

2004

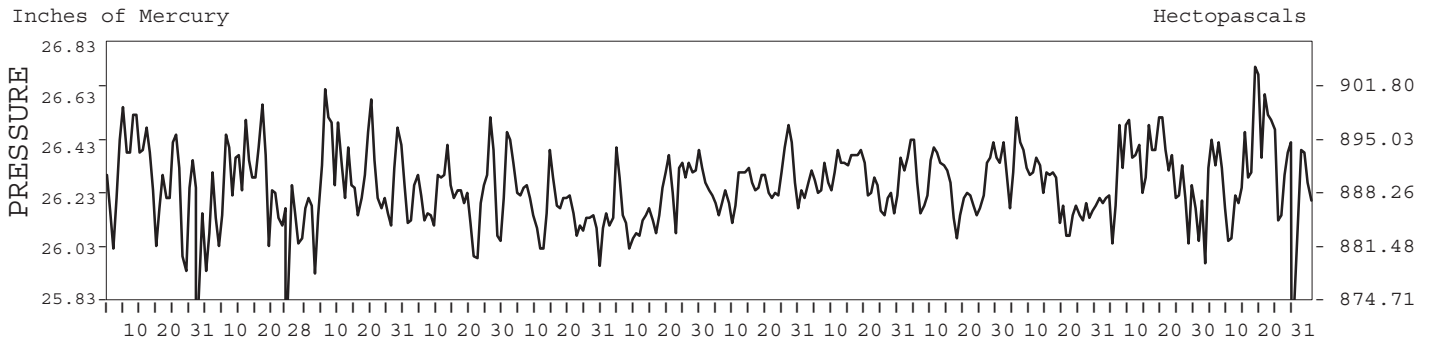
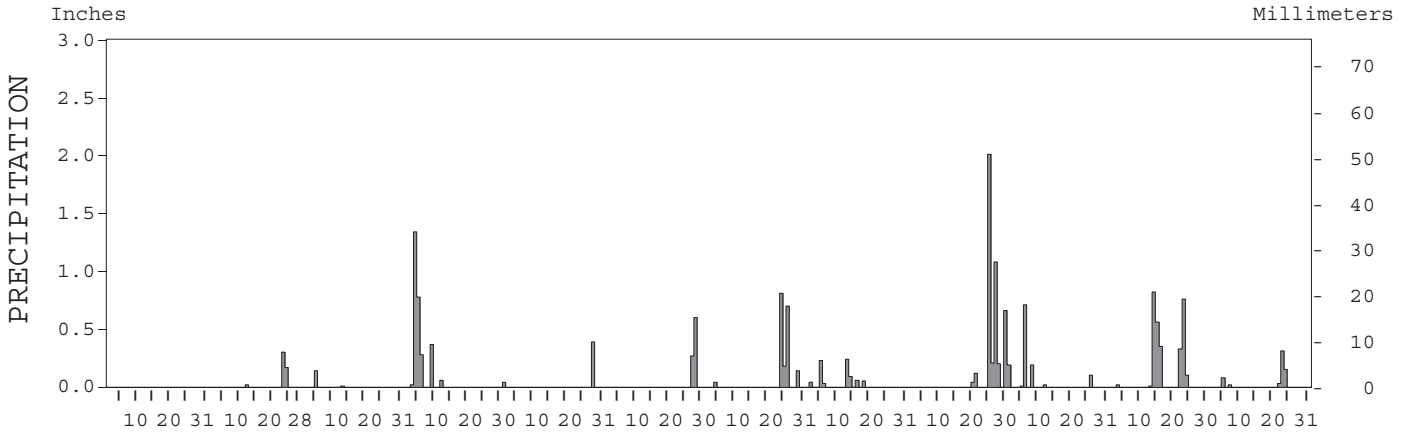
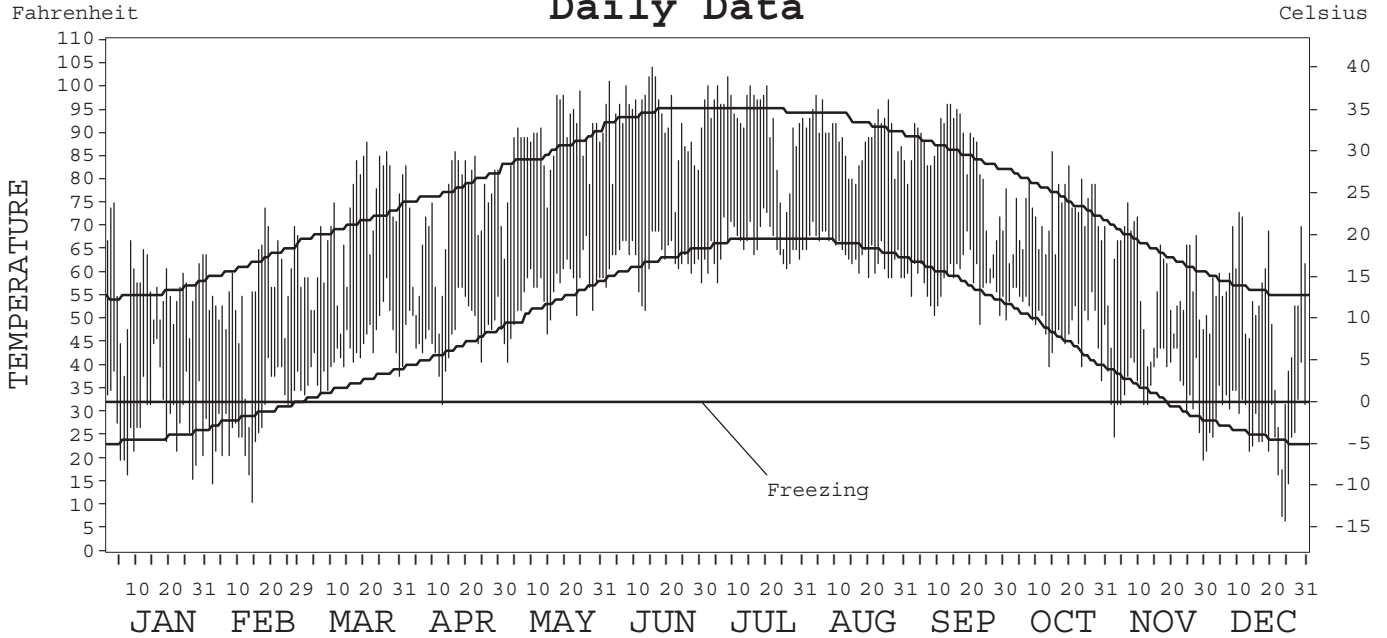
LOCAL CLIMATOLOGICAL DATA  
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-3512

ROSWELL,  
NEW MEXICO (ROW)

Daily Data



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# METEOROLOGICAL DATA FOR 2004

## ROSWELL, NM (ROW)

LATITUDE: 33° 18' 29" N      LONGITUDE: 104° 32' 28" W      ELEVATION (FT): GRND: 3649      BARO: 3652      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	57.5	56.1	70.5	72.4	88.0	92.6	92.1	89.0	84.1	72.9	57.9	52.8	73.8	
	HIGHEST DAILY MAXIMUM	75	74	88	86	99	104	102	98	96	86	75	73	104	
	DATE OF OCCURRENCE	03	18	20	16	24	15	08	04	14+	15	07	11	JUN 15	
	MEAN DAILY MINIMUM	29.6	28.8	43.2	47.3	55.8	62.8	66.0	64.2	58.3	49.3	36.1	26.8	47.3	
	LOWEST DAILY MINIMUM	16	11	34	32	41	52	58	59	49	37	20	7	7	
	DATE OF OCCURRENCE	27	14	06+	12	02	13	05	31+	23	30	30	25	DEC 25	
	AVERAGE DRY BULB	43.6	42.5	56.9	59.9	71.9	77.7	79.1	76.6	71.2	61.1	47.0	39.8	60.6	
	MEAN WET BULB			45.2	48.5	54.5	59.7	63.4	63.8	58.8	52.6	41.0			
	MEAN DEW POINT			31.9	37.6	37.9	45.1	52.8	56.2	49.7	45.7	35.3			
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	14	22	24	16	12	0	0	0	0	88
	MAXIMUM ≤ 32°	0	1	0	0	0	0	0	0	0	0	0	3	4	4
	MINIMUM ≤ 32°	21	20	0	1	0	0	0	0	0	0	10	24	76	76
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/C	HEATING DEGREE DAYS	654	647	266	178	22	0	1	0	18	121	534	771	3212	
	COOLING DEGREE DAYS	0	0	21	30	245	391	445	368	210	9	0	0	1719	
RH	MEAN (PERCENT)	47	53	48	53	36	39	47	54	54	63	70	64	52	
	HOUR 05 LST	58	68	66	71	61	63	66	76	74	80	83	79	70	
	HOUR 11 LST	44	47	39	46	31	33	42	44	44	53	60	51	44	
	HOUR 17 LST	33	36	29	35	18	21	30	34	35	46	58	50	35	
	HOUR 23 LST	50	58	53	57	34	44	48	64	61	69	78	72	57	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	2	2	3	0	0	0	0	0	3	4	2	1	17	
	THUNDERSTORMS	0	0	1	2	2	0	0	1	1	0	0	0	7	
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.)			26.32	26.23	26.20	26.23	26.28	26.32	26.29	26.26	26.34			
	MEAN SEA-LEVEL PRESS. (IN.)			29.99	29.88	29.79	29.80	29.85	29.91	29.90	30.06				
WINDS	RESULTANT SPEED (MPH)			1.6	1.6	2.9	2.2	1.1	1.6	4.5	1.1	2.2			
	RES. DIR. (TENS OF DEGS.)			17	16	20	14	14	17	15	20	35			
	MEAN SPEED (MPH)	7.2	8.8	9.2	10.2	10.7	9.5	8.5	7.3	8.8	7.4	7.9	6.2	8.5	
	PREVAIL. DIR. (TENS OF DEGS.)	15	15	15	17	15	15	15	14	15	16	36	16	15	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	36	47	43	38	43	45	37	33	35	43	31	37	47	
	DIR. (TENS OF DEGS.)	20	25	30	30	15	36	03	04	24	22	21	26	25	
	DATE OF OCCURRENCE	03	19	05	30	19	27	20+	12	29	21	28+	06	FEB 19	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	44	53	51	46	53	53	44	40	39	52	38	44	53	
DIR. (TENS OF DEGS.)	31	26	30	19	14	01	30	04	34	21	21	29	01		
DATE OF OCCURRENCE	25	19	05	22	19	27	03	12	24	21	28	09+	JUN 27		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	T	0.49	0.15	2.89	0.39	0.87	1.87	0.74	4.51	1.03	2.95	0.59	16.48	
	GREATEST 24-HOUR (IN.)	T	0.47	0.14	2.08	0.39	0.60	0.85	0.26	2.06	0.72	0.86	0.34	2.08	
	DATE OF OCCURRENCE	30+	23-24	04	03-04	27	27	23-24	04-05	24-25	04-05	22-23	21-22	APR 03-04	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	0	3	2	7	1	2	5	7	8	5	8	5	53	
PRECIPITATION ≥ 0.10	0	2	1	4	1	2	4	2	7	3	6	2	34		
PRECIPITATION ≥ 1.00	0	0	0	1	0	0	0	0	2	0	0	0	3		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)											1.0	10.1		
	GREATEST 24-HOUR (IN.)											1.0	6.2		
	DATE OF OCCURRENCE											13	22		
	MAXIMUM SNOW DEPTH (IN.)											1	7		
	DATE OF OCCURRENCE											13	24		
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0											1	2			

# NORMALS, MEANS, AND EXTREMES

## ROSWELL, NM (ROW)

LATITUDE: 33° 18' 29" N      LONGITUDE: 104° 32' 28" W      ELEVATION (FT): GRND: 3649      BARO: 3652      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	55.6	62.0	70.0	77.7	86.0	94.0	94.8	92.3	85.7	76.5	64.5	56.3	76.3
	MEAN DAILY MAXIMUM	51	54.7	60.3	68.0	76.5	85.5	93.5	94.3	92.1	85.7	76.2	63.7	55.4	75.5
	HIGHEST DAILY MAXIMUM	32	82	85	93	99	107	114	111	107	103	99	88	81	114
	YEAR OF OCCURRENCE		1975	1996	1989	1989	2000	1994	1995	2002	2000	2000	1996	1981	JUN 1994
	MEAN OF EXTREME MAXS.	51	74.0	78.4	84.1	91.1	97.6	103.6	100.7	100.3	96.9	90.3	80.5	73.7	89.3
	NORMAL DAILY MINIMUM	30	24.4	29.3	35.7	43.3	53.2	62.0	66.7	65.5	58.3	46.3	33.3	25.1	45.3
	MEAN DAILY MINIMUM	51	26.5	30.8	37.2	45.7	55.4	64.1	66.8	66.6	59.5	47.5	35.0	27.0	46.8
	LOWEST DAILY MINIMUM	32	-9	3	9	23	34	47	0	54	40	14	4	-8	-9
	YEAR OF OCCURRENCE		1979	1985	2002	1973	1975	1992	1997	1990	2000	1991	1976	1978	JAN 1979
	MEAN OF EXTREME MINS.	51	10.2	14.9	22.6	31.4	42.8	54.4	61.0	60.3	48.1	34.5	20.0	12.2	34.4
	NORMAL DRY BULB	30	40.0	45.7	52.9	60.5	69.6	78.0	80.8	78.9	72.0	61.4	48.9	40.7	60.8
	MEAN DRY BULB	51	40.7	45.5	52.7	61.2	70.3	78.8	81.2	79.2	72.5	61.8	49.4	41.2	61.2
	MEAN WET BULB	20	33.3	37.0	41.8	47.1	55.0	61.9	61.2	61.6	59.7	50.7	40.3	33.6	48.6
	MEAN DEW POINT	20	23.3	24.6	27.6	30.8	40.1	49.9	52.4	57.7	51.7	40.8	29.5	23.2	37.6
NORMAL NO. DAYS WITH:															
MAXIMUM ≥ 90°	30	0.0	0.0	0.2	1.5	9.9	21.4	25.3	22.6	10.5	1.9	0.0	0.0	93.3	
MAXIMUM ≤ 32°	30	1.8	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.7	4.7	
MINIMUM ≤ 32°	30	25.1	16.4	7.5	1.9	0.0	0.0	0.0	0.0	0.0	1.1	12.3	24.2	88.5	
MINIMUM ≤ 0°	30	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.3	
H/C	NORMAL HEATING DEG. DAYS	30	775	542	378	182	51	2	0	0	18	144	485	755	3332
	NORMAL COOLING DEG. DAYS	30	0	0	1	47	194	391	488	431	228	32	2	0	1814
RH	NORMAL (PERCENT)	30	57	50	42	37	40	44	48	53	55	52	52	56	49
	HOUR 05 LST	30	71	66	58	54	59	65	69	74	75	70	68	68	66
	HOUR 11 LST	30	50	44	34	30	33	35	40	44	47	43	44	48	41
	HOUR 17 LST	30	41	33	26	22	24	27	32	36	39	36	38	41	33
	HOUR 23 LST	30	62	55	45	41	44	48	54	60	62	59	59	61	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)	32	3.0	2.2	0.6	0.3	0.4	0.2	0.2	0.2	1.0	1.7	2.2	2.1	14.1
	THUNDERSTORMS	32	0.2	0.2	0.6	1.7	3.9	5.5	5.9	6.7	3.8	1.5	0.5	0.1	30.6
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)	30	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)	20	30.06	30.00	29.90	29.83	29.79	29.79	29.86	29.89	29.92	29.96	30.02	30.08	29.92
WINDS	MEAN SPEED (MPH)	41	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)	25	16	16	16	16	15	16	15	14	16	16	16	36	16
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	8	43	47	46	56	51	53	49	41	43	44	44	41	56
	DIR. (TENS OF DEGS)		30	25	32	25	23	35	19	31	35	24	31	29	25
	YEAR OF OCCURRENCE		1999	2004	2002	2003	2003	2003	1997	2003	2002	1998	2003	2003	APR 2003
	MAXIMUM 5-SECOND:														
SPEED (MPH)	8	54	54	54	64	58	62	59	55	51	52	53	51	64	
DIR. (TENS OF DEGS)		31	20	32	25	23	27	23	31	33	21	27	34	25	
YEAR OF OCCURRENCE		1999	2001	2002	2003	2003	2002	2000	2003	2002	2004	2001	2000	APR 2003	
PRECIPITATION	NORMAL (IN)	30	0.39	0.41	0.35	0.58	1.30	1.62	1.99	2.31	1.98	1.29	0.53	0.59	13.34
	MAXIMUM MONTHLY (IN)	32	1.03	2.02	2.84	2.89	4.57	5.02	6.88	6.48	6.58	5.91	2.95	3.07	6.88
	YEAR OF OCCURRENCE		1992	1987	2001	2004	1992	1986	1991	1974	1980	1998	2004	1997	JUL 1991
	MINIMUM MONTHLY (IN)	32	0.03	0.00	0.00	0.01	T	0.02	0.01	0.07	0.05	T	0.00	0.00	0.00
	YEAR OF OCCURRENCE		2004	1999	1980	2002	1996	1990	1980	2000	2003	1995	1991	1976	FEB 1999
	MAXIMUM IN 24 HOURS (IN)	32	0.67	1.41	2.22	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	2001	1985	1981	1981	1981	1977	1980	1986	1984	1997	JUL 1981
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	4.1	3.4	2.9	3.0	4.4	5.3	6.6	8.2	6.7	4.3	2.8	3.9	55.6	
PRECIPITATION ≥ 1.00	30	0.0	*	0.1	0.1	0.4	0.4	0.4	0.5	0.4	0.4	0.0	*	2.7	
SNOWFALL	NORMAL (IN)	30	3.1	2.6	0.9	0.4	0.*	0.0	0.0	0.0	0.0	0.3	1.3	3.3	11.9
	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	0.9	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.5	1.0	4.1	

PRECIPITATION (inches) 2004 ROSWELL, NM (ROW)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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
2000	T	T	0.68	0.15	T	1.67	1.12	0.07	0.05	2.03	2.11	0.31	8.19
2001	0.66	0.42	2.84	0.25	1.31	0.47	0.27	0.51	0.34	0.25	1.11	0.24	8.67
2002	0.52	0.14	1.64	0.01	T	3.62	1.00	0.74	1.88	2.11	0.08	1.10	12.84
2003	0.05	0.44	0.17	0.02	0.39	0.61	0.54	0.28	T	0.14	0.24	0.02	2.90
2004	T	0.49	0.15	2.89	0.39	0.87	1.87	0.74	4.51	1.03	2.95	0.59	16.48
POR= 110 YRS	0.45	0.48	0.55	0.71	1.12	1.48	1.93	1.78	1.78	1.16	0.56	0.54	12.54

WBAN : 23009

AVERAGE TEMPERATURE (°F) 2004 ROSWELL, NM (ROW)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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	61.6
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
2000	43.9	51.5	53.7	63.8	75.9	77.9	82.9	81.4	75.8	61.0	43.5	38.3	62.5
2001	36.9	47.1	50.7	63.1	71.2	80.5	84.2	79.8	74.3	63.9	51.6	41.1	62.0
2002	43.2	44.0	50.3	65.6	72.0	81.1	80.7	81.7	73.6	58.8	48.1	40.8	61.7
2003	43.9	46.8	55.1	63.6	72.5	77.0	82.5	80.3	73.6	65.0	52.0	42.1	62.9
2004	43.6	42.5	56.9	59.9	71.9	77.7	79.1	76.6	71.2	61.1	47.0	39.8	60.6
POR= 110 YRS	39.7	44.4	51.5	59.9	68.5	76.9	78.6	77.9	71.1	60.1	48.1	40.0	59.7

## HEATING DEGREE DAYS (base 65°F) 2004 ROSWELL, NM (ROW)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
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
1999-00	0	0	21	145	330	764	648	387	342	105	9	0	2751
2000-01	0	0	13	181	638	820	866	496	434	88	23	0	3559
2001-02	0	0	0	79	394	734	667	581	449	74	6	0	2984
2002-03	0	0	0	218	501	744	646	505	301	92	9	0	3016
2003-04	0	0	1	64	396	706	654	647	266	178	22	0	2934
2004-	1	0	18	121	534	771							

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## COOLING DEGREE DAYS (base 65°F) 2004 ROSWELL, NM (ROW)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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	1584
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
2000	0	0	0	75	352	394	560	514	342	62	0	0	2299
2001	0	0	1	37	221	474	605	467	285	49	0	0	2139
2002	0	0	4	97	228	489	494	521	265	36	1	0	2135
2003	0	1	0	55	248	368	549	481	266	70	14	0	2052
2004	0	0	21	30	245	391	445	368	210	9	0	0	1719

SNOWFALL (inches) 2004 ROSWELL, NM (ROW)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
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							
1999-00													
2000-01													
2001-02													
2002-03													
2003-04													
2004-					1.0	10.1							
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

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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 (1971 - 2000). 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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2004  
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										AUTOMATIC OBSERVING EQUIPMENT *	* TYPE M = AMOS T = AUTOB S = ASOS W = AWOS  REMARKS	
						SEA LEVEL		GROUND										TEMPERATURE
						GROUND	SITE	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET	WEIGHING RAIN GAGE	8 INCH RAIN GAGE	HYGROMETER			
*NOTE:																		
<u>AIRPORT</u>																		
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 j	3 h3	6 i5	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		33°18'	104°32'	k3669								S	k. ASOS Commissioned 10/01/96 Ground elevation.			

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\* NOTES: For earlier station history see previous edition.