



# NOVEMBER 2013 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					
																			3-SEC		2-MIN			
									DEPTH 11	WATER- EQUIV 12	SNOW- FALL 13	WATER EQUIV 14					SPEED 20	DIR 21	SPEED 22	DIR 23				
01	73	53	63*	10	52	58	2	0	RA BR	0		0.0	0.37	28.71	29.73	8.8	24	10.2	40*	25	31*	26	01	
02	66	47	57	4	41	48	8	0	RA	0		0.0	T	28.85	29.92	4.7	27	5.5	22	29	17	28	02	
03	61	40	51	-2	37	44	14	0		0		0.0	0.00	29.15	30.23	4.7	02	5.0	18	05	13	03	03	
04	66	36	51	-1	37	44	14	0		0		0.0	0.00	29.29	30.37	0.6	02	2.0	10	02	8	04	04	
05	68	45	57	5	40	48	8	0		0		0.0	0.00	29.33	30.37	1.6	04	2.2	13	03	10	03	05	
06	77*	47	62	10	46	53	3	0		0		0.0	0.00	29.15	30.17	3.1	22	5.3	28	21	22	22	06	
07	65	42	54	3	42	49	11	0	RA DZ BR	0		0.0	0.41	29.09	30.15	5.3	34	8.0	23	28	15	28	07	
08	56	33	45	-6	27	37	20	0		0		0.0	0.00	29.26	30.32	2.7	04	3.3	20	06	14	05	08	
09	58	32	45	-6	32	39	20	0		0		0.0	0.00	29.21	30.28	3.3	22	4.0	17	23	14	23	09	
10	67	39	53	2	34	44	12	0		0		0.0	0.00	29.21	30.27	1.7	32	3.4	13	02	9	35	10	
11	65	36	51	1	29	41	14	0		0		0.0	0.00	29.19	30.24	0.8	29	3.6	14	27	10	27	11	
12	53	30	42	-8	26	36	23	0	RA	0		0.0	T	29.24	30.34	8.1	36	10.2	29	36	23	02	12	
13	45	24	35	-15	17	28	30	0		0		0.0	0.00	29.49	30.57	5.5	03	5.8	17	03	13	02	13	
14	57	23*	40	-9	21	32	25	0		0		0.0	0.00	29.34	30.40	0.4	34	0.9	13	23	7	34	14	
15	49	30	40	-9	32	37	25	0	RA BR	0		0.0	0.08	29.18	30.24	1.9	05	2.3	10	04	8	01	15	
16	68	44	56	7	47	50	9	0	BR HZ	0		0.0	0.00	29.10	30.15	0.6	30	1.2			8	29	16	
17	69	50	60	11	56	58	5	0	RA FG BR	0		0.0	0.57	28.92	29.93	3.6	22	5.7	31	21	23	21	17	
18	69	49	59	11	40	50	6	0	RA BR	0		0.0	0.37	28.95	30.02	4.0	30	6.3	33	31	23	31	18	
19	55	36	46	-2	26	38	19	0		0		0.0	0.00	29.13	30.18	9.0	03	9.3	23	02	17	03	19	
20	60	33	47	-1	29	39	18	0		0		0.0	0.00	29.18	30.25	1.9	04	2.0	12	03	9	03	20	
21	63	36	50	2	37	44	15	0		0		0.0	0.00	29.25	30.31	1.2	01	2.3	13	05	10	05	21	
22	59	51	55	7	51	53	10	0	RA DZ BR	0		0.0	0.18	29.20	30.24	0.8	28	2.0	17	01	13	36	22	
23	55	33	44	-3	34	41	21	0	RA DZ	0		0.0	T	29.23	30.29	8.5	36	8.8	24	36	18	36	23	
24	38	25	32*	-14	10	25	33	0		0		0.0	0.00	29.42	30.50	10.2	02	10.8	24	03	20	03	24	
25	38	27	33	-13	16	27	32	0	RA	0		0.0	0.10	29.33	30.38	4.8	03	5.1	12	04	9	04	25	
26	45	34	40	-6	36	38	25	0	RA PL BR	0		T	2.23	28.92	29.95	4.8	03	6.1	20	36	15	36	26	
27	38	29	34	-12	25	30	31	0	RA SN PL BR	1		0.8	0.10	28.94	30.05	6.2	34	7.3	22	32	15	28	27	
28	44	24	34	-11	20	28	31	0		0		0.0	0.00	29.31	30.41	2.3	05	2.7	12	04	9	07	28	
29	51	25	38	-7	25	32	27	0		0		0.0	0.00	29.44	30.53	3.5	04	3.7	15	05	10	04	29	
30	55	26	41	-4	28	34	24	0		0		0.0	0.00	29.37	30.43	0.2	21	0.8	10	25	8	24	30	

57.8		36.0		46.9		☼	33.1	40.8	17.8	0.0	< MONTHLY AVERAGES   TOTALS >		0.8	4.41	29.18	30.24	2.2	36	4.9	< MONTHLY AVERAGES			
-2.6		-3.0		-2.8			-----DEPARTURE FROM NORMAL ----->						0.40		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3								
<b>DEGREE DAYS</b>										GREATEST 24-HR PRECIPITATION : 2.27 DATE : 25-26				SEA LEVEL PRESSURE				DATE TIME					
MONTHLY					SEASON TO DATE					GREATEST 24-HR SNOWFALL : 0.8 DATE : 27				MAXIMUM : 30.67 13 1107									
TOTAL DEPARTURE					TOTAL DEPARTURE					GREATEST SNOW DEPTH : 1 DATE : 27				MINIMUM : 29.65 01 0253									
HEATING :		535		73		690		9		NUMBER OF -> DAYS WITH		MAXIMUM TEMP >= 90 : 0		MINIMUM TEMP <= 32 : 11		PRECIPITATION >= 0.01 INCH: 9							
COOLING :		0		-3		1445		-81		THUNDERSTORMS : 0		MAXIMUM TEMP <= 32 : 0		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH: 8							
												HEAVY FOG : 0				SNOWFALL >= 1.0 INCH : 0							

**NOVEMBER 2013  
KNOXVILLE, TN**

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN (KTYS)  
NOVEMBER 2013

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	T	0.05	0.03	0.28	0.01								01												01	0.37	0.37	
02													02												02	T	T	
03													03												03	0.00	0.00	
04													04												04	0.00	0.00	
05													05												05	0.00	0.00	
06													06												06	0.00	0.00	
07		T	0.04	0.12	0.12	0.07	0.04	0.02					07												07	0.41	0.41	
08									T				08												08	0.00	0.00	
09													09												09	0.00	0.00	
10													10												10	0.00	0.00	
11													11												11	0.00	0.00	
12											T		12	T										12	T	T		
13													13												13	0.00	0.00	
14													14												14	0.00	0.00	
15													15			T	0.01	0.02	0.03	0.02				15	0.08	0.08		
16													16												16	0.00	0.00	
17													17	0.02	0.26	0.12	0.05	0.06	T	0.04		0.02		17	0.57	0.57		
18	0.37	T	T										18											18	0.37	0.37		
19													19												19	0.00	0.00	
20													20												20	0.00	0.00	
21													21												21	0.00	0.00	
22									T	0.02			22		0.01	0.01	0.01	0.02	0.01	0.03	T	0.01	0.04	0.01	0.01	22	0.18	0.18
23	T	T				T	T						23												23	T	T	
24													24												24	0.00	0.00	
25													25							T	0.03	T	0.02	0.05	25	0.10	0.10	
26	0.04	0.06	0.09	0.10	0.10	0.09	0.23	0.25	0.12	0.16	0.12	0.14	26	0.09	0.18	0.11	0.14	0.04	0.01	0.03	0.02	0.05	0.03	0.01	0.02	26	2.23	2.23
27	0.02	0.01	0.02	0.02	0.02	T	T	0.01			T	T	27	T	T	T	T		T	T	T	T			27	0.10	0.10	
28													28												28	0.00	0.00	
29													29												29	0.00	0.00	
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)	0.20	0.24	0.27	0.31	0.35	0.37	0.37	0.39	0.45	0.49	0.55	0.62
Ending Date	18	18	18	18	18	18	18	26	26	26	26	26
Ending Time (Hr/Min)	0018	0023	0028	0033	0043	0057	0057	0746	0800	0814	0827	0933

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.

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).

## 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	
VC In the Vicinity	UP Unkown Precipitation		GL Glaze

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

# KNOXVILLE, TN NOVEMBER 2013

Sky Condition is based on the sum (not to exceed 8) of the sunrise to sunset cloud cover below and above 12,000 feet.

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.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

**NORMALS ARE FOR THE YEARS 1981-2010**

### ADDITIONAL NOTES & ERRATA:

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

Beginning with the January 2013 LCD, monthly mean temperature calculations have changed to the National Data Stewardship Team standard. Monthly maximum and minimum temperature are not rounded until after monthly mean temperature is calculated. This is the most accurate outcome, but may be slightly different from the mean derived from rounded monthly maximum and minimum.

Date	VISIBILITY (MILES)	
	MINIMUM	MAXIMUM
01	7.00	10.00
02	9.00	10.00
03	10.00	10.00
04	9.00	10.00
05	9.00	10.00
06	10.00	10.00
07	1.50	10.00
08	10.00	10.00
09	10.00	10.00
10	10.00	10.00
11	10.00	10.00
12	10.00	10.00
13	10.00	10.00
14	10.00	10.00
15	6.00	10.00
16	2.50	10.00
17	1.50	10.00
18	4.00	10.00
19	10.00	10.00
20	10.00	10.00
21	10.00	10.00
22	1.00	10.00
23	7.00	10.00
24	10.00	10.00
25	9.00	10.00
26	1.50	10.00
27	1.25	10.00
28	10.00	10.00
29	7.00	10.00
30	8.00	10.00
<b>AVGS</b>	7.47	10.00
<b>MINIMUM VISIBILITY (MILES)</b>		
<= .25	<= 3.0	>= 7.0
0	6	22

# OBSERVATIONS AT 3-HOURLY INTERVALS

**KNOXVILLE, TN**  
**NOVEMBER 2013**      **KTYS**

**WBAN # 13891**

HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)					
					DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL						DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION Tens of Deg	STATION	SEA LEVEL				
<b>SUNRISE: 0658</b>					<b>NOV 01</b>					<b>SUNSET: 1741</b>					<b>SUNRISE: 0704</b>					<b>NOV 07</b>					<b>SUNSET: 1735</b>				
01	OVC	060	8.00	-RA	70	62	65	76	24	21	28.65	29.66	01	OVC	042	10.00		64	53	58	68	7	28	29.01	30.03				
04	OVC	055	10.00	-RA	65	60	62	84	14	24	28.68	29.69	04	OVC	020	1.50	RA BR	61	58	59	90	6	25	28.99	30.02				
07	SCT	080	10.00		64	60	62	87	13	20	28.74	29.75	07	OVC	029	3.00	RA BR	58	55	56	90	15	28	29.01	30.04				
10	FEW	026	10.00		65	54	59	68	11	28	28.77	29.78	10	BKN	018	10.00		51	45	48	80	13	35	29.15	30.19				
13	FEW	040	10.00		70	52	60	53	11	27	28.71	29.72	13	SCT	250	10.00		54	38	46	55	13	35	29.18	30.21				
16	FEW	050	10.00		71	47	58	42	11	24	28.68	29.70	16	SCT	250	10.00		56	34	46	44	9	03	29.14	30.18				
19	FEW	055	10.00		62	45	53	54	6	27	28.73	29.75	19	CLR	NC	10.00		50	31	42	48	7	35	29.18	30.22				
22	CLR	NC	10.00		57	43	50	60	6	26	28.78	29.80	22	FEW	250	10.00		46	30	39	54	5	36	29.21	30.27				
<b>SUNRISE: 0659</b>					<b>NOV 02</b>					<b>SUNSET: 1740</b>					<b>SUNRISE: 0705</b>					<b>NOV 08</b>					<b>SUNSET: 1734</b>				
01	BKN	070	10.00		53	45	49	74	5	29	28.78	29.80	01	CLR	NC	10.00		39	32	36	76	3	06	29.24	30.30				
04	FEW	070	10.00		50	43	47	77	3	17	28.79	29.82	04	CLR	NC	10.00		35	30	33	82	3	06	29.24	30.30				
07	FEW	070	10.00		48	42	45	80	5	28	28.82	29.86	07	SCT	250	10.00		34	28	32	79	0	00	29.28	30.35				
10	BKN	250	10.00		56	47	51	72	3	22	28.87	29.90	10	FEW	250	10.00		47	29	39	50	9	05	29.33	30.39				
13	BKN	080	10.00		62	37	50	40	8	28	28.85	29.89	13	FEW	250	10.00		54	23	41	30	8	04	29.29	30.35				
16	SCT	110	10.00		63	34	49	34	13	28	28.85	29.89	16	FEW	250	10.00		55	21	41	26	3	06	29.23	30.30				
19	OVC	100	10.00		55	38	47	53	8	30	28.95	29.99	19	CLR	NC	10.00		48	24	38	39	0	00	29.24	30.30				
22	SCT	075	10.00		50	39	45	66	5	25	29.05	30.09	22	CLR	NC	10.00		41	27	35	57	0	00	29.23	30.29				
<b>SUNRISE: 0660</b>					<b>NOV 03</b>					<b>SUNSET: 1739</b>					<b>SUNRISE: 0706</b>					<b>NOV 09</b>					<b>SUNSET: 1734</b>				
01	FEW	090	10.00		46	41	44	83	0	00	29.06	30.10	01	FEW	250	10.00		39	29	35	67	0	00	29.22	30.28				
04	FEW	090	10.00		44	39	42	83	0	00	29.09	30.13	04	FEW	250	10.00		34	28	32	79	3	04	29.23	30.29				
07	FEW	090	10.00		40	37	39	89	0	00	29.15	30.21	07	FEW	250	10.00		32	27	30	82	0	00	29.25	30.32				
10	FEW	042	10.00		52	39	46	61	7	01	29.22	30.28	10	BKN	250	10.00		44	34	40	68	0	00	29.27	30.34				
13	FEW	100	10.00		57	35	47	44	5	VR	29.21	30.26	13	OVC	250	10.00		55	34	45	45	6	27	29.22	30.28				
16	CLR	NC	10.00		60	34	48	38	6	04	29.16	30.21	16	OVC	250	10.00		57	32	46	39	9	22	29.18	30.24				
19	CLR	NC	10.00		51	34	43	52	9	04	29.21	30.26	19	SCT	200	10.00		47	34	41	61	7	22	29.18	30.25				
22	CLR	NC	10.00		48	34	42	58	6	02	29.22	30.28	22	SCT	250	10.00		46	34	41	63	9	21	29.21	30.27				
<b>SUNRISE: 0701</b>					<b>NOV 04</b>					<b>SUNSET: 1738</b>					<b>SUNRISE: 0707</b>					<b>NOV 10</b>					<b>SUNSET: 1733</b>				
01	CLR	NC	10.00		41	34	38	76	5	06	29.26	30.32	01	OVC	070	10.00		49	35	43	59	0	00	29.21	30.25				
04	CLR	NC	10.00		41	35	38	79	6	03	29.27	30.33	04	SCT	250	10.00		43	34	39	71	5	22	29.21	30.26				
07	BKN	250	10.00		37	34	36	89	0	00	29.31	30.37	07	FEW	150	10.00		42	35	39	76	0	00	29.23	30.29				
10	BKN	250	10.00		50	37	44	61	3	06	29.35	30.41	10	CLR	NC	10.00		54	38	46	55	0	00	29.26	30.32				
13	SCT	250	10.00		61	37	49	41	6	VR	29.33	30.39	13	CLR	NC	10.00		64	39	51	40	3	VR	29.21	30.26				
16	BKN	250	10.00		64	37	51	37	0	00	29.28	30.33	16	CLR	NC	10.00		66	37	52	34	6	28	29.18	30.23				
19	BKN	250	10.00		59	38	49	46	3	06	29.28	30.35	19	CLR	NC	10.00		56	26	43	32	6	35	29.21	30.26				
22	OVC	250	10.00		53	39	46	59	6	25	29.31	30.37	22	CLR	NC	10.00		50	25	40	38	6	04	29.25	30.31				
<b>SUNRISE: 0702</b>					<b>NOV 05</b>					<b>SUNSET: 1737</b>					<b>SUNRISE: 0708</b>					<b>NOV 11</b>					<b>SUNSET: 1732</b>				
01	OVC	250	10.00		50	42	46	74	0	00	29.34	30.39	01	CLR	NC	10.00		45	26	37	48	8	36	29.24	30.29				
04	OVC	250	10.00		49	42	46	77	0	00	29.36	30.41	04	CLR	NC	10.00		40	26	35	58	8	02	29.23	30.28				
07	BKN	250	10.00		46	40	43	79	0	00	29.37	30.42	07	FEW	070	10.00		38	27	34	65	6	01	29.23	30.29				
10	BKN	250	10.00		54	39	47	57	3	05	29.38	30.44	10	SCT	170	10.00		48	30	40	50	0	00	29.27	30.33				
13	BKN	180	10.00		63	39	51	41	3	VR	29.34	30.39	13	FEW	180	10.00		59	28	45	31	3	VR	29.18	30.23				
16	SCT	250	10.00		67	39	53	36	0	00	29.27	30.32	16	CLR	NC	10.00		64	29	48	27	5	21	29.12	30.17				
19	SCT	250	10.00		60	41	50	50	3	05	29.27	30.32	19	CLR	NC	10.00		56	29	44	36	3	22	29.11	30.16				
22	SCT	250	10.00		54	40	47	59	3	09	29.26	30.31	22	OVC	110	10.00		51	33	43	50	3	19	29.12	30.17				
<b>SUNRISE: 0703</b>					<b>NOV 06</b>					<b>SUNSET: 1736</b>					<b>SUNRISE: 0709</b>					<b>NOV 12</b>					<b>SUNSET: 1731</b>				
01	SCT	250	10.00		52	40	46	64	5	01	29.26	30.31	01	OVC	150	10.00		52	34	44	50	0	00	29.12	30.16				
04	OVC	065	10.00		53	36	45	52	5	02	29.22	30.26	04	OVC	110	10.00		52	35	44	53	6	25	29.08	30.12				
07	BKN	250	10.00		50	38	44	63	0	00	29.21	30.25	07	OVC	100	10.00		52	37	45	57	7	35	29.13	30.17				
10	SCT	070	10.00		61	43	52	52	0	00	29.19	30.24	10	OVC	043	10.00		43	32	38	65	13	35	29.26	30.32				
13	BKN	075	10.00		73	50	60	44	0	00	29.14	30.17	13	OVC	026	10.00		39	28	35	65	15	36	29.31	30.37				
16	SCT	200	10.00		75	51	61	43	16	21	29.07	30.09	16	SCT	200	10.00		40	18	32	41	20	02	29.35	30.41				
19	OVC	060	10.00		68	51	58	55	8	19	29.05	30.08	19	FEW	048	10.00		35	16	29	46	9	01	29.43	30.50				
22	SCT	100	10.00		63	52	57	68	6	27	29.03	30.06	22	SCT	048	10.00		31	16	26	54	8	05	29.48	30.55				

# OBSERVATIONS AT 3-HOURLY INTERVALS

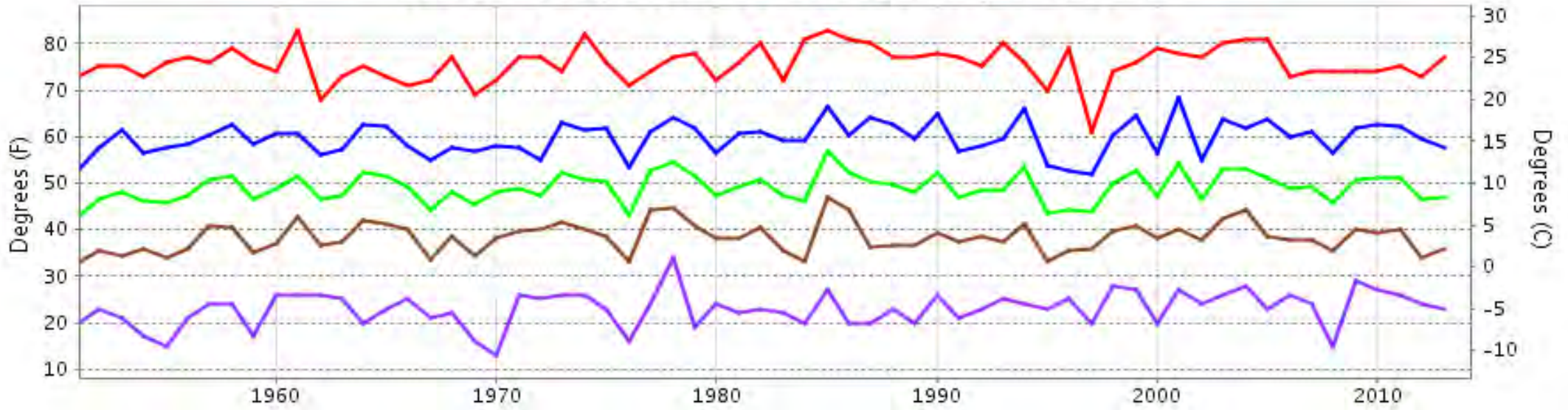
**KNOXVILLE, TN**  
**NOVEMBER 2013**      **KTYS**

**WBAN # 13891**

HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER	CEILING 100's of FT.	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)																																																																																																																																																																																							
					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	STATION	SEA LEVEL																																																																																																																																																																																						
<b>SUNRISE: 0710</b>					<b>NOV 13</b>				<b>SUNSET: 1730</b>				<b>SUNRISE: 0716</b>					<b>NOV 19</b>				<b>SUNSET: 1727</b>																																																																																																																																																																																									
01	CLR	NC	10.00		28	16	24	60	9	03	29.49	30.58	01	CLR	NC	10.00		48	29	40	48	9	01	29.12	30.16	04	CLR	NC	10.00		44	27	37	51	6	01	29.12	30.16	07	CLR	NC	10.00		25	17	23	72	9	03	29.52	30.60	10	FEW	020	10.00		35	19	29	52	9	03	29.57	30.66	13	CLR	NC	10.00		42	17	33	36	7	03	29.52	30.60	16	CLR	NC	10.00		44	16	34	32	6	05	29.46	30.53	19	CLR	NC	10.00		37	17	30	44	3	05	29.44	30.53	22	CLR	NC	10.00		32	19	28	59	0	00	29.42	30.50	22	OVC	250	10.00		46	27	38	47	7	03	29.14	30.19																																																																														
<b>SUNRISE: 0711</b>					<b>NOV 14</b>				<b>SUNSET: 1730</b>				<b>SUNRISE: 0717</b>					<b>NOV 20</b>				<b>SUNSET: 1726</b>																																																																																																																																																																																									
01	CLR	NC	10.00		28	19	25	69	0	00	29.40	30.48	01	OVC	250	10.00		44	28	37	53	8	03	29.14	30.19	04	CLR	NC	10.00		26	19	24	75	0	00	29.39	30.47	04	CLR	NC	10.00		39	28	35	65	3	05	29.15	30.21	07	CLR	NC	10.00		25	19	23	78	0	00	29.40	30.49	07	SCT	250	10.00		36	29	33	76	0	00	29.21	30.27	10	CLR	NC	10.00		37	24	32	59	0	00	29.42	30.49	10	SCT	250	10.00		46	30	39	54	5	01	29.26	30.32	13	CLR	NC	10.00		51	22	39	32	3	VR	29.34	30.41	13	FEW	250	10.00		55	27	43	34	0	00	29.21	30.27	16	CLR	NC	10.00		56	20	41	24	7	34	29.24	30.31	16	FEW	250	10.00		59	28	45	31	0	00	29.18	30.22	19	FEW	250	10.00		49	20	38	32	0	00	29.23	30.31	19	BKN	250	10.00		51	29	42	43	3	05	29.19	30.25	22	FEW	250	10.00		38	23	32	55	3	10	29.24	30.31	22	BKN	250	10.00		44	32	39	63	0	00	29.22	30.28
<b>SUNRISE: 0712</b>					<b>NOV 15</b>				<b>SUNSET: 1729</b>				<b>SUNRISE: 0718</b>					<b>NOV 21</b>				<b>SUNSET: 1726</b>																																																																																																																																																																																									
01	BKN	250	10.00		34	24	30	67	0	00	29.21	30.28	01	SCT	250	10.00		40	33	37	77	0	00	29.24	30.30	04	BKN	250	10.00		33	25	30	72	0	00	29.19	30.25	04	CLR	NC	10.00		39	31	36	73	0	00	29.26	30.32	07	BKN	250	10.00		32	26	30	79	3	07	29.22	30.29	07	SCT	075	10.00		40	31	36	70	7	03	29.28	30.34	10	OVC	080	10.00		40	29	36	65	6	05	29.23	30.29	10	OVC	080	10.00		49	28	40	44	0	00	29.18	30.24	13	OVC	080	10.00		47	36	42	66	5	08	29.14	30.19	13	BKN	250	10.00		60	39	50	46	0	00	29.25	30.31	16	OVC	041	8.00	-RA	44	40	42	85	0	00	29.13	30.19	16	BKN	250	10.00		62	42	52	48	3	30	29.21	30.26	19	OVC	065	9.00	-RA	44	40	42	85	0	00	29.13	30.19	19	BKN	250	10.00		55	41	48	59	5	25	29.22	30.28	22	OVC	090	8.00		45	41	43	86	0	00	29.14	30.19	22	BKN	250	10.00		54	42	48	64	0	00	29.27	30.32
<b>SUNRISE: 0713</b>					<b>NOV 16</b>				<b>SUNSET: 1728</b>				<b>SUNRISE: 0719</b>					<b>NOV 22</b>				<b>SUNSET: 1725</b>																																																																																																																																																																																									
01	OVC	046	6.00	BR	45	42	44	90	0	00	29.15	30.20	01	OVC	250	10.00		53	43	48	69	0	00	29.24	30.29	04	OVC	025	5.00	BR	45	42	44	90	0	00	29.12	30.17	04	OVC	250	10.00		51	43	47	74	0	00	29.22	30.27	07	OVC	039	5.00	BR	47	44	46	90	0	00	29.14	30.19	07	OVC	030	10.00		53	46	49	77	0	00	29.21	30.26	10	OVC	040	3.00	HZ	50	45	48	83	0	00	29.18	30.23	10	OVC	007	2.00	BR	50	45	48	83	0	00	29.18	30.23	13	SCT	034	6.00	HZ	61	50	55	67	0	00	29.10	30.15	13	OVC	005	1.50	BR	67	52	58	59	0	00	29.05	30.09	16	SCT	250	7.00		58	52	55	81	8	29	29.06	30.10	16	OVC	010	1.25	-RA BR	58	52	55	81	8	29	29.06	30.10	19	SCT	250	10.00		54	50	52	87	3	27	29.06	30.10	19	OVC	003	1.00	-DZ BR	54	50	52	87	3	27	29.06	30.10	22	OVC	018	1.50	-RA BR	58	56	57	93	0	00	29.15	30.19	22	OVC	018	1.50	-RA BR	58	56	57	93	5	29	29.15	30.20
<b>SUNRISE: 0714</b>					<b>NOV 17</b>				<b>SUNSET: 1728</b>				<b>SUNRISE: 0720</b>					<b>NOV 23</b>				<b>SUNSET: 1725</b>																																																																																																																																																																																									
01	FEW	120	2.50	BR	51	48	49	89	0	00	29.05	30.09	01	OVC	028	10.00		54	49	51	83	8	01	29.18	30.22	04	BKN	120	3.00	BR	51	48	49	89	0	00	28.99	30.02	04	OVC	012	10.00	-RA	51	46	48	83	9	36	29.15	30.21	07	BKN	250	2.00	BR	50	48	49	93	3	08	28.98	30.01	07	OVC	020	10.00		46	40	43	79	10	01	29.21	30.26	10	BKN	050	7.00		59	53	56	81	6	02	28.96	29.99	10	OVC	013	7.00		45	38	42	77	10	35	29.26	30.31	13	OVC	050	10.00	-RA	65	56	60	73	5	25	28.87	29.91	13	BKN	019	10.00		47	36	42	66	8	34	29.24	30.29	16	OVC	036	7.00	-RA	64	61	62	90	0	00	28.82	29.84	16	SCT	250	10.00		50	27	40	41	9	36	29.22	30.27	19	OVC	035	5.00	-RA BR	65	62	63	90	6	26	28.82	29.84	19	SCT	250	10.00		43	28	37	56	6	01	29.27	30.33	22	OVC	035	10.00		68	63	65	84	17	20	28.81	29.83	22	CLR	NC	10.00		39	20	32	46	9	34	29.30	30.37
<b>SUNRISE: 0715</b>					<b>NOV 18</b>				<b>SUNSET: 1727</b>				<b>SUNRISE: 0721</b>					<b>NOV 24</b>				<b>SUNSET: 1724</b>																																																																																																																																																																																									
01	OVC	060	4.00	-RA BR	62	58	60	86	6	24	28.84	29.86	01	CLR	NC	10.00		31	16	26	54	16	35	29.35	30.42	04	OVC	080	10.00		60	57	58	90	6	21	28.90	29.93	04	CLR	NC	10.00		28	13	23	53	13	36	29.39	30.46	07	BKN	100	10.00		57	48	52	72	6	27	28.93	29.96	07	FEW	200	10.00		25	13	21	60	13	36	29.45	30.53	10	SCT	180	10.00		62	43	52	50	5	VR	28.97	30.00	10	FEW	250	10.00		31	13	25	47	14	02	29.49	30.58	13	SCT	200	10.00		65	29	48	26	5	34	28.99	30.02	13	BKN	250	10.00		37	12	29	36	10	06	29.46	30.54	16	SCT	250	10.00		64	31	49	29	11	26	28.98	30.01	16	BKN	250	10.00		37	4	27	25	10	04	29.40	30.48	19	CLR	NC	10.00		55	33	45	44	5	31	29.05	30.09	19	CLR	NC	10.00		32	6	25	33	8	02	29.42	30.51	22	CLR	NC	10.00		51	33	43	50	7	36	29.10	30.14	22	CLR	NC	10.00		29	9	23	43	8	03	29.40	30.48



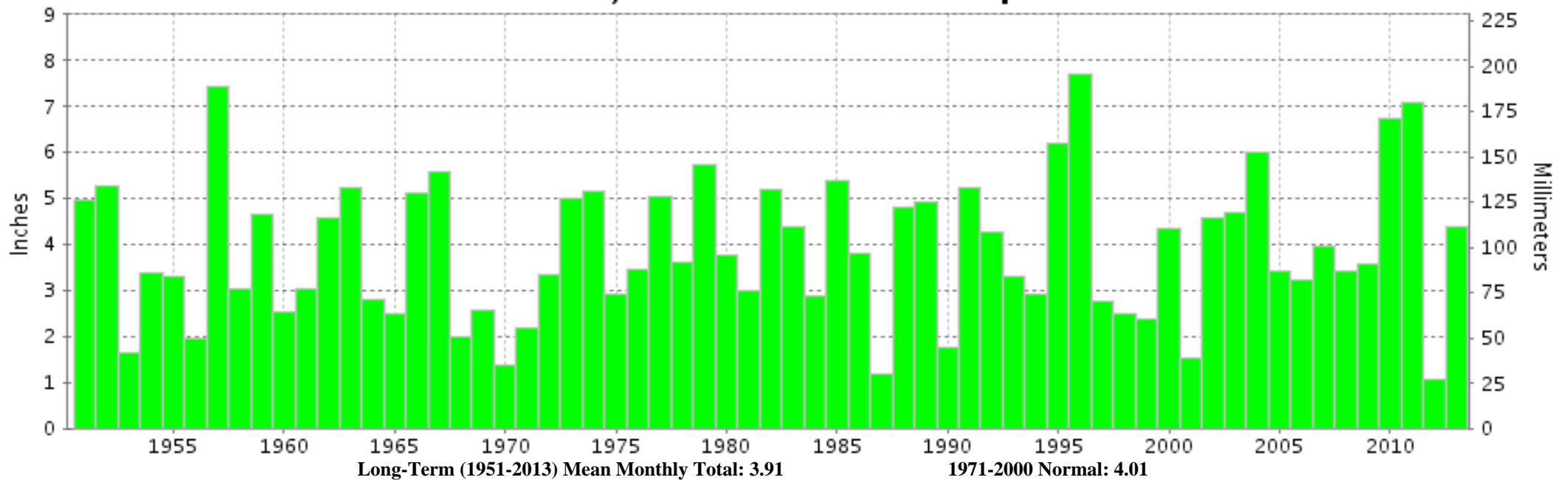
## KNOXVILLE, TN NOVEMBER Temperatures



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

**Long-Term (1951-2013) Mean: 49.0**  
**1971-2000 Normal: 49.7**

## KNOXVILLE, TN NOVEMBER Precipitation



Long-Term (1951-2013) Mean Monthly Total: 3.91      1971-2000 Normal: 4.01





**NOVEMBER 2013  
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.*

A handwritten signature in black ink, appearing to read "Thomas R. Karl".

**DIRECTOR**

NCDC now offers free online access to the **Edited Local Climatological Data Publication**. Go to : [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov) and choose Most Popular.

We welcome your questions or comments, please contact us at:  
(828) 271-4800, option 2  
Fax Number : 828-271-4876  
TDD : (828) 271-4010  
or Email : [ncdc.orders@noaa.gov](mailto:ncdc.orders@noaa.gov)

NOAA\National Climatic Data Center  
Attn: User Engagement & Services Branch  
151 Patton Avenue  
Asheville, NC 28801-5001