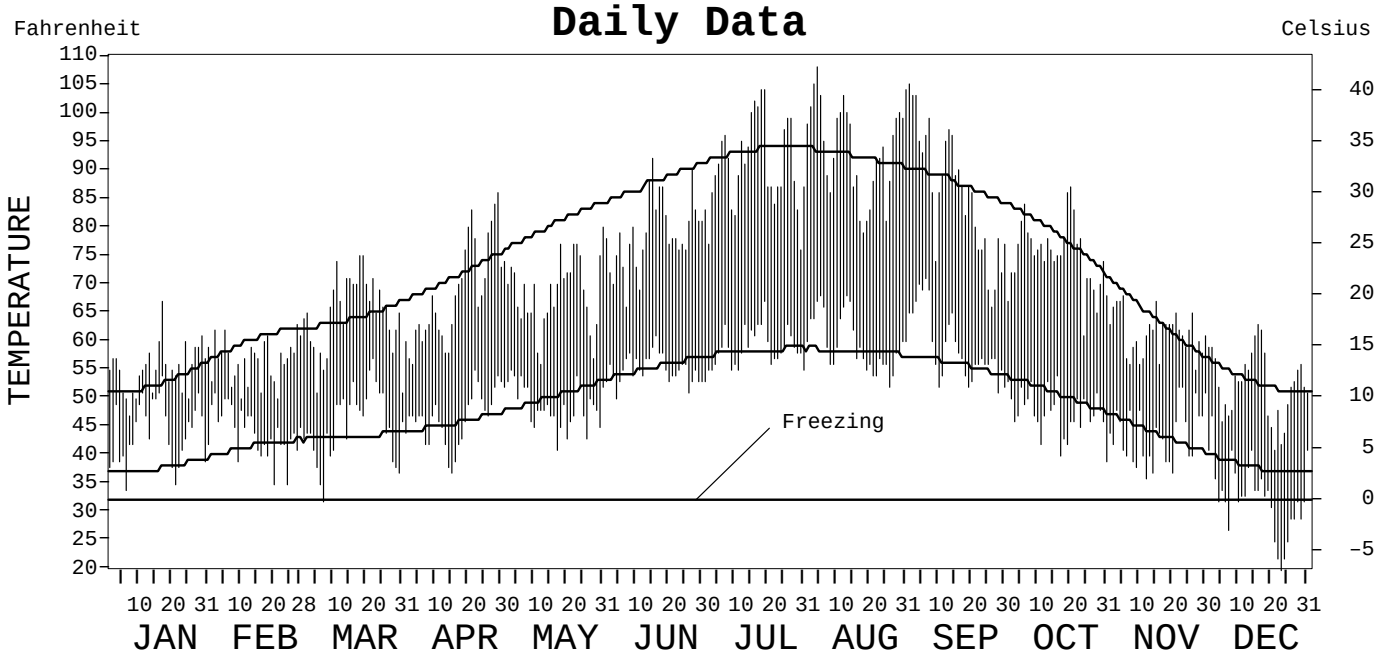
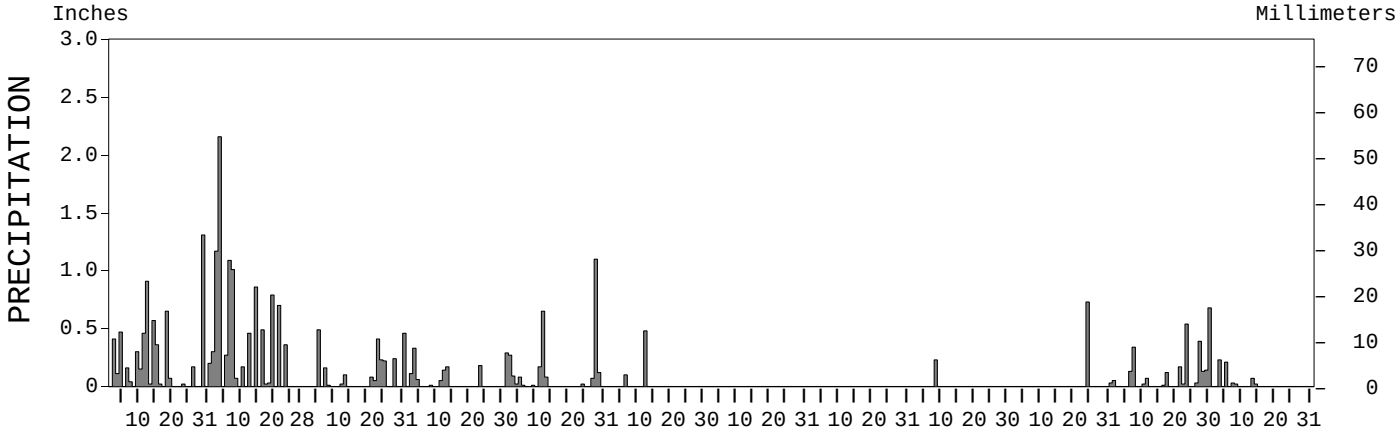
1998 LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA

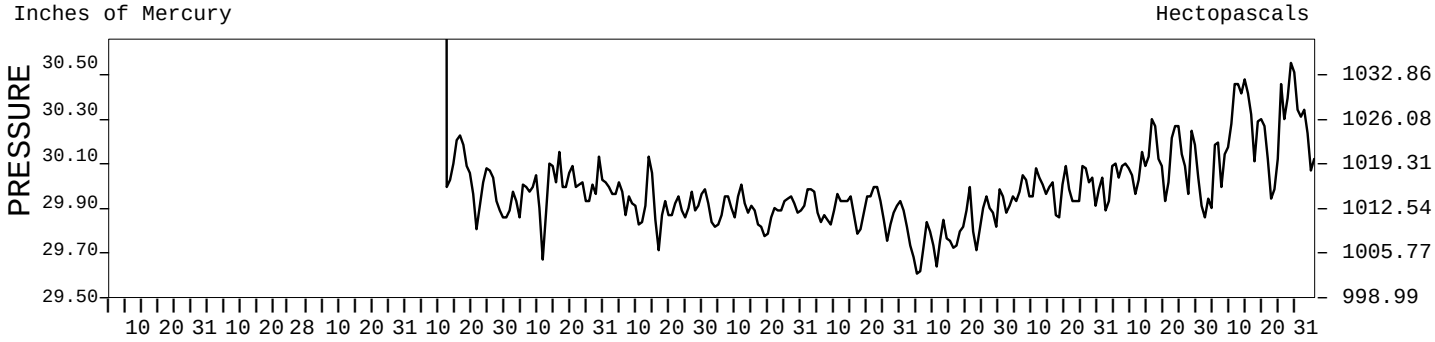
ISSN 0198-0807

SACRAMENTO,
CALIFORNIA (SAC)

Daily Data







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NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE
NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NORTH CAROLINA
DIRECTOR NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 1998

SACRAMENTO, CA (SAC)

LATITUDE: 38° 30′ 45″ N LONGITUDE: 121° 29′ 33″ W ELEVATION (FT): GRND: 21 BARO: 21 TIME ZONE: PACIFIC (UTC+ 8) WBAN: 23232

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	MEAN DAILY MAXIMUM	55.3	56.6	64.9	68.4	68.7	78.8	90.8	93.9	86.0	75.1	61.5	52.4	71.0
	HIGHEST DAILY MAXIMUM	67	63	75	86	80	92	104	108	105	87	68	63	108
	DATE OF OCCURRENCE	17	27	19+	29	31	15	19+	04	01	20	05	16	AUG 04
	MEAN DAILY MINIMUM	44.1	44.1	45.3	46.5	48.7	55.1	58.7	59.6	59.1	47.5	43.5	32.6	48.7
	LOWEST DAILY MINIMUM	34	35	32	37	41	50	53	52	51	39	36	20	20
	DATE OF OCCURRENCE	06	24+	07	15	17	04	01	26	28	31	12	23	DEC 23
	AVERAGE DRY BULB	49.7	50.4	55.1	57.5	58.7	67.0	74.8	76.8	72.6	61.3	52.5	42.5	59.9
	MEAN WET BULB					54.0	60.3	64.9		61.5	52.4	49.2	39.7	
	MEAN DEW POINT					50.7	56.4	60.2		55.4	44.7	46.4	36.5	
	NUMBER OF DAYS WITH:													
	MAXIMUM ≥ 90°	0	0	0	0	0	2	15	20	11	0	0	0	48
	MAXIMUM ≤ 32°	0	0	0	0	0	0	0	0	0	0	0	0	0
	MINIMUM ≤ 32°	0	0	1	0	0	0	0	0	0	0	0	15	16
	MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0
H/C	HEATING DEGREE DAYS	465	404	299	233	190	13	0	0	8	113	367	689	2781
	COOLING DEGREE DAYS	0	0	0	12	2	78	311	371	241	8	0	0	1023
RH	MEAN (PERCENT)				75	79	74	67	62	62	62	83	82	
	HOUR 04 LST				95	93	92	88	85	80	80	94	93	
	HOUR 10 LST				70	70	67	61	57	55	53	79	82	
	HOUR 16 LST				52	64	53	41	35	39	35	65	62	
	HOUR 22 LST				85	86	82	75	70	69	71	89	88	
S	PERCENT POSSIBLE SUNSHINE													
W/O	NUMBER OF DAYS WITH:													
	HEAVY FOG(VISBY ≤ 1/4 MI)	10	3	1	1	0	0	0	0	0	1	7	8	31
	THUNDERSTORMS	0	0	2	0	0	1	0	0	0	0	0	0	3
CLOUDINESS	AVG. SKY COVER (OKTAS)													
	SUNRISE – SUNSET	7	7	5										
	MIDNIGHT – MIDNIGHT													
	NUMBER OF DAYS WITH:													
	CLEAR	0	0	4										
	PARTLY CLOUDY	6	7	16										
	CLOUDY	25	21	11										
PR	MEAN STATION PRESS. (IN.)					29.96	29.90	29.87	29.87	29.79	29.96	30.06	30.23	
	MEAN SEA-LEVEL PRESS. (IN.)					29.98	29.92	29.89	29.89	29.81	29.98	30.08	30.25	
WINDS	RESULTANT SPEED (MPH)	4.7	6.9	2.0	3.0	4.0	5.6	4.9	3.2	3.9	1.8	2.6	1.0	2.8
	RES. DIR. (TENS OF DEGS.)	14	14	22	20	19	22	21	21	21	29	16	31	19
	MEAN SPEED (MPH)	7.8	9.7	7.3	6.6	7.1	8.6	6.9	5.6	6.2	5.7	5.4	4.7	6.8
	PREVAIL.DIR.(TENS OF DEGS.)	14	12	20	22	22	22	19	20	21	32	15	33	20
	MAXIMUM 2-MINUTE WIND:													
	SPEED (MPH)	21	35	23	23	26	38	18	17	25	30	36	25	38
	DIR. (TENS OF DEGS.)	14	14	14	33	23	32	22	21	22	34	14	32	32
	DATE OF OCCURRENCE	29+	07	31+	25+	16	16	28+	25	04	16	07	19	JUN 16
	MAXIMUM 5-SECOND WIND:													
	SPEED (MPH)					31	46	23	22	30	38	46	32	
	DIR. (TENS OF DEGS.)					23	32	21	22	22	34	15	32	
	DATE OF OCCURRENCE					16	16	29+	08	04	16	07	19	
PRECIPITATION	WATER EQUIVALENT:													
	TOTAL (IN.)	6.40	9.95	2.47	1.05	2.98	0.58	0.00	0.00	0.23	0.76	2.84	0.58	27.84
	GREATEST 24-HOUR (IN.)	1.31	2.16	0.49	0.33	1.15	0.48	0.00	0.00	0.23	0.73	0.68	0.23	2.16
	DATE OF OCCURRENCE	29	03	05	03	27-28	12			08	24	30	03	FEB 03
	NUMBER OF DAYS WITH:													
	PRECIPITATION ≥ 0.01	19	16	12	8	14	2	0	0	1	2	15	6	95
	PRECIPITATION ≥ 0.10	14	13	8	5	6	2	0	0	1	1	9	2	61
	PRECIPITATION ≥ 1.00	1	4	0	0	1	0	0	0	0	0	0	0	6
SNOWFALL	SNOW,ICE PELLETS,HAIL:													
	TOTAL (IN.)	0.0	0.0	0.0										
	GREATEST 24-HOUR (IN.)	0.0	0.0	0.0										
	DATE OF OCCURRENCE													
	MAXIMUM SNOW DEPTH (IN.)		0											
	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:													
	SNOWFALL ≥ 1.0	0	0	0										

NORMALS, MEANS, AND EXTREMES

SACRAMENTO, CA (SAC)

LATITUDE: 38° 30′ 45″ N LONGITUDE: 121° 29′ 33″ W ELEVATION (FT): GRND: 21 BARO: 21 TIME ZONE: PACIFIC (UTC+ 8) WBAN: 23232

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	52.7	60.0	64.0	71.1	80.3	87.8	93.2	92.1	87.3	77.9	63.1	52.7	73.5
	MEAN DAILY MAXIMUM	51	53.0	59.8	64.3	71.5	79.8	87.2	91.1	91.6	87.6	77.8	63.7	53.3	73.4
	HIGHEST DAILY MAXIMUM	48	70	76	88	95	105	115	114	110	108	101	87	72	115
	YEAR OF OCCURRENCE		1991	1992	1988	1996	1984	1961	1972	1996	1988	1970	1960	1989	JUN 1961
	MEAN OF EXTREME MAXS.	51	63.3	69.9	76.2	85.5	95.4	102.8	102.6	103.4	100.4	91.8	76.3	63.9	86.0
	NORMAL DAILY MINIMUM	30	37.7	41.4	43.2	45.5	50.3	55.3	58.1	58.0	55.7	50.4	43.4	37.8	48.1
	MEAN DAILY MINIMUM	51	38.1	41.3	43.0	45.8	50.4	55.1	56.7	57.7	55.9	50.2	42.8	37.9	47.9
	LOWEST DAILY MINIMUM	48	23	23	26	32	36	41	48	49	43	36	26	18	18
	YEAR OF OCCURRENCE		1979	1989	1971	1953	1974	1990	1983	1978	1978	1989	1993	1990	DEC 1990
	MEAN OF EXTREME MINS.	51	27.7	31.4	34.0	37.9	42.0	47.9	51.2	52.0	48.7	41.4	32.3	28.1	39.5
	NORMAL DRY BULB	30	45.2	50.7	53.6	58.3	65.3	71.6	75.7	75.1	71.5	64.2	53.3	45.3	60.8
	MEAN DRY BULB	51	45.7	50.5	53.8	58.8	65.0	71.1	74.0	74.6	71.7	64.0	53.3	45.5	60.7
	MEAN WET BULB	13	43.8	47.3	50.2	52.8	55.8	59.6	58.1	55.6	54.4	51.0	44.1	38.9	51.0
	MEAN DEW POINT	13	40.9	43.1	45.5	46.3	48.4	51.5	50.9	48.9	47.5	44.1	39.6	35.9	45.2
	NORMAL NO. DAYS WITH:														
	MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.4	5.8	12.5	22.5	20.0	12.4	2.8	0.0	0.0	76.4
	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
	MINIMUM ≤ 32°	30	7.0	1.8	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.2	6.9	17.4
	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	614	400	357	230	80	12	0	0	16	78	351	611	2749
	NORMAL COOLING DEG. DAYS	30	0	0	0	29	89	210	332	313	211	53	0	0	1237
RH	NORMAL (PERCENT)	30	83	77	72	64	59	55	53	56	57	63	76	83	66
	HOUR 04 LST	30	90	87	84	82	81	78	76	78	77	80	86	90	82
	HOUR 10 LST	30	85	77	69	58	50	47	47	50	50	57	74	84	62
	HOUR 16 LST	30	70	59	53	43	35	31	28	29	31	38	58	70	45
	HOUR 22 LST	30	86	81	77	73	69	64	61	64	65	70	81	86	73
S	PERCENT POSSIBLE SUNSHINE	47	48	65	74	82	90	94	97	96	93	86	66	49	78
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG(VISBY≤1/4 MI)	50	10.0	5.3	1.7	0.3	0.2	0.0	0.0	0.0	0.2	1.4	5.0	9.4	33.5
	THUNDERSTORMS	50	0.4	0.6	0.8	0.7	0.4	0.3	0.2	0.1	0.5	0.3	0.2	0.2	4.7
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	48	5.7	5.0	4.5	3.8	2.9	1.8	0.9	1.1	1.5	2.6	4.5	5.5	3.3
	MIDNIGHT-MIDNIGHT (OKTAS)	31	5.3	4.6	3.9	3.3	2.3	1.7	0.8	1.0	1.2	2.1	3.9	4.8	2.9
	MEAN NO. DAYS WITH:														
	CLEAR	49	6.5	7.6	9.9	11.9	16.9	21.7	26.9	25.1	23.2	18.9	9.8	7.6	186.0
	PARTLY CLOUDY	49	5.9	7.0	8.7	9.6	8.6	5.9	3.2	4.1	4.2	6.0	7.4	5.8	76.4
	CLOUDY	49	18.7	13.6	12.4	8.4	5.5	2.4	1.0	1.3	2.1	5.4	12.4	17.0	100.2
PR	MEAN STATION PRESSURE(IN)	21	30.10	30.05	29.99	29.98	29.90	29.86	29.85	29.86	29.86	29.96	30.06	30.12	29.97
	MEAN SEA-LEVEL PRES. (IN)	13	30.13	30.06	30.03	30.00	29.93	29.87	29.87	29.87	29.88	29.97	30.09	30.14	29.99
WINDS	MEAN SPEED (MPH)	33	7.3	7.8	8.7	8.6	9.1	9.7	9.2	8.7	7.5	6.7	6.3	6.6	8.0
	PREVAIL.DIR(TENS OF DEGS)	18	14	14	22	22	22	21	21	20	20	18	14	14	21
	FASTEST MILE:														
	SPEED (MPH)	49	60	51	66	45	74	47	36	38	42	68	70	70	74
	DIR.		SE	SE	S	SW	SW	SW	SW	SW	NW	SE	SE	SE	SW
	YEAR OF OCCURRENCE		1954	1959	1952	1955	1993	1950	1956	1954	1965	1950	1953	1952	MAY 1993
	PEAK GUST :														
	SPEED (MPH)														
	DIR. (TENS OF DEGS)														
	YEAR OF OCCURRENCE														
PRECIPITATION	NORMAL (IN)	30	3.73	2.87	2.57	1.16	0.27	0.12	0.05	0.07	0.37	1.08	2.72	2.51	17.52
	MAXIMUM MONTHLY (IN)	59	9.69	9.95	8.13	4.76	3.13	1.26	0.79	0.65	2.78	7.51	7.41	12.64	12.64
	YEAR OF OCCURRENCE		1995	1998	1995	1941	1948	1993	1974	1976	1989	1962	1970	1955	DEC 1955
	MINIMUM MONTHLY (IN)	59	0.16	0.15	0.05	0.00	T	0.00	0.00	0.00	0.00	0.00	T	0.00	0.00
	YEAR OF OCCURRENCE		1984	1964	1994	1949	1992	1981	1983	1982	1980	1966	1995	1989	DEC 1989
	MAXIMUM IN 24 HOURS (IN)	50	3.41	3.01	2.30	2.22	1.38	1.21	0.00	0.32	0.23	5.59	2.95	3.64	5.59
	YEAR OF OCCURRENCE		1967	1986	1982	1958	1994	1993		1997	1998	1962	1970	1955	OCT 1962
	NORMAL NO. DAYS WITH:														
	PRECIPITATION ≥ 0.01	30	9.6	8.1	8.6	5.1	2.1	1.1	0.3	0.5	1.7	3.6	7.9	8.7	57.3
	PRECIPITATION ≥ 1.00	30	0.8	0.5	0.3	0.1	*	0.0	0.0	0.0	*	0.2	0.6	0.3	2.8
SNOWFALL	NORMAL (IN)	30	T	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.1
	MAXIMUM MONTHLY (IN)	50	T	2.0	T	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T	2.0
	YEAR OF OCCURRENCE		1974	1976	1982		1994							1995	FEB 1976
	MAXIMUM IN 24 HOURS (IN)	50	T	2.0	T	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T	2.0
	YEAR OF OCCURRENCE		1974	1976	1982		1994							1995	FEB 1976
	MAXIMUM SNOW DEPTH (IN)	48	0	0	0	0	0	0	0	0	0	0	0	0	0
	YEAR OF OCCURRENCE														
	NORMAL NO. DAYS WITH:														
	SNOWFALL ≥ 1.0	30	0.0	0.*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

PRECIPITATION (inches) 1998 SACRAMENTO, CA (SAC)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	8.50	6.98	0.94	1.63	0.04	0.08	T	0.00	0.02	0.72	0.60	4.41	23.92
1970	7.88	1.58	1.62	0.18	T	0.16	0.00	0.00	0.00	0.84	7.41	3.40	23.07
1971	0.90	0.56	2.05	0.44	0.77	0.01	0.00	0.00	T	0.13	0.87	4.05	9.78
1972	0.81	1.28	0.29	1.39	0.28	0.19	0.00	0.00	0.90	1.75	5.14	1.88	13.91
1973	6.87	5.64	2.76	0.05	0.13	0.00	0.00	0.00	0.33	1.64	6.27	2.79	26.48
1974	3.58	1.37	3.27	0.96	0.01	0.50	0.79	T	0.00	1.16	0.66	2.86	15.16
1975	0.73	4.59	4.28	0.81	T	T	0.04	0.23	T	2.03	0.29	0.18	13.18
1976	0.36	1.49	0.44	1.53	0.00	0.04	0.00	0.65	0.52	0.02	0.55	0.65	6.25
1977	1.17	1.17	1.27	0.30	0.73	0.00	T	0.00	0.76	0.12	1.92	4.27	11.71
1978	9.14	4.46	3.38	2.31	T	T	0.00	T	0.30	T	3.20	0.95	23.74
1979	5.66	4.55	2.47	0.76	0.14	0.00	0.25	0.00	T	1.62	1.48	3.41	20.34
1980	5.64	7.12	2.62	1.06	0.49	0.04	0.40	0.00	0.00	0.06	0.12	1.79	19.34
1981	4.56	0.87	3.55	0.66	0.50	0.00	0.00	0.00	0.25	2.57	6.09	3.28	22.33
1982	5.50	2.35	7.12	3.07	T	0.15	0.00	0.00	1.81	2.61	5.74	3.25	31.60
1983	4.92	5.56	6.75	4.21	0.25	0.40	0.00	0.11	0.66	0.40	4.91	5.26	33.43
1984	0.16	1.22	1.35	0.34	0.01	0.10	T	0.01	0.07	1.39	3.61	1.23	9.49
1985	0.66	1.52	2.01	T	0.01	0.15	T	0.06	0.56	0.53	3.72	2.34	11.56
1986	3.67	8.60	3.20	0.91	0.07	0.00	0.00	0.00	0.60	0.19	0.14	0.76	18.14
1987	2.29	3.23	3.05	0.20	T	T	0.00	0.00	0.00	1.28	2.53	3.25	15.83
1988	2.96	0.99	0.17	1.58	0.89	0.19	0.00	0.00	0.00	0.19	1.68	2.73	11.38
1989	0.71	1.25	6.29	0.31	0.06	0.43	0.00	0.20	2.78	1.76	1.32	0.00	15.11
1990	4.97	2.91	0.93	0.73	2.10	0.00	T	0.00	0.00	0.09	0.43	1.60	13.76
1991	0.36	3.10	6.14	0.29	0.25	0.53	T	0.14	0.04	1.25	0.19	1.60	13.89
1992	1.39	5.47	2.05	0.92	T	0.15	0.00	T	0.00	1.31	0.28	4.94	16.51
1993	8.63	4.94	2.39	0.63	1.14	1.26	0.00	0.00	0.00	0.47	2.28	1.75	23.49
1994	2.12	3.15	0.05	0.67	1.68	0.00	0.00	0.00				2.68	
1995	9.69	0.20	8.13	1.46	1.06	0.47	0.00	0.00	0.00	T	T	5.49	26.50
1996	4.16	5.49	1.73	1.25	0.79	0.00	0.00	T	T	0.67	1.97	6.39	22.45
1997	9.05	0.28	0.34	0.18	0.35	0.59	0.00	0.32	0.16	0.82	4.56	2.91	19.56
1998	6.40	9.95	2.47	1.05	2.98	0.58	0.00	0.00	0.23	0.76	2.84	0.58	27.84
POR= 59 YRS	3.82	3.06	2.53	1.27	0.52	0.15	0.00	0.01	0.20	0.90	2.15	2.92	17.53

WBAN : 23232

AVERAGE TEMPERATURE (°F) 1998 SACRAMENTO, CA (SAC)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	44.0	47.4	52.4	57.1	66.9	69.0	76.3	77.9	74.0	61.0	53.9	48.0	60.7
1970	49.3	51.9	54.9	56.1	67.6	71.5	76.8	74.7	72.8	62.1	55.3	46.1	61.6
1971	45.3	48.2	52.6	56.4	61.8	70.5	76.2	76.8	72.2	61.2	52.7	43.0	59.7
1972	41.0	51.4	58.6	58.6	66.9	72.5	76.0	75.9	69.5	62.0	49.7	40.6	60.2
1973	44.3	53.1	51.1	60.8	69.4	74.6	76.8	74.2	70.8	63.4	51.9	46.9	61.4
1974	46.3	48.4	54.1	56.6	63.8	70.5	74.1	74.0	72.2	66.3	53.2	46.4	60.5
1975	43.4	49.2	50.3	51.8	68.2	73.2	77.3	76.9	77.4	65.1	54.6	47.4	61.2
1976	47.2	51.9	54.6	57.9	70.1	73.9	76.5	73.4	71.8	66.1	56.7	46.5	62.2
1977	43.8	52.4	51.0	62.2	59.4	72.2	74.2	73.9	68.8	63.9	54.5	49.6	60.5
1978	50.3	51.9	57.2	55.8	66.4	70.0	75.1	75.0	69.6	65.9	49.8	41.7	60.7
1979	45.3	48.8	54.6	56.9	66.7	71.9	75.6	73.1	74.6	64.0	51.7	46.7	60.8
1980	46.9	51.9	51.6	59.6	62.7	66.8	75.0	71.4	69.4	63.7	53.5	45.4	59.8
1981	46.8	50.4	51.2	57.9	64.7	74.8	75.1	74.5	69.7	63.5	60.3	48.6	61.5
1982	42.0	50.5	50.8	55.5	64.6	66.2	72.1	71.7	68.2	61.0	46.9	43.0	57.7
1983	43.1	52.2	53.4	54.7	64.2	70.8	72.2	76.6	74.9	67.5	53.7	51.0	61.2
1984	48.2	50.2	58.1	58.7	70.0	71.7	78.3	75.3	75.5	62.8	53.6	45.1	62.3
1985	42.4	51.4	50.8	61.5	63.2	75.1	77.0	72.9	68.5	63.3	49.8	42.6	59.9
1986	51.4	54.7	58.8	58.4	65.5	71.6	75.0	75.2	66.2	64.8	55.5	45.7	61.9
1987	44.9	51.3	53.8	62.7	69.1	72.4	71.8	74.9	71.8	67.6	53.4	47.2	61.7
1988	48.0	54.2	58.0	60.9	64.7	72.9	80.4	75.9	72.5	66.5	53.8	46.2	62.8
1989	44.1	47.1	55.6	63.2	65.8	71.7	76.2	73.8	69.6	62.4	54.3	44.3	60.7
1990	47.5	48.6	55.4	63.4	65.5	72.4	77.7	76.6	74.0	66.6	53.0	41.0	61.8
1991	47.3	55.0	51.0	58.0	63.3	70.2	77.1	73.2	74.8	68.8	55.9	46.3	61.7
1992	43.6	54.1	56.2	62.1	70.6	70.9	75.3	77.0	72.4	66.6	53.4	44.1	62.2
1993	45.2	49.5	57.9	58.4	64.6	71.7	74.3	74.1	71.5	65.0	51.5	44.3	60.7
1994	47.0	48.8	56.7	60.1	65.3	71.6	74.0	75.2	71.7		47.6	43.7	
1995	51.3	52.1	53.0	57.7	63.1	69.0	74.2	75.1	72.3		59.3	51.1	
1996	48.2	54.3	56.7	61.1	67.0	73.3	78.7	78.3	71.0	63.9	55.0	51.1	63.2
1997	48.3	52.7	57.9	62.4	71.9	72.9	76.5	75.9	75.1	64.1	56.9	46.2	63.4
1998	49.7	50.4	55.1	57.5	58.7	67.0	74.8	76.8	72.6	61.3	52.5	42.5	59.9
POR= 58 YRS	45.6	50.4	53.7	58.6	64.9	70.9	74.1	74.4	71.6	63.9	53.1	45.7	60.6

HEATING DEGREE DAYS (base 65°F) 1998 SACRAMENTO, CA (SAC)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	0	0	1	129	323	519	478	359	304	258	56	9	2436
1970-71	0	0	4	129	286	578	603	466	379	249	114	14	2822
1971-72	0	0	33	191	363	673	731	390	197	190	63	11	2842
1972-73	0	0	6	115	451	749	636	325	424	141	15	1	2863
1973-74	0	0	0	77	384	553	571	456	332	251	93	9	2726
1974-75	7	0	0	44	347	569	661	435	449	389	69	1	2971
1975-76	0	0	0	72	306	539	547	374	315	211	1	3	2368
1976-77	0	0	1	44	252	567	650	345	424	92	187	9	2571
1977-78	0	0	17	68	309	472	451	362	235	269	46	0	2229
1978-79	0	0	11	51	449	715	606	446	313	236	57	2	2886
1979-80	0	0	0	100	391	558	551	373	408	164	107	29	2681
1980-81	2	0	4	134	339	596	557	405	420	229	81	2	2769
1981-82	0	0	9	66	145	498	708	398	434	282	70	40	2650
1982-83	3	0	31	125	532	675	670	353	354	303	99	4	3149
1983-84	3	0	0	7	333	425	514	421	206	191	22	11	2133
1984-85	0	0	0	115	335	611	693	377	433	122	89	11	2786
1985-86	0	2	15	95	450	689	411	284	192	200	73	0	2411
1986-87	0	0	53	47	277	593	614	377	340	95	37	0	2433
1987-88	1	0	0	11	339	544	522	307	212	138	94	27	2195
1988-89	0	0	3	38	329	576	640	496	285	106	50	3	2526
1989-90	0	0	11	107	316	634	536	453	289	71	53	6	2476
1990-91	0	0	0	24	356	739	543	274	427	205	104	6	2678
1991-92	0	0	0	82	267	572	657	310	265	104	0	9	2266
1992-93	0	0	0	24	340	643	605	426	214	202	55	21	2530
1993-94	0	0	5	33	399	634	550	449	248	147	48	1	2514
1994-95	0	0	0		515	654	415	354	364	210	105	26	
1995-96	0	0	0		166	421	513	302	250	154	21	1	
1996-97	0	0	0	121	294	423	511	336	214	104	7	1	2011
1997-98	0	0	0	56	248	577	465	404	299	233	190	13	2485
1998-	0	0	8	113	367	689							

WBAN : 23232

COOLING DEGREE DAYS (base 65°F) 1998 SACRAMENTO, CA (SAC)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	0	0	0	1	108	136	361	409	278	13	0	0	1306
1970	0	0	0	0	143	208	374	305	245	46	0	0	1321
1971	0	0	0	0	22	186	355	375	254	82	0	0	1274
1972	0	0	6	5	129	245	351	349	147	30	0	0	1262
1973	0	0	0	19	156	295	373	293	181	34	0	0	1351
1974	0	0	0	5	61	180	296	285	222	89	0	0	1138
1975	0	0	0	0	177	258	388	375	375	81	0	0	1654
1976	0	0	1	8	167	278	363	270	213	83	8	0	1391
1977	0	0	0	12	19	230	290	284	139	40	0	0	1014
1978	0	0	0	0	98	157	318	315	157	87	0	0	1132
1979	0	0	0	0	117	214	336	260	295	72	0	0	1294
1980	0	0	0	8	42	91	317	207	145	99	0	0	909
1981	0	0	0	26	78	303	318	301	155	28	7	0	1216
1982	0	0	0	2	67	83	230	213	133	9	0	0	737
1983	0	0	0	0	81	183	235	368	304	92	0	0	1263
1984	0	0	0	6	183	216	419	327	320	57	0	0	1528
1985	0	0	0	22	41	319	380	254	128	48	0	0	1192
1986	0	0	10	9	95	207	315	321	95	47	0	0	1099
1987	0	0	0	34	171	234	220	314	212	100	0	0	1285
1988	0	0	5	22	88	269	484	346	233	92	0	0	1539
1989	0	0	1	60	83	211	354	280	158	32	0	0	1179
1990	0	0	0	33	75	236	399	367	276	82	0	0	1468
1991	0	0	0	3	54	171	379	261	300	208	0	0	1376
1992	0	0	0	23	180	193	330	381	231	81	0	0	1419
1993	0	0	1	9	49	227	294	291	207	38	0	0	1116
1994	0	0	0	9	67	205	285	320	209		0	0	
1995	0	0	0	0	54	152	294	322	228		0	0	
1996	0	0	0	42	91	258	430	422	187	96	0	0	1526
1997	0	0	1	31	227	244	362	348	312	33	11	0	1569
1998	0	0	0	12	2	78	311	371	241	8	0	0	1023

SNOWFALL (inches) 1998 SACRAMENTO, CA (SAC)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970–71	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
1971–72	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
1972–73	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1973–74	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	T
1974–75	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
1975–76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	2.0
1976–77	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1977–78	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1978–79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1979–80	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
1980–81	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
1981–82	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
1982–83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983–84	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1984–85	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1985–86	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1986–87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1987–88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1988–89	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1989–90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1990–91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1991–92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992–93	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1993–94	0.0	0.0	0.0	0.0	0.0	T	0.0	T	0.0	0.0	T	0.0	T
1994–95	0.0	0.0		0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
1995–96	0.0	0.0	0.0	0.0	0.0	T	0.0	T	0.0	0.0	0.0	0.0	T
1996–97	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
1997–98	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0				
1998–													
POR= 48 YRS	0.0	0.0	0.0	0.0	0.0	T	T	0.0	T	0.0	T	0.0	T

WBAN : 23232

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.
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.

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.

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.

1998
SACRAMENTO, CALIFORNIA (SAC)

Sacramento, and the lower Sacramento Valley, has a mild climate with abundant sunshine most of the year. A nearly cloud–free sky prevails throughout the summer months, and in much of the spring and fall. The summers are usually dry with warm to hot afternoons and mostly mild nights. The rainy season generally is November through March. About 75 percent of the annual precipitation occurs then, but measurable rain falls only on an average of nine days per month during that period. The shielding effect of mountains to the north, east, and west usually modifies winter storms. The Sierra Nevada snow fields, only 70 miles east of Sacramento, usually provide an adequate water supply during the dry season, and an important recreational area in winter. Heavy snowfall and torrential rains frequently fall on the western Sierra slopes, and may produce flood conditions along the Sacramento River and its tributaries. In the valley, however, excessive rainfall as well as damaging winds are rare.

The prevailing wind at Sacramento is southerly every month but November, when it is northerly. Topographic effects, the north–south alignment of the valley, the coast range, and the Sierra Nevada strongly influence the wind flow in the valley. A sea level gap in the coast range permits cool, oceanic air to flow, occasionally, into the valley during the summer season with a marked lowering of temperature through the Sacramento–San Joaquin River Delta to the capital. In the spring and fall, a large north–to–south pressure gradient develops over the northern part of the state. Air flowing over the Siskiyou mountains to the north warms and dries as it descends to the valley floor. This gusty, blustery north wind is a local variation of the chinook. It apparently carries a form of pollen which may cause allergic responses by susceptible individuals.

As is well known, relative humidity has a marked influence on the reactions of plants and animals to temperature. The extremely low relative humidity that ordinarily accompanies high temperatures in this valley should be considered when comparing temperatures here with those of cities in more humid regions. The extreme hot spells, with temperatures exceeding 100 degrees, are usually caused by air flow from a sub–tropical high pressure area that brings light to nearly calm winds and humidities below 20 percent.

Thunderstorms are few in number, usually mild in character, and occur mainly in the spring. An occasional thunderstorm may drift over the valley from the Sierra Nevada in the summer. Snow falls so rarely, and in such small amounts, that its occurrence may be disregarded as a climatic feature. Heavy fog occurs mostly in midwinter, never in summer, and seldom in spring or autumn. An occasional winter fog, under stagnant atmospheric conditions, may continue for several days. Light and moderate fogs are more frequent, and may come anytime during the wet, cold season. The fog is the radiational cooling type, and is usually confined to the early morning hours.

Sacramento is the geographical center of the great interior valley of California that reaches from Red Bluff in the north to Bakersville in the south. This predominantly agricultural region produces an extremely wide and abundant variety of fruits, grains, and vegetables ranging from the semi–tropical to the hardier varieties.

Based on the 1951–1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is December 1 and the average last occurrence in the spring is February 14.

STATION LOCATION

SACRAMENTO, CALIFORNIA

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE SEA LEVEL: GROUND TEMPERATURE SITE	ELEVATION ABOVE GROUND: WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET RAIN GAGE	WEIGHING RAIN GAGE	8 INCH RAIN GAGE	HYGROTHERMOMETER	AUTOMATIC OBSERVING	EQUIPMENT *	REMARKS
CITY																	
4th & J Streets St. George Building	7/01/77	11/27/79					70	46					57				Thermometer shelter most likely attached to window directly above street.
Second & K Streets Fratts Building	11/28/79	5/31/82	570 ft.WSW	38° 35'	121°31'	30	71	37					54				Thermometer shelter attached to window.
1006 Second Street Arcade Building	6/01/82	1/31/84	100 ft. N			26	72	37					58				Thermometer shelter attached to window.
117 J Street Lyon & Curtis Building	2/01/84	4/30/94	200 ft.WSW	38° 35'	121°30'	28	70	A62					57				A - 32 ft. (Window exposure) until moved to roof 8/18/85.
7th & K Street Old P.O. Building	5/01/94	10/31/33	2250 ft. ESE	38° 35'	121°30'	26	117	106			B 100		C100				B - Added 9/1/02; 112 ft. to 2/9/05. C - 112 ft. from 9/1/02 to 2/9/05.
9th & I Street P.O. & Court House Building	11/01/33	11/19/58	1375 ft. NE	38° 35'	121°30'	25	E 115	D87			84		F83				D - 92 ft. from 7/11/34 to 3/14/52. E - Removed 10/1/51. F - 84 ft. to 3720/52.
1725 23rd Street State of Calif. Bldg.	11/19/58	9/28/64	1.4 mi.SSE	38° 34'	121°29'	23	53	37			36	G84	36				G - Installed at old site for comparison of catch.
P.O. & Courthouse Bldg. 9th & I Streets	9/29/64	Present	1.4 mi.NNW	38° 25'	121°30'	25		85			84	84	83				Temperature and precipitation data remoted to Weather Bureau Office, Resources Building, 1416 9th Street. Data summarized and published through 1964.
AIRPORT																	
United Airlines Radio Office, Municipal AP	6/03/30	12/01/37		38° 31'	121°30'	17	44	5	5								
Administration Bldg. Municipal Airport	12/01/37	5/17/56	1000 ft.NE	38° 31'	121°30'	17	77	5	5		3		3				
New Administration Building, Municipal AP	5/17/56	5/01/60	112 ft.WNW	38° 31'	121°30'	17	69	5	5	69%	3		3				% - Commissioned 5/25/56.
New Administration Building, Municipal AP+	5/01/60	Present	No Change	38° 31'	121°30'	17	20 b20	NA	NA	69	3 b3	NA	a3	5 b5 c5	NA		Wind system and hygrothermometer remoted to field location, 1900 ft. ESE. Eqposure excellent. a - Decommissioned 11/16/76. b - Relocated 1900 ft. SW 11/16/76. c - Type change 5/1/85.
+Name changed to Executive Airport in 1969.															S		ASOS Commissioned 04/15/98

* Type
M = AMOS
T = AUTOB
S = ASOS
W = AWOS

SUBSCRIPTION:
Price and ordering information available through: National Climatic Data Center, Federal Building, Asheville, North Carolina 28801.

INQUIRIES/COMMENTS CALL: (828) 271-4800

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