

U. S. DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

CALIFORNIA SECTION.

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GENERAL SUMMARY.

The outstanding feature of the weather in California during September was the excessive rainfall. For the State as a whole it was the wettest September in 14 years. The rainfall was excessive in the Sacramento, Santa Clara and northern San Joaquin Valleys, and in the San Francisco Bay region. At Red Bluff the total precipitation was 7.46 inches, the greatest for a month of September in the 41 years of record. Heavy snow fell on Mount Shasta on the 12th-13th, and again on the 27th, on which date light snow also fell throughout the high Sierras, the first reported there during the present season. Thunderstorms of extraordinary violence were frequent. A storm of this type did considerable damage in the Santa Clara Valley on the 21st. On the 27th, lightning struck an oil tank near Bakersfield, and in the fire which followed, property valued at \$200,000 was destroyed. Two days later, another severe thunderstorm did considerable damage in the same vicinity, and lightning caused another oil fire near Maricopa, where property valued at \$125,000 was consumed. Light hail occurred at several stations during the month, but no damage from that source was reported. Abnormal cloudiness kept the midday temperatures relatively low, and, as a result, the mean temperature for the month was somewhat below normal. After maintaining extremely low stages throughout the summer, streams showed a moderate rise following the heavy rains.

The weather during the first ten days of the month was similar to that of the two preceding months, hot and dry in the interior, and cool and foggy along the coast. Southern California experienced a hot spell from the 10th-12th. General rains, heavy in central California, fell from the 11th-14th. A few cloudless days followed, but a period of unsettled and showery weather began about the 18th, and persisted during the remainder of the month.

Agriculturally, the abnormal weather was partly favorable, partly unfavorable. Frequent showers and deficient sunshine did great damage to drying fruit, baled hay and sacked grain which was stacked in the fields. Much harm was done to unharvested beans in the Salinas and Sacramento Valleys. Drying prunes in the Santa Clara Valley and drying raisins grapes in the San Joaquin Valley were damaged by mildew and rot. However, as a result of ample rain warnings which were issued, a large portion of the uncured fruit was covered before the rains began. The principal compensating effects of the weather were the improved condition of pastures and the softening of the soil, making possible early fall plowing and seeding. Though the intermittent showers interrupted harvesting, the weather was favorable for the gathering of deciduous fruit, nuts, corn, sugar beets, cotton, beans and potatoes.

A. H. P.

PRESSURE.

The mean sea level pressure, determined from the records of twelve regular Weather Bureau stations, was 29.93 inches. The highest was 30.21 inches at Eureka on the 23d; the lowest was 29.66 inches at Fresno on the 16th; the range for the State was 0.55 inch.

TEMPERATURE.

The monthly mean temperature for the State, as shown by the records of 99 stations, was 67.6°, which is 0.9° below the normal. The highest monthly mean was 85.8°, at Indio; and the lowest was 52.6°, at La Porte. The highest temperature, 112°, occurred at Greenland Ranch on the 1st; and the lowest, 23°, occurred at Alturas on the 24th, and at Blue Canon on the 26th. The range for the State was 89°.

PRECIPITATION.

The average precipitation for the State, as shown by the records of 223 stations, was 2.37 inches, or 1.88 inches above the normal. The greatest monthly amount was 7.65 inches, at Downieville. Ten stations reported no precipitation. The greatest amount in 24 hours was 6.12 inches at Red Bluff on the 13th-14th.

RELATIVE HUMIDITY, SUNSHINE AND CLOUDINESS.

Table with columns: Stations, Relative humidity (5 a.m., 5 p.m., Mean), Sunshine (Actual No. of hours, Percent of possible). Rows include Eureka, Fresno, Independence, Los Angeles, Mount Tamalpais, Red Bluff, Sacramento, San Diego, San Francisco, San Jose, San Luis Obispo.

WIND MOVEMENT.—(Miles.)

Table with columns: Stations, Total mov. for month, Ave. hr. velocity, Maximum velocity, Direction, Date, Prev. dir. Rows include Eureka, Fresno, Independence, Los Angeles, Mount Tamalpais, Point Reyes, Red Bluff, Sacramento, San Diego, San Francisco, San Jose, San Luis Obispo.

COMPARATIVE DATA FOR SEPTEMBER.

Table with columns: Year, Mean temp., Ave. precip., Year, Mean temp., Ave. precip., Year, Mean temp., Ave. precip., Year, Mean temp., Ave. precip. Rows include 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918.

\* The departures from the normal temperature and precipitation are computed only for such stations as have ten or more years of record, but all complete reports are used in determining section or division means. † Also on other dates. a, b, c, etc., indicate respectively, 1, 2, 3, etc., days missing from the record.

Daily evaporation (inches) and wind movement (miles) for September, 1918.

Table with columns: Stations, Data, Day of Month (1-31), Monthly. Rows include Chula Vista, Dodgeland, Oakdale, Tahoe.

\* Observation taken at 7 a. m.; \*\* at 8 a. m. † Included in next following entry. 1 Ele. 9 ft.; 10 miles SE of San Diego. 2 Ele. .... ft.; 16 miles SW of Chico. 3 Ele. 215 ft.; Woodward Reservoir, 8 miles N of Oakdale. 4 Ele. 6230 feet; float in Lake Tahoe.

Climatological Data for September, 1918.

Table with columns: Stations, Counties, Elevation, Length of record, Mean, Departure from normal, Highest, Date, Lowest, Date, Greatest daily range, Total, Departure from normal, Greatest in 24 hours, Snowfall, Precipitation, Number of days, and Observers. Lists data for 100+ stations across California.



Daily Temperature for September, 1918.

Table with 32 columns for stations (1-31) and a Mean column. Rows list various California cities like Bakersfield, Calexico, Chico, Escondido, Eureka, Fresno, Independence, Los Angeles, Merced, Mount Tamalpais, Oakland, Orland, 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, and Stockton, with their daily maximum and minimum temperatures.

SUPPLEMENTAL PRECIPITATION TABLE.

Table with 12 columns: Stations, Watersheds, Precip. inches, Stations, Watersheds, Precip. inches, Stations, Watersheds, Precip. inches, Stations, Watersheds, Precip. inches. Lists various locations and their precipitation amounts, such as Abbotts, Aguanga, Alder Creek, Angiola, Antelope Valley, Arroyo Seco, Auberry, Auburn, Bagdad, Barrett Dam, Beaumont, Beaumont (near), Big Bar, Bishop, Bishop Creek, Bridgeport, Calhulla, Campbell, Camp Baldy, Camp Bonita, Campo, Camp Rincon, Canon Dam, Cascada, Centerville, Chester, China Flat, Churn Creek, Clovis, Clyde Ranch, Colby Springs, Coldbrook, Colusa, Covelo, Crockett, Cuyamaca, Deer Creek, Del Monte, Denair, and De Saba.