

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.
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CLIMATOLOGICAL DATA.

CALIFORNIA SECTION
EDWARD A. BEALS, METEOROLOGIST.

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GENERAL SUMMARY.

Seasonable weather prevailed in California during July; it was hot and dry in the interior valleys, and relatively cool along the coast, with much low cloud and fog. At Greenland Ranch, in Death Valley, the temperature rose to 112° or higher on every day of the month, and culminated with a maximum of 126° on the 15th. Thunderstorms were of frequent occurrence in the mountains. Unsettled and showery weather prevailed throughout the State on the 18th; the rainfall was heavy in the mountains of southern California; at Campo, San Diego County, altitude 2,590 feet, 7.10 inches fell during one storm on that date; at Squirrel Inn, San Bernardino County, altitude 5,280 feet, 5.01 inches fell in 90 minutes. At Summit and Fordyce Dam last winter's snow remained on the ground until about the 7th. Streams continued to fall during the month. There was abundant sunshine in the interior valleys; wind movement was everywhere light.

Agriculture prospered as a result of the favorable weather. It was good harvest weather. The high temperatures in the agricultural regions accelerated the maturing of large crops of deciduous fruit; many varieties were harvested, and the sun-curing of apricots was started under excellent conditions. Improvement was shown during the month by corn, cotton, rice, sugar beets, apricots, prunes, apples, almonds and walnuts; frequent fog along the coast improved the condition of beans. Raisin grapes were somewhat sunburned, but the crop prospects continued good. The "June drop" of citrus fruits continued throughout July. Olives showed a spotted condition; the condition of figs declined. However, the general agricultural situation was excellent at the close of July. There was ample water available for irrigation and for hydroelectric power. Valley pastures continued to deteriorate, but there was ample dry feed available for grazing stock; those on mountain ranges maintained an excellent condition.

A. H. P.

PRESSURE.

The mean sea-level pressure, determined from the records of 11 regular Weather Bureau stations, was 29.96 inches. The highest was 30.28 inches at Eureka on the 25th; the lowest was 29.66 inches at Independence on the 8th; the range for the State was 0.62 inch.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 96 stations, was 73.4° which is 0.2° above normal. The highest monthly mean was 95.8°, at Needles; and the lowest was 54.7°, at Point Reyes. The highest temperature, 126°, occurred at Greenland Ranch on the 15th; and the lowest, 25°, occurred at Portola on the 22d. The range for the State was 98°.

PRECIPITATION.

The average precipitation for the State, as shown by the records of 246 stations, was 0.15 inch, or 0.07 inch above the normal. The greatest monthly amount was 7.10 inches, at Campo; and the least monthly amount was 0, at 117 stations. The greatest amount in 24 hours was 7.10 inches at Campo on the 18th.

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.....	92	81	86	191	42
Fresno.....	51	15	33	433	97
Independence.....	37	16	25	380	85
Los Angeles.....	92	66	79	547	79
Red Bluff.....	55	19	27	423	94
Sacramento.....	73	37	55	453	95
San Diego.....	90	73	82	313	72
San Francisco.....	90	76	83	349	78
San Jose.....	53	53	53	386	86
San Luis Obispo.....	91	55	73	330	75

WIND MOVEMENT.—(Miles.)

Stations.	Total mov. for month.	Ave. hr. velocity.	Maximum velocity.	Direction.	Date	Prev. dir.
Eureka.....	4,088	5.5	19	nw.	22	nw
Fresno.....	6,080	8.2	24	nw.	18	nw.
Independence.....	4,069	5.5	32	se.	18	nw.
Los Angeles.....	3,774	5.1	22	nw.	15	sw.
Point Reyes.....	12,646	17.0	50	nw.	24	nw.
Red Bluff.....	3,389	4.6	15	se.	10	se.
Sacramento.....	6,592	8.9	20	s.	7	s.
San Diego.....	4,583	6.2	22	w.	17	w.
San Francisco.....	7,317	9.8	30	w.	21	sw.
San Jose.....	4,113	5.5	20	nw.	22	nw.
San Luis Obispo.....	2,823	3.8	16	ne.	25	nw.

COMPARATIVE DATA FOR JULY.

Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.
1897....	74.5	0.01	1904....	72.2	0.09	1911....	74.1	0.10	1918....	71.5	0.07
1898....	81.4	T.	1905....	74.8	0.01	1912....	71.0	0.06	1919....	72.4	0.01
1899....	77.9	T.	1906....	76.8	0.04	1913....	73.1	0.46	1920....	71.7	0.06
1900....	75.9	T.	1907....	73.1	0.03	1914....	72.4	0.06	1921....	74.0	0.05
1901....	76.0	0.01	1908....	76.4	0.04	1915....	72.7	0.06	1922....	73.4	0.15
1902....	72.8	0.07	1909....	71.2	0.05	1916....	70.3	0.31
1903....	71.2	0.03	1910....	75.5	0.10	1917....	75.8	0.08

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.....	238	171	185	231	273	177	152	161	233	277	253	262	242	239	251	247	203	111	233	270	256	210	225	219	212	212	243	233	249	164	235	6,870
	Wind movement.....	94	78	80	125	130	100	72	81	78	104	111	99	90	111	94	84	104	101	98	123	130	95	81	80	89	80	70	90	86	106	129	2,993
Dodgeland*	Evaporation.....	208	201	082	214	481	390	255	286	372	205	288	216	325	135	194	450	252	348	289	217	493	410	184	240	259	259	480	521	295	250	118	8,917
	Wind movement.....	10	15	4	19	6	44	36	49	30	43	7	29	2	4	13	44	13	35	49	7	83	56	36	33	3	21	19	27	32	11	45	825
Oakdale (near)*	Evaporation.....	400	447	606	595	592	493	539	485	407	449	351	477	459	440	523	495	663	444	503	475	507	467	482	453	454	449	571	533	457	603	512	15,381
	Wind movement.....	85	65	120	115	110	105	150	140	120	180	145	125	130	110	90	90	125	145	140	120	120	110	100	100	100	100	90	70	80	110	115	3,505
Tahoe**	Evaporation.....	175	175	160	185	140	145	170	165	190	190	170	165	170	135	195	180	175	185	175	155	230	245	205	145	185	190	135	175	150	175	095	5,330
	Wind movement.....	23	46	46	25	51	23	23	32	48	41	54	54	31	28	33	49	47	63	67	55	48	51	28	35	41	19	18	13	25	25	7	1,149

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

Climatological Data for July, 1922.

Table with columns: Stations, Counties, Elevation, Length of record, Temperature (Mean, Departure from normal, Highest, Date, Lowest, Date, Greatest daily range), Precipitation (Total, Departure from normal, Greatest in 24 hours, Snowfall), Number of days (Precipitation or more, Clear, Partly cloudy, Cloudy), Prevailing direction of wind, Observers.

Daily Temperature for July, 1922.

Table with 32 columns (Stations, 1-31, Mean) and 32 rows (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). Each station row contains two sub-rows for Maximum and Minimum temperatures.

SUPPLEMENTAL PRECIPITATION TABLE.

Table with 12 columns (Stations, Drainage-basin, Precip. inches) and 32 rows listing various locations and their precipitation data. Locations include Abbots, Aguanga, Amago, Angiola, Antelope Valley, Arroyo de San Juan, Auberry, Avalon, Bagdad, Barrett Dam, Beaumont, Beaumont (near), Bellota, Benson's Ferry, Betteravia, Big Bar, Big Sur, Bishop Creek, Brawley, Campbell, Campo, Camptonville, Canon Dam, Cananda, Cedarville, Centerville Pwr. H., Chester, China Flat, Churn Creek, Clovis, Coalinga, Colgate, Crockett, Cuyamaca, Deer Creek, Del Monte, Deunit, De Sable, Dinkey Meadow, Dinuba, Dobbins (near), Downieville, Dudley, Dudleys, Edison, Electra, Emigrant Gap, Escondido-2, Fairmont, Firebaugh, Fort Bragg, Fort Ross, Georgetown, Giant Forest, Glacier Point, Glennville, Happy Camp, Hat Creek, Hayfork, Head Dam, Helen Mine, Hetch Hetchy, Hot Springs, Hot Springs Camp, Huntington Lake, Idria, Jenny Lind, Jolon, Kennedy Mine, Kentfield, Kernville, King City, King's River, N. Fk., Knights Landing, Lake Eleanor, Lakeport, Lake Spaulding, Lake Tahoe, Las Plumas, Lathrop, Le Grand, Litchfield, Livermore, Livingston, Llano, Los Alamos, Los Gatos, Lytle Creek, Madeline, Maricopa, Markleville, Melones, Merced Falls, Mesa Grande, Middlewater, Parkfield-1, Parkfield-2, Pattiway, Peachland, Piedra, Point Loma, Portola, Priest Valley, Redding, Reedley, Represa, Rio Vista, Ruth, St. Helena, St. John, St. Miguel Island, San Pedro, Santa Ana River, Santa Maria, Santa Monica, Scott Bar, Seven Oaks, Shield's Ranch, Sierraville, Sonora, Spaulding, Sterling, Tamarack, Tejon Rancho, Three Rivers, Trona, Turlock, Tustin (near), Twin Lakes, Twin Valley, Upper Mattole, Victorville, Walnut Creek, Warner Springs, Wasco, Wasioja, West Branch, West Point, Westwood, Wrights.

*Data obtained from 3-inch rain gage.