

RESOLUTION NO. _____

A RESOLUTION OF THE COUNCIL OF THE CITY OF
FRESNO, CALIFORNIA MAKING AND ADOPTING EXPRESS
FINDINGS THAT MODIFICATIONS OR CHANGES TO THE
CALIFORNIA FIRE CODE ARE REASONABLY NECESSARY
BECAUSE OF LOCAL CLIMATIC, GEOLOGICAL AND
TOPOGRAPHICAL CONDITIONS

WHEREAS, the State of California has adopted the 2021 edition of the International Fire Code, with amendments, which was entitled the 2022 California Fire Code. The 2022 California Fire Code has been incorporated into Title 24, Part 9 of the California Code of Regulations and will take effect on January 1, 2023; and,

WHEREAS, California Health & Safety Code Section 17958.5 authorizes the City, by ordinance, to make changes or modifications to the requirements contained in the provisions of the California Fire Code and other regulations adopted pursuant to California Health & Safety Code Section 17921(a) that result in more stringent local requirements; and,

WHEREAS, California Health & Safety Code Sections 17958, 17958.5 and 17958.7 require more stringent local requirements be supported by express findings made by a city that such modifications or changes are "reasonably necessary because of local climatic, geological or topographical conditions"; and,

WHEREAS, the Council of the City of Fresno intends this Resolution to fulfill the requirements of the California Health & Safety Code regarding modifications or changes to the California Fire Code including express findings of reasonable necessity because of local climatic, geological or topographical conditions.

Date Adopted:

Date Approved:

Effective Date:

City Attorney Approval: BC

Resolution No.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Fresno that said Council expressly finds each of the various proposed modifications or changes to the California Fire Code, which are enumerated below, are reasonably necessary because of local climatic, geological and topographical conditions in the area encompassed by the City of Fresno, as follows:

A. LOCAL CONDITIONS:

Pursuant to Health and Safety Code, Sections 17958.7 and 18941.5, local climatic, topographical or geological conditions make the amendments to the California Fire Code reasonably necessary.

1. CLIMATIC – EXTREME TEMPERATURES

1.1 As documented in the Fresno General Plan and the recently certified Programmatic Environmental Impact Report during the summer months the City of Fresno experiences periods of what can only be described as extreme heat.

The last three years' worth of the "Local Climatological Data Annual Summary with Comparative Data" reports for 2019, 2020, and 2021 promulgated by the United States Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center demonstrate this condition. In the 2019 summary, the mean daily maximum temperature for Fresno in June, July, August and September is: 94.3°F, 99.0°F, 99.0°F and 90.5°F respectively. In 2020 the same information is noted as: 93.6°F, 99.9°F, 100.4°F and 93.0°F and in 2021 was: 97.0°F, 103.3°F, 100.2°F and 94.1°F.

Though Health & Safety Code § 17958.7 does not require the local conditions to be unique to a particular jurisdiction, the temperature charts demonstrate that the temperatures experienced in Fresno are extreme when compared to temperatures experienced in other parts of California.

1.2 Because of the extreme heat Fresno experiences during the summer months, Fresno firefighters responding to fires and other incidents requiring the evacuation of a building are regularly exposed to temperatures in excess of 105°F degrees, when accounting for their protective gear, exposing them to the probability of heat cramps, heat exhaustion and possibly heat stroke.

2. GEOLOGICAL – LIMITED WATER SUPPLY AND WATER PRESSURE

2.1 The Fresno Metropolitan area is arid area that receives small amounts of

rainfall each year. In 2019 Fresno received 12.40 inches of water equivalent precipitation. In 2020, the City received only 6.17 inches and in 2021, only 10.38 inches. Furthermore, the Fresno City Metropolitan Area relies primarily on groundwater for its municipal water supply. According to the California Department of Water Resources, the Kings basin (our underground aquifer) is in a state of critical overdraft.

2.2 Due to the hot, dry summers in the Fresno area, domestic water demand substantially reduces the ability of the public water system to dependably meet the larger fire flow demand in many areas of the City.

3. CLIMATIC/TOPOGRAPHICAL – POOR AIR QUALITY CAUSED BY TOPOGRAPHY OF SAN JOAQUIN VALLEY AIR BASIN, LARGE NUMBER OF SUNNY DAYS AND INVERSIONS THAT FORM DURING WINTER MONTHS

3.1 As a result of the San Joaquin Valley's climate and topography, the San Joaquin Valley Air Basin (SJVAP) is predisposed to poor air quality. High mountain ranges surrounding the Valley frequently create air layer inversions that prevent mixing of air masses. The large number of sunny days per year, and high temperatures in the summer favors the formation of ozone. The area receives so much sunshine that the City of Fresno was ranked the second highest major California city for sunshine, eighth in the nation, with an estimated 79 percent annual average of possible sunshine for more than a 30-year period. In the winter, inversions form that often trap particulate matter.

3.2 The Federal EPA and California Air Resources Board have classified the San Joaquin Valley Air Basin as severe non-attainment for Ozone and serious non-attainment (federal) non-attainment (state) for PM₁₀. Ozone is formed by a complex series of chemical reactions between reactive organic gases (ROG), oxides of nitrogen and sunlight. PM₁₀ is suspended particulate matter that is less than 10 microns in size. Given its small size, PM₁₀ can remain airborne for long periods and can be inhaled, pass through the respiratory system, and lodge in the lungs. In general, non-attainment means that the federal standard has been exceeded more than twice per year.

3.3 Smoke is composed primarily of carbon dioxide, water vapor, carbon monoxide, particulate matter, hydrocarbons and other organic chemicals, nitrogen oxides, trace minerals and several thousand other compounds. Particulate matter is the principal pollutant of concern for the relatively short-term exposures (hours to weeks) typically experienced by the public. Particulate matter in wood smoke has a size range near the wavelength of visible light (.4-.7 micrometers). Because these particles can be inhaled into the deepest recesses of the lungs, they are thought to represent a greater health concern than larger particles. Another pollutant of concern during some events is carbon monoxide. The San Joaquin Valley Air Pollution Control District states "Emissions from burning include fine particulate, hydrocarbons, oxides of nitrogen, oxides of sulfur, carbon monoxide, and toxic air contaminants that contribute to our air quality problems."

4. TOPOGRAPHICAL – FRESNO'S DEVELOPMENT PATTERN

4.1 Due to the relatively low-density growth pattern in the Fresno area, its 20 fire stations are spaced approximately four miles apart resulting in an average of a two-mile running distance for the designated first-in engine company. This average two-mile travel distance increases the response time to fires, which result in an increase in the size and intensity of fires.

4.2 As set forth in detail in the attached proposed Resolution and Ordinance, each of the local amendments to the California Fire Code are reasonably necessary because of these climatic, topographical, and geological conditions. The amendments may be generally characterized as relating to (1) fire sprinkler systems; (2) luminous exit markings; (3) additional regulation of recycling and waste handling facilities; and (4) additional regulation of locations of above-ground tanks, the amount of Class 1 and Class II liquids at farms and construction sites in above-ground tanks and basement storage of flammable liquids. Below is a brief summary of the reasons these amendments are necessary.

5 FIRE SPRINKLER SYSTEMS

5.1 Fire sprinkler systems have proven extremely effective in suppressing and extinguishing unwanted fires using a small fraction of the water used by traditional fire suppression methods. This results in smaller fires or fires of shorter duration and thus produces far less toxic smoke that affects air quality. Because fire sprinklers limit the size and the duration of fires, fewer fire personnel are likely to be required to respond to said fires, which reduce the number of fire personnel who would be exposed to the health risks associated with sustained exposure to high temperatures and smoke toxicity. Fire sprinklers also address the extended run times due to topography-related, low density growth patterns in Fresno, and require personnel to stay on scene for shorter periods of time. This allows personnel to be available for other calls for services at a higher rate. Finally, the lower consumption of water as a result of the installation of fire sprinklers preserves one of our City's most valuable resources, and limits the amount of water effluent (which could be in the millions of gallons) that must be treated downstream. The modifications proposed in this category maintain existing amendments approved by previous Councils that continue a proactive fire sprinkler installation emphasis for community-wide fire protection that commenced in 1979, and expand protection to reduce demand on the City's resources.

6. PHOTOLUMINESCENT EXIT MARKINGS

6.1 Photoluminescent exit markings greatly assist individuals in evacuating buildings without the use of fire personnel. Accordingly, requiring these markings facilitate the unassisted evacuation of buildings. Therefore, fewer fire personnel will be needed at the scene of a fire to assist in the evacuation of a building in which photoluminescent exit markings have been installed. This modification continues an existing amendment first approved by Council in 2006.

7. ADDITIONAL REGULATION OF RECYCLING AND WASTE HANDLING

FACILITIES

7.1 These regulations will serve to reduce the possibility of spontaneous combustion of piles of waste materials and facilitate the suppression and extinguishing of fires at these sites. This will result in smaller amounts of pollutants being released into the air and in effluent water runoff, and result in fewer fire personnel having to respond to said fires. This may also shorten the time that fire personnel will be required to remain at the scene of the fire. These modifications are a continuation of requirements approved by Council in 2003, after the disastrous Crippen Fire in southwest Fresno.

8. ADDITIONAL REGULATION OF MOTOR FUEL DISPENSING AND REPAIR GARAGES, LOCATIONS OF ABOVE-GROUND TANKS, THE AMOUNT OF CLASS I AND CLASS II LIQUIDS AT FARMS AND CONSTRUCTION SITES IN ABOVE-GROUND TANKS AND BASEMENT STORAGE OF FLAMMABLE LIQUIDS.

8.1 Fresno's very hot, dry conditions make all combustible materials (grass, weeds, buildings, roof coverings, etc.) highly combustible, which increases the general community wide fire hazard. High temperatures also make all flammable and combustible liquids and gases much more volatile, increasing the fire hazard where they are present. Therefore, increased regulation of the storage of certain classes of fuels and gases is reasonably necessary to reduce the fire risk associated with the ignition of these materials. These modifications are a continuation of amendments approved by Council that date back to at least 1978, in an effort to control the risk of low flash point hazardous materials in our community.

STATE OF CALIFORNIA)
COUNTY OF FRESNO) ss.
CITY OF FRESNO)

I, TODD STERMER, City Clerk of the City of Fresno, certify that the foregoing resolution was adopted by the Council of the City of Fresno, at a regular meeting held on the _____ day of _____ 2022.

AYES :
NOES :
ABSENT :
ABSTAIN :

TODD STERMER, CMC
City Clerk

By: _____
Deputy Date

APPROVED AS TO FORM:
RINA M. GONZALES
Interim City Attorney

By: _____
Brandon M. Collet Date
Supervising Deputy City Attorney

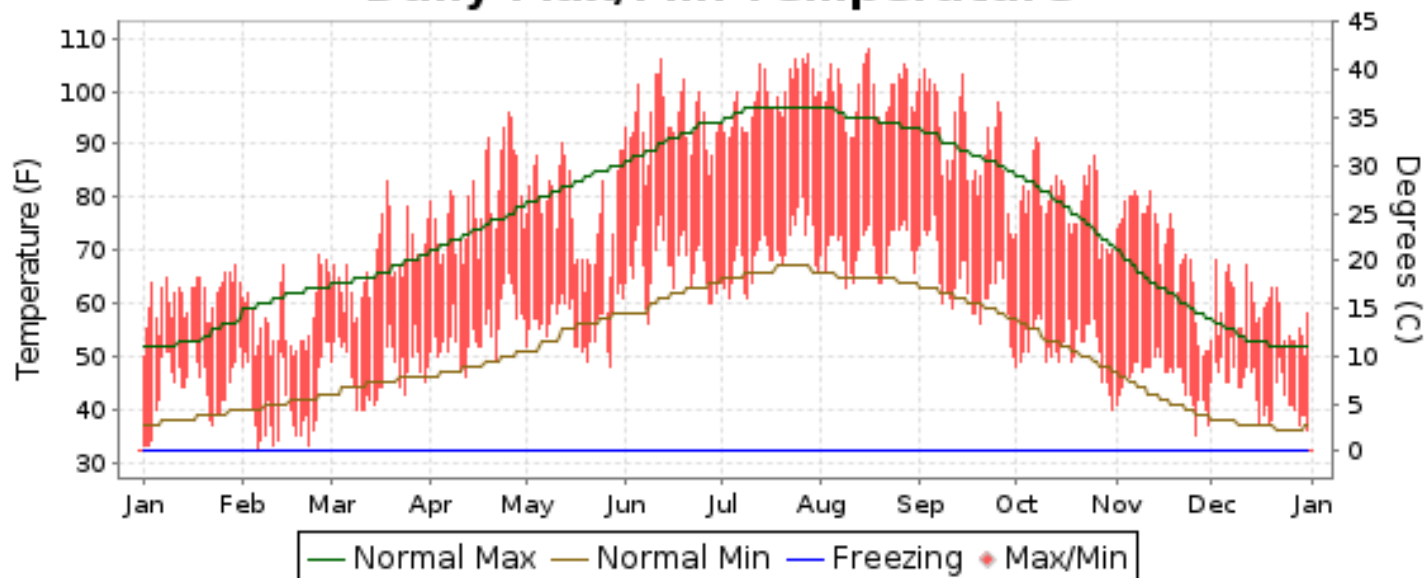


2019 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

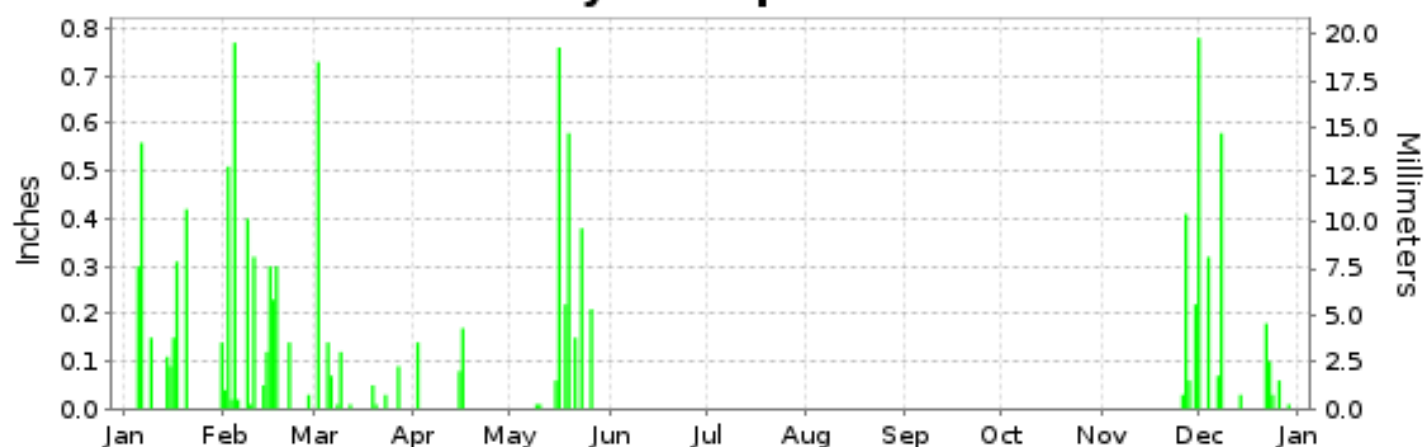
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FRESNO, CALIFORNIA (KFAT)

Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

NATIONAL
OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL
ENVIRONMENTAL SATELLITE, DATA
AND INFORMATION SERVICE

NATIONAL CENTERS for
ENVIRONMENTAL INFORMATION (NCEI)
ASHEVILLE, NORTH CAROLINA

Mary A. Wohlgemuth
DIRECTOR
NCEI

METEOROLOGICAL DATA FOR 2019

FRESNO (KFAT)

LATITUDE: 36° 46'N **LONGITUDE:** 119° 43'W **ELEVATION (FT):** GRND: 333 BARO: 375 **TIME ZONE:** PACIFIC (UTC -8) **WBAN: 93193**

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	MEAN DAILY MAXIMUM	61.0	57.3	67.4	79.3	77.2	94.3	99.0	99.5	90.5	79.3	70.4	58.3	77.8
	HIGHEST DAILY MAXIMUM	67	69	83	96	90	106	107	108	104	91	81	68	108
	DATE OF OCCURRENCE	30	25	18	25	12	12	28	16	02	07	12+	02	AUG 16
	MEAN DAILY MINIMUM	44.0	41.1	47.4	54.8	56.2	67.1	69.5	70.1	63.9	51.6	45.4	43.6	54.6
	LOWEST DAILY MINIMUM	33	32	40	46	48	56	61	63	50	40	35	36	32
	DATE OF OCCURRENCE	03+	06	11+	12	27	08	09+	09	30	31	26	31	FEB 06
	AVERAGE DRY BULB	52.5	49.2	57.4	67.1	66.7	80.7	84.2	84.8	77.2	65.5	57.9	51.0	66.2
	MEAN WET BULB	47.9	44.5	50.0	56.1	56.1	63.4	64.9	65.8	60.8		48.2	46.9	
	MEAN DEW POINT	44.2	39.1	43.1	46.9	47.6	50.9	51.8	53.6	49.2		39.2	42.6	
	NUMBER OF DAYS WITH:													
	MAXIMUM >= 90°	0	0	0	4	1	24	31	31	15	2	0	0	108
	MAXIMUM <= 32°	0	0	0	0	0	0	0	0	0	0	0	0	0
	MINIMUM <= 32°	0	1	0	0	0	0	0	0	0	0	0	0	1
	MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0
H/C	HEATING DEGREE DAYS	381	433	233	46	57	0	0	0	6	51	205	427	1839
	COOLING DEGREE DAYS	0	0	5	114	118	477	605	622	379	72	0	0	2392
RH	MEAN (PERCENT)	77	70	64	53	55	38	36	38	41	41	56	76	54
	HOUR 04 LST	89	81	81	75	75	58	55	59	61	62	72	84	71
	HOUR 10 LST	72	66	56	44	48	32	29	33	35	32	46	72	47
	HOUR 16 LST	63	56	43	32	39	21	17	19	22	21	40	66	37
	HOUR 22 LST	84	76	71	60	60	41	41	42	46	46	65	81	59
W/O	NUMBER OF DAYS WITH:													
	HEAVY FOG(VISBY <= 1/4 MI)	3	1	0	0	0	0	0	0	0	0	0	6	10
	THUNDERSTORMS	0	1	0	1	4	0	0	0	0	0	0	1	7
PR	MEAN STATION PRESS. (IN.)	29.76	29.65	29.70	29.62	29.54	29.51	29.54	29.52	29.54	29.63	29.64	29.73	29.62
	MEAN SEA-LEVEL PRESS. (IN.)	30.12	30.01	30.05	29.97	29.88	29.96	29.88	29.86	29.89	29.98	29.99	30.09	29.97
WINDS	RESULTANT SPEED (MPH)	2.1	3.9	0.4	4.3	3.8	5.9	6.2	5.8	5.0		0.3	1.1	
	RES. DIR. (TENS OF DEGS.)	11	13	32	32	31	31	31	31	31		07	10	
	MEAN SPEED (MPH)	4.3	6.8	6.3	6.9	7.2	8.1	7.8	7.5	6.9	4.5	3.7	4.3	6.2
	PREVAIL.DIR.(TENS OF DEGS.)	11	12	32	32	32	31	32	31	32	31	30	12	32
	MAXIMUM 2-MINUTE WIND													
	SPEED (MPH)	36	33	29	40	30	25	23	21	26	26	29	21	40
	DIR. (TENS OF DEGS.)	29	18	17	31	30	31	31	33	31	30	32	32	31
	DATE OF OCCURRENCE	20	14	06	09	09	06	16	10	07	02	25	14	APR 09
	MAXIMUM 3-SECOND WIND:													
	SPEED (MPH)	44	47	37	50	40	30	30	29	33	31	35	27	50
	DIR. (TENS OF DEGS.)	28	17	16	31	02	31	31	32	32	31	32	13	31
	DATE OF OCCURRENCE	20	14	06	09	09	27	16	10	07	17	25	07	APR 09
PRECIPITATION	WATER EQUIVALENT:													
	TOTAL (IN.)	2.23	3.26	1.26	0.39	2.38	0.00	T	0.00	0.00	0.00	0.72	2.16	12.40
	GREATEST 24-HOUR (IN.)	0.56	0.77	0.73	0.25	0.82	0.00	T	0.00	0.00	0.00	0.44	0.78	0.82
	DATE OF OCCURRENCE	06	04	02	15-16	15-16		26+				26-27	01	MAY 15-16
	NUMBER OF DAYS WITH:													
	PRECIPITATION 0.01	9	15	10	3	9	0	0	0	0	0	4	10	60
	PRECIPITATION 0.10	8	9	3	2	6	0	0	0	0	0	2	5	35
	PRECIPITATION 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0
SNOWFALL	SNOW,ICE PELLETS,HAIL													
	TOTAL (IN.)	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
	GREATEST 24-HOUR (IN.)	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
	DATE OF OCCURRENCE	0	0	0	0	0	0	0	0	0	0	0	0	0
	MAXIMUM SNOW DEPTH (IN.)													
	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:													
	SNOWFALL >= 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0

NORMALS, MEANS, AND EXTREMES

FRESNO (KFAT)

LATITUDE:
36° 46'N

LONGITUDE:
119° 43'W

ELEVATION (FT):
GRND: 333 BARO: 375

TIME ZONE:
PACIFIC (UTC -8)

WBAN: 93193

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	54.8	61.6	67.6	74.6	84.1	92.0	98.4	97.1	90.9	79.5	65.1	54.9	76.7
	MEAN DAILY MAXIMUM	70	55.1	61.8	67.5	74.7	83.5	92.0	98.5	96.6	90.9	79.8	65.6	55.1	76.8
	HIGHEST DAILY MAXIMUM	70	78	80	91	100	107	110	113	112	111	102	90	77	113
	YEAR OF OCCURRENCE		2014	2014	2015	1981	1984	2017	2006	1996	1955	1980	2010	2006	JUL 2006
	MEAN OF EXTREME MAXS.	70	67.7	73.3	80.7	90.2	98.7	105.2	107.2	105.8	102.4	93.5	79.9	67.2	89.3
	NORMAL DAILY MINIMUM	30	38.3	41.5	45.6	49.4	56.2	62.4	67.6	66.2	61.5	53.0	43.4	38.0	51.9
	MEAN DAILY MINIMUM	70	38.1	41.0	44.3	48.4	54.7	61.0	66.3	64.6	60.2	51.6	42.9	37.6	50.9
	LOWEST DAILY MINIMUM	70	19	24	26	32	36	44	50	49	37	27	26	18	18
	YEAR OF OCCURRENCE		1963	1990	1966	1982	1975	1955	1955	1966	1950	1972	1975	1990	DEC 1990
	MEAN OF EXTREME MINS.	70	28.4	31.7	34.9	39.1	45.1	51.5	57.7	57.1	51.2	41.8	33.0	28.3	41.7
	NORMAL DRY BULB	30	46.6	51.5	56.6	62.0	70.1	77.2	83.0	81.7	76.2	66.2	54.3	46.5	64.3
	MEAN DRY BULB	70	46.6	51.4	55.9	61.6	69.1	76.5	82.4	80.6	75.5	65.8	54.3	46.4	63.8
	MEAN WET BULB	36	42.6	45.3	48.0	49.2	52.3	56.1	60.0	59.4	56.7	52.3	46.7	41.5	50.8
	MEAN DEW POINT	36	42.6	44.6	47.4	47.7	50.5	54.6	58.4	57.8	55.4	50.9	45.6	41.3	49.7
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	1.8	8.7	18.5	28.7	27.1	18.1	3.3	0.0	0.0	106.2
	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	5.6	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	5.1	13.2
	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	572	377	265	136	30	3	0	0	2	61	325	575	2346
	NORMAL COOLING DEG. DAYS	30	0	0	5	46	190	369	558	516	338	100	2	0	2124
RH	NORMAL (PERCENT)		84	77	70	57	48	43	40	44	49	58	74	83	61
	HOURLY 04 LST	30	92	90	87	80	71	65	62	66	71	78	88	92	79
	HOURLY 10 LST	30	85	77	66	51	44	39	38	41	45	52	71	83	58
	HOURLY 16 LST	30	69	57	49	35	28	24	22	25	28	35	53	67	41
	HOURLY 22 LST	30	89	83	76	62	51	44	42	46	51	63	81	88	65
S	PERCENT POSSIBLE SUNSHINE	46	47	65	77	85	90	95	97	96	94	88	66	46	79
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	56	10.1	4.4	1.3	0.2	0.0	0.0	0.0	0.0	0.0	0.5	4.4	9.7	30.6
	THUNDERSTORMS	70	0.2	0.4	0.8	0.6	0.6	0.4	0.2	0.2	0.5	0.5	0.2	0.3	4.9
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS) MIDNIGHT-MIDNIGHT (OKTAS) MEAN NO. DAYS WITH: CLEAR PARTLY CLOUDY CLOUDY														
PR	MEAN STATION PRESSURE(IN)	36	29.80	29.74	29.70	29.65	29.58	29.52	29.53	29.53	29.53	29.63	29.74	29.77	29.64
	MEAN SEA-LEVEL PRES. (IN)	36	30.16	30.09	30.05	30.00	29.92	29.87	29.87	29.87	29.88	29.98	30.09	30.15	29.99
WINDS	MEAN SPEED (MPH)	36	4.1	5.0	5.9	7.3	8.2	8.3	7.5	6.9	6.0	4.7	3.9	4.0	6.0
	PREVAIL.DIR(TENS OF DEGS)	44	12	12	32	32	31	31	31	31	31	31	31	12	31
	MAXIMUM 2-MINUTE: SPEED (MPH)	24	38	36	36	40	32	33	24	26	31	35	31	35	40
	DIR. (TENS OF DEGS)		16	13	29	31	32	30	30	31	29	28	27	28	31
	YEAR OF OCCURRENCE		2005	1998	2017	2019	1998	2012	2015	2014	2013	2007	2016	2008	APR 2019
	MAXIMUM 3-SECOND SPEED (MPH)	24	46	47	42	50	40	40	33	41	36	45	39	45	50
	DIR. (TENS OF DEGS)		16	17	29	31	02	31	07	31	29	33	27	01	31
	YEAR OF OCCURRENCE		2005	2019	2017	2019	2019	2012	2007	2013	2013	2009	2016	2011	APR 2019
PRECIPITATION	NORMAL (IN)	30	2.19	2.03	2.03	0.95	0.43	0.21	0.01	0.01	0.17	0.63	1.07	1.77	11.50
	MAXIMUM MONTHLY (IN)	70	8.56	6.12	7.24	4.41	2.38	1.93	0.43	0.25	1.19	2.45	3.50	6.73	8.56
	YEAR OF OCCURRENCE		1969	2000	1991	1967	2019	1998	2015	1964	1976	2000	1972	1955	JAN 1969
	MINIMUM MONTHLY (IN)	70	0.04	T	0.00	T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	YEAR OF OCCURRENCE		1976	1964	1972	2008	1982	1983	1983	1981	1981	1978	1959	1989	DEC 1989
	MAXIMUM IN 24 HOURS (IN)	70	2.74	1.99	2.43	2.04	1.42	1.80	0.36	0.25	0.97	1.76	1.35	1.82	2.74
	YEAR OF OCCURRENCE		2006	1969	1995	2017	1990	1998	2015	1964	1978	1992	1953	2007	JAN 2006
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	7.6	8.6	7.5	4.5	2.2	0.7	0.2	0.3	1.0	2.5	5.5	7.5	48.1
	PRECIPITATION >= 1.00	30	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	1.3
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)	60	2.2	T	T	T	0.0	T	0.0	T	T	T	0.0	1.2	2.2
	YEAR OF OCCURRENCE		1962	1994	2011	2017	2018	2013	2019	2017	2011	1974		1968	JAN 1962
	MAXIMUM IN 24 HOURS (IN)	60	1.5	T	T	T	T	T	0.0	0.0	0.0	T	0.0	1.2	1.5
	YEAR OF OCCURRENCE		1962	1994	2011	2017	2015	1995				1974		1968	JAN 1962
	MAXIMUM SNOW DEPTH (IN)	59	0	0	0	0	0	0	0	0	0	0	0	1	1
	YEAR OF OCCURRENCE													1968	DEC 1968
	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) 2019 FRESNO (KFAT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1990	2.82	1.33	0.67	0.92	1.65	0.00	T	0.00	0.15	0.05	0.46	0.68	8.73
1991	0.13	1.01	7.24	0.02	0.03	T	0.00	T	T	0.80	0.04	1.22	10.49
1992	1.94	4.73	2.14	0.18	T	T	0.22	T	T	2.19	T	2.68	14.08
1993	5.18	2.44	1.76	0.20	0.25	1.61	0.00	0.00	0.00	0.12	1.16	1.03	13.75
1994	1.15	1.92	0.52	1.36	1.30	0.00	T	0.00	0.20	0.77	1.57	1.33	10.12
1995	5.42	0.93	5.88	1.08	1.19	0.66	0.01	T	0.00	0.00	T	2.12	17.29
1996	2.07	3.57	1.52	1.17	0.38	0.08	T	0.00	0.00	1.97	1.94	4.27	16.97
1997	3.53	0.17	0.10	T	T	0.01	T	0.00	0.15	0.07	2.66	0.99	7.68
1998	3.40	4.89	3.44	1.26	1.37	1.93	0.00	0.00	0.15	0.16	0.43	0.62	17.65
1999	2.82	1.18	0.49	0.93	0.03	0.20	0.00	0.01	T	T	0.48	0.03	6.17
2000	3.15	6.12	1.35	1.16	0.05	0.56	0.00	T	0.32	2.45	0.01	0.07	15.24
2001	2.66	2.22	0.96	1.87	0.00	0.00	0.08	0.00	T	0.29	1.99	1.95	12.02
2002	0.76	0.40	0.95	0.21	0.38	0.02	0.00	0.00	T	0.00	1.78	2.25	6.75
2003	0.40	1.22	0.63	2.84	0.68	0.00	T	0.04	T	T	0.40	2.93	9.14
2004	0.88	1.69	1.54	0.03	0.07	0.00	0.00	0.00	0.00	2.45	0.81	3.16	10.63
2005	2.42	2.30	2.51	0.56	1.62	0.01	0.00	T	0.04	0.05	0.17	2.00	11.68
2006	3.40	0.54	4.73	3.27	0.36	0.00	T	0.00	0.00	0.08	0.23	1.33	13.94
2007	0.59	2.29	0.97	0.49	0.05	0.00	T	0.02	0.02	0.20	0.09	2.31	7.03
2008	3.32	2.12	0.02	T	0.30	0.00	0.01	0.00	0.00	0.23	1.37	1.09	8.46
2009	1.02	2.43	0.24	0.72	0.46	0.20	0.00	T	0.01	1.39	0.20	2.41	9.08
2010	2.05	2.94	0.96	2.19	0.21	0.00	T	0.00	0.00	0.44	1.80	5.92	16.51
2011	1.71	1.60	3.46	0.32	0.35	1.91	T	0.00	T	0.90	0.67	0.00	10.92
2012	1.38	0.75	2.43	2.02	0.00	T	T	T	0.00	0.25	1.11	2.03	9.97
2013	0.58	0.89	0.65	0.09	0.07	T	T	T	0.01	0.03	0.54	0.15	3.01
2014	0.57	2.11	0.62	0.74	0.04	0.00	0.01	T	0.18	0.50	0.40	2.29	7.46
2015	0.21	1.13	0.06	1.25	0.57	0.01	0.43	0.00	0.12	0.49	1.74	2.97	8.98
2016	4.42	0.33	2.93	1.06	0.29	0.06	0.00	0.00	0.00	0.67	1.38	2.51	13.65
2017	5.50	2.52	1.08	3.42	0.12	0.00	0.00	T	0.16	0.09	0.28	0.04	13.21
2018	1.23	0.26	4.19	0.64	T	0.00	0.00	0.00	0.00	0.10	1.67	0.56	8.65
2019	2.23	3.26	1.26	0.39	2.38	0.00	T	0.00	0.00	0.00	0.72	2.16	12.40
POR= 70 YRS	2.11	1.87	1.83	1.05	0.37	0.15	0.01	0.01	0.15	0.50	1.13	1.64	10.82

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AVERAGE TEMPERATURE (°F) 2019 FRESNO (KFAT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1990	45.5	48.0	57.3	65.7	68.1	76.8	84.0	80.6	75.8	67.7	52.9	41.5	63.7
1991	47.0	55.8	51.5	59.5	66.1	74.7	83.8	78.6	79.9	70.5	55.8	47.0	64.2
1992	42.7	55.5	58.8	66.8	76.0	77.0	81.3	83.2	77.0	68.6	54.3	45.3	65.5
1993	47.1	51.9	60.3	61.7	69.9	75.7	80.2	79.7	75.7	67.8	53.9	45.6	64.1
1994	46.9	49.9	59.3	63.2	68.5	77.7	83.3	82.3	75.4	64.8	48.1	45.3	63.7
1995	51.9	54.1	56.2	60.7	66.2	73.3	80.7	82.6	76.3	66.8	58.7	50.5	64.8
1996	48.3	54.2	57.2	63.6	69.9	77.8	85.4	83.4	74.8	64.1	53.9	49.1	65.1
1997	48.7	50.3	60.0	63.5	75.3	75.8	81.3	80.6	77.3	63.8	56.9	44.7	64.9
1998	49.0	50.0	55.5	59.0	62.0	71.5	82.1	84.1	75.8	63.1	53.1	42.8	62.3
1999	44.7	49.9	53.5	58.5	68.0	75.9	80.6	78.4	77.3	68.7	56.9	47.0	63.3
2000	50.2	53.8	56.5	64.2	71.0	79.8	78.8	81.2	74.5	63.9	49.2	47.8	64.2
2001	46.2	48.7	58.8	58.6	77.3	79.7	81.6	81.9	77.0	68.5	56.4	47.4	65.2
2002	45.0	52.2	55.1	62.8	69.6	78.1	84.1	80.0	77.1	65.2	56.2	49.3	64.6
2003	50.6	51.1	58.1	58.6	69.5	78.4	86.5	81.4	79.2	69.8	52.2	49.3	65.4
2004	46.6	50.5	62.6	65.8	70.9	77.4	83.3	81.3	75.9	64.1	51.7	46.5	64.7
2005	47.4	54.4	57.8	59.6	69.4	73.6	86.8	84.0	73.9	65.9	57.6	51.0	65.1
2006	48.7	52.4	50.1	59.7	71.9	80.7	87.9	80.2	75.8	64.0	55.4	47.1	64.5
2007	43.7	51.4	60.3	63.0	71.5	78.0	83.2	82.8	73.7	64.4	57.4	45.5	64.6
2008	47.0	51.1	57.0	61.7	70.3	79.1	83.8	84.1	78.0	67.1	57.5	44.9	65.1
2009	47.7	51.5	56.0	62.0	75.3	75.7	85.0	81.8	79.7	63.7	54.1	47.2	65.0
2010	48.6	52.2	55.5	57.7	65.2	77.6	83.1	79.9	76.9	68.0	53.8	50.9	64.1
2011	46.6	49.2	55.4	60.7	65.1	75.0	82.0	82.4	80.3	68.0	53.5	45.6	63.7
2012	49.3	52.7	56.2	63.0	72.4	77.9	83.4	86.6	81.4	69.1	58.3	50.9	66.8
2013	47.1	51.0	62.1	67.6	73.0	80.9	87.1	83.0	77.9	66.6	58.5	47.3	66.8
2014	53.2	56.8	62.4	66.8	74.2	80.9	86.9	84.4	80.7	72.0	57.7	51.9	69.0
2015	49.0	57.0	64.0	64.3	68.5	82.0	83.1	82.4	78.7	71.3	52.0	45.8	66.5
2016	50.0	55.5	58.7	65.3	71.3	80.9	84.0	82.5	76.1	66.4	57.6	47.1	66.3
2017	48.1	53.9	58.8	62.1	71.0	80.5	86.5	85.2	77.2	65.7	58.0	48.0	66.3
2018	52.5	53.2	56.8	64.9	70.9	79.4	88.2	83.0	78.0	68.1	57.8	50.0	66.9
2019	52.5	49.2	57.4	67.1	66.7	80.7	84.2	84.8	77.2	65.5	57.9	51.0	66.2
POR= 70 YRS	46.6	51.4	55.9	61.6	69.1	76.5	82.4	80.6	75.5	65.8	54.3	46.4	63.8

HEATING DEGREE DAYS (base 65°F) 2019 FRESNO (KFAT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1990-91	0	0	0	17	356	722	549	253	412	163	65	0	2537
1991-92	0	0	0	81	276	551	683	267	183	25	0	1	2067
1992-93	0	0	0	18	316	602	549	359	145	113	9	12	2123
1993-94	0	0	0	12	326	595	553	414	168	97	37	0	2202
1994-95	0	0	0	58	500	602	398	298	269	146	60	16	2347
1995-96	0	0	0	30	184	444	513	304	238	99	8	0	1820
1996-97	0	0	0	148	329	486	500	405	169	97	2	0	2136
1997-98	0	0	0	92	246	621	490	412	293	226	104	7	2491
1998-99	0	0	7	79	351	682	619	418	348	227	35	12	2778
1999-00	0	0	0	14	235	550	452	317	259	72	27	3	1929
2000-01	0	0	0	103	466	526	577	451	208	222	0	0	2553
2001-02	0	0	0	23	251	538	610	352	310	109	30	0	2223
2002-03	0	0	0	67	256	477	440	382	216	191	49	0	2078
2003-04	0	0	0	24	378	482	565	413	113	64	3	0	2042
2004-05	0	0	6	124	391	566	537	291	217	158	30	1	2321
2005-06	0	0	0	41	217	424	500	345	456	170	9	0	2162
2006-07	0	0	2	56	283	546	654	373	158	117	19	1	2209
2007-08	0	0	6	59	223	600	552	396	243	149	20	0	2248
2008-09	0	0	0	39	219	616	531	369	274	145	0	0	2193
2009-10	0	0	2	87	322	544	500	352	289	227	62	0	2385
2010-11	0	0	0	40	346	432	563	438	292	138	67	7	2323
2011-12	0	0	0	29	338	595	478	352	268	129	6	2	2197
2012-13	0	0	0	38	205	432	545	386	107	42	4	0	1759
2013-14	0	0	0	32	189	540	361	223	88	68	3	0	1504
2014-15	0	0	0	5	216	401	487	217	83	85	25	0	1519
2015-16	0	0	0	5	385	587	456	268	189	47	10	0	1947
2016-17	0	0	2	23	226	544	514	305	202	94	26	4	1940
2017-18	0	0	4	45	209	523	376	324	258	70	4	0	1813
2018-19	0	0	0	9	209	458	381	433	233	46	57	0	1826
2019-	0	0	6	51	205	427							

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COOLING DEGREE DAYS (base 65°F) 2019 FRESNO (KFAT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1990	0	0	2	61	122	360	595	490	333	108	0	0	2071
1991	0	0	0	6	107	298	588	428	454	259	5	0	2145
1992	0	0	0	88	350	366	511	572	365	135	0	0	2387
1993	0	0	3	20	168	342	476	462	331	105	0	0	1907
1994	0	0	1	52	151	389	576	547	318	59	0	0	2093
1995	0	0	0	25	104	273	494	551	347	91	0	0	1885
1996	0	0	4	66	162	389	640	579	300	125	0	0	2265
1997	0	0	18	61	330	334	514	492	373	61	11	0	2194
1998	0	0	6	50	18	210	536	600	338	25	0	0	1783
1999	0	0	0	39	135	348	487	423	373	135	0	0	1940
2000	0	0	0	54	217	454	434	509	291	81	0	0	2040
2001	0	0	20	37	389	447	521	533	365	137	0	0	2449
2002	0	0	9	50	180	400	599	472	372	81	0	0	2163
2003	0	0	7	5	192	406	671	518	431	180	0	0	2410
2004	0	0	45	97	188	376	576	514	341	99	0	0	2236
2005	0	0	4	2	170	266	682	597	271	79	2	0	2073
2006	0	0	0	20	231	478	715	475	337	31	1	0	2288
2007	0	0	20	64	229	396	569	560	274	50	0	0	2162
2008	0	0	0	54	192	431	592	599	394	114	1	0	2377
2009	0	0	1	62	330	328	628	527	451	53	3	0	2383
2010	0	0	0	15	72	386	563	470	364	144	17	0	2031
2011	0	0	1	18	81	315	535	546	466	128	0	0	2090
2012	0	0	2	77	242	391	577	677	495	172	11	0	2644
2013	0	0	23	124	260	483	691	565	394	85	0	0	2625
2014	0	0	12	132	299	485	687	606	479	230	2	0	2932
2015	0	0	58	70	145	513	568	545	418	205	2	0	2524
2016	0	0	1	63	214	487	598	552	344	73	10	0	2342
2017	0	0	17	13	221	477	674	637	375	72	4	0	2490
2018	0	0	10	78	193	440	729	566	399	112	2	0	2529
2019	0	0	5	114	118	477	605	622	379	72	0	0	2392

SNOWFALL (inches) 2019 FRESNO (KFAT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1991-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1992-93	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
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	T	0.0	0.0	0.0	0.0	T	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	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1997-98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.0	0.0	0.0	T
1998-99	0.0	0.0	0.0	0.0	0.0	0.5	T	T	0.0	0.0	0.0	0.0	0.5
1999-00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
2000-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
2001-02	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
2002-03	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
2003-04	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
2004-05	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
2005-	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
2006-07	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
2007-08	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
2008-09	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
2009-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
2010-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
2011-12	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
2012-13	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
2013-	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
2013-14	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
2014-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	T
2015-16	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
2016-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
2017-18	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
2018-19	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
2019-	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
POR= 70 YRS	0.0	0.0	0.0	T	0.0	T	T	T	T	T	T	T	T

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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 STATION 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.

2019 FRESNO CALIFORNIA (KFAT)

Fresno is located about midway and toward the eastern edge of the San Joaquin Valley, which is oriented northwest to southeast and has a length of about 225 miles and an average width of 50 miles. The San Joaquin Valley is generally flat. About 15 miles east of Fresno the terrain slopes upward with the foothills of the Sierra Nevada. The Sierra Nevada attain an elevation of more than 14,000 feet 50 miles east of Fresno. West of the city 45 miles lie the foothills of the Coastal Range.

The climate of Fresno is dry and mild in winter and hot in summer. Nearly nine-tenths of the annual precipitation falls in the six months from November to April.

Due to clear skies during the summer and the protection of the San Joaquin Valley from marine effects, the normal daily maximum temperature reaches the high 90s during the latter part of July. The daily maximum temperature during the warmest month has ranged from 76 to 115 degrees. Low relative humidities and some wind movement substantially lower the sensible temperature during periods of high readings. Humidity readings of 15 percent are common on summer afternoons, and readings as low as 8 percent have been recorded. In contrast to this, humidity readings average 90 percent during the morning hours of December and January.

Winds flow with the major axis of the San Joaquin Valley, generally from the northwest. This feature is especially beneficial since, during the warmest months, the northwest winds increase during the evenings. These refreshing breezes and the normally large temperature variation of about 35 degrees between the highest and lowest readings of the day, generally result in comfortable evening and night temperatures.

Winter temperatures are usually mild with infrequent cold spells dropping the readings below freezing. Heavy frost occurs almost every year, and the first frost usually occurs during the last week of November. The last frost in spring is usually in early March, however, one year in five will have the last frost after the first of April. The growing season is 291 days.

Although the heaviest rains recorded at Fresno for short periods have occurred in June, usually any rainfall during the summer is very light. Snow is a rare occurrence in Fresno.

Fresno enjoys a very high percentage of sunshine, receiving more than 80 percent of the possible amounts during all but the four months of November, December, January, and February. Reduction of sunshine during these months is caused by fog and short periods of stormy weather.

During foggy periods, at times lasting nearly two weeks, sunshine is reduced to a minimum. This fog frequently lifts to a few hundred feet above the surface of the valley and presents the appearance of a heavy, solid cloud layer.

Spring and autumn are very enjoyable seasons in Fresno, with clear skies, light rainfall and winds and mild temperatures.

Station History

FRESNO, CA

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
FRESNO AIR TERMINAL	1949-08-31	1961-01-01	36° 46'	-119° 42'	338		AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1961-09-01	1978-01-01	36° 46'	-119° 43'	328	.9 MI W	AIRWAYS, COOP, USHCN
FRESNO YOSEMITE INTL AP	1995-09-01	1995-11-15	36° 46'	-119° 43'	333	.5 MI WSW	ASOS, COOP, USHCN
FRESNO YOSEMITE INT'L	2017-10-01	2019-12-19	36° 46'	-119° 43'	333		ASOS, COOP, PLCD, USHCN
FRESNO AIR TERMINAL	1949-08-20	1949-08-31	36° 46'	-119° 42'	338	7 MI ENE	AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1978-01-01	1985-02-01	36° 46'	-119° 43'	328		COOP, USHCN, WXSVC
FRESNO YOSEMITE INT'L	2016-08-22	2017-10-01	36° 46'	-119° 43'	333		ASOS, COOP, USHCN
FRESNO YOSEMITE INT'L	2019-12-19	Present	36° 46'	-119° 43'	333		ASOS, COOP, PLCD, USHCN
FRESNO AIR TERMINAL	1985-02-01	1993-11-10	36° 46'	-119° 43'	336	1 MI NNE	COOP, USHCN, WXSVC
FRESNO YOSEMITE INTL AP	1995-11-15	2010-06-24	36° 46'	-119° 43'	333		ASOS, COOP, USHCN
FRESNO AIR TERMINAL	1961-01-01	1961-09-01	36° 46'	-119° 43'	328		AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1947-10-01	1949-08-01	36° 46'	-119° 42'			AIRWAYS
FRESNO AIR TERMINAL	1993-11-10	1995-09-01	36° 46'	-119° 43'	336		COOP, USHCN, WXSVC
FRESNO AIR TERMINAL	1949-08-01	1949-08-20	36° 46'	-119° 42'	338		AIRWAYS
FRESNO YOSEMITE INTL AP	2010-06-24	2016-08-22	36° 46'	-119° 43'	333		ASOS, COOP, USHCN

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
TEMP	1969-04-01	1982-01-01	DAILY	2400			
MAX/MINTEM	1982-01-01	1985-02-01	DAILY	0800	PALMER		
TEMP	2001-06-04	2007-04-03	DAILY	2400	ATEMP		
PRECIP	2001-06-04	2007-04-03	DAILY	2400	AHTB	RCRD;HTD	
TEMP	1995-07-01	1995-09-01	DAILY	2400	MXMN		
PRECIP	1995-09-01	2001-06-04	HOURLY	2400	TB	RCRD	
PRECIP	2007-04-03	2010-06-24	HOURLY	2400	AHTB	RCRD;HTD	
TEMP	2010-06-24	2019-12-19	DAILY	2400	ATEMP		
TEMP	2019-12-19	Present	DAILY	2400	ATEMP		
MAX/MINTEM	1969-04-01	1982-01-01	DAILY	0800	PALMER		
PRECIP	1985-02-01	1995-07-01	DAILY	2400	UNIV	RCRD	
PRECIP	2001-06-04	2007-04-03	HOURLY	2400	AHTB	RCRD;HTD	
WIND	2010-06-24	2019-12-19	HOURLY	UNKN	ANEMSONIC		
WIND	2019-12-19	Present	HOURLY	UNKN	ANEMSONIC		
PRECIP	1947-10-01	1969-04-01	DAILY	2400	UNIV	RCRD	
MAX/MINTEM	1969-04-01	1982-01-01	DAILY	0800	PALMER		
PRECIP	1982-01-01	1985-02-01	DAILY	2400	UNIV	RCRD	
PRECIP	2010-06-24	2016-08-22	HOURLY	VAR	AWPAG	RCRD;HTD	
TEMP	1947-10-01	1969-04-01	DAILY	2400			
PRECIP	1969-04-01	1982-01-01	DAILY	2400	UNIV	RCRD	
PRECIP	1982-01-01	1985-02-01	HOURLY	2400			
TEMP	1985-02-01	1995-07-01	DAILY	2400	MXMN		
PRECIP	1995-07-01	1995-09-01	HOURLY	2400	UNIV	RCRD	
PRECIP	1995-07-01	1995-09-01	DAILY	2400	UNIV	RCRD	
TEMP	1995-09-01	2001-06-04	DAILY	2400	HYGR		
WIND	2001-06-04	2007-04-03	HOURLY	UNKN	ANEMCUP		
PRECIP	2007-04-03	2010-06-24	DAILY	2400	AHTB	RCRD;HTD	
PRECIP	2010-06-24	2019-12-19	HOURLY	2400	AWPAG	RCRD;HTD	
TEMP	2010-06-24	2016-08-22	DAILY	1700	ATEMP		
PRECIP	2019-12-19	Present	DAILY	2400	AWPAG	RCRD;HTD	
TEMP	1982-01-01	1985-02-01	DAILY	2400			
PRECIP	1985-02-01	1995-07-01	HOURLY	2400			
WIND	1995-09-01	2001-06-04	HOURLY	UNKN	ANEMCUP		
WIND	2007-04-03	2010-06-24	HOURLY	UNKN	ANEMSONIC		
PRECIP	2019-12-19	Present	HOURLY	2400	AWPAG	RCRD;HTD	
MAX/MINTEM	1982-01-01	1985-02-01	DAILY	0800	PALMER		
PRECIP	1995-09-01	2001-06-04	DAILY	2400	TB	RCRD	
TEMP	2007-04-03	2010-06-24	DAILY	2400	ATEMP		
PRECIP	2010-06-24	2019-12-19	DAILY	2400	PCPNX		

* For explanation of codes and abbreviations 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

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151 Patton Avenue

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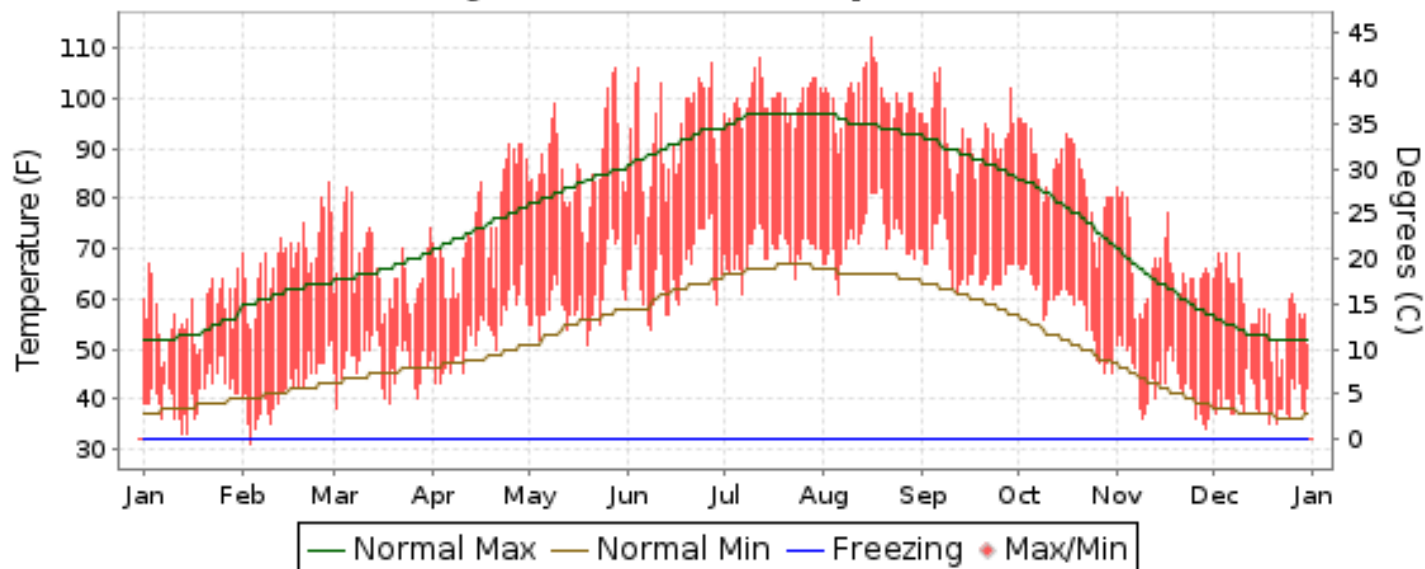


2020 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

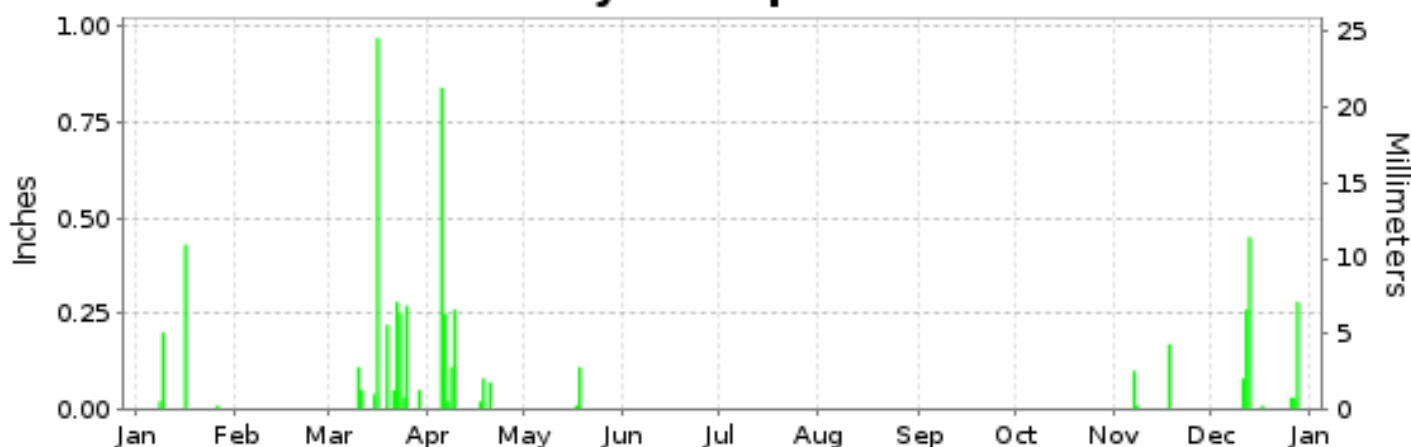
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FRESNO, CALIFORNIA (KFAT)

Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

NATIONAL
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NATIONAL
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NATIONAL CENTERS for
ENVIRONMENTAL INFORMATION (NCEI)
ASHEVILLE, NORTH CAROLINA

Mary A. Wohlgemuth
DIRECTOR
NCEI

METEOROLOGICAL DATA FOR 2020

FRESNO (KFAT)

LATITUDE:
36° 46'N

LONGITUDE:
119° 43'W

ELEVATION (FT):
GRND: 333 BARO: 375

TIME ZONE:
PACIFIC (UTC -8)

WBAN: 93193

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	MEAN DAILY MAXIMUM	57.2	68.2	66.4	75.1	87.0	93.6	99.9	100.4	93.0	85.2	66.6	58.4	79.3
	HIGHEST DAILY MAXIMUM	67	83	82	91	106	107	108	112	106	96	82	69	112
	DATE OF OCCURRENCE	03	28	05	29+	28	27	12	16	07	02+	01	09+	AUG 16
	MEAN DAILY MINIMUM	40.7	41.8	46.9	53.1	59.9	65.4	69.4	72.1	66.6	58.0	43.2	39.4	54.7
	LOWEST DAILY MINIMUM	33	31	38	43	51	54	61	61	61	45	34	35	31
	DATE OF OCCURRENCE	15+	04	02	03+	19	08	07	06	12	31+	29	21+	FEB 04
	AVERAGE DRY BULB	49.0	55.0	56.6	64.1	73.4	79.5	84.6	86.2	79.8	71.6	54.9	48.9	67.0
	MEAN WET BULB	45.6	46.1	48.9	54.7	57.9	61.8	64.1	66.7	63.5	57.1	46.8	43.2	54.7
	MEAN DEW POINT	42.6	36.7	41.7	46.7	45.2	48.6	49.9	54.6	52.8	45.7	38.6	37.2	45.0
	NUMBER OF DAYS WITH:													
	MAXIMUM >= 90°	0	0	0	4	10	19	31	30	23	10	0	0	127
	MAXIMUM <= 32°	0	0	0	0	0	0	0	0	0	0	0	0	0
	MINIMUM <= 32°	0	1	0	0	0	0	0	0	0	0	0	0	1
	MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0
H/C	HEATING DEGREE DAYS	489	285	253	111	4	0	0	0	0	23	301	493	1959
	COOLING DEGREE DAYS	0	2	1	93	273	440	614	666	453	236	5	0	2783
RH	MEAN (PERCENT)	82	55	62	57	40	36	33	37	43	44	59	69	51
	HOURLY 04 LST	92	75	78	78	62	56	52	56	61	61	74	80	69
	HOURLY 10 LST	80	47	55	49	32	31	27	32	36	34	50	65	45
	HOURLY 16 LST	69	32	42	39	23	20	16	20	25	27	41	57	34
	HOURLY 22 LST	86	62	69	62	46	41	37	42	48	52	67	75	57
W/O	NUMBER OF DAYS WITH:													
	HEAVY FOG(VISBY <= 1/4 MI)	9	1	0	0	0	0	0	0	0	0	0	6	16
PR	THUNDERSTORMS	0	0	0	0	1	0	0	0	0	0	0	0	1
PR	MEAN STATION PRESS. (IN.)	29.88	29.76	29.68	29.65	29.58	29.52	29.50	29.48	29.57	29.75	29.75	29.83	29.66
	MEAN SEA-LEVEL PRESS. (IN.)	30.22	30.12	30.03	30.00	29.93	29.86	29.83	29.82	29.91	29.96	30.10	30.19	30.00
WINDS	RESULTANT SPEED (MPH)	0.5	1.0	0.6	3.3	5.6	7.1	6.2	5.0	3.0	1.3	1.2	0.4	2.9
	RES. DIR. (TENS OF DEGS.)	33	33	29	31	31	31	31	30	31	31	32	34	31
	MEAN SPEED (MPH)	3.7	3.7	5.9	7.1	8.1	8.5	7.5	6.7	4.7	3.5	3.8	3.8	5.6
	PREVAIL.DIR.(TENS OF DEGS.)	29	31	30	31	31	31	30	30	29	29	29	29	31
	MAXIMUM 2-MINUTE WIND													
	SPEED (MPH)	26	25	23	25	23	28	21	21	17	16	25	17	28
	DIR. (TENS OF DEGS.)	28	32	15	31	31	30	30	31	32	32	31	12	30
	DATE OF OCCURRENCE	16	29	14	23	14	12	27	05	18	10	06	28	JUN 12
	MAXIMUM 3-SECOND WIND:													
	SPEED (MPH)	32	32	30	34	32	35	28	26	27	21	31	22	35
	DIR. (TENS OF DEGS.)	29	32	18	33	32	32	29	30	01	32	32	31	32
	DATE OF OCCURRENCE	16	02	15	30	12	12	27	17	19	10	06	26	JUN 12
PRECIPITATION	WATER EQUIVALENT:													
	TOTAL (IN.)	0.66	T	2.32	1.65	0.12	0.00	0.00	T	T	0.00	0.28	1.14	6.17
	GREATEST 24-HOUR (IN.)	0.43	T	1.01	0.92	0.12	0.00	0.00	T	T	0.00	0.17	0.45	1.01
	DATE OF OCCURRENCE	16	22+	15-16	05-06	17-18			13	18+		18	13	MAR 15-16
	NUMBER OF DAYS WITH:													
	PRECIPITATION 0.01	4	0	11	8	2	0	0	0	0	0	3	7	35
	PRECIPITATION 0.10	2	0	6	4	1	0	0	0	0	0	2	3	18
SNOWFALL	PRECIPITATION 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0
	SNOW,ICE PELLETS,HAIL													
	TOTAL (IN.)	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
	GREATEST 24-HOUR (IN.)	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
	DATE OF OCCURRENCE	0	0	0	0	0	0	0	0	0	0	0	0	0
	MAXIMUM SNOW DEPTH (IN.)													
SNOWFALL	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:													
	SNOWFALL >= 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0

NORMALS, MEANS, AND EXTREMES FRESNO (KFAT)

LATITUDE:
36° 46'N

LONGITUDE:
119° 43'W

ELEVATION (FT):
GRND: 333 BARO: 375

TIME ZONE:
PACIFIC (UTC -8)

WBAN: 93193

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	54.8	61.6	67.6	74.6	84.1	92.0	98.4	97.1	90.9	79.5	65.1	54.9	76.7
	MEAN DAILY MAXIMUM	71	55.2	61.9	67.5	74.7	83.6	92.0	98.5	96.7	90.9	79.9	65.6	55.2	76.8
	HIGHEST DAILY MAXIMUM	71	78	83	91	100	107	110	113	112	111	102	90	77	113
	YEAR OF OCCURRENCE		2014	2020	2015	1981	1984	2017	2006	2020	1955	1980	2010	2006	JUL 2006
	MEAN OF EXTREME MAXS.	71	67.6	73.5	80.7	90.2	98.8	105.2	107.2	105.9	102.4	93.5	79.9	67.2	89.3
	NORMAL DAILY MINIMUM	30	38.3	41.5	45.6	49.4	56.2	62.4	67.6	66.2	61.5	53.0	43.4	38.0	51.9
	MEAN DAILY MINIMUM	71	38.1	41.0	44.3	48.5	54.8	61.1	66.4	64.7	60.2	51.7	42.9	37.6	50.9
	LOWEST DAILY MINIMUM	71	19	24	26	32	36	44	50	49	37	27	26	18	18
	YEAR OF OCCURRENCE		1963	1990	1966	1982	1975	1955	1955	1966	1950	1972	1975	1990	DEC 1990
	MEAN OF EXTREME MINS.	71	28.5	31.7	34.9	39.2	45.2	51.5	57.7	57.1	51.4	41.8	33.0	28.4	41.7
	NORMAL DRY BULB	30	46.6	51.5	56.6	62.0	70.1	77.2	83.0	81.7	76.2	66.2	54.3	46.5	64.3
	MEAN DRY BULB	71	46.6	51.5	55.9	61.6	69.2	76.6	82.4	80.7	75.6	65.8	54.3	46.4	63.9
	MEAN WET BULB	37	42.6	45.1	47.8	49.2	52.1	55.9	59.7	59.3	56.6	52.1	46.4	41.4	50.7
	MEAN DEW POINT	37	42.7	44.7	47.4	47.9	50.7	54.8	58.5	58.1	55.6	51.0	45.6	41.4	49.9
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	1.8	8.7	18.5	28.7	27.1	18.1	3.3	0.0	0.0	106.2
	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	5.6	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	5.1	13.2
	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	572	377	265	136	30	3	0	0	2	61	325	575	2346
	NORMAL COOLING DEG. DAYS	30	0	0	5	46	190	369	558	516	338	100	2	0	2124
RH	NORMAL (PERCENT)		84	77	70	57	48	43	40	44	49	58	74	83	61
	HOURLY 04 LST	30	92	90	87	80	71	65	62	66	71	78	88	92	79
	HOURLY 10 LST	30	85	77	66	51	44	39	38	41	45	52	71	83	58
	HOURLY 16 LST	30	69	57	49	35	28	24	22	25	28	35	53	67	41
	HOURLY 22 LST	30	89	83	76	62	51	44	42	46	51	63	81	88	65
S	PERCENT POSSIBLE SUNSHINE	46	47	65	77	85	90	95	97	96	94	88	66	46	79
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	57	10.1	4.4	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.5	4.4	9.6	30.4
	THUNDERSTORMS	71	0.2	0.4	0.8	0.6	0.6	0.4	0.2	0.2	0.5	0.5	0.2	0.3	4.9
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS) MIDNIGHT-MIDNIGHT (OKTAS) MEAN NO. DAYS WITH: CLEAR PARTLY CLOUDY CLOUDY														
PR	MEAN STATION PRESSURE(IN)	37	29.80	29.74	29.70	29.65	29.58	29.52	29.53	29.52	29.53	29.63	29.74	29.77	29.64
	MEAN SEA-LEVEL PRES. (IN)	37	30.16	30.09	30.05	30.00	29.92	29.87	29.87	29.87	29.88	29.97	30.09	30.15	29.99
WINDS	MEAN SPEED (MPH)	37	4.1	5.0	5.9	7.3	8.2	8.3	7.5	6.9	6.0	4.6	3.9	4.0	6.0
	PREVAIL.DIR(TENS OF DEGS)	45	12	12	32	32	31	31	31	31	31	31	31	12	31
	MAXIMUM 2-MINUTE: SPEED (MPH)	25	38	36	36	40	32	33	24	26	31	35	31	35	40
	DIR. (TENS OF DEGS)		16	13	29	31	32	30	30	31	29	28	27	28	31
	YEAR OF OCCURRENCE		2005	1998	2017	2019	1998	2012	2015	2014	2013	2007	2016	2008	APR 2019
	MAXIMUM 3-SECOND SPEED (MPH)	25	46	47	42	50	40	40	33	41	36	45	39	45	50
	DIR. (TENS OF DEGS)		16	17	29	31	02	31	07	31	29	33	27	01	31
	YEAR OF OCCURRENCE		2005	2019	2017	2019	2019	2012	2007	2013	2013	2009	2016	2011	APR 2019
PRECIPITATION	NORMAL (IN)	30	2.19	2.03	2.03	0.95	0.43	0.21	0.01	0.01	0.17	0.63	1.07	1.77	11.50
	MAXIMUM MONTHLY (IN)	71	8.56	6.12	7.24	4.41	2.38	1.93	0.43	0.25	1.19	2.45	3.50	6.73	8.56
	YEAR OF OCCURRENCE		1969	2000	1991	1967	2019	1998	2015	1964	1976	2000	1972	1955	JAN 1969
	MINIMUM MONTHLY (IN)	71	0.04	T	0.00	T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	YEAR OF OCCURRENCE		1976	2020	1972	2008	1982	1983	1983	1981	1981	1978	1959	1989	DEC 1989
	MAXIMUM IN 24 HOURS (IN)	71	2.74	1.99	2.43	2.04	1.42	1.80	0.36	0.25	0.97	1.76	1.35	1.82	2.74
	YEAR OF OCCURRENCE		2006	1969	1995	2017	1990	1998	2015	1964	1978	1992	1953	2007	JAN 2006
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	7.6	8.6	7.5	4.5	2.2	0.7	0.2	0.3	1.0	2.5	5.5	7.5	48.1
	PRECIPITATION >= 1.00	30	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	1.3
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)	61	2.2	0.0	T	T	0.0	T	0.0	0.0	0.0	T	0.0	1.2	2.2
	YEAR OF OCCURRENCE		1962	2020	2011	2017	2018	2013	2019	2020	2020	1974		1968	JAN 1962
	MAXIMUM IN 24 HOURS (IN)	61	1.5	T	T	T	T	T	0.0	0.0	0.0	T	0.0	1.2	1.5
	YEAR OF OCCURRENCE		1962	1994	2011	2017	2015	1995				1974		1968	JAN 1962
	MAXIMUM SNOW DEPTH (IN)	60	0	0	0	0	0	0	0	0	0	0	0	1	1
	YEAR OF OCCURRENCE													1968	DEC 1968
	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) 2020 FRESNO (KFAT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1991	0.13	1.01	7.24	0.02	0.03	T	0.00	T	T	0.80	0.04	1.22	10.49
1992	1.94	4.73	2.14	0.18	T	T	0.22	T	T	2.19	T	2.68	14.08
1993	5.18	2.44	1.76	0.20	0.25	1.61	0.00	0.00	0.00	0.12	1.16	1.03	13.75
1994	1.15	1.92	0.52	1.36	1.30	0.00	T	0.00	0.20	0.77	1.57	1.33	10.12
1995	5.42	0.93	5.88	1.08	1.19	0.66	0.01	T	0.00	0.00	T	2.12	17.29
1996	2.07	3.57	1.52	1.17	0.38	0.08	T	0.00	0.00	1.97	1.94	4.27	16.97
1997	3.53	0.17	0.10	T	T	0.01	T	0.00	0.15	0.07	2.66	0.99	7.68
1998	3.40	4.89	3.44	1.26	1.37	1.93	0.00	0.00	0.15	0.16	0.43	0.62	17.65
1999	2.82	1.18	0.49	0.93	0.03	0.20	0.00	0.01	T	T	0.48	0.03	6.17
2000	3.15	6.12	1.35	1.16	0.05	0.56	0.00	T	0.32	2.45	0.01	0.07	15.24
2001	2.66	2.22	0.96	1.87	0.00	0.00	0.08	0.00	T	0.29	1.99	1.95	12.02
2002	0.76	0.40	0.95	0.21	0.38	0.02	0.00	0.00	T	0.00	1.78	2.25	6.75
2003	0.40	1.22	0.63	2.84	0.68	0.00	T	0.04	T	T	0.40	2.93	9.14
2004	0.88	1.69	1.54	0.03	0.07	0.00	0.00	0.00	0.00	2.45	0.81	3.16	10.63
2005	2.42	2.30	2.51	0.56	1.62	0.01	0.00	T	0.04	0.05	0.17	2.00	11.68
2006	3.40	0.54	4.73	3.27	0.36	0.00	T	0.00	0.00	0.08	0.23	1.33	13.94
2007	0.59	2.29	0.97	0.49	0.05	0.00	T	0.02	0.02	0.20	0.09	2.31	7.03
2008	3.32	2.12	0.02	T	0.30	0.00	0.01	0.00	0.00	0.23	1.37	1.09	8.46
2009	1.02	2.43	0.24	0.72	0.46	0.20	0.00	T	0.01	1.39	0.20	2.41	9.08
2010	2.05	2.94	0.96	2.19	0.21	0.00	T	0.00	0.00	0.44	1.80	5.92	16.51
2011	1.71	1.60	3.46	0.32	0.35	1.91	T	0.00	T	0.90	0.67	0.00	10.92
2012	1.38	0.75	2.43	2.02	0.00	T	T	T	0.00	0.25	1.11	2.03	9.97
2013	0.58	0.89	0.65	0.09	0.07	T	T	T	0.01	0.03	0.54	0.15	3.01
2014	0.57	2.11	0.62	0.74	0.04	0.00	0.01	T	0.18	0.50	0.40	2.29	7.46
2015	0.21	1.13	0.06	1.25	0.57	0.01	0.43	0.00	0.12	0.49	1.74	2.97	8.98
2016	4.42	0.33	2.93	1.06	0.29	0.06	0.00	0.00	0.00	0.67	1.38	2.51	13.65
2017	5.50	2.52	1.08	3.42	0.12	0.00	0.00	T	0.16	0.09	0.28	0.04	13.21
2018	1.23	0.26	4.19	0.64	T	0.00	0.00	0.00	0.00	0.10	1.67	0.56	8.65
2019	2.23	3.26	1.26	0.39	2.38	0.00	T	0.00	0.00	0.00	0.72	2.16	12.40
2020	0.66	T	2.32	1.65	0.12	0.00	0.00	T	T	0.00	0.28	1.14	6.17
POR= 71 YRS	2.09	1.85	1.83	1.06	0.37	0.15	0.01	0.01	0.14	0.50	1.11	1.63	10.75

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AVERAGE TEMPERATURE (°F) 2020 FRESNO (KFAT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1991	47.0	55.8	51.5	59.5	66.1	74.7	83.8	78.6	79.9	70.5	55.8	47.0	64.2
1992	42.7	55.5	58.8	66.8	76.0	77.0	81.3	83.2	77.0	68.6	54.3	45.3	65.5
1993	47.1	51.9	60.3	61.7	69.9	75.7	80.2	79.7	75.7	67.8	53.9	45.6	64.1
1994	46.9	49.9	59.3	63.2	68.5	77.7	83.3	82.3	75.4	64.8	48.1	45.3	63.7
1995	51.9	54.1	56.2	60.7	66.2	73.3	80.7	82.6	76.3	66.8	58.7	50.5	64.8
1996	48.3	54.2	57.2	63.6	69.9	77.8	85.4	83.4	74.8	64.1	53.9	49.1	65.1
1997	48.7	50.3	60.0	63.5	75.3	75.8	81.3	80.6	77.3	63.8	56.9	44.7	64.9
1998	49.0	50.0	55.5	59.0	62.0	71.5	82.1	84.1	75.8	63.1	53.1	42.8	62.3
1999	44.7	49.9	53.5	58.5	68.0	75.9	80.6	78.4	77.3	68.7	56.9	47.0	63.3
2000	50.2	53.8	56.5	64.2	71.0	79.8	78.8	81.2	74.5	63.9	49.2	47.8	64.2
2001	46.2	48.7	58.8	58.6	77.3	79.7	81.6	81.9	77.0	68.5	56.4	47.4	65.2
2002	45.0	52.2	55.1	62.8	69.6	78.1	84.1	80.0	77.1	65.2	56.2	49.3	64.6
2003	50.6	51.1	58.1	58.6	69.5	78.4	86.5	81.4	79.2	69.8	52.2	49.3	65.4
2004	46.6	50.5	62.6	65.8	70.9	77.4	83.3	81.3	75.9	64.1	51.7	46.5	64.7
2005	47.4	54.4	57.8	59.6	69.4	73.6	86.8	84.0	73.9	65.9	57.6	51.0	65.1
2006	48.7	52.4	50.1	59.7	71.9	80.7	87.9	80.2	75.8	64.0	55.4	47.1	64.5
2007	43.7	51.4	60.3	63.0	71.5	78.0	83.2	82.8	73.7	64.4	57.4	45.5	64.6
2008	47.0	51.1	57.0	61.7	70.3	79.1	83.8	84.1	78.0	67.1	57.5	44.9	65.1
2009	47.7	51.5	56.0	62.0	75.3	75.7	85.0	81.8	79.7	63.7	54.1	47.2	65.0
2010	48.6	52.2	55.5	57.7	65.2	77.6	83.1	79.9	76.9	68.0	53.8	50.9	64.1
2011	46.6	49.2	55.4	60.7	65.1	75.0	82.0	82.4	80.3	68.0	53.5	45.6	63.7
2012	49.3	52.7	56.2	63.0	72.4	77.9	83.4	86.6	81.4	69.1	58.3	50.9	66.8
2013	47.1	51.0	62.1	67.6	73.0	80.9	87.1	83.0	77.9	66.6	58.5	47.3	66.8
2014	53.2	56.8	62.4	66.8	74.2	80.9	86.9	84.4	80.7	72.0	57.7	51.9	69.0
2015	49.0	57.0	64.0	64.3	68.5	82.0	83.1	82.4	78.7	71.3	52.0	45.8	66.5
2016	50.0	55.5	58.7	65.3	71.3	80.9	84.0	82.5	76.1	66.4	57.6	47.1	66.3
2017	48.1	53.9	58.8	62.1	71.0	80.5	86.5	85.2	77.2	65.7	58.0	48.0	66.3
2018	52.5	53.2	56.8	64.9	70.9	79.4	88.2	83.0	78.0	68.1	57.8	50.0	66.9
2019	52.5	49.2	57.4	67.1	66.7	80.7	84.2	84.8	77.2	65.5	57.9	51.0	66.2
2020	49.0	55.0	56.6	64.1	73.4	79.5	84.6	86.2	79.8	71.6	54.9	48.9	67.0
POR= 71 YRS	46.6	51.5	55.9	61.6	69.2	76.6	82.4	80.7	75.6	65.8	54.3	46.4	63.9

HEATING DEGREE DAYS (base 65°F) 2020 FRESNO (KFAT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1991-92	0	0	0	81	276	551	683	267	183	25	0	1	2067
1992-93	0	0	0	18	316	602	549	359	145	113	9	12	2123
1993-94	0	0	0	12	326	595	553	414	168	97	37	0	2202
1994-95	0	0	0	58	500	602	398	298	269	146	60	16	2347
1995-96	0	0	0	30	184	444	513	304	238	99	8	0	1820
1996-97	0	0	0	148	329	486	500	405	169	97	2	0	2136
1997-98	0	0	0	92	246	621	490	412	293	226	104	7	2491
1998-99	0	0	7	79	351	682	619	418	348	227	35	12	2778
1999-00	0	0	0	14	235	550	452	317	259	72	27	3	1929
2000-01	0	0	0	103	466	526	577	451	208	222	0	0	2553
2001-02	0	0	0	23	251	538	610	352	310	109	30	0	2223
2002-03	0	0	0	67	256	477	440	382	216	191	49	0	2078
2003-04	0	0	0	24	378	482	565	413	113	64	3	0	2042
2004-05	0	0	6	124	391	566	537	291	217	158	30	1	2321
2005-06	0	0	0	41	217	424	500	345	456	170	9	0	2162
2006-07	0	0	2	56	283	546	654	373	158	117	19	1	2209
2007-08	0	0	6	59	223	600	552	396	243	149	20	0	2248
2008-09	0	0	0	39	219	616	531	369	274	145	0	0	2193
2009-10	0	0	2	87	322	544	500	352	289	227	62	0	2385
2010-11	0	0	0	40	346	432	563	438	292	138	67	7	2323
2011-12	0	0	0	29	338	595	478	352	268	129	6	2	2197
2012-13	0	0	0	38	205	432	545	386	107	42	4	0	1759
2013-14	0	0	0	32	189	540	361	223	88	68	3	0	1504
2014-15	0	0	0	5	216	401	487	217	83	85	25	0	1519
2015-16	0	0	0	5	385	587	456	268	189	47	10	0	1947
2016-17	0	0	2	23	226	544	514	305	202	94	26	4	1940
2017-18	0	0	4	45	209	523	376	324	258	70	4	0	1813
2018-19	0	0	0	9	209	458	381	433	233	46	57	0	1826
2019-20	0	0	6	51	205	427	489	285	253	111	4	0	1831
2020-	0	0	0	23	301	493							

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COOLING DEGREE DAYS (base 65°F) 2020 FRESNO (KFAT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1991	0	0	0	6	107	298	588	428	454	259	5	0	2145
1992	0	0	0	88	350	366	511	572	365	135	0	0	2387
1993	0	0	3	20	168	342	476	462	331	105	0	0	1907
1994	0	0	1	52	151	389	576	547	318	59	0	0	2093
1995	0	0	0	25	104	273	494	551	347	91	0	0	1885
1996	0	0	4	66	162	389	640	579	300	125	0	0	2265
1997	0	0	18	61	330	334	514	492	373	61	11	0	2194
1998	0	0	6	50	18	210	536	600	338	25	0	0	1783
1999	0	0	0	39	135	348	487	423	373	135	0	0	1940
2000	0	0	0	54	217	454	434	509	291	81	0	0	2040
2001	0	0	20	37	389	447	521	533	365	137	0	0	2449
2002	0	0	9	50	180	400	599	472	372	81	0	0	2163
2003	0	0	7	5	192	406	671	518	431	180	0	0	2410
2004	0	0	45	97	188	376	576	514	341	99	0	0	2236
2005	0	0	4	2	170	266	682	597	271	79	2	0	2073
2006	0	0	0	20	231	478	715	475	337	31	1	0	2288
2007	0	0	20	64	229	396	569	560	274	50	0	0	2162
2008	0	0	0	54	192	431	592	599	394	114	1	0	2377
2009	0	0	1	62	330	328	628	527	451	53	3	0	2383
2010	0	0	0	15	72	386	563	470	364	144	17	0	2031
2011	0	0	1	18	81	315	535	546	466	128	0	0	2090
2012	0	0	2	77	242	391	577	677	495	172	11	0	2644
2013	0	0	23	124	260	483	691	565	394	85	0	0	2625
2014	0	0	12	132	299	485	687	606	479	230	2	0	2932
2015	0	0	58	70	145	513	568	545	418	205	2	0	2524
2016	0	0	1	63	214	487	598	552	344	73	10	0	2342
2017	0	0	17	13	221	477	674	637	375	72	4	0	2490
2018	0	0	10	78	193	440	729	566	399	112	2	0	2529
2019	0	0	5	114	118	477	605	622	379	72	0	0	2392
2020	0	2	1	93	273	440	614	666	453	236	5	0	2783

SNOWFALL (inches) 2020 FRESNO (KFAT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1992-93	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
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	T	0.0	0.0	0.0	0.0	T	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	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1997-98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.0	0.0	0.0	T
1998-99	0.0	0.0	0.0	0.0	0.0	0.5	T	T	0.0	0.0	0.0	0.0	0.5
1999-00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
2000-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
2001-02	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
2002-03	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
2003-04	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
2004-05	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
2005-	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
2006-07	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
2007-08	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
2008-09	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
2009-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
2010-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
2011-12	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
2012-13	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
2013-	0.0	0.0	0.0	0.0	0.0	0.0							
2013-14	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
2014-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	T
2015-16	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
2016-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
2017-18	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
2018-19	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
2019-20	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
2020-	0.0	0.0	0.0	0.0	0.0	0.0							
POR= 71 YRS	0.0	0.0	0.0	T	0.0	T	T	T	T	T	T	T	T

WBAN : 93193

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.
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2020 FRESNO CALIFORNIA (KFAT)

Fresno is located about midway and toward the eastern edge of the San Joaquin Valley, which is oriented northwest to southeast and has a length of about 225 miles and an average width of 50 miles. The San Joaquin Valley is generally flat. About 15 miles east of Fresno the terrain slopes upward with the foothills of the Sierra Nevada. The Sierra Nevada attain an elevation of more than 14,000 feet 50 miles east of Fresno. West of the city 45 miles lie the foothills of the Coastal Range.

The climate of Fresno is dry and mild in winter and hot in summer. Nearly nine-tenths of the annual precipitation falls in the six months from November to April.

Due to clear skies during the summer and the protection of the San Joaquin Valley from marine effects, the normal daily maximum temperature reaches the high 90s during the latter part of July. The daily maximum temperature during the warmest month has ranged from 76 to 115 degrees. Low relative humidities and some wind movement substantially lower the sensible temperature during periods of high readings. Humidity readings of 15 percent are common on summer afternoons, and readings as low as 8 percent have been recorded. In contrast to this, humidity readings average 90 percent during the morning hours of December and January.

Winds flow with the major axis of the San Joaquin Valley, generally from the northwest. This feature is especially beneficial since, during the warmest months, the northwest winds increase during the evenings. These refreshing breezes and the normally large temperature variation of about 35 degrees between the highest and lowest readings of the day, generally result in comfortable evening and night temperatures.

Winter temperatures are usually mild with infrequent cold spells dropping the readings below freezing. Heavy frost occurs almost every year, and the first frost usually occurs during the last week of November. The last frost in spring is usually in early March, however, one year in five will have the last frost after the first of April. The growing season is 291 days.

Although the heaviest rains recorded at Fresno for short periods have occurred in June, usually any rainfall during the summer is very light. Snow is a rare occurrence in Fresno.

Fresno enjoys a very high percentage of sunshine, receiving more than 80 percent of the possible amounts during all but the four months of November, December, January, and February. Reduction of sunshine during these months is caused by fog and short periods of stormy weather.

During foggy periods, at times lasting nearly two weeks, sunshine is reduced to a minimum. This fog frequently lifts to a few hundred feet above the surface of the valley and presents the appearance of a heavy, solid cloud layer.

Spring and autumn are very enjoyable seasons in Fresno, with clear skies, light rainfall and winds and mild temperatures.

Station History

FRESNO, CA

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
FRESNO AIR TERMINAL	1947-10-01	1949-08-01	36° 46'	-119° 42'			AIRWAYS
FRESNO AIR TERMINAL	1949-08-01	1949-08-20	36° 46'	-119° 42'	338		AIRWAYS
FRESNO AIR TERMINAL	1949-08-20	1949-08-31	36° 46'	-119° 42'	338	7 MI ENE	AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1949-08-31	1961-01-01	36° 46'	-119° 42'	338		AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1961-01-01	1961-09-01	36° 46'	-119° 43'	328		AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1961-09-01	1978-01-01	36° 46'	-119° 43'	328	.9 MI W	AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1978-01-01	1985-02-01	36° 46'	-119° 43'	328		COOP, USHCN, WXSVC
FRESNO AIR TERMINAL	1985-02-01	1993-11-10	36° 46'	-119° 43'	336	1 MI NNE	COOP, USHCN, WXSVC
FRESNO AIR TERMINAL	1993-11-10	1995-09-01	36° 46'	-119° 43'	336		COOP, USHCN, WXSVC
FRESNO YOSEMITE INTL AP	1995-09-01	1995-11-15	36° 46'	-119° 43'	333	.5 MI WSW	ASOS, COOP, USHCN
FRESNO YOSEMITE INTL AP	1995-11-15	2010-06-24	36° 46'	-119° 43'	333		ASOS, COOP, USHCN
FRESNO YOSEMITE INTL AP	2010-06-24	2016-08-22	36° 46'	-119° 43'	333		ASOS, COOP, USHCN
FRESNO YOSEMITE INT'L	2016-08-22	2017-10-01	36° 46'	-119° 43'	333		ASOS, COOP, USHCN
FRESNO YOSEMITE INT'L	2017-10-01	2019-12-19	36° 46'	-119° 43'	333		ASOS, COOP, PLCD, USHCN
FRESNO YOSEMITE INT'L	2019-12-19	Present	36° 46'	-119° 43'	333		ASOS, COOP, PLCD, USHCN

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1947-10-01	1969-04-01	DAILY	2400	UNIV	RCRD	
TEMP	1947-10-01	1969-04-01	DAILY	2400			
MAX/MINTEM	1969-04-01	1982-01-01	DAILY	0800	PALMER		
MAX/MINTEM	1969-04-01	1982-01-01	DAILY	0800	PALMER		
PRECIP	1969-04-01	1982-01-01	DAILY	2400	UNIV	RCRD	
TEMP	1969-04-01	1982-01-01	DAILY	2400			
MAX/MINTEM	1982-01-01	1985-02-01	DAILY	0800	PALMER		
MAX/MINTEM	1982-01-01	1985-02-01	DAILY	0800	PALMER		
PRECIP	1982-01-01	1985-02-01	HOURLY	2400			
PRECIP	1982-01-01	1985-02-01	DAILY	2400	UNIV	RCRD	
TEMP	1982-01-01	1985-02-01	DAILY	2400			
PRECIP	1985-02-01	1995-07-01	HOURLY	2400			
PRECIP	1985-02-01	1995-07-01	DAILY	2400	UNIV	RCRD	
TEMP	1985-02-01	1995-07-01	DAILY	2400	MXMN		
PRECIP	1995-07-01	1995-09-01	HOURLY	2400	UNIV	RCRD	
PRECIP	1995-07-01	1995-09-01	DAILY	2400	UNIV	RCRD	
TEMP	1995-07-01	1995-09-01	DAILY	2400	MXMN		
PRECIP	1995-09-01	2001-06-04	HOURLY	2400	TB	RCRD	
PRECIP	1995-09-01	2001-06-04	DAILY	2400	TB	RCRD	
TEMP	1995-09-01	2001-06-04	DAILY	2400	HYGR		
WIND	1995-09-01	2001-06-04	HOURLY	UNKN	ANEMCUP		
PRECIP	2001-06-04	2007-04-03	DAILY	2400	AHTB	RCRD;HTD	
PRECIP	2001-06-04	2007-04-03	HOURLY	2400	AHTB	RCRD;HTD	
TEMP	2001-06-04	2007-04-03	DAILY	2400	ATEMP		
WIND	2001-06-04	2007-04-03	HOURLY	UNKN	ANEMCUP		
PRECIP	2007-04-03	2010-06-24	DAILY	2400	AHTB	RCRD;HTD	
PRECIP	2007-04-03	2010-06-24	HOURLY	2400	AHTB	RCRD;HTD	
TEMP	2007-04-03	2010-06-24	DAILY	2400	ATEMP		
WIND	2007-04-03	2010-06-24	HOURLY	UNKN	ANEMSONIC		
PRECIP	2010-06-24	2016-08-22	HOURLY	VAR	AWPAG	RCRD;HTD	
TEMP	2010-06-24	2016-08-22	DAILY	1700	ATEMP		
PRECIP	2010-06-24	2019-12-19	HOURLY	2400	AWPAG	RCRD;HTD	
PRECIP	2010-06-24	2019-12-19	DAILY	2400	PCPNX		
TEMP	2010-06-24	2019-12-19	DAILY	2400	ATEMP		
WIND	2010-06-24	2019-12-19	HOURLY	UNKN	ANEMSONIC		
PRECIP	2019-12-19	Present	HOURLY	2400	AWPAG	RCRD;HTD	
PRECIP	2019-12-19	Present	DAILY	2400	AWPAG	RCRD;HTD	
TEMP	2019-12-19	Present	DAILY	2400	ATEMP		
WIND	2019-12-19	Present	HOURLY	UNKN	ANEMSONIC		

* For explanation of codes and abbreviations 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

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Asheville, NC 28801-5001

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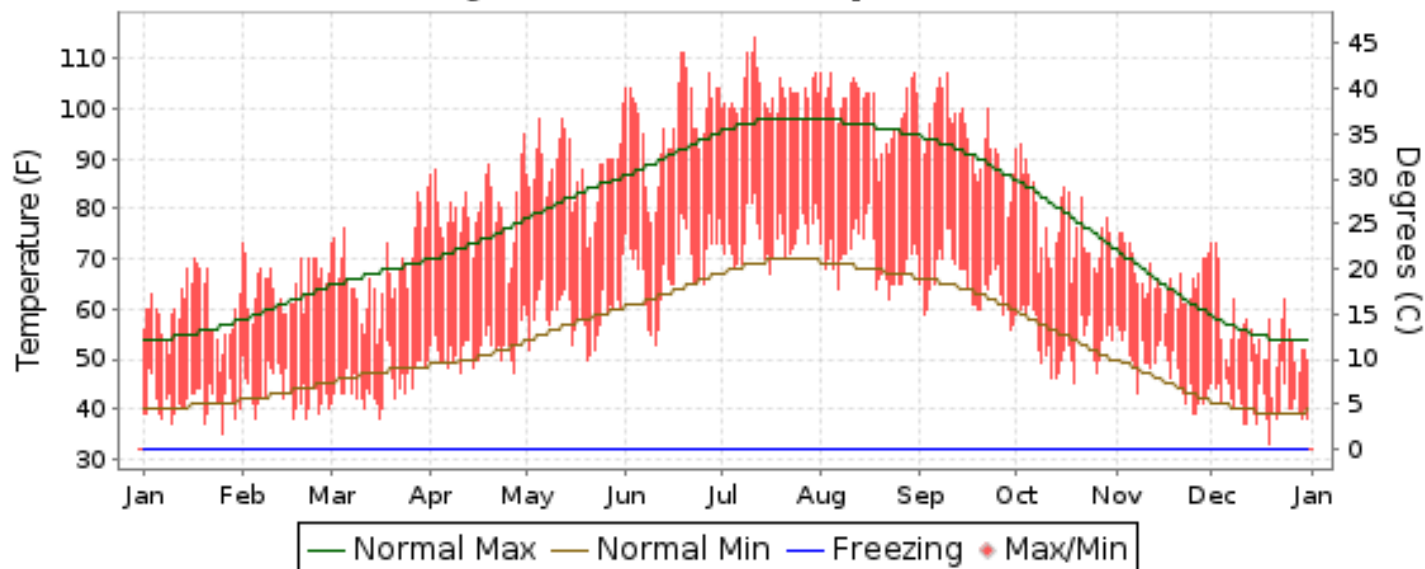


2021 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

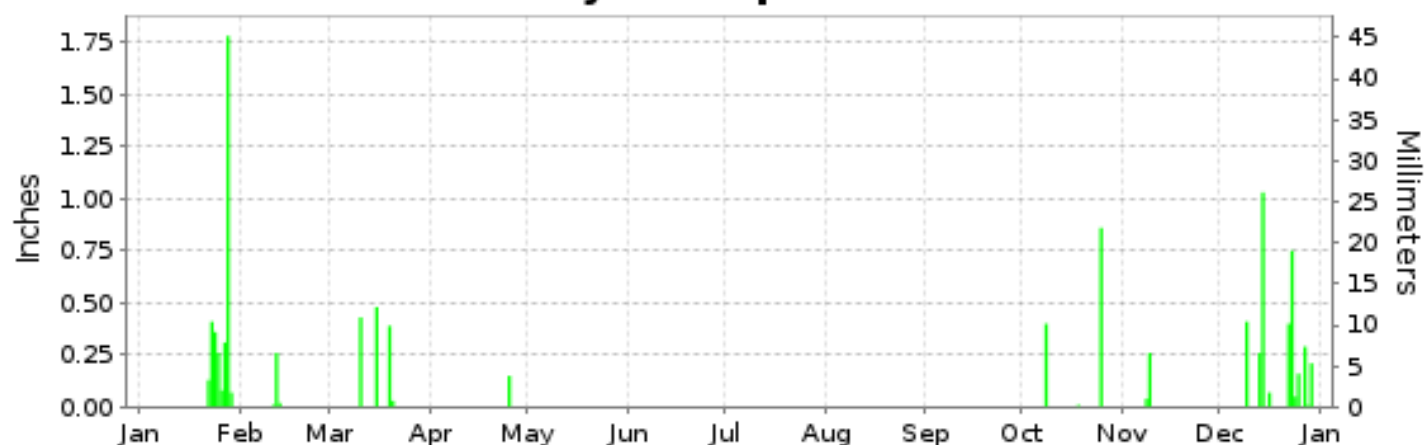
ISSN 0198-0890

FRESNO, CALIFORNIA (KFAT)

Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

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NATIONAL
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NATIONAL CENTERS for
ENVIRONMENTAL INFORMATION (NCEI)
ASHEVILLE, NORTH CAROLINA

Mary A. Wohlgemuth
DIRECTOR
NCEI

METEOROLOGICAL DATA FOR 2021

FRESNO (KFAT)

LATITUDE:
36° 46'N

LONGITUDE:
119° 43'W

ELEVATION (FT):
GRND: 334.29 BARO: 375

TIME ZONE:
PACIFIC (UTC -8)

WBAN: 93193

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	MEAN DAILY MAXIMUM	59.6	64.9	67.6	79.8	87.6	97.0	103.3	100.2	94.1	76.6	66.5	55.0	79.4
	HIGHEST DAILY MAXIMUM	70	73	84	95	101	111	114	107	107	93	75	73	114
	DATE OF OCCURRENCE	17	01	31	30	31	19+	11	30+	09	02	03+	02+	JUL 11
	MEAN DAILY MINIMUM	41.3	43.3	44.9	52.1	59.1	68.1	74.1	70.2	65.1	53.7	48.0	41.3	55.1
	LOWEST DAILY MINIMUM	35	38	38	47	50	53	67	62	56	45	39	33	33
	DATE OF OCCURRENCE	26	21+	16	27+	20	10	16	22	29	19	26+	19	DEC 19
	AVERAGE DRY BULB	50.4	54.1	56.3	65.9	73.4	82.6	88.7	85.2	79.6	65.1	57.2	48.1	67.2
	MEAN WET BULB	45.1	46.4	47.1	52.3	56.2	62.4	65.6	64.8	61.6	53.7	52.4	45.3	54.4
	MEAN DEW POINT	39.5	38.4	37.0	39.5	40.8	48.2	50.5	51.3	48.4	43.1	49.2	42.5	44.0
	NUMBER OF DAYS WITH:													
	MAXIMUM >= 90°	0	0	0	2	14	25	31	30	22	3	0	0	127
	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	445	298	269	37	6	0	0	0	0	69	226	517	1867
	COOLING DEGREE DAYS	0	0	5	72	270	535	744	633	443	80	1	0	2783
RH	MEAN (PERCENT)	71	59	53	42	34	34	30	35	38	51	80	83	51
	HOURLY 04 LST	80	76	72	64	55	53	46	53	59	67	92	91	67
	HOURLY 10 LST	68	53	46	35	28	27	25	29	31	43	75	81	45
	HOURLY 16 LST	56	40	33	23	18	18	15	18	20	35	63	73	34
	HOURLY 22 LST	75	65	60	47	37	38	35	39	40	58	86	87	56
W/O	NUMBER OF DAYS WITH:													
	HEAVY FOG(VISBY <= 1/4 MI)	5	0	0	0	0	0	0	0	0	0	14	8	27
PR	THUNDERSTORMS	0	0	1	0	0	0	0	0	0	0	0	0	1
PR	MEAN STATION PRESS. (IN.)	29.77	29.78	29.72	29.62	29.56	29.50	29.51	29.47	29.55	29.64	29.80	29.70	29.64
	MEAN SEA-LEVEL PRESS. (IN.)	30.12	30.13	30.07	29.97	29.91	29.84	29.85	29.81	29.89	29.99	30.16	30.06	29.98
WINDS	RESULTANT SPEED (MPH)	0.6	2.4	2.2	5.0	7.3	7.3	6.1	5.3	3.6	1.6	1.0	1.1	3.3
	RES. DIR. (TENS OF DEGS.)	09	32	32	31	30	30	30	30	30	30	30	14	31
	MEAN SPEED (MPH)	4.5	5.2	5.6	6.4	8.6	8.4	7.5	6.7	5.8	5.3	3.4	5.1	6.0
	PREVAIL.DIR.(TENS OF DEGS.)	29	29	29	30	30	30	30	30	29	29	29	29	30
	MAXIMUM 2-MINUTE WIND													
	SPEED (MPH)	26	24	26	23	25	25	21	20	21	35	16	23	35
	DIR. (TENS OF DEGS.)	12	31	33	31	30	31	17	31	31	31	10	14	31
	DATE OF OCCURRENCE	27	20	15	20	20	08	26	12	28	11	09	25	OCT 11
	MAXIMUM 3-SECOND WIND:													
	SPEED (MPH)	31	29	35	28	37	31	29	25	28	44	20	29	44
	DIR. (TENS OF DEGS.)	14	31	22	32	30	30	31	31	31	31	10	12	31
	DATE OF OCCURRENCE	26	20	09	20	20	08	10	18	19	11	09	13	OCT 11
PRECIPITATION	WATER EQUIVALENT:													
	TOTAL (IN.)	3.40	0.29	1.33	0.15	0.00	0.00	0.00	0.00	0.00	1.27	0.30	3.64	10.38
	GREATEST 24-HOUR (IN.)	1.82	0.27	0.48	0.15	0.00	0.00	0.00	0.00	0.00	0.86	0.30	1.20	1.82
	DATE OF OCCURRENCE	28-29	11-12	15	25						25	08-09	13-14	JAN 28-29
	NUMBER OF DAYS WITH:													
	PRECIPITATION 0.01	8	3	4	1	0	0	0	0	0	3	2	11	32
SNOWFALL	PRECIPITATION 0.10	6	1	3	1	0	0	0	0	0	2	1	8	22
	PRECIPITATION 1.00	1	0	0	0	0	0	0	0	0	0	0	1	2
SNOWFALL	SNOW,ICE PELLETS,HAIL													
	TOTAL (IN.)	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
	GREATEST 24-HOUR (IN.)	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
	DATE OF OCCURRENCE			10										MAR 10
	MAXIMUM SNOW DEPTH (IN.)	0	0	0	0	0	0	0	0	0	0	0	0	0
SNOWFALL	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:													
	SNOWFALL >= 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0

NORMALS, MEANS, AND EXTREMES

FRESNO (KFAT)

LATITUDE:
36° 46'N

LONGITUDE:
119° 43'W

ELEVATION (FT):
GRND: 334.29 BARO: 375

TIME ZONE:
PACIFIC (UTC -8)

WBAN: 93193

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	54.8	61.6	67.6	74.6	84.1	92.0	98.4	97.1	90.9	79.5	65.1	54.9	76.7
	MEAN DAILY MAXIMUM	72	55.2	61.9	67.5	74.8	83.6	92.1	98.6	96.7	90.9	79.8	65.6	55.2	76.8
	HIGHEST DAILY MAXIMUM	72	78	83	91	100	107	111	114	112	111	102	90	77	114
	YEAR OF OCCURRENCE		2014	2020	2015	1981	1984	2021	2021	2020	1955	1980	2010	2006	JUL 2021
	MEAN OF EXTREME MAXS.	72	67.7	73.5	80.7	90.3	98.8	105.3	107.3	105.9	102.5	93.5	79.8	67.3	89.4
	NORMAL DAILY MINIMUM	30	38.3	41.5	45.6	49.4	56.2	62.4	67.6	66.2	61.5	53.0	43.4	38.0	51.9
	MEAN DAILY MINIMUM	72	38.2	41.1	44.3	48.5	54.8	61.2	66.5	64.7	60.3	51.8	43.0	37.7	51.0
	LOWEST DAILY MINIMUM	72	19	24	26	32	36	44	50	49	37	27	26	18	18
	YEAR OF OCCURRENCE		1963	1990	1966	1982	1975	1955	1955	1966	1950	1972	1975	1990	DEC 1990
	MEAN OF EXTREME MINS.	72	28.5	31.8	34.9	39.3	45.2	51.5	57.8	57.2	51.4	41.9	33.1	28.4	41.8
	NORMAL DRY BULB	30	46.6	51.5	56.6	62.0	70.1	77.2	83.0	81.7	76.2	66.2	54.3	46.5	64.3
	MEAN DRY BULB	72	46.7	51.5	55.9	61.7	69.2	76.7	82.5	80.8	75.6	65.8	54.3	46.4	63.9
	MEAN WET BULB	38	42.5	44.9	47.5	48.9	51.8	55.7	59.5	59.1	56.4	51.9	46.5	41.4	50.5
	MEAN DEW POINT	38	42.8	44.7	47.4	48.0	50.8	55.0	58.7	58.2	55.8	51.1	45.8	41.5	50.0
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	1.8	8.7	18.5	28.7	27.1	18.1	3.3	0.0	0.0	106.2
	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	5.6	1.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	5.1	13.2
	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	572	377	265	136	30	3	0	0	2	61	325	575	2346
	NORMAL COOLING DEG. DAYS	30	0	0	5	46	190	369	558	516	338	100	2	0	2124
RH	NORMAL (PERCENT)		84	77	70	57	48	43	40	44	49	58	74	83	61
	HOURLY 04 LST	30	92	90	87	80	71	65	62	66	71	78	88	92	79
	HOURLY 10 LST	30	85	77	66	51	44	39	38	41	45	52	71	83	58
	HOURLY 16 LST	30	69	57	49	35	28	24	22	25	28	35	53	67	41
	HOURLY 22 LST	30	89	83	76	62	51	44	42	46	51	63	81	88	65
S	PERCENT POSSIBLE SUNSHINE	46	47	65	77	85	90	95	97	96	94	88	66	46	79
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	58	10.0	4.3	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.5	4.5	9.6	30.3
	THUNDERSTORMS	72	0.2	0.4	0.8	0.6	0.6	0.4	0.2	0.2	0.5	0.5	0.2	0.3	4.9
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS) MIDNIGHT-MIDNIGHT (OKTAS) MEAN NO. DAYS WITH: CLEAR PARTLY CLOUDY CLOUDY														
PR	MEAN STATION PRESSURE(IN)	38	29.80	29.74	29.70	29.65	29.58	29.52	29.53	29.52	29.53	29.63	29.74	29.77	29.64
	MEAN SEA-LEVEL PRES. (IN)	38	30.16	30.09	30.05	30.00	29.92	29.87	29.87	29.86	29.88	29.98	30.09	30.15	29.99
WINDS	MEAN SPEED (MPH)	38	4.1	5.0	5.9	7.3	8.2	8.3	7.5	6.9	6.0	4.6	3.9	4.0	6.0
	PREVAIL.DIR(TENS OF DEGS)	46	12	32	32	32	31	31	31	31	31	31	31	12	31
	MAXIMUM 2-MINUTE: SPEED (MPH)	26	38	36	36	40	32	33	24	26	31	35	31	35	40
	DIR. (TENS OF DEGS)		16	13	29	31	32	30	30	31	29	31	27	28	31
	YEAR OF OCCURRENCE		2005	1998	2017	2019	1998	2012	2015	2014	2013	2021	2016	2008	APR 2019
	MAXIMUM 3-SECOND SPEED (MPH)	26	46	47	42	50	40	40	33	41	36	45	39	45	50
	DIR. (TENS OF DEGS)		16	17	29	31	02	31	07	31	29	33	27	01	31
	YEAR OF OCCURRENCE		2005	2019	2017	2019	2019	2012	2007	2013	2013	2009	2016	2011	APR 2019
PRECIPITATION	NORMAL (IN)	30	2.19	2.03	2.03	0.95	0.43	0.21	0.01	0.01	0.17	0.63	1.07	1.77	11.50
	MAXIMUM MONTHLY (IN)	72	8.56	6.12	7.24	4.41	2.38	1.93	0.43	0.25	1.19	2.45	3.50	6.73	8.56
	YEAR OF OCCURRENCE		1969	2000	1991	1967	2019	1998	2015	1964	1976	2000	1972	1955	JAN 1969
	MINIMUM MONTHLY (IN)	72	0.04	T	0.00	T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	YEAR OF OCCURRENCE		1976	2020	1972	2008	1982	1983	1983	1981	1981	1978	1959	1989	DEC 1989
	MAXIMUM IN 24 HOURS (IN)	72	2.74	1.99	2.43	2.04	1.42	1.80	0.36	0.25	0.97	1.76	1.35	1.82	2.74
	YEAR OF OCCURRENCE		2006	1969	1995	2017	1990	1998	2015	1964	1978	1992	1953	2007	JAN 2006
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	7.6	8.6	7.5	4.5	2.2	0.7	0.2	0.3	1.0	2.5	5.5	7.5	48.1
	PRECIPITATION >= 1.00	30	0.2	0.2	0.2	0.1	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.2	1.3
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)	62	2.2	0.0	T	T	0.0	T	0.0	0.0	0.0	T	0.0	1.2	2.2
	YEAR OF OCCURRENCE		1962	2020	2021	2017	2018	2013	2019	2020	2020	1974		1968	JAN 1962
	MAXIMUM IN 24 HOURS (IN)	62	1.5	T	T	T	T	T	0.0	0.0	0.0	T	0.0	1.2	1.5
	YEAR OF OCCURRENCE		1962	1994	2021	2017	2015	1995				1974		1968	JAN 1962
	MAXIMUM SNOW DEPTH (IN)	61	0	0	0	0	0	0	0	0	0	0	0	1	1
	YEAR OF OCCURRENCE													1968	DEC 1968
	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) 2021 FRESNO (KFAT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1992	1.94	4.73	2.14	0.18	T	T	0.22	T	T	2.19	T	2.68	14.08
1993	5.18	2.44	1.76	0.20	0.25	1.61	0.00	0.00	0.00	0.12	1.16	1.03	13.75
1994	1.15	1.92	0.52	1.36	1.30	0.00	T	0.00	0.20	0.77	1.57	1.33	10.12
1995	5.42	0.93	5.88	1.08	1.19	0.66	0.01	T	0.00	0.00	T	2.12	17.29
1996	2.07	3.57	1.52	1.17	0.38	0.08	T	0.00	0.00	1.97	1.94	4.27	16.97
1997	3.53	0.17	0.10	T	T	0.01	T	0.00	0.15	0.07	2.66	0.99	7.68
1998	3.40	4.89	3.44	1.26	1.37	1.93	0.00	0.00	0.15	0.16	0.43	0.62	17.65
1999	2.82	1.18	0.49	0.93	0.03	0.20	0.00	0.01	T	T	0.48	0.03	6.17
2000	3.15	6.12	1.35	1.16	0.05	0.56	0.00	T	0.32	2.45	0.01	0.07	15.24
2001	2.66	2.22	0.96	1.87	0.00	0.00	0.08	0.00	T	0.29	1.99	1.95	12.02
2002	0.76	0.40	0.95	0.21	0.38	0.02	0.00	0.00	T	0.00	1.78	2.25	6.75
2003	0.40	1.22	0.63	2.84	0.68	0.00	T	0.04	T	T	0.40	2.93	9.14
2004	0.88	1.69	1.54	0.03	0.07	0.00	0.00	0.00	0.00	2.45	0.81	3.16	10.63
2005	2.42	2.30	2.51	0.56	1.62	0.01	0.00	T	0.04	0.05	0.17	2.00	11.68
2006	3.40	0.54	4.73	3.27	0.36	0.00	T	0.00	0.00	0.08	0.23	1.33	13.94
2007	0.59	2.29	0.97	0.49	0.05	0.00	T	0.02	0.02	0.20	0.09	2.31	7.03
2008	3.32	2.12	0.02	T	0.30	0.00	0.01	0.00	0.00	0.23	1.37	1.09	8.46
2009	1.02	2.43	0.24	0.72	0.46	0.20	0.00	T	0.01	1.39	0.20	2.41	9.08
2010	2.05	2.94	0.96	2.19	0.21	0.00	T	0.00	0.00	0.44	1.80	5.92	16.51
2011	1.71	1.60	3.46	0.32	0.35	1.91	T	0.00	T	0.90	0.67	0.00	10.92
2012	1.38	0.75	2.43	2.02	0.00	T	T	T	0.00	0.25	1.11	2.03	9.97
2013	0.58	0.89	0.65	0.09	0.07	T	T	T	0.01	0.03	0.54	0.15	3.01
2014	0.57	2.11	0.62	0.74	0.04	0.00	0.01	T	0.18	0.50	0.40	2.29	7.46
2015	0.21	1.13	0.06	1.25	0.57	0.01	0.43	0.00	0.12	0.49	1.74	2.97	8.98
2016	4.42	0.33	2.93	1.06	0.29	0.06	0.00	0.00	0.00	0.67	1.38	2.51	13.65
2017	5.50	2.52	1.08	3.42	0.12	0.00	0.00	T	0.16	0.09	0.28	0.04	13.21
2018	1.23	0.26	4.19	0.64	T	0.00	0.00	0.00	0.00	0.10	1.67	0.56	8.65
2019	2.23	3.26	1.26	0.39	2.38	0.00	T	0.00	0.00	0.00	0.72	2.16	12.40
2020	0.66	T	2.32	1.65	0.12	0.00	0.00	T	T	0.00	0.28	1.14	6.17
2021	3.40	0.29	1.33	0.15	0.00	0.00	0.00	0.00	0.00	1.27	0.30	3.64	10.38
POR= 72 YRS	2.11	1.82	1.83	1.05	0.36	0.15	0.01	0.01	0.14	0.51	1.10	1.66	10.75

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AVERAGE TEMPERATURE (°F) 2021 FRESNO (KFAT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1992	42.7	55.5	58.8	66.8	76.0	77.0	81.3	83.2	77.0	68.6	54.3	45.3	65.5
1993	47.1	51.9	60.3	61.7	69.9	75.7	80.2	79.7	75.7	67.8	53.9	45.6	64.1
1994	46.9	49.9	59.3	63.2	68.5	77.7	83.3	82.3	75.4	64.8	48.1	45.3	63.7
1995	51.9	54.1	56.2	60.7	66.2	73.3	80.7	82.6	76.3	66.8	58.7	50.5	64.8
1996	48.3	54.2	57.2	63.6	69.9	77.8	85.4	83.4	74.8	64.1	53.9	49.1	65.1
1997	48.7	50.3	60.0	63.5	75.3	75.8	81.3	80.6	77.3	63.8	56.9	44.7	64.9
1998	49.0	50.0	55.5	59.0	62.0	71.5	82.1	84.1	75.8	63.1	53.1	42.8	62.3
1999	44.7	49.9	53.5	58.5	68.0	75.9	80.6	78.4	77.3	68.7	56.9	47.0	63.3
2000	50.2	53.8	56.5	64.2	71.0	79.8	78.8	81.2	74.5	63.9	49.2	47.8	64.2
2001	46.2	48.7	58.8	58.6	77.3	79.7	81.6	81.9	77.0	68.5	56.4	47.4	65.2
2002	45.0	52.2	55.1	62.8	69.6	78.1	84.1	80.0	77.1	65.2	56.2	49.3	64.6
2003	50.6	51.1	58.1	58.6	69.5	78.4	86.5	81.4	79.2	69.8	52.2	49.3	65.4
2004	46.6	50.5	62.6	65.8	70.9	77.4	83.3	81.3	75.9	64.1	51.7	46.5	64.7
2005	47.4	54.4	57.8	59.6	69.4	73.6	86.8	84.0	73.9	65.9	57.6	51.0	65.1
2006	48.7	52.4	50.1	59.7	71.9	80.7	87.9	80.2	75.8	64.0	55.4	47.1	64.5
2007	43.7	51.4	60.3	63.0	71.5	78.0	83.2	82.8	73.7	64.4	57.4	45.5	64.6
2008	47.0	51.1	57.0	61.7	70.3	79.1	83.8	84.1	78.0	67.1	57.5	44.9	65.1
2009	47.7	51.5	56.0	62.0	75.3	75.7	85.0	81.8	79.7	63.7	54.1	47.2	65.0
2010	48.6	52.2	55.5	57.7	65.2	77.6	83.1	79.9	76.9	68.0	53.8	50.9	64.1
2011	46.6	49.2	55.4	60.7	65.1	75.0	82.0	82.4	80.3	68.0	53.5	45.6	63.7
2012	49.3	52.7	56.2	63.0	72.4	77.9	83.4	86.6	81.4	69.1	58.3	50.9	66.8
2013	47.1	51.0	62.1	67.6	73.0	80.9	87.1	83.0	77.9	66.6	58.5	47.3	66.8
2014	53.2	56.8	62.4	66.8	74.2	80.9	86.9	84.4	80.7	72.0	57.7	51.9	69.0
2015	49.0	57.0	64.0	64.3	68.5	82.0	83.1	82.4	78.7	71.3	52.0	45.8	66.5
2016	50.0	55.5	58.7	65.3	71.3	80.9	84.0	82.5	76.1	66.4	57.6	47.1	66.3
2017	48.1	53.9	58.8	62.1	71.0	80.5	86.5	85.2	77.2	65.7	58.0	48.0	66.3
2018	52.5	53.2	56.8	64.9	70.9	79.4	88.2	83.0	78.0	68.1	57.8	50.0	66.9
2019	52.5	49.2	57.4	67.1	66.7	80.7	84.2	84.8	77.2	65.5	57.9	51.0	66.2
2020	49.0	55.0	56.6	64.1	73.4	79.5	84.6	86.2	79.8	71.6	54.9	48.9	67.0
2021	50.4	54.1	56.3	65.9	73.4	82.6	88.7	85.2	79.6	65.1	57.2	48.1	67.2
POR= 72 YRS	46.7	51.5	55.9	61.7	69.2	76.7	82.5	80.8	75.6	65.8	54.3	46.4	63.9

HEATING DEGREE DAYS (base 65°F) 2021 FRESNO (KFAT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1992-93	0	0	0	18	316	602	549	359	145	113	9	12	2123
1993-94	0	0	0	12	326	595	553	414	168	97	37	0	2202
1994-95	0	0	0	58	500	602	398	298	269	146	60	16	2347
1995-96	0	0	0	30	184	444	513	304	238	99	8	0	1820
1996-97	0	0	0	148	329	486	500	405	169	97	2	0	2136
1997-98	0	0	0	92	246	621	490	412	293	226	104	7	2491
1998-99	0	0	7	79	351	682	619	418	348	227	35	12	2778
1999-00	0	0	0	14	235	550	452	317	259	72	27	3	1929
2000-01	0	0	0	103	466	526	577	451	208	222	0	0	2553
2001-02	0	0	0	23	251	538	610	352	310	109	30	0	2223
2002-03	0	0	0	67	256	477	440	382	216	191	49	0	2078
2003-04	0	0	0	24	378	482	565	413	113	64	3	0	2042
2004-05	0	0	6	124	391	566	537	291	217	158	30	1	2321
2005-06	0	0	0	41	217	424	500	345	456	170	9	0	2162
2006-07	0	0	2	56	283	546	654	373	158	117	19	1	2209
2007-08	0	0	6	59	223	600	552	396	243	149	20	0	2248
2008-09	0	0	0	39	219	616	531	369	274	145	0	0	2193
2009-10	0	0	2	87	322	544	500	352	289	227	62	0	2385
2010-11	0	0	0	40	346	432	563	438	292	138	67	7	2323
2011-12	0	0	0	29	338	595	478	352	268	129	6	2	2197
2012-13	0	0	0	38	205	432	545	386	107	42	4	0	1759
2013-14	0	0	0	32	189	540	361	223	88	68	3	0	1504
2014-15	0	0	0	5	216	401	487	217	83	85	25	0	1519
2015-16	0	0	0	5	385	587	456	268	189	47	10	0	1947
2016-17	0	0	2	23	226	544	514	305	202	94	26	4	1940
2017-18	0	0	4	45	209	523	376	324	258	70	4	0	1813
2018-19	0	0	0	9	209	458	381	433	233	46	57	0	1826
2019-20	0	0	6	51	205	427	489	285	253	111	4	0	1831
2020-21	0	0	0	23	301	493	445	298	269	37	6	0	1872
2021-	0	0	0	69	226	517							

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COOLING DEGREE DAYS (base 65°F) 2021 FRESNO (KFAT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1992	0	0	0	88	350	366	511	572	365	135	0	0	2387
1993	0	0	3	20	168	342	476	462	331	105	0	0	1907
1994	0	0	1	52	151	389	576	547	318	59	0	0	2093
1995	0	0	0	25	104	273	494	551	347	91	0	0	1885
1996	0	0	4	66	162	389	640	579	300	125	0	0	2265
1997	0	0	18	61	330	334	514	492	373	61	11	0	2194
1998	0	0	6	50	18	210	536	600	338	25	0	0	1783
1999	0	0	0	39	135	348	487	423	373	135	0	0	1940
2000	0	0	0	54	217	454	434	509	291	81	0	0	2040
2001	0	0	20	37	389	447	521	533	365	137	0	0	2449
2002	0	0	9	50	180	400	599	472	372	81	0	0	2163
2003	0	0	7	5	192	406	671	518	431	180	0	0	2410
2004	0	0	45	97	188	376	576	514	341	99	0	0	2236
2005	0	0	4	2	170	266	682	597	271	79	2	0	2073
2006	0	0	0	20	231	478	715	475	337	31	1	0	2288
2007	0	0	20	64	229	396	569	560	274	50	0	0	2162
2008	0	0	0	54	192	431	592	599	394	114	1	0	2377
2009	0	0	1	62	330	328	628	527	451	53	3	0	2383
2010	0	0	0	15	72	386	563	470	364	144	17	0	2031
2011	0	0	1	18	81	315	535	546	466	128	0	0	2090
2012	0	0	2	77	242	391	577	677	495	172	11	0	2644
2013	0	0	23	124	260	483	691	565	394	85	0	0	2625
2014	0	0	12	132	299	485	687	606	479	230	2	0	2932
2015	0	0	58	70	145	513	568	545	418	205	2	0	2524
2016	0	0	1	63	214	487	598	552	344	73	10	0	2342
2017	0	0	17	13	221	477	674	637	375	72	4	0	2490
2018	0	0	10	78	193	440	729	566	399	112	2	0	2529
2019	0	0	5	114	118	477	605	622	379	72	0	0	2392
2020	0	2	1	93	273	440	614	666	453	236	5	0	2783
2021	0	0	5	72	270	535	744	633	443	80	1	0	2783

SNOWFALL (inches) 2021 FRESNO (KFAT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
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	T	0.0	0.0	0.0	0.0	T	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	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1997-98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.0	0.0	0.0	T
1998-99	0.0	0.0	0.0	0.0	0.0	0.5	T	T	0.0	0.0	0.0	0.0	0.5
1999-00	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
2000-01	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
2001-02	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
2002-03	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
2003-04	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
2004-05	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T
2005-	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
2006-07	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
2007-08	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
2008-09	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
2009-10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
2010-11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
2011-12	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
2012-13	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
2013-	0.0	0.0	0.0	0.0	0.0	0.0							
2013-14	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
2014-15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	T
2015-16	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
2016-17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T
2017-18	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
2018-19	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
2019-20	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
2020-21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
2021-	0.0	0.0	0.0	0.0	0.0	0.0							
POR= 72 YRS	0.0	0.0	0.0	T	0.0	T	T	T	T	T	T	T	T

WBAN : 93193

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.
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2021 FRESNO CALIFORNIA (KFAT)

Fresno is located about midway and toward the eastern edge of the San Joaquin Valley, which is oriented northwest to southeast and has a length of about 225 miles and an average width of 50 miles. The San Joaquin Valley is generally flat. About 15 miles east of Fresno the terrain slopes upward with the foothills of the Sierra Nevada. The Sierra Nevada attain an elevation of more than 14,000 feet 50 miles east of Fresno. West of the city 45 miles lie the foothills of the Coastal Range.

The climate of Fresno is dry and mild in winter and hot in summer. Nearly nine-tenths of the annual precipitation falls in the six months from November to April.

Due to clear skies during the summer and the protection of the San Joaquin Valley from marine effects, the normal daily maximum temperature reaches the high 90s during the latter part of July. The daily maximum temperature during the warmest month has ranged from 76 to 115 degrees. Low relative humidities and some wind movement substantially lower the sensible temperature during periods of high readings. Humidity readings of 15 percent are common on summer afternoons, and readings as low as 8 percent have been recorded. In contrast to this, humidity readings average 90 percent during the morning hours of December and January.

Winds flow with the major axis of the San Joaquin Valley, generally from the northwest. This feature is especially beneficial since, during the warmest months, the northwest winds increase during the evenings. These refreshing breezes and the normally large temperature variation of about 35 degrees between the highest and lowest readings of the day, generally result in comfortable evening and night temperatures.

Winter temperatures are usually mild with infrequent cold spells dropping the readings below freezing. Heavy frost occurs almost every year, and the first frost usually occurs during the last week of November. The last frost in spring is usually in early March, however, one year in five will have the last frost after the first of April. The growing season is 291 days.

Although the heaviest rains recorded at Fresno for short periods have occurred in June, usually any rainfall during the summer is very light. Snow is a rare occurrence in Fresno.

Fresno enjoys a very high percentage of sunshine, receiving more than 80 percent of the possible amounts during all but the four months of November, December, January, and February. Reduction of sunshine during these months is caused by fog and short periods of stormy weather.

During foggy periods, at times lasting nearly two weeks, sunshine is reduced to a minimum. This fog frequently lifts to a few hundred feet above the surface of the valley and presents the appearance of a heavy, solid cloud layer.

Spring and autumn are very enjoyable seasons in Fresno, with clear skies, light rainfall and winds and mild temperatures.

Station History

FRESNO, CA

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
FRESNO AIR TERMINAL	1948-01-01	1949-08-20	36° 46'	-119° 42'	338		AIRWAYS
FRESNO AIR TERMINAL	1949-08-20	1949-08-31	36° 46'	-119° 42'	338	7 MI ENE	AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1949-08-31	1961-01-01	36° 46'	-119° 42'	338		AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1961-01-01	1961-09-01	36° 46'	-119° 43'	328		AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1961-09-01	1978-01-01	36° 46'	-119° 43'	328	.9 MI W	AIRWAYS, COOP, USHCN
FRESNO AIR TERMINAL	1978-01-01	1985-02-01	36° 46'	-119° 43'	328		COOP, USHCN, WXSVC
FRESNO AIR TERMINAL	1985-02-01	1993-11-10	36° 46'	-119° 43'	336	1 MI NNE	COOP, USHCN, WXSVC
FRESNO AIR TERMINAL	1993-11-10	1995-09-01	36° 46'	-119° 43'	336		COOP, USHCN, WXSVC
FRESNO YOSEMITE INTL AP	1995-09-01	1995-11-15	36° 46'	-119° 43'	333	.5 MI WSW	ASOS, COOP, USHCN
FRESNO YOSEMITE INTL AP	1995-11-15	2010-06-24	36° 46'	-119° 43'	333		ASOS, COOP, USHCN
FRESNO YOSEMITE INTL AP	2010-06-24	2016-08-22	36° 46'	-119° 43'	333		ASOS, COOP, USHCN
FRESNO YOSEMITE INT'L	2016-08-22	2017-10-01	36° 46'	-119° 43'	333		ASOS, COOP, USHCN
FRESNO YOSEMITE INT'L	2017-10-01	2019-12-19	36° 46'	-119° 43'	333		ASOS, COOP, PLCD, USHCN
FRESNO YOSEMITE INT'L	2019-12-19	2021-11-22	36° 46'	-119° 43'	333		ASOS, COOP, PLCD, USHCN
FRESNO YOSEMITE INT'L	2021-11-22	Present	36° 46'	-119° 43'	334.29		ASOS, COOP, PLCD, USHCN

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1947-10-01	1969-04-01	DAILY	2400	UNIV	RCRD	
TEMP	1947-10-01	1969-04-01	DAILY	2400			
MAX/MINTEM	1969-04-01	1982-01-01	DAILY	0800	PALMER		
MAX/MINTEM	1969-04-01	1982-01-01	DAILY	0800	PALMER		
PRECIP	1969-04-01	1982-01-01	DAILY	2400	UNIV	RCRD	
TEMP	1969-04-01	1982-01-01	DAILY	2400			
MAX/MINTEM	1982-01-01	1985-02-01	DAILY	0800	PALMER		
MAX/MINTEM	1982-01-01	1985-02-01	DAILY	0800	PALMER		
PRECIP	1982-01-01	1985-02-01	HOURLY	2400			
PRECIP	1982-01-01	1985-02-01	DAILY	2400	UNIV	RCRD	
TEMP	1982-01-01	1985-02-01	DAILY	2400			
PRECIP	1985-02-01	1995-07-01	HOURLY	2400			
PRECIP	1985-02-01	1995-07-01	DAILY	2400	UNIV	RCRD	
TEMP	1985-02-01	1995-07-01	DAILY	2400	MXMN		
PRECIP	1995-07-01	1995-09-01	DAILY	2400	UNIV	RCRD	
PRECIP	1995-07-01	1995-09-01	HOURLY	2400	UNIV	RCRD	
TEMP	1995-07-01	1995-09-01	DAILY	2400	MXMN		
PRECIP	1995-09-01	2001-06-04	HOURLY	2400	TB	RCRD	
PRECIP	1995-09-01	2001-06-04	DAILY	2400	TB	RCRD	
TEMP	1995-09-01	2001-06-04	DAILY	2400	HYGR		
WIND	1995-09-01	2001-06-04	HOURLY	UNKN	ANEMCUP		
PRECIP	2001-06-04	2007-04-03	DAILY	2400	AHTB	RCRD;HTD	
PRECIP	2001-06-04	2007-04-03	HOURLY	2400	AHTB	RCRD;HTD	
TEMP	2001-06-04	2007-04-03	DAILY	2400	ATEMP		
WIND	2001-06-04	2007-04-03	HOURLY	UNKN	ANEMCUP		
PRECIP	2007-04-03	2010-06-24	DAILY	2400	AHTB	RCRD;HTD	
PRECIP	2007-04-03	2010-06-24	HOURLY	2400	AHTB	RCRD;HTD	
TEMP	2007-04-03	2010-06-24	DAILY	2400	ATEMP		
WIND	2007-04-03	2010-06-24	HOURLY	UNKN	ANEMSONIC		
PRECIP	2010-06-24	2016-08-22	HOURLY	VAR	AWPAG	RCRD;HTD	
TEMP	2010-06-24	2016-08-22	DAILY	1700	ATEMP		
PRECIP	2010-06-24	2019-12-19	HOURLY	2400	AWPAG	RCRD;HTD	
PRECIP	2010-06-24	2019-12-19	DAILY	2400	PCPNX		
TEMP	2010-06-24	2019-12-19	DAILY	2400	ATEMP		
WIND	2010-06-24	2019-12-19	HOURLY	UNKN	ANEMSONIC		
PRECIP	2019-12-19	Present	HOURLY	2400	AWPAG	RCRD;HTD	
PRECIP	2019-12-19	Present	DAILY	2400	AWPAG	RCRD;HTD	
TEMP	2019-12-19	Present	DAILY	2400	ATEMP		
WIND	2019-12-19	Present	HOURLY	UNKN	ANEMSONIC		

* For explanation of codes and abbreviations 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>

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