San Francisco Ca 1948

Sheet 2

U. S. DEPARTMENT OF COMMERCE

WEATHER BUREAU

Annual Meteorological Summary for San Francisco, Calif. Year 1948 —Contd.

MONTH	Average cloudiness (Scale 0-10)	NUMBER OF DAYS: Winds, 32 m.p.h. and over	Clear	Partly Cloudy	Cloudy	Precipitation, 0.01 inch or more	Snow, 0.01 inch or more (Melted)	Thunderstorms	Fog, dense	Fog, light	TEMPERATURE Maximum: 32° or below	90° or above	Minimum: 32° or below	0° or
Jan.	4.7	0	13	7	11	5	0	0	6	17	0	0	0	0
Feb.	5.6	0	10	5	14	9	0	0	1	4	0	0	0	0
Mar.	5.6	1	10	9	12	11	0	0	0	2	0	0	0	0
Apr.	6.6	1	7	8	15	16	0	2	0	1	0	0	0	0
May	5.0	0	13	7	11	4	0	1	0	1	0	0	0	0
June	5.5	0	11	8	11	1	0	0	0	3	0	0	0	0
July	4.2	0	13	12	6	1	0	0	0	1	0	0	0	0
Aug.	4.9	0	11	13	7	2	0	0	00	1	0	0	0	0
Sept.	4.3	0	13	11	6	1	0	0	3	17	0	0	0	0
Oct.	4.9	0	11	12	8	4	0	0	4	18	0	0	0	0
Nov.	3.8	0	17	6	7	8	0	0	1	4	0	0	0	0
Dec.	6.7	0	6	9	16	14	0	0	2	13	0	0	0	0
Year	5.2	2	135	107	124	76	0	3	17	82	0	0	0	0

Comparative Data and Extremes, San Francisco, California

(Averages from all available records, including the year 1948)

MONTH	TEMPERATURE: Mean Maximum	Mean Minimum	Mean Monthly	EXTREMES: Highest	Date	Lowest	Date	Number of Degree Days (base 65)	RELATIVE HUMIDITY (percent) City Office Data: 5:00 A.M.	Noon	5:00 P.M.
Length of Record Yrs.	74	74	78	78	78	73	78	19	52	31	52
Jan.	55.2	44.9	50.2	78	1899	29	1888	438	85	68	71
Feb.	58.4	47.1	52.7	80	1899	33	1887	331	84	65	68
Mar.	60.6	48.3	54.3	86	1914	33	1886	296	83	60	66
Apr.	62.1	49.4	55.7	89	1926	40	1891*	260	83	61	67
May	63.3	50.8	57.0	97	1887	42	1906	233	85	63	69
June	65.5	52.3	58.9	100	1891	46	1908	170	88	66	70
July	65.0	53.0	58.9	99	1931	47	1893	171	91	70	75
Aug.	65.2	53.5	59.4	92	1891	46	1903	162	92	71	77
Sept.	68.5	54.7	61.5	101	1913*	47	1900	112	88	64	70
Oct.	67.8	53.8	60.8	96	1917	43	1935	127	85	59	67
Nov.	62.8	50.6	56.7	83	1895	38	1919	235	83	59	65
Dec.	56.4	46.6	51.5	74	1929	27	1932	397	83	68	70
Year	62.6	50.4	56.5	101	Sept. 1913	27	Dec. 1932	2932	86	64	70

The climate of San Francisco is characterized by relatively cool summers and relatively warm winters. September is the warmest month, with an average temperature of 61.6°, while the coldest is January, when temperatures average 50.1°. A striking feature of this climate is the fact that the average daily range in temperature is but 12°.

Most of the average annual rainfall, 22.02", falls in the period from November to March, inclusive. There is no snowfall of measurable amount on the average. Frequent summer high fogs forms at night in the marine air brought in by fresh sea breezes in the afternoons. These fogs, strictly speaking, low-lying stratus clouds, usually dissipate during the morning hours.

Frost occurs occasionally during midwinter, but on account of the proximity of this region to the Pacific Ocean and the prevalence of on-shore winds, destructive frosts are infrequent. Thunderstorms occur infrequently. Topography has a marked influence in causing climatic differences between various parts of the San Francisco Bay Region.

Sheet 1

U. S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

San Francisco Ca 1948

Annual Meteorological Summary for San Francisco, California Year 1948

MONTH	TEMPERATURE °F Mean Maximum	Mean Minimum	Mean Monthly	EXTREMES Highest	Date	Lowest	Date	Number of Degree Days (base 65)	RELATIVE HUMIDITY (percent) AIRPORT DATA: 4:30 A.M.	10:30 A.M.	4:30 P.M.	10:30 P.M.
Jan.	61.6	47.8	54.7	75	23	42	28	312	77	83	77	65
Feb.	56.6	45.0	50.8	70	17	39	7	414	79	82	69	66
Mar.	56.9	46.5	51.7	71	27	43	25	412	82	85	71	66
Apr.	58.6	48.5	53.6	70	14	44	2 8	343	80	85	69	69
May	60.8	50.3	55.6	70	15	47	1	293	84	88	70	69
June	64.5	54.3	59.4	80	22	51	1	175	86	89	70	69
July	64.9	53.7	59.3	83	14	51	19	180	85	89	70	66
Aug.	65.0	54.3	59.6	74	28	52	12	168	87	91	72	69
Sept.	66.9	53.0	60.0	83	13	50	13	154	86	90	70	67
Oct.	67.7	53.0	60.4	84	17	47	30	158	85	89	74	66
Nov.	63.8	49.4	56.6	73	13	42	28	256	76	80	66	60
Dec.	52.2	43.4	47.8	63	1	37	24	534	85	89	78	73
Year	61.6	49.9	55.8	84	Oct.17	37	Dec.24	3399	83	87	71	67

MONTH	PRECIPITATION (inches) Total	Greatest in 24 Hours	Date	Snowfall (unmelted) Total	Greatest in 24 hours	Date	SUNSHINE Number of hours	Percent of possible	WIND (corrected to true velocity) Average hourly Velocity	Prevailing Direction	Highest Velocity	Direction	Date
Jan.	1.00	0.39	2	0.0	0.0	-	178	58	5.2	E	18	W	31
Feb.	2.32	0.60	5-6	0.0	0.0	-	177	56	7.7	W	26	W	26
Mar.	3.36	1.00	12-13	0.0	0.0	-	187	50	8.2	W	34	S	23
Apr.	3.04	0.53	28-29	0.0	0.0	-	171	43	9.7	W	37	S	8
May	0.54	0.36	29-30	0.0	0.0	-	258	58	10.7	W	28	W	10
June	0.01	0.01	3	0.0	0.0	-	220	50	11.1	W	29	W	15
July	0.02	0.02	4-5	0.0	0.0	-	259	58	11.0	W	27	W	28
Aug.	0.02	0.02	21-22	0.0	0.0	-	273	65	10.6	W	24	W	30
Sept.	0.09	0.09	18	0.0	0.0	-	276	74	9.2	W	28	W	24
Oct.	0.20	0.15	11	0.0	0.0	-	215	62	7.4	W	28	W	29
Nov.	1.18	0.51	1-2	0.0	0.0	-	219	72	6.9	W	27	W	25
Dec.	4.75	1.62	25-26	0.0	0.0	-	111	37	7.2	N	27	E	25
Year	16.53	1.62	Dec. 25-26	0.0	0.0	-	2544	57	8.7	W	37	S	April 8

COMPARATIVE TEMPERATURE AND PRECIPITATION DATA, 1948, SAN FRANCISCO BAY AREA.

Stations	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Ann'l.
Monthly and annual average temperatures:													
*San Francisco	54.7	50.8	51.7	53.6	55.6	59.4	59.3	59.6	60.0	60.4	56.6	47.8	55.8
*S.F.Airport	51.1	48.1	49.8	52.6	54.8	60.2	60.8	69.2	60.0	59.0	53.5	45.8	55.4
*Oakland Airpt.	50.8	48.6	49.9	53.5	56.3	61.2	62.6	70.3	61.7	60.0	53.5	45.2	56.1

* See sheet 3 for station locations.

Monthly and annual average high temperatures:													
San Francisco	61.6	56.6	56.9	58.6	60.8	64.5	64.9	65.0	66.9	67.7	63.8	52.2	61.6
S.F. Airport	60.7	55.7	57.0	58.5	60.5	66.9	68.4	53.6	69.1	67.9	62.7	51.6	61.0
Oakland Airpt.	61.0	57.3	58.7	60.4	63.8	68.5	70.2	55.1	71.8	69.3	64.0	52.1	62.7
Monthly and annual average low temperaturds:													
San Francisco	47.8	45.0	46.5	48.5	50.3	54.3	53.7	54.3	53.0	53.0	49.4	43.4	49.9
S. F. Airport	41.5	40.5	42.5	46.7	49.0	53.4	53.2	61.4	51.0	50.0	43.9	39.9	47.8
Oakland Airpt.	40.7	39.8	41.1	46.6	48.8	54.0	55.0	62.7	51.6	50.5	42.6	38.4	47.6
Highest temperatures for each month													
San Francisco	75	70	71	70	70	80	83	74	83	84	73	65	84
S.F. Airport	72	67	72	72	71	84	87	79	87	84	73	58	87
Oakland Airpt.	72	69	71	72	73	89	93	85	92	82	73	59	92
Lowest temperatures for each month:													
San Francisco	42	39	43	44	47	51	51	52	50	47	42	37	37
S.F. Airport	33	33	35	39	45	49	51	49	46	43	37	32	32
Oakland Airpt.	32	30	35	38	40	49	52	51	44	38	34	29	29
Monthly and annual precipitation: (in inches; T indicates trace, amount too small to measure)													
San Francisco	1.00	2.32	3.36	3.04	0.54	0.01	0.02	0.02	0.09	0.20	1.18	4.75	16.53
S.F. Airport	0.31	1.59	2.62	2.77	0.35	0.05	T	T	0.05	0.31	0.27	4.07	12.39
Oakland Airpt.	0.77	1.74	2.66	3.48	0.84	0.02	0.02	T	0.01	0.53	0.43	4.02	14.52

Sheet 3

U. S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

San Francisco Ca 1948

Comparative Data and Extremes, San Francisco, California Contd.
(Average from all available records, including the year 1948)

MONTH	PRECIPITATION (inches) Total	Greatest in 24 hours	Date	Snowfall (unmelted) Total	Greatest in 24 hours	Date	SUNSHINE Number of hours	Percent of possible	WIND (corrected to true velocity) Average hourly velocity	Prevailing Direction	Highest Velocity	Direction	Date
Length of Record Yrs.	99	78	78	78	78	78	58	58	59	59	78	78	78
Jan.	4.65	4.67	29,'81	T	0.1	16,'88	163	53	7.4	N	45	SE	3,1901
Feb.	3.76	3.60	4-5,'87	0.1	3.7	5,'84	174	55	7.7	W	41	S	24,1917
Mar.	3.08	3.65	30,'40	T	1.0	3,'96	235	63	8.6	W	47	S	1,1902
Apr.	1.54	2.43	24,'96	0.0	0.0	--	279	70	9.7	W	38	NW	23,'71
May	0.68	1.42	28,'06	0.0	0.0	--	310	70	10.5	W	36	W	11,1897
June	0.15	1.23	12,'84	0.0	0.0	--	333	75	11.2	W	38	SW	30,1873
July	0.01	0.23	16,'86	0.0	0.0	--	308	69	11.5	W	34	SW	15,1939
Aug.	0.02	0.25	26,'35	0.0	0.0	--	267	63	10.9	W	34	SW	2,1893
Sept.	0.28	3.58	24,'04	0.0	0.0	--	264	71	9.4	W	37	N	17,1923
Oct.	0.97	2.03	13,'89	0.0	0.0	--	243	70	7.8	W	35	NE	20,1906
Nov.	2.43	3.98	23,'74	0.0	0.0	--	190	63	7.0	W	50	NE	30,1906
Dec.	4.38	3.44	21,'24	0.1	3.5	31,'82	161	54	7.2	N	50	NE	1,1923
Year	22.02	4.67	Jan.29 1881	0.2	3.7	Feb.5 1887	2927	66	9.1	W	50	NE	11/30/'0 12/1/'23

MONTH	Average cloudiness (Scale 0-10)	NUMBER OF DAYS Winds 55 m.p.h. or over	Clear	Partly cloudy	Cloudy	Precipitation 0.01 inch or more	Snow, sleet or more (Melted)	Thunderstorms	Fog, dense	Fog, light	Temperature Maximum 32° or below	Maximum 90° or above	Minimum 32° or below	Minimum 0° or below
Length of Record Yrs.	60	25	64	64	64	78	78	58	57	--	78	78	78	78
Jan.	5.5	1	10	8	13	11	#	#	2	--	0	0	#	0
Feb.	5.1	#	10	8	10	11	#	#	2	--	2	0	0	0
Mar.	4.4	#	12	9	10	10	#	#	1	--	0	0	0	0
Apr.	3.8	#	13	11	6	6	0	#	#	--	0	0	0	0
May	3.8	#	14	10	7	4	0	#	#	--	0	#	0	0
June	3.2	#	17	9	4	2	0	#	1	--	0	#	0	0
July	3.9	0	14	12	5	#	0	#	1	--	0	#	0	0
Aug	4.2	0	12	13	6	#	0	#	1	--	0	#	0	0
Sept.	3.5	#	15	10	5	2	0	#	1	--	0	1	0	0
Oct.	3.7	#	16	9	6	4	0	#	2	--	0	#	0	0
Nov.	4.1	#	13	9	8	7	0	#	2	--	0	0	0	0
Dec.	5.0	#	11	8	12	10	#	#	2	--	0	0	#	0
Year	4.2	1	157	116	92	67	#	2	15	--	0	1	#	0

less than ½

BAY AREA STATION DESCRIPTIONS

Station:	San Francisco City Office, Federal Bldg. 50 Fulton, Civic Center.	San Francisco Airpt. Station, 11 mi. S of City office & 1 1/4 Mi. E of San Bruno.	Oakland Airpt. Sta., Admin. Bldg., Oakland Mun. Airpt., 12 mi. ESE of S.F. City Office
Ground Elevations	52 ft., m.s.l.	1 ft., m.s.l.	3 ft., m.s.l.
Elevation Anemometers	132 ft. above ground	70 ft. above ground	45 ft. above ground
Elevation Rain Gages	104 ft. " "	38 ft. " "	15 ft. " "
Elevation Thermometers	112 ft. " "	37 ft. " "	17 ft. " "
Latitude	37° 47' North	37° 37' North	37° 44' North
Longitude	122° 25' West	122° 23' West	122° 12' West

Annual Meteorological Summary prepared under the direction of E. L. Felton, Official in Charge of the Weather Bureau (City) Office at San Francisco, California.

SAN FRANCISCO San Francisco
1948