

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CALIFORNIA SECTION.

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GENERAL SUMMARY.

September was a warm month along the coast of California, but elsewhere in the State the mean temperatures were below normal. Rainfall was heavy in the extreme north portion of the State, while little or no rain fell elsewhere. During a hot spell which prevailed for the first week of the month, temperatures of 100° or higher were common throughout the interior valleys. The latter half of the month was cool and cloudy, and showers were frequent in the north portion. Some damage was caused by high winds which accompanied a local storm at Orland on the 30th. Light snow fell in the high Sierra Nevada Mountains on several occasions. Fog was of frequent occurrence along the coast; Point Reyes experienced fog on 21 days. For the State as a whole the per centage of the possible sunshine received and the wind movement were about normal. Streams maintained extremely low stages.

Agriculturally, the weather during September was favorable for the maturing and the harvesting of a great variety of crops. Those especially benefited included citrus fruit, grapes, sugar beets, hops, corn, potatoes and rice. Meadows, pastures and ranges were improved by the early rains, which also moistened the ground sufficiently to make possible early fall plowing. It was good harvest weather. The sun-curing of fruit proceeded without interruption; occasional showers during the latter part of the month did little or no damage to raisins or prunes, as clear and dry weather followed. Because of unfavorable weather earlier in the season, beans and cotton were somewhat below normal in condition, and the nut crops did not come up to expectations. The abrupt change to colder weather near the close of the month caused cattlemen to bring their cattle and sheep down from the mountains somewhat earlier than usual. The draining of rice lands was completed. At the close of the month the principal crops being harvested included grapes, apples, figs, rice, sugar beets, cotton, corn, potatoes, tomatoes, almonds and walnuts. In quantity, most crops were below those of last year, owing to the deficient supply of irrigation water during the growing season. However, at the close of the month the agricultural situation was generally favorable, and the outlook for the future was satisfactory.

A. H. P.

PRESSURE.

The mean sea-level pressure, determined from the records of 12 regular Weather Bureau stations, was 29.95 inches. The highest was 30.25 inches at Independence on the 27th; the lowest was 29.47 inches at Independence on the 23d; the range for the State was 0.78 inch.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 98 stations, was 66.4°, which is 2.1° below the normal. The highest monthly mean was 82.5°, at Indio; and the lowest was 51.2°, at Summit.

The highest temperature, 112°, occurred at Greenland Ranch on the 3d; and the lowest, 20°, occurred at Portola on the 21st. The range for the State was 92°.

PRECIPITATION.

The average precipitation for the State, as shown by the records of 252 stations, was 0.29 inch, or 0.20 inch below the normal. The greatest monthly amount was 11.59 inches, at Crescent City. No rain fell at 73 stations.

The greatest amount in 24 hours was 3.00 inches at Crescent City on the 3d.

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	82	87	170	45
Fresno.....	62	24	43	356	86
Independence.....	48	19	33	335	90
Los Angeles.....	86	60	73	267	72
Mount Tamalpais.....	68	55	59	325	83
Red Bluff.....	68	28	48	310	83
Sacramento.....	78	37	56	332	89
San Diego.....	86	75	80	286	77
San Francisco.....	93	76	84	277	74
San Jose.....	56	56	56	309	80
San Luis Obispo.....	83	59	71	288	78

WIND MOVEMENT.—(Miles.)

Stations.	Total mov. for month.	Ave. hr. velocity.	Maximum velocity.	Direction.	Date.	Prev dir.
Eureka.....	3,713	5.1	39	sw.	17	w.
Fresno.....	5,755	9.0	28	nw.	23	nw.
Independence.....	4,046	9.9	33	nw.	23	s.
Los Angeles.....	9,567	15.9	76	w.	27	sw.
Mount Tamalpais.....	11,500	18.0	76	nw.	23	nw.
Point Reyes.....	16,421	22.8	56	nw.	23	sw.
Red Bluff.....	3,951	5.5	29	w.	28	sw.
Sacramento.....	5,758	9.0	25	s.	30	s.
San Diego.....	4,444	6.2	21	nw.	18	nw.
San Francisco.....	8,619	12.0	37	sw.	29	sw.
San Jose.....	4,127	5.7	24	w.	23	nw.
San Luis Obispo.....	3,007	4.2	19	w.	24	dw.

COMPARATIVE DATA FOR SEPTEMBER.

Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.	Year	Mean temp.	Ave. precip.
1897....	67.7	0.03	1903....	68.7	0.10	1909....	68.2	0.52	1915....	66.2	0.06
1898....	69.2	0.64	1904....	70.3	2.06	1910....	67.3	0.69	1916....	66.4	0.56
1899....	70.9	0.03	1905....	68.6	0.16	1911....	63.9	0.19	1917....	69.0	0.10
1900....	65.4	0.22	1906....	68.6	0.25	1912....	66.5	1.65	1918....	67.6	2.37
1901....	66.0	0.94	1907....	65.6	0.13	1913....	70.7	0.07	1919....	67.3	0.98
1902....	70.7	0.01	1908....	68.1	0.49	1914....	66.2	0.23	1920....	66.4	0.29

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

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.....	213	201	214	219	224	231	226	216	230	225	205	221	219	191	181	163	226	209	215	211	228	229	234	209	184	189	153	159	156	178	.....	6.162
	Wind movement.....	112	98	116	150	149	66	71	87	112	85	89	93	92	113	113	77	108	91	95	110	121	123	112	93	98	110	90	88	54	86	.....	3.011
Dodgeland*	Evaporation.....	315	249	278	278	294	282	128	184	122	162	128	357	144	162	079	293	207	271	215	210	187	208	215	238	170	142	146	136	178	207	.....	6.191
	Wind movement.....	6	4	34	33	33	32	44	38	21	17	31	20	25	50	3	17	12	75	23	43	8	48	24	54	19	5	17	5	19	.....	7.62	
Oakdale (near)*	Evaporation.....	512	393	512	487	413	242	239	357	243	282	275	336	300	318	297	294	527	232	290	326	300	324	273	227	155	322	286	336	280	365	.....	9.743
	Wind movement.....	105	100	100	125	130	145	115	145	125	90	95	70	120	100	110	60	150	160	100	140	130	130	110	105	95	130	90	50	50	90	.....	3.245
Tahoe**	Evaporation.....	120	150	130	110	130	130	140	240	190	230	240	130	220	150	180	140	130	160	100	090	170	080	070	130	160	120	190	250	210	140	.....	4.697
	Wind movement.....	28	36	61	36	39	37	52	80	43	46	38	78	96	45	96	33	73	75	37	60	103	119	79	86	111	92	82	104	84	75	.....	2.021

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

Climatological Data for September, 1920.

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, Precipitation on inch or more, Clear, Partly cloudy, Cloudy), Number of days (Clear, Partly cloudy, Cloudy), Prevailing direction of wind, Observers.

Daily Precipitation for September, 1920.

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		
Antioch	San Joaquin																																0	
Atascadero	Coast.																																0	
Bakersfield	San Joaquin																																0	
Barstow	Desert																																0	
Berkeley	Coast.																																0	
Blue Canon	Sacramento																	.28															.28	
Blythe	Colorado																																.98	
Bonita	Coast.																																0	
Branscomb	do											.09		.05																			.74	
Brawley	Imperial Valley																																.70	
Calexico	do														1.20	.10																	1.30	
Chico	Sacramento																																.04	
China Vista	Coast.														.03											.01							.09	
Claremont	do																																.11	
Cloverdale	do																																.83	
Colfax	Sacramento																	.43															.02	
Colusa	do																																.07	
Corona	Coast.																.07																.59	
Crescent City	do	.40	.18	3.00	.04	2.00	1.00				27																						.03	
Davis	Sacramento																																	.03
Dodgeland	do																																	.07
Durham	do																																	.03
El Cajon	Coast.																.05																.03	
Elstner	do																.08																.03	
Escondido	do																	.03															.03	
EUREKA	do																																.07	
Folsom	Sacramento																																	.07
Fontana	Coast.																																	.23
Fort Bidwell	Mountain Lakes																																	.52
FRESNO***	San Joaquin																																	.15
Grass Valley	Sacramento																																	.01
Greenland Ranch	Desert																																	.15
Hanford	San Joaquin																																	.01
Healdsburg	Coast.																																	.11
Hollister	do																																	.11
INDEPENDENCE***	Owens																																	.15
Indio	Coachella Val.																																	.15
Inskip	Sacramento																																	.17
Kennett	do																																	.07
La Porte	do																																	.07
Lemon Cove	San Joaquin																																	.04
Lick Observatory	Coast.																																	.04
Lindsay	San Joaquin																																	.02
Lone Pine	Owens																																	.04
LOS ANGELES***	Coast.																																	.02
McCloud	Sacramento																																	.17
Marysville	do																																	.18
Mecca	Coachella Val.																																	.34
Merced	San Joaquin																																	.03
MT. TAMALPAIS***	Coast.																																	.15
Mount Wilson	do																																	.51
Napa	do																																	.07
Needles	Colorado																																	.27
Nevada City	Sacramento																																	.04
Newman	San Joaquin																																	.08
Oakdale (near)	do																																	.10
Oakdale (near)	do																																	.22
Oakland	Coast.																																	.14
Ojai	do																																	.06
Orland	Sacramento																																	.07
Oroville (near)	do																																	.10
Pasadena	Coast.																																	.22
Paso Robles-1	do																																	.24
Petaluma	do																																	.06
Placerville	Sacramento																																	.07
POINT REYES***	Coast.																																	.04
Pomona	do																																	.06
Porterville	San Joaquin																																	.07
Portola	Sacramento																																	.04
RED BLUFF***	do																																	.05
Redding	do																																	.21
Redlands	Coast.																																	.06
Riverside	do																																	.06
Rocklin	Sacramento																																	.01
Rohnerville	Coast.																																	.01
SACRAMENTO***	Sacramento																																	.17
St. Helena	Coast.																																	.02
Salinas	do																																	

Daily Temperature for September, 1920.

Table with 32 columns (Stations, 1-31, Mean) and 31 rows of temperature data for various California locations like Bakersfield, Calexico, Chico, Escondido, Eureka, Fresno, Independence, Los Angeles, Merced, Mount Tamalpais, Oakland, Oriand, Oroville, 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 11 columns (Stations, Watersheds, Precip. inches) and 100 rows of precipitation data for various California locations and watersheds.

* Data obtained from 3-inch rain gage.