

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
CHARLES F. MARVIN, Chief.

CLIMATOLOGICAL DATA.

CALIFORNIA SECTION

EDWARD A. BEALS, METEOROLOGIST.

Vol. XXV. SAN FRANCISCO, OCTOBER, 1921. No. 10.

GENERAL SUMMARY.

Temperatures were somewhat above normal; during a hot spell which prevailed from the 17th to the 20th the maximum temperatures at several stations were the highest ever recorded during a month of October. Precipitation was about normal in southern California, but throughout the central and northern portions of the State it was less than one-half of the normal. Light snow fell in the Sierra Nevada Mountains during the last decade, but most of it melted before the close of the month. The heaviest snowfall reported was 18 inches, at Summit, Placer County, altitude 7,017 feet. A tornado occurred at Sacramento on the 26th; several persons were injured and the property damage was estimated at about \$17,000. There were no general storms, however, and the wind movement was light. Sunshine was somewhat deficient, for although the precipitation was subnormal in most regions, there was much cloudiness, and the rains came in the form of frequent but light showers. As far as personal comfort was concerned it was a pleasant month.

The weather for the month as a whole was favorable for agriculture. The sun-curing of fruit was completed under excellent weather conditions. Citrus fruit trees in southern California were especially benefited by the timely rains; navel oranges made excellent growth, and there was every prospect of an unusually good crop. It was good harvest weather for rice, beans, corn, sugar beets, tomatoes, alfalfa and late grapes. Because of inadequate rainfall the soil in the central and northern portions of the State was too dry for fall plowing, and seeding is somewhat backward as a result. In southern California the generous showers softened the soil sufficiently to permit plowing. Dry feed held out well throughout the State, and grazing cattle and sheep maintained excellent condition. No damaging frosts occurred in the agricultural regions. Generally favorable weather has characterized the agricultural year now drawing to a close, and harvests have been satisfactory, both in quality and quantity.

A.H.P.

PRESSURE.

The mean sea-level pressure, determined from the records of 11 regular Weather Bureau stations, was 30.00 inches. The highest was 30.55 inches at Independence on the 28th; the lowest was 29.52 inches at Independence on the 22d; the range for the State was 1.03 inches.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 96 stations, was 62.7°, which is 1.6° above normal. The highest monthly mean was 77.6°, at Indio; and the lowest was 45.6°, at Foydyce Dam.

The highest temperature, 109°, occurred at Greenland Ranch on the 2d; and the lowest, 14°, occurred at Portola on the 26th. The range for the State was 95°.

PRECIPITATION.

The average precipitation for the State, as shown by the records of 231 stations, was 0.85 inch, or 0.60 inch below the normal. The greatest monthly amount was 5.18 inches, at Crescent City. No rain fell at 7 stations.

The greatest amount in 24 hours was 3.45 inches at Beaumont (near) on the 1st.

RELATIVE HUMIDITY, SUNSHINE AND CLOUDINESS.

Stations.	Relative humidity Per cent.			Sunshine.	
	5 a.m.	5 p.m.	Mean.	Actual No. of hours	Percent of possible.
Eureka.....	92	84	88	117	34
Fresno.....	72	33	52	295	85
Independence.....	50	24	37	294	85
Los Angeles.....	80	64	72	232	66
Red Bluff.....	77	38	55	263	76
Sacramento.....	77	48	62	296	85
San Diego.....	83	76	79	189	54
San Francisco.....	89	71	80	226	65
San Jose.....	57	.....	.....	253	73
San Luis Obispo.....	73	56	64	246	70

WIND MOVEMENT. (Miles.)

Stations.	Total mov. for month.	Ave. hr. velocity.	Maximum velocity.	Direction.		Date	Prev. dir.
				Direction.	Date		
Eureka.....	3,724	5.0	35	se.	25	se.	
Fresno.....	4,131	5.6	28	nw.	27	nw.	
Independence.....	3,136	4.2	39	se.	22	se.	
Los Angeles.....	3,494	4.7	17	s.	22	sw.	
Point Reyes.....	11,413	15.3	52	nw.	21	nw.	
Red Bluff.....	3,183	4.3	24	se.	26	s.	
Sacramento.....	4,211	5.6	27	s.	21	s.	
San Diego.....	4,112	5.5	24	nw.	24	nw.	
San Francisco.....	6,299	8.5	34	w.	21	w.	
San Jose.....	3,572	4.8	23	nw.	21	nw.	
San Luis Obispo.....	3,128	4.2	30	ne.	27	nw.	

COMPARATIVE DATA FOR OCTOBER.

Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.
1897....	58.5	1.79	1904....	61.6	2.74	1911....	59.1	0.58	1918....	62.9	1.02
1898....	61.0	0.59	1905....	60.7	0.12	1912....	57.1	0.36	1919....	57.6	0.63
1899....	58.1	3.50	1906....	63.4	0.09	1913....	61.9	0.08	1920....	57.0	2.52
1900....	58.8	2.34	1907....	62.0	1.56	1914....	60.2	1.60	1921....	62.7	0.85
1901....	63.2	1.50	1908....	58.3	1.37	1915....	62.3	0.14	1922....	.....	.....
1902....	60.7	1.78	1909....	60.2	1.66	1916....	55.0	1.91	1923....	.....	.....
1903....	64.0	0.49	1910....	61.9	0.83	1917....	64.4	0.01	1924....	.....	.....

Daily evaporation (inches) and wind movement (miles) for October.

Stations.	Data.	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
Chula Vista**....	{ Evaporation.....	.063	.075	.065	.100	.190	.190	.129	.123	.132	.084	.104	.087	.167	.167	.097	.124	.049	.073	.178	.153	.165	.146	.225	.161	.139	.115	.149	.247	.210	.227	.169	4,303
Dodgeland*....	{ Wind movement.....	.61	.80	.108	.86	.84	.88	.55	.61	.83	.63	.73	.65	.115	.101	.61	.69	.48	.47	.63	.79	.130	.86	.147	.113	.85	.77	.81	.61	.63	.79	.57	2,467
Oakdale (near)*....	{ Evaporation.....	.239	.024	.292	.199	.312	.253	.094	.053	.143	.113	.156	.100	.074	.169	.140	.010	.033	.077	.093	.191	.176	.045	.064	.010	.145	.188	.0	.059	.062	.143	.062	3,669
Tahoe**.....	{ Wind movement.....	6	.33	7	.26	.25	5	.29	.13	.23	9	.17	.20	.22	.39	11	.17	.34	.64	.11	.13	.74	.71	.42	1	.24	.49	.41	.58	.12	.31	9	836

* Observations taken at 7 a. m.; ** at 8 a. m. † Included in the next following entry.

OCTOBER, 1921.

Climatological Data for October, 1921.

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 (0.1 inch or more).	Clear.	Partly cloudy.	Cloudy.	
Antioch.....	Contra Costa.....	46	42	66.6	+3.2	90	9	45	29	.38	.15	-.55	.10	0	2	22	0	w.	C. G. McDaniel.
Atascadero.....	San Luis Obispo.....	837	5	58.6	-2.9	94	20	30	24	.51	.17	-.55	.15	0	2	23	5	sw.	Colony Holding Corp.
Bakersfield.....	Kern.....	404	32	68.4	+2.9	96	11	38	28	.46	.57	+.21	.46	0	3	21	6	4	Santa Fe Co.
Barstow.....	San Bernardino.....	2,105	18															L. Tiernan.	
Berkeley.....	Alameda.....	317	34	61.8	-0.3	94	19	44	23	.37	.72	-.61	.33	0	6	12	11	8	State University.
Blue Canon.....	Placer.....	4,695	22	60.0	+7.3	89	13	86	25	.41	1.23	-2.69	.68	1.0	3	25	0	6	e.
Blythe.....	Riverside.....	263	15	73.6	-	103	20	43	25	.49	.46	-.46	.0	1	27	4	0	Palo Verde Water Co.	
Bonita.....	San Diego.....	110	3	64.9	-	96	20	45	26	.47	1.73	-.18	.18	0	5	22	3	w.	
Branscomb.....	Mendocino.....	2,000	21	58.2	+2.0	92	7	30	23	.40	3.28	-.253	1.74	0	6	22	3	n.	
Brawley.....	Imperial.....	-105	11	73.0	-	96	12	44	26	.45	T.	0	0	0	0	0	A. J. Haun.		
Calexico.....	California.....	0	16	75.2	+2.9	103	18	43	25	.42	0	-.16	0	0	29	2	0	M. D. Witter.	
Chico.....	Butte.....	189	51	64.4	-	92	8	38	27	.44	.96	-.24	.33	0	3	18	9	4	W. S. Pratt.
Chula Vista.....	San Diego.....	9	3	63.4	-	87	20	47	24	.34	.60	-.56	.0	3	9	14	8	U. S. Bureau Plant Ind.	
Claremont.....	Los Angeles.....	1,200	29	66.4	+2.0	101	18	40	25	.44	2.10	+.108	1.53	0	5	20	4	5	Western Salt Works.
Cloverdale.....	Sonoma.....	340	19	63.4	+1.0	93	19	39	22	.38	1.66	-.20	.68	0	5	26	0	5	John O. Ogle.
Colfax.....	Placer.....	2,421	50	62.9	+3.4	88	7	37	23	.35	1.12	-.126	.46	0	3	21	7	3	Southern Pacific Co.
Colusa.....	Colusa.....	60	18	62.2	+0.6	86	18	39	27	.36	.82	+.23	.41	0	5	23	3	se.	
Corona.....	Riverside.....	615	66.9	-		102	19	41	26	.47	2.81	-.06	2.12	0	10	18	4	8	E. A. Houchins.
Crescent City.....	Del Norte.....	125	7	56.8	-	81	1	40	30	.39	5.13	-.06	1.75	0	11	21	1	w.	
Davis.....	Yolo.....	51	49	55.1	+0.2	95	19	38	27	.34	.60	-.54	.12	0	2	27	3	1	Thos. E. Peacock.
Dodgeland.....	Butte.....	160	25	63.2	-	89	8	37	27	.40	.77	-.25	.0	4	15	6	10	Prof. S. H. Beckett.	
El Cajon.....	San Diego.....	482	21	66.0	+0.5	103	19	41	26	.52	1.38	+.88	.61	0	4	25	1	5	Dodge Land Co.
Elsinore.....	Riverside.....	1,300	5	69.7	-	106	20	40	25	.51	.05	-.53	.05	1	16	9	6	Eugene P. Kessler.	
Escondido-1.....	San Diego.....	742	27	65.2	+3.1	99	20	38	26	.48	1.44	+.91	.92	0	4	22	4	5	W. L. Withee.
EUREKA.....	Humboldt.....	64	35	54.5	+1.4	71	17	42	23	.19	1.59	-.106	1.20	0	7	5	7	H. L. Harlow.	
Folsom.....	Sacramento.....	252	48	64.6	+1.0	90	1	40	24	.39	.41	-.85	.18	0	3	23	3	5	U. S. Weather Bureau.
Fontana.....	San Bernardino.....	1,325	9	64.4	-	101	18	34	25	.45	1.06	-.77	.0	5	23	3	5	Pacific Gas & Electric Co.	
Fordyce Dam.....	Nevada.....	6,500	27	45.6	+1.2	73	2	15	27	.38	1.89	-.228	.55	13.0	6	12	14	5	Fontana Land Co.
Fort Bidwell.....	Modoc.....	2,375	32	53.8	+3.2	87	4	21	27	.50	.51	-.45	.43	0	2	14	6	11	E. E. Roening.
FRESNO.....	Fresno.....	293	34	66.6	+1.9	92	19	42	25	.37	T.	-.72	T.	0	0	20	9	1	U. S. Weather Bureau.
Grass Valley.....	Nevada.....	2,690	49	61.8	+3.1	86	19	34	27	.32	1.23	-.157	.49	0	5	16	6	9	Mrs. L. M. Wentworth.
Greenland Ranch.....	Inyo.....	178	10	71.2	-	109	2	35	26	.54	.10	-.10	.18	0	1	27	0	4	O. A. Denton.
Healdsburg.....	Kings.....	249	21	63.6	-0.1	92	9	36	27	.40	.18	-.10	.18	0	1	25	0	5	Santa Fe Co.
Hollister.....	Sonoma.....	110	28	62.2	+0.8	95	19	39	22	.50	1.46	-.81	.68	0	4	11	17	3	Dr. F. J. Kinley.
INDEPENDENCE.....	San Benito.....	284	47	60.6	+0.9	94	19	38	28	.47	.14	-.56	.08	0	2	20	6	5	Grangers Union.
Indio.....	Inyo.....	3,957	25	66.6	+1.3	85	19	32	26	.41	.43	+.10	.18	0	4	23	6	2	U. S. Weather Bureau.
Inskip.....	Riverside.....	-20	43	77.6	+2.2	108	19	49	26	.46	.06	-.05	.05	1	1	15	13	3	U. S. Bureau Plant Ind.
La Porte.....	Butte.....	4,975	14	55.7	+2.4	78	6	28	27	24	2.00	-.151	1.04	1.0	4	16	6	9	Pacific Gas & Electric Co.
Lemon Cove.....	Shasta.....	730	9	66.6	-	102	7	36	26	.50	1.91	-.56	.80	0	5	20	5	6	Mammoth Copper Mine.
Lick Observatory.....	Plumas.....	5,000	27	46.4	-2.3	73	1	26	27	.33	1.19	-.872	.46	T.	3	21	1	9	Wm. Schuld.
Lindsay.....	Tulare.....	600	26	65.6	-1.8	91	19	38	27	.38	.07	-.68	.07	0	1	23	6	2	Frank McGee.
Long Beach.....	Santa Clara.....	4,209	32	59.0	+4.0	86	19	32	27	.30	.26	-.142	.13	0	3	18	9	4	Lick Observatory.
Los Angeles.....	Tulare.....	384	7	65.2	-	96	20	35	26	.49	.09	-.08	.08	0	2	17	11	3	Basil Prior.
Los Angeles.....	Los Angeles.....	50	14	64.4	-	96	19	42	25	.48	.60	-.06	.30	0	4	13	15	3	George D. West.
Los Angeles.....	Los Angeles.....	293	44	66.7	-2.1	99	19	48	24	.36	.59	-.18	.30	0	3	16	6	9	U. S. Weather Bureau.
McCloud.....	Siskiyou.....	3,270	11	54.0	-	88	9	25	23	.52	2.95	-.180	T.	1	17	6	5	McCloud River Lbr. Co.	
Marysville.....	Yuba.....	67	50	61.6	-3.7	88	8	38	27	.38	.55	-.64	.23	0	3	22	3	6	Southern Pacific Co.
Mecca.....	Riverside.....	-185	15	76.2	+3.9	107	19	49	25	.46	.09	-.90	.03	0	1	23	5	3	Cooperative Date Garden.
Merced.....	Merced.....	173	47	63.3	-1.5	90	20	36	25	.43	T.	-.50	0	0	0	24	6	1	Santa Fe Co.
MT. TAMALPAIS.....	Marin.....	2,375	22	60.4	-	96	19	42	25	.48	.60	-.60	.30	0	4	20	10	1	U. S. Weather Bureau.
Mount Wilson.....	Los Angeles.....	5,704	4	60.1	-	86	20	29	24	.28	1.12	-.77	T.	2	22	6	3	Solar Observatory.	
Napa.....	Napa.....	20	44	62.4	+0.4	94	19	35	24	.41	.62	-.57	.23	0	3	22	7	2	State Hospital.
Needles.....	San Bernardino.....	477	29	73.2	+1.5	98	18	45	26	.43	.97	+.85	.50	0	2	20	5	6	Santa Fe Co.
Nevada City.....	Nevada.....	2,850	29	59.0	+3.3	91	19	29	25	.51	1.05	-.143	.40	0	6	18	11	2	B. H. Preston.
Newman.....	Stanislaus.....	91	32	63.9	-0.9	93	t14	38	25	.45	.03	-.60	.03	0	1	20	1	10	E. S. Wangenhein.
Oakland.....	Alameda.....	322	45	60.4	+2.0	84	19	46	24	.27	.67	-.88	.32	0	5	21	12	9	S. San Joaquin Irr. Dist.
Ojai.....	Ventura.....	900	15	66.0	+1.7	106	18	36	25	.54	.63	0	.60	0	3	21	7	3	Chatobot Observatory.
Orland.....	Glen.....	254	39	65.4	-1.0	98	7	38	27	.46	.74	-.22	.40	0	3	21	3	7	W. H. Duncan.
Oroville (near).....	Butte.....	250	37	65.1	-0.3	91	1	41	27	.41	.94	-.49	.30	0	5	21	7	3	William Noyer.
Paso Robles-1.....	Los Angeles.....	805	31	65.0	+0.2	98	18	40	25	.48	1.51	+.53	.85	0	4	19	3	9	Morris S. Jones.
Petaluma.....	Sonoma.....	9	7	64.9	-	93	18	47	29	.39	.85	-.39	.39	0	5	20	9	2	Mrs. A. Z. Campbell.
El Dorado.....	El Dorado.....	1,925	32	55.0	-1.3	83	9	31	25	.45	.88	-.41	.40	0	3	10	5	16	John Landis.
POINT REYES.....	Marin.....	490	29	56.3	+0.8	76	19	46	23	1.18	.57	-.45	.45	0	5	9	5	O. E. Bailey.	
POMONA.....	Los Angeles.....	857	7	65.0	-	101	19	36	26	.54	1.63	-.07	.45	0	4	11	16	4	U. S. Weather Bureau.
Porterville.....	Tulare.....	464	32	66.8	+1.9	95	t19	40	25	.45	1.35	-.45	.06	0	4	20	10	1	J. E. Adamson.
REED BLOFF.....	Tehama.....	307	44	65.8	+1.7	97	7	38	27	.42	.65	-.93	.27	0	3	21	5	5	Santa Fe Co.
Redlands.....	Shasta.....	1,352	28	66.2	+0.5	100	19	40	25	.44	1.82	+.111	1.13	0	4	21	6	4	E. W. Harvey.
Riverside.....	Riverside.....	851	39	67.2	+3.0	106	19	39	25	.53	.41	-.13	.24	0	4	20	8	3	P. W. Moore.
Rocklin.....	Placer.....	249	50	61.6	+2.0	89	11	35	17	.47	.56	-.49	.23	0	4	25	2	4	J. H. D. Cox.
SACRAMENTO.....	Sacramento.....	71	44	64.1	+1.9	88	20	40	27	.35	.50	-.24	.69	0	3	22	8	1	S

Daily Precipitation for October, 1921

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. At regular Weather Bureau station: precipitation is for the 24-hour period, midnight to midnight.

Precipitation included in the total following measurement. Separate dates of fall not recorded. T., trace, or less than 0.01 inch.

OCTOBER, 1921.

Daily Temperature for October, 1921.

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.....	96	84	96	82	85	82	91	89	92	88	91	86	82	83	89	90	84	92	80	87	82	85	80	78	71	79	85	86	88	85		
	64	57	58	56	57	59	57	56	57	58	54	53	56	52	51	50	52	51	49	52	46	39	40	39	33	39	42	44	51	53		
Calexico.....	87	84	92	94	95	90	92	94	98	100	97	94	95	96	97	100	103	103	102	95	91	82	75	77	81	81	84	88	87	92	91.	
	70	70	66	68	65	60	59	58	57	59	63	61	61	60	61	62	62	59	56	55	55	43	44	45	46	51	53	51	50	53		
Chico.....	91	85	85	89	91	81	88	92	90	87	87	82	78	70	75	80	83	89	90	92	82	69	60	64	66	63	65	73	80	80	80.	
	47	46	47	50	52	51	46	51	54	49	54	49	47	53	48	46	50	53	50	55	55	45	40	46	50	38	41	42	43	44	48.	
Escondido.....	65	68	68	67	73	74	75	81	79	78	75	77	73	80	83	95	98	99	75	71	66	63	68	71	72	86	92	92	88	78.		
	60	68	60	58	59	53	52	58	51	57	57	53	56	58	50	51	54	54	54	45	40	39	39	30	39	50	46	49	45	62.		
Eureka.....	57	59	54	52	52	55	52	56	53	61	56	67	68	70	69	66	71	67	60	60	56	58	62	63	57	63	64	61	52	65		
	46	47	51	49	48	47	47	47	50	50	54	51	56	54	52	52	54	54	53	50	45	42	43	46	46	45	47	46	47	49.		
Fresno.....	85	84	81	86	82	80	85	90	89	85	85	80	80	80	81	80	84	87	92	91	83	64	62	65	69	70	67	75	79	84	80.	
	53	54	56	51	57	55	56	51	58	56	55	54	57	59	52	55	53	55	54	54	49	42	42	43	44	46	47	47	42	52.		
Independence.....	80	84	81	80	80	70	74	77	77	82	82	82	80	76	80	81	84	84	85	83	80	76	57	59	60	65	68	69	72	73	75.	
	56	52	51	52	52	52	54	49	47	47	51	50	47	44	45	45	48	42	47	55	40	37	33	32	43	35	36	38	35	45.		
Los Angeles's.....	67	73	71	65	63	72	75	78	82	74	74	69	72	69	72	75	78	90	99	94	71	68	59	65	67	69	76	93	92	85		
	60	61	60	59	59	56	56	62	59	59	53	57	59	58	56	57	57	67	68	55	59	53	45	51	52	57	66	65	60	57.		
Merced.....	83	82	77	84	83	78	84	88	86	83	84	79	76	79	76	79	80	84	83	78	75	65	65	69	63	66	72	76	81	81	78.	
	52	52	53	56	54	53	53	54	55	53	52	53	57	52	54	48	46	44	47	47	41	40	36	37	42	37	40	41	48	52		
Oakland.....	65	66	66	64	66	62	72	64	64	64	61	68	67	69	71	73	83	84	78	73	59	57	60	62	60	64	70	76	78	67.		
	55	55	54	55	55	54	55	54	54	55	56	56	50	56	59	51	53	56	60	62	53	49	47	46	50	50	55	55	55	53.		
Orland.....	92	86	89	93	95	98	91	89	88	85	73	79	63	78	80	83	90	90	89	87	75	65	60	62	65	66	73	81	80	78.		
	51	50	50	54	52	52	52	52	57	52	51	53	51	54	54	50	43	55	55	57	60	49	47	43	43	49	38	45	46	47	50.	
Oroville.....	91	89	84	83	86	89	87	90	89	85	80	73	79	68	77	82	83	88	89	89	74	62	62	64	68	60	67	72	79	80.		
	50	48	49	57	51	50	49	55	56	50	50	52	50	57	51	51	52	57	60	56	50	48	46	46	50	41	41	46	52	51.		
Pasadena.....	66	76	76	66	66	76	79	85	85	88	81	76	75	79	76	77	81	88	92	97	96	75	71	71	77	71	72	89	92	87		
	60	59	58	59	59	54	50	50	54	57	50	49	57	49	50	52	54	54	55	47	58	51	41	40	42	43	45	47	51.			
Paso Robles.....	67	72	71	78	70	78	87	85	90	85	88	83	84	81	82	81	88	95	97	98	78	70	65	69	69	69	76	74	84	90.		
	50	53	52	52	50	51	48	49	46	46	45	44	46	46	47	48	46	47	50	51	48	38	40	34	36	38	38	40	40	57.		
Point Reyes.....	61	63	62	56	55	57	52	59	58	59	58	63	61	56	57	59	61	66	76	60	57	56	57	65	67	72	73	59	60.			
	49	54	54	52	53	51	53	52	52	53	54	53	54	54	54	58	51	55	53	54	50	49	46	49	51	52	49	51	52	51.		
Pomona.....	63	73	76	76	73	75	80	88	78	78	78	78	71	77	75	70	79	84	93	100	101	98	74	74	57	68	76	88	92	91.		
	60	59	57	59	59	55	48	48	50	37	54	58	57	58	48	50	49	49	45	59	54	44	57	36	38	39	38	40	50.			
Porterville.....	87	85	85	89	87	86	87	88	87	88	88	86	87	87	84	85	92	95	95	86	88	68	64	68	73	68	76	80	86	86	83.	
	59	57	56	59	56	57	56	55	56	54	54	52	52	51	50	51	50	51	46	51	41	40	42	46	41	40	42	46	52.			
Red Bluff.....	93	88	86	87	91	83	97	91	89	87	84	71	78	63	72	78	83	92	89	90	74	60	59	62	63	60	64	75	81	80.		
	54	52	53	56	57	54	55	56	60	53	56	55	56	51	56	58	58	56	47	44	40	45	48	45	46	47	48	48	52.			
Redlands.....	64	67	74	66	71	72	79	89	91	85	87	84	79	71	80	94	97	98	100	97	86	74	59	62	67	70	80	88	87	86.		
	60	58	57	59	59	57	50	49	47	52	53	51	49	56	48	52	58	60	60	55	58	47	40	40	43	44	48	49	49	50.		
Sacramento.....	84	80	76	84	79	75	86	87	85	84	83	75	76	75	74	78	81	88	88	88	76	63	60	65	61	65	72	78	81	76.		
	50	51	51	56	52	52	51	57	55	52	54	58	55	54	50	51	55	55	57	56	49	47	42	47	49	40	45	47	48	52.		
San Bernardino.....	64	71	79	68	75	78	84	92	93	88	91	89	83	75	85	95	101	103	105	102	88	76	60	66	71	75	85	85	90	93.		
	61	59	61	60	59	58	51	49	52	52	51	55	55	59	51	51	52	51	52	51	50	48	39	38	40	42	40	42	42	50.		
San Diego.....	66	67	65	66	70	69	69	70	68	68	69	69	70	69	66	66	66	69	79	85	65	66	67	61	61	64	67	70	74	70.		
	66	67	67	64	60	61	61	72	69	65	64	68	65	69	73	75	84	85	74	67	62	60	62	64	67	73	76	77	68.			
San Francisco.....	55	56	56	55	56	56	56	55	56	55	56	55	56	57	57	55	55	55	55	56	57	50	51	51	52	53	53	55	54	54.		
	75	74	70	75	70	74	71	73	71	71	76	73	74	73	77	77	86	90	89	70	60	65	66	67	68	68	70	73	74.			
San Jose.....	51	49	53	56	56	53	55	57	55	57	52	49	53	55	54	51	49	51	47	48	45	40	42	44	46	47	48	49	49	50.		
	65	72	69	70	61	63	73	75	77	75	73	70	68	67	63	68	71	73	75	77	68	62	66	66	67	70	75	73	74	71.		
San Luis Obispo.....	55	55	53	58	54	54	50	52	53	49	51	52	50	53	47	40	43	53	56	51	53	44	39	38	40	41	42	43	48	48	50.	
	55	55	53	58	54	54	50	49	51	52	50	46	48	48	53	55	47	40	43	48	45	43	48	45	46	47	48	49	49	50.		
Santa Barbara.....	65	74	74	64	62	63	70	75	81	70	68	67	63	70	70	70	70	70	70	70	69	64	74	73	83	91	96	94	95	85.		
	57	59	56	56	57	52	50	46	51	48																						

SUPPLEMENTAL PRECIPITATION TABLE.

Stations.	Drainage-basin.	Precip., inches.	Stations.	Drainage-basin.	Precip., inches.	Stations.	Drainage-basin.	Precip., inches.	Stations.	Drainage-basin.	Precip., inches.
Abbotts.....	Coast.....	0.19	Dobbins (near).....	Sacramento.....	1.18	Las Plumas.....	Sacramento.....	1.79	Quincy.....	Sacramento.....	1.01
Aguanga.....	do.....	0.31	Downieville.....	do.....	2.36	Lathrop.....	San Joaquin.....	0.13	Reedley.....	San Joaquin.....	0.03
Amago.....	do.....	2.78	Dudley.....	San Joaquin.....	0.36	Le Grand.....	do.....	0	Represa.....	Sacramento.....	0.45
Angiola.....	San Joaquin.....	0.10	Dudleys.....	do.....	0.50	Livermore.....	Coast.....	0.15	Rio Vista.....	do.....	0.33
Antelope Valley.....	do.....	0.38	East Park.....	Sacramento.....	0.13	Livingston.....	San Joaquin.....	0.01	Ruth.....	Coast.....	2.00
Arrowhead Springs.....	Coast.....	1.75	Edison.....	San Joaquin.....	0.24	Liano.....	Coast.....	0.13	St. Helena.....	St. John.....	0.50
Auberry.....	San Joaquin.....	0.24	Electra.....	do.....	0.58	Lompoc.....	do.....	0	St. Helena.....	Sacramento.....	0.75
Auburn.....	Sacramento.....	0.62	Emigrant Gap.....	Sacramento.....	1.53	Los Alamos.....	do.....	0.32	St. John.....	Sacramento.....	0.30
Avalon.....	Ocean.....	0.37	Escondido-2.....	Coast.....	1.57	Los Gatos.....	do.....	0.34	Sacramento.....	Ocean Coast.....	1.54
Bagdad.....	Desert.....	1.42	Fairmont.....	Coast.....	0.28	Lytie Creek.....	do.....	3.30	Santa Ana River.....	Santa Clara.....	0.18
Barrett Dam.....	Coast.....	2.58	Firebaugh.....	San Joaquin.....	0.08	Mountain Lakes.....	do.....	0.27	Santa Maria.....	do.....	0.09
Beaumont (near).....	do.....	1.93	Fort Bragg.....	Coast.....	1.37	Maricopa.....	do.....	0.25	Santa Monica.....	do.....	0.32
Bellota.....	San Joaquin.....	4.12	Fort Ross.....	do.....	2.13	Mariposa.....	do.....	0.21	Seven Oaks.....	do.....	1.88
Benson's Ferry.....	do.....	0.11	Friant.....	San Joaquin.....	T	Marysville.....	Carsen.....	0.18	Sheldy's Ranch.....	Walker T.....	0
Betteravia.....	Coast.....	0.19	Georgetown.....	Sacramento.....	....	Melones.....	San Joaquin.....	0.32	Shively.....	Coast.....	....
Big Bar.....	Sacramento.....	0.12	Great Forest.....	San Joaquin.....	1.07	Merced Falls.....	do.....	0.07	Sierraville.....	Sacramento.....	0.71
Big Sur.....	Coast.....	0.33	Glacier Point.....	do.....	0.18	Mesa Grande.....	Coast.....	2.58	Sonora.....	San Joaquin.....	0.38
Bishop Creek.....	Owens.....	1.40	Glenville.....	do.....	0.23	Middlewater.....	San Joaquin.....	0.21	Spaulding.....	Sacramento.....	1.77
Calaveras R. S.....	San Joaquin.....	....	Gray Mountain.....	Desert.....	0.24	Mill Creek-1.....	do.....	0.97	Standish.....	Mountain Lakes.....	0
Campbell.....	Coast.....	0.31	Happy Camp.....	Coast.....	3.01	Mill Creek-2.....	Coast.....	2.26	Sterling.....	Desert.....	....
Campo.....	do.....	2.12	Hayfork.....	Sacramento.....	1.44	Milo.....	do.....	0.40	Storey.....	San Joaquin.....	....
Camptonville.....	Sacramento.....	2.08	Head Dam.....	do.....	1.50	Milton (near).....	do.....	0.28	Tamarack.....	Sacramento.....	0.86
Canon Dam.....	do.....	0.38	Helen Mine.....	Coast.....	....	Mokelumne Hill.....	do.....	0.58	Tejon Rancho.....	San Joaquin.....	....
Cascada.....	San Joaquin.....	0.47	Hetch Hetchy.....	San Joaquin.....	....	Monroeville.....	Sacramento.....	0.50	Three Rivers.....	do.....	0.05
Cedarville.....	Mountain Lakes.....	0.33	Hot Springs.....	do.....	....	Montague.....	Klamath.....	....	Trona.....	Desert.....	0.07
Centerville Pwr H.....	Sacramento.....	1.16	Hulvily (near).....	Coast.....	1.89	Nellie.....	Coast.....	3.99	Tustin (near).....	San Joaquin.....	0.07
Chester.....	do.....	0.83	Huntington Lake.....	San Joaquin.....	0.65	Nicolaus.....	Sacramento.....	0.52	Twin Lakes.....	Coast.....	1.21
China Flat.....	Coast.....	2.16	Idria.....	do.....	0.20	North Bloomfield.....	do.....	1.05	Mountain Lakes.....	do.....	1.25
Churn Creek.....	Sacramento.....	0.88	Jenny Lind.....	do.....	0.31	North Fork.....	San Joaquin.....	0.38	Sacramento.....	Coast.....	1.17
Clovis.....	do.....	....	Jolon.....	Coast.....	0.10	Oak Grove.....	Coast.....	0.04	Upper Mattole.....	Coast.....	2.84
Coalinga.....	San Joaquin.....	0.16	Julian.....	do.....	2.13	Orleans.....	Klamath.....	2.17	Walnut Creek.....	Coast.....	0.28
Colgate.....	Sacramento.....	1.05	Kennedy Mine.....	San Joaquin.....	0.19	Ozene.....	Coast.....	0.52	Warner Springs.....	do.....	0.01
Crockett.....	Coast.....	0.56	Kentfield.....	do.....	1.13	Parkfield.....	do.....	0.07	Wasco.....	San Joaquin.....	0.35
Cuyamaca.....	do.....	1.85	Kernville.....	San Joaquin.....	0.16	Paso Robles-2.....	Pattiway.....	0.44	Wascojita.....	Coast.....	....
Deer Creek.....	Sacramento.....	0.92	King City*.....	Coast.....	0	Peachland.....	San Joaquin.....	....	West Branch.....	Sacramento.....	1.80
Del Monte.....	Coast.....	0	Knights Landing.....	Sacramento.....	0.36	Piedra.....	Coast.....	1.26	West Point.....	San Joaquin.....	1.09
Denair.....	San Joaquin.....	0.10	Lake Eleanor.....	San Joaquin.....	....	Point Loma.....	Coast.....	0.27	Westwood.....	Sacramento.....	0.72
De Sabla.....	Sacramento.....	1.80	Lakeport.....	Sacramento.....	0.82	Portola.....	Sacramento.....	1.60	Wrights.....	Coast.....	0.47
Dinuba.....	San Joaquin.....	....	Lake Spaulding.....	do.....	1.77	Priest Valley.....	Coast.....	0.40	Yorba Linda.....	do.....	0.22
			Lake Tahoe.....	Truckee.....	0.52			0.08			

*Data obtained from 3-inch rain gage.