MAY 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

DATE	TEMPERATURE °F MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	DEG DAYS BASE 65° HEATING	COOLING	WEATHER	SNOW/ICE ON GND(IN) 0700 LST DEPTH	1300 LST WATER EQUIV	PRECIPITATION (INCHES) 2400 LST SNOW−FALL	2400 LST WATER EQUIV	PRESSURE (INCHES OF HG) AVERAGE STATION	AVERAGE SEA LEVEL	WIND SPEED = MPH DIR = TENS OF DEGREES RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM 5−SEC SPEED	5−SEC DIR	MAXIMUM 2−MIN SPEED	2−MIN DIR	DATE
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
01	72	50	61	0	46	55	4	0	TSRA RA	0			0.02	28.78	29.80	14.1	26	12.9	30	29	25	29	01
02	81	43	62	0	47	54	3	0	TS TSRA RA BR	0			0.83	28.87	29.90	6.5	22	9.2	36	22	30	24	02
03	70	51	61	−1	51	56	4	0	TSRA RA BR	0			0.89	28.83	29.85	14.7	25	17.6	38	25	29	25	03
04	65	48	57	−5	38	47	8	0		0			0.00	29.14	30.18	10.2	27	7.5	21	29	16	27	04
05	69	41	55	−8	41	49	10	0		0			0.00	29.14	30.18	9.2	25	8.4	23	25	17	23	05
06	76	53	65	2	42	53	0	0	TS RA	0			0.05	29.05	30.08	8.5	27	8.5	22	27	18	25	06
07	74	44	59	−4	40	50	6	0		0			0.00	29.13	30.17	3.6	02	5.5	18	07	16	08	07
08	78	49	64	1	54	57	1	0	RA BR	0			0.05	29.00	30.02	3.3	26	7.5	30	24	25	24	08
09	66	51	59	−4	52	56	6	0	RA BR	0			0.21	28.99	30.02	6.3	27	9.1	25	31	20	32	09
10	67	41	54	−10	35	46	11	0		0			0.00	29.08	30.13	5.0	26	4.9	20	01	15	29	10
11	72	39	56	−8	40	49	9	0		0			0.00	29.03	30.06	4.9	27	4.9	17	25	14	25	11
12	75	49	62	−2	44	53	3	0	RA	0			T	28.81	29.83	5.9	25	10.2	25	22	21	22	12
13	65	45	55	−10	45	49	10	0	TS RA BR	0			0.13	28.79	29.81	2.2	30	7.0	31	34	23	32	13
14	78	42	60	−5	48	54	5	0	RA FG+ BR	0			T	28.78	29.81	8.8	25	12.0	39*	23	31*	24	14
15	70	47	59	−6	42	52	6	0		0			0.00	28.89	29.92	8.0	29	9.9	31	29	25	26	15
16	64	37*	51*	−14	35	45	14	0		0			0.00	29.04	30.08	3.1	29	4.7	17	03	15	03	16
17	78	40	59	−6	43	52	6	0		0			0.00	28.96	29.99	6.6	23	7.3	21	23	17	24	17
18	87*	54	71	5	54	61	0	6		0			0.00	28.94	29.96	9.8	24	9.9	26	24	22	25	18
19	83	61	72	6	63	66	0	7	RA	0			T	28.90	29.91	9.3	25	10.3	26	22	22	25	19
20	75	59	67	1	61	64	0	2	TSRA RA BR	0			2.14	28.93	29.94	5.1	27	8.6	21	29	17	23	20
21	71	52	62	−5	45	52	3	0		0			0.00	29.06	30.09	6.4	02	7.4	22	03	18	05	21
22	73	47	60	−7	44	52	5	0		0			0.00	29.11	30.15	8.1	04	8.5	20	05	17	05	22
23	79	50	65	−2	51	58	0	0		0			0.00	29.10	30.13	4.0	01	5.2	14	24	13	24	23
24	79	60	70	2	62	65	0	5	BR HZ	0			0.00	29.01	30.03	3.5	24	6.0	21	22	17	23	24
25	76	66	71	3	66	67	0	6	RA BR HZ	0			0.09	28.82	29.83	9.3	22	9.2	26	24	22	24	25
26	78	67	73*	5	68	69	0	8	TS TSRA RA BR	0			0.03	28.81	29.82	7.1	24	7.4	18	24	15	24	26
27	75	60	68	0	65	66	0	3	TS TSRA RA BR	0			0.99	28.93	29.95	3.1	03	6.1	26	26	22	25	27
28	69	55	62	−7	57	59	3	0	RA BR	0			0.40	29.12	30.16	4.3	02	5.9	21	27	16	27	28
29	62	54	58	−11	56	57	7	0	RA BR	0			0.15	29.14	30.18	4.6	02	3.5	9	34	7	02	29
30	71	59	65	−4	62	63	0	0	RA BR	0			0.53	29.08	30.11	3.0	04	3.0	9	34	8	04	30
31	81	63	72	2	63	65	0	7	RA FG+ BR	0			0.25	28.80	29.82	3.8	12	5.8	23	19	16	20	31
	73.5	50.9	62.2		50.3	56.2	4.0	1.4	< MONTHLY AVERAGES	TOTALS−>			6.76	28.97	30.00	3.2	26	7.9					<− MONTHLY AVERAGES
	−4.1	−2.2	−3.2		<−−−−−−−−−−−−− DEPARTURE FROM NORMAL −−−−−−−−−−−−−>								2.63	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									

DEGREE DAYS

	MONTHLY TOTAL	MONTHLY DEPARTURE	SEASON TO DATE TOTAL	SEASON TO DATE DEPARTURE
HEATING:	124	30	3599	−338
COOLING:	44	−62	59	−56

GREATEST 24−HR PRECIPITATION: 2.14 DATE: 20
GREATEST 24−HR SNOWFALL: DATE:
GREATEST SNOW DEPTH: 0 DATE:

	SEA LEVEL PRESSURE	DATE	TIME
MAXIMUM	30.29	05	0747
MINIMUM	29.61	31	2356

NUMBER OF DAYS WITH →

MAXIMUM TEMP ≥ 90:	0	MINIMUM TEMP ≤ 32:	0
MAXIMUM TEMP ≤ 32:	0	MINIMUM TEMP ≤ 0:	0
THUNDERSTORMS:	8	HEAVY FOG:	2

PRECIPITATION ≥ 0.01 INCH:	15
PRECIPITATION ≥ 0.10 INCH:	10
SNOWFALL ≥ 1.0 INCH:	0

MAY 1997
KNOXVILLE, TN

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN

MAY 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 Water Equiv.
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			
01						0.02	T						01													01		0.02
02													02								0.03	0.31	0.12	0.25	0.10	02	0.81	0.83
03	0.09	0.17	0.24	0.25	0.15	0.01							03													03	0.91	0.89
04													04													04		0.00
05													05													05		0.00
06	0.02	0.03											06													06		0.05
07													07													07		0.00
08							T	T	T				08						T	T	0.03	0.02	T			08		0.05
09											0.06	0.12	09	0.03												09		0.21
10													10													10		0.00
11													11													11		0.00
12													12												T	12		T
13	T	0.01	0.08	0.03	T	T							13		T	T		0.01								13		0.13
14									T				14				T									14		T
15													15													15		0.00
16													16													16		0.00
17													17													17		0.00
18													18													18		0.00
19													19				T				T					19		T
20	0.79	1.35	T										20	T												20		2.14
21													21													21		0.00
22													22													22		0.00
23													23													23		0.00
24													24													24		0.00
25				0.02	0.02	T				0.03	0.01	T	25		T				T				0.01	T		25		0.09
26	T					0.02	T		0.01				26	T	T	T		T								26		0.03
27													27		0.18	0.43	0.20	T	0.03	0.06	0.02	0.03	0.03	T	0.01	27		0.99
28	T	T	0.02	0.17	T								28					0.01	0.05	0.01	T	T	0.03	0.07	0.04	28		0.40
29	T	T	T						0.02	T		T	29	0.01	0.03	0.03	0.03	0.02	T				0.01	T		29		0.15
30					T	0.01							30						0.50	0.01	0.01					30		0.53
31			T	T									31							T	0.04	0.04	0.13	0.03	0.01	31		0.25

MAXIMUM SHORT DURATION PRECIPITATION (See Note 1)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.32	.60	.79	.93	1.31	1.92	2.09	2.14	2.14	2.14	2.14	2.14
Ending Date	20	20	20	20	20	20	20	20	20	20	20	20
Ending Time (Hour/Min)	0119	0119	0121	0123	0117	0121	0134	0145	0145	0145	0145	0145

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 occurence 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		
DESCRIPTOR	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
MAY 1997

Ceilometer (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
			SR−SS		MN−MN				
	TOTAL MINUTES	PERCENT POSSIBLE	CEILOMETER	SATELLITE	CEILOMETER	SATELLITE	MINIMUM	MAXIMUM	
01	657						9.00	10.00	
02	665	81					5.00	10.00	
03	546	66					4.00	10.00	
04	692	84					10.00	10.00	
05	688	83					9.00	10.00	
06	699						7.00	10.00	
07	708						10.00	10.00	
08	428						3.00	10.00	
09	375						2.00	10.00	
10	730	88					10.00	10.00	
11	839	100					10.00	10.00	
12	662	79					8.00	10.00	
13	665	79					5.00	10.00	
14	518						.25	10.00	
15	648						10.00	10.00	
16	735						10.00	10.00	
17	710						10.00	10.00	
18	713	84					10.00	10.00	
19	670	79					7.00	10.00	
20	472	55					.75	10.00	
21	727						10.00	10.00	
22	726						10.00	10.00	
23	733						8.00	10.00	
24	528	62					3.00	10.00	
25	397	46					1.75	10.00	
26	512	60					3.00	10.00	
27	200	23					.75	10.00	
28	403						2.00	10.00	
29	201						1.50	9.00	
30	347						.75	10.00	
31	509	59					.25	10.00	
MONTHLY AVGS							5.84	9.97	

SUNSHINE (MINUTES)

Total: 18103 Possible: 26143
Percent Possible: 69

NUMBER OF DAYS WITH:

SKY CONDITION

CLR	PTLY CLDY	CLOUDY	MISSING
			31

MINIMUM VISIBILITY (MILES)

<=0.25	<=3.0	>=7.0
2	12	16

OBSERVATIONS AT 3–HOURLY INTERVALS

KNOXVILLE, TN

MAY 1997 TYS WBAN # 13891

HOUR (LST)	≤ 12K FEET		SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)	
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
					SUNRISE: 0544	**MAY 01**			**SUNSET: 1922**					
01	OVC	060			10.00		69	55	61	61	18	22	28.66	29.67
04	OVC	032			10.00		68	58	62	70	21	23	28.63	29.64
07	OVC	039			10.00		59	54	56	83	12	26	28.73	29.74
10	SCT	NC			10.00		65	50	57	59	18	26	28.78	29.79
13	FEW	NC			10.00		68	43	55	41	21	25	28.80	29.81
16	CLR	NC			10.00		71	34	53	26	17	29	28.79	29.81
19	CLR	NC			10.00		67	36	52	32	8	29	28.85	29.87
22	CLR	NC			10.00		56	39	48	53	0	00	28.91	29.94
					SUNRISE: 0543	**MAY 02**			**SUNSET: 1923**					
01	CLR	NC			10.00		47	41	44	80	5	06	28.94	29.98
04	CLR	NC			10.00		44	42	43	93	0	00	28.95	29.98
07	CLR	NC			10.00		48	43	46	83	7	03	28.95	29.99
10	CLR	NC			10.00		62	46	54	56	3	09	28.94	29.97
13	FEW	NC			10.00		76	44	58	32	15	25	28.87	29.90
16	SCT	NC			10.00		80	40	58	24	16	21	28.79	29.81
19	OVC	090			10.00		76	46	59	35	14	19	28.76	29.78
22	OVC	033			5.00	RA BR	62	60	61	93	7	20	28.84	29.86
					SUNRISE: 0542	**MAY 03**			**SUNSET: 1924**					
01	OVC	047			6.00	TSRA BR	63	60	61	90	17	20	28.81	29.83
04	OVC	029			6.00	TSRA BR	61	59	60	93	17	18	28.71	29.72
07	OVC	055			10.00		62	58	60	86	17	25	28.72	29.74
10	SCT	NC			10.00		67	59	62	76	23	24	28.75	29.76
13	BKN	100			10.00		69	49	58	49	22	27	28.78	29.79
16	BKN	065			10.00		65	45	54	49	18	29	28.84	29.86
19	BKN	060			10.00		60	41	50	50	18	29	28.93	29.96
22	OVC	060			10.00		54	43	48	67	12	29	29.04	30.07
					SUNRISE: 0541	**MAY 04**			**SUNSET: 1925**					
01	OVC	045			10.00		51	42	47	71	10	27	29.08	30.11
04	OVC	037			10.00		50	43	47	77	9	26	29.08	30.11
07	SCT	NC			10.00		49	43	46	80	6	27	29.14	30.18
10	BKN	050			10.00		57	38	48	49	6	VR	29.18	30.22
13	SCT	NC			10.00		61	34	48	36	12	28	29.16	30.20
16	SCT	NC			10.00		64	33	49	32	6	VR	29.13	30.16
19	FEW	NC			10.00		62	32	48	32	8	30	29.13	30.17
22	CLR	NC			10.00		56	33	45	42	3	30	29.18	30.22
					SUNRISE: 0540	**MAY 05**			**SUNSET: 1925**					
01	CLR	NC			10.00		48	38	43	68	0	00	29.19	30.24
04	CLR	NC			10.00		45	39	42	80	0	00	29.19	30.24
07	CLR	NC			9.00		44	41	43	89	3	25	29.22	30.28
10	CLR	NC			10.00		61	43	52	52	7	25	29.22	30.27
13	FEW	NC			10.00		66	39	52	37	12	25	29.17	30.21
16	BKN	120			10.00		67	40	53	37	14	25	29.09	30.13
19	SCT	NC			10.00		63	44	53	50	10	24	29.03	30.07
22	FEW	NC			10.00		62	42	52	48	14	23	29.03	30.06
					SUNRISE: 0539	**MAY 06**			**SUNSET: 1926**					
01	OVC	050			7.00	-RA	58	48	53	70	10	23	29.03	30.06
04	OVC	060			10.00		60	47	53	62	13	23	29.01	30.04
07	BKN	110			10.00		60	49	54	67	10	25	29.05	30.08
10	FEW	NC			10.00		66	49	57	54	7	VR	29.07	30.10
13	SCT	NC			10.00		73	44	57	36	9	28	29.04	30.06
16	SCT	NC			10.00		76	36	55	23	12	29	29.00	30.03
19	CLR	NC			10.00		70	37	53	30	7	30	29.04	30.07
22	CLR	NC			10.00		62	32	48	32	0	00	29.11	30.14

HOUR (LST)	≤ 12K FEET		SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)	
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
					SUNRISE: 0538	**MAY 07**			**SUNSET: 1927**					
01	CLR	NC			10.00		53	39	46	59	5	05	29.13	30.17
04	CLR	NC			10.00		46	42	44	86	5	02	29.14	30.17
07	FEW	NC			10.00		50	43	47	77	10	05	29.19	30.23
10	CLR	NC			10.00		64	42	53	45	13	07	29.21	30.24
13	CLR	NC			10.00		70	37	53	30	7	06	29.16	30.19
16	FEW	NC			10.00		72	33	53	24	6	27	29.10	30.14
19	CLR	NC			10.00		70	36	53	29	0	00	29.07	30.11
22	CLR	NC			10.00		58	46	52	65	3	06	29.07	30.11
					SUNRISE: 0537	**MAY 08**			**SUNSET: 1928**					
01	CLR	NC			10.00		51	46	49	83	3	05	29.06	30.09
04	CLR	NC			10.00		50	46	48	86	0	00	29.05	30.08
07	OVC	100			10.00		53	48	50	83	5	08	29.06	30.09
10	BKN	110			10.00		62	52	56	70	3	VR	29.04	30.07
13	BKN	120			10.00		74	58	64	57	24	24	28.95	29.98
16	BKN	120			10.00		74	59	65	60	15	25	28.90	29.93
19	OVC	075			10.00		69	54	60	59	10	30	28.95	29.98
22	OVC	009			4.00	BR	62	61	61	96	6	22	28.98	30.01
					SUNRISE: 0536	**MAY 09**			**SUNSET: 1929**					
01	OVC	004			3.00	BR	62	61	61	96	5	28	28.98	30.01
04	OVC	003			3.00	BR	61	61	61	100	7	22	28.95	29.98
07	BKN	009			3.00	BR	62	60	61	93	7	23	28.95	29.98
10	OVC	090			6.00	BR	65	61	63	87	10	26	28.95	29.98
13	OVC	080			10.00		58	55	56	90	9	20	28.95	29.98
16	SCT	NC			10.00		65	53	58	66	13	27	28.94	29.97
19	CLR	NC			10.00		61	41	51	48	12	30	28.99	30.02
22	BKN	048			10.00		55	39	47	55	16	01	29.11	30.14
					SUNRISE: 0535	**MAY 10**			**SUNSET: 1930**					
01	CLR	NC			10.00		49	36	43	61	5	34	29.11	30.15
04	CLR	NC			10.00		44	37	41	76	0	00	29.07	30.11
07	SCT	NC			10.00		44	40	42	85	0	00	29.11	30.15
10	SCT	NC			10.00		57	35	47	44	12	34	29.12	30.16
13	FEW	NC			10.00		62	37	50	40	8	24	29.09	30.12
16	FEW	NC			10.00		66	30	49	26	12	34	29.05	30.09
19	CLR	NC			10.00		63	30	48	29	8	36	29.05	30.09
22	CLR	NC			10.00		53	34	44	49	0	00	29.09	30.14
					SUNRISE: 0534	**MAY 11**			**SUNSET: 1930**					
01	CLR	NC			10.00		48	39	44	71	0	00	29.09	30.13
04	CLR	NC			10.00		44	38	41	79	0	00	29.10	30.14
07	CLR	NC			10.00		44	41	43	89	0	00	29.15	30.19
10	CLR	NC			10.00		61	38	50	43	3	VR	29.12	30.16
13	CLR	NC			10.00		68	42	54	39	9	24	29.05	30.09
16	CLR	NC			10.00		71	39	54	31	12	25	28.95	29.99
19	CLR	NC			10.00		67	38	52	35	9	25	28.91	29.94
22	CLR	NC			10.00		57	40	49	53	10	23	28.91	29.94
					SUNRISE: 0533	**MAY 12**			**SUNSET: 1931**					
01	CLR	NC			10.00		54	40	47	59	7	25	28.88	29.91
04	CLR	NC			10.00		52	40	46	64	3	23	28.87	29.90
07	FEW	NC			10.00		54	44	49	69	6	24	28.87	29.90
10	CLR	NC			10.00		68	46	56	45	16	25	28.85	29.87
13	SCT	NC			10.00		72	46	58	40	12	23	28.79	29.81
16	SCT	NC			10.00		75	48	60	39	15	23	28.72	29.74
19	OVC	050			10.00		67	51	58	57	12	01	28.71	29.73
22	OVC	042			10.00		59	37	48	44	12	03	28.80	29.81

OBSERVATIONS AT 3–HOURLY INTERVALS

KNOXVILLE, TN

MAY 1997 TYS WBAN # 13891

HOUR (LST)	≤ 12K FEET		SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)	
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
					SUNRISE: 0532	**MAY 13**			**SUNSET: 1932**					
01	OVC	065			10.00		53	45	49	74	6	02	28.80	29.82
04	OVC	055			9.00	-RA	48	46	47	93	8	04	28.78	29.80
07	SCT	NC			10.00		49	47	48	93	5	02	28.78	29.80
10	SCT	NC			10.00		55	46	50	72	0	00	28.78	29.80
13	SCT	NC			10.00		62	39	51	43	10	29	28.75	29.78
16	BKN	075			10.00	TS	62	43	52	50	18	29	28.77	29.80
19	SCT	NC			10.00		54	46	50	75	6	09	28.79	29.83
22	FEW	NC			10.00		47	44	46	90	5	06	28.84	29.87
					SUNRISE: 0531	**MAY 14**			**SUNSET: 1933**					
01	BKN	075			10.00		47	45	46	93	3	01	28.82	29.85
04	VV	001			0.75	BR	44	44	44	100	0	00	28.83	29.86
07	OVC	090			3.00	BR	45	45	45	100	0	00	28.84	29.87
10	OVC	085			9.00		54	49	51	83	6	15	28.82	29.85
13	SCT	NC			10.00		74	49	60	41	25	24	28.77	29.79
16	BKN	090			10.00		76	49	60	39	23	26	28.73	29.75
19	OVC	090			10.00		73	49	59	43	14	23	28.72	29.74
22	BKN	070			10.00		69	50	58	51	15	24	28.77	29.79
					SUNRISE: 0531	**MAY 15**			**SUNSET: 1934**					
01	OVC	043			10.00		66	52	58	61	7	30	28.80	29.81
04	BKN	095			10.00		61	54	57	78	8	30	28.81	29.82
07	SCT	NC			10.00		58	46	52	65	5	33	28.88	29.91
10	FEW	NC			10.00		63	39	51	41	12	30	28.91	29.93
13	SCT	NC			10.00		66	43	54	43	12	28	28.89	29.91
16	SCT	NC			10.00		69	31	51	24	21	25	28.87	29.88
19	OVC	090			10.00		64	35	50	34	9	32	28.89	29.93
22	BKN	110			10.00		54	34	45	47	9	02	29.01	30.05
					SUNRISE: 0530	**MAY 16**			**SUNSET: 1935**					
01	CLR	NC			10.00		48	35	42	61	0	00	29.02	30.06
04	CLR	NC			10.00		42	38	40	85	3	01	29.02	30.06
07	CLR	NC			10.00		42	38	40	85	0	00	29.08	30.13
10	SCT	NC			10.00		55	31	44	40	6	11	29.11	30.15
13	FEW	NC			10.00		62	32	48	32	0	00	29.07	30.11
16	FEW	NC			10.00		62	31	48	31	0	00	29.03	30.07
19	CLR	NC			10.00		61	34	48	36	9	21	29.00	30.04
22	CLR	NC			10.00		54	37	46	53	6	25	29.00	30.04
					SUNRISE: 0529	**MAY 17**			**SUNSET: 1935**					
01	CLR	NC			10.00		47	38	43	71	7	22	28.98	30.02
04	CLR	NC			10.00		44	38	41	79	3	09	28.99	30.03
07	FEW	NC			10.00		47	42	45	83	0	00	29.01	30.05
10	CLR	NC			10.00		66	38	52	36	17	24	29.01	30.04
13	SCT	NC			10.00		74	42	57	32	9	21	28.96	29.99
16	SCT	NC			10.00		76	45	59	33	9	24	28.91	29.95
19	CLR	NC			10.00		73	48	59	41	8	22	28.89	29.92
22	CLR	NC			10.00		64	49	56	58	6	22	28.94	29.96
					SUNRISE: 0528	**MAY 18**			**SUNSET: 1936**					
01	CLR	NC			10.00		62	46	54	56	7	24	28.94	29.96
04	CLR	NC			10.00		59	47	53	64	3	27	28.95	29.97
07	SCT	NC			10.00		59	52	55	78	0	00	28.99	30.02
10	FEW	NC			10.00		79	56	65	45	16	22	28.98	30.01
13	FEW	NC			10.00		84	57	67	40	16	24	28.95	29.98
16	SCT	NC			10.00		86	53	66	32	21	24	28.89	29.91
19	CLR	NC			10.00		80	58	66	47	13	25	28.88	29.91
22	CLR	NC			10.00		70	56	62	61	6	23	28.92	29.94

HOUR (LST)	≤ 12K FEET		SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)	
	SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
					SUNRISE: 0528	**MAY 19**			**SUNSET: 1937**					
01	CLR	NC			10.00		68	56	61	66	9	22	28.88	29.90
04	CLR	NC			10.00		65	56	60	73	5	31	28.91	29.93
07	SCT	NC			8.00		67	58	62	73	3	25	28.94	29.96
10	SCT	NC			10.00		79	64	69	60	13	24	28.94	29.96
13	BKN	070			10.00		81	65	70	58	18	26	28.90	29.91
16	BKN	065			7.00		77	66	70	69	12	27	28.87	29.88
19	OVC	120			10.00		76	66	69	72	13	24	28.86	29.87
22	SCT	NC			8.00		70	66	67	87	8	22	28.88	29.89
					SUNRISE: 0527	**MAY 20**			**SUNSET: 1938**					
01	OVC	004			0.75	+TSRA BR	67	66	66	97	12	25	28.87	29.88
04	BKN	029			6.00	BR	68	66	67	93	13	23	28.86	29.87
07	OVC	020			5.00	BR	67	65	66	93	8	25	28.90	29.92
10	OVC	019			10.00		69	63	65	81	12	26	28.93	29.96
13	OVC	022			10.00		68	64	66	87	6	01	28.93	29.96
16	BKN	050			10.00		75	61	66	62	8	35	28.92	29.94
19	SCT	NC			10.00		70	56	62	61	6	36	28.94	29.96
22	FEW	NC			10.00		63	50	56	63	8	02	29.00	30.03
					SUNRISE: 0526	**MAY 21**			**SUNSET: 1938**					
01	SCT	NC			10.00		58	50	54	75	0	00	29.02	30.06
04	CLR	NC			10.00		53	48	50	83	6	01	29.00	30.03
07	SCT	NC			10.00		54	48	51	80	6	02	29.05	30.09
10	SCT	NC			10.00		64	46	54	52	14	06	29.09	30.12
13	FEW	NC			10.00		69	43	55	39	10	34	29.08	30.11
16	FEW	NC			10.00		70	41	55	35	7	02	29.03	30.06
19	CLR	NC			10.00		66	41	53	40	8	01	29.05	30.09
22	CLR	NC			10.00		59	39	49	48	9	01	29.08	30.12
					SUNRISE: 0526	**MAY 22**			**SUNSET: 1939**					
01	CLR	NC			10.00		54	39	47	57	10	03	29.10	30.14
04	CLR	NC			10.00		50	39	45	66	9	05	29.11	30.14
07	CLR	NC			10.00		51	39	45	64	13	05	29.16	30.19
10	FEW	NC			10.00		62	39	51	43	13	06	29.17	30.21
13	FEW	NC			10.00		69	46	57	44	7	07	29.14	30.17
16	FEW	NC			10.00		72	46	58	40	3	33	29.08	30.12
19	CLR	NC			10.00		67	52	58	59	6	08	29.06	30.10
22	CLR	NC			10.00		62	49	55	62	9	01	29.10	30.13
					SUNRISE: 0525	**MAY 23**			**SUNSET: 1940**					
01	CLR	NC			10.00		54	49	51	83	0	00	29.12	30.15
04	CLR	NC			10.00		53	46	49	77	7	03	29.13	30.16
07	CLR	NC			10.00		55	45	50	69	9	05	29.16	30.19
10	SCT	NC			10.00		66	48	56	52	0	00	29.17	30.20
13	FEW	NC			10.00		75	52	62	45	5	23	29.11	30.14
16	CLR	NC			10.00		79	54	64	42	9	31	29.06	30.08
19	CLR	NC			10.00		76	55	63	48	6	30	29.03	30.06
22	BKN	075			9.00		70	56	62	61	0	00	29.05	30.08
					SUNRISE: 0525	**MAY 24**			**SUNSET: 1941**					
01	CLR	NC			6.00	HZ	67	61	63	81	6	25	29.05	30.07
04	BKN	075			5.00	BR	64	60	62	87	7	25	29.04	30.06
07	BKN	090			3.00	BR	62	59	60	90	3	15	29.07	30.09
10	OVC	039			4.00	HZ	68	60	63	76	0	00	29.06	30.09
13	BKN	095			7.00		72	62	66	71	5	31	29.03	30.06
16	OVC	035			10.00		77	64	69	64	13	24	28.96	29.98
19	BKN	110			10.00		73	63	67	71	7	22	28.93	29.95
22	OVC	100			7.00		71	64	67	79	6	25	28.95	29.97

OBSERVATIONS AT 3−HOURLY INTERVALS

KNOXVILLE, TN

MAY 1997 TYS WBAN # 13891

HOUR (LST)	≤ 12K FEET: SKY COVER	≤ 12K FEET: CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F: DRY BULB	TEMPERATURE °F: DEW POINT	TEMPERATURE °F: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0524	**MAY 25**			**SUNSET: 1941**					
01	OVC	100			6.00	HZ	69	64	66	84	0	00	28.90	29.92
04	OVC	032			4.00	−RA BR	67	64	65	91	14	21	28.89	29.91
07	BKN	037			6.00	BR	66	64	65	93	3	28	28.86	29.87
10	OVC	031			1.75	RA BR	69	67	68	93	6	21	28.84	29.85
13	OVC	031			10.00		74	67	69	79	17	24	28.80	29.81
16	OVC	021			10.00		75	67	70	76	17	21	28.75	29.76
19	OVC	032			9.00		69	66	67	90	15	22	28.75	29.77
22	OVC	050			3.00	−RA BR	68	67	67	96	12	23	28.79	29.80
					SUNRISE: 0524	**MAY 26**			**SUNSET: 1942**					
01	OVC	070			4.00	BR	68	66	67	93	10	23	28.78	29.79
04	OVC	009			5.00	BR	67	65	66	93	9	23	28.78	29.79
07	BKN	007			3.00	BR	68	66	67	93	9	22	28.79	29.80
10	BKN	030			8.00		74	68	70	82	10	24	28.84	29.85
13	BKN	055			10.00		76	67	70	74	3	21	28.84	29.85
16	BKN	100			10.00		75	69	71	82	5	26	28.80	29.81
19	OVC	055			9.00		74	69	71	85	3	25	28.81	29.82
22	SCT	NC			4.00	BR	69	68	68	96	5	23	28.84	29.85
					SUNRISE: 0523	**MAY 27**			**SUNSET: 1943**					
01	BKN	120			6.00	BR	69	67	68	93	3	24	28.84	29.85
04	FEW	NC			2.00	BR	68	67	67	96	0	00	28.84	29.85
07	OVC	001			1.50	BR	69	67	68	93	6	01	28.88	29.90
10	OVC	006			3.00	BR	70	67	68	90	7	06	28.92	29.94
13	BKN	034			8.00		73	68	70	84	7	04	28.91	29.93
16	OVC	024			10.00		65	63	64	93	7	07	28.94	29.96
19	OVC	008			3.00	−RA BR	63	61	62	93	13	05	29.00	30.02
22	OVC	030			3.00	−RA BR	62	60	61	93	3	01	29.04	30.07
					SUNRISE: 0523	**MAY 28**			**SUNSET: 1944**					
01	OVC	018			3.00	BR	59	58	58	96	6	06	29.06	30.09
04	OVC	012			2.00	−RA BR	58	57	57	97	6	06	29.09	30.12
07	OVC	050			3.00	BR	58	56	57	93	5	06	29.14	30.17
10	OVC	048			10.00		63	58	60	84	5	VR	29.15	30.18
13	BKN	080			10.00		67	59	62	76	12	03	29.11	30.14
16	OVC	045			10.00		66	54	59	65	8	25	29.12	30.15
19	OVC	048			5.00	−RA BR	60	58	59	93	0	00	29.12	30.16
22	OVC	005			2.50	−RA BR	57	54	55	90	5	07	29.16	30.19
					SUNRISE: 0522	**MAY 29**			**SUNSET: 1944**					
01	OVC	035			5.00	−RA BR	55	54	54	96	0	00	29.15	30.18
04	OVC	003			7.00		55	54	54	96	5	35	29.14	30.17
07	OVC	012			2.50	BR	54	53	53	97	6	02	29.16	30.19
10	OVC	007			8.00		57	54	55	90	6	02	29.15	30.19
13	OVC	011			4.00	−RA	58	56	57	93	3	01	29.14	30.18
16	OVC	012			5.00	−RA BR	61	58	59	90	3	06	29.12	30.16
19	OVC	011			8.00		61	59	60	93	5	09	29.12	30.16
22	OVC	009			7.00	−RA	60	59	59	96	0	00	29.15	30.19
					SUNRISE: 0522	**MAY 30**			**SUNSET: 1945**					
01	OVC	029			5.00	BR	60	59	59	96	0	00	29.13	30.16
04	OVC	007			5.00	BR	60	59	59	96	5	03	29.11	30.14
07	OVC	026			2.00	BR	61	59	60	93	3	07	29.13	30.16
10	OVC	008			8.00		64	60	62	87	7	06	29.14	30.17
13	OVC	030			10.00		69	62	65	78	0	00	29.09	30.11
16	OVC	019			10.00		70	64	66	82	6	36	29.04	30.07
19	OVC	046			4.00	−RA BR	66	65	65	96	5	08	29.02	30.05
22	BKN	046			8.00		64	63	63	96	0	00	29.02	30.05

HOUR (LST)	≤ 12K FEET: SKY COVER	≤ 12K FEET: CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F: DRY BULB	TEMPERATURE °F: DEW POINT	TEMPERATURE °F: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0521	**MAY 31**			**SUNSET: 1946**					
01	OVC	060			1.00	BR	64	63	63	96	3	07	28.96	29.98
04	OVC	002			1.00	BR	63	63	63	100	3	08	28.92	29.94
07	OVC	001			1.25	BR	63	63	63	100	6	06	28.90	29.93
10	FEW	NC			10.00		71	63	66	76	0	00	28.87	29.89
13	OVC	060			10.00		77	60	66	56	12	20	28.82	29.83
16	SCT	NC			10.00		79	59	66	50	14	17	28.72	29.72
19	OVC	065			10.00	−RA	70	65	67	84	12	28	28.68	29.70
22	OVC	020			3.00	RA BR	67	65	66	93	0	00	28.67	29.68

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 Visibilty = 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: CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL	VISIBILITY (MILES)	WIND SPEED (MPH)	RESULTANT WIND (MPH): SPEED	RESULTANT WIND (MPH): DIRECTION
01			58	50	54	77	28.97	30.00	7.83	7	3	27
02			57	50	53	79	28.96	29.99	7.92	6	2	27
03			56	50	53	83	28.96	29.99	7.68	6	1	26
04			55	50	53	84	28.97	29.99	7.60	7	2	27
05			54	50	52	87	28.97	30.00	7.60	7	2	26
06			54	50	52	86	28.98	30.01	7.31	6	2	27
07			56	51	53	84	29.00	30.03	7.43	6	1	27
08			58	51	55	79	29.00	30.03	7.72	7	1	27
09			62	52	57	71	29.00	30.03	8.71	8	3	32
10			65	51	57	63	29.00	30.03	8.96	10	3	27
11			66	51	58	59	29.00	30.03	9.23	9	4	27
12			69	50	59	55	28.99	30.01	9.35	10	7	27
13			70	50	59	53	28.97	30.00	9.65	10	7	27
14			71	50	60	51	28.96	29.98	9.65	12	9	27
15			72	49	59	49	28.94	29.97	9.50	11	9	27
16			72	49	59	48	28.93	29.96	9.74	11	8	27
17			71	49	59	50	28.93	29.96	9.52	10	5	29
18			70	49	58	52	28.93	29.96	9.25	9	6	26
19			67	49	58	56	28.93	29.96	9.29	8	4	28
20			64	50	57	62	28.95	29.98	8.71	7	3	27
21			63	50	56	66	28.96	29.99	8.53	7	2	28
22			61	50	55	68	28.98	30.00	8.18	7	2	28
23			60	50	54	72	28.98	30.01	8.27	6	2	27
24			58	50	54	75	28.98	30.00	8.02	6	2	27

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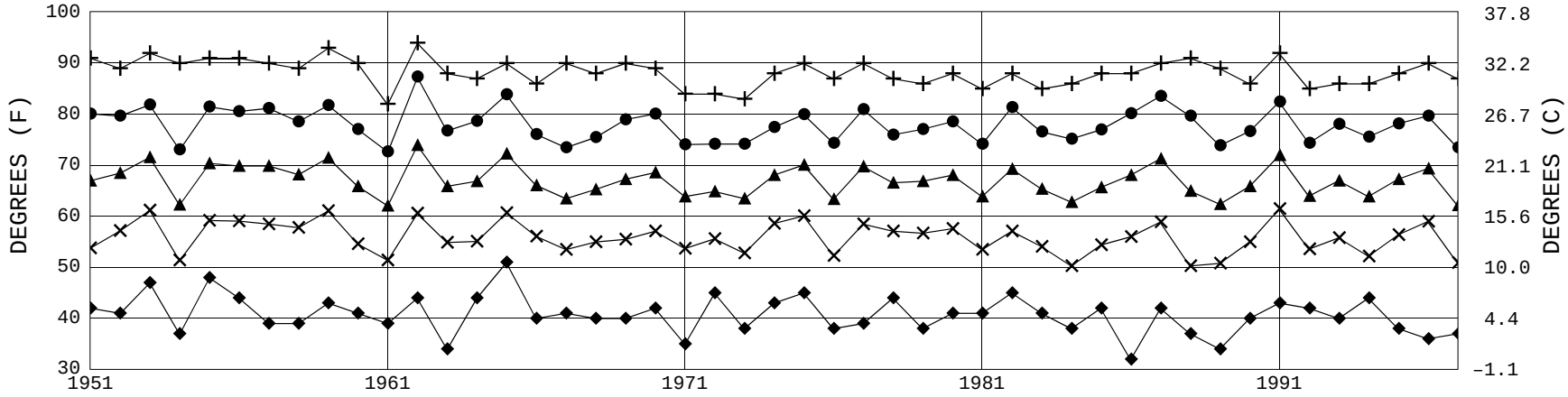
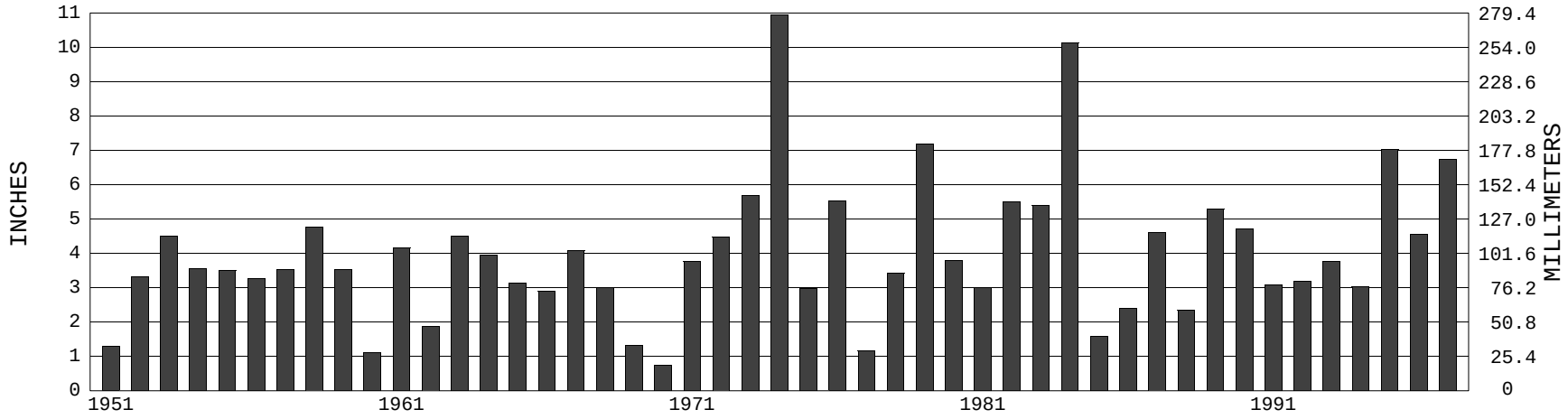
KNOXVILLE, TN MAY TEMPERATURES



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

Long–Term (1951–1997) Mean: 67.0 1961–1990 Normal: 65.4

KNOXVILLE, TN MAY PRECIPITATION



Long–Term (1951–1997) Mean Monthly Total: 4.00 1961–1990 Normal: 4.13

MAY 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 Hadeen

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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