

1999

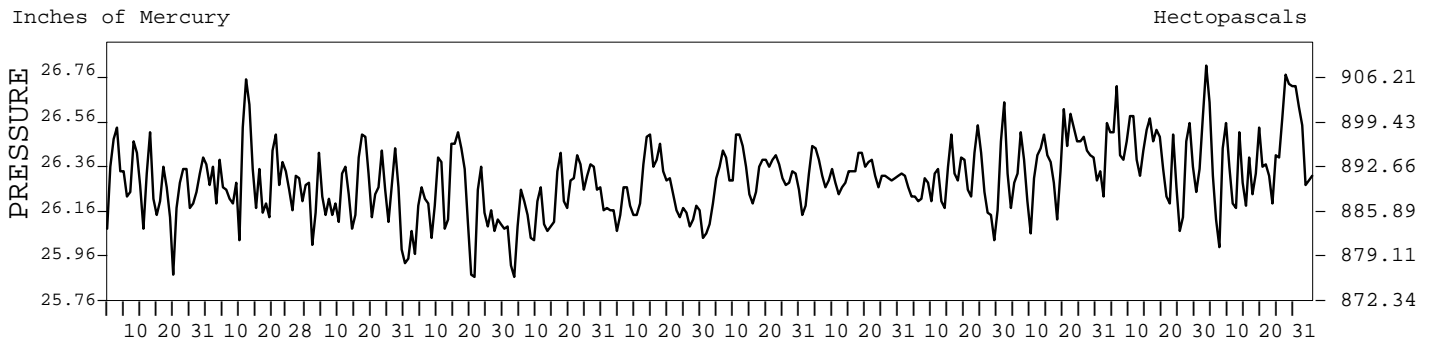
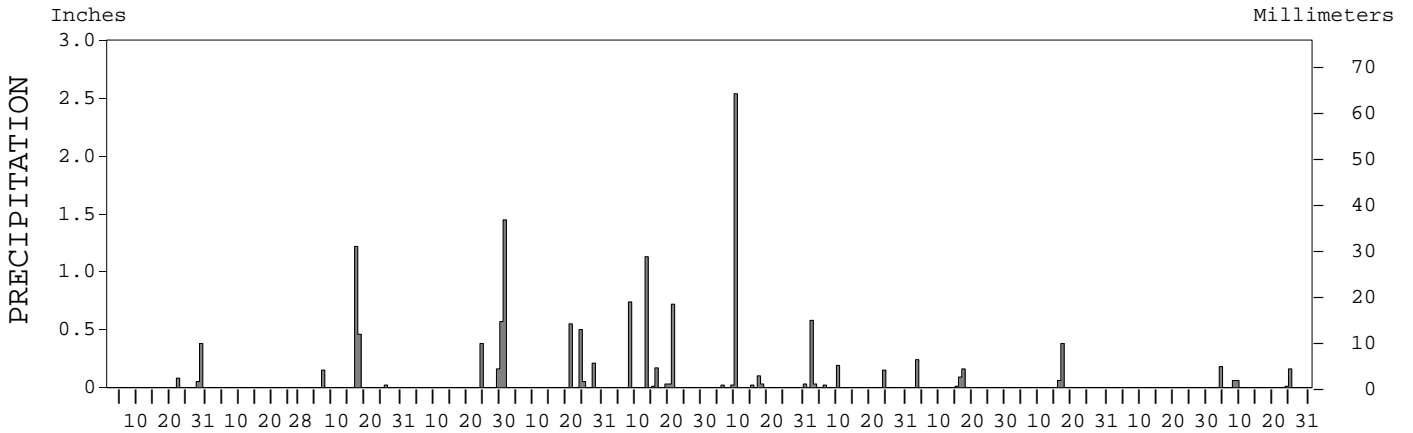
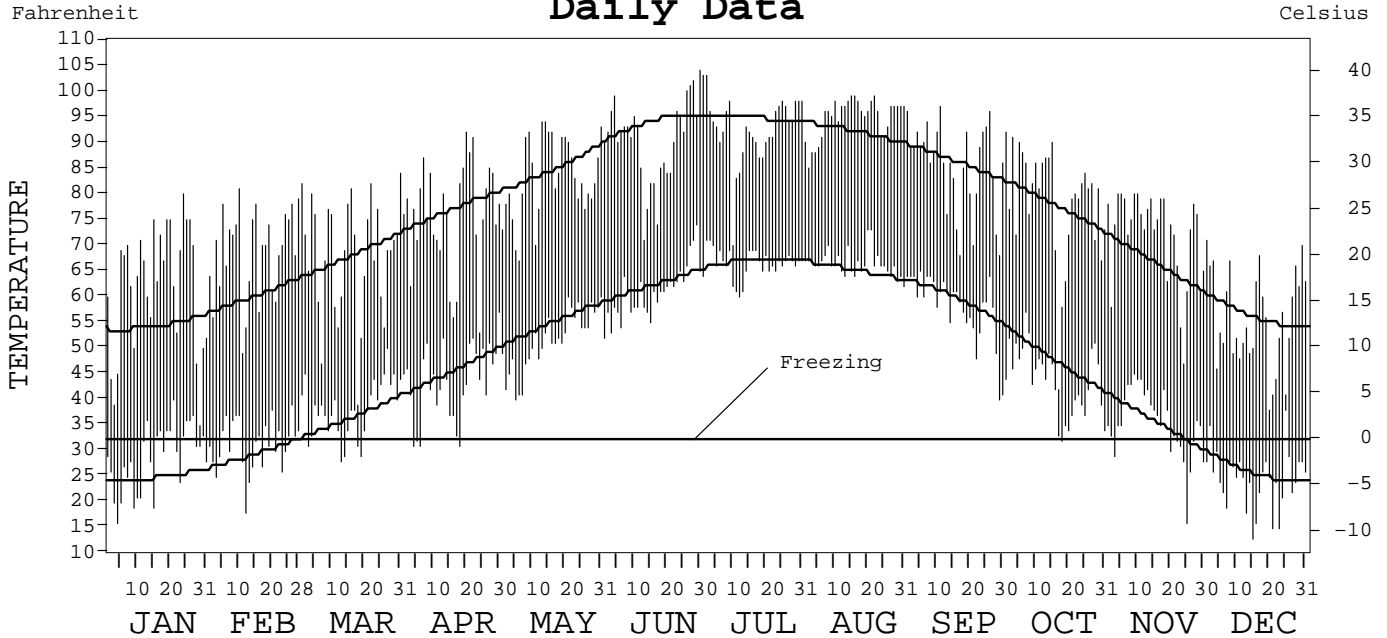
LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-3512

ROSWELL,
NEW MEXICO (ROW)

Daily Data



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Thomas R. Karl

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
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 ASHEVILLE, NORTH CAROLINA
 DIRECTOR NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 1999

ROSWELL, NM (ROW)

LATITUDE: 33° 18' 29" N LONGITUDE: 104° 32' 28" W ELEVATION (FT): GRND: 3650 BARO: 3650 TIME ZONE: MOUNTAIN (UTC + 7) WBAN: 23009

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	61.9	68.6	68.0	75.8	83.1	90.3	92.6	94.8	85.3	78.5	71.9	55.7	77.2	
	HIGHEST DAILY MAXIMUM	80	81	84	92	94	104	103	99	97	92	80	71	104	
	DATE OF OCCURRENCE	24	10	31	20	14+	30	02+	22+	11	01	10+	01	JUN 30	
	MEAN DAILY MINIMUM	28.7	31.3	38.1	43.4	51.5	60.9	66.5	66.5	58.0	43.8	35.5	24.5	45.7	
	LOWEST DAILY MINIMUM	16	18	28	31	40	52	60	62	40	32	16	13	13	
	DATE OF OCCURRENCE	04	12	13	18+	05	01	12	31	29	18	25	15	DEC 15	
	AVERAGE DRY BULB	45.3	50.0	53.1	59.6	67.3	75.6	79.6	80.7	71.7	61.2	53.7	40.1	61.5	
	MEAN WET BULB	35.9	37.9	43.6			63.1	67.0		60.1	48.3	41.7	33.6		
	MEAN DEW POINT	25.0	21.7	33.1			54.8	60.5		52.9	36.5	29.3	25.0		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	2	10	20	25	27	10	4	0	0	0	98
MAXIMUM ≤ 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
MINIMUM ≤ 32°	20	15	5	4	0	0	0	0	0	1	9	29	83		
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	600	414	363	179	44	0	0	0	21	145	330	764	2860	
	COOLING DEGREE DAYS	0	0	0	26	123	328	458	493	227	34	0	0	1689	
RH	MEAN (PERCENT)	53	39	56	39	47	56	57	51	58	47	46	63	51	
	HOUR 05 LST	70	58	75	56	72	79	79	74	78	67	60	81	71	
	HOUR 11 LST	45	30	47	32	40	44	46	38	47	36	37	52	41	
	HOUR 17 LST	37	19	36	25	28	37	40	35	39	27	32	45	33	
	HOUR 23 LST	58	44	63	43	54	64	66	59	64	52	53	71	58	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	0	0	1	0	0	0	0	0	0	0	1	0	2	
	THUNDERSTORMS	0	0	1	1	2	2	2	3	1	0	0	0	12	
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.)	26.27	26.29	26.23	26.17	26.18	26.21	26.30	26.31	26.28	26.37	26.42	26.38	26.28	
	MEAN SEA-LEVEL PRESS. (IN.)	29.99	29.99	29.91			29.79	29.87		29.89	30.03	30.10	30.11		
WINDS	RESULTANT SPEED (MPH)	1.9	2.5	0.4	2.7		3.4	0.2	0.8	0.6	0.6	1.1	2.4		
	RES. DIR. (TENS OF DEGS.)	28	24	18	25		18	07	22	13	23	21	30		
	MEAN SPEED (MPH)	8.1	9.0	9.7	11.5	9.4	8.7	7.9	6.7	8.0	8.1	6.2	7.3	8.4	
	PREVAIL. DIR. (TENS OF DEGS.)	16	16	16	22	36	17	15	14	15	16	15	34	15	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	43	37	40	48	40	40	31	31	33	40	29	38	48	
	DIR. (TENS OF DEGS.)	30	31	01	24	32	30	36	02	29	36	01	30	24	
	DATE OF OCCURRENCE	22+	22	18+	07	05	21	09	23	19	29	01	14	APR 07	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	54	44	47	55	46	45	38	38	45	47	37	49	55	
DIR. (TENS OF DEGS.)	31	31	01	25	32	30	35	36	28	36	25	32	25		
DATE OF OCCURRENCE	21	22+	18	07	05	21+	09	23	19	29	22	14	APR 07		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.51	0.00	1.85	1.11	2.76	2.83	2.76	0.97	0.50	0.44	T	0.47	14.20	
	GREATEST 24-HOUR (IN.)	0.40	0.00	1.68	0.57	1.45	1.13	2.54	0.58	0.24	0.44	T	0.18	2.54	
	DATE OF OCCURRENCE	28-29		17-18	30	01	13	10	02	03	16-17	25	04	JUL 10	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	3	0	4	3	5	7	7	5	4	2	0	5	45	
PRECIPITATION ≥ 0.10	1	0	3	3	4	4	2	3	2	1	0	2	25		
PRECIPITATION ≥ 1.00	0	0	1	0	1	1	1	0	0	0	0	0	4		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)														
	GREATEST 24-HOUR (IN.)														
	DATE OF OCCURRENCE														
	MAXIMUM SNOW DEPTH (IN.)														
	DATE OF OCCURRENCE														
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0															

NORMALS, MEANS, AND EXTREMES

ROSWELL, NM (ROW)

LATITUDE: 33° 18' 29" N LONGITUDE: 104° 32' 28" W ELEVATION (FT): GRND: 3650 BARO: 3650 TIME ZONE: MOUNTAIN (UTC + 7) WBAN: 23009

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	54.3	59.9	67.8	76.7	84.7	93.6	94.6	91.9	86.0	77.3	66.0	56.0	75.7	
	MEAN DAILY MAXIMUM	46	54.4	60.1	67.8	76.2	85.0	93.3	94.0	92.0	85.5	76.3	64.0	55.5	75.3	
	HIGHEST DAILY MAXIMUM	27	82	85	93	99	104	114	111	106	103	96	88	81	114	
	YEAR OF OCCURRENCE		1975	1996	1989	1989	1996	1994	1995	1994	1995	1993	1996	1981		JUN 1994
	MEAN OF EXTREME MAXS.	46	73.8	78.4	83.9	91.0	97.1	103.6	100.4	100.1	96.7	90.2	80.7	73.7	89.1	
	NORMAL DAILY MINIMUM	30	24.7	29.1	36.3	45.3	54.7	62.1	66.7	64.9	59.2	47.1	35.1	25.6	45.9	
	MEAN DAILY MINIMUM	46	26.4	30.9	37.2	45.6	55.3	64.1	66.7	66.7	59.5	47.4	34.9	27.0	46.8	
	LOWEST DAILY MINIMUM	27	-9	3	13	23	34	47	0	54	40	14	4	-8	-9	
	YEAR OF OCCURRENCE		1979	1985	1996	1973	1975	1992	1997	1990	1999	1991	1976	1978		JAN 1979
	MEAN OF EXTREME MINS.	46	9.6	14.9	22.5	31.2	42.7	54.2	61.0	60.2	48.3	34.3	20.1	12.0	34.2	
	NORMAL DRY BULB	30	39.5	44.5	52.1	61.0	69.7	77.9	80.7	78.4	72.6	62.2	50.6	40.8	60.8	
	MEAN DRY BULB	46	40.4	45.5	52.5	60.9	70.2	78.7	81.1	79.3	72.4	61.8	49.4	41.3	61.1	
	MEAN WET BULB	16	33.2	37.1	41.5	46.7	54.9	62.0	60.4	61.1	59.8	50.4	40.3	33.7	48.4	
	MEAN DEW POINT	16	23.2	25.1	27.0	30.0	40.0	50.2	51.8	58.3	52.0	40.0	28.6	23.0	37.4	
	NORMAL NO. DAYS WITH:															
MAXIMUM ≥ 90°	30	0.0	0.0	0.2	1.1	7.9	20.9	24.3	21.2	9.1	1.2	0.0	0.0	85.9		
MAXIMUM ≤ 32°	30	2.3	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.1	5.9		
MINIMUM ≤ 32°	30	25.4	17.2	7.2	1.9	0.0	0.0	0.0	0.0	0.0	0.9	11.6	24.8	89.0		
MINIMUM ≤ 0°	30	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.5		
H/C	NORMAL HEATING DEG. DAYS	30	791	574	409	162	19	0	0	0	8	122	432	750	3267	
	NORMAL COOLING DEG. DAYS	30	0	0	9	42	165	387	487	415	236	35	0	0	1776	
RH	NORMAL (PERCENT)	30	57	51	40	36	40	43	49	54	58	54	53	54	49	
	HOUR 05 LST	30	71	66	56	53	59	64	68	74	76	70	66	66	66	
	HOUR 11 LST	30	50	45	33	30	32	36	41	45	49	44	44	47	41	
	HOUR 17 LST	30	40	34	24	22	24	27	32	37	41	36	38	40	33	
	HOUR 23 LST	30	62	55	44	41	44	47	54	60	64	60	58	60	54	
S	PERCENT POSSIBLE SUNSHINE	7	60	68	75	77	80	83	77	73	72	77	73	71	74	
W/O	MEAN NO. DAYS WITH:															
	HEAVY FOG (VISBY ≤ 1/4 MI)	27	3.2	2.4	0.5	0.2	0.4	0.2	0.2	0.2	0.9	1.4	2.2	2.0	13.8	
	THUNDERSTORMS	27	0.2	0.2	0.6	2.1	4.3	6.4	6.8	7.5	4.4	1.4	0.5	0.1	34.5	
CLOUDINESS	MEAN:															
	SUNRISE-SUNSET (OKTAS)															
	MIDNIGHT-MIDNIGHT (OKTAS)															
	MEAN NO. DAYS WITH:															
	CLEAR	9	11.3	12.1	14.2	14.3	13.4	17.2	11.1	12.8	12.8	18.1	15.8	14.9	168.0	
	PARTLY CLOUDY	9	8.8	7.8	9.1	8.9	11.8	9.9	14.7	12.2	7.9	5.9	7.1	9.0	113.1	
	CLOUDY	9	10.9	8.3	7.7	6.8	5.8	2.9	5.2	6.0	9.3	7.0	7.1	7.1	84.1	
PR	MEAN STATION PRESSURE (IN)	26	26.32	26.28	26.20	26.20	26.20	26.23	26.29	26.31	26.31	26.32	26.31	26.32	26.27	
	MEAN SEA-LEVEL PRES. (IN)	16	30.06	29.99	29.91	29.83	29.79	29.79	29.86	29.89	29.92	29.96	30.01	30.07	29.92	
WINDS	MEAN SPEED (MPH)	36	6.9	8.1	9.5	9.8	9.6	9.6	8.5	7.7	7.6	7.3	7.2	6.9	8.2	
	PREVAIL. DIR (TENS OF DEGS)	20	36	16	16	16	14	16	14	14	14	16	36	36	14	
	MAXIMUM 2-MINUTE:															
	SPEED (MPH)	3	43	37	43	48	43	49	49	37	33	44	41	38	49	
	DIR. (TENS OF DEGS)		30	31	27	24	25	22	19	15	29	24	22	30	19	
	YEAR OF OCCURRENCE		1999	1999	1998	1999	1998	1997	1997	1997	1999	1998	1998	1999	JUL 1997	
	MAXIMUM 5-SECOND:															
	SPEED (MPH)	3	54	44	52	55	53	60	59	45	45	48	48	49	60	
DIR. (TENS OF DEGS)		31	31	22	25	26	20	32	16	28	25	21	32	20		
YEAR OF OCCURRENCE		1999	1999	1998	1999	1998	1997	1997	1997	1999	1997	1998	1999	JUN 1997		
PRECIPITATION	NORMAL (IN)	30	0.35	0.46	0.33	0.46	1.04	1.61	1.71	2.58	2.02	1.05	0.52	0.45	12.58	
	MAXIMUM MONTHLY (IN)	27	1.03	2.02	1.85	2.48	4.57	5.02	6.88	6.48	6.58	5.91	1.89	3.07	6.88	
	YEAR OF OCCURRENCE		1992	1987	1999	1985	1992	1986	1991	1974	1980	1998	1986	1997	JUL 1991	
	MINIMUM MONTHLY (IN)	27	0.03	0.00	0.00	0.02	T	0.02	0.01	0.34	0.10	T	0.00	0.00	0.00	
	YEAR OF OCCURRENCE		1998	1999	1980	1991	1996	1990	1980	1985	1992	1995	1991	1976	FEB 1999	
	MAXIMUM IN 24 HOURS (IN)	27	0.67	1.41	1.68	2.24	1.77	3.05	4.91	3.94	2.71	3.89	1.33	1.10	4.91	
	YEAR OF OCCURRENCE		1986	1988	1999	1985	1981	1981	1981	1977	1980	1986	1984	1997	JUL 1981	
	NORMAL NO. DAYS WITH:															
PRECIPITATION ≥ 0.01	30	4.3	3.6	2.8	2.9	4.0	5.0	6.1	8.6	7.0	4.1	2.9	3.7	55.0		
PRECIPITATION ≥ 1.00	30	0.0	0.1	0.1	0.1	0.3	0.4	0.2	0.8	0.6	0.3	0.0	0.0	2.9		
SNOWFALL	NORMAL (IN)	30	3.0	3.3	1.0	0.5	T	0.0	0.0	0.0	0.0	0.3	1.4	3.1	12.6	
	MAXIMUM MONTHLY (IN)	25	10.4	16.9	4.8	5.3	0.8	1.0	0.0	0.0	1.0	4.2	12.3	21.0	21.0	
	YEAR OF OCCURRENCE		1997	1988	1984	1983	1989	1991			1989	1976	1980	1997	DEC 1997	
	MAXIMUM IN 24 HOURS (IN)	25	7.3	16.5	4.8	4.0	2.0	1.0	0.0	0.0	1.0	3.1	6.3	9.7	16.5	
	YEAR OF OCCURRENCE		1980	1988	1984	1983	1988	1991	1973	1973	1989	1976	1980	1987	FEB 1988	
	MAXIMUM SNOW DEPTH (IN)	43	9	13	2	2	0	0	0	0	0	2	8	16	16	
	YEAR OF OCCURRENCE		1997	1956	1989	1983						1993	1961	1997	DEC 1997	
NORMAL NO. DAYS WITH:																
SNOWFALL ≥ 1.0	30	1.0	1.2	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.0	4.4		

PRECIPITATION (inches) 1999 ROSWELL, NM (ROW)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0.01	0.28	0.51	0.02	0.48	2.72	2.07	0.52	0.97	0.78	0.09	0.18	8.63
1971	0.18	0.23	0.11	0.26	T	0.18	1.88	3.62	1.57	0.76	0.45	0.80	10.04
1972	0.20	0.00	0.03	0.00	0.16	2.06	5.43	3.35	3.25	1.27	0.49	0.26	16.50
1973	0.73	0.92	1.48	0.15	0.73	0.97	2.26	1.27	2.55	0.51	0.01	0.02	11.60
1974	0.24	0.01	0.11	0.50	T	0.03	0.31	6.48	6.47	3.81	0.09	0.60	18.65
1975	0.20	1.06	0.27	0.29	0.13	0.57	2.75	1.28	2.83	0.16	T	0.05	9.59
1976	0.12	0.22	0.24	0.79	0.82	1.55	2.44	1.98	2.29	0.69	0.41	0.00	11.55
1977	0.07	0.36	0.27	1.25	2.43	0.25	0.46	4.45	0.29	0.62	0.48	0.02	10.95
1978	0.50	0.48	0.39	0.02	1.81	4.31	0.52	3.49	3.58	1.47	1.25	0.43	18.25
1979	0.41	0.44	0.13	0.32	1.25	1.56	1.44	2.28	0.15	0.18	T	0.37	8.53
1980	0.85	0.19	0.00	1.06	0.85	0.29	0.01	2.45	6.58	T	0.77	0.15	13.20
1981	0.27	0.17	0.10	0.79	3.35	4.55	6.27	4.73	2.70	1.02	0.25	0.13	24.33
1982	0.66	0.20	0.12	0.41	0.20	0.76	1.03	0.93	2.00	0.20	0.92	1.62	9.05
1983	0.50	0.22	0.11	0.64	0.93	0.67	0.37	0.80	0.42	3.43	1.52	0.42	10.03
1984	0.04	T	0.46	0.03	1.62	4.52	0.85	5.03	1.04	2.74	1.57	0.85	18.75
1985	0.37	0.04	0.70	2.48	2.22	2.58	2.71	0.34	1.93	0.98	0.12	0.07	14.54
1986	0.67	0.50	0.12	0.31	1.19	5.02	1.11	3.11	3.93	5.48	1.89	1.47	24.80
1987	0.45	2.02	0.20	0.26	1.54	3.69	0.40	4.71	0.78	0.28	0.46	1.41	16.20
1988	0.22	1.48	0.03	0.27	3.42	1.27	4.45	0.51	1.56	0.01	0.03	0.51	13.76
1989	0.32	0.49	0.23	0.07	0.44	0.07	1.14	1.93	1.22	0.10	0.00	0.07	6.08
1990	0.41	0.22	0.74	0.84	0.11	0.02	1.24	1.20	1.44	0.38	0.57	0.32	7.49
1991	0.29	0.33	0.02	0.02	1.04	1.24	6.88	3.40	4.10	0.12	0.95	2.67	21.06
1992	1.03	0.70	0.20	0.65	4.57	2.12	1.08	1.56	0.10	0.50	0.08	0.68	13.27
1993	0.75	0.20	0.01	1.15	0.38	0.56	3.39	2.19	0.88	0.55	0.13	0.16	10.35
1994	0.03	T	0.68	0.40	3.93	0.11	0.76	1.19	1.20	1.65	0.72	0.08	10.75
1995	0.97	0.08	0.17	0.31	0.32	2.28	0.48	0.89	2.78	T	0.10	0.07	8.45
1996	0.16	0.02	0.09	0.27	T	2.66	5.42	3.94	1.27	0.22	0.12	T	14.17
1997	0.60	1.53	0.06	2.38	1.48	0.69	2.70	2.16	1.97	1.63	0.31	3.07	18.58
1998	T	0.13	0.82	0.05	T	0.18	1.96	1.44	0.24	5.91	0.22	0.80	11.75
1999	0.51	0.00	1.85	1.11	2.76	2.83	2.76	0.97	0.50	0.44	T	0.47	14.20
POR= 105 YRS	0.43	0.47	0.49	0.69	1.13	1.44	1.95	1.81	1.77	1.14	0.50	0.52	12.34

WBAN : 23009

AVERAGE TEMPERATURE (°F) 1999 ROSWELL, NM (ROW)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	37.0	46.1	46.6	58.0	67.7	74.3	80.3	78.3	71.0	55.7	48.5	43.4	58.9
1971	41.3	42.9	52.9	58.5	68.6	78.1	79.7	74.9	69.3	59.4	48.4	40.8	59.6
1972	40.6	45.7	56.2	63.4	68.3	77.5	79.0	76.0	70.8	59.1	42.9	39.5	59.9
1973	39.0	43.6	52.3	54.5	66.2	75.3	78.8	77.6	69.7	61.4	51.1	41.9	59.3
1974	40.4	43.3	57.6	61.2	73.5	79.2	80.0	74.5	64.4	59.2	47.5	39.5	60.0
1975	41.3	42.3	49.9	56.6	65.9	76.7	77.0	78.3	68.5	62.5	49.5	43.4	59.3
1976	40.4	53.3	54.1	63.7	68.7	79.3	78.6	80.3	71.2	56.2	42.7	39.3	60.7
1977	38.6	48.2	52.1	62.3	73.3	81.6	84.2	83.0	78.4	64.1	53.1	47.0	63.8
1978	36.0	43.6	55.6	66.2	71.5	79.3	83.4	78.0	69.2	60.3	49.0	37.2	60.8
1979	34.9	43.6	50.5	60.6	67.5	75.1	81.0	76.5	72.2	63.8	44.6	40.6	59.2
1980	39.9	44.6	51.1	57.7	68.0	83.5	85.4	78.7	71.6	57.9	43.8	44.0	60.5
1981	41.6	46.2	51.7	63.5	68.5	79.0	79.9	75.7	69.9	59.8	53.7	45.3	61.2
1982	38.9	42.7	53.4	60.5	68.0	76.7	80.9	80.5	73.6	59.4	47.0	37.8	60.0
1983	38.9	45.5	52.8	54.7	66.3	76.5	81.6	81.4	76.1	62.9	51.8	35.2	60.3
1984	38.5	46.5	51.7	60.2	72.5	75.8	79.1	76.2	69.3	57.7	48.5	42.1	59.8
1985	37.0	43.2	54.2	63.4	70.1	75.8	79.4	80.4	70.7	61.1	53.2	40.3	60.7
1986	44.1	46.8	56.2	64.6	69.1	75.9	79.2	78.6	72.1	59.3	46.0	40.0	61.0
1987	39.7	44.9	49.1	57.3	67.5	75.8	80.2	78.7	70.6	63.9	49.0	39.3	59.7
1988	37.6	44.5	51.4	59.7	68.2	77.5	78.6	78.7	72.2	64.0	53.3	40.6	60.5
1989	43.1	43.8	56.6	65.6	74.3	78.4	81.6	79.6	71.3	63.3	51.3	37.2	62.2
1990	42.5	47.0	53.1	62.7	70.5	85.0	79.9	77.7	74.6	62.8	52.5	41.7	62.5
1991	39.8	49.6	55.3	64.1	74.2	79.8	78.6	78.3	68.1	61.7	46.4	41.5	61.5
1992	38.4	47.2	54.2	62.8	67.0	75.4	80.6	78.9	74.2	64.4	45.9	41.1	60.8
1993	42.3	45.6	53.8	62.3	70.1	79.9	83.0	79.8	72.4	59.3	45.4	42.2	61.3
1994	41.2	44.8	54.0	61.6	70.2	83.6	83.7	82.3	73.7	62.4	51.2	46.0	62.9
1995	43.9	52.1	53.5	60.4	70.5	77.4	82.8	82.4	71.9	63.7	53.4	44.1	63.0
1996	42.6	49.5	50.7	62.3	79.0	81.3	82.1	78.5	70.8	61.1	49.8	44.7	62.7
1997	38.7	41.4	54.5	55.6	68.2	76.5	79.1	79.1	74.1	60.4	46.6	33.4	60.5
1998	38.7	45.2	50.1	56.7	72.5	80.2	83.0	78.0	77.5	63.0	51.8	42.0	61.6
1999	45.3	50.0	53.1	59.6	67.3	75.6	79.6	80.7	71.7	61.2	53.7	40.1	61.5
POR= 105 YRS	39.7	44.3	51.4	59.8	68.4	76.9	78.5	77.9	71.0	60.0	48.1	40.0	59.7

HEATING DEGREE DAYS (base 65°F) 1999 ROSWELL, NM (ROW)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0	0	56	298	490	662	729	612	384	206	30	0	3467
1971-72	0	0	82	183	495	743	750	551	273	109	25	0	3211
1972-73	0	0	13	216	660	785	800	594	386	310	73	0	3837
1973-74	0	0	27	130	410	710	755	599	233	151	11	0	3026
1974-75	0	0	104	190	518	784	729	630	462	269	36	1	3723
1975-76	0	0	48	104	462	662	755	334	334	90	36	0	2825
1976-77	0	0	18	275	663	789	811	463	393	109	0	0	3521
1977-78	0	0	0	68	349	551	895	593	294	45	39	3	2837
1978-79	0	0	55	174	468	856	929	591	444	161	51	2	3731
1979-80	0	0	27	115	602	748	773	587	425	222	53	0	3552
1980-81	0	0	19	234	630	645	719	521	404	100	21	0	3293
1981-82	0	0	11	183	333	603	803	616	357	160	27	0	3093
1982-83	0	0	2	195	530	834	802	541	372	322	44	2	3644
1983-84	0	0	7	115	389	920	817	529	404	164	19	0	3364
1984-85	0	0	56	227	488	704	863	604	332	85	10	1	3370
1985-86	0	0	46	131	344	759	641	504	271	77	31	0	2804
1986-87	0	0	0	181	564	770	779	556	484	243	22	0	3599
1987-88	0	0	4	71	476	788	844	588	417	163	36	0	3387
1988-89	0	7	7	56	359	749	673	590	275	90	7	0	2813
1989-90	0	0	23	121	405	854	691	497	366	119	62	0	3138
1990-91	0	0	0	98	369	715	775	426	299	68	8	0	2758
1991-92	0	0	59	152	551	719	815	509	325	117	32	3	3282
1992-93	0	0	0	64	563	734	697	538	341	124	24	0	3085
1993-94	0	0	8	221	583	699	733	559	338	136	16	0	3293
1994-95	0	0	8	127	417	581	648	357	359	180	11	0	2688
1995-96	0	0	31	74	343	643	686	449	440	130	0	0	2796
1996-97	0	0	22	182	449	621	808	656	319	295	25	0	3377
1997-98	0	0	7	187	549	974	808	547	463	250	0	0	3785
1998-99	0	0	0	127	390	708	600	414	363	179	44	0	2825
1999-	0	0	21	145	330	764							

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COOLING DEGREE DAYS (base 65°F) 1999 ROSWELL, NM (ROW)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	9	146	303	482	420	244	16	0	0	1620
1971	0	0	14	17	146	402	463	315	220	17	0	0	1594
1972	0	0	7	68	133	382	438	350	197	41	0	0	1616
1973	0	0	0	2	118	316	434	400	174	25	0	0	1469
1974	0	0	11	45	283	433	473	299	95	16	0	0	1655
1975	0	0	0	19	67	361	379	416	159	33	3	0	1437
1976	0	0	7	57	159	436	429	478	211	9	0	0	1786
1977	0	0	0	34	269	505	602	564	408	46	0	0	2428
1978	0	0	8	91	244	438	576	410	187	37	0	0	1991
1979	0	0	0	35	133	311	506	364	251	84	0	0	1684
1980	0	0	0	8	152	564	636	430	223	21	1	0	2035
1981	0	0	0	59	133	430	467	336	166	31	0	0	1622
1982	0	0	6	35	124	357	499	488	266	27	0	0	1802
1983	0	0	0	21	89	353	523	512	346	58	0	0	1902
1984	0	0	2	26	256	331	443	356	189	6	0	0	1609
1985	0	0	8	44	175	332	457	485	224	18	0	0	1743
1986	0	0	6	74	167	331	447	429	221	10	0	0	1685
1987	0	0	0	17	108	330	478	432	176	43	0	0	1584
1988	0	0	0	11	140	382	430	441	230	32	15	0	1681
1989	0	4	19	115	303	412	523	460	217	75	0	0	2128
1990	0	0	4	57	241	607	472	403	295	37	2	0	2118
1991	0	0	3	48	300	451	431	419	158	59	0	0	1869
1992	0	0	0	56	101	319	492	436	283	52	0	0	1739
1993	0	0	0	51	189	454	564	463	236	53	0	0	2010
1994	0	0	6	39	181	566	586	540	277	55	6	0	2256
1995	0	0	11	47	188	378	560	547	246	42	0	0	2019
1996	0	9	0	55	436	499	538	427	204	66	0	0	2234
1997	0	0	1	20	129	350	446	446	287	54	0	0	
1998	0	0	7	7	241	467	565	410	381	71	0	0	2149
1999	0	0	0	26	123	328	458	493	227	34	0	0	1689

SNOWFALL (inches) 1999 ROSWELL, NM (ROW)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	0.0	0.2	0.0	0.0	2.0	2.4	1.0	0.0	0.0	0.0	5.6
1971-72	0.0	0.0	0.0	0.0	0.0	5.5	1.9	0.0	0.0	0.0	0.0	0.0	7.4
1972-73	0.0	0.0	0.0	0.6	2.6	4.8	6.8	7.5	0.5	1.1	0.0	0.0	23.9
1973-74	0.0	0.0	0.0	0.0	0.0	T	1.0	T	0.2	0.0	0.0	0.0	1.2
1974-75	0.0	0.0	0.0	0.0	0.0	1.4	1.5	3.7	1.4	0.0	0.0	0.0	8.0
1975-76	0.0	0.0	0.0	0.0	T	0.3	1.2	0.0	2.4	0.0	0.0	0.0	3.9
1976-77	0.0	0.0	0.0	4.2	4.1	0.0	0.4	0.4	0.9	0.0	0.0	0.0	10.0
1977-78	0.0	0.0	0.0	0.0	0.0	0.0	3.2	2.3	0.7	0.0	T	0.0	6.2
1978-79	0.0	0.0	0.0	0.0	0.5	7.7	0.7	6.4	0.0	0.0	0.0	0.0	15.3
1979-80	0.0	0.0	0.0	0.4	0.0	3.8	7.3	4.0	0.0	3.0	0.0	0.0	18.5
1980-81	0.0	0.0	0.0	T	12.3	0.6	5.3	0.0	T	0.0	0.0	0.0	18.2
1981-82	0.0	0.0	0.0	0.0	0.0	0.0	6.9	2.6	1.2	T	0.0	0.0	10.7
1982-83	0.0	0.0	0.0	0.0	7.1	8.0	2.4	1.0	0.0	5.3	0.0	0.0	23.8
1983-84	0.0	0.0	0.0	0.0	0.0	3.5	0.5	T	4.8		0.0	0.0	
1984-85	0.0	0.0	0.0	0.0	0.0	5.4	1.9	0.3	0.0	0.0	0.0	0.0	7.6
1985-86	0.0	0.0	0.0	0.0	0.0	1.1	5.4	4.9	0.0	0.0	0.0	0.0	11.4
1986-87	0.0	0.0	0.0	T	0.5	3.4	5.5	8.7	0.5	0.0	0.0	0.0	18.6
1987-88	0.0	0.0	0.0	0.0	0.0	15.3	0.4	16.9	T	T	0.0	0.0	32.6
1988-89	0.0	0.0	0.0	0.0	T	3.9	T	1.2	4.3	T	0.8	0.0	10.2
1989-90	0.0	0.0	1.0	0.0	0.0	T	2.7	T	1.2	0.0	0.0	0.0	4.9
1990-91	0.0	0.0	0.0	0.0	0.5	0.8	1.9	0.0	0.0	T	T	1.0	4.2
1991-92	0.0	0.0	0.0	1.2	T	2.9	4.4	0.0	0.0	T	0.0	T	8.5
1992-93	0.0	0.0	0.0	0.0	T	5.0	T	0.0	T	0.0	0.0	0.0	5.0
1993-94	0.0	0.0	0.0	1.8	T	T	0.6	0.0	0.9	0.0	T	0.0	3.3
1994-95	0.0	0.0	0.0	0.0	T	0.0	1.0	0.0	0.0	0.0	0.0	T	1.0
1995-96	0.0	0.0	0.0	0.0	1.0	0.7	1.4	0.3	1.4	0.4	0.0	T	5.2
1996-97	0.0	0.0	0.0	0.1	T	0.5	10.4	5.9					
1997-98						21.0							
1998-99						0.5							
1999-													
POR= 48 YRS	0.0	0.0	0.0	0.2	1.2	3.2	2.8	2.6	1.2	0.3	0.0	0.0	11.5

WBAN : 23009

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
ROSWELL,
NEW MEXICO (ROW)

The climate at Roswell conforms to the basic trend of the four seasons, but shows certain deviations related to geography. Higher landmasses almost surround the valley location, with a long, gradual descent from points southwest through west and north. The topography acts to modify air masses, especially the cold outbreaks in wintertime. Downslope warming of air, as well as air interchange within a tempering environment, often prevents sharp cooling. Moreover, the elevation of 3,600 feet is high enough to moderate the heat and humidity compared to locations to the south and east.

Summer moves into a wet phase that delivers the most important rain of the year. Rather frequent showers and thunderstorms from June through September account for over half of the annual precipitation. Storm clouds that build up from the heat of the day, overspread the sky on many afternoons, retarding a further rise in temperature. At the same time, relative humidity shows moderation, ranging from about 70 percent in early morning to 30 percent in the mid-afternoon. Temperatures are quite warm on most summer days with readings of 100 degrees or higher occurring on 10 days in an average year.

Rainfall tapers off markedly in the fall with decline in storm activity. This leaves usually agreeable conditions because of low wind movement and mostly clear skies. Frosty nights alternate with warm days. Relative humidity reaches rather low levels in autumn, but dryness is not as rigorous as in the spring.

In winter, sub-freezing at night is tempered by considerable warming during the day. Zero or lower temperatures occur on only one day in an average winter. Sub-zero cold spells are of short duration. Winter is the season of least precipitation.

Spring ushers in the driest season of the year with respect to relative humidity. Wind movement shows a large increase, especially from the plateau areas of the west. Most of the 60 days a year with winds of 25 mph or more occur from February to May. Destructive storms seldom strike the city, but minor damage results from thundersqualls or hailstorms about once a year. Rain is most erratic in spring, ranging from none of consequence in some years, to excessive amounts in others.

STATION LOCATION

ROSWELL, NEW MEXICO

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE											* Type	REMARKS				
						SEA LEVEL	GROUND															
							WIND	TEMP	REL	MO	OR	HT	OK	KS	S	T			R	W	8	H
<u>COOPERATIVE</u> Downtown vacant lot	6/01/94	12/31/04		33°24'	104°31'	3560			5													Open lot with no important obstructions.
<u>CITY</u> 608 North Main Street	9/01/04	6/30/13	App. same	33°24'	104°31'	3560	57	11	9				4									First Order Station, yard exposure, reasonably open.
Room 327, P.O. Bldg. 313 North Richardson	6/30/13	6/04/47	2 blks. S 1 blk. W	33°24'	104°31'	3563	85	76	75				69	69	68							Roof exposure, fairly open but irregular.
<u>AIRPORT</u> City Building Municipal Airport	6/04/47	5/10/50	1.25 mi. WNW	33°24'	104°32'	3611	30	6	5				4	4	4							
Administration Building Municipal Airport	5/10/50	12/01/72	150 ft. W	33°24'	104°32'	d3612	a18 g20	f22	f21	e25	b19	b19	b19	c4								Roof exposure, slight building effects. a - 46 feet to 4/30/51 and 52 feet to 7/31/60. b - 30 feet from 4/30/51 to 12/1/54. c - Added 3145 feet west of office 9/1/60. Decommissioned 1/15/69. d - 3617 feet 9/1/60-1/15/69. e - Added 3/1/62. f - Data source except period 9/1/60-1/15/69. g - Direct reading sensor on field effective 4/5/61.
FAA/NWS Building Industrial Air Center	12/01/72	10/01/96	8 mi. S	33°18'	104°32'	3649	20	5	5	7	3	3	h3	i5	NA							h - Moved 100' SW 6/11/82. i - Moved 10' NE & type change 11/06/85. j - Removed 8/1988.
Industrial Air Center AP	10/01/96	Present	NA	33°18'	104°32'	3650									S							ASOS Commissioned 10/01/96

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

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

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