

1999

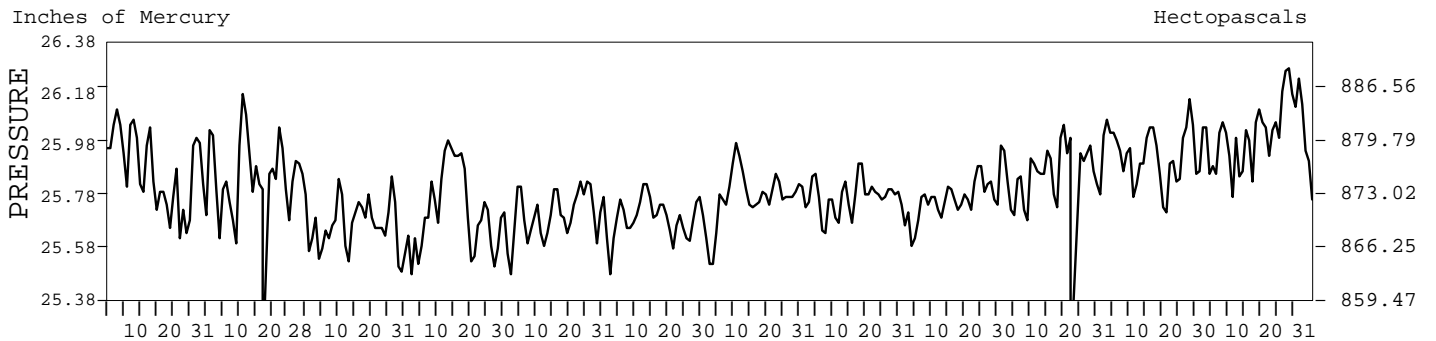
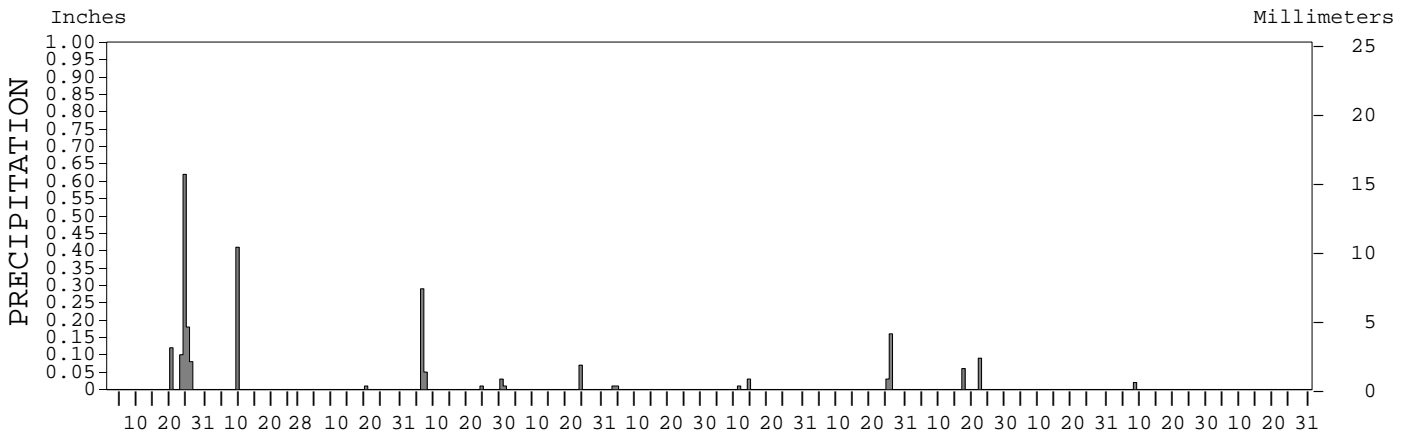
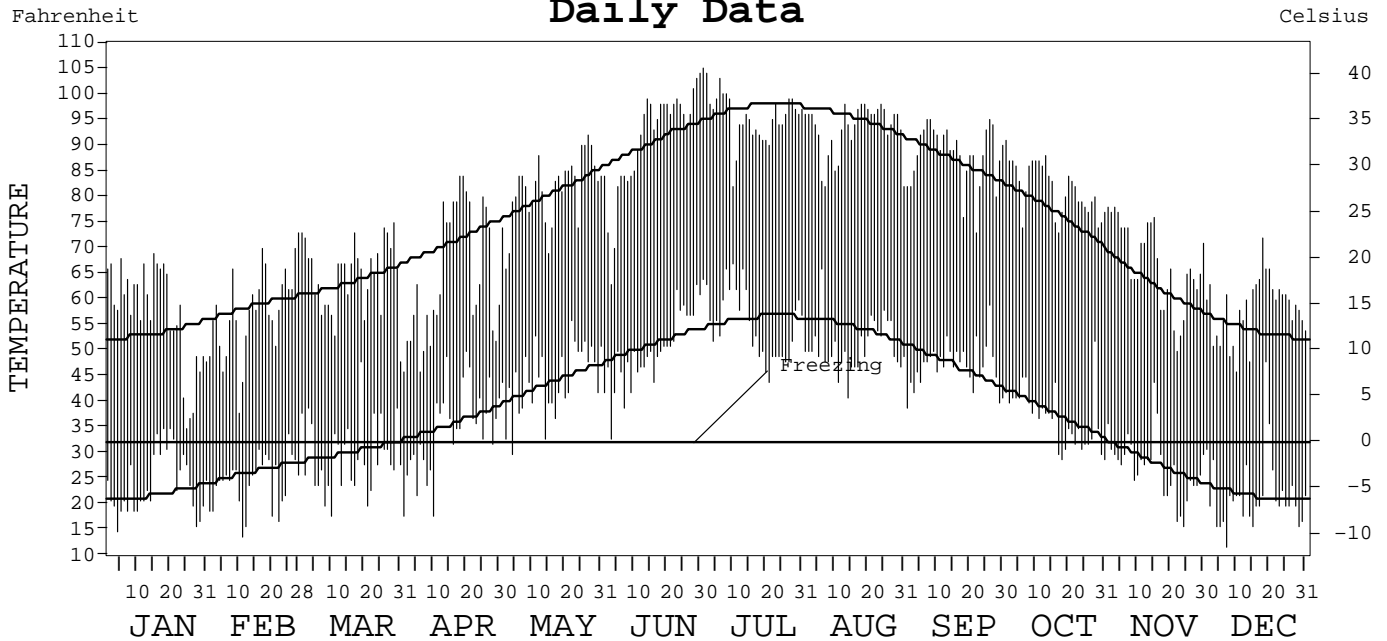
LOCAL CLIMATOLOGICAL DATA  
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-0866

BISHOP,  
CALIFORNIA (BIH)

Daily Data



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# METEOROLOGICAL DATA FOR 1999

## BISHOP, CA (BIH)

LATITUDE: 37° 22' 23" N      LONGITUDE: 118° 21' 46" W      ELEVATION (FT): GRND: 4110      BARO: 4110      TIME ZONE: PACIFIC (UTC + 8)      WBAN: 23157

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	56.9	57.8	64.8	64.7	81.3	91.1	95.7	93.1	88.2	81.6	67.0	58.2	75.0	
	HIGHEST DAILY MAXIMUM	69	73	75	84	92	104	105	98	95	91	78	72	105	
	DATE OF OCCURRENCE	15	28	29	19+	27	30	01	24+	26+	01	03+	18	JUL 01	
	MEAN DAILY MINIMUM	24.2	24.6	29.6	34.8	44.4	50.0	55.3	50.9	47.1	37.0	27.5	22.1	37.3	
	LOWEST DAILY MINIMUM	15	14	18	18	30	33	44	41	39	29	16	12	12	
	DATE OF OCCURRENCE	04	11	10	10+	04	03	21	14	01	31+	24	07	DEC 07	
	AVERAGE DRY BULB	40.6	41.2	47.2	49.8	62.9	70.6	75.5	72.0	67.7	59.3	47.3	40.2	56.2	
	MEAN WET BULB	31.3			38.0	47.1				50.3		34.7	28.8		
	MEAN DEW POINT	17.0			20.9	27.9				31.3		16.1	9.5		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	4	19	29	25	13	1	0	0	91	
	MAXIMUM ≤ 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	
	MINIMUM ≤ 32°	27	27	22	12	1	0	0	0	0	9	26	29	153	
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	748	659	542	451	102	38	0	15	173	529	764	4021		
	COOLING DEGREE DAYS	0	0	0	1	42	212	335	224	103	3	0	920		
RH	MEAN (PERCENT)	47	47	32	37	29	25	25	27	31	24	34	33	33	
	HOUR 04 LST	59	66	50	55	50	44	46	49	48	39	50	48	50	
	HOUR 10 LST	40	40	23	28	23	18	20	18	23	15	25	25	25	
	HOUR 16 LST	31	25	16	22	15	15	13	13	14	9	16	17	17	
	HOUR 22 LST	54	50	35	40	30	26	25	27	33	29	36	38	35	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	1	0	0	0	0	0	0	0	0	0	0	0	1	
	THUNDERSTORMS	0	0	0	0	0	0	0	0	0	0	0	0	0	
CLOUDINESS	SUNRISE-SUNSET: (OKTAS)														
	CEILOMETER (≤ 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
	MIDNIGHT-MIDNIGHT: (OKTAS)														
	CEILOMETER (≤ 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
NUMBER OF DAYS WITH:															
CLEAR															
PARTLY CLOUDY															
CLOUDY															
PR	MEAN STATION PRESS. (IN.)	25.88		25.68	25.72	25.71	25.70	25.78	25.78	25.79		25.94	26.02		
	MEAN SEA-LEVEL PRESS. (IN.)	30.11			29.88	29.82				29.89			30.24		
WINDS	RESULTANT SPEED (MPH)	3.4		1.6	5.0	3.5	0.3	2.1	3.1	1.4		0.6	6.0		
	RES. DIR. (TENS OF DEGS.)	33		19	34	33	05	18	17	29		26	34		
	MEAN SPEED (MPH)	7.3	7.4	11.4	11.1	9.2	8.0	8.9	9.6	7.0	7.6	7.6	8.3	8.6	
	PREVAIL. DIR. (TENS OF DEGS.)	36	35	15	36	35	31	15	15	31	33	31	32	36	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	36	45	37	40	34	36	30	32	26	36	36	38	45	
	DIR. (TENS OF DEGS.)	35	27	17	35	08	25	25	01	36	28	14	35	27	
	DATE OF OCCURRENCE	21	18	19	03	25+	02	03	21	27	28	07	07	FEB 18	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	46	60	49	52	46	43	37	39	38	45	41	47	60	
DIR. (TENS OF DEGS.)	36	23	28	35	08	26	28	16	18	31	14	35	23		
DATE OF OCCURRENCE	21	18	30	03	25	02	03	09	05	28	07	07	FEB 18		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	1.10	0.41	0.01	0.38	0.08	0.02	0.04	0.19	0.15	0.00	0.02	0.00	2.40	
	GREATEST 24-HOUR (IN.)	0.62	0.41	0.01	0.34	0.07	0.02	0.03	0.16	0.09	0.00	0.02	0.00	0.62	
	DATE OF OCCURRENCE	24	09	20	06-07	24	03-04	14	26	22		08		JAN 24	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	5	1	1	4	2	2	2	2	2	0	1	0	22	
PRECIPITATION ≥ 0.10	4	1	0	1	0	0	0	1	0	0	0	0	7		
PRECIPITATION ≥ 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)														
	GREATEST 24-HOUR (IN.)														
	DATE OF OCCURRENCE														
	MAXIMUM SNOW DEPTH (IN.)														
	DATE OF OCCURRENCE														
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0															

# NORMALS, MEANS, AND EXTREMES

## BISHOP, CA (BIH)

LATITUDE: 37° 22' 23" N      LONGITUDE: 118° 21' 46" W      ELEVATION (FT): GRND: 4110      BARO: 4110      TIME ZONE: PACIFIC (UTC + 8)      WBAN: 23157

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	53.5	58.5	63.4	71.1	80.6	90.5	97.2	94.9	86.8	76.3	62.4	53.8	74.1
	MEAN DAILY MAXIMUM	52	53.1	58.1	63.7	70.2	80.3	90.6	97.3	95.5	87.7	76.7	63.2	54.4	74.2
	HIGHEST DAILY MAXIMUM	52	77	81	87	93	101	109	109	107	112	97	84	78	112
	YEAR OF OCCURRENCE		1948	1986	1966	1989	1951	1954	1972	1993	1995	1980	1988	1958	SEP 1995
	MEAN OF EXTREME MAXS.	52	67.0	70.7	76.5	83.2	93.4	101.7	104.5	103.3	98.0	88.4	77.5	68.2	86.0
	NORMAL DAILY MINIMUM	30	22.0	26.3	30.2	35.7	43.8	51.2	56.1	54.2	46.8	37.4	27.8	21.7	37.8
	MEAN DAILY MINIMUM	52	21.5	25.9	29.9	35.4	43.6	50.6	56.0	53.6	46.8	37.2	27.6	21.8	37.5
	LOWEST DAILY MINIMUM	52	-7	-2	9	15	25	29	34	37	26	16	5	-8	-8
	YEAR OF OCCURRENCE		1982	1969	1971	1953	1964	1988	1987	1959	1986	1970	1958	1990	DEC 1990
	MEAN OF EXTREME MINS.	52	9.1	14.4	17.8	24.1	32.2	39.0	46.5	44.1	36.7	26.1	15.7	9.9	26.3
	NORMAL DRY BULB	30	37.8	42.4	46.8	53.4	62.2	70.9	76.7	74.6	66.8	56.9	45.2	37.8	56.0
	MEAN DRY BULB	52	37.3	42.0	46.8	52.7	61.9	70.6	76.6	74.5	67.3	56.9	45.4	38.0	55.8
	MEAN WET BULB	10	33.7	36.2	40.4	43.6	49.1	54.2	58.6	53.0	51.7	44.3	36.5	31.5	44.4
	MEAN DEW POINT	10	20.6	22.8	21.5	23.6	29.6	34.0	40.5	35.5	33.1	26.8	21.5	18.3	27.3
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.4	5.2	18.3	28.8	25.8	12.4	1.4	0.0	0.0	92.3	
MAXIMUM ≤ 32°	30	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.2	
MINIMUM ≤ 32°	30	29.1	23.4	19.6	8.8	1.2	0.1	0.0	0.0	0.4	6.4	23.2	29.3	141.5	
MINIMUM ≤ 0°	30	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.6	
H/C	NORMAL HEATING DEG. DAYS	30	843	633	564	361	140	16	0	0	51	265	594	843	4310
	NORMAL COOLING DEG. DAYS	30	0	0	0	13	53	193	363	298	105	14	0	0	1039
RH	NORMAL (PERCENT)														
	HOUR 04 LST	30	50	42	32	24	22	19	20	22	23	26	37	46	30
	HOUR 10 LST	30	34	28	22	17	16	14	14	14	15	18	27	35	21
	HOUR 16 LST														
	HOUR 22 LST														
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	26	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.3
	THUNDERSTORMS	26	0.0	0.0	0.0	0.2	1.1	1.2	3.9	2.3	0.9	0.4	0.1	0.0	10.1
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	1					3.2	1.6							
	MIDNIGHT-MIDNIGHT (OKTAS)	1					3.2	1.6				0.0			
	MEAN NO. DAYS WITH:														
	CLEAR														
	PARTLY CLOUDY														
	CLOUDY														
PR	MEAN STATION PRESSURE (IN)	14	25.81	25.79	25.71	25.70	25.71	25.70	25.80	25.80	25.79	25.80	25.88	25.90	25.78
	MEAN SEA-LEVEL PRES. (IN)	10	30.11	30.02	29.97	29.91	29.85	29.85	29.87	29.90	29.92	30.00	30.05	30.15	29.97
WINDS	MEAN SPEED (MPH)	5	7.2	8.3	9.7	10.4	9.1	8.4	8.0	8.0	7.6	8.2	7.4	7.5	8.3
	PREVAIL. DIR (TENS OF DEGS)	5	36	36	36	36	36	36	16	16	16	36	36	36	36
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	4	36	45	40	40	39	44	30	32	33	36	40	38	45
	DIR. (TENS OF DEGS)		35	27	01	35	25	35	25	01	14	28	34	35	27
	YEAR OF OCCURRENCE		1999	1999	1996	1999	1996	1998	1999	1999	1997	1999	1996	1999	FEB 1999
	MAXIMUM 5-SECOND:														
	SPEED (MPH)	4	46	60	51	52	53	54	40	40	41	45	53	48	60
DIR. (TENS OF DEGS)		36	23	01	35	25	35	32	16	14	31	34	35	23	
YEAR OF OCCURRENCE		1999	1999	1996	1999	1996	1998	1996	1997	1997	1999	1996	1998	FEB 1999	
PRECIPITATION	NORMAL (IN)	30	1.11	0.95	0.39	0.26	0.29	0.18	0.23	0.18	0.24	0.13	0.57	0.84	5.37
	MAXIMUM MONTHLY (IN)	50	8.93	6.01	2.94	2.26	1.30	1.31	1.47	0.64	1.28	1.58	2.59	5.79	8.93
	YEAR OF OCCURRENCE		1969	1969	1991	1956	1962	1998	1976	1983	1994	1957	1960	1966	JAN 1969
	MINIMUM MONTHLY (IN)	51	0.00	T	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	YEAR OF OCCURRENCE		1976	1967	1972	1973	1983	1981	1982	1980	1974	1973	1976	1975	MAY 1983
	MAXIMUM IN 24 HOURS (IN)	50	3.32	3.64	1.79	1.58	0.95	0.72	0.86	0.46	1.25	1.05	1.79	3.35	3.64
	YEAR OF OCCURRENCE		1952	1969	1995	1982	1953	1982	1976	1979	1994	1957	1950	1966	FEB 1969
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	3.7	3.4	3.2	2.1	2.5	1.7	2.3	2.1	2.0	1.4	2.8	2.6	29.8	
PRECIPITATION ≥ 1.00	30	0.3	0.1	*	*	0.0	0.0	0.0	0.0	0.0	0.0	*	0.2	0.6	
SNOWFALL	NORMAL (IN)	30	3.7	2.0	0.6	0.2	0.1	0.0	0.0	0.0	0.0	0.1	0.4	1.6	8.7
	MAXIMUM MONTHLY (IN)	47	23.2	31.9	14.5	8.8	2.3	0.0	0.0	0.0	T	1.8	3.9	13.2	31.9
	YEAR OF OCCURRENCE		1969	1969	1952	1956	1964				1955	1978	1964	1967	FEB 1969
	MAXIMUM IN 24 HOURS (IN)	47	18.0	14.2	7.5	8.8	2.3	0.0	0.0	0.0	T	1.8	3.9	6.7	18.0
	YEAR OF OCCURRENCE		1969	1976	1952	1956	1964				1955	1978	1964	1967	JAN 1969
	MAXIMUM SNOW DEPTH (IN)	48	22	14	13	1	2	0	0	0	0	0	4	6	22
	YEAR OF OCCURRENCE		1969	1976	1969	1980	1964						1964	1984	JAN 1969
	NORMAL NO. DAYS WITH:														
SNOWFALL ≥ 1.0	30	0.8	0.3	0.2	0.1	0.*	0.0	0.0	0.0	0.0	0.*	0.2	0.5	2.1	

PRECIPITATION (inches) 1999 BISHOP, CA (BIH)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0.71	0.54	0.05	0.44	T	0.04	0.03	0.01	0.00	0.00	1.64	0.22	3.68
1971	0.01	0.11	0.27	0.06	1.04	0.00	0.14	0.13	0.01	0.01	0.04	1.85	3.67
1972	T	0.00	0.00	T	0.11	0.25	0.04	0.09	0.36	0.90	0.68	0.01	2.44
1973	3.02	1.59	0.32	0.00	0.09	0.14	0.00	0.01	0.00	0.00	1.94	0.60	7.71
1974	1.48	0.00	1.75	0.21	0.33	0.00	0.16	T	0.00	0.80	T	0.64	5.37
1975	T	0.20	0.69	0.20	T	0.07	T	0.10	1.18	0.09	0.02	0.00	2.55
1976	0.00	1.37	0.05	0.05	0.59	0.17	1.47	T	0.94	0.02	0.00	T	4.66
1977	0.77	0.22	0.04	0.02	0.60	0.61	T	0.51	T	T	0.05	2.53	5.35
1978	2.68	3.33	1.64	0.22	0.00	0.02	0.02	0.01	0.51	0.18	0.51	0.50	9.62
1979	0.45	0.64	0.49	T	T	T	0.03	0.02	0.25	0.07	0.13	0.57	2.65
1980	1.56	2.72	0.28	0.43	0.10	T	0.35	0.00	0.14	T	0.08	1.25	6.91
1981	0.65	0.11	0.85	0.68	0.88	0.00	0.00	0.04	0.03	0.09	1.30	0.11	4.74
1982	1.43	0.02	0.50	1.62	0.08	1.29	0.00	0.51	0.74	0.68	0.87	2.67	10.41
1983	1.82	1.29	1.20	0.22	0.00	T	0.05	0.64	0.40	0.08	1.31	1.14	8.15
1984	T	0.36	0.09	0.02	T	0.04	1.04	0.58	T	0.16	1.97	0.85	5.11
1985	0.25	0.01	0.06	0.00	0.00	0.67	0.31	0.00	0.34	0.05	0.95	0.55	3.19
1986	0.86	3.04	1.00	0.65	T	0.00	0.31	0.06	0.12	0.00	0.03	0.08	6.15
1987	0.42	0.31	0.03	0.04	0.54	0.16	0.18	0.03	0.01	0.13	1.67	0.60	4.12
1988	0.87	0.30	0.07	0.63	0.12	0.23	T	T	0.50	0.00	0.12	0.68	3.52
1989	0.06	0.12	0.04	0.00	1.04	0.04	0.00	0.01	0.24	0.00	0.26	0.00	1.81
1990	0.95	0.50	0.00	0.56	0.21	0.15	0.26	0.45	0.28	0.00	0.00	0.00	3.36
1991	T	0.07	2.94	0.07	T	0.02	0.00	0.00	0.21	0.69	0.00	0.58	4.58
1992	0.38	1.31	0.67	0.00	0.06	0.30	0.12	0.06	0.05	0.53	0.00	1.50	4.98
1993	2.03	2.62	0.91	0.00	0.04	0.00	0.00	T	0.00	0.06	0.12	0.08	5.86
1994	0.04	1.33	0.57	0.03	0.54	0.00	0.00	0.00	1.28	0.24	0.05	0.25	4.33
1995	2.87	0.60	2.28	0.07	0.72	0.20	0.23	0.01	T	T	0.02	1.06	8.06
1996	0.38	1.85	0.79	0.43	0.02	0.00	0.12	T	T	0.77	0.78	T	5.14
1997		T	0.00	0.00	0.01	0.47	0.23	T	0.24	T	0.25	0.48	
1998	0.55	5.16	0.85	0.28	0.57	1.31	0.01	0.03	0.28	0.17	0.01	0.06	9.28
1999	1.10	0.41	0.01	0.38	0.08	0.02	0.04	0.19	0.15	0.00	0.02	0.00	2.40
POR= 87 YRS	1.23	0.99	0.63	0.27	0.28	0.13	0.10	0.10	0.20	0.21	0.40	0.77	5.31

WBAN : 23157

AVERAGE TEMPERATURE (°F) 1999 BISHOP, CA (BIH)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	37.9	45.3	46.9	49.5	64.2	70.6	77.8	77.9	65.0	54.9	45.8	35.4	55.9
1971	41.5	43.0	47.4	52.9	57.5	70.4	78.4	78.1	66.5	52.5	43.2	33.5	55.4
1972	37.7	44.8	55.0	53.7	62.9	72.6	78.8	74.6	65.2	53.8	43.0	34.8	56.4
1973	31.7	40.6	42.8	52.2	65.4	72.3	77.2	73.7	66.7	56.2	43.4	40.5	55.2
1974	29.7	41.8	49.0	52.7	64.6	73.9	76.4	73.7	70.5	55.7	45.8	36.9	55.9
1975	39.4	41.4	44.2	46.3	61.6	70.1	77.7	73.0	69.6	54.3	43.5	42.2	55.3
1976	40.0	40.3	46.3	50.7	64.7	69.3	76.4	70.2	66.8	57.6	50.3	39.1	56.0
1977	38.0	46.1	42.8	56.8	55.6	74.0	76.8	76.9	66.7	59.4	49.6	42.0	57.1
1978	39.0	42.7	49.7	50.9	60.7	70.3	76.1	74.6	63.8	60.2	43.0	35.6	55.6
1979	34.8	38.7	48.2	55.1	64.0	70.4	76.5	72.6	70.3	57.9	43.6	38.9	55.9
1980	40.2	42.5	43.2	53.0	57.4	67.4	76.6	74.1	66.5	56.5	45.9	42.7	55.5
1981	39.4	44.7	46.2	56.8	63.6	75.8	77.6	76.7	70.1	53.1	46.8	42.7	57.8
1982	31.9	43.5	43.8	52.1	62.3	68.3	75.3	74.4	64.7	54.5	40.4	37.3	54.0
1983	39.7	43.1	46.2	47.9	61.0	70.0	72.5	72.6	68.4	57.3	45.0	40.6	55.4
1984	42.4	43.1	50.6	52.0	68.6	70.5	78.0	75.1	69.4	52.3	42.4	32.1	56.4
1985	38.1	41.7	44.3	57.8	62.6	74.4	78.1	73.2	61.9	54.4	41.8	38.9	55.6
1986	42.3	44.0	50.0	53.0	62.8	72.1	73.3	75.6	60.6	53.9	45.6	38.1	55.9
1987	36.7	41.1	45.8	56.9	62.2	71.6	72.7	74.9	67.9	59.5	44.9	32.4	55.6
1988	36.8	44.9	49.0	53.8	61.1	70.4	79.2	75.1	66.4	61.8	45.3	34.6	56.5
1989	35.3	38.9	51.2	60.5	63.0	71.0	78.1	72.2	66.2	54.8	46.9	40.9	56.6
1990	38.2	39.1	50.5	58.2	61.3	71.7	77.7	73.3	67.8	57.7	45.8	31.6	56.1
1991	37.3	45.8	41.9	51.6	57.8	69.1	77.2	74.5	69.3	59.6	46.1	38.6	55.7
1992	37.5	44.0	47.5	59.0	66.6	68.6	74.7	76.3	69.1	60.2	43.5	34.3	56.8
1993	30.8	37.9	50.1	55.2	64.1	68.7	75.1	73.6	66.5	57.5	42.5	36.8	54.9
1994	39.9	37.7	51.0	55.6	62.4	73.9	79.8	76.8	65.5	54.5	37.2	36.9	55.9
1995		48.3	46.5	52.5	57.7	65.3	74.5	74.6	68.9	57.6	51.1	39.7	
1996	40.5	43.5	48.4	53.7	63.7	72.4	78.8	76.4	66.1	55.1	45.1	39.8	
1997	40.1	42.4	50.1	53.9	66.3	70.4	73.9	74.2	67.1	54.6	44.6	35.4	56.1
1998	39.2	38.1	47.1	49.2	54.1	65.5	75.7	76.2	66.9	52.7	43.4	37.3	53.8
1999	40.6	41.2	47.2	49.8	62.9	70.6	75.5	72.0	67.7	59.3	47.3	40.2	56.2
POR= 73 YRS	37.2	40.9	46.8	53.8	61.3	69.4	75.9	73.4	66.6	56.6	45.0	38.9	55.5

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HEATING DEGREE DAYS (base 65°F) 1999 BISHOP, CA (BIH)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0	0	59	312	572	911	719	607	539	356	234	29	4338
1971-72	0	0	100	391	648	972	841	578	305	330	103	1	4269
1972-73	0	1	36	343	654	930	1028	676	681	376	66	2	4793
1973-74	0	6	20	264	642	751	1088	642	488	364	87	0	4352
1974-75	0	0	6	277	568	864	787	654	639	552	147	22	4516
1975-76	0	1	0	330	640	702	767	711	573	423	56	21	4224
1976-77	1	5	24	227	432	798	829	524	682	245	304	2	4073
1977-78	0	0	64	169	455	704	796	622	464	419	151	1	3845
1978-79	0	1	93	165	653	906	931	731	514	291	97	18	4400
1979-80	0	0	6	232	634	805	759	646	667	352	236	44	4381
1980-81	0	0	27	298	567	684	787	563	574	249	90	4	3843
1981-82	0	0	8	361	541	685	1021	593	649	380	111	31	4380
1982-83	3	0	109	317	735	853	775	608	574	508	201	6	4689
1983-84	0	0	45	231	594	749	693	627	440	383	44	8	3814
1984-85	0	0	31	387	668	1014	828	645	632	208	84	20	4517
1985-86	0	0	113	326	687	802	699	583	458	354	134	0	4156
1986-87	1	0	199	336	576	824	871	662	588	239	116	4	4416
1987-88	15	0	1	187	597	1003	869	578	491	330	173	41	4285
1988-89	0	0	69	106	582	933	916	723	421	157	107	7	4021
1989-90	0	0	34	305	536	742	823	719	440	205	122	8	3934
1990-91	0	8	37	227	571	1029	852	530	711	391	225	3	4584
1991-92	0	1	6	200	559	813	845	602	536	186	23	36	3807
1992-93	0	0	0	146	638	947	1056	753	454	291	62	54	4401
1993-94	0	0	55	231	669	868	773	758	426	280	136	1	4197
1994-95	0	0	40	320	828	861		464	565	366	224	83	
1995-96	0	0	18	223	411	773	751	615	508		64	8	
1996-97	0	0	41	322	591	775	766	626	455	330	38	18	3962
1997-98	0	0	23	326	606	910	795	748	550	470	330	56	4814
1998-99	0	0	45	375	641	853	748	659	542	451	102	38	4454
1999-	0	0	15	173	529	764							

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COOLING DEGREE DAYS (base 65°F) 1999 BISHOP, CA (BIH)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	0	60	201	404	407	66	5	0	0	1143
1971	0	0	0	0	8	197	423	411	148	12	0	0	1199
1972	0	0	1	0	45	237	437	306	53	0	0	0	1079
1973	0	0	0	1	86	230	385	281	80	0	0	0	1063
1974	0	0	0	0	83	275	358	280	179	0	0	0	1175
1975	0	0	0	0	52	183	402	258	148	5	0	0	1048
1976	0	0	0	0	57	157	361	167	82	3	0	0	827
1977	0	0	0	5	18	281	373	378	120	1	0	0	1176
1978	0	0	0	0	25	167	353	309	64	25	0	0	943
1979	0	0	0	0	70	187	365	243	172	17	0	0	1054
1980	0	0	0	0	6	122	370	289	78	42	0	0	907
1981	0	0	0	9	53	334	398	371	170	0	0	0	1335
1982	0	0	0	0	35	134	331	299	106	0	0	0	905
1983	0	0	0	0	83	164	238	241	156	0	0	0	882
1984	0	0	0	0	159	177	411	320	168	0	0	0	1235
1985	0	0	0	0	17	312	417	260	27	7	0	0	1040
1986	0	0	0	0	73	220	264	334	78	0	0	0	969
1987	0	0	0	1	35	208	264	313	94	24	0	0	939
1988	0	0	0	0	60	209	447	321	117	11	0	0	1165
1989	0	0	0	29	49	197	415	231	77	0	0	0	998
1990	0	0	0	7	11	216	401	273	129	8	0	0	1045
1991	0	0	0	0	10	136	388	302	140	39	0	0	1015
1992	0	0	0	14	81	153	306	359	128	7	0	0	1048
1993	0	0	0	4	42	170	320	275	106	9	0	0	926
1994	0	0	0	5	61	276	466	374	61	1	0	0	1244
1995	0	0	0	0	5	97	300	303	142	0	0	0	
1996	0	0	0	0	31	236	437	360	82	20	0	0	
1997	0	0	0	4	85	189	282	292	91	8	0	0	951
1998	0	0	0	0	0	77	339	352	110	0	0	0	878
1999	0	0	0	1	42	212	335	224	103	3	0	0	920

SNOWFALL (inches) 1999 BISHOP, CA (BIH)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	0.0	0.0	T	2.3	0.1	T	0.0	0.1	0.0	0.0	2.5
1971-72	0.0	0.0	0.0	0.0	0.0	1.8	T	0.0	0.0	0.0	0.0	0.0	1.8
1972-73	0.0	0.0	0.0	0.0	T	0.0	6.0	T	1.0	0.0	0.0	0.0	7.0
1973-74	0.0	0.0	0.0	0.0	T	1.5	13.8	0.0	1.1	0.0	T	0.0	16.4
1974-75	0.0	0.0	0.0	0.0	0.0	T	0.0	T	T	0.0	0.0	0.0	T
1975-76	0.0	0.0	0.0	0.0	0.1	0.0	0.0	21.0	0.4	0.0	0.0	0.0	21.5
1976-77	0.0	0.0	0.0	0.0	0.0	T	2.6	T	0.4	0.0	T	0.0	3.0
1977-78	0.0	0.0	0.0	0.0	T	4.5	0.4	1.5	T	T	0.0	0.0	6.4
1978-79	0.0	0.0	0.0	1.8	2.1	0.6	4.8	T	0.8	0.0	T	0.0	10.1
1979-80	0.0	0.0	0.0	0.0	0.0	5.5	0.8	0.0	T	1.9	0.4	0.0	8.6
1980-81	0.0	0.0	0.0	0.0	0.0	T	6.0	T	3.8	0.3	0.0	0.0	10.1
1981-82	0.0	0.0	0.0	0.0	2.1	0.0	20.7	T	4.8	0.0	0.0	0.0	27.6
1982-83	0.0	0.0	0.0	0.0	1.2	T	8.1	T	1.1	0.0	0.0	0.0	10.4
1983-84	0.0	0.0	0.0	0.0	1.0	0.0	T	T	0.0	0.0	0.0	0.0	1.0
1984-85	0.0	0.0	0.0	0.0	1.5	7.9	T	T	0.5	0.0	0.0	0.0	9.9
1985-86	0.0	0.0	0.0	0.0	0.6	1.3	0.0	T	T	0.0	0.0	0.0	1.9
1986-87	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.5	0.0	0.0	T	0.0	1.4
1987-88	0.0	0.0	0.0	0.0	0.0	5.2	8.9	0.0	0.0	0.0	0.4	0.0	14.5
1988-89						0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0
1989-90	0.0	0.0	0.0	0.0	0.0	0.0	0.1	T	0.0	0.0	0.0	0.0	0.1
1990-91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
1991-92	0.0	0.0	0.0	0.0	0.0	0.0		0.2		0.0	0.0	0.0	
1992-93	0.0	0.0	0.0	0.0	0.0	1.0	15.8	8.3	0.0	0.0	0.0	0.0	25.1
1993-94	0.0	0.0	0.0	0.0	T	0.0	0.4		0.2	T	0.0	0.0	
1994-95	0.0	0.0	0.0	0.0	T	T	5.9	0.0	T	T	0.0	0.0	5.9
1995-96	0.0	0.0	0.0		0.0								
1996-97													
1997-98													
1998-99													
1999-													
POR= 47 YRS	0.0	0.0	T	0.0	0.3	1.3	3.9	1.5	0.7	0.3	0.1	0.0	8.1

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REFERENCE NOTES:

<p>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).</p> <p>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).</p> <p>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. NORMALS ARE 30-YEAR AVERAGES (1961 - 1990). 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 AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET. THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD.</p>	<p>GENERAL CONTINUED: CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED. 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.</p> <p>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 EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
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1999  
BISHOP,  
CALIFORNIA (BIH)

The station at Bishop is located at the Municipal Airport 2 1/2 miles east of the town, 1 mile west of the Owens River, on the floor of the Owens Valley, which is orientated northwest to southeast and at this point is 12 miles wide, level, and semi-arid. Peaks of the 12,000 to 14,000 feet Sierra Nevadas are 25 miles west, and the 12,000 to 14,000 feet White Mountains are 10 miles east. The northern end of the valley is partly cut off by 6,000 to 8,000 feet mountains about 45 miles distant. The southern end of the valley makes a gradual descent to the Mojave Desert about 150 miles distant.

During the summer and autumn, the Mojave Desert causes an early morning and late evening northerly wind. Conversely, in the heat of the afternoon, it causes a southerly wind that is occasionally strong. Summer skies are mostly clear with thunderstorms from May through August. The days are hot and dry, the nights cool.

Winter and spring, although seasons of adverse weather, are quite mild. The skies are partly cloudy with the years greatest amounts of precipitation falling during the months of November through April. At times, strong northerly winds blow, especially in the spring during the months of February, March, and April. East and west winds frequently give pronounced foehn effects and turbulence.

During the winter and spring, strong westerly winds aloft, flowing over the Sierra Nevadas, create the Sierra Wave, known to sailplane pilots the world over.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 13 and the average last occurrence in the spring is May 7.

# STATION LOCATION

BISHOP, CALIFORNIA

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE											ACQUISITION DATE	* Type M = AMOS T = AUTOB S = ASOS W = AWOS	REMARKS
						SEA LEVEL	GROUND												
							WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND	WIND			
<u>COOPERATIVE</u> Carson & Colorado RR Station, Laws, Calif. 5 miles NNE of Bishop Post Office	11/1/83	12/31/94	NA	37° 24'	118°21'	4147												Railway Agent was observer. No instrument record.	
W.A. Chalfant 263 W. Academy Avenue 1/4 mile NNW of P.O.	1/1/95	7/31/11	5 mi. SSW	37° 22'	118°24'													No instrument record.	
Paul E. Lodge 815 Home Street 1/2 mile N of P.O.	4/1/12	2/12/16	0.3 mi. NNE	37° 22'	118°24'													No instrument record.	
W.A. Chalfant 263 W. Academy Avenue	2/25/16	10/18/17	0.3 mi. SSW	37° 22'	118°24'													No instrument record.	
E.M. Nordyke Pine Street 3/4 mile NNE of P.O.	1/1/18	8/31/18	0.6 mi. NE	37° 22'	118°24'													No instrument record.	
<u>CITY</u> 525 Howard Street 3 blocks E & 3 blocks N of Bishop Post Office	6/17/43	3/28/44	0.5 mi. S	37° 22'	118°25'	4137	32	5	5					3					
<u>AIRPORT</u> Base Operations Bldg. Bishop Air Base	3/28/44	10/18/45	1.6 mi. E	37° 22'	118°22'	4108	44	4	4					3					
Ray Residence 1-1/2 miles W of P.O.	10/18/45	5/4/46	3.1 mi. W	37° 22'	118°28'		19	5	4					4					
150 Johnson Drive 1/2 mile E of P.O.	5/4/46	3/9/47	2 mi. E	37° 22'	118°26'	4119	21	4	4					3					
Base Operations Bldg. Bishop Airport	3/9/47	5/22/79	1.6 mi. ENE	37° 22'	118°22'	4108	40 c20	4	4	NA	NA	NA	NA	4	NA	NA		a - Installed 1/6/54. b - Raised 1/11/56. c - Lowered 2/15/66.	
NWS Building Bishop Airport	5/22/79	05/01/94	360 ft. WSW	37° 22'	118°22'	4110	d20	5	4	NA	NA	5 e5	4 e5	NA	NA			d - Not moved 5/22/79. e - Minor move 9/15/79.	
Bishop Airport	05/01/94	Present	NA	37°22'	118°22'	4110									S			ASOS Commissioned 05/01/94	

SUBSCRIPTION: Price and ordering information available through: National Climatic Data Center, Federal Building, Asheville, North Carolina 28801.  
INQUIRIES/COMMENTS CALL: (828) 271-4800

National Climatic Data Center  
151 Patton Avenue, Rm 120  
Asheville NC 28801-5001

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