JULY 2011
LOCAL CLIMATOLOGICAL DATA
NOAA, National Climatic Data Center

OAK RIDGE, TN
OAK RIDGE (KOQT)
Lat:36° 1'N Long: 84° 14'W Elev (Ground) 910 Feet
Time Zone : EASTERN WBAN: 53868 ISSN#: 0198-487X

Date	Temperature °F						Deg Days BASE 65°		WEATHER	SNOW/ICE ON GND(IN)		PRECIPITATION ON GND(IN)		PRESSURE (INCHES OF HG)		WIND SPEED = MPH DIR = TENS OF DEGREES							Date
										null00 LST	null00 LST	null00 LST	null00 LST						MAXIMUM 3-SEC		MAXIMUM 2-MIN		
	MAXIMUM	MINIMUM	AVERAGE	DEP FROM NORMAL	AVERAGE DEW PT	AVERAGE WET BULB	HEATING	COOLING		DEPTH	WATER-EQUIV	SNOW-FALL	WATER EQUIV	AVERAGE STATION	AVERAGE SEA LEVEL	RESULTANT SPEED	RES DIR	AVERAGE SPEED	SPEED	DIR	SPEED	DIR	
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	90	61*	76	0	63	68	0	11					0.00	29.10	30.03	0.5	05	0.9	10	07	7	06	01
02	92	65	79	3	66	70	0	14	FG+ FG BR				0.00	29.11	30.04	0.4	02	0.8	9	14	7	13	02
03	93	69	81	5	68	72	0	16	BR				0.00	29.05	29.97			0.3	12	21	8	26	03
04	90	70	80	4	70	72	0	15	RA BR				0.17	29.02	29.95	0.7	09	1.8			6	05	04
05	88	69	79	2	68	71	0	14	RA BR				0.08	29.04	29.97	0.3	05	1.3	14	25	8	26	05
06	89	67	78	1	67	70	0	13	RA				T	29.05	29.98	0.5	21	2.0	17	12	12	14	06
07	90	70	80	3	69	72	0	15	FG+ FG BR HZ				0.00	29.01	29.93	0.3	18	1.4	20	16	14	15	07
08	89	70	80	3	70	72	0	15	RA BR				0.01	28.89	29.81	1.9	25	2.6	20	25	12	26	08
09	91	71	81	4	69	73	0	16					0.00	28.95	29.89	0.9	08	1.6	12	09	8	06	09
10	95	72	84	7	70	74	0	19					0.00	29.03	29.96	0.3	20	1.4	12	21	8	21	10
11	97*	74	86*	9	73	77	0	21	BR				0.00	29.05	29.97	1.1	22	2.2	13	19	8	20	11
12	86	72	79	2	73	75	0	14	RA BR				0.24	29.04	29.96	0.5	18	1.9	28*	07	18*	08	12
13	92	71	82	5	70	74	0	17	BR				0.00	28.98	29.90	1.0	05	1.2	13	07	9	08	13
14	94	73	84	7	71	74	0	19	RA FG BR				1.85	28.95	29.88	1.0	09	2.4	25	14	15	17	14
15	80	70	75*	-2	71	72	0	10	RA FG+ BR				1.53	29.02	29.95	1.1	07	1.4	9	05	6	19	15
16	83	69	76	-1	68	70	0	11	RA BR				T	29.13	30.08	0.7	08	1.4	13	02	7	05	16
17	88	70	79	2	68	71	0	14					0.00	29.22	30.16	0.2	06	1.3	10	27	8	26	17
18	92	72	82	4	71	74	0	17	BR				0.00	29.15	30.07	0.6	26	0.9	15	27	10	28	18
19	94	71	83	5	72	75	0	18	RA BR				T	29.03	29.94	0.6	25	1.9	14	26	9	27	19
20	95	75	85	7	74	77	0	20	BR HZ				0.00	28.97	29.88	0.3	08	0.5	15	08	8	07	20
21	82	71	77	-1	73	75	0	12	RA FG BR HZ				0.45	28.99	29.92	0.5	08	0.9	25	36	14	01	21
22	94	74	84	6	73	76	0	19	BR HZ				0.00	29.05	29.98	1.1	23	2.1	12	24	8	26	22
23	94	74	84	6	73	76	0	19	FG+ FG BR HZ				0.00	29.10	30.03	0.6	16	1.2	13	16	8	15	23
24	93	74	84	6	73	76	0	19	BR				0.00	29.11	30.01	0.7	25	2.2	13	28	9	26	24
25	88	75	82	4	74	76	0	17	RA BR				0.23	28.98	29.89	0.2	22	1.4	15	25	10	26	25
26	93	73	83	5	71	74	0	18	FG+ FG BR				0.00	28.94	29.86	0.8	07	0.8	12	09	8	09	26
27	95	71	83	5	70	74	0	18	FG+ FG BR HZ				0.00	29.01	29.94	0.7	05	1.3	10	07	7	05	27
28	96	71	84	6	71	75	0	19	BR				0.00	29.10	30.03	0.8	26	1.5	14	26	8	25	28
29	93	75	84	6	72	76	0	19	BR				0.00	29.13	30.04	0.4	29	1.7	14	27	9	27	29
30	92	74	83	5	73	75	0	18	RA BR				0.24	29.11	30.04	0.0	27	1.0	18	36	13	36	30
31	92	73	83	6	72	75	0	18	BR				0.00	29.10	30.03	0.4	08	1.4	15	06	9	06	31
	91.0	71.2	81.1	¤	70.5	73.6	0.0	16.3	< MONTHLY AVERAGES | TOTALS >				4.80	29.05	29.97	0.1	13	1.4	< MONTHLY AVERAGES				
	2.9	4.8	3.8		<---------- DEPARTURE FROM NORMAL ---------->								-0.36	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									

JULY 2011
OAK RIDGE, TN

DEGREE DAYS

	MONTHLY TOTAL	MONTHLY DEPARTURE	SEASON TO DATE TOTAL	SEASON TO DATE DEPARTURE
HEATING :	0	0	0	0
COOLING :	505	125	1148	398

GREATEST 24-HR PRECIPITATION : 3.38 DATE : 14-15
GREATEST 24-HR SNOWFALL : DATE :
GREATEST SNOW DEPTH : DATE :

SEA LEVEL PRESSURE		DATE	TIME
MAXIMUM :	30.21	17	1131
MIMIMUM :	29.75	08	1753

NUMBER OF -> DAYS WITH

MAXIMUM TEMP >= 90 : 22	MINIMUM TEMP <= 32 : 0	PRECIPITATION >= 0.01 INCH: 9
MAXIMUM TEMP <= 32 : 0	MINIMUM TEMP <= 0 : 0	PRECIPITATION >= 0.10 INCH: 7
THUNDERSTORMS : 0	HEAVY FOG : 6	SNOWFALL >= 1.0 INCH :

HOURLY PRECIPITATION
(WATER EQUIVALENT IN INCHES)

OAK RIDGE, TN (KOQT)
JULY 2011

WBAN # 53868

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													01	0.00	0.00
02													02													02	0.00	0.00
03													03													03	0.00	0.00
04													04	0.09	0.08	T										04	0.17	0.17
05													05					T	0.08		T	T				05	0.08	0.08
06													06							T	T					06	T	T
07													07													07	0.00	0.00
08								0.01	T				08		T											08	0.01	0.01
09													09													09	0.00	0.00
10													10													10	0.00	0.00
11													11													11	0.00	0.00
12						0.23	T	0.01					12	T												12	0.24	0.24
13													13													13	0.00	0.00
14													14										0.03	0.42	1.40	14	1.85	1.85
15	0.19	0.12	0.04	0.09	0.29	0.03							15	T	0.03	0.01	T	0.37	0.09	0.18	0.08	0.01				15	1.53	1.53
16													16										T			16	T	T
17													17													17	0.00	0.00
18													18													18	0.00	0.00
19													19												T	19	T	T
20													20													20	0.00	0.00
21											0.31	0.13	21	0.01	T	T	T	T	T							21	0.45	0.45
22													22													22	0.00	0.00
23													23													23	0.00	0.00
24													24													24	0.00	0.00
25				0.19	T							T	25	T	0.03	0.01	T									25	0.23	0.23
26													26													26	0.00	0.00
27													27													27	0.00	0.00
28													28													28	0.00	0.00
29													29													29	0.00	0.00
30													30			0.21	0.02	T			0.01	T				30	0.24	0.24
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)	0.31	0.51	0.64	0.75	1.15	1.48	1.74	1.83	1.91	1.96	2.03	2.11
Ending Date	14	14	14	14	14	14	14	15	15	15	15	15
Ending Time (Hr/Min)	2302	2302	2325	2328	2324	2338	2348	0008	0027	0048	0119	0138

Date and time are not entered for TRACE amounts.

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.

REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

*** = Extreme for the month (last occurence 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 1971-2000

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	GL Glaze
VC In the Vicinity	UP Unkown Precipitation		

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

OAK RIDGE, TN
JULY 2011

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:

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Station Augmentation-OAK RIDGE ATDD COOP
  Lat/Lon:36.00278/-84.24861 Elevation:905FT
  Distance:1.5 MI Dir:SW
  Augmented Elements:Temp,Precip,Snow
  Equipment:Pcpn-Model TRP525M, Temp Vaisala HMP35C,
     Snow Board, Snow Stick
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Date	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
			SR-SS		MN-MN				
	TOTAL MINUTES	PERCENT POSSIBLE	Sky Cover	Satellite	Sky Cover	Satellite	MINIMUM	MAXIMUM	
01							9.00	10.00	
02							0.25	10.00	
03							5.00	10.00	
04							3.00	10.00	
05							3.00	10.00	
06							9.00	10.00	
07							0.25	10.00	
08							5.00	10.00	
09							9.00	10.00	
10							9.00	10.00	
11							6.00	10.00	
12							2.00	10.00	
13							7.00	10.00	
14							1.25	10.00	
15							1.00	10.00	
16							6.00	10.00	
17							9.00	10.00	
18							4.00	10.00	
19							4.00	10.00	
20							6.00	10.00	
21							0.75	10.00	
22							5.00	10.00	
23							0.25	10.00	
24							1.25	10.00	
25							1.00	10.00	
26							1.50	10.00	
27							0.25	10.00	
28							1.50	10.00	
29							6.00	10.00	
30							2.00	10.00	
31							2.50	10.00	
MONTHLY AVGS							3.90	10.00	

SUNSHINE (Minutes)

Total : 0 **Possible :**
Percent Possible :

NUMBER OF DAYS WITH :

SKY CONDITION

Clear	Partly CLDY	Cloudy	Missing

MINIMUM VISIBILTY (MILES)

<= .25	<= 3.0	>= 7.0
4	16	6

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

JULY 2011 **KOQT** **WBAN # 53868**

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE Observation Time (LST)	SATELLITE Eff Cld Amt Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION Tens of Deg	PRESSURE (INCHES, HG) STATION	PRESSURE (INCHES, HG) SEA LEVEL
						SUNRISE: 0524 JUL 01 SUNSET: 1958								
01	CLR	NC			10.00		65	60	62	84	0	00	29.10	30.03
04	CLR	NC			10.00		63	59	61	87	0	00	29.10	30.02
07	CLR	NC			10.00		66	62	64	87	0	00	29.13	30.06
10	CLR	NC			10.00		78	62	68	58	0	00	29.10	30.04
13	CLR	NC			10.00		88	60	70	39	5	05	29.10	30.02
16	CLR	NC			10.00		89	62	71	41	0	00	29.09	30.01
19	CLR	NC			10.00		84	67	73	57	0	00	29.09	30.02
22	CLR	NC			10.00		75	70	72	85	0	00	29.12	30.04
						SUNRISE: 0524 JUL 02 SUNSET: 1958								
01	CLR	NC			9.00		70	67	68	90	0	00	29.10	30.03
04	CLR	NC			7.00		67	65	66	93	0	00	29.13	30.05
07	VV	002			0.25	FG	66	66	66	100	0	00	29.14	30.08
10	CLR	NC			10.00		82	67	72	61	0	00	29.15	30.08
13	CLR	NC			10.00		89	62	71	41	3	35	29.13	30.06
16	CLR	NC			10.00		91	63	72	39	3	06	29.10	30.02
19	CLR	NC			10.00		87	66	73	50	0	00	29.08	30.00
22	CLR	NC			10.00		77	69	72	76	0	00	29.09	30.01
						SUNRISE: 0525 JUL 03 SUNSET: 1958								
01	CLR	NC			10.00		73	68	70	84	0	00	29.08	29.99
04	CLR	NC			7.00		70	67	68	90	0	00	29.07	29.98
07	CLR	NC			5.00	BR	72	68	69	87	0	00	29.08	30.00
10	CLR	NC			10.00		84	71	75	65	0	00	29.09	30.01
13	FEW	043			10.00		89	69	75	52	0	00	29.07	29.98
16	CLR	NC			10.00		91	65	73	42	3	VR	29.02	29.93
19	CLR	NC			10.00		90	66	74	45	0	00	29.00	29.91
22	CLR	NC			10.00		79	69	72	72	0	00	29.04	29.96
						SUNRISE: 0525 JUL 04 SUNSET: 1957								
01	CLR	NC			7.00		75	71	72	87	0	00	29.02	29.93
04	BKN	060			5.00	BR	74	71	72	90	0	00	29.01	29.93
07	CLR	NC			4.00	BR	75	71	72	87	0	00	29.05	29.96
10	CLR	NC			10.00		85	73	77	67	5	16	29.04	29.95
13	OVC	085			3.00	+RA	73	68	70	84	0	00	29.06	29.98
16	CLR	NC			10.00		73	68	70	84	5	10	29.02	29.95
19	FEW	039			10.00		75	67	70	76	3	07	28.99	29.92
22	FEW	048			10.00		72	68	69	87	0	00	29.04	29.96
						SUNRISE: 0526 JUL 05 SUNSET: 1957								
01	BKN	060			6.00	BR	71	67	68	87	0	00	29.05	29.98
04	FEW	011			5.00	BR	70	68	69	93	0	00	29.03	29.96
07	BKN	018			5.00	BR	71	68	69	90	0	00	29.07	30.00
10	OVC	018			9.00		78	69	72	74	0	00	29.09	30.01
13	OVC	037			10.00		84	69	74	61	5	VR	29.06	29.98
16	SCT	055			10.00		86	68	74	55	3	08	29.01	29.93
19	CLR	NC			10.00		76	69	71	79	6	VR	29.02	29.95
22	SCT	080			10.00		71	68	69	90	0	00	29.07	29.99
						SUNRISE: 0526 JUL 06 SUNSET: 1957								
01	CLR	NC			10.00		69	66	67	90	0	00	29.06	29.98
04	CLR	NC			10.00		68	66	67	93	0	00	29.04	29.96
07	CLR	NC			10.00		70	66	67	87	0	00	29.08	30.01
10	CLR	NC			10.00		80	69	73	69	3	VR	29.10	30.02
13	SCT	049			10.00		87	69	75	55	5	VR	29.06	29.98
16	CLR	NC			10.00		84	68	73	59	6	18	29.03	29.95
19	OVC	095			10.00	-RA	80	67	71	65	3	34	29.03	29.95
22	CLR	NC			10.00		74	68	70	82	0	00	29.05	29.97

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE Observation Time (LST)	SATELLITE Eff Cld Amt Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION Tens of Deg	PRESSURE (INCHES, HG) STATION	PRESSURE (INCHES, HG) SEA LEVEL
						SUNRISE: 0527 JUL 07 SUNSET: 1957								
01	CLR	NC			10.00		71	68	69	90	0	00	29.04	29.96
04	OVC	003			0.50	FG	70	69	69	97	0	00	29.03	29.95
07	VV	002			0.25	FG	70	69	69	97	0	00	29.06	29.98
10	OVC	008			8.00		76	71	73	85	3	VR	29.06	29.99
13	BKN	042			10.00		87	70	75	57	0	00	29.02	29.93
16	BKN	095			6.00	HZ	87	68	74	53	0	00	28.96	29.88
19	BKN	060			10.00		81	66	71	60	8	14	28.96	29.88
22	CLR	NC			10.00		76	68	71	76	0	00	28.96	29.88
						SUNRISE: 0527 JUL 08 SUNSET: 1957								
01	CLR	NC			10.00		74	68	70	82	0	00	28.92	29.83
04	SCT	045			7.00		71	68	69	90	0	00	28.92	29.84
07	OVC	047			7.00		73	69	70	87	0	00	28.94	29.86
10	BKN	024			10.00		79	71	74	77	7	26	28.91	29.83
13	FEW	035			10.00		86	70	75	59	10	26	28.87	29.78
16	BKN	070			10.00		85	70	75	61	5	24	28.83	29.75
19	OVC	100			10.00		85	69	74	59	0	00	28.85	29.77
22	OVC	100			10.00		80	70	73	72	0	00	28.89	29.80
						SUNRISE: 0528 JUL 09 SUNSET: 1956								
01	CLR	NC			10.00		75	71	72	87	0	00	28.89	29.80
04	OVC	028			10.00		73	70	71	90	0	00	28.91	29.83
07	OVC	028			10.00		73	68	70	84	0	00	28.97	29.88
10	BKN	029			10.00		81	70	73	69	5	06	29.00	29.91
13	FEW	030			10.00		86	70	75	59	0	00	29.00	29.91
16	SCT	042			10.00		89	68	75	50	6	09	28.96	29.87
19	CLR	NC			10.00		87	69	75	55	0	00	28.98	29.89
22	CLR	NC			10.00		79	70	73	74	0	00	29.03	29.94
						SUNRISE: 0528 JUL 10 SUNSET: 1956								
01	CLR	NC			10.00		75	70	72	85	0	00	29.02	29.93
04	CLR	NC			10.00		73	70	71	90	0	00	29.03	29.94
07	CLR	NC			10.00		74	70	71	87	0	00	29.07	29.99
10	BKN	042			10.00		84	73	76	70	5	VR	29.08	30.00
13	SCT	044			10.00		90	71	77	54	5	18	29.06	29.97
16	OVC	055			10.00		94	69	76	44	3	09	29.02	29.93
19	CLR	NC			10.00		91	68	75	47	0	00	29.02	29.93
22	CLR	NC			10.00		81	72	75	74	0	00	29.08	29.99
						SUNRISE: 0529 JUL 11 SUNSET: 1956								
01	CLR	NC			7.00		77	72	74	85	0	00	29.06	29.97
04	CLR	NC			7.00		75	71	72	87	0	00	29.06	29.97
07	CLR	NC			8.00		77	72	74	85	0	00	29.12	30.03
10	CLR	NC			10.00		86	72	76	63	0	00	29.13	30.04
13	CLR	NC			10.00		92	73	78	54	0	00	29.08	29.98
16	CLR	NC			10.00		96	74	80	49	6	VR	29.02	29.93
19	CLR	NC			10.00		93	74	79	54	3	25	28.99	29.90
22	SCT	047			10.00		85	77	79	77	0	00	29.04	29.94
						SUNRISE: 0530 JUL 12 SUNSET: 1955								
01	CLR	NC			9.00		82	76	78	82	0	00	29.04	29.94
04	CLR	NC			8.00		81	76	77	85	0	00	29.02	29.92
07	OVC	010			10.00		73	71	72	93	3	VR	29.10	30.02
10	FEW	090			10.00		77	72	74	85	3	VR	29.13	30.06
13	CLR	NC			10.00		80	74	76	82	5	VR	29.03	29.94
16	CLR	NC			10.00		84	73	76	70	5	VR	29.02	29.93
19	CLR	NC			10.00		82	73	76	74	0	00	29.02	29.94
22	CLR	NC			10.00		77	74	75	91	0	00	29.04	29.96

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

JULY 2011 **KOQT** **WBAN # 53868**

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE Observation Time (LST)	SATELLITE Eff Cld Amt Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION Tens of Deg	PRESSURE (INCHES, HG) STATION	PRESSURE (INCHES, HG) SEA LEVEL
						SUNRISE: 0530 JUL 13 SUNSET: 1955								
01	CLR	NC			10.00		73	71	72	93	0	00	29.03	29.95
04	CLR	NC			9.00		72	70	71	93	0	00	28.98	29.90
07	SCT	002			8.00		73	70	71	90	0	00	29.00	29.92
10	FEW	110			10.00		84	71	75	65	0	00	29.02	29.93
13	CLR	NC			10.00		89	68	75	50	5	01	29.00	29.91
16	CLR	NC			10.00		91	66	74	44	6	06	28.95	29.86
19	CLR	NC			10.00		88	70	75	55	5	07	28.94	29.85
22	CLR	NC			10.00		79	71	74	77	0	00	28.97	29.88
						SUNRISE: 0531 JUL 14 SUNSET: 1955								
01	CLR	NC			10.00		75	71	72	87	0	00	28.97	29.88
04	CLR	NC			9.00		73	70	71	90	0	00	28.96	29.87
07	CLR	NC			10.00		77	70	72	79	5	06	28.99	29.90
10	CLR	NC			10.00		85	72	76	65	5	VR	29.00	29.91
13	FEW	038			10.00		90	71	77	54	6	VR	28.96	29.88
16	CLR	NC			10.00		93	69	76	46	0	00	28.92	29.83
19	CLR	NC			10.00		82	70	74	67	0	00	28.92	29.83
22	OVC	050			3.00	RA BR	77	73	74	88	0	00	28.98	29.89
						SUNRISE: 0532 JUL 15 SUNSET: 1954								
01	OVC	080			4.00	RA BR	73	72	72	97	0	00	29.00	29.91
04	OVC	042			6.00	-RA BR	73	71	72	93	5	06	28.99	29.90
07	OVC	090			4.00	BR	73	71	72	93	0	00	29.02	29.94
10	OVC	009			7.00		76	71	73	85	3	08	29.04	29.96
13	OVC	065			10.00		79	71	74	77	5	08	29.02	29.95
16	OVC	043			10.00		78	72	74	82	0	00	29.01	29.93
19	OVC	070			2.50	RA BR	73	72	72	97	0	00	29.04	29.97
22	OVC	100			10.00		72	70	71	93	0	00	29.08	30.01
						SUNRISE: 0532 JUL 16 SUNSET: 1954								
01	OVC	044			7.00		70	68	69	93	0	00	29.09	30.02
04	OVC	050			7.00		69	67	68	93	0	00	29.09	30.02
07	OVC	095			6.00	BR	69	67	68	93	0	00	29.13	30.06
10	OVC	070			10.00		73	67	69	82	3	08	29.16	30.10
13	OVC	095			10.00		80	68	72	67	3	13	29.15	30.09
16	BKN	110			10.00		78	69	72	74	5	VR	29.16	30.10
19	OVC	095			10.00		76	68	71	76	0	00	29.18	30.11
22	OVC	110			10.00		73	69	70	87	0	00	29.20	30.14
						SUNRISE: 0533 JUL 17 SUNSET: 1953								
01	OVC	065			10.00		71	68	69	90	0	00	29.20	30.13
04	OVC	080			10.00		70	68	69	93	0	00	29.20	30.14
07	OVC	090			10.00		71	68	69	90	0	00	29.25	30.19
10	OVC	075			10.00		77	67	70	71	0	00	29.27	30.21
13	OVC	070			10.00		83	66	72	57	5	VR	29.26	30.19
16	OVC	042			10.00		87	67	73	52	3	VR	29.21	30.14
19	CLR	NC			10.00		83	69	73	63	3	05	29.19	30.12
22	OVC	095			10.00		78	71	73	79	0	00	29.21	30.14
						SUNRISE: 0534 JUL 18 SUNSET: 1953								
01	BKN	090			8.00		74	70	71	87	0	00	29.20	30.13
04	OVC	095			7.00		72	70	71	93	0	00	29.19	30.11
07	BKN	060			5.00	BR	73	70	71	90	0	00	29.21	30.14
10	BKN	045			10.00		82	71	74	69	0	00	29.19	30.11
13	FEW	038			10.00		87	70	75	57	0	00	29.15	30.08
16	SCT	045			10.00		88	70	75	55	0	00	29.10	30.02
19	CLR	NC			10.00		84	72	76	67	3	VR	29.07	29.99
22	CLR	NC			10.00		79	73	75	82	0	00	29.10	30.02

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE Observation Time (LST)	SATELLITE Eff Cld Amt Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION Tens of Deg	PRESSURE (INCHES, HG) STATION	PRESSURE (INCHES, HG) SEA LEVEL
						SUNRISE: 0534 JUL 19 SUNSET: 1952								
01	CLR	NC			8.00		75	72	73	90	3	27	29.09	30.01
04	CLR	NC			7.00		73	70	71	90	0	00	29.06	29.98
07	CLR	NC			5.00	BR	73	70	71	90	0	00	29.08	29.99
10	CLR	NC			8.00		83	72	75	70	3	19	29.08	30.00
13	FEW	037			10.00		90	72	77	56	0	00	29.04	29.95
16	SCT	055			8.00		92	72	78	52	6	VR	28.99	29.90
19	CLR	NC			10.00		90	72	77	56	6	28	28.97	29.88
22	CLR	NC			10.00		83	74	77	74	0	00	28.99	29.91
						SUNRISE: 0535 JUL 20 SUNSET: 1952								
01	CLR	NC			9.00		79	74	76	85	3	10	28.99	29.90
04	CLR	NC			9.00		77	72	74	85	0	00	28.97	29.88
07	SCT	031			7.00		76	73	74	90	0	00	29.00	29.91
10	CLR	NC			8.00		86	75	78	70	0	00	29.00	29.91
13	BKN	055			9.00		89	75	79	63	0	00	28.99	29.90
16	SCT	049			10.00		93	75	80	56	5	07	28.94	29.85
19	CLR	NC			10.00		91	73	78	56	0	00	28.94	29.85
22	CLR	NC			9.00		81	75	77	82	0	00	28.98	29.89
						SUNRISE: 0536 JUL 21 SUNSET: 1951								
01	CLR	NC			7.00		78	74	75	88	0	00	28.97	29.88
04	CLR	NC			5.00	BR	76	73	74	90	0	00	28.96	29.86
07	CLR	NC			3.00	BR	76	73	74	90	0	00	29.00	29.91
10	BKN	110			6.00	HZ	82	75	77	79	0	00	29.01	29.92
13	OVC	095			10.00	-RA	75	72	73	90	3	VR	29.01	29.93
16	BKN	100			10.00	-RA	78	74	75	88	0	00	29.00	29.92
19	CLR	NC			10.00		80	74	76	82	0	00	29.00	29.92
22	CLR	NC			6.00	BR	76	74	75	94	0	00	29.02	29.94
						SUNRISE: 0536 JUL 22 SUNSET: 1950								
01	OVC	003			5.00	BR	75	73	74	94	0	00	29.02	29.95
04	BKN	021			7.00		74	73	73	97	0	00	29.04	29.96
07	BKN	100			8.00		75	72	73	90	0	00	29.10	30.02
10	BKN	010			8.00		81	74	76	79	3	VR	29.10	30.03
13	FEW	029			6.00	HZ	89	73	78	59	5	28	29.08	30.00
16	CLR	NC			10.00		93	73	79	52	5	18	29.04	29.95
19	CLR	NC			9.00		87	75	78	68	3	07	29.04	29.95
22	CLR	NC			7.00		80	74	76	82	0	00	29.08	30.00
						SUNRISE: 0537 JUL 23 SUNSET: 1950								
01	CLR	NC			5.00	BR	77	74	75	91	0	00	29.08	29.99
04	SCT	003			3.00	BR	75	73	74	94	0	00	29.09	30.00
07	VV	002			0.25	FG	76	75	75	97	0	00	29.16	30.08
10	FEW	016			8.00		84	75	78	74	0	00	29.16	30.09
13	FEW	060			8.00		90	73	78	57	3	17	29.13	30.04
16	CLR	NC			10.00		94	71	78	47	0	00	29.08	29.98
19	CLR	NC			10.00		91	73	78	56	0	00	29.07	29.98
22	OVC	055			10.00		83	71	75	67	3	10	29.13	30.04
						SUNRISE: 0538 JUL 24 SUNSET: 1949								
01	CLR	NC			10.00		79	72	74	79	0	00	29.14	30.06
04	CLR	NC			10.00		74	72	73	94	0	00	29.12	30.03
07	OVC	002			1.25	BR	74	72	73	94	0	00	29.16	30.08
10	BKN	036			10.00		85	73	77	67	6	VR	29.14	30.06
13	BKN	055			10.00		90	72	77	56	6	VR	29.12	30.03
16	CLR	NC			10.00		91	71	77	52	6	VR	29.05	29.96
19	CLR	NC			9.00		88	72	77	59	3	27	29.04	29.95
22	CLR	NC			8.00		81	74	76	79	0	00	29.05	29.96

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

JULY 2011 **KOQT** **WBAN # 53868**

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE Observation Time (LST)	SATELLITE Eff Cld Amt Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION Tens of Deg	PRESSURE (INCHES, HG) STATION	PRESSURE (INCHES, HG) SEA LEVEL
						SUNRISE: 0539 JUL 25 SUNSET: 1948								
01	FEW	049			6.00	BR	78	74	75	88	3	09	29.03	29.93
04	OVC	055			1.00	+RA BR	75	74	74	97	0	00	29.01	29.92
07	CLR	NC			8.00		77	74	75	91	0	00	29.02	29.93
10	BKN	021			10.00		85	74	77	70	3	24	29.01	29.92
13	CLR	NC			10.00		84	75	78	74	5	VR	28.97	29.89
16	BKN	008			10.00		79	74	76	85	0	00	28.94	29.85
19	CLR	NC			10.00		81	73	75	77	0	00	28.92	29.83
22	BKN	016			10.00		78	73	75	85	0	00	28.94	29.85
						SUNRISE: 0539 JUL 26 SUNSET: 1948								
01	CLR	NC			8.00		74	72	73	94	0	00	28.95	29.86
04	OVC	005			9.00		75	72	73	90	0	00	28.92	29.84
07	OVC	007			7.00		73	72	72	97	3	07	28.95	29.87
10	BKN	015			7.00		81	73	75	77	3	06	28.97	29.88
13	CLR	NC			8.00		89	72	77	57	0	00	28.95	29.86
16	FEW	050			10.00		92	68	75	45	0	00	28.91	29.82
19	CLR	NC			10.00		88	70	75	55	0	00	28.91	29.83
22	CLR	NC			8.00		78	73	75	85	0	00	28.96	29.87
						SUNRISE: 0540 JUL 27 SUNSET: 1947								
01	CLR	NC			6.00	BR	74	71	72	90	0	00	28.97	29.88
04	FEW	002			4.00	BR	72	70	71	93	0	00	28.98	29.89
07	VV	002			0.25	FG	72	71	71	97	0	00	29.05	29.96
10	CLR	NC			10.00		84	73	76	70	0	00	29.06	29.97
13	CLR	NC			10.00		92	69	76	47	3	01	29.03	29.95
16	FEW	002			5.00	HZ	94	63	73	36	5	VR	29.01	29.92
19	CLR	NC			10.00		90	72	77	56	0	00	29.02	29.93
22	CLR	NC			10.00		79	72	74	79	0	00	29.06	29.97
						SUNRISE: 0541 JUL 28 SUNSET: 1946								
01	CLR	NC			7.00		75	71	72	87	0	00	29.06	29.96
04	CLR	NC			6.00	BR	73	70	71	90	0	00	29.08	29.99
07	CLR	NC			5.00	BR	73	70	71	90	0	00	29.13	30.04
10	CLR	NC			8.00		86	73	77	65	3	VR	29.15	30.08
13	FEW	041			10.00		92	71	77	50	6	VR	29.13	30.04
16	CLR	NC			10.00		92	68	75	45	0	00	29.10	30.01
19	CLR	NC			10.00		92	69	76	47	0	00	29.10	30.01
22	CLR	NC			10.00		84	70	74	63	0	00	29.13	30.05
						SUNRISE: 0542 JUL 29 SUNSET: 1945								
01	CLR	NC			9.00		79	72	74	79	0	00	29.13	30.04
04	CLR	NC			8.00		77	71	73	82	0	00	29.10	30.02
07	CLR	NC			7.00		77	71	73	82	0	00	29.16	30.08
10	FEW	085			10.00		85	73	77	67	0	00	29.17	30.09
13	FEW	032			10.00		90	73	78	57	0	00	29.15	30.07
16	FEW	049			10.00		92	72	78	52	5	VR	29.10	30.01
19	CLR	NC			10.00		89	72	77	57	3	31	29.08	29.99
22	CLR	NC			10.00		82	74	76	77	0	00	29.12	30.03
						SUNRISE: 0542 JUL 30 SUNSET: 1945								
01	CLR	NC			10.00		78	73	75	85	0	00	29.13	30.04
04	FEW	070			10.00		76	73	74	90	0	00	29.13	30.04
07	CLR	NC			10.00		76	73	74	90	0	00	29.14	30.06
10	FEW	095			10.00		85	72	76	65	0	00	29.15	30.07
13	SCT	050			10.00		90	71	77	54	0	00	29.12	30.03
16	BKN	065			10.00	-RA	80	74	76	82	3	23	29.08	30.00
19	SCT	031			10.00		84	76	78	77	0	00	29.09	30.01
22	CLR	NC			10.00		76	73	74	90	3	13	29.12	30.03

HOUR (LST)	SKY COVER	CEILING 100's of FT.	SATELLITE Observation Time (LST)	SATELLITE Eff Cld Amt Oktas	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F DRY BULB	TEMPERATURE °F DEW POINT	TEMPERATURE °F WET BULB	RELATIVE HUMIDITY (PCT)	WIND SPEED (MPH)	WIND DIRECTION Tens of Deg	PRESSURE (INCHES, HG) STATION	PRESSURE (INCHES, HG) SEA LEVEL
						SUNRISE: 0543 JUL 31 SUNSET: 1944								
01	CLR	NC			10.00		74	72	73	94	0	00	29.10	30.02
04	SCT	004			10.00		73	71	72	93	0	00	29.10	30.03
07	FEW	004			10.00		75	72	73	90	0	00	29.14	30.06
10	CLR	NC			10.00		83	73	76	72	0	00	29.14	30.07
13	BKN	032			10.00		89	73	78	59	0	00	29.12	30.03
16	FEW	042			10.00		90	73	78	57	3	VR	29.08	29.99
19	CLR	NC			10.00		85	72	76	65	3	VR	29.07	29.98
22	CLR	NC			10.00		80	72	74	77	0	00	29.10	30.01

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

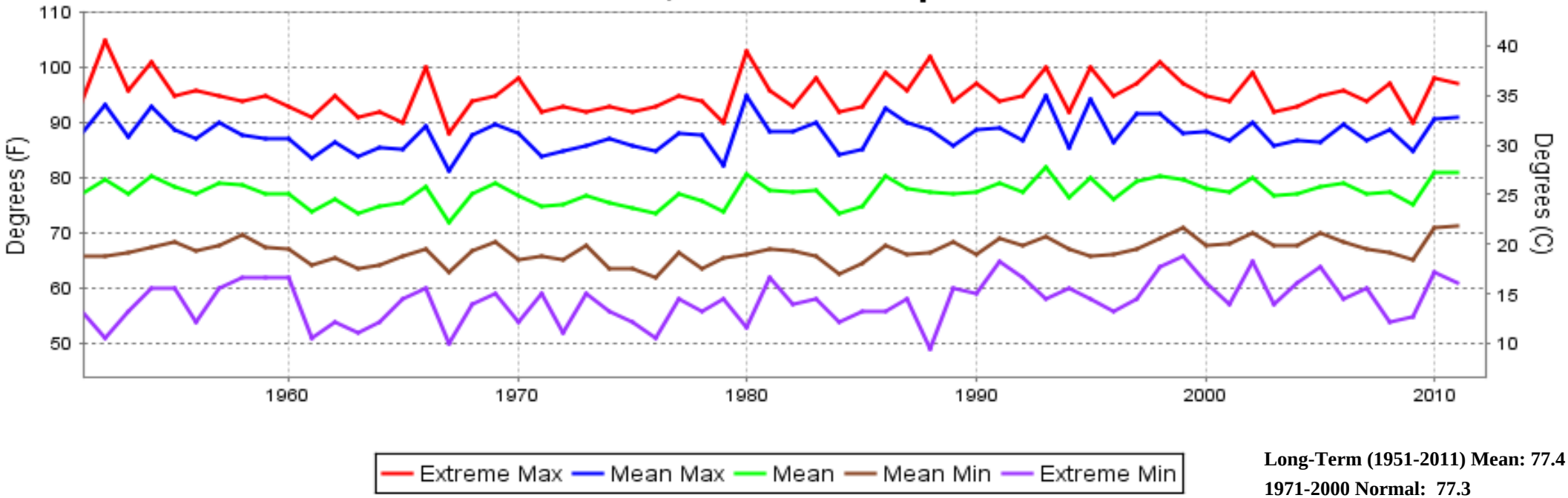
Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet. NC = No Ceiling detected.

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

SUMMARY BY HOUR

HOUR (LST)	AVERAGES CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (Inches, HG) STATION	PRESSURE (Inches, HG) SEA LEVEL	VISIBILITY (Miles)	WIND SPEED (MPH)	RESULTANT WIND (MPH) SPEED	RESULTANT WIND (MPH) DIRECTION
01			74	71	72	88	29.05	29.96	8.29	0	xx	xx
02			74	70	72	89	29.04	29.96	8.10	0	xx	xx
03			73	70	71	90	29.04	29.96	7.84	0	xx	xx
04			73	70	71	91	29.04	29.96	7.21	0	xx	xx
05			72	70	71	92	29.05	29.97	6.46	0	xx	xx
06			72	70	70	93	29.07	29.99	5.32	0	xx	xx
07			73	70	71	90	29.08	30.00	6.27	0	xx	xx
08			76	71	72	84	29.09	30.01	8.19	1	0	36
09			79	71	73	77	29.09	30.01	9.00	1	0	27
10			82	71	75	71	29.09	30.01	9.26	2	1	36
11			84	71	75	66	29.08	30.01	9.31	3	1	27
12			86	71	75	62	29.08	29.99	9.32	3	0	36
13			87	70	75	59	29.06	29.98	9.48	3	0	27
14			87	70	75	58	29.05	29.97	9.58	3	1	36
15			87	70	75	58	29.03	29.95	9.48	3	3	36
16			88	70	75	56	29.02	29.94	9.65	3	2	36
17			88	70	75	56	29.02	29.93	9.61	4	3	27
18			87	70	75	58	29.01	29.93	9.60	3	1	27
19			85	70	75	63	29.02	29.94	9.69	2	0	36
20			82	71	74	71	29.03	29.95	9.55	0	xx	xx
21			80	72	74	78	29.04	29.96	9.58	1	2	36
22			78	72	74	81	29.05	29.97	9.39	0	xx	xx
23			77	72	73	84	29.06	29.97	8.98	0	xx	xx
24			76	71	73	86	29.05	29.97	8.65	0	xx	xx

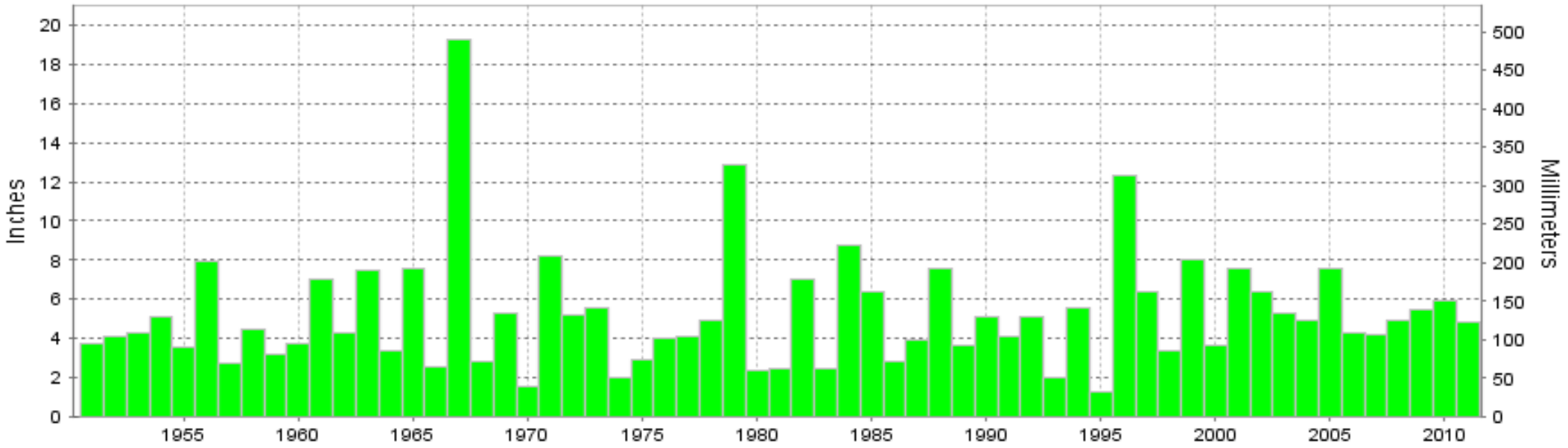
OAK RIDGE, TN JULY Temperatures



Long-Term (1951-2011) Mean: 77.4

1971-2000 Normal: 77.3

OAK RIDGE, TN JULY Precipitation



Long-Term (1951-2011) Mean Monthly Total: 5.23 **1971-2000 Normal: 5.16**

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OAK RIDGE, TN

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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