



# SEPTEMBER 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

SEPTEMBER 2002  
 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	88	68	78	4	66	70	0	13				0.00	29.12	30.13	2.1	02	3.1	16	03	10	05	01																																									
02	89	67	78	4	66	70	0	13				0.00	29.02	30.03	1.5	24	3.8	12	24	9	24	02																																									
03	92	69	81	7	68	72	0	16				0.00	29.03	30.05	3.1	26	4.4	12	26	10	27	03																																									
04	95	69	82*	8	69	73	0	17	BR			0.00	29.04	30.05	1.0	30	2.9	18	31	14	34	04																																									
05	93	65	79	5	58	66	0	14	BR HZ			0.00	29.00	30.01	6.5	03	7.2	20	02	15	02	05																																									
06	92	60	76	2	61	67	0	11				0.00	29.02	30.04	1.2	02	2.9	13	34	9	30	06																																									
07	93	65	79	5	63	69	0	14	BR HZ			0.00	29.12	30.13	1.4	06	2.9	20	07	12	09	07																																									
08	93	65	79	5	64	69	0	14	BR HZ			0.00	29.13	30.15	2.3	04	4.9	20	06	16	05	08																																									
09	94	65	80	7	62	68	0	15				0.00	29.02	30.03	1.9	01	4.0	18	01	16	01	09																																									
10	95*	62	79	6	58	66	0	14				0.00	28.85	29.86	2.1	33	3.3	18	01	14	32	10																																									
11	88	66	77	4	61	67	0	12	HZ			0.00	28.84	29.85	3.5	35	5.7	22	01	18	01	11																																									
12	87	60	74	1	57	64	0	9				0.00	28.93	29.94	4.1	02	5.6	18	36	14	05	12																																									
13	91	63	77	5	63	68	0	12	RA BR			0.09	28.99	30.01	1.9	22	5.8	20	22	17	22	13																																									
14	86	69	78	6	69	71	0	13	RA BR			0.23	29.02	30.03	1.6	11	4.1	28	17	22	18	14																																									
15	80	68	74	3	69	70	0	9	RA			0.07	29.01	30.02	2.3	01	4.1	9	08	8	09	15																																									
16	86	68	77	6	69	71	0	12	BR HZ			0.00	29.00	30.02	1.4	26	2.6	14	26	12	26	16																																									
17	84	68	76	5	69	71	0	11	TS RA BR HZ			0.10	28.98	30.00	1.0	36	3.8	17	28	14	29	17																																									
18	79	68	74	4	70	71	0	9	RA FG+ BCFG BR HZ			T	28.94	29.96	0.9	25	3.0	13	31	10	32	18																																									
19	89	69	79	9	69	72	0	14	RA BR HZ			T	28.91	29.93	3.3	24	4.7	20	24	16	24	19																																									
20	87	66	77	7	67	70	0	12	TSRA RA BR			0.40	28.87	29.88	5.1	18	7.7	25	16	21	17	20																																									
21	74	69	72	2	70	70	0	7	TSRA RA BR			2.41	28.91	29.92	3.3	04	4.4	15	02	13	02	21																																									
22	76	66	71	2	69	69	0	6	TS TSRA RA FG+ BR			0.66	28.95	29.97	1.3	32	4.2	23	29	20	29	22																																									
23	77	60	69	1	59	62	0	4	BR			0.00	29.05	30.07	8.6	03	9.2	21	02	15	04	23																																									
24	79	61	70	2	58	62	0	5				0.00	29.12	30.15	5.1	02	5.8	13	02	12	36	24																																									
25	67	62	65	-3	62	63	0	0	RA BR			0.44	29.07	30.09	7.4	04	7.7	18	05	16	05	25																																									
26	66	60	63*	-4	62	62	2	0	RA BR			0.73	28.78	29.80	9.8	05	10.0	20	04	16	05	26																																									
27	80	65	73	6	66	68	0	8	RA BR			0.04	28.63	29.64	7.3	24	10.4	33*	24	29*	24	27																																									
28	80	65	73	7	62	65	0	8				0.00	28.98	30.00	8.0	04	8.5	23	05	20	06	28																																									
29	83	59*	71	5	62	65	0	6	BR			0.00	29.09	30.11	2.8	03	3.2	12	04	10	02	29																																									
30	81	61	71	6	64	67	0	6	BR			0.00	29.12	30.14	2.2	27	4.9	14	25	12	24	30																																									
										84.8		64.9		74.9		■ ■		64.4		67.9		0.1		10.1		< MONTHLY AVERAGES		TOTALS-->		5.17		28.98		30.00		1.6		02		5.2		<- MONTHLY AVERAGES																					
										4.1		4.1		4.1		■ ■		<-----DEPARTURE FROM NORMAL----->																				2.13		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																							
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 2.79 DATE :20-21										SEA LEVEL PRESSURE										DATE		TIME																															
MONTHLY TOTAL DEPARTURE										SEASON TO DATE TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL:										MAXIMUM										:		08 0853																					
HEATING: 2 -20										2 -20										GREATEST SNOW DEPTH:										MINIMUM										:		27 0353																					
COOLING: 304 99										1747 328										NUMBER OF DAYS WITH →										MAXIMUM TEMP ≥ 90: 9										MINIMUM TEMP ≤ 32: 0										PRECIPITATION ≥ 0.01 INCH :		10											
																														MAXIMUM TEMP ≤ 32 : 0										MINIMUM TEMP ≤ 0 : 0										PRECIPITATION ≥ 0.10 INCH :		7											
																																								THUNDERSTORMS : 4										HEAVY FOG : 2										SNOWFALL ≥ 1.0 INCH :			

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

## KNOXVILLE, TN

SEPTEMBER 2002 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												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		0.00		
09													09												09		0.00		
10													10												10		0.00		
11													11												11		0.00		
12													12												12		0.00		
13													13												13	0.04	0.09		
14	0.19	T		T	T	0.01	T	0.02	0.02	0.02			14						0.01	0.01		T	0.01	0.03	14	0.28	0.23		
15	T	0.03	0.03	0.01	T	T							15												15		0.07		
16													16												16		0.00		
17													17				0.02	0.08				T	T		17		0.10		
18													18	T	T		T							T	18		T		
19													19												19		T		
20													20									T	0.17	0.23	20		0.40		
21	0.13	0.10	0.13	0.01	T	0.25	0.03		0.15	0.17	.11	0.04	21		0.01	0.13	0.28	0.33	0.04	0.17	0.01	0.02	T	0.02	T	2.13	2.41		
22							T	0.02	0.01	0.14	0.27	.01	22	T		T	0.20	T	0.01	T				22		0.66			
23													23												23		0.00		
24													24												24		0.00		
25													25	T	T	T	0.01	0.01	0.09	0.03	0.02	T	0.01	0.03	0.11	25	0.44		
26	0.11	0.24	T	0.01	T	T	0.01	T	0.04	0.11	0.01	0.01	26	0.01	0.01	0.01	0.01	0.07	0.07	T	T	0.01	T	26		0.73			
27						0.01	0.01	T	T	0.01			27				T	T	0.01					27		0.04			
28													28												28		0.00		
29													29												29		0.00		
30													30												30		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)	.12	.17	.26	.30	.37	.54	.56	.62	.64	.65	.69	.81
Ending Date	22	21	21	21	21	21	21	21	21	21	21	21
Ending Time (Hour/Min)	1502	1617	1554	1558	1610	1621	1633	1654	1703	1730	1807	1835

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 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 1971–2000

### 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	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 SEPTEMBER 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
	TOTAL MINUTES	PERCENT POSSIBLE	SR–SS		MN–MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							10.00	10.00	
02							9.00	10.00	
03							7.00	10.00	
04							5.00	10.00	
05							6.00	10.00	
06							9.00	10.00	
07							5.00	10.00	
08							5.00	10.00	
09							7.00	10.00	
10							7.00	10.00	
11							6.00	10.00	
12							10.00	10.00	
13							5.00	10.00	
14							1.50	10.00	
15							7.00	10.00	
16							3.00	10.00	
17							2.50	7.00	
18							.25	10.00	
19							2.50	10.00	
20							2.50	10.00	
21							.00	10.00	
22							.25	10.00	
23							5.00	10.00	
24							10.00	10.00	
25							2.00	10.00	
26							1.75	10.00	
27							1.75	10.00	
28							10.00	10.00	
29							4.00	10.00	
30							2.50	10.00	
<b>MONTHLY AVGS</b>							5.05	9.90	
<b>SUNSHINE (MINUTES)</b>									
Total:                      Possible: Percent Possible:									
<b>NUMBER OF DAYS WITH:</b>									
<b>SKY CONDITION</b>									
CLR   PTLY CLDY   CLOUDY   MISSING 30									
<b>MINIMUM VISIBILITY (MILES)</b>									
<=0.25      <=3.0      >=7.0 2              12              10									

# OBSERVATIONS AT 3-HOURLY INTERVALS

## KNOXVILLE, TN

SEPTEMBER 2002

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	STATION	SEA LEVEL
<b>SUNRISE: 0608</b>				<b>SEP 01</b>				<b>SUNSET: 1905</b>				<b>SUNRISE: 0612</b>				<b>SEP 07</b>				<b>SUNSET: 1855</b>									
01	FEW	NC			10.00	71	67	68	87	3	05	29.17	30.18	01	CLR	NC			7.00	71	65	67	81	5	VR	29.07	30.08		
04	BKN	032			10.00	70	66	67	87	0	00	29.17	30.18	04	CLR	NC			6.00	68	64	66	87	3	06	29.09	30.11		
07	OVC	015			10.00	70	64	66	82	6	01	29.20	30.21	07	CLR	NC			5.00	68	63	65	84	0	00	29.15	30.17		
10	SCT	NC			10.00	76	66	69	72	5	31	29.20	30.22	10	CLR	NC			10.00	79	63	69	58	5	VR	29.19	30.21		
13	BKN	040			10.00	83	66	72	57	7	35	29.13	30.15	13	CLR	NC			10.00	88	63	71	43	7	VR	29.14	30.15		
16	SCT	NC			10.00	87	65	72	48	7	02	29.04	30.05	16	CLR	NC			10.00	93	59	71	32	6	VR	29.08	30.09		
19	SCT	NC			10.00	83	65	71	55	3	06	29.02	30.04	19	SCT	NC			10.00	87	62	71	43	0	00	29.08	30.10		
22	FEW	NC			10.00	77	66	70	69	0	00	29.06	30.07	22	CLR	NC			10.00	77	63	68	62	0	00	29.13	30.14		
<b>SUNRISE: 0609</b>				<b>SEP 02</b>				<b>SUNSET: 1903</b>				<b>SUNRISE: 0613</b>				<b>SEP 08</b>				<b>SUNSET: 1853</b>									
01	FEW	NC			10.00	73	66	69	79	5	28	29.06	30.07	01	CLR	NC			10.00	73	66	69	79	6	29	29.15	30.16		
04	CLR	NC			9.00	68	65	66	90	0	00	29.04	30.06	04	CLR	NC			9.00	69	63	65	81	3	03	29.16	30.17		
07	SCT	NC			10.00	70	66	67	87	0	00	29.08	30.09	07	FEW	NC			5.00	65	63	64	93	3	04	29.20	30.22		
10	SCT	NC			10.00	78	68	71	71	6	20	29.07	30.09	10	FEW	NC			8.00	79	64	69	60	5	VR	29.21	30.22		
13	SCT	NC			10.00	86	67	73	53	5	VR	29.02	30.03	13	FEW	NC			9.00	87	65	72	48	7	08	29.14	30.15		
16	SCT	NC			10.00	88	65	73	46	5	VR	28.95	29.96	16	CLR	NC			10.00	92	62	72	37	6	VR	29.07	30.08		
19	SCT	NC			10.00	79	66	70	65	3	02	28.94	29.96	19	SCT	NC			10.00	87	61	70	42	5	03	29.05	30.07		
22	BKN	060			10.00	78	68	71	71	7	23	29.00	30.01	22	CLR	NC			10.00	75	62	67	64	6	21	29.09	30.10		
<b>SUNRISE: 0609</b>				<b>SEP 03</b>				<b>SUNSET: 1902</b>				<b>SUNRISE: 0614</b>				<b>SEP 09</b>				<b>SUNSET: 1852</b>									
01	SCT	NC			10.00	75	68	70	79	7	26	29.01	30.02	01	FEW	NC			10.00	74	63	67	69	9	27	29.09	30.11		
04	SCT	NC			10.00	72	67	69	84	5	30	29.03	30.04	04	CLR	NC			9.00	69	63	65	81	0	00	29.08	30.09		
07	SCT	NC			7.00	70	67	68	90	0	00	29.06	30.08	07	FEW	NC			7.00	66	63	64	90	0	00	29.10	30.12		
10	CLR	NC			10.00	80	68	72	67	5	VR	29.08	30.09	10	FEW	NC			10.00	81	61	68	51	5	VR	29.10	30.12		
13	FEW	NC			10.00	88	70	75	55	7	25	29.05	30.06	13	FEW	NC			10.00	88	62	71	42	5	VR	29.02	30.03		
16	SCT	NC			10.00	91	66	74	44	5	VR	29.00	30.00	16	FEW	NC			10.00	93	61	72	34	9	07	28.94	29.95		
19	SCT	NC			10.00	86	69	74	57	7	27	29.00	30.02	19	SCT	NC			10.00	88	60	70	39	3	01	28.92	29.94		
22	SCT	NC			10.00	77	68	71	74	5	20	29.02	30.03	22	SCT	NC			10.00	80	62	68	54	3	32	28.92	29.93		
<b>SUNRISE: 0610</b>				<b>SEP 04</b>				<b>SUNSET: 1859</b>				<b>SUNRISE: 0615</b>				<b>SEP 10</b>				<b>SUNSET: 1851</b>									
01	CLR	NC			9.00	73	68	70	84	3	24	29.04	30.05	01	CLR	NC			10.00	71	62	65	73	0	00	28.91	29.92		
04	CLR	NC			8.00	71	67	68	87	3	22	29.05	30.06	04	CLR	NC			10.00	68	60	63	76	0	00	28.89	29.91		
07	CLR	NC			5.00	71	68	69	90	3	30	29.08	30.09	07	FEW	NC			10.00	64	59	61	84	0	00	28.91	29.92		
10	CLR	NC			9.00	82	70	74	67	3	VR	29.10	30.11	10	CLR	NC			10.00	80	61	68	52	5	VR	28.90	29.91		
13	SCT	NC			10.00	91	70	76	50	0	00	29.06	30.06	13	CLR	NC			10.00	93	56	69	29	6	05	28.85	29.85		
16	SCT	NC			9.00	93	68	76	44	6	26	28.99	30.00	16	CLR	NC			10.00	94	53	68	25	9	33	28.80	29.80		
19	BKN	250			10.00	84	69	74	61	7	35	28.99	30.01	19	SCT	NC			10.00	86	55	67	35	7	36	28.79	29.80		
22	FEW	NC			8.00	79	70	73	74	0	00	29.03	30.05	22	CLR	NC			10.00	80	55	65	42	3	34	28.81	29.81		
<b>SUNRISE: 0611</b>				<b>SEP 05</b>				<b>SUNSET: 1858</b>				<b>SUNRISE: 0615</b>				<b>SEP 11</b>				<b>SUNSET: 1849</b>									
01	CLR	NC			7.00	75	69	71	82	0	00	29.02	30.03	01	CLR	NC			10.00	71	57	63	61	3	21	28.82	29.81		
04	CLR	NC			6.00	70	67	68	90	6	04	29.00	30.01	04	CLR	NC			8.00	68	58	62	70	3	24	28.81	29.81		
07	CLR	NC			6.00	69	64	66	84	8	03	29.03	30.05	07	SCT	NC			6.00	68	58	62	70	0	00	28.85	29.85		
10	CLR	NC			10.00	80	62	69	54	10	03	29.05	30.06	10	FEW	NC			6.00	82	64	70	55	6	31	28.86	29.86		
13	FEW	NC			10.00	90	56	68	32	8	03	28.99	30.00	13	BKN	060			7.00	86	65	72	50	5	VR	28.84	29.85		
16	FEW	NC			10.00	93	52	68	25	8	35	28.94	29.95	16	FEW	NC			9.00	87	66	73	50	12	01	28.82	29.82		
19	SCT	NC			10.00	85	48	63	28	5	06	28.95	29.96	19	SCT	NC			10.00	79	59	66	50	9	01	28.86	29.86		
22	CLR	NC			10.00	76	53	62	45	5	02	28.99	30.01	22	FEW	NC			10.00	73	59	64	62	7	01	28.89	29.90		
<b>SUNRISE: 0612</b>				<b>SEP 06</b>				<b>SUNSET: 1856</b>				<b>SUNRISE: 0616</b>				<b>SEP 12</b>				<b>SUNSET: 1848</b>									
01	CLR	NC			10.00	69	55	61	61	0	00	29.00	30.01	01	CLR	NC			10.00	66	54	59	65	8	04	28.89	29.91		
04	CLR	NC			10.00	66	55	60	68	0	00	29.00	30.01	04	CLR	NC			10.00	62	54	57	75	9	04	28.89	29.91		
07	FEW	NC			10.00	63	56	59	78	3	07	29.05	30.07	07	CLR	NC			10.00	62	53	57	73	9	02	28.94	29.96		
10	CLR	NC			10.00	78	60	67	54	5	VR	29.07	30.09	10	SCT	NC			10.00	74	54	62	50	8	05	28.97	29.98		
13	FEW	NC			10.00	88	64	72	45	3	VR	29.04	30.05	13	SCT	NC			10.00	85	58	68	40	7	VR	28.93	29.94		
16	SCT	NC			10.00	90	63	72	41	0	00	28.98	29.99	16	SCT	NC			10.00	86	60	69	42	5	VR	28.90	29.91		
19	SCT	NC			10.00	87	64	72	46	3	34	28.99	30.00	19	SCT	NC			10.00	82	61	69	49	3	34	28.90	29.92		
22	CLR	NC			9.00	76	64	68	67	6	22	29.05	30.06	22	CLR	NC			10.00	74	61	66	64	5	13	28.95	29.97		



# OBSERVATIONS AT 3-HOURLY INTERVALS

# KNOXVILLE, TN

## SEPTEMBER 2002

## TYS

## WBAN # 13891

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	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	VISIBILITY (MILES)		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	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB
<b>SUNRISE: 0626</b>				<b>SEP 25</b>				<b>SUNSET: 1828</b>				<b>SUNRISE:</b>				<b>SEP 31</b>				<b>SUNSET:</b>					
01	OVC	250		10.00	66	60	62	81	5	35	29.12	30.14													
04	BKN	100		10.00	65	59	61	81	0	00	29.09	30.11													
07	BKN	055		4.00	63	61	62	93	0	00	29.12	30.15													
10	OVC	018		2.50	65	63	64	93	7	02	29.15	30.17													
13	OVC	009		5.00	66	63	64	90	10	05	29.07	30.10													
16	OVC	017		4.00	66	64	65	93	12	05	29.03	30.06													
19	OVC	010		2.50	64	62	63	93	13	05	29.01	30.04													
22	OVC	008		4.00	63	61	62	93	10	04	28.99	30.02													
<b>SUNRISE: 0627</b>				<b>SEP 26</b>				<b>SUNSET: 1827</b>																	
01	OVC	008		5.00	61	59	60	93	13	05	28.97	29.99													
04	OVC	006		6.00	60	59	59	96	8	04	28.91	29.94													
07	OVC	006		4.00	60	59	59	96	9	03	28.89	29.92													
10	OVC	010		2.00	62	61	61	96	12	04	28.87	29.90													
13	OVC	007		10.00	64	63	63	96	13	06	28.81	29.83													
16	OVC	007		7.00	65	63	64	93	12	05	28.69	29.71													
19	OVC	007		10.00	65	64	64	97	12	05	28.62	29.63													
22	SCT	NC		10.00	65	64	64	97	9	02	28.59	29.60													
<b>SUNRISE: 0628</b>				<b>SEP 27</b>				<b>SUNSET: 1826</b>																	
01	SCT	NC		10.00	67	65	66	93	3	06	28.51	29.52													
04	OVC	065		10.00	74	67	69	79	7	17	28.42	29.42													
07	OVC	050		10.00	73	71	72	94	10	26	28.49	29.49													
10	BKN	060		10.00	76	69	71	79	26	24	28.57	29.57													
13	OVC	033		10.00	74	66	69	76	18	23	28.63	29.64													
16	OVC	028		10.00	74	66	69	76	14	23	28.68	29.68													
19	BKN	013		10.00	68	65	66	90	0	00	28.78	29.79													
22	OVC	041		10.00	68	63	65	84	5	35	28.86	29.86													
<b>SUNRISE: 0628</b>				<b>SEP 28</b>				<b>SUNSET: 1824</b>																	
01	OVC	039		10.00	67	62	64	84	8	01	28.87	29.89													
04	BKN	045		10.00	66	62	64	87	7	02	28.90	29.93													
07	BKN	041		10.00	66	62	64	87	7	03	28.98	30.00													
10	SCT	NC		10.00	72	61	65	69	14	07	29.02	30.04													
13	FEW	NC		10.00	77	61	67	58	16	06	28.99	30.01													
16	CLR	NC		10.00	79	60	67	52	13	03	28.97	29.99													
19	FEW	NC		10.00	73	61	66	66	6	03	29.00	30.02													
22	CLR	NC		10.00	68	62	64	81	5	01	29.03	30.05													
<b>SUNRISE: 0629</b>				<b>SEP 29</b>				<b>SUNSET: 1823</b>																	
01	FEW	NC		10.00	65	60	62	84	3	03	29.05	30.07													
04	CLR	NC		8.00	61	59	60	93	0	00	29.05	30.08													
07	FEW	NC		6.00	59	58	58	96	0	00	29.11	30.14													
10	FEW	NC		9.00	71	63	66	76	5	07	29.15	30.17													
13	SCT	NC		10.00	80	65	70	60	6	05	29.10	30.12													
16	FEW	NC		10.00	82	64	70	55	7	03	29.06	30.09													
19	CLR	NC		10.00	75	64	68	69	3	05	29.06	30.09													
22	FEW	NC		10.00	71	64	67	79	0	00	29.09	30.11													
<b>SUNRISE: 0630</b>				<b>SEP 30</b>				<b>SUNSET: 1821</b>																	
01	CLR	NC		6.00	66	64	65	93	3	36	29.11	30.13													
04	SCT	NC		6.00	64	62	63	93	3	04	29.12	30.14													
07	FEW	NC		2.50	62	61	61	96	0	00	29.15	30.18													
10	CLR	NC		9.00	73	64	67	74	5	05	29.17	30.19													
13	SCT	NC		10.00	80	64	70	58	5	VR	29.12	30.14													
16	BKN	095		10.00	81	66	71	61	10	27	29.08	30.10													
19	OVC	085		10.00	76	66	69	72	6	28	29.08	30.11													
22	FEW	NC		10.00	72	65	67	79	7	24	29.11	30.13													

### 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 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.

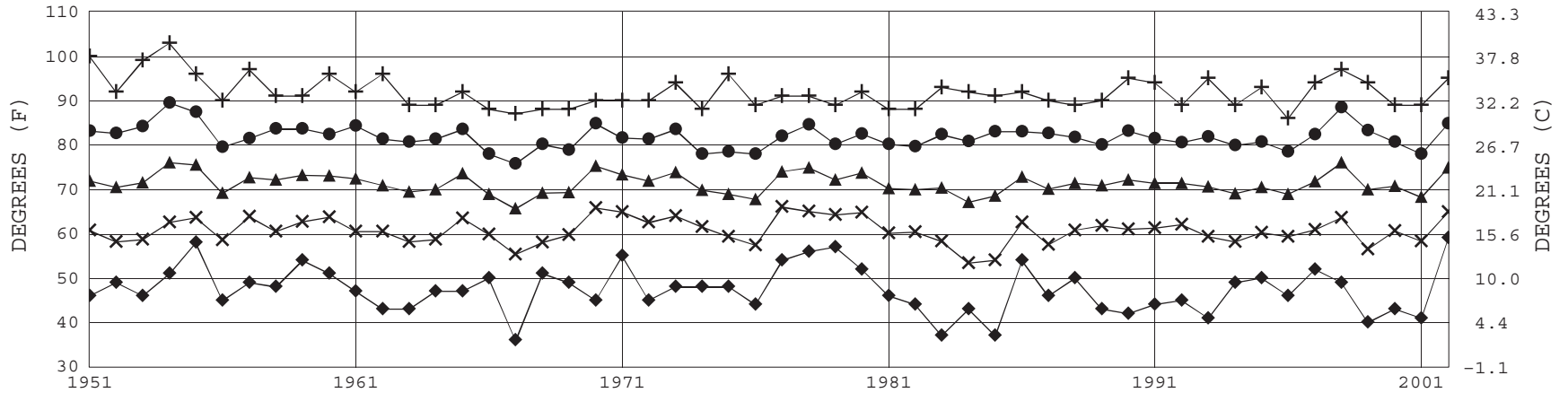
See page 3 for additional notes.

### SUMMARY BY HOUR

HOUR (LST)	AVERAGES											RESULTANT WIND (MPH)	
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	DIRECTION	SPEED	DIRECTION
							STATION	SEA LEVEL					
01			70	64	66	84	28.98	30.00	7.86	4	2	34	
02			68	64	66	87	28.98	29.99	7.56	4	3	3	
03			68	64	65	87	28.98	29.99	7.53	3	2	2	
04			68	64	65	87	28.98	29.99	7.58	3	2	3	
05			67	63	65	89	28.98	30.00	7.33	3	3	4	
06			66	63	64	90	29.00	30.01	6.70	4	2	5	
07			67	63	65	90	29.01	30.03	6.25	4	2	3	
08			69	64	66	84	29.02	30.04	6.83	4	2	3	
09			72	64	67	79	29.03	30.05	7.43	5	3	3	
10			75	65	68	73	29.03	30.05	7.68	5	2	1	
11			77	65	69	69	29.03	30.04	8.05	5	1	3	
12			79	65	70	64	29.01	30.03	8.50	6	2	1	
13			81	65	71	61	29.00	30.01	9.17	5	0	0	
14			82	65	71	59	28.97	29.99	9.23	6	1	1	
15			83	65	71	57	28.95	29.97	9.27	6	2	1	
16			83	64	71	56	28.94	29.96	8.83	7	2	36	
17			82	64	70	58	28.94	29.96	8.73	7	2	1	
18			81	64	70	60	28.95	29.96	9.22	7	2	4	
19			78	64	69	66	28.95	29.97	9.18	6	2	4	
20			76	64	68	70	28.96	29.98	9.28	5	1	3	
21			74	65	68	74	28.97	29.99	9.05	4	1	35	
22			73	64	67	76	28.98	30.00	9.10	4	2	34	
23			72	64	67	79	28.99	30.00	8.54	4	2	33	
24			70	64	67	82	28.98	30.00	8.42	4	1	34	



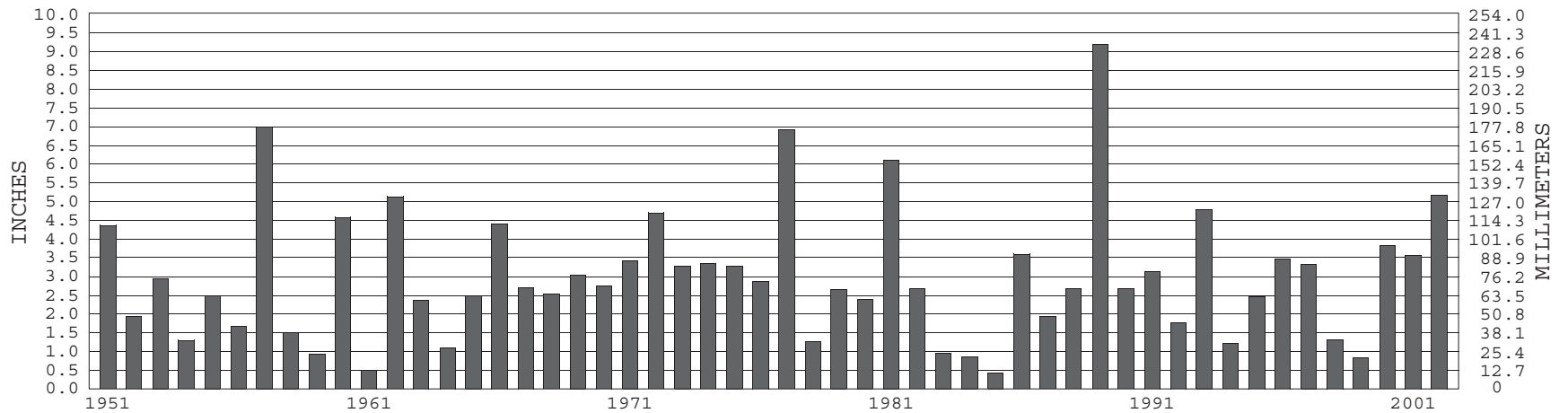
### KNOXVILLE, TN SEPTEMBER TEMPERATURES



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

Long-Term (1951-2002) Mean: 71.3      1961-1990 Normal: 70.8

### KNOXVILLE, TN SEPTEMBER PRECIPITATION



Long-Term (1951-2002) Mean Monthly Total: 2.99

1961-1990 Normal: 3.04



SEPTEMBER 2002

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.*

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