WB Form 1030 W.B.O., San Francisco, 10-3-45—800

U. S. DEPARTMENT OF COMMERCE, WEATHER BUREAU

MONTHLY METEOROLOGICAL SUMMARY

120th Meridian Time

SAN FRANCISCO, CALIFORNIA

City Office: 557 Federal Office Bldg. / 50 Fulton Street

Prepared Under Direction of
C. E. NORQUEST, Senior Meteorologist

September 1945

Airport Station: San Francisco Airport / One mile east of San Bruno

The daily mean temperatures were above normal most of the month, resulting in a monthly mean temperature two degrees higher than normal. The highest for the month, however, was lower than is usually recorded in September. This month's maximum—85°—is the lowest recorded in September since 1940.

Clear, warm weather prevailed, with only four days on which there was precipitation, yielding 0.04 inch for the month, less than one-tenth of the normal fall. The morning fog that prevailed in August continued during the first half of September, however, no fog was recorded during the latter part of the month, with good visibility predominating until restricted by haze and smoke from forest fires the last few days. The last week of the month was unusually dry, with little wind movement and extremely low humidities creating considerable fire hazard. At noon on the 27th, 13% relative humidity was recorded, compared to an average of 63% at that time of the day.

Date	TEMPERATURE (°F.) City Office Maximum	City Office Minimum	City Office Mean	City Office Departure from normal	City Office Degree days	Airport Maximum	Airport Minimum	Airport Mean	Airport Departure from normal	Airport Degree days	PRECIPITATION City Office Total inches, mid. to mid.	PRECIPITATION Airport Total inches, mid. to mid.	*WIND City Office Max. velocity and direction, miles per hour	*WIND City Office Average hourly velocity, mph	WEATHER City Office Percentage of sunshine	Standard times of Sunrise	Standard times of Sunset	Average cloudiness (scale 0 to 10)	Date
1	59	51	55	− 5	10	63	50	56	− 4	9	T.	T.	22 w.	12.2	30	5:40	6:40	9	1
s2	60	52	56	− 4	9	61	52	56	− 4	9	0	T.	20 w.	10.5	61	5:40	6:39	5	2
3	64	53	58	− 2	7	67	50	58	− 2	7	0	0	25 w.	10.0	89	5:41	6:37	4	3
4	70	56	63	+ 3	2	72	55	64	+ 4	1	0	T.	22 w.	11.5	100	5:42	6:36	1	4
5	65	57	61	+ 1	4	67	53	60	0	5	T.	T.	25 w.	9.6	75	5:43	6:34	4	5
6	83	58	70	+10	0	87	50	68	+ 8	0	0	0	17 w.	5.2	100	5:44	6:33	0	6
7	76	55	66	+ 6	0	88	55	72	+12	0	0	0	20 w.	8.3	100	5:45	6:31	0	7
8	65	55	60	− 1	5	71	53	62	+ 2	3	0	0	23 w.	10.9	86	5:46	6:29	4	8
s9	71	56	64	+ 3	1	80	54	67	+ 7	0	0	0	23 w.	9.9	52	5:46	6:28	6	9
10	64	56	60	− 1	5	68	55	62	+ 2	3	0	0	17 w.	10.0	40	5:47	6:26	8	10
11	64	56	60	− 1	5	68	55	62	+ 2	3	0	0	20 w.	9.8	62	5:48	6:25	4	11
12	67	55	61	0	4	69	55	62	+ 2	3	0	0	18 w.	10.9	62	5:49	6:23	9	12
13	65	55	60	− 1	5	65	54	60	0	5	0	0	20 w.	11.5	59	5:50	6:22	8	13
14	58	53	56	− 5	9	66	50	58	− 2	7	0	0	17 w.	9.9	0	5:51	6:20	10	14
15	64	52	58	− 3	7	68	53	60	0	5	0	0	19 w.	8.5	71	5:52	6:19	4	15
s16	72	55	64	+ 3	1	76	50	63	+ 3	2	0	0	22 w.	9.2	92	5:52	6:17	6	16
17	63	55	59	− 2	6	73	50	62	+ 2	3	0	0	20 w.	11.9	57	5:53	6:15	5	17
18	63	58	60	− 1	5	74	53	64	+ 4	1	0	0	15 sw.	9.0	25	5:54	6:14	9	18
19	67	57	62	+ 1	3	70	49	60	0	5	0	0	18 w.	7.9	76	5:55	6:12	5	19
20	61	56	58	− 3	7	61	57	59	− 1	6	0	T.	13 w.	7.7	0	5:56	6:11	10	20
21	63	55	59	− 2	6	64	53	58	− 2	7	0.02	T.	20 w.	11.6	86	5:57	6:09	3	21
22	65	55	60	− 1	5	67	54	60	0	5	0.02	0	19 w.	9.2	88	5:58	6:08	2	22
s23	68	54	61	0	4	71	47	59	− 1	6	0	0	18 w.	6.4	100	5:58	6:06	0	23
24	76	55	66	+ 5	0	78	48	62	+ 2	3	0	0	18 w.	6.7	100	5:59	6:04	0	24
25	81	56	68	+ 7	0	82	50	66	+ 6	0	0	0	19 w.	6.0	97	6:00	6:03	1	25
26	78	55	66	+ 5	0	81	49	65	+ 5	0	0	0	17 w.	6.4	100	6:01	6:01	0	26
27	84	70	77	+16	0	82	63	72	+12	0	0	0	17 n.	10.0	100	6:02	6:00	0	27
28	85	65	75	+14	0	85	58	72	+13	0	0	0	14 w.	6.4	100	6:03	5:58	0	28
29	82	56	69	+ 8	0	81	51	66	+ 7	0	0	0	17 w.	6.0	100	6:04	5:57	0	29
s30	72	54	63	+ 2	2	77	48	62	+ 3	3	0	0	17 w.	7.1	100	6:05	5:55	0	30
..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	..
Mean	69.2	55.9	62.6	+1.7	§112	72.7	52.4	62.6	+2.6	§101	§0.04	§ T.	.....	9.0	73	.....	.....	3.9	Mean
Normal	67.5	54.3	60.9	.....	§122	.....	.....	60.0	.....	.....	§0.45	§0.45	.....	.....	70	.....	.....	4.2	Normal

DATA BELOW are for CITY OFFICE EXCEPT PRESSURE AND FLYING WEATHER which are for SAN FRANCISCO AIRPORT

Atmospheric Pressure (Airport)

(Reduced to sea-level: inches)

Mean 29.94
Highest ..... 30.10; date, 23
Lowest ..... 29.74; date, 6

Temperature

Highest ..... 85; date, 28
Lowest ..... 51; date, 1
Greatest daily range ..... 26; date, 29
Accumulated excess (+) or deficiency (−) since January 1 ..... +130
Average daily excess (+) or deficiency (−) since January 1 ..... +0.5
Highest this month since 1871. 101; date, 16, †1918
Lowest this month since 1871.... 47; date, 30, 1900

Notes

§ Sum.
T Trace, .005 inch or less.
* All wind velocities are true values.
† Also other dates.
s Opposite date indicates Sunday.
‡ Less than one-half

*Wind

Direction	n.	ne.	e.	se.
Aver. hrly. vel.	8.6	0	3.2	5.1
% of hours	4	0	4	1

Direction	s.	sw.	w.	nw.
Aver. hrly. vel.	2.7	7.2	10.3	5.3
% of hours	1	10	73	4

Average hourly velocity (mph) 9.0
Prevailing direction ..... west
Total movement for the month (miles) 6494
Aver. hrly. vel. (mph) (1890-1944) 9.4
Prevailing direction (1890-1944) ..... west

Weather (Number of days)

	This month	(1885-1944)
Clear (scale, 0 to 3)	13	15
Pt. cloudy (scale, 4 to 7)	10	10
Cloudy (scale, 8 to 10)	7	5

	This month	(1871-1944)
0.01 in. or more precip.	2	2
0.25 in. or more precip.	0	‡

Greatest number of days this month with 0.01 in. or more of precipitation ..... 6; year, 1940
Sunshine, hours: this month 273.5; possible 372.8

Flying Weather (Airport)

Hours ceiling below 500 ft. and/or visibility less than 1 mile (from record observations) ..... 12 hrs.

Frost (1897-1944)

Average date last killing frost in spring...Jan. 10
Latest date last killing frost in spring.....Mar. 27
Average date first killing frost in autumn. Dec. 28
Earliest date first killing frost in autumn..Dec. 4

Miscellaneous Phenomena

(Dates of)

Frosts: Light 0
Heavy 0
Killing 0
Auroras 0
Halos: Solar 0
Lunar 0
Hail 0
Sleet 0
Heavy fog 4, 5, 8, 9
Thunderstorms 0

San Francisco, California (*city office*) SEPTEMBER 1945

PRECIPITATION

Date	Hourly Amounts A. M. 1	2	3	4	5	6	7	8	9	10	11	12	P. M. 1	2	3	4	5	6	7	8	9	10	11	12	Total
1			T.																						T.
2																									0
3																									0
4																									0
5			T.																						T.
6																									0
7																									0
8																									0
9																									0
10																									0
11																									0
12																									0
13																									0
14																									0
15																									0
16																									0
17																									0
18																									0
19																									0
20																									0
21	T.	.02	T.																		T.	T.	T.	T.	0.02
22	T.	T.	T.	T.	.02		T.																		0.02
23																									0
24																									0
25																									0
26																									0
27																									0
28																									0
29																									0
30																									0
Total	T.	0.02	T.	T.	0.02	0.00	T.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	T.	T.	T.	T.	0.04

Greatest in—	This month	Years 1906-1945
5 minutes	T. ; date, †1	0.14; date, 3, †1940
10 minutes	T. ; date, †1	0.26; date, 3, 1940
15 minutes	0.01; date, 22	0.32; date, 3, 1940
30 minutes	0.01; date, †21	0.36; date, 3, 1940
1 hour	0.01; date, †21	0.41; date, 3, 1940
2 hours	0.02; date, 21	0.51; date, 6, 1912
		Years 1871-1945
24 hours	0.02; date, †21	3.58; date, 23-24, 1904

† Also other dates.

Excess (+) or deficiency (−) this month as compared with normal	−0.41
Seasonal precipitation, since July 1	0.04
Accumulated excess (+) or deficiency (−) since July 1	−0.44
Seasonal precipitation, since September 1	0.04
Accumulated excess (+) or deficiency (−) since Sept. 1	−0.41
Annual precipitation, since January 1	9.92
Accumulated excess (+) or deficiency (−) since January 1	−4.68
Greatest snowfall in 24 hours	0.0
Greatest snowfall in 24 hours this month since 1871	0.0
Greatest total snowfall this month since 1871	0.0

PSYCHROMETRIC DATA

Date	City Office Local noon Dry bulb	Wet bulb	Dew point	Relative humidity	Airport 4:30 a. m. Dry bulb	Wet bulb	Dew point	Relative humidity	10:30 a. m. Dry bulb	Wet bulb	Dew point	Relative humidity	4:30 p. m. Dry bulb	Wet bulb	Dew point	Relative humidity	10:30 p. m. Dry bulb	Wet bulb	Dew point	Relative humidity	Date
1	57.5	54.7	53	84	51.5	51.0	51	96	58.1	54.8	53	82	58.9	55.0	52	78	54.1	53.2	52	94	1
2	59.1	54.9	52	76	53.0	52.2	52	95	55.1	53.1	52	88	59.4	55.6	53	78	55.0	53.1	52	88	2
3	59.0	54.2	50	73	53.4	52.0	51	91	60.1	54.8	51	71	64.8	57.9	53	66	59.9	57.0	55	84	3
4	68.7	62.0	58	69	56.9	56.0	55	95	70.0	62.6	58	66	69.1	63.0	59	71	60.8	59.2	58	91	4
5	62.4	58.9	57	81	58.6	57.9	57	96	63.1	60.1	58	84	64.1	58.6	55	72	55.9	54.0	53	89	5
6	83.0	63.3	58	42	55.6	53.5	52	88	72.9	61.9	55	54	80.1	64.1	54	41	69.6	58.4	50	51	6
7	75.2	62.2	54	48	57.8	53.0	49	74	85.0	60.1	40	21	74.9	63.2	56	52	60.9	57.0	54	79	7
8	65.0	59.1	55	71	53.6	52.7	52	95	70.5	62.1	57	62	64.1	59.0	56	74	57.0	55.4	54	91	8
9	67.2	60.3	56	68	58.0	57.0	56	94	65.0	60.0	57	75	63.0	59.2	57	80	59.1	57.3	56	90	9
10	63.1	59.2	57	79	57.3	56.3	56	94	65.0	60.1	57	75	62.8	59.6	58	83	57.4	56.3	56	94	10
11	63.1	58.4	55	76	56.0	54.9	54	94	64.3	59.0	56	73	64.0	59.8	57	79	56.5	55.7	55	96	11
12	64.0	58.9	56	74	55.3	54.9	55	98	63.2	59.0	56	78	64.4	59.3	56	74	56.3	55.2	54	93	12
13	63.2	58.0	54	73	55.6	54.9	54	96	61.6	57.8	55	80	59.9	55.9	53	78	55.0	53.7	53	92	13
14	56.9	54.4	53	86	51.6	51.0	50	96	61.4	56.0	52	72	60.0	56.0	53	78	53.0	52.0	51	94	14
15	61.3	56.2	53	73	55.3	53.6	52	90	61.7	57.3	54	76	66.4	57.2	50	57	57.1	54.9	53	87	15
16	63.0	57.4	54	72	51.7	50.8	50	95	67.4	61.7	58	73	69.0	59.4	53	57	56.0	54.0	53	94	16
17	62.8	58.2	55	76	52.0	51.4	51	96	62.2	58.0	55	78	68.1	60.0	55	62	56.6	54.7	53	89	17
18	60.9	57.8	56	83	56.6	55.0	54	91	64.3	59.0	56	73	68.2	60.0	55	62	56.1	54.1	53	88	18
19	65.3	58.9	55	69	51.4	50.3	49	93	64.0	58.0	54	70	67.8	59.4	54	61	58.0	56.3	55	90	19
20	60.8	56.5	53	76	59.1	56.0	54	82	61.0	56.8	54	78	59.1	55.6	53	80	58.5	55.8	54	84	20
21	60.2	54.6	50	70	56.5	54.8	54	90	61.2	55.0	50	67	61.0	55.0	50	68	56.0	53.9	52	88	21
22	62.2	55.8	51	67	56.9	54.0	52	83	63.2	55.2	49	60	63.8	56.3	51	63	55.5	53.2	51	86	22
23	68.0	58.7	52	58	48.0	47.2	46	94	62.1	55.2	50	64	64.2	56.4	51	62	53.7	51.7	50	88	23
24	74.1	58.7	47	39	48.6	45.5	42	79	67.0	58.1	52	58	73.9	58.1	46	37	56.1	54.0	52	87	24
25	79.1	60.0	46	31	52.8	49.1	46	77	74.0	63.0	56	54	69.8	58.3	50	50	58.0	54.7	52	81	25
26	78.4	55.0	32	18	51.8	49.5	48	86	73.0	58.0	47	39	71.9	55.2	41	32	56.5	48.3	40	54	26
27	80.0	54.1	26	13	64.2	49.0	32	30	75.4	55.0	36	24	74.2	59.0	48	40	66.8	51.0	35	30	27
28	82.5	55.9	29	14	66.2	56.2	49	53	77.3	57.3	40	27	81.9	59.0	40	23	68.2	52.2	42	46	28
29	78.0	56.0	36	22	54.0	45.1	35	48	66.0	59.2	55	67	69.9	60.0	54	56	57.0	50.0	44	61	29
30	69.4	59.6	53	56	49.3	47.0	45	86	65.5	60.6	58	76	69.6	59.3	52	54	52.0	51.5	51	97	30
Mean	67.1	57.7	51	61	55.0	52.4	50	86	66.0	58.3	53	66	66.9	58.5	52	62	57.6	54.3	51	83	Mean
Normal	66.9	58.5	53	63																	Normal

Ceiling and Visibility Frequencies for September 1945

(Based on Hourly Record Observations)

Weather Bureau Airport Stations

SAN FRANCISCO AIRPORT

Visibility (miles)	CEILING (feet) 0	100–200	300–400	500–900	1000–1900	2000–2900	3000–4900	5000–9500	Over 9500	Total
0 to 1/8	0	0	0	0	0	0	0	0	0	0
3/16 to 3/8	0	0	0	0	0	0	0	0	0	0
1/2 to 3/4	0	1	0	0	0	0	0	0	0	1
1 to 2 1/2	0	0	1	2	3	0	0	0	12	18
3 to 6	0	0	3	10	7	0	0	2	119	141
7 to 15	0	0	7	32	37	5	0	3	425	509
20 to 30	0	0	0	0	0	1	0	0	50	51
35 or more	0	0	0	0	0	0	0	0	0	0
Total	0	1	11	44	47	6	0	5	606	720

OAKLAND AIRPORT

Visibility (miles)	CEILING (feet) 0	100–200	300–400	500–900	1000–1900	2000–2900	3000–4900	5000–9500	Over 9500	Total
0 to 1/8	0	0	0	0	0	0	0	0	0	0
3/16 to 3/8	0	0	0	0	0	0	0	0	0	0
1/2 to 3/4	0	0	0	0	0	0	0	0	0	0
1 to 2 1/2	0	0	2	10	1	0	0	1	21	35
3 to 6	0	1	5	59	26	2	1	1	240	335
7 to 15	0	0	1	34	36	5	1	0	197	274
20 to 30	0	0	0	0	8	4	4	1	59	76
35 or more	0	0	0	0	0	0	0	0	0	0
Total	0	1	8	103	71	11	6	3	517	720

COMPARATIVE DATA FOR THIS MONTH FROM THE RECORDS OF PREVIOUS YEARS

SAN FRANCISCO CITY OFFICE

	Temperature Mean	Highest	Lowest	Precipitation Total	Greatest in 24 Hours
1871	60.4	78	53	0.00	0.00
1872	59.3	82	52	0.04	0.04
1873	58.3	69	53	0.00	0.00
1874	61.4	89	50	0.02	0.02
1875	59.2	82	52	0.00	0.00
1876	61.5	86	52	0.38	0.20
1877	62.5	92	51	0.00	0.00
1878	60.2	78	52	0.55	0.45
1879	61.0	86	52	T.	T.
1880	58.9	79	50	0.00	0.00
1881	59.7	80	50	0.25	0.25
1882	59.8	83	60	0.26	0.26
1883	63.1	91	53	0.42	0.42
1884	59.6	73	52	0.33	0.21
1885	61.8	87	52	0.11	0.11
1886	62.4	94	50	0.01	0.01
1887	62.0	89	50	0.29	0.18
1888	62.6	88	50	0.98	0.92
1889	64.6	89	51	T.	T.
1890	60.4	81	52	0.31	0.31
1891	61.8	86	51	0.77	0.63
1892	60.2	88	51	0.02	0.02
1893	59.3	72	50	0.21	0.12
1894	63.4	94	49	1.05	1.04
1895	60.7	89	51	0.77	0.62
1896	59.6	81	52	0.52	0.41
1897	60.8	92	50	0.10	0.08
1898	59.0	80	50	1.06	0.73
1899	58.2	73	48	0.00	0.00
1900	63.3	92	**47**	0.46	0.45
1901	58.5	78	50	0.78	0.67
1902	61.9	83	51	T.	T.
1903	61.0	92	50	T.	T.
1904	64.0	**101**	49	**5.07**	**3.58**
1905	60.4	87	51	T.	T.
1906	60.0	82	48	0.18	0.12
1907	60.6	78	53	0.11	0.11
1908	60.5	89	50	0.13	0.10
1909	61.6	93	50	0.80	0.67
1910	57.6	82	48	0.05	0.04
1911	60.0	82	49	T.	T.
1912	63.4	94	52	1.25	1.21
1913	64.6	**101**	52	0.00	0.00
1914	60.8	92	51	T.	T.
1915	62.4	82	52	0.00	0.00
1916	62.2	87	50	1.20	0.74
1917	64.0	94	49	0.02	0.02
1918	62.2	80	54	2.53	1.54
1919	62.0	93	52	0.39	0.22
1920	60.4	86	50	0.13	0.13
1921	63.3	93	52	0.35	0.23
1922	63.4	91	52	T.	T.
1923	64.0	87	52	0.44	0.43
1924	62.4	88	51	T.	T.
1925	62.7	81	53	0.45	0.28
1926	61.2	88	48	T.	T.
1927	62.4	76	53	T.	T.
1928	61.4	99	50	0.03	0.02
1929	61.4	79	51	T.	T.
1930	62.4	75	54	0.10	0.08
1931	62.8	86	52	T.	T.
1932	63.0	100	52	0.00	0.00
1933	61.2	82	50	0.14	0.14
1934	63.6	92	52	0.13	0.13
1935	60.6	89	51	0.08	0.07
1936	63.0	91	51	T.	T.
1937	61.4	89	50	T.	T.
1938	61.2	89	51	0.15	0.15
1939	66.2	97	53	1.06	0.80
1940	65.0	83	55	0.59	0.42
1941	63.5	87	55	T.	T.
1942	60.2	93	53	0.18	0.18
1943	63.4	96	52	0.02	0.01
1944	60.6	91	51	0.00	0.00
1945	62.6	85	51	0.04	0.02

Extremes in comparative table in **bold face** type.

LOCATION OF STATIONS AND INSTRUMENTS

	CITY OFFICE	AIRPORT
Latitude	37° 47′ N.	37° 37′ N.
Longitude	122° 25′ W.	122° 23′ W.
Elevation of ground	52 feet above sea level	1 foot above sea level
Elevation of rain gage	104 feet above ground	38 feet above ground
Elevation of wind instruments	132 feet above ground	70 feet above ground
Elevation of thermometers	112 feet above ground	37 feet above ground