



APRIL 1997

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

KNOXVILLE, TN

MC GHEE TYSON AIRPORT (TYS)
 Lat: 35° 49' N Long: 83° 59' W Elev (Ground): 979 Feet
 Time Zone: EASTERN WBAN: 13891 ISSN #: 0198-4810

APRIL 1997
KNOXVILLE, TN

DATE	TEMPERATURE °F							DEG DAYS BASE 65°		WEATHER	SNOW/ICE ON GND(IN)		PRECIPITATION (INCHES)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								DATE																																								
	MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	HEATING	COOLING	0700 LST		1300 LST	2400 LST	2400 LST	AVERAGE STATION	AVERAGE SEA LEVEL	RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM																																														
																			5-SEC		2-MIN																																												
1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17	18	19	20	21	22	23	24																																											
01	59	33	46	-8	24	38	19	0				0.00	29.20	30.26	6.8	05	7.5	18	06	15	05	01																																											
02	67	39	53	-1	26	42	12	0				0.00	29.24	30.29	5.6	04	4.5	14	04	13	05	02																																											
03	72	36	54	0	33	46	11	0				0.00	29.12	30.17	5.7	03	2.5	13	28	11	23	03																																											
04	74	42	58	3	43	51	7	0				0.00	29.04	30.08	7.8	04	1.2	10	29	8	30	04																																											
05	83*	58	71*	16	52	60	0	6	RA			0.03	28.92	29.94	10.4	20	11.9	41*	27	33*	28	05																																											
06	75	60	68	13			0	3	TSRA RA FG+ BR			1.42					11.0	34	23	29	25	06																																											
07	64	44	54	-1	30	44	11	0				0.00	29.06	30.10	8.7	29	10.9	24	29	20	27	07																																											
08	61	35	48	-8	31	42	17	0				0.00	29.16	30.21	3.5	34	5.7	16	15	14	04	08																																											
09	55	37	46	-10	28	40	19	0				0.00	29.18	30.23	6.7	01	7.6	24	01	18	01	09																																											
10	61	32	47	-9	25	37	18	0				0.00	29.21	30.27	6.5	02	6.9	17	06	15	06	10																																											
11	74	37	56	0	42	49	9	0	RA			T	29.04	30.08	3.8	01	6.2	28	17	22	16	11																																											
12	70	54	62	5	58	59	3	0	TS TSRA RA BR			0.21	28.74	29.76	5.0	27	8.7	24	28	20	29	12																																											
13	56	40	48	-9	34	41	17	0				0.00	28.94	29.99	10.4	31	11.3	25	30	18	30	13																																											
14	56	31*	44*	-13	32	39	21	0				0.00	29.15	30.21	6.7	04	6.7	18	01	15	01	14																																											
15	64	32	48	-9	32	42	17	0	FU			0.00	29.19	30.24	5.1	04	2.5	14	02	13	03	15																																											
16	70	35	53	-5	38	47	12	0	FU			0.00	29.06	30.10	3.3	24	6.6	22	25	18	25	16																																											
17	57	41	49	-9	35	42	16	0	RA BR			0.14	28.94	29.98	7.4	31	9.5	24	35	21	27	17																																											
18	59	38	49	-9	29	40	16	0				0.00	28.90	29.94	6.4	30	6.7	23	33	16	27	18																																											
19	63	43	53	-5	48	50	12	0	RA BR			0.07	28.69	29.72	2.3	30	7.7	18	02	16	02	19																																											
20	66	39	53	-5	44	49	12	0	FG+ BR			0.00	28.78	29.81	2.0	02	3.5	14	25	10	24	20																																											
21	57	49	53	-6	52	53	12	0	TS TSRA RA BR			0.20	28.64	29.67	1.9	35	6.1	30	30	22	30	21																																											
22	68	53	61	2	55	56	4	0	TSRA RA FG BR			0.25	28.57	29.59	1.8	30	6.1	17	01	15	01	22																																											
23	54	40	47	-13	48	49	18	0	RA DZ BR			0.03	28.53	29.55	6.3	02	6.2	23	03	20	03	23																																											
24	63	39	51	-9	42	46	14	0	FG+ BR			0.00	28.79	29.82	3.2	27	3.5	14	29	10	29	24																																											
25	67	45	56	-4	40	48	9	0	BR			0.00	29.05	30.09	2.2	23	2.8	13	26	10	01	25																																											
26	64	46	55	-5	44	50	10	0	RA			T	29.12	30.16	4.7	04	6.6	16	05	14	05	26																																											
27	66	53	60	0	54	56	5	0	RA BR			0.16	28.85	29.88	4.0	01	4.1	11	31	10	31	27																																											
28	66	54	60	-1	58	58	5	0	TS TSRA RA BR			1.22	28.62	29.64	8.0	04	9.0	24	01	21	03	28																																											
29	67	51	59	-2	52	54	6	0	RA BR			0.09	28.79	29.82	4.3	02	4.4	21	02	17	02	29																																											
30	78	49	64	3	55	59	1	0	FG+ BR HZ			0.00	28.77	29.79	1.8	28	7.3	25	23	20	23	30																																											
											65.2		42.8		54.0		■ ■		11.1		0.3		< MONTHLY AVERAGES				TOTALS-->		3.82				6.5		<-- MONTHLY AVERAGES																														
											-5.2		-1.8		-3.5		■ ■		<----- DEPARTURE FROM NORMAL ----->										0.10		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																																		
DEGREE DAYS											GREATEST 24-HR PRECIPITATION: 1.45 DATE: 5-6											SEA LEVEL PRESSURE DATE TIME																																											
MONTHLY TOTAL DEPARTURE											SEASON TO DATE TOTAL DEPARTURE											GREATEST 24-HR SNOWFALL: DATE:											MAXIMUM : 30.38 02 1041																																
HEATING: 333 99											3475 -368											GREATEST SNOW DEPTH: 0 DATE:											MINIMUM : 29.46 23 0453																																
COOLING: 9 0											15 6											NUMBER OF DAYS WITH →											MAXIMUM TEMP ≥ 90: 0											MINIMUM TEMP ≤ 32: 3											PRECIPITATION ≥ 0.01 INCH : 11										
																																	MAXIMUM TEMP ≤ 32 : 0											MINIMUM TEMP ≤ 0 : 0											PRECIPITATION ≥ 0.10 INCH : 7										
																																	THUNDERSTORMS : 5											HEAVY FOG : 4											SNOWFALL ≥ 1.0 INCH : 0										

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN

APRIL 1997

TYS

WBAN # 13891

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note 2)	2400 LST	
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			Water	Equiv.
01													01												01		0.00		
02													02												02		0.00		
03													03												03		0.00		
04													04												04		0.00		
05		T	T										05						0.02	0.01	T	T			05		0.03		
06		T	0.01	0.03	0.14	0.09	0.25	0.20	0.26	0.43	0.01		06												06		1.42		
07													07												07		0.00		
08													08												08		0.00		
09													09												09		0.00		
10													10												10		0.00		
11													11												11		T		
12	T	0.01	0.06	0.07	0.02	0.04	T	T	0.01	T	T		12							T	T				12		0.21		
13													13												13		0.00		
14													14												14		0.00		
15													15												15		0.00		
16													16												16		0.00		
17		T	0.08	0.06	T								17												17		0.14		
18													18												18		0.00		
19			T	T	T	0.06	0.01	T					19						T						19		0.07		
20													20												20		0.00		
21							0.06				T	0.07	21			T		T	0.01	0.06	T	T	T		21		0.20		
22													22							T	T	T			22		0.25		
23	0.01	T	T	T	T					T	T	T	23			T	0.02	0.04	0.20	T	T	T		0.01	23		0.03		
24													24								T				24		0.00		
25													25												25		0.00		
26													26						T	T	T	T	T		26		T		
27													27								T	T			27		0.16		
28						0.01	0.02	0.13	T	T			28	0.02		T	0.07	0.06	0.01	0.01	0.01	T	T	0.03	28	0.87	1.22		
29	0.09	0.01	T	T	T								29						0.23	0.22	0.10	0.06	0.03	0.02	29	0.10	0.09		
30													30												30		0.00		

MAXIMUM SHORT DURATION PRECIPITATION (See Note 1)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

Date and time are not entered for TRACE amounts.

Note 1: NCDC derives these data from one-minute ASOS values. The table is not printed when inconsistent with ASOS hourly totals.

Note 2: The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

* = Extreme for the month (last occurrence if more than one)

T = Trace precipitation amount

+ = also occurs on earlier date

FG+ = Heavy fog, visibility .25 miles or less
BLANK entries denote missing or unreported data

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Precipitation is for the 24-hour period ending at the time indicated in the column heading.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

NORMALS ARE FOR THE YEARS 1961 – 1990

WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		
	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PE Ice Pellets	HZ Haze	SQ Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC In the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):
'+' = Heavy '' = Moderate '-' = Light

KNOXVILLE, TN APRIL 1997

Ceilorometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR-SS), or midnight to midnight (MN-MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0-2 oktas, Partly Cloudy = 3-6 oktas, Cloudy = 7-8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled at constant pressure by evaporation of moisture into it, to 100% relative humidity.

ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01	680	90					10.00	10.00	
02	695						10.00	10.00	
03	698						10.00	10.00	
04	642						10.00	10.00	
05	583	76					7.00	10.00	
06	402	52					1.00	10.00	
07	697	91					10.00	10.00	
08	637	83					10.00	10.00	
09	698						9.00	10.00	
10	711						10.00	10.00	
11	638						10.00	10.00	
12	331						1.00	10.00	
13	485	62					10.00	10.00	
14	705	90					8.00	10.00	
15	785	100					7.00	10.00	
16	712						9.00	10.00	
17	538						4.00	10.00	
18	709	90					10.00	10.00	
19	267	34					4.00	10.00	
20	663	83					1.00	10.00	
21	102	13					1.50	10.00	
22	394	49					.50	10.00	
23	33						.75	8.00	
24	555						<.25	10.00	
25	710						5.00	10.00	
26	382	47					7.00	10.00	
27	301	37					2.00	10.00	
28	138	37					1.00	10.00	
29	603						3.00	10.00	
30	610						<.25	10.00	
MONTHLY AVGS							5.73	9.93	
SUNSHINE (MINUTES)									
Total: 16104 Possible: 23591 Percent Possible: 68									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 30									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 2 11 16									

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

APRIL 1997

TYS

WBAN # 13891

HOUR (LST)	≤ 12K FEET		SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)		HOUR (LST)	≤ 12K FEET		SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)			
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG
SUNRISE: 0622						APR 01	SUNSET: 1858						SUNRISE: 0614						APR 07	SUNSET: 1902							
01	CLR	NC			10.00	41	24	34	51	7	01	29.16	30.21	01	SCT	NC			10.00	63	49	55	60	10	27	28.90	29.93
04	CLR	NC			10.00	38	25	33	60	7	03	29.16	30.22	04	BKN	060			10.00	58	34	47	41	13	26	28.96	29.99
07	CLR	NC			10.00	34	22	30	61	5	08	29.20	30.26	07	SCT	NC			10.00	52	34	44	50	10	30	29.04	30.07
10	CLR	NC			10.00	45	22	36	40	9	07	29.23	30.29	10	CLR	NC			10.00	55	34	45	45	7	31	29.09	30.13
13	CLR	NC			10.00	53	23	41	31	10	02	29.24	30.30	13	CLR	NC			10.00	59	30	46	33	10	28	29.08	30.11
16	SCT	NC			10.00	58	25	44	28	6	04	29.20	30.25	16	CLR	NC			10.00	62	24	46	23	16	29	29.06	30.09
19	CLR	NC			10.00	52	23	40	32	6	08	29.18	30.24	19	CLR	NC			10.00	57	20	42	24	9	29	29.08	30.12
22	CLR	NC			10.00	50	22	39	33	6	02	29.21	30.27	22	CLR	NC			10.00	49	21	38	33	10	02	29.16	30.21
SUNRISE: 0621						APR 02	SUNSET: 1859						SUNRISE: 0612						APR 08	SUNSET: 1903							
01	CLR	NC			10.00	39	28	35	65	7	06	29.22	30.28	01	CLR	NC			10.00	44	24	36	45	7	01	29.17	30.21
04	CLR	NC			10.00	43	25	36	49	10	03	29.23	30.29	04	CLR	NC			10.00	36	31	34	82	8	06	29.18	30.23
07	CLR	NC			10.00	39	25	34	57	5	05	29.28	30.34	07	CLR	NC			10.00	38	30	35	73	5	04	29.21	30.27
10	CLR	NC			10.00	52	27	41	38	6	04	29.32	30.37	10	CLR	NC			10.00	51	29	42	43	10	05	29.23	30.28
13	CLR	NC			10.00	62	27	46	26	0	00	29.26	30.32	13	CLR	NC			10.00	58	32	46	38	6	VR	29.15	30.20
16	CLR	NC			10.00	66	26	48	22	0	00	29.20	30.25	16	SCT	NC			10.00	60	30	46	32	3	20	29.11	30.16
19	CLR	NC			10.00	61	25	45	25	3	20	29.19	30.24	19	BKN	120			10.00	58	35	47	42	5	22	29.10	30.15
22	CLR	NC			10.00	52	31	43	45	3	25	29.21	30.26	22	BKN	100			10.00	56	34	46	44	5	32	29.14	30.18
SUNRISE: 0619						APR 03	SUNSET: 1859						SUNRISE: 0611						APR 09	SUNSET: 1904							
01	CLR	NC			10.00	42	32	38	68	5	08	29.18	30.22	01	BKN	090			10.00	54	35	45	49	3	25	29.12	30.16
04	CLR	NC			10.00	43	32	38	65	0	00	29.17	30.22	04	OVC	090			10.00	51	36	44	56	10	01	29.12	30.16
07	CLR	NC			10.00	37	33	35	86	0	00	29.18	30.23	07	FEW	NC			10.00	44	32	39	63	7	01	29.18	30.22
10	CLR	NC			10.00	57	38	48	49	0	00	29.21	30.25	10	CLR	NC			10.00	46	28	39	50	10	01	29.21	30.27
13	CLR	NC			10.00	68	34	51	28	3	23	29.13	30.18	13	CLR	NC			10.00	51	27	41	39	5	VR	29.19	30.24
16	CLR	NC			10.00	71	32	52	24	9	24	29.06	30.09	16	CLR	NC			10.00	53	26	42	35	9	07	29.15	30.19
19	CLR	NC			10.00	69	27	50	21	5	22	29.03	30.07	19	CLR	NC			10.00	47	18	36	31	9	02	29.17	30.22
22	CLR	NC			10.00	59	36	48	42	0	00	29.06	30.10	22	CLR	NC			10.00	41	19	33	41	10	01	29.25	30.31
SUNRISE: 0618						APR 04	SUNSET: 1900						SUNRISE: 0610						APR 10	SUNSET: 1904							
01	CLR	NC			10.00	49	39	44	69	0	00	29.07	30.10	01	CLR	NC			10.00	36	21	31	55	6	03	29.25	30.31
04	CLR	NC			10.00	44	39	42	83	0	00	29.03	30.06	04	CLR	NC			10.00	33	21	29	61	9	04	29.22	30.29
07	FEW	NC			10.00	44	38	41	79	0	00	29.10	30.14	07	CLR	NC			10.00	33	21	29	61	10	05	29.26	30.33
10	CLR	NC			10.00	62	41	51	46	0	00	29.13	30.17	10	CLR	NC			10.00	44	23	36	43	13	03	29.30	30.37
13	FEW	NC			10.00	72	51	60	48	3	VR	29.07	30.10	13	CLR	NC			10.00	53	26	42	35	0	00	29.24	30.30
16	SCT	NC			10.00	72	42	56	34	5	01	28.99	30.03	16	SCT	NC			10.00	60	25	45	26	7	34	29.15	30.20
19	CLR	NC			10.00	71	41	55	34	0	00	28.98	30.02	19	CLR	NC			10.00	57	27	44	32	6	03	29.14	30.19
22	SCT	NC			10.00	65	47	55	52	3	10	28.99	30.02	22	CLR	NC			10.00	50	30	41	46	5	03	29.18	30.23
SUNRISE: 0617						APR 05	SUNSET: 1900						SUNRISE: 0608						APR 11	SUNSET: 1905							
01	SCT	NC			10.00	61	51	56	70	5	14	28.97	30.00	01	CLR	NC			10.00	47	29	39	50	0	00	29.14	30.19
04	FEW	NC			10.00	67	50	57	55	9	20	28.96	29.99	04	CLR	NC			10.00	39	36	38	89	5	04	29.13	30.18
07	SCT	NC			10.00	66	51	58	59	9	19	28.98	30.00	07	CLR	NC			10.00	38	36	37	93	0	00	29.16	30.21
10	SCT	NC			10.00	73	52	61	48	14	19	28.95	29.97	10	CLR	NC			10.00	55	38	47	53	3	VR	29.17	30.21
13	SCT	NC			10.00	77	50	61	39	10	17	28.88	29.91	13	CLR	NC			10.00	67	45	55	45	7	28	29.06	30.09
16	BKN	120			10.00	80	48	62	33	15	18	28.85	29.86	16	FEW	NC			10.00	72	49	59	44	13	25	28.93	29.97
19	OVC	080			10.00	77	49	61	37	16	18	28.85	29.86	19	CLR	NC			10.00	68	47	56	47	9	19	28.89	29.93
22	BKN	100			7.00	66	59	62	78	5	11	28.86	29.87	22	CLR	NC			10.00	65	47	55	52	14	15	28.91	29.94
SUNRISE: 0615						APR 06	SUNSET: 1901						SUNRISE: 0607						APR 12	SUNSET: 1906							
01	OVC	048			10.00	65	60	62	84	6	29	28.87	29.88	01	OVC	090			10.00	58	56	57	93	7	32	28.87	29.90
04	OVC	055			8.00	62	62	62	100	9	30	28.85	29.85	04	OVC	037			3.00	-RA	BR			6	05	28.80	29.82
07	OVC	005			1.50	61	61	61	100	3	31	28.87	29.90	07	OVC	044			1.00	-RA	BR			5	03	28.75	29.77
10	OVC	004			1.00	62	62	62	100	6	21	28.90	29.92	10	OVC	006			2.50	-RA	BR			5	29	28.75	29.77
13	BKN	065			10.00	71	66	68	84	21	23	28.86	29.88	13	OVC	043			6.00	BR				7	29	28.74	29.76
16	SCT	NC			10.00	75	56	63	52	23	24	28.84	29.85	16	BKN	060			10.00	70	61	64	73	9	25	28.67	29.69
19	SCT	NC			10.00	69	54	60	59	12	24	28.85	29.87	19	OVC	090			10.00	67	59	62	76	16	22	28.66	29.68
22					10.00									22	CLR	NC			10.00	60	59	59	96	7	25	28.71	29.73

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

APRIL 1997

TYS

WBAN # 13891

HOUR (LST)	≤ 12K FEET		SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)		HOUR (LST)	≤ 12K FEET		SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)											
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL						
SUNRISE: 0606						APR 13						SUNSET: 1907						SUNRISE: 0558						APR 19						SUNSET: 1912					
01	OVC	028			10.00		54	48	51	80	13	31	28.77	29.79	01	BKN	110			10.00		44	38	41	79	5	20	28.75	29.79						
04	OVC	031			10.00		48	40	44	74	10	29	28.81	29.84	04	OVC	065			5.00	-RA	BR	45	44	45	97	7	05	28.76	29.80					
07	BKN	039			10.00		44	34	40	68	13	30	28.87	29.90	07	BKN	075			4.00	-RA	BR	44	44	44	100	8	22	28.69	29.73					
10	OVC	040			10.00		45	34	40	66	13	32	28.91	29.96	10	OVC	040			9.00			51	49	50	92	6	27	28.66	29.69					
13	OVC	042			10.00		48	33	41	56	12	31	28.93	29.98	13	BKN	038			10.00		61	52	56	72	9	26	28.63	29.67						
16	BKN	055			10.00		48	31	41	52	16	30	28.97	30.02	16	BKN	090			10.00		63	52	57	68	6	27	28.61	29.64						
19	BKN	050			10.00		42	29	37	60	8	31	29.04	30.09	19	OVC	042			7.00		56	51	53	84	17	04	28.65	29.68						
22	OVC	046			10.00		42	27	36	55	3	01	29.11	30.16	22	OVC	015			6.00	BR	52	50	51	93	6	01	28.75	29.79						
SUNRISE: 0604						APR 14						SUNSET: 1908						SUNRISE: 0557						APR 20						SUNSET: 1913					
01	CLR	NC			9.00		38	30	35	73	8	36	29.12	30.18	01	CLR	NC			7.00		47	46	46	97	7	01	28.76	29.79						
04	CLR	NC			10.00		35	32	34	89	6	02	29.13	30.19	04	CLR	NC			4.00	BR	45	45	45	100	5	04	28.76	29.79						
07	CLR	NC			10.00		34	31	33	89	6	06	29.17	30.24	07	CLR	NC			2.00	BR	43	43	43	100	0	00	28.80	29.84						
10	SCT	NC			10.00		44	32	39	63	8	05	29.21	30.27	10	FEW	NC			9.00		55	45	50	69	8	06	28.83	29.86						
13	CLR	NC			10.00		51	34	43	52	9	03	29.16	30.22	13	FEW	NC			10.00		62	46	54	56	6	VR	28.79	29.82						
16	FEW	NC			10.00		55	33	45	44	9	06	29.13	30.18	16	FEW	NC			10.00		65	42	53	44	6	VR	28.75	29.78						
19	CLR	NC			10.00		51	32	43	48	6	08	29.13	30.19	19	SCT	NC			10.00		63	39	51	41	5	16	28.74	29.78						
22	CLR	NC			10.00		45	34	40	66	0	00	29.17	30.22	22	BKN	120			10.00		56	47	51	72	0	00	28.77	29.80						
SUNRISE: 0603						APR 15						SUNSET: 1909						SUNRISE: 0555						APR 21						SUNSET: 1914					
01	CLR	NC			10.00		39	34	37	82	3	36	29.17	30.23	01	SCT	NC			10.00		51	47	49	86	0	00	28.72	29.75						
04	CLR	NC			10.00		37	34	36	89	0	00	29.19	30.24	04	BKN	110			9.00		51	47	49	86	5	01	28.67	29.69						
07	CLR	NC			10.00		35	34	35	96	3	05	29.23	30.30	07	OVC	043			6.00	-RA	BR	50	49	49	96	6	17	28.71	29.73					
10	CLR	NC			10.00		53	40	47	61	6	04	29.25	30.31	10	BKN	070			9.00		56	50	53	81	6	30	28.68	29.70						
13	CLR	NC			10.00		60	34	48	38	3	VR	29.21	30.27	13	BKN	055			2.00	TS	BR	53	53	53	100	5	08	28.64	29.67					
16	CLR	NC			10.00		64	20	45	18	3	VR	29.14	30.19	16	BKN	005			3.00	BR	56	55	55	97	12	02	28.59	29.62						
19	CLR	NC			10.00		61	22	44	22	0	00	29.13	30.18	19	OVC	065			1.50	TSRA	BR	54	54	54	100	8	01	28.59	29.62					
22	CLR	NC			10.00		51	30	42	45	0	00	29.17	30.21	22	OVC	002			2.00	TS	BR	55	55	55	100	6	34	28.60	29.63					
SUNRISE: 0602						APR 16						SUNSET: 1909						SUNRISE: 0554						APR 22						SUNSET: 1914					
01	FEW	NC			10.00	FU	47	32	40	56	0	00	29.15	30.19	01	OVC	002			1.25	BR	55	55	55	100	7	30	28.59	29.62						
04	CLR	NC			10.00		39	34	37	82	0	00	29.13	30.18	04	VV	001			0.50	FG	55	55	55	100	8	27	28.60	29.62						
07	CLR	NC			10.00		40	35	38	83	0	00	29.16	30.21	07	OVC	050			1.00	BR	55	55	55	100	5	23	28.63	29.66						
10	CLR	NC			10.00		56	41	49	57	6	20	29.15	30.19	10	BKN	025			7.00		60	56	58	86	6	02	28.64	29.66						
13	CLR	NC			10.00		68	40	54	36	13	24	29.07	30.11	13	BKN	045			10.00		66	54	59	65	6	VR	28.61	29.62						
16	CLR	NC			10.00		69	38	53	32	14	23	28.99	30.03	16	BKN	095			10.00		66	52	58	61	9	02	28.53	29.54						
19	CLR	NC			10.00		64	39	51	40	8	22	28.94	29.98	19	OVC	045			2.50	-RA	BR	57	55	56	93	7	04	28.50	29.52					
22	BKN	100			10.00		57	40	49	53	6	22	28.94	29.98	22	OVC	043			4.00	-RA	BR	56	55	55	97	8	32	28.48	29.49					
SUNRISE: 0600						APR 17						SUNSET: 1910						SUNRISE: 0553						APR 23						SUNSET: 1915					
01	OVC	090			10.00		56	46	51	70	6	01	28.96	29.99	01	OVC	049			4.00	-RA	BR	52	51	51	97	15	02	28.48	29.49					
04	OVC	035			8.00	-RA	47	47	47	100	7	16	28.96	30.00	04	OVC	012			4.00	-RA	BR	52	51	51	97	7	03	28.47	29.48					
07	BKN	050			9.00		46	46	46	100	6	27	28.94	29.98	07	OVC	019			2.50	BR	51	50	51	96	7	01	28.47	29.49						
10	SCT	NC			10.00		50	36	44	59	7	29	28.92	29.96	10	OVC	026			3.00	-RA	BR	50	48	49	93	10	01	28.49	29.51					
13	BKN	060			10.00		53	31	43	43	15	30	28.90	29.94	13	OVC	026			8.00		52	48	50	86	7	01	28.50	29.52						
16	BKN	060			10.00		51	28	41	41	10	31	28.88	29.93	16	OVC	045			5.00	-RA	BR	50	46	48	86	8	35	28.53	29.56					
19	SCT	NC			10.00		43	26	36	51	8	35	28.95	30.00	19	BKN	100			4.00	BR	49	47	48	93	7	09	28.57	29.61						
22	OVC	070			10.00		41	26	35	55	5	31	28.99	30.04	22	FEW	NC			7.00		46	45	46	96	3	08	28.63	29.67						
SUNRISE: 0559						APR 18						SUNSET: 1911						SUNRISE: 0552						APR 24						SUNSET: 1916					
01	OVC	060			10.00		41	27	35	57	0	00	28.95	29.99	01	OVC	007			<.25	FG	41	41	41	100	3	31	28.64	29.68						
04	OVC	046			10.00		40	29	35	65	5	01	28.92	29.97	04	VV	001			<.25	FG	40	40	40	100	7	23	28.67	29.70						
07	FEW	NC			10.00		39	31	36	73	3	30	28.97	30.02	07	VV	001			<.25	FG	42	42	42	100	3	19	28.74	29.77						
10	SCT	NC			10.00		45	29	38	54	8	35	28.98	30.04	10	SCT	NC			3.00	BR	49	46	47	90	5	25	28.80	29.83						
13	FEW	NC			10.00		53	28	42	38	8	30	28.91	29.96	13	BKN	080			10.00		59	41	50	51	8	29	28.79	29.83						
16	FEW	NC			10.00		59	27	45	29	13	26	28.84	29.88	16	BKN	100			10.00		62	39	51	43	5	VR	28.80	29.83						
19	CLR	NC			10.00		56	28	44	34	8	28	28.81	29.85	19	BKN	100			10.00		59	39	49	48	3	24	28.84	29.88						
22	CLR	NC			10.00		46	34	41	63	6	24	28.83	29.87	22	SCT	NC			10.00		51	43	47	74	0	00	28.91	29.96						

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

APRIL 1997

TYS

WBAN # 13891

HOUR (LST)	≤ 12K FEET		SATELLITE		WEATHER	TEMPERATURE °F			WIND	PRESSURE (INCHES, HG)		HOUR (LST)	≤ 12K FEET		SATELLITE		WEATHER	TEMPERATURE °F			WIND	PRESSURE (INCHES, HG)					
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)		EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)
SUNRISE: 0550						APR 25	SUNSET: 1917						SUNRISE: APR 31						SUNSET:								
01	OVC	090			9.00		51	44	48	77	0	00	28.94	29.98													
04	OVC	090			7.00		48	45	47	89	0	00	28.97	30.01													
07	CLR	NC			7.00		47	44	46	90	0	00	29.04	30.09													
10	CLR	NC			10.00		58	41	49	54	0	00	29.08	30.12													
13	SCT	NC			10.00		63	40	51	43	6	20	29.07	30.11													
16	SCT	NC			10.00		66	37	52	34	3	VR	29.05	30.09													
19	CLR	NC			10.00		65	33	50	31	0	00	29.07	30.11													
22	CLR	NC			10.00		51	41	46	69	3	06	29.11	30.15													
SUNRISE: 0549						APR 26	SUNSET: 1918						SUNRISE: APR 31						SUNSET:								
01	CLR	NC			10.00		50	38	44	63	7	03	29.15	30.19													
04	CLR	NC			10.00		50	39	45	66	10	03	29.15	30.19													
07	SCT	NC			10.00		50	39	45	66	9	04	29.17	30.21													
10	BKN	120			10.00		56	40	48	55	14	04	29.18	30.22													
13	SCT	NC			10.00		62	43	52	50	8	07	29.13	30.17													
16	OVC	075			10.00		64	45	54	50	6	07	29.07	30.11													
19	OVC	055			10.00		60	48	54	65	8	20	29.08	30.12													
22	OVC	048			9.00	-RA	55	51	53	87	9	26	29.07	30.11													
SUNRISE: 0548						APR 27	SUNSET: 1919						SUNRISE: APR 31						SUNSET:								
01	OVC	065			7.00		54	51	52	90	3	01	29.02	30.06													
04	OVC	042			8.00		54	51	52	90	0	00	28.96	29.99													
07	OVC	040			10.00		54	49	51	83	6	36	28.92	29.96													
10	BKN	095			10.00		61	51	56	70	0	00	28.88	29.92													
13	OVC	070			10.00		65	54	59	68	7	32	28.84	29.87													
16	OVC	007			2.00	RA BR	59	58	58	96	5	29	28.81	29.84													
19	OVC	029			2.00	-RA BR	59	58	58	96	6	17	28.76	29.78													
22	OVC	001			2.50	BR	59	58	58	96	9	31	28.72	29.74													
SUNRISE: 0547						APR 28	SUNSET: 1920						SUNRISE: APR 31						SUNSET:								
01	OVC	004			3.00	BR	58	58	58	100	0	00	28.70	29.72													
04	OVC	002			1.75	BR	58	58	58	100	5	02	28.67	29.70													
07	OVC	013			1.25	TSRA BR	58	58	58	100	5	01	28.66	29.68													
10	OVC	020			9.00		62	60	61	93	9	06	28.65	29.67													
13	OVC	016			10.00		63	60	61	90	13	02	28.58	29.60													
16	OVC	023			10.00		60	57	58	90	16	02	28.51	29.52													
19	OVC	021			4.00	-RA BR	57	56	56	96	13	04	28.56	29.59													
22	OVC	024			6.00	-RA BR	56	55	55	97	3	36	28.63	29.65													
SUNRISE: 0546						APR 29	SUNSET: 1920						SUNRISE: APR 31						SUNSET:								
01	OVC	017			4.00	RA BR	52	51	52	97	9	03	28.69	29.71													
04	OVC	007			5.00	BR	51	51	51	100	6	03	28.70	29.72													
07	OVC	025			3.00	BR	52	50	51	93	6	35	28.78	29.81													
10	OVC	016			8.00		57	50	53	78	3	VR	28.83	29.85													
13	BKN	030			10.00		60	51	55	72	3	VR	28.83	29.85													
16	SCT	NC			10.00		65	53	58	66	3	VR	28.79	29.82													
19	CLR	NC			10.00		63	55	58	76	0	00	28.81	29.84													
22	CLR	NC			8.00		56	53	54	90	5	07	28.84	29.87													
SUNRISE: 0545						APR 30	SUNSET: 1921						SUNRISE: APR 31						SUNSET:								
01	CLR	NC			5.00	BR	53	52	52	96	0	00	28.83	29.85													
04	OVC	030			5.00	BR	53	52	52	96	0	00	28.84	29.86													
07	VV	001			<.25	FG	51	51	51	100	0	00	28.87	29.91													
10	SCT	NC			5.00	HZ	60	55	57	84	0	00	28.86	29.89													
13	CLR	NC			10.00		72	57	63	60	12	26	28.78	29.80													
16	CLR	NC			7.00		76	59	65	56	16	25	28.69	29.70													
19	CLR	NC			10.00		73	60	65	64	12	25	28.65	29.67													
22	CLR	NC			10.00		68	54	60	61	12	27	28.65	29.66													

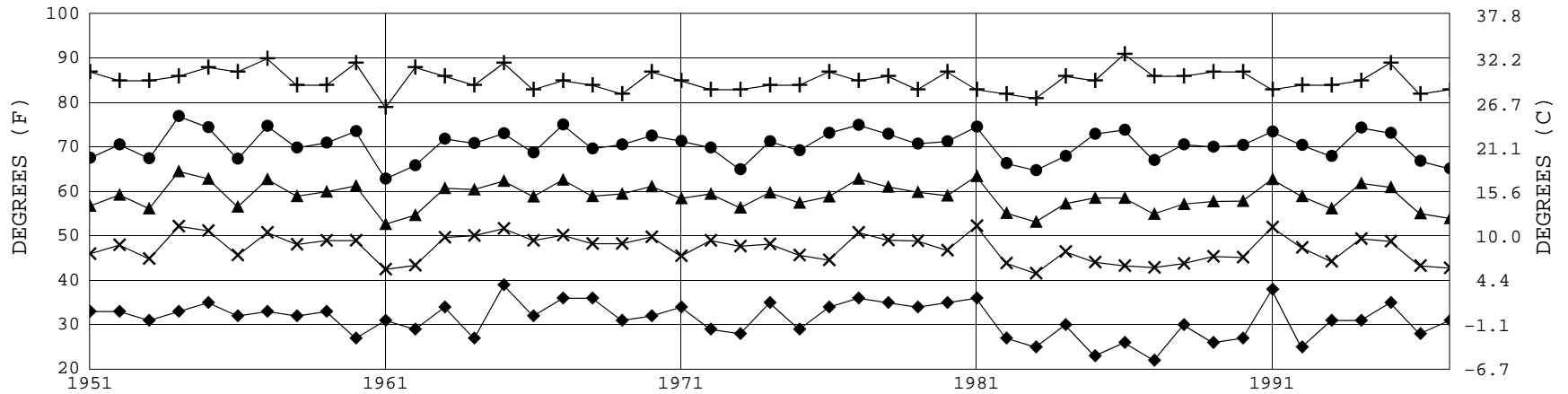
3-HOURLY OBSERVATION NOTES

Sky Cover is the amount of the sky obscured. CLR = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibility = 8/8. Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC = No ceiling detected. & = Original observation contained additional weather elements. See page 3 for additional notes.

SUMMARY BY HOUR

HOUR (LST)	AVERAGES											RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	DIRECTION	SPEED	DIRECTION
							STATION	SEA LEVEL					
01			49	41	46	75	28.94	29.98	8.31	6	4	27	
02			49	41	45	76	28.94	29.97	8.18	6	3	27	
03			48	41	45	80	28.94	29.97	7.77	7	3	27	
04			47	41	45	82	28.94	29.98	7.61	7	3	36	
05			46	41	44	83	28.94	29.98	7.42	7	2	27	
06			45	40	43	84	28.95	29.99	7.25	6	2	27	
07			46	41	44	84	28.97	30.01	6.95	5	2	27	
08			49	42	45	78	28.98	30.02	7.40	7	2	36	
09			51	42	47	71	28.98	30.02	8.27	7	3	36	
10			54	42	48	65	28.98	30.02	8.52	7	3	36	
11			57	42	50	61	28.98	30.02	9.20	7	2	27	
12			59	42	51	56	28.97	30.00	9.33	9	3	27	
13			61	42	52	54	28.94	29.98	9.53	8	4	27	
14			62	42	52	50	28.93	29.97	9.60	8	4	29	
15			63	41	52	48	28.91	29.94	9.33	9	5	27	
16			63	41	52	48	28.90	29.93	9.23	9	4	27	
17			63	41	52	49	28.89	29.93	9.10	8	2	27	
18			62	41	52	51	28.90	29.93	8.66	8	2	25	
19			60	40	50	53	28.90	29.94	8.70	7	1	27	
20			57	41	49	59	28.91	29.95	8.77	6	1	28	
21			55	41	49	63	28.93	29.96	8.53	6	2	36	
22			54	41	48	67	28.93	29.97	8.67	6	2	27	
23			53	41	48	67	28.93	29.97	8.59	7	2	27	
24			51	42	47	72	28.93	29.97	8.35	6	2	27	

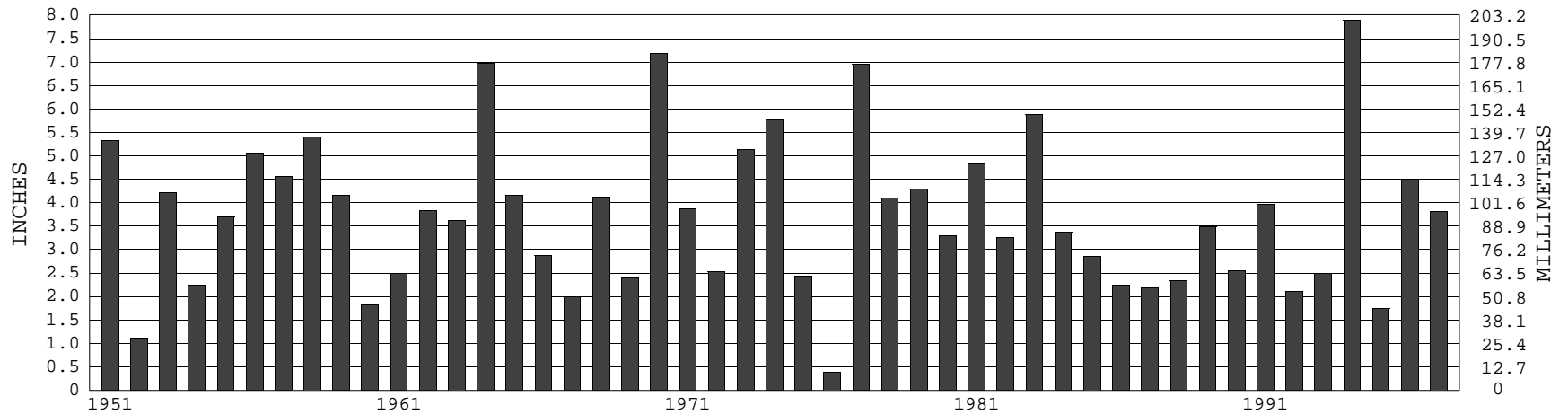
KNOXVILLE, TN APRIL TEMPERATURES



+ Extreme Max. ● Mean Max. ▲ Mean × Mean Min. ◆ Extreme Min.

Long-Term (1951-1997) Mean: 58.9 1961-1990 Normal: 57.5

KNOXVILLE, TN APRIL PRECIPITATION



Long-Term (1951-1997) Mean Monthly Total: 3.74

1961-1990 Normal: 3.72



**APRIL 1997
KNOXVILLE, TN**

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA – National Weather Service / Department Of Transportation – Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.

Kenneth D Hadean

DIRECTOR

NOTICE

Effective July 1, 1996, the National Weather Service & Federal Aviation Administration began using the METAR format for Hourly Observations.

We welcome your questions or comments, please contact us at
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