MAY 2003
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	82	59	71	9	60	63	0	6	RA BR				0.06	28.90	29.91	4.4	26	7.0	39	28	30	28	01
02	75	57	66	4	60	62	0	1	TSRA RA BCFG BR VCTS				0.10	28.87	29.89	3.4	24	5.6	35	31	29	31	02
03	75	57	66	4	58	61	0	1	BR				0.00	28.94	29.96	3.8	27	5.9	17	26	13	29	03
04	77	50	64	2	51	56	1	0	BR HZ				0.00	28.95	29.97	3.1	02	4.6	14	02	12	04	04
05	72	61	67	4	61	63	0	2	TSRA RA BR VCTS				3.04	28.82	29.84	7.9	20	11.0	32	16	28	19	05
06	72	61	67	4	63	64	0	2	TSRA RA BR				1.73	28.90	29.92	5.7	21	8.1	37	14	30	13	06
07	70	62	66	3	64	65	0	1	TS TSRA RA BR				1.08	28.94	29.96	2.6	25	7.6	22	24	17	32	07
08	82	63	73	10	68	69	0	8	BCFG BR HZ				0.00	28.96	29.98	7.1	24	7.6	22	25	18	24	08
09	84	66	75	11	69	71	0	10	BR				0.00	28.94	29.95	10.6	23	11.4	29	25	24	22	09
10	85*	69	77*	13	68	71	0	12	BR				0.00	28.87	29.88	11.0	23	11.4	31	23	26	23	10
11	76	61	69	5	63	66	0	4	TSRA RA BR				0.45	28.82	29.83	14.5	23	15.0	54*	25	37*	26	11
12	71	53	62	-2	46	54	3	0					0.00	28.97	30.00	11.2	26	12.2	29	25	23	27	12
13	75	49*	62*	-3	47	55	3	0					0.00	29.02	30.05	5.0	27	6.6	18	28	16	28	13
14	74	54	64	-2	55	59	1	0	RA				T	28.93	29.96	4.8	24	5.5	22	23	18	23	14
15	76	60	68	2	60	62	0	3	TS TSRA RA BR				0.53	28.88	29.91	5.7	23	8.3	29	34	26	33	15
16	80	58	69	3	63	65	0	4	RA FG+ BR				T	28.93	29.96	2.1	04	4.1	24	01	18	01	16
17	83	61	72	6	64	66	0	7	TS TSRA RA BR HZ				0.17	28.95	29.97	1.4	05	6.3	28	28	23	29	17
18	79	61	70	3	65	66	0	5	RA DZ BR				0.08	28.96	29.98	4.0	03	5.7	17	25	15	26	18
19	81	60	71	4	64	66	0	6	RA				0.02	29.04	30.06	2.1	34	5.6	15	03	13	23	19
20	73	62	68	1	61	63	0	3	RA				T	29.14	30.16	3.3	28	5.2	10	27	9	30	20
21	72	63	68	0	63	64	0	3	RA BR				0.54	29.06	30.09	1.7	02	4.4	14	04	12	02	21
22	75	61	68	0	62	63	0	3	RA BR				0.02	28.97	30.00	5.1	04	6.1	15	01	13	36	22
23	76	56	66	-2	59	62	0	1	BCFG BR HZ				0.00	28.95	29.97	3.5	35	5.6	20	29	17	29	23
24	74	57	66	-3	51	58	0	1					0.00	28.93	29.95	3.5	33	5.2	14	28	9	29	24
25	73	53	63	-6	55	58	2	0	RA BR				0.04	28.88	29.91	1.9	02	4.6	22	31	18	32	25
26	74	58	66	-3	56	60	0	1	BR				0.00	28.93	29.95	5.2	01	5.8	16	36	14	35	26
27	74	57	66	-3	54	59	0	1	HZ				0.00	29.00	30.02	3.7	35	5.8	16	31	12	06	27
28	77	52	65	-5	54	59	0	0	RA BR				0.02	28.95	29.97	6.7	25	7.8	20	25	15	27	28
29	70	57	64	-6	57	59	1	0	RA BR				0.21	28.75	29.77	8.4	26	9.9	26	29	20	29	29
30	78	54	66	-4	54	59	0	1	BR				0.00	28.76	29.77	7.3	24	7.9	23	26	18	24	30
31	83	61	72	2	58	63	0	7	TS RA				T	28.64	29.65	11.0	27	15.4	37	28	28	27	31
	76.4	58.5	67.5		59.1	62.3	0.4	3.0	< MONTHLY AVERAGES TOTALS−>				8.09	28.92	29.94	3.4	26	7.5					<− MONTHLY AVERAGES
	0.1	2.9	1.5		<−−−−−−−−−−−−−DEPARTURE FROM NORMAL−−−−−−−−−−−−−>								3.41	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									

DEGREE DAYS

	MONTHLY TOTAL	MONTHLY DEPARTURE	SEASON TO DATE TOTAL	SEASON TO DATE DEPARTURE
HEATING:	11	-54	3575	-112
COOLING:	93	-17	114	-29

GREATEST 24−HR PRECIPITATION: 4.35 DATE :05-06
GREATEST 24−HR SNOWFALL: DATE :
GREATEST SNOW DEPTH: DATE :

	SEA LEVEL PRESSURE	DATE	TIME
MAXIMUM :	30.21	20	0853
MINIMUM :	29.54	31	1053

NUMBER OF DAYS WITH →

MAXIMUM TEMP ≥ 90:	0	MINIMUM TEMP ≤ 32 :	0
MAXIMUM TEMP ≤ 32 :	0	MINIMUM TEMP ≤ 0 :	0
THUNDERSTORMS :	8	HEAVY FOG :	1
PRECIPITATION ≥ 0.01 INCH :	15		
PRECIPITATION ≥ 0.10 INCH :	9		
SNOWFALL ≥ 1.0 INCH :			

MAY 2003
KNOXVILLE, TN

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN

MAY 2003 TYS WBAN # 13891

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT											DATE	Sum if Different (See Note)	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													01									0.03	0.03			01		0.06
02												T	02	0.07	0.03											02		0.10
03													03													03		0.00
04													04													04		0.00
05			T	T		T	0.03	0.07	0.14	0.16	0.02	T	05			T	0.21	0.18	0.49	0.79	0.60	0.16	0.07	0.06	0.06	05		3.04
06	0.08	0.08	T	0.09	0.15	0.07	0.10	0.13	0.21	0.23	0.29	0.26	06	0.04												06		1.73
07		T		0.14		0.22	0.13	T		0.01			07		0.24	0.07	0.01	T								07	0.82	1.08
08													08													08		0.00
09													09													09		0.00
10													10													10		0.00
11							0.20	0.15		T			11													11	0.35	0.45
12													12													12		0.00
13													13													13		0.00
14						T	T						14													14		T
15									T				15					T	T	0.53			T			15		0.53
16													16						T	T						16		T
17												T	17	T					0.17	T						17		0.17
18					T	T		0.02	0.01				18				0.05									18		0.08
19													19							T	T	0.01	0.01	T		19		0.02
20			T	T									20													20		T
21				0.02	0.01	0.03	0.09	0.17	0.10	0.05	0.04	0.02	21	T	0.01	T										21		0.54
22				0.02	T	T							22													22		0.02
23													23													23		0.00
24													24													24		0.00
25													25				0.03	0.01						T	T	25		0.04
26													26													26		0.00
27													27													27		0.00
28													28											T	0.02	28		0.02
29		0.03	0.18	T		T							29													29		0.21
30													30													30		0.00
31						T	T						31													31		T

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.32	.48	.52	.53	.60	.75	1.00	1.24	1.54	1.79	1.87	1.95
Ending Date	15	15	15	05	05	05	05	05	05	05	05	05
Ending Time (Hour/Min)	1820	1822	1826	1801	1811	1826	1841	1853	1921	1934	2003	2033

Date and time are not entered for TRACE amounts.

Note : 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 1971−2000

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	PL 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 2003

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 to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
			SR−SS		MN−MN				
	TOTAL MINUTES	PERCENT POSSIBLE	CEILOMETER	SATELLITE	CEILOMETER	SATELLITE	MINIMUM	MAXIMUM	
01							5.00	10.00	
02							2.50	10.00	
03							.75	10.00	
04							4.00	10.00	
05							1.00	10.00	
06							1.75	10.00	
07							.00	10.00	
08							1.25	10.00	
09							3.00	10.00	
10							6.00	10.00	
11							1.00	10.00	
12							10.00	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							.75	10.00	
16							.13	10.00	
17							1.00	10.00	
18							1.75	10.00	
19							9.00	10.00	
20							10.00	10.00	
21							1.25	10.00	
22							3.00	10.00	
23							2.00	10.00	
24							8.00	10.00	
25							5.00	10.00	
26							3.00	10.00	
27							6.00	10.00	
28							5.00	10.00	
29							2.50	10.00	
30							3.00	10.00	
31							7.00	10.00	
MONTHLY AVGS							4.52	10.00	

SUNSHINE (MINUTES)

Total: Possible:
Percent Possible:

NUMBER OF DAYS WITH:

SKY CONDITION

CLR	PTLY CLDY	CLOUDY	MISSING
			31

MINIMUM VISIBILITY (MILES)

<=0.25	<=3.0	>=7.0
1	14	7

OBSERVATIONS AT 3–HOURLY INTERVALS

KNOXVILLE, TN

MAY 2003 TYS WBAN # 13891

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0544	**MAY 01**			**SUNSET: 1922**					
01	FEW	NC			10.00		65	56	60	73	3	29	28.91	29.93
04	SCT	NC			10.00		59	56	57	90	0	00	28.92	29.95
07	BKN	150			10.00		62	58	60	86	0	00	28.96	29.99
10	FEW	NC			10.00		71	61	65	71	3	15	28.95	29.97
13	SCT	NC			10.00		80	64	70	58	13	24	28.89	29.91
16	SCT	NC			10.00		82	59	67	46	14	26	28.83	29.84
19	BKN	200			10.00		73	61	66	66	9	22	28.83	29.85
22	SCT	NC			10.00		63	61	62	93	7	07	28.85	29.86
					SUNRISE: 0543	**MAY 02**			**SUNSET: 1923**					
01	SCT	NC			5.00	BCFG	61	60	60	97	3	28	28.88	29.90
04	SCT	NC			4.00	BCFG	59	58	58	96	0	00	28.87	29.88
07	BKN	070			10.00		60	59	59	96	7	24	28.88	29.90
10	BKN	200			10.00		69	61	64	76	7	25	28.88	29.91
13	OVC	035			4.00	VCTS -RA BR	63	60	61	90	7	04	28.89	29.92
16	SCT	NC			10.00		70	60	64	71	7	25	28.85	29.86
19	OVC	180			10.00		67	60	63	79	5	08	28.87	29.89
22	OVC	250			10.00		65	61	63	87	0	00	28.88	29.90
					SUNRISE: 0542	**MAY 03**			**SUNSET: 1923**					
01	SCT	NC			10.00		60	59	59	96	5	24	28.89	29.92
04	BKN	038			8.00		59	58	58	96	3	24	28.89	29.92
07	OVC	002			1.00	BR	60	60	60	100	0	00	28.95	29.98
10	BKN	080			7.00		68	61	64	78	3	08	28.95	29.98
13	SCT	NC			10.00		72	59	64	64	7	29	28.94	29.96
16	SCT	NC			10.00		75	56	63	52	10	27	28.92	29.94
19	FEW	NC			10.00		72	55	62	55	6	28	28.90	29.93
22	SCT	NC			10.00		63	53	57	70	5	VR	28.98	30.01
					SUNRISE: 0541	**MAY 04**			**SUNSET: 1924**					
01	SCT	NC			9.00		57	51	54	81	7	01	28.99	30.02
04	CLR	NC			6.00	BR	53	50	51	89	7	36	29.00	30.03
07	CLR	NC			4.00	BR	52	50	51	93	6	04	29.02	30.05
10	CLR	NC			8.00		63	52	57	68	5	VR	29.03	30.06
13	FEW	NC			10.00		72	49	59	44	0	00	28.95	29.97
16	BKN	250			10.00		74	49	60	41	7	33	28.89	29.92
19	BKN	250			10.00		71	52	60	51	5	22	28.88	29.91
22	OVC	250			10.00		64	53	58	68	7	09	28.83	29.85
					SUNRISE: 0540	**MAY 05**			**SUNSET: 1925**					
01	OVC	070			10.00		68	57	61	68	8	22	28.82	29.83
04	OVC	250			9.00		69	60	64	73	6	VR	28.80	29.81
07	OVC	060			5.00	-TSRA	67	62	64	84	0	00	28.78	29.80
10	OVC	028			10.00		64	61	62	90	17	16	28.81	29.83
13	OVC	055			10.00		68	62	64	81	3	VR	28.75	29.76
16	OVC	026			4.00	-RA BR	64	63	63	96	12	18	28.81	29.83
19	OVC	014			1.50	VCTS +RA BR	61	60	60	97	8	13	28.87	29.89
22	OVC	055			9.00	-TSRA	63	62	62	97	13	21	28.87	29.90
					SUNRISE: 0539	**MAY 06**			**SUNSET: 1926**					
01	OVC	095			10.00	-RA	62	61	61	96	16	19	28.92	29.95
04	OVC	026			4.00	RA BR	61	60	60	97	13	22	28.87	29.89
07	OVC	027			3.00	RA BR	63	62	62	97	10	21	28.89	29.92
10	OVC	050			2.50	+RA BR	63	63	63	100	6	18	28.95	29.98
13	OVC	100			7.00		65	60	62	84	10	34	28.81	29.83
16	BKN	250			10.00		70	64	66	82	13	23	28.88	29.91
19	OVC	055			10.00		69	65	66	87	5	23	28.90	29.93
22	BKN	043			10.00		66	65	65	96	0	00	28.91	29.94

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0538	**MAY 07**			**SUNSET: 1927**					
01	OVC	039			10.00		65	64	64	97	3	17	28.92	29.94
04	OVC	040			7.00	-RA	66	64	65	93	8	12	28.91	29.94
07	OVC	031			9.00	-RA	62	61	61	96	9	15	29.00	30.03
10	OVC	090			10.00		66	63	64	90	7	27	28.97	30.00
13	OVC	039			10.00	-RA					13	33	28.98	
16	OVC	040			3.00	-RA	66	64	65	93	3	VR	28.89	29.92
19	OVC	044			7.00		68	66	67	93	7	23	28.87	29.89
22	FEW	NC			8.00		68	66	67	93	8	26	28.93	29.95
					SUNRISE: 0537	**MAY 08**			**SUNSET: 1928**					
01	BKN	028			6.00	BR	67	65	66	93	10	26	28.93	29.96
04	SCT	NC			3.00	BCFG	63	63	63	100	0	00	28.93	29.96
07	OVC	003			1.50	BR	65	65	65	100	3	23	28.99	30.01
10	BKN	016			9.00		75	69	71	82	14	24	28.98	30.00
13	SCT	NC			10.00		80	70	73	71	14	25	28.97	29.99
16	BKN	050			7.00		80	70	73	71	13	22	28.95	29.97
19	BKN	200			6.00	HZ	76	70	72	82	6	22	28.92	29.94
22	CLR	NC			5.00	BR	73	69	70	87	0	00	28.96	29.98
					SUNRISE: 0536	**MAY 09**			**SUNSET: 1928**					
01	FEW	NC			6.00	BR	72	68	69	87	6	25	28.93	29.95
04	OVC	044			3.00	BR	68	67	67	96	3	06	28.92	29.94
07	BKN	250			7.00		73	69	70	87	12	23	28.96	29.97
10	OVC	022			9.00		76	70	72	82	15	23	28.99	30.01
13	SCT	NC			10.00		82	70	74	67	21	24	28.95	29.96
16	SCT	NC			10.00		83	70	74	65	20	24	28.90	29.92
19	FEW	NC			10.00		79	70	73	74	9	23	28.91	29.92
22	CLR	NC			10.00		74	70	71	88	7	22	28.93	29.95
					SUNRISE: 0535	**MAY 10**			**SUNSET: 1929**					
01	CLR	NC			10.00		72	66	68	82	5	24	28.92	29.94
04	CLR	NC			9.00		71	66	68	84	0	00	28.90	29.92
07	FEW	NC			6.00	BR	71	68	69	90	6	27	28.94	29.96
10	BKN	018			7.00		77	70	72	79	17	24	28.90	29.92
13	FEW	NC			10.00		83	69	73	63	18	22	28.87	29.88
16	SCT	NC			10.00		84	68	73	59	20	23	28.84	29.84
19	CLR	NC			10.00		79	68	72	69	10	21	28.82	29.82
22	BKN	250			10.00		78	69	72	74	10	22	28.83	29.83
					SUNRISE: 0534	**MAY 11**			**SUNSET: 1930**					
01	OVC	250			10.00		75	67	70	76	12	22	28.77	29.77
04	OVC	070			10.00		76	68	71	77	16	21	28.78	29.78
07	OVC	026			2.00	+TSRA BR	68	64	66	87	18	25	28.83	29.84
10	OVC	007			10.00		69	67	68	93	12	21	28.84	29.84
13	BKN	200			10.00		74	66	69	76	23	24	28.82	29.83
16	SCT	NC			10.00		75	64	68	69	22	23	28.81	29.81
19	FEW	NC			10.00		72	63	66	73	13	23	28.81	29.83
22	CLR	NC			10.00		65	49	56	56	12	26	28.89	29.91
					SUNRISE: 0533	**MAY 12**			**SUNSET: 1931**					
01	CLR	NC			10.00		57	47	52	69	9	22	28.93	29.95
04	CLR	NC			10.00		56	47	51	72	8	23	28.94	29.96
07	SCT	NC			10.00		57	49	53	75	9	21	28.98	30.01
10	SCT	NC			10.00		63	46	54	54	17	27	28.99	30.02
13	SCT	NC			10.00		68	48	57	49	17	25	28.97	30.00
16	FEW	NC			10.00		71	46	57	41	17	29	28.93	29.96
19	FEW	NC			10.00		67	44	55	44	14	27	28.96	29.99
22	CLR	NC			10.00		59	45	52	60	7	25	29.02	30.05

OBSERVATIONS AT 3–HOURLY INTERVALS

KNOXVILLE, TN

MAY 2003 TYS WBAN # 13891

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0533	**MAY 13**			**SUNSET: 1932**					
01	CLR	NC			10.00		57	44	50	62	3	18	29.03	30.06
04	CLR	NC			10.00		53	44	49	72	3	22	29.03	30.06
07	CLR	NC			10.00		53	46	49	77	5	23	29.06	30.10
10	CLR	NC			10.00		65	46	55	51	5	VR	29.06	30.10
13	SCT	NC			10.00		71	47	58	42	8	30	29.02	30.05
16	SCT	NC			10.00		75	48	60	39	7	VR	28.96	29.99
19	SCT	NC			10.00		71	48	58	44	6	30	28.97	30.00
22	SCT	NC			10.00		64	52	57	65	6	28	28.98	30.01
					SUNRISE: 0532	**MAY 14**			**SUNSET: 1933**					
01	BKN	250			10.00		59	51	55	75	0	00	28.98	30.01
04	OVC	250			10.00		58	50	54	75	0	00	28.96	29.99
07	BKN	120			10.00		58	53	55	84	5	15	28.96	29.99
10	BKN	100			10.00		67	55	60	66	3	25	28.96	29.99
13	OVC	100			10.00		72	56	62	57	5	26	28.95	29.97
16	OVC	200			10.00		71	57	63	61	12	23	28.88	29.91
19	OVC	048			10.00		67	56	60	68	10	26	28.87	29.90
22	OVC	044			10.00		63	58	60	84	8	22	28.91	29.93
					SUNRISE: 0531	**MAY 15**			**SUNSET: 1933**					
01	OVC	037			10.00		62	58	60	86	8	25	28.90	29.93
04	OVC	011			9.00		62	59	60	90	9	23	28.89	29.92
07	BKN	007			6.00	BR	61	59	60	93	5	28	28.90	29.93
10	BKN	016			7.00		67	61	63	81	8	25	28.91	29.93
13	SCT	NC			10.00		75	63	67	66	15	22	28.86	29.88
16	BKN	030			10.00		73	62	66	69	16	23	28.79	29.81
19	BKN	055			7.00		63	61	62	93	3	14	28.86	29.88
22	BKN	095			9.00		61	60	60	97	5	06	28.89	29.92
					SUNRISE: 0530	**MAY 16**			**SUNSET: 1934**					
01	OVC	001			0.25	FG	59	59	59	100	0	00	28.90	29.93
04	VV	001			0.13	FG	58	58	58	100	3	08	28.89	29.91
07	OVC	001			0.75	BR	60	59	59	96	0	00	28.93	29.96
10	OVC	017			6.00	BR	66	62	64	87	0	00	28.95	29.98
13	BKN	250			8.00		76	67	70	74	5	VR	28.95	29.98
16	BKN	250			10.00		78	63	68	60	5	28	28.93	29.96
19	OVC	060			5.00	BR	71	67	68	87	7	09	28.92	29.94
22	SCT	NC			6.00	BR	67	65	66	93	9	03	28.94	29.96
					SUNRISE: 0529	**MAY 17**			**SUNSET: 1935**					
01	BKN	110			5.00	BR	65	63	64	93	5	32	28.94	29.96
04	SCT	NC			3.00	BR	63	62	62	97	6	04	28.95	29.97
07	BKN	250			2.00	BR	63	62	62	97	5	05	28.94	29.97
10	SCT	NC			7.00		72	66	68	82	8	32	28.96	29.98
13	SCT	NC			7.00		77	68	71	74	3	VR	28.93	29.95
16	BKN	060			10.00		81	67	72	62	9	17	28.90	29.92
19	OVC	075			7.00		66	65	65	96	10	13	28.96	29.99
22	BKN	200			10.00		65	63	64	93	6	07	28.97	29.99
					SUNRISE: 0529	**MAY 18**			**SUNSET: 1936**					
01	BKN	110			10.00		64	63	63	96	9	04	28.95	29.96
04	OVC	110			10.00		62	60	61	93	8	06	28.93	29.95
07	BKN	090			10.00		62	60	61	93	8	06	28.97	30.00
10	BKN	150			10.00		67	64	65	91	8	03	29.00	30.02
13	BKN	250			10.00		77	69	72	77	8	01	28.96	29.98
16	SCT	NC			10.00		78	69	72	74	6	30	28.92	29.94
19	BKN	100			10.00		75	68	70	79	5	30	28.92	29.94
22	SCT	NC			10.00		69	67	68	93	5	27	28.99	30.01

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0528	**MAY 19**			**SUNSET: 1937**					
01	SCT	NC			10.00		66	63	64	90	6	31	28.98	30.00
04	SCT	NC			10.00		63	60	61	90	3	35	29.01	30.03
07	SCT	NC			10.00		62	59	60	90	6	02	29.05	30.07
10	SCT	NC			10.00		70	62	65	76	6	02	29.07	30.09
13	BKN	042			10.00		77	66	70	69	6	06	29.05	30.07
16	BKN	070			10.00		78	65	70	64	5	33	29.03	30.05
19	OVC	037			10.00	-RA	73	67	69	81	6	22	29.04	30.06
22	OVC	100			10.00	-RA	68	67	67	96	8	24	29.08	30.10
					SUNRISE: 0527	**MAY 20**			**SUNSET: 1937**					
01	OVC	009			10.00		67	64	65	91	6	27	29.09	30.11
04	OVC	018			10.00		65	59	61	81	6	02	29.13	30.15
07	OVC	020			10.00		63	57	60	81	3	36	29.17	30.19
10	OVC	020			10.00		65	59	61	81	6	24	29.18	30.21
13	BKN	090			10.00		68	61	64	78	5	23	29.16	30.19
16	BKN	030			10.00		72	62	66	71	6	27	29.12	30.14
19	OVC	049			10.00		68	63	65	84	7	27	29.12	30.14
22	OVC	019			10.00		66	62	64	87	5	22	29.13	30.16
					SUNRISE: 0527	**MAY 21**			**SUNSET: 1938**					
01	OVC	039			7.00		65	62	63	90	5	23	29.11	30.14
04	OVC	004			2.00	-RA BR	64	63	63	96	3	26	29.08	30.10
07	OVC	005			1.25	RA BR	64	63	63	96	3	32	29.10	30.13
10	OVC	011			2.50	RA BR	65	63	64	93	0	00	29.11	30.14
13	OVC	021			7.00	-RA	67	64	65	91	5	36	29.07	30.10
16	BKN	200			10.00		71	62	65	73	7	06	29.04	30.06
19	BKN	200			10.00		69	63	65	81	6	08	29.01	30.03
22	BKN	180			10.00		65	63	64	93	3	04	29.03	30.06
					SUNRISE: 0526	**MAY 22**			**SUNSET: 1939**					
01	SCT	NC			9.00		63	62	62	97	5	05	28.99	30.02
04	OVC	006			6.00	BR	62	61	61	96	8	03	28.97	29.99
07	OVC	006			4.00	BR	61	60	60	97	7	04	28.99	30.02
10	OVC	008			7.00		64	61	62	90	6	05	29.00	30.03
13	OVC	016			10.00		67	62	64	84	8	10	28.98	30.01
16	BKN	200			10.00		74	63	67	69	8	04	28.93	29.96
19	BKN	200			10.00		71	63	66	76	6	08	28.94	29.96
22	CLR	NC			9.00		65	61	63	87	9	36	28.96	29.99
					SUNRISE: 0526	**MAY 23**			**SUNSET: 1940**					
01	CLR	NC			8.00		61	58	59	90	5	33	28.96	29.98
04	FEW	NC			6.00	BCFG	58	57	57	97	5	32	28.95	29.98
07	BKN	060			3.00	BR	60	59	59	96	6	04	28.97	30.00
10	SCT	NC			10.00		68	61	64	78	0	00	28.97	29.99
13	SCT	NC			10.00		74	62	66	67	8	27	28.94	29.96
16	BKN	050			10.00		72	62	66	71	13	33	28.91	29.94
19	BKN	055			6.00	HZ	71	59	64	66	6	34	28.92	29.94
22	OVC	049			6.00	HZ	66	60	62	81	3	04	28.95	29.98
					SUNRISE: 0525	**MAY 24**			**SUNSET: 1940**					
01	BKN	046			9.00		63	54	58	73	6	35	28.93	29.96
04	BKN	055			8.00		59	53	56	81	5	35	28.92	29.95
07	BKN	049			10.00		59	52	55	78	3	01	28.96	29.99
10	FEW	NC			10.00		67	49	57	53	7	02	28.96	29.98
13	FEW	NC			10.00		72	53	61	52	6	29	28.93	29.95
16	BKN	250			10.00		73	49	59	43	6	29	28.89	29.92
19	BKN	250			10.00		70	48	58	46	5	27	28.88	29.91
22	FEW	NC			10.00		61	54	57	78	5	05	28.91	29.94

OBSERVATIONS AT 3–HOURLY INTERVALS

KNOXVILLE, TN

MAY 2003 TYS WBAN # 13891

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: 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	CLR	NC			10.00		58	52	55	81	5	02	28.90	29.93
04	OVC	180			9.00		56	53	54	90	0	00	28.88	29.91
07	OVC	110			5.00	BR	56	53	54	90	5	05	28.88	29.91
10	BKN	200			10.00		64	56	59	75	3	VR	28.89	29.92
13	BKN	200			10.00		72	57	63	60	9	25	28.86	29.88
16	OVC	080			5.00	-RA BR	60	56	58	86	8	32	28.87	29.91
19	OVC	037			7.00		60	57	58	90	7	10	28.86	29.88
22	OVC	033			8.00		60	58	59	93	6	02	28.89	29.92
					SUNRISE: 0524	MAY 26			SUNSET: 1942					
01	OVC	023			6.00	BR	60	57	58	90	3	05	28.89	29.91
04	BKN	019			4.00	BR	59	58	58	96	0	00	28.88	29.92
07	BKN	031			5.00	BR	60	58	59	93	5	04	28.92	29.96
10	BKN	019			8.00		63	58	60	84	7	35	28.95	29.98
13	SCT	NC			10.00		68	57	61	68	9	35	28.94	29.97
16	SCT	NC			10.00		73	57	63	57	7	30	28.91	29.93
19	SCT	NC			10.00		70	55	61	59	6	04	28.90	29.93
22	OVC	070			10.00		63	56	59	78	5	36	28.97	30.00
					SUNRISE: 0523	MAY 27			SUNSET: 1943					
01	OVC	042			9.00		61	53	57	75	5	31	28.96	29.98
04	OVC	047			8.00		59	53	56	81	8	35	28.95	29.97
07	BKN	070			6.00	HZ	59	54	56	83	3	03	29.00	30.03
10	BKN	080			8.00		66	56	60	70	6	04	29.03	30.06
13	BKN	050			10.00		71	52	60	51	10	01	29.01	30.03
16	SCT	NC			10.00		73	53	61	50	8	26	28.99	30.02
19	BKN	090			10.00		70	54	61	57	10	03	28.98	30.01
22	BKN	060			10.00		65	53	58	66	0	00	29.02	30.05
					SUNRISE: 0523	MAY 28			SUNSET: 1943					
01	SCT	NC			8.00		60	54	57	80	0	00	29.02	30.05
04	CLR	NC			6.00	BR	54	52	53	93	6	22	29.01	30.03
07	CLR	NC			9.00		57	53	55	87	8	22	29.02	30.05
10	FEW	NC			10.00		69	57	62	66	9	24	29.02	30.04
13	BKN	080			10.00		75	55	63	50	12	28	28.97	29.99
16	BKN	250			10.00		77	52	62	42	10	28	28.90	29.92
19	SCT	NC			10.00		71	55	62	57	7	24	28.86	29.88
22	OVC	110			10.00		66	56	60	70	12	22	28.85	29.87
					SUNRISE: 0522	MAY 29			SUNSET: 1944					
01	OVC	095			10.00		62	58	60	86	8	21	28.76	29.77
04	BKN	085			6.00	BR	59	58	58	96	7	22	28.74	29.75
07	BKN	100			7.00		61	59	60	93	10	23	28.73	29.75
10	SCT	NC			10.00		67	60	63	79	15	25	28.73	29.75
13	OVC	060			10.00		67	52	58	59	14	29	28.73	29.75
16	OVC	065			10.00		65	55	59	70	12	28	28.75	29.77
19	OVC	070			10.00		64	56	59	75	9	29	28.78	29.80
22	BKN	090			9.00		60	58	59	93	6	21	28.81	29.82
					SUNRISE: 0522	MAY 30			SUNSET: 1945					
01	CLR	NC			6.00	BR	56	54	55	93	5	22	28.78	29.80
04	BKN	080			5.00	BR	55	54	54	96	0	00	28.78	29.80
07	SCT	NC			6.00	BR	57	55	56	93	3	24	28.79	29.81
10	SCT	NC			10.00		69	55	61	61	7	23	28.80	29.82
13	BKN	250			10.00		75	55	63	50	14	24	28.78	29.79
16	BKN	250			10.00		77	52	62	42	14	27	28.74	29.76
19	SCT	NC			10.00		73	54	62	51	6	27	28.71	29.73
22	FEW	NC			10.00		63	57	59	81	6	23	28.72	29.73

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE: OBSERVATION TIME (LST)	SATELLITE: EFF CLD AMT Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE ℉: DRY BULB	TEMPERATURE ℉: DEW POINT	TEMPERATURE ℉: WET BULB	RELATIVE HUMIDITY (PCT)	WIND: SPEED (MPH)	WIND: DIRECTION TENS OF DEG	PRESSURE (INCHES,HG): STATION	PRESSURE (INCHES,HG): SEA LEVEL
					SUNRISE: 0522	MAY 31			SUNSET: 1945					
01	BKN	090			10.00		66	53	59	63	13	22	28.68	29.69
04	BKN	100			10.00		69	54	60	59	17	23	28.57	29.58
07	SCT	NC			10.00		70	61	64	73	14	24	28.56	29.57
10	BKN	032			8.00		75	66	69	74	16	24	28.54	29.55
13	SCT	NC			10.00		80	60	67	51	24	29	28.57	29.57
16	BKN	080			10.00		75	55	63	50	21	29	28.66	29.67
19	SCT	NC			10.00		71	56	62	59	12	28	28.71	29.71
22	BKN	075			10.00		66	55	60	68	14	36	28.79	29.80

3–HOURLY OBSERVATION NOTES

Sky Cover is the amount of the sky obscured. CLR or SKC = 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			63	58	60	85	28.92	29.94	8.49	6	3	25
02			62	58	60	87	28.91	29.93	7.98	6	2	25
03			61	58	59	88	28.91	29.93	7.48	6	2	25
04			61	58	59	88	28.91	29.93	6.94	5	1	25
05			61	57	59	90	28.92	29.94	6.65	5	2	26
06			60	57	59	90	28.93	29.95	5.69	5	1	23
07			61	58	60	90	28.94	29.96	6.24	6	2	24
08			63	59	61	86	28.94	29.97	6.74	7	3	24
09			66	60	62	82	28.95	29.98	7.84	9	4	24
10			68	60	63	77	28.95	29.97	8.58	7	4	25
11			70	60	64	73	28.94	29.97	8.86	8	4	25
12			72	60	65	68	28.93	29.95	9.11	9	6	25
13			73	60	65	66	28.92	29.94	9.45	10	6	27
14			74	60	65	64	28.91	29.93	9.87	10	7	27
15			74	60	65	62	28.90	29.92	9.77	11	8	26
16			74	59	65	63	28.89	29.91	9.32	10	7	26
17			73	60	65	64	28.89	29.92	9.29	10	6	27
18			72	60	65	67	28.89	29.91	8.95	9	5	27
19			70	60	64	72	28.90	29.92	8.92	7	3	24
20			68	60	63	75	28.90	29.93	9.13	7	2	25
21			67	59	62	78	28.92	29.94	9.10	7	2	27
22			65	60	62	83	28.92	29.95	9.32	6	1	26
23			64	59	61	82	28.93	29.95	9.10	6	2	31
24			63	58	60	84	28.92	29.95	8.68	5	2	25

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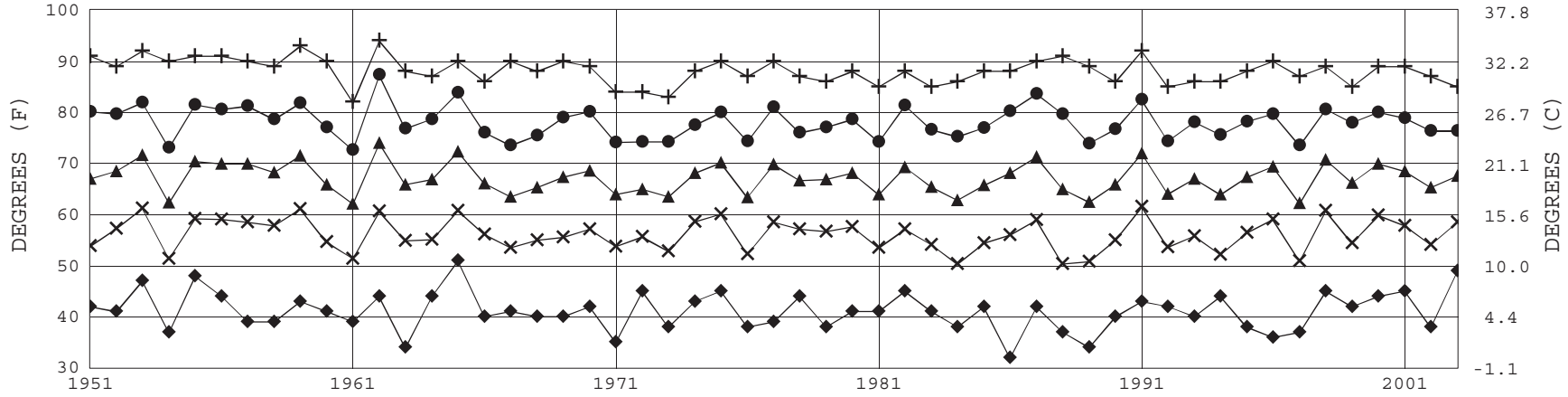
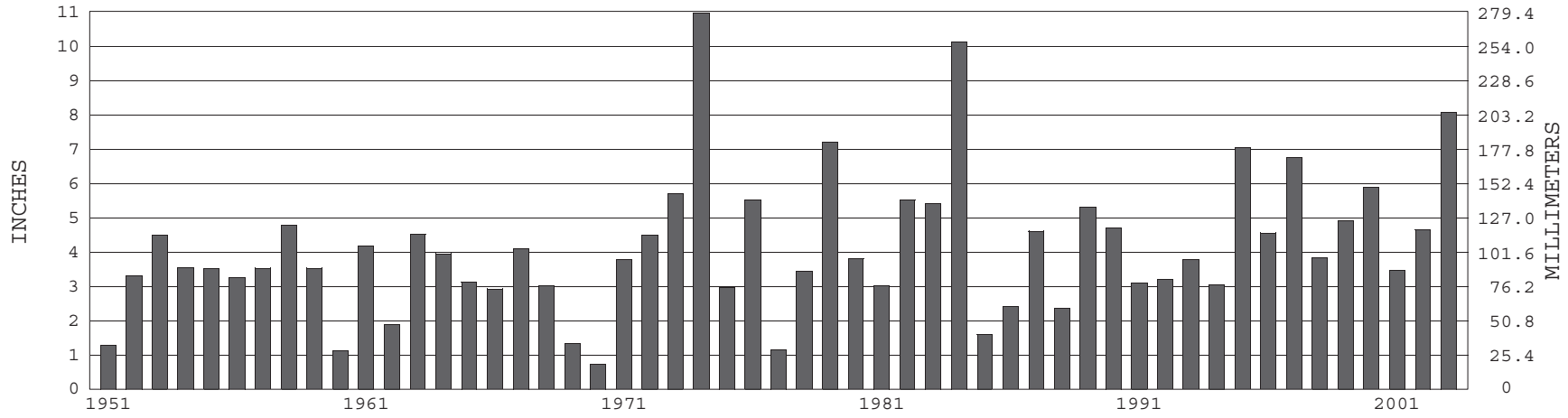
KNOXVILLE, TN MAY TEMPERATURES



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

Long-Term (1951-2003) Mean: 67.1 1961-1990 Normal: 66.0

KNOXVILLE, TN MAY PRECIPITATION



Long-Term (1951-2003) Mean Monthly Total: 4.13 1961-1990 Normal: 4.68

MAY 2003

KNOXVILLE, TN

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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Thomas R Karl

DIRECTOR

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