

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU

CLIMATOLOGICAL DATA

4

CALIFORNIA SECTION

E. H. BOWIE

Vol. XL

SAN FRANCISCO, JULY, 1936

No. 7

GENERAL SUMMARY

The mean temperature for the State as a whole was somewhat above normal, although minus departures occurred over much of the Klamath River drainage basin and locally in north-central California and in Riverside and San Bernardino counties. Plus departures were largest in the southern San Joaquin Valley and coastal districts. Daily means averaged generally above normal, except from the 6th to 12th and 26th to 28th, when somewhat below. Day temperatures were highest from the 17th to 23rd, and night temperatures were lowest from the 8th to 11th. Extremes were well within the July record. The highest temperature reported was 125° at Greenland Ranch on the 17th and 18th, and the lowest was 26° at Ellery Lake on the 11th. Monthly means ranged from 53.1° at Fort Bragg to 102.4° at Cow Creek.

The total precipitation for the State was nearly three times the 40-year average, but was exceeded in July 1913 and 1916. The distribution was irregular, with large local excesses over the desert regions, the eastern slopes of the southern Sierra Nevada, and northern and central Coast Range valleys, and deficiencies over the extreme northern portion of the State, the northern Sierra Nevada, the San Joaquin Valley, and locally elsewhere. Showers were most frequent from the 7th to 10th, 16th to 20th, and 26th to 28th. The greatest monthly total was 2.14 inches at South Lake, and the heaviest 24-hour fall was 1.70 inches at Indio on the 26th. Thunderstorms were numerous in desert and mountain districts. There was no appreciable damage by hail or wind. Sunshine exceeded the normal along the northern and middle coast and was deficient elsewhere.

July weather was generally favorable for the development and harvest of crops, although showers during the latter part of the first decade did some damage locally to cut hay, grains, and ripe fruits, and high temperatures during the week ending with the 23rd caused some burning of fruits and walnuts. The warm weather improved rice and cotton. Crop yields were generally satisfactory, and the condition of ranges and livestock was mostly good. Water for livestock and irrigation was ample.

M. S.

PRESSURE, WIND, HUMIDITY, AND SUNSHINE

Stations	Atmospheric pressure (reduced to sea level)				Wind			Relative humidity			Percentage of sunshine		
	Mean	Highest	Date	Lowest	Date	Average hourly velocity	Maximum velocity	Direction	Date	5 a. m.		12 noon	5 p. m.
Eureka	30.03	30.16	29	29.78	8	7.3	24	n.	6	94	81	78	60
Fresno	29.81	29.96	11	29.61	15	7.1	24	n.	17	48	24	18	94
Los Angeles	29.87	30.00	28	29.66	14	5.6	15	w.	17	84	50	59	73
Redding	29.80	30.00	11	29.62	15	7.7	20	n.w.	30	67	31	23	93
Sacramento	29.82	29.99	11	29.65	15	7.8	19	sw.	2	47	61	74	85
San Diego	29.86	29.98	27	29.66	14	6.5	17	n.w.	21	88	72	74	85
San Francisco	29.89	29.97	11	29.74	14	10.8	25	w.	2	89	68	70	84

†Also on other dates.

COMPARATIVE DATA FOR JULY

Year	Temperature			Precipitation Average	Number of days			
	Mean	Highest	Lowest		Precip. .01 in. or more	Clear	Partly cloudy	Cloudy
1897	74.5	124	21	0.01	†	24	6	1
1898	81.4	124	27	T.	†	26	3	2
1899	77.9	123	25	T.	†	26	3	2
1900	75.9	126	30	0.03	†	26	3	2
1901	76.0	121	28	0.01	†	26	3	2
1902	72.8	122	17	0.07	†	25	4	2
1903	71.2	121	15	T.	†	27	3	1
1904	72.2	117	23	0.09	†	24	4	3
1905	74.8	128	18	0.01	†	27	3	1
1906	76.8	120	27	0.04	†	27	3	1
1907	78.1	123	28	0.03	†	26	3	2
1908	78.4	119	34	0.04	†	27	3	1
1909	71.2	117	26	0.05	†	28	2	1
1910	75.5	119	22	0.10	†	25	4	2
1911	74.1	117	28	0.10	†	24	5	2
1912	71.0	118	23	0.06	†	23	6	2
1913	78.1	134	22	0.46	2	21	5	5
1914	72.4	122	28	0.06	1	25	5	1
1915	72.7	120	29	0.06	1	27	3	1
1916	70.3	127	24	0.31	†	28	2	1
1917	75.8	125	23	0.08	†	24	5	2
1918	71.5	120	29	0.07	†	24	5	2
1919	72.4	122	23	0.09	†	25	4	2
1920	71.7	125	26	0.06	†	25	4	2
1921	74.0	123	24	0.05	†	26	4	1
1922	73.4	126	28	0.15	†	24	5	2
1923	71.4	123	29	0.05	†	26	4	1
1924	71.3	124	26	0.01	†	27	3	1
1925	75.9	125	27	0.15	1	23	6	2
1926	74.0	125	26	0.07	†	26	4	1
1927	73.5	125	22	0.05	†	27	3	1
1928	72.3	125	26	0.01	†	26	4	1
1929	72.9	123	30	0.01	†	27	3	1
1930	72.3	122	32	0.02	†	25	4	2
1931	77.2	126	30	0.04	†	26	4	1
1932	71.3	121	22	0.04	†	27	3	1
1933	74.8	127	31	0.04	†	27	3	1
1934	72.9	125	26	0.05	†	27	3	1
1935	71.0	123	22	0.07	1	25	4	2
1936	74.5	125	26	0.19	1	23	5	3
Period	73.6	134	15	0.07	†	25	4	2

†Less than one-half.

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

(See temperature and precipitation data on the following pages)

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	
Alvarado (nr)†	Evaporation	267	277	265	271	273	211	241	296	058	189	233	248	272	266	276	260	244	250	261	275	216	281	286	273	260	250	257	259	228	246	243	7,762
	Wind movement	70	100	110	50	100	140	90	130	80	80	80	80	100	40	160	100	80	120	60	130	50	120	140	130	130	100	150	90	60	80	80	3,080
Chula Vista**	Evaporation	270	225	221	190	197	287	308	295	303	280	247	255	164	255	248	272	204	280	284	284	291	295	226	288	169	203	230	267	253	240	278	7,787
	Wind movement	103	72	82	64	53	92	120	113	113	108	70	86	59	98	79	95	81	109	94	75	105	104	84	87	89	94	123	147	85	76	82	2,840
Davis§§	Evaporation	333	310	344	354	401	529	309	418	170	264	342	285	321	362	364	439	349	294	354	391	409	251	374	450	349	356	309	293	316	308	393	11,166
	Wind movement	48	95	60	44	78	97	44	103	85	48	77	27	21	41	28	75	52	24	20	23	43	36	31	75	44	72	73	32	28	24	41	1,690
Fall River Mill**	Evaporation	400	440	400	404	423	397	398	084	238	168	339	418	480	371	386	406	432	454	450	440	436	408	437	432	434	428	405	392	406	424	392	12,203
	Wind movement	45	69	63	61	56	42	56	33	46	45	41	36	53	32	33	52	43	28	38	19	52	39	40	50	35	32	58	34	27	86	34	1,340
Lodi***	Evaporation	360	380	380	420	420	320	460	490	140	240	370	350	390	420	460	460	410	420	500	460	450	430	440	480	380	470	320	340	400	450	500	12,480
	Wind movement	66	61	69	69	67	34	54	67	64	57	78	63	42	39	50	56	58	51	57	42	49	41	53	54	37	68	52	60	57	67	1,729	
Oakdale (near)*	Evaporation	405	489	408	487	489	394	419	581	178	257	336	426	399	514	540	570	497	588	496	488	512	525	414	606	473	492	419	360	415	557	585	14,323
	Wind movement	100	110	115	110	125	80	80	125	120	70	130	65	125	60	105	95	95	110	95	75	60	100	70	85	85	95	100	115	90	105	110	3,005
Tahoe***	Evaporation	150	169	190	200	200	170	190	140	120	040	040	100	140	150	160	170	200	180	160	160	190	190	160	210	230	180	200	160	170	170	5,060	
	Wind movement	24	21	39	42	36	36	33	32	39	21	18	14	25	26	25	27	28	26	23	22	22	21	26	28	33	35	30	26	23	24	24	849

Observations taken at 7:00 a. m.; **7:30 a. m.; ***8:00 a. m.; †9:00 a. m.; †12:00 noon. †Included in the next following entry. ††Total of daily values multiplied by coefficient 1.035, because of connection of evaporation pan to float well. †††Wind movement by 4-cup anemometer.

Climatological Data for July, 1936

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, With precip., Clear, Partly cloudy, Cloudy), Number of days, Prevailing direction of wind, Observers.

Climatological Data for July, 1936-Continued

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)	With precip., 0.01 in. or more	Clear			Partly cloudy	Cloudy	
Madera	Madera	296	86	82.1	+3.4	112	†21	52	11	53	0	-0.01	0	0	0	30	1	0	nw.	Santa Fe Co.	
Maricopa	Kern	640	24	89.3	+4.0	113	†23	62	9	36	T.	-0.01	T.	0	0	19	6	6	ne.	Union Oil Co.	
Marysville	Yuba	67	65	80.8	+2.0	108	†18	55	2	46	0	0	0	0	0	27	1	3	s.	Southern Pacific Co.	
Merced	Merced	173	64	81.1	+3.7	110	24	54	11	44	T.	-0.01	T.	0	0	29	1	1	n.	Santa Fe Co.	
Middlewater	Kern	803	24	88.6	+3.9	114	23	60	11	39	0.12	+0.11	0.12	0	0	28	0	3	n.	Union Oil Co.	
Mineral	Tehama	4,950	11	62.8	.....	98	20	37	3	53	T.	-0.09	T.	0	0	27	4	0	nw.	U. S. Forest Service
Modesto	Stanislaus	90	66	77.1	.....	104	†19	52	17	47	0.07	+0.07	0.07	0	0	23	7	1	nw.	Prof. W. F. Martin
Montague	Siskiyou	2,450	47	73.8	-1.9	106	21	45	11	47	0.17	-0.28	0.14	0	0	26	4	1	s.	R. E. Swigart	
Mount Shasta	Siskiyou	3,565	48	67.4	+0.4	98	†19	33	9	44	0.50	+0.36	0.50	0	0	25	2	4	s.	Southern Pacific Co.	
Mount Wilson	Los Angeles	5,850	20	74.0	+1.4	97	18	42	9	31	0.07	+0.04	0.07	0	0	20	6	5	sw.	Solar Observatory	
Napa	Napa	60	53	66.3	+0.4	94	18	45	26	45	0.03	+0.03	0.03	0	0	30	0	1	sw.	Ernest Royce	
Needles	San Bernardino	480	44	98.0	+1.1	114	†15	68	11	58	0.01	-0.37	0.01	0	0	16	5	10	n.	Mrs. L. L. Skelton	
Nevada City	Nevada	2,570	72	72.2	+3.3	105	22	40	3	56	T.	-0.04	T.	0	0	21	9	1	sw.	Mrs. B. H. Preston	
North Bloomfield	Nevada	3,214	65	83.5	+2.0	96	†13	43	11	51	0.01	-0.02	0.01	0	0	27	2	2	sw.	W. W. Kallenberger	
North Fork	Madera	3,000	31	80.4	+0.7	109	†15	48	10	46	0.29	+0.25	0.20	0	0	3	23	1	7	sw.	U. S. Forest Service
Oakdale (near)	Stanislaus	215	47	78.5	+0.7	111	24	54	10	48	T.	0	T.	0	0	29	1	1	nw.	S. San Joaquin Irr. Dist.	
Oakland	Alameda	322	62	65.5	+2.9	84	18	63	25	28	0.06	+0.05	0.06	0	0	29	1	1	nw.	Chabot Observatory	
Ojai	Ventura	900	30	75.2	+2.6	111	17	45	12	56	0.04	+0.02	0.04	0	0	17	13	1	sw.	Howard D. Gally	
Orange Cove	Fresno	431	5	82.2	.....	110	23	54	2	51	0	.....	0	0	0	28	0	3	n.	L. R. Coole
Orland	Glenn	254	53	82.2	+1.0	109	†18	58	27	46	0	-0.02	0	0	0	30	0	1	s.	U. S. Reclamation Bureau	
Orleans	Humboldt	401	32	69.9	+4.9	101	20	48	18	46	0.52	+0.32	0.45	0	0	28	0	3	n.	E. J. Anderson	
Oroville	Butte	273	51	81.5	+2.0	108	†19	57	11	44	0.03	+0.02	0.02	0	0	28	2	1	s.	Guy T. Adams	
Oxnard	Ventura	51	12	67.0	+3.3	87	20	49	1	29	0.02	+0.02	0.02	0	0	27	2	2	w.	Am. Crystal Sugar Co.	
Palm Springs	Riverside	584	40	89.4	+3.1	108	16	59	11	40	1.50	+1.40	0.90	0	0	12	15	4	w.	U. S. Bureau Plant Ind.	
Palo Alto	Santa Clara	57	24	66.8	+1.5	94	18	49	†17	45	0.03	+0.03	0.02	0	0	25	3	3	ne.	A. V. Youens	
Parker Res	San Bernardino	750	2	96.8	.....	118	16	69	11	34	0.37	.....	0.35	0	0	27	11	3	n.	Met. Water Dist.
Paso Robles	San Luis Obispo	1,019	49	73.8	+2.2	108	19	43	2	55	0.25	+0.25	0.24	0	0	27	4	0	n.	Vernon Exline	
Petaluma	Sonoma	10	46	67.0	+1.6	101	19	44	17	50	T.	-0.01	T.	0	0	25	4	2	w.	Pacific Gas & Electric Co.	
Placerville	El Dorado	1,925	62	75.5	+3.1	107	23	46	†11	55	0.07	+0.05	0.05	0	0	22	6	3	s.	J. R. Johnson	
Point Reyes	Marin	510	55	53.8	+0.2	63	9	45	21	12	0.19	+0.15	0.10	0	0	3	11	4	16	nw.	U. S. Weather Bureau
Pomona	Los Angeles	870	23	76.3	+2.8	109	17	51	†1	48	0.06	+0.06	0.04	0	0	25	15	1	sw.	J. E. Adamson	
Porterville	Tulare	464	47	84.0	+1.0	111	15	54	12	52	0	-0.01	0	0	0	28	2	1	se.	Santa Fe Co.	
Portola	Pumas	4,832	20	62.8	+0.3	98	†20	29	16	64	0	-0.02	0	0	0	27	3	1	sw.	Western Pacific Co.	
Quincy	Pumas	3,409	40	66.6	+0.9	100	19	34	17	61	T.	-0.09	T.	0	0	27	3	1	w.	U. S. Forest Service	
Red Bluff	Tehama	303	64	80.8	+0.8	110	19	58	17	42	0.70	+0.08	0.10	0	0	28	2	1	sw.	Mrs. Hazel L. Tucker	
REDDING	Shasta	718	61	83.1	+1.1	110	19	58	9	34	0.42	+0.32	0.42	0	0	27	2	2	nw.	U. S. Weather Bureau	
Redlands	San Bernardino	1,352	47	78.2	+1.4	109	15	51	1	44	0.03	-0.02	0.03	0	0	20	10	1	w.	C. E. Arthur	
Redwood City	San Mateo	81	5	68.2	.....	97	18	49	†16	48	0.01	.....	0.01	0	0	25	2	4	nw.	Capt. L. W. Fowler
Riverside	Riverside	891	55	78.3	+2.5	112	17	51	1	46	0.04	+0.02	0.04	0	0	16	11	4	w.	Eugene F. Hunt	
Rocklin	Placer	2,239	66	80.2	+2.2	114	20	38	18	49	0	.....	0	0	0	25	6	0	w.	A. D. Ricksacker
Ruth (near)	Trinity	2,750	22	66.2	+2.2	101	20	38	18	49	0.96	+0.86	0.64	0	0	28	1	2	n.	U. S. Weather Bureau	
SACRAMENTO	Sacramento	25	86	78.9	+2.1	109	19	55	†7	62	0.07	+0.07	0.06	0	0	27	2	1	sw.	St. Helena Star	
St. Helena	Napa	255	28	70.2	+0.4	106	18	44	†17	62	0.07	+0.07	0.06	0	0	27	2	1	sw.	C. R. McAnander	
Salinas	Monterey	45	63	61.0	-0.7	78	†4	42	†18	36	0.43	+0.42	0.22	0	0	22	1	3	w.	Clyde J. Still	
San Bernardino (near)	San Bernardino	1,172	65	79.6	+3.4	113	15	49	1	53	0.09	+0.06	0.09	0	0	22	8	1	sw.	C. O. Easley	
San Clemente	Orange	135	6	70.8	.....	84	†4	68	†1	24	T.	.....	T.	0	0	23	6	2	w.	U. S. Weather Bureau
SAN DIEGO	Los Angeles	4,517	3	76.1	+3.4	100	17	44	9	30	0.08	.....	0.08	0	0	21	8	2	nw.	U. S. Weather Bureau
San Fernando	San Diego	26	86	70.6	+3.4	84	20	61	1	13	0.01	-0.02	0.01	0	0	11	14	6	sw.	U. S. Weather Bureau	
SAN FRANCISCO	Los Angeles	960	56	77.1	+3.4	111	17	49	1	52	0.10	+0.07	0.06	0	0	3	18	5	8	Bert Hanneman
San Jacinto	San Francisco	17	86	59.4	+0.9	78	18	50	27	19	0.03	+0.01	0.03	0	0	18	12	1	w.	U. S. Weather Bureau	
San Jose	Riverside	1,550	43	80.8	+3.5	114	16	50	11	55	0	-0.10	0	0	0	23	7	1	w.	E. T. Tanner	
San Luis Obispo	Santa Clara	95	62	69.6	+2.8	94	18	49	17	42	0.03	+0.03	0.02	0	0	26	3	2	nw.	Andrew B. Bennett	
Santa Ana	San Luis Obispo	300	66	68.1	+3.7	104	18	46	16	47	0.14	+0.14	0.09	0	0	27	2	2	nw.	J. C. Deuel	
Santa Barbara	Orange	133	26	75.0	+3.6	100	†17	53	11	42	0.06	+0.06	0.06	0	0	1	.....	.....	E. E. Campbell	
Santa Clara	Santa Barbara	130	68	70.1	+4.2	95	18	49	1	36	0.01	-0.01	0.01	0	0	25	4	2	sw.	Mrs. E. H. Hensel	
Santa Clara	Santa Clara	90	56	68.6	+3.3	95	18	45	17	47	0.02	+0.01	0.01	0	0	27	3	1	nw.	Univ. of Santa Clara	
Santa Cruz	Santa Cruz	125	63	65.8	+2.8	90	4	45	17	42	0.53	+0.51	0.53	0	0	1	10	17	4	sw.	Prof. R. E. Burton
Santa Maria	Santa Barbara	217	44	64.7	+1.1	85	6	48	†12	33	0.02	+0.02	0.01	0	0	21	0	0	nw.	A. A. Howard	
Santa Rosa	Sonoma	167	47	70.1	+4.3	105	19	44	17	58	T.	-0.02	T.	0	0	31	0	0	sw.	Mrs. O. K. Newberry	
Scales	Sierra	4,300	1	68.2	.....	95	†18	43	27	49	T.	.....	T.	0	0	28	1	2	s.	Scales Placer Mining Co.
Scotia	Humboldt	146	10	62.4	+2.0	74	4	50	18	21	0.25	+0.24	0.16	0	0	24	0	7	n.	W. G. Corbitt	
Seriterre	Butte	623	16	82.4	+2.8	111	20	56	10	45	T.	-0.01	T.	0	0	28	0	3	sw.	Guy Wilkinson	
Seven Oaks	San Bernardino	5,000	26	63.0	+0.8	85	†3	32	19	49	1.60	+0.85	0.76	0	0	6	19	11	1	w.	W. H. Glass
Sierra Madre	Los Angeles	1,050	39	77.4	+4.6	108	17	55	11	41	0.07	+0.06	0.06	0	0	21	7	3	sw.	Mrs. L. A. Hersey	
Sierraville	Sierra	5,000	26	64.1	+1.5	98	†18	31	18	67	0	-0.05	0	0	0	10	6	15	sw.	C. D. Johnson	
Soda Springs	Nevada	6,752	68	53.8	.....	85	20	34												

Prevailing Wind Direction from May to October, Inclusive

(Based on all available records to and including 1980)

