



MARCH 1998

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

MARCH 1998
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	58	40	49	5	37	44	16	0	RA DZ BR	0		0.0	0.11	28.75	29.79	2.9	28	6.4	24	27	21	27	01																																		
02	50	32	41	-4	29	36	24	0	RA SN	0		T	0.03	28.73	29.77	4.2	28	5.9	31	28	25	29	02																																		
03	40	30	35	-10	27	32	30	0	SN	0		T	T	28.82	29.87	9.2	26	9.8	21	25	17	26	03																																		
04	54	35	45	0	31	39	20	0	RA SN BR	0		T	0.01	28.91	29.96	9.2	24	9.8	26	26	21	26	04																																		
05	54	45	50	4	41	45	15	0		0		0.0	0.00	28.96	30.01	0.7	28	5.8	18	23	16	23	05																																		
06	61	45	53	7	46	49	12	0	RA BR HZ	0		0.0	0.07	28.98	30.02	2.5	04	3.8	11	04	10	03	06																																		
07	60	47	54	8	49	50	11	0	RA BR	0		0.0	0.07	28.87	29.91	4.8	05	5.8	16	16	10	16	07																																		
08	73	52	63	16	54	57	2	0	RA BR	0		0.0	0.99	28.51	29.53	5.4	18	11.1	37	20	29	20	08																																		
09	59	35	47	0	36	41	18	0	RA DZ SN BR	0		T	0.32	28.63	29.66	17.6	26	18.5	34	26	30	26	09																																		
10	35	27	31	-16	16	26	34	0	SN BR	0		T	T	29.16	30.24	8.9	33	10.2	25	29	21	29	10																																		
11	37	22	30	-18	13	24	35	0	SN	0		T	T	29.33	30.41	5.5	36	9.2	24	33	21	29	11																																		
12	35	18	27*	-21	10	21	38	0		0		0.0	0.00	29.45	30.54	4.9	03	6.1	18	33	15	04	12																																		
13	46	16*	31	-17	15	27	34	0		0		0.0	0.00	29.29	30.37	6.5	24	7.0	24	26	21	25	13																																		
14	61	36	49	1	32	42	16	0		0		0.0	0.00	29.15	30.21	10.8	26	12.0	29	27	23	23	14																																		
15	59	32	46	-3	21	37	19	0		0		0.0	0.00	29.22	30.27	3.0	02	3.7	11	03	10	01	15																																		
16	49	40	45	-4	40	43	20	0	RA BR	0		0.0	0.20	29.19	30.25	9.0	05	9.1	15	05	14	05	16																																		
17	61	41	51	2	44	47	14	0	RA BR HZ	0		0.0	T	29.07	30.12	6.0	04	6.4	14	04	13	04	17																																		
18	52	48	50	0	47	49	15	0	TSRA RA BR	0		0.0	1.50	28.96	30.00	2.0	01	5.0	18	30	15	29	18																																		
19	68	49	59	9	51	54	6	0	FG+ BR HZ	0		0.0	0.00	28.78	29.81	2.7	05	4.2	14	04	11	04	19																																		
20	61	41	51	1	44	47	14	0	TS TSRA RA BR	0		0.0	1.01	28.53	29.55	11.7	26	15.1	41*	28	32*	27	20																																		
21	41	36	39	-12	33	36	26	0	RA BR UP	0		0.0	0.09	28.67	29.71	10.2	26	10.7	23	27	18	29	21																																		
22	51	37	44	-7	30	37	21	0		0		0.0	0.00	28.87	29.92	5.3	27	6.2	20	29	16	29	22																																		
23	48	32	40	-11	31	36	25	0	RA HZ	0		0.0	0.17	29.00	30.06	4.5	24	5.7	20	25	16	22	23																																		
24	55	33	44	-7	34	39	21	0	FG+ BR HZ	0		0.0	0.00	29.15	30.22	2.8	08	3.8	13	09	9	05	24																																		
25	70	38	54	2	40	47	11	0	RA	0		0.0	0.01	29.27	30.32	4.6	24	6.1	30	22	24	23	25																																		
26	77	47	62	10	46	54	3	0		0		0.0	0.00	29.26	30.30	10.0	25	10.8	34	22	26	22	26																																		
27	78	57	68	16	50	58	0	3		0		0.0	0.00	29.11	30.14	10.1	23	11.0	31	20	23	20	27																																		
28	79	60	70	17	52	59	0	5		0		0.0	0.00	28.98	30.00	13.1	23	13.8	33	26	29	21	28																																		
29	81	61	71	18	53	60	0	6		0		0.0	0.00	29.01	30.03	7.0	25	7.7	22	23	18	23	29																																		
30	84*	53	69	16	53	60	0	4		0		0.0	0.00	28.93	29.95	6.7	23	8.1	23	23	21	24	30																																		
31	80	62	71*	18	56	63	0	6	TSRA RA BR	0		0.0	0.17	28.80	29.82	12.1	20	13.0	38	22	31	22	31																																		
58.6										40.2		49.4		■ ■		37.5		43.8		16.1		0.8		< MONTHLY AVERAGES		TOTALS-->		T		4.75		28.98		30.02		3.0		26		8.5		<- MONTHLY AVERAGES															
-2.7										3.6		0.4		■ ■		<----- DEPARTURE FROM NORMAL ----->																				- .34		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																			
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.50 DATE :18										SEA LEVEL PRESSURE										DATE		TIME																									
MONTHLY										GREATEST 24-HR SNOWFALL: T DATE :11+										MAXIMUM										:		30.65		12 1011																							
TOTAL DEPARTURE										GREATEST SNOW DEPTH: 0 DATE :										MINIMUM										:		29.28		08 2337																							
HEATING: 500 4 3355 -254										NUMBER OF DAYS WITH =>										MAXIMUM TEMP ≥ 90: 0										MINIMUM TEMP ≤ 32: 8										PRECIPITATION ≥ 0.01 INCH : 14																	
COOLING: 24 24 24 24																				MAXIMUM TEMP ≤ 32 : 0										MINIMUM TEMP ≤ 0 : 0										PRECIPITATION ≥ 0.10 INCH : 8																	
																				THUNDERSTORMS : 3										HEAVY FOG : 2										SNOWFALL ≥ 1.0 INCH : 0																	

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN

MARCH 1998

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	0.02	0.04	0.01	T	0.04	T	T						01												01		0.11		
02													02				0.02	T	0.01	T					02		0.03		
03					T								03			T									03		T		
04													04												04		0.01		
05													05												05		0.00		
06													06	0.01							T		T		06		0.07		
07	T	T											07	0.02	0.01	T					T		T		07	0.97	0.07		
08		0.03	0.11	0.10	0.17	0.02	T						08						0.03	0.10	0.19	0.07	0.03	0.12	08	0.34	0.99		
09	0.28	0.05	T	T	T	T	T						09		T			T			T	T			09		0.32		
10	T	T		T	T	T							10	T	T	T									10		T		
11													11												11		T		
12													12								T		T		12		0.00		
13													13												13		0.00		
14													14												14		0.00		
15													15												15		0.00		
16	T	T	T	0.03	0.04	0.04	0.03	0.02	0.01	T	0.01	0.01	16	0.01											16		0.20		
17													17			T	T				T				17		T		
18	T												18	0.01	0.06	0.27	0.46	0.23	0.16	0.08	0.04	0.03	T	T	18		1.50		
19													19												19		0.00		
20			0.01	0.34	0.38	0.15	0.02	0.08	0.01				20					T	0.02	T		T		T	20		1.01		
21	0.04	0.03	0.02	T	T	T							21							T	T				21		0.09		
22													22												22		0.00		
23													23			0.01	0.03	0.06	0.04	0.03	T			23		0.17			
24													24												24		0.00		
25						0.01	T						25												25		0.01		
26													26												26		0.00		
27													27												27		0.00		
28													28												28		0.00		
29													29												29		0.00		
30													30												30		0.00		
31													31												31	0.16	0.17		

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 MARCH 1998

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.

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
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01	298	44					3.00	10.00	
02	246						7.00	10.00	
03	126						8.00	10.00	
04	389						5.00	10.00	
05	122	18					9.00	10.00	
06	273	39					3.00	10.00	
07	0	0					2.50	10.00	
08	165						2.00	10.00	
09	9						3.00	10.00	
10	242						1.00	10.00	
11	338						9.00	10.00	
12	479	68					10.00	10.00	
13	267	38					10.00	10.00	
14	369	52					10.00	10.00	
15	348						10.00	10.00	
16	35						4.00	10.00	
17	171						5.00	10.00	
18	0	0					1.50	10.00	
19	492	68					.25	10.00	
20	335	46					2.50	10.00	
21	0						6.00	10.00	
22	332						9.00	10.00	
23	56						4.00	10.00	
24	407						.25	10.00	
25	493	67					7.00	10.00	
26	389	52					10.00	10.00	
27	462	62					10.00	10.00	
28	365						10.00	10.00	
29	560						10.00	10.00	
30	367	49					8.00	10.00	
31	423	56					5.00	10.00	
MONTHLY AVGS							5.97	10.00	
SUNSHINE (MINUTES)									
Total: 8558 Possible: 22295 Percent Possible: 38									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 31									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 2 10 15									

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

MARCH 1998

TYS

WBAN # 13891

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)		HOUR (LST)	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: 0555				MAR 01	SUNSET: 1719				SUNRISE: 0547				MAR 07	SUNSET: 1724													
01	OVC	050		9.00	-RA	49	43	46	80	8	20	28.81	29.83	01	OVC	046		7.00	-RA	51	47	49	86	6	02	28.96	30.00
04	BKN	070		10.00		44	43	44	96	7	08	28.79	29.82	04	SCT	NC		5.00	BR	48	46	47	93	5	01	28.92	29.96
07	SCT	NC		9.00		41	40	41	96	6	09	28.77	29.81	07	CLR	NC		3.00	BR	47	45	46	93	6	05	28.95	30.00
10	SCT	NC		10.00		49	43	46	80	5	04	28.78	29.81	10	FEW	NC		6.00	BR	51	47	49	86	8	02	28.95	29.99
13	SCT	NC		10.00		57	32	46	39	9	25	28.73	29.76	13	BKN	021		2.50	-RA BR	52	50	51	93	7	03	28.99	29.93
16	BKN	095		10.00		56	29	44	36	10	24	28.69	29.72	16	OVC	055		4.00	BR	54	51	52	90	6	06	28.83	29.87
19	BKN	100		10.00		53	30	43	41	5	29	28.70	29.73	19	OVC	060		5.00	BR	54	51	52	90	8	05	28.77	29.80
22	BKN	075		10.00		48	32	41	54	7	25	28.75	29.78	22	OVC	065		10.00		59	49	54	69	9	16	28.76	29.79
SUNRISE: 0553				MAR 02	SUNSET: 1719				SUNRISE: 0545				MAR 08	SUNSET: 1725													
01	OVC	055		10.00		44	31	38	60	9	01	28.78	29.81	01	OVC	047		8.00	-RA	53	51	52	93	6	03	28.69	29.72
04	SCT	NC		10.00		40	30	36	68	5	10	28.75	29.78	04	OVC	029		4.00	RA BR	52	51	52	97	6	05	28.62	29.65
07	FEW	NC		10.00		38	29	34	70	0	00	28.73	29.77	07	BKN	095		10.00		52	51	51	97	6	36	28.53	29.56
10	BKN	100		10.00		43	31	38	63	0	00	28.72	29.75	10	BKN	080		10.00		65	53	58	66	21	20	28.53	29.55
13	BKN	060		10.00		48	25	39	41	9	25	28.68	29.71	13	OVC	050		10.00		68	53	59	59	16	18	28.53	29.55
16	OVC	019		7.00	-RA	40	36	38	86	17	28	28.69	29.73	16	BKN	049		10.00		71	55	62	57	13	20	28.47	29.47
19	OVC	032		10.00		37	32	35	82	14	29	28.74	29.79	19	OVC	055		10.00	-RA	65	56	60	73	14	17	28.44	29.45
22	BKN	100		10.00		36	25	32	64	6	29	28.78	29.83	22	OVC	080		7.00	RA	60	57	58	90	6	08	28.39	29.39
SUNRISE: 0552				MAR 03	SUNSET: 1720				SUNRISE: 0544				MAR 09	SUNSET: 1726													
01	BKN	085		10.00		31	26	29	82	8	25	28.75	29.79	01	OVC	012		3.00	-RA BR	56	54	55	93	15	21	28.37	29.38
04	OVC	040		9.00		33	29	31	85	10	25	28.74	29.79	04	BKN	050		10.00		52	47	49	83	17	24	28.39	29.40
07	OVC	049		10.00		32	25	29	75	9	28	28.78	29.83	07	OVC	030		10.00		49	42	46	77	17	25	28.47	29.48
10	BKN	033		9.00		35	26	32	70	7	27	28.83	29.88	10	OVC	037		10.00		44	34	40	68	21	25	28.56	29.59
13	OVC	039		10.00		38	23	32	55	13	26	28.84	29.89	13	OVC	032		10.00		43	34	39	71	24	24	28.62	29.65
16	OVC	036		10.00		40	25	34	55	13	29	28.82	29.87	16	OVC	033		10.00		41	30	36	65	15	25	28.71	29.74
19	OVC	070		10.00		38	29	34	70	8	31	28.86	29.92	19	OVC	034		10.00		39	31	36	73	22	26	28.81	29.85
22	SCT	NC		10.00		34	30	32	85	8	25	28.88	29.95	22	OVC	023		7.00	-SN	36	27	32	70	14	29	28.90	29.96
SUNRISE: 0551				MAR 04	SUNSET: 1721				SUNRISE: 0543				MAR 10	SUNSET: 1727													
01	OVC	070		10.00		35	31	33	85	8	23	28.89	29.95	01	OVC	036		9.00	-SN	34	23	30	64	15	29	28.96	30.02
04	OVC	065		10.00		36	31	34	82	5	24	28.88	29.94	04	OVC	009		1.00	-SN	30	25	28	82	13	34	29.01	30.07
07	OVC	031		5.00	-SN BR	36	32	34	86	7	25	28.93	29.99	07	OVC	043		10.00		30	18	26	61	10	32	29.09	30.15
10	FEW	NC		10.00		41	36	39	82	13	22	28.94	30.00	10	BKN	035		10.00		30	16	25	56	10	32	29.17	30.23
13	SCT	NC		10.00		49	28	40	45	16	26	28.93	29.98	13	BKN	047		9.00	-SN	32	14	26	47	10	32	29.18	30.24
16	FEW	NC		10.00		52	27	41	38	10	22	28.87	29.91	16	BKN	047		10.00		32	14	26	47	12	36	29.21	30.28
19	SCT	NC		10.00		49	30	41	48	9	23	28.87	29.93	19	OVC	045		10.00		28	12	23	51	9	36	29.26	30.35
22	OVC	070		10.00		49	34	42	57	13	28	28.91	29.96	22	BKN	050		10.00		27	12	23	53	7	01	29.32	30.40
SUNRISE: 0549				MAR 05	SUNSET: 1722				SUNRISE: 0541				MAR 11	SUNSET: 1728													
01	OVC	060		10.00		47	35	42	63	14	26	28.95	29.99	01	OVC	044		10.00		27	12	23	53	9	04	29.30	30.38
04	OVC	028		10.00		45	38	42	77	8	23	28.94	29.99	04	OVC	042		10.00		26	13	22	57	8	05	29.30	30.39
07	OVC	029		10.00		45	40	43	83	5	24	28.98	30.03	07	FEW	NC		10.00		23	11	20	60	5	03	29.32	30.41
10	OVC	026		9.00		46	41	44	83	3	24	29.00	30.05	10	FEW	NC		10.00		29	12	24	49	5	VR	29.35	30.43
13	OVC	030		10.00		51	43	47	74	5	VR	28.96	30.01	13	SCT	NC		10.00		35	14	28	42	12	25	29.33	30.41
16	OVC	039		10.00		53	42	48	66	6	01	28.93	29.98	16	BKN	080		10.00		36	11	28	35	9	26	29.24	30.32
19	OVC	041		10.00		52	42	47	69	7	08	28.94	29.98	19	OVC	041		10.00		29	19	26	66	13	34	29.31	30.40
22	OVC	045		10.00		50	42	46	74	3	36	28.94	29.99	22	CLR	NC		10.00		24	11	20	57	14	01	29.42	30.50
SUNRISE: 0548				MAR 06	SUNSET: 1723				SUNRISE: 0540				MAR 12	SUNSET: 1728													
01	OVC	049		10.00		49	41	45	74	0	00	28.96	30.01	01	BKN	038		10.00		21	12	19	68	12	02	29.46	30.54
04	OVC	055		6.00	-RA BR	46	44	45	93	3	03	28.94	29.99	04	SCT	NC		10.00		20	12	18	71	5	02	29.46	30.54
07	OVC	029		5.00	BR	45	43	44	93	7	03	28.97	30.01	07	SCT	NC		10.00		18	12	16	77	5	36	29.52	30.61
10	OVC	065		4.00	BR	47	44	46	90	7	06	29.01	30.06	10	BKN	031		10.00		24	9	20	52	7	04	29.55	30.65
13	BKN	065		10.00		56	46	51	70	0	00	29.00	30.04	13	FEW	NC		10.00		30	8	24	39	8	10	29.48	30.57
16	OVC	045		10.00		60	48	54	65	0	00	28.97	30.01	16	CLR	NC		10.00		34	7	26	32	5	VR	29.41	30.50
19	OVC	030		10.00		57	48	52	72	0	00	28.96	30.01	19	CLR	NC		10.00		31	5	24	33	6	02	29.39	30.48
22	OVC	075		10.00		55	46	50	72	3	03	28.98	30.02	22	CLR	NC		10.00		29	7	23	39	5	04	29.38	30.47

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

MARCH 1998

TYS

WBAN # 13891

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)		HOUR (LST)	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)
SUNRISE: 0538				MAR 13				SUNSET: 1729				SUNRISE: 0530				MAR 19				SUNSET: 1734						
01	CLR	NC		10.00	22	12	19	66	0	00	29.36	30.45	01	OVC	005		1.50	BR	50	49	49	96	0	00	28.88	29.92
04	CLR	NC		10.00	19	15	18	85	0	00	29.34	30.42	04	OVC	002		1.50	BR	51	49	50	92	3	21	28.87	29.91
07	FEW	NC		10.00	17	12	16	80	0	00	29.36	30.45	07	OVC	003		0.25	FG	50	49	49	96	0	00	28.87	29.91
10	FEW	NC		10.00	29	15	25	56	0	00	29.37	30.46	10	OVC	006		7.00		55	51	53	87	0	00	28.88	29.92
13	BKN	080		10.00	43	14	33	31	15	24	29.30	30.38	13	BKN	023		10.00		62	53	57	73	5	VR	28.84	29.86
16	OVC	065		10.00	44	14	34	30	10	24	29.23	30.31	16	FEW	NC		10.00		67	53	59	61	10	03	28.72	29.74
19	FEW	NC		10.00	40	18	32	41	10	24	29.21	30.28	19	FEW	NC		10.00		61	51	56	70	6	07	28.68	29.70
22	CLR	NC		10.00	36	18	30	48	8	24	29.20	30.27	22	FEW	NC		10.00		56	51	53	84	6	06	28.62	29.64
SUNRISE: 0537				MAR 14				SUNSET: 1730				SUNRISE: 0529				MAR 20				SUNSET: 1735						
01	CLR	NC		10.00	39	22	33	50	14	25	29.15	30.21	01	FEW	NC		10.00		53	49	51	86	7	06	28.53	29.55
04	CLR	NC		10.00	37	24	32	60	10	24	29.14	30.20	04	OVC	016		2.50	+TSRA BR	53	50	51	89	12	24	28.59	29.62
07	BKN	032		10.00	43	26	36	51	14	23	29.15	30.21	07	OVC	023		9.00	-RA	54	50	52	87	12	25	28.50	29.51
10	OVC	028		10.00	49	34	42	57	17	23	29.18	30.24	10	SCT	NC		10.00		56	51	53	84	12	23	28.51	29.52
13	SCT	NC		10.00	58	40	49	51	16	26	29.15	30.20	13	SCT	NC		10.00		58	42	50	56	16	26	28.48	29.50
16	FEW	NC		10.00	59	38	49	46	14	29	29.11	30.16	16	BKN	060		10.00		51	38	45	61	23	28	28.52	29.54
19	FEW	NC		10.00	54	36	46	51	7	29	29.13	30.18	19	BKN	095		10.00		42	38	40	85	13	23	28.56	29.60
22	CLR	NC		10.00	50	35	43	57	6	30	29.17	30.22	22	OVC	030		10.00		43	38	41	82	12	24	28.58	29.61
SUNRISE: 0536				MAR 15				SUNSET: 1731				SUNRISE: 0527				MAR 21				SUNSET: 1736						
01	FEW	NC		10.00	43	21	35	42	3	02	29.20	30.24	01	OVC	015		7.00	-RA	39	35	37	86	9	28	28.58	29.61
04	CLR	NC		10.00	38	20	31	48	3	36	29.21	30.25	04	OVC	006		10.00	-RA	36	35	36	97	14	24	28.55	29.59
07	CLR	NC		10.00	33	21	29	61	0	00	29.25	30.32	07	OVC	009		10.00		37	34	36	89	13	24	28.58	29.63
10	CLR	NC		10.00	43	23	35	45	8	04	29.29	30.35	10	OVC	015		10.00		38	33	36	83	12	26	28.64	29.69
13	CLR	NC		10.00	52	17	39	25	7	06	29.25	30.31	13	OVC	028		10.00		40	32	37	73	14	28	28.66	29.70
16	FEW	NC		10.00	57	20	42	24	0	00	29.18	30.23	16	OVC	038		10.00		39	32	36	76	10	28	28.68	29.73
19	CLR	NC		10.00	54	18	40	24	0	00	29.18	30.23	19	OVC	019		6.00	-RA BR	37	32	35	82	9	31	28.76	29.81
22	OVC	075		10.00	48	25	39	41	3	03	29.18	30.23	22	OVC	020		10.00		37	32	35	82	6	26	28.81	29.86
SUNRISE: 0534				MAR 16				SUNSET: 1732				SUNRISE: 0526				MAR 22				SUNSET: 1737						
01	OVC	060		10.00	47	30	40	52	7	03	29.18	30.22	01	OVC	020		10.00		37	32	35	82	6	24	28.82	29.87
04	OVC	060		10.00	41	31	37	67	10	05	29.19	30.24	04	OVC	023		10.00		37	33	35	86	3	29	28.82	29.87
07	OVC	038		6.00	40	38	39	93	8	05	29.21	30.27	07	OVC	036		10.00		37	32	35	82	7	27	28.87	29.92
10	OVC	007		4.00	43	41	42	93	9	06	29.25	30.31	10	OVC	040		10.00		39	34	37	82	5	32	28.88	29.94
13	OVC	008		7.00	46	43	45	89	7	04	29.22	30.28	13	BKN	045		10.00		45	28	38	52	7	31	28.89	29.94
16	OVC	008		6.00	48	44	46	86	8	05	29.16	30.22	16	OVC	065		10.00		50	28	41	43	10	29	28.85	29.89
19	OVC	010		5.00	47	45	46	93	9	02	29.17	30.22	19	FEW	NC		10.00		47	25	38	42	8	33	28.88	29.93
22	SCT	NC		4.00	46	44	45	93	12	05	29.17	30.22	22	BKN	070		10.00		42	27	36	55	5	25	28.93	29.99
SUNRISE: 0533				MAR 17				SUNSET: 1733				SUNRISE: 0524				MAR 23				SUNSET: 1738						
01	CLR	NC		5.00	45	42	44	90	8	05	29.15	30.20	01	OVC	070		10.00		37	29	34	73	0	00	28.95	30.01
04	CLR	NC		5.00	43	40	42	89	7	05	29.12	30.16	04	OVC	080		10.00		34	30	32	85	3	19	28.95	30.01
07	BKN	100		5.00	41	38	40	89	8	06	29.14	30.19	07	BKN	065		10.00		35	30	33	82	0	00	28.99	30.04
10	SCT	NC		6.00	50	43	47	77	9	04	29.11	30.16	10	OVC	055		10.00		44	30	38	58	7	26	29.03	30.09
13	OVC	046		10.00	56	46	51	70	5	09	29.07	30.11	13	OVC	055		10.00		46	31	40	56	9	24	29.02	30.07
16	BKN	065		10.00	59	48	53	67	5	01	29.02	30.07	16	OVC	048		10.00		46	31	40	56	12	23	28.96	30.02
19	OVC	075		10.00	54	47	50	77	6	01	29.02	30.06	19	OVC	034		4.00	RA	41	32	37	70	6	30	29.02	30.08
22	OVC	042		10.00	50	45	47	83	7	03	29.03	30.07	22	OVC	046		7.00		40	32	37	73	7	19	29.07	30.12
SUNRISE: 0531				MAR 18				SUNSET: 1734				SUNRISE: 0523				MAR 24				SUNSET: 1739						
01	OVC	043		10.00	49	45	47	86	5	04	29.02	30.06	01	CLR	NC		3.00	BR	36	32	34	86	0	00	29.05	30.11
04													04	OVC	001		0.25	FG	34	32	33	92	0	00	29.07	30.13
07	OVC	039		10.00	49	44	47	83	6	03	29.00	30.05	07	OVC	007		4.00	BR	38	36	37	93	8	07	29.13	30.19
10	OVC	039		7.00	50	46	48	86	5	31	29.00	30.04	10	OVC	006		4.00	BR	40	37	39	89	6	07	29.19	30.25
13	OVC	035		7.00	51	49	50	92	3	VR	28.94	29.98	13	FEW	NC		10.00		47	39	43	74	6	04	29.20	30.26
16	OVC	011		1.50	49	48	48	97	9	17	28.95	30.00	16	FEW	NC		10.00		54	33	44	45	5	VR	29.17	30.22
19	OVC	002		2.00	50	49	49	96	7	03	28.91	29.95	19	CLR	NC		10.00		51	32	43	48	3	09	29.18	30.24
22	OVC	025		1.50	50	49	49	96	0	00	28.90	29.95	22	CLR	NC		10.00		47	32	40	56	3	09	29.21	30.27

OBSERVATIONS AT 3-HOURLY INTERVALS

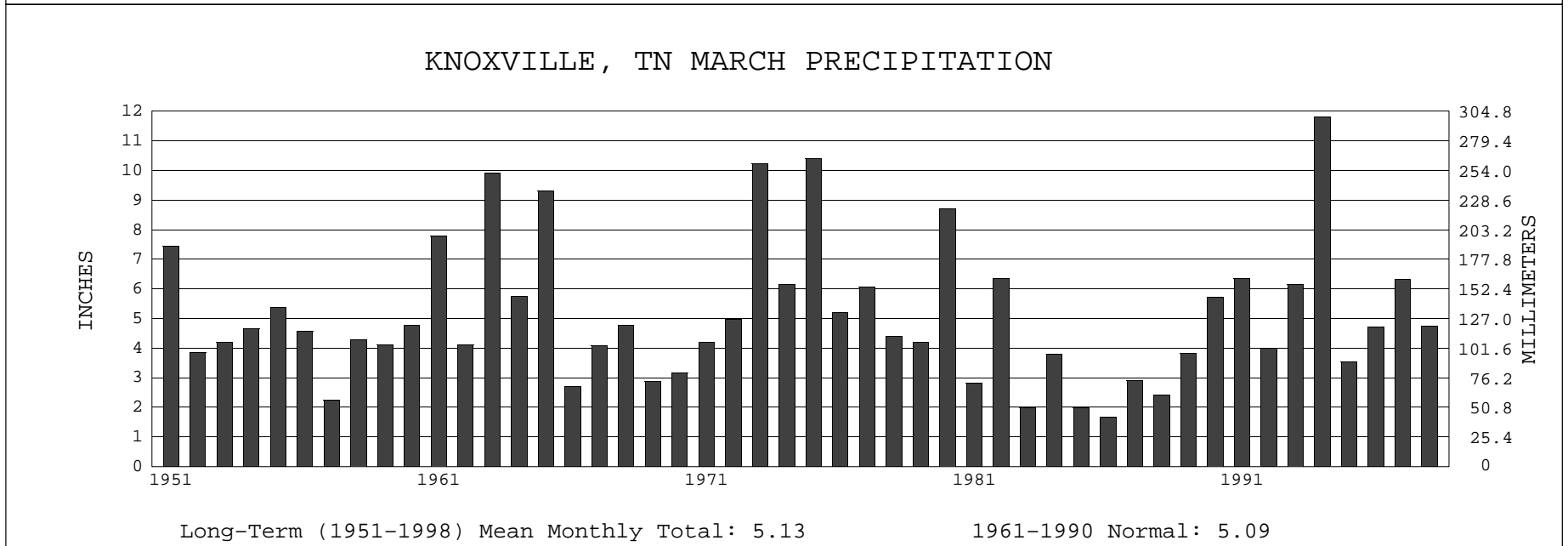
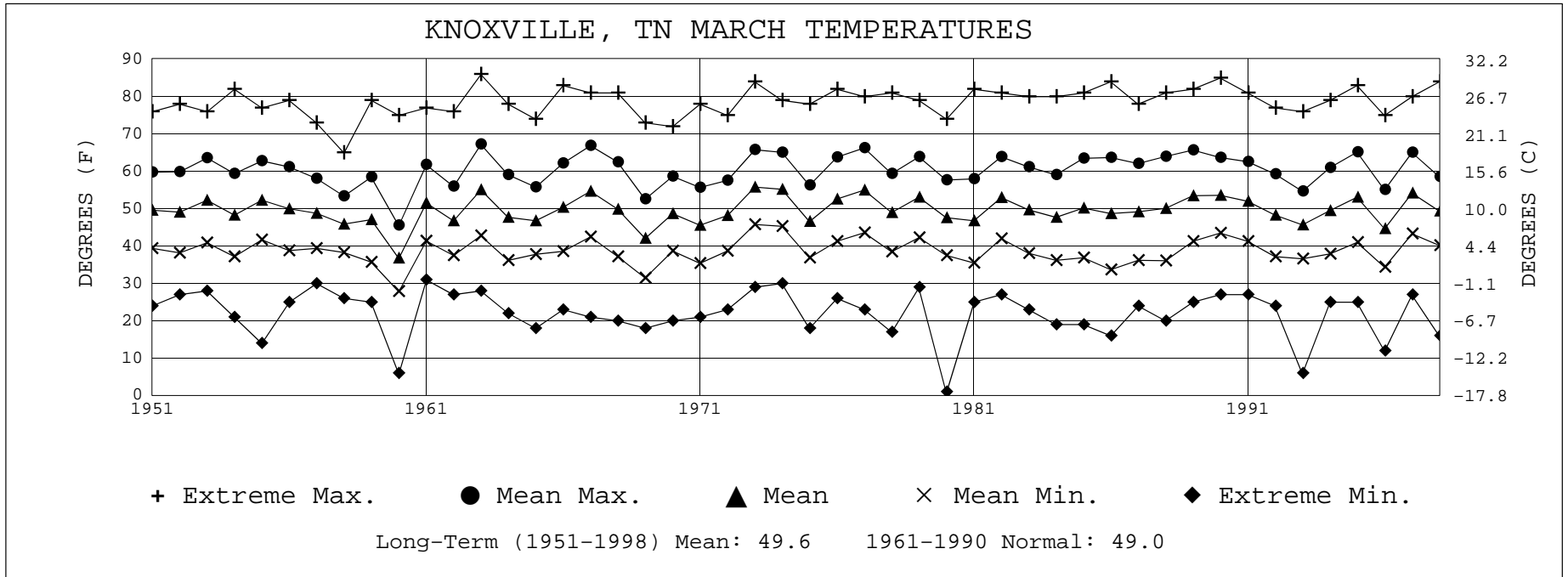
KNOXVILLE, TN

MARCH 1998

TYS

WBAN # 13891

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE ° F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE ° F				WIND		PRESSURE (INCHES, HG)													
	SKY COVER	CEILING		OBSERVATION TIME (LST)	EFF CLD AMT Okltas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION		SEA LEVEL	SKY COVER		CEILING	OBSERVATION TIME (LST)		EFF CLD AMT Okltas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL										
SUNRISE: 0521							MAR 25							SUNSET: 1740							SUNRISE: 0513							MAR 31							SUNSET: 1745						
01	CLR	NC			10.00		40	33	37	77	0	00	29.21	30.27	01	FEW	NC			10.00		66	54	59	65	8	24	28.86	29.87												
04	OVC	050			8.00		41	37	39	86	0	00	29.23	30.29	04	FEW	NC			10.00		66	52	58	61	7	20	28.83	29.83												
07	OVC	085			8.00		42	38	40	85	0	00	29.28	30.34	07	FEW	NC			10.00		65	52	58	63	6	21	28.86	29.87												
10	SCT	NC			10.00		51	38	45	61	5	07	29.34	30.40	10	SCT	NC			10.00		75	57	64	54	21	22	28.88	29.90												
13	FEW	NC			10.00		63	45	53	52	7	28	29.30	30.35	13	BKN	090			10.00		79	60	67	52	20	22	28.86	29.87												
16	SCT	NC			10.00		70	44	56	39	14	23	29.22	30.27	16	SCT	NC			10.00		80	56	65	44	16	19	28.75	29.76												
19	FEW	NC			10.00		62	39	51	43	13	23	29.24	30.30	19	BKN	120			10.00		75	56	63	52	16	18	28.71	29.72												
22	CLR	NC			10.00		56	40	48	55	7	25	29.28	30.34	22	SCT	NC			10.00		74	58	64	57	10	21	28.71	29.72												
SUNRISE: 0520							MAR 26							SUNSET: 1740							3-HOURLY OBSERVATION NOTES																				
01	CLR	NC			10.00		50	41	46	71	5	29	29.28	30.33	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 Visibility = 8/8.																										
04	CLR	NC			10.00		52	43	48	72	9	26	29.27	30.32	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.																										
07	SCT	NC			10.00		52	43	48	72	9	28	29.32	30.37	NC= No ceiling detected.																										
10	FEW	NC			10.00		65	49	56	56	12	24	29.35	30.39	& = Original observation contained additional weather elements.																										
13	CLR	NC			10.00		74	48	59	40	16	23	29.30	30.34	See page 3 for additional notes.																										
16	CLR	NC			10.00		76	50	61	40	15	28	29.21	30.25																											
19	CLR	NC			10.00		70	49	58	47	12	26	29.19	30.22																											
22	CLR	NC			10.00		64	47	55	54	8	20	29.21	30.24																											
SUNRISE: 0518							MAR 27							SUNSET: 1741																											
01	CLR	NC			10.00		61	49	54	65	8	24	29.21	30.24																											
04	CLR	NC			10.00		59	49	54	69	8	24	29.17	30.20																											
07	FEW	NC			10.00		59	48	53	67	6	26	29.20	30.23																											
10	FEW	NC			10.00		70	53	60	55	12	24	29.21	30.25																											
13	FEW	NC			10.00		75	54	63	48	9	26	29.16	30.18																											
16	FEW	NC			10.00		77	52	62	42	18	25	29.04	30.06																											
19	FEW	NC			10.00		74	47	59	38	14	20	28.99	30.01																											
22	CLR	NC			10.00		70	49	58	47	15	20	28.99	30.01																											
SUNRISE: 0517							MAR 28							SUNSET: 1742																											
01	CLR	NC			10.00		65	50	57	59	10	22	28.99	30.01																											
04	FEW	NC			10.00		62	51	56	67	9	21	28.98	30.00																											
07	CLR	NC			10.00		61	52	56	72	9	22	29.01	30.04																											
10	CLR	NC			10.00		71	51	60	49	23	21	29.02	30.04																											
13	SCT	NC			10.00		77	53	63	44	15	21	28.98	30.00																											
16	FEW	NC			10.00		78	52	63	40	24	26	28.94	29.96																											
19	FEW	NC			10.00		73	52	61	48	13	25	28.94	29.97																											
22	FEW	NC			10.00		67	51	58	57	7	22	28.98	30.01																											
SUNRISE: 0516							MAR 29							SUNSET: 1743																											
01	CLR	NC			10.00		64	50	56	61	5	21	29.00	30.02																											
04	CLR	NC			10.00		62	50	55	65	6	25	29.00	30.02																											
07	BKN	085			10.00		63	51	56	65	6	29	29.05	30.08																											
10	BKN	085			10.00		73	58	64	59	10	24	29.09	30.11																											
13	SCT	NC			10.00		79	57	65	47	15	23	29.04	30.06																											
16	FEW	NC			10.00		81	54	65	39	15	28	28.96	29.98																											
19	CLR	NC			10.00		75	52	62	45	7	27	28.95	29.98																											
22	CLR	NC			10.00		69	51	59	53	5	22	28.99	30.01																											
SUNRISE: 0514							MAR 30							SUNSET: 1744																											
01	CLR	NC			10.00		63	50	56	63	6	19	28.96	29.98																											
04	CLR	NC			10.00		62	49	55	62	6	23	28.94	29.96																											
07	CLR	NC			9.00		56	51	53	84	6	33	28.98	30.01																											
10	CLR	NC			10.00		71	54	61	55	5	24	29.01	30.03																											
13	SCT	NC			10.00		81	55	65	41	8	25	28.95	29.97																											
16	FEW	NC			10.00		83	56	66	40	12	25	28.87	29.88																											
19	SCT	NC			10.00		75	54	62	48	10	24	28.87	29.88																											
22	FEW	NC			10.00		74	52	61	46	10	18	28.87	29.89																											





**MARCH 1998
KNOXVILLE, TN**

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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DIRECTOR

NOTICE

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

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