



APRIL 2000

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): 992 Feet
 Time Zone: EASTERN WBAN: 13891 ISSN #: 0198-4810

APRIL 2000
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	11	12	13	14	15	16	17	18	19	20	21	22	23	24													
01	75	43	59	5	46	53	6	0			0.0	0.00	29.07	30.12	4.8	22	6.1	22	17	17	20	01													
02	69	57	63	9	59	61	2	0	TS	TSRA	RA	BR	0.0	1.20	28.94	29.98	7.5	24	9.8	30	23	25	24	02											
03	65	54	60	6	59	59	5	0	TSRA	RA	BR		0.0	1.73	28.80	29.84	3.5	21	6.9	38	27	33	29	03											
04	55	35	45	-10	34	41	20	0	RA	BR			0.0	0.26	28.87	29.93	11.9	27	13.2	32	30	26	29	04											
05	59	30	45	-10	29	39	20	0			0.0	0.00	29.01	30.07	7.6	23	8.2	24	23	20	23	05													
06	73	52	63	8	46	54	2	0			0.0	0.00	28.89	29.93	15.5	23	15.6	29	23	24	23	06													
07	74	55	65	10	52	58	0	0			0.0	0.00	28.84	29.88	14.2	24	14.7	29	24	24	23	07													
08	67	38	53	-3	39	43	12	0	TSRA	RA	BR		0.0	0.23	28.90	29.95	12.7	26	15.6	38	27	32	27	08											
09	58	30*	44*	-12	28	38	21	0			0.0	0.00	29.15	30.23	5.9	22	6.9	26	21	21	22	09													
10	68	35	52	-4	36	46	13	0			0.0	0.00	29.14	30.20	4.0	25	5.1	18	24	16	23	10													
11	65	49	57	1	47	52	8	0	RA	BR		0.0	0.17	29.11	30.16	8.5	24	9.3	25	24	21	24	11												
12	63	49	56	-1	47	51	9	0	RA	BR		0.0	0.02	29.21	30.27	7.3	03	8.5	20	05	17	05	12												
13	51	44	48	-9	45	47	17	0	RA	DZ	BR		0.0	0.81	29.17	30.24	9.3	05	9.5	20	03	15	03	13											
14	71	47	59	2	52	54	6	0	RA	DZ	BR		0.0	0.05	29.06	30.11	4.9	05	5.6	13	04	11	04	14											
15	66	53	60	3	55	57	5	0	RA				0.0	0.04	28.98	30.02	2.4	25	3.3	10	22	9	23	15											
16	76	53	65	7	54	59	0	0			0.0	0.00	28.99	30.03	4.2	25	5.3	16	26	14	25	16													
17	72	51	62	4	50	55	3	0	RA		0.0	0.01	28.84	29.88	9.2	26	11.1	32	28	25	29	17													
18	57	50	54	-4	48	50	11	0	DZ	BR		0.0	T	28.93	29.99	3.4	28	5.8	11	01	10	01	18												
19	75	46	61	3	51	55	4	0	BR		0.0	0.00	28.97	30.01	4.3	04	5.0	15	06	13	06	19													
20	84*	49	67*	9	52	58	0	2	TS	TSRA	RA	BR	HZ	0.0	0.61	28.82	29.85	12.2	23	13.3	48*	23	38*	23	20										
21	61	44	53	-6	45	48	12	0	RA	DZ		0.0	T	28.76	29.80	11.4	26	12.3	28	28	22	28	21												
22	59	44	52	-7	44	46	13	0	BR		0.0	0.00	28.83	29.88	1.1	28	4.3	13	28	11	28	22													
23	67	38	53	-7	43	48	12	0	BR		0.0	0.00	28.82	29.87	0.9	28	1.8	10	27	9	26	23													
24	55	50	53	-7	51	52	12	0	RA	BR		0.0	0.90	28.65	29.69	6.8	05	7.6	20	05	16	04	24												
25	56	45	51	-9	50	51	14	0	RA	DZ	BR		0.0	0.35	28.76	29.81	5.1	01	5.5	15	01	10	02	25											
26	68	43	56	-4	39	47	9	0	FG+	BR		0.0	0.00	28.94	29.99	1.8	30	3.3	20	28	16	28	26												
27	68	38	53	-7	41	48	12	0	RA		0.0	0.0	T	28.87	29.92	3.8	20	5.4	20	20	16	20	27												
28	66	51	59	-2	51	54	6	0	RA	BR		0.0	0.31	28.78	29.82	1.9	23	5.2	18	21	14	22	28												
29	68	49	59	-2	48	52	6	0	RA		0.0	0.0	T	28.98	30.02	3.2	24	5.7	23	23	17	27	29												
30	76	43	60	-1	45	52	5	0	BR		0.0	0.00	29.12	30.18	0.3	06	1.5	13	34	8	34	30													
										66.2		45.5	55.9	■ ■	46.2	50.9	8.8	0.1	< MONTHLY AVERAGES		TOTALS-->		0.0	6.69	28.94	29.99	3.7	25	7.7	<- MONTHLY AVERAGES					
										-4.2		0.9	-1.6	■ ■	<----- DEPARTURE FROM NORMAL ----->										2.97	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 2.49 DATE: 02-03				SEA LEVEL PRESSURE DATE TIME																					
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: 0.0 DATE:				MAXIMUM : 30.35 12 1053																					
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOWFALL: 0 DATE:				MINIMUM : 29.59 25 0153																					
HEATING: 265 31 3294 -549										NUMBER OF DAYS WITH →		MAXIMUM TEMP ≥ 90: 0		MINIMUM TEMP ≤ 32: 2		PRECIPITATION ≥ 0.01 INCH : 14																			
COOLING: 2 -7 2 -7												MAXIMUM TEMP ≤ 32 : 0		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 10																			
												THUNDERSTORMS : 4		HEAVY FOG : 1		SNOWFALL ≥ 1.0 INCH : 0																			

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

KNOXVILLE, TN

APRIL 2000

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	1.17		1.20		
03	0.16	T	T	0.08	0.12	0.02	T						03	0.06	0.03	T	T							03	1.75		1.73			
04	0.05	0.09	0.12	0.02	0.01	T		T	0.02	0.03			04	0.02	T	0.05	0.08	0.11	0.29	0.37	0.11	0.04	0.07	0.05	0.04	0.04	0.26			
05													05												05	0.27		0.00		
06													06												06			0.00		
07													07												07			0.00		
08				T	0.06	0.03	0.11	0.02	0.01				08					T						08			0.23			
09													09								T			09			0.00			
10													10											10			0.00			
11													11			T	0.02	T		0.01	0.04	0.03	0.07	T	11			0.17		
12													12											12			0.02			
13		0.01	T	0.01	0.01	T	0.08	0.16	0.16	0.15	0.07	T	13		0.01	T	T	0.03	0.04	0.02	0.01	T	T	0.01	T	13			0.81	
14		0.01	0.03	0.01	T	T							14											14			0.05			
15													15	0.04										15			0.04			
16													16											16			0.00			
17													17	T	T									17			0.01			
18								0.01	T				18											18			T			
19								T					19											19			0.00			
20													20							T			T	0.52	0.09	20			0.61	
21	T												21										T	T	T	21			T	
22													22										T	T	T	22			0.00	
23													23										T	T	T	23			0.00	
24				T	0.02	0.01	T			0.02	0.20	0.12	0.02	24	0.09	0.13	0.03	0.02	0.03	0.02	0.01	0.04	0.02	T	0.03	0.09	24			0.90
25	0.03	0.01	0.12	0.11	0.06	T	0.01	T		T			25	0.01	T	T	T										25			0.35
26													26												26			0.00		
27													27												27			T		
28	0.03	0.02	0.05	0.10	0.07	0.04	T						28											T	T	T	28			0.31
29													29												29			T		
30													30												30			0.00		

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

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	
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 Unknown Precipitation		

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

KNOXVILLE, TN APRIL 2000

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							10.00	10.00	
02							1.00	10.00	
03							.75	10.00	
04							4.00	10.00	
05							10.00	10.00	
06							10.00	10.00	
07							10.00	10.00	
08							2.50	10.00	
09							10.00	10.00	
10							10.00	10.00	
11							6.00	10.00	
12							1.50	10.00	
13							1.50	10.00	
14							5.00	10.00	
15							8.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							3.00	10.00	
19							2.00	10.00	
20							1.75	10.00	
21							10.00	10.00	
22							5.00	10.00	
23							4.00	10.00	
24							1.75	10.00	
25							2.00	10.00	
26							<.25	10.00	
27							10.00	10.00	
28							2.00	10.00	
29							10.00	10.00	
30							5.00	10.00	
MONTHLY AVGS							5.91	10.00	
SUNSHINE (MINUTES)									
Total: Possible:									
Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING									
30									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0									
1 10 12									

OBSERVATIONS AT 3-HOURLY INTERVALS

KNOXVILLE, TN

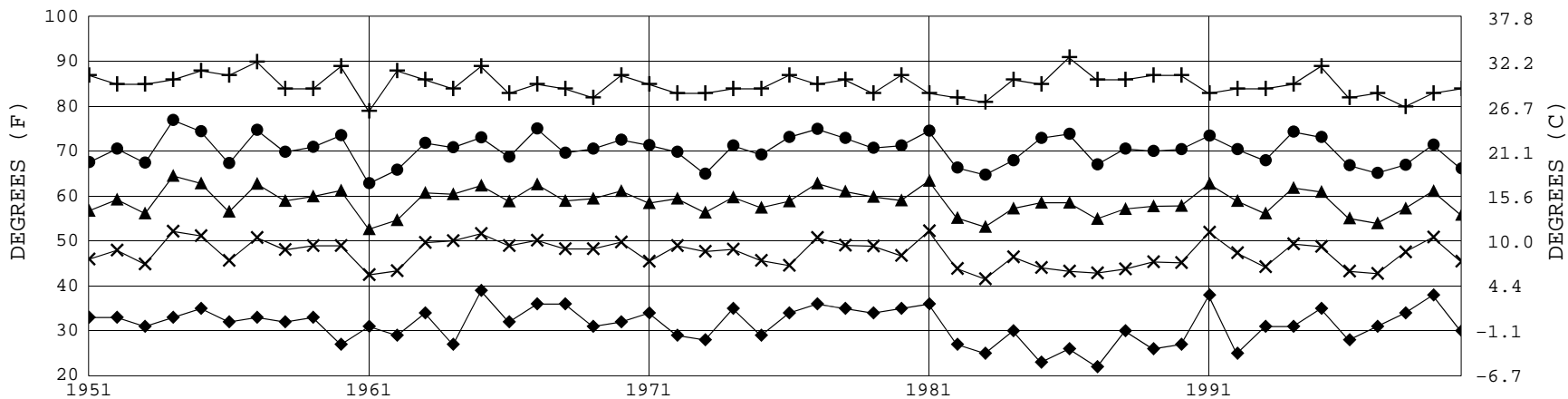
APRIL 2000

TYS

WBAN # 13891

HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)	
	SKY COVER	CEILING 100'S OF FT		DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		SKY COVER	CEILING 100'S OF FT		DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0622 APR 01 SUNSET: 1858																							
01	CLR	NC		50	43	47	77	3	04	29.06	30.11	01	CLR	NC		58	48	53	70	9	24	28.90	29.93
04	CLR	NC		48	39	44	71	0	00	29.06	30.11	04	CLR	NC		56	48	52	75	8	23	28.89	29.93
07	CLR	NC		45	41	43	86	0	00	29.12	30.18	07	SCT	NC		59	52	55	78	12	22	28.91	29.95
10	CLR	NC		60	42	51	52	0	00	29.17	30.23	10	BKN	038		66	53	59	63	20	23	28.91	29.95
13	CLR	NC		72	54	61	53	6	29	29.09	30.14	13	SCT	NC		72	54	61	53	24	24	28.86	29.90
16	FEW	NC		73	52	61	48	10	22	29.01	30.05	16	FEW	NC		74	54	62	50	17	26	28.77	29.81
19	FEW	NC		68	51	58	55	9	22	29.00	30.05	19	FEW	NC		69	52	59	55	10	26	28.76	29.79
22	FEW	NC		67	47	56	49	15	21	29.03	30.07	22	FEW	NC		66	49	57	54	13	24	28.79	29.82
SUNRISE: 0620 APR 02 SUNSET: 1859																							
01	OVC	100		68	43	55	41	10	19	28.99	30.03	01	FEW	NC		66	50	57	56	17	20	28.69	29.71
04	OVC	036	4.00	57	57	57	100	9	24	29.00	30.03	04	OVC	055	-TSRA	63	54	58	73	23	22	28.63	29.65
07	OVC	040	6.00	58	58	58	100	3	10	28.94	29.98	07	OVC	039	-RA	51	48	49	89	22	29	28.71	29.74
10	OVC	045	10.00	65	59	61	81	16	26	28.92	29.95	10	OVC	100		43	37	40	80	21	28	28.87	29.92
13	BKN	022	4.00	61	61	61	100	13	22	28.98	30.02	13	OVC	035		41	32	37	70	8	30	28.95	30.00
16	OVC	120	10.00	67	63	64	87	13	28	28.90	29.94	16	OVC	033		41	32	37	70	13	29	28.97	30.03
19	BKN	120	10.00	65	62	63	90	5	26	28.91	29.95	19	OVC	032		39	31	36	73	15	28	29.07	30.13
22	OVC	055	10.00	62	62	62	100	3	34	28.90	29.94	22	OVC	042		39	25	34	57	6	VR	29.13	30.21
SUNRISE: 0619 APR 03 SUNSET: 1860																							
01	OVC	055	5.00	60	60	60	100	9	19	28.94	29.98	01	BKN	049		37	32	35	82	7	23	29.14	30.22
04	OVC	090	10.00	60	59	59	96	13	13	28.83	29.86	04	CLR	NC		34	29	32	82	3	29	29.16	30.24
07	BKN	120	10.00	58	58	58	100	0	00	28.86	29.90	07	CLR	NC		32	29	31	88	0	00	29.21	30.30
10	OVC	033	5.00	60	60	60	100	6	25	28.90	29.94	10	CLR	NC		42	27	36	55	7	VR	29.23	30.31
13	OVC	047	7.00	62	62	62	100	5	08	28.80	29.84	13	CLR	NC		50	26	40	39	9	20	29.15	30.23
16	OVC	026	4.00	65	63	64	93	9	20	28.71	29.74	16	CLR	NC		57	27	44	32	15	22	29.10	30.16
19	OVC	025	2.50	55	54	54	96	23	28	28.70	29.73	19	CLR	NC		53	29	43	40	9	22	29.09	30.16
22	OVC	080	8.00	55	54	54	96	3	VR	28.76	29.80	22	CLR	NC		49	28	40	45	6	18	29.13	30.20
SUNRISE: 0618 APR 04 SUNSET: 1901																							
01	OVC	060	7.00	54	54	54	100	12	23	28.69	29.73	01	CLR	NC		43	30	38	60	7	21	29.14	30.22
04	OVC	047	7.00	48	47	47	96	6	24	28.70	29.74	04	CLR	NC		41	31	37	67	0	00	29.17	30.24
07	OVC	026	5.00	46	43	45	89	14	26	28.81	29.86	07	CLR	NC		40	32	37	73	0	00	29.19	30.26
10	BKN	110	10.00	47	34	41	61	13	28	28.88	29.93	10	CLR	NC		59	35	48	41	8	23	29.19	30.25
13	BKN	080	10.00	49	29	40	46	14	27	28.87	29.93	13	SCT	NC		65	38	51	37	8	23	29.14	30.20
16	BKN	070	10.00	49	25	39	39	22	28	28.89	29.94	16	FEW	NC		67	37	52	33	10	29	29.09	30.14
19	SCT	NC	10.00	44	22	36	41	13	29	28.96	30.02	19	OVC	110		62	40	51	44	5	22	29.11	30.16
22	CLR	NC	10.00	39	23	33	53	7	27	29.04	30.10	22	OVC	100		60	41	50	50	3	14	29.11	30.15
SUNRISE: 0616 APR 05 SUNSET: 1901																							
01	CLR	NC	10.00	35	25	31	67	3	23	29.06	30.13	01	CLR	NC		55	43	49	64	5	25	29.11	30.17
04	CLR	NC	10.00	32	26	30	79	6	22	29.04	30.11	04	CLR	NC		54	38	46	55	5	23	29.11	30.15
07	CLR	NC	10.00	32	27	30	82	0	00	29.08	30.15	07	SCT	NC		52	39	46	61	6	21	29.13	30.19
10	CLR	NC	10.00	47	29	39	50	12	22	29.11	30.18	10	SCT	NC		65	44	54	47	18	24	29.13	30.19
13	CLR	NC	10.00	52	27	41	38	9	29	29.06	30.12	13	BKN	120		63	48	55	58	12	29	29.10	30.14
16	CLR	NC	10.00	57	32	46	39	13	22	28.95	30.01	16	OVC	055	9.00	60	53	56	78	9	19	29.10	30.15
19	CLR	NC	10.00	55	32	45	42	9	21	28.90	29.96	19	OVC	070	10.00	57	52	54	83	12	21	29.10	30.16
22	CLR	NC	10.00	49	34	42	57	12	23	28.91	29.97	22	OVC	036	8.00	56	54	55	93	9	23	29.11	30.16
SUNRISE: 0615 APR 06 SUNSET: 1901																							
01	CLR	NC	10.00	54	35	45	49	17	23	28.92	29.97	01	OVC	039	5.00	56	55	55	97	3	28	29.12	30.17
04	CLR	NC	10.00	54	38	46	55	17	23	28.90	29.95	04	OVC	001	1.75	56	55	55	97	0	00	29.14	30.19
07	FEW	NC	10.00	54	40	47	59	16	23	28.91	29.96	07	OVC	023	7.00	50	48	49	93	6	36	29.21	30.27
10	CLR	NC	10.00	63	46	54	54	20	22	28.93	29.98	10	OVC	040	10.00	52	46	49	80	10	03	29.28	30.34
13	CLR	NC	10.00	69	51	59	53	18	22	28.88	29.92	13	BKN	038	10.00	57	47	52	69	7	36	29.24	30.29
16	CLR	NC	10.00	73	52	61	48	18	24	28.84	29.88	16	FEW	NC	10.00	62	47	54	58	9	06	29.20	30.26
19	CLR	NC	10.00	69	53	60	57	12	23	28.83	29.87	19	BKN	120	10.00	58	50	54	75	8	07	29.21	30.27
22	CLR	NC	10.00	63	50	56	63	9	24	28.88	29.92	22	BKN	120	10.00	53	39	46	59	13	03	29.22	30.29

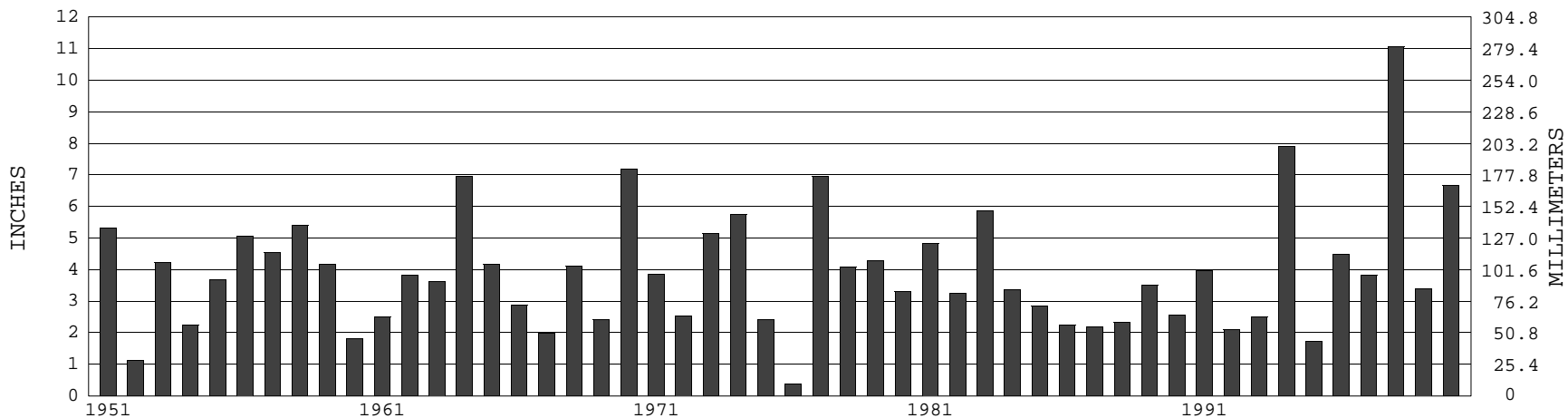
KNOXVILLE, TN APRIL TEMPERATURES



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

Long-Term (1951-2000) Mean: 58.9 1961-1990 Normal: 57.5

KNOXVILLE, TN APRIL PRECIPITATION



Long-Term (1951-2000) Mean Monthly Total: 3.94

1961-1990 Normal: 3.72



**APRIL 2000
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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