

1999

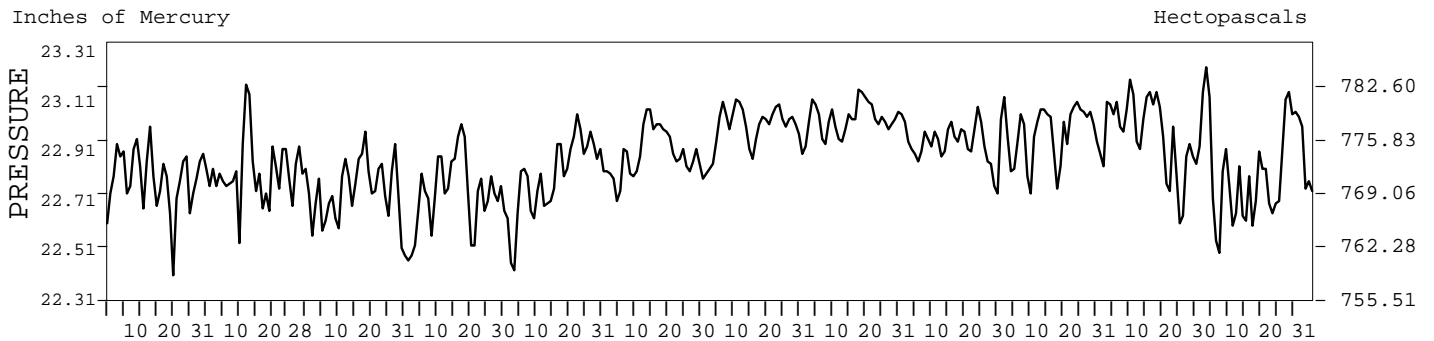
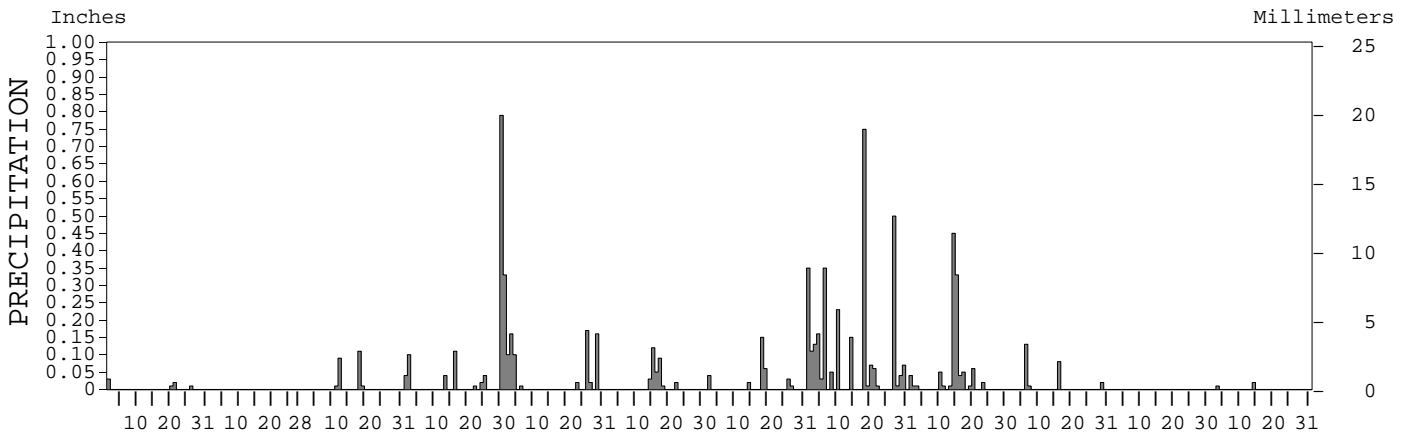
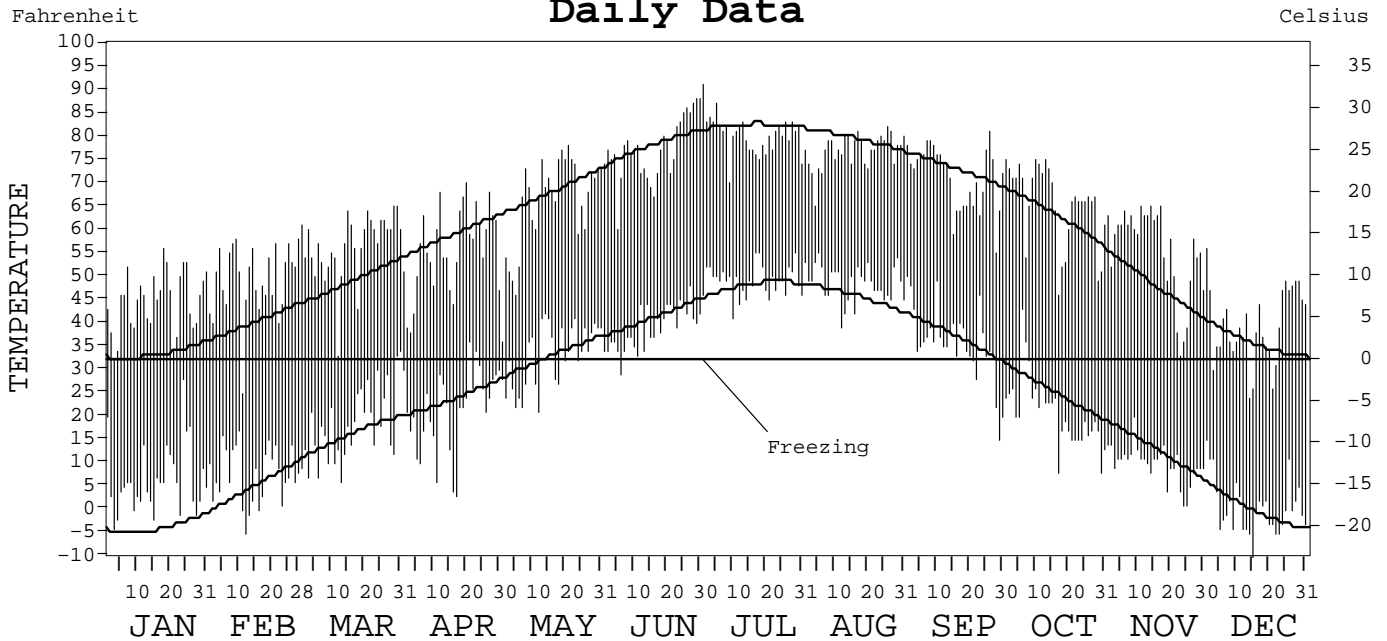
LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-7720

ALAMOSA, COLORADO (ALS)

Daily Data



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METEOROLOGICAL DATA FOR 1999

ALAMOSA, CO (ALS)

LATITUDE: 37° 26' 10" N LONGITUDE: 105° 51' 56" W ELEVATION (FT): GRND: 7539 BARO: 7539 TIME ZONE: MOUNTAIN (UTC + 7) WBAN: 23061

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	44.6	49.2	56.6	55.8	65.5	77.1	80.3	76.8	71.1	65.5	55.6	39.5	61.5	
	HIGHEST DAILY MAXIMUM	56	58	65	70	78	88	91	82	81	75	65	56	91	
	DATE OF OCCURRENCE	18	28+	30+	20	21	30+	01	26	26	13+	17+	01	JUL 01	
	MEAN DAILY MINIMUM	6.5	7.6	18.0	21.5	33.0	38.9	49.0	48.5	35.7	20.9	9.8	.6	24.2	
	LOWEST DAILY MINIMUM	-4	-5	6	3	21	29	41	39	15	8	1	-10	-10	
	DATE OF OCCURRENCE	03	12	13	17	12	06	10	12	29	30+	25+	15	DEC 15	
	AVERAGE DRY BULB	25.6	28.4	37.3	38.7	49.3	58.0	64.7	62.7	53.4	43.2	32.7	20.1	42.8	
	MEAN WET BULB	20.1	21.2	29.0	31.0	39.1	46.3		53.8		32.7	23.2	14.3		
	MEAN DEW POINT	10.5	6.8	14.3	18.5	26.5	33.8		48.6		19.2	9.3	4.6		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	0	1	0	0	0	0	0	0	1
	MAXIMUM ≤ 32°	1	1	0	0	0	0	0	0	0	0	0	5	7	
	MINIMUM ≤ 32°	31	28	29	28	14	1	0	0	5	29	30	31	226	
	MINIMUM ≤ 0°	6	4	0	0	0	0	0	0	0	0	0	18	28	
H/C	HEATING DEGREE DAYS	1217	1018	851	784	482	206	30	69	339	667	962	1388	8013	
	COOLING DEGREE DAYS	0	0	0	0	0	2	28	3	0	0	0	0	33	
RH	MEAN (PERCENT)	58	46	46	51	48	47	61	68	60	48	47	58	53	
	HOUR 05 LST	78	70	74	72	76	80	88	91	87	76	74	76	78	
	HOUR 11 LST	46	31	31	34	32	28	42	49	39	28	29	44	36	
	HOUR 17 LST	37	23	22	36	29	27	43	48	37	22	24	37	32	
	HOUR 23 LST	67	58	54	65	58	60	76	83	75	62	59	69	66	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	1	0	2	3	4	3	2	1	0	1	0	0	17	
	THUNDERSTORMS	0	0	0	5	8	13	24	23	15	4	0	0	92	
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.)	22.80	22.83	22.76	22.73	22.81	22.90	23.01	23.04	22.95	22.98	22.99	22.80	22.88	
	MEAN SEA-LEVEL PRESS. (IN.)	30.12	30.13		29.89	29.90			30.11			30.32	30.30		
WINDS	RESULTANT SPEED (MPH)	1.8	2.7	4.7	4.8		4.4	2.1	1.3	1.4	1.1	0.9	0.9		
	RES. DIR. (TENS OF DEGS.)	24	24	21	20		21	17	19	21	19	22	32		
	MEAN SPEED (MPH)	7.4	8.4	10.1	11.9	10.5	9.1	7.4	5.5	6.3	5.8	4.2	5.2	7.7	
	PREVAIL. DIR. (TENS OF DEGS.)	21	20	20	18	22	24	20	16	20	24	20	36	20	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	41	39	49	51	44	44	36	38	37	36	30	32	51	
	DIR. (TENS OF DEGS.)	25	20	22	24	23	18	20	20	25	10	24	33	24	
	DATE OF OCCURRENCE	26	10	31	09	03	02	02	14	27	16	21+	14	APR 09	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	54	47	60	75	53	56	45	46	44	46	35	39	75	
DIR. (TENS OF DEGS.)	22	29	22	21	24	17	21	20	26	10	24	33	21		
DATE OF OCCURRENCE	26	01	31	09	03	02	02	14	27+	16	21	14	APR 09		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.07	T	0.22	1.15	1.07	0.32	0.31	3.08	1.09	0.24	T	0.03	7.58	
	GREATEST 24-HOUR (IN.)	0.03	T	0.11	0.79	0.43	0.15	0.15	0.76	0.61	0.14	T	0.02	0.79	
	DATE OF OCCURRENCE	01	15+	18	30	01-02	14-15	18	18-19	14-15	06-07	22	14	APR 30	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	4	0	4	8	9	6	6	18	13	4	0	2	74	
PRECIPITATION ≥ 0.10	0	0	1	3	6	1	1	9	2	1	0	0	24		
PRECIPITATION ≥ 1.00	0	0	0	0	0	0	0	0	0	0	0	0	0		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	1.7	T	2.8	7.2	5.9	0.0	0.0	0.0	0.0	T	T	0.3	17.9	
	GREATEST 24-HOUR (IN.)	1.0	T	1.7	4.5	4.1	0.0	0.0	0.0	0.0	T	T	0.2	4.5	
	DATE OF OCCURRENCE	01	15+	12	30	01-02					29+	22	14	APR 30	
	MAXIMUM SNOW DEPTH (IN.)	T	T	1	1	2	0	0	0	0	0	0	T	2	
	DATE OF OCCURRENCE	22+	11+	13	17	02							14+	MAY 02	
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	1	0	2	3	3	0	0	0	0	0	0	0	9		

NORMALS, MEANS, AND EXTREMES

ALAMOSA, CO (ALS)

LATITUDE: 37° 26' 10" N LONGITUDE: 105° 51' 56" W ELEVATION (FT): GRND: 7539 BARO: 7539 TIME ZONE: MOUNTAIN (UTC + 7) WBAN: 23061

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	33.3	39.9	48.7	58.6	68.0	77.8	82.0	79.2	72.7	62.5	47.4	35.4	58.8
	MEAN DAILY MAXIMUM	51	34.0	40.2	48.6	58.3	68.1	78.1	81.9	79.3	73.5	62.7	47.0	35.9	59.0
	HIGHEST DAILY MAXIMUM	53	62	66	73	80	85	95	96	90	87	81	71	61	96
	YEAR OF OCCURRENCE		1971	1986	1989	1989	1984	1994	1989	1977	1990	1979	1980	1958	JUL 1989
	MEAN OF EXTREME MAXS.	51	48.5	53.5	63.6	72.1	79.6	87.4	88.7	86.3	82.5	74.6	61.6	50.4	70.7
	NORMAL DAILY MINIMUM	30	-3.9	4.8	15.8	23.5	32.8	41.0	47.8	45.4	36.7	24.6	12.3	-5	23.4
	MEAN DAILY MINIMUM	51	-2.4	5.2	15.6	23.8	33.1	41.3	47.4	45.6	36.6	24.4	11.6	-1	23.5
	LOWEST DAILY MINIMUM	53	-50	-35	-20	-6	11	24	30	29	15	-10	-30	-42	-50
	YEAR OF OCCURRENCE		1948	1948	1964	1973	1967	1990	1997	1964	1999	1945	1952	1978	JAN 1948
	MEAN OF EXTREME MINS.	51	-22.5	-14.0	-1.3	8.7	20.0	30.5	39.1	36.5	24.2	9.5	-6.1	-19.3	8.8
	NORMAL DRY BULB	30	14.7	22.4	32.3	41.1	50.4	59.4	64.9	62.4	54.8	43.5	29.9	17.5	41.1
	MEAN DRY BULB	53	15.9	22.7	32.2	41.0	50.7	59.7	64.7	62.4	55.2	43.6	29.3	17.9	41.3
	MEAN WET BULB	56	21.0	24.8	31.6	37.8	43.6	50.1	55.8	55.7	47.7	36.8	26.7	16.3	37.3
	MEAN DEW POINT	56	11.2	13.3	19.6	20.8	30.0	34.3	46.4	49.7	40.1	26.3	17.3	8.2	26.4
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.0	0.0	0.3	0.9	*	0.0	0.0	0.0	0.0	1.2	
MAXIMUM ≤ 32°	30	13.5	6.4	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.9	11.3	35.8	
MINIMUM ≤ 32°	30	31.0	28.0	30.5	26.9	14.2	2.1	0.0	0.2	7.3	26.5	29.5	31.0	227.2	
MINIMUM ≤ 0°	30	19.3	9.7	1.5	0.1	0.0	0.0	0.0	0.0	0.0	0.1	3.6	16.0	50.3	
H/C	NORMAL HEATING DEG. DAYS	30	1559	1193	1014	717	453	174	42	98	306	667	1053	1473	8749
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	0	6	39	17	0	0	0	0	62
RH	NORMAL (PERCENT)														
	HOUR 05 LST	30	80	80	76	70	72	77	85	86	83	78	80	80	79
	HOUR 11 LST	30	60	55	43	32	29	29	39	42	40	39	49	59	43
	HOUR 17 LST	30	58	49	38	28	27	26	36	38	34	33	48	60	40
	HOUR 23 LST	30	82	79	69	60	58	56	67	70	67	67	78	81	70
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	26	3.8	2.2	1.6	1.1	0.9	0.5	0.8	1.0	1.3	0.9	2.1	3.9	20.1
	THUNDERSTORMS	26	0.0	0.2	0.2	1.4	6.5	6.1	12.2	12.8	5.5	1.1	0.1	0.0	46.1
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	2	3.2	4.8	4.5	4.8	4.3	2.7	2.4	5.1	2.4	3.6	4.0	3.2	3.8
	MIDNIGHT-MIDNIGHT (OKTAS)	1	4.0	4.8	4.8	4.8	4.3	3.6	2.8	5.3	2.4	4.0	5.2	3.2	4.1
	MEAN NO. DAYS WITH:														
	CLEAR	2	15.5	8.0	8.3	7.5	11.0	14.3	16.0	5.0	9.5	10.5	6.0	12.0	123.6
PARTLY CLOUDY	2	6.0	6.3	4.3	7.5	7.3	6.0	6.5	10.0	1.5	6.5	5.5	7.5	74.9	
CLOUDY	2	5.7	7.0	3.0	7.5	5.7	5.0	1.0	9.0	1.5	3.0	3.5	2.5	54.4	
PR	MEAN STATION PRESSURE (IN)	17	22.76	22.73	22.69	22.70	22.76	22.85	22.95	22.97	22.90	22.85	22.79	22.77	22.81
	MEAN SEA-LEVEL PRES. (IN)	11	30.29	30.15	30.03	29.94	29.94	29.95	30.02	30.10	30.08	30.04	30.17	30.31	30.09
WINDS	MEAN SPEED (MPH)	7	5.3	6.7	8.0	9.7	9.5	8.9	6.9	5.7	6.1	6.2	5.4	4.8	6.9
	PREVAIL. DIR (TENS OF DEGS)	36	24	18	18	18	18	24	18	18	18	18	18	18	18
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	6	41	46	49	51	45	49	41	38	37	45	48	43	51
	DIR. (TENS OF DEGS)		23	23	22	24	18	20	30	20	25	30	21	21	24
	YEAR OF OCCURRENCE		1996	1993	1999	1999	1996	1998	1994	1999	1999	1997	1994	1998	APR 1999
	MAXIMUM 5-SECOND:														
SPEED (MPH)	6	54	62	60	75	57	57	57	47	44	54	55	52	75	
DIR. (TENS OF DEGS)		22	19	22	21	18	20	30	28	26	31	21	21	21	
YEAR OF OCCURRENCE		1999	1998	1999	1999	1996	1998	1994	1997	1999	1997	1994	1998	APR 1999	
PRECIPITATION	NORMAL (IN)	30	0.26	0.29	0.45	0.49	0.64	0.67	1.19	1.12	0.89	0.70	0.43	0.44	7.57
	MAXIMUM MONTHLY (IN)	53	0.75	1.42	1.62	1.72	1.85	2.58	3.50	5.40	1.94	2.37	1.23	1.52	5.40
	YEAR OF OCCURRENCE		1979	1963	1992	1990	1973	1969	1968	1993	1959	1969	1991	1964	AUG 1993
	MINIMUM MONTHLY (IN)	52	T	T	T	T	0.01	T	0.02	0.21	T	T	T	T	T
	YEAR OF OCCURRENCE		1981	1954	1955	1972	1975	1980	1994	1980	1956	1983	1989	1980	NOV 1989
	MAXIMUM IN 24 HOURS (IN)	53	0.47	1.15	1.15	1.33	1.04	1.04	1.57	1.34	1.82	1.27	0.78	0.93	1.82
	YEAR OF OCCURRENCE		1956	1963	1992	1952	1990	1969	1971	1993	1959	1969	1985	1964	SEP 1959
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	3.9	4.4	5.9	4.9	5.3	6.0	9.7	10.4	6.5	4.4	4.1	4.5	70.0	
PRECIPITATION ≥ 1.00	30	0.0	0.0	*	*	0.0	*	0.1	0.0	0.0	*	0.0	0.0	0.1	
SNOWFALL	NORMAL (IN)	30	4.5	4.6	7.0	4.0	1.8	0.*	0.0	0.0	0.3	3.6	4.5	7.1	37.4
	MAXIMUM MONTHLY (IN)	52	13.8	16.0	29.2	16.4	13.5	0.2	T	0.0	4.2	20.3	19.8	27.7	29.2
	YEAR OF OCCURRENCE		1979	1963	1973	1947	1978	1983	1981		1961	1969	1972	1967	MAR 1973
	MAXIMUM IN 24 HOURS (IN)	52	9.4	11.5	14.0	10.0	12.0	0.2	T	0.0	4.2	15.5	9.2	15.8	15.8
	YEAR OF OCCURRENCE		1987	1963	1962	1957	1990	1983	T	1994	1961	1969	1985	1967	DEC 1967
	MAXIMUM SNOW DEPTH (IN)	55	10	10	11	11	4	T	T	0	1	12	12	18	18
	YEAR OF OCCURRENCE		1992	1963	1992	1957	1978	1990	1990		1959	1991	1972	1964	DEC 1964
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	1.5	1.7	2.3	1.1	0.5	0.0	0.0	0.0	0.1	0.9	1.3	2.1	11.5	

PRECIPITATION (inches) 1999 ALAMOSA, CO (ALS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0.06	0.03	0.85	0.54	0.86	0.38	1.35	1.30	1.53	1.09	0.06	0.03	8.08
1971	0.15	0.26	0.03	0.33	1.07	0.08	2.59	1.21	1.45	0.71	0.44	0.45	8.77
1972	0.24	0.09	0.12	T	0.07	0.60	0.80	1.16	1.00	2.16	1.00	0.46	7.70
1973	0.16	0.12	1.42	0.41	1.85	0.69	1.09	0.65	1.06	0.64	0.11	0.19	8.39
1974	0.70	0.08	0.24	0.18	0.09	0.72	1.78	0.72	0.62	0.74	0.15	0.74	6.76
1975	0.38	0.22	0.50	0.33	0.01	0.65	0.51	0.90	1.47	0.78	0.43	0.04	6.22
1976	0.05	0.33	0.39	0.50	0.77	0.07	1.43	1.22	0.67	0.51	0.20	0.07	6.21
1977	0.25	0.27	0.14	0.82	0.35	1.17	2.20	0.63	1.15	0.08	0.63	0.17	7.86
1978	0.33	0.07	0.13	0.20	1.59	1.23	1.04	0.27	0.19	0.51	0.90	0.81	7.27
1979	0.75	0.09	0.29	0.42	0.94	0.72	0.19	1.61	0.22	0.19	0.50	0.55	6.47
1980	0.32	0.31	0.65	1.48	1.21	T	0.54	0.21	0.46	0.52	0.01	T	5.71
1981	T	0.13	0.62	0.01	0.99	0.95	1.43	1.94	1.40	0.34	0.78	0.33	8.92
1982	0.07	0.49	0.40	0.37	0.57	0.22	0.51	0.58	1.85	0.19	0.25	0.49	5.99
1983	0.21	0.25	0.85	0.32	0.87	1.23	0.50	0.87	0.38	T	0.78	0.99	7.25
1984	0.14	0.28	1.12	0.49	0.18	0.55	0.74	1.07	0.36	1.48	0.10	0.59	7.10
1985	0.28	0.28	0.44	0.97	0.37	0.47	1.68	0.91	1.33	2.02	0.68	0.37	9.80
1986	0.05	0.10	0.37	1.08	0.74	0.67	0.54	0.66	1.20	1.18	1.02	0.12	7.73
1987	0.65	0.48	0.29	0.85	1.00	0.14	0.03	1.06	0.22	0.31	0.95	0.51	6.49
1988	0.26	0.25	0.18	0.35	0.51	0.83	0.66	1.08	0.64	0.20	0.35	0.11	5.42
1989	0.31	0.28	0.10	0.09	0.12	0.14	1.46	0.35		0.09	T	0.15	
1990	0.62	0.20	0.43	1.72	0.78	0.45	1.86	1.28	1.48	0.72	0.90	0.75	11.19
1991	0.14	0.36	0.32	0.16	0.66	0.30	0.59	0.88	0.70	0.95	1.23	0.98	7.27
1992	0.08	0.08	1.62	0.04	1.13	1.23	1.21	1.97	0.50	0.01	0.48	0.79	9.14
1993	0.25	0.39	0.68	0.42	0.93	0.14	0.33	5.40	0.58	0.32	0.35	0.10	9.89
1994	0.22	0.04	0.45	0.39	1.78	0.15	0.02	1.22	1.01	0.88	0.84	0.07	7.07
1995	0.10	0.09	0.36	0.87	0.63	1.26	0.95	0.85	1.60	0.00	0.20	0.13	7.04
1996	0.06	0.01	0.36	0.66	0.03	1.16	0.57	0.94	0.57	0.86	0.22	T	5.44
1997	0.33	0.77	0.04	0.17	0.51	0.79	0.92	0.92	1.69	0.43	0.54	0.19	7.30
1998	T	0.03	0.53	0.67	0.01	0.27	1.45	1.03	0.86	1.66	0.35	0.01	6.87
1999	0.07	T	0.22	1.15	1.07	0.32	0.31	3.08	1.09	0.24	T	0.03	7.58
POR= 54 YRS	0.25	0.26	0.39	0.52	0.68	0.54	1.05	1.22	0.80	0.65	0.38	0.33	7.07

WBAN : 23061

AVERAGE TEMPERATURE (°F) 1999 ALAMOSA, CO (ALS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	17.0	28.6	28.6	36.2	51.4	57.5	65.8	64.5	52.5	39.5	31.3	22.9	41.3
1971	19.1	22.3	31.1	40.1	47.3	59.2	63.8	63.0	52.7	42.2	28.1	15.8	40.4
1972	17.4	27.9	37.3	42.7	49.9	61.0	64.1	62.2	56.0	46.6	18.6	10.2	41.2
1973	5.6	16.2	31.6	36.4	50.2	59.0	63.4	62.1	53.4	44.3	33.5	20.7	39.7
1974	11.2	14.9	37.7	38.8	53.2	60.1	63.9	59.3	53.5	45.5	29.2	13.2	40.0
1975	6.8	22.0	31.8	37.3	47.4	57.7	64.7	61.6	54.2	42.4	26.3	16.9	39.1
1976	13.8	29.8	32.3	42.4	50.8	57.9	64.9	60.5	54.3	39.7	28.0	13.3	40.6
1977	13.2	23.5	29.3	43.0	50.6	61.4	65.3	63.9	56.7	44.8	33.0	24.5	42.4
1978	22.8	25.3	35.9	43.3	48.1	60.8	65.4	60.2	55.5	44.4	32.6	8.0	41.9
1979	6.0	10.6	30.4	41.4	50.7	58.0	63.6	61.1	55.9	45.7	21.0	18.5	38.6
1980	20.8	29.4	30.2	38.2	48.5	61.9	67.0	61.9	56.0	40.4	30.4	28.1	42.7
1981	23.7	25.6	33.2	45.5	50.1	62.6	65.9	61.9	56.2	43.6	34.6	20.7	43.6
1982	17.8	22.2	33.2	40.2	48.5	57.2	64.1	64.2	55.6	41.4	30.8	20.9	41.3
1983	20.3	26.2	34.2	36.3	46.8	56.5	65.3	64.7	57.7	43.2	27.7	13.8	41.1
1984	1.6	10.8	27.1	38.1	55.2	58.6	65.9	63.2	56.3	40.7	29.9	20.1	39.0
1985	17.7	21.6	34.5	43.9	51.4	60.3	65.3	63.0	52.2	44.3	30.0	17.4	41.8
1986	25.0	29.7	36.8	43.4	50.5	60.3	63.1	62.8	52.6	41.3	31.3	20.4	43.1
1987	13.4	23.4	31.0	42.7	50.7	61.0	63.9	62.3	52.7	45.4	27.1	14.7	40.7
1988	4.5	17.2	31.5	42.8	50.1	61.8	64.5	63.9	53.5	46.1	29.8	17.8	40.3
1989	15.0	21.5	37.2	44.7	53.3	58.9	65.9	62.3	55.8	42.2	31.4	19.6	42.3
1990	14.8	25.9	36.4	43.3	49.3	62.5	63.6	61.1	58.3	44.4	31.7	13.3	42.1
1991	10.9	26.1	34.0	40.0	51.6	59.4	64.8	63.4	55.4	44.5	22.7	5.2	39.8
1992	1.4	14.5	29.6	47.0	53.5	58.8	62.1	60.8	55.0	45.2	22.1	6.7	38.1
1993	11.9	19.1	33.9	41.7	50.8	58.7	63.3	61.1	53.4	41.1	25.8	18.5	39.9
1994	19.3	22.7	34.8	41.8	52.3	62.4	63.1	63.5	54.2	42.3	25.5	22.6	42.0
1995	23.3	33.2	34.6	38.9	47.4	56.8	62.0	64.7	53.7	42.2	32.4	23.6	42.7
1996	20.8	28.6	32.0	41.7	55.2	60.0	65.1	62.7	52.6	40.2	31.6	21.5	42.7
1997	16.0	22.3	34.9	37.8	50.6	59.1	62.6	62.7	57.9	42.5	27.5	8.7	40.2
1998	15.4	24.2	32.5	38.3	51.0	58.2	65.7	63.2	57.9	42.9	34.1	23.6	42.3
1999	25.6	28.4	37.3	38.7	49.3	58.0	64.7	62.7	53.4	43.2	32.7	20.1	42.8
POR= 54 YRS	16.1	22.9	32.3	41.1	50.5	59.7	64.7	62.4	55.2	43.5	29.3	18.0	41.3

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HEATING DEGREE DAYS (base 65°F) 1999 ALAMOSA, CO (ALS)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	11	40	368	783	1002	1298	1417	1188	1042	738	543	170	8600
1971-72	64	63	361	698	1098	1518	1467	1071	855	666	462	111	8434
1972-73	55	97	267	561	1384	1695	1839	1360	1028	854	449	188	9777
1973-74	74	91	342	633	937	1366	1662	1394	839	778	359	173	8648
1974-75	41	170	339	595	1067	1601	1802	1198	1023	826	537	212	9411
1975-76	26	102	319	695	1157	1485	1579	1014	1010	672	432	208	8699
1976-77	24	132	314	779	1104	1596	1598	1155	1097	655	440	104	8998
1977-78	19	51	246	621	951	1252	1302	1103	900	647	516	126	7734
1978-79	18	141	278	632	966	1762	1827	1518	1069	704	438	203	9556
1979-80	57	127	267	590	1312	1438	1363	1029	1071	798	504	107	8663
1980-81	5	102	263	757	1031	1136	1274	1097	979	576	458	102	7780
1981-82	14	108	256	656	904	1366	1457	1192	977	736	508	230	8404
1982-83	59	47	275	724	1016	1361	1380	1080	946	856	556	249	8549
1983-84	28	35	213	674	1112	1582	1964	1567	1166	799	297	188	9625
1984-85	11	56	252	748	1051	1384	1462	1209	937	625	415	146	8296
1985-86	30	66	378	636	1045	1473	1231	983	866	639	446	138	7931
1986-87	63	75	366	728	1004	1377	1594	1160	1049	661	436	115	8628
1987-88	66	96	364	601	1130	1557	1872	1381	1031	658	454	102	9312
1988-89	28	50	337	577	1049	1453	1544	1211	854	600	357	180	8240
1989-90	17	82	270	698	1001	1400	1550	1089	880	640	480	105	8212
1990-91	59	118	201	633	990	1599	1671	1081	954	742	410	172	8630
1991-92	33	51	280	630	1263	1852	1973	1459	1093	535	350	179	9698
1992-93	97	131	295	607	1281	1803	1638	1280	958	692	435	185	9402
1993-94	51	118	342	735	1167	1435	1412	1179	930	693	387	89	8538
1994-95	62	53	319	700	1174	1307	1287	882	934	777	538	238	8271
1995-96	102	25	334	701	969	1276	1364	1047	1018	692	299	147	7974
1996-97	26	78	366	762	992	1343	1512	1186	924	811	441	169	8610
1997-98	74	80	209	691	1119	1738	1527	1137	999	795	430	212	9011
1998-99	7	58	208	682	920	1276	1217	1018	851	784	482	206	7709
1999-	30	69	339	667	962	1388							

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COOLING DEGREE DAYS (base 65°F) 1999 ALAMOSA, CO (ALS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	0	0	18	45	32	0	0	0	0	95
1971	0	0	0	0	0	3	35	8	0	0	0	0	46
1972	0	0	0	0	0	1	36	18	0	0	0	0	55
1973	0	0	0	0	0	14	30	8	0	0	0	0	52
1974	0	0	0	0	0	31	13	0	0	0	0	0	44
1975	0	0	0	0	0	0	24	4	0	0	0	0	28
1976	0	0	0	0	0	1	25	0	0	0	0	0	26
1977	0	0	0	0	0	2	36	25	2	0	0	0	65
1978	0	0	0	0	0	8	39	0	0	0	0	0	47
1979	0	0	0	0	0	0	21	13	0	0	0	0	34
1980	0	0	0	0	0	22	76	12	0	0	0	0	110
1981	0	0	0	0	0	35	47	19	0	0	0	0	101
1982	0	0	0	0	0	0	38	27	0	0	0	0	65
1983	0	0	0	0	0	4	43	30	1	0	0	0	78
1984	0	0	0	0	2	1	45	8	0	0	0	0	56
1985	0	0	0	0	0	9	47	9	0	0	0	0	65
1986	0	0	0	0	0	3	11	14	0	0	0	0	28
1987	0	0	0	0	0	0	39	22	0	0	0	0	61
1988	0	0	0	0	0	13	17	22	0	0	0	0	52
1989	0	0	0	0	0	6	52	6	0	0	0	0	64
1990	0	0	0	0	0	35	22	3	7	0	0	0	67
1991	0	0	0	0	0	12	33	8	0	0	0	0	53
1992	0	0	0	0	0	1	12	6	0	0	0	0	19
1993	0	0	0	0	0	6	6	4	0	0	0	0	16
1994	0	0	0	0	0	16	12	14	0	0	0	0	42
1995	0	0	0	0	0	0	19	23	4	0	0	0	46
1996	0	0	0	0	0	0	35	15	0	0	0	0	50
1997	0	0	0	0	0	0	5	17	0	0	0	0	22
1998	0	0	0	0	0	14	37	9	0	0	0	0	60
1999	0	0	0	0	0	2	28	3	0	0	0	0	33

SNOWFALL (inches) 1999 ALAMOSA, CO (ALS)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	1.8	14.2	0.8	1.2	3.1	7.7	0.8	4.1	7.4	0.0	41.1
1971-72	0.0	0.0	1.2	T	7.7	11.0	6.9	2.0	4.4	T	T	0.0	33.2
1972-73	0.0	0.0	0.0	14.3	19.8	7.6	3.9	3.6	29.2	6.9	12.2	0.0	97.5
1973-74	0.0	0.0	1.0	8.1	1.1	3.1	12.4	1.9	4.3	5.5	0.0	0.0	37.4
1974-75	0.0	0.0	T	0.2	3.3	10.0	7.0	4.2	6.5	4.3	T	T	35.5
1975-76	0.0	0.0	0.0	0.5	5.9	0.8	0.8	3.4	6.4	2.1	0.0	0.0	19.9
1976-77	0.0	0.0	T	6.5	2.6	2.1	3.4	5.7	2.5	7.1	T	0.0	29.9
1977-78	0.0	0.0	0.0	0.0	0.4	3.9	4.4	0.9	1.0	0.1	13.5	0.0	24.2
1978-79	0.0	0.0	0.0	0.2	4.1	12.1	13.8	0.9	3.0	1.8	2.4	T	38.3
1979-80	0.0	0.0	0.0	1.1	5.3	6.8	5.0	2.1	6.3	8.3	2.3	0.0	37.2
1980-81	0.0	0.0	0.0	2.2	0.1	T	T	1.8	6.0	0.0	T	0.0	10.1
1981-82	T	0.0	0.0	T	5.4	4.9	1.2	6.9	2.9	1.4	2.1	0.0	24.8
1982-83	0.0	0.0	0.0	2.1	2.2	6.0	3.4	5.1	10.2	3.5	0.5	0.2	33.2
1983-84	0.0	0.0	0.0	0.0	8.1	11.2	1.4	2.8	10.6	2.8	T	0.0	36.9
1984-85	0.0	0.0	0.0	6.7	0.9	5.6	2.8	2.8	6.1	0.8	1.2	0.0	26.9
1985-86	0.0	0.0	0.0	6.0	9.7	6.7	0.5	1.0	3.5	4.5	2.1	0.0	34.0
1986-87	0.0	0.0	T	2.7	6.9	1.9	12.8	7.0	3.9	8.4	0.0	0.0	43.6
1987-88	0.0	0.0	0.0	0.0	6.8	7.5	6.0	2.9	3.4	0.7	0.0	0.0	27.3
1988-89	0.0	0.0	0.0	0.0	3.0	1.4	5.2	3.0	1.0	0.9	0.0	0.0	14.5
1989-90	0.0	0.0		T	T	2.2	13.0	2.5	3.3	9.2	4.8	0.0	
1990-91	0.0	0.0	0.0	0.2	6.4	9.9	1.4	4.6	3.2	1.4	0.2	T	27.3
1991-92	0.0	0.0	0.0	15.1	10.2	8.9	0.9	1.7	16.2	0.3	1.0	T	54.3
1992-93	0.0	0.0											
1993-94													
1994-95										0.0	0.0		
1995-96			0.0	0.0	1.3	1.7	0.9	0.3	3.3	5.1	0.0	0.0	
1996-97	0.0	0.0	0.0	11.5	2.1								
1997-98				1.3	5.6	4.1	T	0.7	5.1	8.6	0.0	0.0	
1998-99	0.0	0.0	0.0	1.8	2.3	0.3	1.7	T	2.8	7.2	5.9	0.0	22.0
1999-	0.0	0.0	0.0	T	T	0.3							
POR= 51 YRS	T	0.0	0.2	3.3	4.1	5.3	4.2	3.9	5.9	4.6	1.7	T	33.2

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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
ALAMOSA,
COLORADO (ALS)

Alamosa is located in the south-central part of Colorado, near the center of the San Luis Valley which lies in a broad depression between mountain ranges converging to the north. The valley is the first of a series of basins along the Rio Grande River. The mountain ranges to the east reach altitudes over 14,000 feet and those to the west are between 13,000 and 14,000 feet. The length of the valley from north to south is over 80 miles, and its greatest width is about 50 miles. The valley floor ranges in altitude from 7,500 to near 8,000 feet and has a remarkably flat surface, except for a range of low hills across the southern portion. From the lowest areas which lie along an axis near the eastern border, the valley floor rises to the foothills, steeply to the east and more gently to the west.

The climate of the San Luis Valley is marked by cold winters and moderate summers, light precipitation, and much sunshine. At Alamosa about 80 percent of the annual precipitation occurs from April to October, most of it in the form of scattered light showers and thunderstorms that develop over the mountains and move into the valley during the afternoon. More than half of these thunderstorms occur during July and August. Hail frequently falls in some parts of the valley during their movement. Winter snows occur mainly in frequent light falls, with occasional falls as early as September or as late as May. A good snow cover will remain on the ground for several weeks during the coldest months.

All agriculture in the valley is dependent on irrigation, using water supplied by the more abundant precipitation in the surrounding mountains. Summer grazing of cattle and sheep on nearby mountain ranges and smaller valleys is extensive. A wide variety of vegetables, grains and feed crops are grown locally, with potatoes being the main commercial crop.

Summer is characterized by frequent days with maximum temperatures in the middle 80s and minimum temperatures in the low 40s. Relative humidity ranges from about 76 percent in the early mornings to around 40 percent during the afternoons. Winds are light during the coldest weather, but are strong with occasional blowing dust during the spring and early summer months.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is September 8 and the average last occurrence in the spring is June 8.

STATION LOCATION

ALAMOSA, COLORADO

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE											REMARKS	
						SEA LEVEL	GROUND											
							WIND	EMERGENCY	EMERGENCY	EMERGENCY	EMERGENCY	EMERGENCY	EMERGENCY	EMERGENCY	EMERGENCY	EMERGENCY		EMERGENCY
<u>COOPERATIVE</u>																		
1/2 mile SW Post Office	9/1/91	4/30/92	NA	37°27'	105°52'	7546		5										
2 Blocks W Post Office	4/15/06	5/31/07	0.38 mi. NW	37°28'	105°52'	7531		5										
1-1/2 Blocks SW P.O.	6/1/07	1/31/08	2 blocks S	37°28'	105°52'	7531		5										
1 mile W Post Office	4/1/32	12/1/49	0.88 mi. NW	37°28'	105°53'	7531		5										
<u>AIRPORT</u>																		
Alamosa Airport	1/14/45	10/20/54	2.5 mi. SE	37°26'	105°51'	7534	33	5	5				4	3				
Alamosa Airport	10/20/54	11/17/77	0.5 mi. W	37°27'	105°52'	7538 a7536	25 b33	5 c5	5 c5				4 c4	4 c4				a - Effective 7/1/56. b - Effective 10/20/59. c - Minor relocation 5/14/76.
Alamosa Airport + Bergman Field (Name Change 5/80)	11/17/77 5/1/80	5/1/80 09/01/92	450 ft. S	37°27' 37°27'	105°52' 105°52'	7536	30	5	5	NA	NA		4	4	NA	NA		
San Luis Valley Regional Airport	09/01/92	Present	NA	37°26'	105°52'	7539										S		ASOS Commissioned 09/01/92

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

National Climatic Data Center
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