	− 1.46	0.95	0	6	26	2	3	s.	M. B. Light.
Yates Center	Woodson	1,068	34	81.4	+ 3.9	105	18	56	22	42	0.97	− 3.34	0.48	0	3	17[a]	13[a]	0[a]	s.	J. W. Tipton.

TABLE 1.—*Climatological data for July, 1913. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Oklahoma.																				
Ada	Pontotoc	1,001	5	83.7	.....	104	8†	63	22	34	1.34	.....	0.76	0	6	20	5	6	s.	H. P. Sugg.
Altus	Jackson	1,410	....	84.4	.....	107	11	64	20†	35	1.36	.....	0.61	0	4	19	7	5	s.	U. S. Weather Bureau.
Alva	Woods	1,350	8	83.0	.....	105	16	60	21	36	2.30	.....	2.10	0	2	14	17	0	s.	S. A. Stech.
Apache	Caddo	1,255	3	83.4	.....	106	31	55	22	42	2.44	.....	1.76	0	3	28	2	1	sw.	G. D. Teeter.
Arapaho	Custer	1,575	19	83.2	+ 3.1	106	23	50	22	48	1.77	− 1.91	1.57	0	3	23	7	1	.....	J. C. Brower.
Ardmore	Carter	872	11	85.4	+ 3.2	107	19	62	22	36	3.69	+ 0.63	1.66	0	4	25	3	3	s.	H. T. Nisbett.
Bartlesville	Washington	687	5	86.0	.....	108	18	64	22	35	2.32	.....	1.11	0	5	18	7	6	sw.	Dr. A. P. Owens.
Beaver	Beaver	2,500	16	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. C. Frazer.
Cache	Comanche	1,350	7	79.8	.....	102	11†	51	22	45	2.45	.....	2.05	0	2	26	4	1	sw.	Mrs. Frank Rush.
Calvin	Hughes	713	8	.....	.....	.....	.....	.....	.....	.....	2.25	.....	1.10	0	5	18	0	13	s.	Thomas Purcell.
Chandler	Lincoln	865	11	85.2	+ 3.6	108	31	59	22	41	1.79	− 1.02	1.00	0	5	15	0	16	s.	Chas. L. Kern.
Chattanooga	Comanche	1,150	7	81.6	.....	103	23	59	31	42	1.98	.....	0.92	0	4	26	4	1	s.	Squire Humble.
Chickasha	Grady	1,091	11	84.0	+ 1.3	106	31	53	22	45	1.37	− 0.82	1.25	0	3	19	7	5	s.	Anna W. O'Neil.
Cleveland	Pawnee	800	11	86.4	+ 6.1	108	18	58	22	43	1.23	− 0.88	0.49	0	5	23	6	2	sw.	Chas. C. Breed.
Cloud Chief	Washita	1,400	11	83.9	+ 2.3	107	23	59	22	36	3.79	+ 1.56	3.18	0	2	20	10	1	s.	J. P. Stutzman.
Crawford	Roger Mills	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	W. W. Blackburn.
Durant	Bryan	643	11	82.8	+ 1.8	102	19	64	22	34	7.11	+ 2.77	3.04	0	5	21	6	4	s.	Nelson Houk.
Eldorado	Jackson	1,456	6	82.4	.....	108	11†	59	7†	45	0.26	.....	0.16	0	2	24	6	1	sw.	T. W. Lanham.
El Reno	Canadian	1,400	21	84.0	+ 3.8	104	....	60	....	37[a]	7.44	+ 4.37	6.50	0	2	25	4	2	s.	Rose E. Walker.
Enid	Garfield	1,269	11	83.0	+ 1.8	106	11	57	22	40	1.22	− 2.03	0.55	0	5	18	13	0	s.	Uri B. Worcester.
Erick	Beckham	2,058	8	83.8	.....	107	....	56	....	45[c]	0.24	.....	0.17	0	2	25	6	0	s.	A. W. Hanes.
Eufaula	McIntosh	566	....	83.0	.....	105	....	60	....	35[a]	2.85	.....	1.21	0	7	12	14	5	s.	R. Uhl Brown.
Fairland	Ottawa	839	13	83.3	+ 4.7	104	6†	56	21	40	2.87	− 0.81	1.50	0	7	16	12	3	s.	C. W. Prier.
Fort Gibson	Muskogee	556	8	.....	.....	.....	.....	.....	.....	.....	2.59	.....	1.30	0	7	20	5	6	e.	John T. Welsh.
Frederick	Tillman	1,293	6	85.6	.....	108	31	64	22	38	1.27	.....	0.85	0	4	27	4	0	s.	B. B. Bradley.
Geary	Blaine	1,546	1	82.6	.....	102	11†	60	21	34	4.52	.....	4.32	0	2	26	3	2	sw.	O. P. Ruth.
Goodwell	Texas	3,300	2	81.6	.....	108	13	55	21	38	1.10	.....	0.78	0	6	19	9	3	s.	S. W. Black.
Guthrie	Logan	1,000	20	83.6	+ 2.0	105	31	54	22	42	3.25	+ 0.26	3.25	0	1	24	7	0	s.	S. E. Snyder.
Guymon	Texas	3,133	3	.....	.....	.....	.....	.....	.....	.....	1.38	.....	0.81	0	3	24	7	0	se.	A. L. Mordt.
Hartshorne	Pittsburg	700	14	86.2	+ 4.6	105	9	68	4†	30	0.04	− 3.86	0.02	0	2	25	5	1	s.	Frank Webber.
Healdton	Carter	900	19	84.1	+ 2.8	107	31	54	22	46	1.50	− 2.32	1.22	0	2	20	10	1	se.	C. H. Heald.
Helena	Alfalfa	1,396	5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. G. McCall.
Hennessey	Kingfisher	1,166	18	85.6[e]	+ 4.5	107	11	50	22	50	1.70	− 2.00	1.40	0	2	19	12	0	s.	Mrs. M. C. Parks.
Hobart	Kiowa	1,396	10	83.6	.....	106	11†	59	22	39	2.75	.....	1.30	0	4	25	5	1	s.	J. M. Pate.
Holdenville	Hughes	900	12	84.8	+ 4.8	106	8	63	22	35	1.22	− 2.08	0.91	0	3	24	7	0	s.	Eula Rutherford.
Hooker	Texas	3,038	7	80.9	.....	108	12†	57	21	39	1.89	.....	1.00	0	4	18	1	12	s.	H. N. Kelly.
Hugo	Choctaw	.....	....	82.3	.....	100	19	67	15†	31	6.97	.....	2.63	0	6	22	8	1	n.	G. C. Montgomery.
Hurley	Cimarron	4,200	5	80.8	.....	108	13	52	20	43	1.19	.....	0.81	0	3	12	19	0	sw.	Dr. C. W. Meyers.
Idabel	McCurtain	474	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	
Jefferson	Grant	1,062	19	84.2	+ 3.5	108	8	54	21	42	0.72	− 2.68	0.51	0	4	22	9	0	s.	T. E. Beck.
Kenton	Cimarron	4,000	12	80.0	+ 3.9	108	13	53	24	38	2.34	+ 0.11	1.33	0	5	16	12	3	se.	Ralph H. Guy.
Kingfisher	Kingfisher	1,046	16	84.4	+ 3.2	104	11	53	22	45	2.32	− 0.98	2.13	0	4	20	11	0	s.	J. C. Cross.
Lawton	Comanche	1,111	....	84.6	.....	105	23	58	22	40	2.11	.....	1.42	0	6	21	6	4	se.	Frank M. Head.
Lawtonka Lake	....do	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.97	.....	2.42	0	4	.....	.....	.....	.....	W. F. Stuart.
McAlester	Pittsburg	698	16	85.5	.....	105	8†	68	27†	31	2.11	− 1.78	0.98	0	4	21	3	7	s.	Wm. Noble.
Mangum	Greer	1,585	20	84.2	+ 2.2	107	11	62	22†	44	4.00	+ 1.47	2.68	0	4	20	5	6	se.	F. D. Dodson.
Marlow	Stephens	1,292	12	84.8	+ 4.1	106	20†	63	22	36	0.83	− 1.47	0.33	0	3	21	4	6	se.	Wm. B. Anthony.
May	Harper	.....	19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. C. Gray.
Meeker	Lincoln	1,030	14	87.2	+ 6.6	111	30†	55	22	48	1.00	− 1.75	1.00	0	1	27	1	3	s.	Dr. J. H. Baugh.
Muskogee (1)	Muskogee	.....	....	84.8	.....	105	8†	65	21	35	1.42	.....	1.00	0	4	17	9	5	se.	U. S. Weather Bureau.
Muskogee (2)	....do	614	14	87.6	+ 8.4	107	9	70	3†	33	1.89	− 3.04	1.00	0	4	13	11	7	s.	J. Harry Randall.
Mutual	Woodward	.....	5	83.2	.....	108	18	56	21	41	.....	.....	.....	0	....	28	2	1	s.	Thos. Martin.
Neola	Caddo	1,500	7	83.3	.....	105	31	59	22	37	4.00	.....	3.42	0	3	18	13	0	s.	R. N. Schooling.
Newkirk	Kay	1,149	15	85.0	+ 3.9	104	11†	61	22	38	1.52	− 1.90	0.71	0	4	25	5	1	s.	P. H. Albright & Co.
Norman	Cleveland	1,171	18	84.2	+ 3.6	105	....	54	....	44[a]	1.00	− 2.20	1.00	0	1	8	21	2	s.	S. E. Boyd.
North Muskogee	Muskogee	.....	.....	.....	.....	.....	.....	.....	.....	.....	3.56	.....	2.00	0	6	14	5	12	s.	J. E. Walker.
Oakwood	Dewey	1,854	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Dr. E. E. Lawson.
Okeene	Blaine	1,194	8	83.9	.....	108	11	59	22	39	1.64	.....	0.81	0	5	24	7	0	sw.	Dr. L. H. Murdoch.
Okemah	Okfuskee	.....	1	85.6	.....	106	8†	60	23	37	0.78	.....	0.30	0	5	25	0	6	s.	S. F. Smith.
Oklahoma	Oklahoma	1,247	23	81.7	+ 1.9	103	31	60	22	34	5.06	+ 1.41	5.06	0	1	15	9	7	s.	U. S. Weather Bureau.
Okmulgee	Okmulgee	752	8	85.4	.....	105	9	69	12†	32	2.05	.....	0.88	0	4	17	8	6	s.	J. L. Maynard.
Pauls Valley	Garvin	880	12	84.8	+ 4.5	106	31	56	22	44	1.46	− 2.21	0.94	0	6	26	1	4	s.	A. M. Foss.
Pawhuska	Osage	918	12	84.2	+ 4.0	105	18	54	22	43	0.62	− 3.74	0.36	0	5	22	9	0	sw.	R. C. Block.
Perry	Noble	920	14	83.0	+ 2.5	104	8	57	21	37	2.77	+ 0.24	1.75	0	5	18	13	0	s.	S. E. Laird.
Rankin	Roger Mills	2,200	9	79.6	.....	105	11	57	21	40	1.59	.....	1.30	0	5	24	7	0	sw.	Roy Kagay.
Ravia	Johnston	796	10	83.2	.....	107	19	60	22	41	5.15	.....	1.60	0	4	23	3	5	s.	R. G. Guptill.
Sac and Fox Agency	Lincoln	900	19	85.3	+ 5.3	106	31	60	22	38	1.79	− 1.54	0.80	0	5	11	19	1	n.	Tos. P. Myers.
Shawnee	Pottawattomie	1,041	11	83.6	+ 3.2	105	31	58	22	40	1.82	− 0.94	1.45	0	3	5	24	2	s.	Mrs. Kate Chatman.
Snyder	Kiowa	1,356	6	84.1	.....	104	10	62	22	35	1.53	.....	0.90	0	2	25	5	1	s.	Dr. W. C. Woodard.
Stillwater	Payne	880	20	82.3	+ 2.4	102	11	56	22	38	3.49	+ 0.33	2.40	0	5	21	6	4	s.	Will P. Watson.
Tahlequah	Cherokee	790	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. P. Hardy.
Tulsa	Tulsa	700	24	83.8	.....	105	18	61	22	36	3.12	− 0.14	1.34	0	6	21	9	1	s.	Dr. H. M. Hutchinson.
Vinita	Craig	698	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Insane Hospital.
Wagoner	Wagoner	588	16	83.2	+ 2.2	105	9	60	21	32	3.70	− 0.98	1.80	0	4	5	22	4	s.	Moro Hatfield.
Waukomis	Garfield	1,258	16	83.6	+ 2.3	106	11	56	22	43	1.28	− 2.55	1.05	0	3	22	9	0	sw.	R. C. Shades.
Waurika	Jefferson	988	2	85.3	.....	106	11	62	22	35	2.71	.....	1.60	0	4	25	6	0	s.	B. A. Swindler.
Weatherford	Custer	1,639	11	82.7	+ 2.2	106	31	58	22	44	7.86	+ 5.62	7.00	0	7	18	6	7	s.	Eugene Forbes.
Webbers Falls	Muskogee	479	14	85.4	+ 5.0	108	8†	66	16	41	3.40	− 0.66	1.60	0	5	8	23	0	w.	B. D. Boulineau.
Whiteagle	Kay	945	9	84.2	.....	106	18	58	22	40	1.05	.....	0.65	0	3	20	11	0	sw.	John F. DeJarnette.
Woodward	Woodward	1,900	10	81.9	.....	104	15	56	....	38[a]	0.99	.....	0.65	0	3	11	20	0	s.	Fred A. Baird.
Wyandotte	Ottawa	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.02	.....	1.02	0	6	15	5	11	calm.	Henry Hicks.
Missouri.																				
Belle	Maries	.....	22	79.8	+4.9	102	24	55	22	37	1.61	−2.68	0.81	0	2	13[g]	9[g]	2[g]	s.	A. J. Wofford.
Birch Tree	Shannon	1,200	....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	V. H. Kirkendall.
Cape Girardeau	Cape Girardeau	346	4	.....	.....	.....	.....	.....	.....	.....	6.45	.....	2.10	0	6	19	7	5	s.	D. L. Albert.
Cardwell	Dunklin	.....	2	79.8	.....	100	18	53	22	37	5.93	.....	2.85	0	10	17[c]	9[c]	2[c]	s.	E. M. Perry.
Caruthersville	Pemiscot	.....	23	81.4	+1.9	102	18	59	22	35	2.71	−0.99	0.92	0	7	22	6	3	e	H. E. Averill.
Cassville	Barry	.....	3	77.0	.....	97	9	49	22	37	7.68	.....	2.67	0	8	18	11	2	s.	Mrs. Zuma Bloomer.
Dean	McDonald	.....	15	78.6	+1.0	99	6†	52	21	40	4.15	−0.14	0.95	0	8	24[d]	1[d]	2[d]	sw.	H. E. Dean.
Doniphan	Ripley	440	10	80.2	+2.8	102	18	55	22	36	3.96	−2.45	1.23	0	9	20	5	6	s.	W. W. Martin.
Fruit City	Reynolds	1,150	1	79.7	.....	98	29	58	21	28	4.88	.....	1.31	0	9	19	3	9	w.	R. C. Walton.
Gano	Dent	.....	10	78.6	+2.2	100	18	54	21	33	4.70	+0.05	1.14	0	10	15	14	2	s.	A. C. Leech.
Goodland	Iron	900	9	76.2	.....	98	29	50	22	37	5.27	.....	2.80	0	7	15	13	3	s.	F. M. Adams.
Hollister	Taney	850	4	78.0	.....	94	6	56	22	30	5.15	.....	1.95	0	6	23	0	8	sw.	W. P. Chapmann.
Ironton	Iron	925	36	78.0	+2.4	100	18	47	22	41	3.73	−0.34	1.25	0	8	7	18	6	s.	W. H. Delano.
Jackson	Cape Girardeau	458	23	80.0	+3.5	102	18	54	22	37	5.53	+1.76	2.09	0	9	13	13	5	s.	L. M. Bean.
Joplin	Jasper	979	32	82.0	+3.9	99	16	60	21	31	0.70	−4.09	0.50	0	2	17	0	14	s.	Joplin High School.
Koshkonong	Oregon	911	14	80.7	+3.3	100	18	61	22	30	3.77	−0.80	0.68	0	10	13	15	3	s.	J. W. Hitt.
Lamar	Barton	964	33	82.5	+4.4	104	16	57	20	38	4.96	+0.50	3.36	0	7	20	7	4	sw.	E. H. Adams.

TABLE 1.—*Climatological data for July, 1913. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
***Missouri*—Continued.**																				
Marble Hill	Bollinger	420	20	81.4	+4.6	100	18	56	22†	40	3.12	−1.78	0.83	0	8	20	10	1	s.	A. F. Hendricks.
Mountain Grove	Wright	1,490	15	79.0	+3.5	98	29	61	21†	28	3.40	−1.37	1.45	0	7	19	8	4	s.	Mo. Fruit Exp. Sta.
Mount Vernon	Lawrence	1,480	37	79.6	+1.9	99	7†	52	24	40	5.49	+0.10	1.80	0	6	23	6	2	sw	J. R. White & Son.
Neosho	Newton	1,023	31	80.2	+2.8	101	6	51	21	41	1.95	−2.48	1.06	0	5	27	2	2	sw.	W. O. Buck.
New Madrid	New Madrid	285	20								2.73	−1.70	0.90	0	7	19	3	9	se.	Miss Josie Smith.
Oakfield	Franklin	793	22	80.4	+2.9	104	29	59	21	32	2.67	−2.15	1.10	0	9	3	25	3	sw.	E. E. Steines.
Rolla	Phelps	1,139	33	79.5	+2.7	102	18	56	23	35	3.91	−0.23	0.63	0	14	16	6	9	s	Prof. P. J. Wilkins.
Springfield	Greene	1,350	26	79.2	+2.8	96	18	63	21	26	3.84	−0.95	1.75	0	9	17	12	2	s.	U. S. Weather Bureau.
Kentucky.																				
Blandville	Ballard	445	32	79.1	+1.2	95	1†	61	22	26	6.67	+2.78	3.05	0	6	12	13	6	sw.	E. W. Horr.
Tennessee.																				
Arlington	Shelby		31	80.6	+1.2	98	1†	59	22	31	7.39	+3.65	2.40	0	10	17	6	8	s.	A. Thomas B. Etheridge.
Bolivar	Hardeman	450	30	79.8	+1.3	96	6	59	22	31	4.41	+0.58	1.18	0	9	26	0	5	s.	Miss Mary A. Smith.
Brownsville	Haywood	361	31	81.7	+2.4	98	1†	61	22	32	4.09	+0.59	1.84	0	9	22	2	7	sw.	Miss Hattie N. Moses.
Covington	Tipton	311	30	79.9	+0.5	98	1	62	23	28	5.61	+2.29	2.10	0	10	26	2	6	s.	James S. Ruffin.
Dyersburg	Dyer	310	30	81.1	+1.2	97	1†	61	22	29	3.91	+0.26	1.50	0	9	24	0	7	se.	Miss Martha A. Sinclair.
Jackson	Madison	450	23	81.2[d]	+2.1	102	29	58	23	35[d]	5.17	+0.36	2.15	0	5	14	17	0	sw.	Shelby A. Robert.
Kenton	Obion	325	11	78.8	+0.3	98	29	55	22	35	2.16	−2.64	0.94	0	4	12	13	6	s.	George S. Martin.
Memphis	Shelby	409	42	81.0	+0.3	95	6	69	12	21	5.91	+2.40	2.09	0	9	17	4	10	sw.	U. S. Weather Bureau.
Milan	Gibson	440	31	79.6	+0.4	96	6†	60	22	31	3.56	−0.21	1.76	0	11	12	5	14	s.	Orlando F. Cantwell.
Trenton	do	345	33	78.8	+1.1	97	18	57	22	34	6.44	+3.06	2.00	0	8	18	9	4	sw.	F. L. Dennison.
Union City	Obion	360	18	81.4	+2.1	104	29	56	22	38	3.45	−0.94	1.30	0	8	9	22	0	sw.	J. R. Oliver.
Arkansas.																				
Alicia	Lawrence		9	80.8		97	18	58	22	34	3.90		2.10	0	7	22	9	0	s.	McCullough and Guelck.
Amity	Clark	250	21	82.8[e]	+2.7	103	7	64	23	34[e]	4.76	+0.84	2.50	0	5				sw.	J. W. Campbell.
Arkansas City	Desha	145	30								2.82	−1.06	1.52	0	5					W. C. Blundell.
Batesville	Independence	271	14								2.44	−0.95	0.64	0	10					Lelia I. Teter.
Bee Branch	Van Buren		21	81.6	+2.0	104	6	61	22	33	6.60	+2.89	3.25	0	7					J. E. Scanlan.
Bentonville	Benton	1,303	8	79.4	+0.9	100	9	60	22	30	4.64	+0.33	2.58	0	9	13	14	4	s.	U. S. Weather Bureau.
Bergman	Boone	1,324	15																	John T. Maxey.
Black Rock	Lawrence	259	10								3.86		0.85	0	12					S. J. Howe.
Brinkley	Monroe	226	29	82.2	+2.4	102	18†	58	22	36	4.69	+0.72	1.23	0	10	17	9	5	s.	H. L. D. Whitson.
Calico Rock	Izard	361	9								2.60		1.10	0	4					J. W. Wray.
Camden	Ouachita	158	28	82.0	+0.9	100	7†	64	23	32	4.55	+0.25	2.15	0	8					R. H. Quarterman.
Center Point	Howard	470	14	82.6	+1.0	103	19	68	22†	33	5.29	+0.11	1.25	0	7	14	9	8	sw.	J. M. Huddleston.
Clarendon	Monroe	171	9								1.65		0.41	0	9					Mrs. B. E. Bishop.
Conway	Faulkner	309	30	82.9	+2.5	102	6	62	22	32	5.15	+1.58	2.23	0	7	19	10	2	s.	G. H. Burr.
Corning	Clay	293	20								6.06	+2.63	3.00	0	12	12	11	8	s.	Jacob Brobst.
Dardanelle	Yell	330	27	82.4		102	18	63	22†	34	3.62	−0.60	1.24	0	10					A. Bernard.
Dodd City	Marion	1,175	32	80.2	+0.2	99	6†	57	20	38	2.20	−2.78	0.70	0	6	17	14	0	sw.	Neal Dodd.
Dumas	Desha		2								4.11		0.98	0	7	18	13	0		Lawrence Waterman.
Dutton	Madison		11	76.1	+1.7	94	6†	55	21	32	7.67	+3.54	2.03	0	8	14	11	6	s.	J. M. Ricketts.
Eldorado	Union	265	9	81.4		98	8	67	21	27	3.90		1.04	0	9					Jeff J. Babb.
England	Lonoke		6	81.8		101	19	60	22	34[d]	2.09		0.95	0	5					J. C. Chenault.
Eureka Springs	Carroll	1,465	12	80.7	+3.6	100	6†	57	21†	37	4.70	+0.26	1.42	0	9	3	26	2	sw.	George W. Nichoalds.
Fayetteville	Washington	1,451	25	80.0	+2.6	99	6†	59	12	30	8.26	+3.45	3.88	0	10	4	26	1	sw.	University of Arkansas.
Fordyce	Dallas		3	81.6		99	19	67	23	27	4.83		1.40	0	6	9	12	10	n.	J. B. Atkinson.
Fort Smith	Sebastian	481	31	83.0	+2.0	101	9	66	12	32	3.69	−0.15	0.96	0	10	11	12	8	e.	U. S. Weather Bureau.
Fraziers Turnpike	Pulaski		2																	R. E. Brown.
Fulton	Hempstead	264	26								2.74	−1.01	1.48	0	5					B. C. Logan.
Georgetown	White	200	1								4.80		1.66	0	9					Wm. N. Harris.
Hardy	Sharp	643	15	81.2	+2.7	103	18	58	22	36	4.33	+0.23	1.60	0	8	6	14	11	sw.	C. A. Caywood.
Helena	Phillips	182	41	81.8	+0.4	104	6	66	22	33	3.46	−0.56	1.60	0	8					W. Schwarz.
Hot Springs	Garland	600	22	83.6	+3.2	103	19	68	10	29	4.17	−0.95	2.35	0	7	24	5	2	sw.	Army and Navy Gen. Hosp.
Huttig	Union	85	6	82.2		101	19	66	22	32[e]	3.66		1.80	0	7					C. A. Berry.
Jonesboro	Craighead	345	18	81.7	+0.9	102	29	60	22†	33	4.80	+1.57	1.30	0	8	7	24	0	s.	Benedictine Sisters.
Junction	Union		19	83.2	+2.6	101	19	67	2†	28	2.94	−0.92	1.19	0	4	20	6	5	sw.	J. A. Lowderback.
Lake Farm	Jefferson	195	6	83.0		102	6	60	22	34	3.51		2.02	0	6					G. L. Spellman.
Lewisville	Lafayette	262	10	83.7		101	8†	68	1†	33	2.91		0.80	0	6					F. W. Youmans.
Little Rock	Pulaski	357	34	81.6	+1.0	98	19	67	19	31	3.74	−0.25	1.53	0	11	13	13	5	sw.	U. S. Weather Bureau.
Lutherville	Johnson	775	14	80.7	+1.9	98	6†	61	22	31	3.79	−0.09	1.15	0	10	7	23	1	se.	W. R. Hentschel.
Malvern	Hot Springs	277	32	82.1	+ 0.9	102	19	65	23†	30	5.17	+ 2.19	1.70	0	6					Miss L. C. Smith.
Mammoth Spring	Fulton	512	9	81.2		104	18	56	22	39	5.39		1.42	0	9	10	19	2		F. Wallick.
Marked Tree	Poinsett	229	8																	Chapman & Dewey Lum. Co.
Mena	Polk	1,100	22	80.4	− 0.3	97	28†	66	22	28	2.83	− 2.00	1.52	0	6	6	21	4	sw.	E. W. St. John.
Newport	Jackson	231	30	82.4	+ 1.8	103	29	61	22	34	4.54	+ 1.43	2.00	0	9					Wiley W. McMann.
Pine Bluff	Jefferson	215	30	82.4	0.0	101	19	66	22†	29	5.13	+ 1.59	3.40	0	9					J. H. Hudson.
Pocahontas	Randolph		20	81.4	+ 2.0	102	18	58	22	35[e]	3.83	− 0.68	1.70	0	9	9	18	4		Benedictine Sisters.
Pond	Benton	1,250	16	79.8	+ 3.2	99	6	58	21	31	3.96	− 1.10	1.30	0	6	1	27	3	sw.	A. F. Stevens.
Portland	Ashley	122	5	83.0		103	19	64	22	32	3.19		1.35	0	8					T. A. Corson.
Prescott	Nevada	327	32	82.4	+ 0.5	104	27	63	23	34	5.42	+ 2.54	1.72	0	8					Mrs. G. Cummings.
Rogers	Benton	1,385	22	78.5	+ 1.6	100	9	60	22	29	10.34	+ 5.75	4.00	0	7	16	10	5	s.	Carl A. Starck.
Springbank	Miller	182	6								2.37		1.01	0	7					G. Field.
Stuttgart	Arkansas	495	26	82.9	+ 2.2	103	19	59	22	36	2.02	− 2.72	0.73	0	9	16	11	4	sw.	H. A. Buerkle.
Subiaco	Logan	1,050	16	81.9	+ 2.1	100	9†	65	12†	32	2.91	− 0.92	1.22	0	8	18	5	8	s.	New Subiaco Abbey.
Swain	Newton	2,300	3	76.0		93	6	62	21†	27	8.52		2.41	0	11	16	14	1	s.	George Paxton.
Texarkana	Miller	332	31	83.6	+ 1.5	102	19	67	22	33	2.71	− 0.38	0.73	0	7					D. E. Moore.
Warren	Bradley	304	18	82.6	+ 0.7	102	19	65	22	30	4.07	+ 0.26	1.50	0	7					W. J. Savage.
Whitecliffs	Little River	206	9								0.52		0.23	0	4					F. B. Lane.
Wiggs	Garland		20	80.2	− 0.1	101	19	61	23	39	3.77	− 2.09	1.82	0	8	11	18	2	sw.	S. D. Jester.
Wynne	Cross	250	5	82.2		100	6†	60	22	31	11.54		4.60	0	10					John Seals.
Mississippi.																				
Anguilla	Sharkey	107	5	81.7		99	6	61	22	32	3.62		0.90	0	9	11	13	7	sw.	E. W. Cook.
Austin	Tunica	200	17	81.2	+ 0.9	101	6	59	22	25	5.19	+ 1.03	1.90	0	9	22	6	3	s.	H. J. Irvine.
Batesville	Panola	230	26	81.2	+ 1.0	99	6†	61	22	32	2.83	− 1.32	1.35	0	9	24	0	7	s.	J. M. Cox.
Big Creek	Calhoun		2	82.2		102	19	63	22	30	0.69		0.25	0	7	13	12	6	s.	J. P. Havens.
Canton	Madison	228	23	82.2	+ 1.6	99	6	64	22	31	5.70	+ 1.46	2.30	0	12	12	11	8	se.	Dr. G. W. Smith-Vaniz.
Charleston	Tallahatchie		3	81.2		101	19	57	22	36	2.67		0.60	0	9	21	4	6	sw.	W. B. Burke.
Clarksdale	Coahoma	177	6	82.0		100	6	61	22	31	2.93		0.68	0	11	13	7	11	s.	A. C. Tuttle.
Cleveland	Bolivar	160	1																	W. W. Boone.
Coffeyville	Yalobusha	241	4								2.41		0.50	0	15	9	21	1	s.	C. K. Bailey.
Corinth	Alcorn	470	25	81.2	+ 2.4	102	19	64	8	32	4.70	− 0.26	1.62	0	10	15	4	12	s.	M. A. Candler.
Crenshaw	Panola	187	4								8.11		7.00	0	10	4	3	24	s.	Rodgers Woolard.

TABLE 1.—*Climatological data for July, 1913. District No. 7*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit. Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Precipitation, in inches. Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelted.	Number of rainy days, 0.01 inch or more.	Sky. Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
***Mississippi*—Contd.**																				
Duck Hill	Montgomery		14	81.8	+ 1.8	103	6†	56	22	37	2.48	− 2.34	0.77	0	6				se.	W. H. Eskridge.
Edwards	Hinds	222	26	83.0	+ 0.9	100	19	66	22	32	2.29	− 2.93	0.70	0	11	16	15	0	s.	E. F. Farr.
Fayette	Jefferson	270	12	79.7	− 0.5	95	8	65	8†	30	7.01	+ 1.75	2.72	0	12	8	18	5	sw.	T. L. Darden.
Greenville	Washington	126	26	83.4	+ 1.6	101	6†	66	22	26	4.13	− 0.18	1.64	0	10	18	4	9	sw.	M. G. Harbison.
Greenwood	Leflore	140	13	82.6	+ 1.9	104	19	58	22	39	4.23	− 1.31	1.73	0	10	15	8	8	sw.	J. H. Stephen.
Grenada	Grenada	124	4																	W. F. Hallam.
Hernando	De Soto	391	25	80.9	+ 0.7	98	6	63	22	29	7.49	+ 2.99	4.90	0	10	23	2	6	s.	W. F. Wood.
Hickory Flat	Benton	435	4								4.30		2.25	0	5					H. Powell.
Holly Bluff	Yazoo		5								2.99		1.07	0	10	13	10	8		W. C. Sharbrough.
Holly Springs	Marshall	600	26	79.6	− 0.7	96	6†	64	22	26	5.02	+ 0.71	3.16	0	11	17	5	9	sw.	L. B. Mosby.
Kosciusko	Attala	430	23	81.8	+ 2.1	101	6	63	22	34	3.71	− 1.10	1.58	0	10	18	12	1	sw.	E. L. Lucas.
Malone	Marshall		4								5.85		5.00	0	5					M. J. Wilkins.
Moorhead	Sunflower	117		80.9		98	6†	59	22	34	6.46		2.64	0	9	15	13	3		H. S. Gove.
Natchez	Adams	206	25	79.6	− 2.3	95	8†	60	2	31	5.62	+ 0.54	2.08	0	11	17	3	11	sw.	Catherine E. Garity.
Pontotoc	Pontotoc	475	24	79.2	+ 0.3	96	6	62	21	25	5.00	+ 0.14	1.50	0	5	11	19	1	nw.	Dr. C. W. Bolton.
Port Gibson	Claiborne	116	25	81.0	− 0.1	97	19	64	22	29	3.39	− 1.15	1.02	0	9	9	10	12	e.	H. H. Crisler.
Rosedale	Bolivar	143	5	82.1		100	19	65	22	26	0.99		0.25	0	6	19	4	8	sw.	T. J. Murray.
Shoccoe	Madison		10	81.7	+ 1.1	101	6†	65	22	33	3.65	− 0.69	1.04	0	10	12	8	11	s.	J. C. Pitchford.
Suffolk	Franklin		12	81.3	+ 1.0	99	8	65	9	31	5.70	− 1.43	1.06	0	14	13	10	8	sw.	Prof. Geo. H. Kent.
Swan Lake	Tallahatchie	148	8								1.59		0.55	0	7	18	8	4		Dr. S. D. Robinson.
Tchula	Holmes	130	8	82.4		101	6	60	22	36	1.41		0.48	0	4	7	24	0	w.	Dr. M. P. Winkler.
University	Lafayette	502	20																	Prof. J. H. Dorroh.
Utica	Hinds	287	9	82.4		100	19	64	22	31[b]	2.90		0.95	0	10	8	14	9		Dr. J. B. Dudley.
Vicksburg	Warren	247	42	81.4	+ 1.0	97	8	69	22	25	1.06	− 3.36	0.42	0	8	4	18	9	sw.	U. S. Weather Bureau.
Water Valley	Yalobusha	300	24	81.8	+ 1.6	102	19	64	22	31	4.40	+ 0.02	1.25	0	13	15	8	8	sw.	Miss Loula Erikson.
Woodville	Wilkinson	560	20	79.8	− 1.6	95	19†	64	10	27	4.21	− 3.27	1.65	0	11	13	16	2	se.	James E. Lee.
Yazoo City	Yazoo	116	19	82.0	0.0	98	6†	62	22	34	1.50	− 3.06	0.72	0	7	22	3	6	se.	W. H. Courts.
Louisiana.																				
Abbeville	Vermilion	18	25	81.8	+ 0.2	98	19†	69	23	25	11.77	+ 4.19	6.85	0	14	15	10	6	se.	Hon. C. J. Edwards.
Alexandria	Rapides	77	25	81.6	− 0.4	98	8†	69	7	28	4.85	− 1.01	2.00	0	8	13	8	10	s.	Miss Nellie Graham.
Amite	Tangipahoa	130	25	81.1	− 0.2	98	19	68	1†	28	14.40	+ 6.16	4.00	0	15	16	5	9	n.	Miss L. M. Wentz.
Antioch	Claiborne		1	81.9		101	19	63	21	31[a]	5.09		1.35	0	8	22	0	9	s.	W. L. Anglin.
Avoca Island	St. Mary	9	2								14.14		5.50	0	15	15	10	6		J. N. Pharr & Sons.
Baton Rouge	E. Baton Rouge	60	25	80.4	− 1.0	97	19	68	2†	25	6.01	− 0.41	1.15	0	16	13	10	8	se.	Elmo M. Bott.
Burnside	Ascension	20	13	81.0	+ 0.1	99	8	62	12	29[e]	12.01	+ 5.38	3.00	0	13	10	13	8		C. S. McFarland.
Burrwood	Plaquemines	1	25	81.8	− 0.7	92	26†	68	7	20	4.01	− 3.25	1.26	0	8	21	5	5	s.	Graham Myers.
Cades	St. Martin		3	82.6		97	20	68	23	25	5.71		2.57	0	11	18	10	3	s.	C. E. Smedes.
Calhoun	Ouachita	180	25	81.1[b]	− 0.2	97	19	64	29	29[p]	2.14	− 2.33	0.72	0	8	14	11	6	s.	North Louisiana Exp. Sta.
Cameron	Cameron	6	20	78.2	− 3.6	99	20	60	20	39	5.93	− 1.77	1.52	0	13	6	24	1	sw.	Adolph Bruckert.
Carrollton	Orleans	7	2	80.5		99	18	63	23	32	10.15		2.44	0	23	14	10	7		Loyola College.
Cheneyville	Rapides	67	25	82.2	+ 0.6	100	19	69	7†	28	2.54	− 2.82	0.40	0	10	16	4	11	w.	Walter I. Tanner.
Clinclare	W. Baton Rouge		3	81.8		97	8†	68	22	26	8.17		2.05	0	9	4	17	10	se.	Clinclare Central Factory.
Clinton	East Feliciana	113	25	79.7	− 1.1	95	8	68	26	21	10.08	+ 3.05	2.68	0	18	14	7	10	s.	John A. White.
Collinston	Morehouse	65	12	82.6	+ 0.5	99	7†	65	22	30	8.72	+ 3.20	2.53	0	12	9	10	12	s.	J. B. Reily.
Covington	St. Tammany	39	21	81.2	0.0	99	8	68	9	30	6.12	− 1.35	1.84	0	12	18	6	7	s.	Cecile P. Champagne.
Dodson	Winn		4	81.4		100	19	59	14	35	3.23		0.92	0	6	13	13	5	se.	J. P. Lucas.
Donaldsonville	Ascension	33	25	81.6	+ 0.4	98	18†	68	24	24	19.35	+13.58	4.00	0	14	19	1	11	s.	John F. Park.
Dutchtown	do		2								8.99		2.71	0	14	12	8	11		Picard & Geismar (Ltd.).
Farmerville	Union	177	25	80.7	− 0.4	96	19	67	21	27	8.13	+ 3.40	1.78	0	10	14	9	8	s.	W. P. Chandler.
Florence	Vermilion		1	83.8		98	20	70	22	22	13.63		4.20	0	11	5	24	2	se.	White Lake Land Co.
Franklin	St. Mary	10	21	82.0	− 0.1	98	19	69	24	25	14.14	+ 4.70	2.73	0	19	13	7	11	s.	Miss J. M. Bonney.
Franklinton	Washington		3	81.9		99	4†	66	9	33	9.97		1.25	0	19	4	9	18	sw.	Herbert R. Babington.
Grand Cane	De Soto	302	19	76.5	− 4.8	98	7†	54	24	39	4.56	+ 0.97	1.08	0	9	21	5	5	s.	G. Foster Provost.
Grand Coteau	St. Landry	93	25	82.2	+ 0.9	99	20	69	7†	28	5.41	− 1.07	1.73	0	11	11	6	14	n.	St. Charles College.
Hammond	Tangipahoa	44	21	81.2	− 0.2	99	19	69	1†	27	5.97	− 0.40	2.15	0	9	15	8	8	se.	C. C. Carr.
Houma	Terrebonne		25	83.2	+ 1.7	95	8†	68	22	20	7.90	− 1.33	2.00	0	14	17	4	10	s.	Prof. John M. Foote.
Jena	La Salle		2	82.1[i]		100	19	66	22	28[j]										C. Estus Wilbanks.
Jennings	Calcasieu	30	16	81.6	+ 0.1	99	20	69	24	25	5.66	− 0.17	1.81	0	13	6	21	4	se.	J. F. Buch.
Laark	Morehouse		1	81.2		100	6	61	20	33	3.70		1.55	0	5	22	1	8		P. M. Donley.
Lafayette	Lafayette	36	25	81.2	0.0	96	19†	69	24	24	7.39	+ 0.25	1.37	0	17	15	6	10	e.	J. J. Davidson.
Lake Charles	Calcasieu	22	25	81.4	+ 0.1	102	20	64	6†	35	6.35	− 0.29	1.50	0	12	24	1	6	s.	George Boudreaux.
Lakeside	Cameron	9	12	82.0	0.0	100	20	68	24	24	15.87	+ 8.16	5.30	0	12	18	9	4	w.	Miss L. J. Nunemacher.
La Rose (near)	La Fourche		2																	Louisiana Delta Farms Co.
Lawrence	Plaquemines	6	22	83.2	+ 0.5	99	4†	70	1†	28[b]	9.04	+ 1.82	2.00	0	16	14	9	8	s.	Hon. H. C. Warmoth.
Liberty Hill	Bienville		25	84.9	+ 2.3	105	28	68	9	35	1.40	− 3.85	0.75	0	4	21	3	7	s.	Dr. E. A. Crawford.
Logansport	De Soto	192	9								3.49		2.47	0	6	12	4	15	s.	Mrs. Bettie M. Dennis.
Melville	St. Landry	45	25	80.6	− 1.0	99	8	68	14†	28	3.70	− 2.22	0.83	0	13	16	3	12	e.	Chas. B. McNeill.
Minden	Webster	194	25	80.7	− 1.6	100	18	65	21†	32	4.39	+ 0.24	0.96	0	9	17	10	4	e.	Miss Ethel Fort.
Monroe	Ouachita	82	25	82.4	+ 0.2	100	19	68	9	27	4.65	− 0.31	2.02	0	12	9	3	19	w.	Kathryn Key.
Morgan City	St. Mary	14	7								13.64		5.08	0	14	4	9	18	se.	Virgil E. Kinsey.
Napoleonville	Assumption		4	82.4		99	8†	71	11†	26	11.85		2.45	0	15	6	0	25		Leon Godchaux Co. (Ltd.).
Newellton	Tensas		6	80.6		95	6†	66	22	23	5.75		2.69	0	10					John D. Fultz.
New Iberia	Iberia	15	25	81.8	+ 0.4	95	8†	68	23	21	12.40	+ 5.07	6.25	0	12	11	10	10		Mrs. John A. Gebert.
New Orleans (1)	Orleans	51	42	81.6	+ 0.3	96	19	68	6	26	5.37	− 1.10	1.27	0	16	8	12	11	s.	U. S Weather Bureau.
New Orleans (2)	do	18	25	81.6	− 0.7	96	5†	69	4†	27	9.28	+ 2.56	2.08	0	18	5	5	21	s.	Sugar Experiment Station.
Opelousas	St. Landry	83	21	81.6	0.0	100	19	68	22†	27	6.98	+ 0.77	1.89	0	12	18	3	10	e.	Andrew Moresi.
Paradis	St. Charles		2								9.52		2.50	0	16					R. E. Boyce.
Pearl River	St. Tammany	29	7								5.28		1.22	0	17	19	7	5	s.	Geo. F. Bancks.
Plain Dealing	Bossier	268	21	82.4	+ 0.8	100	9	65	21	32	2.52	− 2.36	1.57	0	6	20	0	11	se.	Leon Sanders.
Rayne	Acadia	44	21	82.8	+ 0.6	101	8	69	7	28	4.33	− 2.65	1.10	0	8	17	2	12	s.	A. P. McNeil.
Reserve	St. John Baptist		12	76.2	− 6.1	98	31	59	3	29	7.09	+ 0.80	2.05	0	8	12	12	7		Leon Godchaux Co. (Ltd.).
Richland Plantation	Rapides		1	83.2		100	9†	69	9†	31	3.62		1.04	0	13	20	1	10	se.	A. B. Pendleton.
Robeline	Natchitoches	147	17	82.5	+ 1.4	102	20	65	22	35	1.80	− 2.83	0.60	0	4	18	5	8	s.	Anna R. McCook.
Ruston	Lincoln	312	18	84.4	+ 2.8	101	21	68	20	32	4.54	− 0.65	1.37	0	8	21	4	6	s.	Andor M. Larson.
St. Francisville	West Feliciana	115	10	82.2		98	9†	69	9	29	10.30		1.52	0	18	13	17	1	s.	G. W. Newman.
Schriever	Terrebonne	17	21	80.6	− 1.2	96	6†	62	5†	34	13.45	+ 4.54	2.70	0	14	25	0	6	w.	William H. Gautreaux.
Shreveport	Caddo	249	42	83.3	+ 1.2	99	19	70	31	24	0.70	− 3.02	0.36	0	7	14	11	6	s.	U. S. Weather Bureau.
Simmesport	Avoyelles	42	7								6.05		1.96	0	13	3	8	20	sw.	Cassius T. Leigh.
Southern Univ. Farm	Jefferson		16								4.09	− 1.76	2.15	0	10	13	7	11	se.	F. L. St. Martin.
Sugartown	Calcasieu		20	82.2	+ 0.5	97	20	70	31	21	3.30	− 1.77	1.24	0	7	8	23	0		G. W. Richardson.
Tallullah	Madison	91	6	82.2		100	20	63	9	32	2.77		0.94	0	10					Neal T. Halt.
Walker	Livingston		3	79.4[f]		99	4†	52	18†	44[l]	9.14		2.40	0	14					L. W. Wilkinson.

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.
*** Temperature extremes are from observed readings of the dry bulb; means are computed from observed readings.
† Also on other dates.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 2.—*Daily precipitation for July, 1913. District No. 7 Low Mississippi Valley.*

Stations.	Watershed.	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	
Colorado.																																	
Buena Vista	Arkansas					T.	T.			T.					.08	.05	.25	.10	.35	.12	.32	.05	T.	.62									1.94
Calhan	Big Sandy		.07		.01		T.			.17	.33				T.		.02		.33	.48				.10	.40	.01							1.82
Canon City ‖	Arkansas									.03	.42					T.	.12		.33	.26	.12			.23	.09								1.60
Colorado Springs	Fountain						T.	T.	T.	.72	.28					T.	.01	T.	.21	.24	T.		.08	.08	.31	T.	T.	.21					2.14
Cripple Creek	Oil Creek								.64	.36						.17	.06	T.	1.91	.21	T.	T.	.06	.21	.40								4.02
Cuchara Camps	Cucharas																	.38	1.42	.87	.29												2.96
Eads	Big Sandy												.80							T.													0.80
Fairview	St. Charles									.47								.36	1.00	.21			.12	.14									2.30
Fremont Experiment Station. ‖	Fountain																																
Garfield	Little Ark						.16	T.	T.	.22	T.				T.	.06	.25		.06	.40	.50	.35	.42	.21			T.			T.			2.63
Hamps	Big Sandy										1.50							T.		.54				.02	.21								2.27
Hermit Lake	Grape Creek						.10		.78									.11	.10	.45	.29	.28	.50	.23									2.84
Hoehne (near)	Purgatoire									.01							.17			.13			T.	.97	.08		.12						1.48
Holly	Arkansas																			2.10						.05		.52					2.67
La Junta	do		T.							.26							.04		1.50	.23				1.29				.04					3.36
La Moraine	Fountain					.22			.13	.16	.15						.06	.10	2.10	.88	.02	T.		.14	.12	T.	.10						4.18
Lamar	Arkansas		.40																1.72	.06					.22								2.00
Las Animas	do		.10							.58									1.23					.30	.03			.20					2.44
La Veta Pass	Cucharas															.15	.23		.16	.21			.43					.23					1.41
Leadville	Arkansas						T.	T.	.26	.67	.27			T.	.01	.32	.22	.26	.45	.06	.06	.06	.06	.12	.25	T.	T.	T.		.02			3.09
Limon (near)	Big Sandy										.85							.48	1.00	.78			T.	.07	.08	T.							3.26
Madrid	Purgatoire	.23							.30			.03					.02		.07			.04	.06	.81	.02			.02					1.60
Marshall Pass	Arkansas				.15	.20		.10	.15			.20							.20		.15		.10	.20	.10	.10	.10						1.75
Monument	Fountain								.01	.12						.74	.07	.06		.31			.12	.18	T.	.06						T.	1.67
North Lake	Pugatoire									.10							.53	.07	.23	.30	.18	.60	.21	.22								.11	2.55
Pueblo	Arkansas							T.	.04	.65							.08	.45	.88	.40	T.		.03	.17	.42	T.	T.						3.12
Rocky Ford (near)	do									.17								T.	1.49	.31					.66			.19					2.82
St. Elmo	Chalk Creek						.15				.09					.04	.12	.02		.05	.25	.26	.10	.12		.02							1.22
Salida ‖	Arkansas								.21	.12						.07	.44	.10	.09	.42	.16	.03		.11						T.			1.75
Stonewall	Purgatoire						.10								T.			.10	.27	.08	.05	.27	.04	.63									1.54
Trinidad	do		.09							.08		.06							T.	.05	.04	.01		.82	.08	.01	.02	.05		.05			1.36
Two Buttes	Arkansas																			1.10					T.		.62						1.72
Two Buttes Res'vr	do		.08							.05							T.		2.02						.08	.03							2.26
Victor	Oil Creek								.30	.10	.38					T.	T.	T.	1.32	.50	T.	.52	.51	T.	.39		T.						4.02
Vilas	Cimarron																		1.60														1.60
Westcliffe	Grape Creek								.49	.07									.21	.12		.01		.42									1.34
Winfield	Clear Creek						T.	.12	.13	.02	.10			.17		.15	.03	.10	.10	.02	.15	.23	.28	.35	.03	.01	T.	.02	T.	.01			2.02
Woodman Sanatorium.	Fountain						T.	T.	T.	.06	.10								.15	.37	.02	T.	.04	1.55	.13		T.						2.42
Wortman	Arkansas	T.					.20	.30	T.	T.	T.	T.	T.	T.	.30	.10	.10	.10	T.	T.	.10	.20	.30	.10	.30	.10	T.			T.	T.	T.	
Yoder	do				T.			T.		1.12							.17	T.	.66	.15				.52	.07								2.69
New Mexico.																																	
Abbott	Canadian																		.08	.28				.77									1.13
Albert	do																							.73									0.73
Anrora	do					.04				.42	.04	.01		.02	.02		.02		.02	1.15	.01	.18	.60	.70	.02						.04	.04	3.33
Bell Ranch	do									.10	.58									.45	.10			.18									1.41
Black Lake	do							.20	.01	.18					.07	.05			.01	.32		.14	.13	.50								.03	1.64
Cabeza	do																							.55									0.55
Campana	do													T.					T.	*	.46			.10			T.		T.	T.			0.56
Chacon	do									1.62	.14					.12						.20	.17										2.25
Cimarron (near)	do		T.						T.	.09				T.	T.	T.			.03	.24		T.	T.	.80			T.			.06	T.		1. 2
Clayton	do													T.					.29		.30			.57		.01		.03					1.20
Clovis	Red																																
Cuervo	Canadian																							T.					.15				0.15
Dawson	do					T.											T.		.16	.17	.02	T.	.08	.87						T.		.21	1.51
Elizabethtown	do						.20			.25	.05								.28	.40	.12	.16	.05	.23								.60	2.34
Folsom	Dry Cimar'n					T.				.17	T.						.02		.20	.50			T.	1.73	T.	.01				T.			2.63
Fort Union	Canadian						T.							T.			.10		.20		.05			.20						.25	T.		0.80
Hayden	do																				.05			.40									0.45
Hoosier Ranch	do	.30				.06				T.										.74				.39					T.				1.49
Johnsons Park	do								.12	.10	.08						.04		.16	.10				.67	.02	.01				.02			1.32
Johnsons Ranch	do										.74									1.40				.32						.07			2.53
Kappus	do																																
Lake Alice	do																																
Logan	do																				.10												0.10
Lykins (near)	Red																								.62					.20			0.82
Maxwell (near)	Canadian						.06												.30	.05				.48									0.89
Melrose	Red														T.				T.	.78													0.78
Miami Ranch	Canadian									.13									.43	.27		.10	.09	.65		.03							1.70
Mills (near)	do					T.					T.								.10	.70	.22			1.19			T.			T.			2.21
Montoya	do																			T.	.15												0.15
Nara Visa	do																																
Palo Verde	do									T.									.10	1.08				1.52									2.70
Pasamonte	do																																
Pleasant View	do								.85	.74										1.14			.21							T.			2.94
Portales	Red																																
Raton	Canadian						.01		.01	.15	.08								.13	.18			.08	1.21		.17							2.02
Rociada	do					T.	T.			1.20					.15		T.	.33						1.25									2.93
Rosebud	do																				.33			.28			.15						0.76
Roy	do									.15									.35	1.17				.85						T.			2.52
Roy (near)	do																																
St. Vrain (near)	Red																						.14						.26	.86			1.26
San Jon	Canadian																				1.57			T.	T.		T.	T.	.22	T.	T.		1.79
Solano	do					.36				.67									.18					.63							.18		2.02
Springer	do																		.25	.05			.45										0.75
Taylor	do																		.50					.38									0.88
Texico (near)	Red																							1.21			.06	.04			.04		1.35
Trementina	Canadian																																
Tucumcari	do																			.18				.38									0.56
Valley	Dry Cimar'n																																
Vance (near)	Canadian										T.								.03					.23	.04								0.30
Vermejo Park	do					T.								.13					.08	.48	T.	.18	T.	.70			T.						1.57
Wagon Mound	do					.45													.01		.20			.57		.01	.01		.04			.01	1.30
Texas.																																	
Amarillo	Canadian	.01																			.05			.15	T.	.82	.01	.03	.73				1.80
Archer City	Red																								.45	.22							0.67
Arthur City ‖	do		1.46	.70	2.25							T.	T.									T.				T.		T.	.77				5.18

TABLE 2.—*Daily precipitation for July, 1913. District No. 7*—Continued.

Stations.	Watershed.	Day of month. 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	Total.
Texas—Continued.																																	
Bonham	Red	T.	1.30	2.30																	1.60				.25			1.37					6.82
Canadian	Canadian	.03																			.01				.83			.04	.06				0.97
Childress	Red																																
Chillicothe	do	.87																								.11	.30						1.28
Clarendon ‖	do	1.00	.02																		.48	.23			.35	.08	T.						2.16
Clarksville	do																																0.00
Claude	do									T.																							T.
Dalhart ‖	Canadian																				.01				.58	.09			.16				0.84
Denison	Red		.03	2.96	1.50																	3.50						2.32	T.				10.31
Finley ‖	do	.60	.20	.20																						.70							1.70
Henrietta ‖	do	.05																								.55		T.					0.60
Jefferson ‖	do	1.10		1.00																							.30						2.40
Memphis	do																																
Miami	Canadian	.04									T.														1.90			.29	.07				2.30
Ochiltree	do																																
Paducah	Red																								.35	.40	.12						0.87
Panhandle	Canadian																1.50									.25							1.75
Paris ‖	Red		.96	.75	1.85						T.	T.										.03				T.	T.	.01	.84				4.44
Plemons	Canadian																								.97	T.	.05	.80	.01				1.83
Quanah ‖	Red	.45																								.11	.25						0.81
Ringo Crossing ‖	do		1.47	1.12	.55																	.52					1.20						4.86
Romero	Canadian																				T.			.10		T.	T.						0.10
Sherman ‖	Red		T.	2.70	1.10							T.										1.90				T.	T.	2.12					7.82
Stratford	Canadian																								.86	.12		.62					1.60
Tulia	Red																			T.	.40		T.		2.81	.03	.61	T.	T.				3.85
Wellington	do																				.22					.20							0.42
Wichita Falls	do																																
Winfield	do	.68	1.18	T.																	.85			T.									2.71
Kansas.																																	
Alden	Arkansas	.02							.18	.07									T.	.18	.08			.20					.78				1.51
Anthony	do	.27								T.			.02						.42		T.			.45	.58		T.	.05	.38				2.17
Ashland	Cimarron									.03			.02								.26				.47		.02		.18			.02	1.00
Burlington	Neosho								.08										.94									.06					1.08
Chanute	do	1.49								T.		T.	T.												1.40	T.	T.						2.89
Cimarron	Cimarron	T.											T.						T.	T.	.25					T.		.07	.04				0.36
Coffeyville	Verdigris																																
Coldwater	Cimarron									T.	T.		.15						T.		.19			T.	.23				.34				0.91
Columbus	Neosho	.21		.01			T.			.01	T.	T.	.02							T.	T.			T.	.20		T.	.30	.01				0.76
Coolidge	Arkansas																			1.10								.60					1.70
Cottonwood Falls	Neosho	.52								.75				T.						.19				T.				.20	T.				1.66
Council Grove	do	.17																		T.				.44	.06			.02	.15				0.84
Cunningham	Arkansas												T.											.25	T.				.25				0.50
Dodge City	do	.01				T.				.01			.10						.15	.09	.17				.01			.16					0.70
El Dorado	do	.26								.02			T.	T.						.04					.05			.55	.12				1.04
Ellinwood	do					T.			.03	.13			.04						T.	.12	.02			.17	T.				.14				0.65
Emporia	Neosho	2.20	.12								.41									.45					.23			.04	.10				3.55
Eureka	Verdigris	.50									T.		T.							.42					.72			.33					1.97
Fall River	do	1.60											T.	T.						.05	T.			.01	.21	.90	T.		.15				2.92
Fargo	Cimarron					.29							.14								.62				.20	T.	.31	T.	.82				2.38
Fredonia	Verdigris	1.78								.03		T.	.01							.09	.01			.32	.13	.08	.03		.01				2.49
Garden City	Arkansas				.91															T.				T.	T.		T.	.07	.16				1.14
Greensburg	do																																
Grenola	Verdigris	.87																		.10				.07	.34			.04	T.				1.42
Howard	do	.90								T.			.14	.06						.14	T.				.15	1.36			.04				2.79
Hugoton	Cimarron					T.				T.			T.						T.	.01	.18				.49		.11	.38	.52				1.69
Hutchinson	Arkansas											T.	T.						.95				.15				.20						1.30
Independence	Verdigris	.40								T.		T.	.15							T.	T.			T.	.91	T.	.02						1.48
Iola	Neosho	1.44								.02		T	T.	T.					.16	.02				.01	.51		T.	.12	.02				2.30
Irene	Arkansas			.09									T.							1.02					.01	T.	T.	T.					1.12
Jetmore	do																																
Kingman	do									T.			.06							.06				.33	.12				.33				0.90
La Crosse	do									.07										.70					.08				.13				0.98
Lakin	do		T.		.80							T.								.32							T.	T.					1.12
Larned	do								.09				.05							T.	.07			.18					.12				0.51
Lebo	Neosho	.18								.22									T.	.02				1.06	.06			.02	.02				1.58
Le Roy	do	2.76	.13							T.	T.		T.							.30					T.			.40					3.59
Liberal	Cimarron					T.	T.			T.			.03	T.					T.	T.	.28				.25		.71	.22	.23				1.72
Macksville	Arkansas	.04								.01			.04							.07				.19	.03				.04				0.42
McPherson	do	.18								.21										.51	.16								.19				1.25
Madison	Verdigris	.10								.65			T.	T.					T.	.51				T.					T.				1.26
Marion	Neosho	.10				.01			T.	.15		.01	T.	.22						.16				T.					.03				0.69
Medicine Lodge	Arkansas	T.								T.			.09							T.	.06			.34	.45			.01	.96				1.90
Minneola	Cimarron											.20									.54						T.	T.	.70				1.44
Mount Hope	Arkansas	.28								.07		.10	.09						.21					.21	.04				.07				1.07
Neosho Rapids	Neosho	1.25	.08								.43									.05					.35			.05	.40				2.61
Ness City	Arkansas																			.19				.18					.19				0.56
Newton	do									.08										.65				T.				.06	.13				0.92
Norwich	do	.12								T.	T.		T.	T.						T.				.42	.53				.67				1.74
Oswego	Neosho	.48											.07								T.			T.	.43			.23	.09				1.30
Pittsburg	do	.12																						.85		.10		.20					1.27
Plains	Cimarron																			.50	.55				.25		.35	.11	.77				2.53
Pratt	Arkansas												.10						T.					.15	.15				.52				0.92
Richfield	Cimarron									T.						T.				.78				.17	.47	T.	.08	.04	T.				1.54
Rome	Arkansas	.11											T.	T.						.09				.30	.90			.42	.30				2.12
Sedan	Verdigris	1.32	.12								.32		.04	T.						.12	.13	T.		T.	.12	.10		T.					2.27
Toronto	do	.80								.04									.20						1.78		.10						2.92
Ulysses	Cimarron				T.																					T.	.45						0.45
Walnut	Neosho											T.	T.												1.86	.22	T.	T.					2.08
Wellington	Arkansas	.20									.06		.06	.02						.08				.38	1.38			1.39	.63				4.20
Wichita	do	.01								.01			.05	T.					T.	.11	.01			.14	.08		T.	.75	.12				1.28
Winfield	do									.60		T.	.10	T.					T.	T.	T.			.16	.65		T.	.95	.10				2.56
Yates Center	Verdigris	.48											T.	T.						T.					.39		T.	.10					0.97
Oklahoma.																																	
Ada	Canadian		.26								.02											.03				.02		.76				.25	1.34
Altus	Red	.44																			.30					.61	.01						1.36
Alva	Arkansas	T.									T.	T.								T.	.20	T.	T.	T.	2.10		T.						2.30
Apache	Red	1.76	T.																		.67					.01							2.44
Arapaho	Washita	1.57												T.						T.	.16			.04									1.77

TABLE 2.—*Daily precipitation for July, 1913. District No. 7*—Continued.

Stations.	Watershed.	Day of month. 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	Total.
Oklahoma—Contd.																																	
Ardmore	Red	T.	1.66								.03										T.	.80						1.20					3.69
Bartlesville	Arkansas	.36	.07								T.		T.	T.											1.11		.12	.66	T.				2.32
Beaver	Canadian																																
Cache	Red	2.05																							.40								2.45
Calvin	Canadian		.30								.10										T.				.10	1.10		.65					2.25
Chandler	do	.10	1.00											.04										T.	.45			.20					1.79
Chattanooga	Red	.92																			.46					.50	.10						1.98
Chickasha	Washita	.62	.63	T.																		.12											1.37
Cleveland	Arkansas	.49									T.	T.	.31								T.			.02	.05		.36		T.				1.23
Cloud Chief	Washita	3.18																			.61												3.79
Crawford	Canadian																																
Durant	Red		.20	1.10	3.04						T.										T.	.68						.08					7.10
Eldorado	do																								.10	.16							0.26
El Reno	Canadian	6.50	.27																		.67												7.44
Enid	Cimarron	.55												.18	.04							T.		.40					.05				1.22
Erick	Red	T.																			.17				.07	T.	T.						0.24
Eufaula	Canadian	.55	T.	.02							.24		1.21											T.	.38	.18	T.	.27					2.85
Fairland	Arkansas	.08									.75		T.											.03	1.50	.06	.35	.10	T.				2.87
Fort Gibson	do	.05		T.							.25	T.		.13	T.										1.30	.05	T.	.78	.03				2.59
Frederick	Red	.85																			.20			.02		.20							1.27
Geary	Canadian	4.32										T.	T.								.20												4.52
Goodwell	do									T.				.14		.04				.02					.78	T.	.06	.06					1.10
Guthrie	Cimarron	3.25											T.														T.						3.25
Guymon	Canadian																		T.				T.		.81		.24	.33					1.38
Hartshorne	do			.02									T.													.02							0.04
Healdton	Red	1.22									T.										T.					T.	.28						1.50
Helena	Cimarron																																
Hennessey	do	1.40											.30																				1.70
Hobart	Red	1.30																			.46					.98	.01						2.75
Holdenville	Canadian		.10								.21															T.	.91						1.22
Hooker	do									1.00	T.		.02			T.			.07						.80			T.					1.89
Hugo	Red	.68	2.50	2.63							.12															.24		.80					6.97
Hurley	Cimarron									T.	T.			.14											.81	.24		T.	T.				1.19
Idabel	Red																																
Jefferson	Arkansas													.11										.51	.05			.05					0.72
Kenton	Cimarron									T.	.07			T.					.03	.89	.02				1.33								2.34
Kingfisher	do	2.13										T.	.04	.07							.08						T.						2.32
Lawton	Red	1.42	.02																	.02	.38				.02	.25							2.11
Lawtonka Lake	do	2.42																			.38					.13	.04						2.97
McAlester	Canadian		.08		.98						.07																	.98					2.11
Mangum	Red	2.68		T.																	.55	.70				.07	T.						4.00
Marlow	Washita	.30			T.																.33				.20								0.83
May	Canadian																																
Meeker	do	1.00																															1.00
Muskogee (1)	Arkansas	.05											.07												.30			1.00					1.42
Muskogee (2)	do	T.									T.		.22												1.00		.45	.22					1.89
Mutual	Canadian																																
Neola	Washita	3.42	T.										T.								.48				T.	.10							4.00
Newkirk	Arkansas	.30								T.			.26							T.	T.			.25	.71								1.52
Norman	Canadian	1.00		T.	T.						T.										T.			T.	T.	T.	T.						1.00
North Muskogee	Arkansas		T.	T.	T.						.50			.36											2.00	T.	.01	.66	.03				3.56
Oakwood	Canadian																																
Okeene	Cimarron	.81											.19	.33							.11						T.		.20				1.64
Okemah	Canadian	.18									.30													.02	.20		.08						0.78
Oklahoma	do	5.06		T.							T.		T.								T.			T.		T.			T.				5.06
Okmulgee	do									.50			.50											T.			.88	.17					2.05
Pauls Valley	Washita	.94	T.								.16										.03				.07	.03	.23						1.46
Pawhuska	Arkansas	.16											.01											.03	.06		.36						0.62
Perry	do	1.75											.16								T.			.06	T.	T.	.65	.10					2.72
Rankin	Red	.02								.01										.24	1.30				.02		T.	T.					1.59
Ravia	Washita	1.30	.73																		1.60							1.52					5.15
Sac and Fox Agency	Canadian	.80																						.07	.03	.15	.74						1.79
Shawnee	do	.19	1.26																						T.			.37					1.82
Snyder	Red																				.63					.90							1.53
Stillwater	Cimarron	.90	1.50	T.								T.		.40	T.							T.	.04	T.	T.		T.	.65					3.49
Tahlequah	Arkansas																																
Tulsa	do	.48	.44								T.	T.	.10	.46								T.			1.34			.30					3.12
Vinita	do																																
Wagoner	do									.65			.48												1.80		.77						3.70
Waukomis	Cimarron	1.05		T.								T.	.20	T.							T.			T.			T.	.03					1.28
Waurika	Red	.63		T.																	.45			.03		1.60							2.71
Weatherford	Canadian	7.00	.02									.05		.17	.02						.30	.30			T.								7.86
Webbers Falls	Arkansas			T.						.50			.15												1.00		1.60		.15				3.40
Whiteagle	do												.30												.10		.65		T.				1.05
Woodward	Canadian	.09	T.	T.						T.			T.								.25				.65		T.	T.					0.99
Wyandotte	Arkansas	.03								.02			.25												1.02	.02		.68					2.02
Missouri.																																	
Belle	Meramec	.81								.80						T.																	1.61
Birchtree	Black																																
Cape Girardeau ‖	Mississippi		.20	1.20					T.	.80	1.80		2.10																T.		.35		6.45
Cardwell	do		2.85	.28				.13	.06	.36	.05	.26	.94												T.	.83	.19				T.		5.93
Caruthersville	do	T.	.08	.09				.18		.52		.25	.67								T.				T.	T.	.92				T.		2.71
Cassville	White	1.08	T.				T.			.50	2.67	1.25	.05												1.21	.52	T.	.40	T.				7.68
Dean	Neosho	.94					T.				.63		.59												.95	.92	.04	.06	.02				4.15
Doniphan	Black		T.	T.				.61	.46	1.23	.31		.65												T.	.30	.20	.05			.15		3.96
Fruit City	do	.03		.11				.32		1.31	.73		.43														T.	.32	.33		1.30		4.88
Gano	Meramec	.80		.16				.31	.55	.53			1.14											.60	.16				.33		.12		4.70
Goodland	Black	.84		.15						2.80			.80													.13		.38			.17		5.27
Hollister	White									.20	1.95	.55													1.00	.53		.92					5.15
Ironton ‖	Mississippi		1.25		T.	.08			.27	.50	T.		.90												T.	.05			.58		T.	.10	3.73
Jackson	do	.40	.01					.01	.82	1.27		2.09												.75				.12		.06			5.53
Joplin	Neosho	.50										.20																					0.70
Koshkonong	Black	T.	T.	.14				.09	.60	T.	.32		.68												.02	.68	.20	.60			.44		3.77
Lamar ‖	Neosho		.08					T.		.15	T.		.31												3.36	T.		.59	.03			.44	4.96
Marble Hill	Mississippi	.55	.30					.50		.83	.25														.57		.10		.02				3.12
Mountaingrove	White	.56			T.			.04	.45		1.45		.62													T.		.08		.20			2.40
Mount Vernon	Neosho	.95						1.63		.13			.48												1.80						.50		5.49
Neosho	do	.15								T.	T.		1.06												.53		.02	.19	T.				1.95
New Madrid ‖	Mississippi		.02	.10					.15	.85	.30		.90																	.41			2.73
Oakfield	Meramec	.73			.09				T.	.13			1.10							.13	T.			.05	.07			.02	T.			.35	2.67
Rolla	do	.41			.47	.20	.28	.28	.18	.30	.63									.20	T.			.11		.09		.30	.27		.19		3.91
Springfield	White	.11			.02	.02				T.		.74	.10											T.	.95	T.	.04	.11	T.		1.75		3.84

TABLE 2.—*Daily precipitation for July, 1913. District No. 7*—Continued.

Stations.	Watershed.	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	
Kentucky.																																	
Blandville	Mississippi		.51							.27	2.78	.52	1.37												T.			T.			1.22		6.67
Tennessee.																																	
Arlington ‖	Mississippi			T.	.11				T.	.20	.57	.55	1.30	.12												1.50	.50				.14	2.40	7.39
Bolivar ‖	do		.90								.50	.09	1.18	.75											.29	.06	T.	T.			.50	.14	4.41
Brownsville ‖	do		.04	.59	T.					.38	.75	.22	1.84	.07											.05	T.					.15	T.	4.09
Covington ‖	do		.60	.40	.37					.28	.23	.55	2.10	.06												.02						1.00	5.61
Dyersburg ‖	do	.01	.40	.10					T.	1.40	.10	.10	.80		T.											.50	.50				T.		3.91
Jackson	do	T.	2.15					.05		1.12	T.	.40	1.45																				5.17
Kenton	do			.49				T.		.47		.26	.94													T.	T.			T.	T.		2.16
Memphis	do	T.	1.24	T.				T.	.02	.78	.17	1.23	2.07												.20	T.	T.			.13	.07		5.91
Milan ‖	do	.07	T.	.15	.04				T.	.27	.55	.05	1.76	T.													.02	.01	.31		.33	T.	3.56
Trenton	do		.41	.39						.71		.87	1.04													.46	.56			2.00			6.44
Union City	do	.14	1.20					.02		.30	.24	.20	1.30														T.			T.		.05	3.45
Arkansas.																																	
Alicia	White		2.10	.20					.10	.35		.20	.75												.20								3.90
Amity	Ouachita		*	*							2.06														2.50	.20							4.76
Arkansas City ‖	Mississippi		T.	.16								1.52													.68		.30				.16		2.82
Batesville ‖	White			.09	.06					.18	.03		.58	.36												.02	.04			.44	.64		2.44
Bee Branch	Arkansas									.20	.30		3.25												.50	.50	1.40				.45		6.60
Bentonville ‖	do	.05			T.					.20	.02	1.25	.08											T.	2.31	.44	.25	.04	T.				4.64
Bergman	White																																
Black Rock ‖	do	.02	.18	.48	.05				.27	.29	.21		.60	T.												.02	.85	.04	.85				3.86
Brinkley ‖	do			.36	.26						.11	.26	.06	1.06													.33	.46			.56	1.23	4.69
Calico Rock ‖	do										.30		1.10												T.	.30	.90						2.60
Camden ‖	Ouachita	.05		.69	.09			.01			1.63	.52														1.51						.05	4.55
Centerpoint	Red	.61	.21	T.			.99				.93											1.10			.20	T.					1.25		5.29
Clarendon ‖	White				.35					T.	.15	.25		.10												.14	.41	.06		.03	.16		1.65
Conway	Arkansas		T.	.37			.06						2.23												.04	.29	.05				2.11		5.15
Corning	White	.01	.56	.06				.32	.90	2.10	.45	.05	.57								.08				T.	.16		.80					6.06
Dardanelle ‖	Arkansas				.10		.08	.05			1.24	.18		.22											T.	.43		.20		.24		.88	3.62
Dodd City	White	T.		.10				T.		.10			.70											.50	.40	.40							2.20
Dumas	Arkansas			.38			.50		.80	T.	.35	.98														.85				.25			4.11
Dutton	White		2.03	.45			.38			T.	.80		1.91												T.	1.15	.44	.51					7.67
Eldorado ‖	Ouachita	.08	.75	.20	.24							.86										.20				1.04	.25					.28	3.90
England ‖	Arkansas	T.	T.					T.		T.	.95	.27	T.	T.												.35	.50	.02				T.	2.09
Eureka Springs	White	.11			T.		T.			.28	.50		.61												1.08	1.42		.70					4.70
Fayetteville	do		.07		.05		.27			.53	.46		3.88												1.25	1.06	.04	.65					8.26
Fordyce	Ouachita		.58	1.35			.15				1.40															.40						.95	4.83
Fort Smith	Arkansas	.01	.46	.15			.58			.46	.14		.25												.92	.28	.44	T.			T.		3.69
Frazier's Turnpike	do																																
Fulton ‖	Red			1.48	.18						.40	T.														.34	.34						2.74
Georgetown ‖	White		1.66		.28							.15	.75	.80							.36					.04	.20					.56	4.80
Hardy	do	T.	.25	T.			T.	.02	.61	.10	1.00		.25	T.											T.	1.60	.50	T.					4.33
Helena ‖	Mississippi				.13						.22	1.60	.06	.28												.10	.72				.35		3.46
Hot Springs	Ouachita		.20	.42			.20		T.	.05	2.35	.15													.80								4.17
Huttig	do	.87	1.80	.11																					.30	.10					.40	.08	3.66
Jonesboro	White		1.30					.60	.40	1.20			.95													.15					.10	.10	4.80
Junction	Ouachita	T.	1.19	.86			T.					T.									T.				.51	.38					T.		2.94
Lake Farm	Arkansas			.15					.15	.61										.20					2.02				.38				3.51
Lewisville	Red	.80	.32	.30							.48														.41						.60		2.91
Little Rock	Arkansas		.12	.02		.02	.12			.01	.86		.04							1.53					.17	.69					.16	T.	3.74
Lutherville	do		.03	.04			.25				1.15	T.	.86												.19	.09	1.00	.06			.12		3.79
Malvern ‖	Ouachita			T.	.20			.25			.95	.87														1.70	1.20						5.17
Mammoth Spring	White							.15	.64		.49		.41												.18	.89	1.42	.30			.91		5.39
Marked Tree ‖	St. Francis																																
Mena	Ouachita	.73		.40							1.52									.06					.10				T.		.02		2.83
Newport ‖	White			2.00	.25						.98		.06	.80													.03			.05	.25	.12	4.54
Pine Bluff ‖	Arkansas			.12	.23			.46			.04	.33		T.							.02				T.	3.40	.45				.08		5.13
Pocahontas	White		.08					.38	.17	.10	.60		.45													1.70	.25	.10					3.83
Pond	Arkansas	T.	T.								.10		1.05											T.	1.30	1.14	.13	.24					3.96
Portland ‖	Ouachita			.43	.04			.04	.12	.22	T.	1.35															.84	.15					3.19
Prescott ‖	do	.09		1.35	.12						.25	.27													.70	1.72	.92						5.42
Rogers	Arkansas	.27	T.								1.32		.71											T.	2.80	3.20	1.12	.92					10.34
Springbank ‖	Red	.02	.14	1.01	T.						.05	.86														.10	.19						2.37
Stuttgart	Arkansas		.06	.28						.04	.67	.03	T.							.09					.02	.73						.10	2.02
Subiaco	do		.53	.12			.13			.10	1.22		.28										T.		T.	.12	.41	T.					2.91
Swain	White		.37	.20		2.41				.50	.65		2.30												.73	.80	.29	.17		.10	T.		8.52
Texarkana ‖	Red	.05	.55	.73	.12			T.				T.										T.				.38	.30					.58	2.71
Warren ‖	Ouachita	.74		.08	.50							1.50														.50	.50				.25		4.07
Whitecliffs ‖	Red		T.	.23	.05			.04			.20												T.			T.	T.						0.52
Wiggs	Ouachita		.35	.49			T.			T.	1.82									.07					.26	.27	T.			.39	T.	.12	3.77
Wynne	St. Francis	.05	.02	2.17	.41					.70	.56	2.20	4.60	.67																		.16	11.54
Mississippi.																																	
Anguilla	Yazoo		.35	.12			.60		.90			.70													.20	.50	T.			.10	.15		3.62
Austin	do	T.		.17				T.	1.07	.24	T.	.79	1.90	.02										T.	.11	.42				T.	.47		5.19
Batesville ‖	do			.06								.09	.60	.37											25		03	.08			.65	.70	2.83
Big Creek	do			.05				T.		T.	.02	.10	.03											.25	.02		T.			.22		T.	0.69
Canton	Big Black	.20	.65	.09			.10				.61	2.00	1.07											.04	.11	.31				.30		.22	5.70
Charleston	Yazoo		T.	.60								.15	.23											.30	.50	.15	.37	.10		T.	.27		2.67
Clarksdale ‖	do		.35	.10	.11					T.	.12	.06	.05	.50											.68		.32				.63	.01	2.93
Cleveland	do	.65	.75	.48			T.		.07	T.	.31	.30	T.	T.																			
Coffeeville	do	.08	.37	.42					.07	.02	.11	.30	.08										.02	.03	.15	.05	.04			.33		.25	2.41
Corinth ‖	Mississippi										.30	.80	.76	.56											.02	1.62		.08	.22		.30	.04	4.70
Crenshaw	Yazoo		.15						.20	.10			7.00											.10	.05	.06			.15		.20	.10	8.11
Duck Hill	do	.54	T.	T.				T.	T.		.57		.33											.15	T.	T.	T.			.77	.12	T.	2.48
Edwards	Big Black	T.	.05	.10	T.	.10	.70	T.		T.	.30	T.	.10	T.									T.	.10	.10	T.	.66		T.	.02		.06	2.29
Fayette	Mississippi	T.	1.62				.72		2.72		.40		.23										.03	.05	.08	T.	.15		.14	.07	.80		7.01
Greenville ‖	Yazoo		.33	.05	.66					.17		1.64	.03														.05		.04		.16	1.00	4.13
Greenwood ‖	do		.78	.28	.04							.30	.38	.04											.10	1.08	.65				.58		4.23
Grenada	do																																
Hernando ‖	do		.10		.70					.02	.21	.20	3.30	1.60													.02				.70	.64	7.49
Hickory Flat	do										.20		2.25												1.25	.30				.30			4.30
Holly Bluff	do		1.07	.03			.30		T.		.59	.09												T.	.13	.36	.03			.11	T.	.28	2.99
Holly Springs ‖	do	.65	.40	.18	.01						.33	.05	2.00	1.16											T.	.02	T.	.08				.14	5.02

TABLE 2.—*Daily precipitation for July, 1913. District No. 7*—Continued.

Stations.	Watershed.	Day of month. 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	Total.
***Mississippi*—Con.**																																	
Kosciusko ‖	Big Black		.05	.14							.02	.65	.19	.75											.12	.15	.06				1.58		3.71
Malone	Yazoo	.34									.21	T.	1.90	3.10											T.	.30							5.85
Moorhead	do		1.44				.24		.05		T.	2.64													.70	.44				.54	.04	.37	6.46
Natchez ‖	Mississippi		2.08	1.33	T.		1.21			.13		.24	T.	.07											.05	.24	.09				.08	.10	5.62
Pontotoc	Yazoo		1.00								T.	T.	1.50												1.00	.80		.70		T.		T.	5.00
Port Gibson ‖	Mississippi	.81	.08	.12				T.		1.02		T.	T.	.67										.25	T.		.20				.11	.13	3.39
Rosedale ‖	Yazoo		.05	.10								.25													.05		.34				.20		0.99
Shoccoe	Big Black				.25	.05	.14				T.	1.04	.20											.64	.24	.06				.43		.60	3.65
Suffolk	Mississippi		1.06			.07	.29		.69		.29	.60	.35									.91		.29	.02	.18	.43			.06	.46	T.	5.70
Swan Lake ‖	Yazoo		.14	.10								.06	.10													.54	.10				.55		1.59
Tchula	do	T.	.45				T.		T.		.15	.33	T.												T.					.48			1.41
University	do																																
Utica	Mississippi	T.	.53		T.	.95	.20						T.			T.	T.						.20	.20	.10	.10	.10			.05		.47	2.90
Vicksburg	do		.42	T.			.01		T.		.08		.08										T.	.05	.22	T.	.18			T.	T.	.02	1.06
Water Valley	Yazoo	.50	.10	.20				T.		T.	.10	.15	.50											.25	.50	.10	T.	.15	T.	1.25	.10	.50	4.40
Woodville	Mississippi	.58	1.65	.25				.06				.06	T.				.02					T.		.64	.68	.05	.09	.13					4.21
Yazoo City ‖	Yazoo		T.	.04				T.				.43	.29	T.												.03	.06	.34			.31		1.50
Louisiana.																																	
Abbeville	Coast	.10	1.01				.15		.15			.10								T.	.72	.75		6.85		.15	.02	1.04		.03	.55	.15	11.77
Alexandria ‖	Red		.70	.46				.60		.11															T.	.05	.30			.63	2.00		4.85
Amite ‖	Coast	4.00	.40	.70			.40	T.				.25	.20	T.	T.	.70	T.	T.				2.25	.30	T.	2.00	.60	.20	1.00	.40	T.	T.	1.00	14.40
Antioch	Red	1.35	1.20	.18							18	1.02													.75	.01					.40		5.09
Avoca Island	Coast	.45	.60	.10			.80				.85	5.50									.08	.10	1.52	2.60	.05	.43			.25	.18		.63	14.14
Baton Rouge ‖	do	.06	1.15	.13						.15		T.	.12				.03	.04				.12	.85	.67	1.00	.20	.09	.80			.28	.32	6.01
Burnside	do	1.60					1.60					0.90		0.06		0.55					0.30	0.72	1.04	3.00	0.07		1.07	0.30		0.80			12.01
Burrwood	do	.72					1.26				.20				T.						.20		.32	.42				T.			.94	.05	4.01
Cades	do		.16				.31		T.			.38					T.	.17			.62	.91	.09	2.57	T.	.33	T.	.13	.04	T.	T.		5.71
Calhoun	Ouachita	.28	.09				.72				.12														.20	.21	.35				.17		2.14
Cameron	Coast		.35				.68		.54	.39	.08	.06	T.									.58		1.52	.06	.17				.18	.14	1.18	5.93
Carrollton	do	.39	.58	.07			.01	.91			.12	2.44	.03		.20	.69		.33	.01		.45	.16	.50	.24	.33	.35	1.02	.30	.12	.35	.55		10.15
Cheneyville ‖	Red		.10	.12				.37									.35					.40		.26		.30	.14		.20			.30	2.54
Clinclare	Coast	2.05	.30									.17									.48	1.64	1.60	.90			.73			.30	T.		8.17
Clinton ‖	do	2.68	.65	.23			1.20	.22		.02		1.39	.41	T.	T.		T.					.36	.31	.05	.88	.05	.30	.72	.35		.05	.21	10.08
Collinston	Ouachita	1.42	1.70	.05				.22	.07		T.	.90	.12												.18	1.07	.40	.06			2.53		8.72
Covington ‖	Coast		.10				.55					.45	.65									.12	1.84	.55	.40	.21	.35				.05		6.12
Dodson	Red	.48	.45	.02				.50					.86												T.						.92		3.23
Donaldsonville ‖	Coast	4.00						1.20				.10	1.20	T.		.10	T.					2.00	.05	2.35	3.35	.05		1.50	.40		2.25	.30	19.35
Dutchtown ‖	do	.47	.19				.70				.14	.35									1.84	.45	.50	2.71	.19	.06	.20	.90		.29			8.99
Farmerville	Ouachita	1.73	1.78				.38	.22	.20		1.72	.20													.30	.57					1.03		8.13
Florence ‖	Coast		1.80			1.30	.60		1.00							.03					1.30	.50	4.20	.80		.10					2.00		13.63
Franklin ‖	do	.85	.50	1.02			T.	.94		2.31		.66	2.73		T.	.01	.47					.12	.15	1.54	1.70	.15	.05	.13	.09	.02	.70	T.	14.14
Franklinton	Pearl	.30	.10			.34	T.	.20			1.15	1.16		.10			.10	.20	1.25	T.	1.12	.47	.40	.81	T.	.28	.29		.60	.20		.90	9.97
Grand Cane ‖	Red	.29	.03	.43	.70							.41		.15										.56			.91					1.08	4.56
Grand Coteau	Coast		.85						.60	.20	.01	.15	T.									T.		.83	T.		.37	.30		1.73	.33	.04	5.41
Hammond	do					2.15	.10				T.	1.15	T.								.30	T.	.05	1.42	.60			.15		T.		.05	5.97
Houma	do	.60	.40				1.20				2.00	1.00									.30	.30	.95	.10	.20	.15	.45	.05		.20			7.90
Jena	Red																																
Jennings ‖	Coast			1.81				.17		.79			.34	.22								.64	.15	.74	.08	.20	.07			.34	.11		5.66
Laark	Red		1.55	.05							.60		T.												1.10						.40		3.70
Lafayette ‖	Coast	.33	.06	1.35				.39		.59			1.37	.02			.05					.28	.05	.92	.82		.02	.34	.60	.18	.02		7.39
Lake Charles ‖	do		1.00	.12		.87				1.03			.05				.03					1.50	.10	.60	.35	.30						.40	6.35
Lakeside	do		.30	1.42						2.92	.40		.30	.10	.02						1.11		2.20	5.30							1.40	.40	15.87
La Rose (near)	do																																
Lawrence ‖	do	.48	.30				.04	.62				1.09	.37							.86	.44	.24	.04	.64	.64	1.13	.03		.12		2.00		9.04
Liberty Hill	Red	.20	.26	.19							.75														T.								1.40
Logansport ‖	Sabine	.25	2.47	.20	.13																						.30					.14	3.49
Melville ‖	Red	.83	.10	.50						.09		.05	.40	T.	T.							.21	.20	.25	.08	T.	.09	T.	T.	.11	T.	.79	3.70
Minden ‖	do	.55	.96	.50	.95									.20											.10	.54	.04					.55	4.39
Monroe ‖	Ouachita		.02	.68	T.			T.	.01	.56		.08		.68											T.	.18	.01	.37	.01		.03	2.02	4.65
Morgan City ‖	Coast	1.86	.14	.69			.02	.49				1.51	5.08									.06	.11	1.79	1.35		T.		.03		.28	.23	13.64
Napoleonville	do	.90	.50				.80		.45		.40	1.60			.15						.10	.35	1.35	2.45	.25		.55		.65	1.35			11.85
Newellton	Mississippi		2.69				.13	.15	.85		.47		.83										.08	.03	T.	.10	.42					T.	5.75
New Iberia	Coast	T.	2.00	.05			.30				T.	.60									.40	T.	.40	6.25	.25	.60	T.	.35	1.05	.15	T.	T.	12.40
New Orleans (1)	do	.08	.16			T.	.78				.10	.98	T.		.05				T.	.57	.70	.11	.35	.83	.10	.29	.08	.01		.18			5.37
New Orleans (2)	do	.15	.29					.95			.11	2.08			.21	.92					.12	.09	.26	.60	.33	1.34	.17	.03	.27	.15		1.21	9.28
New Orleans (3)	do	.04	.05				.70				.14	1.65				.65					.25	.02	.13	.31	.22	.55	.03	.12		.11	.06	.03	5.34
New Orleans (5)	do		1.24				.67				.28	1.32			.33						.47		.33	.43	.10	.41			.57	.14	.07		6.94
New Orleans (6)	do	.11	.16				.70				.11	1.11									.66	.62	.34	.91	.03	.30	.03	.05		.11			5.85
New Orleans (7)	do	.02	.05				.70				.78	1.82				.52					.10	.06	.08	.36	.03	.73	1.18	.04		.18			7.33
New Orleans (8)	do	.06	.32				.72				.27	1.60			.10						.24		.32	.86		.10		.04		.09			4.99
Opelousas ‖	do	.12		1.89						.27			.50									.18	.82	.13	.05	.33	T.	.67	T.		.11	1.91	6.98
Paradis	do	.14	.19				.25				.15	1.35		.15	.50					.43		.27	.41	.22	2.50		.84	1.09	.20	.83			9.52
Pearl River ‖	Pearl	.42	.02				.10	.46				.34	.52				.14	.20		.02	.36		.16	.62	1.22	.08	T.		.42	.14	.06		5.28
Plain Dealing	Red	1.57	.16								.33											.02			.40	.04							2.52
Rayne ‖	Coast	1.10	T.	.30						.30		T.										.74		.60	.40		T.	.74	.15		T.	T.	4.33
Reserve ‖	do	.06		.43				1.07					.70										.43	.81	2.05		1.54						7.09
Richland Plantation	Red	.14	.23	.50				.40		.05				.28	.02							.13			.02	.71	.05			.05		1.04	3.62
Robeline ‖	do	.50	.40	.60				.30																								T.	1.80
Ruston	Ouachita	.73	1.37	.34				.21					1.23												.25	.02					.39		4.54
St. Francisville ‖	Mississippi	.32	.28	.03	.14			.03		1.52		1.43	2.20	.04				T.				.09	1.03	.65	.48	.09	1.05	.85	.04		T.	.03	10.30
Schriever ‖	Coast	.30	.30	.50				.50				2.00	2.70									1.30	.20	1.40	2.40	.40		.50		.60	.35		13.45
Shreveport	Red	.16	.20	.12																					.04	.03					.06	.09	0.70
Simmesport ‖	Coast	.44	1.96	1.11				.09		.03			.18	.46									T.		.03	.40	.25	.26	.15			.69	6.05
South. Univ. Farm.	do	.10					.15				T.	2.15				T.					.19	T.	.30	.15	.45	.30	T.	.10	T.	.20		T.	4.09
Sugartown	do		1.24	.12																	.52		.32		.34				.24		.52		3.30
Tallulah	Mississippi	.29		.16	.28					.94		.06		.32												.25	.12	.15				.20	2.77
Walker	Coast	.50	.50			.25						.25	.20				2.40			1.70		.15	2.05		.75	.03	.15		.05		.16		9.14

* Precipitation included in that of the next measurement.
‡ Separate dates of falls not recorded.
‖ Precipitation for the 24 hours ending on the morning when it is measured.
T. Precipitation is less than 0.01 inch rain or melted snow.

TABLE 3.—*Maximum and minimum temperatures at selected stations for July, 1913. District No. 7, Lower Mississippi Valley.*

Date.	Colorado.						New Mexico.				Texas.				Kansas.										Oklahoma.			
	Lamar.		Leadville.		Pueblo.		Albert.		Cimarron.		Amarillo.		Paris. §§		Dodge City.		Ellinwood.		Iola.		Liberal.		Wichita.		Ardmore. §§		Bartlesville. §§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	90	59	75	37	85	61	91	60	83	50	89	61	93	70	88	63	92	65	83	68	89	67	85	69	87	72	83	73
2	101	70	75	38	100	59	94	64	87	53	93	64	84	72	92	65	95	67	90	66	96	63	90	68	88	72	95	70
3	100	63	75	41	100	56	97	62	89	46	95	64	78	71	94	70	95	71	89	71	103	74	88	74	82	72	94	73
4	100	70	72	45	97	57	98	65	92	50	93	66	90	71	98	70	100	73	92	74	100	71	94	72	91	74	96	76
5	100	69	78	40	92	65	92	62	89	56	93	66	93	73	97	75	101	70	96	74	100	71	97	73	97	73	100	77
6	104	69	77	45	100	68	95	64	87	53	93	65	96	69	99	70	104	75	98	75	100	68	100	76	101	75	103	80
7	104	69	75	45	100	64	100	66	90	52	95	67	98	69	101	72	105	77	95	73	102	71	101	78	102	71	104	79
8	104	68	75	44	94	69	98	64	88	59	97	68	99	73	105	71	110	77	99	77	104	74	102	75	105	76	103	80
9	98	79	73	40	89	65	91	69	80	53	97	68	100	74	97	72	93	72	88	68	99	83	91	74	105	75	98	80
10	99	69	68	43	89	62	93	65	87	56	94	71	97	75	92	68	95	60	90	61	95	77	92	65	104	75	101	68
11	92	66	65	41	80	67	94	64	88	54	96	71	95	74	91	69	92	74	101	69	94	69	98	76	105	74	105	70
12	109	60	73	36	90	57	94	64	90	52	95	66	93	75	89	61	93	59	90	70	95	71	87	70	98	76	85	74
13	109	60	74	41	101	61	102	65	91	50	98	69	92	73	103	74	101	73	92	70	108	75	93	75	100	76	96	80
14	106	67	72	47	97	66	101	65	89	57	101	70	93	73	103	77	106	77	99	77	108	75	98	78	100	76	102	80
15	104	69	66	43	97	65	96	68	87	59	99	72	94	72	103	74	105	74	101	75	106	75	100	76	102	75	104	75
16	101	67	69	41	91	65	100	69	85	51	95	64	96	71	102	76	106	76	102	73	102	80	100	75	102	71	105	75
17	102	62	67	43	90	58	96	64	85	52	92	63	96	72	99	69	104	85	101	72	100	66	99	74	100	72	105	78
18	95	65	68	41	81	61	91	65	80	56	94	66	100	72	96	67	99	70	102	69	99	67	102	76	105	72	108	81
19	85	61	61	39	67	59	85	61	75	51	88	63	102	69	82	62	85	60	88	68	89	65	85	67	107	71	93	75
20	81	58	60	41	76	61	79	62	67	52	76	60	93	72	87	63	92	66	88	63	82	60	89	69	87	74	96	70
21	87	59	60	42	82	59	85	59	76	54	86	58	94	70	87	61	93	56	87	57	90	58	88	62	95	68	93	65
22	96	66	65	41	89	64	94	63	79	57	92	63	96	70	92	64	98	64	95	58	96	64	94	64	97	62	99	64
23	89	63	63	43	72	61	88	57	78	54	93	63	95	69	80	64	87	70	92	69	93	65	88	67	100	66	98	73
24	80	62	62	42	80	59	88	56	80	46	87	62	90	71	81	63	86	69	82	65	79	65	79	66	104	75	82	70
25	93	62	60	35	88	54	93	59	80	46	93	59	95	72	94	64	95	65	88	63	94	64	89	66	98	72	91	71
26	97	59	65	33	84	55	95	57	78	47	91	60	93	71	89	66	95	65	95	70	91	57	91	71	94	72	95	72
27	92	56	56	33	82	54	93	57	81	47	96	64	92	71	94	66	101	71	90	68	91	61	90	67	93	69	93	71
28	93	56	66	30	88	51	95	65	83	44	90	62	93	70	93	62	98	64	98	70	95	63	95	68	95	71	100	74
29	99	60	67	36	94	55	93	61	81	47	87	63	95	72	94	64	99	76	100	71	95	.....	96	74	98	72	102	75
30	99	65	67	37	92	64	93	60	84	45	91	66	100	72	97	69	101	71	100	73	97	.....	98	74	105	70	102	76
31	100	64	70	36	82	60	85	63	80	55	88	67	91	71	89	64	92	67	96	71	92	.....	92	74	106	71	104	74
Mns.	96.5	64.3	68.4	40.0	88.7	60.7	93.1	62.7	83.5	51.7	92.5	64.9	94.1	71.6	93.8	67.6	97.4	69.6	93.8	69.3	96.3	68.5[c]	93.3	71.4	98.5	72.3	97.9	74.2

Date.	Oklahoma.														Missouri.													
	Enid. §§		McAlester. §§		Mangum. §§		Muskogee. §§ [1]		Oklahoma.		Weatherford. §§		Woodward.		Caruthersville.		Ironton. §§		Lamar. §§		Olden.		Springfield.		Blandville, Ky.		Jackson, Tenn.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min
1	85	70	91	71	88	68	96	72	81	67	82	68	85	68	92	72	92	68	83	69	.....	.....	83	69	95	71	98	71
2	90	67	93	71	92	71	85	70	87	69	88	70	88	64	95	74	90	68	95	65	.....	.....	90	69	89	71	94	72
3	90	71	83	72	99	72	92	71	85	70	90	71	91	71	89	72	87	70	94	65	.....	.....	87	69	86	72	89	72
4	91	71	91	71	98	70	100	75	86	74	90	72	89	68	94	70	91	71	95	71	.....	.....	89	72	90	71	94	70
5	95	72	95	75	98	73	102	74	89	72	94	70	94	72	99	70	95	70	100	74	.....	.....	95	71	94	74	96	70
6	98	72	101	73	100	72	102	75	92	72	97	70	96	72	99	76	93	61	98	79	.....	.....	92	73	94	74	.....	.....
7	100	73	102	72	101	72	104	71	92	72	98	72	96	73	87	69	83	61	99	72	.....	.....	85	71	82	66	95	64
8	102	74	105	74	103	72	105	76	94	72	100	71	100	69	91	66	90	65	102	76	.....	.....	93	72	90	64	97	63
9	100	74	104	79	106	73	94	77	94	72	102	71	97	73	86	70	93	66	88	72	.....	.....	92	76	86	70	83	70
10	97	66	97	72	104	74	100	71	93	70	97	69	96	68	91	72	87	64	96	63	.....	.....	88	69	84	67	90	70
11	106	75	99	75	107	74	92	74	97	75	105	72	100	75	85	72	90	63	98	70	.....	.....	91	68	82	72	86	72
12	96	71	97	75	100	73	94	75	90	73	93	72	95	69	82	69	86	66	89	69	.....	.....	80	68	81	67	.....	.....
13	97	66	95	76	100	75	97	69	91	74	94	72	99	.....	89	69	92	67	92	69	.....	.....	87	70	88	69	99	68
14	98	68	97	77	104	76	100	76	93	76	98	72	101	77	94	72	91	71	98	77	.....	.....	91	72	91	72	92	70
15	101	72	99	76	103	74	101	74	95	73	100	76	104	78	95	72	91	70	102	75	.....	.....	93	71	89	73	97	69
16	101	70	103	72	102	69	101	70	95	68	100	68	101	72	97	72	94	68	104	71	.....	.....	95	70	91	74	96	69
17	100	71	102	73	101	68	105	70	95	70	99	69	100	71	98	72	98	67	102	74	.....	.....	95	73	93	72	96	68
18	105	73	105	74	104	67	102	80	98	72	102	69	103	67	102	72	100	67	103	74	.....	.....	96	75	95	75	96	78
19	96	70	105	75	104	67	95	75	96	71	97	70	96	68	96	75	87	70	94	71	.....	.....	86	71	86	75	95	72
20	94	69	94	75	78	64	94	70	85	68	91	63	85	60	97	67	91	56	95	57	.....	.....	87	66	87	65	95	62
21	93	65	97	69	92	65	97	65	87	63	88	62	91	56	90	68	84	50	93	62	.....	.....	85	63	81	62	.....	.....
22	97	57	100	69	99	62	93	70	94	60	96	58	96	58	94	59	90	47	97	62	.....	.....	88	65	86	61	.....	.....
23	92	68	91	75	106	62	90	72	98	74	103	59	94	72	94	61	95	55	92	71	.....	.....	85	68	89	65	93	58
24	85	69	100	75	93	71	93	71	88	70	90	70	88	64	84	69	84	69	80	67	.....	.....	79	67	80	69	94	64
25	92	69	99	75	92	67	94	72	92	71	96	68	94	66	84	70	85	58	86	68	.....	.....	79	71	84	67	93	70
26	93	69	99	75	96	67	90	71	93	70	93	67	98	64	90	71	93	64	94	71	.....	.....	88	69	87	71	94	66
27	99	69	91	68	98	66	97	68	96	69	101	67	98	63	93	72	92	67	87	68	.....	.....	82	67	90	72	95	70
28	100	67	99	68	100	66	98	71	97	74	99	69	100	65	97	74	94	66	96	70	.....	.....	91	70	91	73	99	71
29	100	74	97	73	98	69	98	73	97	72	102	70	99	67	100	72	98	70	98	73	.....	.....	93	74	93	72	102	70
30	102	70	100	72	101	67	100	75	99	73	103	67	100	65	95	74	97	68	96	73	.....	.....	91	65	95	70	96	70
31	91	72	100	73	103	68	100	73	103	70	106	69	93	67	96	73	96	65	99	71	.....	.....	92	71	89	70	98	72
Mns.	96.3	69.8	97.8	73.2	99.0	69.5	97.1	72.5	92.6	70.8	96.6	68.8	95.7	68.1[a]	92.7	70.5	91.3	64.8	95.0	70.0	.....	.....	88.6	69.8	88.3	69.9	94.5[d]	68.9[d]

TABLE 3.—*Maximum and minimum temperatures at selected stations for July, 1913. District No. 7*—Continued.

Date.	Tennessee.				Arkansas.																		Mississippi.					
	Kenton.		Memphis.		Bentonville.		Dardanelle.§§		El Dorado.§§		Fort Smith.		Hardy.		Little Rock.		Pine Bluff.§§		Texarkana.§§		Wynne.§§		Clarksdale.§§		Corinth.§§		Greenville.§§	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	93	70	93	76	90	69	95	70	90	69	95	73	100	72	93	72	94	69	94	68	98	74	95	73	94	72	97	73
2	91	71	90	74	93	68	95	73	86	71	94	72	95	71	89	72	89	72	80	70	94	74	88	74	90	72	86	73
3	87	70	87	74	86	68	88	72	84	72	86	72	90	70	86	73	86	72	88	72	90	72	87	74	90	72	88	73
4	90	68	89	74	91	72	93	73	91	72	92	75	95	70	90	72	92	70	93	70	90	70	93	70	96	70	94	71
5	.....	.....	93	77	96	70	95	71	93	74	95	74	102	73	93	75	96	72	95	72	97	71	96	71	98	70	97	72
6	93	70	95	78	99	70	96	75	96	73	99	69	100	75	96	78	99	76	97	72	100	71	100	78	100	76	101	77
7	85	64	88	74	94	67	93	67	96	73	92	68	91	67	94	73	100	71	98	70	97	71	95	71	89	66	99	74
8	89	60	84	71	99	73	97	71	98	75	100	75	83	67	91	76	100	77	99	72	93	73	92	71	96	64	97	75
9	80	69	84	71	100	70	100	72	97	70	101	69	95	69	93	73	95	75	100	74	98	67	89	70	80	71	93	69
10	88	70	84	72	90	68	85	69	77	73	86	71	84	68	79	69	80	69	91	76	79	72	89	73	94	70	92	74
11	84	71	88	71	91	68	94	70	93	71	95	72	89	68	92	72	92	69	98	71	92	70	91	74	86	71	91	70
12	82	67	77	69	76	64	84	75	90	72	83	66	85	69	84	69	86	73	95	75	77	68	83	74	77	68	90	72
13	88	67	87	71	86	68	95	67	91	71	91	69	90	69	89	71	91	71	97	75	91	71	91	70	90	68	93	72
14	90	71	89	75	91	72	96	71	92	73	95	74	91	72	90	74	93	74	96	73	91	74	94	74	92	70	94	75
15	91	78	89	76	93	69	97	70	93	71	97	73	95	71	92	73	95	72	92	72	95	74	95	72	94	70	95	72
16	92	70	90	77	94	68	101	70	94	72	99	70	98	72	94	74	96	71	100	73	95	73	96	71	96	71	96	74
17	94	70	92	78	94	67	101	70	96	72	100	73	101	72	94	74	97	73	98	72	97	73	97	73	96	72	98	73
18	96	72	94	79	97	71	102	71	96	73	101	74	103	70	96	76	98	73	100	72	100	73	98	72	98	72	100	76
19	91	72	92	78	92	70	99	71	97	71	98	75	95	74	98	67	101	73	102	69	100	73	99	74	102	74	101	76
20	90	62	89	72	91	63	96	70	91	71	94	77	95	64	90	74	95	74	95	73	95	72	92	73	92	70	94	75
21	85	59	85	70	88	60	93	67	92	67	92	72	90	62	87	73	94	73	96	68	92	70	91	70	90	68	95	71
22	90	55	87	69	90	60	94	63	89	68	92	70	94	58	89	68	94	66	94	67	91	60	92	61	94	64	92	66
23	91	59	88	71	88	67	97	63	94	68	94	70	97	69	91	70	93	66	97	69	94	63	89	68	88	66	91	69
24	80	68	82	70	79	67	91	63	77	71	90	70	85	70	82	72	83	71	84	73	85	70	83	69	89	68	87	71
25	85	66	82	73	84	68	91	70	84	70	90	71	79	70	83	70	81	70	95	72	86	71	83	71	91	70	84	74
26	91	68	88	72	87	68	96	70	91	70	94	70	90	70	88	71	91	70	97	72	93	72	92	71	91	72	95	71
27	95	70	89	73	83	67	97	69	93	73	92	70	92	68	89	73	92	72	99	72	92	72	93	72	90	72	95	74
28	96	72	92	77	91	70	97	71	94	72	95	74	94	70	94	75	96	74	99	73	98	74	95	72	94	71	97	73
29	98	69	94	73	92	71	98	69	94	73	98	72	97	70	96	76	97	74	100	73	99	73	96	74	94	74	96	75
30	92	69	83	73	91	71	94	70	90	75	92	75	93	72	87	74	91	74	94	74	92	75	90	71	94	70	89	74
31	97	70	90	76	92	70	96	71	92	71	96	74	95	68	93	74	96	72	99	70	94	73	95	73	92	73	96	73
Mns.	89.8[a]	67.9[a]	88.2	73.7	90.6	68.2	95.0	69.8	91.3	71.5	94.1	71.9	93.0	69.4	90.4	72.7	93.0	71.9	95.5	71.7	93.1	71.3	92.2	71.7	92.2	70.2	94.0	72.8

Date.	Mississippi.						Louisiana.																			
	Kosciusko.§§		Natchez.		Vicksburg.		Alexandria.§§		Baton Rouge.§§		Covington.§§		Lafayette.§§		Lake Charles.§§		Monroe.§§		New Orleans.		Robeline.§§		Schriever.§§		Shreveport.	
	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.
1	94	70	87	60	87	72	89	71	85	70	86	71	87	72	92	68	91	69	83	74	92	70	85	72	89	70
2	90	72	78	60	81	71	86	70	92	68	89	72	84	74	83	69	80	72	85	74	84	70	83	74	78	72
3	91	68	87	62	87	71	89	72	90	70	92	71	89	72	98	68	91	71	91	74	96	72	92	71	84	73
4	97	69	90	62	91	74	91	70	91	72	94	70	91	71	94	70	96	70	92	74	91	69	94	70	90	72
5	98	71	92	63	92	76	94	71	92	73	94	72	93	72	97	67	96	72	94	76	96	68	93	62	94	74
6	101	70	94	66	94	74	95	72	93	74	95	70	95	74	99	64	99	74	93	68	97	68	96	62	96	75
7	99	67	92	61	93	73	97	69	92	70	97	71	93	70	101	66	97	72	95	69	99	67	95	67	98	74
8	98	68	95	65	97	72	98	70	95	73	99	72	95	71	102	72	96	73	95	80	100	69	95	74	98	78
9	99	65	92	68	91	70	94	70	94	69	98	68	92	70	96	65	95	68	91	78	98	70	95	70	99	76
10	86	75	92	73	89	73	94	70	92	73	97	71	91	72	98	69	90	74	90	76	98	70	94	72	92	77
11	82	69	89	70	90	73	93	73	81	72	90	74	89	75	91	72	94	72	80	71	96	70	80	72	94	76
12	89	71	87	73	87	73	93	72	88	72	90	73	87	72	94	69	92	74	91	75	97	73	90	70	94	76
13	90	69	89	72	89	72	92	72	92	70	91	70	90	71	92	68	94	71	89	76	96	70	93	71	95	73
14	93	72	91	72	88	75	93	70	93	72	92	71	91	71	95	66	95	72	91	75	97	71	94	70	94	74
15	94	70	92	72	90	73	93	71	94	71	94	70	91	72	97	68	95	72	89	75	98	69	93	71	95	73
16	95	72	92	72	93	75	94	71	94	72	93	70	91	72	97	67	95	72	93	76	97	68	94	70	95	74
17	97	72	94	72	93	76	95	72	95	70	97	70	93	73	96	69	97	74	95	76	99	68	95	72	97	75
18	99	71	94	72	95	79	96	73	95	71	95	72	94	73	99	69	97	75	93	77	100	66	95	74	96	75
19	100	73	95	73	96	80	98	72	97	73	97	71	96	74	100	70	100	74	96	73	99	68	96	74	99	75
20	93	74	94	74	92	76	90	73	95	74	89	73	96	76	102	69	94	74	88	70	102	67	94	74	92	74
21	95	70	92	68	94	71	93	70	89	71	85	70	90	72	99	66	94	69	84	73	100	66	89	70	94	70
22	96	63	89	69	91	69	92	70	79	70	77	71	82	71	87	67	93	69	79	72	95	65	78	69	94	72
23	86	69	81	71	81	70	85	70	74	69	82	71	75	70	76	65	90	69	86	69	91	70	79	69	91	70
24	89	67	88	71	84	71	87	70	89	68	87	70	88	69	92	64	82	69	86	74	88	67	87	68	84	73
25	88	70	87	72	85	70	87	71	87	72	89	73	88	74	94	70	85	70	88	71	91	72	90	69	92	72
26	91	68	87	70	87	70	92	71	86	71	90	70	89	74	99	69	92	72	89	76	98	68	91	71	94	73
27	95	69	92	70	90	72	92	72	87	70	91	70	87	72	95	70	94	70	89	76	99	70	90	70	94	74
28	98	68	92	70	91	71	93	71	90	71	92	71	90	71	95	69	97	70	89	76	95	71	94	72	95	74
29	96	74	89	73	84	75	91	71	89	72	85	71	88	72	95	68	91	74	85	73	91	69	89	71	95	76
30	91	69	90	73	91	73	90	70	85	69	91	71	87	70	90	69	92	75	89	73	99	72	89	70	89	74
31	95	70	90	70	91	73	90	70	88	71	92	72	88	71	90	67	92	71	88	76	94	70	90	72	92	70
Mns.	93.7	69.8	90.1	69.0	89.8	73.0	92.1	71.0	89.8	71.1	91.3	71.0	89.7	72.7	94.7	68.0	93.1	71.7	89.2	74.1	95.9	69.1	90.7	70.4	92.9	73.7

[a], [b], [c], etc., indicate respectively 1, 2, 3, etc., days missing from the record.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.