



MAY 2016 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 11	1300 LST 12	2400 LST 13	2400 LST 14	AVERAGE STATION 15	AVERAGE SEA LEVEL 16	RESULTANT SPEED 17	RES DIR 18	AVERAGE SPEED 19	MAXIMUM					
																			3-SEC		2-MIN			
20	21	22	23	24																				
01	81	62	72	10	64	66	0	7	TS TSRA RA FG+ FG BR VCTS	0		0.0	0.19	28.92	29.95	6.9	22	7.9	40	25	28*	24	01	
02	79	61	70	8	62	64	0	5	TS TSRA RA BR VCTS	0		0.0	0.27	28.92	29.93	3.9	25	6.1	25	26	18	28	02	
03	72	59	66	4	54	58	0	1	RA BR	0		0.0	0.13	28.84	29.85	5.1	28	5.8	22	28	16	27	03	
04	68	48	58	-4	45	51	7	0	RA	0		0.0	0.06	28.74	29.76	5.3	25	7.6	30	33	25	33	04	
05	57	45	51*	-12	43	47	14	0	RA	0		0.0	0.10	28.74	29.80	5.5	28	6.9	25	33	20	34	05	
06	70	45	58	-5	42	50	7	0		0		0.0	0.00	28.87	29.91	4.1	31	7.7	25	33	18	32	06	
07	83	48	66	3	48	55	0	1		0		0.0	0.00	28.86	29.89	10.4	22	11.1	28	23	24	24	07	
08	83	63	73	10	54	62	0	8		0		0.0	0.00	28.90	29.92	9.1	22	9.8	25	24	21	24	08	
09	81	62	72	8	57	62	0	7	RA	0		0.0	T	28.98	30.01	4.7	23	6.0	19	22	15	23	09	
10	84	62	73	9	58	64	0	8	RA	0		0.0	T	29.02	30.04	8.5	22	9.2	29	23	23	23	10	
11	82	67	75	11	64	67	0	10	TS TSRA RA FG BR VCTS	0		0.0	0.76	29.05	30.07	6.0	22	7.8	28	19	23	24	11	
12	85	64	75	11	64	66	0	10	TS TSRA RA BR VCTS	0		0.0	0.66	29.01	30.01	3.0	25	4.9	40*	24	26	23	12	
13	75	58	67	2	53	59	0	2		0		0.0	0.00	28.98	30.01	4.2	29	6.1	18	25	14	36	13	
14	73	49	61	-5	46	53	4	0		0		0.0	0.00	28.93	29.97	8.6	26	11.2	33	26	26	28	14	
15	65	42	54	-12	35	45	11	0		0		0.0	0.00	29.09	30.14	2.1	34	5.0	20	31	14	03	15	
16	70	42*	56	-10	43	50	9	0		0		0.0	0.00	29.14	30.17	5.1	04	5.8	17	36	13	04	16	
17	77	56	67	1	54	59	0	2	RA	0		0.0	0.04	29.03	30.05	3.9	05	4.9	15	02	12	03	17	
18	75	55	65	-2	58	62	0	0	RA	0		0.0	T	28.96	29.99	3.9	33	8.4	25	28	18	31	18	
19	77	57	67	0	53	58	0	2		0		0.0	0.00	29.01	30.03	8.8	05	9.5	21	04	17	04	19	
20	71	58	65	-2	59	61	0	0	RA BR	0		0.0	0.39	28.99	30.01	2.4	01	6.3	15	24	13	24	20	
21	75	62	69	1	57	61	0	4	RA BR VCTS	0		0.0	0.08	28.94	29.96	6.4	27	8.9	24	28	18	28	21	
22	76	56	66	-2	49	57	0	1		0		0.0	0.00	28.95	29.97	6.0	35	7.6	25	02	18	05	22	
23	77	52	65	-3	50	57	0	0		0		0.0	0.00	28.95	29.98	3.8	07	4.4	18	03	15	06	23	
24	82	51	67	-2	50	58	0	2		0		0.0	0.00	29.05	30.09	1.5	22	3.5	17	24	13	25	24	
25	85	57	71	2	56	63	0	6		0		0.0	0.00	29.12	30.15	2.5	25	4.5	20	25	17	25	25	
26	84	64	74	5	62	66	0	9	RA BR	0		0.0	0.08	29.08	30.10	2.4	07	4.4	13	13	10	10	26	
27	84	63	74	5	65	67	0	9	TS TSRA RA BCFG BR VCTS	0		0.0	1.22	29.01	30.04	1.3	04	4.2	35	04	25	12	27	
28	85	64	75	5	64	68	0	10	FG+ FG BCFG BR	0		0.0	0.00	29.05	30.08	1.9	02	3.2	13	21	10	21	28	
29	85	67	76	6	64	68	0	11	RA BR	0		0.0	0.06	29.05	30.06	1.3	10	4.7	25	05	21	05	29	
30	87	64	76	6	64	67	0	11	RA FG+ FG BR	0		0.0	0.02	28.96	29.98	2.4	03	2.9	22	01	20	02	30	
31	89*	63	76*	6	62	67	0	11	VCTS	0		0.0	0.00	28.91	29.92	2.8	02	4.0	14	32	10	33	31	

78.0	57.0	67.5	☼	54.8	59.9	1.7	4.4	< MONTHLY AVERAGES TOTALS >				0.0	4.06	28.97	29.99	1.8	27	6.5	< MONTHLY AVERAGES			
-0.1	0.8	0.3		-----DEPARTURE FROM NORMAL ----->								-0.45	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS								GREATEST 24-HR PRECIPITATION : 1.22 DATE : 27				SEA LEVEL PRESSURE				DATE TIME						
MONTHLY				SEASON TO DATE				GREATEST 24-HR SNOWFALL : 0.0 DATE :				MAXIMUM : 30.24 16 0839										
TOTAL DEPARTURE				TOTAL DEPARTURE				GREATEST SNOW DEPTH : 0 DATE :				MINIMUM : 29.64 04 1553										
HEATING :		52 -6		2955 -678				NUMBER OF ->		MAXIMUM TEMP >= 90 : 0		MINIMUM TEMP <= 32 : 0		PRECIPITATION >= 0.01 INCH : 14								
COOLING :		137 12		210 48				THUNDERSTORMS : 5		MAXIMUM TEMP <= 32 : 0		MINIMUM TEMP <= 0 : 0		PRECIPITATION >= 0.10 INCH : 8								
										HEAVY FOG : 3		SNOWFALL >= 1.0 INCH : 0										

MAY 2016
KNOXVILLE, TN

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN (KTYS)
MAY 2016

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		0.05	0.05	T	T			T	T				01							0.09				01	0.19	0.19		
02													02				0.13	0.14	T	T			T	02	0.27	0.27		
03	T	T					T	0.01	0.12	T			03											03	0.13	0.13		
04													04				T	0.04	T	T	0.02	T		04	0.06	0.06		
05	T	T	T							T	0.02	0.01	T	05	T	T	0.07							05	0.10	0.10		
06														06										06	0.00	0.00		
07														07										07	0.00	0.00		
08														08										08	0.00	0.00		
09														09									T	09	T	T		
10														10			T						T	10	T	T		
11					0.74	0.01	0.01	T				T	11											11	0.76	0.76		
12			0.07										12			0.01	0.01	0.30	0.01			T	T	12	0.66	0.66		
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			T			0.01	0.01	0.01	0.01	T	T	T	17											17	0.04	0.04		
18													18	T										18	T	T		
19													19											19	0.00	0.00		
20													20	T	T	0.03	0.01	0.12	0.09	T	0.01	0.04	0.01	0.08	20	0.39	0.39	
21	0.06	T		0.01	0.01								21											21	0.08	0.08		
22													22											22	0.00	0.00		
23	T												23											23	T*	0.00		
24													24											24	0.00	0.00		
25													25											25	0.00	0.00		
26						T	T	0.01	0.03	0.02	0.02		26						T					26	0.08	0.08		
27													27		1.17	0.05								27	1.22	1.22		
28													28											28	0.00	0.00		
29													29			0.02		T	0.04	T				29	0.06	0.06		
30													30				T	0.01	0.01					30	0.02	0.02		
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)	0.52	0.85	1.07	1.10	1.14	1.18	1.20	1.22	1.22	1.22	1.22	1.22
Ending Date	27	27	27	27	27	27	27	27	27	27	27	27
Ending Time (Hr/Min)	1354	1354	1354	1355	1355	1401	1421	1428	1428	1428	1428	1428

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 MAY 2016

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	0.25	10.00	
02	10.00	10.00	
03	2.00	10.00	
04	7.00	10.00	
05	7.00	10.00	
06	9.00	10.00	
07	10.00	10.00	
08	9.00	10.00	
09	10.00	10.00	
10	10.00	10.00	
11	7.00	10.00	
12	4.00	10.00	
13	10.00	10.00	
14	10.00	10.00	
15	10.00	10.00	
16	10.00	10.00	
17	5.00	10.00	
18	8.00	10.00	
19	7.00	10.00	
20	1.50	10.00	
21	3.00	10.00	
22	10.00	10.00	
23	10.00	10.00	
24	10.00	10.00	
25	10.00	10.00	
26	5.00	10.00	
27	1.50	10.00	
28	0.00	10.00	
29	4.00	10.00	
30	0.00	10.00	
31	8.00	10.00	
AVGS	6.72	10.00	
MINIMUM VISIBILITY (MILES)			
	<= .25	<= 3.0	>= 7.0
	3	7	20

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN
MAY 2016
KTYS

WBAN # 13891

Table with columns for HOUR (LST), SKY COVER, CEILING 100's of FT., VISIBILITY (MILES), WEATHER, TEMPERATURE °F (DRY BULB, DEW POINT, WET BULB), RELATIVE HUMIDITY (PCT), WIND (SPEED (MPH), DIRECTION Tens of Deg), PRESSURE (INCHES, HG) STATION, SEA LEVEL. The table is split into two main sections for May 01-06 and May 07-12, each containing hourly observations with weather codes and numerical data.

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN MAY 2016

KTYS

WBAN # 13891

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					
SUNRISE: 0524 MAY 25 SUNSET: 1941					01	CLR	NC	10.00		65	51	57	61	3	05	29.10	30.12
04	BKN	070	10.00		60	53	56	78	5	03	29.10	30.12					
07	BKN	250	10.00		62	54	57	75	3	06	29.15	30.18					
10	BKN	150	10.00		74	56	63	54	0	00	29.18	30.22					
13	BKN	250	10.00		82	54	65	38	15	24	29.15	30.18					
16	BKN	250	10.00		84	57	67	40	14	26	29.11	30.13					
19	BKN	250	10.00		81	58	67	45	5	26	29.10	30.12					
22	BKN	250	10.00		72	62	66	71	3	16	29.11	30.13					
SUNRISE: 0524 MAY 26 SUNSET: 1942					01	SCT	250	10.00		68	60	63	76	0	00	29.05	30.06
04	SCT	250	10.00		66	59	62	78	3	30	29.09	30.11					
07	OVC	250	9.00	-RA	68	61	64	78	0	00	29.15	30.17					
10	OVC	100	5.00	RA BR	68	64	65	87	3	11	29.15	30.17					
13	BKN	200	10.00		77	65	69	66	10	10	29.13	30.15					
16	SCT	250	10.00		82	62	69	51	7	06	29.04	30.06					
19	SCT	180	10.00		79	62	68	56	7	04	29.04	30.05					
22	CLR	NC	10.00		71	63	66	76	5	06	29.03	30.05					
SUNRISE: 0523 MAY 27 SUNSET: 1943					01	CLR	NC	10.00		68	64	65	87	0	00	29.01	30.03
04	SCT	250	9.00		65	62	63	90	3	02	29.02	30.03					
07	SCT	250	8.00		67	64	65	91	6	02	29.05	30.08					
10	BKN	250	10.00		78	65	70	64	3	35	29.06	30.08					
13	BKN	150	10.00		83	64	71	53	11	26	29.01	30.03					
16	OVC	110	10.00		73	68	70	84	5	11	29.01	30.03					
19	OVC	250	10.00		74	69	71	85	6	08	28.97	29.99					
22	FEW	120	10.00		69	67	68	93	0	00	29.03	30.04					
SUNRISE: 0523 MAY 28 SUNSET: 1943					01	FEW	001	5.00	BCFG BR	67	66	66	97	3	04	29.03	30.04
04	VV	001	0.25	FG	64	64	64	100	0	00	29.04	30.06					
07	VV	001	0.00	FG	66	65	65	96	0	00	29.07	30.10					
10	SCT	080	10.00		74	68	70	82	5	32	29.12	30.14					
13	BKN	050	10.00		81	61	68	51	6	35	29.09	30.11					
16	BKN	080	10.00		85	62	70	46	6	05	29.04	30.06					
19	BKN	150	10.00		82	62	69	51	3	03	29.04	30.06					
22	OVC	150	10.00		75	66	69	74	0	00	29.06	30.07					
SUNRISE: 0522 MAY 29 SUNSET: 1944					01	OVC	150	10.00		73	64	67	74	6	24	29.07	30.08
04	OVC	150	10.00		71	63	66	76	5	17	29.05	30.07					
07	BKN	150	10.00		71	62	65	73	0	00	29.09	30.11					
10	OVC	250	10.00		77	65	69	66	0	00	29.09	30.11					
13	OVC	250	10.00		83	65	71	55	9	29	29.06	30.07					
16	SCT	100	10.00		85	64	71	50	6	VR	29.01	30.02					
19	BKN	090	10.00	-RA	73	67	69	81	13	09	29.00	30.02					
22	CLR	NC	9.00		69	66	67	90	0	00	29.01	30.03					
SUNRISE: 0522 MAY 30 SUNSET: 1945					01	CLR	NC	5.00	BR	65	64	64	97	0	00	28.98	30.00
04	VV	001	0.00	FG	65	65	65	100	0	00	28.99	30.00					
07	VV	001	0.50	FG	66	65	65	96	3	VR	29.00	30.03					
10	SCT	250	10.00		77	67	70	71	5	11	29.00	30.02					
13	SCT	250	10.00		84	63	70	49	3	VR	28.96	29.97					
16	BKN	250	10.00		86	59	69	40	3	VR	28.91	29.92					
19	SCT	110	10.00		72	65	68	79	7	06	28.90	29.93					
22	CLR	NC	9.00		69	67	68	93	6	09	28.94	29.96					

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					
SUNRISE: 0522 MAY 31 SUNSET: 1945					01	CLR	NC	9.00		66	64	65	93	0	00	28.92	29.93
04	CLR	NC	9.00		64	62	63	93	3	06	28.90	29.92					
07	OVC	250	10.00		67	64	65	91	6	05	28.94	29.96					
10	OVC	250	10.00		77	66	70	69	5	01	28.96	29.98					
13	BKN	250	10.00		85	64	71	50	6	05	28.92	29.93					
16	BKN	250	10.00		88	58	69	36	7	32	28.86	29.88					
19	BKN	250	10.00	VCTS	83	60	68	46	5	06	28.86	29.88					
22	FEW	100	10.00		77	63	68	62	3	07	28.90	29.91					

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

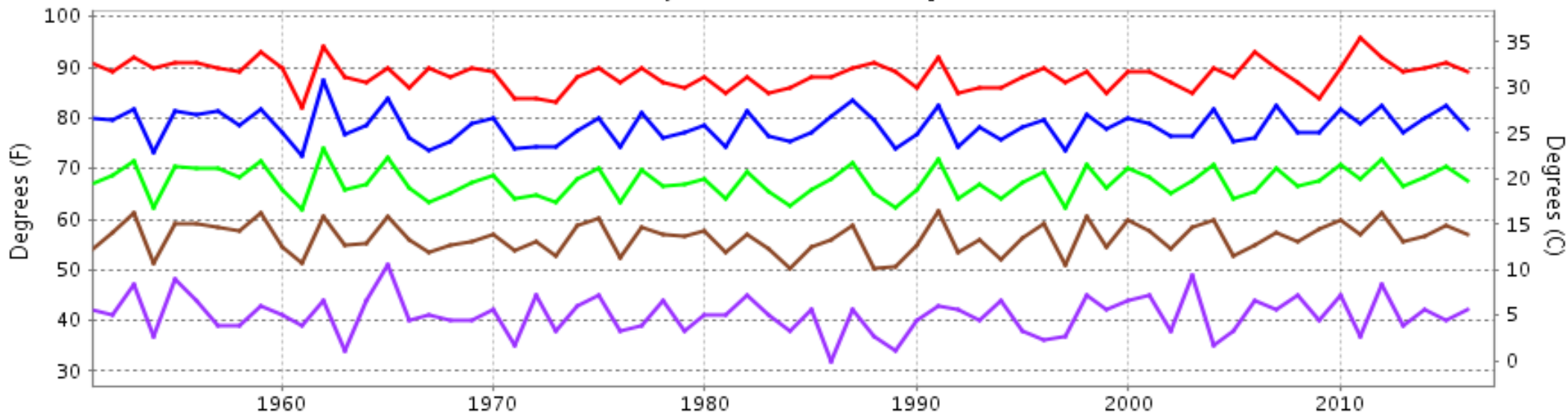
Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC = No Ceiling detected.

& = Original observation contained additional weather elements. See page 3 for additional notes.

SUMMARY BY HOUR

HOUR (LST)	AVERAGES								RESULTANT WIND (MPH)	
	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (Inches, HG)		VISIBILITY (Miles)	WIND SPEED (MPH)	SPEED	DIRECTION
					STATION	SEA LEVEL				
01	62	55	58	78	28.97	29.99	9.45	4	3	25
02	61	55	58	80	28.96	29.99	9.33	5	1	24
03	60	55	57	83	28.96	29.98	8.80	4	1	19
04	59	54	57	84	28.96	29.99	8.88	4	1	24
05	59	55	57	85	28.97	30.00	8.79	4	1	23
06	59	54	56	86	28.99	30.02	8.56	4	2	24
07	60	55	57	84	29.00	30.03	8.46	5	1	23
08	63	56	59	79	29.01	30.04	8.49	6	1	25
09	66	56	60	72	29.01	30.04	9.29	7	2	25
10	68	56	61	66	29.01	30.04	9.65	8	2	25
11	71	55	62	60	29.01	30.03	9.94	8	3	26
12	72	55	62	56	28.99	30.02	9.90	9	4	26
13	74	54	62	52	28.98	30.00	10.00	10	4	26
14	75	54	63	50	28.96	29.99	9.73	9	4	26
15	75	55	63	51	28.95	29.97	9.84	10	4	26
16	76	54	63	49	28.93	29.96	10.00	9	4	26
17	74	54	62	52	28.94	29.96	9.60	10	5	26
18	73	54	62	54	28.94	29.96	9.61	9	2	26
19	71	54	61	58	28.94	29.97	10.00	7	2	25
20	68	54	60	63	28.95	29.98	9.71	6	1	25
21	67	55	60	67	28.96	29.99	9.74	5	2	25
22	65	55	59	71	28.97	30.00	9.94	4	1	21
23	64	55	59	74	28.97	30.00	9.71	4	2	25
24	63	55	59	76	28.97	29.99	9.45	5	2	25

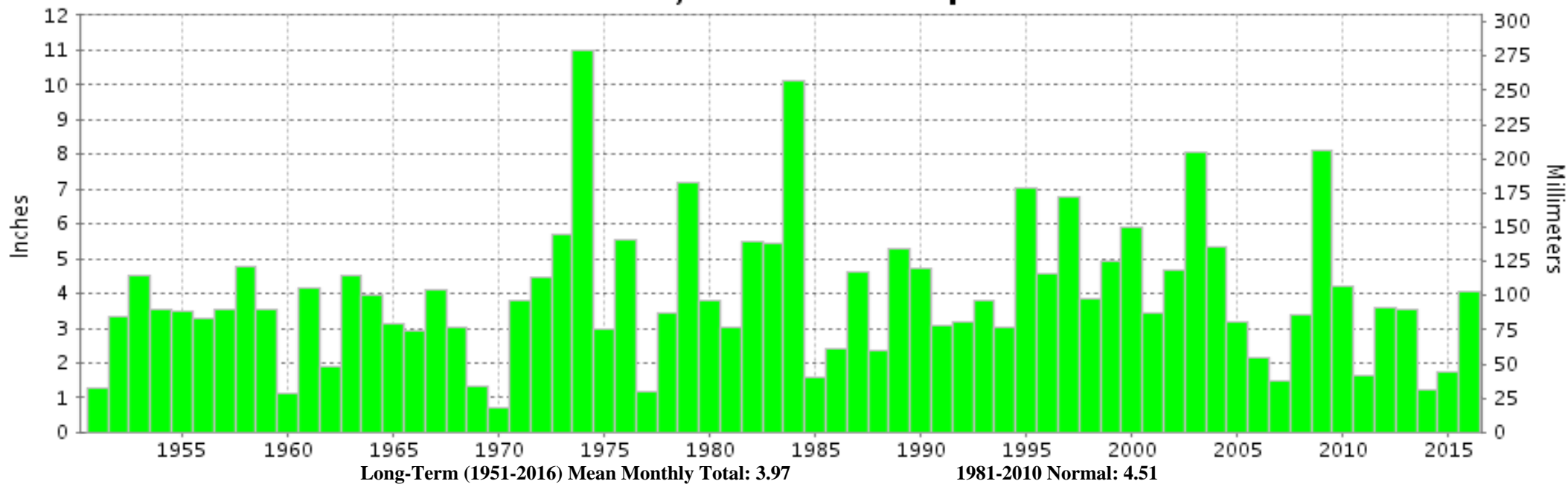
KNOXVILLE, TN MAY Temperatures



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

Long-Term (1951-2016) Mean: 67.3
1981-2010 Normal: 67.2

KNOXVILLE, TN MAY Precipitation



Long-Term (1951-2016) Mean Monthly Total: 3.97

1981-2010 Normal: 4.51



**MAY 2016
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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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

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