

U. S. DEPARTMENT OF AGRICULTURE
WEATHER BUREAU

CLIMATOLOGICAL SERVICE

DISTRICT No. 9, COLORADO VALLEY

FREDERICK H. BRANDENBURG
DISTRICT EDITOR

REPORT FOR JUNE, 1913

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CLIMATOLOGICAL DATA FOR JUNE, 1913.

DISTRICT NO. 9, COLORADO VALLEY.

FREDERICK H. BRANDENBURG, District Editor.

GENERAL SUMMARY.

The weather conditions in the Colorado Basin were of the type common during June. There were great extremes of temperature, ranging from freezing in each of the different areas, except southeastern Nevada, to more than 100° in eastern Utah, western New Mexico, Arizona, and southeastern Nevada. The precipitation in the northern and central parts of the basin was somewhat above the normal, and in general caused a material improvement in the situation, but in the southern part the drought remained unbroken, although in southeastern Arizona and adjacent part of New Mexico beneficial showers occurred after the middle of the month. Grass on the ranges is still poor and stock water is scarce. Dust storms occurred on a number of dates. Snow fell on the 10th in the central mountain region of Colorado, and also over a considerable area on the 12th.

TEMPERATURE.

The monthly mean for the stations reporting was 66.9°, or 1.6° below the normal. The mean for June, 1912, was 67.9°. The highest monthly mean was 83.8° at Aztec, Ariz., and the lowest, 42.2°, at Corona, Colo. A well defined cool spell set in on the 8th and lasted till the 14th; temperatures were also low from the 26th to the end of the month. During the rest of the month temperatures in general were close to the normal. With a few local exceptions the highest temperatures occurred during the latter half of the month, and the lowest during the first half, principally on the 11th or 12th. The highest temperature, 114°, occurred at Maricopa, Ariz., on the 20th, and the lowest, 17°, at Big Piney, Wyo., on the 7th.

Details of temperature are summarized in the following table:

Areas of States in district No. 9.	Temperature.					
	Mean.	Departure from normal.	Highest.	Station.	Lowest.	Station.
Western Wyoming.....	55.2	+2.5	91	Green River.....	17	Big Piney.
Western Colorado.....	59.1	-0.4	97	Grand Valley....	18	Fraser.
Eastern Utah.....	66.2	-0.7	103	Springdale.....	23	Scotfield.
Western New Mexico.....	66.6	-1.2	102	Rodeo.....	26	Luna.
Arizona.....	72.6	-2.8	114	Maricopa.....	20	Flagstaff No.1.
Southeastern Nevada.....	72.1	+2.4	105	Logan.....	36	Callente.

PRECIPITATION.

The average for the stations reporting was 0.67 inch, or 0.06 inch below the normal. The average for June, 1912,

was 0.93 inch. Showers occurred every day somewhere in western Colorado, but in the other areas they occurred less often and in fewer localities. In Arizona practically all the rainfall occurred between the 16th and 23d. A rainfall of an inch or more in 24 hours occurred at only 7 stations, 1 in western Wyoming and 6 in western Colorado. The greatest monthly amount was 4.88 inches at Gladstone, Colo., while none occurred at 2 stations in eastern Utah, 1 in western New Mexico, and 28 in Arizona. A measurable amount of snow fell at 6 stations in Colorado. At Horsefly, Colo., the fall was 8 inches, and at Marshall Pass, Colo., 13 inches.

The average number of days with 0.01 inch or more precipitation was 8 in western Wyoming, 7 in western Colorado, 3 each in eastern Utah and western New Mexico, and 1 each in southeastern Nevada and Arizona. For the district as a whole the average was 4 days.

The average precipitation and departures from the normal on the different watersheds are given in the following table:

Watershed.													
Green.		Grand.		San Juan.		Little Colorado.		Gila.		Mimbres.		Colorado Proper.	
Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.	Average.	Departure.
1.35	+0.41	1.46	+0.56	1.45	+0.16	0.18	-0.36	0.18	-0.15	0.63	-0.09	0.18	+0.08

MISCELLANEOUS.

The average amount of sunshine in percentages, with departures from the normal, was as follows: Grand Junction, 71, -8; Durango, 74, -11; Phoenix, 96, +3; and Yuma, 98, +1.

The relative humidity reported was: Grand Junction, 41, +8 per cent; Durango, 50, +4; Phoenix, 26, +3; and Yuma, 40, +3.

RIVERS.

The volume discharged by the Green, Grand, and San Juan Rivers was much below the average and in case of the Grand the least in 6 years. The highest stages, which were much lower than common, occurred at the beginning of the month, except in the lower reaches of the Colorado River. At Topock, Ariz., the highest stage, 13.8 feet, occurred on the 8th, and at Yuma, Ariz., 21.3 feet occurred on the 11th.

TABLE 1.—Climatological data for June, 1913. District No. 9, Colorado Valley.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.							Precipitation, in inches.				Sky.				Observers.			
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Total snowfall, unmelting.	Number of rainy days, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		Prevailing wind direction.		
<i>Wyoming.</i>																						
Big Piney.....	Lincoln.....	6,800	.....	47.2	.....	87	16	17	7	56	1.53	.....	0.60	.....	0	6	5	0	25	.....	Ira Dodge.
Daniel.....	do.....	6,740	14	53.2	+ 2.5	79	13	32	12	45	2.30	+ 1.17	0.57	.....	0	8	0	23	.....	nw.	J. M. Van Dervort.
Eden.....	Sweetwater	6,577	4	57.6	.....	84	21	34	6	45	1.97	.....	0.47	.....	0	7	5	23	.....	w.	Eden Val. L. & I. Co.
Green River.....	do.....	6,033	8	61.0	.....	91	22	34	30	47	0.96	.....	0.50	.....	0	5	0	15	.....	sw.	Geo. H. Maxom.
Pinedale.....	Fremont.....	7,167	7	54.9	.....	85	21	31	13	54	2.54	.....	0.77	.....	0	9	9	10	.....	nw.	U. S. Forest Service
Wamsutter.....	Sweetwater	6,702	.....	60.4	.....	90	21	34	12	51	2.02	.....	0.95	.....	0	7	16	6	.....	sw.	T. C. Sherman.
Willow Creek Cabin.....	Fremont.....	7,500	4	51.8	.....	75	19	24	1	49	4.33	.....	1.44	.....	0	14	5	13	.....	sw.	U. S. Forest Service.
<i>Colorado.</i>																						
Ashcroft.....	Pitkin.....	9,483	11	50.6	- 0.6	76	27	23	13	47	3.51	+ 2.01	1.22	.....	0	14	.....	.....	.....	.....	Dan McArthur.
Blue Valley Ranch.....	Grand.....	7,525	.....	58.8 ^b	.....	82 ^b	27	32 ^b	11	44 ^b	1.06	.....	0.42	.....	0	8	16	7	.....	.....	L. R. Hubbard.
Breckenridge.....	Summit.....	9,536	24	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Albert S. McCullough.
Buford.....	Rio Blanca.	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. H. Genier.
Cascade.....	San Juan.	8,900	6	.....	.....	.....	.....	.....	.....	.....	3.51	.....	1.45	.....	0	9	8	7	.....	.....	The Western Colorado P. Co.
Cedaredge.....	Delta.....	6,175	15	63.8	- 0.7	86	16	38	11	38	0.78	+ 0.28	0.25	.....	0	7	12	16	.....	.....	Harry A. Cobbett.
Cochetopa.....	Saguache.....	9,088	4	.....	.....	.....	.....	.....	.....	.....	1.32	.....	0.50	.....	0	6	3	11	.....	.....	Miss Bessie McDonough.
Collbran.....	Mesa.....	6,000	20	62.0	- 0.4	83	15	37	12	37	1.11	+ 0.44	0.38	.....	0	6	15	11	.....	.....	A. A. Wood.
Columbine.....	Routt.....	8,766	3	.....	.....	.....	.....	.....	.....	.....	1.47	.....	0.38	.....	0	11	18	10	.....	.....	Mrs. M. A. Caron.
Columbine Ranch.....	Delta.....	6,925	3	.....	.....	.....	.....	.....	.....	.....	1.31	.....	0.43	.....	0	5	18	7	.....	.....	George W. Wade.
Corona.....	Grand.....	11,660	6	42.2	.....	60	27	25	11	27	2.87	.....	0.73	.....	20	.....	.....	.....	.....	.....	U. S. Weather Bureau.
Cortez.....	Montezuma.	6,100	2	66.0	.....	88	16	31	11	49	T.	.....	T.	.....	0	0	20	5	.....	.....	W. G. Clucas.
Crawford (near).....	Montrose.....	6,600	3	61.5	.....	84	27	32	12	34	0.80	.....	0.35	.....	0	4	15	13	.....	.....	C. W. Roe.
Crested Butte.....	Gunnison.....	8,867	3	48.8	.....	75	20	25	13	45	2.86	.....	1.22	.....	0	8	6	11	.....	.....	Charles L. Ross.
Delta.....	Delta.....	4,965	23	66.6	- 1.2	94	20	40	10	49	0.26	- 0.06	0.15	.....	0	3	16	12	.....	.....	E. M. Getts.
Dillon.....	Summit.....	8,800	3	48.6	.....	78	27	25	3	50	1.25	.....	0.56	.....	0	9	7	12	.....	.....	Mrs. Nannie B. Strong.
Durango.....	La Plata.....	6,534	19	61.0	- 1.7	85	16	37	11	44	1.69	+ 0.91	0.96	.....	0	7	9	17	.....	.....	U. S. Weather Bureau.
Eureka.....	San Juan.....	10,000	6	.....	.....	.....	.....	.....	.....	.....	0.64	.....	0.14	.....	T.	5	14	10	.....	.....	The Western Colorado P. Co.
Fraser.....	Grand.....	8,560	4	47.4	.....	75	27	18	2	50	1.76	.....	0.42	.....	T.	11	1	3	.....	.....	L. D. C. Gaskill.
Fruita.....	Mesa.....	4,510	14	68.5	0	94	20	40	30	51	0.23	- 0.07	0.09	0	5	15	11	J. B. Willsea.
Glade Park.....	do.....	7,000	2	.....	.....	.....	.....	.....	.....	.....	0.82	.....	0.33	.....	0	6	13	16	.....	.....	A. F. Terrill.
Gladstone.....	San Juan.....	10,400	6	.....	.....	.....	.....	.....	.....	.....	4.88	.....	1.31	.....	0	10	9	7	.....	.....	The Western Colorado P. Co.
Glenwood Springs (near).....	Garfield.....	5,823	15	60.2	- 1.1	88	30	36	3	50	0.91	+ 0.23	0.30	.....	0	5	23	1	.....	.....	E. A. O'Neil.
Grand Junction.....	Mesa.....	4,602	22	71.0	- 1.6	92	20	47	12	37	0.37	- 0.03	0.24	.....	0	3	10	15	.....	.....	U. S. Weather Bureau.
Grandlake.....	Grand.....	8,153	5	.....	.....	.....	.....	.....	.....	.....	0.92	.....	0.50	.....	T.	4	21	5	.....	.....	Mrs. Belle Kauffman.
Grand Valley.....	Garfield.....	5,089	21	66.0	- 0.1	97	16	37	13	54	1.21	+ 0.61	0.52	.....	0	9	10	12	.....	.....	David Evans.
Gunnison.....	Gunnison.....	7,670	20	55.2	- 0.3	79	5	29	13	46	1.43	+ 0.79	0.85	.....	0	7	7	23	.....	.....	Clarence Adams.
Hayden.....	Routt.....	6,337	.....	60.8	.....	89	28	36	11	46	1.49	.....	0.46	.....	0	11	6	14	.....	.....	A. W. Friederich.
Hesperus (near).....	La Plata.....	7,610	1	.....	.....	.....	.....	.....	.....	.....	0.74	.....	0.50	.....	0	5	8	14	.....	.....	G. F. Snyder.
Horsefly.....	Montrose.....	8,700	3	.....	.....	.....	.....	.....	.....	.....	1.01	.....	0.70	.....	8.0	3	14	13	.....	.....	Lawrence J. Finch.
Ironton.....	Ouray.....	10,000	3	.....	.....	.....	.....	.....	.....	.....	3.14	.....	0.82	.....	T.	7	5	13	.....	.....	Mrs. Amanda E. Foley.
Lake City.....	Hinsdale.....	8,686	8	54.2	.....	79	16	29	13	42	2.42	.....	0.69	.....	0.4	13	5	20	.....	.....	J. F. Maurer.
Lay.....	Moffat.....	6,190	19	60.3	+ 1.0	86	16	29	4	54	0.70	+ 0.04	0.19	.....	0	6	14	5	.....	.....	A. G. Wallihan.
Mancos.....	Montezuma.	6,960	4	62.3	+ 2.0	88	23	31	11	48	0.31	- 0.61	0.13	.....	0	3	7	9	.....	.....	Miss Gertrude Rickner.
Marble.....	Gunnison.....	7,951	4	55.0	.....	80	27	29	13	45	2.22	.....	0.85	.....	0	8	22	4	.....	.....	F. E. Morse.
Marshall Pass.....	Saguache.....	10,846	10	.....	.....	.....	.....	.....	.....	.....	2.06	+ 0.46	0.78	.....	13.0	6	10	12	.....	.....	Wm. L. Williams.
Meeker (near).....	Rio Blanca.	6,182	21	57.8	- 1.4	84	23	31	7	49	0.85	- 0.17	0.38	.....	0	4	16	10	.....	.....	T. Baker.
Montrose.....	Montrose.....	5,811	24	64.6	+ 0.7	88	15	37	11	42	0.69	+ 0.33	0.22	.....	0	6	10	17	.....	.....	U. S. Reclamation Service.
Nast.....	Pitkin.....	7,953	3	52.6	.....	78	28	29	12	43	0.92	.....	0.71	.....	T.	2	18	8	.....	.....	Arthur Hanthorn.
Pagosa Springs.....	Archuleta.....	7,108	6	57.2	.....	87	7	27	6	54	1.71	.....	0.60	.....	0	10	13	13	.....	.....	E. T. Walker.
Palisades.....	Mesa.....	4,729	2	69.6	.....	96	27	40	29	50	0.76	.....	0.42	.....	0	3	13	12	.....	.....	F. P. Undergraft.
Paonia.....	Delta.....	5,694	18	66.6	.....	0	91	16	40	12	43	1.15	+ 0.72	0.41	.....	0	5	9	.....	.....	J. M. Applewood.
Pitkin.....	Gunnison.....	9,500	4	.....	.....	.....	.....	.....	.....	.....	2.59	.....	0.85	.....	1.0	7	11	11	.....	.....	Mrs. Maggie Camman.
Pyramid.....	Rio Blanca.	.....	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. E. Egly.
Red Cliff.....	Eagle.....	8,698	20	.....	.....	.....	.....	.....	.....	.....	1.04	- 0.31	0.50	.....	0	.....	.....	.....	.....	.....	Dorothea Greiner.
Redvale.....	Montrose.....	6,300	.....	61.7	.....	85	16	33	11	40	1.25	.....	0.54	.....	0	4	13	7	.....	.....	Dr. E. S. C. Roster.
Rico.....	Dolores.....	8,824	11	.....	.....	.....	.....	.....	.....	.....	2.76	+ 1.59	0.72	.....	0	14	14	14	.....	.....	Clinton B. Smith.
Rifle.....	Garfield.....	5,437	2	65.0	.....	90	15	38	13	43	0.78	.....	0.22	.....	0	6	14	9	.....	.....	Herman Eiche.
River Portal.....	Montrose.....	6,570	7	65.3	.....	89	22	38	12	41	1.22	.....	0.37	.....	0	7	16	11	.....	.....	U. S. Reclamation Service.
Sapinero (near).....	Gunnison.....	8,125	10	52.4	- 0.9	74	15	29	13	41	1.80	+ 0.90	0.48	.....	0.8	9	11	13	.....	.....	W. F. Irving.
Shoshone.....	Garfield.....	6,110	3	65.4	.....	89	27	44	12	37	1.87	.....	0.41	.....	0	10	17	1	.....	.....	Central Colorado Power Co.
Silverton (near).....	San Juan.....	9,400	6	47.5	.....	70	16	20	7	45	3.73	.....	1.25	.....	0	11	7	10	.....	.....	The Western Colorado P. Co.
Soruce Lodge.....	Grand.....	9,600	5	.....	.....	.....	.....	.....	.....	.....	2.64	.....	0.55	.....	0	18	5	12	.....	.....	H. J. Willis.
Steamboat Springs.....	Routt.....	6,683	10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Herbert B. Gee.
Tacoma.....	La Plata.....	7,300	6	.....	.....	.....	.....	.....	.....	.....	2.95	.....	0.90	.....	0	8	4	8	.....	.....	The Western Colorado P. Co.
Telluride.....	San Miguel.....	8,756	1	51.8	.....	78	16	25	13	50	1.74	.....	0.58	.....	3.1	8	9	16	.....	.....

TABLE 1.—Climatological data for June, 1913. District No. 9—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.						Precipitation, in inches.				Sky.				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, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.		Number of cloudy days.	Prevailing wind direction.
<i>Utah—Continued.</i>																				
Moab	Grand	4,000	23	72.6	+ 0.5	99	22	42	11	49	0.40	+ 0.15	0.36	0	2	9	14	7	Henry Crouse.	
Monticello	San Juan	7,545	5																Geo. F. Barton.	
New Harmony	Washington	5,200	2																Geo. F. Prince.	
Orderville	Kane	6,660	3																F. A. Porter.	
Pine Valley	Washington	6,000	2																Mason Gardner.	
Price	Carbon	5,557	2	66.8		93	21†	37	29	50	0.49		0.13	0	3	6	15	9	George Mathis.	
Ranch	Kane	6,700	11	56.0	+ 0.0	83	21	32	1†	46	0.69	+ 0.36	0.39	0	2	19	10	1	J. W. Seaman.	
San Rafael	Emery	4,250	1																Jos. J. Nougier.	
St. George	Washington	2,880	26	74.6	- 1.9	101	21†	45	1	54	0.06	- 0.01	0.02	0	4	16	12	2	Wm. Goodspeed.	
Scotfield	Carbon	7,625	4	51.7		81	22	23	11	54	2.47		0.58	T.	0	11	0	9	B. Newren.	
Springdale	Washington	3,500	5	74.4		103	28†	40	1†	50	0.00		0.00	0	0	15	3	12	Hattie F. Wood.	
Strawb'ry Fun'l East	Wasatch	7,650	1																U. S. Reclamation Service.	
Teasdale	Wayne	7,000	4																Henry Cullum.	
Thompson	Grand	5,150	2	70.2		92	21	40	29	36	0.80		0.48	0	6	16	6	8	Mrs. A. M. Starmont.	
Tropic	Garfield	7,000	16	59.0	- 2.5	88	21	34	1	42	0.48	+ 0.07	0.43	0	2	12	11	7	E. P. Bolton.	
Trout Creek Rngr	Uinta	9,200	2																Forest Supervisor.	
Vernal	Go.	5,050	16	69.0	+ 3.1	98	2	35	4	61	1.09	+ 0.73	0.87	0	3	21	6	3	H. E. Dillman.	
Victor	Emery	5,250	1																E. F. Noyes.	
White Rocks	Uinta	6,200	2																E. C. Sims.	
Woodside	Emery	4,645	2	66.1		94	20†	36	4	52	0.68		0.35	0	5	14	10	6	D. P. Adams.	
<i>New Mexico.</i>																				
Alma	Socorro	5,500	15	66.5	- 2.7	96	30	32	12	59	0.42	- 0.27	0.31	0	3	13	16	1	sw.	Max A. Balke.
Aragon	do	6	6	62.8		89d	30	35d	12	47d	0.42		0.22	0	3	21	9	0	sw.	John R. Milligan.
Aztec	San Juan	5,590	13								T.	- 0.37	T.	0	0	11	16	3	sw.	Dr. J. T. West.
Berger's Ranch	McKinley	8,000	1	57.0d		83d	30	29d	13	50d	0.86		0.46	0	0	16	11	3	e.	Herman Berger.
Blackrock	do	6,500	4																P. Des Georges.	
Bloomfield	San Juan	5,500	18	67.6	- 0.5	93	20†	37	11†	49	0.46	+ 0.07	0.28	0	3	15	13	2	sw.	Fred LeClerc.
Cambay	Luna	4,215	14									+ 0.56	0.70	0	4	18	5	7	e.	Agent So. Pac. R. R.
Cliff	Grant	4,470	13	78.1	+ 3.6	100	30	42	2†	54	0.39	- 0.09	0.16	0	3	22	8	0		W. C. Belden.
Columbus	Luna	4,054	4										0.69	0	3	14	2	14	se.	Agent E. P. & S. W. R. R.
Deming	do	4,333	36	74.6		100	17	42	15	50	2.37	- 0.31	0.28	0	1				w.	Agent So. Pac. R. R.
Dulce	Rio Arriba	6,756	16	60.5	+ 0.5	87	15†	29	29	54	1.76	+ 1.14	0.47	0	6	15	13	2	w.	E. O. Green.
Farmington	San Juan																			Orville Ricketts.
Fort Bayard	Grant	6,152	44	67.2	- 3.8	90	30	44	11	38	0.51	- 0.25	0.23	0	7	17	6	7	w.	U. S. General Hospital.
Frontland	San Juan	4,800	19	67.6	- 0.7	93	20	35	11	47	T.	- 0.15	T.	0	0	10	18	2	sw.	Cyril J. Collyer.
Gage	Luna	4,486	13	74.4		92	26	32	7	29	0.25	- 0.37	0.20	0	0	15	9	0	sw.	Agent So. Pac. R. R.
Gila Planting Station	Grant	6,475	2	66.4		86	30	43	11	37	0.38		0.09	0	0	20	8	2	sw.	U. S. Forest Service.
G. O. S. Ranch	do	8,900	1	62.4e		92e	14†	30e	4†	58	1.21		0.58	0	7	7	20	3	w.	Victor Culberson.
Hachita	do	4,504	4										0.33	0	2	23	5	2	se.	Agent E. P. & S. W. R. R.
Haynes	Rio Arriba	6,600	2	63.1		87	26	35	10†	45	0.81		0.20	0	7	16	11	3	sw.	Dr. John R. Haynes.
Hernandes	Luna	4,451	4																	Agent E. P. & S. W. R. R.
Lordsburg	Grant	4,245	31	73.3	- 4.8	96	30	48	11†	41	0.28	- 0.02	0.25	0	2	8	22	0	w.	J. H. McClure.
Luna	Socorro	7,300	12	58.4		89	30	26	12	57	0.38	- 0.28	0.28	0	2	12	18	0	w.	C. B. Martin.
Mimbres	Grant	5,007	8										0.46	0	3	20	10	0		Charles Dennis.
Pinos Altos (near)	do	7,253	2					34	12		1.39		0.56	0	9	14	16	0	w.	O. L. Scott.
Pratt	do	4,415	4								0.04		0.04	0	1	20	7	3	sw.	Agent E. P. & S. W. R. R.
Putnam	San Juan	6,200	1	64.6†		95†	16	37†	6†	49				0	0	10	12	8	e.	C. F. Spader.
Redrock	Grant	4,150	8								0.23		0.12	0	2	25	5	0		Robt. H. Woods.
Rodeo	do	4,118	4					102	14	54	11†		0.00	0	0	17	10	3	sw.	Agent E. P. & S. W. R. R.
Silver City	do	5,860	2	68.4		93	15†	42	11	43	0.40		0.22	0	5	22	8	0	n.	E. M. Brumbaek.
<i>Arizona.</i>																				
Allaire's Ranch	Cochise	4,184	17								0.03	- 0.24	0.03	0	1	21	9	0	sw.	Thomas Allaire.
Alpine	Apache	8,500	4	53.6		83	30	22	12	52	0.30		0.25	0	2	19	5	6	sw.	U. S. Forest Service.
Ashfork	Yavapai	5,229	2								0.00		0.00	0	0	23	3	1		Do.
Aztec	Benson	4,492	15	83.8	- 6.7	112	21	52	11	41	0.06	- 0.01	0.00	0	0	27	2	0	w.	Agent So. Pac. Ry.
Benson	Cochise	3,523	32†	74.7	- 7.4	98	2†	47	11	45	0.20	- 0.11	0.20	0	1	21	4	5	w.	Do.
Bisbee	do	4,350	23																	Bisbee High Schools.
Blue	Greenlee	6,500	6								0.21		0.10	0	3	14	16	0		Mary A. Jones.
Bonita	Graham	4,916	39								0.00	- 0.42	0.00	0	0	21	7	2		A. H. Jelley.
Bowie	Cochise	3,756	37	79.8	- 0.1	104	30	51	11	43e	0.64	+ 0.08	0.30	0	3	15	1	14		Agent So. Pac. Ry.
Buckeye	Maricopa	980	21	80.8	0.0	110	21	47	11	48	0.00	- 0.01	0.00	0	0	28	2	0	sw.	H. E. Kell.
Canille	Santa Cruz	5,225	4								0.40		0.20	0	5	14	16	0	sw.	Robert A. Rodgers.
Casa Grande	Pinal	1,396	32								0.00	- 0.12	0.00	0	0	30	0	0	sw.	Agent So. Pac. Ry.
Casa Grande Ruins	do	1,422	5	80.9		109	20	45	11	52	T.		T.	0	0	25	3	2	w.	Frank Pinkley.
Cavecreek (near)	Maricopa	1,452	6	82.6		108	21	55	11	43	0.00		0.00	0	0	28	1	1	sw.	John B. Lammers
Chandler	do	1,213	18	81.5	- 1.9	108	21	47	11	48	0.00	- 0.18	0.00	0	0	29	1	0	nw.	F. V. N. Dana.
Chin Lee	Apache	6,090	5	64.6d				28	29	54b	0.26		0.21	0	2	11	6	13	sw.	Rev. L. Ostermann, O. F. M.
Chilarsons Mill	Graham	8,000	6	63.4		79	14†	41	11	32	1.12		0.51	0	5	12	17	1		H. R. Chilarson.
Clifton	Greenlee	3,584	22	79.7		103	28†	50	1	45	T.	- 0.58	T.	0	0	24	5	1		L. C. Kyhl.
Cochise	Cochise	4,219	15	71.9		99	19†	38	3	51b	0.16	- 0.03	0.07	0	3	21	0	9	w.	Agent So. Pac. Ry.
Columbia	Yavapai	1,900	13	83.7	+ 0.6	106	24†	64	11	36	0.00	- 0.25	0.00	0	0	30	0	0	s.	M. J. Nolan.
Cornville	do	3,300		71.7		98	21†	40	11	47	0.27		0.25	0	2	19	11	0	sw.	N. F. Girdner.
Courtland	Cochise	4,543	4								1.25		0.80	0	5	16	6	8	nw.	Agent E. P. & S. W. R. R.
Dos Cabezos	do	5,250	5	70.0		98	15	38	12	52	0.55		0.53	0	0	19	9	2	w.</	

DISTRICT NO. 9. CLIMATOLOGICAL SUMMARY.

JUNE, 1913

TABLE 1.—Climatological data for June, 1913. District No. 9—Continued.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahrenheit.					Precipitation, in inches.				Sky.				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, 0.01 inch or more.	Number of clear days.		Number of partly cloudy days.	Number of cloudy days.	Prevailing wind direction.
<i>Arizona—Continued.</i>																				
Jerome.....	Yavapai.....	4,743	16	73.0	- 3.6	96	21	48	11	31	0.17	- 0.08	0.17	0	1	22	8	0	s.	Dr. L. A. Hawkins.
Keams Canyon.....	Navajo.....	6,600	9	64.8	.....	88	20	33	11	48	0.01	.....	0.01	0	1	15	12	3	se.	Fred A. Bartram.
Kingman.....	Mohave.....	3,326	10	72.5	- 1.5	99	21 ^f	48	4	44	T.	- 0.06	T.	0	0	23	7	0	s.	Agent A. T. & S. F. Ry.
Lakeside.....	Navajo.....	6,500	15	59.1	.....	86	30	30	12	51	0.51	+ 0.12	0.33	0	2	18	1	11	sw.	Prof. J. Peterson.
McNeal.....	Cochise.....	4,150	3	.....	.....	.....	.....	.....	.....	.....	0.18	.....	0.18	0	1	20	4	6	sw.	Mrs. Gladys Taylor.
Maricopa.....	Pinal.....	1,186	37	83.6	- 5.7	114	20	49	11	51	T.	- 0.08	T.	0	0	26	4	0	w.	Agent So. Pac. Ry.
Marinette.....	Maricopa.....	1,150	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Theo. Katzenstein.
Mocasin.....	Mohave.....	4,500	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. G. Maxwell.
Mohawk Summit.....	Yuma.....	538	13	.....	.....	111	23	.....	.....	.....	0.00	0.00	0.00	0	0	22	7	1	e.	Agent So. Pac. Ry.
Naco.....	Cochise.....	4,579	4	.....	.....	.....	.....	.....	.....	.....	0.09	.....	0.05	0	3	22	2	0	s.	Agent E. P. & S. W. R. R.
Natural Bridge.....	Gila.....	4,990	24	.....	.....	.....	.....	.....	.....	.....	T.	- 0.27	T.	0	0	20	9	1	sw.	D. G. Goodfellow.
Nurisio.....	Apache.....	8,000	3	.....	.....	.....	.....	.....	.....	.....	0.13	.....	0.06	0	4	15	5	10	sw.	J. W. Lawson.
Oracle.....	Pinal.....	4,502	19	71.8	- 6.3	94	19	46	14	42	0.10	- 0.29	0.10	0	1	23	4	3	w.	U. S. Forest Service.
Paradise.....	Cochise.....	5,436	7	65.1	.....	93	30	38	11	46	0.03	.....	0.03	0	1	13	15	2	sw.	J. C. Hancock.
Parker.....	Yuma.....	345	17	82.5	- 2.4	111	24 ^f	50	11	55	0.00	- 0.04	0.00	0	0	29	1	0	sw.	M. A. Israel, M. D.
Payson.....	Gila.....	5,550	5	64.0	.....	90	1	30	11	54	T.	.....	T.	0	0	12	9	9	sw.	Mart. McDonald.
Phoenix.....	Maricopa.....	1,108	19	81.9	- 2.5	105	21	55	11	39	0.00	- 0.12	0.00	0	0	23	6	1	e.	U. S. Weather Bureau.
Phoenix (1).....	do.....	1,092	23	80.6	- 2.2	109	21	49	11	50 ^a	0.00	- 0.08	0.00	0	0	27	3	0	sw.	Geo. Acuff.
Phoenix (2).....	do.....	1,189	5	81.9	.....	107	21 ^f	53	11	43	0.00	.....	0.00	0	0	27	2	1	sw.	Salt River Valley Nurseries.
Pinal Ranch.....	Pinal.....	4,520	19	.....	.....	.....	.....	.....	.....	.....	0.28	- 0.16	0.25	0	2	.....	.....	.....	.....	Irion & Craig.
Pinedale.....	Navajo.....	6,500	1	.....	.....	.....	.....	.....	.....	.....	0.37	.....	0.32	0	2	11	16	3	sw.	E. Thomas, jr.
Pinto.....	Apache.....	5,660	9	.....	.....	.....	.....	.....	.....	.....	T.	.....	T.	0	0	25	4	1	sw.	Celia F. Henning.
Prescott.....	Yavapai.....	5,320	46	63.7	- 3.7	93	30	35	11	50	T.	- 0.27	T.	0	0	26	4	0	sw.	Dr. J. W. Flinn.
Prescott Dry Farm.....	do.....	5,008	1	68.0	.....	92	20 ^f	40	4	45	0.00	.....	0.00	0	0	24	6	0	s.	L. L. Bates.
Quartzite.....	Yuma.....	800	6	83.4	.....	112	21	53	11	49	0.00	.....	0.00	0	0	18	11	1	s.	W. E. Scott.
Rice.....	Gila.....	2,540	30	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Arthur Pritchard.
Roosevelt.....	do.....	2,173	9	.....	.....	.....	.....	.....	.....	.....	0.10	.....	0.10	0	1	16	14	0	w.	U. S. Reclamation Service.
Sacaton.....	Pinal.....	1,280	6	81.9	.....	108	20 ^f	48	11	47	0.07	.....	0.07	0	1	.....	.....	.....	.....	E. W. Hudson.
St. Johns.....	Apache.....	5,650	9	64.4 ^e	.....	92	27 ^f	31	11	53 ^e	0.20	.....	0.20	0	0	15	6	9	sw.	Alexander Shreeve.
St. Michaels.....	do.....	6,950	26	63.4	- 1.2	100	24 ^f	31	11	49	T.	- 0.09	T.	0	0	16	13	1	sw.	Rev. A. Weber, O. F. M.
San Simon.....	Cochise.....	3,609	27	.....	.....	100	24 ^f	34	11	52	0.00	- 0.12	T.	0	0	22	5	3	ne.	Agent So. Pac. Ry.
Seligman.....	Yavapai.....	5,219	8	64.1	.....	94	30	34	11	52	0.00	.....	0.00	0	0	30	0	0	sw.	Librarian, A. T. & S. F. Ry.
Sentinel.....	Maricopa.....	685	15	.....	.....	112	21	54	10	.....	0.00	.....	0.00	0	0	30	0	0	sw.	Agent So. Pac. Ry.
Silverbell.....	Pima.....	2,664	8	.....	.....	104	30	.....	.....	.....	T.	.....	T.	0	0	29	1	0	s.	Imperial Copper Co.
Snowflake.....	Navajo.....	5,644	6	61.8	.....	92	30	28	11	60	0.03	.....	0.03	0	1	8	3	19	sw.	William J. Flake.
Springerville.....	Apache.....	6,862	3	60.6	.....	83	14	29	2	49	0.13	.....	0.10	0	3	19	7	4	sw.	U. S. Forest Service.
Supai.....	Coconino.....	3,200	7	79.5	.....	104	21	56	30	47	0.00	.....	0.00	0	0	21	6	3	.....	Laura B. Symons.
Tempe.....	Maricopa.....	1,165	9	81.0	.....	109	21	49	11	46	0.00	.....	0.00	0	0	24	6	0	nw.	F. H. Simmons.
Thatcher.....	Graham.....	2,800	10	78.0 ^a	+ 1.3	105	27	45	12	53 ^a	0.17	- 0.07	0.17	0	1	21	7	2	.....	J. H. Larson.
Tombstone.....	Cochise.....	4,550	18	76.8	- 0.5	98	18 ^f	50	10	40	0.41	- 0.01	0.19	0	3	21	9	0	se.	F. N. Wolcott.
Truxton.....	Mohave.....	3,997	3	67.4	.....	97	21	.....	.....	56 ^e	0.03	.....	0.03	0	1	18	9	3	s.	Truxton Canyon Indian School.
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ira E. Bell.
Tuba.....	Coconino.....	4,500	13	69.2	- 2.0	91	30	44	11	43	0.17	- 0.07	0.15	0	2	16	13	1	sw.	University of Arizona.
Tucson.....	Pima.....	2,390	33	78.2	- 3.7	105	20	49	11 ^f	46	0.08	- 0.10	0.05	0	2	20	10	0	s.	Rev. James F. Record.
Tucson (1).....	do.....	2,380	5	75.1	.....	105	20	42	12	53 ^a	0.04	.....	0.02	0	2	22	8	0	sw.	U. S. Coast & Geodetic Survey.
Tucson (2).....	do.....	2,526	4	77.8	.....	104	20	50	11 ^f	47	0.03	.....	0.03	0	2	22	5	3	w.	.....
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Agent So. Pac. Ry.
Vail.....	do.....	3,421	14	72.2	.....	102	20	42	10	49	T.	- 0.07	T.	0	0	.....	.....	.....	.....	J. O. Carter.
Walnut Grove.....	Yavapai.....	3,640	20	.....	.....	.....	.....	.....	.....	.....	T.	- 0.06	T.	0	0	.....	.....	.....	.....	Agent S. F. P. & P. Ry.
Wickenburg.....	Maricopa.....	2,072	15	76.4	- 2.4	107	21 ^f	44	10	51	0.06	+ 0.04	0.06	0	1	21	0	9	.....	Agent So. Pac. Ry.
Willcox.....	Cochise.....	4,164	32	70.3	.....	96	19 ^f	40	1 ^f	54	0.00	.....	0.00	0	0	21	9	0	s.	E. J. Nordyke.
Williams.....	Coconino.....	6,750	13	59.2	- 3.9	90	30	30	12 ^f	54	0.00	- 0.20	0.00	0	0	22	0	8	.....	Winslow High School.
Winslow.....	Navajo.....	4,855	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	U. S. Weather Bureau.
Yuma.....	Yuma.....	141	33	81.6	- 3.1	110	21	55	11	46	0.00	.....	0.00	0	0	30	0	0	sw.	C. J. Wood.
Yuma (1).....	do.....	150	6	76.0	.....	104	19 ^f	.....	.....	48 ^b	0.00	.....	0.00	0	0	28	2	0	sw.	.....
<i>Nevada.</i>																				
Caliente.....	Lincoln.....	4,407	3	62.2	.....	90	20	36	2	48	0.04	.....	0.04	0	1	23	7	0	se.	Salt Lake Route.
Las Vegas.....	Clark.....	2,033	11	76.6	+ 2.4	104	21	52	11	43	0.31	+ 0.22	0.24	0	2	.....	.....	.....	.....	C. P. Squires.
Logan.....	do.....	1,355	6	77.6	.....	105	21 ^f	51	11	49	0.08	.....	0.08	0	1	27	3	0	s.	Orin W. Jarvis.

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 June, 1913. District No. 9—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
<i>Arizona—Contd.</i>																																
Marinette.....	Agua Fria.....																															0.00
Moccasin.....	Colorado.....																															0.00
Mohawk Summit.....	Gila.....																															0.10
Naco.....	San Pedro.....																		.02				.02		.05							0.09
Natural Bridge.....	Verde.....																						T.									T.
Nutrioso.....	Little Colorado.....								.01	.02									.06		.04											0.13
Oracle.....	San Pedro.....																.10															0.10
Osborn.....	do.....																				T.	T.										0.03
Paradise.....	Desert.....																								.05	.05						0.03
Parker.....	Colorado.....																				T.		T.									0.00
Payson.....	Verde.....																						T.	T.								T.
Phoenix.....	Salt.....																															0.00
Phoenix (1).....	do.....																															0.00
Phoenix (2).....	do.....																															0.00
Pinal Ranch||.....	Gila.....																		.03													0.28
Pinedale.....	Little Colorado.....																															0.37
Pinto.....	do.....																		.05													T.
Prescott.....	Hassayampa.....								T.	T.	T.																					T.
Prescott Dry Farm.....	Verde.....																															0.00
Quartzsite.....	Colorado.....																															0.00
Rice.....	Gila.....																															0.00
Roosevelt.....	Salt.....																															0.10
Sacaton.....	Gila.....																									.07						0.07
St. Johns.....	Little Colorado.....																															0.20
St. Michaels.....	do.....								T.	T.										.20		T.	T.	T.	T.	T.						T.
San Simon.....	Gila.....																															T.
Seligman.....	Verde.....																															0.00
Sentinel.....	Gila.....																															0.00
Silverbell.....	Santa Cruz.....																				T.											T.
Snowflake.....	Little Colorado.....																			.03	T.											0.03
Springerville.....	do.....										.02									.10						.01						0.13
Supai.....	Colorado.....																															0.00
Tempe.....	Salt.....																															0.00
Thatcher.....	Gila.....																															0.17
Tombstone.....	San Pedro.....																															0.41
Truxton.....	Colorado.....																															0.03
Tuba.....	Little Colorado.....																															0.17
Tucson.....	Santa Cruz.....																															0.08
Tucson (1).....	do.....																															0.04
Tucson (2).....	do.....																															0.03
Vail.....	do.....																															T.
Walnut Grove.....	Hassayampa.....																															T.
Wickenburg.....	do.....																															0.06
Willcox.....	Desert.....																															0.00
Williams.....	Colorado.....																															0.00
Winslow.....	Little Colorado.....																															0.00
Yuma.....	Colorado.....																															0.00
Yuma (1).....	do.....																															0.00
<i>Nevada.</i>																																
Caliente.....	Colorado.....																															0.04
Las Vegas.....	do.....																															0.31
Logan.....	do.....																															0.08

* 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 for June, 1913. District No. 9, Colorado Valley.

Table with columns for Date, Wyoming (Daniel, Green River), Colorado (Durango, Grand Junction, Gunnison, Meeker, Steamboat Springs), Utah (Emery, Hite, Moab, St. George, Vernal), and New Mexico (Bloomfield, Fort Bayard). Rows show daily temperature data from June 1 to 30, including maximum and minimum values for each location, and a final row for monthly means.

Table for Arizona and Logan, Nev. Columns include Date, Bisbee, Flagstaff, Fort Apache, Grand Canyon, Parker, Phoenix, Prescott, St. Michaels, Tucson, Yuma, and Logan, Nev. Rows show daily temperature data from June 1 to 30, including maximum and minimum values for each location, and a final row for monthly means.

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.

Total Precipitation, June, 1913.



H. A.

Departure of the Mean Temperature from the Normal, June, 1913.

