



AUGUST 1996

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

AUGUST 1996
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	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
01	81	65	73	-4	65	67	0	8	RA FG+ BR HZ				0.26	28.96	29.98	1.7	31	4.4	16	35	14	35	01	
02	81	61	71*	-6	63	66	0	6	BR HZ				0.00	28.96	29.98	2.7	04	3.9	11	09	10	08	02	
03	86	65	76	-1	65	68	0	11	BR HZ				0.00	28.99	30.00	3.8	02	3.9	11	03	9	01	03	
04	87	65	76	-1	68	71	0	11	FG BR HZ				0.00	29.07	30.08	3.0	02	3.3	14	23	13	24	04	
05	88	69	79	2	70	73	0	14	BR HZ				0.00	29.11	30.12	3.6	36	3.4	13	12	11	12	05	
06	88	70	79	2	70	73	0	14	BR HZ				0.00	29.13	30.15	2.3	05	2.3	11	09	9	08	06	
07	89	70	80	3	72	74	0	15	BR HZ				0.00	29.10	30.11	0.7	30	1.7	9	10	8	09	07	
08	88	73	81	4	72	74	0	16	TS RA BR HZ				T	29.07	30.08	3.5	27	6.0	23	24	21	23	08	
09	86	70	78	1	65	69	0	13	BR				0.00	29.02	30.03	5.1	35	5.7	15	01	13	36	09	
10	86	61*	74	-3	64	68	0	9	HZ				0.00	28.99	30.01	5.5	05	6.1	15	26	13	05	10	
11	83	66	75	-2	67	69	0	10	RA BR HZ				0.46	28.96	29.98	5.3	03	6.2	18	16	15	16	11	
12	76	68	72	-4	66	68	0	7	RA BR HZ				0.22	28.88	29.89	5.2	05	5.5	17	11	15	10	12	
13	79	68	74	-2	62	66	0	9	FG+ HZ				0.00	28.97	29.99	4.6	02	5.7	17	01	15	36	13	
14	82	62	72	-4	72	72	0	7	HZ				0.00	29.06	30.08	6.0	04	5.0	16	07	11	06	14	
15	85	62	74	-2	64	67	0	9	BR HZ				0.00	29.08	30.10	4.4	04	2.3	13	29	10	30	15	
16	86	65	76	0	65	69	0	11	BR HZ				0.00	29.08	30.10	4.4	04	2.3	10	27	9	29	16	
17	87	65	76	0	67	70	0	11	BR HZ				0.00	29.07	30.09	3.1	01	3.8	13	32	10	29	17	
18	88	65	77	1	67	70	0	12	FG+ BR HZ				0.00	29.12	30.13	2.9	02	2.9	9	33	8	05	18	
19	90	66	78	2	68	71	0	13	FG+ BR HZ				0.00	29.18	30.20	3.1	02	3.5	10	22	9	23	19	
20	89	68	79	3	69	72	0	14	BR HZ				0.00	29.21	30.23	2.9	03	3.7	13	06	11	06	20	
21	89	71	80	4	68	72	0	15	BR HZ				0.00	29.17	30.19	1.9	01	3.3	11	04	9	07	21	
22	91	69	80	4	69	72	0	15	BR HZ				0.00	29.13	30.15	2.6	01	3.5	14	06	10	33	22	
23	91*	70	81*	6	68	72	0	16	TS RA BR HZ				T	29.13	30.15	1.3	33	4.5	16	14	14	16	23	
24	89	68	79	4	67	69	0	14	TS TSRA BR HZ				0.26	29.09	30.11	2.6	29	4.2	37*	34	28*	30	24	
25	83	67	75	0	67	69	0	10	FG+ BR HZ				0.00	29.01	30.03	0.8	08	2.4	11	31	9	32	25	
26	86	62	74	-1	66	69	0	9	TS RA FG+ BR HZ				0.12	28.96	29.98	1.2	20	3.0	18	27	16	28	26	
27	83	68	76	1	67	69	0	11	RA BR HZ				T	28.97	29.98	5.4	27	5.1	22	02	20	02	27	
28	86	65	76	1	66	69	0	11	BR HZ				0.00	29.02	30.04	4.1	29	4.5	20	01	15	01	28	
29	88	64	76	1	66	69	0	11	BR HZ				0.00	29.02	30.04	4.7	03	5.3	15	04	11	04	29	
30	87	63	75	1	65	69	0	10	RA BR HZ				0.01	29.00	30.02	5.0	06	4.5	15	05	13	05	30	
31	83	69	76	2	66	69	0	11	BR HZ				0.00	28.98	29.99	3.0	06	3.8	20	07	16	07	31	
85.8		66.5	76.2	■ ■			0.0	11.4	< MONTHLY AVERAGES	TOTALS-->			1.33	29.05	30.06	2.0	02	4.1	<-- MONTHLY AVERAGES					
-9		1.2	0.2	■ ■	<----- DEPARTURE FROM NORMAL ----->						-1.80		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3											
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.68			DATE: 11-12			SEA LEVEL PRESSURE		DATE		TIME					
MONTHLY TOTAL DEPARTURE				SEASON TO DATE TOTAL DEPARTURE				GREATEST 24-HR SNOWFALL:			DATE:			MAXIMUM		:		20 0920						
HEATING: 0				0				GREATEST SNOW DEPTH:			DATE:			MINIMUM		:		12 1717						
COOLING: 353				12				NUMBER OF DAYS WITH			MAXIMUM TEMP ≥ 90: 3			MINIMUM TEMP ≤ 32: 0			PRECIPITATION ≥ 0.01 INCH: 6							
											MAXIMUM TEMP ≤ 32: 0			MINIMUM TEMP ≤ 0: 0			PRECIPITATION ≥ 0.10 INCH: 5							
											THUNDERSTORMS: 4			HEAVY FOG: 6			SNOWFALL ≥ 1.0 INCH: 0							

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN

AUGUST 1996

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	0.11	0.16	T										01												01	0.27	0.26		
02													02												02		0.00		
03													03												03		0.00		
04													04												04		0.00		
05													05												05		0.00		
06													06												06		0.00		
07													07												07		0.00		
08													08												08	T	T		
09													09												09		0.00		
10													10												10		0.00		
11													11												11	0.45	0.46		
12	0.07	T	0.01	T			T	0.01	T			0.07	12	T	0.03	0.02	0.01	0.10	0.01		0.08	0.10	0.02	0.02	0.06	0.23	0.22		
13													13												13		0.00		
14													14												14		0.00		
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		0.00		
21													21												21		0.00		
22													22												22		0.00		
23													23												23		T		
24													24			0.07	0.17	0.02	T						24		0.26		
25													25												25		0.00		
26													26												26		0.12		
27		T											27									0.01	0.11		27		T		
28													28												28		0.00		
29													29												29		0.00		
30													30												30	T	0.01		
31													31												31	T	0.00		

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	
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 AUGUST 1996

Ceilometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR-SS), or midnight to midnight (MN-MN).

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet. Both ceilometer and satellite data must be present to compute Sky Condition. Clear = 0-2 oktas, Partly Cloudy = 3-6 oktas, Cloudy = 7-8 oktas.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled at constant pressure by evaporation of moisture into it, to 100% relative humidity.

ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							.25	10.00	
02							1.50	10.00	
03							2.50	10.00	
04							.50	10.00	
05							1.75	9.00	
06							3.00	10.00	
07							2.00	7.00	
08							1.25	8.00	
09							6.00	10.00	
10							6.00	10.00	
11							1.25	8.00	
12							1.25	10.00	
13							9.00	10.00	
14							3.00	10.00	
15							2.50	10.00	
16							3.00	6.00	
17							2.00	6.00	
18							<.25	6.00	
19							<.25	5.00	
20							2.00	5.00	
21							2.50	6.00	
22							1.50	5.00	
23							2.50	9.00	
24							3.00	8.00	
25							.25	6.00	
26							<.25	9.00	
27							2.50	10.00	
28							2.50	8.00	
29							1.50	4.00	
30							1.25	7.00	
31							2.00	5.00	
MONTHLY AVGS							2.21	7.97	
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 5 28 1									

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

AUGUST 1996

TYS

WBAN # 13891

HOUR (LST)	≤ 12K FEET		SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	≤ 12K FEET		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	STATION	SEA LEVEL						
																														DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG
SUNRISE: 0544						AUG 01						SUNSET: 1941						SUNRISE: 0549						AUG 07						SUNSET: 1935					
01	OVC	005			3.00	RA BR	70	69	69	97	8	33	28.94	29.96	01	SCT	NC			5.00	BR	74	71	72	91	0	00	29.10	30.11						
04	BKN	014			4.00	BR	67	66	66	97	6	23	28.97	29.99	04	CLR	NC			6.00	BR	73	70	71	90	0	00	29.08	30.10						
07	OVC	002			2.00	BR	67	66	66	97	5	27	28.97	30.00	07	OVC	022			4.00	BR	73	71	72	94	3	26	29.15	30.16						
10	OVC	009			4.00	BR	70	66	67	87	0	00	28.99	30.01	10	SCT	NC			6.00	HZ	79	72	74	79	0	00	29.17	30.18						
13	CLR	NC			6.00	HZ	78	65	70	64	5	25	28.97	29.99	13	FEW	NC			3.00	HZ	86	73	77	65	3	11	29.12	30.13						
16	CLR	NC			8.00		81	61	68	51	8	28	28.93	29.95	16	CLR	NC			5.00	HZ	88	70	75	55	6	VR	29.06	30.07						
19	CLR	NC			10.00		77	62	67	60	5	04	28.93	29.95	19	CLR	NC			5.00	HZ	86	71	76	61	0	00	29.06	30.07						
22	CLR	NC			6.00	BR	69	65	66	87	3	09	28.96	29.99	22	FEW	NC			4.00	HZ	80	73	75	79	0	00	29.06	30.07						
SUNRISE: 0545						AUG 02						SUNSET: 1940						SUNRISE: 0549						AUG 08						SUNSET: 1934					
01	CLR	NC			4.00	BR	65	63	64	93	5	02	28.95	29.97	01	CLR	NC			4.00	BR	76	72	73	88	3	26	29.10	30.11						
04	CLR	NC			2.50	BR	61	61	61	100	3	08	28.93	29.95	04	BKN	055			3.00	BR	76	72	73	88	0	00	29.07	30.08						
07	CLR	NC			1.75	BR	63	61	62	93	0	00	28.97	29.99	07	FEW	NC			1.25	BR	75	73	74	94	0	00	29.11	30.12						
10	FEW	NC			5.00	HZ	71	65	67	81	6	03	28.98	30.01	10	CLR	NC			4.00	HZ	81	71	74	72	6	18	29.12	30.14						
13	FEW	NC			9.00		78	63	68	60	8	02	28.97	29.98	13	FEW	NC			5.00	HZ	87	73	77	63	5	24	29.07	30.08						
16	CLR	NC			10.00		80	59	67	49	7	08	28.93	29.95	16	CLR	NC			4.00	HZ	85	73	77	68	9	29	29.00	30.01						
19	CLR	NC			10.00		76	62	67	62	3	05	28.94	29.96	19	BKN	024			8.00		77	68	71	74	13	23	29.04	30.06						
22	CLR	NC			10.00		72	63	66	73	5	36	28.96	29.98	22	BKN	050			7.00		75	70	72	84	8	17	29.03	30.04						
SUNRISE: 0545						AUG 03						SUNSET: 1939						SUNRISE: 0550						AUG 09						SUNSET: 1933					
01	CLR	NC			8.00		69	63	65	81	5	35	28.95	29.97	01	BKN	060			6.00	BR	73	70	71	90	7	25	29.03	30.05						
04	CLR	NC			6.00	BR	66	63	64	90	6	03	28.95	29.96	04	OVC	030			10.00		71	68	69	90	0	00	29.01	30.02						
07	CLR	NC			3.00	BR	66	64	65	93	0	00	28.99	30.01	07	BKN	031			7.00		71	67	68	87	3	03	29.04	30.06						
10	CLR	NC			5.00	HZ	75	66	69	74	0	00	29.02	30.03	10	OVC	023			7.00		76	68	71	77	7	01	29.05	30.06						
13	CLR	NC			7.00		82	65	71	56	5	30	28.99	30.00	13	FEW	NC			8.00		83	68	73	61	8	34	29.03	30.04						
16	CLR	NC			8.00		84	63	70	49	5	VR	28.97	29.98	16	CLR	NC			10.00		85	61	69	45	8	01	28.98	29.99						
19	CLR	NC			9.00		82	65	71	56	3	36	28.98	30.00	19	CLR	NC			10.00		79	59	66	50	8	36	28.97	29.99						
22	CLR	NC			5.00	BR	72	68	69	87	3	08	29.01	30.03	22	CLR	NC			10.00		73	59	64	62	3	05	29.01	30.03						
SUNRISE: 0546						AUG 04						SUNSET: 1938						SUNRISE: 0551						AUG 10						SUNSET: 1932					
01	CLR	NC			6.00	BR	70	67	68	90	0	00	29.02	30.03	01	CLR	NC			8.00		68	60	63	76	3	01	29.01	30.03						
04	CLR	NC			4.00	BR	67	65	66	93	0	00	29.02	30.04	04	CLR	NC			10.00		65	61	63	87	3	03	28.99	30.01						
07	CLR	NC			0.50	FG	69	67	68	93	0	00	29.09	30.11	07	CLR	NC			10.00		65	61	63	87	6	04	29.02	30.04						
10	CLR	NC			5.00	HZ	78	69	72	74	7	03	29.10	30.12	10	SCT	NC			8.00		76	65	69	69	9	03	29.03	30.04						
13	CLR	NC			6.00	HZ	84	70	74	63	3	VR	29.07	30.09	13	CLR	NC			8.00		82	65	71	56	7	10	29.00	30.02						
16	CLR	NC			6.00	HZ	86	68	74	55	5	04	29.06	30.08	16	BKN	050			9.00		86	64	71	48	6	VR	28.96	29.97						
19	BKN	047			10.00		81	68	72	65	10	25	29.06	30.08	19	CLR	NC			6.00	HZ	80	66	71	62	6	08	28.95	29.97						
22	CLR	NC			10.00		76	68	71	77	5	27	29.09	30.10	22	CLR	NC			9.00		75	65	69	71	6	03	28.98	30.00						
SUNRISE: 0547						AUG 05						SUNSET: 1937						SUNRISE: 0552						AUG 11						SUNSET: 1931					
01	CLR	NC			6.00	BR	71	68	69	90	3	04	29.07	30.08	01	FEW	NC			7.00		70	64	66	82	6	05	28.98	30.00						
04	CLR	NC			4.00	BR	70	68	69	93	0	00	29.08	30.10	04	CLR	NC			7.00		68	63	65	84	6	04	28.97	29.98						
07	CLR	NC			1.75	BR	70	69	69	97	0	00	29.12	30.14	07	CLR	NC			5.00	HZ	68	63	65	84	6	05	29.00	30.01						
10	CLR	NC			4.00	HZ	79	71	74	77	3	02	29.15	30.16	10	CLR	NC			6.00	HZ	78	67	71	69	7	05	28.99	30.01						
13	FEW	NC			6.00	HZ	86	71	76	61	0	00	29.13	30.14	13	SCT	NC			6.00	HZ	82	68	73	63	6	10	28.94	29.96						
16	FEW	NC			8.00		85	71	75	63	9	12	29.08	30.10	16	BKN	075			2.50	-RA BR	72	70	71	94	5	02	28.93	29.95						
19	CLR	NC			8.00		83	71	75	67	5	16	29.09	30.11	19	OVC	015			3.00	BR	71	69	70	94	8	01	28.95	29.97						
22	CLR	NC			8.00		76	71	73	85	3	22	29.11	30.13	22	OVC	008			4.00	-RA BR	68	67	67	96	8	02	28.93	29.95						
SUNRISE: 0548						AUG 06						SUNSET: 1936						SUNRISE: 0552						AUG 12						SUNSET: 1930					
01	CLR	NC			10.00		76	68	71	77	0	00	29.11	30.12	01	OVC	049			2.50	-RA BR	69	68	68	96	8	05	28.90	29.91						
04	CLR	NC			4.00	BR	71	70	70	96	3	03	29.13	30.14	04	OVC	004			2.50	BR	69	67	68	93	8	05	28.86	29.87						
07	CLR	NC			3.00	BR	72	70	71	94	3	10	29.17	30.19	07	OVC	004			1.25	-RA BR	69	67	68	93	6	05	28.86	29.88						
10	CLR	NC			6.00	HZ	81	72	75	74	5	10	29.20	30.21	10	OVC	006			4.00	BR	71	68	69	90	5	02	28.87	29.89						
13	FEW	NC			8.00		85	71	75	63	5	VR	29.16	30.17	13	BKN	080			10.00		71	68	69	90	9	11	28.87	29.89						
16	FEW	NC			9.00		86	70	75	59	5	11	29.09	30.10	16	CLR	NC			10.00		75	64	68	69	7	VR	28.87	29.88						
19	CLR	NC			9.00		84	71	75	65	5	09	29.09	30.11	19	BKN	075			10.00		73	65	68	76	5	08	28.87	29.89						
22	CLR	NC			6.00	HZ	78	73	75	85	0	00	29.12	30.13	22	OVC	070			10.00		70	66	67	87	5	35	28.90	29.92						

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

AUGUST 1996

TYS

WBAN # 13891

HOUR (LST)	≤ 12K FEET		SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	≤ 12K FEET		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	STATION	SEA LEVEL						
SUNRISE: 0553						AUG 13						SUNSET: 1928						SUNRISE: 0558						AUG 19						SUNSET: 1921					
01	BKN	120			10.00	69	67	68	93	3	01	28.89	29.91	01	CLR	NC			3.00	BR	71	68	69	90	3	04	29.15	30.16							
04	OVC	040			10.00	69	65	66	87	3	03	28.91	29.93	04	CLR	NC			1.50	BR	68	67	67	96	0	00	29.15	30.16							
07	OVC	036			10.00	68	64	66	87	3	36	28.94	29.96	07	VV	001			<.25	FG	69	67	68	93	3	07	29.21	30.22							
10	OVC	042			10.00	70	64	66	82	8	35	28.97	30.00	10	CLR	NC			3.00	HZ	78	68	71	71	5	08	29.23	30.26							
13	OVC	049			10.00	74	63	67	69	3	VR	28.98	30.00	13	CLR	NC			4.00	HZ	87	68	74	53	7	33	29.21	30.22							
16	BKN	070			10.00	79	65	70	62	10	35	28.96	29.98	16	CLR	NC			4.00	HZ	89	66	73	47	3	30	29.17	30.18							
19	OVC	047			10.00	75	62	67	64	10	01	28.98	30.00	19	CLR	NC			4.00	HZ	81	70	73	69	5	23	29.17	30.18							
22	OVC	065			10.00					10	03	29.03	30.05	22	CLR	NC			5.00	HZ	75	69	71	82	6	25	29.18	30.19							
SUNRISE: 0554						AUG 14						SUNSET: 1927						SUNRISE: 0559						AUG 20						SUNSET: 1920					
01	CLR	NC			8.00	66	43	54	43	6	05	29.04	30.06	01	CLR	NC			5.00	HZ	73	68	70	84	3	31	29.20	30.21							
04	CLR	NC			5.00	65	41	53	42	6	01	29.03	30.05	04	SCT	NC			4.00	BR	70	67	68	90	0	00	29.21	30.24							
07	CLR	NC			3.00					5	01	29.08	30.10	07	CLR	NC			2.00	BR	70	68	69	93	0	00	29.25	30.27							
10	FEW	NC			6.00					6	05	29.10	30.12	10	CLR	NC			4.00	HZ	80	69	73	69	5	VR	29.26	30.29							
13	FEW	NC			8.00	79	48	61	34	9	02	29.08	30.10	13	CLR	NC			4.00	HZ	86	68	74	55	7	09	29.24	30.26							
16	CLR	NC			9.00	82	62	69	51	5	VR	29.04	30.06	16	CLR	NC			5.00	HZ	88	67	74	50	6	05	29.19	30.20							
19	CLR	NC			10.00	78	63	68	60	3	07	29.04	30.06	19	CLR	NC			4.00	HZ	83	69	74	63	5	10	29.16	30.17							
22	CLR	NC			7.00	71	64	67	79	0	00	29.06	30.09	22	BKN	050			4.00	HZ	77	71	73	82	3	23	29.19	30.20							
SUNRISE: 0555						AUG 15						SUNSET: 1926						SUNRISE: 0560						AUG 21						SUNSET: 1919					
01	CLR	NC			7.00	67	62	64	84	5	03	29.06	30.09	01	FEW	NC			6.00	HZ	75	68	70	79	5	32	29.20	30.22							
04	CLR	NC			4.00	63	62	62	97	0	00	29.07	30.09	04	CLR	NC			4.00	BR	72	69	70	91	5	20	29.20	30.22							
07	CLR	NC			5.00	63	61	62	93	3	05	29.11	30.13	07	CLR	NC			2.50	BR	72	68	69	87	0	00	29.22	30.24							
10	CLR	NC			6.00	75	65	69	71	0	00	29.13	30.15	10	CLR	NC			3.00	HZ	80	68	72	67	3	31	29.22	30.24							
13	BKN	046			9.00	81	67	72	62	8	30	29.11	30.12	13	CLR	NC			4.00	HZ	87	67	73	51	8	34	29.20	30.21							
16	CLR	NC			10.00	85	64	71	50	5	VR	29.06	30.08	16	FEW	NC			4.00	HZ	89	66	73	47	6	04	29.12	30.13							
19	CLR	NC			10.00	80	62	69	54	0	00	29.05	30.07	19	CLR	NC			4.00	HZ	83	69	74	63	6	10	29.10	30.12							
22	CLR	NC			8.00	73	66	69	79	0	00	29.08	30.09	22	CLR	NC			3.00	HZ	77	71	73	82	3	16	29.15	30.16							
SUNRISE: 0556						AUG 16						SUNSET: 1925						SUNRISE: 0600						AUG 22						SUNSET: 1918					
01	CLR	NC			5.00	70	66	67	87	0	00	29.08	30.09	01	CLR	NC			4.00	HZ	75	69	71	82	0	00	29.14	30.16							
04	FEW	NC			5.00	65	64	64	97	0	00	29.09	30.10	04	CLR	NC			2.50	BR	70	69	69	97	3	09	29.13	30.15							
07	CLR	NC			3.00	67	64	65	91	0	00	29.10	30.12	07	CLR	NC			1.50	BR	71	68	69	90	0	00	29.17	30.18							
10	CLR	NC			6.00	77	67	70	71	5	25	29.13	30.14	10	CLR	NC			2.50	HZ	81	70	73	69	3	VR	29.17	30.18							
13	FEW	NC			5.00	83	67	72	59	7	27	29.10	30.12	13	SCT	NC			4.00	HZ	88	68	74	52	3	VR	29.14	30.15							
16	CLR	NC			5.00	85	62	70	46	5	VR	29.05	30.07	16	SCT	NC			4.00	HZ	88	68	74	52	7	01	29.08	30.10							
19	CLR	NC			5.00	82	64	70	55	3	29	29.04	30.06	19	CLR	NC			4.00	HZ	82	71	74	69	6	31	29.09	30.11							
22	CLR	NC			3.00	71	67	68	87	3	04	29.06	30.08	22	CLR	NC			4.00	BR	76	72	73	88	8	25	29.13	30.14							
SUNRISE: 0556						AUG 17						SUNSET: 1924						SUNRISE: 0601						AUG 23						SUNSET: 1916					
01	CLR	NC			4.00	71	67	68	87	0	00	29.06	30.08	01	CLR	NC			5.00	BR	74	70	71	88	3	29	29.14	30.15							
04	CLR	NC			2.50	68	66	67	93	0	00	29.06	30.07	04	CLR	NC			5.00	BR	72	68	69	87	3	26	29.15	30.16							
07	CLR	NC			2.50	68	65	66	90	3	07	29.08	30.10	07	CLR	NC			2.50	BR	71	68	69	90	3	01	29.17	30.19							
10	CLR	NC			3.00	78	68	71	71	3	31	29.10	30.12	10	CLR	NC			4.00	HZ	81	70	73	69	0	00	29.18	30.19							
13	CLR	NC			4.00	86	69	74	57	8	29	29.08	30.09	13	CLR	NC			4.00	HZ	87	70	75	57	5	VR	29.15	30.16							
16	CLR	NC			5.00	86	65	72	50	5	30	29.04	30.06	16	BKN	060			4.00	HZ	83	68	73	61	10	22	29.09	30.10							
19	CLR	NC			4.00	81	69	73	67	7	03	29.04	30.06	19	CLR	NC			6.00	HZ	82	68	73	63	5	25	29.08	30.09							
22	BKN	049			5.00	76	68	71	77	8	04	29.09	30.10	22	BKN	055			8.00		78	68	71	71	6	28	29.13	30.14							
SUNRISE: 0557						AUG 18						SUNSET: 1923						SUNRISE: 0602						AUG 24						SUNSET: 1915					
01	CLR	NC			5.00	72	66	68	82	5	06	29.08	30.10	01	CLR	NC			8.00		73	67	69	81	0	00	29.12	30.13							
04	CLR	NC			3.00	67	65	66	93	0	00	29.08	30.09	04	CLR	NC			7.00		70	66	67	87	5	24	29.10	30.11							
07	VV	001			<.25	67	66	66	97	6	05	29.13	30.15	07	CLR	NC			5.00	HZ	71	66	68	84	5	27	29.12	30.14							
10	CLR	NC			2.50	77	66	70	69	0	00	29.15	30.17	10	CLR	NC			5.00	HZ	80	67	71	64	0	00	29.12	30.14							
13	CLR	NC			5.00	86	67	73	53	0	00	29.14	30.15	13	BKN	037			4.00	HZ	86	69	74	57	7	17	29.05	30.06							
16	CLR	NC			6.00	87	64	72	46	6	28	29.09	30.10	16	OVC	018			3.00	-TSRA	69	67	68	93	5	17	29.08	30.11							
19	CLR	NC			4.00	82	69	73	65	3	36	29.11	30.12	19	CLR	NC			5.00	BR	70	68	69	93	0	00	29.05	30.07							
22	CLR	NC			4.00	77	71	73	82	3	02	29.14	30.16	22	OVC	003			3.00	BR	69	68	68	96	3	04	29.06	30.08							

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

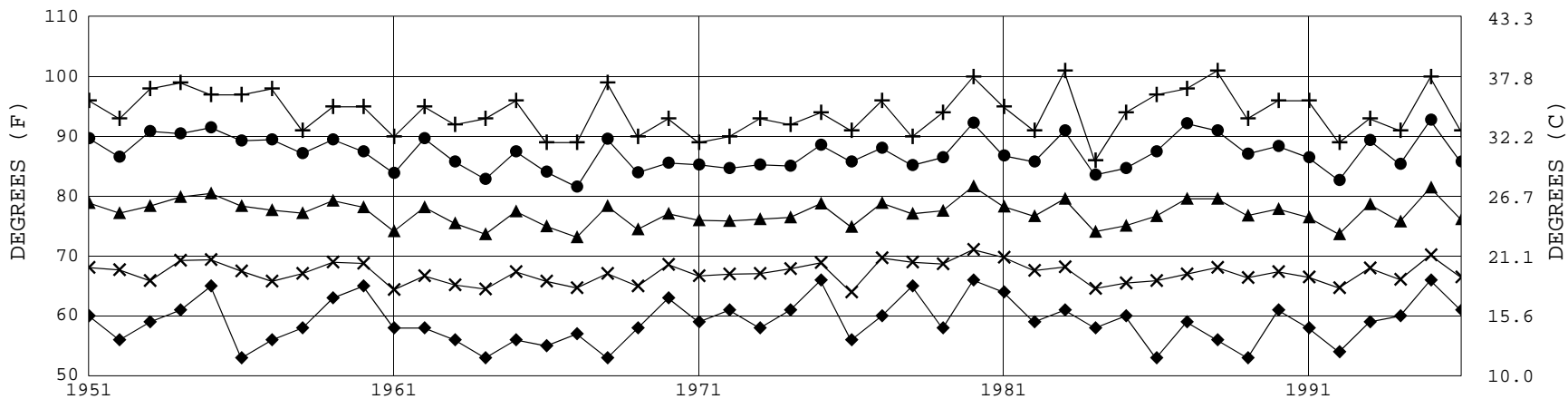
AUGUST 1996

TYS

WBAN # 13891

HOUR (LST)	≤ 12K FEET		SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	≤ 12K FEET		SATELLITE		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		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL																																																																																																																
SUNRISE: 0603						AUG 25						SUNSET: 1914						SUNRISE: 0607						AUG 31						SUNSET: 1905																																																																																																													
01	BKN	004		3.00	BR	68	67	67	96	0	00	29.05	30.07	01	SCT	NC		4.00	BR	71	67	68	87	3	11	28.99	30.01	04	OVC	095		4.00	BR	70	66	67	87	0	00	28.98	29.99	07	BKN	100		2.00	BR	70	67	68	90	0	00	29.00	30.02	10	OVC	012		3.00	BR	71	68	69	90	5	06	29.05	30.08	13	BKN	022		4.00	HZ	78	68	71	71	0	00	29.02	30.04	16	CLR	NC		6.00	HZ	83	65	71	55	5	VR	28.96	29.97	19	CLR	NC		6.00	HZ	79	67	71	67	3	05	28.93	29.95	22	FEW	NC		5.00	BR	72	68	69	87	0	00	28.98	30.00	22	FEW	NC		4.00	HZ	72	67	69	84	8	25	28.95	29.97
SUNRISE: 0603						AUG 26						SUNSET: 1912						3-HOURLY OBSERVATION NOTES																																																																																																																									
Sky Cover is the amount of the sky obscured. CLR = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical 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.																																																																																																																																											
01	CLR	NC		4.00	BR	69	66	67	90	3	27	28.98	29.99	04	CLR	NC		5.00	BR	67	65	66	93	0	00	28.96	29.98	07	CLR	NC		2.50	BR	64	63	63	96	0	00	29.00	30.02	10	FEW	NC		5.00	HZ	75	65	69	71	3	20	29.01	30.03	13	CLR	NC		6.00	HZ	85	67	73	55	7	25	28.97	29.99	16	CLR	NC		8.00		83	66	72	57	5	VR	28.90	29.91	19	CLR	NC		9.00		77	63	68	62	0	00	28.91	29.93	22	OVC	043		5.00	-RA BR	72	68	69	87	8	29	28.97	29.98																												
SUNRISE: 0604						AUG 27						SUNSET: 1911						SUMMARY BY HOUR																																																																																																																									
AVERAGES												RESULTANT WIND (MPH)																																																																																																																															
HOUR (LST)	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	WIND DIRECTION																																																																																																																																
							STATION	SEA LEVEL			SPEED	DIRECTION																																																																																																																															
01			71	66	68	86	29.04	30.06	5.50	4	2	36																																																																																																																															
02			70	66	67	90	29.04	30.05	5.07	4	2	36																																																																																																																															
03			69	66	67	90	29.04	30.05	4.91	4	1	36																																																																																																																															
04			68	65	66	91	29.04	30.05	4.62	4	2	36																																																																																																																															
05			68	65	66	91	29.05	30.06	4.11	4	2	36																																																																																																																															
06			67	65	66	91	29.06	30.08	3.56	4	2	36																																																																																																																															
07			68	66	67	92	29.07	30.09	2.94	4	2	36																																																																																																																															
08			70	67	68	89	29.08	30.10	3.21	4	3	36																																																																																																																															
09			73	67	69	82	29.08	30.10	4.15	4	3	36																																																																																																																															
10			76	68	71	75	29.09	30.10	4.69	4	3	36																																																																																																																															
11			79	68	71	70	29.08	30.10	5.07	5	3	27																																																																																																																															
12			81	67	72	64	29.07	30.09	5.24	5	2	27																																																																																																																															
13			83	67	72	60	29.06	30.07	5.84	6	2	27																																																																																																																															
14			83	66	72	58	29.05	30.06	6.26	8	4	27																																																																																																																															
15			84	66	72	55	29.03	30.04	6.48	6	3	36																																																																																																																															
16			84	66	72	56	29.01	30.03	6.40	6	2	36																																																																																																																															
17			83	66	72	57	29.01	30.03	6.52	5	3	36																																																																																																																															
18			82	66	72	61	29.01	30.03	6.29	6	2	36																																																																																																																															
19			79	67	71	66	29.02	30.03	6.74	5	1	36																																																																																																																															
20			77	66	70	71	29.02	30.04	7.08	5	2	36																																																																																																																															
21			75	68	70	79	29.04	30.05	6.61	5	1	36																																																																																																																															
22			74	68	70	82	29.04	30.06	6.16	5	1	27																																																																																																																															
23			72	67	69	85	29.05	30.06	5.77	4	1	36																																																																																																																															
24			72	66	68	84	29.05	30.06	5.81	4	1	28																																																																																																																															

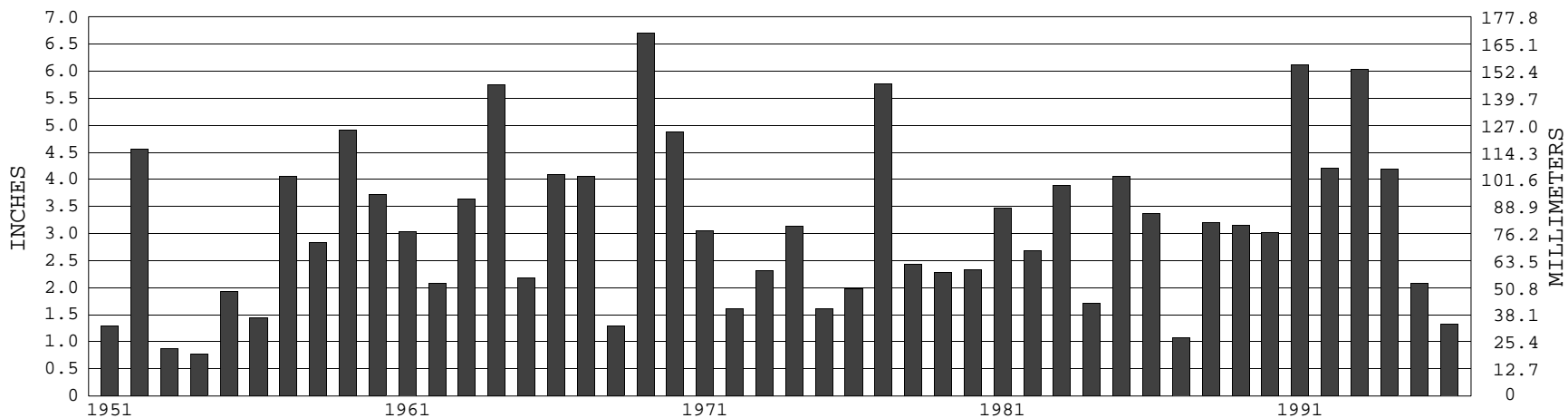
KNOXVILLE, TN AUGUST TEMPERATURES



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

Long-Term (1951-1996) Mean: 77.2 1961-1990 Normal: 76.0

KNOXVILLE, TN AUGUST PRECIPITATION



Long-Term (1951-1996) Mean Monthly Total: 3.14

1961-1990 Normal: 3.13



**AUGUST 1996
KNOXVILLE, TN**

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

I certify that this is an official publication of the National Oceanic and Atmospheric Administration (NOAA). It is compiled using information from weather observing sites operated by NOAA – National Weather Service / Department Of Transportation – Federal Aviation Administration and received at the National Climatic Data Center (NCDC), Asheville, North Carolina 28801.

Kenneth D Hadean

DIRECTOR

NOTICE

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

We welcome your questions or comments, please contact us at
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