



DECEMBER 2014 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



**DECEMBER 2014
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					
																			3-SEC		2-MIN			
																			SPEED 20	DIR 21	SPEED 22	DIR 23		
01	64*	46	55	10	51	54	10	0	RA BR	0		0.0	0.13	29.24	30.30	6.1	25	8.0	24	22	18	21	01	
02	59	48	54	9	52	53	11	0	RA DZ BR	0		0.0	0.47	29.21	30.25	2.3	25	3.4	12	23	10	24	02	
03	62	43	53	9	49	52	12	0	RA FG+ FG BR	0		0.0	T	29.18	30.23	7.0	26	9.3	22	23	17	23	03	
04	55	41	48	4	43	46	17	0	RA	0		0.0	0.01	29.22	30.28	2.8	03	3.0	10	36	8	35	04	
05	60	49	55*	12	50	52	10	0	RA BR	0		0.0	T	29.21	30.26	0.7	02	1.3	9	29	8	39	05	
06	58	43	51	8	48	50	14	0	RA BR	0		0.0	0.79	29.11	30.18	5.4	34	8.1	32	33	23	33	06	
07	48	37	43	0	33	38	22	0	RA	0		0.0	T	29.31	30.38	11.4	03	11.7	26	02	22	02	07	
08	51	35	43	1	31	37	22	0		0		0.0	0.00	29.21	30.27	0.2	11	1.8	9	07	7	22	08	
09	45	38	42	0	34	38	23	0	RA	0		0.0	T	29.08	30.14	3.8	30	7.3	21	35	17	35	09	
10	41	36	39	-3	29	35	26	0		0		0.0	0.00	29.13	30.19	6.5	36	6.9	20	01	15	36	10	
11	42	27	35	-7	23	31	30	0		0		0.0	0.00	29.13	30.22	3.4	02	4.4	17	01	12	35	11	
12	51	22*	37	-5	21	30	28	0		0		0.0	0.00	29.24	30.33	1.7	03	2.2	12	02	8	01	12	
13	46	23	35	-6	27	31	30	0	BR HZ	0		0.0	0.00	29.21	30.27	2.4	01	2.9	14	04	12	36	13	
14	38	25	32*	-9	29	31	33	0	BR	0		0.0	0.00	29.15	30.20	5.9	06	6.7	17	07	14	04	14	
15	50	24	37	-4	31	34	28	0	RA FG+ FZFG BR	0		0.0	0.03	29.01	30.06	1.0	05	2.6	11	02	10	02	15	
16	52	41	47	6	41	44	18	0	TS TSRA RA FG+ FG BR	0		0.0	0.36	28.94	30.01	7.1	25	9.0	28	26	21	24	16	
17	45	33	39	-1	35	38	26	0		0		0.0	0.00	29.14	30.21	2.8	25	3.9	13	28	12	28	17	
18	44	31	38	-2	30	35	27	0	RA	0		0.0	T	29.13	30.20	1.5	04	2.1	13	06	10	02	18	
19	46	31	39	-1	27	34	26	0		0		0.0	0.00	29.13	30.19	4.1	01	4.4	14	01	12	35	19	
20	43	37	40	0	32	37	25	0	RA	0		0.0	T	29.13	30.21	2.2	04	2.7	8	36	7	01	20	
21	53	38	46	6	34	39	19	0		0		0.0	0.00	29.13	30.17	4.1	01	4.5	11	01	8	02	21	
22	60	43	52	13	41	45	13	0	RA BR	0		0.0	0.15	28.91	29.93	1.8	35	3.5	13	30	12	30	22	
23	53	48	51	12	49	49	14	0	TS TSRA RA DZ BR	0		0.0	1.24	28.79	29.82	2.7	03	3.9	13	11	10	11	23	
24	59	44	52	13	50	51	13	0	RA FG+ BR	0		0.0	0.43	28.64	29.68	4.5	26	8.3	43*	26	35*	26	24	
25	49	33	41	2	34	38	24	0	RA	0		0.0	0.01	29.05	30.14	4.9	24	5.8	30	27	25	28	25	
26	50	27	39	0	32	35	26	0	BCFG BR	0		0.0	0.00	29.23	30.30	0.8	02	2.5	13	28	10	28	26	
27	53	36	45	6	38	42	20	0	RA	0		0.0	T	29.18	30.24	0.6	02	0.9	7	02	7	04	27	
28	52	47	50	12	47	48	15	0	RA DZ BR	0		0.0	0.42	29.03	30.07	1.2	02	2.1	11	35	9	35	28	
29	48	39	44	6	43	44	21	0	RA BR	0		0.0	0.19	29.05	30.12	5.5	35	6.1	17	36	13	35	29	
30	40	32	36	-2	33	35	29	0	RA DZ BR	0		0.0	0.01	29.26	30.36	8.4	36	8.7	19	36	15	36	30	
31	39	27	33	-5	23	29	32	0		0		0.0	0.00	29.39	30.47	4.6	01	4.9	13	02	10	02	31	
50.2		36.3	43.2	☼	36.8	40.5	21.4	0.0	< MONTHLY AVERAGES TOTALS >			0.0	4.24	29.12	30.18	2.1	35	4.9	< MONTHLY AVERAGES					
0.4		4.6	2.4		<-----DEPARTURE FROM NORMAL ----->							-0.26	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3											
DEGREE DAYS									GREATEST 24-HR PRECIPITATION : 1.49 DATE : 23-24				SEA LEVEL PRESSURE				DATE		TIME					
MONTHLY				SEASON TO DATE					GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.53				31		1029					
TOTAL DEPARTURE				TOTAL DEPARTURE					GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.51				24		1453					
HEATING :		664		-88		1490		57		NUMBER OF		MAXIMUM TEMP >= 90 : 0		MINIMUM TEMP <= 32 : 10		PRECIPITATION >= 0.01 INCH : 13								
COOLING :		0		0		1486		-40		DAYS WITH		MAXIMUM TEMP <= 32 : 0		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH : 9								
										THUNDERSTORMS : 2		HEAVY FOG : 4		SNOWFALL >= 1.0 INCH : 0										

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN (KTYS)
DECEMBER 2014

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	T	T					T	0.01	0.01	T	0.02	0.09	01	0.13	0.13
02	0.09	0.08	0.04	0.01	T		0.02	T	0.09	T	0.01	0.02	02	0.02	0.01	T	T	T	0.01	T	0.01	0.01	0.02	0.01	0.02	02	0.47	0.47
03		T											03													03	T	T
04								T	T	T	0.01	T	04													04	0.01	0.01
05								T					05										T	T		05	T	T
06	0.05	0.10	0.11	0.09	0.03	0.05		0.01	0.18	0.05	0.11	0.01	06		T	T										06	0.79	0.79
07						T		T					07													07	T	T
08													08													08	0.00	0.00
09													09		T	T	T									09	T	T
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						T	T	0.03	T	T			15	0.03	0.03
16	0.01	T	0.20	0.11	0.04								16							T						16	0.36	0.36
17													17													17	0.00	0.00
18								T	T				18													18	T	T
19													19													19	0.00	0.00
20					T	T	T						20													20	T	T
21													21													21	0.00	0.00
22													22				T			T			0.01	0.01	0.13	22	0.15	0.15
23	0.01						0.02	T	T	T			23			0.04	0.18	0.07	0.04	0.01	0.04	0.09	0.36	0.38	23	1.24	1.24	
24	0.03	T	0.01	T	0.01	0.02	0.02	0.05	0.10	0.04			24			T	0.12	0.02	0.01				T	T	24	0.43	0.43	
25	T	0.01	T	T				T	T				25													25	0.01	0.01
26													26													26	0.00	0.00
27													27													27	T	T
28	0.01	T	T	T	T	T	T	T	0.14	0.03	0.07	0.06	28	0.03	0.01	T									28	0.42	0.42	
29	0.03	0.06	0.02	0.01	T	0.01	T	T					29	T	T	T	0.01	T	T	0.01	T	0.02	0.01	0.01	T	29	0.19	0.19
30	T	T	T	T	T	T	0.01	T	T	T	T		30													30	0.01	0.01
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)	0.09	0.12	0.13	0.16	0.22	0.31	0.41	0.53	0.64	0.74	0.82	0.84
Ending Date	06	23	23	23	23	23	23	23	23	23	24	24
Ending Time (Hr/Min)	0816	1620	1626	2322	2331	2346	2341	2343	2343	2355	0001	0001

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 DECEMBER 2014

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:

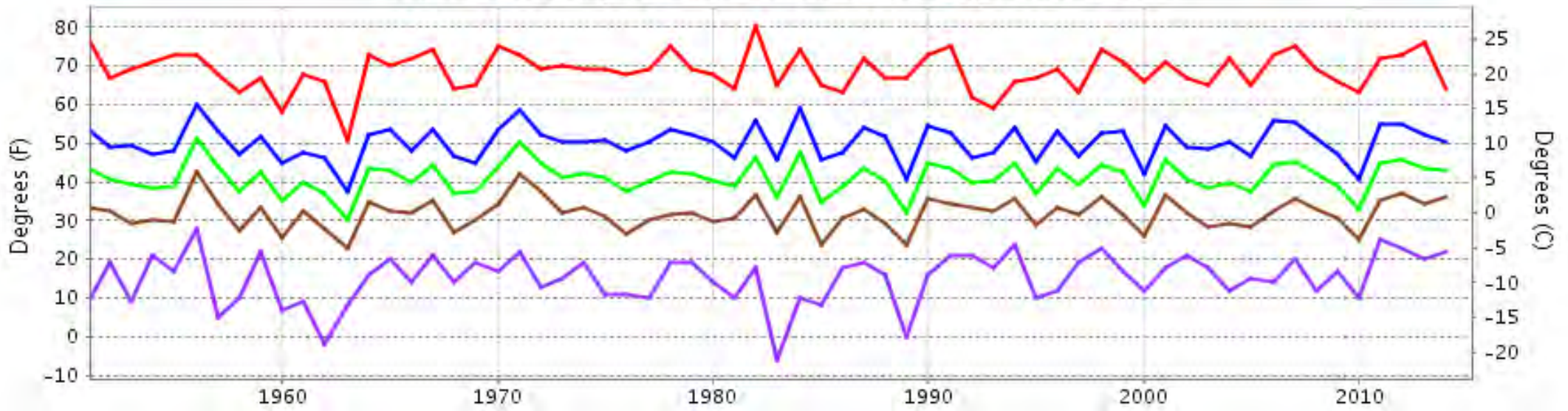
Station Augmentation-CONTRACTOR ON AIRPORT
Lat/Lon:/ Elevation:
Distance:2200 FT Dir:W
Augmented Elements:Temp,Precip,Snow
Equipment:SRG, PSY, Snow Board, Snow stick

Date	VISIBILITY (MILES)		
	MINIMUM	MAXIMUM	
01	5.00	10.00	
02	2.00	10.00	
03	0.00	10.00	
04	9.00	10.00	
05	6.00	10.00	
06	1.50	10.00	
07	10.00	10.00	
08	9.00	10.00	
09	10.00	10.00	
10	10.00	10.00	
11	10.00	10.00	
12	7.00	10.00	
13	6.00	10.00	
14	3.00	9.00	
15	0.00	10.00	
16	0.00	10.00	
17	10.00	10.00	
18	10.00	10.00	
19	10.00	10.00	
20	9.00	10.00	
21	9.00	10.00	
22	4.00	10.00	
23	1.50	10.00	
24	0.25	10.00	
25	10.00	10.00	
26	6.00	10.00	
27	10.00	10.00	
28	0.50	10.00	
29	1.50	10.00	
30	2.00	10.00	
31	10.00	10.00	
AVGS	5.88	9.97	
MINIMUM VISIBILITY (MILES)			
	<= .25	<= 3.0	>= 7.0
	4	11	15

OBSERVATIONS AT 3-HOURLY INTERVALS

Table with 4 main columns: Hour (LST), Sky Cover, Ceiling, Visibility, and Weather. Each main column is further divided into sub-columns for specific measurements like Dry Bulb, Dew Point, Wet Bulb, Relative Humidity, Wind Speed/Direction, Station/Sea Level, and Pressure. Data spans from Dec 13 to Dec 24, including sunrise and sunset times.

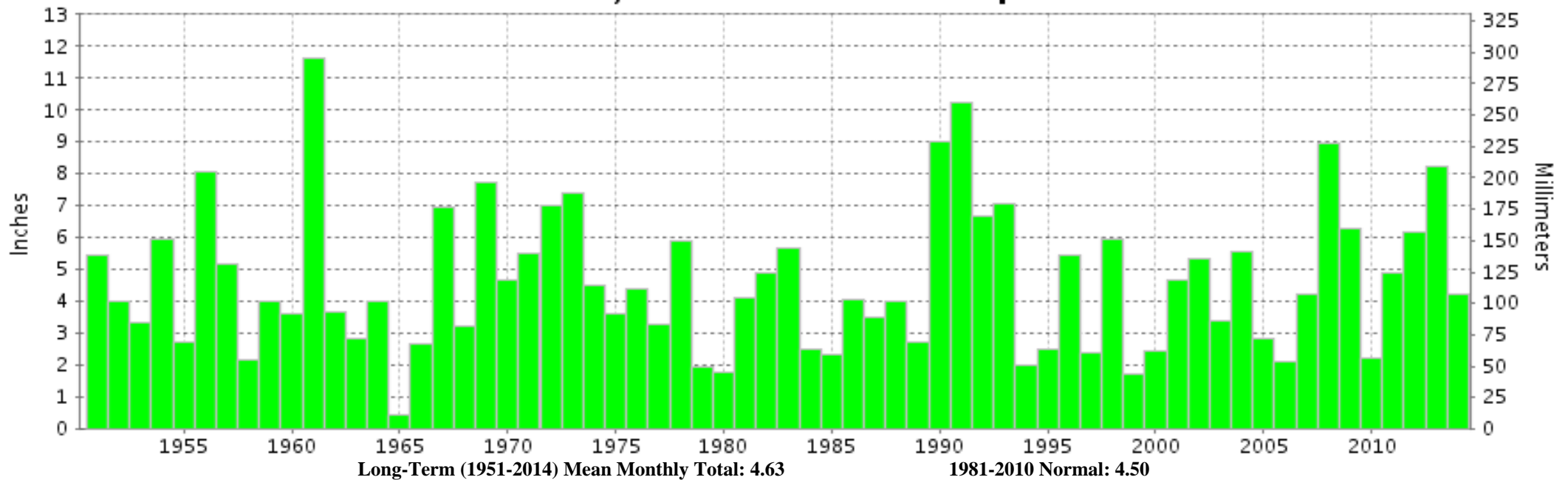
KNOXVILLE, TN DECEMBER Temperatures



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

Long-Term (1951-2014) Mean: 41.0
1981-2010 Normal: 40.8

KNOXVILLE, TN DECEMBER Precipitation



Long-Term (1951-2014) Mean Monthly Total: 4.63

1981-2010 Normal: 4.50



**DECEMBER 2014
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

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