



AUGUST 2001

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

OAK RIDGE, TN

OAK RIDGE (OQT)
 Lat: 36°01' N Long: 84°14' W Elev (Ground): 913 Feet
 Time Zone: EASTERN WBAN: 53868 ISSN #: -

AUGUST 2001
OAK RIDGE, 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																												
																			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	88	70	79	3	70	73	0	14	BR				0.00	29.31	30.24	1.3	23	2.7	17	28	13	28	01																										
02	87	71	79	3	70	73	0	14	BR HZ				0.00	29.29	30.22	1.1	19	2.6	14	26	10	20	02																										
03	79	71	75	-1	71	72	0	10	RA BR HZ				0.17	29.12	30.05	2.5	23	3.9	14	27	9	26	03																										
04	86	72	79	3	72	73	0	14	RA BR HZ				0.15	29.00	29.93	1.6	20	2.3	15	06	13	06	04																										
05	87	71	79	3	71	73	0	14	RA FG BR HZ				T	29.13	30.06	1.1	15	2.8	10	16	9	16	05																										
06	90	69	80	4	70	73	0	15	RA BR HZ				T	29.22	30.15	0.4	11	2.2	10	06	7	07	06																										
07	89	70	80	4	70	73	0	15	BR				0.00	29.22	30.14	1.0	22	2.5	15	23	9	24	07																										
08	91	73	82	7	72	75	0	17	BR HZ				0.00	29.14	30.07	1.1	21	2.4	9	32	7	18	08																										
09	91	73	82*	7	73	75	0	17	RA FG BR				0.26	29.09	30.01	2.7	22	4.0	22	20	16	23	09																										
10	88	72	80	5	71	73	0	15	RA				T	29.06	29.99	1.5	22	4.0	15	29	10	26	10																										
11	88	71	80	5	72	74	0	15	RA FG BR HZ				0.58	29.07	29.99	0.2	15	1.9	12	08	9	33	11																										
12	85	73	79	5	73	74	0	14	RA BR				T	29.13	30.06	1.0	21	3.4	13	28	9	17	12																										
13	84	68	76	2	71	73	0	11	RA BR				T	29.11	30.04	0.5	28	1.9	8	21	6	35	13																										
14	87	64	76	2	64	68	0	11	BR				0.00	29.05	29.98	0.8	03	2.3	14	07	10	06	14																										
15	89	66	78	4	67	70	0	13	BR HZ				0.00	29.04	29.97	0.5	15	2.3	14	16	12	16	15																										
16	89	69	79	4	67	71	0	14	BR HZ				0.00	29.09	30.02	3.1	23	4.0	20	25	14	24	16																										
17	87	67	77	2	65	69	0	12	RA BR HZ				T	29.14	30.07	1.1	24	3.2	15	28	10	28	17																										
18	80	62	71	-4	64	67	0	6	RA				0.02	29.07	30.01	0.2	14	.5	7	20	6	26	18																										
19	88	67	78	3	68	70	0	13	RA BR				T	28.96	29.89	2.5	22	4.0	20	21	15	21	19																										
20	84	60	72	-2	60	64	0	7	FG+ BR				0.00	29.10	30.03	0.8	34	2.2	12	35	9	36	20																										
21	84	57*	71	-4	57	62	0	6	FG+ BR				0.00	29.18	30.12	1.4	07	2.5	14	07	10	07	21																										
22	88	58	73	-2	61	65	0	8	FG+ BR				0.00	29.19	30.13	0.3	17	1.6	10	19	7	16	22																										
23	91*	66	79	7	69	72	0	14	BR				0.00	29.14	30.07	1.5	22	2.9	17	20	12	21	23																										
24	89	73	81	7	71	73	0	16	RA BR				0.07	29.12	30.04	0.6	16	2.5	22*	02	16*	36	24																										
25	88	69	79	5	71	72	0	14	RA FG+ BR HZ				T	29.12	30.05	0.1	05	1.0	16	35	13	36	25																										
26	89	69	79	5	70	73	0	14	BR HZ				0.00	29.09	30.02	0.6	22	2.4	15	28	12	19	26																										
27	87	68	78	4			0	13	FG BR				0.00	29.04		1.1	20	1.9	12	22	9	21	27																										
28	86	67	77	3	69	71	0	12	BR				0.00	29.07		1.9	20	3.0	14	15	10	19	28																										
29	89	71	80	6	70	72	0	15	BR HZ				0.00	29.09	30.01	0.7	24	2.1	13	21	10	20	29																										
30	83	67	75	1	68	71	0	10	RA BR				0.20	29.09	30.02	2.7	20	4.8	20	16	15	21	30																										
31	74	68	71*	-2	69	70	0	6	RA FG BR				1.59	29.05	29.99	4.1	21	5.0	17	22	12	21	31																										
										86.6		68.1		77.4		■ ■		0.0		12.5		< MONTHLY AVERAGES		TOTALS-->		3.04		29.11		0.7		21		2.7		<-- MONTHLY AVERAGES													
										0.6		3.8		2.2		■ ■		<-----DEPARTURE FROM NORMAL----->										- .66		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3																			
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 1.59 DATE : 31										SEA LEVEL PRESSURE										DATE		TIME																	
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL:										MAXIMUM										:		30.29		01		1053													
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH:										MINIMUM										:		29.81		19		1553													
HEATING: 0 0 0 0										NUMBER OF DAYS WITH →										MAXIMUM TEMP ≥ 90: 4										MINIMUM TEMP ≤ 32: 0										PRECIPITATION ≥ 0.01 INCH: 8									
COOLING: 389 73 1212 236																				MAXIMUM TEMP ≤ 32: 0										MINIMUM TEMP ≤ 0: 0										PRECIPITATION ≥ 0.10 INCH: 6									
																				THUNDERSTORMS: 0										HEAVY FOG: 4										SNOWFALL ≥ 1.0 INCH: :									

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

OAK RIDGE, TN

AUGUST 2001

OQT

WBAN # 53868

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		0.00		
03													03												03		0.17		
04											T	T	04	0.02	T		T	0.01	0.07	0.01	T	T		04		0.15			
05													05			T		0.05					T	05		T			
06													06											06		T			
07													07											07		0.00			
08													08											08		0.00			
09													09											09		0.00			
10													10											10		0.26			
11													11											11		T			
12													12											12		0.58			
13													13											13		T			
14													14											14		T			
15													15											15		0.00			
16													16											16		0.00			
17													17											17		T			
18													18											18		0.02			
19													19											19		T			
20													20											20		0.00			
21													21											21		0.00			
22													22											22		0.00			
23													23											23		0.00			
24													24											24		0.07			
25													25											25		T			
26													26											26		0.00			
27													27											27		0.00			
28													28											28		0.00			
29													29											29		0.00			
30													30											30		0.20			
31	0.01	0.05				T							31	0.46	0.27	T	T							31		1.59			

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.20	.35	.47	.51	.57	.61	.66	.70	.83	.96	1.02	1.04
Ending Date	11	11	11	11	11	31	31	31	31	31	31	31
Ending Time (Hour/Min)	2208	2209	2210	2212	2215	1218	1233	1245	1324	1328	1332	1343

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

OAK RIDGE, TN AUGUST 2001

Ceilorometer (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							5.00	10.00	
02							4.00	9.00	
03							1.75	10.00	
04							1.50	10.00	
05							.50	10.00	
06							1.75	10.00	
07							5.00	10.00	
08							.00	10.00	
09							.50	10.00	
10							8.00	10.00	
11							.50	10.00	
12							2.00	10.00	
13							4.00	10.00	
14							2.00	10.00	
15							4.00	10.00	
16							3.00	10.00	
17							4.00	10.00	
18							5.00	10.00	
19							3.00	10.00	
20							.25	10.00	
21							.25	10.00	
22							.25	10.00	
23							3.00	10.00	
24							2.00	10.00	
25							.25	10.00	
26							3.00	7.00	
27							.50	10.00	
28							.00	10.00	
29							1.75	10.00	
30							1.25	10.00	
31							.50	10.00	
MONTHLY AVGS							2.92	9.81	
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									
3 20 3									

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

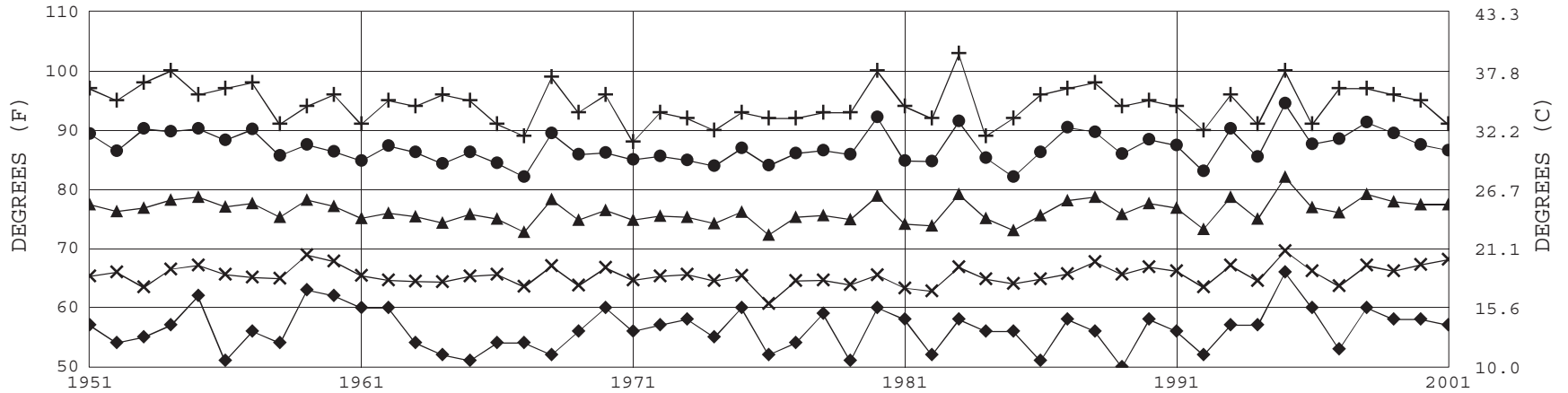
AUGUST 2001

OQT

WBAN # 53868

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: 0603					AUG 25				SUNSET: 1915				SUNRISE: 0608					AUG 31				SUNSET: 1907													
01	SCT	NC	2.00	BR	72	72	72	100	0	00	29.11	30.03	01	OVC	017	9.00	-RA	71	69	70	94	3	22	29.08	30.00										
04	CLR	NC	4.00	BR	71	69	70	94	0	00	29.10	30.03	04	OVC	009	8.00		71	69	70	94	0	00	29.06	29.99										
07	OVC	001	0.25	FG	71	71	71	100	0	00	29.14	30.07	07	OVC	010	4.00	BR	71	70	70	96	7	21	29.07	30.00										
10	OVC	007	4.00	BR	74	71	72	91	0	00	29.17	30.10	10	BKN	018	6.00	-RA BR	73	71	72	94	7	20	29.08	30.01										
13	BKN	029	9.00		86	71	76	61	6	VR	29.13	30.06	13	OVC	022	2.50	RA BR	71	70	70	96	6	21	29.07	30.01										
16	BKN	043	9.00		86	68	74	55	0	00	29.09	30.01	16	BKN	031	10.00	-RA	74	71	72	91	7	21	29.03	29.96										
19	CLR	NC	5.00	BR	78	74	75	87	0	00	29.08	30.01	19	OVC	009	5.00	-RA BR	70	69	69	97	6	21	29.03	29.96										
22	CLR	NC	5.00	BR	73	71	72	94	0	00	29.11	30.05	22	OVC	010	5.00	-RA BR	69	68	68	96	7	21	29.04	29.98										
SUNRISE: 0604					AUG 26				SUNSET: 1914				3-HOURLY OBSERVATION NOTES																						
01	CLR	NC	4.00	BR	71	70	70	96	0	00	29.10	30.03	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.																						
04	CLR	NC	5.00	BR	69	68	68	96	0	00	29.09	30.02	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.																						
07	SCT	NC	4.00	BR	72	70	71	94	0	00	29.14	30.08	NC = No ceiling detected.																						
10	SCT	NC	6.00	HZ	78	69	72	74	5	VR	29.16	30.09	& = Original observation contained additional weather elements.																						
13	SCT	NC	6.00	HZ	86	71	76	61	5	VR	29.10	30.03	See page 3 for additional notes.																						
16	CLR	NC	5.00	HZ	86	70	75	59	5	VR	29.05	29.97	SUMMARY BY HOUR																						
19	FEW	NC	5.00	HZ	82	70	74	67	0	00	29.04	29.96	AVERAGES																						
22	CLR	NC	4.00	HZ					0	00	29.07		RESULTANT WIND (MPH)																						
SUNRISE: 0605					AUG 27				SUNSET: 1912				HOUR (LST)																						
01	CLR	NC	2.50	BR					0	00	29.03		CEILOMETER																						
04	VV	001	0.50	FG					3	18	29.04		EFF CLD AMT																						
07	CLR	NC	3.00	BR					0	00	29.06		DRY BULB																						
10	FEW	NC	10.00						0	00	29.08		DEW POINT																						
13	SCT	NC	10.00						3	VR	29.06		WET BULB																						
16	CLR	NC	10.00						7	18	29.01		RELATIVE HUMIDITY																						
19	CLR	NC	10.00						5	24	29.01		STATION																						
22	CLR	NC	8.00		72	68	69	87	0	00	29.05		SEA LEVEL																						
SUNRISE: 0606					AUG 28				SUNSET: 1911				PRESSURE (INCHES, HG)																						
01	CLR	NC	8.00		70	67	68	90	0	00	29.05		VISIBILITY (MILES)																						
04	CLR	NC	8.00		68	66	67	93	0	00	29.04		WIND SPEED (MPH)																						
07	CLR	NC	5.00	BR	68	66	67	93	0	00	29.07		SPEED																						
10									3	VR	29.11		DIRECTION																						
13	FEW	NC	10.00		82	70	74	67	8	21	29.08	30.01	01																						
16	CLR	NC	10.00		84	70	74	63	8	19	29.03	29.96	02																						
19	FEW	NC	8.00		80	72	74	76	6	VR	29.06	29.98	03																						
22	CLR	NC	9.00		77	71	73	82	3	VR	29.08		04																						
SUNRISE: 0606					AUG 29				SUNSET: 1910				05																						
01	CLR	NC	6.00	BR	73	70	71	90	0	00	29.08	30.01	06																						
04	OVC	007	5.00	BR	72	70	71	94	0	00	29.08	30.00	07																						
07	OVC	003	1.75	BR	71	70	70	96	3	33	29.13	30.06	08																						
10	OVC	009	5.00	HZ	75	70	72	84	0	00	29.13	30.06	09																						
13	FEW	NC	10.00		85	68	73	57	8	22	29.09	30.02	10																						
16	SCT	NC	10.00		88	68	74	52	5	VR	29.06	29.98	11																						
19	CLR	NC	10.00		84	70	74	63	0	00	29.05	29.97	12																						
22	OVC	055	9.00		75	72	73	90	0	00	29.08	30.02	13																						
SUNRISE: 0607					AUG 30				SUNSET: 1908				14																						
01	CLR	NC	9.00		74	71	72	91	3	20	29.08	29.99	15																						
04	CLR	NC	8.00		73	70	71	90	0	00	29.07	29.98	16																						
07	OVC	020	10.00		71	63	66	76	9	18	29.11	30.04	17																						
10	CLR	NC	10.00		73	64	67	74	0	00	29.13	30.07	18																						
13	SCT	NC	10.00		83	70	74	65	8	20	29.09	30.02	19																						
16	CLR	NC	10.00		77	67	70	71	9	22	29.08	30.01	20																						
19	BKN	039	10.00		75	69	71	82	6	21	29.06	29.98	21																						
22	FEW	NC	10.00		73	69	70	87	3	VR	29.09	30.03	22																						

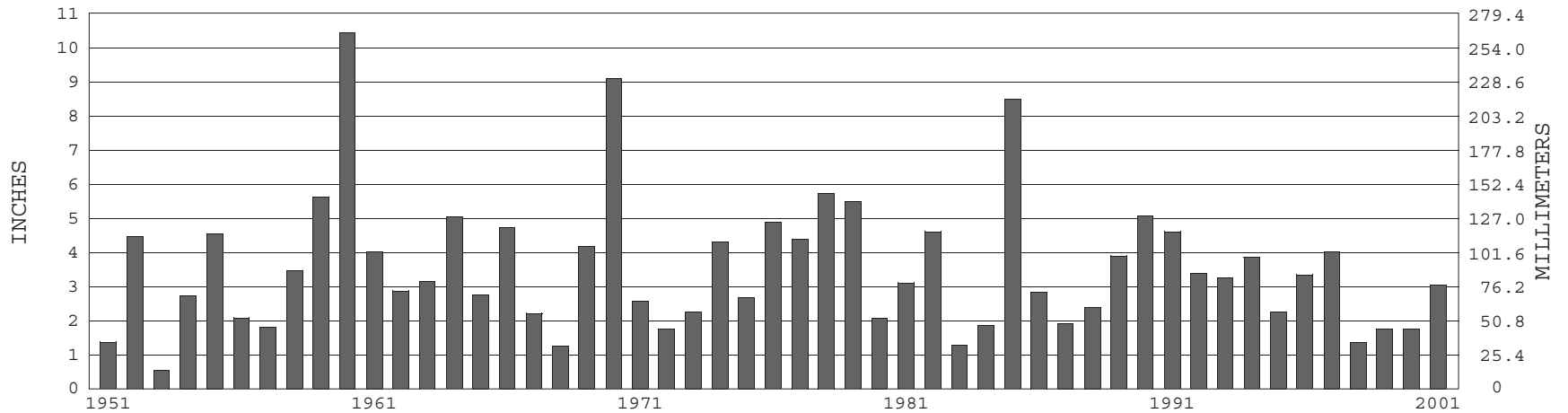
OAK RIDGE, TN AUGUST TEMPERATURES



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

Long-Term (1951-2001) Mean: 76.3 1961-1990 Normal: 75.2

OAK RIDGE, TN AUGUST PRECIPITATION



Long-Term (1951-2001) Mean Monthly Total: 3.54

1961-1990 Normal: 3.70



**AUGUST 2001
OAK RIDGE, 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.

DIRECTOR

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