



FEBRUARY 2002

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 #: -

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		
01	68*	38	53	17	41	47	12	0	RA BR				0.38	29.17	30.14	7.0	27	9.9	32*	21	23*	21	01		
02	46	34	40	4	22	32	25	0					0.00	29.39	30.41	4.6	04	5.7	18	03	14	06	02		
03	42	33	38	2	31	35	27	0	RA BR				0.06	29.25	30.26	2.2	22	3.3	14	25	10	21	03		
04	39	27	33	-3	17	29	32	0					0.00	29.29	30.31	5.3	32	8.5	29	35	21	33	04		
05	37	23	30	-7	10	24	35	0					0.00	29.46	30.50	4.4	05	4.9	14	06	12	06	05		
06	37	32	35	-2	24	31	30	0	RA FZRA SN BR UP				0.45	29.20	30.22	3.4	05	3.4	16	06	13	06	06		
07	41	30	36	-1	35	36	29	0	RA FZFG BR				0.45	29.06	30.06	1.5	34	2.0	18	01	13	36	07		
08	52	27	40	3	31	34	25	0	FG+ FZFG BR				0.00	29.29	30.31	0.1	05	.3	7	07	5	01	08		
09	62	30	46	9	34	38	19	0	FG+ FZFG BR				0.00	29.26	30.27	0.5	04	1.1	8	25	6	06	09		
10	62	35	49	12	39	44	16	0	RA BR				0.14	29.16	30.15	3.7	23	5.6	25	29	20	22	10		
11	46	29	38	0	27	34	27	0	RA				0.01	29.29	30.30	2.1	35	3.9	24	35	16	35	11		
12	57	25	41	3	24	34	24	0					0.00	29.17	30.19	2.6	22	3.4	15	21	13	21	12		
13	52	29	41	3	23	34	24	0					0.00	29.28	30.28	0.6	04	1.8	13	36	10	06	13		
14	56	25	41	3	22	33	24	0					0.00	29.32	30.34	1.0	09	2.2	13	22	9	23	14		
15	61	36	49	10	28	40	16	0	RA				T	29.19	30.18	3.9	24	4.9	23	21	16	21	15		
16	58	39	49	10	29	41	16	0	RA				T	29.07	30.05	2.5	26	4.4	22	28	14	25	16		
17	49	29	39	0	20	33	26	0					0.00	29.18	30.18	3.3	34	5.2	22	01	16	01	17		
18	57	23	40	1	20	32	25	0					0.00	29.33	30.34	0.9	06	1.7	13	05	10	05	18		
19	52	29	41	1	23	35	24	0					0.00	29.23	30.23	0.6	22	1.9	14	26	10	25	19		
20	66	44	55*	15	44	50	10	0	RA BR				0.36	28.92	29.89	7.7	22	8.7	31	19	22	19	20		
21	64	37	51	11	34	43	14	0					0.00	29.03	30.00	4.6	25	4.9	26	27	18	25	21		
22	44	33	39	-2	27	34	26	0					0.00	29.16	30.16	3.0	36	3.7	15	01	12	35	22		
23	50	30	40	-1	24	33	25	0					0.00	29.15	30.16	5.2	04	5.5	18	06	14	06	23		
24	62	25	44	3	26	35	21	0					0.00	29.21	30.22	0.3	19	.9	10	18	7	17	24		
25	66	36	51	9	30	43	14	0					0.00	29.14	30.12	5.0	22	6.7	23	21	18	21	25		
26	55	25	40	-2	29	36	25	0	RA SN BR				0.12	28.99	29.98	7.7	26	8.2	29	27	21	27	26		
27	28	16	22*	-20	7	18	43	0	SN UP				T	29.18	30.22	6.5	27	7.8	23	27	16	27	27		
28	40	16*	28	-15	12	23	37	0					0.00	29.30	30.35	1.5	21	2.7	16	21	14	21	28		
										< MONTHLY AVERAGES				TOTALS->				<- MONTHLY AVERAGES							
										<-----DEPARTURE FROM NORMAL----->				-2.37				SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3							
DEGREE DAYS										GREATEST 24-HR PRECIPITATION: 0.81 DATE :06-07				SEA LEVEL PRESSURE				DATE TIME							
MONTHLY TOTAL DEPARTURE										GREATEST 24-HR SNOWFALL: DATE :				MAXIMUM : 30.58 05 1053											
SEASON TO DATE TOTAL DEPARTURE										GREATEST SNOW DEPTH: DATE :				MINIMUM : 29.77 20 1753											
HEATING: 671 -63 2695 -610										NUMBER OF DAYS WITH =>				MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 18				PRECIPITATION ≥ 0.01 INCH : 8			
COOLING: 0 0 0 0														MAXIMUM TEMP ≤ 32 : 1				MINIMUM TEMP ≤ 0 : 0				PRECIPITATION ≥ 0.10 INCH : 6			
														THUNDERSTORMS : 0				HEAVY FOG : 2				SNOWFALL ≥ 1.0 INCH :			

FEBRUARY 2002
OAK RIDGE, TN

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

OAK RIDGE, TN

FEBRUARY 2002

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					0.02	0.01	0.26	0.09					01												01		0.38		
02													02												02		0.00		
03													03	T	T	0.01	0.03	0.01	0.01	T				03		0.06			
04													04								T				04		0.00		
05													05												05		0.00		
06												T	06	0.04	0.03	0.07	0.07	0.10	0.05	0.03	0.03	T	0.03	T	06		0.45		
07		0.03	0.04	0.04	0.03	0.04	0.02	0.09	0.03	0.03	0.01		07	0.01	0.02	0.01	0.03	0.02							07		0.45		
08													08												08		0.00		
09													09												09		0.00		
10													10		T	0.08	0.06								10		0.14		
11													11												11		0.01		
12		T	T	0.01		T	T				T		12												12		0.00		
13													13												13		0.00		
14													14												14		0.00		
15													15									T		T	15		T		
16	T	T	T	T									16												16		T		
17													17												17		0.00		
18													18												18		0.00		
19													19												19		0.00		
20								0.06	0.11	0.08	0.09	0.02	20					T			T			20		0.36			
21													21												21		0.00		
22													22												22		0.00		
23													23												23		0.00		
24													24												24		0.00		
25													25												25		0.00		
26					0.08	0.04	T						26	T	T									T	26		0.12		
27	T	T	T	T									27	T											27		T		
28													28												28		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)	.11	.14	.17	.20	.25	.30	.33	.35	.36	.36	.36	.38
Ending Date	01	01	01	01	01	01	01	01	01	01	01	01
Ending Time (Hour/Min)	0635	0638	0638	0648	0651	0708	0720	0726	0726	0726	0726	0726

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 FEBRUARY 2002

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							1.75	10.00	
02							10.00	10.00	
03							6.00	10.00	
04							10.00	10.00	
05							10.00	10.00	
06							4.00	10.00	
07							.50	10.00	
08							<.25	10.00	
09							<.25	10.00	
10							2.00	10.00	
11							10.00	10.00	
12							9.00	10.00	
13							10.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							2.50	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							10.00	10.00	
24							7.00	10.00	
25							10.00	10.00	
26							2.00	10.00	
27							6.00	10.00	
28							10.00	10.00	
MONTHLY AVGS							7.33	10.00	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 28									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 2 6 19									

OBSERVATIONS AT 3-HOURLY INTERVALS

OAK RIDGE, TN

FEBRUARY 2002

OQT

WBAN # 53868

HOUR (LST)	SKY COVER CEILING 100'S OF FT		SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER CEILING 100'S OF FT		SATELLITE		WEATHER	TEMPERATURE °F			WIND		PRESSURE (INCHES, HG)					
			OBSERVATION TIME (LST)	EFF CLD AMT Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG				STATION	SEA LEVEL		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
01	CLR	NC			SUNRISE: 0712	FEB 25	SUNSET: 1828	38	29	34	70	5	19	29.18	30.18														
04	CLR	NC						42	24	35	49	5	VR	29.21	30.20														
07	CLR	NC						40	30	36	68	5	22	29.20	30.20														
10	CLR	NC						53	31	43	43	7	VR	29.23	30.22														
13	CLR	NC						62	31	48	31	10	23	29.17	30.15														
16	CLR	NC						66	30	49	26	12	22	29.08	30.06														
19	CLR	NC						60	29	46	31	6	VR	29.06	30.03														
22	CLR	NC						54	30	43	40	3	25	29.03	30.00														

01	CLR	NC			SUNRISE: 0711	FEB 26	SUNSET: 1829	55	31	44	40	9	21	28.94	29.89										
04	OVC	060						52	33	43	49	6	VR	28.85	29.80										
07	OVC	012	BR					48	46	47	93	6	25	28.88	29.85										
10	OVC	016						42	36	39	79	10	27	28.99	29.97										
13	OVC	027						39	31	36	73	13	27	29.05	30.03										
16	BKN	041						38	24	33	57	13	27	29.05	30.03										
19	OVC	046						33	21	29	61	9	28	29.07	30.06										
22	OVC	055						29	17	25	61	9	26	29.08	30.09										
01	OVC	034			SUNRISE: 0710	FEB 27	SUNSET: 1830	24	12	21	60	12	28	29.08	30.11										
04	BKN	060						20	3	16	48	9	27	29.08	30.10										
07	OVC	039						16	4	13	59	7	VR	29.12	30.16										
10	OVC	026						20	5	16	52	10	27	29.19	30.23										
13	BKN	036						24	5	19	44	10	26	29.19	30.23										
16	OVC	041						26	8	21	46	10	28	29.18	30.23										
19	OVC	050						24	9	20	52	8	25	29.24	30.29										
22	OVC	040						24	11	20	57	3	VR	29.29	30.33										

01	SCT	NC			SUNRISE: 0708	FEB 28	SUNSET: 1831	22	9	18	57	0	00	29.28	30.32										
04	SCT	NC						18	12	16	77	0	00	29.29	30.34										
07	CLR	NC						16	12	15	84	0	00	29.32	30.37										
10	CLR	NC						26	11	22	53	3	VR	29.36	30.40										
13	CLR	NC						34	10	27	37	5	VR	29.31	30.34										
16	CLR	NC						39	11	30	31	8	21	29.26	30.29										
19	CLR	NC						37	10	28	33	3	18	29.27	30.31										
22	CLR	NC						28	14	24	56	3	23	29.32	30.36										
					SUNRISE:	FEB 29	SUNSET:																		
					SUNRISE:	FEB 30	SUNSET:																		

					SUNRISE:	FEB 31	SUNSET:																		

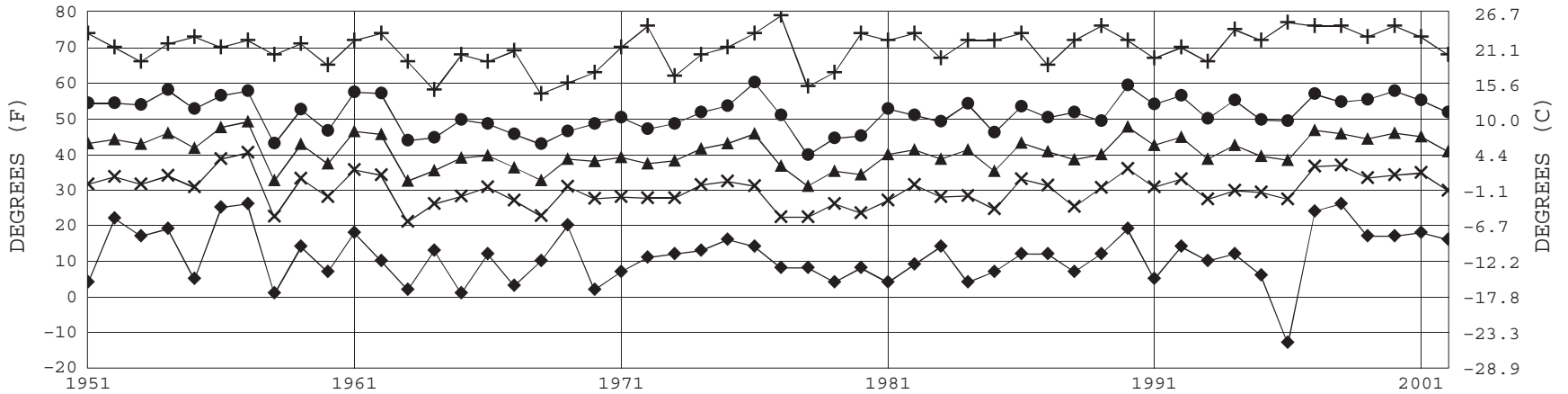
3-HOURLY OBSERVATION NOTES

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	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	SPEED	DIRECTION		
							STATION	SEA LEVEL						
01			38	27	33	67	29.20	30.20	9.62	3	1	28		
02			37	27	33	70	29.19	30.20	9.17	2	1	29		
03			36	27	33	72	29.19	30.19	9.19	3	1	32		
04			35	27	32	72	29.19	30.19	9.11	3	1	34		
05			35	27	32	75	29.19	30.19	8.84	3	1	23		
06			35	28	32	77	29.20	30.20	8.95	2	1	28		
07			34	28	32	79	29.21	30.22	8.39	2	2	26		
08			34	27	32	77	29.22	30.23	8.69	3	1	27		
09			37	28	33	71	29.23	30.24	8.66	4	1	32		
10			40	27	35	63	29.24	30.25	8.91	5	1	31		
11			42	27	36	57	29.24	30.25	9.61	5	2	31		
12			45	26	37	50	29.23	30.24	9.52	6	2	27		
13			46	26	38	49	29.21	30.21	9.54	5	2	27		
14			48	26	39	46	29.18	30.19	9.71	7	3	25		
15			48	25	39	45	29.17	30.17	9.54	7	2	27		
16			49	24	39	43	29.16	30.17	9.54	6	3	26		
17			48	24	39	42	29.17	30.17	9.71	7	2	27		
18			47	23	38	43	29.18	30.18	9.96	5	2	25		
19			45	24	37	48	29.19	30.20	9.93	4	2	28		
20			42	25	36	53	29.20	30.21	9.75	3	2	27		
21			40	25	35	57	29.20	30.21	9.75	2	1	29		
22			39	26	34	62	29.21	30.22	9.61	2	1	28		
23			38	25	33	63	29.21	30.22	9.50	2	1	30		
24			37	26	33	65	29.21	30.22	9.32	2	1	29		

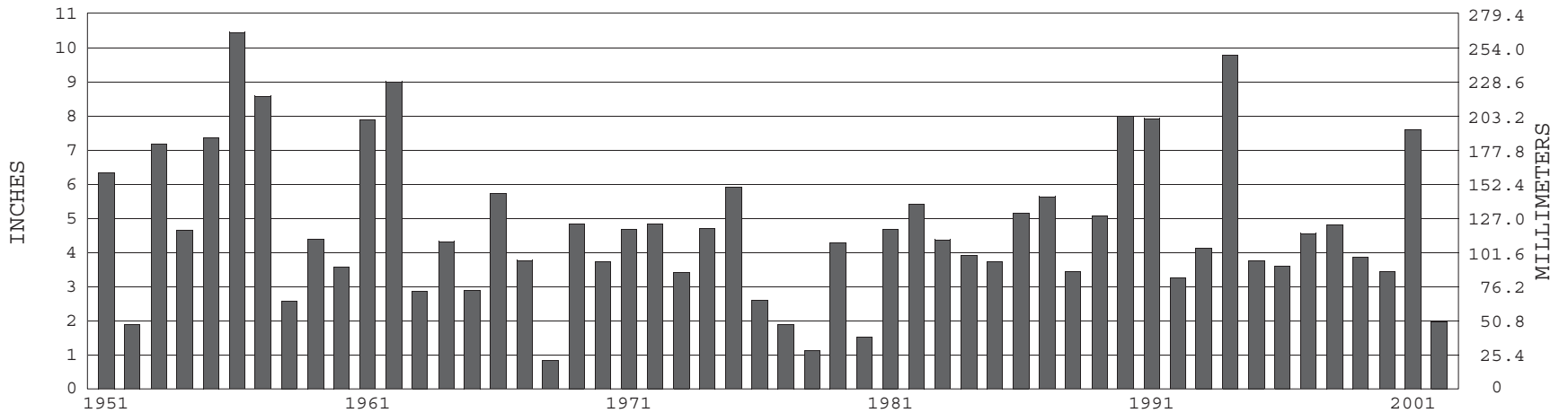
OAK RIDGE, TN FEBRUARY TEMPERATURES



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

Long-Term (1951-2002) Mean: 40.7 1961-1990 Normal: 38.8

OAK RIDGE, TN FEBRUARY PRECIPITATION



Long-Term (1951-2002) Mean Monthly Total: 4.73

1961-1990 Normal: 4.34



FEBRUARY 2002

OAK RIDGE, TN

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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