



# JUNE 2007 LOCAL CLIMATOLOGICAL DATA

## NOAA, National Climatic Data Center

**KNOXVILLE, TN**  
**MC GHEE TYSON AIRPORT (KTYS)**  
 Lat:35° 49'N Long: 83° 59'W Elev (Ground) 962 Feet  
 Time Zone : EASTERN WBAN: 13891 ISSN#: 0198-4810



Date 1	Temperature °F						Deg Days BASE 65°		WEATHER 10	SNOW/ICE ON GND(IN)		PRECIPITATION ON GND(IN)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES								Date 24
	MAXIMUM 2	MINIMUM 3	AVERAGE 4	DEP FROM NORMAL 5	AVERAGE DEW PT 6	AVERAGE WET BULB 7	HEATING 8	COOLING 9		0700 LST	1300 LST	2400 LST	2400 LST	AVERAGE STATION 15	AVERAGE SEA LEVEL 16	RESULTANT SPEED 17	RES DIR 18	AVERAGE SPEED 19	MAXIMUM					
																			5-SEC		2-MIN			
11	12	13	14	15	16	17	18	19	20	21	22	23	24											
01	88	63	76	6	61	66	0	11	TSRA RA HZ	0		0.0	0.09	29.01	30.02	1.8	25	5.2	46	26	30	26	01	
02	80	66	73	3	63	67	0	8	BR HZ	0		0.0	0.00	28.88	29.88	1.6	35	3.4	14	23	12	23	02	
03	81	66	74	4	65	67	0	9	TS TSRA RA BR HZ	0		0.0	0.24	28.64	29.64	1.8	21	3.2	23	02	20	02	03	
04	85	65	75	5	59	65	0	10	RA	0		0.0	0.06	28.61	29.64	8.9	24	9.7	47*	24	37*	25	04	
05	85	62	74	4	58	64	0	9	TS TSRA RA	0		0.0	0.09	28.71	29.75	5.6	26	8.4	22	24	17	24	05	
06	86	60	73	2	57	64	0	8	FG+ FG BR HZ	0		0.0	0.00	28.89	29.91	0.5	21	3.2	21	25	13	23	06	
07	93	62	78	7	61	68	0	13		0		0.0	0.00	28.92	29.94	6.9	21	8.6	35	22	23	20	07	
08	89	67	78	6	67	71	0	13	TS TSRA RA	0		0.0	0.05	28.98	30.01	7.5	22	9.4	29	28	21	30	08	
09	87	65	76	4	64	68	0	11	BR HZ	0		0.0	0.00	29.00	30.00	1.9	30	3.7	15	22	10	05	09	
10	89	66	78	5	59	66	0	13	BR HZ	0		0.0	0.00	28.94	29.95	4.9	02	6.2	23	05	14	01	10	
11	81	65	73	0	59	64	0	8	BR HZ	0		0.0	0.00	28.97	29.99	3.7	01	4.0	10	34	9	03	11	
12	88	61	75	2	55	63	0	10	BR HZ	0		0.0	0.00	28.97	29.98	5.1	02	6.1	22	35	15	04	12	
13	89	66	78	4	57	63	0	13	TS TSRA RA HZ	0		0.0	0.01	28.93		2.7	06	4.0	22	06	17	04	13	
14	88	62	75	1	60	65	0	10	RA BR HZ	0		0.0	T	28.94	29.95	1.5	29	5.0	24	20	21	20	14	
15	87	62	75	1	60	66	0	10	BR	0		0.0	0.00	28.94	29.95	3.5	25	4.2	18	23	14	24	15	
16	89	66	78	3	61	67	0	13	HZ	0		0.0	0.00	28.98	30.00	4.1	25	6.2	22	23	17	23	16	
17	93	61	77	2	56	65	0	12	BR HZ	0		0.0	0.00	29.02	30.04	0.9	02	1.8	20	32	12	01	17	
18	92	63	78	3	62	67	0	13	TS TSRA RA BR HZ	0		0.0	0.22	29.03	30.04	2.4	20	5.0	32	21	25	19	18	
19	90	68	79	4	67	69	0	14	RA DZ BR HZ	0		0.0	0.31	29.00	30.01	1.5	26	4.5	35	29	26	30	19	
20	87	67	77	2	58	65	0	12	FG+ FG BR HZ	0		0.0	0.00	29.02	30.05	6.0	01	6.5	24	03	18	02	20	
21	88	58*	73*	-3	52	61	0	8		0		0.0	0.00	29.07	30.08	2.9	05	3.9	18	04	15	04	21	
22	90	60	75	-1	55	63	0	10		0		0.0	0.00	28.99	29.99	2.1	30	3.5	15	29	12	26	22	
23	92	67	80	4	64	69	0	15	TS RA HZ	0		0.0	0.02	28.92	29.93	2.0	35	3.7	18	29	14	28	23	
24	95*	69	82	6	64	69	0	17	TS TSRA RA BR SQ	0		0.0	0.23	28.98	29.98	3.8	23	7.2	43	22	36	21	24	
25	88	66	77	1	65	69	0	12	TS BR HZ	0		0.0	0.00	29.13	30.16	2.4	10	5.4	28	12	22	12	25	
26	89	68	79	3	66	70	0	14	BR HZ	0		0.0	0.00	29.22	30.24	1.6	23	3.5	23	20	20	20	26	
27	92	67	80	4	66	70	0	15	BR HZ	0		0.0	0.00	29.13	30.15	2.6	22	4.5	28	22	23	22	27	
28	93	70	82*	5	66	71	0	17	TS BR HZ	0		0.0	0.00	29.04	30.05	2.9	26	5.7	24	29	18	28	28	
29	91	71	81	4	67	71	0	16	TS TSRA RA DZ BR HZ	0		0.0	0.02	29.03	30.04	1.3	25	5.3	30	31	23	35	29	
30	91	69	80	3	66	71	0	15	BR	0		0.0	0.00	28.99	30.00	2.5	01	3.4	16	35	12	01	30	

88.5	64.9	76.7	☼	61.3	66.8	0.0	12.0	< MONTHLY AVERAGES   TOTALS >				0.0	1.34	29.02	30.04	1.2	27	5.1	< MONTHLY AVERAGES				
4.9	1.0	2.9		----- DEPARTURE FROM NORMAL -----								-2.70	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3										
<b>DEGREE DAYS</b>								GREATEST 24-HR PRECIPITATION : 0.47 DATE : 18-19				SEA LEVEL PRESSURE				DATE TIME							
MONTHLY								GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.29				26 0953							
TOTAL DEPARTURE								GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.57				03 1553							
SEASON TO DATE								NUMBER OF -> DAYS WITH				MAXIMUM TEMP >= 90 : 11				MINIMUM TEMP <= 32 : 0				PRECIPITATION >= 0.01 INCH : 11			
HEATING : 0 -3 3477 -213								MAXIMUM TEMP <= 32 : 0				MINIMUM TEMP <= 0 : 0				PRECIPITATION >= 0.10 INCH : 4							
COOLING : 359 77 608 183								THUNDERSTORMS : 11				HEAVY FOG : 2				SNOWFALL >= 1.0 INCH : 0							

**JUNE 2007  
KNOXVILLE, TN**

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN (KTYS)  
JUNE 2007

WBAN # 13891

Date	FOR HOUR (LST) ENDING AT												Date	FOR HOUR (LST) ENDING AT												Date	Sum of Hourly Data	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				0.03	0.06							01	0.09	0.09	
02													02												02	0.00	0.00	
03													03		0.09	T		T	0.14	0.01	T				03	0.24	0.24	
04													04											0.06	04	0.06	0.06	
05	T												05		T	T						T	0.05	0.04	05	0.09	0.09	
06													06												06	0.00	0.00	
07													07												07	0.00	0.00	
08													08		0.01	T		0.02	T	0.02					08	0.05	0.05	
09													09												09	0.00	0.00	
10													10												10	0.00	0.00	
11													11												11	0.00	0.00	
12													12												12	0.00	0.00	
13													13			0.01									13	0.01	0.01	
14													14												14	T	T	
15													15												15	0.00	0.00	
16													16												16	0.00	0.00	
17													17												17	0.00	0.00	
18													18					T	0.06	T			T	0.16	18	0.22	0.22	
19													19				0.17	0.11	0.02	0.01					19	0.31	0.31	
20													20												20	0.00	0.00	
21													21												21	0.00	0.00	
22													22												22	0.00	0.00	
23													23											0.02	23	0.02	0.02	
24													24						0.22	0.01					24	0.23	0.23	
25													25												25	0.00	0.00	
26													26												26	0.00	0.00	
27													27												27	0.00	0.00	
28													28												28	0.00	0.00	
29													29		T	0.01	0.01						T	T	29	0.02	0.02	
30													30												30	0.00	0.00	

\* Indicates sum of Hourly and Daily disagree.

### MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	0.11	0.15	0.16	0.17	0.22	0.22	0.23	0.25	0.28	0.29	0.30	0.31
Ending Date	18	18	18	24	24	24	19	19	19	19	19	19
Ending Time (Hr/Min)	2216	2221	2222	1932	1938	1938	1818	1839	1858	1911	1923	2017

Note : The hourly and daily precipitation totals are printed in the last 2 columns and hi-lighted in red when they disagree. 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.

Date and time are not entered for TRACE amounts.

# 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		
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	
PR Partial	RA Rain	PY Spray	SQ Squalls
SH Shower(s)	SG Snow Grains	SA Sand	SS Sandstorm
TS Thunderstorm	SN Snow	VA Volcanic Ash	GL Glaze
VC In the Vicinity	UP Unkown Precipitation		

Intensity (as indicated on pages 4 to 6):  
'+' = Heavy    '' = Moderate    '-' = Light

# KNOXVILLE, TN JUNE 2007

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:

Station Augmentation-CONTRACTOR ON AIRPORT  
Lat/Lon: / Elevation:  
Distance: 2200 FT Dir: W  
Augmented Elements: Temp, Precip, Snow  
Equipment: SRG, PSY, Snow Board, Snow stick

Date	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			Sky Cover	Satellite	Sky Cover	Satellite			
01							3.00	10.00	
02							3.00	7.00	
03							2.00	6.00	
04							4.00	10.00	
05							7.00	10.00	
06							0.25	10.00	
07							7.00	10.00	
08							4.00	10.00	
09							1.50	10.00	
10							6.00	10.00	
11							6.00	10.00	
12							2.50	10.00	
13							5.00	10.00	
14							3.00	10.00	
15							6.00	10.00	
16							5.00	10.00	
17							2.50	10.00	
18							3.00	8.00	
19							1.75	10.00	
20							0.25	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							4.00	10.00	
24							5.00	10.00	
25							3.00	10.00	
26							4.00	10.00	
27							4.00	10.00	
28							4.00	10.00	
29							6.00	10.00	
30							3.00	10.00	
MONTHLY AVGS							4.19	9.70	
<b>SUNSHINE (Minutes)</b>									
Total : 0			Possible : 26171						
Percent Possible : 0									
<b>NUMBER OF DAYS WITH : SKY CONDITION</b>									
Clear		Partly CLDY		Cloudy		Missing			
<b>MINIMUM VISIBILITY (MILES)</b>									
<= .25		<= 3.0				>= 7.0			
2		13				4			

# OBSERVATIONS AT 3-HOURLY INTERVALS

# KNOXVILLE, TN

## JUNE 2007

## KTYS

## WBAN # 13891

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)								
			Observation Time (LST)	Eff Cld Amt Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)				STATION	SEA LEVEL		Observation Time (LST)	Eff Cld Amt Oktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	STATION	SEA LEVEL			
																												DRY BULB	DEW POINT	WET BULB
<b>SUNRISE: 0521      JUN 01      SUNSET: 1946</b>						<b>SUNRISE: 0520      JUN 07      SUNSET: 1950</b>																								
01	CLR	NC				70	59	63	68	3	03	29.03	30.04	01	CLR	NC				10.00			67	58	62	73	3	03	28.90	29.92
04	CLR	NC				67	59	62	76	0	00	29.02	30.04	04	FEW	090				10.00			65	58	61	78	3	01	28.91	29.92
07	CLR	NC				67	61	63	81	0	00	29.05	30.06	07	CLR	NC				9.00			68	59	63	73	0	00	28.96	29.97
10	CLR	NC				81	60	68	49	6	VR	29.05	30.06	10	SCT	030				10.00			83	66	72	57	18	22	28.98	30.00
13	SCT	050				85	61	69	45	10	25	29.01	30.02	13	FEW	060				10.00			90	64	73	42	13	20	28.94	29.95
16	SCT	100			-TSRA	75	63	67	66	17	26	28.95	29.97	16	SCT	065				10.00			93	62	72	36	14	22	28.89	29.90
19	FEW	100				75	63	67	66	7	32	28.97	29.99	19	FEW	070				10.00			89	62	71	41	9	21	28.88	29.90
22	CLR	NC				71	62	65	73	6	08	28.98	29.99	22	SCT	085				10.00			82	63	70	53	7	18	28.94	29.94
<b>SUNRISE: 0521      JUN 02      SUNSET: 1947</b>						<b>SUNRISE: 0520      JUN 08      SUNSET: 1950</b>																								
01	CLR	NC				69	61	64	76	3	03	28.95	29.96	01	SCT	080				10.00			78	65	70	64	8	24	28.95	29.96
04	FEW	120				67	62	64	84	5	05	28.93	29.95	04	CLR	NC				10.00			76	65	69	69	10	22	28.96	29.97
07	CLR	NC				67	63	65	87	3	02	28.94	29.96	07	OVC	026				10.00			77	66	70	69	7	25	29.04	30.04
10	CLR	NC				74	62	66	66	0	00	28.92	29.94	10	BKN	032				10.00			83	69	73	63	11	21	29.02	30.03
13	CLR	NC				76	63	68	64	6	33	28.88	29.90	13	BKN	070				10.00			88	70	75	55	16	22	29.00	30.01
16	FEW	120				78	64	69	62	6	35	28.82	29.83	16	SCT	065				10.00			83	66	72	57	14	20	28.95	29.97
19	SCT	120				77	64	69	64	0	00	28.77	29.78	19	CLR	NC				10.00			72	68	69	87	8	11	28.95	29.97
22	FEW	041				73	65	68	76	7	20	28.77	29.77	22	SCT	006				10.00			69	67	68	93	3	19	29.02	30.03
<b>SUNRISE: 0521      JUN 03      SUNSET: 1947</b>						<b>SUNRISE: 0520      JUN 09      SUNSET: 1951</b>																								
01	BKN	037				70	64	66	81	7	21	28.72	29.73	01	CLR	NC				9.00			66	65	65	97	5	21	29.02	30.03
04	FEW	050				67	63	65	87	0	00	28.67	29.68	04	BKN	002				7.00			66	65	65	97	3	30	28.99	30.01
07	SCT	090				66	63	64	90	3	24	28.66	29.67	07	OVC	008				2.00		BR	68	66	67	93	0	00	29.04	30.06
10	BKN	080				75	64	68	69	3	VR	28.64	29.65	10	BKN	033				3.00		HZ	72	66	68	82	3	VR	29.04	30.06
13	BKN	050				80	63	69	56	5	VR	28.60	29.60	13	SCT	033				6.00		HZ	81	63	69	54	0	00	29.01	30.03
16	BKN	100				80	62	68	54	3	23	28.57	29.57	16	FEW	050				10.00			86	61	70	43	3	26	28.94	29.96
19	BKN	090				70	68	69	93	0	00	28.60	29.61	19	SCT	065				10.00			84	61	69	46	6	01	28.91	29.93
22	CLR	NC				67	65	66	93	0	00	28.62	29.63	22	CLR	NC				10.00			77	62	67	60	6	01	28.94	29.96
<b>SUNRISE: 0520      JUN 04      SUNSET: 1948</b>						<b>SUNRISE: 0519      JUN 10      SUNSET: 1951</b>																								
01	BKN	085				66	64	65	93	0	00	28.58	29.59	01	CLR	NC				9.00			72	62	66	71	0	00	28.94	29.95
04	BKN	110			BR	65	62	63	90	7	22	28.61	29.62	04	BKN	055				9.00			69	62	65	79	5	02	28.92	29.93
07	SCT	090				67	62	64	84	8	22	28.63	29.64	07	CLR	NC				10.00			71	61	65	71	9	36	28.96	29.98
10	BKN	070				76	61	67	60	10	26	28.65	29.65	10	SCT	120				9.00			81	62	69	53	11	07	28.96	29.97
13	FEW	045				82	54	65	38	14	28	28.63	29.63	13	FEW	040				10.00			85	59	68	41	3	VR	28.95	29.96
16	SCT	100				84	53	65	34	17	25	28.60	29.60	16	BKN	120				10.00			88	53	66	30	7	01	28.92	29.93
19	BKN	095				70	61	64	73	7	28	28.64	29.65	19	FEW	120				10.00			84	56	67	38	8	01	28.92	29.93
22	SCT	100				68	60	63	76	14	20	28.68	29.69	22	CLR	NC				10.00			76	59	65	56	5	01	28.95	29.96
<b>SUNRISE: 0520      JUN 05      SUNSET: 1948</b>						<b>SUNRISE: 0519      JUN 11      SUNSET: 1952</b>																								
01	BKN	100				66	61	63	84	8	23	28.68	29.69	01	CLR	NC				10.00			72	57	63	59	7	02	28.95	29.96
04	CLR	NC				62	59	60	90	7	21	28.69	29.70	04	CLR	NC				10.00			68	58	62	71	5	02	28.94	29.95
07	FEW	110				66	61	63	84	6	23	28.74	29.75	07	CLR	NC				10.00			69	57	62	66	0	00	28.97	29.99
10	CLR	NC				76	61	67	60	11	22	28.76	29.77	10	SCT	120				10.00			71	58	63	64	0	00	29.01	30.03
13	BKN	080				80	59	67	49	9	32	28.74	29.75	13	SCT	120				10.00			75	58	65	56	0	00	29.02	30.03
16	SCT	090				84	53	65	34	10	28	28.70	29.71	16	SCT	120				7.00			80	62	68	54	5	02	28.97	29.98
19	SCT	110				81	53	64	38	6	29	28.72	29.72	19	CLR	NC				6.00		HZ	78	61	67	56	5	35	28.96	29.98
22	OVC	095			-TSRA	69	60	63	73	13	33	28.82	29.83	22	CLR	NC				9.00			72	62	66	71	3	03	28.99	30.01
<b>SUNRISE: 0520      JUN 06      SUNSET: 1949</b>						<b>SUNRISE: 0519      JUN 12      SUNSET: 1952</b>																								
01	FEW	100				64	61	62	90	0	00	28.84	29.85	01	CLR	NC				5.00		BR	66	63	64	90	0	00	28.99	30.01
04	SCT	075				64	61	62	90	0	00	28.85	29.86	04	CLR	NC				3.00		BR	62	60	61	93	0	00	28.97	29.99
07	FEW	050				64	62	63	93	0	00	28.91	29.93	07	CLR	NC				2.50		BR	65	61	63	87	0	00	29.00	30.02
10	FEW	065			BR	75	61	66	62	0	00	28.95	29.97	10	CLR	NC				5.00		HZ	78	56	65	47	9	06	29.00	30.01
13	FEW	060				81	50	63	34	8	23	28.93	29.96	13	FEW	050				10.00			86	52	65	31	11	01	28.97	29.98
16	FEW	090				85	52	65	32	0	00	28.88	29.90	16	FEW	055				10.00			86	49	64	28	11	34	28.93	29.94
19	FEW	120				82	55	65	40	5	07	28.87	29.89	19	CLR	NC				10.00			83	51	64	33	9	36	28.91	29.93
22	CLR	NC				73	56	63	55	5	06	28.90	29.92	22	CLR	NC				10.00			76	54	63	47	8	02	28.95	29.96

# OBSERVATIONS AT 3-HOURLY INTERVALS

# KNOXVILLE, TN JUNE 2007 KTYS

WBAN # 13891

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)			
			Observation Time (LST)	Eff Cld Amt Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL				Observation Time (LST)	Eff Cld Amt Oktas			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL		
SUNRISE: 0519							JUN 13				SUNSET: 1952					SUNRISE: 0520							JUN 19				SUNSET: 1955				
01	CLR	NC			10.00		68	55	60	63	3	36	28.97		01	CLR	NC			4.00	BR		71	68	69	90	0	00	29.01	30.02	
04	CLR	NC			7.00		61	55	58	81	0	00	28.96		04	CLR	NC			3.00	BR		70	67	68	90	0	00	29.00	30.01	
07	CLR	NC			5.00	HZ	64	55	59	73	0	00	28.97		07	SCT	120			2.00	BR		71	68	69	90	0	00	29.03	30.05	
10	FEW	100			6.00	HZ	80	60	67	51	6	10	28.97		10	FEW	070			7.00			80	66	71	62	9	26	29.02	30.04	
13	SCT	060			10.00		84	55	66	37	5	VR	28.94		13	SCT	120			10.00			86	66	73	51	10	24	28.96	29.97	
16	SCT	065			10.00		86	56	67	36	7	10	28.88		16	OVC	100			10.00			77	65	69	67	14	36	28.95	29.96	
19	FEW	075			10.00		79	59	66	50	3	32	28.88		19	OVC	100			2.50	-RA BR		70	68	69	93	3	07	28.99	30.01	
22	SCT	120			10.00		69	60	64	73	8	03	28.93		22	BKN	120			10.00			70	67	68	90	0	00	29.00	30.01	
SUNRISE: 0519							JUN 14				SUNSET: 1953					SUNRISE: 0520							JUN 20				SUNSET: 1955				
01	CLR	NC			10.00		66	61	63	84	6	36	28.95	29.97	01	SCT	002			9.00			68	66	67	93	3	09	28.99	30.00	
04	CLR	NC			5.00	BR	62	60	61	93	0	00	28.93	29.94	04	BKN	038			5.00	BR		68	66	67	93	0	00	28.98	30.00	
07	CLR	NC			3.00	BR	64	61	62	90	0	00	28.97	29.98	07	OVC	001			0.50	FG		68	67	67	97	3	05	29.04	30.06	
10	CLR	NC			10.00		77	60	66	56	5	23	28.97	29.99	10	SCT	026			10.00			78	64	69	62	11	02	29.06	30.08	
13	SCT	044			10.00		81	59	67	47	3	VR	28.92	29.94	13	SCT	060			10.00			85	56	67	37	11	03	29.04	30.06	
16	SCT	060			10.00		82	60	68	47	11	34	28.88	29.90	16	SCT	100			10.00			86	49	64	28	10	05	29.02	30.03	
19	SCT	110			10.00		72	59	64	64	11	20	28.91	29.93	19	CLR	NC			10.00			82	49	63	32	7	35	29.03	30.04	
22	SCT	070			10.00		69	61	64	76	7	02	28.93	29.95	22	CLR	NC			10.00			73	51	60	46	0	00	29.05	30.07	
SUNRISE: 0519							JUN 15				SUNSET: 1953					SUNRISE: 0520							JUN 21				SUNSET: 1955				
01	FEW	060			10.00		68	59	63	73	0	00	28.95	29.96	01	CLR	NC			10.00			67	54	59	63	0	00	29.08	30.10	
04	SCT	055			7.00		64	61	62	90	0	00	28.95	29.96	04	CLR	NC			10.00			58	55	56	90	0	00	29.07	30.09	
07	CLR	NC			6.00	BR	65	61	63	87	0	00	28.97	29.99	07	CLR	NC			10.00			64	56	59	75	3	04	29.10	30.12	
10	SCT	040			10.00		78	61	67	56	6	24	28.97	29.99	10	CLR	NC			10.00			79	50	62	36	11	06	29.10	30.11	
13	SCT	100			10.00		82	62	69	51	8	22	28.95	29.96	13	CLR	NC			10.00			84	49	63	30	0	00	29.08	30.09	
16	SCT	050			10.00		84	59	68	43	5	VR	28.90	29.91	16	CLR	NC			10.00			87	46	63	24	6	VR	29.03	30.05	
19	FEW	050			10.00		84	54	66	36	3	28	28.89	29.91	19	CLR	NC			10.00			85	49	64	29	6	07	29.01	30.03	
22	CLR	NC			10.00		74	60	65	62	0	00	28.93	29.95	22	CLR	NC			10.00			72	55	62	55	0	00	29.03	30.04	
SUNRISE: 0519							JUN 16				SUNSET: 1954					SUNRISE: 0520							JUN 22				SUNSET: 1955				
01	CLR	NC			9.00		71	61	65	71	6	25	28.95	29.96	01	CLR	NC			10.00			66	53	59	63	0	00	29.03	30.05	
04	CLR	NC			8.00		69	61	64	76	6	24	28.96	29.97	04	CLR	NC			10.00			62	53	57	73	0	00	29.02	30.03	
07	BKN	070			5.00	HZ	70	64	66	81	5	29	29.01	30.02	07	CLR	NC			10.00			65	54	59	68	3	32	29.04	30.06	
10	BKN	080			8.00		78	63	68	60	14	24	29.02	30.03	10	CLR	NC			10.00			77	58	65	52	5	25	29.03	30.05	
13	SCT	055			7.00		83	63	70	51	7	30	29.01	30.03	13	FEW	060			10.00			87	51	65	29	0	00	29.00	30.01	
16	FEW	040			9.00		87	57	68	36	10	25	28.97	29.98	16	SCT	110			10.00			87	55	67	34	5	26	28.92	29.93	
19	FEW	065			7.00		85	59	68	41	3	02	28.97	29.98	19	FEW	110			10.00			86	57	68	37	5	30	28.89	29.91	
22	CLR	NC			7.00		74	60	65	62	3	07	29.01	30.02	22	CLR	NC			10.00			79	59	66	50	5	35	28.91	29.92	
SUNRISE: 0520							JUN 17				SUNSET: 1954					SUNRISE: 0521							JUN 23				SUNSET: 1956				
01	CLR	NC			6.00	HZ	71	60	64	68	0	00	29.03	30.04	01	CLR	NC			10.00			74	62	66	66	5	36	28.91	29.93	
04	CLR	NC			5.00	HZ	65	59	61	81	0	00	29.02	30.03	04	CLR	NC			8.00			69	62	65	79	5	01	28.91	29.93	
07	CLR	NC			3.00	HZ	66	61	63	84	0	00	29.06	30.08	07	CLR	NC			4.00	HZ		70	63	66	79	0	00	28.95	29.97	
10	CLR	NC			5.00	HZ	81	59	67	47	0	00	29.08	30.09	10	CLR	NC			9.00			81	63	69	54	0	00	28.94	29.96	
13	CLR	NC			10.00		90	53	67	28	6	VR	29.05	30.06	13	SCT	050			10.00			87	62	71	43	0	00	28.91	29.92	
16	FEW	050			10.00		93	51	67	24	5	VR	28.99	30.01	16	BKN	060			9.00			84	67	73	57	6	30	28.87	29.88	
19	CLR	NC			10.00		91	51	67	26	3	01	28.97	29.98	19	BKN	100			8.00			82	69	73	65	3	35	28.88	29.89	
22	CLR	NC			10.00		79	57	65	47	0	00	29.01	30.03	22	BKN	090			10.00			76	67	70	74	6	29	28.94	29.95	
SUNRISE: 0520							JUN 18				SUNSET: 1954					SUNRISE: 0521							JUN 24				SUNSET: 1956				
01	CLR	NC			7.00		71	57	63	61	0	00	29.02	30.03	01	CLR	NC			8.00			71	66	68	84	5	05	28.89	29.91	
04	CLR	NC			8.00		65	58	61	78	0	00	29.00	30.01	04	CLR	NC			7.00			70	66	67	87	3	01	28.89	29.90	
07	CLR	NC			5.00	HZ	68	60	63	76	0	00	29.05	30.06	07	SCT	120			7.00			72	66	68	82	0	00	28.96	29.97	
10	CLR	NC			6.00	HZ	82	59	67	46	0	00	29.07	30.08	10	FEW	120			10.00			83	66	72	57	3	VR	28.98	29.99	
13	SCT	100			6.00	HZ	88	62	71	42	11	22	29.05	30.06	13	SCT	120			10.00			91	64	73	41	11	24	28.97	29.98	
16	FEW	120			5.00	HZ	92	62	72	37	3	28	28.99	30.00	16	SCT	085			10.00			92	58	70	32	14	22	28.94	29.95	
19	BKN	100			3.00	-RA HZ	73	67	69	82	5	09	28.99	30.01	19	BKN	095			8.00	TS SQ		83	64	71	53	33	21	29.00	30.01	
22	BKN	070			6.00	HZ	73	66	68	79	20	22	29.05	30.06	22	BKN	110			8.00			70	66	67	87	5	06	29.06	30.07	

# OBSERVATIONS AT 3-HOURLY INTERVALS

**KNOXVILLE, TN**

**JUNE 2007**

**KTYS**

**WBAN # 13891**

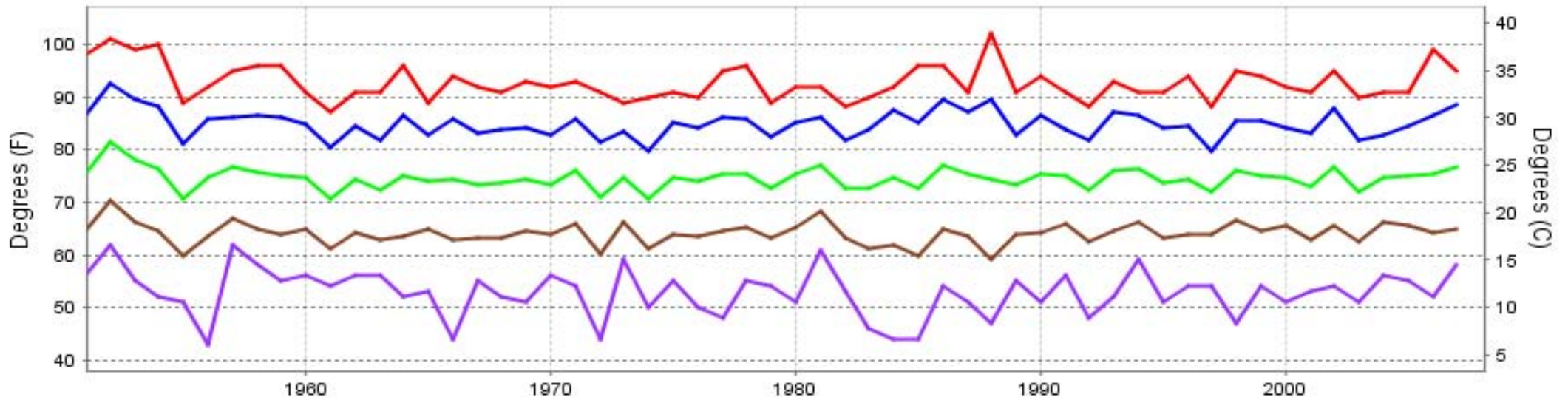
HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE			WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)		
			Observation Time (LST)	Eff Cld Amt Oktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB		RELATIVE HUMIDITY (PCT)	STATION	SEA LEVEL
			<b>SUNRISE: 0521</b>			<b>JUN 25</b>	<b>SUNSET: 1956</b>						
01	CLR	NC			6.00	BR	68	66	67	93	5 10	29.08	30.09
04	CLR	NC			4.00	BR	67	65	66	93	5 04	29.09	30.10
07	CLR	NC			3.00	BR	69	66	67	90	6 03	29.14	30.16
10	FEW	120			5.00	HZ	81	68	72	65	0 00	29.18	30.19
13	SCT	100			7.00		85	66	72	53	7 27	29.16	30.18
16	SCT	080			10.00	TS	86	62	70	45	9 18	29.13	30.14
19	FEW	120			10.00		83	63	70	51	5 13	29.15	30.17
22	SCT	120			10.00		74	66	69	76	3 07	29.19	30.22
			<b>SUNRISE: 0521</b>			<b>JUN 26</b>	<b>SUNSET: 1956</b>						
01	CLR	NC			9.00		72	66	68	82	0 00	29.21	30.23
04	CLR	NC			5.00	BR	69	67	68	93	0 00	29.22	30.25
07	SCT	120			4.00	BR	71	67	68	87	0 00	29.25	30.27
10	SCT	120			6.00	HZ	81	66	71	60	0 00	29.26	30.29
13	SCT	120			7.00		86	66	73	51	3 20	29.24	30.26
16	SCT	070			10.00		87	64	72	46	13 20	29.18	30.20
19	FEW	120			10.00		78	65	70	64	0 00	29.18	30.20
22	CLR	NC			10.00		76	65	69	69	0 00	29.19	30.21
			<b>SUNRISE: 0522</b>			<b>JUN 27</b>	<b>SUNSET: 1956</b>						
01	CLR	NC			9.00		73	65	68	76	0 00	29.16	30.19
04	CLR	NC			6.00	BR	69	66	67	90	3 04	29.14	30.16
07	CLR	NC			5.00	HZ	72	67	69	84	0 00	29.18	30.20
10	CLR	NC			6.00	HZ	83	67	72	59	3 VR	29.18	30.21
13	SCT	045			7.00		88	66	73	48	3 VR	29.15	30.16
16	SCT	110			9.00		92	63	73	38	9 22	29.08	30.09
19	FEW	090			9.00		85	66	72	53	8 19	29.05	30.07
22	CLR	NC			10.00		78	65	70	64	5 23	29.10	30.11
			<b>SUNRISE: 0522</b>			<b>JUN 28</b>	<b>SUNSET: 1956</b>						
01	CLR	NC			8.00		76	66	69	71	0 00	29.08	30.09
04	CLR	NC			7.00		73	67	69	82	0 00	29.05	30.06
07	CLR	NC			5.00	HZ	73	68	70	84	0 00	29.07	30.08
10	CLR	NC			9.00		85	66	72	53	10 24	29.09	30.10
13	SCT	045			10.00		90	68	75	48	9 23	29.03	30.03
16	FEW	055			10.00		88	65	73	47	7 29	28.98	29.99
19	SCT	110			10.00		87	63	71	45	5 29	29.00	30.01
22	FEW	045			10.00		78	65	70	64	9 04	29.06	30.06
			<b>SUNRISE: 0523</b>			<b>JUN 29</b>	<b>SUNSET: 1956</b>						
01	FEW	120			10.00		72	65	68	79	0 00	29.05	30.06
04	BKN	120			10.00		73	67	69	82	3 33	29.02	30.03
07	SCT	120			6.00	HZ	72	67	69	84	5 15	29.05	30.06
10	CLR	NC			8.00		83	68	73	61	6 19	29.06	30.07
13	SCT	050			10.00		90	64	73	42	6 VR	29.02	30.03
16	SCT	055			9.00		78	71	73	79	7 22	28.99	30.00
19	SCT	100			10.00		78	69	72	74	7 26	29.01	30.03
22	BKN	120			10.00	-RA	75	65	69	71	8 07	29.05	30.06
			<b>SUNRISE: 0523</b>			<b>JUN 30</b>	<b>SUNSET: 1956</b>						
01	CLR	NC			10.00		73	67	69	82	7 34	29.01	30.02
04	CLR	NC			10.00		70	67	68	90	0 00	29.00	30.02
07	SCT	120			3.00	BR	70	67	68	90	3 04	29.02	30.03
10	SCT	120			10.00		78	68	71	71	0 00	29.03	30.05
13	FEW	030			10.00		86	63	71	46	0 00	29.01	30.02
16	BKN	070			10.00		88	64	72	45	6 30	28.95	29.96
19	SCT	100			10.00		86	65	72	50	7 36	28.93	29.94
22	SCT	060			10.00		78	68	71	71	6 05	28.98	29.99

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE			WEATHER	TEMPERATURE °F			WIND SPEED (MPH) DIRECTION Tens of Deg	PRESSURE (INCHES, HG)		
			Observation Time (LST)	Eff Cld Amt Oktas	VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB		RELATIVE HUMIDITY (PCT)	STATION	SEA LEVEL
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, W = 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)	SPEED	DIRECTION
							STATION	SEA LEVEL				
01			70	62	65	77	28.96	29.98	8.40	3	1	28
02			69	62	65	80	28.96	29.97	7.80	4	1	27
03			67	62	64	83	28.95	29.97	7.27	2	0	29
04			67	62	64	85	28.96	29.97	7.30	2	1	28
05			66	62	63	86	28.97	29.98	6.43	2	0	28
06			66	62	63	87	28.98	29.99	5.27	2	1	28
07			68	63	65	83	28.99	30.01	5.40	2	1	27
08			72	63	66	74	29.00	30.02	6.38	3	0	28
09			75	63	67	67	29.00	30.02	7.20	4	1	27
10			79	63	68	58	29.00	30.02	7.83	6	2	27
11			81	62	69	53	29.00	30.01	8.30	7	3	27
12			83	61	69	47	28.99	30.01	8.63	7	6	27
13			85	60	69	45	28.97	29.99	8.70	7	5	27
14			85	60	69	45	28.95	29.97	8.43	8	4	27
15			86	60	69	42	28.94	29.95	8.53	8	4	27
16			85	59	69	43	28.93	29.94	9.03	8	4	27
17			84	59	69	45	28.92	29.94	8.77	9	4	27
18			83	60	68	48	28.92	29.94	8.85	8	3	27
19			80	61	68	54	28.93	29.94	8.53	6	1	27
20			78	61	67	59	28.94	29.95	8.53	6	0	28
21			76	61	67	64	28.95	29.96	8.80	5	1	09
22			74	62	66	68	28.97	29.98	9.07	5	1	09
23			72	62	66	73	28.97	29.98	9.03	4	1	09
24			71	62	65	75	28.97	29.98	8.53	3	0	08

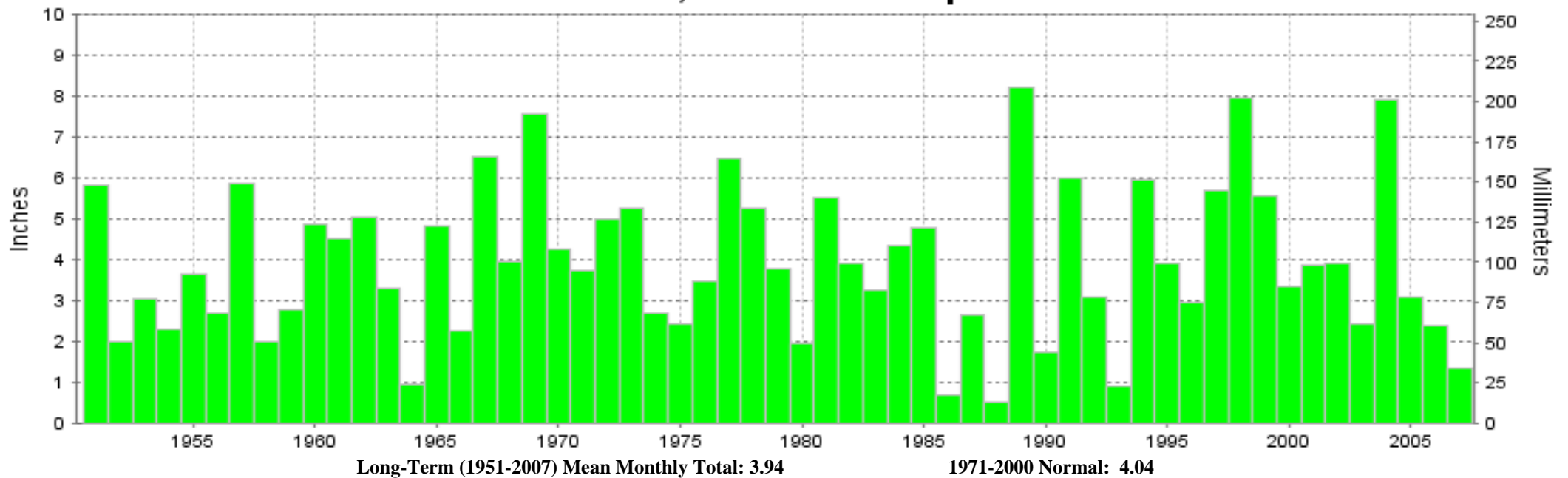
## KNOXVILLE, TN JUNE Temperatures



— Extreme Max   
 — Mean Max   
 — Mean   
 — Mean Min   
 — Extreme Min

**Long-Term (1951-2007) Mean: 74.5**  
**1971-2000 Normal: 73.8**

## KNOXVILLE, TN JUNE Precipitation



Long-Term (1951-2007) Mean Monthly Total: 3.94

1971-2000 Normal: 4.04



**JUNE 2007  
KNOXVILLE, TN**

**LOCAL CLIMATOLOGICAL DATA  
NOAA, National Climatic Data Center**

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