

1998

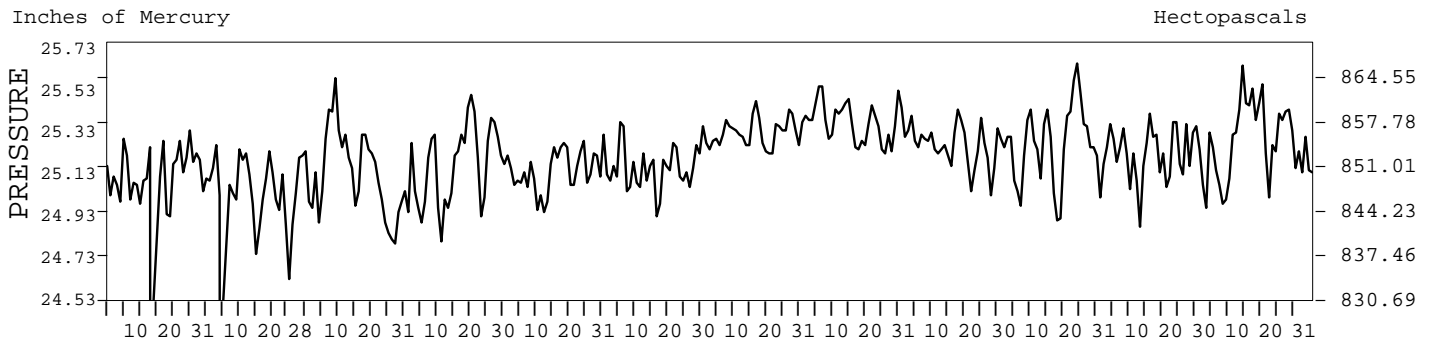
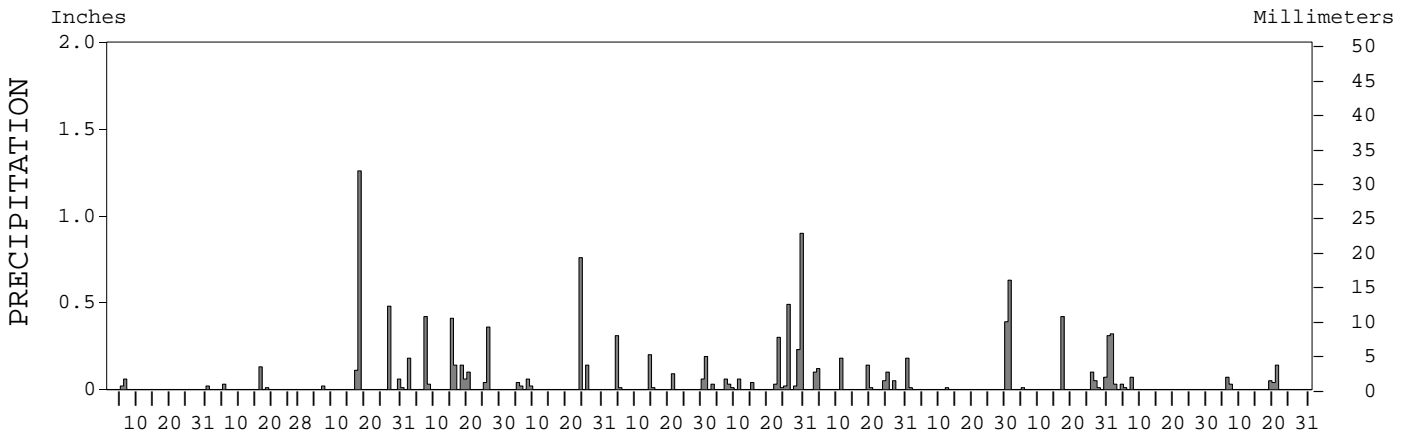
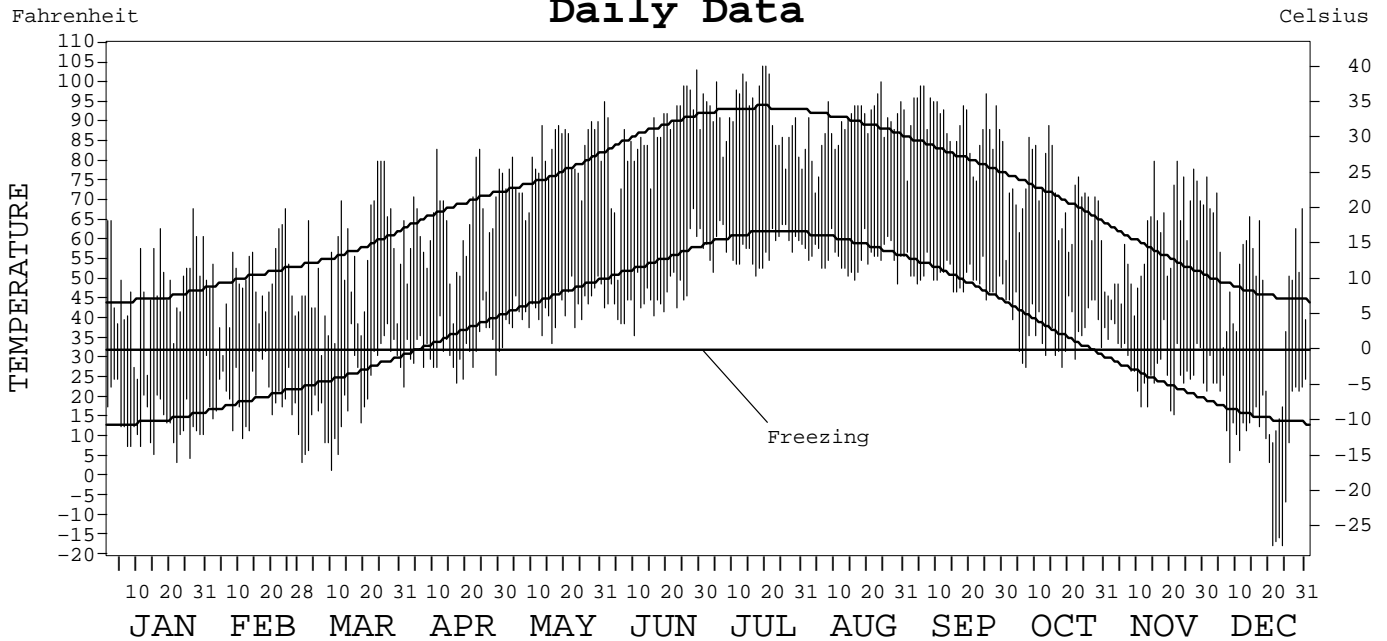
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-764X

PUEBLO,
COLORADO (PUB)

Daily Data



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Thomas R. Karl

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METEOROLOGICAL DATA FOR 1998

PUEBLO, CO (PUB)

LATITUDE: 38° 17' 24" N LONGITUDE: 104° 29' 54" W ELEVATION (FT): GRND: 4684 BARO: 4661 TIME ZONE: MOUNTAIN (UTC+ 7) WBAN: 93058

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	48.4	48.6	54.1	63.1	80.1	86.0	91.9	89.1	88.9	70.1	60.5	46.6	68.9	
	HIGHEST DAILY MAXIMUM	68	68	80	83	90	103	104	100	99	89	80	76	104	
	DATE OF OCCURRENCE	27	24	26+	24	30+	29	20+	24	06+	14	22+	01	JUL 20+	
	MEAN DAILY MINIMUM	14.3	20.4	21.0	32.0	42.4	47.2	58.1	55.7	50.6	37.5	28.1	12.0	34.9	
	LOWEST DAILY MINIMUM	4	10	2	23	33	36	51	49	45	28	16	-17	-17	
	DATE OF OCCURRENCE	22	11	10	1	01	10	17	29	25	18+	21	24+	DEC 24+	
	AVERAGE DRY BULB	31.4	34.5	37.6	47.6	61.3	66.6	75.0	72.4	69.8	53.8	44.3	29.3	52.0	
	MEAN WET BULB			31.4	39.2	50.1	52.4	62.5	61.0	56.6	44.8	36.5	24.0		
	MEAN DEW POINT			21.8	28.6	38.7	38.4	55.0	54.0	46.8	35.3	27.3	16.2		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	2	13	20	18	13	0	0	0	0	66
	MAXIMUM ≤ 32°	3	2	1	0	0	0	0	0	0	0	0	6	12	
	MINIMUM ≤ 32°	31	28	26	18	0	0	0	0	0	9	20	31	163	
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	5	5		
H/C	HEATING DEGREE DAYS	1035	848	844	517	126	61	0	4	339	613	1099	5486		
	COOLING DEGREE DAYS	0	0	0	0	19	117	318	237	155	0	0	846		
RH	MEAN (PERCENT)	65	63	59	55	48	41	58	59	51	58	61	65	57	
	HOUR 05 LST	75	80	79	80	76	65	83	87	77	82	81	80	79	
	HOUR 11 LST	51	50	47	39	34	30	41	39	34	42	45	50	42	
	HOUR 17 LST	56	41	38	36	26	24	42	40	28	41	45	56	39	
	HOUR 23 LST	75	72	67	66	60	49	68	73	60	68	70	74	67	
S	PERCENT POSSIBLE SUNSHINE	77	69	83	73	78	79	78	82	90	81	72			
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	5	3	3	0	0	0	0	1	2	1	2	2	19	
	THUNDERSTORMS	0	0	1	3	4	4	15	10	1	1	0	0	39	
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.)			25.14	25.17	25.15	25.16	25.33	25.38	25.27	25.27	25.22	25.29		
	MEAN SEA-LEVEL PRESS. (IN.)			29.91	29.78	29.76	29.93	30.00	29.88	29.96	29.97	30.16			
WINDS	RESULTANT SPEED (MPH)			1.4	2.7	0.6	1.5	1.0	0.7	2.1	0.7	0.9	1.1		
	RES. DIR. (TENS OF DEGS.)			06	34	10	21	05	02	08	35	30	02		
	MEAN SPEED (MPH)	6.1	6.5	7.6	8.8	8.8	10.0	7.4	7.0	6.9	7.2	7.0	5.8	7.4	
	PREVAIL. DIR. (TENS OF DEGS.)	27	27	12	01	09	09	09	11	09	09	26	08	09	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	31	39	36	34	38	37	41	39	31	39	33	38	41	
	DIR. (TENS OF DEGS.)	28	28	24	22	01	26	27	32	19	27	25	25	27	
	DATE OF OCCURRENCE	20+	25	29	12+	24	13	19+	24	25	04	24+	28	JUL 19+	
	MAXIMUM 5-SECOND WIND:														
SPEED (MPH)	40	45	44	43	45	45	57	45	37	46	39	44	57		
DIR. (TENS OF DEGS.)	28	28	23	34	35	36	26	32	19	27	25	25	26		
DATE OF OCCURRENCE	17	25+	29	02	22	14	19	24	25	04	24+	28	JUL 19		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.10	0.17	1.94	1.88	1.04	0.68	2.42	0.93	0.41	1.60	0.46	0.33	11.96	
	GREATEST 24-HOUR (IN.)	0.08	0.13	1.31	0.51	0.76	0.31	1.10	0.18	0.39	1.02	0.32	0.17	1.31	
	DATE OF OCCURRENCE	05-06	16	17-18	15-16	24	04	29-30	31+	30	30-01	01	20-21	MAR 17-18	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	3	3	6	10	6	6	15	9	3	8	5	5	79	
PRECIPITATION ≥ 0.10	0	1	3	7	2	2	5	6	1	4	1	1	33		
PRECIPITATION ≥ 1.00	0	0	1	0	0	0	0	0	0	0	0	0	1		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	1.0	0.6	12.5	1.3	T	0.0	T	T	0.0	T	T	8.1	23.5	
	GREATEST 24-HOUR (IN.)	0.8	0.3	11.1	1.2	T	0.0	T	T	0.0	T	T	3.1	11.1	
	DATE OF OCCURRENCE	06	16+	18	16	26+	0	30	19	0	31	09+	20-21	MAR 18	
	MAXIMUM SNOW DEPTH (IN.)	T	T	10	T	0	0	0	0	0	0	0	3	10	
	DATE OF OCCURRENCE	10	27+	19+	16								25+	MAR 19+	
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	0	0	1	1	0	0	0	0	0	0	0	3	5		

NORMALS, MEANS, AND EXTREMES

PUEBLO, CO (PUB)

LATITUDE: 38° 17' 24" N LONGITUDE: 104° 29' 54" W ELEVATION (FT): GRND: 4684 BARO: 4661 TIME ZONE: MOUNTAIN (UTC+ 7) WBAN: 93058

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	45.3	50.7	57.2	67.9	76.5	87.7	93.0	89.7	81.3	70.5	56.8	46.7	68.6
	MEAN DAILY MAXIMUM	44	45.2	50.2	57.1	66.8	76.6	87.6	92.4	89.4	81.7	70.3	55.6	47.2	68.3
	HIGHEST DAILY MAXIMUM	56	81	81	86	93	99	108	106	104	100	94	84	82	108
	YEAR OF OCCURRENCE		1997	1981	1989	1992	1996	1990	1981	1980	1990	1991	1980	1980	JUN 1990
	MEAN OF EXTREME MAXS.	44	66.3	69.5	77.7	85.4	91.2	100.1	102.0	99.3	95.1	87.4	75.9	69.5	84.9
	NORMAL DAILY MINIMUM	30	14.2	19.5	26.1	35.7	45.6	54.2	61.2	59.0	50.2	36.6	24.3	15.5	36.8
	MEAN DAILY MINIMUM	44	13.6	18.8	25.5	35.1	45.6	54.3	60.4	58.6	49.6	36.5	23.8	16.1	36.5
	LOWEST DAILY MINIMUM	56	-29	-31	-20	2	25	36	44	40	27	4	-17	-25	-31
	YEAR OF OCCURRENCE		1948	1951	1948	1997	1954	1998	1994	1968	1985	1997	1991	1990	FEB 1951
	MEAN OF EXTREME MINS.	44	-7.3	-8	7.5	20.6	33.0	43.9	52.9	50.6	36.3	22.1	6.1	-3.8	21.8
	NORMAL DRY BULB	30	29.8	35.1	41.7	51.8	61.1	71.0	77.1	74.3	65.8	53.6	40.5	31.1	52.7
	MEAN DRY BULB	44	28.9	33.8	41.2	51.0	61.1	70.9	76.5	74.1	65.6	53.3	39.8	31.6	52.3
	MEAN WET BULB	48	24.0	28.3	33.1	40.4	49.2	56.0	61.0	60.3	52.7	42.4	32.1	26.3	42.1
	MEAN DEW POINT	48	14.3	16.9	20.8	27.0	37.2	45.3	52.2	52.1	42.5	30.8	23.1	16.9	31.6
NORMAL NO. DAYS WITH:	MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.1	2.6	14.2	22.8	17.9	6.6	0.3	0.0	0.0	64.5
	MAXIMUM ≤ 32°	30	6.5	3.1	1.2	*	0.0	0.0	0.0	0.0	0.0	0.1	1.5	5.5	17.9
	MINIMUM ≤ 32°	30	30.2	26.3	24.2	9.0	0.8	0.0	0.0	0.0	0.5	9.3	25.5	29.9	155.7
	MINIMUM ≤ 0°	30	4.5	1.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.2	9.5
H/C	NORMAL HEATING DEG. DAYS	30	1091	837	722	396	152	10	0	0	62	357	735	1051	5413
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	31	190	375	291	86	0	0	0	973
RH	NORMAL (PERCENT)	30	57	52	49	44	45	45	49	52	50	47	57	57	50
	HOUR 05 LST	30	68	66	66	63	67	69	72	74	71	65	72	67	68
	HOUR 11 LST	30	52	47	42	34	37	34	36	39	39	36	45	51	41
	HOUR 17 LST	30	50	40	34	29	32	28	32	34	32	32	43	50	36
	HOUR 23 LST	30	66	61	56	51	52	52	58	60	58	55	65	65	58
S	PERCENT POSSIBLE SUNSHINE	56	75	74	74	74	74	80	79	78	81	79	72	71	76
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI) THUNDERSTORMS	49 49	1.4 0.0	1.2 0.0	1.1 0.3	0.7 1.6	0.5 6.0	0.2 7.9	0.1 11.6	0.3 9.5	0.5 3.1	0.7 0.5	1.1 0.1	1.7 0.0	9.5 40.6
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	1	3.2	4.0	4.8	4.4	5.2	2.4	2.8	4.0	3.2	2.8	3.2	2.4	3.5
	MIDNIGHT-MIDNIGHT (OKTAS)	1	4.0	4.0	4.8	4.8	5.2	2.4	2.8	4.0	3.2	3.2	3.2	2.4	3.7
	MEAN NO. DAYS WITH:														
CLEAR	3	11.0	9.3	7.0	9.5	4.0	11.3	15.0	8.0	9.0	11.0	10.0	15.0	120.1	
PARTLY CLOUDY	2	3.5	4.7	2.3	8.5	7.3	4.0	6.5	11.0	1.5	3.5	2.5	4.0	59.3	
CLOUDY	3	3.3	5.7	4.7	5.0	4.3	2.0	2.0	5.0	2.5	5.0	2.5	2.5	44.5	
PR	MEAN STATION PRESSURE (IN)	10	25.22	25.22	25.15	25.16	25.19	25.22	25.30	25.32	25.31	25.27	25.24	25.23	25.24
	MEAN SEA-LEVEL PRES. (IN)	48	30.09	30.03	29.93	29.86	29.85	29.83	29.91	29.93	29.95	30.00	30.06	30.08	29.96
WINDS	MEAN SPEED (MPH)	19	7.1	7.8	9.3	10.4	9.7	9.1	8.6	7.8	7.8	7.4	7.2	7.3	8.3
	PREVAIL. DIR (TENS OF DEGS)	10	27	12	09	12	12	12	12	13	13	12	27	27	12
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	5	44	43	49	48	44	46	41	40	41	47	38	43	49
	DIR. (TENS OF DEGS)		01	34	27	26	28	28	02	27	27	30	33	27	27
	YEAR OF OCCURRENCE		1996	1994	1994	1994	1997	1996	1994	1994	1994	1996	1994	1993	MAR 1994
MAXIMUM 5-SECOND:															
SPEED (MPH)	5	53	48	56	55	51	59	60	52	48	55	45	49	60	
DIR. (TENS OF DEGS)		01	02	28	03	28	02	02	36	27	30	35	27	02	
YEAR OF OCCURRENCE		1996	1994	1994	1996	1997	1997	1994	1994	1994	1996	1997	1993	JUL 1994	
PRECIPITATION	NORMAL (IN)	30	0.32	0.31	0.78	0.88	1.25	1.25	2.09	1.99	0.90	0.57	0.43	0.42	11.19
	MAXIMUM MONTHLY (IN)	56	1.45	1.39	2.34	6.17	5.43	4.26	5.14	5.85	2.73	4.91	2.48	0.97	6.17
	YEAR OF OCCURRENCE		1948	1987	1979	1942	1957	1961	1990	1955	1976	1957	1991	1979	APR 1942
	MINIMUM MONTHLY (IN)	56	0.00	T	0.05	T	0.30	T	0.09	0.08	T	T	T	T	0.00
	YEAR OF OCCURRENCE		1993	1970	1966	1963	1965	1990	1987	1960	1956	1988	1989	1993	JAN 1993
	MAXIMUM IN 24 HOURS (IN)	56	0.61	0.60	1.31	2.49	2.53	2.24	1.96	2.95	1.57	3.77	1.08	0.71	3.77
	YEAR OF OCCURRENCE		1990	1987	1998	1957	1957	1979	1977	1955	1982	1957	1997	1979	OCT 1957
NORMAL NO. DAYS WITH:															
PRECIPITATION ≥ 0.01	30	4.3	3.9	6.0	5.1	7.4	7.0	9.4	8.8	5.8	3.3	3.5	4.5	69.0	
PRECIPITATION ≥ 1.00	30	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.4	*	0.0	0.0	0.0	1.0	
SNOWFALL	NORMAL (IN)	30	6.0	4.3	6.8	3.1	0.6	0.0	0.0	0.0	0.4	1.1	3.6	5.9	31.8
	MAXIMUM MONTHLY (IN)	56	20.0	14.4	22.4	21.2	10.6	T	T	T	14.0	16.3	29.3	15.3	29.3
	YEAR OF OCCURRENCE		1948	1965	1948	1957	1990	1992	1992	1991	1959	1991	1946	1967	NOV 1946
	MAXIMUM IN 24 HOURS (IN)	56	12.4	8.2	11.1	16.8	9.4	T	T	T	9.5	12.6	16.3	8.7	16.8
	YEAR OF OCCURRENCE		1990	1989	1998	1990	1990	1992	1992	1991	1959	1991	1946	1961	APR 1990
	MAXIMUM SNOW DEPTH (IN)	49	12	7	10	9	3	0	0	0	1	8	12	10	12
YEAR OF OCCURRENCE		1960	1989	1998	1990	1990				1984	1997	1972	1967	NOV 1972	
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	1.7	1.4	2.1	0.7	0.2	0.0	0.0	0.0	0.1	0.3	1.0	1.9	9.4	

PRECIPITATION (inches) 1998 PUEBLO, CO (PUB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	0.04	0.05	0.82	0.54	0.87	1.74	1.73	1.58	1.28	2.04	0.48	0.50	11.67
1970	0.25	T	0.92	1.32	0.44	0.77	0.70	1.64	1.24	1.55	0.45	T	9.28
1971	0.42	0.23	0.55	0.88	0.73	0.66	1.93	0.85	1.20	0.20	0.45	0.18	8.28
1972	0.35	0.13	0.93	0.68	0.84	0.98	1.99	1.96	1.12	1.05	1.49	0.41	11.93
1973	0.11	0.07	1.34	1.64	1.84	0.38	3.23	1.77	1.19	0.76	0.05	0.82	13.20
1974	0.40	0.17	0.45	0.29	1.17	1.70	1.23	1.75	0.65	0.86	0.69	0.32	9.68
1975	0.07	0.24	0.12	0.85	0.69	2.05	2.19	2.24	0.06	0.61	0.71	0.05	9.88
1976	0.15	0.11	0.86	0.88	0.68	1.34	2.08	0.88	2.73	0.98	0.30	0.14	11.13
1977	0.10	0.32	0.10	1.77	0.60	0.25	2.96	3.53	0.08	T	0.14	0.02	9.87
1978	0.16	0.34	0.40	0.44	1.95	1.19	0.99	1.23	0.08	0.68	0.24	0.71	8.41
1979	0.59	0.06	2.34	0.54	2.60	3.51	1.47	2.04	0.63	0.36	0.94	0.97	16.05
1980	0.39	0.14	1.22	2.99	2.20	0.43	0.75	2.35	0.47	T	0.64	0.01	11.59
1981	0.12	0.15	1.24	0.13	0.76	0.16	1.28	2.55	0.32	0.19	0.04	0.67	7.61
1982	0.54	0.31	0.26	0.13	2.28	1.71	2.71	4.35	2.24	0.37	0.12	0.44	15.46
1983	0.60	0.04	2.08	1.05	1.96	2.07	1.49	1.58	0.18	0.22	0.51	0.95	12.73
1984	0.23	0.07	1.15	1.17	1.11	0.35	4.21	4.37	0.27	2.55	0.20	0.44	16.12
1985	0.50	0.36	0.72	1.70	1.46	0.10	4.82	0.95	1.01	0.60	1.13	0.27	13.62
1986	0.25	0.14	0.55	0.43	0.84	2.21	1.71	2.42	0.35	0.90	0.48	0.49	10.77
1987	0.74	1.39	0.45	0.30	2.09	1.29	0.09	2.89	0.31	0.04	0.49	0.74	10.82
1988	0.94	0.38	0.93	0.70	1.33	1.86	2.00	0.67	1.80	T	0.17	0.60	11.38
1989	0.42	0.83	0.14	0.59	1.45	1.27	0.61	1.02	1.03	0.10	T	0.87	8.33
1990	0.76	0.69	1.14	1.57	2.34	0.00	5.14	3.08	1.83	0.59	0.54	0.22	17.90
1991	0.08	0.01	0.74	0.83	0.72	1.97	2.79	2.14	1.36	0.62	2.48	0.52	14.26
1992	0.04	0.19	1.31	0.43	0.40	3.15	1.39	2.48	0.70	0.71	1.30	0.47	12.57
1993		0.18	1.72	1.40	1.99	1.49	1.37	3.71	0.62	0.54	1.07	T	
1994	0.46	0.24	0.83	2.13	2.36	2.59	0.12	4.01	0.16	1.69	0.58	0.24	15.41
1995	0.01	0.16	0.88	2.52	4.30	2.29	1.18	2.57	1.38	T	0.14	T	15.43
1996	0.24	0.12	0.95	0.66	1.80	1.32	3.41	2.11	1.46	0.31	0.43	0.22	13.03
1997	0.17	0.42	0.26	2.29	0.53	2.02	0.80	4.13	0.96	0.83	1.53	0.38	14.32
1998	0.10	0.17	1.94	1.88	1.04	0.68	2.42	0.93	0.41	1.60	0.46	0.33	11.96
POR= 44 YRS	0.31	0.30	0.80	1.04	1.51	1.30	1.95	2.12	0.88	0.75	0.55	0.36	11.87

WBAN : 93058

AVERAGE TEMPERATURE (°F) 1998 PUEBLO, CO (PUB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	36.5	37.8	36.3	56.1	64.3	68.0	80.2	79.0	69.8	49.9	44.0	36.8	54.9
1970	31.7	41.8	39.2	50.8	65.2	73.1	80.3	79.8	65.7	50.0	45.6	38.4	55.1
1971	34.9	35.3	41.7	49.9	58.5	73.4	75.4	74.6	62.2	52.8	40.7	33.5	52.7
1972	29.8	38.6	45.9	52.9	60.4	73.2	74.4	74.2	66.5	53.8	31.9	23.1	52.1
1973	29.5	35.1	42.7	47.0	59.4	71.2	75.3	76.5	64.7	56.2	42.1	32.0	52.6
1974	26.3	36.8	47.0	51.3	65.6	72.4	78.7	72.8	63.3	56.8	41.5	28.8	53.4
1975	31.6	33.5	40.5	49.3	59.8	70.0	76.8	75.3	64.0	54.6	38.3	36.5	52.5
1976	30.9	40.2	38.5	51.3	59.5	69.4	76.6	72.5	63.8	48.4	36.0	33.0	51.7
1977	27.6	38.2	42.0	54.2	65.3	74.2	77.5	74.1	67.5	53.8	40.6	36.0	54.3
1978	25.2	29.1	43.7	53.2	58.0	70.2	77.9	72.8	66.7	53.6	38.9	24.0	51.1
1979	16.1	34.4	43.1	51.8	57.6	68.9	76.5	71.7	67.4	55.2	35.8	33.9	51.0
1980	28.2	37.2	40.6	48.3	58.3	72.8	80.2	76.0	67.0	52.4	40.8	41.2	53.6
1981	36.6	39.8	45.9	59.6	62.0	75.6	79.2	74.2	68.7	56.3	46.4	34.5	56.6
1982	31.0	33.3	46.1	53.0	60.8	67.8	77.3	76.6	66.3	51.0	38.3	32.2	52.8
1983	33.3	37.5	41.0	46.1	56.9	67.1	77.5	77.4	68.0	54.1	41.8	20.8	51.8
1984	26.6	36.0	40.1	47.9	63.5	71.7	77.5	75.3	64.0	49.5	41.0	35.5	52.4
1985	25.8	29.1	43.4	54.0	61.9	70.9	75.4	75.0	62.7	51.6	31.1	27.4	50.7
1986	39.5	38.9	47.8	53.2	59.9	71.1	75.9	73.3	63.1	50.9	40.1	30.2	53.7
1987	29.8	37.3	40.4	52.9	61.7	71.2	77.0	72.0	65.0	53.3	39.6	29.0	52.4
1988	19.7	33.6	39.7	51.5	60.8	73.2	75.7	75.8	64.8	55.0	41.8	30.5	51.8
1989	33.1	24.0	46.3	52.8	62.8	67.9	76.8	73.6	65.3	53.2	42.3	26.1	52.0
1990	33.6	33.4	42.4	51.6	57.7	74.3	72.8	72.0	68.3	53.3	44.4	24.6	52.4
1991	28.8	38.7	43.4	51.3	64.0	72.3	74.9	73.7	64.7	52.8	33.9	32.1	52.6
1992	33.9	38.6	45.1	54.6	61.9	66.8	73.2	70.5	65.6	52.1	31.1	28.2	51.8
1993	26.5	30.6	42.1	50.5	59.1	68.8	74.9	71.2	60.1	49.0	32.3	31.8	49.7
1994	30.0	32.1	42.6	49.2	61.1	73.1	73.9	73.9	66.0	52.2	38.7	33.7	52.2
1995	31.6	36.7	41.1	44.4	54.0	65.1	71.8	75.6	62.2	48.7	41.3	31.8	50.4
1996	27.9	34.7	38.0	50.4	64.7	70.3	75.0	72.6	62.2	51.2	38.1	32.7	51.5
1997	28.0	31.7	43.1	43.8	58.2	69.5	75.0	72.0	66.5	49.9	34.9	29.5	50.2
1998	31.4	34.5	37.6	47.6	61.3	66.6	75.0	72.4	69.8	53.8	44.3	29.3	52.0
POR= 45 YRS	29.5	34.5	41.2	50.8	60.9	70.8	76.4	74.2	65.6	53.4	39.8	31.7	52.4

HEATING DEGREE DAYS (base 65°F) 1998 PUEBLO, CO (PUB)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	0	0	4	468	626	865	1026	645	796	418	89	20	4957
1970-71	0	0	105	471	572	820	926	825	715	450	200	0	5084
1971-72	3	0	180	371	723	968	1081	756	585	359	170	0	5196
1972-73	16	2	58	340	987	1294	1093	832	685	532	197	25	6061
1973-74	2	0	84	268	682	1017	1192	782	552	409	59	36	5083
1974-75	0	0	103	250	698	1118	1024	876	756	472	167	39	5503
1975-76	0	0	119	320	795	874	1049	714	814	401	175	25	5286
1976-77	0	2	106	507	861	986	1151	747	708	318	44	1	5431
1977-78	0	4	34	343	894	1228	1001	653	347	238	238	54	5519
1978-79	0	6	59	347	778	1264	1509	849	674	391	247	48	6172
1979-80	0	8	45	299	870	959	1135	797	751	492	214	6	5576
1980-81	0	0	46	383	717	731	871	697	584	175	119	3	4326
1981-82	0	0	22	272	554	938	1047	883	582	358	151	35	4842
1982-83	0	0	62	427	794	1010	974	762	740	561	258	50	5638
1983-84	0	0	52	330	689	1365	1183	834	763	505	120	2	5843
1984-85	0	0	127	474	713	907	1209	999	662	325	125	9	5550
1985-86	0	0	172	410	1010	1161	783	728	523	346	169	21	5323
1986-87	0	0	94	428	741	1069	1082	768	756	358	119	10	5425
1987-88	4	17	43	355	754	1111	1399	903	777	399	167	8	5937
1988-89	1	0	84	308	689	1062	980	1145	573	378	134	35	5389
1989-90	0	0	94	373	676	1199	964	877	695	394	233	2	5507
1990-91	1	0	34	360	610	1245	1116	730	667	406	103	3	5275
1991-92	1	0	76	380	929	1014	958	759	608	309	125	41	5200
1992-93	0	15	58	390	1009	1132	1186	959	703	428	195	30	6105
1993-94	0	18	155	491	973	1020	1081	915	687	468	143	0	5951
1994-95	0	6	57	389	785	964	1028	788	734	608	335	64	5758
1995-96	7	0	157	498	700	1019	1144	872	829	435	88	5	5754
1996-97	0	0	122	420	804	995	1139	925	672	633	211	11	5932
1997-98	0	3	58	466	898	1092	1035	848	844	517	126	61	5948
1998-	0	0	4	339	613	1099							

WBAN : 93058

COOLING DEGREE DAYS (base 65°F) 1998 PUEBLO, CO (PUB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1969	0	0	0	0	68	141	480	440	155	8	0	0	1292
1970	0	0	0	2	100	271	481	470	133	14	0	0	1471
1971	0	0	0	0	4	259	329	305	101	0	0	0	998
1972	0	0	0	2	34	255	316	294	109	3	0	0	1013
1973	0	0	0	0	29	219	328	363	83	2	0	0	1024
1974	0	0	0	6	83	264	432	249	60	4	0	0	1098
1975	0	0	0	6	14	191	371	326	97	3	0	0	1008
1976	0	0	0	0	9	163	365	239	76	0	0	0	852
1977	0	0	0	1	57	283	396	293	115	0	0	0	1145
1978	0	0	3	0	27	217	411	255	116	2	0	0	1031
1979	0	0	0	1	25	169	363	221	124	1	0	0	904
1980	0	0	0	1	14	247	482	347	111	0	0	0	1202
1981	0	0	0	20	34	328	446	291	142	9	0	0	1270
1982	0	0	0	3	30	123	395	359	110	0	0	0	1020
1983	0	0	0	0	16	120	392	391	149	0	0	0	1068
1984	0	0	0	0	76	210	395	328	103	0	0	0	1112
1985	0	0	0	0	36	192	329	318	114	1	0	0	990
1986	0	0	0	0	17	212	347	264	45	0	0	0	885
1987	0	0	0	2	26	203	385	240	50	2	0	0	908
1988	0	0	0	0	45	261	342	342	84	4	0	0	1078
1989	0	0	0	16	72	128	373	273	109	11	0	0	982
1990	0	0	0	0	13	286	250	223	140	3	0	0	915
1991	0	0	0	0	78	232	314	276	75	9	0	0	984
1992	0	0	0	3	34	100	262	191	82	0	0	0	672
1993	0	0	0	1	18	152	316	221	16	1	0	0	725
1994	0	0	0	0	29	251	283	289	94	0	0	0	946
1995	0	0	0	0	0	76	228	338	80	0	0	0	722
1996	0	0	0	4	87	170	316	244	45	1	0	0	867
1997	0	0	0	0	7	152	314	229	112	8	0	0	822
1998	0	0	0	0	19	117	318	237	155	0	0	0	846

SNOWFALL (inches) 1998 PUEBLO, CO (PUB)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1969-70	0.0	0.0	0.0	3.9	2.8	5.9	3.3	T	15.3	5.6	0.0	0.0	36.8
1970-71	0.0	0.0	0.0	6.3	T	T	6.0	6.6	8.0	5.9	T	0.0	32.8
1971-72	0.0	0.0	7.5	1.9	3.5	2.2	6.5	3.0	10.9	T	0.0	0.0	35.5
1972-73	0.0	0.0	0.0	12.6	15.7	9.2	3.8	0.8	6.2	4.6	0.6	0.0	53.5
1973-74	0.0	0.0	0.0	T	1.7	8.1	4.4	2.7	4.8	3.3	0.0	0.0	25.0
1974-75	0.0	0.0	0.0	0.0	1.5	4.2	1.7	4.1	1.4	8.2	0.0	0.0	21.1
1975-76	0.0	0.0	0.0	0.0	5.4	0.9	2.8	2.2	11.1	T	0.0	0.0	22.4
1976-77	0.0	0.0	0.0	2.4	4.0	2.0	1.8	3.6	1.1	T	0.0	0.0	14.9
1977-78	0.0	0.0	0.0	T	0.1	0.3	3.6	5.3	1.5	0.2	3.5	0.0	14.5
1978-79	0.0	0.0	0.0	T	1.0	11.5	11.0	T	7.7	0.8	1.4	0.0	33.4
1979-80	0.0	0.0	0.0	T	2.9	9.9	4.1	3.0	13.0	9.7	0.0	0.0	42.6
1980-81	0.0	0.0	0.0	0.0	5.3	0.1	1.6	3.0	6.4	0.4	0.0	0.0	16.8
1981-82	0.0	0.0	0.0	0.0	0.4	4.9	9.1	4.3	2.4	0.3	2.2	0.0	23.6
1982-83	0.0	0.0	0.0	0.0	0.4	3.3	5.7	0.4	8.9	3.6	0.0	0.0	22.3
1983-84	0.0	0.0	0.0	0.0	1.9	12.9	5.3	0.2	11.5	8.9	0.3	0.0	41.0
1984-85	0.0	0.0	3.0	4.9	1.5	6.2	10.1	4.1	7.8	0.0	0.0	0.0	37.6
1985-86	0.0	0.0	1.2	T	23.5	4.9	3.9	3.7	2.4	2.5	T	0.0	42.1
1986-87	0.0	0.0	0.0	T	3.6	6.2	13.9	4.9	1.8	1.1	0.0	0.0	31.5
1987-88	0.0	0.0	0.0	0.0	5.2	12.0	18.3	8.3	11.1	8.9	0.4	0.0	64.2
1988-89	0.0	0.0	0.0	0.0	1.2	9.3	9.0	12.6	T	1.2	T	T	33.3
1989-90	0.0	0.0	0.0	T	T	10.4	15.0	12.7	2.5	18.4	10.6	0.0	69.6
1990-91	0.0	0.0	0.0	1.6	5.1	6.5	2.4	0.1	10.5	2.0	T	T	28.2
1991-92	T	T	T	16.3	25.6	4.0	1.1	0.5	1.2	0.0	0.0	T	48.7
1992-93	T	0.0	0.0				6.4						
1993-94										17.2	T	0.0	
1994-95	0.0	T	0.0	0.0	6.7	5.0	0.4	5.4	11.6	0.0	0.0		
1995-96		0.0	3.5	0.0	1.2	T	5.5	2.7	5.4	3.6	0.0	0.0	
1996-97	0.0	T	0.8	3.5	4.3	2.8	4.8	6.3	3.2	7.3	0.0	T	33.0
1997-98	0.0	T	0.0	8.2	10.6	5.2	1.0	0.6	12.5	1.3	T	0.0	39.4
1998-	T	T	0.0	T	T	8.1							
POR= 43 YRS	T	T	0.7	1.7	4.3	5.2	5.9	4.2	6.6	4.1	0.5	T	33.2

WBAN : 93058

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 EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
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1998
PUEBLO,
COLORADO (PUB)

The city of Pueblo is located about 40 miles east-southeast of the Royal Gorge, at the junction of the Arkansas and Fountain Rivers. The mountains west of the city extend from within 25 miles to the southwest to about 35 miles to the northwest. Lake Pueblo, the largest body of water in southern Colorado, is located 7 miles west of the city and provides a variety of water sports, fishing, picnicing, and a wildlife preserve. The countryside surrounding Pueblo consists of rolling plains, broken by normally dry arroyos, and is generally treeless, covered mainly with sparse bunchgrass and occasional cacti. The business section of the city is 4,663 feet above sea level. The National Weather Service Office is located at Pueblo Memorial Airport, 6 miles east of the Pueblo Post Office, and about 1 1/2 miles north of the Arkansas River. Terrain at the airport is relatively flat, and from 50 to 100 feet above the river. The air quality in Pueblo is rated the best of large Colorado cities along the front range.

The climate is semi-arid and marked by large daily temperature variations. The temperature reaches 90 degrees or more about half the time during the summer, but thanks to the low relative humidity, the heat is not oppressive. Summer nights are invariably cool since mountain breezes prevail from shortly after sunset to about noon

the following day. The sun shines about 76 percent of the time. Winter is comparatively mild due to the abundant sunshine and the protection afforded by the nearby mountains. Temperatures reach 50 degrees or higher in the winter. The temperature drops to zero or below about eight times during the winter. Cold spells are generally broken after a few days by chinook winds, a very dry, warm, downslope westerly wind.

The probability of measurable precipitation in summer is one day out of four and in winter one out of eight. Summer rains usually occur in the form of afternoon thunderstorms. Blowing dust frequently develops during the spring months of abnormally dry years, especially in areas where dry farming has been attempted.

Agriculture consists chiefly of cattle grazing on the dry plains and irrigated farming near streams. Sugar beets, corn, chili peppers, and melons are the most important crops. In addition, a variety of vegetables, from asparagus to zucchini, are grown. Some dry farming is attempted, but the extent of such operations is limited by the annual precipitation of less than 12 inches.

STATION LOCATION

PUEBLO, COLORADO

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE										AUGUST 1980	* Type M = AMOS T = AUTOB S = ASOS W = AWOS	REMARKS	
						SEA LEVEL	GROUND												
							WIND	1	2	3	4	5	6	7	8				9
CITY																			
Thatcher & Gast Bldg., 417-1/2 Santa Fe Ave.	6/27/88	6/30/89		38°18'	104°36'	4706	68	61	61										
Building (Frame) 5th & Summit Streets	7/01/89	2/28/91	600 ft. NNE	38°18'	104°36'	4736	51	23	23										
Swift Block 6th & Main Streets	3/01/91	8/31/98	800 ft. WSW	38°18'	104°36'	4716	81	74	74										
Post Office Building 5th & Main Streets	9/01/98	6/30/40	400 ft. S	38°18'	104°36'	4668	86	78	78		72								
AIRPORT																			
Pueblo Municipal AP Administration Bldg.	2/01/32	7/01/40	3.5 mi. SW of P.O.	38°14'	104°38'	4796	36		5										
Pueblo Municipal AP Administration Bldg.	7/01/40	6/01/54	No Change	38°14'	104°38'	4799	36	6	5		5	3	3					City office and airport office consolidated.	
Building T-134 Memorial Airport 6 miles east of P.O.	6/01/54	9/30/69	10 mi. ENE	38°17'	104°31'	d4684	b22	5	5		a4	5	3	c4				Relocation to former Pueblo Army Air Base, redesignated as Pueblo Memorial Airport. a - Installed 5/9/55. b - 34 feet prior to move to field site 3/19/62. c - Commissioned 2600 feet NNW of thermometer site 2/10/64. d - 4639 feet to 2/10/64.	
Terminal Building Memorial Airport	9/30/69	1/1/82	350 ft. NNW	38°17'	104°31'	4684	e22	5	5	26	3	4	3	e4	NA			e - Same site as prior to 9/30/69. Data for period 1/1/82-8/31/82 obtained from SAWRS at Memorial Airport.	
Terminal Building Memorial Airport	9/1/82 10/1/92	10/1/92 Present	NA	38°17' 38°17'	104°30' 104°30'	4684	33	5	5	26	3	4	3	4	NA S			WSO reopened at same location. ASOS commissioned 10/01/92.	

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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