

1999

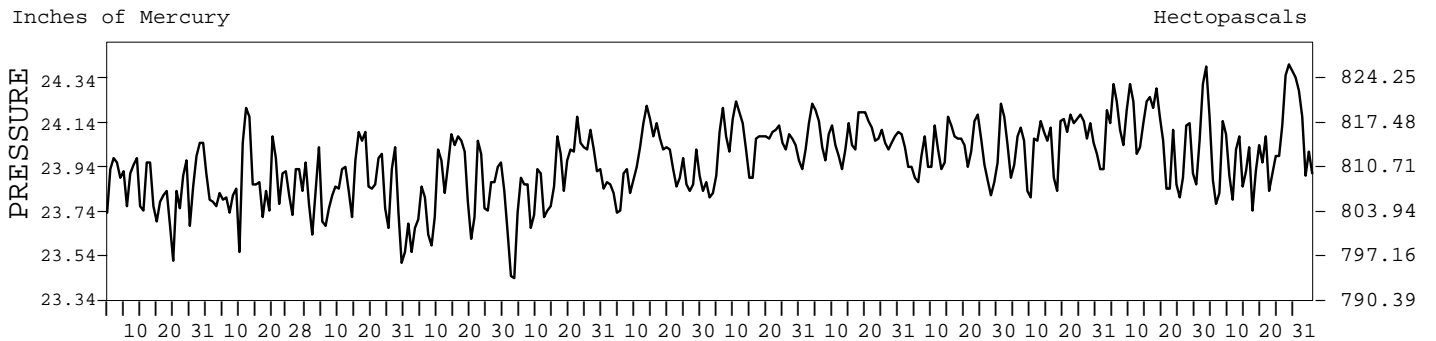
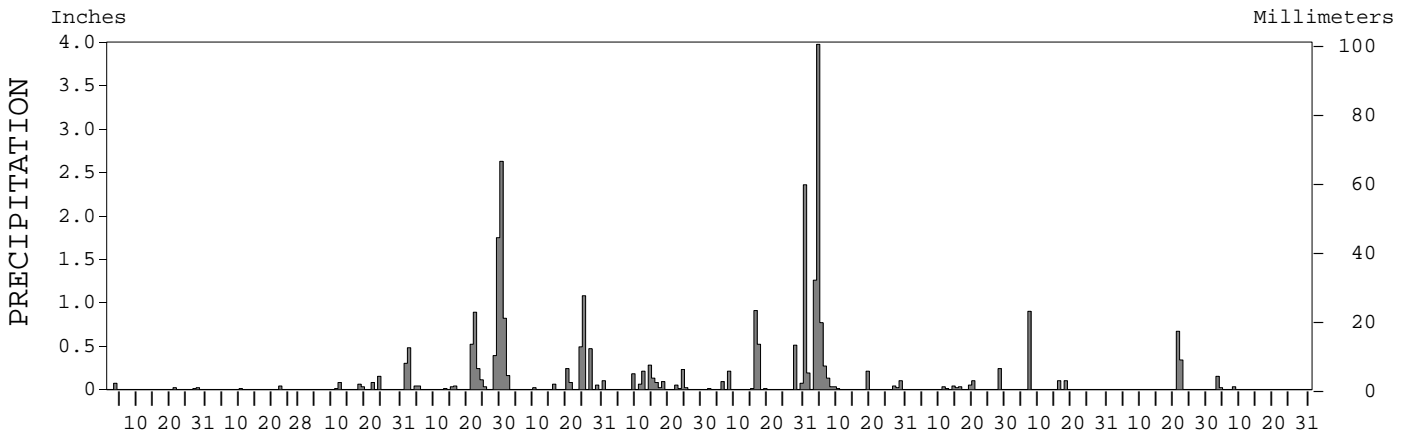
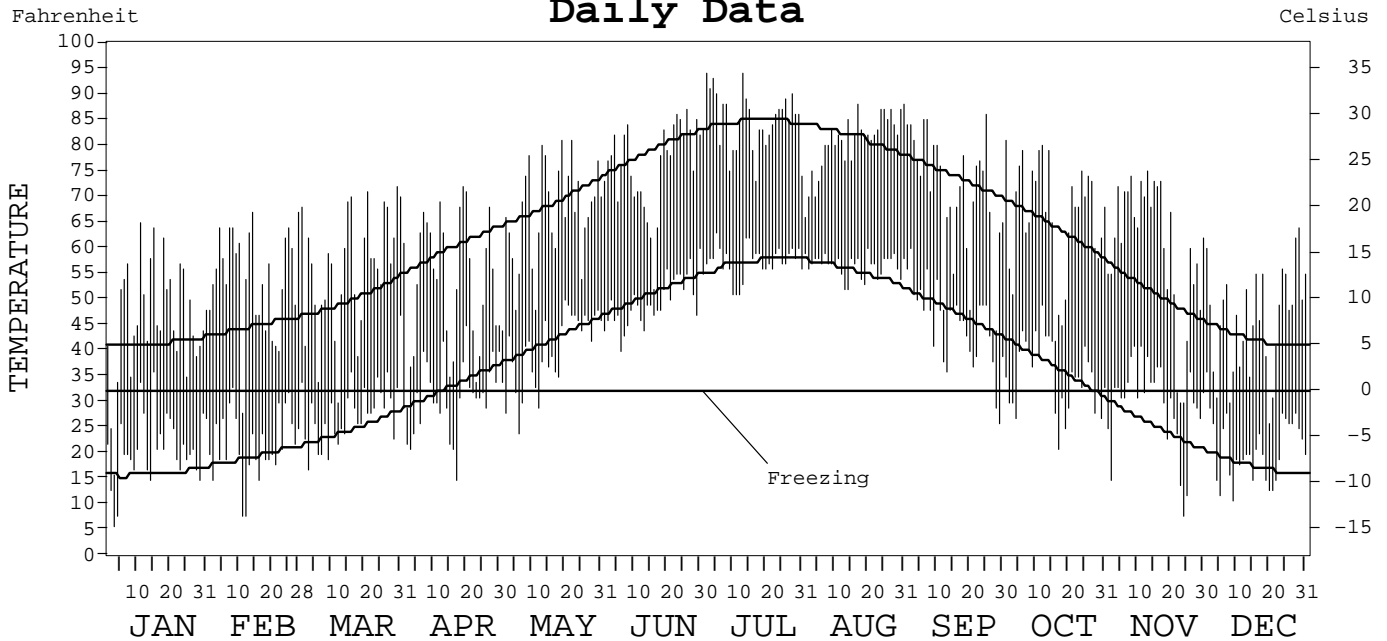
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA



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COLORADO SPRINGS,
COLORADO (COS)

Daily Data



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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 ASHEVILLE, NORTH CAROLINA

METEOROLOGICAL DATA FOR 1999

COLORADO SPRINGS, CO (COS)

LATITUDE: 38° 48' 43" N LONGITUDE: 104° 42' 40" W ELEVATION (FT): GRND: 6090 BARO: 6090 TIME ZONE: MOUNTAIN (UTC + 7) WBAN: 93037

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	46.3	54.2	56.1	53.2	66.5	76.2	84.8	80.8	70.2	66.3	60.0	46.1	63.4	
	HIGHEST DAILY MAXIMUM	65	67	72	72	81	87	94	88	86	81	75	64	94	
	DATE OF OCCURRENCE	11	28+	30	19	22+	26	13+	31+	25	01	13	29	JUL 13+	
	MEAN DAILY MINIMUM	21.1	22.0	28.1	31.2	40.2	49.5	57.4	56.6	45.2	35.3	29.7	21.0	36.4	
	LOWEST DAILY MINIMUM	6	8	17	15	24	40	51	52	26	21	8	11	6	
	DATE OF OCCURRENCE	03	12+	03	17	06	06	12+	14+	29	17	24	09	JAN 03	
	AVERAGE DRY BULB	33.7	38.1	42.1	42.2	53.4	62.9	71.1	68.7	57.7	50.8	44.9	33.6	49.9	
	MEAN WET BULB	27.6	28.6	32.9	35.0	44.6	52.4	59.4	58.6	47.7	39.7	33.3	26.1	40.5	
	MEAN DEW POINT	16.3	11.2	19.3	25.3	35.2	43.0	52.1	52.3	38.8	27.3	15.8	13.4	29.2	
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	0	6	0	0	0	0	0	0	6
	MAXIMUM ≤ 32°	2	1	1	1	0	0	0	0	0	0	3	4	12	
	MINIMUM ≤ 32°	29	27	24	19	5	0	0	0	2	11	18	30	165	
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	965	748	702	674	357	101	0	5	239	434	600	968	5793	
	COOLING DEGREE DAYS	0	0	0	0	0	42	196	130	26	0	0	0	394	
RH	MEAN (PERCENT)	54	37	49	60	57	54	57	62	57	48	38	49	52	
	HOUR 05 LST	65	47	67	72	77	71	75	79	73	59	43	57	65	
	HOUR 11 LST	43	26	38	47	44	40	40	47	43	32	29	37	39	
	HOUR 17 LST	43	24	34	51	42	41	45	52	41	37	34	43	41	
	HOUR 23 LST	63	44	57	69	62	63	70	72	69	60	46	59	61	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	5	1	6	6	2	1	3	0	4	0	1	0	29	
	THUNDERSTORMS	0	0	1	6	8	14	19	12	3	1	0	0	64	
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.)	23.86	23.87	23.86	23.85	23.88	23.95	24.05	24.09	24.03	24.06	24.12	24.03	23.97	
	MEAN SEA-LEVEL PRESS. (IN.)	30.02	29.99	29.95	29.93	29.87	29.87	29.93	30.01	30.01	30.12	30.15	30.15	30.00	
WINDS	RESULTANT SPEED (MPH)	2.5	2.3	2.3	2.4	1.1	1.7	1.4	0.4	1.5	2.1	2.7	5.3	1.4	
	RES. DIR. (TENS OF DEGS.)	34	33	15	35	11	11	04	02	07	04	03	36	02	
	MEAN SPEED (MPH)	10.0	11.7	11.7	12.7	10.9	10.3	9.7	8.4	9.0	8.9	8.0	9.5	10.1	
	PREVAIL. DIR. (TENS OF DEGS.)	01	01	16	34	15	15	34	36	15	01	02	35	36	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	41	61	37	51	43	41	48	37	36	40	40	39	61	
	DIR. (TENS OF DEGS.)	30	28	23	28	29	01	24	30	35	03	29	30	28	
	DATE OF OCCURRENCE	16	03	31+	08	29	11	02	25+	19	01	18	18	FEB 03	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	54	78	46	60	49	49	56	45	44	46	47	47	78	
DIR. (TENS OF DEGS.)	29	28	24	29	31	25	24	30	35	03	30	01	28		
DATE OF OCCURRENCE	17	03	31+	10	24	02	02	25	10	01	18	14	FEB 03		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.12	0.05	0.41	7.50	3.57	1.36	4.70	7.04	0.52	1.10	1.01	0.20	27.58	
	GREATEST 24-HOUR (IN.)	0.07	0.04	0.15	3.30	1.52	0.28	2.36	4.11	0.24	0.90	1.01	0.17	4.11	
	DATE OF OCCURRENCE	03	22	24	29-30	24-25	14	31	04-05	28	07	21-22	03-04	AUG 04-05	
	NUMBER OF DAYS WITH:														
PRECIPITATION ≥ 0.01	4	2	6	15	11	12	10	13	8	3	2	3	89		
PRECIPITATION ≥ 0.10	0	0	1	9	7	5	5	8	2	3	2	1	43		
PRECIPITATION ≥ 1.00	0	0	0	2	1	0	1	2	0	0	0	0	6		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	2.9	0.3	2.7	17.6	0.3	T	0.0	0.0	0.2	3.0	10.6	2.3	39.9	
	GREATEST 24-HOUR (IN.)	2.0	0.3	1.5	9.0	0.3	T	0.0	0.0	0.2	1.0	10.6	1.9	10.6	
	DATE OF OCCURRENCE	03	10-11	18-19	01-02	01	14	0	0	28	18+	21-22	03-04	NOV 21-22	
	MAXIMUM SNOW DEPTH (IN.)	2	T	1	9	0	0	0	0	T	0	9	2	9	
	DATE OF OCCURRENCE	03	22+	19	03					28		22	04	NOV 22	
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	1	0	2	5	0	0	0	0	0	3	2	1	14		

NORMALS, MEANS, AND EXTREMES

COLORADO SPRINGS, CO (COS)

LATITUDE: 38° 48' 43" N LONGITUDE: 104° 42' 40" W ELEVATION (FT): GRND: 6090 BARO: 6090 TIME ZONE: MOUNTAIN (UTC + 7) WBAN: 93037

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	41.4	44.6	50.0	59.8	68.7	79.0	84.4	81.3	73.6	63.5	50.7	42.2	61.6
	MEAN DAILY MAXIMUM	50	42.2	45.3	50.1	59.1	68.6	79.1	84.6	82.0	74.5	64.1	50.8	43.6	62.0
	HIGHEST DAILY MAXIMUM	50	73	76	81	87	93	100	100	99	94	86	78	77	100
	YEAR OF OCCURRENCE		1997	1963	1971	1992	1984	1954	1954	1954	1995	1979	1981	1955	JUL 1954
	MEAN OF EXTREME MAXS.	22	63.0	65.5	70.2	78.8	83.9	92.5	95.3	92.0	88.1	79.9	71.2	64.3	78.7
	NORMAL DAILY MINIMUM	30	16.1	19.3	24.6	33.0	42.1	51.1	57.1	55.2	47.1	36.3	24.9	17.4	35.4
	MEAN DAILY MINIMUM	50	16.2	19.5	24.2	32.6	42.3	51.2	56.8	55.3	47.3	36.4	24.7	17.9	35.4
	LOWEST DAILY MINIMUM	50	-26	-27	-11	-3	21	32	42	39	22	5	-8	-24	-27
	YEAR OF OCCURRENCE		1951	1951	1956	1959	1954	1951	1952	1992	1985	1969	1976	1990	FEB 1951
	MEAN OF EXTREME MINS.	22	-1.8	-8	7.7	17.9	30.4	41.0	50.0	48.7	33.2	20.0	8.4	-1.9	21.1
	NORMAL DRY BULB	30	28.8	32.0	37.3	46.4	55.4	65.0	70.8	68.3	60.4	49.9	37.8	29.8	48.5
	MEAN DRY BULB	51	29.4	32.4	37.3	45.8	55.6	65.3	70.7	68.8	60.9	50.3	37.7	30.9	48.8
	MEAN WET BULB	54	22.8	25.5	29.4	36.1	44.5	52.1	56.8	56.0	48.9	39.1	29.5	23.9	38.7
	MEAN DEW POINT	54	10.9	13.3	17.3	23.7	34.0	41.7	48.3	48.4	38.9	27.0	18.2	12.3	27.8
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.0	0.2	4.3	10.8	3.3	0.8	0.0	0.0	0.0	19.4	
MAXIMUM ≤ 32°	30	8.3	6.6	2.7	0.7	0.0	0.0	0.0	0.0	0.1	0.3	3.3	7.8	29.8	
MINIMUM ≤ 32°	30	30.3	26.2	25.1	12.8	2.1	0.0	0.0	0.0	1.1	9.1	24.4	29.3	160.4	
MINIMUM ≤ 0°	30	2.6	2.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.3	7.5	
H/C	NORMAL HEATING DEG. DAYS	30	1122	924	859	558	302	87	6	18	164	468	816	1091	6415
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	0	87	186	120	26	0	0	0	419
RH	NORMAL (PERCENT)	30	51	50	50	46	49	48	50	54	51	46	50	51	50
	HOUR 05 LST	30	56	59	61	61	66	66	68	70	66	58	59	56	62
	HOUR 11 LST	30	41	40	40	35	37	36	36	40	39	35	39	42	38
	HOUR 17 LST	30	46	41	38	34	36	34	39	41	37	36	44	48	40
	HOUR 23 LST	30	57	58	58	55	59	57	60	64	60	56	58	57	58
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	50	2.3	2.7	2.7	2.3	1.9	0.8	0.6	1.0	2.0	1.8	2.7	2.2	23.0
	THUNDERSTORMS	50	0.0	0.0	0.5	2.4	8.4	11.1	15.9	13.5	4.8	0.8	0.0	0.0	57.4
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	1	3.2	3.7	5.6	6.0	4.8	3.6	3.6	5.6	3.2	4.0	3.2	2.4	4.1
	MIDNIGHT-MIDNIGHT (OKTAS)	1	4.0	3.6	6.4	6.0	4.8	3.2	3.6	5.6	3.2	4.4	2.8	2.4	4.2
	MEAN NO. DAYS WITH:														
	CLEAR	2	5.3	8.3	8.0	5.0	1.0	3.0	7.0	6.0	11.0	10.5	6.0	11.0	82.1
PARTLY CLOUDY	2	2.0	5.0	5.7	5.5	5.0	4.0	4.0	8.5	4.0	1.0	2.0	4.5	51.2	
CLOUDY	2	1.7	6.7	7.0	8.0	2.0	2.0	1.5	7.5	6.0	5.0	1.5	1.0	49.9	
PR	MEAN STATION PRESSURE (IN)	26	23.89	23.88	23.82	23.88	23.90	23.98	24.06	24.07	24.04	24.00	23.92	23.91	23.95
	MEAN SEA-LEVEL PRES. (IN)	54	30.09	30.06	29.96	29.92	29.89	29.88	29.95	29.97	29.99	30.04	30.08	30.09	29.99
WINDS	MEAN SPEED (MPH)	33	9.5	10.1	11.1	11.5	11.2	10.5	9.3	8.8	9.4	9.6	9.6	9.5	10.0
	PREVAIL. DIR (TENS OF DEGS)	18	36	36	36	36	36	36	36	36	36	36	36	36	36
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	6	49	61	43	61	43	47	48	41	39	53	47	53	61
	DIR. (TENS OF DEGS)		27	28	24	28	12	27	24	25	35	30	30	29	28
	YEAR OF OCCURRENCE		1996	1999	1998	1996	1995	1998	1999	1995	1996	1996	1998	1993	FEB 1999
	MAXIMUM 5-SECOND:														
SPEED (MPH)	6	55	78	52	68	52	61	57	55	55	70	57	59	78	
DIR. (TENS OF DEGS)		26	28	23	30	27	17	23	25	33	30	26	29	28	
YEAR OF OCCURRENCE		1996	1999	1998	1996	1997	1998	1995	1995	1996	1996	1995	1993	FEB 1999	
PRECIPITATION	NORMAL (IN)	30	0.29	0.40	0.94	1.19	2.15	2.25	2.90	3.02	1.33	0.84	0.47	0.46	16.24
	MAXIMUM MONTHLY (IN)	50	1.17	2.45	2.42	7.50	5.67	8.00	5.27	7.04	4.28	5.01	2.21	1.05	8.00
	YEAR OF OCCURRENCE		1987	1987	1998	1999	1957	1965	1968	1999	1976	1984	1957	1988	JUN 1965
	MINIMUM MONTHLY (IN)	50	T	T	0.01	0.01	0.33	0.13	0.67	0.15	T	0.01	T	T	T
	YEAR OF OCCURRENCE		1995	1991	1966	1964	1974	1990	1987	1962	1953	1980	1995	1995	DEC 1995
	MAXIMUM IN 24 HOURS (IN)	50	0.79	1.49	1.63	3.30	2.57	3.09	3.66	4.11	1.73	1.60	1.45	0.69	4.11
	YEAR OF OCCURRENCE		1987	1987	1998	1999	1955	1954	1997	1999	1959	1960	1979	1981	AUG 1999
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	6.2	5.8	8.3	7.7	12.5	9.7	11.0	14.0	6.8	5.2	4.3	6.4	97.9	
PRECIPITATION ≥ 1.00	30	0.0	0.1	0.1	0.2	0.4	0.2	0.4	0.5	0.2	0.1	0.0	0.0	2.2	
SNOWFALL	NORMAL (IN)	30	6.7	7.1	12.1	4.5	2.5	0.0	0.0	0.0	0.2	2.8	5.3	10.2	51.4
	MAXIMUM MONTHLY (IN)	51	28.7	23.2	23.2	42.7	19.4	1.1	T	T	27.9	25.9	26.3	18.2	42.7
	YEAR OF OCCURRENCE		1987	1987	1984	1957	1978	1975	1992	1992	1959	1984	1991	1983	APR 1957
	MAXIMUM IN 24 HOURS (IN)	51	22.0	14.8	15.0	18.0	17.4	1.1	T	T	17.1	19.9	14.5	9.6	22.0
	YEAR OF OCCURRENCE		1987	1987	1998	1957	1978	1975	1992	1992	1959	1997	1972	1979	JAN 1987
	MAXIMUM SNOW DEPTH (IN)	23	16	12	15	12	11	0	0	0	2	20	11	10	20
	YEAR OF OCCURRENCE		1987	1987	1998	1997	1978				1985	1997	1979	1979	OCT 1997
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	1.9	1.9	3.1	1.3	0.4	0.0	0.0	0.0	0.1	0.6	1.5	3.0	13.8	

PRECIPITATION (inches) 1999 COLORADO SPRINGS, CO (COS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0.05	0.17	1.06	0.91	0.33	3.63	3.79	4.24	1.09	0.95	0.27	T	16.49
1971	0.34	0.53	0.34	1.36	2.24	0.39	2.82	1.99	1.36	0.23	0.03	0.23	11.86
1972	0.27	0.25	0.55	0.42	1.46	2.07	4.08	3.55	4.13	1.34	1.08	0.83	20.03
1973	0.06	0.06	1.16	1.72	4.27	0.47	3.31	0.89	1.03	0.35	0.15	0.64	14.11
1974	0.26	0.18	0.52	1.92	0.33	1.29	1.42	1.14	0.43	1.36	0.23	0.42	9.50
1975	0.13	0.29	0.24	0.68	1.00	2.97	2.65	2.06	0.16	0.52	1.00	0.07	11.77
1976	0.32	0.23	0.63	1.63	2.09	2.46	1.75	5.94	4.28	0.49	0.40	0.12	20.34
1977	0.29	0.20	1.18	2.57	1.12	3.87	3.02	5.11	0.45	0.19	0.60	0.18	18.78
1978	0.25	0.38	0.40	1.15	3.58	0.54	2.14	2.51	0.05	0.90	0.37	1.01	13.28
1979	0.53	0.04	2.38	1.83	3.13	1.58	2.73	2.50	0.92	0.55	1.82	1.02	19.03
1980	0.25	0.54	1.30	3.64	4.99	1.60	1.69	4.59	0.65	0.01	0.35	0.05	19.66
1981	0.07	0.12	0.93	0.13	3.14	1.98	3.64	5.24	0.52	0.37	0.03	0.82	16.99
1982	0.25	0.27	0.73	0.76	3.07	3.81	3.64	5.37	3.02	0.22	0.10	0.70	21.94
1983	0.43	0.09	1.79	0.97	3.08	2.41	0.99	2.59	0.37	0.28	1.09	0.70	14.79
1984	0.32	0.09	1.93	1.66	0.74	1.54	3.97	4.03	0.93	5.01	0.14	0.64	21.00
1985	0.42	0.24	1.68	2.07	3.36	0.78	4.92	1.56	1.49	0.52	0.42	0.55	18.01
1986	0.01	0.30	0.31	0.65	1.89	2.47	1.63	6.06	0.61	1.41	0.64	0.28	16.26
1987	1.17	2.45	1.79	0.50	3.82	2.89	0.67	2.77	0.55	0.54	0.44	0.64	18.23
1988	0.43	0.68	0.90	0.27	1.01	1.69	2.07	2.88	1.19	0.08	0.36	1.05	12.61
1989	0.23	1.23	0.49	1.06	1.11	3.42	2.26	2.63	2.30	0.28	0.02	0.41	15.44
1990	0.53	0.59	1.77	2.04	3.90	0.13	5.13	1.45	1.50	1.46	0.30	0.27	19.07
1991	0.09	T	0.42	1.76	0.80	3.07	2.87	4.57	0.56	0.88	2.05	0.45	17.52
1992	0.06	0.02	2.36	0.92	2.07	3.91	0.76	3.37	0.13	0.30	0.75	0.11	14.76
1993	0.52	0.21	0.79	1.02	1.60	1.27	2.38	2.17	1.44	0.91	0.97	0.11	13.39
1994	0.18	0.28	0.54	1.49	4.10	4.32	1.29	3.92	1.52	2.67	0.32	0.13	20.76
1995	T	0.21	0.71	3.05	4.81	7.78	1.91	1.77	1.87	0.02	T	T	22.13
1996	0.16	0.34	0.82	0.39	2.22	1.58	4.46	3.46	2.04	0.89	0.17	0.04	16.57
1997	0.11	0.18	0.34	3.30	1.16	5.44	4.63	4.70	1.78	0.98	0.22	0.10	22.94
1998	0.03	0.34	2.42	1.38	0.72	1.27	5.26	2.75	0.51	0.93	0.44	0.15	16.20
1999	0.12	0.05	0.41	7.50	3.57	1.36	4.70	7.04	0.52	1.10	1.01	0.20	27.58
POR= 51 YRS	0.28	0.33	0.89	1.41	2.30	2.27	2.94	2.93	1.26	0.83	0.49	0.34	16.27

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AVERAGE TEMPERATURE (°F) 1999 COLORADO SPRINGS, CO (COS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	28.2	37.2	32.6	42.6	58.2	64.6	71.2	71.4	57.7	44.2	38.2	32.9	48.3
1971	29.8	29.8	37.7	45.3	53.3	67.8	68.8	69.1	56.7	49.3	37.9	30.4	48.0
1972	30.0	36.1	43.3	49.1	55.9	67.8	68.9	67.7	60.8	49.4	29.8	23.5	48.5
1973	25.4	32.3	36.5	40.9	53.3	65.6	68.4	70.6	58.8	52.6	39.6	31.2	47.9
1974	27.0	33.9	42.1	46.0	59.7	66.2	72.6	67.9	58.0	52.6	38.5	28.0	49.4
1975	29.1	29.8	35.6	44.4	53.4	63.8	71.0	70.2	59.4	52.3	36.4	35.3	48.4
1976	30.1	37.8	36.1	47.7	54.7	64.3	72.1	68.1	59.3	45.7	36.2	32.9	48.8
1977	26.8	35.0	37.1	48.3	58.6	68.0	71.4	68.6	64.0	51.5	38.6	34.6	50.2
1978	25.1	27.7	40.9	48.8	52.5	66.2	72.8	67.5	62.8	51.9	36.5	21.9	47.9
1979	16.9	32.5	38.1	48.3	54.0	64.3	70.6	67.5	64.4	51.7	31.2	33.5	47.8
1980	26.7	34.3	35.7	44.3	53.4	69.2	75.3	70.4	62.3	49.9	39.5	39.8	50.1
1981	34.9	34.4	39.3	53.8	54.5	69.4	71.9	67.3	63.4	50.8	43.3	32.7	51.3
1982	29.4	29.0	38.1	45.7	52.7	60.1	70.2	68.5	59.0	47.6	35.4	29.8	47.1
1983	32.5	34.4	35.7	40.1	50.5	61.1	72.3	71.9	63.8	51.3	37.7	18.4	47.5
1984	26.1	33.3	35.3	41.4	58.2	65.1	71.5	68.4	59.5	42.8	38.4	33.1	47.8
1985	25.1	26.3	37.9	48.7	57.2	65.0	70.3	69.8	58.0	49.0	32.1	27.9	47.3
1986	38.2	34.7	44.3	48.5	54.6	65.8	70.4	67.6	59.1	48.0	37.7	29.8	49.9
1987	29.4	33.0	35.3	48.5	56.0	65.1	70.7	66.1	60.0	50.4	39.2	29.0	48.6
1988	24.3	31.8	36.2	48.2	56.4	68.7	70.6	70.4	60.8	53.0	39.2	29.2	49.1
1989	32.8	21.8	43.7	49.0	57.6	62.1	71.8	68.4	61.0	49.7	41.5	27.3	48.9
1990	33.6	31.7	38.9	47.1	53.8	69.5	68.0	68.0	64.5	49.5	42.7	24.3	49.3
1991	28.0	38.0	39.9	45.8	58.0	67.0	69.4	68.1	60.5	50.3	33.0	31.0	49.1
1992	32.6	37.6	41.6	52.1	57.8	62.5	68.4	66.6	62.9	52.4	31.9	29.3	49.6
1993	26.7	29.4	39.8	46.1	55.6	65.0	70.7	67.3	58.1	48.0	32.3	32.3	47.6
1994	31.5	31.6	40.6	45.5	57.7	69.1	69.8	70.2	62.7	49.1	37.4	33.6	49.9
1995	31.4	35.8	38.7	41.3	49.4	60.6	67.4	71.9	59.0	48.9	41.4	32.1	48.2
1996	27.2	34.0	35.5	47.2	59.6	65.7	69.8	67.6	57.4	49.0	38.1	33.0	48.7
1997	27.1	30.2	40.7	39.5	53.8	64.3	70.5	67.1	62.2	48.5	33.5	30.5	47.3
1998	32.1	31.6	35.4	43.0	58.9	63.8	71.0	67.6	65.4	50.0	41.7	28.3	49.1
1999	33.7	38.1	42.1	42.2	53.4	62.9	71.1	68.7	57.7	50.8	44.9	33.6	49.9
POR= 51 YRS	29.3	32.4	37.4	45.9	55.6	65.3	70.7	68.8	60.8	50.3	37.8	31.0	48.8

HEATING DEGREE DAYS (base 65°F) 1999 COLORADO SPRINGS, CO (COS)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	2	3	235	637	797	987	1086	980	837	584	357	32	6537
1971-72	33	5	285	481	806	1067	1080	832	665	469	273	6	6002
1972-73	41	34	136	476	1049	1281	1221	912	877	715	359	76	7177
1973-74	32	1	194	378	754	1041	1172	866	700	566	176	88	5968
1974-75	1	17	229	376	789	1143	1102	980	904	608	350	88	6587
1975-76	0	10	200	391	852	916	1075	782	891	512	314	80	6023
1976-77	0	11	191	593	859	988	1181	837	858	494	192	5	6209
1977-78	2	22	73	413	784	938	1231	1036	741	479	386	98	6203
1978-79	3	44	119	400	848	1329	1484	906	825	494	336	97	6885
1979-80	6	41	88	407	1005	969	1180	883	901	615	351	32	6478
1980-81	0	7	113	463	759	776	928	850	789	335	321	38	5379
1981-82	5	30	70	433	643	993	1095	1001	827	571	374	163	6205
1982-83	8	11	198	532	880	1084	1001	851	904	742	444	159	6814
1983-84	2	0	101	417	811	1438	1198	911	912	700	220	58	6768
1984-85	0	6	200	684	790	982	1233	1077	830	481	242	77	6602
1985-86	5	8	253	487	978	1142	822	840	635	487	315	49	6021
1986-87	4	14	174	519	813	1081	1096	888	912	491	272	50	6314
1987-88	17	74	150	445	767	1108	1256	958	886	499	273	25	6458
1988-89	7	8	154	366	767	1099	989	1207	655	475	247	134	6108
1989-90	0	4	172	473	699	1164	966	928	805	526	345	24	6106
1990-91	28	21	83	473	663	1258	1142	750	773	568	219	33	6011
1991-92	16	16	145	453	954	1048	998	788	717	383	219	96	5833
1992-93	21	53	91	383	990	1101	1179	991	776	558	286	84	6513
1993-94	0	40	212	519	972	1008	1032	926	749	576	223	14	6271
1994-95	10	14	98	486	821	969	1035	811	808	702	477	152	6383
1995-96	38	3	231	490	700	1011	1162	890	908	527	192	48	6200
1996-97	2	17	237	490	800	986	1167	967	747	758	341	70	6582
1997-98	6	28	111	506	937	1060	1012	928	911	653	208	116	6476
1998-99	3	6	43	458	691	1129	965	748	702	674	357	101	5877
1999-	0	5	239	434	600	968							

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COOLING DEGREE DAYS (base 65°F) 1999 COLORADO SPRINGS, CO (COS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	0	15	89	200	209	22	0	0	0	535
1971	0	0	0	0	1	126	158	138	41	0	0	0	464
1972	0	0	0	2	0	96	168	124	17	0	0	0	407
1973	0	0	0	0	0	104	145	180	13	0	0	0	442
1974	0	0	0	0	18	130	241	109	26	0	0	0	524
1975	0	0	0	0	0	59	195	180	41	5	0	0	480
1976	0	0	0	0	0	66	227	114	28	0	0	0	435
1977	0	0	0	0	0	103	204	142	49	0	0	0	498
1978	0	0	0	0	4	143	255	127	59	1	0	0	589
1979	0	0	0	0	1	84	185	124	77	2	0	0	473
1980	0	0	0	0	0	169	327	180	41	0	0	0	717
1981	0	0	0	4	2	176	226	105	27	0	0	0	540
1982	0	0	0	0	0	23	176	127	26	0	0	0	352
1983	0	0	0	0	1	48	236	219	71	0	0	0	575
1984	0	0	0	0	17	68	207	119	42	0	0	0	453
1985	0	0	0	0	5	83	179	163	51	0	0	0	481
1986	0	0	0	0	1	82	180	102	3	0	0	0	368
1987	0	0	0	0	0	62	199	113	6	0	0	0	380
1988	0	0	0	0	12	143	190	181	33	0	0	0	559
1989	0	0	0	3	25	54	220	117	57	3	0	0	479
1990	0	0	0	0	6	168	128	121	73	0	0	0	496
1991	0	0	0	0	8	101	161	120	15	4	0	0	409
1992	0	0	0	4	3	28	131	106	32	0	0	0	304
1993	0	0	0	0	2	89	183	117	11	1	0	0	403
1994	0	0	0	0	5	143	165	182	33	0	0	0	528
1995	0	0	0	0	0	30	120	226	60	0	0	0	436
1996	0	0	0	4	31	77	159	106	16	1	0	0	394
1997	0	0	0	0	0	55	182	101	33	0	0	0	371
1998	0	0	0	0	23	88	194	95	61	0	0	0	461
1999	0	0	0	0	0	42	196	130	26	0	0	0	394

SNOWFALL (inches) 1999 COLORADO SPRINGS, CO (COS)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	0.8	4.6	1.5	T	8.7	11.5	3.0	2.8	T	0.0	32.9
1971-72	0.0	0.0	9.7	2.9	0.3	3.8	5.2	3.6	7.0	3.3	T	0.0	35.8
1972-73	0.0	0.0	0.0	14.4	16.4	11.4	3.9	2.3	15.6	11.2	0.8	0.0	76.0
1973-74	0.0	0.0	0.0	3.9	1.8	9.1	2.4	2.4	6.8	10.0	0.0	T	36.4
1974-75	0.0	0.0	T	T	1.5	6.3	2.8	4.8	3.5	6.9	0.2	1.1	27.1
1975-76	0.0	0.0	0.0	4.3	9.8	0.9	6.9	5.2	8.6	10.1	0.0	0.0	45.8
1976-77	0.0	0.0	T	2.5	4.9	2.6	4.8	2.5	13.8	4.3	0.0	0.0	35.4
1977-78	0.0	0.0	0.0	0.9	1.9	3.0	4.2	8.6	3.3	1.1	19.4	0.0	42.4
1978-79	0.0	0.0	T	0.5	4.0	15.2	9.9	1.2	20.0	14.6	4.1	0.0	69.5
1979-80	0.0	0.0	0.0	1.3	19.1	17.6	4.7	5.9	12.7	11.3	0.0	0.0	72.6
1980-81	0.0	0.0	0.0	0.2	4.4	1.4	1.0	1.7	9.0	0.3	0.2	0.0	18.2
1981-82	0.0	0.0	0.0	0.4	0.5	9.1	3.6	6.2	8.4	2.3	3.9	0.0	34.4
1982-83	0.0	0.0	0.0	0.2	0.9	8.2	4.0	1.1	16.3	4.8	0.8	0.0	36.3
1983-84	0.0	0.0	0.0	0.0	10.3	18.2	7.8	1.4	23.2	9.0	0.8	0.0	70.7
1984-85	0.0	0.0	0.9	25.9	2.0	10.9	8.0	4.7	22.3	0.8	T	0.0	75.5
1985-86	0.0	0.0	1.9	1.7	8.3	6.3	0.2	4.6	2.9	4.0	T	0.0	29.9
1986-87	0.0	0.0	0.0	1.4	7.3	4.4	28.7	23.2	14.9	3.3	T	0.0	83.2
1987-88	0.0	0.0	0.0	0.0	4.8	9.5	4.9	11.5	12.6	1.0	0.3	0.0	44.6
1988-89	0.0	0.0	0.0	0.0	1.6	13.6	3.0	18.9	T	1.0	0.0	T	38.1
1989-90	T	T	T	2.1	0.2	7.5	8.7	9.3	9.7	11.3	4.2	0.0	53.0
1990-91	0.0	0.0	0.0	8.2	2.7	4.1	0.9	T	5.2	5.9	1.5	0.0	28.5
1991-92	0.0	0.0	0.0	7.5	26.3	4.5	1.2	0.2	3.0	T	0.0	T	42.7
1992-93	T	T	0.0	T	11.4	2.6	7.5	3.3	2.3	1.2	T	T	28.3
1993-94	T	0.0	0.1	0.5	12.3	0.5	2.2	1.5	6.8	8.7	T	T	32.6
1994-95	0.0	0.0	T	0.2	6.1	3.9	4.5	6.5	7.7	0.0	0.0	T	28.9
1995-96	0.0	0.0	0.5	0.2	T	T	2.9	4.7	6.9	3.2			
1996-97				8.7			9.3	3.4	2.4	12.3	T	0.0	
1997-98	0.0	T	0.0	19.9	3.5	1.8	0.3	4.3	17.5	9.5	T	T	56.8
1998-99	T	T	0.0	1.1	1.7	7.3	2.9	0.3	2.7	17.6	0.3	T	33.9
1999-	0.0	0.0	0.2	3.0	10.6	2.3							
POR= 52 YRS	T	T	1.0	3.4	5.4	5.1	5.0	4.9	9.2	6.8	1.4	T	42.2

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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
COLORADO SPRINGS,
COLORADO (COS)

At an elevation near 6,200 feet above sea level, Colorado Springs is located in relatively flat semi-arid country on the eastern slope of the Rocky Mountains. Immediately to the west the mountains rise abruptly to heights ranging from 10,000 to 14,000 feet but generally averaging near 11,000 feet. To the east lie gently undulating prairie lands. The land slopes upward to the north, reaching an average height of about 8,000 feet in 20 miles at the top of Palmer Lake Divide.

Colorado Springs is in the Arkansas River drainage basin. The principal tributary feeding the Arkansas from this area is Fountain Creek which rises in the high mountains west of the city and is fed by Monument Creek originating to the north in the Palmer Lake Divide area.

Other topographical features of the area, and particularly its wide range of elevations, help to give Colorado Springs the various and altogether delightful plains and mountain mixture of climate that has established the locality as a highly desirable place to live. The higher elevations immediately to the west and north of the city produce significant differences in temperature and precipitation. Precipitation amounts at these higher elevations are approximately twice those at nearby lower elevations and the number of rainy days is almost triple.

In Colorado Springs itself, precipitation is relatively sparse. Over 80 percent of it falls between April 1 and September 30, mostly as heavy downpours accompanying summer thunderstorms. Temperatures, in view of the station latitude and elevation, are mild. Uncomfortable extremes, in either summer or winter, are comparatively rare and of short duration. Relative humidity is normally low and wind movement moderately high. This is notably true of the west-to-east movement of the chinook winds, that cause rapid rises in winter temperatures and remind us that the Indian meaning of CHINOOK is SNOW EATER.

Colorado Springs is best known as a resort city, but is also important to the high-tech industry and military community. Several military installations, including the United States Air Force Academy and the Space Command are located within or near the city. The surrounding prairie is also important for cattle raising and a considerable amount of grazing land is used for sheep in the summer months. The growing season varies considerably in length but averages from the first week in May to the first week of October.

STATION LOCATION

COLORADO SPRINGS, COLORADO

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE													REMARKS	
						SEA LEVEL	GROUND													
							G	W	E	P	S	T	R	W	8	H	A	E		I
<u>COOPERATIVE</u>	12/1871	11/11/73	NA	Unk	Unk	Unk														Precipitation record from December 1871.
	11/12/73	3/16/74	Unk	Unk	Unk	Unk														Supply Station for Pikes Peak.
Wanless Block, Corner of Tejon & Pikes Peak Ave.	3/16/74	7/31/76	Unk	38° 50'	104°49'	6012														
Huntington Block, Corner High & Broad Streets	1878	7/1/87	Unk	Unk	Unk	6038														Station served as supply station to Pikes Peak. Breaks in record.
Tejon & Uintah Streets Second Floor	7/1/87	11/1/89	Unk	38° 51'	104°49'	6065		16	16							1				North window type shelter. Bottom of rain gage probably 1 inch above ground.
El Paso & Uintah Sts.	11/1/89	4/1/90	2950 ft. E	38° 51'	104°49'	6055			12	11						2				Standard shelter used.
First National Bank Building, Tejon & Pikes Peak, 3rd Floor	4/1/90	11/30/90	6800 ft. SW	38° 50'	104°49'	6012			71	70						61				Standard shelter in use.
CITY Hagerman Hall Colorado College N. Cascade Avenue	1/1/93	7/31/47	4800 ft. NNW	38° 51'	104°50'	6060	56 a49	49 a39	49 a39							42 a32				Station reopened as USWB. a - Effective 10/1/94.
AIRPORT Building T-20 Peterson Field 6.22 miles ESE of P. O.	1/2/42	6/25/48	NA	38° 49'	104°42'	6170	78	5	5							3				Air Force to 4/1/48 then Weather Bureau.
Building T-20 Peterson Field Moved to 3rd Floor	6/25/48	1/26/54	No Change	38° 49'	104°42'	#6175	78	35	35							33				# - New survey. Wind equipment still on old tower.
Administration Building Peterson Field 2nd Floor NW End	1/26/54	4/12/67	No Change	38° 49'	104°42'	%6173 f6145	78 b76 c57 d22	20	20	NA	NA	NA			17	NA e6 g6	NA			% - New survey. b - Effective 9/15/54. c - Effective 5/5/56. d - Moved to field site 2/20/58. e - Commissioned on field site 2/1/60. f - Effective 2/1/60. g - Moved 750' SE 4/5/67.
Maytag Hangar Peterson Field	4/12/67	11/1/92	5775 ft. SW	38° 49'	104°43'	6145	h22	4	4	NA	NA k3	NA j5			4	h6 m5	NA			h - Not moved 4/12/67. i - Installed 4/10/74. j - type changed 6/13/74. k - Installed as standby on roof 4/20/83. m - type change 9/18/85.
Colorado Springs Municipal Airport	11/01/92	Present	NA	38°49'	104°43'	6090											S			ASOS commissioned 11/1/92.

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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