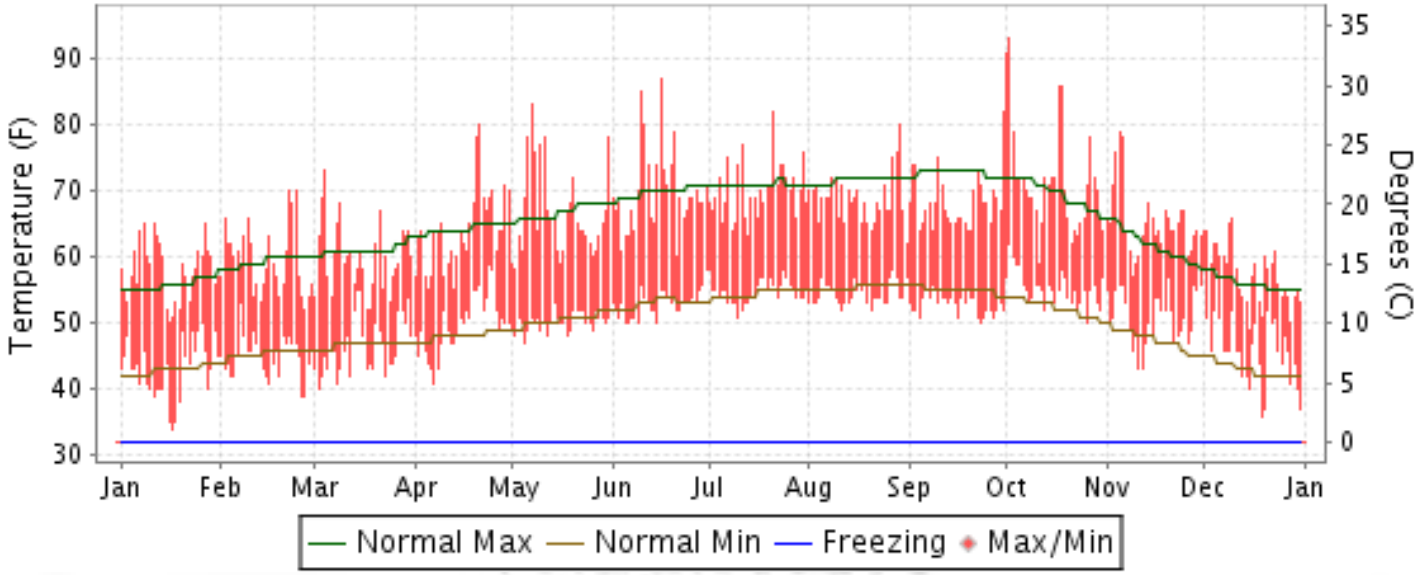
2012
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA

ISSN 0198-098X

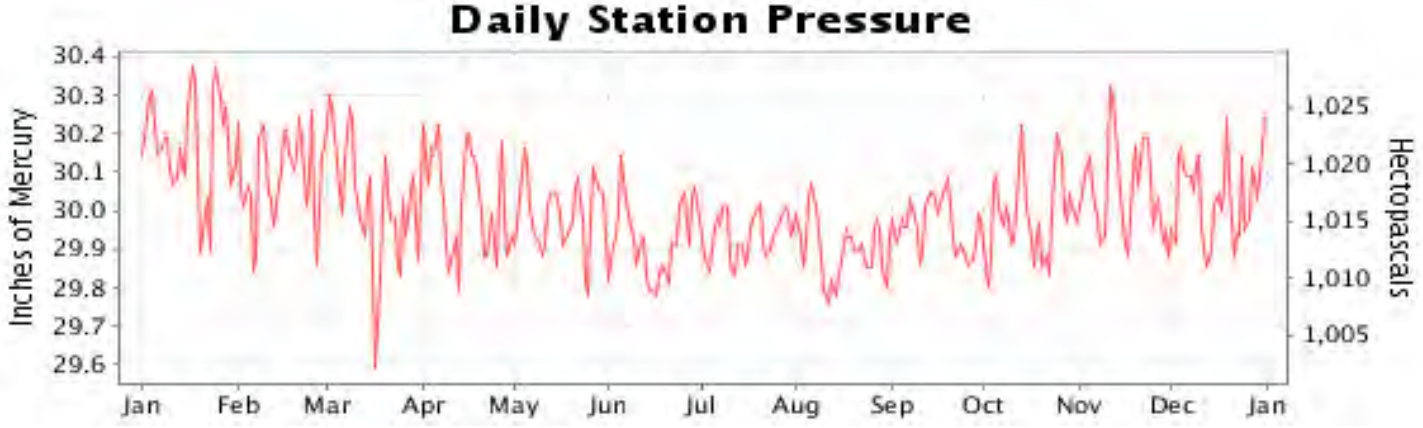
SAN FRANCISCO, CALIFORNIA (KSFO)

Daily Max/Min Temperature



Daily Precipitation

Daily Station Pressure



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Thomas R. Karl

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL SATELLITE, DATA AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NORTH CAROLINA

DIRECTOR NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 2012
SAN FRANCISCO (KSFO)

LATITUDE: 37° 37'N **LONGITUDE:** 122° 21'W **ELEVATION (FT):** GRND: 8 BARO: 89 **TIME ZONE:** PACIFIC (UTC -8) **WBAN:** 23234

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	MEAN DAILY MAXIMUM	58.1	59.5	60.0	64.0	66.6	69.9	70.1	68.8	68.3	71.4	65.3	57.4	65.0
	HIGHEST DAILY MAXIMUM	65	70	73	80	83	87	82	80	82	93	79	66	93
	DATE OF OCCURRENCE	27+	24+	04	21	07	16	21	29	30	02	05	10	OCT 02
	MEAN DAILY MINIMUM	43.0	44.9	46.5	49.8	50.2	52.9	54.8	54.5	52.9	55.3	51.0	46.3	50.2
	LOWEST DAILY MINIMUM	34	39	40	41	47	50	51	52	50	50	43	36	34
	DATE OF OCCURRENCE	17	27+	02	07	05	15+	10	20+	23	26	12+	19	JAN 17
	AVERAGE DRY BULB	50.6	52.2	53.3	56.9	58.4	61.4	62.5	61.7	60.6	63.4	58.2	51.9	57.6
	MEAN WET BULB	46.1	47.0	47.4	50.1	51.0	53.4	55.1	55.0	53.9	55.8	52.8	47.8	51.3
	MEAN DEW POINT	41.2	41.5	41.7	45.0	45.4	47.6	50.5	51.1	50.0	50.8	48.1	43.2	46.3
	NUMBER OF DAYS WITH:													
	MAXIMUM >= 90°	0	0	0	0	0	0	0	0	0	2	0	0	2
	MAXIMUM <= 32°	0	0	0	0	0	0	0	0	0	0	0	0	0
	MINIMUM <= 32°	0	0	0	0	0	0	0	0	0	0	0	0	0
	MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0
H/C	HEATING DEGREE DAYS	441	365	357	239	199	115	78	102	126	85	204	400	2711
	COOLING DEGREE DAYS	0	0	0	5	2	16	5	6	2	44	6	0	86
RH	MEAN (PERCENT)	73	70	69	69	68	66	71	74	74	70	72	73	71
	HOUR 04 LST	82	79	76	78	79	78	81	84	84	79	80	78	80
	HOUR 10 LST	72	65	68	60	58	55	61	64	66	66	69	72	65
	HOUR 16 LST	64	63	61	61	57	56	61	65	67	61	64	65	62
	HOUR 22 LST	75	74	72	75	76	74	78	80	80	75	74	74	76
W/O	NUMBER OF DAYS WITH:													
	HEAVY FOG(VISBY <= 1/4 MI)	2	1	0	0	0	0	0	0	0	2	1	1	7
	THUNDERSTORMS	0	1	0	1	0	0	0	0	0	2	2	0	6
PR	MEAN STATION PRESS. (IN.)	30.17	30.09	30.02	30.03	29.99	29.93	29.93	29.90	29.96	29.99	30.05	30.04	30.01
	MEAN SEA-LEVEL PRESS. (IN.)	30.19	30.11	30.05	30.05	30.01	29.95	29.95	29.92	29.99	30.01	30.07	30.06	30.03
WINDS	RESULTANT SPEED (MPH)	2.6	6.1	5.2	9.3	13.3	13.0	10.0	12.0	10.6	5.9	2.4	2.6	7.4
	RES. DIR. (TENS OF DEGS.)	26	27	24	27	27	27	28	29	29	27	22	21	28
	MEAN SPEED (MPH)	6.3	8.9	10.7	12.2	14.5	14.0	11.9	12.8	11.6	8.3	6.7	7.9	10.5
	PREVAIL.DIR.(TENS OF DEGS.)	28	28	28	28	27	27	29	29	29	28	28	28	29
	MAXIMUM 2-MINUTE WIND													
	SPEED (MPH)	40	37	37	37	45	43	30	30	30	33	40	44	45
	DIR. (TENS OF DEGS.)	19	28	28	28	28	27	29	28	27	26	17	18	28
	DATE OF OCCURRENCE	20	18	17	04	24	12	21	16	09	20	30	02	MAY 24
	MAXIMUM 3-SECOND WIND:													
	SPEED (MPH)	56	44	48	43	58	51	36	37	37	39	54	53	58
	DIR. (TENS OF DEGS.)	19	27	28	29	28	27	27	28	27	27	18	18	28
	DATE OF OCCURRENCE	20	24	06	04	24	12	20	07	09	20	30	02	MAY 24
PRECIPITATION	WATER EQUIVALENT:	2.16	0.66	4.76	2.79	T	0.09	T	T	0.00	0.70	4.06	6.24	21.46
	TOTAL (IN.)	1.29	0.24	1.29	1.65	T	0.09	T	T	0.00	0.38	2.01	1.45	2.01
	GREATEST 24-HOUR (IN.)	20-21	28-29	24-25	12-13	03	04	16	18+		22	29-30	01-02	NOV 29-30
	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:	5	9	10	8	0	1	0	0	0	7	10	14	64
	PRECIPITATION 0.01	3	2	8	4	0	0	0	0	0	2	7	13	39
	PRECIPITATION 0.10	1	0	1	1	0	0	0	0	0	0	1	1	5
	PRECIPITATION 1.00													
SNOWFALL	SNOW,ICE PELLETS,HAIL													
	TOTAL (IN.)													
	GREATEST 24-HOUR (IN.)													
	DATE OF OCCURRENCE													
	MAXIMUM SNOW DEPTH (IN.)													
	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:													
	SNOWFALL >= 1.0													

NORMALS, MEANS, AND EXTREMES
SAN FRANCISCO (KSFO)

LATITUDE: 37° 37'N **LONGITUDE:** 122° 21'W **ELEVATION (FT):** GRND: 8 BARO: 89 **TIME ZONE:** PACIFIC (UTC -8) **WBAN:** 23234

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	56.3	59.5	62.1	64.7	67.6	70.6	72.0	72.7	73.6	70.4	62.9	56.6	65.8
	MEAN DAILY MAXIMUM	67	55.9	59.0	61.1	63.7	66.6	69.9	71.2	71.9	73.3	70.1	62.8	56.4	65.2
	HIGHEST DAILY MAXIMUM	85	72	78	85	92	97	106	105	100	103	99	85	75	106
	YEAR OF OCCURRENCE		2009	1930	1952	1989	1984	1961	1988	1993	1971	1987	1967	1958	JUN 1961
	MEAN OF EXTREME MAXS.	67	64.5	68.3	73.3	79.0	84.1	88.4	86.4	86.6	90.1	85.8	74.1	64.5	78.8
	NORMAL DAILY MINIMUM	30	44.2	46.3	47.7	49.1	51.6	53.8	55.4	56.3	55.8	53.2	48.7	44.6	50.6
	MEAN DAILY MINIMUM	67	42.4	44.8	46.1	47.7	50.2	52.7	54.1	54.9	54.7	52.0	47.3	43.3	49.2
	LOWEST DAILY MINIMUM	85	24	25	30	31	36	41	43	42	38	34	25	20	20
	YEAR OF OCCURRENCE		1928	1929	1929	1929	1929	1932	1928	1935	1929	1929	1931	1932	DEC 1932
	MEAN OF EXTREME MINS.	67	34.0	37.2	39.0	41.6	45.1	48.5	50.3	51.1	49.8	45.4	39.3	35.0	43.0
	NORMAL DRY BULB	30	50.3	52.9	54.9	56.9	59.6	62.2	63.7	64.5	64.7	61.8	55.8	50.6	58.2
	MEAN DRY BULB	67	49.1	51.9	53.6	55.7	58.4	61.3	62.7	63.4	64.1	61.1	55.1	49.8	57.2
	MEAN WET BULB	29	46.2	47.6	48.7	49.5	51.7	53.8	55.9	56.6	56.2	53.8	50.1	46.0	51.3
	MEAN DEW POINT	29	44.9	46.0	46.9	47.3	49.6	51.7	54.0	54.9	54.4	51.8	48.1	44.4	49.5
	NORMAL NO. DAYS WITH:														
	MAXIMUM >= 90	30	0.0	0.0	0.0	0.1	0.4	0.7	0.3	0.4	1.0	0.3	0.0	0.0	3.2
	MAXIMUM <= 32	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MINIMUM <= 32	30	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3
	MINIMUM <= 0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
H/C	NORMAL HEATING DEG. DAYS	30	457	339	314	248	180	105	65	48	53	121	277	446	2653
	NORMAL COOLING DEG. DAYS	30	0	0	1	5	13	21	24	33	44	22	1	0	164
RH	NORMAL (PERCENT)	30	80	78	76	72	72	72	74	75	75	73	76	78	75
	HOUR 04 LST	30	87	86	83	82	84	84	86	87	85	83	84	85	85
	HOUR 10 LST	30	80	77	72	65	64	63	66	68	68	69	72	77	70
	HOUR 16 LST	30	68	66	64	60	60	58	60	61	60	60	63	67	62
	HOUR 22 LST	30	81	80	79	77	79	79	82	83	81	78	78	79	80
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	49	2.5	1.6	0.3	0.1	0.0	0.0	0.0	0.1	0.1	0.6	1.1	1.7	8.1
	THUNDERSTORMS	67	0.4	0.5	0.4	0.3	0.1	0.0	0.1	0.1	0.3	0.2	0.2	0.3	2.9
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	55	5.0	5.0	4.6	4.2	3.6	3.0	2.4	2.6	2.6	3.1	4.2	4.7	3.8
	MIDNIGHT-MIDNIGHT (OKTAS)	32	4.7	4.9	4.6	3.9	3.4	3.2	2.6	2.8	2.6	3.0	4.0	4.3	3.7
	MEAN NO. DAYS WITH:														
	CLEAR	69	8.5	7.8	9.5	10.8	13.5	16.2	20.3	18.8	17.9	15.5	11.1	9.4	159.3
	PARTLY CLOUDY	69	7.5	7.3	8.7	9.3	9.7	8.6	7.5	8.6	8.2	8.9	8.3	7.5	100.1
	CLOUDY	69	15.0	13.1	12.8	9.9	7.8	5.2	2.8	3.3	3.6	6.5	10.6	14.1	104.7
PR	MEAN STATION PRESSURE(IN)	29	30.11	30.05	30.02	30.03	29.98	29.93	29.90	29.90	29.92	29.99	30.07	30.10	30.00
	MEAN SEA-LEVEL PRES. (IN)	29	30.13	30.08	30.07	30.05	30.00	29.96	29.96	29.95	29.94	30.01	30.10	30.13	30.03
WINDS	MEAN SPEED (MPH)	29	7.0	8.6	10.6	12.6	13.9	14.0	13.2	12.4	11.0	9.2	7.7	7.4	10.6
	PREVAIL.DIR(TENS OF DEGS)	38	28	28	28	28	27	29	29	29	29	28	28	28	29
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	16	54	60	46	49	49	47	40	38	40	48	51	48	60
	DIR. (TENS OF DEGS)		17	18	26	28	27	28	26	27	28	27	18	17	18
	YEAR OF OCCURRENCE		2008	2006	2000	2009	2011	2005	2006	2010	2009	2009	2002	2002	FEB 2006
	MAXIMUM 3-SECOND														
	SPEED (MPH)	16	68	71	62	60	58	58	49	48	52	62	66	64	71
	DIR. (TENS OF DEGS)		17	18	17	29	28	28	26	27	27	17	17	18	18
	YEAR OF OCCURRENCE		2008	2006	2011	2009	2012	2005	2005	2007	2009	2009	2002	2005	FEB 2006
PRECIPITATION	NORMAL (IN)	30	4.19	4.06	2.96	1.29	0.47	0.11	0.00	0.04	0.17	0.95	2.38	4.03	20.65
	MAXIMUM MONTHLY (IN)	85	11.26	13.64	9.01	6.36	3.81	1.49	0.35	0.66	2.30	7.30	7.94	12.30	13.64
	YEAR OF OCCURRENCE		1993	1998	1958	1958	1957	2011	1977	1976	1959	1962	1973	1955	FEB 1998
	MINIMUM MONTHLY (IN)	85	0.24	T	T	T	0.00	0.00	0.00	0.00	0.00	T	0.00	0.01	0.00
	YEAR OF OCCURRENCE		1991	1953	1934	1977	2001	1928	1930	1996	2002	1978	1929	1989	SEP 2002
	MAXIMUM IN 24 HOURS (IN)	85	5.71	3.41	2.46	2.66	1.54	0.83	0.35	0.60	2.30	3.74	2.43	3.33	5.71
	YEAR OF OCCURRENCE		1982	1998	1982	1958	1957	1967	1977	1997	1959	1962	1994	1955	JAN 1982
	NORMAL NO. DAYS WITH:														
	PRECIPITATION >= 0.01	30	11.4	11.0	10.7	6.0	3.3	1.1	0.2	0.4	1.4	3.2	8.0	11.1	67.8
	PRECIPITATION >= 1.00	30	1.1	1.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.5	0.9	4.4
SNOWFALL	NORMAL (IN)	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	MAXIMUM MONTHLY (IN)	69	1.5	T	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.5
	YEAR OF OCCURRENCE		1962	1996	1995									1932	JAN 1962
	MAXIMUM IN 24 HOURS (IN)	69	1.5	T	T	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.5
	YEAR OF OCCURRENCE'		1962	1996	1995	1987								1932	JAN 1962
	MAXIMUM SNOW DEPTH (IN)	48	0	0	0	0	0	0	0	0	0	0	0	0	0
	YEAR OF OCCURRENCE														
	NORMAL NO. DAYS WITH:														
	SNOWFALL >= 1.0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PRECIPITATION (inches) 2012 SAN FRANCISCO (KSFO)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1983	6.83	6.64	8.50	3.11	0.32	T	0.01	T	0.57	0.10	6.03	6.23	38.34
1984	0.46	1.47	1.36	0.68	T	0.03	T	0.11	0.05	1.96	6.12	1.89	14.13
1985	0.74	2.35	3.30	0.12	0.05	0.29	0.03	0.02	0.18	0.69	3.19	1.61	12.57
1986	4.04	8.09	5.84	0.39	0.15	T	0.01	T	0.47	0.02	0.06	1.66	20.73
1987	2.80	3.52	1.98	0.16	0.06	T	T	T	T	0.93	1.64	4.51	15.60
1988	3.92	0.38	0.05	2.02	0.29	0.60	T	T	0.03	0.42	2.31	3.65	13.67
1989	1.25	1.28	4.00	0.78	0.04	0.01	T	T	1.24	1.40	1.34	0.01	11.35
1990	3.06	2.28	0.79	0.20	1.55	T	0.01	T	0.20	0.19	0.28	1.79	10.35
1991	0.24	3.76	6.07	0.61	0.21	0.11	T	0.27	0.04	1.73	0.23	2.70	15.97
1992	2.04	6.44	4.12	0.25	T	0.39	0.00	0.14	T	1.12	0.15	6.04	20.69
1993	11.26	4.68	2.34	0.41	0.55	0.16	T	T	T	0.45	1.47	2.19	23.51
1994	2.50	5.26	0.24	1.12	1.52	0.03	T	T	0.10	0.33	5.73	2.49	19.32
1995	8.89	0.38	8.75	1.41	0.93	0.60	T	T	T	0.03	0.02	6.41	27.42
1996	6.92	6.03	2.89	1.40	1.24	T	T	.00	T	.76	2.56	6.97	28.77
1997	7.52	0.31	0.25	0.30	0.21	0.24	T	0.60	T	0.68	6.41	3.87	20.39
1998	8.20	13.64	2.05	2.24	2.37	0.03	T	0.00	0.09	0.62	2.43	0.96	32.63
1999	2.96	4.59	2.80	2.18	0.10	0.18	0.00	0.06	0.27	0.46	1.47	0.43	15.50
2000	5.83	8.46	1.74	1.30	0.53	0.14	0.00	0.01	0.07	2.14	0.91	0.44	21.57
2001	3.87	6.12	1.02	1.56	0.00	0.10	0.00	0.00	0.11	0.31	4.51	8.54	26.14
2002	1.38	1.50	2.13	0.36	0.48	T	0.00	0.00	0.00	T	2.94	10.75	19.54
2003	1.43	2.45	1.17	4.42	0.63	0.00	T	T	T	T	2.17	6.41	18.68
2004	3.02	4.57	0.67	0.10	0.07	T	0.00	T	0.04	3.19	1.22	6.42	19.30
2005	4.27	5.10	3.74	1.70	1.15	0.30	T	0.00	0.08	0.08	1.23	9.34	26.99
2006	2.45	2.30	6.13	4.01	0.37	T	0.00	0.00	0.00	0.33	1.64	3.37	20.60
2007	0.65	4.14	0.27	1.14	0.09	0.00	0.01	0.00	0.15	1.97	0.58	2.65	11.65
2008	7.61	2.04	0.23	0.03	T	0.00	T	0.01	0.00	0.32	1.82	2.36	14.42
2009	0.69	6.40	2.35	0.27	0.36	0.04	T	0.00	0.27	2.96	0.20	3.07	16.61
2010	5.97	2.70	2.78	2.75	0.69	T	0.00	T	0.01	0.84	2.41	6.00	24.15
2011	0.94	4.79	5.70	0.33	0.47	1.49	T	0.00	0.01	1.18	1.55	0.13	16.59
2012	2.16	0.66	4.76	2.79	T	0.09	T	T	0.00	0.70	4.06	6.24	21.46
POR= 67 YRS	4.15	3.49	2.86	1.36	0.38	0.13	0.02	0.04	0.17	1.00	2.35	3.75	19.70

WBAN : 23234

AVERAGE TEMPERATURE (°F) 2012 SAN FRANCISCO (KSFO)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1983	48.0	53.4	54.1	54.7	57.8	61.5	65.1	66.9	68.3	64.4	55.5	53.4	58.6
1984	51.3	52.9	57.0	56.0	61.8	61.3	65.6	64.4	69.7	60.4	53.8	47.7	58.5
1985	46.4	51.6	51.4	59.0	58.6	65.2	64.8	64.0	63.2	60.7	52.0	47.1	57.0
1986	53.7	56.3	57.1	56.2	58.6	62.5	62.4	61.2	62.9	61.4	57.1	50.3	58.3
1987	49.3	53.3	54.9	59.2	61.6	62.4	63.1	65.1	64.0	63.9	57.0	50.5	58.7
1988	50.6	54.5	56.5	58.1	59.5	62.5	65.3	65.0	63.1	61.4	56.5	50.4	58.6
1989	48.3	48.4	54.9	60.8	59.8	62.7	62.8	64.0	61.4	60.8	56.4	50.1	57.5
1990	49.9	49.2	53.3	58.5	59.0	62.4	64.5	66.3	66.4	63.1	56.0	46.4	57.9
1991	50.1	55.3	52.2	55.7	56.9	59.4	63.7	64.4	62.9	62.8	57.5	50.8	57.6
1992	48.9	56.1	57.4	60.6	63.4	63.6	65.8	63.8	65.3	65.4	56.8	49.8	59.7
1993	49.3	52.5	57.5	58.1	62.2	64.8	64.8	67.3	63.1	63.4	56.3	50.1	59.1
1994	51.5	50.6	56.0	56.8	58.5	61.5	62.1	64.5	64.1	60.1	49.9	48.0	57.0
1995	52.2	54.1	53.9	55.0	57.0	60.8	64.8	63.0	63.2	62.5	58.4	53.7	58.2
1996	51.8	54.9	56.0	59.1	60.4	61.5	63.2	62.7	63.0	60.9	56.3	53.9	58.6
1997	50.9	53.4	56.1	58.2	64.4	62.3	64.0	66.9	68.3	61.8	57.7	51.1	59.6
1998	52.8	52.3	55.0	55.7	57.7	61.6	62.8	64.3	64.3	60.3	54.2	47.0	57.3
1999	49.3	50.4	51.0	54.6	55.5	59.6	61.9	63.8	63.6	62.5	57.1	51.1	56.7
2000	52.4	53.5	54.4	58.2	60.2	62.9	61.4	63.6	66.2	60.0	52.6	51.6	58.1
2001	48.8	51.0	55.7	53.6	62.6	62.6	62.7	63.2	62.9	62.4	57.3	51.7	57.9
2002	49.0	53.3	53.8	56.7	58.0	61.4	63.9	64.4	64.8	61.2	57.5	52.6	58.1
2003	53.8	52.2	55.9	54.3	58.9	62.8	63.0	66.4	66.9	63.2	53.9	52.0	58.6
2004	50.3	52.2	59.4	59.4	60.4	61.7	64.8	66.5	67.4	60.8	55.3	52.2	59.2
2005	49.7	55.0	57.2	56.8	61.5	61.9	64.4	63.4	62.4	61.3	57.2	53.1	58.7
2006	51.6	52.9	51.1	55.6	59.8	63.3	65.8	63.5	62.4	60.5	55.5	50.3	57.7
2007	48.0	52.4	55.9	56.1	58.8	61.3	64.2	64.4	64.3	59.9	55.7	49.5	57.5
2008	48.4	51.7	53.7	55.4	58.7	61.5	62.8	64.4	65.0	63.2	57.8	48.9	57.6
2009	51.3	52.1	53.8	56.4	59.4	62.9	62.3	65.6	66.2	61.8	56.6	49.2	58.1
2010	51.2	54.0	55.1	55.6	57.6	62.4	63.0	63.6	68.6	65.1	55.0	52.1	58.6
2011	50.5	50.6	53.7	55.5	56.9	60.5	62.7	62.2	64.7	63.1	53.8	49.3	57.0
2012	50.6	52.2	53.3	56.9	58.4	61.4	62.5	61.7	60.6	63.4	58.2	51.9	57.6
POR= 67 YRS	49.1	51.9	53.6	55.7	58.4	61.3	62.7	63.4	64.1	61.1	55.1	49.8	57.2

HEATING DEGREE DAYS (base 65°F) 2012 SAN FRANCISCO (KSFO)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1983-84	33	1	18	43	281	354	415	342	242	269	124	115	2237
1984-85	43	34	5	147	328	527	570	370	416	180	192	27	2839
1985-86	49	51	60	158	382	546	343	236	239	260	191	78	2593
1986-87	77	113	62	122	228	447	477	320	309	168	128	85	2536
1987-88	60	16	40	70	233	445	440	296	259	212	184	78	2333
1988-89	40	29	71	128	246	447	511	455	308	162	160	94	2651
1989-90	70	38	103	138	249	454	459	437	356	189	185	94	2772
1990-91	33	13	8	77	262	570	454	265	387	273	244	166	2752
1991-92	57	44	65	96	223	434	494	252	226	133	52	58	2134
1992-93	20	49	34	40	235	466	480	346	225	201	100	54	2250
1993-94	33	11	71	67	256	455	408	396	273	238	200	118	2526
1994-95	91	43	46	154	446	522	388	301	338	293	242	143	3007
1995-96	48	79	73	98	192	344	398	289	270	187	149	128	2255
1996-97	75	73	71	155	255	333	431	317	270	194	76	74	2324
1997-98	32	8	2	109	222	422	370	348	301	269	218	109	2410
1998-99	81	59	57	147	320	550	483	403	428	315	289	170	3302
1999-00	104	47	75	92	229	423	381	327	328	207	169	94	2476
2000-01	106	56	32	151	367	409	497	384	282	334	107	95	2820
2001-02	76	60	74	100	225	408	489	321	340	241	212	120	2666
2002-03	48	56	60	138	218	379	339	354	276	313	190	108	2479
2003-04	70	16	27	88	325	396	448	365	181	187	142	101	2346
2004-05	23	6	27	151	286	390	470	275	237	240	101	90	2296
2005-06	34	58	86	115	225	363	410	333	426	276	166	68	2560
2006-07	53	59	84	137	278	448	517	346	281	264	205	117	2789
2007-08	39	45	48	158	270	474	508	378	344	284	228	138	2914
2008-09	90	52	53	79	215	492	419	354	340	277	182	70	2623
2009-10	91	35	31	104	250	483	418	298	299	278	223	102	2612
2010-11	67	77	13	58	299	392	441	397	345	277	249	144	2759
2011-12	77	84	48	86	330	482	441	365	357	239	199	115	2823
2012-	78	102	126	85	204	400							

WBAN : 23234

COOLING DEGREE DAYS (base 65°F) 2012 SAN FRANCISCO (KSFO)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1983	0	0	0	0	7	16	42	66	119	32	0	0	282
1984	0	0	0	4	33	10	70	24	152	9	0	0	302
1985	0	0	0	8	1	38	50	28	11	33	0	0	169
1986	0	0	1	2	0	11	5	0	7	16	0	0	42
1987	0	0	0	4	29	15	9	26	17	43	0	0	143
1988	0	0	0	11	19	8	55	34	23	24	0	0	174
1989	0	0	0	40	6	35	8	15	2	16	0	0	122
1990	0	0	0	1	3	23	23	58	58	24	0	0	190
1991	0	0	0	0	0	6	21	29	13	33	2	0	104
1992	0	0	0	9	10	21	53	18	49	58	0	0	218
1993	0	0	0	0	18	58	33	91	19	26	1	0	246
1994	0	0	0	0	4	18	4	30	27	8	0	0	91
1995	0	0	0	0	0	26	48	26	25	29	0	0	154
1996	0	0	0	18	16	30	22	9	21	36	0	0	152
1997	0	0	1	0	65	1	5	78	107	15	7	0	279
1998	0	0	0	0	0	13	23	44	45	6	0	0	131
1999	0	0	0	9	0	15	17	19	41	24	0	0	125
2000	0	0	2	10	27	36	2	20	73	1	0	0	171
2001	0	0	0	0	38	30	13	10	16	28	0	0	135
2002	0	0	0	0	3	18	20	46	59	31	0	0	177
2003	0	0	0	0	10	48	16	69	90	38	0	0	271
2004	0	0	13	25	4	7	25	63	104	26	0	0	267
2005	0	0	5	0	1	3	22	17	14	6	0	0	68
2006	0	0	0	0	11	26	82	17	14	6	0	0	156
2007	0	0	1	0	21	12	19	32	35	6	0	0	126
2008	0	0	0	5	39	40	30	40	62	30	5	0	251
2009	0	0	0	23	15	14	13	61	73	12	3	0	214
2010	0	0	1	0	0	30	11	39	127	67	6	0	281
2011	0	0	2	1	3	15	12	5	46	31	0	0	115
2012	0	0	0	5	2	16	5	6	2	44	6	0	86

SNOWFALL (inches) 2012 SAN FRANCISCO (KSFO)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1976-77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977-78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978-79	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	T
1979-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
1980-81	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1981-82	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	T	0.0	0.0	0.0	T
1982-83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.0	0.0	0.0	T
1983-84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984-85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985-86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986-87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1987-88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988-89	0.0	0.0	0.0	0.0	0.0	T	T	T	0.0	0.0	0.0	0.0	T
1989-90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990-91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
1992-93	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1993-94	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1994-95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
1995-96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1996-97	0.0	0.0	0.0										
1997-98													
1998-99													
1999-00													
2000-01													
2001-02													
2002-03													
2003-04													
2004-05													
2005-													
POR= 52 YRS	0.0	0.0	0.0	0.0	0.0	T	T	T	T	0.0	0.0	0.0	T

WBAN : 23234

REFERENCE NOTES :

PAGE 1:
THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).
PAGE 2 AND 3:
H/C INDICATES HEATING AND COOLING DEGREE DAYS.
RH INDICATES RELATIVE HUMIDITY
W/O INDICATES WEATHER AND OBSTRUCTIONS
S INDICATES SUNSHINE.
PR INDICATES PRESSURE.
CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).
GENERAL:
T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE.
+ INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES.
BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA.
ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM.
PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH.
POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING.
WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED.
0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05.
CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET
CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS.
GENERAL CONTINUED:
WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH.
RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION.
AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2.
SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN PRECIPITATION, INCLUDING HAIL.
A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65 F.
DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR.
DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY.
WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY.
ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.
STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED SATION HISTORY INFORMATION GO TO "Historical Observing Metadata Repository", URL IS:
http://www.ncdc.noaa.gov/homr/
SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.

NOTE:

The "Period of Record:(POR)" for all "averages" is based on "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.

The 2012 Annual Publications were reproduced on 6/05/13 to correct two problems that occurred when the Publications were first produced on 02/28/13.

1) A small number of stations did not correctly show number of days with thunderstorms and heavy fog.
2) Climate Normals in the Annual Publications were based on a first edition of the 1981-2010 Normals release. With the release of Service Pack 1 (SP1) new normals for 83 stations are available and now included. Additional information on SP1 is available at: http://www1.ncdc.noaa.gov/pub/data/normals/1981-2010/status.txt.

2012
SAN FRANCISCO INTERNATIONAL AIRPORT
CALIFORNIA (KSFO)

The station is located in the central Terminal Building of the San Francisco International Airport, which is on flat filled tideland on the west shore of San Francisco Bay. The bay borders the airport from the north to the south-southeast. San Bruno Mountain, 5 miles to the north-northwest, rises to 1,300 feet. A north-south trending ridge of coastal mountains, 4 miles to the west, varies in elevation from 700 to 1,900 feet, being highest southward along the peninsula. The Pacific Ocean west of the ridge is 6 miles from the airport. A broad gap to the northwest of the station, between San Bruno Mountain and the coastal mountains, allows a strong flow of marine air over the station and dominate the local climate.

San Francisco Airport enjoys a marine-type climate characterized by mild and moderately wet winters and by dry, cool summers. Winter rains, occurring from November through March, account for over 80 percent of the annual rainfall, and measurable precipitation occurs on an average of 10 days per month during this period. However, there are frequent dry periods lasting well over a week. Severe winter storms with gale winds and heavy rains occur only occasionally. Thunderstorms average two a year and may occur in any month.

The daily and annual range in temperature is small. A few frosty mornings occur during the winter but the temperature seldom drops below freezing. Winter temperatures generally rise to the high 50s in the early afternoon.

The summer weather is dominated by a cool sea breeze resulting in an average summer wind speed of nearly 15 mph. Winds are light in the early morning but normally reach 20 to 25 mph in the afternoon.

A sea fog, arriving over the station during the late evening or night as a low cloud, is another persistent feature of the summer weather. This high fog, occasionally producing drizzle or mist, usually disappears during the late forenoon. Despite the morning overcast, summer days are sunny. On the average a total of only 14 days during the four months from June through September are classified as cloudy.

Daytime temperatures are held down both by the morning low overcast and the afternoon strengthening sea breeze, resulting in daily maximum readings averaging about 70 degrees from May through August. However, during these months occasional hot spells, lasting a few days, are experienced without the usual high fog and sea breeze. September, when the sea breeze becomes less pronounced, is the warmest month with highs in the 70s. Low temperatures during the summer are in the mid-50s.

A strong temperature inversion with its base usually about 1,500 feet persists throughout the summer. Inversions close to the ground are infrequent in summer but rather common in fall and winter. As a consequence of these factors and the continued population and economic growth of the area, atmospheric pollution has become a problem of increasing importance.

Station History

SAN FRANCISCO, CA

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
SAN FRANCISCO AP	1928-05-01	1931-01-01	37° 37'	-122° 22'			AIRWAYS
SAN FRANCISCO AP	1955-01-01	1955-06-29	37° 37'	-122° 22'	8		AIRWAYS,COOP
SAN FRANCISCO INTL AP	1955-06-29	1973-01-01	37° 37'	-122° 22'	8		AIRWAYS,COOP
SAN FRANCISCO AP	1933-01-01	1937-01-01	37° 37'	-122° 22'	16		AIRWAYS,COOP
SAN FRANCISCO AP	1950-01-01	1955-01-01	37° 37'	-122° 22'	20		AIRWAYS,COOP
SAN FRANCISCO INTL AP	2011-09-29	Present	37° 37'	-122° 21'	8		ASOS,COOP
SAN FRANCISCO AP	1939-01-01	1950-01-01	37° 37'	-122° 22'	16		AIRWAYS,COOP
SAN FRANCISCO INTL AP	1996-10-01	2011-09-29	37° 39'	-122° 26'	8		ASOS,COOP
SAN FRANCISCO INTL AP	1973-01-01	1981-12-31	37° 37'	-122° 22'	8		COOP,WXSVC
SAN FRANCISCO INTL AP	1981-12-31	1996-10-01	37° 37'	-122° 22'	8		COOP
SAN FRANCISCO AP	1931-01-01	1932-11-30	37° 37'	-122° 22'	7		AIRWAYS,COOP
SAN FRANCISCO AP	1937-01-01	1939-01-01	37° 37'	-122° 22'	46		AIRWAYS,COOP

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1933-01-01	1964-05-11	DAILY	2400	TB	RCRD	
TEMP	1933-01-01	1964-05-11	DAILY	2400	MXMN		ROOF
PRECIP	1995-07-01	2011-09-29	DAILY	2400	TB	RCRD	
PRECIP	2011-09-29	Present	DAILY	2400	PCPNX		
TEMP	1928-05-01	1932-11-30	DAILY	2400	MXMN		ROOF
PRECIP	1982-01-01	1995-07-01	HOURLY	2400			
PRECIP	1982-01-01	1995-07-01	DAILY	2400	TB	RCRD	
TEMP	1995-07-01	2011-09-29	DAILY	2400	HYGR		
PRECIP	1995-07-01	2011-09-29	HOURLY	2400	TB	RCRD	
TEMP	2011-09-29	Present	DAILY	2400	ATEMP		
TEMP	1982-01-01	1995-07-01	DAILY	2400	HYGR		
PRECIP	1928-05-01	1932-11-30	DAILY	2400	TB	RCRD	
TEMP	1964-05-11	1982-01-01	DAILY	2400	HYGR		
PRECIP	1964-05-11	1982-01-01	DAILY	2400	TB	RCRD	
PRECIP	2011-09-29	Present	HOURLY	2400	AHTB	RCRD;HTD	

* For explanation of codes and abbrevitions see Station Metadata link below.

Other Station Information can be found at:
ASOS Implementation by NWS: http://www.nws.noaa.gov/ops2/Surface/asosimplementation.htm
Station Metadata website: http://www.ncdc.noaa.gov/homr

INQUIRES/COMMENTS CALL: (828) 271-4800, option 2
Fax Number : (828) 271-4876
TDD : (828) 271-4010
Email : ncdc.orders@noaa.gov

NOAA/National Climatic Data Center
Attn: User Engagement & Services Branch
151 Patton Avenue
Asheville, NC 28801-5001