



AUGUST 2001

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

KNOXVILLE, TN

MC GHEE TYSON AIRPORT (TYS)
 Lat: 35° 49' N Long: 83° 59' W Elev (Ground): 979 Feet
 Time Zone: EASTERN WBAN: 13891 ISSN #:0198-4810

AUGUST 2001
KNOXVILLE, TN

DATE	TEMPERATURE °F						DEG DAYS BASE 65°		WEATHER	SNOW/ICE ON GND(IN)		PRECIPITATION (INCHES)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES						DATE		
	MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	HEATING	COOLING		0700 LST	1300 LST	2400 LST	2400 LST	AVERAGE STATION	AVERAGE SEA LEVEL	RESULTANT SPEED	RES DIR	AVERAGE SPEED	MAXIMUM					
																			5-SEC		2-MIN			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
01	84	70	77	0	70	72	0	12					0.00	29.22	30.24	2.2	23	3.7	13	12	12	09	01	
02	88	71	80	3	69	72	0	15	RA BR HZ				T	29.19	30.21	2.2	25	4.1	16	24	12	30	02	
03	80	71	76	-1	70	72	0	11	RA BR HZ				0.03	29.02	30.04	7.2	25	7.6	16	25	15	25	03	
04	86	72	79	2	71	73	0	14	RA BR HZ				T	28.91	29.92	2.5	23	5.8	15	09	13	10	04	
05	86	70	78	1	71	73	0	13	TS RA FG BR HZ				0.06	29.04	30.05	0.8	20	4.6	21	12	17	12	05	
06	89	69	79	2	71	73	0	14	RA FG+ BR HZ				0.16	29.12	30.14	0.6	05	2.4	18	21	16	22	06	
07	88	70	79	2	71	74	0	14					0.00	29.12	30.14	3.3	27	4.4	14	28	13	29	07	
08	90	74	82	5	72	75	0	17	TS BR HZ				0.00	29.05	30.06	3.6	25	5.2	25	13	21	12	08	
09	91	74	83*	6	72	75	0	18	TS BR HZ				0.00	28.99	30.00	7.4	24	7.8	32*	24	28*	24	09	
10	88	72	80	3	71	73	0	15	TS TSRA RA BR				0.05	28.97	29.98	5.7	24	6.6	21	26	18	24	10	
11	88	71	80	3	72	74	0	15	TS RA FG+ BR HZ				0.02	28.97	29.99	1.4	26	2.5	17	16	14	16	11	
12	83	73	78	2	72	74	0	13	TS RA BR HZ				0.04	29.04	30.05	6.3	24	6.9	23	24	20	23	12	
13	85	70	78	2	70	72	0	13	BR HZ				0.00	29.02	30.03	2.4	25	4.1	12	28	10	29	13	
14	88	66	77	1	66	69	0	12	FG+ BR HZ				0.00	28.95	29.96	2.5	05	4.0	22	06	13	35	14	
15	90	67	79	3	67	70	0	14	RA BR HZ				T	28.95	29.96	0.2	29	5.6	18	26	15	28	15	
16	91	68	80	4	66	70	0	15	BR HZ				0.00	29.00	30.01	7.8	24	8.2	29	25	21	25	16	
17	86	71	79	3	67	70	0	14	RA BR HZ				0.11	29.05	30.06	4.4	25	6.2	21	26	15	26	17	
18	82	64	73	-3	65	68	0	8	RA BR				T	28.97	29.99	1.6	35	2.3	12	31	9	31	18	
19	90	67	79	3	68	70	0	14	TS TSRA RA SN IC BR				0.18	28.88	29.89	9.4	23	10.3	28	24	24	22	19	
20	83	64	74	-2	62	66	0	9	FG+ BR				0.00	29.00	30.01	1.9	36	4.1	16	29	13	27	20	
21	83	59	71	-5	58	63	0	6	BCFG				0.00	29.08	30.10	4.1	07	4.9	20	10	14	08	21	
22	88	59*	74	-2	60	65	0	9					0.00	29.10	30.12	0.9	05	3.3	14	32	10	30	22	
23	92*	66	79	4	67	71	0	14					0.00	29.05	30.06	4.8	24	5.5	24	26	14	25	23	
24	86	73	80	5	71	73	0	15	TS TSRA BR HZ				0.06	29.02	30.04	4.2	25	5.3	18	28	16	28	24	
25	89	69	79	4	70	72	0	14	FG+ BR HZ				0.00	29.02	30.04	1.2	35	3.5	14	28	12	28	25	
26	90	70	80	5	69	72	0	15	BCFG BR HZ				0.00	29.00	30.01	4.5	24	5.6	18	23	16	23	26	
27	83	68	76	1	68	70	0	11	TSRA RA BR HZ				T	28.95	29.96	4.3	25	5.3	17	23	15	29	27	
28	84	67	76	1	69	71	0	11	BR				0.00	28.97	29.99	3.4	23	4.5	14	19	13	19	28	
29	89	70	80	5	69	72	0	15	BR				0.00	28.99	30.00	4.4	26	5.2	17	30	13	27	29	
30	80	64	72	-2	68	69	0	7	TS TSRA RA BR				1.85	29.00	30.01	7.4	22	8.3	25	18	21	23	30	
31	74	68	71*	-3	68	69	0	6	TSRA RA BR				1.18	28.97	29.98	9.4	22	9.6	22	23	17	23	31	
MONTHLY AVERAGES										TOTALS-->				<-- MONTHLY AVERAGES										
86.3 68.6 77.5										68.4 71.0 0.0 12.7				3.74 29.02 30.03 2.6 24 5.4										
- .4 3.3 1.5										<-----DEPARTURE FROM NORMAL----->				0.61				SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3						
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 2.09 DATE: 30-31				SEA LEVEL PRESSURE DATE TIME										
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: DATE: DATE:				MAXIMUM : 30.29 02 0953										
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH: DATE: DATE:				MINIMUM : 29.82 19 1653										
HEATING: 0 0 0 0										NUMBER OF DAYS WITH =>				MAXIMUM TEMP ≥ 90: 7										
COOLING: 393 52 1250 188														MINIMUM TEMP ≤ 32: 0										
														PRECIPITATION ≥ 0.01 INCH: 11										
														PRECIPITATION ≥ 0.10 INCH: 5										
														SNOWFALL ≥ 1.0 INCH: :										

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN

AUGUST 2001

TYS

WBAN # 13891

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note)	2400 LST
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			Water Equiv.
01													01												01		0.00	
02													02												02		T	
03													03												03		0.03	
04													04	T	T					T					04		T	
05													05			0.06									05		0.06	
06													06			0.16				T					06		0.16	
07													07												07		0.00	
08													08												08		0.00	
09													09												09		0.00	
10													10	T					0.02	0.03					10		0.05	
11													11												11		0.02	
12	0.04												12												12		0.04	
13													13												13		0.00	
14													14												14		0.00	
15													15												15		T	
16													16												16		0.00	
17				T	T								17												17		0.11	
18							0.01	0.04	0.06				18		T	T									18		T	
19													19							T	T				19		0.18	
20													20						0.06	0.12					20		0.00	
21													21												21		0.00	
22													22												22		0.00	
23													23												23		0.00	
24													24												24		0.06	
25													25												25		0.00	
26													26												26		0.00	
27													27	T	T										27		T	
28													28												28		0.00	
29													29												29		0.00	
30							0.73	0.67	.23	0.08	0.01		30												30		1.85	
31	0.24	T				0.01	0.37	0.35			0.01	0.04	31	0.07	T	0.01								0.12	31	T	1.18	

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.24	.44	.56	.72	.92	1.18	1.30	1.38	1.41	1.53	1.58	1.61
Ending Date	30	30	30	30	30	30	30	30	30	30	30	30
Ending Time (Hour/Min)	0543	0547	0552	0557	0601	0616	0628	0647	0713	0731	0751	0828

Date and time are not entered for TRACE amounts.

Note : The sum of the hourly totals is given when it differs from the daily total. 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.

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 1961–1990

WEATHER NOTATIONS

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

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

KNOXVILLE, TN AUGUST 2001

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:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR–SS		MN–MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							7.00	10.00	
02							4.00	8.00	
03							3.00	7.00	
04							1.00	8.00	
05							.50	10.00	
06							.25	10.00	
07							2.50	10.00	
08							4.00	10.00	
09							4.00	10.00	
10							3.00	10.00	
11							.25	10.00	
12							2.00	10.00	
13							2.50	10.00	
14							<.25	10.00	
15							4.00	9.00	
16							3.00	10.00	
17							.75	10.00	
18							6.00	10.00	
19							1.75	10.00	
20							.25	10.00	
21							8.00	10.00	
22							7.00	10.00	
23							7.00	10.00	
24							2.00	10.00	
25							.25	10.00	
26							3.00	7.00	
27							2.50	10.00	
28							4.00	10.00	
29							5.00	10.00	
30							.75	10.00	
31							.75	10.00	
MONTHLY AVGS							3.22	9.65	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING									
31									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0									
5 19 5									

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

AUGUST 2001

TYS

WBAN # 13891

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		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																								
	OBSERVATION TIME (LST)	EFF CLD AMT Okta		OBSERVATION TIME (LST)	EFF CLD AMT Okta			OBSERVATION TIME (LST)	EFF CLD AMT Okta	OBSERVATION TIME (LST)	EFF CLD AMT Okta	OBSERVATION TIME (LST)	EFF CLD AMT Okta	OBSERVATION TIME (LST)		EFF CLD AMT Okta	OBSERVATION TIME (LST)		EFF CLD AMT Okta	OBSERVATION TIME (LST)			EFF CLD AMT Okta																								
SUNRISE: 0544								AUG 01								SUNSET: 1941								SUNRISE: 0548								AUG 07								SUNSET: 1935							
01	CLR	NC				10.00		74	68	70	82	6	28	29.18	30.19	01	CLR	NC				7.00		74	72	73	94	0	00	29.14	30.15																
04	FEW	NC				9.00		71	69	70	94	0	00	29.20	30.22	04	CLR	NC				9.00		73	70	71	90	0	00	29.14	30.15																
07	FEW	NC				7.00		73	69	70	87	0	00	29.23	30.25	07	CLR	NC				8.00		72	70	71	94	0	00	29.17	30.19																
10	BKN	090				8.00		79	70	73	74	3	22	29.26	30.29	10	FEW	NC				10.00		82	70	74	67	3	VR	29.17	30.18																
13	BKN	090				10.00		83	70	74	65	3	34	29.25	30.27	13	SCT	NC				10.00		86	72	76	63	9	29	29.14	30.15																
16	BKN	110				9.00		81	69	73	67	6	14	29.21	30.24	16	BKN	110				9.00		86	72	76	63	8	26	29.08	30.09																
19	FEW	NC				9.00		81	73	75	77	7	26	29.20	30.21	19	FEW	NC				7.00		85	71	75	63	7	27	29.06	30.08																
22	CLR	NC				9.00		74	70	71	88	5	22	29.24	30.26	22	OVC	075				8.00		80	73	75	79	6	24	29.10	30.11																
SUNRISE: 0545								AUG 02								SUNSET: 1940								SUNRISE: 0549								AUG 08								SUNSET: 1934							
01	BKN	055				7.00		73	71	72	94	6	28	29.23	30.25	01	BKN	110				6.00	BR	76	73	74	91	5	23	29.10	30.11																
04	CLR	NC				8.00		73	69	70	87	3	27	29.21	30.23	04	CLR	NC				5.00	BR	74	72	73	94	6	23	29.07	30.09																
07	FEW	NC			BR	4.00		72	69	70	91	0	00	29.23	30.26	07	BKN	016				5.00	BR	75	72	73	90	6	27	29.10	30.11																
10	BKN	050				7.00		77	69	72	77	6	26	29.26	30.29	10	BKN	017				5.00	HZ	80	73	75	79	6	VR	29.11	30.12																
13	FEW	NC				7.00		83	69	74	63	8	24	29.22	30.24	13	SCT	NC				5.00	HZ	85	72	76	65	6	25	29.06	30.07																
16	FEW	NC				6.00	HZ	87	68	74	53	5	VR	29.16	30.17	16	SCT	NC				7.00		89	72	77	57	3	33	28.99	30.00																
19	CLR	NC				6.00	HZ	83	69	74	63	5	09	29.12	30.14	19	SCT	NC				7.00		87	72	76	61	6	28	28.98	29.99																
22	CLR	NC				6.00	HZ	78	70	73	76	0	00	29.13	30.15	22	SCT	NC				7.00		79	73	75	82	8	24	29.03	30.04																
SUNRISE: 0545								AUG 03								SUNSET: 1939								SUNRISE: 0550								AUG 09								SUNSET: 1933							
01	FEW	NC				6.00	HZ	75	69	71	82	9	24	29.13	30.14	01	FEW	NC				7.00		77	74	75	90	7	23	29.01	30.02																
04	BKN	038				6.00	HZ	73	67	69	81	7	24	29.08	30.09	04	CLR	NC				6.00	BR	75	73	74	94	0	00	28.98	29.99																
07	BKN	085				4.00	BR	72	68	69	87	7	26	29.11	30.12	07	SCT	NC				4.00	BR	75	73	74	94	0	00	29.04	30.06																
10	SCT	NC				6.00	HZ	78	69	72	74	10	25	29.07	30.09	10	FEW	NC				6.00	HZ	82	74	76	77	7	25	29.03	30.04																
13	BKN	021				3.00	-RA	77	71	73	82	8	27	29.04	30.05	13	SCT	NC				9.00		88	72	77	59	7	25	28.99	29.99																
16	BKN	120				6.00	HZ	79	71	74	77	7	28	28.97	29.98	16	BKN	050				7.00		88	74	78	63	15	27	28.94	29.95																
19	BKN	041				4.00	-RA BR	75	72	73	90	6	28	28.94	29.96	19	BKN	120				10.00		80	70	73	71	10	24	28.94	29.96																
22	OVC	038				3.00	BR	74	72	73	94	6	23	28.93	29.95	22	FEW	NC				10.00		75	71	72	88	7	23	29.00	30.01																
SUNRISE: 0546								AUG 04								SUNSET: 1938								SUNRISE: 0551								AUG 10								SUNSET: 1932							
01	OVC	038				3.00	BR	73	71	72	94	6	24	28.91	29.93	01	SCT	NC				9.00		74	71	72	91	7	24	28.99	30.00																
04	OVC	030				3.00	BR	73	71	72	94	5	26	28.89	29.90	04	BKN	055				10.00		74	70	71	88	5	26	28.99	30.01																
07	OVC	007				1.00	BR	73	71	72	94	8	24	28.90	29.92	07	BKN	023				10.00		74	70	71	88	7	26	28.99	30.00																
10	OVC	023				2.50	HZ	76	71	73	85	9	20	28.93	29.94	10	FEW	NC				7.00		80	72	74	76	9	18	28.97	29.98																
13	FEW	NC				4.00	HZ	81	72	75	74	8	24	28.92	29.93	13	BKN	060				8.00		85	73	77	68	9	24	28.97	29.98																
16	SCT	NC				6.00	HZ	86	71	76	61	5	34	28.88	29.89	16	FEW	NC				10.00		82	70	74	67	17	26	28.94	29.95																
19	SCT	NC				6.00	HZ	79	72	74	79	6	09	28.89	29.90	19	SCT	NC				10.00		76	72	73	88	8	22	28.93	29.95																
22	CLR	NC				6.00	BR	75	71	72	88	0	00	28.94	29.96	22	BKN	110				10.00		74	72	73	94	5	24	28.98	30.00																
SUNRISE: 0547								AUG 05								SUNSET: 1937								SUNRISE: 0552								AUG 11								SUNSET: 1931							
01	FEW	NC				5.00	BR	73	70	71	90	0	00	28.97	29.98	01	CLR	NC				8.00		73	71	72	94	0	00	28.96	29.97																
04	FEW	NC				4.00	BR	71	69	70	94	0	00	28.98	29.99	04	FEW	NC				2.50	BR	71	70	70	96	3	14	28.95	29.97																
07	BKN	039				1.50	BR	71	70	70	96	0	00	29.01	30.03	07	VV	001				0.25	FG	72	71	71	97	0	00	29.00	30.02																
10	FEW	NC				6.00	HZ	80	72	74	76	3	VR	29.06	30.07	10	OVC	035				5.00	HZ	77	72	74	85	0	00	29.00	30.01																
13	OVC	031				6.00	HZ	85	71	75	63	6	33	29.05	30.06	13	BKN	030				9.00		83	72	75	70	6	32	28.98	30.00																
16	SCT	NC				10.00		81	73	75	77	8	13	29.03	30.05	16	SCT	NC				8.00		87	72	76	61	9	23	28.94	29.95																
19	BKN	100				10.00		81	71	74	72	6	21	29.05	30.06	19	OVC	060				8.00		84	72	76	67	5	20	28.94	29.96																
22	BKN	065				10.00		75	69	71	82	6	29	29.11	30.12	22	OVC	042				9.00		77	72	74	85	6	28	29.01	30.03																
SUNRISE: 0548								AUG 06								SUNSET: 1936								SUNRISE: 0552								AUG 12								SUNSET: 1930							
01	CLR	NC				5.00	BR	71	69	70	94	0	00	29.11	30.12	01	OVC	080				6.00	BR	75	73	74	94	8	22	29.00	30.01																
04	CLR	NC				5.00	BR	71	69	70	94	0	00	29.11	30.12	04	BKN	110				4.00	BR	74	72	73	94	0	00	29.01	30.03																
07	VV	001				0.50	FG	70	69	69	97	0	00	29.14	30.15	07	SCT	NC				3.00	BR	74	72	73	94	3	22	29.05	30.06																
10	CLR	NC				6.00	HZ	80	72	74	76	3	VR	29.16	30.17	10	OVC	026				6.00	HZ	78	73	75	85	9	31	29.06	30.08																
13	BKN	040				10.00		86	71	76	61	6	03	29.15	30.16	13	BKN	090				10.00		82	72	75	72	12	22	29.05	30.06																
16	BKN	095				10.00		87	70	75	57	7	08	29.10	30.11	16	SCT	NC				10.00		82	72	75	72	10	25	29.02	30.03																
19	FEW	NC				10.00		83	73	76	72	0	00	29.10	30.11	19	SCT	NC				8.00	TS	79	73	75	82	8	23	29.03	30.05																
22	CLR	NC				8.00		77	73	74	88	0	00	29.13	30.14	22	SCT	NC				8.00		75	71	72	88	6	24	29.06	30.08																

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

AUGUST 2001

TYS

WBAN # 13891

HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)					
	SKY COVER	CEILING 100'S OF FT			OBSERVATION TIME (LST)	EFF CLD AMT Oktas	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL			SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0553					AUG 13				SUNSET: 1929				SUNRISE: 0558					AUG 19				SUNSET: 1922							
01	FEW	NC		6.00	BR	73	72	72	96	6	27	29.04	30.06	01	BKN	055		8.00	BR	71	66	68	84	0	00	28.89	29.90		
04	OVC	024		7.00		73	71	72	94	6	21	29.02	30.04	04	SCT	NC		6.00		68	66	67	93	6	27	28.87	29.88		
07	OVC	008		4.00	BR	74	71	72	91	6	24	29.05	30.07	07	SCT	NC		8.00		71	67	68	87	12	23	28.87	29.88		
10	BKN	012		5.00	BR	77	73	74	88	6	22	29.07	30.09	10	BKN	025		8.00		78	69	72	74	17	24	28.89	29.91		
13	BKN	060		6.00	HZ	81	70	73	69	0	00	29.02	30.03	13	SCT	NC		10.00		84	67	72	57	14	23	28.87	29.87		
16	SCT	NC		7.00		83	72	75	70	5	21	28.96	29.97	16	SCT	NC		10.00		88	67	74	50	21	23	28.82	29.82		
19	SCT	NC		10.00		82	67	72	60	5	01	28.97	29.98	19	BKN	040		10.00	TS	76	68	71	77	13	20	28.85	29.86		
22	CLR	NC		7.00		73	69	70	87	3	25	28.99	30.01	22	SCT	NC		9.00		70	68	69	93	7	24	28.92	29.93		
SUNRISE: 0554					AUG 14				SUNSET: 1928				SUNRISE: 0559					AUG 20				SUNSET: 1920							
01	CLR	NC		4.00	BR	70	68	69	93	3	22	28.97	29.98	01	BKN	060		3.00	BR	69	67	68	93	5	16	28.92	29.94		
04	VV	001		<.25	FG	67	67	67	100	0	00	28.96	29.97	04	VV	001		0.25	FG	67	67	67	100	3	26	28.94	29.95		
07	VV	001		<.25	FG	67	67	67	100	0	00	28.98	30.00	07	BKN	001		0.50	FG	64	64	64	100	0	00	28.99	30.01		
10	CLR	NC		8.00		78	67	71	69	5	06	28.99	30.00	10	SCT	NC		10.00		72	63	66	73	5	VR	29.04	30.06		
13	SCT	NC		9.00		84	65	71	53	8	35	28.94	29.96	13	SCT	NC		10.00		79	60	67	52	6	01	29.02	30.03		
16	SCT	NC		10.00		85	60	69	43	7	02	28.90	29.92	16	SCT	NC		10.00		82	59	67	46	7	01	28.99	30.00		
19	CLR	NC		10.00		82	64	70	55	5	12	28.90	29.91	19	SCT	NC		10.00		64	61	62	90	6	36	28.99	30.01		
22	CLR	NC		7.00		72	68	69	87	0	00	28.94	29.96	22	FEW	NC		10.00		70	60	64	71	3	09	29.03	30.05		
SUNRISE: 0555					AUG 15				SUNSET: 1926				SUNRISE: 0559					AUG 21				SUNSET: 1919							
01	CLR	NC		7.00		68	66	67	93	5	07	28.93	29.94	01	CLR	NC		10.00		64	60	62	87	0	00	29.05	30.07		
04	SCT	NC		6.00	BR	69	65	66	87	7	04	28.92	29.93	04	CLR	NC		10.00		62	59	60	90	5	02	29.05	30.07		
07	CLR	NC		4.00	HZ	69	64	66	84	5	04	28.96	29.97	07	CLR	NC		8.00		61	59	60	93	0	00	29.10	30.13		
10	FEW	NC		5.00	HZ	78	67	71	69	5	11	28.98	29.99	10	FEW	NC		10.00		74	61	66	64	8	07	29.12	30.14		
13	SCT	NC		6.00	HZ	87	68	74	53	9	25	28.94	29.95	13	FEW	NC		10.00		79	55	64	44	9	09	29.10	30.11		
16	SCT	NC		7.00		88	67	74	50	10	26	28.91	29.92	16	FEW	NC		10.00		83	54	65	37	9	03	29.07	30.09		
19	BKN	100		8.00	-RA	82	69	73	65	6	22	28.93	29.95	19	CLR	NC		10.00		77	56	64	48	5	07	29.05	30.07		
22	CLR	NC		5.00	HZ	76	69	71	79	0	00	28.96	29.97	22	CLR	NC		10.00		67	60	63	79	3	06	29.08	30.10		
SUNRISE: 0556					AUG 16				SUNSET: 1925				SUNRISE: 0600					AUG 22				SUNSET: 1918							
01	CLR	NC		5.00	BR	72	68	69	87	0	00	28.95	29.96	01	CLR	NC		10.00		63	59	61	87	0	00	29.08	30.10		
04	SCT	NC		5.00	BR	71	67	68	87	5	26	28.97	29.98	04	CLR	NC		8.00		62	60	61	93	0	00	29.10	30.12		
07	BKN	100		3.00	HZ	72	67	69	84	0	00	29.01	30.02	07	CLR	NC		10.00		61	58	59	90	3	10	29.13	30.15		
10	SCT	NC		3.00	HZ	83	67	72	59	12	22	29.03	30.04	10	CLR	NC		10.00		74	62	66	67	0	00	29.15	30.17		
13	SCT	NC		8.00		87	67	73	51	14	25	29.01	30.02	13	CLR	NC		10.00		84	60	69	44	8	28	29.14	30.16		
16	SCT	NC		10.00		90	60	70	37	16	22	28.97	29.98	16	CLR	NC		10.00		87	58	69	37	5	VR	29.08	30.10		
19	FEW	NC		10.00		84	61	69	46	9	25	28.98	29.99	19	CLR	NC		10.00		82	61	69	49	5	09	29.05	30.07		
22	FEW	NC		10.00		75	62	67	64	5	22	29.03	30.04	22	CLR	NC		10.00		76	64	68	67	3	23	29.03	30.04		
SUNRISE: 0556					AUG 17				SUNSET: 1924				SUNRISE: 0601					AUG 23				SUNSET: 1917							
01	OVC	085		7.00		75	66	69	74	6	21	29.02	30.03	01	CLR	NC		9.00		70	64	66	82	0	00	29.08	30.09		
04	OVC	055		7.00	-RA	75	68	70	79	12	29	29.03	30.04	04	CLR	NC		7.00		66	64	65	93	0	00	29.07	30.08		
07	OVC	045		2.00	BR	72	69	70	91	7	23	29.07	30.09	07	CLR	NC		7.00		67	64	65	91	0	00	29.10	30.12		
10	BKN	006		2.50	BR	74	71	72	91	5	22	29.10	30.12	10	CLR	NC		10.00		81	64	70	57	13	25	29.09	30.11		
13	SCT	NC		7.00		81	67	72	62	0	00	29.08	30.09	13	CLR	NC		10.00		88	67	74	50	5	VR	29.06	30.07		
16	FEW	NC		10.00		86	66	73	51	10	25	29.02	30.03	16	FEW	NC		10.00		90	67	74	47	8	21	29.00	30.01		
19	SCT	NC		10.00		82	64	70	55	5	32	29.01	30.02	19	CLR	NC		9.00		83	70	74	65	7	23	28.99	30.01		
22	BKN	046		10.00		73	64	67	74	3	07	29.04	30.06	22	CLR	NC		9.00		80	69	73	69	7	24	29.01	30.02		
SUNRISE: 0557					AUG 18				SUNSET: 1923				SUNRISE: 0602					AUG 24				SUNSET: 1915							
01	CLR	NC		10.00		68	65	66	90	0	00	29.04	30.05	01	SCT	NC		7.00		75	69	71	82	8	24	29.01	30.02		
04	SCT	NC		9.00		66	63	64	90	3	36	29.01	30.02	04	FEW	NC		6.00	HZ	75	69	71	82	3	29	29.01	30.02		
07	CLR	NC		6.00	BR	67	64	65	91	0	00	29.02	30.04	07	BKN	110		4.00	HZ	74	69	71	85	0	00	29.04	30.05		
10	CLR	NC		10.00		76	66	69	72	0	00	29.03	30.05	10	OVC	050		2.50	-TSRA BR	73	71	72	94	6	29	29.07	30.09		
13	SCT	NC		10.00		78	67	71	69	6	34	29.01	30.03	13	SCT	NC		8.00		83	71	75	67	5	31	29.04	30.05		
16	BKN	090		10.00		79	66	70	65	6	31	28.94	29.96	16	BKN	120		9.00	TS	80	73	75	79	13	26	29.00	30.01		
19	BKN	090		10.00		78	65	70	64	5	09	28.91	29.93	19	BKN	120		10.00		79	72	74	79	6	24	29.00	30.02		
22	CLR	NC		10.00		71	68	69	90	5	32	28.88	29.90	22	CLR	NC		8.00		75	72	73	90	3	20	29.02	30.04		

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

AUGUST 2001

TYS

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)	
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Okta			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Okta			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0603								AUG 25								SUNSET: 1914															
01	CLR	NC				6.00	BR	73	71	72	94	3	03	29.02	30.04	01	OVC	026				5.00	-RA BR	70	68	69	93	8	27	28.98	30.00
04	FEW	NC				3.00	BR	72	70	71	94	3	05	29.01	30.02	04	OVC	080				10.00		70	68	69	93	0	00	28.96	29.98
07	BKN	001				0.25	FG	70	70	70	100	3	07	29.04	30.06	07	OVC	055				8.00		69	68	68	96	7	22	28.98	30.00
10	FEW	NC				5.00	HZ	80	70	73	71	7	07	29.07	30.09	10	OVC	055				7.00		72	70	71	94	14	21	29.00	30.01
13	BKN	041				9.00		84	70	74	63	9	28	29.04	30.05	13	OVC	014				3.00	-RA BR	72	69	70	91	13	23	28.98	30.01
16	FEW	NC				10.00		88	68	74	52	8	29	28.99	30.00	16	OVC	055				10.00		74	69	71	85	17	23	28.94	29.96
19	SCT	NC				9.00		84	69	74	61	5	36	28.98	29.99	19	OVC	047				3.00	-RA BR	70	67	68	90	14	22	28.94	29.96
22	CLR	NC				10.00		77	69	72	77	0	00	29.02	30.03	22	OVC	027				10.00	-RA	69	66	67	90	10	22	28.95	29.97
SUNRISE: 0603								AUG 26								SUNSET: 1913															
01	FEW	NC				7.00		75	70	72	84	0	00	29.01	30.02	01	FEW	NC				7.00		75	70	72	84	0	00	29.01	30.02
04	FEW	NC				4.00	BR	72	70	71	94	3	36	29.00	30.01	04	FEW	NC				4.00	BR	72	70	71	94	3	36	29.00	30.01
07	SCT	NC				4.00	BR	72	69	70	91	0	00	29.06	30.07	07	SCT	NC				4.00	BR	72	69	70	91	0	00	29.06	30.07
10	SCT	NC				6.00	HZ	81	70	73	69	8	24	29.07	30.08	10	SCT	NC				6.00	HZ	81	70	73	69	8	24	29.07	30.08
13	SCT	NC				5.00	HZ	86	70	75	59	8	24	29.01	30.03	13	SCT	NC				5.00	HZ	86	70	75	59	8	24	29.01	30.03
16	SCT	NC				5.00	HZ	89	66	73	47	10	24	28.94	29.95	16	SCT	NC				5.00	HZ	89	66	73	47	10	24	28.94	29.95
19	FEW	NC				4.00	HZ	84	70	74	63	5	30	28.94	29.96	19	FEW	NC				4.00	HZ	84	70	74	63	5	30	28.94	29.96
22	CLR	NC				5.00	HZ	77	69	72	77	6	24	28.96	29.97	22	CLR	NC				5.00	HZ	77	69	72	77	6	24	28.96	29.97
SUNRISE: 0604								AUG 27								SUNSET: 1911															
01	CLR	NC				4.00	HZ	74	68	70	82	6	23	28.93	29.94	01	CLR	NC				4.00	HZ	74	68	70	82	6	23	28.93	29.94
04	CLR	NC				4.00	BR	72	68	69	87	6	31	28.94	29.95	04	CLR	NC				4.00	BR	72	68	69	87	6	31	28.94	29.95
07	BKN	070				2.50	BR	72	69	70	91	5	26	28.96	29.97	07	BKN	070				2.50	BR	72	69	70	91	5	26	28.96	29.97
10	SCT	NC				6.00	HZ	80	68	72	67	3	VR	28.99	30.00	10	SCT	NC				6.00	HZ	80	68	72	67	3	VR	28.99	30.00
13	BKN	090				9.00	-RA	79	68	72	69	10	30	28.95	29.96	13	BKN	090				9.00	-RA	79	68	72	69	10	30	28.95	29.96
16	BKN	100				4.00	-RA BR	75	71	72	88	10	21	28.92	29.94	16	BKN	100				4.00	-RA BR	75	71	72	88	10	21	28.92	29.94
19	SCT	NC				9.00		74	68	70	82	0	00	28.91	29.93	19	SCT	NC				9.00		74	68	70	82	0	00	28.91	29.93
22	BKN	041				9.00		71	68	69	90	5	26	28.95	29.96	22	BKN	041				9.00		71	68	69	90	5	26	28.95	29.96
SUNRISE: 0605								AUG 28								SUNSET: 1910															
01	CLR	NC				6.00	BR	69	67	68	93	0	00	28.94	29.96	01	CLR	NC				6.00	BR	69	67	68	93	0	00	28.94	29.96
04	CLR	NC				5.00	BR	68	67	67	96	0	00	28.94	29.96	04	CLR	NC				5.00	BR	68	67	67	96	0	00	28.94	29.96
07	BKN	120				4.00	BR	68	67	67	96	0	00	28.97	29.99	07	BKN	120				4.00	BR	68	67	67	96	0	00	28.97	29.99
10	SCT	NC				9.00		74	68	70	82	6	29	29.02	30.03	10	SCT	NC				9.00		74	68	70	82	6	29	29.02	30.03
13	SCT	NC				10.00		79	69	72	72	7	23	28.99	30.01	13	SCT	NC				10.00		79	69	72	72	7	23	28.99	30.01
16	CLR	NC				9.00		82	69	73	65	9	22	28.94	29.96	16	CLR	NC				9.00		82	69	73	65	9	22	28.94	29.96
19	SCT	NC				9.00		79	69	72	72	7	23	28.96	29.97	19	SCT	NC				9.00		79	69	72	72	7	23	28.96	29.97
22	SCT	NC				8.00		76	70	72	82	8	25	28.99	30.01	22	SCT	NC				8.00		76	70	72	82	8	25	28.99	30.01
SUNRISE: 0606								AUG 29								SUNSET: 1909															
01	OVC	048				6.00	BR	74	71	72	91	5	27	29.00	30.01	01	OVC	048				6.00	BR	74	71	72	91	5	27	29.00	30.01
04	FEW	NC				6.00	BR	70	68	69	93	5	23	28.98	29.99	04	FEW	NC				6.00	BR	70	68	69	93	5	23	28.98	29.99
07	FEW	NC				5.00	BR	71	68	69	90	3	23	29.03	30.05	07	FEW	NC				5.00	BR	71	68	69	90	3	23	29.03	30.05
10	BKN	020				10.00		79	69	72	72	3	26	29.03	30.05	10	BKN	020				10.00		79	69	72	72	3	26	29.03	30.05
13	SCT	NC				9.00		84	68	73	59	5	VR	29.00	30.01	13	SCT	NC				9.00		84	68	73	59	5	VR	29.00	30.01
16	SCT	NC				10.00		88	66	73	48	9	28	28.96	29.97	16	SCT	NC				10.00		88	66	73	48	9	28	28.96	29.97
19	SCT	NC				10.00		83	68	73	61	6	22	28.95	29.96	19	SCT	NC				10.00		83	68	73	61	6	22	28.95	29.96
22	BKN	046				10.00		78	69	72	74	0	00	29.00	30.01	22	BKN	046				10.00		78	69	72	74	0	00	29.00	30.01
SUNRISE: 0606								AUG 30								SUNSET: 1907															
01	BKN	048				9.00		75	69	71	82	7	24	28.98	29.99	01	BKN	048				9.00		75	69	71	82	7	24	28.98	29.99
04	BKN	120				9.00		74	69	71	85	8	23	28.96	29.97	04	BKN	120				9.00		74	69	71	85	8	23	28.96	29.97
07	OVC	028				3.00	-TSRA BR	67	64	65	91	12	21	29.02	30.04	07	OVC	028				3.00	-TSRA BR	67	64	65	91	12	21	29.02	30.04
10	BKN	100				10.00		71	67	68	87	0	00	29.04	30.06	10	BKN	100				10.00		71	67	68	87	0	00	29.04	30.06
13	FEW	NC				10.00		79	69	72	72	5	20	29.01	30.03	13	FEW	NC				10.00		79	69	72	72	5	20	29.01	30.03
16	BKN	044				10.00		75	67	70	76	17	22	28.99	30.01	16	BKN	044				10.00		75	67	70	76	17	22	28.99	30.01
19	CLR	NC				10.00		73	67	69	81	10	20	28.96	29.98	19	CLR	NC				10.00		73	67	69	81	10	20	28.96	29.98
22	SCT	NC				10.00		71	67	68	87	8	23	29.00	30.02	22	SCT	NC				10.00		71	67	68	87	8	23	29.00	30.02

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, VV = 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.

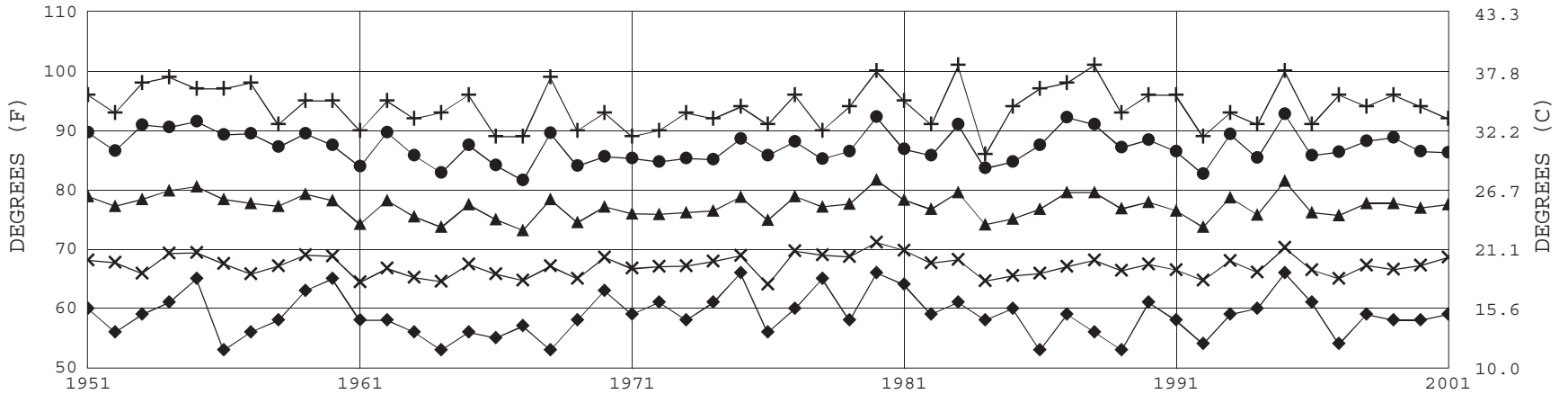
& = Original observation contained additional weather elements.

See page 3 for additional notes.

SUMMARY BY HOUR

HOUR (LST)	AVERAGES										RESULTANT WIND (MPH)	
	CEILOMETER											

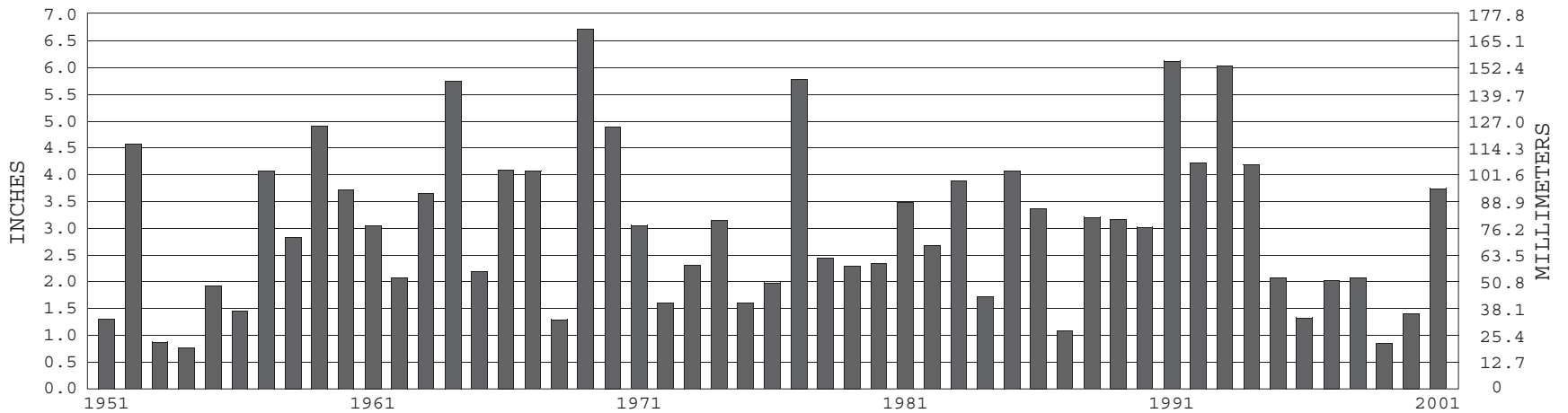
KNOXVILLE, TN AUGUST TEMPERATURES



+ Extreme Max. ● Mean Max. ▲ Mean × Mean Min. ◆ Extreme Min.

Long-Term (1951-2001) Mean: 77.2 1961-1990 Normal: 76.0

KNOXVILLE, TN AUGUST PRECIPITATION



Long-Term (1951-2001) Mean Monthly Total: 3.03

1961-1990 Normal: 3.13



**AUGUST 2001
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.

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