



OCTOBER 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



OCTOBER 2007
KNOXVILLE, TN

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			
																			SPEED 20	DIR 21	SPEED 22	DIR 23		
01	84	48	66	1	48	56	0	1			0.0	0.00	29.22	30.26	1.4	30	2.4	15	34	10	26	01		
02	85	53	69	4	50	58	0	4			0.0	0.00	29.11	30.14	1.0	08	2.3	23	04	15	06	02		
03	87	58	73	9	58	64	0	8	RA		0.0	T	29.01	30.04	0.5	30	3.9	28	19	12	18	03		
04	85	68	77	13	67	69	0	12	TS TSRA RA FG BR		0.0	0.19	29.05	30.07	5.0	05	5.7	29	07	21	10	04		
05	86	67	77*	14	66	69	0	12	FG+ FG BR		0.0	0.00	29.11	30.14	0.2	28	1.4	14	01	9	03	05		
06	88	63	76	13	62	67	0	11			0.0	0.00	29.10	30.11	1.9	02	2.3	15	06	12	06	06		
07	89*	63	76	14	61	66	0	11			0.0	0.00	29.04	30.06	2.0	02	2.6	17	04	14	04	07		
08	88	63	76	14	61	66	0	11			0.0	0.00	29.00	30.02	0.9	32	1.9	15	01	9	01	08		
09	81	64	73	12	64	67	0	8	RA BR HZ		0.0	0.01	28.95	29.96	2.0	28	2.7	16	33	13	33	09		
10	79	56	68	7	49	57	0	3	FG+ FG BR		0.0	0.00	28.85	29.87	5.1	28	6.7	28	28	23	27	10		
11	64	47	56	-5	37	47	9	0			0.0	0.00	28.85	29.90	5.2	34	6.4	20	29	14	34	11		
12	67	42	55	-5	41	48	10	0			0.0	0.00	28.92	29.97	0.3	05	1.5	16	34	12	05	12		
13	72	42	57	-3	43	50	8	0			0.0	0.00	28.98	30.03	0.3	28	1.1	12	03	8	22	13		
14	81	47	64	5	46	54	1	0			0.0	0.00	29.05	30.08	2.6	02	3.5	15	04	10	04	14		
15	81	51	66	7	50	57	0	1			0.0	0.00	29.04	30.08	0.6	28	1.9	15	35	12	22	15		
16	79	58	69	10	56	61	0	4			0.0	0.00	29.00	30.03	0.5	22	4.6	22	26	17	28	16		
17	85	63	74	16	59	64	0	9			0.0	0.00	28.97	29.98	3.3	17	6.5	23	16	18	14	17		
18	83	69	76	18	61	67	0	11	RA		0.0	T	28.77	29.76	11.0	19	11.3	25	18	22	19	18		
19	77	57	67	10	55	61	0	2	RA BR		0.0	0.32	28.68	29.70	10.8	22	11.1	30	22	25	22	19		
20	73	50	62	5	43	51	3	0			0.0	0.00	28.94	30.00	3.0	23	3.8	14	30	10	26	20		
21	81	44	63	6	44	52	2	0			0.0	0.00	29.09	30.14	0.0	21	1.5	9	25	7	27	21		
22	69	49	59	3	55	57	6	0	RA BR		0.0	0.05	29.05	30.06	2.2	36	2.3	9	01	7	34	22		
23	80	61	71	15	64	67	0	6	RA DZ BR		0.0	0.61	28.77	29.78	8.5	21	9.0	36*	23	28*	22	23		
24	65	57	61	5	56	58	4	0	RA		0.0	0.05	28.77	29.78	1.7	07	4.2	13	22	12	22	24		
25	70	52	61	6	49	55	4	0			0.0	0.00	28.84	29.90	2.8	23	5.0	31	14	21	16	25		
26	74	52	63	8	49	54	2	0			0.0	0.00	29.02	30.07	3.7	21	8.0	29	21	23	22	26		
27	65	47	56	1	44	50	9	0			0.0	0.00	29.21	30.27	3.4	32	5.7	16	36	13	02	27		
28	65	47	56	2	43	50	9	0			0.0	0.00	29.34	30.40	9.4	03	9.7	22	02	17	02	28		
29	64	38	51	-3	34	43	14	0			0.0	0.00	29.39	30.45	2.6	04	2.9	14	04	12	04	29		
30	68	34*	51*	-3	37	44	14	0	BR		0.0	0.00	29.32	30.37	0.7	04	1.2	9	14	7	02	30		
31	71	36	54	0	41	47	11	0	BR		0.0	0.00	29.21	30.24	0.7	33	2.4	13	28	10	28	31		
77.0		53.1	65.1	Σ	51.4	57.3	3.4	3.7	< MONTHLY AVERAGES TOTALS >				0.0	1.23	29.02	30.05	0.6	26	4.4	< MONTHLY AVERAGES				
7.1		5.4	6.3		----- DEPARTURE FROM NORMAL -----								-1.42	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3										
DEGREE DAYS									GREATEST 24-HR PRECIPITATION : 0.61 DATE : 23-24				SEA LEVEL PRESSURE				DATE TIME							
MONTHLY				SEASON TO DATE					GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.54 29 0853											
TOTAL DEPARTURE				TOTAL DEPARTURE					GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.64 19 0349											
HEATING :		106	-104	106		-126		NUMBER OF -> DAYS WITH				MAXIMUM TEMP >= 90 : 0		MINIMUM TEMP <= 32 : 0		PRECIPITATION >= 0.01 INCH: 6								
COOLING :		114	186	1987		540						MAXIMUM TEMP <= 32 : 0		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH: 3								
												THUNDERSTORMS : 1		HEAVY FOG : 2		SNOWFALL >= 1.0 INCH : 0								

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN (KTYS)
OCTOBER 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												01	0.00	0.00	
02													02												02	0.00	0.00	
03													03			T								T	03	T	T	
04			0.02		T	T							04			0.01	0.12	0.03	0.01		T			04	0.19	0.19		
05													05											05	0.00	0.00		
06													06											06	0.00	0.00		
07													07											07	0.00	0.00		
08													08											08	0.00	0.00		
09													09	T	T	0.01								09	0.01	0.01		
10													10											10	0.00	0.00		
11													11											11	0.00	0.00		
12													12											12	0.00	0.00		
13													13											13	0.00	0.00		
14													14											14	0.00	0.00		
15													15											15	0.00	0.00		
16													16											16	0.00	0.00		
17													17											17	0.00	0.00		
18													18											18	T	T		
19		0.03		0.03	0.06	0.20					T		19											19	0.32	0.32		
20													20											20	0.00	0.00		
21													21											21	0.00	0.00		
22												0.01	22	0.03	T	0.01							T	22	0.05	0.05		
23	T	0.02	0.01	T	T	0.02				T			23	T		T	0.03	0.06	0.26	0.14	0.05		T	23	0.61	0.61		
24		T	0.02	0.01	T						T	0.01	24	T									T	24	0.05	0.05		
25												0.01	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											29	0.00	0.00		
30													30											30	0.00	0.00		
31													31											31	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	0.14	0.16	0.22	0.28	0.33	0.37	0.38	0.41	0.45	0.46	0.50
Ending Date	19	19	23	23	23	23	23	23	23	23	23	23
Ending Time (Hr/Min)	0512	0516	1758	1805	1811	1811	1811	1833	1909	1923	1923	1911

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 OCTOBER 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							10.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							1.00	10.00	
05							0.50	10.00	
06							10.00	10.00	
07							10.00	10.00	
08							8.00	10.00	
09							3.00	10.00	
10							0.00	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							7.00	10.00	
18							10.00	10.00	
19							4.00	10.00	
20							10.00	10.00	
21							10.00	10.00	
22							6.00	10.00	
23							1.00	10.00	
24							10.00	10.00	
25							10.00	10.00	
26							10.00	10.00	
27							10.00	10.00	
28							10.00	10.00	
29							10.00	10.00	
30							3.00	10.00	
31							6.00	10.00	
MONTHLY AVGS							7.73	10.00	
SUNSHINE (Minutes)									
Total : 0					Possible : 20949				
Percent Possible : 0									
NUMBER OF DAYS WITH : SKY CONDITION									
Clear		Partly CLDY			Cloudy			Missing	
MINIMUM VISIBILITY (MILES)									
<= .25			<= 3.0				>= 7.0		
1			6				22		

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN
OCTOBER 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								
																												Observation Time (LST)	Eff Cld Amt Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)
SUNRISE: 0631						OCT 01						SUNSET: 1820						SUNRISE: 0636						OCT 07						SUNSET: 1812					
01	CLR	NC			10.00		62	48	54	60	3	24	29.26	30.29	01	CLR	NC			10.00		67	62	64	84	0	00	29.05	30.06						
04	CLR	NC			10.00		52	48	50	86	3	36	29.27	30.30	04	CLR	NC			10.00		64	61	62	90	0	00	29.05	30.07						
07	CLR	NC			10.00		51	47	49	86	0	00	29.27	30.32	07	FEW	040			10.00		64	60	62	87	0	00	29.09	30.11						
10	CLR	NC			10.00		67	49	57	53	6	31	29.29	30.33	10	FEW	040			10.00		77	64	69	64	0	00	29.11	30.12						
13	CLR	NC			10.00		78	45	60	31	6	VR	29.23	30.26	13	FEW	050			10.00		85	63	71	48	6	32	29.05	30.06						
16	CLR	NC			10.00		80	47	61	31	7	31	29.16	30.19	16	FEW	060			10.00		89	59	70	36	8	06	28.98	30.00						
19	CLR	NC			10.00		71	50	59	48	0	00	29.15	30.19	19	CLR	NC			10.00		81	58	67	46	6	02	28.98	30.00						
22	CLR	NC			10.00		65	50	57	59	0	00	29.18	30.20	22	CLR	NC			10.00		74	59	65	60	3	15	29.02	30.03						
SUNRISE: 0631						OCT 02						SUNRISE: 0636						OCT 08						SUNSET: 1810											
01	CLR	NC			10.00		59	50	54	72	0	00	29.16	30.19	01	CLR	NC			10.00		66	61	63	84	6	05	29.02	30.03						
04	CLR	NC			10.00		57	51	54	80	0	00	29.15	30.19	04	CLR	NC			10.00		65	61	63	87	0	00	29.03	30.04						
07	CLR	NC			10.00		55	49	52	80	0	00	29.19	30.23	07	CLR	NC			10.00		64	60	62	87	0	00	29.05	30.07						
10	CLR	NC			10.00		69	54	60	59	5	07	29.21	30.24	10	CLR	NC			10.00		77	63	68	62	0	00	29.07	30.08						
13	CLR	NC			10.00		81	50	63	34	3	08	29.12	30.14	13	FEW	045			10.00		84	61	69	46	6	26	29.01	30.03						
16	CLR	NC			10.00		85	47	63	27	3	05	29.04	30.06	16	FEW	055			10.00		88	57	68	35	6	34	28.95	29.97						
19	CLR	NC			10.00		79	47	61	32	0	00	29.01	30.04	19	FEW	055			10.00		81	60	68	49	3	25	28.95	29.96						
22	CLR	NC			10.00		69	52	59	55	6	17	29.04	30.06	22	CLR	NC			10.00		73	61	66	66	0	00	28.98	30.00						
SUNRISE: 0632						OCT 03						SUNRISE: 0637						OCT 09						SUNSET: 1809											
01	CLR	NC			10.00		64	54	58	70	3	02	29.02	30.04	01	CLR	NC			10.00		69	61	64	76	3	18	28.97	29.99						
04	CLR	NC			10.00		58	53	55	84	0	00	29.01	30.03	04	CLR	NC			10.00		65	61	63	87	0	00	28.96	29.97						
07	FEW	080			10.00		60	53	56	78	5	27	29.05	30.08	07	SCT	100			10.00		66	61	63	84	0	00	28.98	30.00						
10	FEW	080			10.00		74	57	64	56	3	10	29.06	30.08	10	SCT	100			10.00		79	65	70	62	9	26	28.97	29.98						
13	BKN	060			10.00		84	59	68	43	3	VR	29.00	30.02	13	BKN	110			10.00	-RA	75	65	69	71	9	32	28.96	29.98						
16	OVC	060			10.00		81	60	68	49	9	24	28.98	30.00	16	BKN	070			8.00		74	66	69	76	3	01	28.91	29.93						
19	BKN	120			10.00		78	62	68	58	7	23	28.98	30.01	19	BKN	090			10.00		72	66	68	82	3	22	28.92	29.94						
22	SCT	110			10.00		72	65	68	79	3	03	29.03	30.05	22	BKN	037			10.00		71	67	68	87	3	28	28.92	29.93						
SUNRISE: 0633						OCT 04						SUNRISE: 0638						OCT 10						SUNSET: 1807											
01	SCT	100			10.00		71	65	67	81	0	00	29.03	30.04	01	OVC	007			0.50	FG	67	66	66	97	0	00	28.91	29.93						
04	OVC	090			10.00		69	67	68	93	3	06	29.03	30.04	04	VV	001			0.25	FG	62	61	61	97	0	00	28.88	29.91						
07	BKN	090			10.00		69	67	68	93	5	06	29.06	30.08	07	VV	001			0.00	FG	59	58	58	97	3	25	28.89	29.92						
10	BKN	090			10.00		76	68	71	76	9	05	29.09	30.11	10	FEW	004			10.00		68	55	60	63	9	22	28.88	29.91						
13	BKN	090			10.00		81	67	72	63	10	05	29.06	30.07	13	CLR	NC			10.00		76	39	56	26	15	28	28.82	29.84						
16	BKN	100			10.00		84	67	73	57	10	05	29.01	30.02	16	CLR	NC			10.00		78	40	58	26	11	28	28.77	29.78						
19	BKN	095			10.00	-RA	70	68	69	93	5	36	29.06	30.08	19	CLR	NC			10.00		69	36	52	30	8	28	28.79	29.80						
22	CLR	NC			9.00		69	68	68	97	0	00	29.08	30.10	22	CLR	NC			10.00		61	39	50	44	8	36	28.82	29.85						
SUNRISE: 0634						OCT 05						SUNRISE: 0639						OCT 11						SUNSET: 1806											
01	OVC	050			1.50	BR	69	68	68	97	0	00	29.10	30.12	01	CLR	NC			10.00		54	40	47	59	8	36	28.84	29.87						
04	OVC	100			3.00	BR	68	67	67	97	0	00	29.10	30.11	04	CLR	NC			10.00		50	37	44	61	7	01	28.84	29.87						
07	BKN	085			1.50	BR	67	67	67	100	0	00	29.14	30.17	07	FEW	040			10.00		47	37	42	68	5	36	28.86	29.90						
10	BKN	100			7.00		73	69	70	87	0	00	29.18	30.20	10	SCT	038			10.00		55	36	46	49	7	03	28.90	29.94						
13	SCT	090			10.00		85	65	72	51	3	VR	29.14	30.16	13	SCT	045			10.00		59	36	48	42	8	33	28.86	29.90						
16	BKN	095			10.00		86	64	71	48	5	VR	29.09	30.11	16	SCT	050			10.00		61	36	49	39	7	31	28.82	29.86						
19	FEW	070			10.00		80	64	70	58	3	26	29.09	30.11	19	FEW	060			10.00		59	38	49	46	10	35	28.85	29.89						
22	BKN	065			10.00		76	63	68	64	3	22	29.13	30.15	22	CLR	NC			10.00		55	40	48	57	6	01	28.91	29.95						
SUNRISE: 0635						OCT 06						SUNRISE: 0640						OCT 12						SUNSET: 1805											
01	CLR	NC			10.00		69	66	67	90	0	00	29.13	30.14	01	CLR	NC			10.00		48	39	44	71	0	00	28.91	29.95						
04	CLR	NC			10.00		65	63	64	93	0	00	29.12	30.14	04	CLR	NC			10.00		44	40	42	86	0	00	28.91	29.95						
07	CLR	NC			10.00		65	62	63	90	3	01	29.14	30.16	07	BKN	050			10.00		44	40	42	86	0	00	28.96	30.00						
10	SCT	055			10.00		75	64	68	69	0	00	29.16	30.19	10	BKN	050			10.00		55	44	49	67	0	00	28.97	30.01						
13	FEW	050			10.00		84	62	70	48	3	35	29.10	30.11	13	OVC	046			10.00		62	41	51	46	3	01	28.94	29.98						
16	SCT	060			10.00		88	58	69	36	0	00	29.04	30.05	16	FEW	070			10.00		65	40	52	40	3	VR	28.89	29.93						
19	FEW	060			10.00		79	60	67	52	5	01	29.03	30.05	19	FEW	060			10.00		61	40	50	46	0	00	28.90	29.94						
22	CLR	NC			10.00		74	59	65	60	0	00	29.05	30.06	22	CLR	NC			10.00		51	44	48	77	3	03	28.94	29.98						

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN OCTOBER 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								
																												WEATHER	WEATHER						
SUNRISE: 0641						OCT 13						SUNSET: 1803						SUNRISE: 0646						OCT 19						SUNSET: 1756					
01	CLR	NC			10.00		51	42	47	71	0	00	28.96	29.99	01	BKN	090			10.00		76	64	68	67	16	20	28.67	29.67						
04	CLR	NC			10.00		45	42	44	89	0	00	28.96	30.01	04	OVC	045			10.00	-RA	70	65	67	84	9	24	28.64	29.65						
07	CLR	NC			10.00		43	41	42	93	0	00	29.02	30.06	07	OVC	060			10.00		67	66	66	97	8	21	28.67	29.68						
10	CLR	NC			10.00		57	45	51	64	0	00	29.05	30.09	10	BKN	080			10.00		69	62	65	79	13	23	28.70	29.71						
13	CLR	NC			10.00		67	42	54	40	0	00	29.00	30.03	13	SCT	060			10.00		71	51	60	49	16	23	28.68	29.69						
16	CLR	NC			10.00		72	41	56	33	3	33	28.96	29.99	16	FEW	065			10.00		74	42	57	32	21	22	28.67	29.68						
19	CLR	NC			10.00		65	43	53	45	0	00	28.98	30.02	19	FEW	070			10.00		66	47	56	51	9	22	28.70	29.72						
22	CLR	NC			10.00		59	44	51	58	0	00	29.01	30.04	22	FEW	070			10.00		62	48	54	60	7	24	28.78	29.79						
SUNRISE: 0641						OCT 14						SUNSET: 1802						SUNRISE: 0647						OCT 20						SUNSET: 1754					
01	CLR	NC			10.00		53	46	49	77	0	00	29.04	30.08	01	CLR	NC			10.00		56	48	52	75	7	23	28.82	29.83						
04	CLR	NC			10.00		53	48	50	83	5	02	29.03	30.06	04	CLR	NC			10.00		52	47	49	83	7	21	28.86	29.89						
07	CLR	NC			10.00		47	44	46	89	0	00	29.07	30.11	07	FEW	060			10.00		50	47	48	90	6	23	28.94	29.97						
10	CLR	NC			10.00		64	46	54	52	5	05	29.11	30.14	10	CLR	NC			10.00		62	49	55	63	3	28	29.00	30.03						
13	CLR	NC			10.00		76	43	58	31	5	33	29.06	30.09	13	CLR	NC			10.00		69	37	53	31	6	30	28.99	30.02						
16	CLR	NC			10.00		81	45	61	28	6	VR	29.01	30.04	16	CLR	NC			10.00		72	37	54	28	7	28	28.98	30.01						
19	CLR	NC			10.00		70	47	57	44	5	06	29.03	30.06	19	CLR	NC			10.00		66	38	52	36	0	00	29.01	30.05						
22	CLR	NC			10.00		62	49	55	63	0	00	29.05	30.08	22	CLR	NC			10.00		58	41	50	53	0	00	29.04	30.08						
SUNRISE: 0642						OCT 15						SUNSET: 1801						SUNRISE: 0648						OCT 21						SUNSET: 1753					
01	CLR	NC			10.00		57	49	53	75	0	00	29.04	30.06	01	CLR	NC			10.00		52	43	48	72	0	00	29.05	30.09						
04	CLR	NC			10.00		54	49	51	83	3	04	29.06	30.08	04	CLR	NC			10.00		47	43	45	86	3	06	29.08	30.12						
07	CLR	NC			10.00		52	48	50	86	0	00	29.10	30.13	07	CLR	NC			10.00		46	40	43	80	0	00	29.13	30.17						
10	CLR	NC			10.00		67	50	58	55	0	00	29.13	30.16	10	CLR	NC			10.00		58	43	50	58	0	00	29.15	30.19						
13	CLR	NC			10.00		78	50	62	38	5	36	29.07	30.09	13	CLR	NC			10.00		74	44	58	34	3	16	29.11	30.14						
16	CLR	NC			10.00		80	49	62	34	0	00	29.00	30.03	16	CLR	NC			10.00		80	44	60	28	3	VR	29.06	30.09						
19	CLR	NC			10.00		73	50	60	44	0	00	28.97	30.00	19	CLR	NC			10.00		71	46	57	41	7	24	29.08	30.11						
22	CLR	NC			10.00		68	51	58	55	10	22	29.03	30.05	22	CLR	NC			10.00		60	47	53	62	0	00	29.12	30.16						
SUNRISE: 0643						OCT 16						SUNSET: 1759						SUNRISE: 0649						OCT 22						SUNSET: 1752					
01	CLR	NC			10.00		64	51	57	63	6	13	29.01	30.03	01	CLR	NC			10.00		52	47	49	83	0	00	29.13	30.16						
04	OVC	085			10.00		65	53	58	65	6	31	29.01	30.03	04	CLR	NC			10.00		50	46	48	86	0	00	29.11	30.14						
07	FEW	070			10.00		60	53	56	78	6	35	29.01	30.04	07	OVC	110			10.00		53	48	50	83	0	00	29.12	30.15						
10	SCT	060			10.00		72	56	62	57	3	VR	29.03	30.06	10	BKN	100			10.00		66	50	57	57	6	03	29.11	30.14						
13	BKN	090			10.00		77	57	65	50	10	21	29.00	30.02	13	OVC	060			10.00		63	58	60	84	5	01	29.04	30.08						
16	BKN	090			10.00		75	59	65	58	6	33	28.98	30.00	16	BKN	110			10.00		66	61	63	84	5	31	28.96	30.00						
19	OVC	110			10.00		71	59	64	66	5	04	28.98	30.01	19	OVC	080			6.00	BR	65	62	63	90	5	34	28.93	29.97						
22	OVC	110			10.00		68	59	63	73	0	00	29.01	30.03	22	BKN	120			9.00		65	62	63	90	3	34	28.90	29.93						
SUNRISE: 0644						OCT 17						SUNSET: 1758						SUNRISE: 0650						OCT 23						SUNSET: 1751					
01	BKN	070			10.00		66	61	63	84	5	36	29.03	30.05	01	OVC	095			10.00	-RA	65	63	64	93	0	00	28.84	29.85						
04	SCT	100			8.00		63	60	61	90	0	00	29.01	30.03	04	BKN	120			10.00	-RA	71	65	67	81	7	20	28.79	29.82						
07	BKN	085			8.00		64	59	61	84	3	34	29.04	30.06	07	BKN	100			10.00		71	64	67	79	6	20	28.74	29.76						
10	SCT	100			10.00		72	60	65	66	3	VR	29.05	30.07	10	BKN	090			10.00		78	66	70	67	15	22	28.77	29.78						
13	SCT	100			10.00		82	58	67	44	9	19	28.97	29.99	13	BKN	090			10.00		76	68	71	76	11	21	28.73	29.74						
16	BKN	120			10.00		82	59	67	46	13	20	28.90	29.92	16	OVC	060			7.00	-RA	76	66	69	71	10	17	28.68	29.68						
19	FEW	100			10.00		75	59	65	58	7	19	28.88	29.90	19	OVC	045			3.00	-RA BR	65	64	64	97	13	22	28.76	29.78						
22	CLR	NC			10.00		75	58	65	56	8	14	28.87	29.89	22	OVC	036			10.00	-RA	62	60	61	93	7	22	28.82	29.85						
SUNRISE: 0645						OCT 18						SUNSET: 1757						SUNRISE: 0650						OCT 24						SUNSET: 1750					
01	CLR	NC			10.00		71	57	63	61	0	00	28.82	29.82	01	OVC	055			10.00		61	57	59	87	5	13	28.81	29.82						
04	SCT	080			10.00		75	57	64	54	13	19	28.81	29.80	04	OVC	060			10.00		58	55	56	90	7	07	28.76	29.78						
07	BKN	090			10.00	-RA	71	60	64	68	9	20	28.81	29.82	07	OVC	095			10.00		58	56	57	93	6	05	28.77	29.79						
10	BKN	100			10.00	-RA	73	63	67	71	11	20	28.82	29.83	10	OVC	060			10.00		60	58	59	93	3	29	28.78	29.80						
13	OVC	075			10.00		79	62	68	56	17	17	28.76	29.77	13	OVC	029			10.00		61	57	59	87	3	22	28.75	29.78						
16	BKN	070			10.00		80	63	69	56	14	19	28.72	29.72	16	BKN	030			10.00		64	56	59	75	3	34	28.71	29.73						
19	OVC	055			10.00		78	62	68	58	11	17	28.71	29.72	19	SCT	060			10.00		61	56	58	84	0	00	28.76	29.78						
22	BKN	065			10.00		77	63	68	62	11	19	28.67	29.68	22	CLR	NC			10.00		59	57	58	93	6	05	28.76	29.78						

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN
OCTOBER 2007 **KTYS**

WBAN # 13891

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)						
			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: 0651						OCT 25						SUNSET: 1748					
01	BKN	015			10.00	60	58	59	93	0	00	28.74	29.76				
04	OVC	012			10.00	59	55	57	87	7	25	28.74	29.76				
07	SCT	070			10.00	59	48	53	67	6	32	28.79	29.83				
10	SCT	060			10.00	60	48	54	65	6	29	28.86	29.90				
13	FEW	070			10.00	66	43	54	43	14	17	28.88	29.91				
16	FEW	065			10.00	69	45	56	42	9	19	28.88	29.91				
19	CLR	NC			10.00	62	46	54	56	3	04	28.94	29.97				
22	BKN	060			10.00	56	48	52	75	0	00	29.01	30.05				
SUNRISE: 0652						OCT 26						SUNSET: 1747					
01	BKN	060			10.00	53	48	50	83	0	00	29.02	30.05				
04	OVC	060			10.00	54	49	51	83	6	04	29.02	30.06				
07	BKN	070			10.00	54	49	51	83	6	06	29.02	30.06				
10	BKN	080			10.00	61	49	55	65	0	00	29.07	30.10				
13	BKN	065			10.00	71	48	58	44	11	18	29.00	30.03				
16	SCT	065			10.00	72	48	59	43	14	20	28.98	30.01				
19	BKN	070			10.00	63	53	57	70	8	24	29.04	30.07				
22	OVC	039			10.00	60	47	53	62	9	26	29.10	30.13				
SUNRISE: 0653						OCT 27						SUNSET: 1746					
01	SCT	048			10.00	54	46	50	75	7	26	29.12	30.15				
04	OVC	043			10.00	52	44	48	74	11	27	29.15	30.19				
07	BKN	041			10.00	50	43	47	77	5	27	29.21	30.25				
10	FEW	045			10.00	55	44	49	67	0	00	29.24	30.29				
13	SCT	040			10.00	61	43	52	52	5	02	29.21	30.26				
16	SCT	041			10.00	63	44	53	50	5	35	29.21	30.26				
19	FEW	055			10.00	55	44	49	67	7	36	29.28	30.34				
22	OVC	037			10.00	56	46	51	69	6	35	29.32	30.37				
SUNRISE: 0654						OCT 28						SUNSET: 1745					
01	OVC	036			10.00	55	46	50	72	5	04	29.31	30.36				
04	OVC	042			10.00	55	46	50	72	8	02	29.31	30.36				
07	OVC	038			10.00	55	47	51	75	8	02	29.34	30.40				
10	OVC	042			10.00	58	47	52	67	10	04	29.39	30.44				
13	SCT	047			10.00	63	46	54	54	11	05	29.36	30.41				
16	SCT	050			10.00	64	41	52	43	11	02	29.33	30.38				
19	CLR	NC			10.00	56	38	47	51	9	02	29.37	30.42				
22	CLR	NC			10.00	50	35	43	57	10	03	29.39	30.44				
SUNRISE: 0655						OCT 29						SUNSET: 1744					
01	CLR	NC			10.00	46	33	40	61	8	04	29.40	30.45				
04	CLR	NC			10.00	41	32	37	70	5	04	29.39	30.45				
07	CLR	NC			10.00	39	32	36	76	0	00	29.43	30.49				
10	CLR	NC			10.00	50	33	42	52	5	VR	29.47	30.53				
13	CLR	NC			10.00	59	34	47	39	0	00	29.40	30.46				
16	CLR	NC			10.00	64	32	49	30	6	01	29.35	30.40				
19	CLR	NC			10.00	56	34	46	44	3	03	29.35	30.41				
22	CLR	NC			10.00	45	37	41	74	0	00	29.35	30.41				
SUNRISE: 0656						OCT 30						SUNSET: 1743					
01	CLR	NC			10.00	40	36	38	86	0	00	29.34	30.40				
04	SCT	002			3.00	37	35	36	93	0	00	29.34	30.40				
07	CLR	NC			10.00	36	34	35	92	0	00	29.38	30.45				
10	CLR	NC			10.00	51	41	46	69	0	00	29.41	30.47				
13	CLR	NC			10.00	63	39	51	41	3	03	29.32	30.37				
16	CLR	NC			10.00	68	36	52	31	0	00	29.25	30.30				
19	CLR	NC			10.00	57	35	47	44	0	00	29.24	30.30				
22	CLR	NC			10.00	47	39	43	74	0	00	29.26	30.32				

BR

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)						
			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: 0657						OCT 31						SUNSET: 1742					
01	CLR	NC			10.00	43	38	41	83	5	05	29.26	30.31				
04	CLR	NC			10.00	37	35	36	93	3	04	29.24	30.29				
07	CLR	NC			10.00	37	34	36	89	0	00	29.26	30.32				
10	CLR	NC			10.00	52	39	46	61	3	04	29.26	30.31				
13	CLR	NC			10.00	65	40	52	40	0	00	29.19	30.24				
16	FEW	050			10.00	71	46	57	41	7	27	29.11	30.15				
19	FEW	065			10.00	59	47	53	65	5	26	29.12	30.17				
22	OVC	060			10.00	55	47	51	75	3	16	29.13	30.17				

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.

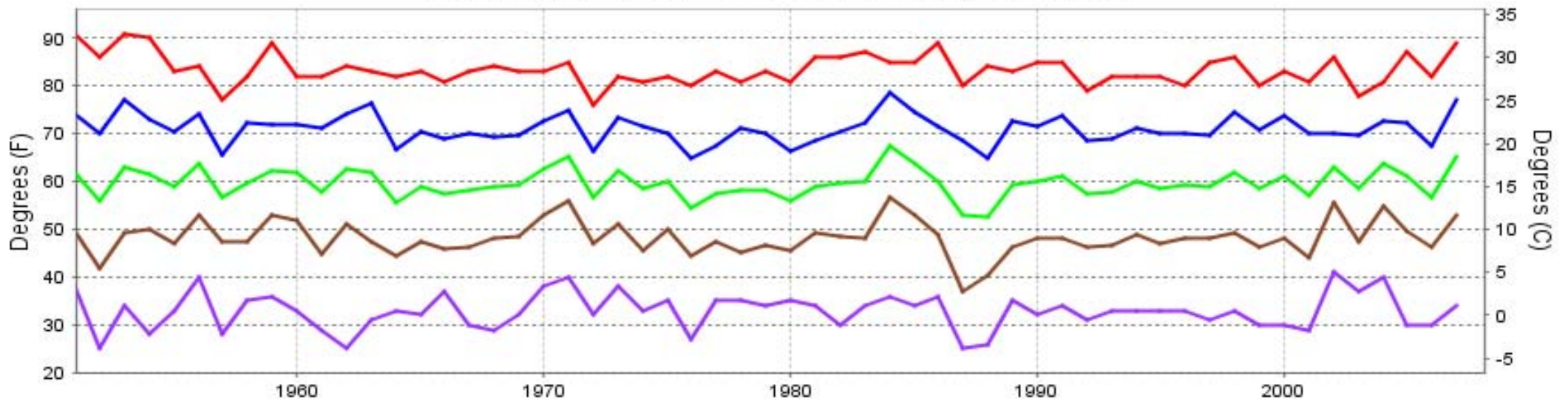
& = Original observation contained additional weather elements.

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			59	52	55	77	29.03	30.05	9.42	3	1	02
02			58	52	55	80	29.02	30.05	9.20	3	1	36
03			58	52	54	81	29.02	30.05	9.37	3	1	01
04			57	51	54	83	29.02	30.05	9.17	4	1	33
05			56	51	54	84	29.03	30.06	9.65	3	1	36
06			56	51	53	84	29.04	30.07	8.94	2	2	03
07			56	51	53	84	29.05	30.08	9.34	3	1	32
08			58	52	55	81	29.06	30.10	9.26	4	1	33
09			62	53	57	73	29.07	30.10	9.47	5	1	02
10			65	53	58	64	29.07	30.10	9.90	4	2	31
11			69	52	60	56	29.07	30.10	10.00	5	2	30
12			71	51	60	50	29.05	30.08	10.00	6	1	32
13			73	51	60	48	29.03	30.05	10.00	7	2	30
14			74	51	61	46	29.00	30.03	10.00	6	4	29
15			75	50	61	44	28.99	30.01	9.87	7	2	29
16			75	50	61	44	28.98	30.01	9.84	7	2	29
17			74	50	61	46	28.98	30.01	10.00	6	1	32
18			71	51	60	51	28.98	30.01	9.65	5	2	29
19			68	51	59	56	28.99	30.03	9.65	5	2	30
20			66	51	58	61	29.00	30.04	9.77	4	2	31
21			65	51	57	63	29.02	30.05	9.90	3	1	33
22			63	52	57	68	29.02	30.05	9.94	4	1	33
23			62	52	56	71	29.02	30.05	9.81	3	2	35
24			61	52	56	74	29.02	30.05	9.48	2	2	02

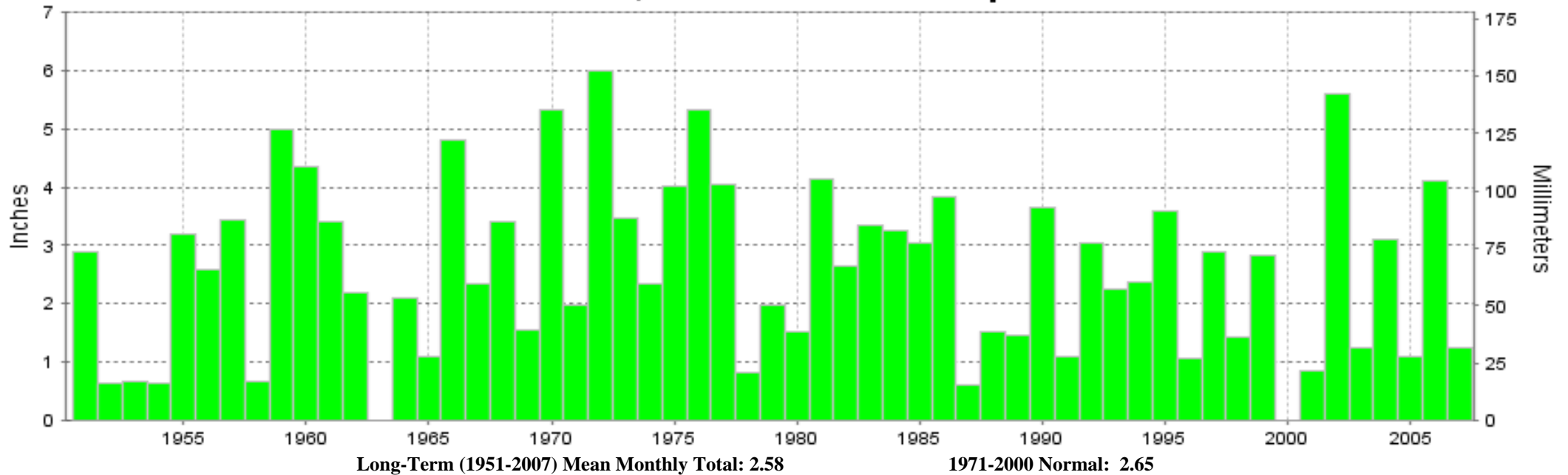
KNOXVILLE, TN OCTOBER Temperatures



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

Long-Term (1951-2007) Mean: 59.7
1971-2000 Normal: 58.8

KNOXVILLE, TN OCTOBER Precipitation



Long-Term (1951-2007) Mean Monthly Total: 2.58

1971-2000 Normal: 2.65



OCTOBER 2007
KNOXVILLE, TN

LOCAL CLIMATOLOGICAL DATA NOAA, National Climatic Data Center

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