JANUARY 2002
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	35	14*	25*	−13	12	21	40	0					0.00	29.18	30.26	6.0	03	6.2	14	01	13	04	01
02	36	23	30	−8	13	24	35	0					0.00	29.16	30.24	4.8	04	5.6	17	04	14	04	02
03	34	26	30	−8	14	24	35	0					0.00	29.07	30.14	6.7	36	7.0	24	01	20	01	03
04	40	19	30	−8	15	25	35	0					0.00	29.25	30.33	1.2	32	3.6	12	02	9	01	04
05	49	18	34	−4	17	27	31	0					0.00	29.13	30.20	0.9	26	2.3	14	24	12	24	05
06	40	32	36	−1	32	34	29	0	RA SN PL FG BR				0.34	28.73	29.79	3.6	28	8.1	21	28	18	28	06
07	35	27	31	−6	28	31	34	0	SN PL BR				T	28.97	30.03	7.8	28	8.1	20	29	16	29	07
08	37	21	29	−8	19	26	36	0					0.00	29.12	30.19	5.1	24	5.3	13	25	10	23	08
09	57	30	44	7	32	39	21	0					0.00	28.98	30.04	11.9	25	12.0	26	24	23	24	09
10	59	49	54	17	49	52	11	0					0.00	28.96	29.99	14.2	23	14.3	28	22	24	22	10
11	59	35	47	10	38	43	18	0	RA BR				0.04	29.03	30.07	3.6	28	5.9	30	24	24	23	11
12	41	24	33	−4	30	32	32	0	FG+ FZFG BR				0.00	28.91	29.97	3.2	24	4.4	20	22	17	23	12
13	49	28	39	2	25	33	26	0					0.00	28.92	29.98	3.2	24	5.3	15	21	13	22	13
14	58	25	42	5	32	37	23	0					0.00	28.89	29.95	6.4	23	8.6	31	22	26	21	14
15	48	30	39	2	26	35	26	0					0.00	29.10	30.16	3.5	28	5.7	21	27	17	28	15
16	50	27	39	2	25	33	26	0					0.00	29.15	30.21	1.2	02	3.5	10	26	9	27	16
17	54	30	42	5	30	39	23	0	RA				T	29.05	30.10	4.2	25	5.7	18	01	14	01	17
18	45	34	40	3	33	37	25	0	RA BR				0.27	29.12	30.18	7.3	04	8.3	20	01	16	01	18
19	42	34	38	1	34	36	27	0	RA DZ FG BR				2.12	28.82	29.88	3.9	01	7.2	22	30	18	30	19
20	44	31	38	0	30	34	27	0					0.00	29.02	30.08	3.3	03	4.6	14	01	12	10	20
21	55	34	45	7	34	40	20	0	RA BR				0.19	28.99	30.05	6.6	25	8.1	26	24	22	24	21
22	55	26	41	3	29	37	24	0	RA BR				0.16	29.21	30.27	1.7	02	2.8	15	32	13	32	22
23	50	42	46	8	44	45	19	0	RA FG+ BR				3.40	29.05	30.11	2.5	05	3.6	16	30	14	30	23
24	64	44	54	16	53	54	11	0	RA BR				1.50	28.87	29.91	7.6	23	9.2	40*	30	30*	31	24
25	50	33	42	4	31	37	23	0	RA BR				0.04	29.14	30.20	7.6	03	8.1	21	01	17	01	25
26	57	26	42	4	30	36	23	0					0.00	29.23	30.30	0.7	03	1.2	8	33	6	30	26
27	61	29	45	7	36	41	20	0	BR				0.00	29.19	30.25	1.4	22	2.9	14	25	13	24	27
28	67	34	51	13	44	47	14	0	BR				0.00	29.11	30.16	4.3	24	5.8	22	24	18	23	28
29	73	57	65*	27	57	59	0	0	BCFG BR				0.00	29.07	30.11	8.1	25	9.2	23	23	20	24	29
30	75	48	62	23	54	57	3	0	FG+ BR				0.00	29.08	30.11	6.4	24	7.9	31	24	26	24	30
31	75*	51	63	24	55	59	2	0	BR HZ				0.00	29.05	30.08	8.3	24	8.8	31	22	25	24	31
	51.4	31.6	41.5		32.3	37.9	23.2	0.0	< MONTHLY AVERAGES TOTALS−>				8.06	29.05	30.11	2.5	27	6.4					<− MONTHLY AVERAGES
	5.1	2.7	3.9		<−−−−−−−−−−−−−DEPARTURE FROM NORMAL−−−−−−−−−−−−−>								3.49	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									

JANUARY 2002
KNOXVILLE, TN

DEGREE DAYS

	MONTHLY TOTAL	MONTHLY DEPARTURE	SEASON TO DATE TOTAL	SEASON TO DATE DEPARTURE
HEATING:	719	−180	1953	−463
COOLING:	0	0	0	0

GREATEST 24−HR PRECIPITATION: 3.56 DATE :22−23
GREATEST 24−HR SNOWFALL: DATE :
GREATEST SNOW DEPTH: DATE :

SEA LEVEL PRESSURE		DATE	TIME
MAXIMUM	30.41	04	0953
MINIMUM	29.65	06	0853

NUMBER OF DAYS WITH →

MAXIMUM TEMP ≥ 90:	0	MINIMUM TEMP ≤ 32 :	19
MAXIMUM TEMP ≤ 32 :	0	MINIMUM TEMP ≤ 0 :	0
THUNDERSTORMS :	0	HEAVY FOG :	3
PRECIPITATION ≥ 0.01 INCH :	9		
PRECIPITATION ≥ 0.10 INCH :	7		
SNOWFALL ≥ 1.0 INCH :			

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN

JANUARY 2002 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													01		0.00
02													02													02		0.00
03													03													03		0.00
04													04													04		0.00
05													05													05		0.00
06		T	T	0.01	0.04	0.03	T	T	T	0.01	0.01	0.06	06	0.07	0.06	0.05	0.07	0.04		0.02						06	0.47	0.34
07			T	T	T	T					T	T	07	T	T	T	T	T	T	T	T	T	T			07		T
08													08													08		0.00
09													09													09		0.00
10													10													10		0.00
11			T	0.01	0.03	T	T						11													11		0.04
12													12													12		0.00
13													13													13		0.00
14													14													14		0.00
15													15													15		0.00
16													16													16		0.00
17													17												T	17		T
18	0.01	0.10	0.06	0.07	0.03	T							18													18		0.27
19			T	0.04	0.10	0.19	0.32	0.36	0.20	0.15	0.20	0.05	19	0.15	0.17	0.11	0.03	0.04	0.01	T	T	T				19		2.12
20													20													20		0.00
21			T	0.04	0.07	0.07	0.01						21													21		0.19
22													22									0.01	0.12	.02	0.01	22		0.16
23	0.02	0.03	0.10	0.29	0.21	0.20	0.38	0.27	0.33	0.16	0.14	0.25	23	0.35	0.10	0.38	0.15	0.04	T							23		3.40
24								0.52	0.10	0.07	0.05	0.03	24	0.04	0.01	0.02	0.01	0.08	0.04	0.09	0.09	0.11	0.10	0.10	0.04	24		1.50
25	0.03	0.01	T										25													25		0.04
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)	.32	.45	.49	.51	.54	.57	.59	.62	.65	.69	.84	.98
Ending Date	24	24	24	24	24	24	24	24	24	23	23	23
Ending Time (Hour/Min)	0737	0741	0746	0751	0759	0812	0828	0850	0909	0807	0807	0905

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
JANUARY 2002

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							8.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							8.00	10.00	
05							8.00	10.00	
06							.50	10.00	
07							2.00	10.00	
08							8.00	10.00	
09							10.00	10.00	
10							8.00	10.00	
11							2.50	10.00	
12							<.25	10.00	
13							9.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							8.00	10.00	
17							8.00	10.00	
18							2.50	10.00	
19							.50	10.00	
20							7.00	10.00	
21							2.50	10.00	
22							6.00	10.00	
23							.25	10.00	
24							.75	10.00	
25							2.00	10.00	
26							8.00	10.00	
27							5.00	10.00	
28							1.25	10.00	
29							4.00	10.00	
30							<.25	10.00	
31							5.00	10.00	
MONTHLY AVGS							5.61	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
3	11	15

OBSERVATIONS AT 3–HOURLY INTERVALS

KNOXVILLE, TN

JANUARY 2002 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: 0746	**JAN 01**			**SUNSET: 1733**					
01	CLR	NC			10.00		22	11	19	63	0	00	29.13	30.21
04	CLR	NC			10.00		19	10	17	68	3	03	29.15	30.23
07	CLR	NC			9.00		15	11	14	84	5	03	29.17	30.25
10	CLR	NC			10.00		23	15	21	72	9	03	29.21	30.31
13	FEW	NC			10.00		32	14	26	47	8	04	29.18	30.25
16	FEW	NC			10.00		34	12	27	40	7	01	29.17	30.25
19	CLR	NC			10.00		29	12	24	49	5	05	29.20	30.28
22	CLR	NC			10.00		24	12	21	60	7	05	29.21	30.30
					SUNRISE: 0746	**JAN 02**			**SUNSET: 1734**					
01	CLR	NC			10.00		25	11	21	55	10	03	29.20	30.27
04	CLR	NC			10.00		24	11	20	57	7	04	29.24	30.32
07	CLR	NC			10.00		24	12	21	60	8	04	29.21	30.29
10	SCT	NC			10.00		25	12	21	58	8	05	29.22	30.31
13	SCT	NC			10.00		34	12	27	40	5	03	29.17	30.24
16	SCT	NC			10.00		35	13	28	40	3	35	29.13	30.20
19	OVC	080			10.00		34	16	28	48	0	00	29.10	30.17
22	BKN	075			10.00		32	15	27	50	9	36	29.07	30.15
					SUNRISE: 0746	**JAN 03**			**SUNSET: 1735**					
01	OVC	060			10.00		31	14	26	49	6	03	29.03	30.09
04	OVC	110			10.00		29	15	25	56	6	36	29.00	30.07
07	BKN	090			10.00		27	15	23	61	9	01	28.99	30.06
10	BKN	085			10.00		28	14	24	56	8	36	29.04	30.11
13	SCT	NC			10.00		32	15	26	50	9	04	29.01	30.08
16	SCT	NC			10.00		29	14	24	54	13	35	29.06	30.13
19	FEW	NC			10.00		26	13	22	57	6	36	29.15	30.23
22	OVC	042			10.00		28	14	24	56	3	36	29.21	30.29
					SUNRISE: 0746	**JAN 04**			**SUNSET: 1736**					
01	OVC	042			10.00		28	17	25	63	3	35	29.21	30.29
04	BKN	038			10.00		23	17	21	78	5	36	29.23	30.32
07	FEW	NC			8.00		21	18	20	88	5	03	29.27	30.36
10	CLR	NC			9.00		27	18	24	69	0	00	29.32	30.41
13	CLR	NC			10.00		35	16	29	46	3	22	29.25	30.33
16	CLR	NC			10.00		39	13	30	34	8	30	29.23	30.31
19	CLR	NC			10.00		34	12	27	40	5	26	29.21	30.29
22	CLR	NC			10.00		28	15	24	58	3	19	29.22	30.31
					SUNRISE: 0746	**JAN 05**			**SUNSET: 1737**					
01	CLR	NC			9.00		23	15	21	72	0	00	29.20	30.27
04	CLR	NC			9.00		24	15	21	68	0	00	29.22	30.29
07	CLR	NC			9.00		20	15	19	81	0	00	29.22	30.31
10	CLR	NC			10.00		28	20	25	72	0	00	29.24	30.32
13	CLR	NC			10.00		43	19	34	38	7	25	29.12	30.19
16	CLR	NC			10.00		49	13	36	23	8	24	29.06	30.12
19	FEW	NC			10.00		41	15	32	35	0	00	29.04	30.11
22	CLR	NC			10.00		35	19	29	52	3	03	28.97	30.04
					SUNRISE: 0746	**JAN 06**			**SUNSET: 1737**					
01	OVC	090			10.00		34	22	30	61	5	07	28.91	29.96
04	OVC	023			7.00	-RAPL	40	32	37	73	3	VR	28.84	29.88
07	OVC	001			2.00	-SNPL BR	32	32	32	100	12	05	28.68	29.73
10	BKN	005			0.50	SN FG	33	33	33	100	7	35	28.60	29.66
13	OVC	003			1.25	-SN BR	33	33	33	100	7	25	28.62	29.67
16	OVC	026			6.00	BR	35	35	35	100	10	25	28.68	29.73
19	BKN	013			10.00		36	33	35	89	13	26	28.76	29.81
22	OVC	027			10.00		35	32	34	89	13	28	28.81	29.87
					SUNRISE: 0746	**JAN 07**			**SUNSET: 1738**					
01	OVC	023			10.00		34	32	33	92	10	27	28.82	29.88
04	OVC	019			6.00	-PL BR	33	32	33	96	8	28	28.84	29.90
07	OVC	039			10.00		33	29	31	85	7	27	28.87	29.93
10	OVC	029			3.00	-SN BR	33	31	32	92	6	26	28.94	30.00
13	OVC	029			9.00	-SN	35	30	33	82	6	29	28.95	30.01
16	OVC	047			7.00	-SN	33	29	31	85	12	29	29.02	30.09
19	OVC	048			10.00	-SN	32	26	30	79	7	26	29.08	30.14
22	BKN	046			10.00		30	22	27	72	8	29	29.13	30.19
					SUNRISE: 0746	**JAN 08**			**SUNSET: 1739**					
01	CLR	NC			10.00		26	17	23	69	6	27	29.15	30.22
04	BKN	031			10.00		23	17	21	78	6	19	29.16	30.23
07	CLR	NC			10.00		22	17	20	82	3	21	29.17	30.25
10	SCT	NC			8.00		26	20	24	78	0	00	29.20	30.27
13	SCT	NC			10.00		33	21	29	61	6	23	29.12	30.19
16	SCT	NC			10.00		37	21	31	52	8	25	29.08	30.14
19	CLR	NC			10.00		32	22	28	66	7	24	29.06	30.14
22	CLR	NC			10.00		31	20	27	64	7	23	29.05	30.12
					SUNRISE: 0746	**JAN 09**			**SUNSET: 1740**					
01	CLR	NC			10.00		34	21	29	59	12	24	29.04	30.11
04	CLR	NC			10.00		31	23	28	72	12	24	29.02	30.09
07	CLR	NC			10.00		33	23	29	67	5	25	29.02	30.08
10	FEW	NC			10.00		41	29	36	62	8	26	29.02	30.08
13	FEW	NC			10.00		54	37	46	53	21	25	28.96	30.01
16	BKN	250			10.00		57	40	49	53	17	24	28.91	29.96
19	FEW	NC			10.00		46	37	42	71	7	24	28.93	29.99
22	CLR	NC			10.00		50	40	45	68	14	25	28.96	30.01
					SUNRISE: 0746	**JAN 10**			**SUNSET: 1741**					
01	CLR	NC			10.00		50	43	47	77	15	24	28.98	30.02
04	OVC	029			10.00		53	47	50	80	10	24	28.99	30.03
07	OVC	030			10.00		54	48	51	80	12	23	28.98	30.03
10	OVC	026			10.00		56	49	52	77	14	22	29.00	30.04
13	OVC	022			10.00		59	51	55	75	17	22	28.96	30.00
16	OVC	022			10.00		57	51	54	81	20	23	28.92	29.96
19	OVC	029			9.00		55	52	53	90	9	23	28.93	29.97
22	OVC	055			10.00		57	50	53	78	15	22	28.90	29.94
					SUNRISE: 0746	**JAN 11**			**SUNSET: 1742**					
01	OVC	080			10.00		57	49	53	75	14	23	28.86	29.89
04	OVC	015			6.00	-RA BR	51	49	50	92	14	32	28.91	29.95
07	OVC	028			10.00		45	44	45	97	5	08	29.02	30.06
10	BKN	250			10.00		47	39	43	74	5	VR	29.08	30.13
13	SCT	NC			10.00		51	29	42	43	7	33	29.08	30.12
16	SCT	NC			10.00		52	33	43	49	8	30	29.06	30.10
19	CLR	NC			10.00		45	31	39	58	5	28	29.08	30.13
22	CLR	NC			10.00		37	30	34	76	0	00	29.08	30.14
					SUNRISE: 0746	**JAN 12**			**SUNSET: 1743**					
01	CLR	NC			10.00		32	29	31	88	0	00	29.07	30.12
04	CLR	NC			8.00		28	27	28	96	0	00	29.06	30.12
07	CLR	NC			7.00		28	26	27	92	5	02	29.00	30.06
10	BKN	001			<.25	FZFG	30	30	30	100	0	00	29.00	30.06
13	BKN	110			10.00		40	33	37	77	6	32	28.87	29.93
16	OVC	100			10.00		41	33	38	74	5	27	28.80	29.85
19	SCT	NC			10.00		34	30	32	85	9	22	28.78	29.84
22	BKN	065			10.00		35	31	33	85	9	22	28.79	29.84

OBSERVATIONS AT 3–HOURLY INTERVALS

KNOXVILLE, TN

JANUARY 2002 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: 0746	**JAN 13**			**SUNSET: 1744**					
01	OVC	044			10.00		38	31	35	76	6	19	28.81	29.85
04	CLR	NC			10.00		34	27	31	76	8	25	28.87	29.92
07	FEW	NC			10.00		32	26	30	79	5	23	28.93	30.00
10	FEW	NC			10.00		38	29	34	70	8	23	28.98	30.04
13	FEW	NC			10.00		45	24	37	44	6	VR	28.96	30.01
16	FEW	NC			10.00		49	22	38	35	7	20	28.95	30.01
19	CLR	NC			10.00		41	20	33	43	5	07	28.93	29.98
22	CLR	NC			10.00		32	21	28	64	5	25	28.92	29.98
					SUNRISE: 0746	**JAN 14**			**SUNSET: 1745**					
01	CLR	NC			10.00		29	21	26	72	0	00	28.93	29.99
04	CLR	NC			10.00		26	21	24	81	0	00	28.92	29.98
07	BKN	038			10.00		26	20	24	78	0	00	28.94	30.00
10	OVC	250			10.00		33	25	30	72	5	04	28.93	30.00
13	BKN	250			10.00		52	38	45	59	13	21	28.84	29.89
16	OVC	050			10.00		56	42	49	60	22	22	28.80	29.85
19	BKN	041			10.00		53	43	48	69	15	23	28.84	29.89
22	SCT	NC			10.00		50	43	47	77	13	23	28.90	29.95
					SUNRISE: 0745	**JAN 15**			**SUNSET: 1746**					
01	FEW	NC			10.00		45	31	39	58	13	30	28.96	30.00
04	CLR	NC			10.00		39	28	35	65	5	27	29.01	30.06
07	CLR	NC			10.00		35	28	32	76	0	00	29.06	30.11
10	CLR	NC			10.00		39	30	35	70	7	27	29.12	30.17
13	SCT	NC			10.00		46	27	38	47	8	25	29.12	30.16
16	CLR	NC			10.00		47	23	37	39	10	28	29.11	30.17
19	FEW	NC			10.00		42	24	35	49	3	28	29.17	30.23
22	CLR	NC			10.00		36	22	31	57	5	02	29.19	30.26
					SUNRISE: 0745	**JAN 16**			**SUNSET: 1747**					
01	CLR	NC			10.00		31	22	28	69	3	06	29.19	30.25
04	FEW	NC			9.00		27	23	26	85	5	06	29.21	30.27
07	CLR	NC			10.00		28	22	26	78	6	03	29.21	30.28
10	OVC	250			10.00		32	27	30	82	3	06	29.22	30.29
13	BKN	250			10.00		45	27	38	49	3	26	29.19	30.25
16	SCT	NC			10.00		50	24	39	36	3	27	29.09	30.15
19	BKN	250			10.00		45	25	37	46	6	15	29.07	30.13
22	CLR	NC			10.00		38	26	33	62	0	00	29.05	30.11
					SUNRISE: 0745	**JAN 17**			**SUNSET: 1748**					
01	SCT	NC			10.00		34	27	31	76	0	00	29.06	30.12
04	BKN	070			10.00		34	25	31	70	0	00	29.06	30.12
07	OVC	060			10.00		41	27	35	57	3	24	29.05	30.11
10	OVC	060			10.00		46	29	39	51	8	25	29.10	30.15
13	SCT	NC			10.00		52	29	42	41	5	22	29.07	30.12
16	OVC	055			10.00		53	32	44	45	9	23	29.04	30.09
19	OVC	050			10.00		49	33	42	55	6	22	29.03	30.09
22	OVC	060			10.00		48	34	42	58	6	30	28.99	30.04
					SUNRISE: 0744	**JAN 18**			**SUNSET: 1749**					
01	OVC	050			5.00	-RA	41	35	38	79	9	36	29.04	30.09
04	OVC	055			3.00	-RA BR	39	38	39	96	5	05	29.08	30.13
07	OVC	026			10.00		34	31	33	89	9	02	29.14	30.19
10	OVC	040			10.00		36	31	34	82	14	04	29.20	30.26
13	SCT	NC			10.00		41	32	37	70	12	08	29.17	30.23
16	BKN	250			10.00		45	34	40	66	9	10	29.14	30.19
19	SCT	NC			10.00		37	32	35	82	5	06	29.14	30.21
22	OVC	090			10.00		39	33	37	79	6	03	29.09	30.15

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: 0744	**JAN 19**			**SUNSET: 1750**					
01	BKN	100			10.00		38	29	34	70	10	05	28.95	30.01
04	OVC	046			5.00	-RA	36	31	34	82	6	05	28.87	29.93
07	OVC	006			2.00	+RA BR	35	34	35	96	9	35	28.85	29.90
10	OVC	006			2.00	+RA BR	36	35	36	97	6	34	28.86	29.91
13	OVC	003			1.50	RA BR	39	38	39	96	10	31	28.71	29.76
16	OVC	006			2.00	-RA BR	41	40	41	96	6	31	28.68	29.72
19	OVC	006			7.00	-RA	42	40	41	92	6	32	28.76	29.80
22	OVC	020			10.00		37	31	35	79	8	35	28.96	30.03
					SUNRISE: 0743	**JAN 20**			**SUNSET: 1751**					
01	OVC	024			10.00		34	28	32	79	9	36	28.98	30.04
04	OVC	028			10.00		33	27	31	78	6	01	29.07	30.13
07	OVC	025			9.00		31	27	29	85	7	06	29.05	30.11
10	OVC	019			9.00		34	26	31	73	7	01	29.10	30.16
13	BKN	250			10.00		39	29	35	67	0	00	29.07	30.13
16	BKN	100			10.00		44	32	39	63	6	09	28.98	30.04
19	OVC	250			10.00		39	32	36	76	0	00	28.96	30.03
22	SCT	NC			9.00		37	32	35	82	0	00	28.92	29.98
					SUNRISE: 0743	**JAN 21**			**SUNSET: 1752**					
01	OVC	250			7.00		37	33	35	86	0	00	28.88	29.94
04	OVC	050			4.00	-RA BR	38	36	37	93	0	00	28.89	29.94
07	OVC	070			4.00	BR	41	39	40	93	0	00	28.88	29.93
10	SCT	NC			10.00		48	45	47	89	20	22	28.94	30.00
13	SCT	NC			10.00		53	40	47	61	16	25	28.98	30.03
16	CLR	NC			10.00		54	34	45	47	15	26	29.00	30.05
19	CLR	NC			10.00		47	26	38	44	9	27	29.09	30.14
22	CLR	NC			10.00		44	23	36	43	7	30	29.15	30.20
					SUNRISE: 0743	**JAN 22**			**SUNSET: 1753**					
01	CLR	NC			10.00		36	27	33	70	0	00	29.19	30.24
04	CLR	NC			10.00		32	27	30	82	0	00	29.21	30.28
07	CLR	NC			10.00		30	25	28	82	3	02	29.24	30.31
10	FEW	NC			10.00		36	30	34	79	5	07	29.29	30.36
13	SCT	NC			10.00		52	29	42	41	5	VR	29.24	30.30
16	OVC	250			10.00		54	24	42	31	3	25	29.20	30.25
19	BKN	110			10.00		50	29	41	44	5	05	29.15	30.21
22	OVC	054			7.00	-RA	44	38	41	79	12	32	29.18	30.24
					SUNRISE: 0742	**JAN 23**			**SUNSET: 1754**					
01	OVC	042			10.00	-RA	43	41	42	93	5	03	29.14	30.19
04	OVC	037			3.00	RA BR	42	41	42	96	6	06	29.12	30.17
07	OVC	004			1.75	+RA BR	42	41	42	96	5	36	29.09	30.14
10	OVC	011			2.50	-RA BR	43	42	43	97	0	00	29.09	30.14
13	OVC	014			1.50	+RA BR	44	43	44	96	0	00	29.07	30.13
16	OVC	014			1.50	-RA BR	48	47	47	96	0	00	29.03	30.08
19	OVC	001			1.00	BR	50	49	49	96	3	35	29.01	30.06
22	OVC	001			0.50	FG	48	47	47	96	3	02	28.97	30.02
					SUNRISE: 0742	**JAN 24**			**SUNSET: 1755**					
01	BKN	110			2.00	BR	47	46	46	97	3	36	28.93	29.98
04	FEW	NC			9.00		55	54	54	96	10	20	28.84	29.87
07	OVC	100			10.00		63	56	59	78	26	22	28.80	29.83
10	OVC	025			4.00	-RA BR	57	56	56	96	7	18	28.92	29.96
13	OVC	031			7.00	-RA	59	57	58	93	8	25	28.85	29.89
16	OVC	060			10.00	-RA	59	56	57	90	9	24	28.83	29.85
19	OVC	060			6.00	-RA BR	55	52	53	90	9	28	28.88	29.92
22	OVC	040			5.00	-RA BR	51	50	51	96	8	28	28.90	29.94

OBSERVATIONS AT 3−HOURLY INTERVALS

KNOXVILLE, TN

JANUARY 2002 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: 0741	JAN 25			SUNSET: 1756					
01	OVC	007			2.00	-RA BR	47	45	46	93	16	36	28.93	29.98
04	OVC	070			10.00		41	34	38	76	9	01	29.07	30.12
07	SCT	NC			10.00		37	31	35	79	7	02	29.11	30.16
10	FEW	NC			10.00		38	32	36	79	10	05	29.17	30.23
13	FEW	NC			10.00		47	32	40	56	14	04	29.19	30.24
16	FEW	NC			10.00		50	25	40	38	10	04	29.18	30.23
19	CLR	NC			10.00		45	25	37	46	5	05	29.19	30.25
22	CLR	NC			10.00		38	27	34	65	0	00	29.21	30.27
					SUNRISE: 0740	JAN 26			SUNSET: 1757					
01	CLR	NC			10.00		31	28	30	89	0	00	29.21	30.27
04	CLR	NC			10.00		30	27	29	88	0	00	29.23	30.30
07	CLR	NC			8.00		27	24	26	89	5	08	29.26	30.33
10	CLR	NC			10.00		36	30	34	79	0	00	29.30	30.37
13	CLR	NC			10.00		50	30	41	46	3	36	29.24	30.32
16	CLR	NC			10.00		56	31	45	39	0	00	29.20	30.25
19	CLR	NC			10.00		51	33	43	50	0	00	29.20	30.26
22	CLR	NC			10.00		42	34	39	73	0	00	29.21	30.27
					SUNRISE: 0740	JAN 27			SUNSET: 1758					
01	CLR	NC			10.00		37	32	35	82	0	00	29.21	30.26
04	CLR	NC			5.00	BR	32	30	31	92	3	07	29.21	30.26
07	CLR	NC			7.00		31	28	30	89	3	01	29.22	30.29
10	CLR	NC			7.00		38	34	36	86	5	07	29.26	30.33
13	FEW	NC			10.00		55	38	47	53	0	00	29.21	30.26
16	CLR	NC			10.00		61	42	51	50	8	26	29.14	30.19
19	BKN	250			10.00		53	42	48	66	0	00	29.13	30.18
22	BKN	250			10.00		49	42	46	77	5	21	29.16	30.21
					SUNRISE: 0739	JAN 28			SUNSET: 1759					
01	CLR	NC			8.00		42	40	41	92	0	00	29.14	30.19
04	CLR	NC			5.00	BR	36	35	36	97	0	00	29.14	30.19
07	SCT	NC			3.00	BR	36	34	35	93	0	00	29.16	30.22
10	FEW	NC			7.00		44	40	42	85	3	07	29.16	30.21
13	OVC	025			10.00		55	42	49	62	6	22	29.12	30.17
16	CLR	NC			10.00		66	48	56	52	15	24	29.06	30.10
19	OVC	045			10.00		61	53	57	75	9	24	29.07	30.12
22	OVC	045			10.00		60	54	57	80	10	26	29.05	30.10
					SUNRISE: 0738	JAN 29			SUNSET: 1800					
01	OVC	055			10.00		59	53	56	81	7	28	29.04	30.08
04	OVC	060			10.00		59	54	56	83	10	29	29.05	30.08
07	OVC	021			10.00		60	55	57	84	5	27	29.07	30.11
10	OVC	024			10.00		63	57	60	81	12	24	29.11	30.14
13	BKN	065			10.00		71	60	64	68	14	24	29.08	30.11
16	BKN	060			10.00		71	59	64	66	14	22	29.05	30.08
19	SCT	NC			10.00		64	58	60	81	10	24	29.09	30.12
22	SCT	NC			8.00		61	57	59	87	5	26	29.09	30.12
					SUNRISE: 0738	JAN 30			SUNSET: 1801					
01	SCT	NC			3.00	BR	54	54	54	100	3	09	29.07	30.11
04	BKN	001			0.25	FG	50	50	50	100	3	08	29.08	30.11
07	BKN	001			0.25	FG	52	52	52	100	9	15	29.10	30.14
10	SCT	NC			4.00	BR	58	57	57	97	6	28	29.13	30.16
13	SCT	NC			10.00		72	56	62	57	14	26	29.09	30.12
16	BKN	055			10.00		73	56	63	55	13	27	29.05	30.08
19	BKN	095			10.00		66	55	60	68	7	24	29.07	30.10
22	CLR	NC			10.00		62	54	57	75	6	24	29.07	30.11

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: 0737	JAN 31			SUNSET: 1802					
01	CLR	NC			10.00		61	53	57	75	6	24	29.06	30.09
04	CLR	NC			10.00		60	53	56	78	5	28	29.05	30.07
07	BKN	047			7.00		54	51	52	90	0	00	29.07	30.11
10	OVC	047			9.00		64	56	59	75	10	29	29.12	30.15
13	SCT	NC			10.00		74	58	64	57	21	24	29.08	30.11
16	SCT	NC			10.00		73	58	64	59	17	23	29.02	30.05
19	FEW	NC			10.00		67	58	62	73	9	26	29.02	30.05
22	FEW	NC			10.00		61	57	59	87	9	26	28.99	30.02

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			38	31	35	76	29.04	30.10	8.90	6	2	32
02			38	31	35	77	29.04	30.10	8.48	5	2	28
03			36	31	34	80	29.05	30.11	8.59	5	2	31
04			36	31	34	82	29.05	30.11	8.04	5	2	31
05			36	31	34	83	29.05	30.10	8.26	6	2	34
06			35	30	33	83	29.05	30.11	8.08	6	1	32
07			35	30	33	83	29.06	30.12	7.97	6	1	36
08			34	30	33	84	29.07	30.13	7.56	5	1	32
09			36	32	35	84	29.08	30.14	7.42	5	1	35
10			39	33	37	79	29.09	30.15	7.91	6	1	30
11			42	33	39	72	29.09	30.15	8.60	7	1	28
12			45	33	40	65	29.08	30.13	8.93	7	3	24
13			47	34	41	60	29.05	30.10	9.04	8	4	26
14			49	34	42	58	29.03	30.08	9.16	8	5	23
15			50	33	43	55	29.02	30.07	9.20	9	5	23
16			50	33	43	56	29.02	30.07	9.24	10	6	25
17			49	33	42	58	29.02	30.08	9.13	8	5	26
18			47	33	41	62	29.03	30.08	9.42	7	4	25
19			45	33	40	65	29.04	30.09	9.45	6	3	25
20			44	33	39	67	29.04	30.10	9.50	5	3	26
21			43	33	39	70	29.04	30.10	9.40	5	3	27
22			42	33	38	72	29.05	30.10	9.34	6	4	28
23			41	33	38	74	29.05	30.10	9.27	6	3	27
24			40	32	37	74	29.04	30.10	9.34	6	2	28

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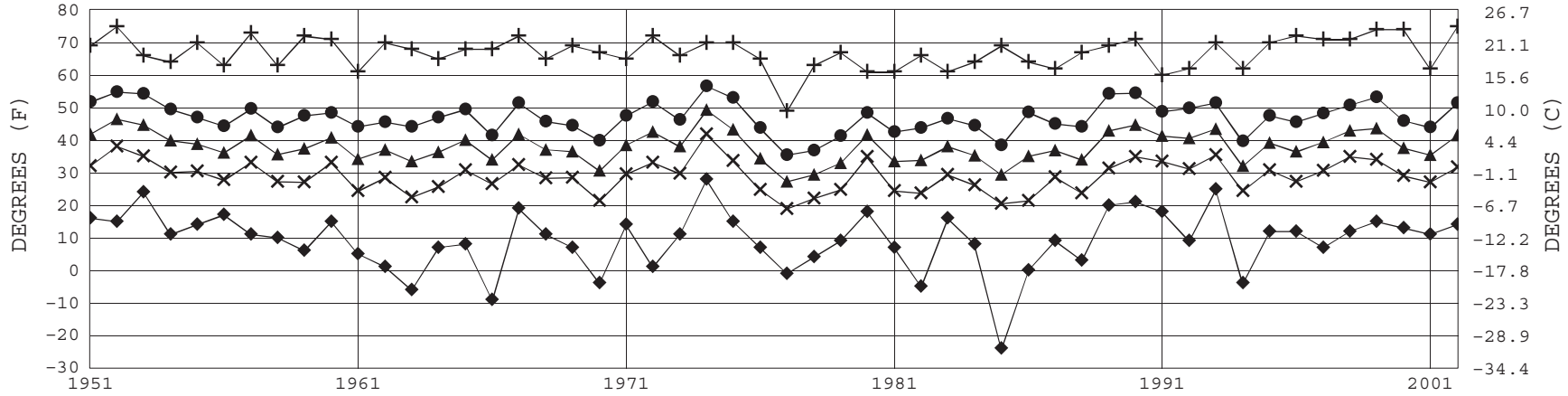
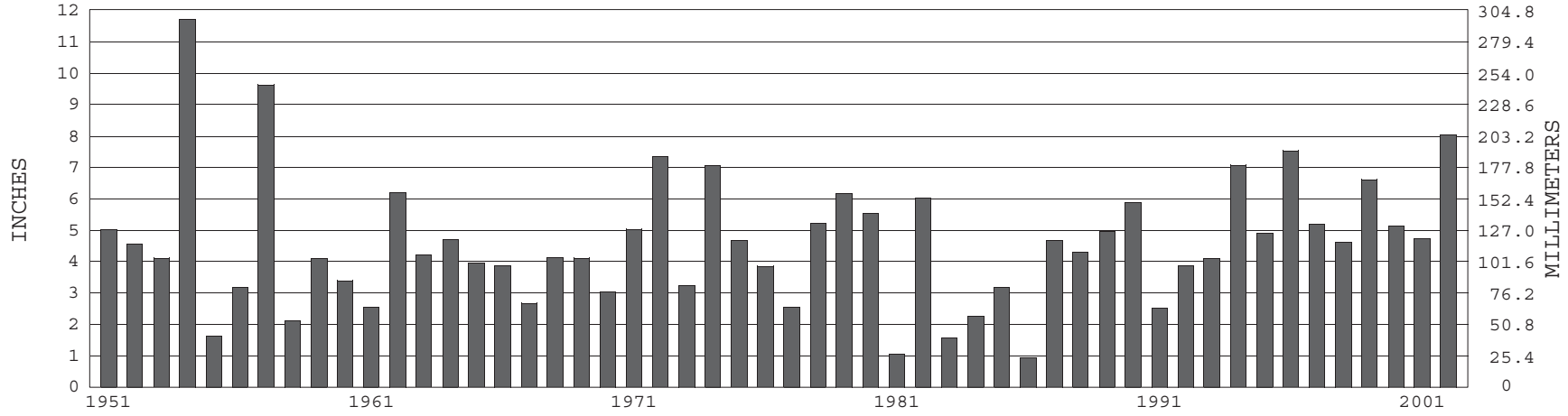
KNOXVILLE, TN JANUARY TEMPERATURES



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

Long-Term (1951-2002) Mean: 38.0 1961-1990 Normal: 37.6

KNOXVILLE, TN JANUARY PRECIPITATION



Long-Term (1951-2002) Mean Monthly Total: 4.59 1961-1990 Normal: 4.57

JANUARY 2002

KNOXVILLE, TN

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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