Climatological Data for July, 1909.

DISTRICT No. 9, COLORADO VALLEY.

FREDERICK H. BRANDENBURG, District Editor.

INTRODUCTION.

The month was marked by the beginning of the seasonal thundershowers, which set in shortly after the 15th. Although slightly later than usual in beginning, they were remarkably persistent, and extended far to the north, giving to the whole mountain region more than the usual precipitation. The hot, dry weather, characteristic of early summer in this region, continued through the first two weeks, broken only by light showers from the 2d to 5th.

TEMPERATURE.

The mean temperature was high to the northward of Arizona, but remarkably deficient in the Gila Valley. The mean of the 143 stations was 74.9°, or 0.2° below the normal. In southwestern Wyoming the excess was about 2°; in eastern Utah, 1.2°; in western Colorado and western New Mexico, 0.3°, while in Arizona there was a deficiency of 1°. The highest mean was 98.2° at Mohawk Summit, Ariz., and the lowest, 50.0° at Corona, Colo. The difference in mean temperature between points of the same elevation in the extreme northern and extreme southern portions of the district was about one-fourth that of the two stations mentioned.

The extremes of temperature were such as are commonly found in July. The highest was 120° at Mohawk Summit; 110° or higher was common in southern Arizona, and 100° was reached at most stations of less than 5,000 feet elevation. Mean maxima of 100° or higher occurred in portions of Arizona, Nevada, and Utah. The freezing point was reached at several points in western Colorado and Wyoming; the lowest reading was 22° at Breckenridge, Colo. Frost occurred in the mountains of northern Arizona on the 28th and 29th.

The 1st and 2d, with the period from the 12th to 16th, included the highest temperatures of the month. From the 16th to 26th the days were comparatively cool, but the nights warmer than normal. Unusually low temperatures prevailed on the 28th and 29th.

PRECIPITATION.

The rainfall was, to an unusual extent, dependent upon the topography. Over the Colorado Plateau and in western Arizona the amounts were insignificant; nearer the mountains the fall was heavier, and on their slopes was considerably above the normal, with monthly totals ranging from 2 to more than 6 inches. The average of the 177 stations reporting was 1.91 inches, an excess of 0.28 inch. As the majority of these stations are in the mountains, or in their immediate vicinity, their mean is higher than the true average for the district. For the Green River Basin the mean of all stations was 1.49 inches; for the Grand, 1.73 inches; the San Juan, 2.97 inches; the Little Colorado, 2.23 inches; and for the Gila and its tributaries, 2.16 inches.

The heaviest rainfall was 6.11 inches, at Chlarsons Mill, in southeastern Arizona; 4 inches or over occurred at several stations in the southern half of the district, while at Blythe, in the California Desert, no rain fell, and in the lower Gila and Colorado valleys the amounts were usually less than half an inch. The daily falls were seldom excessive; the heaviest reported was 2.37 inches at Lordsburg, N. Mex.

In point of time the distribution of the rainfall was very uniform. Light showers were general from the 2d to 5th; from the 5th to the middle of the month the weather was uniformly dry. From the 15th to the 26th showers fell daily over much of the district; the closing days were generally fair.

The Colorado and its northern tributaries fell steadily from the beginning of the month, and at its close had returned to their normal height. The flow of the Arizona streams was greatly augmented by the heavy rains which terminated a drought of unusual severity.

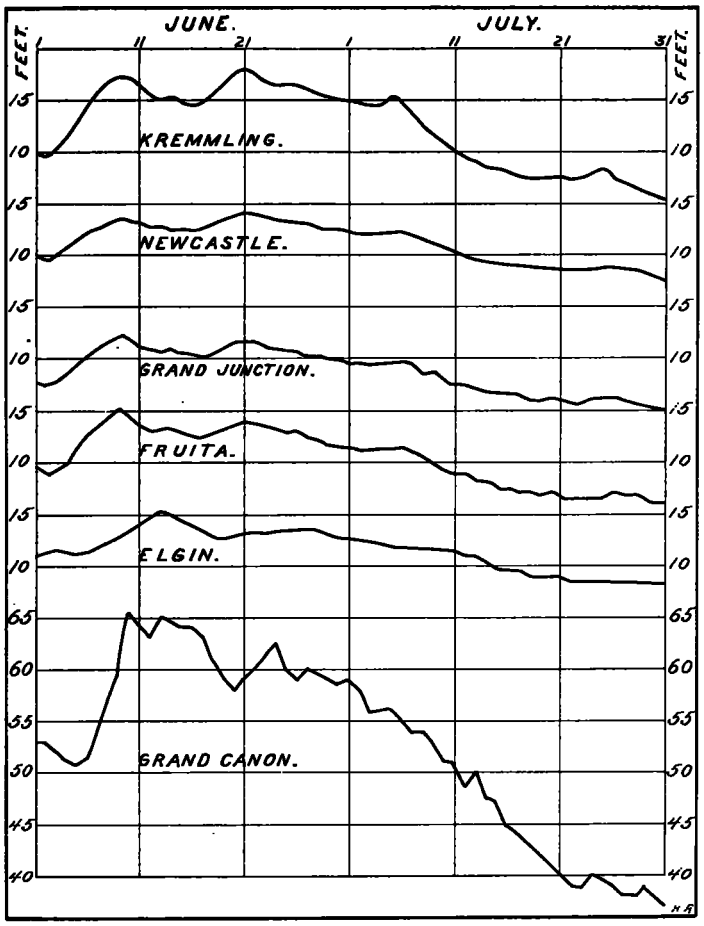

FIG. 1.—Hydrographs of the Colorado and tributaries, June and July, 1909.

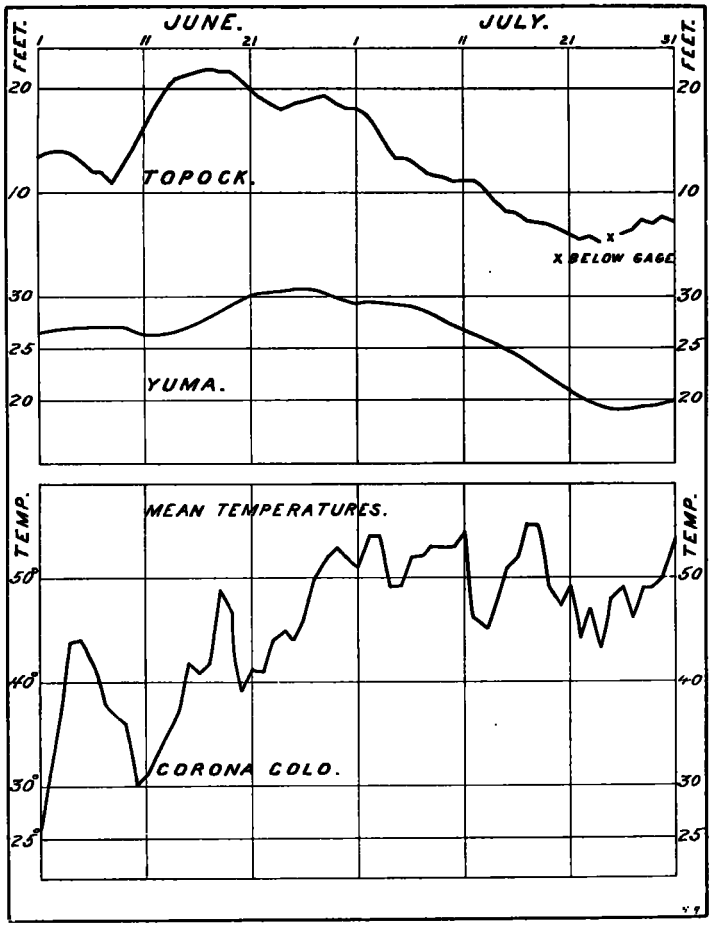

FIG. 2.—Hydrographs of the Colorado and tributaries, June and July, 1909, compared with the mean temperatures at Corona, Colo.

TABLE 1.—*Climatological data for July, 1909. District No. 9, Colorado Valley.*

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Number of rainy days, .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.		
Wyoming.																				
Daniel	Uinta	6,740	10	58.4	+ 2.5	92	18	30	14	52	2.31	+ 1.46	1.36	0.0	2	17	14	0	nw.	J. M. Van Dervort.
Dixon	Carbon			66.4		96	4†	36	12	50	2.05		1.50	0.0	5	20	4	7		Carey O. Morgan.
Eden	Sweetwater	6,577		64.2		95	2	35	12	48	1.71		0.73	0.0	7	19	9	3	w.	Eden Valley L'd & Ir. Co.
Fontenelle	Uinta	6,400	3																	C. W. Holden.
Green River	Sweetwater	6,083	4	68.6		98	16†	38	28	53	0.02		0.02	0.0	1	18	8	5	w.	Geo. H. Maxom.
Kendall[1]	Fremont	7,630		56.2		86	16†	28	12	49				0.0	17	3	1		w.	Art. Doyle.
Pinedale	do.	7,167	3																	Forest Service.
Willow Creek Cabin[b]	do.	7,500	1	54.8		84	2	30	12†	40	2.46		0.87	0.0	18	9	2		nw.	John L. Allen.
Colorado.																				
Ashcroft	Pitkin	9,483	8	57.2		84	8	33	28	47	2.29	+ 0.60	0.81	0.0	15					Dan McArthur.
Breckenridge	Summit	9,536	19	53.8[a]	+ 0.4	79[a]	2	22[a]	12	51[a]	3.04	+ 0.85	1.00	0.0	15	6	18	6	se.	Mrs. J. G. Thompson.
Cascade	San Juan	8,900	3								4.41		1.25	0.0	10	19	3	9	e.	San Juan P. & W. Co.
Chromo	Archuleta	7,500	3	63.2		90	12†	32	11	54	2.41		1.00	0.0	7	9	21	1	sw.	Lawrence Nolan.
Cochetopa	Saguache	9,088									1.88		0.43	0.0	12	7	23	1	w.	Bessie McDonough.
Collbran	Mesa	6,000	16	69.0	+ 0.3	91	16	45	10	38	0.52	− 0.66	0.18	0.0	5	24	7	0	sw.	A. A. Wood.
Columbine	Routt	8,766																		Jas. H. Carom.
Columbine Ranch	Delta	6,925																		Geo. W. Wade.
Corona	Grand	11,660	2	50.0		64	7†	32	12	28	1.72		0.48	0.0	8				w.	U. S. Weather Bureau.
Crawford (near)	Montrose	6,600		70.0		90	13	51	28	34	1.06		0.43	0.0	8	13	15	3		C. W. Roe.
Crested Butte	Gunnison	8,867									2.71		1.40	0.0	8	13	0	18	w.	Charles L. Ross.
De Beque	Mesa	4,935																		C. M. Paine.
Delta	Delta	4,965	18	75.5	+ 1.4	101	13	47	11	51	1.25	+ 0.41	0.69	0.0	6	24	7	0		E. M. Getts.
Dillon	Summit	8,800									3.87		1.05	0.0	11	15	15	1	n.	Harry T. Hamilton.
Dolores	Dolores	6,500		74.9		92	4†	56	11	34	0.47		0.25	0.0	7	18	7	6	nw.	Geo. R. Simmons, jr.
Dunkley	Routt	7,400	3	68.4[1]		88[1]	4	51[1]	10	30[1]	0.26		0.09	0.0	6	11		11		Geo. W. Dunkley.
Durango	La Plata	6,534	16	68.9	+ 0.2	91	13	46	28	42	2.20	+ 0.65	0.58	0.0	12	10	20	1	nw.	U. S. Weather Bureau.
Eagle	Eagle	6,598	4	63.8		92	3	35	10	50	1.78		0.76	0.0	5	22	8	1	w.	J. M. Witteman.
Eureka	San Juan	10,000	2								2.42		0.36	0.0	11					San Juan P. & W. Co.
Fruita	Mesa	4,510	10	74.2	− 1.0	100	15	45	10	48	1.48	+ 0.76	0.75	0.0	8	19	10	2	sw.	J. B. Willsea.
Gladstone	San Juan	10,400	3								3.84		0.89	0.0	13	2	27	2	ne.	San Juan W. & P. Co.
Glenwood Springs (near)	Garfield	5,823	11																	E. A. O'Neill.
Grand Junction	Mesa	4,608	18	78.3	− 0.9	100	2	57	11	39	0.50	− 0.14	0.23	0.0	4	18	7	6	e.	U. S. Weather Bureau.
Grand Lake	Grand	8,153									0.65		0.65	0.0	1	27	0	3		Mrs. Belle Kauffman.
Grand Valley	Garfield	5,089	17	72.6	− 0.2	99	2†	40	7	50	1.55	+ 0.68	0.66	0.0	10	15	9	7		David Evans.
Gunnison	Gunnison	7,670	16	62.9	+ 2.0	89	9†	35	4†	51	1.53	+ 0.35	0.57	0.0	9	12	13	6	sw.	Clarence Adams.
Hayden	Routt	6,337		64.6		96	5	37	12†	50	3.73		0.89	0.0	9	23	7	1	ne.	C. W. Harkness.
Hesperus	La Plata	8,870	11																	John S. Spear.
Horsefly	Montrose	8,700																		Lawrence J. Finch.
Ignacio	La Plata	6,425									3.10		1.00	0.0	11	11	19	0	s.	Elizabeth Schalles.
Ironton	Ouray	10,000																		P. H. Foley.
Kremmling (near)	Grand	7,337	1	62.6		88	16	38	28	45	1.37		0.36	0.0	9	19	9	3		H. A. Howe.
Lake City	Hinsdale	8,686	4	62.0		82	2†	41	13†	41	2.30		0.55	0.0	9	10	13	8		W. H. Ogle.
Lay	Routt	6,190	15	65.4	− 1.4	94	3†	32	12	56	1.04	+ 0.14	0.29	0.0	7	20	6	5	sw.	A. G. Wallihan.
Lujane	Montrose	6,620	3	72.2		97	17	51	12†	39	0.93		0.50	0.0	5	21	5	5	se.	T. T. Richards.
Mancos	Montezuma	6,960	10	68.3	+ 2.3	91	13	45	28†	43	2.41	+ 1.32	0.76	0.0	7	12	19	0	w.	B. M Krumpanitsky.
Marble	Gunnison	7,951		61.7		87	1†	36	11†	47	1.83		0.44	0.0	9	18	7	6	e.	Homer Harrington.
Marshall Pass	Saguache	10,846	6								2.17		0.43	0.0	10	20	7	4	w.	William D. Lillard.
Meeker	Rio Blanco	6,182	17	64.3	− 1.3	89	16	39	14†	47	0.59	− 0.97	0.21	0.0	6	16	14	2		T. Baker.
Montrose (near)	Montrose	5,811	20	68.2	− 2.0	93	1	43	29	46	1.07	+ 0.29	0.46	0.0	8	12	19	0		R. Butterfield.
Nast	Pitkin	7,953									1.54		0.88	0.0	5	19	10	2	w.	Arthur Hanthorn.
Pagoda	Routt	6,500	18	64.2	+ 0.3	91	3	34	12	53	1.68	+ 0.44	0.54	0.0	7	26	4	1		Shaw Brothers.
Pagosa Springs	Archuleta	7,108	2	64.9		92	12†	32	11	57	2.97		1.17	0.0	10	11	14	6	sw.	E. T. Walker.
Paonia	Delta	5,694	8	74.9		99	3†	49	28	46	.033	− 0.69	0.20	0.0	5	13	18	0	sw.	J. M. Underwood.
Parshall	Grand										1.32		0.85	0.0	4					F. A. Field.
Pitkin	Gunnison	9,500									2.47		0.85	0.0	6	23	8	0		Mrs. Maggie Cammann.
Rangely	Rio Blanco	5,050	10	72.2	+ 3.0	100	16	42	12	53	1.11	+ 0.52	0.60	0.0	6	17	12	2	w.	Mrs. C. P. Hill.
Redcliff	Eagle	8,695	14								3.30	+ 1.44	0.70	0.0	9	17	3	11		Dorothea Greiner.
Rico	Dolores	8,824	8																	Clinton B. Smith.
River Portal	Montrose	6,570	3	70.4[d]		96[d]	15	43[e]	12	40[e]	0.78		0.21	0.0	7	9	10	7		J. Dill.
Sapinero	Gunnison	8,125	9	59.8		83	16	32	8	47	1.56		0.23	0.0	13	16	8	7	w.	W. F. Irving.
Silt	Garfield	5,441	13	71.4	+ 0.8	97	16†	42	11	50	1.70	+ 0.57	0.53	0.0	9	18	13	0	w.	W. S. Park.
Silverton (1)	San Juan	9,285	5	57.9		83	11	32	11†	51	3.96		0.70	0.0	10	15	8	8		V. E. Kerr.
Silverton (2)	do.	9,400	3	56.7		79	12	32	11	45	3.27		0.56	0.0	9	16	4	11	ne.	San Juan P. & W. Co.
Spruce Lodge	Grand	9,600	1								2.87		0.44	0.0	12					H. J. Wills.
Steamboat Springs	Routt	6,683						32	13		1.08		0.56	0.0	6	29	2	0		M. Elliot Houston.
Tacoma	La Plata	7,300	3	67.0		90	15	46	28	41	3.89		0.81	0.0	12	9	8	14	sw.	San Juan P. & W. Co.
Terminal Dam	do.	8,300	3								4.48		0.98	0.0	14	14	10	7	n.	Do.
Uncompahgre Plateau	Montrose	8,400																		Martin Esser.
Whitepine	Gunnison	9,500	8	52.2		76	8	32	21	41	2.50	+ 0.61	1.00	0.0	4	14	17	0	s	C. E. Macy.
Yampa	Routt	8,000									1.16		0.40	0.0	6	19	5	7	nw	Percy A. Hughes.
Utah.																				
Aneth	San Juan	4,800	9																	
Baker	do.	7,560																		Maude A. Palmer.
Basin	Grand	9,500																		E. H. Wolf.
Castle Dale	Emery	5,500	10	74.2	+ 5.4	99	2	46	29	43	T.	− 0.58	T.	0.0	0	23	8	0		James Jeffs.
Dragon	Uinta		1																	H. J. Cooper.
Dyer Mountain	do.	10,000																		U. S. Forest Service.
Elkhorn	do.	7,000																		Do.
Emery	Emery	6,260	9	69.0	+ 3.8	93	2	41	8	41	0.75	+ 0.34	0.45	0.0	2	6	9	16	sw.	H. C. Wickman.
Escalante	Garfield	5,700	9	69.6	− 0.2	93	13	45	8†	41	1.63	+ 0.71	1.27	0.0	6	11	0	20		Geo. H. Barney.
Experiment Station	Washington	2,880	5	82.0		110	1	51	28†	48						14	8	9		Joesph T. Atkin.
Fort Duchesne	Uinta	5,000	21	73.7	+ 2.8	101	2†	43	28	53	0.65	+ 0.16	0.25	0.0	4	24	1	6	ne.	H. Curtis.
Grayson	San Juan	5,750	5	74.6		98	13	50	28†	41	2.00	+ 0.88	1.40	0.0	5	21	5	5	s.	Joseph A. Lyman.
Green River	Emery	4,080	12																	B. F. Miller.
Hite	Garfield	3,000	10	84.4	0.0	107	1	59	30	43	0.36	− 0.06	0.18	0.0	3	18	13	0	sw.	John P. Hite.
Kanab	Kane	4,925	9																	W. T. Dobson.
La Sal[a]	San Juan	7,000	9	69.0	+ 1.3	90	13	46	28	33	2.70	+ 1.69	1.68	0.0	10	12	14	4		Gertrude W. Carpenter.
Loa[d]	Wayne	7,000	17	66.4	+ 0.6	97	15†	36	28	49	0.90	− 0.02	0.30	0.0	5					Michael Hansen.
Mill Canyon	Washington	8,400									0.40		0.18	0.0	4					J. A. Gardner.
Moab	Grand	4,000	20	79.8	+ 2.4	106	2	50	29	48	0.50	− 0.11	0.15	0.0	7	15	13	3		Henry Crouse.
Monticello	San Juan		1																	D. B. Perkins.
Ranch	Kane	6,700	8	62.4		93	1	34	9†	45	1.46	+ 1.80	0.45	0.0	7	18	12	1	w.	J. W. Seaman.
St. George	Washington	2,880	23																	Jas. G. Bleak.
Scofield	Carbon	7,625	1	68.6		98	3	42	21	52	4.12		1.75	0.0	6	25	1	5		O. E. Jorgensen.
Springdale	Washington		4	82.0		109	1	57	26	42	3.12		1.05	0.0	7	16	2	13	s.	Wm. W. Flanigan.
Strawberry Valley	Wasatch		1	63.0		89	1	36	28	44	1.04		0.41	0.0	5	21	7	3		U. S. Reclamation Service.
Sunnyside	Carbon	5,280	5								1.64	+ 0.63	0.70	0.0	3					Henry Cullum.

TABLE 1.—*Climatological data for July, 1909. District No. 9*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	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.	Sky. Number of rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.	Observers.
Utah—Cont'd.																				
Teasdale[1]	Wayne	7,000	1	67.4	.....	90	15†	49	27	35	1.19	.....	0.33	0.0	6	8	0	11	.....	Josiah Shurtz.
Theodore	Wasatch	5,507	4	68.2	.....	97	2	38	7	50	1.27	.....	0.75	0.0	8	19	10	2	.....	L. Claire Winslow.
Tropic	Garfield	7,000	12	69.0	+ 1.8	101	1	38	28	51	0.91	+ 0.02	0.36	0.0	5	17	8	6	nw.	E. P. Bolton.
Vernal	Uinta	5,380	14	73.6	+ 1.9	99	2	50	12†	40	0.87	+ 0.13	0.35	0.0	4	26	4	1	sw.	Joab Collier.
Wellington[1]	Carbon	5,540	10	63.8	− 5.0	94	1	40	7	44	.....	.....	.....	.....	.....	.....	.....	.....	.....	Melville Branch.
New Mexico.																				
Blackrock	McKinley	.....	2	71.8	.....	100	13	50	7†	38	0.78	.....	0.20	0.0	9	21	0	10	w.	Wm. J. Oliver.
Bloomfield	San Juan	5,500	13	77.4	+ 3.2	102	13†	46	8	53	1.71	+ 0.97	0.80	0.0	5	11	19	1	se.	Fred Le Clerc.
Cambray	Luna	4,215	11	.....	.....	.....	.....	.....	.....	.....	1.40	+ 0.10	0.75	0.0	4	13	9	9	sw.	Agent, Southern Pac. Ry.
Cliff	Grant	4,470	11	78.7	+ 1.4	107	13	52	15	48	2.13	− 0.45	0.94	0.0	7	.....	.....	.....	.....	T. J. Clark, sr.
Columbus	Luna	4,054	.....	.....	.....	.....	.....	.....	.....	.....	2.15	.....	1.15	0.0	4	11	18	2	sw.	Agent, E. P. & S. W. R. R.
Deming	.....do.	4,333	33	81.2	.....	110	12	59	24	42	0.40	− 1.55	0.30	0.0	2	9	22	0	w.	Agent, Southern Pac. Ry.
Dulce	Rio Arriba	6,767	3	69.2	.....	94	13†	22	28†	47	2.50	.....	1.00	0.0	3	9	17	5	.....	W. A. Fuller.
Fort Bayard	Grant	6,152	35	74.0	+ 1.2	99	12	52	19	37	2.05	− 0.96	0.65	0.0	10	20	10	1	w.	U. S. A. Gen'l Hospital.
Fort Wingate	McKinley	6,997	46	70.0	− 1.9	92	12†	50	8†	40	2.40	+ 0.14	0.50	0.0	8	17	13	1	sw.	Medical Corps, U. S. A.
Frisco	Socorro	5,800	3	74.4	.....	105	12	51	8	52	2.20	.....	0.68	0.0	5	5	25	1	sw.	John R. Milligan.
Fruitland	San Juan	4,800	17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cyril Jas. Collyer.
Gage	Luna	4,486	9	79.6	.....	104	12	69	19†	38	0.90	.....	0.30	0.0	5	3	21	7	se.	Agent, Southern Pac. Ry.
Hachita	Grant	4,504	11	.....	.....	.....	.....	.....	.....	.....	1.91	.....	0.66	0.0	10	6	12	13	w.	Agent E. P. & S. W. R. R.
Hermanes	Luna	4,451	14	.....	.....	.....	.....	.....	.....	.....	0.65	.....	0.17	0.0	5	11	16	4	.....	Do.
Lordsburg	Grant	4,245	10	80.8	− 2.6	105	12	62	5†	37	4.22	+ 2.49	2.37	0.0	7	3	14	14	sw.	Agent Southern Pac. Ry.
Luna (near)	Socorro	7,300	5	66.4	.....	93	13	41	8	48	1.61	.....	0.25	0.0	12	2	29	0	w.	C. B. Martin.
Manuelito	McKinley	6,252	5	68.4	.....	100	15†	35	12†	63	2.77	.....	0.90	0.0	9	10	5	16	sw.	W. A. L. Tarr.
Mimbres	Grant	5,007	3	.....	.....	.....	.....	.....	.....	.....	5.13	.....	1.35	0.0	15	11	19	1	se.	Charles Dennis.
Pratt	.....do.	4,415	.....	.....	.....	.....	.....	.....	.....	.....	0.56	.....	0.55	0.0	2	16	8	7	e.	Agent, E. P. & S. W. R. R.
Redrock	.....do.	4,150	5	.....	.....	.....	.....	.....	.....	.....	3.37	.....	1.10	0.0	8	6	16	9	.....	Robt. H. Woods.
Rodeo	.....do.	4,118	1	.....	.....	.....	.....	.....	.....	.....	3.28	.....	1.05	0.0	11	19	9	3	.....	Agent, E. P. & S. W. R. R.
Rosa	Rio Arriba	6,000	5	.....	.....	.....	.....	.....	.....	.....	2.73	.....	0.60	0.0	11	18	12	1	.....	B. A. Candelario.
Arizona.																				
Allaire's Ranch	Cochise	4,184	13	.....	.....	.....	.....	.....	.....	.....	2.91	− 0.22	1.20	0.0	11	10	13	8	w.	Thos. Allaire.
Arizona Canal Dam	Maricopa	1,372	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Reclamat'n Service.
Aztec	Yuma	492	9	93.4	− 2.6	115	13†	65	28	42	0.11	− 0.03	0.06	0.0	2	18	13	0	w.	Agent, Southern Pac. Ry.
Benson	Cochise	3,523	26	82.2	− 3.2	106	13†	61	28	35	2.16	+ 0.11	0.90	0.0	7	5	11	15	e.	Do
Bisbee	.....do.	5,500	19	73.4	− 2.1	94	13	60	7†	27	5.66	+ 2.11	2.08	0.0	12	10	17	4	w.	Rev. J. G. Pritchard.
Bonita	Graham	4,916	30	.....	.....	.....	.....	.....	.....	.....	2.11	− 0.26	0.85	0.0	7	10	10	11	w.	A. Johnson & Co.
Bowie	Cochise	3,756	9	83.4	+ 1.3	112	13	62	28	35	3.21	+ 1.23	1.18	0.0	10	11	3	17	w.	Agent, Southern Pac. Ry.
Buckeye	Maricopa	980	17	88.3	+ 1.1	112	1†	61	28	44	1.76	+ 0.64	1.10	0.0	5	23	8	0	e.	H. E. Kell.
Casa Grande	Pinal	1,396	28	87.7	− 5.5	114	12	60	28	46	1.05	+ 0.30	0.50	0.0	4	12	13	6	sw.	Agent, Southern Pac. Ry.
Casa Grande Ruins	.....do.	1,422	1	92.0	.....	113	13	62	27	41	1.14	.....	0.38	0.0	6	13	9	3	w.	F. Pinkley.
Cavecreek	Maricopa	1,520	2	86.0	.....	112	1†	58	28	43	1.91	.....	1.26	0.0	7	16	15	0	.....	E. H. Howard.
Chin Lee	Apache	6,090	1	74.9	.....	101	13	50	28	45	2.14	.....	0.66	0.0	10	13	10	8	sw.	Fr. L. Osterman, O. F. M.
Chiarsons Mill	Graham	8,000	4	67.8	.....	84	13	50	27	25	6.11	.....	2.30	0.0	8	12	13	6	.....	H. R. Chiarson.
Clifton	.....do.	3,584	17	86.8	.....	112	12†	66	20	37	1.77	0.00	1.56	0.0	2	16	13	2	.....	W. B. Cramer.
Cline	Gila	2,300	8	84.4	.....	108	13	60	27	38	0.81	− 0.85	0.25	0.0	5	15	14	2	sw.	W. M. Clanton.
Cochise	Cochise	4,219	11	82.5	+ 0.4	106	13	63	28	34	1.95	− 0.03	0.72	0.0	10	9	20	2	.....	Agent Southern Pac. Ry.
Columbia	Yavapai	1,900	9	88.6	+ 0.9	112	13	60	27	35	4.43	+ 2.39	1.06	0.0	5	15	2	14	se.	M. J. Nolan.
Congress	.....do.	3,688	13	84.6	− 0.9	104	1†	68	10†	28	1.11	− 0.39	0.50	0.0	8	15	9	7	sw.	Assayer, Congress Mine.
Dos Cabezos	Cochise	5,250	1	79.1	.....	109	13	56	7	46	4.61	.....	1.18	0.0	11	13	5	5	sw.	N. Erickson.
Douglas	.....do.	3,930	6	80.6	.....	109	14	61	22	46	3.50	+ 0.76	0.85	0.0	15	13	16	2	sw.	Dr. F. T. Wright.
Dudleyville	Pinal	2,204	18	83.1	− 5.7	105	13	62	27	38	1.42	− 0.54	0.41	0.0	13	6	19	6	sw.	G. F. Cook.
Flagstaff (1)	Coconino	6,907	17	64.6	− 0.4	91	12	40	28	45	1.74	− 0.05	0.51	0.0	12	14	10	7	sw.	U. S. Weather Bureau.
Flagstaff (2)	.....do.	7,452	4	62.6	.....	93	15	39	29	45	2.12	.....	0.71	0.0	12	13	17	1	.....	C. C. Moers.
Flagstaff (3) §	.....do.	7,500	1	63.5	.....	91	12	34	28†	46	2.27	.....	0.73	0.0	11	10	16	5	sw.	U. S. Forest Service.
Florence	Pinal	1,504	1	90.3	.....	114	1	66	25	38	1.28	.....	1.22	0.0	3	20	5	6	se.	Agent, P. & E. R. R.
Fort Apache	Navajo	5,200	30	75.2	+ 1.5	104	13	51	28	45	1.73	− 0.89	0.35	0.0	10	14	17	0	sw.	Post Surgeon.
Fort Huachuca	Cochise	5,100	23	81.9	+ 4.8	105	13	64	24	34	0.90	− 2.65	0.21	0.0	16	15	6	10	s.	Do.
Fort Mohave	Mohave	604	20	91.8	− 1.9	115	12	65	9	41	0.27	+ 0.05	0.25	0.0	2	17	12	2	sw.	A. F. Duclos.
Gilabend	Maricopa	737	18	93.9	− 0.5	116	13†	63	28	42	0.37	− 0.35	0.15	0.0	5	20	10	1	e.	Agent, Southern Pac. Ry.
Globe	Gila	3,525	8	82.6	.....	106	13	62	23	39	2.24	+ 0.16	0.85	0.0	8	9	22	0	nw.	Dr. B. G. Fox.
Grand Canyon (1)	Coconino	6,866	5	65.3	.....	88	14	46	17	38	3.41	.....	0.82	0.0	8	13	7	11	sw.	Agent, Santa Fe R. R.
Grand Canyon (2)	.....do.	3,676	2	82.8	.....	106	13	62	28	34	2.53	.....	0.70	0.0	7	15	6	10	sw.	C. C. Spaulding.
Greer	Apache	9,200	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. M. Butler.
Holbrook	Navajo	5,069	18	76.4	+ 0.8	103	13†	51	28	45	3.99	+ 2.45	1.32	0.0	12	15	16	0	sw.	Thorwald Larson.
Intake	Gila	2,230	4	.....	.....	.....	.....	.....	.....	.....	0.98	.....	0.41	0.0	6	15	10	6	ne.	A. H. Neal.
Jerome	Yavapai	4,743	12	78.6	− 1.7	102	13	60	20	27	3.72	+ 1.48	1.17	0.0	9	14	13	4	n.	Dr. L. A. Hawkins.
Keams Canyon	Navajo	.....	4	71.2	.....	94	13	46	27	42	2.91	+ 1.61	1.01	0.0	11	7	24	0	w.	L. R. Ballard.
Kingman	Mohave	3,326	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	G. R. Gooding.
Maricopa	Pinal	1,186	29	87.6	− 6.6	116	13	65	18†	42	0.74	+ 0.11	0.62	0.0	3	16	11	4	w.	Agent, Southern Pac. Ry.
Mesa	Maricopa	1,244	14	89.2	+ 0.4	114	13	63	27	44	2.01	+ 0.96	1.11	0.0	4	12	16	3	sw.	C. L. Diehl.
Mohawk Summit	Yuma	538	9	98.2	+ 1.0	120	1†	60	23	57	0.07	− 0.09	0.03	0.0	3	17	13	1	.....	Agent, Southern Pac. Ry.
Natural Bridge	Gila	4,990	20	.....	.....	.....	.....	.....	.....	.....	1.52	− 0.79	0.68	0.0	5	13	8	0	sw.	D. G. Goodfellow.
Nogales	Santa Cruz	3,830	5	80.9	.....	106	13†	58	9	41	5.65	+ 2.81	1.43	0.0	14	13	13	5	.....	Wallace & Summerhayes.
Oracle	Pinal	4,500	19	80.2	− 0.2	100	13	62	23†	32	4.68	+ 2.19	1.20	0.0	12	8	19	4	.....	W. H. Winters.
Paradise	Cochise	3,940	2	74.7	.....	99	14	54	1	37	3.48	.....	0.80	0.0	7	0	27	4	sw.	J. C. Hancock.
Parker	Yuma	345	11	91.0	+ 1.4	116	1	61	29	48	0.19	− 0.18	0.16	0.0	2	19	7	5	s.	Dr. H. K. Marshall.
Payson	Gila	5,500	1	72.6	.....	97	13	50	8†	42	2.09	.....	0.50	0.0	6	14	14	3	sw.	M. McDonald.
Phœnix (1)	Maricopa	1,108	14	88.7	− 1.7	110	13	69	29	35	1.00	− 0.07	0.90	0.0	5	15	16	0	e.	U. S. Weather Bureau.
Phœnix (2)	.....do.	1,092	18	88.2	− 1.0	112	13†	65	7†	42	0.55	− 0.44	0.40	0.0	3	16	13	2	w.	G. Acuff.
Phœnix (3)	.....do.	1,189	1	91.3	.....	113	13†	70	29	37	2.07	.....	1.65	0.0	2	9	19	3	sw.	J. A. Ream.
Pinal Ranch	Pinal	4,520	15	.....	.....	.....	.....	.....	.....	.....	1.05	− 1.54	0.46	0.0	7	16	10	5	.....	Irion & Craig.
Pinto	Apache	5,660	5	.....	.....	.....	.....	.....	.....	.....	1.67	+ 0.36	0.50	0.0	5	17	12	2	sw.	Mrs. C. F. Henning.
Prescott	Yavapai	5,320	28	71.4	− 1.3	97	13	47	28	37	5.25	+ 2.35	1.69	0.0	12	18	8	5	.....	Dr. J. W. Flinn.
Quartzsite	Yuma	800	2	92.5	.....	115	13†	66	28	39	0.54	.....	0.30	0.0	3	21	10	0	sw.	W. E. Scott.
Redrock	Pinal	1,856	2	91.0	.....	114	13†	70	28	34	1.43	.....	0.59	0.0	8	4	27	0	w.	W. J. Crowell.
Roosevelt	Gila	2,175	4	90.0	.....	112	13	69	26	31	0.62	− 0.48	0.42	0.0	3	15	16	0	.....	Wm. A. Schoenfeld.
Sacaton	Pinal	.....	2	88.1	.....	111	1†	65	27	40	1.59	.....	0.70	0.0	6	15	16	0	.....	E. W. Hudson.
St. Johns	Apache	5,650	4	75.8	.....	102	13	52	27	43	3.21	+ 1.47	1.00	0.0	8	4	5	22	sw.	Alex. Shreeve.
St. Michaels	.....do.	6,950	13	72.4	+ 4.0	97	13	48	8	6	2.46	+ 0.88	0.67	0.0	11	12	5	14	sw.	Rev. A. Weber, O. F. M.
Salome	Yuma	880	2	86.8	.....	116	14	57	8	47	0.96	.....	0.75	0.0	4	16	4	11	se.	Agent A. & C. R. R.
San Carlos	Gila	2,456	19	85.0	− 1.4	113	13	51	28	50	1.23	− 0.34	0.43	0.0	5	11	20	0	sw.	F. S. Thomas.
San Simon	Cochise	3,609	24	84.5	− 0.2	111	13	62	5	35	2.81	+ 1.94	0.76	0.0	10	10	13	8	sw.	Agent, Southern Pac. Ry.
Seligman	Yavapai	5,219	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. W. Dougherty.
Sentinel	Maricopa	685	11	92.3	− 3.0	115	13†	70	4†	39	0.05	− 0.39	0.03	0.0	2	17	11	3	.....	Agent, Southern Pac. Ry.
Showlow	Navajo	6,300	6	71.0	.....	99	14	46	28	44	2.00	− 0.03	1.02	0.0	6	12	11	8	sw.	Miss Z. Hall.
Silverbell	Pima	2,650	4	86.6	.....	107	13†	65	18	32	1.83	.....	0.94	0.0	5	18	4	9	w.	Imperial Copper Co.
Supai	Coconino	3,200	2	81.6	.....	106	11	60	28	42	2.53	.....	1.25	0.0	8	16	10	5	.....	Chas. E. Coe.
Tempe	Maricopa	1,165	5	87.8	.....	111	13†	65	27†	42	1.06	− 0.19	0.46	0.0	5	19	9	3	se.	F. H. Simmons.

TABLE 2.—*Climatological data for July, 1909. District No. 9*—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, yrs.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				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 rainy days, .01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Arizona—Cont'd.																				
Thatcher	Graham	2,800																		Prof. J. H. Larson.
Tombstone	Cochise	4,550	14	78.5	+ 0.1	103	13	56	22	36	3.03	− 0.10	0.80	0.0	13	6	22	3		F. N. Walcott.
Tuba	Coconino	4,500	9	76.4	− 1.7	103	13	52	28	43	0.54	+ 0.02	0.14	0.0	9	12	11	8	ne.	G. H. Kraus.
Tucson (1)	Pima	2,390	29	85.0	− 2.0	108	14	64	18	36	4.04	+ 1.99	1.05	0.0	10	3	28	0	nw.	University of Arizona.
Tucson (2)	do	2,380	1	84.8		110	14	62	10†	43	3.34		2.06	0.0	5	13	18	0	sw.	H. G. Brown.
Upper San Pedro	Cochise	5,000																		B. T. Stuart.
Vail	Pima	3,421	11	82.6	− 3.3	106	14	62	18†	39	2.07	+ 1.43	0.60	0.0	7	14	15	2		Agent, Southern Pac. Ry.
Walnut Grove	Yavapai	3,649	19								3.60	+ 1.97	2.20	0.0	8	14	16	1		J. O. Carter.
Wickenburg	Maricopa	2,072	2	88.2		110	6	65	21†	38	0.76		0.46	0.0	6	14	17	0	sw.	Agent, P. & P. R. R.
Willcox	Cochise	4,164	29	79.9	− 2.4	105	12	60	28	40	3.26	+ 1.33	1.55	0.0	7	6	17	8	sw.	Agent, Southern Pac. Ry.
Williams	Coconino	6,750	10	69.2	+ 0.8	102	1	41	29	52	1.68	− 0.98	1.28	0.0	8	14	2	15	ne.	H. Victor.
Winslow	Navajo	4,853	1	76.8		107	13	49	10	50	1.75	+ 1.13	1.50	0.0	6	19	3	9		L. C. Henning.
Yarnell	Yavapai	4,700	11								2.02	− 0.45	1.10	0.0	5	12	6	13	s.	E. L. Bartholomew.
Yuma (1)	Yuma	141	30	90.2	− 0.7	112	14	64	8	41	0.01	− 0.11	0.01	0.0	1	29	2	0	sw.	U. S. Weather Bureau.
Yuma (2)	do	150	2	85.5		109	1†	55	27	49	0.02		0.02	0.0	1	16	15	0	sw.	E. L. Crane.
Nevada.																				
Caliente	Lincoln																			
Las Vegas	Clark	2,033	2	85.4		115	1	52	7†	51	0.18		0.18	0.0	1	19	12	0	n.	
Logan	do	1,700	3	85.6		116	1	51	28†	50	0.26		0.18	0.0	4	19	9	3	s.	

* Temperature extremes are from observed readings of the dry-bulb; means are computed from observed readings.
** Precipitation included in that of the next measurement.
† Also on other dates.
§ Data are from standard instruments not supplied by the U. S. Weather Bureau.
§§ Instruments are read in the morning; the maximum temperature then read is charged to the preceding day, on which it almost always occurs.
‖ Estimated by observer.
‖‖ 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.
[a], [b], [c], etc., indicate, respectively, 1, 2, 3, etc., days missing from the record.

TABLE 2.—*Daily precipitation for July, 1909. District No. 9, Colorado Valley.*

Stations.	River basins.	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	
Wyoming.																																	
Daniel	Green				T.	.95	T.													T.	T.		T.				T.	1.36					2.31
Dixon	do				1.50								T.							.08	.14	.06						.27				T.	2.05
Eden	do			T.		.73	.01												T.	.02				.22	.10		.26	.37					1.71
Fontenelle	do																																
Green River	do				T.	T.	T.								T.				T.	T.	T.						.02						0.02
Kendall	do									.20											.09			.28			.35	1.16	.10				
Pinedale	do																																
Willow Creek Cabin	do			**	**	**	1.25					T.							T.	T.	.03			.03			.28	.87					2.46
Colorado.																																	
Ashcroft	Grand		.14	.19	.81	T.								T.	.14	.04		.02	.06	.09	.03	.05	.10	.34	.05	T.	.20	.03					2.29
Breckenridge	do		.12	1.00	.39		T.		.04					.05		.03		.05	.04	.41	.15	.14	.15	.18	.25					.04			3.04
Cascade	San Juan	T.	.32	T.	.31	.54										T.	T.			T.	.47	.08	.05	.95	.36		1.25	.08					4.41
Chromo	do	T.	T.	T.	.06	T.	.27							T.		T.	T.	.06	T.				.27	1.00	.60		.15					T.	2.41
Cochetopa	Gunnison			.15	.43	.24	.01										T.	.01		T.	.06	.30	.37	.20			.07	.03		.01			1.88
Collbran	Grand					.02									T.					.06	.17			T.	.18		.09						0.52
Columbine	Yampa																																
Columbine Ranch	Gunnison																																
Corona	Grand					.48														.06	.06	.36		.12	.40	.08		.16					1.72
Crawford	Gunnison			.07	.03										.03			T.		T.	.16	.43	T.	.09			.15	.10					1.06
Crested Butte	do			1.40	.46																	.05	.25	.10	.20	.20	.05						2.71
De Beque	Grand																																
Delta	Gunnison																		.03	.12	.02		T.	.69	.01	.38							1.25
Dillon	Grand			T.	.50	.10	T.							T.	T.	.10	T.	.40	.20	1.05	T.	1.04		.08	T.	.20	.10	.10					3.87
Dolores	Dolores																	.02		.01	.11	.25	.03	.04			.01						0.47
Dunkley	Yampa				.03	.C1												.02	.09				.05		.06								0.26
Durango	San Juan		T.	.02	.34	.31	.04											T.	.C1		.12	.04	.48	.13	.02	.12	.57						2.20
Eagle	Grand				.16										T.	T.			.17	.75				.20	.50		T.						1.78
Eureka	San Juan			.09	.23	.31														.23	.20	.36	.19	.34	.12	.21	.14						2.42
Fruita	Grand			T.	.12	.06								T.	.04			T.	T.	.17	.14		T.	.15	.05		.75						1.48
Gladstone	San Juan	.02		.34	.60	.13	.01									.01		.02				.89	.08	.86	.23		.50	.15					3.84
Glenwood Springs	Grand																																
Grand Junction	do			T.	.09	T.	T.							T.	T.	T.		T.	T.	.04	T.		T.	.14	T.	T.	.23						0.50
Grand Lake	do			T.	T.	T.							T.	T.	T.		.65												T.	T.	T.		0.65
Grand Valley	do			.05	.66	.16													.02	.05	.06		.03	.13	.24		.15						1.55
Gunnison	Gunnison				.04										T.	.11			.17	.06	.32	.57	.12	.07	.17								1.53
Hayden	Yampa							.87										.04	.78	.49	.89	.02	T.		.39	.10	.15						3.73
Hesperus	San Juan																				.11	.24	.48	.44	T.		.88	.21					
Horsefly	Gunnison																																
Ignacio	San Juan		.03	.05	.28	.46													T.	.15	.26	.12	.46	1.00	.24		.02						3.10
Ironton	Gunnison																																
Kremmling	Grand				.01	.21	.30							T.	T.	.01			.14	.15	.03			.16	.36			T.					1.37
Lake City	Gunnison		T.		.15	.21											T.	T.	T.	.09		.18	.55	.51	.50	.01	T.			.10			2.30
Lay	Yampa			T.	.04	.19									T.			T.	.11	.14		T.		.01	T.	.29	.26						1.04
Lujane	Gunnison			T.	.03										T.				T.	T.	T.	.50	.10	.10	T.		.20						0.93
Mancos	San Juan			T.	.12	.76																.42	.10	.24	.45		.32						2.41
Marble	Grand			.20	.38	.11								.05							.12		.02	.62		.08	.25						1.83
Marshall Pass	Gunnison		.13	.10		.14													.40		.14	.43	.35	.04	.18			.26					2.17
Meeker	White															T.		.10	.01			.10	.12	.05	T.		.21						0.59
Montrose	Gunnison			T.	.35	.02												T.	T.	T.	.46	.02	.01	.15	.01		.05						1.07
Nast	Grand				.88														.08		.03			.52	.03								1.54
Pagoda	Yampa				T.	.45								.16	.42	.02		.02		.54		.07											1.68
Pagosa Springs	San Juan		T.	.10	T.	.13										T.	.03				.15	.01	.47	.62	1.17		.27	.02					2.97
Paonia	Gunnison				T.															.02	T.	T.	T.	.04	.02	.20	.05						0.33
Parshall	Grand				.85														.16		.06					.25							1.32
Pitkin	Gunnison		.37	.85	.25										T.							.60	.20	T.			.20						2.47
Rangely	White														T.					.04	.30		.02	.11			.60	.04					1.11
Redcliffe	Grand					.60	.30		.20							.50	.20				.40	.70						.10	.30				3.30
Rico	Dolores																																
River Portal	Gunnison																.04			.03		.15	.13	.02		.21	.20						0.78
Sapinero	do			.23	.22	.02	T.								.03	T.			.16	.02	.16	.18	.15	.16	.15		.04	.04					1.56
Silt	Grand			T.	T.	.22								T.	.05				.53	.23	.21		.11	.08	.02		.25						1.70
Silverton (1)	San Juan			.45	.55	.23												.14			.12	.47	.50	.70	.39		.41						3.96
Silverton (2)	Grand			.45	.56	.23												T.			.02	.45	.53	.54	.48	.01							3.27
Spruce Lodge	do			.33	.35	.16				.02									.11	.41	.08		.16	.43	.22		.44			.16			2.87
Steamboat Springs	Yampa																		.10	.13	.20		.01	.08	.56								1.08
Tacoma	San Juan	T.	T.	.05	.30	.45	.03									.35	.07					.05	.81	.68	.58		.25	.27					3.89
Terminal Dam	do	T.	.09	.08	.09	.50	.04									.05	.13	T.		T.	.24	.98	.16	.72	.45		.85	.10					4.48
Uncompahgre Plateau	Gunnison																																
Whitepine	do		T.	1.00											.50					T.	T.	.50	T.				.50						2.50
Yampa	Yampa				.10														.11	.13	.10			.40	.32								1.16
Utah.																																	
Aneth	Colorado																																
Baker	do																																
Basin	Grand																																
Castle Dale	Green																		T.	T.			T.										T.
Dragon	do																																
Dyer Mountain	do																																
Elkhorn	do																																
Emery	Colorado				T.														T.	T.		.30	.45	T.			T.						0.75
Escalante	do			.04	.08															1.27				.06	.10		.08						1.63
Fort Duchesne	Green			T.		.25		T.											.10	T.	.10			T.	T.		.20						0.65
Grayson	San Juan					.25															.20			**	1.40	.15							2.00
Green River	Green																																
Hite	Colorado					T.													T.	.02	T.		T.	.18	T.		.16						0.36
Kanab	do																																
La Sal	Grand		.03		.05	.51														.15		.02	.06	1.68	.06		.11	.03					2.70
Loa	Colorado																				.10	.10	.20	.20			.30						0.90
Mill Canyon	do			.02																		.02		.18	.18								0.40
Moab	Grand			T.	.04													.01	.03	.06			.07	.15			.14						0.50
Monticello	do																																
Ranch	Colorado																		.15	.12		.24	.30	T.	.45	.20	.10						1.46
St. George	do																																
Scofield	Green			1.75		.09										.62						.52				.83	.31						4.12
Springdale	Colorado				T.			T.							.95				.20	.13		.33	.27			1.05	.19						3.12
Strawberry Valley	Green			T.		.02													.11	.39					.41		.11						1.04
Sunnyside	Green																		T.	.34			T.	.60			.70						1.64
Teasdale	Colorado																		.33	.11		.09	.02	.23			.11						1.19
Theodore	Green			.01	T.										T.			T.	.05	.75			.02	.20	.07		.12	.05					1.27
Tropic	Colorado		T.	T.	T.													T.	T.	.09	T.	.28	.36	.05	.13	T.							0.91
Vernal	Green																			.20					.17		.35	.15					0.87
Wellington	do																																
New Mexico.																																	
Blackrock	Little Colorado															.15					.02	.03	.04	.05	.07	.20	.02					.20	0.78
Bloomfield	San Juan	T.	T.	T.	T.	T.										T.		T.	T.	T.	T.	.06	.80	.10	T.	.44	.31	T.				T.	1.71

TABLE 2.—*Daily precipitation for July, 1909. District No. 9*—Continued.

Stations.	River basins.	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.
New Mexico—Cont'd.																																	
Cambray	Mimbres			.05										.75		.10					.50												1.40
Cliff	Gila			.94	.34	.17									.27		T.						.17	T.	.19							.05	2.13
Columbus	do			T.	T.	1.15										T.		T.	.75		.05			T.							T.	.20	2.15
Deming	do					T.								T.				.30	T.											.10			0.40
Dulce	San Juan			T.	1.00				.50	1.00					T.																		2.50
Fort Bayard	Mimbres		T.			.65								.30	.15	T.	.30		.13	.10	.10		.08		.04					.20	T.	T.	2.05
Fort Wingate	Little Colorado	T.	T.		.10	.50									.40			T.			.40	.10	T.	.40	.10	.40							2.40
Frisco	Gila			.33		.42												T.	T.			T.		.35		.68	.42					T.	2.20
Fruitland	San Juan																																
Gage	Gila				.30											.10	.10			.30												.10	0.90
Hachita	do					.15												.15	.15	.03	.52	.66	.06			.09					.05	.05	1.91
Hermanes	do	T.			T.		T.										.12		.17	.15	.11							.10		T.	T.		0.65
Lordsburg	do			.50	1.12	1.25													.52	.38		.10			.35								4.22
Luna	do			T.		T.	.14				.25					.05	.08	T.	.15		T.	.03	T.	.17	.15	.19	.25				.03	.12	1.61
Manuelito	Little Colorado		.03	.90												.25			.25		.33	.20	.10		.70						.01		2.77
Mimbres	Gila		1.31		.10	1.35	.42							.25	.35		.05	.27	.03	.07	.07			.19		.39				.15	.13		5.13
Pratt	do					.55	.01									T.			T.		T.	T.			T.	T.				T.			0.56
Redrock	do		.90	1.10		.25													.02	.35			.52			.05						.18	3.37
Rodeo	do					.20	.17								T.	.07		.24	.04	.13	.06	.56	.73			1.05						.03	3.28
Rosa	San Juan				.40													.60	.30	.45	.10	.20	.40	.12	.03	.08	.05						2.73
Arizona.																																	
Allaires Ranch	Sonora			.03		.40										T.		.12	.24	.31	.04	.08	.32	.04		1.20						.13	2.91
Arizona Canal Dam	Salt																																
Aztec	Gila	.05	T.																			.06	T.		T.								0.11
Benson	San Pedro		T.	.23											T.	.06	T.	T.	.04	.28			.40	.25							T.	.90	2.16
Bisbee	do	T.		.13		.58	T.							T.	.14		T.	.28	.01	2.08		.01	.60	.03	.15					T.	.85	.80	5.66
Bonita	Gila			T.											T.		.30	.25	.85		.03		T.	.04		.62					.02		2.11
Bowie	do			.21		.40										.10		.30	1.18	.15	.10	.50				.22	.05						3.21
Buckeye	do	.10	1.10	.03														.25	T.			T.	T.	T.	.28								1.76
Casa Grande	do			T.														.38	.50	.02						.15							1.05
Casa Grande Ruins	do	T.	.38																.15	.06	.04		.23		.28								1.14
Cavecreek	Verde	.11																1.26	.32				.12	.02	.04		.04						1.91
Chin Lee	San Juan	.09			.04	.66												T.	.03	.28	.22		.19	.04		.48	.11						2.14
Chiarsons Mills	Gila	.17	.02	.07	2.30														.65	1.55					.05	1.30							6.11
Clifton	do	T.				T.											T.	T.	T.	T.	1.56		.21	T.									1.77
Cline	Salt	T.																.25	.25	.12				.09	.10								0.81
Cochise	Desert			.10		.26										.02		.25	.72	.11	.08	.35				.02	.04						1.95
Columbia	Agua Fria	T.															1.02	1.06	0.65		T.		1.00	T.		T.	.70				T.		4.43
Congress	Hassayampa		.32	T.	.05														T.	.02	.10	.02		.04	.06	.50							1.11
Dos Cabezos	Desert			.73	1.18	.18										.28	.12		.26	.31	.39		.12		.56							.48	4.61
Douglas	Sonora		T.		.85	.38	.28			T.	T.				T.	.07	.08	.07	.09	.02	.18		.36	.03	.15	.53	.02			T.		.39	3.50
Dudleyville	Gila	T.	.01	.15	.04										T.	T.	.03	.25	.01	.15	T.	.02	.18	.12	.29	.15	.02						1.42
Flagstaff (1)	Little Colorado	T.	.01	.12	T.												T.	.12	.01	.51	.09	.09	.13	.06	.21	.28	.11						1.74
Flagstaff (2)	do	T.	.08	.15	.01												.12	.02	T.	.04	.26	.11	.71	.10	.22	.30	T.						2.12
Flagstaff (3)	do		.08		T.												.22	.04		.21	.09	.29	.73	.03	.17	.21	.20						2.27
Florence	Gila	T.	T.																1.22				.04		.02								1.28
Fort Apache	Salt															.27		.01	.06	.35	.25	.35	.08	.03	.08	.25	T.					T.	1.73
Fort Huachuca	San Pedro	.02		.03	.07	.06	.21	.20									.05		.05	.01	.06		.06	.07	.01	.01	.06					.02	0.99
Fort Mohave	Colorado																						.02			.25							0.27
Gilabend	Gila			.05														.05		.03		T.		.09		.15							0.37
Globe	Salt		.12		.05												.85		.27	.67			.10		.11		.07						2.24
Grand Canyon (1)	Colorado			T.	.22					T.								.78		.28		.70	.37	.10	T.	.14	.82						3.41
Grand Canyon (2)	do		T.	T.	.31						T.							.61		.14	.03		.64			.70	.10						2.53
Greer	Little Colorado																																
Holbrook	do	.03	T.	1.32							T.				.03		.02	.03	.47	.81			.24	.14	.62	.02	.26				T.		3.99
Intake	Salt	.03																	.41	.21			.25		.06	.02							0.98
Jerome	Verde				.34												.36	.37		.12	1.07		.08		.17	.04	1.17						3.72
Keams Canyon	Little Colorado	T.	T.	1.01	.05											T.	T.	.02	.03	.04	.75	.04	.10	.25	.48	.14							2.91
Kingman	Colorado																																
Maricopa	Gila		T.																.62				.02	T.		.10							0.74
Mesa	Salt	T.	T.		T.													T.	T.	1.11		T.	.25	.50	T.	.15	T.				T.		2.01
Mohawk Summit	Gila	.03																			.02			.02									0.07
Natural Bridge	Verde				.05												.10		.05						.68	.64							1.52
Nogales	Altar		.08	.45	.19	.94									.10		.18	.46	.74		.51	.37	1.43	.65	.03							.12	5.65
Oracle	Santa Clara	.28	.35	.53	.68												.07	.35	.02	.14	.01	1.20	.90	T.	.15								4.68
Paradise	Desert				T.	.70	.80								T.		T.	T.		.20		.35	.30		.38							.75	3.48
Parker	Colorado		T.																						.10	.03							0.19
Payson	Verde	.27			.40												T.		.15	.36	.50		T.				.41						2.09
Phoenix (1)	Salt	T.	T.															.53	.37	.03			.01	T.	T.	.06	T.						1.00
Phoenix (2)	do	T.	T.	T.	T.														.40	.10			.05	T.	T.	T.	T.				T.		0.55
Phoenix (3)	do		T.																1.65	.42							T.						2.07
Pinal Ranch	do	.06															T.	.46	.03			T.	.23	.10		.02	.15						1.05
Pinto	Little Colorado	.02												T.	T.					T.	T.	.25		.45	.45		.50			T.	T.		1.67
Prescott	Hassayampa	.32	.18		.27													1.40	.02		.13	.41	.40	.02	.11	.30	1.69						5.25
Quartzsite	Colorado																			.30					.11	.13							0.54
Redrock	Santa Cruz	T.	.01		.35											T.	T.	.09	T.	.07		.04	.21	.59	.07								1.43
Roosevelt	Salt	T.	T.	T.													T.	.05	.15			T.	T.	T.	T.	.42						T.	0.60
Sacaton	Gila			.03														.41	.70	.05				.28		.12							1.59
St. Johns	Little Colorado			.41	.07														.22	1.00	.23		.55	.43	.30								3.21
St. Michaels	do	.05		T.	.01										T.	.17	T.	T.	.45	.02	.13	.04	T.	.67	.20	.13	.59				T.		2.46
Salome	Colorado	T.	T.	T.														.05	T.	.75		T.	T.	.05		.11							0.96
San Carlos	Gila			.30												T.		.30	.43						.12		.08						1.23
San Simon	do				.30	.25										.08		.22	.76	.12	.09	.48				.25	.26						2.81
Seligman	Verde																																
Sentinel	Gila	.02	T.																			.03	T.										0.05
Showlow	Little Colorado		.02	.09															.25			1.02	.50			.12							2.00
Silverbell	Santa Cruz	.14		.06													T.		.65	.04	T.	T.	T.	T.			.94						1.83
Supai	Colorado		.03		.10													.50	T.	1.25	.05	.35	.20	T.	T.	.05							2.53
Tempe	Salt		.08																.11	.46		.40				.01							1.06
Thatcher	Gila																																
Tombstone	San Pedro			.05	.05											.10	.47	.30	.52	.80		.05	.10	.41	.08					.02		.08	3.03
Tuba	Little Colorado		T.		.02	T.												.04	.01	.11	.04	.08		.04		.03	.14						0.54
Tucson (1)	Santa Cruz	.01			.45											T.	.02	.94	.11	1.05			.05	.82	.58	.01							4.04
Tucson (2)	do	.12			.48															2.06	T.		.16	.52	T.								3.34
Upper San Pedro	San Pedro																																
Vail	Santa Cruz	T.			.07											.27	T.	.60	.05	.22			.60	.26									2.07
Walnut Grove	Hassayampa	T.	T.		.18													.30	.06		.34	.46	.04			2.20						.02	3.60
Wickenburg	do	T.																.46	.25	.02			.01	T.	T.	.01	.01						0.76
Willcox	Desert			T.	.74	.03								T.					.39	.15	1.55	.10			.30								3.26
Williams	Colorado	.21	.12																.02	.01	1.28	.01	.01	.02									1.68
Winslow	Little Colorado	T.		.06												T.		T.	.07	.04	T.		1.50		.06		.02						1.75
Yarnell	Hassayampa		.20		.42													T.			T.	.20		.10		1.10							2.02
Yuma (1)	Colorado		T.															T.							.01								0.01
Yuma (2)	do																	T.							.02								0.02

TABLE 2—*Daily precipitation for July, 1909. District No. 9*—Continued.

Stations.	River basins.	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	
Nevada.																																	
Caliente	Colorado																																
Las Vegas	do														T.											.18							0.18
Logan	do		.18	.04	.01														.03					T.									0.26

TABLE 3.—*Maximum and minimum temperatures at selected stations, for July, 1909. District No. 9, Colorado Valley.*

Date.	Wyoming.				Colorado.										Utah.										New Mexico.			
	Daniel.		Green River.		Durango.		Grand Junction.		Gunnison.		Meeker.		Steamboat Springs.		Emery.		Fort Duchesne.		Hite.		Moab.		St. George (Experiment station).		Fort Bayard.		Fort Wingate.	
	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...	87	45	94	60	87	57	98	67	88	40	85	44	.....	42	92	55	98	50	107	68	103	58	110	88	86	60	86	56
2...	90	47	97	50	86	54	100	68	84	42	78	47	.....	43	93	55	101	84	106	71	106	62	109	68	86	57	87	54
3...	85	45	96	60	85	55	98	75	79	36	86	48	.....	49	91	61	99	55	104	74	102	72	100	71	85	55	82	56
4...	80	44	86	60	79	57	89	65	80	35	75	48	.....	49	85	57	92	56	96	73	98	72	98	75	86	57	82	54
5...	78	50	87	52	82	59	89	62	83	37	84	54	.....	51	86	54	88	63	101	69	96	64	97	66	83	57	85	51
6...	70	41	87	52	85	54	95	67	86	38	85	48	.....	37	85	47	99	50	100	66	97	65	96	59	80	60	89	56
7...	71	43	79	47	85	46	92	62	85	40	83	41	.....	37	87	43	92	44	99	75	97	57	99	62	87	60	85	56
8...	87	41	92	40	89	49	97	62	86	38	86	44	.....	33	82	41	95	56	101	69	99	55	99	58	95	65	90	50
9...	72	37	86	46	87	50	94	59	89	40	84	42	.....	32	85	51	97	54	98	69	98	56	99	64	90	60	88	61
10...	76	36	86	46	86	46	93	60	82	35	83	48	.....	37	85	58	100	48	100	62	97	54	103	59	92	65	86	61
11...	72	40	84	41	88	46	96	57	83	48	87	40	.....	36	87	54	92	48	103	70	101	54	103	63	92	60	89	55
12...	75	31	78	40	91	51	91	59	86	35	79	41	.....	33	86	50	92	51	103	73	99	57	107	63	99	62	92	56
13...	74	32	79	40	91	51	99	63	89	40	86	44	.....	32	82	54	99	47	106	69	105	60	107	64	93	64	92	58
14...	80	30	85	43	91	57	97	71	88	48	81	39	.....	41	85	56	96	60	103	71	103	70	107	71	92	63	91	59
15...	81	33	88	45	91	58	98	76	84	51	88	47	.....	36	82	55	101	53	106	66	102	60	105	66	88	60	90	50
16...	87	35	98	53	88	52	99	68	85	45	89	44	.....	38	85	59	100	49	106	74	103	60	102	70	89	65	88	52
17...	85	35	98	53	89	54	98	72	85	48	88	52	.....	39	92	51	99	50	104	72	103	62	101	69	89	65	90	56
18...	92	45	89	67	89	54	92	71	86	49	85	51	.....	46	91	55	98	64	101	74	98	65	86	73	90	55	90	56
19...	71	50	86	58	84	59	87	66	84	48	86	50	.....	49	86	50	85	62	96	72	98	65	84	65	88	52	85	56
20...	74	43	90	51	82	57	85	65	83	47	75	52	.....	47	82	55	89	57	91	71	98	64	100	68	85	60	88	57
21...	73	41	80	40	85	57	92	66	79	45	81	39	.....	44	81	50	95	52	96	76	94	62	99	68	85	55	80	55
22...	72	35	94	50	80	57	86	69	72	52	79	46	.....	42	80	52	90	53	97	71	95	68	99	71	87	60	83	55
23...	63	42	82	63	75	57	81	64	74	52	75	54	.....	51	86	53	87	51	93	67	95	65	91	70	83	57	73	55
24...	69	49	90	54	76	54	87	63	75	54	81	56	.....	54	87	59	89	55	95	74	94	62	93	71	87	55	77	57
25...	70	55	93	48	82	54	93	61	79	49	83	46	.....	41	85	52	95	55	100	72	97	60	94	63	83	53	75	55
26...	60	38	84	55	73	57	78	62	80	43	86	41	.....	41	86	57	82	53	90	63	97	67	92	60	81	60	77	55
27...	61	37	82	55	79	50	88	64	75	48	80	42	.....	46	85	52	82	51	93	63	90	61	92	52	83	65	78	56
28...	71	41	83	38	81	46	87	58	79	46	80	42	.....	37	85	48	96	43	95	60	95	52	96	51	85	70	81	51
29...	73	45	81	41	86	48	92	59	82	38	85	41	.....	36	85	47	91	45	100	63	98	50	99	51	87	65	80	50
30...	82	35	93	43	87	51	93	62	82	40	87	40	.....	37	82	45	95	46	102	59	101	59	101	55	89	70	87	57
31...	81	35	95	42	88	52	97	58	79	42	86	41	.....	37	85	43	97	45	102	61	101	52	99	69	85	60	82	54
Mns	76.2	40.5	87.8	49.5	84.7	53.1	92.3	64.4	82.3	43.5	83.1	45.5	.....	41.1	85.7	52.2	93.9	53.5	100.0	68.9	98.7	61.0	98.9	65.2	87.5	60.4	84.8	55.2

Date.	Arizona.																								Logan, Nev.	
	Bisbee.		Flagstaff.		Fort Apache.		Grand Canyon.		Parker.		Phoenix.		Prescott.		St. Michaels.		San Carlos.		Tucson.		Yuma.			
	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	88	68	87	51	95	59	79	50	116	78	108	84	92	59	90	57	105	74	105	76	111	82	116	74
2	86	67	81	56	96	61	79	52	114	84	107	78	90	63	91	56	105	70	103	74	109	83	113	87
3	82	66	82	49	93	60	78	50	106	81	96	78	84	60	91	61	102	70	98	74	101	82	102	73
4	78	63	77	53	90	57	80	51	105	80	99	76	87	60	89	59	99	71	93	69	107	78	105	73
5	77	63	79	49	92	60	80	51	105	70	101	78	83	59	91	59	101	72	97	74	104	74	103	65
6	78	63	78	49	91	56	82	50	100	70	102	74	82	52	88	58	101	69	98	74	100	77	100	59
7	81	60	80	45	92	57	82	52	100	70	102	74	85	51	89	56	103	81	98	75	104	68	103	56
8	84	66	81	41	96	56	80	51	101	72	101	74	81	54	94	48	105	61	100	72	105	64	103	61
9	82	66	81	42	94	54	81	52	105	69	101	72	86	50	91	57	103	64	100	74	105	68	104	58
10	86	64	82	50	96	57	82	50	107	70	102	75	87	50	90	59	104	65	100	73	105	68	104	61
11	87	68	86	47	97	56	82	48	110	69	105	77	90	58	91	56	107	67	103	74	106	70	109	59
12	90	67	91	46	103	58	87	49	112	70	108	77	95	60	96	57	110	70	104	70	110	69	110	65
13	94	67	90	48	104	59	87	53	115	71	110	76	97	60	97	53	113	67	107	71	111	70	114	67
14	91	66	87	49	100	62	88	52	114	75	109	81	94	61	95	69	111	73	108	73	112	74	111	63
15	89	69	87	55	100	61	86	51	111	76	107	81	92	61	93	65	109	73	105	80	107	78	110	69
16	79	62	85	57	90	60	78	50	112	76	106	81	92	65	92	56	102	75	102	73	106	80	108	68
17	84	62	83	56	95	59	78	46	107	78	104	70	87	59	95	55	99	67	100	65	104	79	105	68
18	86	61	76	57	89	58	79	48	105	79	96	70	91	61	93	56	106	75	96	64	107	79	101	77
19	79	60	72	55	91	58	78	52	106	81	93	72	81	62	85	56	97	66	95	67	107	74	104	77
20	81	60	75	53	92	63	78	52	111	76	101	76	82	57	79	56	98	65	97	71	106	76	106	69
21	83	62	77	48	88	64	75	49	113	75	105	78	81	59	82	59	103	74	98	75	109	76	108	67
22	82	62	72	48	86	57	75	50	106	76	95	78	82	57	83	57	93	72	94	70	101	80	106	78
23	82	62	72	49	84	56	75	50	107	78	100	75	82	56	82	58	98	63	93	65	106	77	101	72
24	81	62	77	54	87	61	78	52	110	78	99	76	83	59	77	59	100	61	92	66	106	80	106	76
25	77	64	72	54	83	57	76	53	106	81	97	76	78	59	75	55	98	65	91	71	104	81	95	71
26	79	64	68	51	81	61	76	53	104	78	98	72	77	57	72	56	98	61	94	71	105	76	97	65
27	80	60	72	46	84	54	80	53	103	65	101	71	77	51	79	57	99	55	94	68	101	65	96	54
28	83	62	74	40	88	51	80	52	103	62	101	73	86	47	81	56	101	51	96	65	103	66	100	51
29	83	64	81	41	99	55	78	50	109	61	104	69	85	48	89	51	107	57	106	68	107	67	102	57
30	85	63	81	48	91	61	78	51	111	66	98	75	86	53	88	58	105	68	98	76	108	72	100	51
31	82	61	80	51	90	60	80	52	111	78	103	73	84	58	90	53	104	65	99	72	107	79	106	63
Means	83.2	63.7	79.5	49.6	92.2	58.3	79.8	50.8	107.9	74.0	101.9	75.5	85.8	57.0	87.7	57.0	10.28	67.3	98.6	71.3	105.9	74.6	104.8	66.3