CLIMATOLOGICAL DATA FOR MAY, 1912.

DISTRICT NO. 11, CALIFORNIA.

Prof. ALEXANDER G. MCADIE, District Forecaster.

GENERAL SUMMARY.

May, 1912, was slightly cooler than the average May, but with more rain than usually falls in California at this season. Like the spring of 1911, the weather has been cold, although not so cold as that season was. The present month was about as cool as May, 1909, and nearly 5° cooler than May, 1910. There was more rain than has fallen in any May since 1909. There were three periods of rain during the month, the most important of which extended from the 19th to the 26th. This rain was of untold value to the crops and general industries of the State, although some slight damage was done to cut alfalfa, mown hay, and ripening cherries. The storm, however, did not bring much snow to the mountain sections; indeed, temperatures were so high that on two or three days warm rains occurred, and these materially decreased the already light snow cover. The season has been a peculiar one regarding snowfall. During February and March the snow cover both in depth and area was less than had been known for many years. Occasional storms during March and April added to the depth, and fortunately there were no warm periods to cause rapid melting. The run-off this season has been less than usual, and in fact the river stages are the lowest known for this period of the year. There have been no floods and no waste of water. While, therefore, the actual precipitation in nearly all sections of the State has been far below the normal, not exceeding 60 per cent in many places, the efficiency will equal that of a normal rainfall with the usual floods and waste. The distribution of the rain, both in frequency and intensity, has been remarkable. The rain seemed to come exactly when most needed and rarely in amounts heavy enough to cause floods even in the steepest watersheds.

The month began with a well-marked depression moving along the usual path of late winter storms. This caused rain in the central and northern counties of California on the 1st and 2d, with some thunderstorms in the northern portion of the Sacramento Valley. A period of fair weather followed with north winds of moderate velocity, and there were no high temperatures until the afternoon of the 6th. In the southern portion of the State unsettled weather and light showers occurred, due to the slow development of a storm of the Sonora type over the valley of the Colorado. A thunderstorm was reported at Fresno on the 8th, and the weather did not clear in the southern counties until the 9th and in the extreme south until the 10th. The Sonora storm, after a comparatively slow movement over the valley of the Colorado and the northwestern States of Mexico, moved eastward with increasing velocity, and by May 10 appeared as a well-defined storm over Texas and adjoining States. In California the weather continued fair with moderate temperatures and usual conditions of fog on the northern coast and warm afternoons in the valleys. On May 19 a depression similar to that at the beginning of the month in its formation and path caused moderate rain in the central and northern counties, extending, however, over a much longer period. There was no rain in the south until May 25 and in the extreme south until the 26th.

The most noteworthy feature of the weather of the month was the warm spell which began on May 28, culminating at the end of the month. The high temperatures seem to be confined to the air strata near the earth's surface.

One interesting incident of the effect of weather conditions in the mountains upon the ordinary occupation of dwellers in the cities a hundred or more miles away is afforded by the local storms of May 6. The Sierra Light & Power Co. furnishes power for the United Railroads of San Francisco. During a thunderstorm in the mountains damage was done by either lightning or wind. The local railway system was deprived of power in pleasant weather at the very hour when men and women were returning home from the day's work. In the city of San Francisco 200 street cars had to be returned to the car barns.

In some of the southern counties of the State, particularly Riverside, Kern, and San Bernardino, some damage was done to grain by the thunderstorms of May 8. In the San Bernardino Valley the downpour was so heavy that fishing parties, travelers, and isolated ranchers were in danger of losing their lives in the rush of waters.

Compared with other Mays, there was much less wind than usual, and northwest winds along the coast did not reach the high velocities usually reported. There was less cloudiness this May than last, and there were few frosts, and these did no damage. From an agricultural point of view the weather of May was excellent, all crops making good growth. The season has agreeably disappointed expectations, inasmuch as the outlook during the early spring was most unfavorable.

TEMPERATURE.

The mean temperature for the State was 1.4° below the normal. The following table gives the means and departures for each May from 1897 to 1912, inclusive:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	°F.	°F.		°F.	°F.
1897	66.9	+4.8	1905	59.6	—2.5
1898	61.3	—0.8	1906	59.8	—2.3
1899	59.9	—2.2	1907	61.5	—0.6
1900	64.0	+1.9	1908	58.0	—4.1
1901	62.0	—0.1	1909	60.4	—1.7
1902	60.8	—1.3	1910	65.5	+3.4
1903	63.5	+1.4	1911	58.3	—3.8
1904	64.9	+2.8	1912	60.7	—1.4

The highest temperature recorded was 108° at Healdsburg on the 31st. This was 4° higher than the highest recorded during May, 1911, but 13° lower than the temperature recorded at a number of stations in California during May, 1910. The lowest temperature was 8° at Tamarack on the 7th, or 3° lower than the lowest temperature during May, 1911, which occurred at the same place.

PRECIPITATION.

While the precipitation for the season has been much below the normal, the precipitation for the month of May was about 60 per cent greater than the normal. It was much greater than that of May, 1911, 1910, and 1909, and slightly greater than that of 1908.

The following table gives the average and departure from the normal for each May from 1897 to 1912, inclusive:

Year.	Mean.	Departure.	Year.	Mean.	Departure.
	Inches.	*Inches.*		*Inches.*	*Inches.*
1897	0.18	−1.04	1905	2.18	+0.96
1898	1.56	+0.34	1906	3.19	+1.97
1899	0.73	−0.49	1907	0.57	−0.65
1900	1.39	+0.17	1908	1.63	+0.41
1901	1.03	−0.19	1909	0.23	−0.99
1902	0.84	−0.38	1910	0.18	−1.04
1903	0.14	−1.08	1911	0.72	−0.50
1904	0.22	−1.00	1912	1.92	+0.70

The greatest monthly rainfall was 7.01 inches at Fordyce Dam, and there was no rainfall at five stations. The greatest 24-hour rainfall was 3.27 inches at Weitchpec, Humboldt County.

Snowfall.—May was a month of light snowfall. The outlook for water was only fair at the beginning of the month, but was somewhat improved by the rains and light snow. At Blue Canyon and other points in the Sierra below 5,000 feet elevation 4 to 6 inches of moist snow fell on May 22.

Summit.—The following table shows the depth of snow on the ground at Summit on given dates in May during the period 1907 to 1912:

	May 1.	May 15.	May 31.
	Inches.	*Inches.*	*Inches.*
1907	115	121	71
1908	20	42	16
1909	119	66	33
1910	13	12	3
1911	94	65	37
1912	36	13	6

SUNSHINE.

The following table gives the hours of sunshine and percentages of the possible:

Station.	Hours.	Percentage of possible.	Station.	Hours.	Percentage of possible.
Eureka	185	41	Sacramento	273	61
Fresno	374	85	San Diego	225	52
Los Angeles	289	67	San Francisco	310	70
Mount Tamalpais	275	62	San Jose	346	79
Red Bluff	320	72	San Luis Obispo	234	54

A peculiar feature of the sunshine during May, 1912, was the comparatively small amount at Mount Tamalpais. Usually during the month of May the sunshine exceeds 70 per cent of the possible. This May the sunshine was only 62 per cent, while at San Francisco, where the sunshine is usually below 60 per cent, this May reached 70 per cent. There was less sunshine in the valleys than usual.

NOTES ON THE RIVERS OF THE SACRAMENTO AND LOWER SAN JOAQUIN WATERSHEDS DURING MAY, 1912.

By N. R. Taylor, Local Forecaster.

Sacramento watershed.—While the rivers of this watershed were below the May normal generally they averaged from 1 foot to nearly 4 feet above that of April, and were higher than during any of the preceding 11 months, a condition that has probably never before occurred in the Sacramento Valley.

A slight swell, which was a continuation of the rise that was in progress during the last days in April, occurred in the Sacramento River during the first few days of May, and another rise occurred during the last decade of the month which culminated, at most points, in the highest stages of the month. At Sacramento city the highest stage, 16.7 feet, on the 30th and 31st, is the highest at this point for the season of 1911–12.

In the Feather-Yuba and American River watersheds there were no rises much in excess of 1 foot, and all streams averaged much below the usual stages for the month.

There was little departure from the usual May rainfall in the floor of the valley. The snowfall in the mountains was below that which usually falls, and the accumulated amounts of snow in the high Sierras dwindled rapidly during the last days of the month, but at no time were the effects of snow water noticeable in any of the main streams of the Sacramento drainage basin.

Lower San Joaquin watershed.—The rivers of this watershed, like those of the Sacramento, were much higher than during the preceeding month. They were, however, below the May normal, especially the San Joaquin itself, below the mouth of the Stanislaus. There was a general rise in progress during the last few days of the month, due to melting snows in the southern Sierras.

NOTES ON THE STREAMS OF THE UPPER SAN JOAQUIN WATERSHED.

By W. E. Bonnett, Local Forecaster.

With the coming of the warmer weather of May, the streams of this district rose considerably, but there was nowhere any approach to flood conditions. The average monthly stages in the Merced at Merced Falls and in the San Joaquin at Friant were very slightly higher than the average stages for May, 1908, which were the lowest for the six years' record for this month. In the Kings at Piedra and in the San Joaquin at Firebaugh, the average stages were even lower than those of May, 1908.

The month closed with some very warm days, and the highest stages at all points were reached on the 30th or 31st, but the fall that has taken place during the first week of June coincident with some very warm weather would indicate that the highest stages for this season have already been reached and that the summer decline has begun.

In the season of 1907–8, which was a dry one followed by very low summer water in the streams, the snowfall occurred mainly during the midwinter months, and probably was of such a character as to yield a better sustained flow than is to be hoped for this year. Furthermore, May, 1908, was a very cool month, and this had its effect in retarding the melting of mountain snows and making

TABLE 1.—*Climatological data for May, 1912. District No. 11, California.*

Stations.	Counties.	Elevation, feet.	Length of record, years.	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, 0.01 inch or more.	Number of clear days.	Number of partly cloudy days.	Number of cloudy days.		
Oregon.																				
Klamath Agency	Klamath	4,169	4	49.6	.....	74	11†	28	23	42	1.30	.....	0.80	0.5	3	17	13	1	w.	Edson C. Watson.
Klamath Falls	do	4,100	23	51.5	− 1.8	77	14†	28	2	37	1.45	+ 0.41	0.60	0	11	14	7	11	s.	W. H. Heileman.
Lakeview	Lake	4,825	29	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Ralph E. Koozer.
Merrill	Klamath	4,070	6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mrs. Agnes Ritchson.
Yonna	do	4,146	5	49.0	.....	76	13	24	2	44	2.07	.....	0.50	0	11	12	14	5	w.	Jacob Ruecke.
California.																				
Alameda	Alameda	19	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Chas. E. Sears.
Alturas	Modoc	4,460	8	51.1	.....	82	31	28	2†	49	1.07	.....	0.16	0	10	15	9	7	sw.	Prof. C. B. Towle.
Angiola	Tulare	208	12	60.2	− 4.9	92	29	30	3†	55	T.	− 0.30	T.	0	0	28	2	1	.....	Santa Fe Co.
Antioch **	Contra Costa	46	33	61.0	− 5.1	98	31	39	1	....	1.05	+ 0.55	0.77	0	3	22	0	9	.....	Southern Pacific Co.
Aptos **	Santa Cruz	102	27	61.0	+ 2.2	82	31	50	4	....	2.00	+ 1.00	0.70	0	8	15	6	10	nw.	Do.
Arrowhead Springs	San Bernardino	2,000	3	63.2	.....	98	29	42	3	36	0.47	.....	0.25	0	5	26	2	3	.....	Dr. E. A. Crokat.
Auburn	Placer	1,360	41	60.7	− 2.0	96	14	32	6	45	0.90	− 0.62	0.90	0	1	25	0	6	.....	Southern Pacific Co.
Avalon	Los Angeles	30	2	59.4	.....	70	26	50	2†	18	0.30	.....	0.19	0	4	28	0	3	w.	T. S. Manning.
Azusa	do	540	10	64.6	+ 2.1	97	31	40	3	45	0.16	.....	0.09	0	4	22	2	7	.....	A. P. Griffith.
Bagdad	San Bernardnio	784	9	82.8	.....	106	29†	59	9	30	1.75	.....	1.75	0	1	.....	.....	.....	.....	Santa Fe Co.
Bakersfield	Kern	404	23	71.8	+ 0.4.	95	31	54	22†	33	0.00	− 0.38	0.00	0	0	.....	.....	.....	.....	Do.
Barstow	San Bernardino	2,105	9	67.2	.....	98	28	42	3†	48	0.25	+ 0.21	0.25	0	1	30	0	1	w.	E. L. White.
Berkeley	Alameda	317	25	58.4	+ 0.9	87	31	43	2	33	1.56	+ 0.39	0.63	0	6	12	8	11	sw.	State University.
Biggs **	Butte	98	13	63.4	− 2.6	94	13†	48	2	....	1.27	+ 0.21	0.40	0	6	20	3	8	s.	Southern Pacific Co.
Bishop	Inyo	4,450	17	54.8	− 4.9	86	28†	25	22	49	0.51	+ 0.29	0.26	0	3	.....	.....	.....	.....	Paul E. Lodge.
Bishop Creek	do	8,500	2	44.6	.....	70	28	19	2	33	1.60	.....	0.60	16.0	5	23	0	8	.....	Do.
Blocksburg	Humboldt	1,700	6	56.2	.....	87	13	32	2	41	4.46	.....	1.45	0	9	18	3	10	nw.	Victor Hope.
Blue Canon	Placer	4,695	13	48.4	− 3.8	74	14	25	2	35	5.40	+ 1.84	1.60	13.0	9	23	0	8	.....	Southern Pacific Co.
Blythe	Riverside	268	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	C. L. Suits.
Branscomb	Mendocino	2,000	12	54.0	.....	89	13†	33	2†	41	6.00	+ 3.18	1.60	0	10	20	2	9	n.	A. J. Haun.
Brawley	Imperial	−105	3	75.0	.....	102	28	52	1†	42	0.45	.....	0.20	0	3	.....	.....	.....	.....	M. D. Witter.
Burney	Shasta	3,300	2	52.4	.....	83	13†	26	3	51	3.04	.....	1.50	0	11	16	3	12	sw.	Mrs. M. D Chambers.
Cahuilla	Riverside	3,600	1	54.8	.....	89	28†	25	3	47	1.13	.....	1.00	0	2	.....	.....	.....	.....	Carl Stevens.
Calexico	Imperial	0	7	75.1	.....	102	28†	52	5	41	0.53	.....	0.40	0	2	27	0	4	nw.	J. E. Peck.
Caliente **	Kern	1,290	36	69.2	− 0.8	104	29	52	5†	....	1.25	+ 0.65	0.88	0	2	20	1	10	.....	Southern Pacific Co.
Calistoga	Napa	363	40	54.8	− 6.7	100	30†	40	7†	....	2.10	+ 0.94	0.75	0	7	19	0	12	.....	Do.
Campbell	Santa Clara	217	15	58.0	+ 0.5	91	31	36	3	45	0.61	+ 0.05	0.29	0	4	19	7	5	nw.	F. M. Righter.
Camptonville (near)	Yuba	3,500	5	58.8	.....	90	13†	30	1†	42	5.68	.....	1.40	0	11	17	4	10	n.	Cal. Gas & Elect. Co.
Cedarville	Modoc	4,675	18	52.2	+ 0.2	78	29†	28	3	49	0.86	− 0.41	0.29	0	5	17	14	0	sw.	T. H. Johnstone.
Chico	Butte	189	42	64.3	− 4.1	98	13	38	3	52	1.80	+ 0.86	0.50	0	5	22	0	9	s.	G. H. Stephenson.
China Flat	Humboldt	600	3	61.2	.....	95	13	40	2†	54	2.55	.....	0.62	0	9	15	7	9	s.	O. I. Westerburg.
Chino **	San Bernardino	714	20	65.0	− 0.4	93	21	43	3†	....	T.	− 0.46	T.	0	0	26	0	5	.....	Southern Pacific Co.
Cisco **	Placer	5,939	41	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Claremont	Los Angeles	1,200	20	61.4	+ 0.2	96	31	40	5	46	0.09	− 0.76	0.06	0	3	20	7	4	w.	Prof. F. P. Brackett.
Cloverdale	Sonoma	340	10	58.4	− 3.3	96	31	40	2†	48	2.14	+ 0.75	0.82	0	10	.....	.....	.....	.....	John O. Ogle.
Coalinga	Fresno	.....	....	66.4	.....	98	14	38	2	43	0.31	.....	0.16	0	4	27	2	2	w.	Union Oil Co.
Colfax	Placer	2,421	41	55.8	− 5.4	87	13	30	2	39	5.91	+ 3.53	1.60	0	9	21	0	10	n.	Southern Pacific Co.
Colusa	Colusa	60	9	65.4	.....	94	31	45	1†	37	0.93	+ 0.28	0.54	0	3	20	7	4	.....	C. D. McComish.
Corning **	Tehama	277	26	73.1	+ 4.9	95	31	55	20	....	1.31	+ 0.36	0.38	0	5	20	7	4	s.	Southern Pacific Co.
Cuyamaca	San Diego	4,677	13	53.2	+ 3.1	78	29	35	5†	28	1.69	− 0.50	0.82	0	4	10	12	9	e.	C. Macquarie.
Davisville	Yolo	51	40	63.7	− 4.2	97	31	36	2†	49	1.12	+ 0.40	0.77	0	4	22	8	1	sw.	S. H. Brackett.
Deer Creek	Nevada	3,700	5	51.4	.....	80	31	26	2	38	6.13	.....	2.03	1.0	10	19	2	10	w.	Cal. Gas & Elect. Co.
Del Monte	Monterey	25	1	62.5	.....	75	31	46	3	22	0.43	.....	0.30	0	4	19	4	8	w.	H. R. Warner.
Delta	Shasta	1,138	27	65.0	+ 0.7	91	31	34	22	41	5.84	.....	2.00	0	8	23	0	8	n.	Southern Pacific Co.
Denair	Stanislaus	126	12	60.1	− 4.2	93	13	31	2	48	0.42	− 0.17	0.22	0	2	15	6	10	.....	Santa Fe Co.
De Sabia	Butte	2,500	8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Cal. Gas & Elect. Co.
Dobbins (near)	Yuba	1,650	8	63.2	.....	94	12	38	2	40	3.62	.....	1.08	0	9	19	3	9	s.	Do.
Downieville	Sierra	3,150	1	54.8	.....	90	31	31	2	50	5.72	.....	1.72	T.	10	14	7	10	s.	J. T. Mason.
Dudley	Kings	595	....	68.8	.....	102	13†	34	23	48	0.42	.....	0.17	0	5	13	9	9	nw.	Union Oil Co.
Dudleys	Mariposa	3,000	3	55.0	.....	84	31	29	2	38	2.03	.....	0.48	0	9	13	6	12	nw.	W. H. Dudley.
Dunlap (near)	Fresno	2,800	....	58.3	.....	88	31	32	2	38	1.30	.....	0.45	0	5	17	8	6	.....	U. S. Forest Service.
Dunnigan **	Yolo	65	35	73.1	+ 2.8	95	31	55	22	....	1.03	+ 0.06	0.57	0	3	22	4	5	n.	Southern Pacific Co.
Dunsmuir **	Siskiyou	2,285	25	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Do.
Durham	Butte	160	17	63.7	− 0.1	92	13	40	2	44	1.68	+ 0.55	0.58	0	5	19	2	10	s.	R. W. Durham.
El Cajon	San Diego	482	13	62.5	− 0.2	90	14†	39	4	41	1.29	+ 0.85	0.62	0	5	24	0	7	w.	H. H. Kessler.
Electra	Amador	725	8	63.8	.....	92	31	40	2	38	2.81	.....	0.83	0	7	23	5	3	.....	Cal. Gas & Elect. Co.
Elsinore	Riverside	1,234	17	64.4	− 0.2	103	31	33	3	56	0.13	− 0.23	0.06	0	3	20	5	6	w.	A. F. Schult.
Emigrant Gap	Placer	5,230	38	50.4	+ 0.2	78	31	28	1	33	2.20	− 0.42	1.20	22.0	4	21	2	8	.....	Southern Pacific Co.
Escondido	San Diego	657	18	63.4	+ 0.4	88	15†	39	3†	40	1.58	+ 0.94	0.78	0	5	5	22	4	w.	A. R. Moon.
Eureka	Humboldt	64	26	52.1	0.0	63	25	43	3	15	1.98	− 0.85	0.53	0	11	10	12	9	n.	U. S. Weather Bureau.
Farmington **	San Joaquin	111	33	74.6	+ 8.5	100	29†	54	18	....	0.26	− 0.57	0.13	0	3	27	3	1	nw.	Southern Pacific Co.
Folsom	Sacramento	252	40	63.7	− 2.8	97	31	39	2	44	1.47	+ 0.28	0.44	0	7	19	5	7	s.	F. O. Hutton.
Fordyce Dam	Nevada	6,500	17	48.6	.....	73	28	31	2	34	7.01	+ 2.80	2.00	33.0	10	9	14	8	sw.	E. E. Roening.
Fort Bidwell	Modoc	4,735	23	48.2	− 6.8	80	28	20	1†	45	1.00	− 0.43	0.40	2.0	4	12	12	7	.....	E. O. Franklin.
Fouts Springs	Colusa	1,650	8	57.6	.....	89	31	27	1	41	1.95	.....	0.98	0	8	.....	.....	.....	.....	A. J. Burgi.
Fresno	Fresno	293	25	67.4	− 1.0	98	31	40	2	38	0.41	+ 0.05	0.21.	0	5	12	17	2	nw.	U. S. Weather Bureau.
Galt **	Sacramento	49	34	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Southern Pacific Co.
Georgetown	Eldorado	2,650	39	58.0	− 4.4	86	31	32	2	43	4.37	+ 1.57	0.97	0	10	20	0	11	.....	H. D. Jerrett.
Gilroy **	Santa Clara	193	38	62.2	− 0.3	95	30†	45	3	....	0.84	+ 0.08	0.30	0	6	21	0	10	n.	Southern Pacific Co.
Gilta	Siskiyou	3,300	2	56.8	.....	99	31	30	2	50	4.62	.....	1.88	0	10	19	0	12	s.	A. Dannenbrink.
Glennville	Kern	3,300	2	57.6	.....	87	31	34	3	38	0.95	.....	0.43	0	5	14	16	1	w.	C. H. Likely.
Gold Run	Placer	3,222	13	57.0	− 1.2	83	13†	31	2	33	5.80	+ 3.44	1.13	0	10	21	3	7	.....	Southern Pacific Co.
Gonzales **	Monterey	127	13	65.0	+ 8.2	97	31	49	5	....	0.94	+ 0.52	0.60	0	3	27	0	4	n.	Do.
Grass Valley	Nevada	2,690	40	56.6	.....	84	12†	30	2	37	3.54	+ 1.22	1.12	0	9	18	4	9	sw.	F. R. Hull.
Greenland Ranch	Inyo	−178	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	J. W. Corkhill.
Greenville	Plumas	3,600	18	52.2	− 0.7	84	31	27	3	49	2.74	+ 0.76	0.87	0	9	14	6	11	sw.	C. H. Higbie.
Groveland	Tuolumne	2,828	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	H. S. Richardson.
Guinda **	Yolo	350	14	61.5	− 4.6	92	31	40	17†	....	0.99	+ 0.36	0.55	0	4	10	12	9	sw.	Southern Pacific Co.
Hanford	Kings	249	12	65.5	− 1.4	93	31	44	3†	38	0.27	− 0.42	0.12	0	3	25	6	0	.....	Santa Fe Co.
Healdsburg	Sonoma	110	19	65.8	− 5.9	108	31	42	16	58	2.59	+ 0.81	0.77	0	7	14	0	17	s.	F. J. Kinley.
Hearst	do	1,800	2	54.8	.....	88	13	34	5	48	4.00	.....	1.50	0	9	20	1	10	w.	H. D. Ellmaker.
Heber	Imperial	−20	6	73.2	.....	103	28†	45	1	50	0.34	.....	0.27	0	2	17	13	1	w.	C. J. Booth.
Hetch Hetchy	Tuolumne	3,665	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	E. W. Brown.
Hollister	San Benito	284	38	58.8	− 3.5	96	31	39	5	48	0.87	+ 0.33	0.32	0	6	19	9	3	w.	J. N. Thompson.
Hornbrook **	Siskiyou	2,154	24	50.8	− 8.7	81	9	37	20	....	3.00	+ 2.09	0.20	0	23	5	20	6	n.	Southern Pacific Co.
Hot Springs	Tulare	3,300	5	58.2	.....	87	31	35	2†	36	0.54	.....	0.21	0	5	21	6	4	.....	U. S. Forest Service.
Hullville	Lake	2,250	5	55.8	.....	88	31	30	2	49	4.14	.....	1.45	0	12	2	20	9	sw.	T. H. Betterton.
Idyllwild	Riverside	5,250	11	50.8	− 0.3	84	29	26	3	44	1.56	+ 0.16	0.43	0	6	21	7	3	sw.	Earl Powers.
Independence	Inyo	3,907	16	61.0	− 3.5	92	29	37	2	37	0.85	+ 0.56	0.32	0	4	22	8	1	n.	U. S. Weather Bureau.

TABLE 1.—*Climatological data for May, 1912. District No. 11*—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.		
California—Continued.																				
Indio	Riverside	−20	34	77.5	− 2.6	106	28	53	3	42	0.53	+ 0.51	0.39	0	2	23	8	0	nw.	F. N. Johnson.
Inskip	Butte	4,975	5	51.2	.....	82	31	26	2	30	6.71	.....	1.74	7.0	7	6	12	13	.....	Cal. Gas & Elect. Co.
Ione **	Amador	287	34	69.2	+ 4.2	96	13†	46	2	....	1.14	− 0.05	0.34	0	6	19	2	10	nw.	Southern Pacific Co.
Jamestown	Tuolumne	1,471	9	58.6	.....	92	31	35	2†	49	2.85	.....	1.30	0	8	17	0	14	.....	Sierra Railway Co.
Kennett	Shasta	730	....	64.8	.....	97	31	35	2	45	4.57	.....	1.03	0	9	20	7	4	sw.	O. J. Egleston.
Kentfield	Marin	65	24	60.0	.....	95	31	41	16	46	3.04	+ 0.76	1.03	0	6	20	3	8	.....	Miss M. E. Parsons.
King City	Monterey	333	25	68.8	+ 8.9	104	31	33	6	44	0.60	+ 0.24	0.21	0	5	23	0	8	n.	Southern Pacific Co.
Lake Eleanor	Tuolumne	4,700	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	O. J. Todd.
La Porte	Plumas	5,000	18	48.0	− 0.4	76	31	27	2	33	7.00	+ 2.68	1.99	22.0	11	13	11	7	n.	Chas. W. Hendel.
Le Grand	Merced	255	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Santa Fe Co.
Lemon Cove	Tulare	600	17	69.2	+ 1.4	99	29	45	1†	42	1.17	0.00	0.67	0	3	18	7	6	w.	G. W. Sandidge.
Lick Observatory	Santa Clara	4,209	23	51.6	+ 0.4	77	13	30	2	21	1.31	− 0.30	0.33	0	8	18	4	9	n.	The Director.
Livermore	Alameda	485	41	61.6	+ 0.2	98	31	34	2	47	0.94	+ 0.34	0.60	0	5	17	9	5	w.	E. G. Still.
Lodi	San Joaquin	45	30	64.1	+ 0.7	94	13	41	2	41	1.28	+ 0.11	1.03	0	5	20	6	5	w.	Ezra Fiske.
Lone Pine	Inyo	2,728	7	60.5	.....	94	29†	32	7†	55	1.14	.....	0.44	0	3	21	10	0	s.	G. F. Marsh.
Long Valley	Lassen	4,400	3	54.2	.....	84	28	32	2	43	0.68	.....	0.38	1.0	8	8	11	12	sw.	A. G. Evans.
Los Angeles	Los Angeles	293	35	62.9	+ 2.4	86	15	50	5	27	0.12	− 0.31	0.10	0	2	12	13	6	sw.	U. S. Weather Bureau.
Los Banos **	Merced	121	25	68.6	+ 0.3	93	18	54	2†	....	0.00	− 0.48	0.00	0	0	20	0	11	w.	Southern Pacific Co.
Los Gatos	Santa Clara	600	25	60.4	+ 0.7	93	31	40	2	43	1.61	+ 0.54	1.07	0	6	19	5	7	n.	F. H. McCullagh.
McCloud	Siskiyou	3,410	2	52.6	.....	82	31	23	3	46	4.96	.....	1.31	T.	10	18	9	4	s.	F. F. Spencer.
Macdoel	.....do	4,258	5	47.4	.....	79	31	23	3	46	0.74	.....	0.24	0	7	12	12	7	nw.	Butte Valley Land Co.
Madeline	Lassen	5,270	3	32.2	.....	78	31	23	27	45	1.87	.....	0.33	3.0	13	11	8	12	nw.	J. H. Williams.
Magalia	Butte	2,321	8	58.7	.....	90	12	31	1	42	5.67	.....	1.64	0	9	21	2	8	se.	Butte Co. R. R. Co.
Mammoth Tank	Imperial	257	34	76.0	− 7.6	105	31	52	4	42	1.10	+ 1.08	0.90	0	2	26	3	2	w.	Southern Pacific Co.
Maricopa	Kern	640	1	69.4	.....	100	13	47	2	40	0.65	.....	0.25	0	4	20	3	8	n.	Union Oil Co.
Marysville	Yuba	67	41	65.0	− 3.8	98	31	42	3	45	1.15	+ 0.28	0.62	0	4	20	0	11	s.	Southern Pacific Co.
Mecca	Riverside	−185	6	75.2	.....	106	31	51	5	43	0.15	.....	0.15	0	1	22	9	0	nw.	E. A. Palmer.
Menlo Park **	San Mateo	64	34	62.9	+ 0.8	92	31	45	2	....	0.92	+ 0.34	0.26	0	5	21	5	5	se.	Southern Pacific Co.
Merced	Merced	173	38	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Santa Fe Co.
Middlewater	Kern	.....	1	69.1	.....	99	30	42	3	37	0.75	.....	0.32	0	5	21	3	7	n.	Union Oil Co.
Mill Creek No. 1	Amador	.....	5	55.5	.....	82	12†	32	5	39	4.65	.....	1.12	0	11	17	5	9	n.	Cal. Gas & Elect. Co.
Milton (near)	Calaveras	660	21	65.0	+ 1.3	93	13	39	1	35	1.34	+ 0.11	0.75	0	3	18	7	5	nw.	J. H. Southwick.
Modesto **	Stanislaus	90	40	74.8	+ 5.4	93	13†	55	2	....	0.25	− 0.26	0.25	0	1	.....	.....	.....	.....	Southern Pacific Co.
Mojave	Kern	2,751	35	63.2	− 4.8	82	31	46	8	16	0.50	+ 0.47	0.50	0	1	27	1	3	.....	Do.
Mokelumne Hill	Calaveras	1,550	19	61.4	+ 2.6	92	31	31	22	35	2.40	+ 0.83	1.14	0	5	14	10	7	.....	C. E. Prindle.
Mono Ranch	Ventura	3,210	6	56.2	.....	88	28	33	22	39	1.85	.....	1.16	0	3	22	5	4	n.	Herbert Lathrop.
Montague	Siskiyou	2,450	24	54.8	− 5.6	85	13†	29	2†	48	2.45	+ 1.62	0.77	2.0	10	8	17	6	n.	I. E. Deboy.
Monterey **	Monterey	15	47	61.5	+ 3.2	74	31	54	1†	....	0.84	+ 0.34	0.25	0	5	25	6	0	se.	Southern Pacific Co.
Monterio	Kern	4,500	13	54.6	− 3.7	78	31	32	2	24	0.80	− 0.66	0.50	0	4	12	18	1	nw.	John C. Knecht.
Mount Tamalpais	Marin	2,375	13	54.2	+ 0.5	82	31	35	21	26	1.88	+ 0.96	0.58	0	8	15	6	10	nw.	U. S. Weather Bureau.
Napa City	Napa	20	35	58.7	− 0.7	96	31	36	2	49	1.95	+ 0.94	0.77	0	6	16	15	0	s.	Alex. Hull.
Napa (S. H.)	.....do	60	34	60.6	− 0.2	95	31	39	2	42	2.12	+ 1.11	0.68	0	8	20	5	6	sw.	W. H. Martin.
Needles	San Bernardino	477	20	78.4	− 1.2	105	29	56	4	39	0.00	− 0.06	0.00	0	0	30	0	1	.....	Santa Fe Co.
Nellie	San Diego	5,350	3	54.2	.....	93	30	28	1†	33	1.95	.....	0.95	0	3	23	2	6	.....	T. O. Bailey.
Nevada City	Nevada	2,580	20	55.7	+ 0.1	88	12†	28	2†	47	3.38	+ 0.99	1.21	0	13	18	3	10	s.	S. W. Marsh.
Newhall **	Los Angeles	1,200	35	64.3	+ 0.2	99	31	46	2	....	0.85	+ 0.31	0.36	0	4	22	3	6	se.	Southern Pacific Co.
Newman	Stanislaus	91	23	74.9	+ 5.8	96	17†	52	7	25	0.98	+ 0.41	0.73	0	3	26	0	5	n.	E. S. Wangenheim.
North Bloomfield	Nevada	3,214	15	61.1	+ 5.8	85	30†	41	2	30	3.83	+ 1.28	1.67	0	5	16	6	9	s.	J. R. McIntosh.
North Fork	Madera	3,000	8	57.7	.....	90	31	30	2	50	1.25	.....	0.45	0	7	12	18	1	se.	U. S. Forest Service.
Oakdale **	Stanislaus	156	18	67.1	+ 3.6	97	13	45	2	....	0.48	− 0.30	0.21	0	6	19	8	4	nw.	Southern Pacific Co.
Oak Grove	San Diego	2,751	2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	B. L. Johnson.
Oakland	Alameda	36	36	60.7	+ 2.6	89	31	44	2	34	1.33	+ 0.48	0.67	0	6	14	10	7	w.	Chabot Observatory.
Oceanside	San Diego	60	2	63.6	.....	74	28	48	4	22	0.74	.....	0.50	0	3	11	12	8	w.	H. D. Brodie.
Ojai Valley	Ventura	900	6	60.9	.....	93	28	37	2†	45	1.12	.....	0.64	0	4	20	6	5	sw.	W. H. Duncan.
Orland	Glenn	254	30	67.5	− 2.9	98	31	41	1	39	0.76	− 0.17	0.33	0	7	21	7	3	se.	U. S. Reclamation Service.
Orleans	Humboldt	520	9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	F. T. Hale.
Oroville (near)	Butte	250	28	65.5	− 0.6	99	31	42	3	44	2.20	+ 0.74	0.65	0	7	19	2	10	s.	E. D. Fairchild.
Palermo	.....do	213	21	71.4	+ 6.4	103	16	42	2	51	2.70	+ 1.40	2.00	0	2	18	13	0	s.	Western Pacific Co.
Palm Springs **	Riverside	584	23	73.5	− 4.5	106	29	56	3	....	1.00	+ 0.97	0.55	0	2	23	4	4	w.	Southern Pacific Co.
Pasadena	Los Angeles	827	22	62.2	− 1.4	93	31	42	5†	41	0.22	− 0.21	0.08	0	5	27	2	2	sw.	E. D. Sorver.
Paso Robles	San Luis Obispo	800	25	60.6	− 1.8	96	29	30	22	51	0.91	+ 0.33	0.41	0	3	24	4	3	nw.	Dr. F. W. Sawyer.
Peachland	Sonoma	190	16	58.0	− 1.3	93	31	36	2	43	3.05	+ 1.43	1.30	0	8	17	8	6	sw.	E. H. Parnell.
Placerville	El Dorado	1,875	23	58.8	+ 0.8	88	30	34	2	42	2.80	+ 0.61	0.55	0	8	.....	.....	.....	.....	A. Baring-Gould.
Point Lobos	San Francisco	250	19	55.5	+ 0.4	83	31	46	11†	29	1.57	+ 0.83	0.68	0	7	7	11	13	sw.	John Hyslop.
Point Reyes	Marin	490	20	52.4	+ 0.6	76	31	45	12	27	1.62	+ 0.52	0.82	0	7	10	6	15	nw.	U. S. Weather Bureau.
Porterville	Tulare	464	23	72.2	+ 1.9	101	30	40	4†	53	0.14	− 0.57	0.08	0	3	22	9	0	.....	Leslie McAuliff.
Quincy	Plumas	3,400	17	52.8	− 1.0	84	31	26	1	48	4.05	+ 1.79	1.70	0	9	19	4	8	w.	U. S. Forest Service.
Red Bluff	Tehama	307	35	65.8	− 0.7	93	31	44	2	35	1.58	+ 0.25	0.46	0	9	18	5	8	se.	U. S. Weather Bureau.
Redding	Shasta	552	37	67.1	− 0.1	97	31	39	2	36	2.85	+ 0.61	0.74	0	10	23	5	3	n.	W. W. Jones.
Redlands	San Bernardino	1,352	19	63.2	− 1.2	98	28†	41	4†	46	1.73	+ 1.02	1.62	0	3	14	12	5	w.	P. W. Moore.
Reedley	Fresno	347	12	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Santa Fe Co.
Rialto (near)	San Bernardino	2,250	6	62.4	.....	94	28	40	2	30	0.77	.....	0.35	0	6	15	8	8	sw.	Southern Cal. Edison Co.
Riverside	Riverside	851	30	64.0	− 1.2	102	31	39	4	52	0.38	+ 0.03	0.27	0	3	15	10	6	sw.	J. N. D. Cox.
Rocklin	Placer	249	41	63.4	− 4.4	96	13†	35	1†	49	1.72	+ 0.75	0.60	0	5	22	0	9	s.	Southern Pacific Co.
Rohnerville	Humboldt	75	9	54.1	.....	71	25	39	11	25	2.84	.....	0.95	0	9	18	3	10	w.	Dr. R. Callahan.
Sacramento	Sacramento	71	35	63.6	+ 0.7	95	31	45	2	40	0.94	− 0.02	0.61	0	5	16	10	5	s.	U. S. Weather Bureau.
St. Helena	Napa	255	4	61.5	.....	98	31	37	2	47	1.63	.....	0.68	0	7	23	0	8	.....	E. E. Hooper.
Salinas	Monterey	40	38	59.8	− 0.2	90	30	38	3	37	0.70	+ 0.19	0.20	0	7	23	5	3	.....	Miss E. Ruth Abbott.
San Bernardino	San Bernardino	1,054	20	64.2	+ 0.5	102	28	39	4†	52	0.52	− 0.08	0.25	0	4	16	10	5	sw.	Dr. A. K. Johnson.
San Diego	San Diego	93	41	60.6	− 0.2	72	15	49	4	17	0.17	− 0.20	0.06	0	5	13	9	9	nw.	U. S. Weather Bureau.
San Francisco	San Francisco	207	41	57.2	+ 1.7	87	31	46	12	30	1.47	+ 0.72	0.74	0	8	16	9	6	w.	Do.
San Jacinto	Riverside	1,550	19	64.2	+ 0.6	100	28	36	3	48	1.18	+ 0.71	0.53	0	4	12	6	13	.....	E. T. Tanner.
San Jose	Santa Clara	95	37	60.0	− 0.7	92	31	39	3	41	0.70	+ 0.13	0.35	0	8	20	8	3	nw.	U. S. Weather Bureau.
San Luis Obispo	San Luis Obispo	201	17	58.3	+ 1.6	94	28	40	4	36	2.08	+ 1.76	1.12	0	4	12	6	13	nw.	Do.
San Mateo **	San Mateo	22	38	65.1	+ 4.3	90	31	54	2	....	1.46	+ 0.88	0.82	0	5	25	6	0	nw.	Southern Pacific Co.
San Miguel **	San Luis Obispo	616	25	67.1	+ 3.0	93	31	45	1†	....	2.89	+ 2.48	2.30	0	4	16	3	12	.....	Do.
San Miguel Island	Santa Barbara	500	18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Capt. W. G. Waters.
Sanger **	Fresno	371	23	73.3	+ 1.9	96	13†	48	1	....	1.17	+ 0.64	1.17	0	2	29	0	2	.....	Southern Pacific Co.
Santa Barbara	Santa Barbara	130	28	59.2	− 0.1	80	28	44	1	30	1.58	+ 1.15	1.32	0	3	16	12	3	se.	G. W. Russell.
Santa Clara	Santa Clara	90	23	60.4	+ 2.0	95	31	37	3†	48	0.78	+ 0.15	0.38	0	7	21	1	9	nw.	Santa Clara College.
Santa Cruz	Santa Cruz	20	39	58.2	− 1.6	94	31	36	2	46	1.86	+ 0.83	0.75	0	7	25	1	5	w.	W. R. Springer.
Santa Margarita **	San Luis Obispo	996	23	65.0	+ 4.0	94	30†	35	25	....	1.92	+ 0.73	0.70	0	6	5	9	17	sw.	Southern Pacific Co.
Santa María	Santa Barbara	220	24	61.4	+ 1.9	84	30	37	9	38	1.60	+ 1.09	0.72	0	4	24	0	7	w.	Edwin Morris.
Santa Monica	Los Angeles	110	27	57.5	− 4.6	74	15	44	3	25	0.23	− 0.11	0.23	0	1	19	8	4	w.	N. D. Ingham.
Santa Rosa	Sonoma	181	23	58.5	− 1.7	95	31	34	2	39	2.88	+ 1.36	0.91	0	9	19	3	9	s.	Southern Pacific Co
Selma **	Fresno	311	26	75.5	+ 5.3	98	31	55	25	....	0.73	+ 0.29	0.55	0	3	28	0	3	.....	Do.

TABLE 1.—*Climatological data for May, 1912. District No. 11*—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.		
California—Continued.																				
Seven Oaks	San Bernardino	5,000	2	51.4	.....	84	28	25	20	43	0.47	.....	0.28	0	2	19	0	12	w.	M. Lewis.
Shasta	Shasta	1,048	16	59.8	− 5.7	97	10	33	20	54	5.52	+ 2.79	1.14	0	9	22	3	6	nw.	Dr. T. J. Edgecomb.
Sierra Madre	Los Angeles	1,400	15	63.2	+ 2.1	92	31	47	1†	38	1.22	+ 0.02	0.81	0	6	16	6	9	s.	Mrs. A. E. Gregory.
Sierraville	Sierra	5,000	2	48.6	.....	80	11†	22	4	52	1.54	.....	0.60	2.0	3	15	5	11	sw.	C. D. Johnson.
Sisson	Siskiyou	3,555	23	51.2	− 3.4	78	13†	32	1†	36	2.20	− 0.04	0.65	2.0	8	18	0	13	n.	Southern Pacific Co.
Soledad **	Monterey	188	38	67.8	+ 5.5	95	31	57	8†	....	0.70	+ 0.41	0.40	0	5	14	0	17	s.	Do.
Sonora	Tuolumne	1,825	24	61.2	.....	90	17	39	22	39	2.24	+ 0.26	0.97	0	6	18	9	4	nw.	Chas. F. Jones.
Southeast Farallon	San Francisco	30	9	.....	.....	....	....	....	....	....	.....	.....	.....	.....	....	....	....	....	.....	U. S. Weather Bureau.
Springville	Tulare	4,000	5	54.4	.....	85	31	31	2†	43	0.04	.....	0.04	0	1	17	0	14	.....	D. L. Wishon.
Squirrel Inn	San Bernardino	5,280	2	51.3	.....	78	28†	28	2	25	1.11	.....	0.42	0	7	18	5	8	s.	A. D. Frantz.
Stanwood	Butte	2,140	8	57.6	.....	78	9†	32	3	36	4.71	.....	1.50	0	4	23	0	8	.....	Cal. Gas & Elect. Co.
Stirling City	do	3,525	8	55.3	.....	90	31	30	2	49	4.80	.....	1.40	0	9	13	5	13	se.	Butte Co. R. R. Co.
Stockton (S. H.)	San Joaquin	23	41	64.0	− 0.1	95	31	40	2	40	1.32	+ 0.65	0.93	0	4	20	8	3	nw.	State Hospital.
Storey	Madera	296	12	63.6	− 0.8	93	13†	38	4	44	0.40	− 0.12	0.21	0	3	29	0	2	.....	Santa Fe Co.
Suisun **	Solano	20	32	64.3	+ 0.5	100	31	49	2	....	1.46	+ 0.63	0.75	0	7	23	1	7	sw.	Southern Pacific Co.
Sulphur Banks	Lake	1,350	....	60.6	.....	91	13†	38	2†	45	1.14	.....	0.41	0	9	20	7	4	w.	Geo. D. Ruddock.
Summerdale	Mariposa	5,270	16	51.4	+ 1.5	76	31	29	21	29	2.46	+ 0.15	0.88	0	8	12	8	11	s.	Mrs. J. E. Lowry.
Summit	Placer	7,017	39	41.6	− 1.0	65	18	26	1†	35	1.88	− 0.25	0.90	18.0	4	20	0	11	sw.	Southern Pacific Co.
Susanville	Lassen	4,175	23	52.2	− 2.6	89	8	30	1	55	0.95	− 0.43	0.30	0	8	16	11	4	sw.	James Branham.
Tamarack	Alpine	8,000	6	34.2	.....	62	31	8	7	38	3.26	.....	0.80	35.0	8	12	12	7	nw.	Cal. Gas & Elect. Co.
Tehachapi **	Kern	3,964	35	.....	.....	....	....	....	....	....	.....	.....	.....	.....	....	....	....	....	.....	Southern Pacific Co.
Tehama	Tehama	220	41	63.0	− 5.9	100	31	40	2	....	0.85	− 0.05	0.41	0	3	21	0	10	n.	Do.
Tejon Rancho	Kern	1,500	10	59.1	.....	82	12†	39	1	42	0.75	.....	0.36	0	3	....	....	....	.....	S. E. Bailey.
Three Rivers	Tulare	870	2	65.2	.....	97	31	38	3	43	0.88	.....	0.55	0	6	13	15	3	sw.	E. D. Barton.
Towle	Placer	3,704	26	54.0	− 2.0	82	31	29	2	34	5.63	+ 2.72	1.12	0	10	17	4	10	sw.	Southern Pacific Co.
Tracy **	San Joaquin	64	32	70.1	+ 1.0	91	12†	58	25	....	0.59	− 0.01	0.29	0	4	18	8	5	nw.	Do.
Ukiah	Mendocino	620	19	60.8	+ 1.6	95	31	34	2	50	1.78	+ 0.52	0.80	0	8	14	12	5	nw.	Dr. Geo. McCowen.
Upper Lake	Lake	1,350	27	59.0	− 0.5	94	31	30	2	49	1.91	+ 0.78	0.48	0	9	19	3	9	nw.	C. M. Hammond.
Vacaville	Solano	175	24	64.0	− 0.2	100	31	40	1	53	1.43	+ 0.10	0.65	0	7	18	11	2	sw.	G. O. Coburn.
Valley Springs **	Calaveras	673	23	67.2	+ 1.0	95	31	50	3	....	1.25	− 0.10	0.36	0	6	17	7	7	nw.	Southern Pacific Co.
Visalia	Tulare	334	24	60.4	− 5.7	97	19	29	4	60	0.00	− 0.58	0.00	0	0	31	0	0	.....	Santa Fe Co.
Warner Springs	San Diego	3,165	4	58.7	.....	89	28	33	2	40	1.09	.....	0.54	0	3	23	5	3	.....	Mrs. F. S. Sandford.
Wasco	Kern	336	12	66.8	+ 0.3	105	31	37	2	53	0.05	− 0.25	0.05	0	1	27	2	2	.....	Santa Fe Co.
Watsonville	Santa Cruz	23	16	54.0	− 6.1	90	31	26	2	54	1.64	+ 0.77	0.53	0	6	10	18	3	w.	Spreckels Sugar Co.
Weaverville	Trinity	.....	....	56.2	.....	88	31	29	2	49	3.67	.....	1.12	0	9	17	4	10	w.	U. S. Forest Service.
Weitchpec	Humboldt	1,700	2	54.4	.....	85	12†	30	2	37	6.98	.....	3.27	0	11	20	2	9	s.	M. E. Lathrop.
Westley **	Stanislaus	90	23	73.0	+ 2.9	95	13	55	22	....	0.78	+ 0.19	0.30	0	4	24	0	7	n.	Southern Pacific Co.
Wheatland	Yuba	84	25	63.8	− 0.3	94	31	39	2	41	1.52	+ 0.24	0.95	0	8	14	10	7	n.	William Lumbard.
Willows	Glenn	136	33	67.0	− 1.5	98	13†	37	2	46	1.16	+ 0.44	0.32	0	6	19	3	9	n.	E. C. Mills.
Yosemite	Mariposa	3,945	8	54.8	.....	88	31	22	21	53	0.74	.....	0.30	0	7	11	3	17	s.	J. P. Kelley.

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 May, 1912. District No. 11, California.*

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	
Oregon.																																	
Klamath Agency	Klamath																				.50			.80									1.30
Klamath Falls	do	.60	.06			.08															.11	.01	.33	.08	.03		.08	.03		.04			1.45
Lakeview	Pitt																																
Long Valley	do	.46				.27														T.	.32	.32	.09	.04	T.	.22	.08	.07		.41			2.28
Merrill	Int. Drain																																
Yonna	do	.50			.30																.25	.30	.25	.15	.10	.05	.07	.05	.05				2.07
California.																																	
Aguanga	Coast							.33	.67	.05																							1.05
Alamada	do																																
Alturas	Sacramento	.15				.16				.14											.12	.12	.12	.05	.07	.03				.11			1.07
Angels Camp	San Joaquin						.51													.05	.45						1.51						2.52
Angiola	do																									T.							T.
Antelope Valley	do						.02	.10	.04																	.12	.07						0.35
Antioch	do	.20																			.08					.77							1.05
Aptos	Coast	.05						.11													.31	.10	.05	.12		.56	.70						2.00
Arrowhead Springs	do		.05				.10			.25	.06	.01																					0.47
Auburn	Sacramento																				.90												0.90
Avalon	Ocean						.02	.19	.01																	.08							0.30
Azusa	Coast						T.	.09	T.	.03																.03				.01			0.16
Bagdad	Desert								1.75																								1.75
Bakersfield	San Joaquin																																0.00
Barstow	Desert							.25																									0.25
Bear River	San Joaquin																																
Bear Valley (1)	Sacramento	1.60						T.	T.											.13	1.00	.90	.55	.30	T.	.80	.55			T.			5.83
Bear Valley (2)	San Joaquin							.26	.10	.18																							0.54
Bear Valley Dam	Coast							.72																									0.72
Beaumont	do							.20	.30	.16																							0.66
Beaumont (near)	do			.01				.12	.32	.35																							0.80
Belotta	San Joaquin	.13	.13					.05	.03												.12	.07		.09		.35	.30						1.27
Ben Lomond	Coast																																
Berkeley	do	.06																			.36	.23	.15			.63	.13						1.56
Biggs	Sacramento		.25																		.40	.17		.15		.20				.10			1.27
Bishop	Owens						.19	.06	.26																								0.51
Bishop Creek	do						.60	.30	.20												.10					.40							1.60
Blocksburg	Coast	1.45													T.						.45	.98	.46	.67	.14	.16	.14	.01		T.			4.46
Blue Canon	Sacramento	.85	.35																		.45	1.60	.47	.45	.01	.22	1.00						5.40
Blythe	Desert																																
Boulder Creek	Coast	.13																			.47	.10	.12			.75	1.20						2.77
Branscomb	do	1.60																		.32	1.45	.65	.47	.28	.29	.12	.76	.06					6.00
Brawley	Desert								.20	.15	.10																						0.45
Burney	Sacramento	1.50	.04							T.											.60	.10	.10	.22	.12	.12	.04	.10		.10			3.04
Butte Valley	do																																
Cahuilla	Coast										1.00		.13																				1.13
Calexico	Desert						.13	.40																									0.53
Caliente	San Joaquin					.37	.88																										1.25
Calistoga	Coast						.17														.75	.12	.06	.15		.40		.45					2.10
Campbell	do						.02													T.	.15	.15				.29							0.61
Campo	do							.75	.70	.07																							1.52
Camptonville (near)	Sacramento	1.38	.06			.13	.18	.01	T.												1.40	.37	.74			1.18	.14	.09					5.68
Cedarville	M't'n Lakes	.27				.06													T.	T.	.13	.11			T.	T.	T.			.29			0.86
Chester	Sacramento	.55				T.			T.											T.	.70	.50	1.05			.27	.10			.07			3.24
Chico	do	.22																		.15	.50		.47			.46							1.80
Chico (near)	do	.21																			.70	.17	.47			.59	T.			T.			2.14
China Flat	Coast																			.40	.62	.23	.25	.25	.58	.14	.03		.05				2.55
Chino	do																									T.							T.
Cisco	Sacramento																																
Claremont	Coast								.01	T.	.06																.02			T.			0.09
Cloverdale	do	.39					.02													.04	.42	.26	.04	.08	.01	.82	.06						2.14
Coalinga	San Joaquin							.07	.02	.16																.06							0.31
Colfax	Sacramento	.38	.40						.37												1.10	.80	.45			.26	.55				1.60		5.91
Colgate	do	.48	.31				.27		.01												.98	.09	.88	.18		.38	.09	.01					3.68
Colusa	do																			.54			T.		.29	.10							0.93
Corning	do	T.																		.38	.13	.36	.27	T.	.17	T.							1.31
Corona	Coast																																
Cuyamaca	do						.03	.82	.78										T.							.06							1.69
Davisville	Sacramento	.08							T.												.21		T.			.77	.06						1.12
Deer Creek	do	1.38				T.		.02	.17											T.	2.03	.82	.32	.02		.98	.37			.02			6.13
Del Monte	Coast																				.07	.03				.30	.03						0.43
Delta	Sacramento																			1.50	.20	.65	.56	.10	.43	2.00	.40						5.84
Denair	San Joaquin						.20																			.22							0.42
De Sabla	Sacramento																																
Descanso	Coast								.78	.26																							1.04
Devils Canon	do		.05					.28	.12	.13																							0.58
Dinuba	San Joaquin																																
Dobbins	Sacramento	.57	.15			.22														.02	1.08	.21	.88			.43	.06			T.			3.62
Downieville	do	1.28	.29			T.		T.	T.		T.									.05	1.72	.72	.34	.19		.70	.35			T.	.08		5.72
Dudley	San Joaquin						.17	.02	.07	.02																.14							0.45
Dudleys	do	.24					.19	.05	.24				.05							T.	.48	.01					.52	.25					2.03
Dunlap (near)	do						T.	.31	.45				.10								.24					.20							1.30
Dunnigan	Sacramento																				.36					.57	.10						1.03
Dunsmuir	do																																
Durham	do	.08				T.														.58		.06	.50	T.	T.	.46	T.		T.	T.			1.68
East Park	do																				.10		.07		.64	.26							1.07
Edgewood	do	.09																			.30	.35	.41		.07	.29	.15			.03			1.69
Edison	San Joaquin						.07	.28	.36	.01																							0.72
El Cajon	Coast						.04	.46	.62	.15			.02																				1.29
Electra	San Joaquin	.25	.11			T.	T.														.82	.02	.01			.83	.77						2.81
Elisinore	Coast						T.	.02	.06	.05																T.							0.13
Emigrant Gap	Sacramento	.20							T.											.40	.40	1.20											2.20
Escondido	Coast							.78	.21	.51		.02															.06						1.58
Eureka	do	.26													.04					.25	.44	.07	.09	.29	.08	.05	.15			.26			1.98
Fairmont	do						.15	.10	1.00																	.10							1.35
Farmington	San Joaquin	.13						.11													.02												0.26
Felton	Coast	.12																			.34	.21				.72	1.01						2.40
Firebaugh	San Joaquin	.04							.16													.05				.12							0.37
Folsom	Sacramento	.10	.10				T.		.01												.38	.06	T.			.38	.44						1.47
Fordyce Dam	do	2.00	.35			.06														.80	.80	.55	.62	.32	T.	.65	.86						7.01

TABLE 2.—*Daily precipitation for May, 1912. District No. 11*—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.
California—Contd.																																	
Fort Bidwell	M't'n Lakes.	.40																			.10	.10	T.			T.				.40			1.00
Fort Bragg	Coast	.21																			.90		.11	.02	.06	.04	.03	.04					1.41
Fort Ross	do																			.45	.74	.25		.04	T.	1.10	.27						2.85
Fouts Springs	Sacramento																			.06	.13	.03	.40	.06	.12	.98	.17						1.95
Fredalba	Coast						.09	.11	.60	.40			T.																				1.20
Fresno	San Joaquin.	.01	.02				T.	T.	.21												.01					.16							0.41
Friant	do								.09																	.34	.10						0.53
Galt	San Joaquin.																																
Georgetown	do	.46	.35						.34												.97	.44	.41	.14		.40	.85				.01		4.37
Gilroy	Coast							.10													.06	.10	.03		.25	.30							0.84
Gilta	do	1.88																			1.06	.14	.08	.30	.55	.16	.38	.01		.06			4.62
Glendora	do																																0.00
Glen Ranch	do								.30																								0.30
Glennville	San Joaquin.						.09	.17	.43	.10			.16													T.							0.95
Glenwood	Coast																				.45	.11	.07			.80	1.02						2.45
Gold Run	Sacramento.	.65	.25						.50												.72	1.13	1.00	.15		.30	.75				.35		5.80
Gonzales	Coast						.60	.28																	.06								0.94
Grass Valley	Sacramento.	.88	.12				.03		.15											.07	1.12	.23	.16	T.		.78							3.54
Greenland Ranch	Desert																																
Greenville	Sacramento.	.74	.04			T.			T.											T.	.87	.47	.24	.12	T.	.16	.06	T.		.04			2.74
Gridley	do	.10	.22																		.38	.07	.13	.02		.25					.03		1.20
Groveland	San Joaquin.																																
Guinda	Sacramento																			.27	.02					.55	.15						0.99
Hanford	San Joaquin.								.12	.08																.07							0.27
Head Dam	Sacramento.	.84	.24			.37														.03	1.37	.45	.61			.66	.22			.04			4.83
Healdsburg	Coast																				.62	.09	.17	.33	T.	.77	.55	.06					2.59
Hearst	do	1.50																			.10	.60	.50	.40	.20	.10	.40	.20					4.00
Heber	Desert							.07	.27										T.														0.38
Helen Mine	Coast	1.30					.11													.48	1.42	.04	.08	.09	.04	1.28	1.14						5.94
Hetch Hetchy	San Joaquin.																																
Holcomb	Coast							.11	T.	.40																							0.51
Hollister	do								.08												.06	.05	.14			.22	.32						0.87
Hornbrook	Klamath																																‡3.04
Hot Springs	San Joaquin.							.07	.21	.05											.16					.05							0.50
Hullville	Coast	1.45	.01						.33											.20	.81	.11	.22	.20	.16	.29	.33	.03					4.14
Idyllwild	do		.15	.29			.15	.32	.43	.22																							1.56
Independence	Owens					.05	.19	.29	.32																								0.85
Indio	Desert							T.	.39	.14																							0.53
Inskip	Sacramento.	1.32				T.		T.	T.											T.	1.74	.63	1.18	.25		1.13	.46						6.71
Ione	San Joaquin.	.15	.03																		.28	.09				.34	.25						1.14
Jacksonville	do	.06	.05					.20																		.21	.54						1.06
Jamestown	do	.15	.06				.40	.04													1.30	.10				.50	.30						2.85
Jenny Lind	do	.10	.05																.20							.36	.40						1.11
Jolon	Coast							.07	.14												.04					.47							0.72
Julian	do							.40	.35	1.20																							1.95
Kenneydy Mine	San Joaquin.																																‡1.89
Kennett	Sacramento.	.04																		.47	.93	.36	.80	.18	.03	.73	1.03						4.57
Kentfield	Coast																			.06	.70	.24	.63	T.	T.	1.03	.38						3.04
Kernville	San Joaquin.																																
King City	Coast						.19	.12													.02					.21	.06						0.60
Knights Landing	Sacramento.	.06	.02						T.												.38	.09	.04	T.		.39	.06						1.04
La Grange	do																				.22	.15				.32							0.69
La Jolla	Coast						T.	1.15	.68	.27																							2.10
Lake Eleanor	San Joaquin.																																
Lakeside	Coast																																
La Porte	do	1.57	T.			.04	T.	.01												.10	1.99	.70	.59	.33	T.	.92	.02	T.		.09			7.00
Lathrop	San Joaquin.	.07					T.	.03													.06	T.	.03	.02		.42	.18						0.81
Laurel	Coast	.20						.05													.50	.10	.05	.05		.85	.85	.15					2.80
Laytonville	do																																
Le Grand	San Joaquin.																																
Lemon Cove	do							.67	.39																	.11							1.17
Lick Observatory	Coast	.28					.05													.03	.33	.14	.19			.26	.03						1.31
Livermore	do	.14						T.												T.	.12	.07	.01			.60							0.94
Lodi	San Joaquin.	.09				T.		T.												.09	.05	.02				1.03							1.28
Lone Pine	Owens						.43	.44	.27																								1.14
Long Valley	M't'n Lakes.	.38	.07			.09				.01					T.					T.	.07	T.	.01	.04	T.	T.	T.			.01			0.68
Lordsburg	Coast																																0.00
Los Alamos	do						.10	.17	.17																	.68							1.12
Los Angeles	do						T.	.02	T.																	.10							0.12
Los Banos	San Joaquin.																																0.00
Los Gatos	Coast	.13					T.													.02	.33	.04	.02			1.07	T.						1.61
Los Molinos	Sacramento																																
Lowe Observatory	Coast	.07								.70			T.													.10							0.87
McCloud	Sacramento.	1.03							T.											.20	1.31	.08	.33	.27	.25	.44	.96			.09			4.96
McDoel	Klamath	.24				.16															.10	.15	.07	.04						.04			0.74
Madeline	M't'n Lakes.	.30	.10			.07			.06	T.										T.	.33	.20	.30	.15	.10	.11	.10	.03		T.	.02		1.87
Magalia	Sacramento.	.61																		1.64	.12	.91	.39	.56	.56	.66	.22						5.67
Mammoth Tank	Desert							.90	.20																								1.10
Maricopa	San Joaquin.					.11	.13	.16	.25																								0.65
Mariposa	do	.11						.07	.02												.52					.26	.17						1.15
Marysville	Sacramento.	.15																		.62		T.	.16		.22								1.15
Mecca	Desert						T.	T.	.15																								0.15
Melones	San Joaquin.	.06						.08	.02												.05	.54	.07			.26	.68						1.76
Menlo Park	Coast																			.26	.21	.03			.22	.20							0.92
Merced	San Joaquin.																																
Merced Falls	do							T.	T.												.38	.09	.04	T.		.39	.06						1.04
Mesa Grande	Coast							.83	1.11	.15	.04																						2.13
Middlewater	San Joaquin.					.05	.32	.26	.07																	.05							0.75
Mill Creek (1)	do	.59	.56					.20	.11											.03	1.12	.34	.11	.06		.49	1.04						4.65
Mill Creek (2)	Coast																																
Mills College	do	.27																			.47	.44	.26			.54	.08						2.06
Milo	San Joaquin.								.39														.25										0.64
Milton (near)	do	.25				T.	T.	T.	T.												.34		T.			.75							1.34
Modesto	do																									.25							0.25
Mojave	Desert								.50																								0.50
Mokelumne Hill	San Joaquin.	.28				T.	T.	T.	T.											.05	.67	T.	T.	T.	.26	1.14							2.40
Mono Ranch	Coast						.15	T.	.54																	1.16							1.85
Montague	Klamath	.50	.01			.02												T.			.56	.77	.18	.07	.07			T.		.20	.05		2.45
Monterey	Coast	.10					.12														.25					.24	.13						0.84
Monterio	San Joaquin.						.12	.13	.05	.50																							0.80
Montgomery Creek	Sacramento.	.52	.18																		.95	.50	.55	.75		.54	.01	.51					4.51
Mount Tamalpais	Coast	.01				T.														.06	.31	.34	.44		.04	.56	.12						1.88

TABLE 2.—*Daily precipitation for May, 1912. District No. 11*—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.
California—Contd.																																	
Mount St. Helena	Coast					.35														1.10		*	*	*	*	*	1.35						2.80
Napa City	do	.14																			.77	.12	.12			.70		.10					1.95
Napa (S. H.)	do	.16				.05															.68	.19	.17	.11		.46	.30						2.12
Needles	Desert																																0.00
Nellie	Coast							.95	.85	.15																							1.95
Nevada City	Sacramento	.68	.14			.02	.02		.03											T.	1.21	.34	.18	.01	T.	.63	.09	.01		.02	T.		3.38
Newhall	Coast						.10	.23	.16																	.36							0.85
Newman	San Joaquin							.24														.01				.23							0.98
North Bloomfie d	Sacramento	.81						.40											1.69	.75	.20												3.83
North Fork	San Joaquin	.18	.23	.07					.06	.02											.24					.45							1.25
North Lakeport	Coast	.11																		.05	.30	.10	.15		.04	.35							1.10
Oakdale	San Joaquin	.04						.04	T.											T.	.03	.05	T.			.21	.11						0.48
Oak Grove	Coast																																
Oakland	do	T.					T.			T.										T.	.31	.09	.18		T.	.67	.07	.01					1.33
Oakville	do	.05																			.52	.06	.13	.08		.38	.29						1.51
Oceanside	do						T.	.22	.50	.02			T.								T.												0.74
Ojai Valley	do						.05		.40		.03		T.							T.						.64							1.12
Orland	Sacramento	.05																		.33		.05	.03	T.	.11	.16	.03						0.76
Orleans	Klamath																																
Oroville	Sacramento					T.														.65	.47	.21	.31		.25	.17				.14			2.20
Ozeana	Coast					.16	.11		.50																								0.77
Palermo	Sacramento		T.															T.			.70									2.00			2.70
Palm Springs	Desert							.45	.55																								1.00
Parkfield	Coast							.11	.22																	.54	.07						0.94
Pasadena	do							.02	06		.03															.08					.03		0.22
Paso Robles	do							.41	.40																		.10						0.91
Peachland	do	.30								T.										.21	.55	.39	.09	T.	.01	1.30	.20						3.05
Phoenix Dam	San Joaquin	.28					.10	.17												.11	.95					.89							2.50
Pilot Creek	Sacramento	1.32				T.		.04												.17	1.57		.61	.18	T.	1.05	.16				.09		5.19
Pinchot	Coast						*	*	1.20																		.83						2.03
Pine Crest	do						.08		.22	.11											.08					.85	.66						2.00
Placerville	Sacramento	.47	.48					T.													.55	.35	.05	.03		.32	.55						2.80
Point Lobos	Coast	.15								T.										.01	.27	.06	.34	T.	T.	.68	.06						1.57
Point Loma	do	.01						T.	.07		.03		T.	.01	.01	.01	.01													.01			0.16
Point Reyes	do	T.																		.49	.12	.12	.02		.43	.41	.03						1.62
Porterville	San Joaquin																																‡0.14
Portulaca	do																																
Prattville	Sacramento					.01													.05			1.00		1.32		T.	.24			.05			2.77
Priest Valley	Coast							.43	.60	.12											.02					.40	.25						1.82
Quincy	Sacramento	1.00				.10															1.70	.30	.20	.30		.20	.15			.10			4.05
Red Bluff	do	.10																		.03	.41	.42	.25	.03	.03	.27	.04			T.			1.58
Redding	do	.10	.17																		.74	.45	.48	.11	.03	.54	.17	.06		T.			2.85
Redlands	Coast						T.	T	1.62	.09	.02								T.														1.73
Reedley	San Joaquin																																
Represa	Sacramento	.09																			.36	.10				.43	.68						1.66
Rialto (near)	Coast		.05				T.	.08	.20	T.									T.		.04	.05				.35							0.77
Rio Vista	Sacramento	.06																			.10	T.		.02		.50	.46						1.20
Riverside	Coast							.10	.27	.01																							0.38
Rocklin	Sacramento																			.60	.20	.02			.35	.55							1.72
Rohnerville	Coast	.95				T.									T.					.20	.44	.37	.39	T.	.07	.15	.10		.17				2.84
Sacramento	Sacramento	.04																		.01	.27		.01			.61							0.94
Saint Helena	Coast					T.														.68	.10	.05	.13		.33	.33	.01						1.63
Salinas	do	.04																			.20	.06	.10	.02		.20	.08						0.70
San Bernardino	do						.01	.25	.16	.10																							0.52
San Diego	do						T.	.04	T.	.04	.05															.03	.01						0.17
San Francisco	do	.01								T.										.01	.28	.05	.32		.03	.71	.06						1.47
San Jacinto	do								.53	.50	.05	.10																					1.18
San Jose	do	.01					.01	.01												.02	.15	.14	.01		T.	.35	T.						0.70
San Luis Obispo	do						.23	.19	.54																	1.12							2.08
San Mateo	do																				.30	.25	.04			.82	.05						1.46
San Miguel	do					T.	.21	2.30	.18												T.					.20							2.89
San Miguel Island	Ocean																																
Sanger	San Joaquin								1.10	.07																							1.17
Santa Ana River	Coast						.01	.01	.67	.08																							0.77
Santa Barbara	do						T.	T.	.22									.04									1.32						1.58
Santa Clara	do	.02						.02												.01	.18	.15	.02			.38	T.						0.78
Santa Cruz	do	.07					.07													.35	.10	.15	T.		.75	.37							1.86
Santa Margarita	do							.58	.22	.10											.04					.70	.28						1.92
Santa Maria	do						.52	.26	.10																	.72							1.60
Santa Monica	do										T.															.23							0.23
Santa Rosa	do	.16	.08				.05														.91	.30	.04	.06		.72		.56					2.88
Sausalito	do	.11																		.19	.25	.20				.11	.53						1.39
Selma	San Joaquin							.55	.10																.08								0.73
Seven Oaks	Coast							.28	.19																								0.47
Shasta	Sacramento	.10																		.61	.76	1.14	.54	.87	.17	.91	.42			T.			5.52
Shingle Springs	San Joaquin	.30	.45																		.45	.25	.10	.10		.35		.76					2.76
Shrively	Coast	1.25	.11																	.15	.81	.71	.24	.18	.12	.14							3.71
Sierra Madre	do						.05	.09	.81		.15															.10					.02		1.22
Sierraville	M't'n Lakes	.60				.46															.48												1.54
Sisquoc Ranch	Coast																																
Sisson	Sacramento																			.05	.65	.20	.20	.25	.35	.45	.05						2.20
Soledad	Coast						.40	.10									.05	.05				.10											0.70
Sonora	San Joaquin		.21				.43	T.												T.	.97	.06				.50	.07						2.24
Southeast Farallon	Ocean																																
Spreckels	Coast																																
Springville	San Joaquin							.04																									0.04
Squirrel Inn	Coast	.20	.10					.42	.23	.09	.02								T.							.05							1.11
Stanwood	Sacramento	1.03																			1.35		1.50		.53		.30						4.71
Stirling City	do	1.40	.20																		1.05	.45	.75	.40	.20	.30	.05						4.80
Stockton (S. H.)	San Joaquin	.09					T.	T.													.07	T.	T.	T.	T.	.93	.23						1.32
Storey	do												.05									.14				.21							0.40
Suisun	Sacramento	.10																			.05	.03	.08	.07		.75	.38						1.46
Sulphur Banks	do	.15																		.15	.14	.02	.10	.01	.11	.41	.03						1.14
Summerdale	San Joaquin	.25	T.					.11	.06				.04								.88	.03				.78	.31						2.46
Summit (1)	Sacramento	.50																			.90		.40				.08						1.88
Summit (2)	Coast							.21	.14	.06																							0.41
Susanville	M't'n Lakes	.30				.03															.30	.08	.03				.06	.05		.10			0.95
Tamarack	Sacramento	.45	.32	.16			.20			.03											.80	.50	.20			.60							3.26
Tehachapi	San Joaquin																																
Tehama	Sacramento		T.																	.26		T.	.41		.18								0.85
Tejon Rancho	San Joaquin							.14	.36	.25																							0.75
Three Rivers	do		T.					.55	T.	.08											.03	.05				.17	T.						0.88

TABLE 2.—*Daily precipitation for May, 1912. District No. 11*—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	
California—Contd.																																	
Towle	Sacramento	.73	.35					.30												.88	1.12	.70	.20		.35	.75			.25				5.63
Tracy	San Joaquin																			.06				.12	.12	.29							0.59
Tulare	do						T.														T.					T.							T.
Tustin (near)	Coast							.04	.01	.19																							0.24
Ukiah	do	.80																		T.	.39	.02	.23	.02	.02	.27	.03						1.78
Upper Lake	Sacramento	.48				.15														.10	.24	.24	.14	.03	.02	.51	T.						1.91
Upper Mattole	Coast	.15	.55																		1.85	.55	.45	1.11	.20	.22	.42	.19			.01		5.70
Vacaville	Sacramento																			.18	.07	.05	.03		.65	.43	.02						1.43
Valley Springs	San Joaquin	.15	.04																		.34	.09				.27	.36						1.25
Visalia	do																																0.00
Warner Springs	Coast					T.	.50	.54	.05																								1.09
Wasco	San Joaquin						.05																										0.05
Watsonville	Coast						.09													.30		.36	.07		.29	.53							1.64
Weaverville	do	.86							T.										T.	.19	1.12	.27	.46	.08	.29	.16	.24						3.67
Weitchpec	Klamath	3.27	.02																	.16	1.02	.56	.26	.19	.37	.10	.76			.27			6.98
West Branch	Sacramento	1.56	T.						T.											.14	1.13	.62	.58	.15		.92	.42	T.					5.52
Westley	San Jaoquin							.10															.20		.30	.18							0.78
West Point	do																																
West Saticoy	Coast							T.	.28																	.47							0.75
Wheatland	Sacramento	.10	.02			T.		T.	.01											.02	.95	.02	T.			.30	.10						1.52
Willows	do	.15																		.32	.28	.07	.21			.13							1.16
Yosemite	San Joaquin	.13					.01			.01											.20	.30	.03			.06							0.74

* 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 May, 1912. District No. 11, California.*

Date.	Lakeview, Oreg.		California.																									
			Alturas.		Barstow.		Branscomb.		Brawley.		Colusa.		Eureka.		Fresno.		Independence.		Los Angeles.		Mount Tamalpais.		Nevada City.		Porterville.		Red Bluff.	
	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	.....	.....	48	29	72	45	52	34	92	52	68	45	51	46	67	47	69	43	67	51	45	36	56	36	81	47	62	46
2	.....	.....	48	28	74	44	62	33	79	56	72	45	53	44	69	40	58	37	72	51	53	36	62	28	82	48	66	44
3	.....	.....	59	28	75	42	64	35	82	54	75	46	53	43	76	42	66	40	70	51	64	48	72	28	80	42	74	49
4	.....	.....	60	34	82	46	68	36	.....	.....	77	52	54	47	79	52	68	38	72	51	63	49	70	32	83	40	76	53
5	.....	.....	58	30	82	47	67	36	87	56	79	52	53	49	81	51	68	43	66	50	64	51	68	39	82	43	75	58
6	.....	.....	64	36	75	50	80	39	.....	.....	83	52	58	47	76	55	62	43	62	54	67	44	74	37	85	40	82	60
7	.....	.....	75	35	70	46	73	54	79	56	77	51	60	47	75	54	63	42	58	55	57	44	74	39	86	46	85	63
8	.....	.....	78	35	68	42	65	39	79	57	77	51	54	49	77	56	60	41	68	56	63	43	73	40	85	48	80	56
9	.....	.....	70	41	80	47	67	40	80	55	73	50	56	48	79	52	73	38	66	55	50	41	70	42	88	49	73	50
10	.....	.....	72	32	88	47	72	35	83	54	79	46	57	47	81	49	78	50	63	56	64	38	76	41	90	43	84	50
11	.....	.....	74	31	91	48	78	44	91	60	84	51	56	44	87	55	80	48	66	54	70	56	80	42	91	44	90	55
12	.....	.....	78	43	92	50	84	49	97	64	91	54	56	43	92	58	81	52	65	54	76	62	88	42	94	41	90	56
13	.....	.....	78	33	91	50	89	50	93	67	92	60	54	48	96	63	80	48	76	54	78	61	88	43	98	58	93	58
14	.....	.....	80	34	87	51	68	43	90	62	87	56	56	47	92	59	78	46	80	53	61	42	81	43	97	59	84	54
15	.....	.....	76	45	95	47	70	38	94	52	78	52	56	45	85	54	82	49	86	61	58	42	73	41	96	58	77	55
16	.....	.....	76	29	95	47	70	36	99	52	83	49	57	45	89	53	83	48	83	57	70	50	80	34	98	56	84	52
17	.....	.....	78	32	96	54	75	35	99	62	85	53	58	46	93	57	85	50	78	51	72	59	81	34	97	54	86	55
18	.....	.....	78	37	94	54	78	37	93	57	83	54	58	50	91	58	82	54	77	51	66	52	82	41	92	56	87	59
19	.....	.....	73	33	88	51	57	43	93	68	78	55	60	47	80	60	76	52	72	56	54	42	69	43	93	57	71	55
20	.....	.....	56	34	81	46	51	41	91	64	67	53	57	46	72	52	74	50	67	56	49	41	56	43	94	59	66	50
21	.....	.....	52	31	71	47	50	38	81	62	67	45	56	46	71	47	67	39	69	54	48	35	51	38	95	60	64	48
22	.....	.....	47	36	78	48	49	33	86	55	65	46	56	45	73	44	68	38	68	52	47	41	54	35	96	59	61	41
23	.....	.....	59	33	86	46	51	41	92	58	70	49	60	48	79	52	77	43	71	51	53	41	65	38	98	58	66	50
24	.....	.....	69	33	92	52	55	40	96	58	72	52	57	52	77	54	78	50	75	53	51	44	71	40	89	52	67	54
25	.....	.....	58	39	76	55	65	48	91	60	64	54	63	53	69	56	69	56	63	56	50	46	57	44	88	53	64	54
26	.....	.....	60	41	83	50	58	48	89	63	71	54	58	53	76	51	76	39	68	53	51	46	61	45	90	54	66	54
27	.....	.....	69	39	90	50	65	42	94	57	78	49	58	49	82	52	85	50	73	55	62	44	74	36	94	50	78	50
28	.....	.....	78	35	98	55	73	41	102	61	90	56	62	47	91	56	90	58	80	58	75	58	85	43	96	60	88	58
29	.....	.....	72	40	96	61	75	38	101	68	87	59	58	52	92	62	92	58	74	58	64	48	75	46	100	67	82	62
30	.....	.....	70	35	96	54	78	39	101	65	87	59	58	48	89	51	84	53	74	58	73	52	80	39	101	66	84	59
31	.....	.....	82	33	97	52	89	49	102	63	94	70	59	48	98	60	87	50	81	56	82	66	88	47	100	68	93	69
Mns.	.....	.....	67.6	34.6	85.1	49.2	67.4	40.5	90.9[b]	59.2[b]	78.5	52.3	56.8	47.4	81.7	3.2	75.5	46.6	71.6	54.2	61.3	47.0	72.1	39.3	91.4	53.0	77.4	54.3

Date.	California—Continued.																									
	Redlands.		Sacramento.		San Diego.		San Francisco.		San Jose.		San Luis Obispo.		Santa Barbara.		Santa Rosa.		Sisson.		Stockton.		Summit.		Susanville.		Yosemite.	
	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	70	44	62	46	64	52	57	49	61	47	63	44	70	44	61	42	45	32	64	47	32	26	52	30	56	33
2	71	49	67	45	64	52	62	47	65	42	56	45	72	45	70	34	46	33	69	40	38	26	50	32	58	28
3	72	49	75	50	68	49	68	51	73	39	66	42	78	55	75	37	57	39	77	45	48	28	55	31	68	24
4	77	41	74	50	68	49	63	50	73	41	66	40	69	46	72	40	56	41	79	49	50	28	64	33	69	29
5	73	41	76	53	61	54	66	50	74	44	67	47	60	48	77	40	67	42	80	52	52	29	57	37	68	33
6	59	49	84	55	60	56	63	52	75	45	62	50	58	62	81	44	72	36	86	49	51	27	67	32	74	32
7	70	48	72	48	66	55	67	52	74	49	67	50	69	48	67	40	73	45	76	50	55	32	70	33	70	34
8	66	48	75	50	65	56	59	52	69	48	64	51	62	54	65	49	68	32	76	49	57	30	89	34	72	33
9	62	51	64	49	62	57	55	50	67	52	61	50	65	52	59	49	70	35	68	48	56	31	78	40	68	30
10	63	51	78	46	61	55	56	48	69	49	58	50	59	50	67	47	71	36	78	46	60	33	77	45	74	32
11	76	53	84	48	60	58	56	47	71	45	60	48	62	48	66	46	72	37	84	48	59	31	78	34	80	34
12	76	52	91	51	60	56	59	46	77	51	66	48	62	51	73	43	70	38	89	50	62	34	71	36	81	38
13	89	49	93	59	65	56	66	47	85	49	74	49	67	52	83	44	78	42	92	52	58	31	73	34	86	40
14	89	50	77	51	72	55	61	50	72	52	69	49	66	51	71	49	72	45	77	52	61	34	79	33	87	43
15	89	54	78	49	72	57	63	51	69	45	74	49	78	45	76	40	76	46	77	51	62	34	78	43	85	46
16	89	52	82	49	70	57	69	49	78	39	80	44	76	46	80	49	65	33	86	47	64	30	73	35	82	35
17	84	50	85	54	68	53	66	51	80	44	76	46	70	52	78	41	70	46	88	53	61	32	77	35	83	42
18	80	49	82	53	67	54	57	48	75	47	69	47	64	50	68	41	68	42	85	52	65	35	77	41	82	40
19	82	50	65	52	69	57	60	51	66	51	65	50	65	55	61	48	70	40	66	52	43	33	70	40	78	38
20	72	50	63	50	64	57	59	52	66	51	61	46	63	55	63	46	48	35	67	52	41	30	54	40	73	32
21	69	47	63	47	64	57	59	49	63	45	62	43	70	45	62	45	49	33	67	48	38	27	52	33	50	22
22	71	45	61	46	65	51	59	51	66	44	65	40	65	46	63	45	45	34	65	44	39	30	52	31	65	28
23	78	42	69	50	67	52	64	54	72	51	67	45	66	46	67	45	50	36	72	52	40	31	60	35	70	36
24	84	48	68	57	68	54	64	56	69	53	63	44	67	49	64	50	55	44	69	54	43	35	70	39	75	35
25	67	48	62	53	67	59	61	54	64	53	64	54	62	55	64	52	51	44	68	54	38	31	69	45	64	39
26	70	49	67	52	67	58	62	54	67	53	66	54	75	56	66	49	50	41	70	50	42	34	60	43	74	41
27	82	50	77	51	68	58	64	54	71	52	74	52	76	53	76	49	68	34	80	51	50	33	70	38	80	38
28	98	54	90	58	66	58	75	54	83	47	94	62	80	53	84	47	72	48	88	56	61	40	78	41	85	32
29	83	56	82	58	62	58	63	52	73	51	78	52	66	60	78	48	65	36	84	59	58	37	70	45	83	40
30	82	57	83	53	68	59	74	53	82	46	82	48	67	59	85	55	68	42	88	52	57	32	68	35	84	42
31	98	52	95	63	68	59	87	57	92	51	84	52	69	55	95	57	78	44	95	56	62	33	75	35	88	38
Mns.	77.1	49.3	75.6	51.6	65.7	55.4	63.3	51.0	72.3	47.6	68.5	48.1	67.7	50.8	71.5	45.5	63.4	39.1	77.7	50.3	51.7	31.5	67.7	36.7	74.6	35.1

[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.