

CLIMATOLOGICAL DATA.

CALIFORNIA SECTION

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GENERAL SUMMARY.

Seasonable weather prevailed in California during July. It was cool and foggy along the coast, and hot and dry in the interior. For the State as a whole the mean temperature for the month was exactly normal. Several hot spells occurred during which temperatures above 100° were recorded in the Sacramento-San Joaquin Valley, and temperatures above 110° in the south-eastern desert region. Abundant sunshine was received in the interior valleys. Thunderstorms accompanied by little or no precipitation were frequent in the Sierra Nevada Mountains. The only rain of consequence was that which fell during violent local thunderstorms in the mountains of San Diego County on the 12th, 15th and 20th. Unusually heavy showers in the vicinity of Campo, San Diego County, on the 20th, caused a local flood which resulted in some slight damage. Field and forest fires were numerous in the central and northern portions of the State. Sufficient water was available for the generation of hydroelectric power. Wind movement was light.

Agriculturally, the weather during July was favorable. Irrigation water was ample, and most growing crops made excellent progress toward maturity. During the first week hot, desiccating winds caused some damage to fruit and grain, however. Immature fruit dropped from the trees in larger amounts than is usual during July. Nevertheless, both citrus and deciduous fruits progressed satisfactorily. Apricots, plums, peaches and figs were harvested, and the yields were normal, both in quality and quantity. The harvesting of grain crops was completed; wheat, barley and oats showed the effects of the hot spells in that they matured too rapidly. But the hot weather was good for corn, rice, hops, grapes, walnuts, sugar beets, cotton and alfalfa, all of which crops showed excellent growth. Lowland pastures dried up, but mountain ranges furnished ample feed for grazing stock. Field beans growing along the coast were somewhat backward during the early part of the month, but they improved under the persistent fog. Olives growing in southern California made poor progress. Near the close of the month grapes, pears and apples appeared in the markets. At the close of the month most growing crops were in a satisfactory condition, and there was every indication of normal crops, 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 29.92 inches. The highest was 30.20 inches at Eureka on the 15th; the lowest was 29.61 inches at Independence on the 2nd; the range for the State was 0.59 inch.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 98 stations, was 74.0°, which is exactly normal. The highest monthly mean was 102.0°, at Greenland Ranch; and the lowest was 53.4° at Point Reyes. The highest temperature, 123°, occurred at Greenland Ranch on the 1st and 8th; and the lowest, 24°, occurred at Portola on the 10th. The range for the State was 99°.

PRECIPITATION.

The average precipitation for the State, as shown by the records of 243 stations, was 0.05 inch, or 0.01 inch above the normal. The greatest monthly amount was 5.30 inches, at Campo. No rain fell at 189 stations.

The greatest amount in 24 hours was 2.90 inches at Campo, on the 20th.

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.....	91	78	84	248	54
Fresno.....	46	12	29	430	96
Independence.....	37	19	28	398	89
Los Angeles.....	88	60	74	351	80
Mount Tamalpais.....					
Red Bluff.....	50	15	32	455	100
Sacramento.....	76	27	52	495	99
San Diego.....	88	76	82	278	64
San Francisco.....	87	69	78	297	66
San Jose.....		44		382	87
San Luis Obispo.....	90	54	72	333	75

WIND MOVEMENT.—(Miles.)

Stations.	Total mov. for month.	Ave. hr. velocity.	Maximum velocity.	Direction.	Date	Prev. dir.
Eureka.....	5,342	7.2	39	n.	2	n.w.
Fresno.....	6,101	8.2	25	n.w.	2	n.w.
Independence.....	3,947	5.7	22	w.	1	s.
Los Angeles.....	3,707	5.0	15	sw.	29	sw.
Mount Tamalpais.....						
Point Reyes.....	16,443	22.1	40	n.w.	1	n.w.
Red Bluff.....	3,923	5.3	40	n.w.	2	se.
Sacramento.....	6,593	8.9	38	n.w.	2	s.
San Diego.....	4,342	5.8	30	n.w.	5	s.w.
San Francisco.....	6,789	9.1	30	w.	4	sw.
San Jose.....	4,770	6.4	23	n.w.	3	n.w.
San Luis Obispo.....	2,618	3.5	12	n.w.	29	n.w.

COMPARATIVE DATA FOR JULY.

Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.
1898....	81.4	T.	1904....	72.2	0.09	1910....	75.5	0.10	1916....	70.3	0.31
1899....	77.9	T.	1905....	74.8	0.01	1911....	74.1	0.10	1917....	75.8	0.08
1900....	75.9	T.	1906....	76.8	0.04	1912....	71.0	0.06	1918....	71.5	0.07
1901....	76.0	0.01	1907....	73.1	0.03	1913....	73.1	0.46	1919....	72.4	0.01
1902....	72.8	0.07	1908....	76.4	0.04	1914....	72.4	0.06	1920....	71.7	0.06
1903....	71.2	0.03	1909....	71.2	0.05	1915....	72.7	0.06	1921....	74.0	0.05

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

Stations.	Data.	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	
Chula Vista**	Evaporation.....	.217	.267	.246	.233	.265	.206	.188	.236	.227	.267	.233	.250	.221	.233	.162	.220	.259	.252	.208	.229	.254	.262	.241	.225	.244	.282	.213	.238	.272	.254	.211	7.265
	Wind movement.....	101	114	126	119	126	89	74	97	69	112	95	100	93	103	74	84	97	113	102	119	88	121	112	103	97	107	88	105	118	125	109	3.175
Dodgeland*	Evaporation.....	.141	.645	.629	.340	.310	.410	.231	.322	.432	.374	.364	.508	.380	.654	.330	.151	.507	.244	.304	.309	.302	.378	.343	.318	.531	.266	.341	.280	.242	.299	.356	11.241
	Wind movement.....	3	133	147	118	19	12	28	10	12	19	12	21	20	12	21	4	20	29	19	5	11	21	7	24	33	6	24	10	20	16	13	849
Oakdale (near)*	Evaporation.....	.464	.609	.786	.588	.531	.513	.529	.585	.586	.603	.562	.561	.502	.574	.560	.615	.490	.530	.421	.522	.574	.600	.648	.549	.500	.553	.553	.483	.576	.472	3.351	17.034
	Wind movement.....	145	165	250	145	90	75	70	75	85	115	130	145	115	135	130	150	140	170	120	150	140	160	170	180	180	125	145	120	180	180	180	4.320
Tahoe**	Evaporation.....	.150	.120	.160	.170	.170	.150	.240	.260	.280	.230	.230	.210	.200	.220	.190	.160	.130	.170	.130	.120	.220	.090	.080	.200	.220	.220	.250	.140	.180	.180	.220	5.630
	Wind movement.....	13	32	43	37	32	30	53	34	42	28	17	30	42	51	36	76	52	31	8	33	24	42	24	27	37	35	52	33	58	51	83	1,141

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

Daily Temperature for July, 1921.

Table with columns for Stations, days 1-31, and Mean. Rows include Bakersfield, Calexico, Chico, Escondido, Eureka, Fresno, Independence, Los Angeles, Merced, Oakland, Orland, Oroville, Pasadena, Paso Robles, Point Reyes, Pomona, Porterville, Red Bluff, Redlands, Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo, Santa Barbara, Santa Rosa, Stockton.

SUPPLEMENTAL PRECIPITATION TABLE.

Table with columns for Stations, Drainage-basin, and Precip. inches. Rows include Abbotts, Aguanga, Amago, Angiola, Antelope Valley, Arrowhead Springs, Auburn, Avalon, Bagdad, Barrett Dam, Beaumont, Bellota, Benson's Ferry, Betteravia, Big Bar, Big Sur, Bishop Creek, Calaveras R. S., Campbell, Campo, Camptonville, Canon Dam, Cascaeda, Cedarville, Centerville Pwr. H., Chester, China Flat, Churn Creek, Clovis, Coalinga, Colgate, Crockett, Cuyamaca, Deer Creek, Del Monte, Denair, De Saba, Dinuba, Dobbins (near), Downville, Dudley, Dudleys, East Park, Happy Camp, Hayfork, Head Dam, Helen Mine, Hetch Hetchy, Hot Springs, Hullville (near), Huntington Lake, Idria, Jenny Lind, Jolon, Julian, Kennedy Mine, Kenfield, Kernville, King City, Knights Landing, Lake Eleanor, Lakeport, Lake Spaulding, Lake Tahoe, Las Plumas, Lathrop, The Grand, Livermore, Livingston, Lugo, Lompoc, Los Alamos, Los Gatos, Lytle Creek, Madeline, Maricopa, Mariposa, Markleville, Melones, Merced Falls, Mesa Grande, Middlewater, Mill Creek - 1, Mill Creek - 2, Milo, Milton (near), Mokelumne Hill, Montroseville, Montague, Nellie, Nicolaus, North Bloomfield, North Fork, Oak Grove, Orleans, Ozena, Parkfield, Paso Robles-2, Pattiway, Peachland, Piedra, Point Loma, Portola, Priest Valley, Quincy, Reedley, Represa, Rio Vista, Ruth, St. Helena, St. John, San Miguel Island, Santa Ana River, Santa Clara, Santa Maria, Santa Monica, Seven Oaks, Shively's Ranch, Shively, Sierra Valley, Sonora, Spaulding, Standish, Sterling, Storeys, Tamarack, Tejon Rancho, Three Rivers, Trona, Turlock, Tustin (near), Twin Lakes, Twin Valley, Upper Mattole, Walnut Creek, Warner Springs, Wasco, Wasioja, West Branch, West Point, Westwood, Wrights, Yorba Linda.

*Data obtained from 3-inch rain gage.