U. S. DEPARTMENT OF AGRICULTURE

WEATHER BUREAU

CHARLES F. MARVIN, CHIEF

CLIMATOLOGICAL DATA

CALIFORNIA SECTION

JUNE, 1918

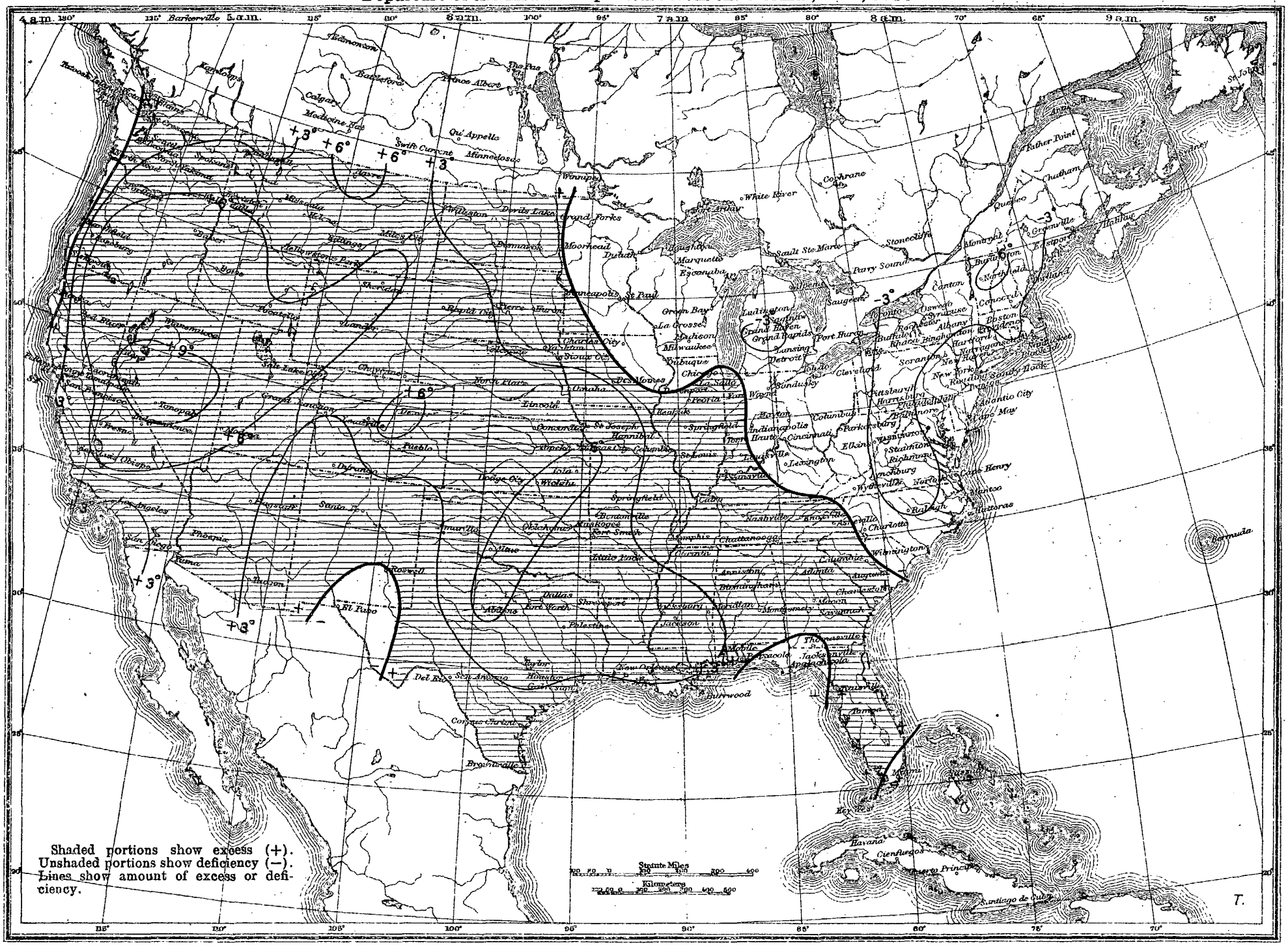
BY

EDWARD A. BEALS,

DISTRICT FORECASTER AND SECTION DIRECTOR.

SAN FRANCISCO, CAL.
WEATHER BUREAU OFFICE
JULY 19, 1918

Departure of the Mean Temperature from the Normal, June, 1918.



U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CALIFORNIA SECTION.

EDWARD A. BEALS, District Forecaster.

VOL. XXII. SAN FRANCISCO, JUNE, 1918. No. 6.

GENERAL SUMMARY.

This was the warmest June in 22 years, the length of the statewide record. Extraordinary heat prevailed throughout the entire month in the interior valleys and in the desert plateaus. In Death Valley the temperature reached or exceeded 100° on every day of the month, culminating with a maximum of 124° on the 27th. Along the immediate coast, however, normal temperatures prevailed, owing to the presence of cool winds and fogs from off the ocean. As is usual during June, the rainfall was light. No measurable precipitation occurred at about one-half of the 300 stations from which reports were received. The rainfall was deficient everywhere except in the southeastern plateau region, where heavy showers fell on several occasions. Barstow, in the heart of the Mojave Desert, received the heaviest precipitation in the State, more rain falling within a period of three hours, on the 15th, than usually falls there in six months. More than the usual amount of sunshine was received, and the wind movement was relatively high. A velocity of 80 miles per hour was recorded on Mount Tamalpais on the 6th, while at Point Reyes velocities exceeding 40 miles per hour occurred on nine days. Thunderstorms were of frequent occurrence and of extraordinary violence. Though most of the snow remaining in the mountains disappeared during the month, streams maintained low stages, and some of the smaller creeks disappeared entirely.

The first ten days of the month were clear and moderately warm, the lowest temperatures of the month occurring at most stations on the 1st or 2d. The second decade was hot and sultry, with frequent thunderstorms which were accompanied by light and scattered showers. Press reports stated that between June 9th and 12th lightning started more than 100 forest fires in the Klamath National Forest. Sonora rains, somewhat earlier than usual, occurred in the southeastern plateau region. The extraordinary heat continued during the last ten days of the month. The highest temperatures ever recorded in June occurred at several stations on the 26th and 27th. A series of severe thunderstorms passed over southern California on June 30–July 1, doing considerable damage in the vicinity of Los Angeles. Lightning struck an oil derrick at La Brea and an oil tank at El Segundo, and in the fires which followed, a loss of $5,000 was sustained at the former place, and a loss of $300,000 at the latter. Though thunderstorms were frequent, no destructive hail accompanied any of them, so far as is known.

Agriculturally, the weather during June was partly favorable, partly unfavorable. All irrigated crops made excellent progress. Sugar beets, rice, cotton, hops, beans, potatoes, and truck crops did well. Oranges set heavily, and grapes made satisfactory progress. Berries, cherries, peaches and apricots were harvested under favorable conditions, and the yields were about normal. It was ideal weather for haying. Second and third crops of alfalfa were harvested in different portions of the State, and good yields were secured. However, the hot spell was injurious to wheat, barley and oats, as they matured too fast, and the harvest began earlier than usual. The high temperatures were injurious to orange trees, as the heat affected the foliage, while the dropping of unripe fruit was abnormally heavy. The heat was also injurious to growing prunes, olives and almonds. Though range feed became scarce, the condition of grazing cattle remained fair to good. In some places irrigation water began to fail rapidly near the close of the month. However, the agricultural situation at the end of the month was generally satisfactory. A. H. P.

PRESSURE.

The mean sea level pressure, determined from the records of twelve regular Weather Bureau stations, was 29.87 inches. The highest was 30.18 inches at Eureka on the 17th; the lowest was 29.56 inches at Fresno on the 22d; the range for the State was 0.62 inch.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 100 stations, was 72.5°, which is 3.5° above the normal.

The highest monthly mean was 98.3°, at Greenland Ranch; and the lowest was 52.2°, at Point Reyes.

The highest temperature, 124°, occurred at Greenland Ranch on the 27th; and the lowest, 27°, occurred at Tamarack on the 1st.

The range for the State was 97°.

PRECIPITATION.

The average precipitation for the State, as shown by the records of 223 stations, was 0.12 inch, or 0.19 inch below the normal.

The greatest monthly amount was 2.97 inches, at Barstow. Seventy-eight stations reported no precipitation.

The greatest amount in 24 hours was 1.93 inches at Barstow on the 15th.

RELATIVE HUMIDITY, SUNSHINE AND CLOUDINESS.

Stations.	Relative humidity. (Per cent.)			Sunshine.	
	5 a. m.	5 p. m.	Mean.	Actual No. of hours	Per cent of possible.
Eureka	94	83	88	257	57
Fresno	45	17	31	411	93
Los Angeles	86	59	72	288	67
Mount Tamalpais	29	28	28	408	92
Red Bluff	43	13	28	412	92
Sacramento	67	25	46	396	89
San Diego	90	74	82	266	62
San Francisco	88	71	80	334	75
San Jose	.....	48	.....	390	89
San Luis Obispo	87	54	70	360	83

WIND MOVEMENT.—(Miles.)

Stations.	Total mov. for month.	Ave. hr. velocity.	Maximum velocity.	Direction.	Date.	Prev. dir.
Eureka	4,770	6.6	27	n.	17	n.
Fresno	6,219	8.6	30	nw.	13	nw.
Los Angeles	3,713	5.2	28	se.	10	sw.
Mount Tamalpais	10,195	14.1	80	nw.	6	nw.
Point Reyes	16,133	22.4	60	nw.	14	nw.
Red Bluff	3,537	4.9	19	n.	1	se.
Sacramento	5,945	8.3	25	s.	25	s.
San Diego	4,697	6.5	30	s.	10	w.
San Francisco	9,042	12.5	35	sw.	3	sw.
San Jose	4,331	6.0	20	nw.	22	nw.
San Luis Obispo	2,631	3.7	15	w.	22	nw.

COMPARATIVE DATA FOR JUNE.

Year.	Mean temp.	Ave. precip.	Year.	Mean temp.	Ave. precip.	Year.	Mean temp.	Ave. precip.	Year.	Mean temp.	Ave. precip.
1897	69.8	0.46	1903	70.9	0.07	1909	68.1	0.19	1915	67.3	0.01
1898	71.3	0.25	1904	71.1	0.04	1910	67.3	0.05	1916	65.2	0.22
1899	71.5	0.57	1905	67.5	0.07	1911	66.7	0.15	1917	69.2	0.02
1900	71.4	0.19	1906	66.7	1.05	1912	68.0	0.49	1918	72.5	0.12
1901	70.5	0.01	1907	66.1	1.02	1913	65.8	0.27	.....	.....	.....
1902	70.2	0.10	1908	66.0	0.17	1914	66.4	0.85	.....	.....	.....

Explanation of Reference Marks Used in This Publication.

The departures from the normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means.

† Also on other dates. T., Precipitation is less than 0.01 inch rain or melted snow.

a, b, c, etc., indicate respectively, 1, 2, 3, etc., days missing from the record.

Station at Llano formerly known as Valyermo; station at Lytle Creek formerly known as Rialto (near).

Climatological Data for June, 1918.

Stations.	Counties.	Elevation, feet.	Length of record, years.	Temperature, in degrees Fahr.							Precipitation, in inches.				Number of days.				Prevailing direction of wind.	Observers.
				Mean.	Departure from the normal.	Highest.	Date.	Lowest.	Date.	Greatest daily range.	Total.	Departure from the normal.	Greatest in 24 hours.	Snowfall (unmelted).	Precipitation .01 inch or more.	Clear.	Partly cloudy.	Cloudy.		
Alturas	Modoc	4,400	14	66.2	+7.6	98	30	29	1	57	0.02	−0.77	0.02	0	1	22	7	1	w.	Prof. C. B. Towle.
Antioch	Contra Costa	46	39	77.4	+5.4	104	26	49	4	52	0.00	−0.11	0.00	0	0	30	0	0	s.	C. G. McDaniel.
Atascadero	San Luis Obispo	837	2	68.8	.....	103	10	39	24	55	0.00	.....	0.00	0	0	22	7	1	s.	Colony Holding Corp.
Avalon	Los Angeles	30	8	63.6	.....	75	†17	55	†2	13	0.04	.....	0.03	0	2	24	6	0	e.	T. S. Manning.
Azusa	do	540	16	74.8	+6.8	105	10	48	1	40	0.22	+0.07	0.12	0	2	26	1	3	.....	C. C. Hillis.
Bakersfield	Kern	404	29	82.2	+3.4	107	†12	54	4	46	0.00	−0.03	0.00	0	0	26	0	4	...	Santa Fe Co.
Barstow	San Bernardino	2,105	15	83.4	+6.0	111	27	52	1	46	2.97	+2.97	1.93	0	4	19	5	6	w.	E. L. White.
Berkeley	Alameda	317	31	62.1	+1.2	89	2	46	14	41	T.	−0.20	T.	0	0	13	16	1	w.	State University.
Betteravia	Santa Barbara	155	5	65.8	.....	92	†11	36	†2	46	0.00	.....	0.00	0	0	30	0	0	...	Union Sugar Co.
Blue Canon	Placer	4,695	19	63.6	+3.2	93	5	35	†1	50	T.	−1.10	T.	0	0	19	10	1	s.	Southern Pacific Co.
Blythe	Riverside	268	9	90.2	.....	120	11	58	3	48	T.	.....	T.	0	0	27	0	3	sw.	C. L. Suits.
Bonita	San Diego	110	2	69.8	.....	95	9	51	6	42	0.02	.....	0.02	0	1	15	13	2	w.	R. M. Allen.
Branscomb	Mendocino	2,000	18	69.2	+10.3	100	27	39	24	55	T.	−1.39	T.	0	0	28	1	1	n.	A. J. Haun.
Brawley	Imperial	−105	8	°88.2	.....	°114	11	°57	1	°44	T.	.....	T.	0	0	.....	.....	.....	.....	M. D. Witter
Calaveras	Calaveras	3,400	2	°68.0	.....	96	†27	41	6	44	0.04	.....	0.02	0	3	24	2	4	sw.	U. S. Forest Service.
Calexico	Imperial	0	13	88.6	+5.2	113	11	59	1	43	T.	−0.03	T.	0	0	14	12	4	se.	H. M. Rouse.
Camptonville (near)	Yuba	3,500	11	62.0	.....	100	†11	50	†1	44	T.	.....	T.	0	0	26	2	2	sw.	Pacific Gas & Electric Co.
Cedarville	Modoc	4,675	24	[1]71.1	+10.7	[1]95	†11	[1]36	1	[1]45	0.31	−0.35	0.16	0	3	8	21	1	sw.	T. H. Johnstone.
Chico	Butte	189	48	79.2	+2.1	112	†12	46	1	50	T.	−0.43	T.	0	0	27	2	1	se.	U. S. Bureau Plant Ind.
Claremont	Los Angeles	1,200	26	72.9	+5.7	99	17	45	1	43	0.02	−0.12	0.02	0	1	18	8	4	.....	Prof. F. P. Brackett.
Cloverdale	Sonoma	340	16	71.8	+3.4	102	†10	46	†4	53	0.46	+0.19	0.46	0	1	28	1	1	w.	John O. Ogle.
Colfax	Placer	2,421	47	76.8	+5.6	100	26	51	23	35	0.00	−0.69	0.00	0	0	27	3	0	.....	Southern Pacific Co.
Corona	Riverside	615	4	76.4	.....	104	14	46	1	48	T.	.....	T.	0	0	24	3	3	nw.	T. C. Sias.
Crescent City	Del Norte	125	4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Thos. E. Peacock.
Davis	Yolo	51	46	77.6	+2.8	112	11	45	5	55	0.00	−0.17	0.00	0	0	29	1	0	sw.	S. H. Beckett.
Downieville	Sierra	3,150	7	70.0	.....	104	26	38	†1	56	T.	.....	T.	0	0	26	2	2	s.	J. T. Mason.
Durham	Butte	160	23	78.7	+6.1	108	11	49	†1	50	T.	−0.38	T.	0	0	27	2	1	s.	R. W. Durham.
El Cajon	San Diego	482	19	73.4	+6.2	100	17	49	1	39	0.00	−0.11	0.00	0	0	30	0	0	sw.	Philip L. Kessler.
Elsinore	Riverside	1,300	2	78.6	.....	105	15	49	1	44	0.00	.....	0.00	0	0	16	10	4	ne.	W. L. Wilhite.
Escondido	San Diego	657	24	71.6	+3.4	98	18	49	1	43	0.02	−0.08	0.02	0	1	19	8	3	w.	A. R. Moon.
EUREKA	Humboldt	64	32	54.3	−0.3	70	3	43	1	25	0.02	−1.04	0.01	0	2	10	6	14	n.	U. S. Weather Bureau.
Folsom	Sacramento	252	45	81.6	+7.5	109	12	51	5	46	0.00	−0.23	0.00	0	0	30	0	0	n.	G. I. Marvin.
Fontana	San Bernardino	1,325	6	74.3	.....	99	17	49	1	43	0.06	.....	0.06	0	1	28	2	0	sw.	Fontana Land Co.
Fort Bidwell	Modoc	4,375	29	69.0	+4.8	94	†8	33	1	46	0.23	−0.75	0.08	0	4	18	9	3	sw.	C. R. Decious.
FRESNO	Fresno	293	31	82.5	+6.7	108	9	57	23	38	0.01	−0.09	0.01	0	1	24	6	0	nw.	U. S. Weather Bureau.
Grass Valley	Nevada	2,690	46	75.6	.....	98	†11	40	28	58	0.00	−0.73	0.00	0	0	30	0	0	sw.	Mrs. L. M. Wentworth.
Greenland Ranch	Inyo	−173	7	98.3	.....	124	27	68	2	42	0.00	.....	0.00	0	0	13	0	17	.....	O. A. Denton.
Hanford	Kings	249	18	82.4	+7.0	108	†9	50	23	52	0.00	−0.07	0.00	0	0	30	0	0	.....	Santa Fe Co.
Healdsburg	Sonoma	110	25	68.0	+2.1	101	10	44	†17	53	0.30	−0.05	0.30	0	1	22	7	1	nw.	Dr. F. J. Kinley.
Hollister	San Benito	284	44	67.4	+1.5	101	10	44	1	47	T.	−0.13	T.	0	0	9	21	0	w.	Grangers' Union.
INDEPENDENCE	Inyo	3,907	22	77.7	+4.3	101	28	52	1	38	0.13	+0.05	0.06	0	5	14	8	8	nw.	U. S. Weather Bureau.
Inskip	Butte	4,975	11	71.0	.....	92	†26	50	15	28	T.	.....	T.	0	0	24	4	2	.....	Pacific Gas & Electric Co.
Kennett	Shasta	730	6	82.2	.....	113	27	52	17	47	0.00	.....	0.00	0	0	26	4	0	sw.	C. H. Kremers.
King City	Monterey	333	31	[4]69.8	+6.2	[4]110	10	[4]40	25	[4]65	0.00	−0.02	0.00	0	0	30	0	0	n.	Southern Pacific Co.
La Porte	Plumas	5,000	24	60.4	+4.2	87	26	39	1	38	0.00	−1.36	0.00	0	0	28	1	1	n.	C. W. Hendel.
Lemon Cove	Tulare	600	23	81.2	+5.2	108	10	55	7	46	T.	−0.09	T.	0	0	27	2	1	nw.	T. E. Bence.
Lick Observatory	Santa Clara	4,209	29	71.8	+11.8	89	†19	52	23	21	0.00	−0.40	0.00	0	0	25	5	0	nw.	The Director.
Lindsay	Tulare	384	4	81.6	.....	111	†19	49	24	51	T.	.....	T.	0	0	21	4	5	nw.	Basil Prior.
Lone Pine	Inyo	3,728	13	75.2	+6.7	99	†13	42	1	44	T.	−0.05	T.	0	0	24	6	0	s.	G. F. Marsh.
LOS ANGELES	Los Angeles	293	41	69.7	+3.0	93	10	52	1	28	0.03	−0.04	0.01	0	3	16	12	2	sw.	U. S. Weather Bureau.
McCloud	Siskiyou	3,270	8	64.8	.....	97	27	32	†1	50	T.	.....	T.	0	0	23	5	2	s.	McCloud River Lbr. Co.
Madeline	Lassen	5,270	9	°65.6	.....	°93	30	°35	24	°52	T.	.....	T.	0	0	23	3	4	nw.	J. H. Williams.
Marysville	Yuba	67	47	78.6	+2.4	110	11	51	24	47	T.	−0.25	T.	0	0	27	2	1	s.	Southern Pacific Co.
Mecca	Riverside	−185	12	90.6	+6.9	113	11	63	1	39	T.	0	T.	0	0	18	11	1	se.	E. A. Palmer.
Merced	Merced	173	44	79.7	+4.4	106	11	50	1	43	T.	−0.12	T.	0	0	27	3	0	nw.	Santa Fe Co.
MOUNT TAMALPAIS	Marin	2,375	19	71.0	+6.1	94	27	43	23	23	0.04	−0.36	0.04	0	1	23	7	0	nw.	U. S. Weather Bureau.
Mount Wilson	Los Angeles	5,704	1	72.6	.....	94	12	51	23	25	0.07	.....	0.04	0	3	19	9	2	sw.	Wendell P. Hoge.
Napa	Napa	20	41	69.9	+4.5	98	10	40	14	51	T.	−0.21	T.	0	0	27	3	0	s.	State Hospital
Needles	San Bernardino	477	26	92.0	+4.7	122	11	59	2	47	0.88	+0.87	0.45	0	4	14	7	9	...	Santa Fe Co.
Nevada City	Nevada	2,850	26	69.4	+6.7	101	†26	38	2	52	T.	−0.65	T.	0	0	27	2	1	sw.	B. H. Preston.
Newman	Stanislaus	91	29	77.2	+0.7	106	†11	46	†22	54	0.00	−0.06	0.00	0	0	.....	.....	.....	.....	E. S. Wangenheim.
Oakland	Alameda	36	42	63.0	+1.5	87	19	51	†1	35	T.	−0.30	T.	0	0	10	16	4	nw.	Chabot Observatory.
Orland	Glenn	254	36	81.7	+3.0	113	11	50	24	46	0.03	−0.31	0.03	0	1	22	5	3	s.	U. S. Rec. Service.
Oroville (near)	Butte	250	34	79.4	+4.9	110	†11	48	24	58	T.	−0.37	T.	0	0	20	7	3	sw.	E. D. Fairchild.
Pasadena	Los Angeles	1,085	28	71.6	+1.0	97	18	45	1	36	T.	−0.01	T.	0	0	22	6	2	sw.	R. P. Hamlin.
Paso Robles	San Luis Obispo	800	31	72.4	+4.2	108	11	41	1	57	0.00	−0.03	0.00	0	0	28	2	0	e.	Virginia Bartlett.
Petaluma	Sonoma	.....	4	63.2	.....	96	19	39	†15	49	0.11	−0.16	0.11	0	1	29	1	0	w.	John Landis.
Placerville	El Dorado	1,925	29	71.0	+4.6	103	†11	43	2	50	T.	−0.66	T.	0	0	28	0	2	w.	O. E. Bailey.
POINT REYES	Marin	490	26	52.2	−0.6	69	8	46	14	20	0.26	+0.01	0.26	0	1	6	11	13	nw.	U. S. Weather Bureau.
Pomona	Los Angeles	857	4	73.2	.....	100	17	46	1	41	T.	.....	T.	0	0	6	7	17	w.	J. E. Adamson.
Porterville	Tulare	464	29	82.2	+3.4	108	9	54	24	42	0.00	−0.11	0.00	0	0	24	4	2	s.	Leslie McAuliffe.
Portola	Plumas	.....	3	55.0	.....	86	30	30	†13	38	0.00	.....	0.00	0	0	30	0	0	sw.	Western Pacific Co.
RED BLUFF	Tehama	307	41	82.0	+6.3	112	27	54	23	42	0.09	−0.37	0.09	0	1	25	4	1	se.	U. S. Weather Bureau.
Redding	Shasta	552	43	82.5	+6.9	111	†27	56	24	42	0.10	−0.73	0.10	0	1	27	3	0	nw.	J. H. Buick.
Redlands	San Bernardino	1,352	25	75.6	+3.9	99	14	48	1	41	0.02	−0.09	0.02	0	1	16	6	8	w.	P. W. Moore.
Riverside	Riverside	851	36	75.1	+4.5	102	17	45	1	45	0.04	−0.01	0.04	0	1	20	10	0	w.	J. H. D. Cox.
Rocklin	Placer	249	47	77.5	.....	110	12	47	1	45	0.00	−0.26	0.00	0	0	28	1	1	s.	Southern Pacific Co.
SACRAMENTO	Sacramento	71	41	75.8	+6.9	107	11	49	24	46	T.	−0.15	T.	0	0	28	2	0	s.	U. S. Weather Bureau.
St. Helena	Napa	255	10	70.4	.....	109	20	42	†1	55	T.	.....	T.	0	0	24	3	3	s.	St. Helena Star.
Salinas	Monterey	40	44	62.5	+0.5	84	8	46	2	34	0.00	−0.13	0.00	0	0	21	9	0	w.	Dr. E. D. Eddy.
San Bernardino	San Bernardino	1,054	26	76.0	+6.2	102	14	46	1	45	1.02	+0.94	1.02	0	1	23	7	0	sw.	Dr. A. K. Johnson.
SAN DIEGO	San Diego	87	47	66.8	+3.0	82	18	56	1	18	0.06	+0.03	0.04	0	3	12	11	7	w.	U. S. Weather Bureau.
SAN FRANCISCO	San Francisco	207	47	59.2	+2.2	83	2	49	24	31	T.	−0.17	T.	0	0	15	11	4	sw.	do
San Jacinto	Riverside	1,550	25	77.2	+6.8	105	11	47	†1	49	0.39	+0.39	0.32	0	3	22	5	3	.....	E. T. Tanner.
SAN JOSE	Santa Clara	95	43	67.1	+2.1	93	19	45	2	46	0.00	−0.08	0.00	0	0	29	1	0	nw.	U. S. Weather Bureau.
SAN LUIS OBISPO	San Luis Obispo	201	23	65.6	+5.2	104	10	47	7	55	T.	−0.10	T.	0	0	18	12	0	nw.	do
Santa Ana	Orange	133	1	65.1	.....	93	17	45	1	39	0.01	.....	0.01	0	1	29	0	1	sw.	R. L. Bisby.
Santa Barbara	Santa Barbara	130	34	65.5	+2.9	90	†10	45	1	34	0.00	−0.09	0.00	0	0	24	5	1	w.	G. W. Russell.
Santa Cruz	Santa Cruz	20	50	62.4	−0.7	90	10	40	2	45	0.00	−0.22	0.00	0	0	26	2	2	w.	W. R. Springer.
Santa Rosa	Sonoma	181	29	64.6	−0.6	100	10	39	†17	56	T.	−0.25	T.	0	0	30	0	0	s.	Southern Pacific Co.
Spreckels	Monterey	48	4	62.2	.....	89	†8	39	2	46	0.00	−0.08	0.00	0	0	21	9	0	nw.	Spreckels Sugar Co.
Squirrel Inn	San Bernardino	5,280	8	70.4	.....	98	12	41	1	38	T.	−0.26	T.	0	0	22	5	3	s.	Mrs. A. D. Frantz.
Stockton	San Joaquin	23	47	75.0	+5.1	103	11	52	24	43	0.00	−0.12	0.00	0	0	28	2	0	nw.	State Hospital.
Summit	Placer	7,017	45	58.8	+5.6	84	†12	34	†1	40	0.15	−0.43	0.15	0	•1	20	3	7	s.	Southern Pacific Co.
Truckee	Nevada	5,819	47	59.2	+1.8	92	†26	28	2	53	0.00	−0.33	0.00	0	0	27	0	3	sw.	do
Ukiah	Mendocino	620	25	71.5	+6.1	110	27	39	18	59	0.02	−0.32	0.02	0	1	24	5	1	nw.	Dr. George McCowen.
Watsonville	Santa Cruz	23	22	61.6	−0.8	88	10	40	2	40	0.00	−0.14	0.00	0	0	11	15	4	sw.	Spreckels Sugar Co.
Weaverville	Trinity	2,162	6	71.0	.....	107	27	33	1	60	T.	−0.77	T.	0	0	26	3	1	.....	U. S. Forest Service.
Willows	Glenn	136	39	77.6	+0.7	112	27	47	17	53	T.	−0.21	T.	0	0	30	0	0	s.	J. T. McPherson.
Yosemite	Mariposa	3,960	14	68.4	+6.0	94	27	41	7	47	0.00	−0.81	0.00	0	0	23	4	3	w.	Supt. National Park.
Yreka	Siskiyou	2,625	29	70.2	+7.6	101	†19	31	1	56	0.07	−0.54	0.07	0	1	19	11	0	nw.	U. S. Forest Service.

Daily Precipitation for June, 1918.

Stations.	Watersheds.	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	
Alturas	Sacramento												.02																				0.02
Antioch	San Joaquin																																0.00
Atascadero	Coast																																0.00
Avalon§	Ocean										.01	T.												T.							.03		0.04
Azusa ‖‖§	Coast										.10					.12				T.											T.		0.22
Bakersfield	San Joaquin																																0.00
Barstow§	Desert														T.	1.93	.08		T.		.79									.17	T.		2.97
Berkeley	Coast												T.																				T.
Betteravia‖‖	....do																																0.00
Blue Canon‖‖	Sacramento												T.																				T.
Blythe	Colorado																T.		T.														T.
Bonita‖‖	Coast										T.					.02	T.							T.							T.		0.02
Branscomb	....do												T.																				T.
Brawley‖‖	Imperial Valley																	T.	T.												T.		T.
Calaveras	San Joaquin												.01			T.	.01				.02												0.04
Calexico‖‖	Imperial Valley																		T.												T.		T.
Camptonville	San Joaquin																T.																T.
Cedarville	Mountain Lakes											.09	.06								T.		.16										0.31
Chico	Sacramento													T.																			T.
Claremont‖‖§	Coast										.02																						0.02
Cloverdale	....do												.46																				0.46
Colfax ‖‖	Sacramento																																0.00
Corona	Coast										T.																				T.		T.
Crescent City	....do																																
Davis	Sacramento																																0.00
Downieville	....do												T.				T.				T.												T.
Durham	....do												T.								T.												T.
El Cajon	Coast																																0.00
Elsinore ‖‖	....do																																0.00
Escondido	....do																				.02										T.		0.02
EUREKA***	....do												.01	.01										T.									0.02
Folsom	Sacramento																																0.00
Fontana§	Coast														T.	.06	T.																0.06
Fort Bidwell	Mountain Lakes				.02							.05	.08								T.		.08										0.23
FRESNO***	San Joaquin																T.				.01												0.01
Grass Valley	Sacramento																																0.00
Greenland Ranch	Desert																																0.00
Hanford ‖‖	San Joaquin																																0.00
Healdsburg ‖‖	Coast													.30																			0.30
Hollister	....do																T.																T.
INDEPENDENCE***	Owens			T.									T.				T.	.02	.01		.03		.01							.06			0.13
Inskip	Sacramento																T.				T.												T.
Kennett	....do																																0.00
King City	Coast																																0.00
La Porte	Sacramento																																0.00
Lemon Cove ‖‖	San Joaquin											T.					T.				T.												T.
Lick Observatory	Coast																																0.00
Lindsay	San Joaquin						•										T.																T.
Lone Pine	Owens															T.	T.	T.												T.		T.		T.
LOS ANGELES***§	Coast										.01					.01					T.										.01		0.03
McCloud	Sacramento												T.								T.												T.
Madeline	Mountain Lakes																			T.	T.	T.	T.										T.
Marysville	Sacramento																				T.												T.
Mecca	Desert															T.			T.	T.													T.
Merced‖‖	San Joaquin											T.																					T.
MT. TAMALPAIS***	Coast												.04				T.																0.04
Mount Wilson§	....do										.04					.01			T.	.02											T.		0.07
Napa	....do												T.																				T.
Needles §	Colorado															.03	.34		.06	.45													0.88
Nevada City	Sacramento																T.				T.												T.
Newman	San Joaquin																																0.00
Oakland	Coast											T.	T.				T.																T.
Orland	Sacramento												.03	T.			T.				T.	T.											0.03
Oroville (near)	....do																			T.													T.
Pasadena §.	Coast										T.								T.												T.		T.
Paso Robles‖‖	....do																																0.00
Petaluma	....do												.11																				0.11
Placerville	Sacramento																T.				T.												T.
POINT REYES***	Coast												.26																				0.26
Pomona‖‖§	....do															T.																	T.
Porterville‖‖	San Joaquin																																0.00
Portola	Sacramento																																0.00
RED BLUFF***	....do												.09				T.						T.										0.09
Redding‖‖	....do												.10																				0.10
Redlands§	Coast															T.		.02															0.02
Riverside	....do										T.					.04																	0.04
Rocklin ‖‖	Sacramento																																0.00
SACRAMENTO ***	....do																T.				T.												T.
St. Helena‖‖	Coast																T.				T.												T.
Salinas‖‖	....do																																0.00
San Bernardino§	....do										T.					1.02																	1.02
SAN DIEGO***	....do										T.				T.	.02								.01	.03	T.				T.	T.		0.06
SAN FRANCISCO***	....do												T.																				T.
San Jacinto	....do										.05																					.02		0.39
SAN JOSE***	....do																																0.00
SAN LUIS OBISPO***	....do										T.						T.				T.												T.
Santa Ana§	....do										.01																						0.01
Santa Barbara	....do																																0.00
Santa Cruz	....do																																0.00
Santa Rosa	....do												T.																				T.
Spreckels ‖‖	....do																																0.00
Squirrel Inn §.	....do										T.								T.												T.		T.
Stockton ‖‖	San Joaquin																																0.00
Summit	Sacramento												T.							T.	.15												0.15
Truckee	Mountain Lakes																																0.00
Ukiah	Coast												.02																				0.02
Watsonville	....do																																0.00
Weaverville	....do												T.								T.												T.
Willows	Sacramento												T.							T.	T.												T.
Yosemite	San Joaquin																																0.00
Yreka	Klamath				T.		.07						T.																				0.07

Except as otherwise indicated observations are generally made late in the afternoon, near sunset, and precipitation recorded is for the 24 hours ending at the time of observation. *** Regular Weather Bureau station; precipitation is for the 24-hour period, midnight to midnight.

‖‖ Precipitation measured in the morning; amount then recorded is for the preceding 24 hours. * Precipitation included in the next following measurement. ‡ Separate dates of fall not recorded. T., Trace, or less than 0.01 inch. Stations marked thus § are in Los Angeles or San Bernardino Counties.

Daily Temperature for June, 1918.

Stations.		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	Mean.
Bakersfield	Maximum	93	99	100	100	99	96	95	98	106	103	106	107	105	95	97	97	98	101	102	102	100	90	90	99	104	106	106	107	105	104	....	100.3
	Minimum	56	56	55	54	63	62	65	64	65	66	63	70	65	56	63	64	66	70	75	70	58	56	57	69	69	70	68	70	72	70	....	64.2
Calexico	Maximum	98	103	101	103	105	106	106	102	103	106	113	105	108	101	96	98	103	103	102	106	109	109	102	104	107	110	110	108	104	104	....	104.5
	Minimum	59	66	64	73	62	67	63	66	74	75	75	79	76	83	77	76	76	79	82	75	76	77	62	69	71	72	76	80	76	78	....	72.8
Chico	Maximum	89	96	96	99	98	95	97	102	100	103	106	112	102	98	94	93	90	97	102	106	98	98	94	86	92	106	110	112	110	110	....	99.8
	Minimum	46	50	54	53	55	53	56	60	67	58	65	70	66	57	54	55	56	59	62	70	68	62	55	48	48	66	62	64	60	61	....	58.7
Escondido	Maximum	78	79	77	75	80	82	84	87	96	89	85	85	86	93	91	93	96	98	88	93	89	89	83	81	81	83	86	83	84	83	77	....	85.4
	Minimum	49	54	55	55	55	53	52	52	53	63	58	55	56	57	60	60	64	65	66	61	57	60	61	61	58	59	55	58	60	62	....	57.8
Eureka	Maximum	54	56	70	65	60	60	59	66	66	62	58	57	58	59	59	58	57	58	58	56	57	56	59	60	60	68	61	60	59	57	....	59.7
	Minimum	43	43	45	49	49	48	47	48	48	52	52	51	51	47	47	51	49	46	46	48	51	52	52	53	51	52	50	48	47	48	....	48.9
Fresno	Maximum	91	97	98	97	98	94	94	100	106	102	105	105	101	91	97	94	98	103	102	96	97	96	86	92	100	105	105	105	103	104	....	98.7
	Minimum	61	63	64	62	62	63	59	66	68	68	72	73	70	62	64	70	68	72	75	75	69	65	57	56	62	68	70	73	67	66	....	66.3
Independence	Maximum	83	86	87	89	90	90	92	94	96	98	99	100	99	98	94	85	88	85	90	86	88	91	89	91	96	100	101	98	96	90	....	92.3
	Minimum	52	54	54	61	60	57	63	57	58	65	71	73	66	68	63	67	66	65	67	65	64	60	60	59	65	74	67	63	63	63	....	63.1
Los Angeles	Maximum	71	74	75	71	73	76	74	80	84	93	81	77	81	79	83	88	89	88	91	88	84	79	74	75	76	76	77	77	77	71	....	79.4
	Minimum	52	54	55	57	56	55	55	56	57	65	60	59	58	59	62	64	64	68	68	66	65	64	62	61	58	59	59	60	61	63	....	60.0
Merced	Maximum	88	96	96	95	96	93	94	99	104	103	106	102	97	90	94	90	97	102	103	97	95	93	84	91	96	104	102	105	102	102	....	97.2
	Minimum	50	53	59	59	56	56	54	60	63	63	69	71	65	69	63	64	64	68	68	76	63	62	56	53	58	65	66	66	64	63	....	62.2
Mount Tamalpais	Maximum	78	82	81	77	76	74	75	87	84	87	84	89	69	74	75	72	81	85	90	81	74	69	56	73	84	84	94	84	80	84	....	79.1
	Minimum	63	66	68	63	63	58	58	69	65	64	65	57	53	53	60	59	61	71	75	66	63	58	43	50	68	74	75	71	72	62	....	62.9
Oakland	Maximum	79	86	75	65	67	71	69	85	81	86	80	69	67	73	67	65	76	82	87	71	63	63	61	67	82	71	72	68	67	67	....	72.7
	Minimum	51	51	59	51	52	52	52	52	53	56	66	54	52	51	51	52	51	58	57	56	53	52	53	51	52	51	51	54	54	54	....	53.4
Orland	Maximum	93	97	100	100	99	98	102	101	105	108	113	96	100	99	95	95	97	103	107	98	100	93	87	95	106	112	111	111	110	104	....	101.2
	Minimum	65	57	60	58	60	59	60	65	66	62	72	71	64	55	59	53	53	61	63	71	67	59	52	50	61	66	65	71	75	65	....	62.2
Oroville	Maximum	93	95	98	98	96	94	96	99	105	108	110	103	95	91	92	90	97	103	106	97	96	93	84	98	104	110	107	105	109	103	....	99.2
	Minimum	51	52	60	55	54	55	55	56	58	50	73	68	64	53	57	54	57	70	65	71	67	68	53	48	54	65	71	63	60	59	....	59.5
Paso Robles	Maximum	87	96	97	92	96	98	97	98	104	102	108	91	95	99	98	91	94	100	105	105	86	99	94	82	84	100	100	99	84	91	....	95.7
	Minimum	41	44	46	43	43	45	49	49	48	50	51	54	51	51	52	52	52	56	57	60	55	50	44	42	42	46	49	50	49	52	....	49.2
Point Reyes	Maximum	54	56	56	56	56	56	56	69	56	59	62	56	54	55	54	54	55	54	55	59	55	55	57	55	55	58	60	57	58	58	....	56.7
	Minimum	47	47	48	49	46	48	47	49	47	48	48	47	48	46	48	47	47	47	48	49	46	47	47	48	47	49	47	49	52	50	....	47.8
Pomona	Maximum	84	84	84	83	86	86	89	93	94	97	92	91	95	96	93	97	100	98	97	97	97	81	82	86	89	90	89	87	87	79	....	90.1
	Minimum	46	47	56	58	53	49	48	53	52	59	58	55	55	56	61	62	60	65	61	65	56	60	62	56	49	56	52	58	61	62	....	56.4
Porterville	Maximum	83	93	98	97	99	95	94	99	108	101	106	105	103	94	100	94	98	103	105	102	99	96	99	91	96	106	106	106	103	104	....	99.4
	Minimum	57	59	61	61	60	60	57	63	66	68	72	72	72	63	61	67	68	67	74	75	68	64	59	54	58	65	68	73	69	69	....	65.0
Red Bluff	Maximum	90	95	97	98	94	96	100	99	102	105	109	97	97	91	92	88	96	101	105	97	97	92	85	93	105	110	112	107	107	104	....	98.5
	Minimum	62	60	61	61	62	61	62	67	67	65	73	75	68	61	60	58	55	63	68	78	72	64	54	56	63	73	70	75	81	69	....	65.6
Redlands	Maximum	87	89	85	85	89	93	92	96	94	95	92	97	98	99	88	93	96	94	91	96	98	89	80	84	91	92	94	89	90	84	....	91.3
	Minimum	48	52	53	56	49	52	53	55	60	67	62	61	61	65	65	66	68	72	67	70	63	62	60	60	56	62	58	56	58	60	....	59.9
Sacramento	Maximum	92	95	95	92	91	89	90	99	100	105	107	97	90	90	87	85	93	99	103	91	87	82	75	89	99	104	102	99	102	92	....	94.1
	Minimum	60	57	62	53	52	56	54	59	65	59	71	63	54	51	55	54	56	67	63	62	54	53	50	49	59	63	59	56	58	59	....	57.6
San Bernardino	Maximum	89	89	88	87	92	93	94	90	95	92	95	98	100	102	90	96	100	100	95	96	100	92	84	87	92	95	95	92	92	83	....	93.4
	Minimum	76	51	55	57	49	52	51	54	56	60	60	59	59	63	64	65	67	70	65	68	60	61	60	60	54	57	57	57	59	61	....	58.6
San Diego	Maximum	66	67	66	67	67	67	68	70	76	73	73	70	70	72	73	79	80	82	82	79	75	69	70	71	70	71	69	71	68	70	....	71.7
	Minimum	56	57	57	58	58	60	58	58	53	64	63	62	61	61	62	63	66	69	68	67	66	64	63	62	63	64	63	63	62	63	....	62.0
San Francisco	Maximum	75	83	66	61	60	65	64	76	68	81	73	62	63	70	61	63	73	74	73	64	61	61	61	63	74	62	64	66	63	63	....	67.1
	Minimum	52	52	52	51	50	52	50	51	52	54	52	51	51	51	50	50	52	52	52	52	51	51	52	49	51	50	52	54	53	52	....	51.4
San Jose	Maximum	87	91	87	79	76	81	77	91	89	92	93	81	73	79	74	76	83	91	93	85	70	69	68	77	92	84	88	83	80	82	....	82.5
	Minimum	46	45	52	49	53	48	47	49	53	53	60	57	53	46	46	47	48	59	58	57	54	52	51	46	50	53	54	54	56	56	....	51.7
San Luis Obispo	Maximum	81	78	72	73	75	81	73	83	86	104	80	81	76	83	81	84	88	94	90	81	71	70	66	69	75	75	75	73	73	78	....	79.0
	Minimum	48	47	51	51	51	49	47	48	47	49	56	53	53	53	52	55	52	56	59	57	54	51	53	52	51	52	52	55	57	57	....	52.3
Santa Barbara	Maximum	68	67	68	66	67	68	68	73	72	90	77	71	76	78	72	78	90	84	84	82	84	77	72	74	71	70	72	68	70	73	....	74.3
	Minimum	45	51	56	54	53	54	50	52	55	56	62	56	56	54	62	60	58	62	62	65	60	58	60	53	55	57	58	58	59	60	....	56.7
Santa Rosa	Maximum	88	93	88	77	77	85	82	95	87	100	92	73	82	85	80	78	89	95	98	78	74	74	69	82	94	80	80	76	78	74	....	82.7
	Minimum	41	40	45	48	49	42	44	44	44	44	51	51	49	41	40	42	39	44	47	50	51	43	39	41	43	47	50	52	53	53	....	45.7
Stockton	Maximum	89	95	94	89	84	89	90	99	96	101	103	93	86	89	89	84	90	98	100	94	88	81	76	87	99	97	97	92	92	89	....	91.7
	Minimum	55	55	57	53	55	56	55	58	64	59	71	65	59	54	54	54	61	66	67	69	58	58	53	52	59	54	60	58	57	57	....	58.4

SUPPLEMENTAL PRECIPITATION TABLE.

Stations.	Watersheds.	Precip., inches.	Stations.	Watersheds.	Precip., inches.	Stations.	Watersheds.	Precip., inches.	Stations.	Watersheds.	Precip., inches.
Abbotts	Coast	0.00	Dillon Ranch§	Coast	.....	L'ano§	Coast	0.40	S. Antonio Intake§	Coast	0.00
Aguanga	....do	1.08	Dinuba	San Joaquin	0.00	Los Gatos	....do	T.	San Gabriel Intake§	....do	0.10
Alder Creek§	....do	0.46	Dobbins (near)	Sacramento	0.00	Lower Haines Can§	....do	T.	do Power House§	....do	0.02
Angiola	San Joaquin	0.00	Dudley	San Joaquin	.....	Lytle Creek§	....do	0.13	San Miguel Island	Ocean	.....
Antelope Valley	....do	0.00	East Park	Sacramento	T.	Magalia	Sacramento	.....	San Pedro§	Coast	0.05
Arroyo Seco§	Coast	0.03	Echo Mountain§	Coast	.....	Maricopa	San Joaquin	0.02	Santa Anita§	....do	.....
Auberry	San Joaquin	0.00	Edison	San Joaquin	0.00	Mariposa	....do	0.08	Santa Clara	....do	0.00
Auburn	Sacramento	0.00	Electra	....do	0.00	May Canyon§	Coast	.....	Santa Monica§	....do	.....
Bagdad§	Desert	0.00	Emigrant Gap	Sacramento	0.00	Mesa Grande	....do	0.18	Seven Oaks§	....do	.....
Barrett Dam	Coast	0.16	Fairmont§	Coast	0.11	Middlewater	San Joaquin	0.00	Shively	....do	0.00
Beaumont	....do	0.88	Fish Canyon§	....do	0.09	Mill Creek—1	....do	0.00	Sierra Alta Ranch§	....do	1 94
Beaumont (near)	....do	0.93	Fordyce Dam	Sacramento	T.	Milton (near)	....do	T.	Sierra Madre§	....do	0.06
Big Bar	Sacramento	.....	Foresters Sanitar.§	Coast	0.10	Mokelumne Hill	....do	T.	Sierraville	Mountain Lakes	0.00
Bishop	Owens	1.54	Fort Bragg	....do	0.12	Monrovia Canyon§	Coast	0.07	Sisson	Sacramento	0.00
Bishop Creek	....do	0.88	Glennville	San Joaquin	T.	Montague	Klamath	T.	Sister Elsie Peak§	Coast	0.15
Bridgeport	Mountain Lakes	.....	Gray Mountain§	Desert	.....	Montgomery Creek	Sacramento	0.00	Springville (near)	San Joaquin	0.92
Cahuilla	Coast	0.85	Gridley	Sacramento	.....	Mountain Springs§	Coast	.....	Standish	Mountain Lakes	0.25
Campbell	....do	0.00	Haines Canyon§	Coast	0.23	Mouth S. Anton.C.§	....do	.....	Stanwood	Coast	0.00
Camp Baldy§	....do	.....	Hansen's Ranch§	....do	.....	Nellie	....do	0.03	Sterling	Desert	0.00
Camp Bonita§	....do	T.	Happy Camp	Klamath	0.13	Niles	....do	0.00	Stevenson Creek	San Joaquin	0.00
Campo	....do	0.20	Hayfork	Sacramento	0.00	North Bloomfield	Sacramento	0.00	Stirling City	Sacramento	.....
Camp Rincon§	....do	.....	Head Dam	....do	0 00	North Fork	San Joaquin	T.	Storey	San Joaquin	0.00
Canon Dam	Sacramento	T.	Helen Mine	Coast	0.00	North Lakeport	Coast	0.28	Susanville	Mountain Lakes	.....
Cascada	San Joaquin	0.16	Hetch Hetchy	San Joaquin	0.02	Oak Grove	....do	0.32	Switzer's Camp§	Coast	.....
Centerville	Sacramento	0.00	Hullville (near)	Coast	0.07	Oceanside	....do	0.22	Tamarack	Sacramento	0.35
Chester	....do	.....	Huntington Lake	San Joaquin	0.42	Ojai Valley	....do	0.01	Tejon Rancho	San Joaquin	.....
China Flat	Coast	T.	Indio	Desert	0.21	O Melveny Camp§	....do	0.06	Tujunga§	Coast	.....
Churn Creek	Sacramento	0.14	Iron Forks§	Coast	.....	Opid Camp§	....do	.....	Three Rivers	San Joaquin	T.
Clovis	San Joaquin	0.00	Julian	....do	0.68	Orleans	Klamath	0.04	Tustin (near)	Coast	0.01
Clyde Ranch§	Coast	.....	Kennedy Mine	San Joaquin	0.00	Ozena	Coast	0.00	Twin Valley	Sacramento	0.21
Colby Springs§	....do	.....	Kentfield	Coast	T.	Pacoima§	....do	.....	Upper Live Oak C.§	Coast	.....
Coldbrook§	....do	.....	La Crescenta§	....do	.....	Parkfield	....do	0.00	Venice§	....do	.....
Colusa	Sacramento	0.00	La Jolla	....do	0.20	Peachland	....do	0.22	Visalia	San Joaquin	0.00
Covelo	Coast	0.00	Lake Eleanor	San Joaquin	.....	Point Loma	....do	0.04	Walnut Creek	Coast	0.00
Crockett	....do	0.00	Lake Spaulding	Sacramento	0.00	Quincy	Sacramento	0.00	Warner Springs	....do	0.48
Cuyamaca	....do	0.59	Lancaster (near)	Desert	0.51	Reedley	San Joaquin	0.00	Wells Meadows	Owens	0.60
Deer Creek	Sacramento	T.	Las Plumas	Sacramento	T.	Represa	Sacramento	0.00	West Branch	Sacramento	T.
Del Monte	Coast	0.00	Le Grand	San Joaquin	0.00	Rohnerville	Coast	T.	West Point	San Joaquin	0.08
Denair	San Joaquin	0.00	Live Oak Canon§	Coast	T.	Ruth	....do	0.00	Wilson Toll House§	Coast	0.31
De Sabla	Sacramento	0.00	Livermore	....do	.....	San Antonio Can.§	....do	.....	Yorba Linda	....do	T.

Total Precipitation, Inches, June, 1918.

The influence of the diversified topography of California upon its precipitation is shown by the lines of equal rainfall in inches, on the accompanying relief map.