

2004

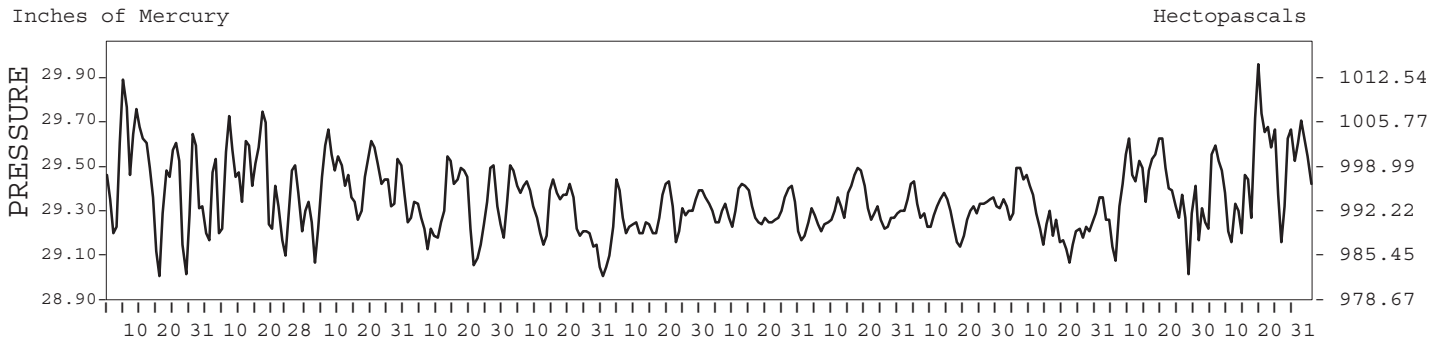
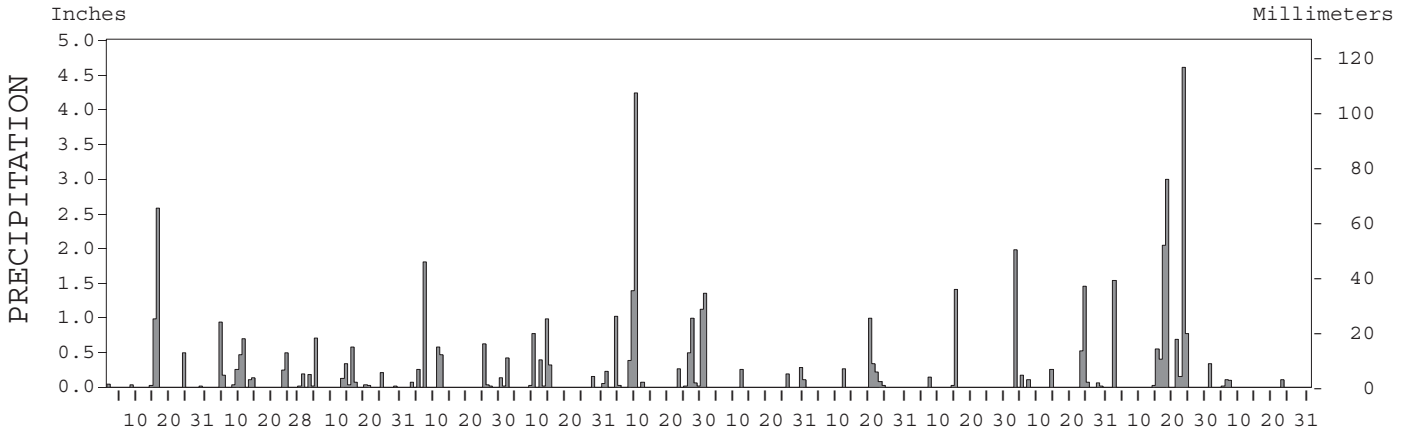
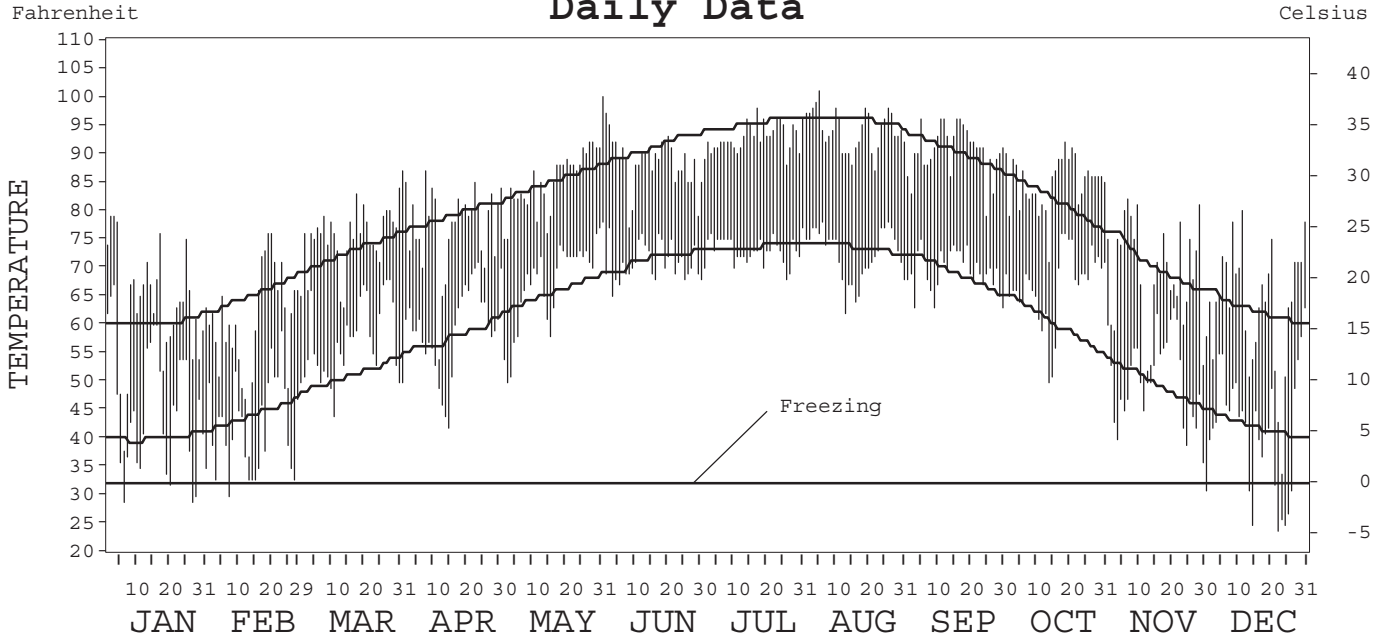
LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 1528-7432

AUSTIN/CITY, TEXAS (ATT)

Daily Data



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION

NATIONAL ENVIRONMENTAL AND INFORMATION SERVICE

NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NORTH CAROLINA

DIRECTOR NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 2004

AUSTIN/CITY, TX (ATT)

LATITUDE: 30° 19' 0" N LONGITUDE: 97° 46' 0" W ELEVATION (FT): GRND: 648 BARO: 651 TIME ZONE: CENTRAL (UTC + 6) WBAN: 13958

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	63.5	60.9	75.9	77.3	85.5	88.5	92.8	94.1	90.6	85.0	68.9	63.4	78.9	
	HIGHEST DAILY MAXIMUM	79	76	87	87	100	97	98	101	96	92	82	80	101	
	DATE OF OCCURRENCE	03+	20+	31	07	31	01	17	05	17+	19	07	12	AUG 05	
	MEAN DAILY MINIMUM	45.5	42.6	57.1	59.3	67.4	71.0	73.0	72.3	69.5	66.8	50.5	41.5	59.7	
	LOWEST DAILY MINIMUM	29	30	44	42	50	65	68	62	63	50	36	24	24	
	DATE OF OCCURRENCE	27	07	10	14	02	03	26	13	30+	14	30	23	DEC 23	
	AVERAGE DRY BULB	54.5	51.8	66.5	68.3	76.5	79.8	82.9	83.2	80.1	75.9	59.7	52.5	69.3	
	MEAN WET BULB		46.5				73.0		72.1	69.2			45.5		
	MEAN DEW POINT		40.6				70.5		67.0	63.7			37.9		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	7	14	29	29	20	4	0	0	0	103
	MAXIMUM ≤ 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINIMUM ≤ 32°	4	1	0	0	0	0	0	0	0	0	0	9	0	14	
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/C	HEATING DEGREE DAYS	340	379	30	38	2	0	0	0	4	164	387	1344		
	COOLING DEGREE DAYS	18	1	83	145	367	447	563	571	458	348	13	6	3020	
RH	MEAN (PERCENT)	68	70	66	71	72	78	69	63	62	75	76	63	69	
	HOUR 00 LST	74	76	73	80	82	87	79	73	70	86	83	71	78	
	HOUR 06 LST	79	82	81	84	85	91	88	85	81	87	84	78	84	
	HOUR 12 LST	61	63	58	60	60	67	54	49	49	64	67	52	59	
	HOUR 18 LST	58	58	55	58	58	69	55	47	48	65	68	53	58	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	4	0	2	1	0	5	0	0	1	0	7	2	22	
	THUNDERSTORMS	0	5	7	7	4	16	6	7	1	9	9	0	71	
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.)	29.43	29.41	29.41	29.29	29.28	29.27	29.29	29.31	29.29	29.26	29.38	29.48	29.34	
	MEAN SEA-LEVEL PRESS. (IN.)		30.12	30.10	29.98		29.94		29.97	29.96	29.93	30.08	30.19		
WINDS	RESULTANT SPEED (MPH)	0.2	1.4	1.4	2.3	1.2	1.3		1.5	0.8	1.5	1.2	1.3		
	RES. DIR. (TENS OF DEGS.)	01	02	14	15	09	08		15	06	17	34	33		
	MEAN SPEED (MPH)	5.4	6.4	6.4	6.6	7.2	5.6	5.1	5.0	4.0	5.3	5.2	5.1	5.6	
	PREVAIL. DIR. (TENS OF DEGS.)	36	36	15	16	16	16	15	16	01	16	32	30	16	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	23	22	24	20	21	22	30	17	16	24	24	22	30	
	DIR. (TENS OF DEGS.)	30	29	31	15	21	03	10	10	12	02	28	01	10	
	DATE OF OCCURRENCE	26	29+	15	18+	31+	03	25	20+	21+	04	23	13+	JUL 25	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	37	31	32	29	33	32	40	28	23	30	36	31	40	
DIR. (TENS OF DEGS.)	31	15	33	14	33	02	11	14	11	11	27	30	11		
DATE OF OCCURRENCE	26	19	15+	18+	01	03	25	28	21+	06	23	06	JUL 25		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	4.15	3.73	2.31	3.97	3.34	11.41	0.83	1.91	1.57	4.62	14.10	0.33	52.27	
	GREATEST 24-HOUR (IN.)	2.71	1.11	0.71	1.80	1.30	4.27	0.28	0.99	1.43	1.98	4.90	0.12	4.90	
	DATE OF OCCURRENCE	15-16	04-05	04	06	13-14	08-09	29	19	13-14	02	16-17	04-05	NOV 16-17	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	7	12	12	10	10	14	4	6	3	9	11	4	102	
PRECIPITATION ≥ 0.10	3	10	6	6	7	9	4	4	2	6	10	3	70		
PRECIPITATION ≥ 1.00	1	0	0	1	0	5	0	0	1	2	4	0	14		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	
	GREATEST 24-HOUR (IN.)	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	
	DATE OF OCCURRENCE		14											FEB 14	
	MAXIMUM SNOW DEPTH (IN.)	0	1	0	0	0	0	0	0	0	0	0	0	1	
	DATE OF OCCURRENCE		14											FEB 14	
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	0	1	0	0	0	0	0	0	0	0	0	0	1		

NORMALS, MEANS, AND EXTREMES

AUSTIN/CITY, TX (ATT)

LATITUDE: 30° 19' 0 " N LONGITUDE: 97° 46' 0 " W ELEVATION (FT): GRND: 648 BARO: 651 TIME ZONE: CENTRAL (UTC + 6) WBAN: 13958

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	60.3	65.1	72.5	78.9	84.8	90.9	95.0	95.6	90.1	81.4	70.1	62.3	78.9
	MEAN DAILY MAXIMUM	57	60.2	64.3	71.7	79.3	85.4	91.3	95.4	95.8	89.7	81.3	70.0	62.8	78.9
	HIGHEST DAILY MAXIMUM	63	90	99	98	98	102	108	109	110	112	98	91	90	112
	YEAR OF OCCURRENCE		1971	1996	1971	2000	1998	1998	1954	2003	2000	1991	1951	1955	SEP 2000
	MEAN OF EXTREME MAXS.	57	79.3	82.1	86.9	90.6	93.9	97.5	100.6	101.6	98.2	92.4	84.8	79.8	90.6
	NORMAL DAILY MINIMUM	30	40.0	44.0	50.9	57.6	65.4	71.1	73.4	73.3	68.8	59.8	49.3	41.9	58.0
	MEAN DAILY MINIMUM	57	39.9	43.5	50.0	58.3	65.8	71.6	74.1	73.7	69.1	59.6	49.1	41.9	58.0
	LOWEST DAILY MINIMUM	63	-2	7	18	35	43	53	64	61	41	30	20	4	-2
	YEAR OF OCCURRENCE		1949	1951	1948	1973	1954	1970	1970	1967	1942	1993	1976	1989	JAN 1949
	MEAN OF EXTREME MINS.	57	23.2	26.9	32.4	42.5	53.4	63.0	69.2	68.6	56.6	44.4	32.9	25.8	44.9
	NORMAL DRY BULB	30	50.2	54.6	61.7	68.3	75.1	81.0	84.2	84.5	79.5	70.6	59.7	52.1	68.5
	MEAN DRY BULB	57	50.0	54.0	60.7	68.8	75.5	81.6	84.7	84.8	79.4	70.4	59.6	52.5	68.5
	MEAN WET BULB	18	45.7	49.3	54.7	61.3	68.9	73.4	74.2	74.1	70.0	63.2	54.5	47.2	61.4
	MEAN DEW POINT	18	39.0	42.6	48.0	55.4	65.1	69.7	70.0	69.3	64.9	58.3	49.1	41.1	56.0
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	*	0.3	0.6	1.6	7.2	20.8	28.0	28.2	18.2	4.4	0.0	0.0	109.3	
MAXIMUM ≤ 32°	30	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0	
MINIMUM ≤ 32°	30	6.6	3.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	*	0.8	4.9	16.6	
MINIMUM ≤ 0°	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
H/C	NORMAL HEATING DEG. DAYS	30	475	319	163	44	2	0	0	0	2	32	205	406	1648
	NORMAL COOLING DEG. DAYS	30	7	18	59	147	323	495	605	610	439	207	51	13	2974
RH	NORMAL (PERCENT)	30	68	67	66	67	73	71	66	65	68	69	70	68	68
	HOUR 00 LST	30	73	72	72	74	82	81	76	75	77	76	78	74	76
	HOUR 06 LST	30	79	80	80	82	89	90	89	88	86	85	83	80	84
	HOUR 12 LST	30	60	59	57	56	62	58	52	51	55	57	60	60	57
	HOUR 18 LST	30	57	52	51	52	58	56	48	47	53	55	60	59	54
S	PERCENT POSSIBLE SUNSHINE	57	49	51	55	54	56	69	75	74	66	64	55	49	60
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	64	4.1	2.9	2.5	1.2	0.9	0.5	0.3	0.3	0.8	2.0	2.8	4.0	22.3
	THUNDERSTORMS	64	1.1	2.2	3.2	4.5	6.9	5.1	3.9	4.8	3.8	3.1	2.0	1.2	41.8
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	1			4.8					2.4				4.8	
	MIDNIGHT-MIDNIGHT (OKTAS)	1			4.8										
	MEAN NO. DAYS WITH:														
	CLEAR														
	PARTLY CLOUDY														
	CLOUDY														
PR	MEAN STATION PRESSURE (IN)	31	29.49	29.39	29.30	29.30	29.30	29.30	29.30	29.30	29.40	29.40	29.50	29.36	
	MEAN SEA-LEVEL PRES. (IN)	17	30.14	30.07	30.01	29.93	29.90	29.92	29.97	29.96	29.97	30.02	30.09	30.01	
WINDS	MEAN SPEED (MPH)	48	9.0	9.3	10.0	9.7	9.1	8.5	7.9	7.3	7.3	7.6	8.4	8.5	8.6
	PREVAIL. DIR (TENS OF DEGS)	33	36	18	18	16	16	16	18	18	18	18	18	36	18
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	9	32	34	33	46	52	34	30	33	47	33	29	33	52
	DIR. (TENS OF DEGS)		03	36	03	27	02	29	10	09	03	36	01	36	02
	YEAR OF OCCURRENCE		1998	1998	1996	1997	1997	1997	2004	1999	1997	1998	1996	1996	MAY 1997
	MAXIMUM 5-SECOND:														
	SPEED (MPH)	9	45	45	52	55	71	47	40	54	57	43	41	46	71
DIR. (TENS OF DEGS)		03	02	03	27	02	28	11	09	05	01	29	30	02	
YEAR OF OCCURRENCE		1996	1996	1996	1997	1997	1997	2004	1999	1997	1998	1998	2003	MAY 1997	
PRECIPITATION	NORMAL (IN)	30	1.89	1.99	2.14	2.51	5.03	3.81	1.97	2.31	2.91	3.97	2.68	2.44	33.65
	MAXIMUM MONTHLY (IN)	63	9.21	6.56	6.03	9.93	9.98	14.96	10.54	9.48	8.11	12.39	14.10	14.16	14.96
	YEAR OF OCCURRENCE		1991	1992	1983	1957	1965	1981	1979	2001	1942	1998	2004	1991	JUN 1981
	MINIMUM MONTHLY (IN)	63	0.04	0.03	T	0.06	0.73	T	0.00	0.00	0.07	T	T	T	0.00
	YEAR OF OCCURRENCE		1971	1999	1972	1984	1998	1967	1962	1952	1947	1952	1970	1950	JUL 1962
	MAXIMUM IN 24 HOURS (IN)	63	4.41	3.73	2.69	3.86	5.66	6.50	5.46	6.01	6.74	7.51	7.55	6.19	7.55
	YEAR OF OCCURRENCE		1991	1958	1980	1942	1979	1964	1961	1994	1973	1998	2001	1991	NOV 2001
	NORMAL NO. DAYS WITH:														
	PRECIPITATION ≥ 0.01	30	7.7	7.0	7.9	7.2	9.5	7.5	5.1	5.2	7.2	7.4	8.2	7.9	87.8
	PRECIPITATION ≥ 1.00	30	0.3	0.3	0.5	0.7	1.6	1.3	0.5	0.7	0.8	1.2	0.7	0.7	9.3
SNOWFALL	NORMAL (IN)	30	0.4	0.1	0.*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.*	0.6
	MAXIMUM MONTHLY (IN)	57	7.5	6.0	2.0	T	T	0.0	0.0	0.0	0.0	0.0	2.0	T	7.5
	YEAR OF OCCURRENCE		1985	1966	1965	1995	1993						1980	1996	JAN 1985
	MAXIMUM IN 24 HOURS (IN)	57	7.0	6.0	2.0	T	T	0.0	0.0	0.0	0.0	0.0	2.0	T	7.0
	YEAR OF OCCURRENCE		1944	1966	1965	1995	1993						1980	1993	JAN 1944
	MAXIMUM SNOW DEPTH (IN)	52	6	6	1	0	0	0	0	0	0	0	0	0	6
	YEAR OF OCCURRENCE		1949	1966	1965										FEB 1966
	NORMAL NO. DAYS WITH:														
SNOWFALL ≥ 1.0	30	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2	

PRECIPITATION (inches) 2004 AUSTIN/CITY, TX (ATT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1975	1.11	2.30	0.80	3.86	8.16	7.07	2.25	2.54	3.62	2.54	0.52	2.04	36.81
1976	1.16	1.11	2.11	8.13	6.05	3.19	4.71	0.80	3.80	5.93	1.78	2.48	41.25
1977	2.25	2.58	2.18	6.08	1.24	1.22	0.21	0.06	3.10	1.19	1.69	0.34	22.14
1978	0.88	1.95	0.84	1.72	5.78	2.98	1.19	1.49	4.44	1.38	5.48	2.84	30.97
1979	2.11	3.54	3.76	2.98	7.29	0.83	10.54	0.61	1.40	0.45	0.59	3.40	37.50
1980	0.85	2.33	3.20	2.20	5.43	0.31	0.28	1.18	5.66	1.29	3.41	1.24	27.38
1981	1.61	1.18	3.05	0.81	9.02	14.96	3.39	0.91	2.65	7.04	0.72	0.39	45.73
1982	0.85	0.80	1.39	4.17	5.68	2.99	0.13	0.77	1.88	2.66	3.19	2.12	26.63
1983	1.88	2.84	6.03	0.16	5.33	3.84	2.85	2.21	2.83	2.82	2.66	0.53	33.98
1984	1.66	1.00	2.49	0.06	1.27	1.69	1.44	0.45	0.79	10.34	1.88	3.23	26.30
1985	1.34	2.10	1.84	2.39	1.65	5.64	1.53	0.37	3.98	5.84	4.75	1.06	32.49
1986	0.45	1.14	0.41	1.46	7.36	2.20	0.45	1.21	4.77	7.98	1.81	5.77	35.01
1987	0.92	2.87	1.36	0.45	6.75	10.85	3.46	0.27	5.03	0.31	3.08	1.31	36.66
1988	0.27	0.32	2.66	2.02	3.33	2.60	2.77	1.67	1.43	0.66	0.34	1.14	19.21
1989	3.79	0.85	2.12	2.43	6.90	3.10	0.09	2.72	0.27	2.20	1.26	0.14	25.87
1990	1.28	3.55	2.08	3.12	3.65	1.55	3.14	0.33	1.76	3.39	3.87	0.72	28.44
1991	9.21	2.99	0.90	4.91	3.98	4.40	1.16	4.28	2.25	3.06	0.91	14.16	52.21
1992	4.83	6.56	5.43	1.90	9.05	4.96	0.96	1.95	1.98	1.38	3.76	3.29	46.05
1993	3.39	3.14	2.09	2.94	5.30	3.99	T	0.75	0.34	2.42	1.00	1.14	26.50
1994	1.43	2.13	1.70	1.68	3.68	0.74	0.26	8.50	5.69	7.85	1.83	5.67	41.16
1995	0.81	1.44	2.21	3.08	9.49	2.74	0.64	5.71	2.86	1.43	3.22	0.51	34.14
1996	0.06	0.62	0.60	1.90	1.82	4.48	0.15	8.81	4.02	0.78	4.13	2.19	29.56
1997	1.07	3.94	1.58	5.59	7.10	8.97	2.37	2.34	1.46	5.42	2.91	4.28	47.03
1998	2.68	3.26	3.07	0.78	0.73	1.56	0.90	1.39	6.76	12.39	4.04	1.56	39.12
1999	0.20	0.03	4.09	0.79	7.07	3.37	4.43	0.70	0.28	1.67	0.15	1.15	23.93
2000	2.85	1.75	1.49	2.40	3.59	5.27	1.87	0.13	1.76	6.03	7.95	2.87	37.96
2001	2.72	1.41	5.51	0.50	3.27	0.85	0.34	9.48	1.71	2.46	10.00	4.62	42.87
2002	1.69	0.66	1.24	0.76	1.25	5.64	4.94	2.35	3.23	6.68	3.04	4.52	36.00
2003	1.70	3.86	0.54	0.10	1.37	4.55	1.42	2.94	2.08	1.03	1.32	0.50	21.41
2004	4.15	3.73	2.31	3.97	3.34	11.41	0.83	1.91	1.57	4.62	14.10	0.33	52.27
POR= 149 YRS	2.07	2.41	2.27	2.36	4.37	3.12	2.11	2.20	3.46	3.20	2.49	2.53	32.59

WBAN : 13958

AVERAGE TEMPERATURE (°F) 2004 AUSTIN/CITY, TX (ATT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1975	53.4	52.2	59.7	67.8	73.7	79.9	82.0	82.6	75.8	70.0	60.4	52.4	67.5
1976	49.5	61.3	62.0	68.0	70.7	79.8	80.2	83.4	78.1	61.3	51.6	48.5	66.2
1977	41.6	54.1	61.3	67.0	75.3	82.2	85.1	86.8	83.8	71.6	61.7	53.6	68.7
1978	40.7	45.0	58.5	69.8	77.3	82.3	86.4	84.8	79.0	69.8	60.6	49.7	67.0
1979	40.4	48.5	61.1	67.0	71.5	79.8	83.1	82.5	77.6	73.5	56.5	53.0	66.2
1980	51.2	52.8	61.4	66.7	75.1	84.6	87.9	86.0	81.7	68.4	57.5	53.7	68.9
1981	50.6	53.4	59.3	72.4	74.6	81.4	84.9	85.5	79.7	72.2	63.7	53.7	69.3
1982	51.9	51.0	64.7	67.3	75.6	81.6	86.5	87.4	81.8	70.7	58.5	52.3	69.1
1983	47.4	51.3	57.8	64.6	72.7	78.4	82.7	84.4	78.3	72.0	62.4	41.9	66.2
1984	46.3	55.5	63.4	71.1	78.0	82.6	85.1	86.0	76.3	70.5	58.7	58.4	69.3
1985	44.1	49.7	64.3	70.0	76.3	80.7	82.9	87.0	79.3	71.7	63.0	49.1	68.2
1986	54.0	57.6	63.7	71.8	73.8	81.4	85.9	84.7	82.0	68.8	59.0	50.8	69.5
1987	50.9	55.5	57.9	67.4	76.1	80.2	83.4	85.4	78.8	69.9	60.0	53.3	68.2
1988	47.3	53.3	60.4	68.5	74.7	80.2	84.6	86.7	81.6	72.5	64.9	55.5	69.2
1989	55.3	48.6	60.8	69.2	78.3	81.3	85.7	84.7	79.3	72.0	62.7	44.3	68.5
1990	57.9	59.3	61.7	69.8	78.5	85.9	83.4	86.1	81.2	70.0	63.6	51.3	70.7
1991	47.3	56.6	63.5	71.4	76.7	81.5	83.9	85.1	77.2	72.7	56.8	54.5	68.9
1992	50.6	58.9	62.7	68.0	73.2	81.6	83.9	82.0	80.8	72.7	56.9	54.8	68.8
1993	49.9	54.5	60.9	66.3	73.7	81.4	85.3	87.4	81.8	70.5	55.7	55.0	68.5
1994	52.2	55.3	62.8	69.3	74.7	84.2	87.2	83.7	77.5	71.4	64.0	55.7	69.8
1995	53.6	56.2	60.6	67.6	76.2	79.3	84.5	84.4	78.7	70.8	59.0	55.0	68.8
1996	50.5	57.6	57.2	68.6	80.6	82.5	86.7	83.9	77.6	69.9	60.5	54.9	69.2
1997	48.9	53.1	62.9	63.0	72.5	79.1	83.9	83.1	81.5	70.4	56.5	50.5	67.1
1998	56.5	55.5	59.5	67.4	79.9	86.4	88.0	85.8	82.9	71.6	62.8	52.9	70.8
1999	55.6	62.3	62.4	71.8	76.5	81.7	83.2	88.3	81.4	71.2	64.4	55.7	71.2
2000	55.4	62.1	66.3	70.3	79.1	81.7	86.7	87.2	81.5	71.4	55.9	45.4	70.3
2001	48.4	56.2	54.9	70.8	76.4	82.7	87.2	86.2	77.2	68.1	62.8	53.8	68.7
2002	53.5	51.2	59.2	73.4	78.0	82.7	82.4	85.3	79.8	69.6	57.2	53.2	68.8
2003	49.7	51.2	60.1	70.8	80.1	82.2	84.7	86.0	78.5	72.4	63.7	55.2	69.6
2004	54.5	51.8	66.5	68.3	76.5	79.8	82.9	83.2	80.1	75.9	59.7	52.5	69.3
POR= 107 YRS	50.4	53.8	60.8	68.1	75.0	81.6	84.2	84.4	79.1	70.1	59.4	51.7	68.2

HEATING DEGREE DAYS (base 65°F) 2004 AUSTIN/CITY, TX (ATT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1975-76	0	0	1	27	204	404	476	158	173	19	3	0	1465
1976-77	0	0	0	170	402	506	719	308	148	20	0	0	2273
1977-78	0	0	0	16	136	354	750	561	225	15	7	0	2064
1978-79	0	0	0	5	186	475	754	460	144	37	10	0	2071
1979-80	0	0	0	16	278	372	425	357	168	47	0	0	1663
1980-81	0	0	0	69	262	361	443	340	196	6	0	0	1677
1981-82	0	0	0	44	86	349	424	400	147	81	2	0	1533
1982-83	0	0	0	37	245	408	538	376	229	93	4	0	1930
1983-84	0	0	4	7	154	721	573	280	123	16	0	0	1878
1984-85	0	0	18	34	221	228	643	428	99	19	0	0	1690
1985-86	0	0	7	12	134	490	338	267	87	14	2	0	1351
1986-87	0	0	0	18	214	431	434	266	228	83	0	0	1674
1987-88	0	0	0	11	203	369	548	357	193	34	0	0	1715
1988-89	0	0	0	3	116	307	307	464	198	64	0	0	1459
1989-90	0	0	0	39	157	638	239	171	154	26	0	0	1424
1990-91	0	0	0	44	121	430	540	242	110	8	1	0	1496
1991-92	0	0	8	34	280	332	440	188	105	39	4	0	1430
1992-93	0	0	0	0	267	327	462	296	163	54	0	0	1569
1993-94	0	0	0	70	298	324	396	287	139	36	15	0	1565
1994-95	0	0	0	20	104	301	359	247	201	35	2	0	1269
1995-96	0	0	8	9	194	347	442	286	282	59	0	0	1627
1996-97	0	0	6	33	176	327	513	343	118	98	0	0	1614
1997-98	0	0	0	36	273	445	271	258	218	13	0	0	1514
1998-99	0	0	0	17	116	405	303	126	118	21	0	0	1106
1999-00	0	0	0	41	80	304	313	146	85	30	0	0	999
2000-01	0	0	5	63	291	599	509	258	309	12	0	0	2046
2001-02	0	0	1	32	137	365	373	380	219	21	0	0	1528
2002-03	0	0	0	36	241	368	477	386	170	22	0	0	1700
2003-04	0	0	0	11	143	308	340	379	30	38	2	0	1251
2004-	0	0	0	4	164	387							

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COOLING DEGREE DAYS (base 65°F) 2004 AUSTIN/CITY, TX (ATT)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1975	21	0	47	141	277	454	536	552	329	187	72	22	2638
1976	0	57	85	115	186	451	479	577	401	61	6	0	2418
1977	0	7	38	90	324	526	629	681	572	227	40	7	3141
1978	5	6	31	167	396	526	670	621	427	161	60	7	3077
1979	2	7	29	102	216	449	570	549	385	285	29	8	2631
1980	5	11	62	106	322	598	718	659	510	182	45	19	3237
1981	2	23	27	233	304	501	627	641	446	272	54	5	3135
1982	23	14	144	157	337	506	672	701	509	219	61	18	3361
1983	0	0	13	90	250	406	556	608	409	227	80	11	2650
1984	0	13	80	204	413	535	629	659	364	206	40	30	3173
1985	0	9	85	174	358	480	562	687	443	228	82	4	3112
1986	2	64	53	227	278	499	654	618	519	141	39	0	3094
1987	5	4	17	158	352	463	576	638	421	170	58	14	2876
1988	7	23	57	146	305	463	614	679	503	243	123	19	3182
1989	16	10	76	197	417	498	650	620	435	263	93	2	3277
1990	28	16	57	178	425	634	579	662	495	204	86	11	3375
1991	0	11	72	207	372	501	594	633	382	280	39	15	3106
1992	0	15	41	137	264	505	595	538	479	246	28	17	2865
1993	0	7	44	99	276	498	641	700	509	248	27	19	3068
1994	9	22	80	173	320	579	693	586	385	224	79	18	3168
1995	12	6	75	121	355	438	612	607	426	198	21	42	2913
1996	3	83	47	174	491	529	682	588	392	192	45	21	3247
1997	15	16	58	46	240	431	592	569	500	211	26	0	2704
1998	15	1	53	92	470	648	715	653	543	231	57	35	3513
1999	18	56	39	231	361	509	572	729	500	242	70	18	3345
2000	23	67	133	198	443	506	681	694	508	270	26	0	3549
2001	0	17	4	192	362	536	691	667	374	138	79	24	3084
2002	24	0	46	279	411	538	547	637	451	183	15	8	3139
2003	5	6	26	202	475	519	621	658	411	247	111	11	3292
2004	18	1	83	145	367	447	563	571	458	348	13	6	3020

SNOWFALL (inches) 2004 AUSTIN/CITY, TX (ATT)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1975-76	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1976-77	0.0	0.0	0.0	0.0	T	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1977-78	0.0	0.0	0.0	0.0	0.0	0.0	T	T	T	0.0	0.0	0.0	T
1978-79	0.0	0.0	0.0	0.0	0.0	T	T	T	0.0	0.0	0.0	0.0	T
1979-80	0.0	0.0	0.0	0.0	T	0.0	T	T	0.0	0.0	0.0	0.0	T
1980-81	0.0	0.0	0.0	0.0	2.0	0.0	T	T	0.0	0.0	0.0	0.0	2.0
1981-82	0.0	0.0	0.0	0.0	0.0	0.0	2.0	T	T	0.0	0.0	0.0	2.0
1982-83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1983-84	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1984-85	0.0	0.0	0.0	0.0	0.0	0.0	7.5	1.2	0.0	0.0	0.0	0.0	8.7
1985-86	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	T
1986-87	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0
1987-88	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1988-89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T	0.0	T	0.0	T
1989-90	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1990-91	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1991-92	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1992-93	0.0	0.0	0.0	0.0	T	0.0	T	0.0	T	0.0	T	0.0	T
1993-94	0.0	0.0	0.0	0.0	0.0	T	T	0.4	T	0.0	0.0	0.0	0.4
1994-95	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T	0.0	0.0	T
1995-96	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3
1996-97	0.0	0.0	0.0	0.0	T	T							
1997-98				0.0		T			T	0.0	0.0	0.0	
1998-99	0.0					T							
1999-00													
2000-01													
2001-02													
2002-03							0.0	0.6	0.0	0.0	0.0	0.0	
2003-04	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0	1.6
2004-	0.0	0.0	0.0	0.0	0.0	0.0							
POR= 58 YRS	0.0	0.0	0.0	0.0	0.1	T	0.5	0.3	0.0	T	T	0.0	0.9

WBAN : 13958

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
AUSTIN/CITY,
TEXAS (ATT)

Austin, capital of Texas, is located on the Colorado River where the stream crosses the Balcones escarpment separating the Texas Hill Country from the Blackland Prairies to the east. Elevations within the city vary from 400 feet to nearly 1,000 feet above sea level. Native trees include cedar, oak, walnut, mesquite, and pecan.

The climate of Austin is humid subtropical with hot summers. Winters are mild, with below freezing temperatures occurring on an average of about 25 days each year. Rather strong northerly winds, accompanied by sharp drops in temperature, frequently occur during the winter months in connection with cold fronts, but cold spells are usually of short duration, seldom lasting more than two days. Daytime temperatures in summer are hot, but summer nights are usually pleasant.

Precipitation is fairly evenly distributed throughout the year, with heaviest amounts occurring in late spring. A secondary rainfall peak occurs in September, primarily because of tropical cyclones that migrate out of the Gulf of Mexico. Precipitation from April through

September usually results from thunderstorms, with fairly large amounts of rain falling within short periods of time. While thunderstorms and heavy rains may occur in all months of the year, most of the winter precipitation consists of light rain. Snow is insignificant as a source of moisture, and usually melts as rapidly as it falls. The city may experience several seasons in succession with no measurable snowfall.

Prevailing winds are southerly, however in winter, northerly winds are about as frequent as those from the south. Destructive winds and damaging hailstorms are infrequent. On rare occasions dissipating tropical storms produce strong winds and heavy rains in the area. Blowing dust occurs occasionally in spring, but visibility rarely drops substantially, and then only for a few hours.

The average length of the warm season (freeze-free period) is 273 days. The average occurrence of the last temperature of 32 degrees in spring is early March and the average occurrence of the first temperature of 32 degrees is late November.

EDITORIAL NOTE:

With the opening of Austin Bergstrom International Airport in May 1999, there are now two sets of Local Climatological Data (LCD) maintained for Austin, Texas. As a user of National Climate Data Center products, you should be aware of the history of the data sets; in addition, you should know where and how these climatological data records are kept for the two Austin area weather observation sites.

Austin City/Camp Mabry (Texas National Guard) (Identifier ATT) The Local Climatological Data for this site is based on weather records started back in the 1800s in the downtown Austin area. This National Weather Service first order data set was moved 3 miles northeast of the downtown area with the opening of Austin Robert Mueller Municipal Airport in the 1940s and continued until the closure of the Robert Mueller Airport on May 23, 1999. The National Weather Service ASOS was left without human augmentation effective with the closure of the airport. With the planned demolition of the former airport site, the National Weather Service held discussions with local users about finding a comparable location (geography and elevation) to maintain this "in city" climate data set. With cooperation of Texas National Guard officials, the National Weather Service moved the ASOS (no human augmentation) to Camp Mabry on July 21, 1999. This location, which is very similar to the former airport site, is along Loop 1/MoPac Expressway about 4 miles west northwest of the former Robert Mueller airport site and about 3 miles northwest of downtown Austin.

Austin Bergstrom International Airport (Identifier AUS) The Local Climatological Data for this site is based upon U. S. Air Force weather records taken at Bergstrom Air Force Base (formerly occupying this site) for the time period 1942 through 1995. With base conversion to civilian use, Austin Bergstrom International Airport was opened to cargo operations on September 1, 1997, with resumption of manual surface weather observations. On October 2, 1997, an ASOS was commissioned at this airport. Austin Bergstrom International Airport was opened to full civilian operations (with full human augmentation as FAA Service Level "A" weather observations) on May 23, 1999. This weather observation site is located about 6 miles southeast of downtown Austin (immediately southeast of the intersection of U.S. Highway 183 and State Highway 71) in the Onion Creek watershed. Because the location is in a more outlying and lowlying area, nighttime temperatures (especially during calm wind conditions during the winter time of the year) tend to be considerably cooler than the Austin City/Camp Mabry (Texas National Guard) weather observation site.

As a NCDC Local Climatological data user, you should be aware of these 1999 changes and how it affects the choice of which Local Climatological Data set you use for Austin, Texas.

STATION LOCATION

AUSTIN/CITY, TEXAS

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE										AUTOMATIC OBSERVING EQUIPMENT * REMARKS	
						SEA LEVEL	GROUND										HYGROMETER
							GROUND	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET	RAIN GAUGE	WINDHOLE	8 INCH RAIN GAUGE		
*NOTE: <u>AIRPORT</u>																	
Administration Building Municipal Airport	8/16/42	6/30/61	3 mi. NNE	30°18'	97°42'	615	41 a32	6	5	Unk	3		3		a. Effective 9/13/57.		
Administration Building 3600 Manor Road Municipal Airport	7/1/61	10/24/79	0.7 mi. SE	30°18'	97°42'	597	20	5 b	5 b	35	3	NA	3 c6	6 NA	b. Removed 7/1/63. c. Minor adjustment 2/20/67.		
Weather Svc Bldg. 3724 Manor Rd. Municipal Airport	10/24/79	07/01/95	0.25 mi. SE	30°17'	97°42'	597	d20 g33	NA	NA	20	5 i5	e5 i5	d3 f3	d6 h5 NA	d. Not moved 10/24/79. e. Installed 10/25/79. f. Relocated 10/30/79. g. Relocated 7/1/82. h. Moved 20' NE & type change 11/15/84. i. Minor move 02/23/89.		
Weather Svc Bldg. 3724 Manor Rd. Municipal Airport	07/01/95	07/21/99	0.25 mi. SE	30°17'	97°42'	597	d20 g33	NA	NA	20	5 i5	e5 i5	d3 f3	d6 h5 NA			
Camp Mabry Army Nat'l Guard Base	07/21/99	Present	4 mi. WNW	30°19'	97°46'	j648								S	ASOS Commissioned 7/1/95 j. Ground elevation.		

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* NOTES: For earlier station history see previous edition.