



# DECEMBER 1999

## 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): 992 Feet  
 Time Zone: EASTERN WBAN: 13891 ISSN #:0198-4810

DECEMBER 1999  
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	46	25	36	-8	18	28	29	0			0.0	0.00	29.42	30.51	4.4	03	4.7	13	04	11	03	01																											
02	57	24	41	-3	23	33	24	0			0.0	0.00	29.28	30.37	1.5	23	1.5	14	23	13	24	02																											
03	55	32	44	1	32	39	21	0	RA		0.0	T	29.18	30.25	0.7	02	1.4	10	31	8	31	03																											
04	66	39	53	10	41	46	12	0			0.0	0.00	29.20	30.26	0.5	04	1.6	8	35	7	29	04																											
05	71*	35	53	10	46	48	12	0	RA BR		0.0	0.26	28.98	30.04	3.1	24	7.5	31	22	28	22	05																											
06	53	33	43	0	36	40	22	0			0.0	0.00	29.04	30.10	5.2	31	7.5	18	32	16	29	06																											
07	51	26	39	-3	28	33	26	0			0.0	0.00	29.19	30.27	3.9	04	4.3	16	05	14	04	07																											
08	55	29	42	0	33	38	23	0			0.0	0.00	29.27	30.35	0.5	27	2.1	9	05	8	05	08																											
09	54	40	47	5	41	45	18	0	RA		0.0	T	29.20	30.27	1.7	03	2.4	9	02	9	24	09																											
10	57	44	51	10	46	49	14	0	RA BR		0.0	0.46	29.00	30.05	5.8	26	9.3	38	26	33*	26	10																											
11	56	35	46	5	34	40	19	0			0.0	0.00	29.10	30.17	6.0	04	6.4	16	03	14	04	11																											
12	61	36	49	8	39	44	16	0	BR		0.0	0.00	28.94	30.00	2.3	04	2.8	10	01	8	04	12																											
13	63	52	58*	17	54	55	7	0	TSRA RA BR		0.0	0.80	28.75	29.79	3.4	02	6.9	30	25	21	24	13																											
14	58	38	48	8	41	44	17	0	RA BR		0.0	T	28.85	29.90	16.4	23	16.6	40*	23	32	23	14																											
15	55	31	43	3	34	39	22	0	BR		0.0	0.00	28.95	30.02	10.1	24	12.3	38	23	32	23	15																											
16	48	29	39	-1	21	32	26	0			0.0	0.00	29.13	30.20	9.8	23	10.1	28	25	23	25	16																											
17	56	29	43	3	23	35	22	0			0.0	0.00	29.16	30.23	7.4	23	8.0	25	23	22	24	17																											
18	55	29	42	3	28	37	23	0			0.0	0.00	29.09	30.16	3.4	03	3.6	11	02	10	05	18																											
19	62	39	51	12	34	43	14	0			0.0	0.00	28.96	30.02	2.3	01	4.2	9	01	9	01	19																											
20	57	43	50	11	46	48	15	0	RA		0.0	T	29.02	30.07	4.1	28	6.2	17	27	14	26	20																											
21	48	32	40	1	35	35	25	0	RA DZ FZDZ PL BR		0	T	0.15	29.09	30.16	6.8	01	7.5	20	01	17	02	21																										
22	42	26	34	-5	27	31	31	0	FZDZ BR		0	T	0.02	29.24	30.33	0.8	10	1.2	10	09	9	09	22																										
23	47	24	36	-2	26	31	29	0	BR		0	0.0	0.00	29.25	30.34	4.7	25	6.4	24	23	21	23	23																										
24	40	25	33	-5	25	29	32	0	SN BR		0	T	0.01	29.15	30.24	5.2	29	10.1	26	26	22	27	24																										
25	34	17*	26*	-12	12	21	39	0			0	0.0	0.00	29.34	30.44	1.2	05	4.7	20	02	13	02	25																										
26	49	21	35	-3	20	30	30	0			0	0.0	0.00	29.05	30.13	10.3	25	12.0	30	23	25	23	26																										
27	43	23	33	-5	14	28	32	0			0	0.0	0.00	28.92	29.99	4.0	25	6.0	17	01	15	24	27																										
28	40	28	34	-3	21	30	31	0			0	0.0	0.00	28.79	29.86	8.2	25	10.5	30	23	25	23	28																										
29	49	32	41	4	28	35	24	0			0	0.0	0.00	28.91	29.97	4.7	23	4.9	13	22	10	22	29																										
30	56	28	42	5	35	39	23	0			0	0.0	0.00	28.95	30.01	5.7	24	6.3	21	25	18	24	30																										
31	62	35	49	12	43	46	16	0			0	0.0	0.00	29.02	30.08	1.5	03	3.2	15	23	15	22	31																										
										53.1		31.6	42.4	■ ■	31.8	37.8	22.4	0.0	< MONTHLY AVERAGES		TOTALS-->		T	1.70	29.08	30.15	2.4	27	6.2	<-- MONTHLY AVERAGES																			
										3.0	1.6	2.3	■ ■	----- DEPARTURE FROM NORMAL -----										-2.84	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																								
<b>DEGREE DAYS</b>										GREATEST 24-HR PRECIPITATION: 0.80 DATE :13										SEA LEVEL PRESSURE DATE TIME																													
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: T DATE :24+										MAXIMUM : 30.58 01 0653																													
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH: 0 DATE :										MINIMUM : 29.67 14 0053																													
HEATING: 694 -78										NUMBER OF DAYS WITH →										MAXIMUM TEMP ≥ 90: 0										MINIMUM TEMP ≤ 32: 19										PRECIPITATION ≥ 0.01 INCH : 6									
COOLING: 0 0																				MAXIMUM TEMP ≤ 32 : 0										MINIMUM TEMP ≤ 0 : 0										PRECIPITATION ≥ 0.10 INCH : 4									
																				THUNDERSTORMS : 1										HEAVY FOG : 0										SNOWFALL ≥ 1.0 INCH : 0									

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

## KNOXVILLE, TN

DECEMBER 1999 TYS WBAN # 13891

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note)	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					T	T					03		T			
04													04											04		0.00			
05													05			T	0.01	0.01	0.09	0.06	0.05	0.01	0.03	T	T	0.26			
06													06											06		0.00			
07													07											07		0.00			
08													08											08		0.00			
09													09											09		T			
10			T	0.02	0.07	0.04	0.09	0.23	T	0.01			10											10		0.46			
11													11											11		0.00			
12													12											12		0.00			
13													13							0.20	0.02	T	0.17	0.17	0.01	13	0.80		
14	T			T	T		0.01	0.20	0.01	0.01			14											14		T			
15													15											15		0.00			
16													16											16		0.00			
17													17											17		0.00			
18													18											18		0.00			
19													19											19		0.00			
20													20											20		T			
21													21	0.01	0.03	0.01	0.01	0.01	T	0.01	T	T	T	T	21	0.12	0.15		
22	0.01	0.01	T	T	T	0.02	T	T	T	T	0.01	T	22											22		0.02			
23													23											23		0.00			
24													24			0.01				T				24		0.01			
25													25											25		0.00			
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		0.00			

### MAXIMUM SHORT DURATION PRECIPITATION (See Note)

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 : 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.



# OBSERVATIONS AT 3-HOURLY INTERVALS

# KNOXVILLE, TN

DECEMBER 1999

TYS

WBAN # 13891

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F			WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F			WIND		PRESSURE (INCHES, HG)			
	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)			SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	DRY BULB	DEW POINT	WET BULB		RELATIVE HUMIDITY (PCT)	SPEED (MPH)		DIRECTION TENS OF DEG	STATION			SEA LEVEL								
SUNRISE: 0727 DEC 01								SUNSET: 1723								SUNRISE: 0732 DEC 07								SUNSET: 1722							
01	CLR	NC				10.00		29	17	25	61	7	03	29.48	30.57	01	CLR	NC				10.00		30	27	29	88	0	00	29.16	30.24
04	CLR	NC				10.00		27	17	24	66	8	02	29.46	30.56	04	CLR	NC				10.00		29	25	28	85	6	03	29.17	30.25
07	CLR	NC				10.00		25	18	23	75	7	02	29.48	30.58	07	CLR	NC				10.00		27	23	26	85	6	04	29.19	30.28
10	CLR	NC				10.00		33	20	29	59	6	04	29.47	30.57	10	CLR	NC				10.00		35	28	32	76	10	04	29.22	30.31
13	CLR	NC				10.00		40	17	32	40	5	06	29.42	30.51	13	CLR	NC				10.00		45	30	39	56	6	VR	29.18	30.26
16	CLR	NC				10.00		45	15	34	30	5	03	29.36	30.44	16	CLR	NC				10.00		51	30	42	45	5	08	29.14	30.22
19	CLR	NC				10.00		38	15	30	39	0	00	29.34	30.43	19	CLR	NC				10.00		44	29	38	55	0	00	29.18	30.26
22	CLR	NC				10.00		31	19	27	61	3	05	29.35	30.44	22	CLR	NC				10.00		36	31	34	82	0	00	29.21	30.29
SUNRISE: 0728 DEC 02								SUNSET: 1722								SUNRISE: 0733 DEC 08								SUNSET: 1722							
01	CLR	NC				10.00		30	19	26	64	0	00	29.33	30.42	01	CLR	NC				10.00		33	30	32	89	0	00	29.22	30.29
04	CLR	NC				10.00		27	21	25	78	0	00	29.33	30.42	04	CLR	NC				10.00		32	29	31	88	0	00	29.26	30.33
07	CLR	NC				10.00		25	21	24	85	0	00	29.34	30.43	07	CLR	NC				10.00		30	28	29	92	3	08	29.29	30.37
10	CLR	NC				10.00		34	24	30	67	0	00	29.36	30.45	10	FEW	NC				10.00		38	33	36	83	0	00	29.33	30.41
13	CLR	NC				10.00		49	23	39	36	3	20	29.29	30.37	13	CLR	NC				10.00		51	33	43	50	0	00	29.29	30.37
16	CLR	NC				10.00		57	22	43	26	9	23	29.22	30.30	16	CLR	NC				10.00		54	33	44	45	3	33	29.24	30.32
19	CLR	NC				10.00		50	18	38	28	0	00	29.21	30.29	19	CLR	NC				10.00		46	35	41	66	5	24	29.27	30.35
22	CLR	NC				10.00		42	27	36	55	0	00	29.21	30.30	22	CLR	NC				10.00		44	36	40	73	6	04	29.27	30.35
SUNRISE: 0729 DEC 03								SUNSET: 1722								SUNRISE: 0734 DEC 09								SUNSET: 1722							
01	CLR	NC				10.00		36	30	34	79	0	00	29.19	30.26	01	OVC	080				10.00		42	37	40	82	0	00	29.26	30.33
04	CLR	NC				10.00		35	27	32	72	0	00	29.20	30.27	04	OVC	043				10.00		44	38	41	79	5	24	29.27	30.34
07	CLR	NC				10.00		35	29	33	78	0	00	29.23	30.31	07	OVC	039				10.00		45	40	43	83	5	08	29.26	30.33
10	SCT	NC				9.00		40	31	36	70	5	07	29.21	30.29	10	OVC	033				10.00		48	38	43	68	3	07	29.27	30.35
13	SCT	NC				10.00		52	30	42	43	3	33	29.15	30.22	13	OVC	032				10.00		52	40	46	64	3	02	29.23	30.30
16	BKN	095				10.00		55	32	45	42	0	00	29.12	30.19	16	OVC	032				10.00		54	41	48	62	0	00	29.17	30.24
19	BKN	060				10.00		51	37	45	59	0	00	29.15	30.22	19	OVC	034				10.00		52	42	47	69	5	03	29.14	30.21
22	FEW	NC				10.00		48	35	42	61	0	00	29.17	30.24	22	OVC	032				10.00		51	44	48	77	0	00	29.07	30.13
SUNRISE: 0730 DEC 04								SUNSET: 1722								SUNRISE: 0735 DEC 10								SUNSET: 1723							
01	FEW	NC				10.00		41	35	38	79	3	35	29.18	30.25	01	OVC	070				10.00		50	43	47	77	6	36	28.96	30.01
04	BKN	060				10.00		41	36	39	82	0	00	29.21	30.28	04	OVC	065				7.00		48	47	47	96	5	VR	28.86	29.91
07	FEW	NC				10.00		40	36	38	86	0	00	29.24	30.31	07	OVC	030				3.00	-RA BR	56	54	55	93	10	23	28.83	29.88
10	FEW	NC				10.00		50	40	45	68	0	00	29.27	30.33	10	SCT	NC				10.00		54	46	50	75	21	23	28.93	29.98
13	SCT	NC				10.00		61	44	52	54	6	02	29.21	30.28	13	OVC	027				10.00		53	45	49	74	17	23	29.02	30.07
16	FEW	NC				10.00		66	46	55	49	0	00	29.16	30.22	16	OVC	033				10.00		54	45	49	72	7	27	29.05	30.10
19	FEW	NC				10.00		57	43	50	60	5	07	29.15	30.22	19	OVC	043				10.00		52	46	49	80	0	00	29.11	30.16
22	FEW	NC				8.00		49	43	46	80	0	00	29.16	30.23	22	BKN	045				10.00		48	45	47	89	8	36	29.15	30.21
SUNRISE: 0731 DEC 05								SUNSET: 1722								SUNRISE: 0736 DEC 11								SUNSET: 1723							
01	CLR	NC				10.00		44	40	42	85	5	18	29.13	30.19	01	CLR	NC				10.00		43	38	41	82	10	03	29.13	30.20
04	FEW	NC				7.00		38	37	38	97	3	06	29.11	30.17	04	CLR	NC				10.00		39	36	38	89	12	02	29.14	30.21
07	FEW	NC				8.00		37	37	37	100	3	01	29.07	30.13	07	CLR	NC				10.00		36	33	35	89	13	04	29.12	30.19
10	SCT	NC				7.00		47	43	45	86	6	01	29.03	30.09	10	CLR	NC				10.00		41	32	37	70	12	04	29.17	30.24
13	SCT	NC				10.00		68	45	56	44	14	20	28.92	29.96	13	CLR	NC				10.00		51	33	43	50	3	VR	29.13	30.20
16	OVC	070				7.00		60	54	57	80	6	24	28.88	29.93	16	CLR	NC				10.00		55	35	46	47	6	09	29.07	30.13
19	OVC	011				5.00	-RA BR	56	56	56	100	0	00	28.87	29.93	19	FEW	NC				10.00		49	34	42	57	5	03	29.04	30.11
22	OVC	025				10.00	-RA	56	52	54	87	14	28	28.88	29.94	22	CLR	NC				10.00		42	35	39	76	0	00	29.04	30.11
SUNRISE: 0732 DEC 06								SUNSET: 1722								SUNRISE: 0736 DEC 12								SUNSET: 1723							
01	FEW	NC				10.00		49	47	48	93	8	23	28.91	29.95	01	SCT	NC				10.00		38	35	37	89	0	00	29.01	30.08
04	OVC	028				10.00		49	42	46	77	9	29	28.91	29.96	04	SCT	NC				7.00		39	35	37	86	0	00	29.00	30.06
07	OVC	049				10.00		47	41	44	80	9	26	28.95	30.00	07	SCT	NC				10.00		38	36	37	93	0	00	29.03	30.09
10	OVC	040				10.00		46	40	43	79	6	30	29.00	30.06	10	CLR	NC				10.00		44	37	41	76	3	05	29.03	30.09
13	OVC	025				10.00		43	35	40	74	13	34	29.03	30.09	13	FEW	NC				10.00		58	39	49	50	6	02	28.95	30.01
16	OVC	036				10.00		42	33	38	71	9	36	29.09	30.15	16	FEW	NC				10.00		60	42	51	52	5	05	28.88	29.93
19	SCT	NC				10.00		38	29	34	70	5	32	29.13	30.21	19	BKN	110				10.00		56	40	48	55	0	00	28.86	29.91
22	CLR	NC				10.00		36	27	33	70	5	05	29.17	30.25	22	OVC	070				10.00		54	43	48	67	0	00	28.84	29.90

# OBSERVATIONS AT 3-HOURLY INTERVALS

# KNOXVILLE, TN

DECEMBER 1999

TYS

WBAN # 13891

HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	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			SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)		EFF CLD AMT Oktas	DRY BULB	DEW POINT	WET BULB
	SUNRISE: 0737				DEC 13	SUNSET: 1723								SUNRISE: 0741				DEC 19	SUNSET: 1725						
01	OVC	080	10.00		53	43	48	69	7	31	28.81	29.85	01	BKN	060	10.00		47	30	40	52	6	01	28.99	30.05
04	OVC	049	10.00		53	47	50	80	5	31	28.79	29.83	04	SCT	NC	10.00		44	28	37	53	5	04	28.96	30.01
07	OVC	043	3.00	-RA BR	54	54	54	100	5	29	28.83	29.88	07	SCT	NC	10.00		39	30	35	70	0	00	28.97	30.03
10	BKN	002	3.00	BR	54	54	54	100	10	33	28.80	29.85	10	SCT	NC	10.00		49	30	41	48	6	06	28.99	30.04
13	BKN	050	8.00		58	56	57	93	6	05	28.76	29.80	13	FEW	NC	10.00		60	37	49	42	6	05	28.95	30.00
16	BKN	075	10.00		62	58	60	86	6	03	28.72	29.76	16	OVC	090	10.00		59	38	49	46	3	25	28.94	29.99
19	OVC	048	5.00	-TSRA BR	59	58	58	96	5	35	28.68	29.72	19	OVC	075	10.00		54	40	47	59	7	25	28.97	30.03
22	OVC	026	3.00	RA BR	58	58	58	100	5	09	28.66	29.69	22	FEW	NC	10.00		49	38	44	66	5	03	28.95	30.01
	SUNRISE: 0738				DEC 14	SUNSET: 1723								SUNRISE: 0741				DEC 20	SUNSET: 1726						
01	SCT	NC	10.00		55	52	53	90	22	25	28.64	29.67	01	FEW	NC	10.00		43	39	41	86	5	29	28.94	29.99
04	OVC	036	10.00		51	46	49	83	18	23	28.69	29.73	04	OVC	035	10.00		49	45	47	86	6	26	28.98	30.03
07	OVC	015	10.00		44	42	43	93	25	23	28.79	29.84	07	OVC	013	7.00	-RA	49	49	49	100	3	23	29.03	30.08
10	OVC	021	10.00		44	40	42	85	18	23	28.87	29.93	10	OVC	039	10.00		50	49	49	96	7	26	29.06	30.12
13	OVC	021	10.00		47	41	44	80	22	22	28.89	29.94	13	BKN	060	10.00		56	49	52	77	7	24	29.01	30.07
16	SCT	NC	10.00		50	41	46	71	13	22	28.88	29.93	16	BKN	060	10.00		55	47	51	74	8	27	29.01	30.06
19	CLR	NC	10.00		44	38	41	79	9	24	28.92	29.98	19	BKN	060	10.00		51	46	49	83	6	28	29.03	30.09
22	CLR	NC	10.00		42	37	40	82	9	25	28.96	30.02	22	OVC	029	10.00		49	44	47	83	12	36	29.05	30.10
	SUNRISE: 0738				DEC 15	SUNSET: 1724								SUNRISE: 0742				DEC 21	SUNSET: 1726						
01	CLR	NC	7.00		36	35	36	97	3	11	28.96	30.02	01	OVC	023	10.00		47	41	44	80	8	01	29.07	30.12
04	FEW	NC	6.00	BR	33	32	33	96	3	13	28.94	30.01	04	OVC	023	10.00		40	34	37	79	6	02	29.08	30.14
07	CLR	NC	10.00		37	32	35	82	0	00	28.91	29.98	07	OVC	018	10.00	-RA	35	33	34	93	9	03	29.12	30.19
10	OVC	025	8.00		38	36	37	93	5	05	28.91	29.98	10	OVC	015	5.00	-RA BR	34	34	34	100	8	06	29.08	30.15
13	FEW	NC	10.00		54	40	47	59	23	23	28.87	29.93	13	OVC	005	1.50	-RA BR	36	36	36	100	8	33	29.07	30.14
16	SCT	NC	10.00		53	38	46	57	21	22	28.89	29.96	16	OVC	003	1.75	-RA BR	36	36	36	100	7	36	29.05	30.12
19	CLR	NC	10.00		43	30	38	60	15	26	29.01	30.08	19	OVC	007	3.00	DZ BR	33	33	33	100	7	01	29.08	30.16
22	OVC	055	10.00		42	28	36	58	16	23	29.06	30.13	22	OVC	005	3.00	FZDZ BR	32	32	32	100	7	35	29.12	30.21
	SUNRISE: 0739				DEC 16	SUNSET: 1724								SUNRISE: 0743				DEC 22	SUNSET: 1727						
01	OVC	060	10.00		41	24	34	51	13	23	29.08	30.14	01	OVC	003	3.00	FZDZ BR	32	32	32	100	0	00	29.17	30.26
04	CLR	NC	10.00		34	25	31	70	13	23	29.11	30.18	04	OVC	032	4.00	BR	31	29	30	92	0	00	29.21	30.29
07	CLR	NC	10.00		31	21	27	67	8	22	29.13	30.21	07	CLR	NC	10.00		29	25	28	85	0	00	29.24	30.33
10	CLR	NC	10.00		40	20	33	45	13	21	29.16	30.24	10	SCT	NC	10.00		30	25	28	82	0	00	29.26	30.35
13	CLR	NC	10.00		46	18	36	33	15	24	29.13	30.20	13	FEW	NC	10.00		38	25	33	60	0	00	29.27	30.35
16	FEW	NC	10.00		47	20	37	34	14	25	29.11	30.19	16	FEW	NC	10.00		41	27	35	57	0	00	29.22	30.31
19	CLR	NC	10.00		41	21	34	45	6	23	29.13	30.22	19	CLR	NC	10.00		38	28	34	68	0	00	29.27	30.35
22	CLR	NC	10.00		37	22	32	54	6	24	29.14	30.22	22	CLR	NC	10.00		31	29	30	92	0	00	29.26	30.35
	SUNRISE: 0740				DEC 17	SUNSET: 1724								SUNRISE: 0743				DEC 23	SUNSET: 1727						
01	CLR	NC	10.00		35	21	30	57	6	22	29.15	30.22	01	CLR	NC	9.00		27	27	27	100	0	00	29.28	30.36
04	CLR	NC	10.00		34	22	30	61	6	27	29.14	30.22	04	CLR	NC	7.00		25	25	25	100	3	05	29.29	30.38
07	CLR	NC	10.00		33	21	29	61	5	28	29.17	30.25	07	CLR	NC	9.00		25	24	25	96	3	05	29.30	30.39
10	CLR	NC	10.00		40	26	35	58	3	28	29.20	30.28	10	FEW	NC	9.00		31	30	31	96	5	14	29.33	30.42
13	CLR	NC	10.00		54	21	41	28	20	24	29.14	30.22	13	CLR	NC	10.00		44	26	37	49	12	22	29.25	30.34
16	CLR	NC	10.00		54	23	41	30	14	22	29.12	30.19	16	FEW	NC	10.00		46	24	37	42	20	25	29.21	30.30
19	CLR	NC	10.00		47	22	37	37	6	22	29.14	30.22	19	OVC	060	10.00		42	25	35	51	8	27	29.23	30.31
22	CLR	NC	10.00		44	22	36	41	3	23	29.16	30.24	22	CLR	NC	10.00		35	25	31	67	5	23	29.18	30.27
	SUNRISE: 0740				DEC 18	SUNSET: 1725								SUNRISE: 0743				DEC 24	SUNSET: 1728						
01	CLR	NC	10.00		38	25	33	60	0	00	29.15	30.22	01	SCT	NC	10.00		30	26	29	85	7	23	29.16	30.24
04	CLR	NC	10.00		33	27	31	78	3	05	29.15	30.22	04	CLR	NC	10.00		27	24	26	89	7	21	29.11	30.19
07	CLR	NC	10.00		30	27	29	88	0	00	29.15	30.23	07	OVC	043	10.00		32	29	31	88	9	24	29.06	30.13
10	CLR	NC	10.00		37	31	35	79	5	05	29.15	30.23	10	OVC	041	6.00	-SN	35	30	33	82	13	25	29.05	30.13
13	SCT	NC	10.00		51	30	42	45	0	00	29.08	30.14	13	OVC	034	9.00		37	31	35	79	14	28	29.10	30.17
16	BKN	090	10.00		53	29	43	40	9	04	29.02	30.09	16	OVC	040	10.00		34	26	31	73	12	33	29.16	30.25
19	OVC	065	10.00		51	27	41	39	8	01	29.03	30.09	19	FEW	NC	10.00		29	21	26	72	9	36	29.23	30.32
22	OVC	090	10.00		48	32	41	54	0	00	29.02	30.09	22	OVC	029	10.00		27	16	24	63	12	36	29.31	30.40

# OBSERVATIONS AT 3-HOURLY INTERVALS

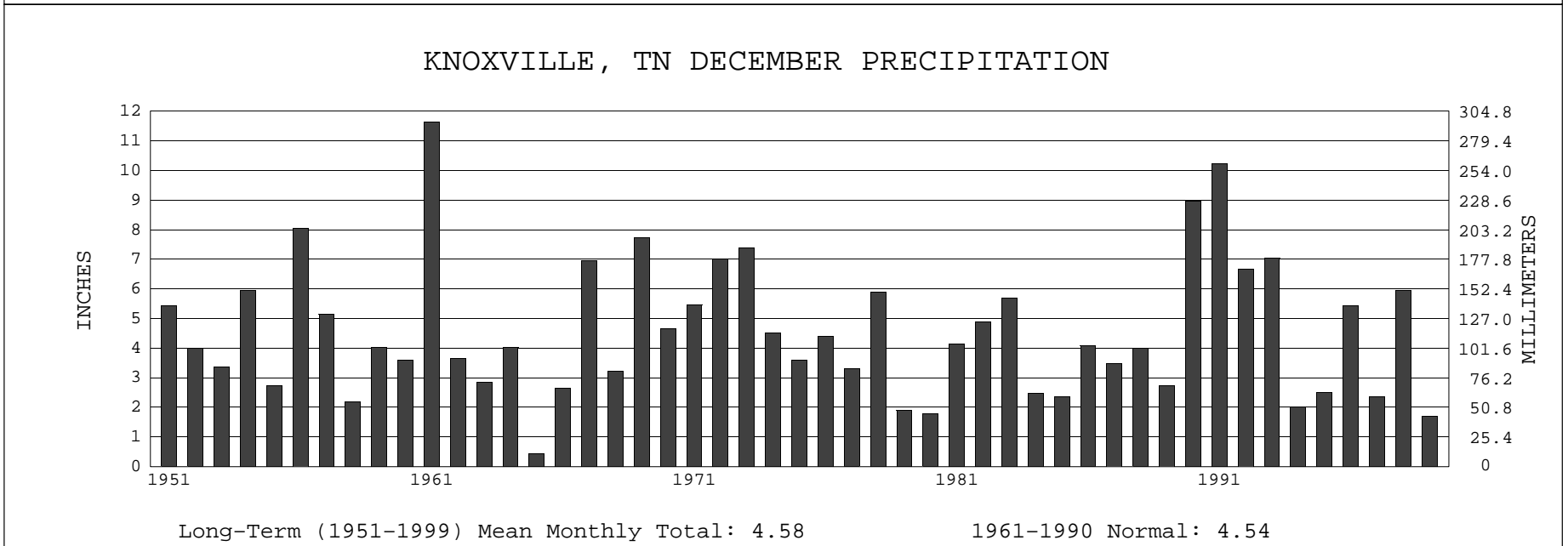
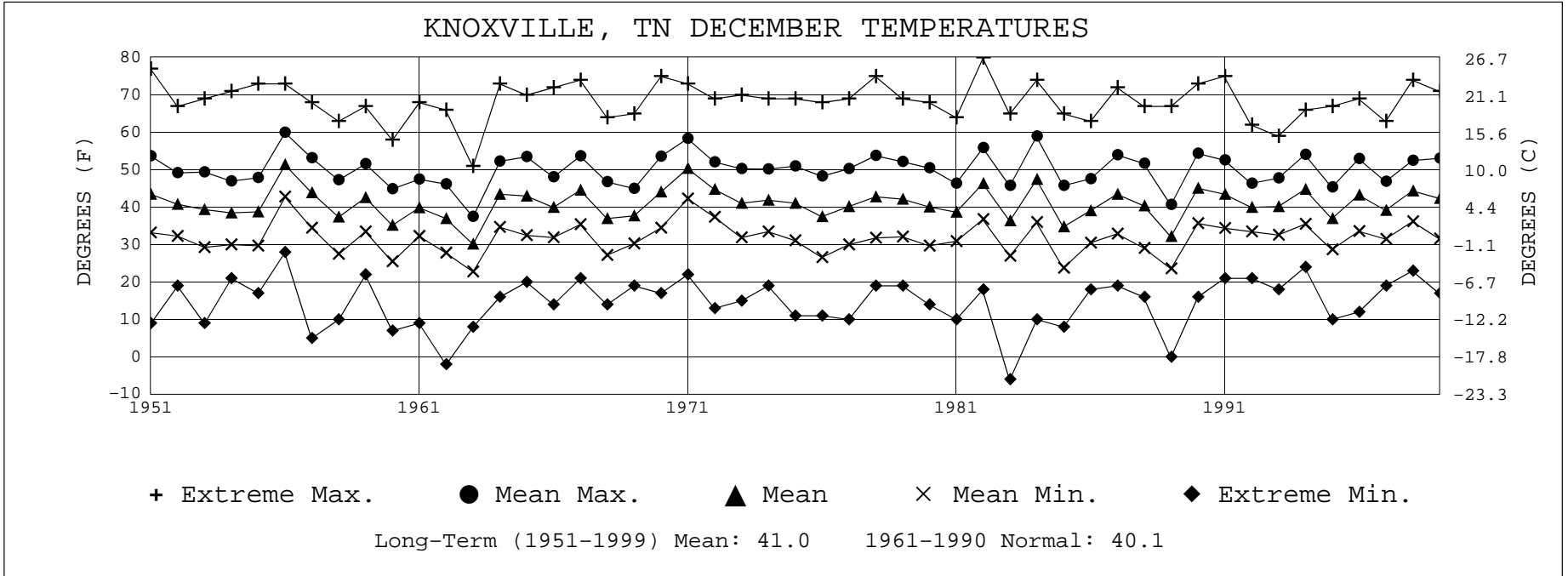
# KNOXVILLE, TN

DECEMBER 1999

TYS

WBAN # 13891

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		
	OBSERVATION TIME (LST)	EFF CLD AMT Ok/as		VISIBILITY (MILES)	DRY BULB		DEW POINT	WET BULB	SPEED (MPH)		DIRECTION TENS OF DEG	STATION	SEA LEVEL	OBSERVATION TIME (LST)		EFF CLD AMT Ok/as	VISIBILITY (MILES)		DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)		DIRECTION TENS OF DEG	STATION	SEA LEVEL		
SUNRISE: 0744							DEC 25	SUNSET: 1728							SUNRISE: 0746							DEC 31	SUNSET: 1732							
01	OVC	029			10.00		25	14	22	63	12	02	29.33	30.43	01	CLR	NC				10.00		46	38	42	73	12	26	28.95	30.00
04	CLR	NC			10.00		19	12	17	74	7	04	29.33	30.43	04	SCT	NC				10.00		39	37	38	93	0	00	28.98	30.04
07	CLR	NC			10.00		18	11	16	74	0	00	29.37	30.47	07	FEW	NC				10.00		37	37	100	8	03	29.00	30.06	
10	CLR	NC			10.00		22	13	19	68	6	06	29.42	30.52	10	BKN	049				10.00		43	40	42	89	3	08	29.06	30.12
13	CLR	NC			10.00		29	12	24	49	0	00	29.39	30.49	13	CLR	NC				10.00		56	46	51	70	3	VR	29.03	30.08
16	CLR	NC			10.00		33	7	25	33	3	26	29.31	30.41	16	CLR	NC				10.00		61	49	54	65	0	00	29.00	30.06
19	CLR	NC			10.00		29	9	23	43	5	19	29.32	30.42	19	BKN	075				10.00		54	48	51	80	5	06	29.05	30.11
22	CLR	NC			10.00		25	14	22	63	6	19	29.28	30.38	22	CLR	NC				10.00		51	47	49	86	3	03	29.05	30.11
SUNRISE: 0744							DEC 26	SUNSET: 1729							3-HOURLY OBSERVATION NOTES															
01	CLR	NC			10.00		24	14	21	65	0	00	29.23	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. 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.															
04	CLR	NC			10.00		25	14	22	63	9	24	29.18	30.27																
07	CLR	NC			10.00		25	13	21	60	9	23	29.11	30.20																
10	CLR	NC			10.00		38	15	30	39	23	23	29.05	30.13																
13	CLR	NC			10.00		45	26	37	48	20	23	28.99	30.07																
16	CLR	NC			10.00		48	28	40	46	16	23	28.89	29.96																
19	CLR	NC			10.00		43	26	36	51	15	29	29.00	30.08																
22	CLR	NC			10.00		37	20	31	50	9	27	29.03	30.10																
SUNRISE: 0745							DEC 27	SUNSET: 1729							SUMMARY BY HOUR															
01	CLR	NC			10.00		32	16	27	52	0	00	28.99	30.06	AVERAGES															
04	CLR	NC			10.00		27	13	23	55	5	21	28.98	30.05	RESULTANT WIND (MPH)															
07	CLR	NC			10.00		26	14	22	60	0	00	28.96	30.03	HOUR (LST)															
10	CLR	NC			10.00		31	17	26	56	5	24	28.97	30.04	CEILOMETER															
13	CLR	NC			10.00		41	13	31	32	14	22	28.88	29.96	EFF CLD AMT															
16	CLR	NC			10.00		43	9	32	25	9	27	28.83	29.91	DRY BULB															
19	OVC	085			10.00		39	13	30	34	5	24	28.86	29.94	DEW POINT															
22	OVC	075			10.00		38	16	30	41	8	01	28.88	29.96	WET BULB															
SUNRISE: 0745							DEC 28	SUNSET: 1730							RELATIVE HUMIDITY															
01	OVC	060			10.00		34	11	27	38	8	01	28.89	29.96	PRESSURE (INCHES, HG)															
04	OVC	050			10.00		32	19	28	59	5	01	28.86	29.93	STATION															
07	OVC	050			10.00		31	21	27	67	0	00	28.86	29.94	SEA LEVEL															
10	SCT	NC			10.00		30	22	27	72	10	27	28.83	29.91	VISIBILITY (MILES)															
13	SCT	NC			10.00		37	23	32	57	16	22	28.74	29.80	WIND SPEED (MPH)															
16	FEW	NC			10.00		39	19	32	45	24	23	28.62	29.68	SPEED															
19	OVC	080			10.00		38	21	32	51	17	24	28.72	29.78	DIRECTION															
22	OVC	048			10.00		38	22	32	53	9	23	28.78	29.86																
SUNRISE: 0745							DEC 29	SUNSET: 1731																						
01	OVC	040			10.00		37	23	32	57	8	22	28.81	29.88																
04	OVC	040			10.00		36	25	32	64	6	21	28.83	29.90																
07	OVC	038			10.00		35	25	31	67	0	00	28.89	29.96																
10	CLR	NC			10.00		39	28	35	65	0	00	28.95	30.01																
13	CLR	NC			10.00		46	31	40	56	7	23	28.94	30.01																
16	CLR	NC			10.00		49	31	41	50	7	23	28.90	29.97																
19	CLR	NC			10.00		43	30	38	60	6	22	28.93	30.00																
22	CLR	NC			10.00		38	31	35	76	8	22	28.95	30.02																
SUNRISE: 0745							DEC 30	SUNSET: 1731																						
01	CLR	NC			10.00		37	30	34	76	6	26	28.94	30.01																
04	CLR	NC			10.00		31	29	30	92	0	00	28.94	30.01																
07	CLR	NC			10.00		30	29	30	96	3	20	28.96	30.03																
10	CLR	NC			10.00		37	34	36	89	3	VR	29.01	30.08																
13	SCT	NC			10.00		53	39	46	59	13	23	28.94	30.00																
16	SCT	NC			10.00		54	40	47	59	12	25	28.92	29.98																
19	CLR	NC			10.00		48	40	44	74	8	25	28.93	29.99																
22	CLR	NC			10.00		46	39	43	77	9	25	28.94	30.01																





**DECEMBER 1999  
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.*

DIRECTOR

## NOTICE

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