



# MARCH 2003

## LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

# GREEN BAY, WI

AUSTIN STRAUBEL FIELD (GRB)  
 Lat: 44°30' N Long: 88°07' W Elev (Ground): 682 Feet  
 Time Zone: CENTRAL WBAN: 14898 ISSN #:0198-5698

MARCH 2003  
GREEN BAY, WI

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		0600 LST	1200 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	40	20	30	5	22	28	35	0	HZ	1		0.0	0.00	29.15	29.93	7.5	21	7.8	17	24	14	24	01															
02	32	-3	15	-11	-2	8	50	0	SN FZFG BR UP	1		0.4	0.02	29.29	30.09	11.2	01	12.7	36*	01	30*	01	02															
03	25	-5	10	-16	7	12	55	0	SN FG+ FZFG BR HZ	2		0.9	0.03	29.16	29.96	8.1	19	10.6	25	18	21	18	03															
04	26	12	19	-7	12	17	46	0	SN BR	2	0.2	0.6	0.02	29.09	29.88	6.5	29	9.9	25	03	22	04	04															
05	17	2	10	-17	1	9	55	0		2	0.2	0.0	0.00	29.24	30.04	3.8	36	7.1	29	03	24	03	05															
06	27	0	14	-13	9	15	51	0		2		0.0	0.00	29.26	30.05	7.0	16	7.2	21	17	17	16	06															
07	35	20	28	0	22	26	37	0	SN FG+ FZFG BR HZ	3	0.2	1.4	0.04	29.17	29.96	7.3	24	9.3	22	21	17	19	07															
08	26	-1	13	-15	8	14	52	0	SN FG+ FZFG BR HZ	2	1.2	3.7	0.10	29.24	30.03	9.3	01	11.4	30	01	26	01	08															
09	12	-6	3*	-25	-10	2	62	0	HZ	5		0.0	0.00	29.37	30.17	14.6	26	14.8	35	26	28	26	09															
10	17	-7*	5	-24	-5	5	60	0		5		0.0	0.00	29.41	30.22	9.6	25	10.3	22	25	18	25	10															
11	38	13	26	-3	18	24	39	0	SN	4		0.1	T	29.06	29.84	10.9	22	11.5	25	21	20	21	11															
12	34	22	28	-2	18	23	37	0	SN BR	4		T	T	29.27	30.06	8.8	05	9.9	24	04	22	04	12															
13	31	17	24	-6	17	22	41	0	SN	3		0.1	T	29.52	30.32	3.5	07	7.2	16	04	14	05	13															
14	46	21	34	4	27	31	31	0	BR HZ	0		0.0	0.00	29.30	30.08	9.6	19	9.8	24	22	21	21	14															
15	59	32	46	15	39	42	19	0	BR HZ	0		0.0	0.00	29.11	29.88	7.1	19	7.3	17	20	14	20	15															
16	65*	36	51	20	45	48	14	0	BR HZ	0		0.0	0.00	28.96	29.72	8.0	20	8.1	18	20	16	20	16															
17	52	36	44	12	41	43	21	0	RA FG+ BR HZ	0		0.0	0.20	29.03	29.79	9.8	05	11.5	32	05	26	05	17															
18	40	35	38	6	32	35	27	0	BR	0		0.0	0.00	29.25	30.03	17.3	04	17.3	28	05	24	05	18															
19	39	31	35	3	28	32	30	0	RA BR UP	0		0.0	0.05	29.17	29.95	18.3	04	18.4	32	04	28	05	19															
20	43	33	38	5	38	38	27	0	TS TSRA RA FG+ BR	0		0.0	0.51	28.93	29.70	6.2	05	6.7	20	04	17	05	20															
21	39	33	36	3	35	36	29	0	RA SN FG+ BR UP	0		1.2	0.42	28.82	29.58	8.8	25	9.4	21	23	17	24	21															
22	48	33	41	7	37	39	24	0	RA SN BR UP	1		T	0.01	29.07	29.84	3.7	29	6.7	20	35	16	35	22															
23	60	35	48	14	40	44	17	0	BR HZ	0		0.0	0.00	29.09	29.85	7.5	19	8.0	17	19	14	15	23															
24	62	48	55*	20	38	46	10	0	RA	0		0.0	T	28.96	29.71	10.8	23	12.4	32	24	21	26	24															
25	54	32	43	8			22	0		0		0.0	0.00	29.12	29.88	8.7	28	10.0	22	28	18	28	25															
26	50	28	39	4			26	0	SN	0		T	T	29.20	29.97	1.9	07	3.5	15	10	12	14	26															
27	40	29	35	-1	34	34	30	0	RA SN FG BR UP	0		0.2	0.31	29.13	29.90	10.3	06	10.8	26	05	23	05	27															
28	39	31	35	-1	35	36	30	0	RA SN BR UP	0		T	0.58	28.83	29.59	7.7	34	10.8	23	31	20	32	28															
29	35	26	31	-6	20	26	34	0	SN BR HZ	0		T	T	29.32	30.10	11.7	28	31	24	30	24	30	29															
30	39	23	31	-6	25	29	34	0	SN BR	T		0.1	0.01	29.43	30.21	1.5	26	5.2	25	33	17	34	30															
31	42	21	32	-6	27	30	33	0	SN BR	0		0.4	0.02	29.21	29.99	7.6	14	10.4	22	17	20	16	31															
										39.1		20.9	30.0	■ ■				34.8		0.0	< MONTHLY AVERAGES		TOTALS->				9.1		2.32	29.17		29.95			9.9		<- MONTHLY AVERAGES	
										-.9		-1.7	-1.3	■ ■		<-----		DEPARTURE FROM NORMAL		----->				0.26		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3												
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.69 DATE :20-21				SEA LEVEL PRESSURE				DATE				TIME																	
MONTHLY TOTAL DEPARTURE									GREATEST 24-HR SNOWFALL: 3.7 DATE :08				MAXIMUM				: 30.39				13 1053																	
SEASON TO DATE TOTAL DEPARTURE									GREATEST SNOW DEPTH: 5 DATE :10+				MINIMUM				: 29.48				28 1153																	
HEATING: 1078 18 6918 -21									NUMBER OF DAYS WITH				MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 23				PRECIPITATION ≥ 0.01 INCH : 14																	
COOLING: 0 0 0 0									MAXIMUM TEMP ≤ 32 : 9				MINIMUM TEMP ≤ 0 : 6				PRECIPITATION ≥ 0.10 INCH : 6																					
									THUNDERSTORMS : 1				HEAVY FOG : 6				SNOWFALL ≥ 1.0 INCH : 3																					

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

# GREEN BAY, WI

MARCH 2003

GRB

WBAN # 14898

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		T	T	T	T	T	T						02												02	T	0.02		
03												T	03	T	T	T	0.01	T	T	T	T				03	T	0.03		
04								T	T	T	T	T	04	T											04	T	0.02		
05													05												05	T	0.00		
06													06												06		0.00		
07		T	0.01	0.02	T	T	T				0.01		07												07		0.04		
08							T	T	T		0.01	T	08	T	0.01	T	T								08	0.02	0.10		
09													09												09		0.00		
10													10												10		0.00		
11	T	T	T	T	T					T			11												11		T		
12			T	T	T								12												12		T		
13	T	T	T	T	T								13												13		T		
14													14												14		0.00		
15													15												15		0.00		
16													16												16		0.00		
17	0.20	T											17												17		0.20		
18													18												18		0.00		
19													19			0.01	0.02	0.01	0.01	T	T			19		0.05			
20							0.03	T	T	0.11	0.37		20						T	T					20		0.51		
21	T	0.01	0.03	0.06	0.03	0.05				0.01			21		T		T	T	0.03	0.06	0.02	0.07	0.02	21	0.39	0.42			
22	0.01	T											22						T					22		0.01			
23													23												23		0.00		
24						T	T						24						T	T					24		T		
25													25												25		0.00		
26													26												26	0.00	T		
27							0.01	0.01	0.02	0.07	0.07	0.06	27	0.02				0.01	T	T	T	0.02	0.02	27		0.31			
28							0.04	0.10	0.09	0.13	0.09	0.01	28	T	T	0.02	0.01	0.02						28		0.58			
29	T	T	0.02	0.01	T	0.02	0.04	0.10	0.09	T	T		29	T	T	T	T	0.01	0.01					29		T			
30													30												30	T	0.01		
31													31												31	T	0.02		

## MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.17	.23	.31	.35	.37	.41	.47	.48	.48	.48	.48	.48
Ending Date	17	20	20	20	20	20	20	20	20	20	20	20
Ending Time (Hour/Min)	0006	1122	1124	1124	1124	1124	1124	1124	1124	1124	1124	1124

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 1971–2000

### 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

## GREEN BAY, WI MARCH 2003

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	513	77					4.00	8.00	
02	625	93					.50	10.00	
03	93	14					.25	10.00	
04	0	0					.75	10.00	
05	588	86					10.00	10.00	
06	606	88					7.00	10.00	
07	237	34					.25	8.00	
08	29	4					.25	10.00	
09	617	89					4.00	10.00	
10	697	100					7.00	10.00	
11	380	54					1.50	10.00	
12	315	45					5.00	10.00	
13	644	91					2.50	10.00	
14	653	92					5.00	10.00	
15	713	100					1.75	5.00	
16	558	77					.75	5.00	
17	396	59					<.25	7.00	
18	125	17					.75	10.00	
19	287	40					4.00	10.00	
20	0	0					<.25	3.00	
21	0	0					.00	10.00	
22	70	10					5.00	10.00	
23	156	21					.75	10.00	
24	190	26					10.00	10.00	
25	239	32					10.00	10.00	
26	392	54					7.00	10.00	
27	34	5					.50	10.00	
28	35	5					1.00	10.00	
29	622	82					.75	10.00	
30	551	73					.75	10.00	
31	563	74					.75	10.00	
<b>MONTHLY AVGS</b>							3.42	9.21	
<b>SUNSHINE (MINUTES)</b>									
Total: 10928    Possible: 22214 Percent Possible: 49									
<b>NUMBER OF DAYS WITH:</b>									
<b>SKY CONDITION</b>									
CLR   PTLY CLDY   CLOUDY   MISSING 31									
<b>MINIMUM VISIBILITY (MILES)</b>									
<=0.25    <=3.0    >=7.0 4            17            7									

# OBSERVATIONS AT 3-HOURLY INTERVALS

# GREEN BAY, WI

MARCH 2003

GRB

WBAN # 14898

HOUR (LST)	SATELLITE			WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE			WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)				
	SKY COVER	CEILING 100'S OF FT	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	SKY COVER		CEILING 100'S OF FT	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
<b>SUNRISE: 0630</b>					<b>MAR 01</b>		<b>SUNSET: 1740</b>					<b>SUNRISE: 0620</b>					<b>MAR 07</b>		<b>SUNSET: 1748</b>									
03	CLR	NC		6.00	HZ	23	17	21	78	6	20	29.26	30.03	03	OVC	010		0.75	-SN	BR	24	21	23	88	16	20	29.13	29.91
06	CLR	NC		6.00	HZ	21	16	20	81	6	20	29.24	30.02	06	OVC	021		4.00	-SN	BR	26	22	25	84	12	21	29.12	29.91
09	CLR	NC		5.00	HZ	27	19	24	72	8	21	29.23	30.01	09	OVC	015		4.00	BR		29	25	28	85	9	24	29.15	29.93
12	CLR	NC		6.00	HZ	37	23	32	57	9	20	29.17	29.95	12	FEW	NC		6.00	HZ		32	25	29	75	10	29	29.18	29.96
15	CLR	NC		7.00		38	22	32	53	10	20	29.09	29.87	15	OVC	034		7.00			35	23	31	61	8	27	29.18	29.96
18	OVC	080		8.00		35	25	31	67	10	21	29.06	29.83	18	BKN	036		4.00	HZ		32	23	29	69	6	21	29.20	29.98
21	OVC	080		6.00	HZ	34	26	31	73	9	22	29.03	29.81	21	CLR	NC		6.00	HZ		25	20	23	81	7	27	29.25	30.03
24	BKN	110		4.00	HZ	32	27	30	82	9	25	29.00	29.77	24	SCT	NC		5.00	BR		21	17	20	85	5	25	29.25	30.03
<b>SUNRISE: 0629</b>					<b>MAR 02</b>		<b>SUNSET: 1741</b>					<b>SUNRISE: 0618</b>					<b>MAR 08</b>		<b>SUNSET: 1749</b>									
03	OVC	031		4.00	-SN	22	17	20	82	17	01	29.07	29.85	03	OVC	028		7.00			26	19	24	75	0	00	29.21	29.98
06	OVC	060		9.00	UP	12	6	11	77	18	36	29.20	29.99	06	OVC	026		10.00			21	17	20	85	12	05	29.21	29.99
09	CLR	NC		10.00		5	-8	3	55	20	01	29.32	30.12	09	OVC	030		3.00	-SN	BR	18	14	17	84	17	03	29.20	29.98
12	CLR	NC		10.00		7	-6	5	55	14	02	29.36	30.15	12	VV	003		0.25	+SN	FZFG	15	11	14	84	20	02	29.18	29.97
15	CLR	NC		10.00		11	-7	8	44	14	36	29.35	30.15	15	OVC	014		2.00	-SN		12	6	11	77	14	01	29.19	29.98
18	CLR	NC		10.00		7	-8	5	50	7	06	29.37	30.18	18	CLR	NC		10.00	-SN		11	2	9	67	6	34	29.25	30.04
21	CLR	NC		10.00		2	-7	1	66	8	06	29.39	30.20	21	OVC	100		10.00			11	-3	8	53	14	31	29.32	30.11
24	CLR	NC		10.00		-3	-11	-4	68	9	04	29.39	30.21	24	CLR	NC		10.00			-1	-12	-2	59	7	28	29.34	30.15
<b>SUNRISE: 0627</b>					<b>MAR 03</b>		<b>SUNSET: 1743</b>					<b>SUNRISE: 0616</b>					<b>MAR 09</b>		<b>SUNSET: 1750</b>									
03	CLR	NC		10.00		-4	-12	-5	68	6	04	29.37	30.18	03	CLR	NC		10.00			-1	-13	-2	56	9	26	29.36	30.17
06	CLR	NC		10.00		-4	-10	-5	75	0	00	29.35	30.16	06	BKN	110		10.00			-1	-14	-2	53	12	25	29.38	30.19
09	CLR	NC		10.00		8	-3	6	60	5	12	29.28	30.08	09	CLR	NC		10.00			-1	-13	-2	56	18	28	29.43	30.24
12	OVC	022		6.00	HZ	20	11	17	68	21	18	29.16	29.96	12	CLR	NC		9.00			6	-10	4	47	20	25	29.38	30.19
15	OVC	009		0.50	SN FZFG	21	18	20	88	16	19	29.04	29.84	15	CLR	NC		8.00			11	-7	8	44	22	26	29.30	30.11
18	OVC	017		1.50	-SN BR	22	19	21	89	14	20	29.09	29.79	18	CLR	NC		8.00			9	-7	6	48	22	27	29.30	30.10
21	OVC	018		8.00		24	20	23	84	13	21	28.95	29.74	21	CLR	NC		10.00			5	-8	3	55	13	27	29.36	30.17
24	OVC	014		6.00	BR	25	21	24	85	12	22	28.96	29.74	24	CLR	NC		10.00			1	-10	0	59	9	26	29.40	30.22
<b>SUNRISE: 0625</b>					<b>MAR 04</b>		<b>SUNSET: 1744</b>					<b>SUNRISE: 0614</b>					<b>MAR 10</b>		<b>SUNSET: 1752</b>									
03	OVC	024		8.00		26	18	23	71	21	26	28.97	29.75	03	CLR	NC		10.00			-5	-13	-6	68	8	27	29.45	30.26
06	OVC	110		10.00		19	12	17	74	8	27	29.04	29.82	06	CLR	NC		10.00			-4	-13	-5	65	10	27	29.50	30.32
09	VV	009		1.00	-SN BR	18	14	17	84	13	26	29.10	29.89	09	CLR	NC		10.00			3	-8	1	60	16	28	29.51	30.33
12	OVC	010		2.00	-SN	18	12	16	77	13	28	29.15	29.94	12	CLR	NC		10.00			10	-3	8	55	12	24	29.47	30.28
15	FEW	NC		10.00		19	11	17	71	7	32	29.11	29.89	15	CLR	NC		10.00			16	0	12	49	16	24	29.40	30.21
18	SCT	NC		10.00		19	9	16	65	5	34	29.11	29.90	18	CLR	NC		10.00			15	0	12	51	7	24	29.34	30.15
21	SCT	NC		10.00		18	12	16	77	3	36	29.16	29.95	21	CLR	NC		10.00			11	-1	9	58	8	23	29.31	30.11
24	FEW	NC		10.00		12	6	11	77	16	04	29.15	29.94	24	OVC	070		10.00			13	1	10	59	10	23	29.27	30.06
<b>SUNRISE: 0623</b>					<b>MAR 05</b>		<b>SUNSET: 1745</b>					<b>SUNRISE: 0613</b>					<b>MAR 11</b>		<b>SUNSET: 1753</b>									
03	BKN	028		10.00		9	2	8	73	18	03	29.17	29.96	03	OVC	065		10.00			13	7	12	77	10	23	29.23	30.02
06	FEW	NC		10.00		4	-1	3	80	8	36	29.21	30.01	06	OVC	041		10.00			15	9	14	77	9	19	29.17	29.96
09	CLR	NC		10.00		10	-2	8	58	7	35	29.27	30.06	09	OVC	049		10.00			19	12	17	74	10	20	29.10	29.89
12	CLR	NC		10.00		14	0	11	53	9	32	29.29	30.09	12	CLR	NC		10.00			28	18	25	66	16	20	29.01	29.80
15	CLR	NC		10.00		17	-1	13	45	0	00	29.25	30.05	15	CLR	NC		10.00			36	24	32	62	18	21	28.91	29.69
18	CLR	NC		10.00		15	0	12	51	0	00	29.26	30.06	18	CLR	NC		10.00			37	26	33	65	12	23	28.93	29.71
21	CLR	NC		10.00		13	2	11	61	5	21	29.28	30.08	21	FEW	NC		10.00			36	27	32	70	10	24	28.99	29.77
24	FEW	NC		10.00		13	5	11	70	0	00	29.26	30.05	24	OVC	060		8.00			34	29	32	82	5	28	29.06	29.84
<b>SUNRISE: 0622</b>					<b>MAR 06</b>		<b>SUNSET: 1747</b>					<b>SUNRISE: 0611</b>					<b>MAR 12</b>		<b>SUNSET: 1754</b>									
03	CLR	NC		10.00		8	2	7	76	0	00	29.27	30.07	03	OVC	020		6.00	BR		29	26	28	89	12	07	29.10	29.88
06	CLR	NC		10.00		1	-3	0	83	0	00	29.28	30.08	06	OVC	028		10.00			23	18	21	81	17	04	29.19	29.97
09	CLR	NC		9.00		14	3	12	61	0	00	29.32	30.11	09	FEW	NC		10.00			23	14	20	68	15	03	29.26	30.04
12	BKN	035		10.00		24	14	21	65	14	17	29.31	30.09	12	OVC	060		10.00			26	14	22	60	12	05	29.30	30.08
15	SCT	NC		10.00		26	15	23	63	13	19	29.25	30.04	15	BKN	029		10.00			27	18	24	69	10	06	29.31	30.09
18	FEW	NC		10.00		23	15	21	72	14	15	29.23	30.03	18	BKN	140		10.00			24	16	22	71	6	06	29.34	30.14
21	CLR	NC		10.00		22	17	20	82	13	16	29.20	29.99	21	CLR	NC		10.00			24	16	22	71	6	11	29.38	30.17
24	BKN	090		7.00		21	17	20	85	8	18	29.18	29.97	24	OVC	028		7.00	-SN		24	17	22	75	7	04	29.39	30.18

# OBSERVATIONS AT 3-HOURLY INTERVALS

## GREEN BAY, WI

MARCH 2003

GRB

WBAN # 14898

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		OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)		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 Oktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
<p><b>SUNRISE: 0609 MAR 13 SUNSET: 1756</b></p>																													
03	OVC	015		4.00	-SN	22	17	20	82	7	02	29.43	30.22	03	OVC	036		10.00		35	25	31	67	14	04	29.29	30.06		
06	CLR	NC		10.00		18	12	16	77	10	04	29.49	30.28	06	CLR	NC		10.00		31	22	28	69	18	03	29.27	30.04		
09	CLR	NC		10.00		21	14	19	74	10	05	29.56	30.35	09	CLR	NC		10.00		33	25	30	72	23	03	29.24	30.01		
12	CLR	NC		10.00		27	17	24	66	9	06	29.58	30.37	12	CLR	NC		10.00		36	27	33	70	22	05	29.20	29.97		
15	CLR	NC		10.00		30	15	25	54	0	00	29.55	30.34	15	BKN	085		10.00		37	27	33	67	24	05	29.11	29.88		
18	CLR	NC		10.00		29	19	26	66	3	17	29.56	30.35	18	OVC	032		5.00	RA	35	30	33	82	20	05	29.08	29.86		
21	CLR	NC		10.00		24	20	23	84	8	16	29.54	30.33	21	OVC	009		9.00		33	32	33	96	17	04	29.08	29.86		
24	CLR	NC		10.00		24	20	23	84	7	18	29.50	30.29	24	OVC	003		4.00	BR	33	33	33	100	14	04	29.04	29.81		
<p><b>SUNRISE: 0607 MAR 14 SUNSET: 1757</b></p>																													
03	CLR	NC		10.00		22	19	21	89	5	17	29.47	30.26	03	OVC	001		1.00	BR	34	34	34	100	10	04	29.02	29.79		
06	CLR	NC		10.00		21	17	20	85	6	17	29.42	30.22	06	OVC	001		0.50	FG	34	34	34	100	7	05	29.00	29.77		
09	FEW	NC		8.00		30	23	28	75	10	19	29.37	30.16	09	VV	001		0.13	FG	36	36	36	100	7	05	28.98	29.75		
12	CLR	NC		6.00	HZ	39	30	35	70	15	19	29.32	30.09	12	OVC	003		2.00	TS	42	42	42	100	0	00	28.94	29.71		
15	CLR	NC		7.00		45	33	40	63	13	20	29.22	29.99	15	OVC	001		0.50	FG	42	42	42	100	8	05	28.89	29.65		
18	CLR	NC		8.00		43	34	39	71	12	20	29.17	29.95	18	VV	001		0.13	FG	41	41	41	100	3	06	28.87	29.64		
21	CLR	NC		7.00		39	34	37	82	8	20	29.17	29.95	21	VV	001		0.25	-RA FG	39	39	39	100	5	30	28.84	29.61		
24	CLR	NC		5.00	BR	35	32	34	89	3	17	29.20	29.96	24	VV	001		0.25	FG	38	38	38	100	0	00	28.82	29.58		
<p><b>SUNRISE: 0605 MAR 15 SUNSET: 1758</b></p>																													
03	CLR	NC		4.00	BR	33	31	32	92	0	00	29.18	29.95	03	OVC	001		0.50	-RA FG	37	37	37	100	5	12	28.79	29.55		
06	CLR	NC		3.00	BR	33	31	32	92	5	19	29.17	29.94	06	OVC	027		10.00		36	35	36	97	5	29	28.79	29.54		
09	CLR	NC		2.50	HZ	41	36	39	82	7	19	29.18	29.95	09	OVC	009		9.00		37	35	36	93	12	26	28.80	29.56		
12	CLR	NC		3.00	HZ	52	43	48	72	12	20	29.14	29.90	12	OVC	015		10.00		38	34	36	86	15	26	28.80	29.56		
15	CLR	NC		4.00	HZ	59	47	53	64	9	19	29.06	29.83	15	OVC	018		10.00		38	34	36	86	12	24	28.82	29.58		
18	CLR	NC		3.00	HZ	48	43	46	83	6	14	29.05	29.82	18	OVC	031		9.00		37	34	36	89	13	23	28.84	29.61		
21	CLR	NC		4.00	BR	44	40	42	85	10	19	29.04	29.80	21	OVC	006		5.00	UP BR	34	33	34	97	8	22	28.85	29.62		
24	CLR	NC		2.00	BR	41	40	41	96	8	20	29.03	29.79	24	OVC	009		5.00	-SN BR	33	32	33	96	9	27	28.85	29.62		
<p><b>SUNRISE: 0604 MAR 16 SUNSET: 1759</b></p>																													
03	CLR	NC		2.00	BR	39	38	39	96	7	23	29.02	29.78	03	OVC	004		7.00		34	33	34	97	10	34	28.91	29.68		
06	CLR	NC		0.75	BR	36	35	36	97	5	18	29.01	29.78	06	OVC	017		10.00		34	32	33	92	6	34	28.99	29.77		
09	CLR	NC		1.25	BR	46	43	45	89	10	20	28.99	29.75	09	OVC	023		8.00		37	35	36	93	6	30	29.07	29.84		
12	CLR	NC		3.00	HZ	55	48	51	77	12	21	28.96	29.72	12	OVC	012		10.00		42	38	40	85	6	34	29.11	29.88		
15	CLR	NC		4.00	HZ	65	53	58	66	10	20	28.90	29.65	15	BKN	019		10.00		47	41	44	80	9	26	29.10	29.87		
18	CLR	NC		5.00	HZ	60	50	55	70	9	19	28.89	29.65	18	OVC	031		7.00		45	41	43	86	7	20	29.14	29.91		
21	CLR	NC		4.00	BR	52	48	50	86	7	20	28.93	29.69	21	OVC	042		6.00	BR	43	40	42	89	7	21	29.16	29.93		
24	OVC	045		2.50	BR	51	48	50	89	6	25	28.94	29.69	24	OVC	036		5.00	BR	42	40	41	92	3	23	29.16	29.92		
<p><b>SUNRISE: 0602 MAR 17 SUNSET: 1801</b></p>																													
03	OVC	100		0.25	FG	45	44	45	97	3	18	28.92	29.67	03	OVC	060		5.00	BR	40	39	40	97	3	20	29.13	29.90		
06	OVC	010		<.25	FG	38	37	38	97	0	00	28.94	29.70	06	CLR	NC		2.00	BR	37	36	37	96	5	21	29.15	29.91		
09	VV	001		<.25	FG	46	46	46	100	6	04	29.00	29.76	09	CLR	NC		4.00	BR	45	41	43	86	7	21	29.15	29.91		
12	SCT	NC		3.00	HZ	49	43	46	80	16	05	29.02	29.78	12	CLR	NC		10.00		55	39	47	55	10	20	29.11	29.87		
15	FEW	NC		3.00	HZ	50	43	47	77	14	03	29.03	29.79	15	CLR	NC		10.00		59	41	50	51	10	20	29.06	29.82		
18	CLR	NC		3.00	HZ	45	39	42	80	13	05	29.08	29.84	18	CLR	NC		7.00		54	43	48	67	12	15	29.04	29.80		
21	OVC	009		5.00	BR	38	35	37	89	14	04	29.13	29.90	21	CLR	NC		8.00		49	40	45	71	10	18	29.05	29.80		
24	OVC	011		6.00	HZ	39	34	37	82	18	04	29.15	29.91	24	FEW	NC		9.00		49	39	44	69	12	18	29.00	29.76		
<p><b>SUNRISE: 0560 MAR 18 SUNSET: 1801</b></p>																													
03	OVC	005		5.00	BR	37	35	36	93	17	04	29.17	29.93	03	BKN	110		10.00		52	37	45	57	13	19	28.95	29.70		
06	OVC	017		8.00		37	34	36	89	13	04	29.23	30.00	06	OVC	085		10.00		50	38	44	63	15	20	28.93	29.68		
09	OVC	015		9.00		36	32	34	86	16	04	29.27	30.04	09	CLR	NC		10.00		52	40	46	64	13	21	28.93	29.68		
12	OVC	015		10.00		38	33	36	83	17	04	29.28	30.05	12	SCT	NC		10.00		58	44	51	60	13	30	28.91	29.67		
15	OVC	024		10.00		38	31	35	76	22	04	29.27	30.04	15	FEW	NC		10.00		60	35	48	39	13	25	28.93	29.69		
18	OVC	024		10.00		35	29	33	78	16	04	29.29	30.06	18	SCT	NC		10.00		54	38	46	55	9	22	28.95	29.70		
21	OVC	036		10.00		35	28	32	76	16	04	29.31	30.08	21	OVC	080		10.00		51	35	44	54	10	23	29.01	29.76		
24	OVC	028		10.00		36	29	33	76	15	04	29.30	30.07	24	BKN	100		10.00		48	34	42	58	8	24	29.00	29.76		

# OBSERVATIONS AT 3-HOURLY INTERVALS

# GREEN BAY, WI

MARCH 2003

GRB

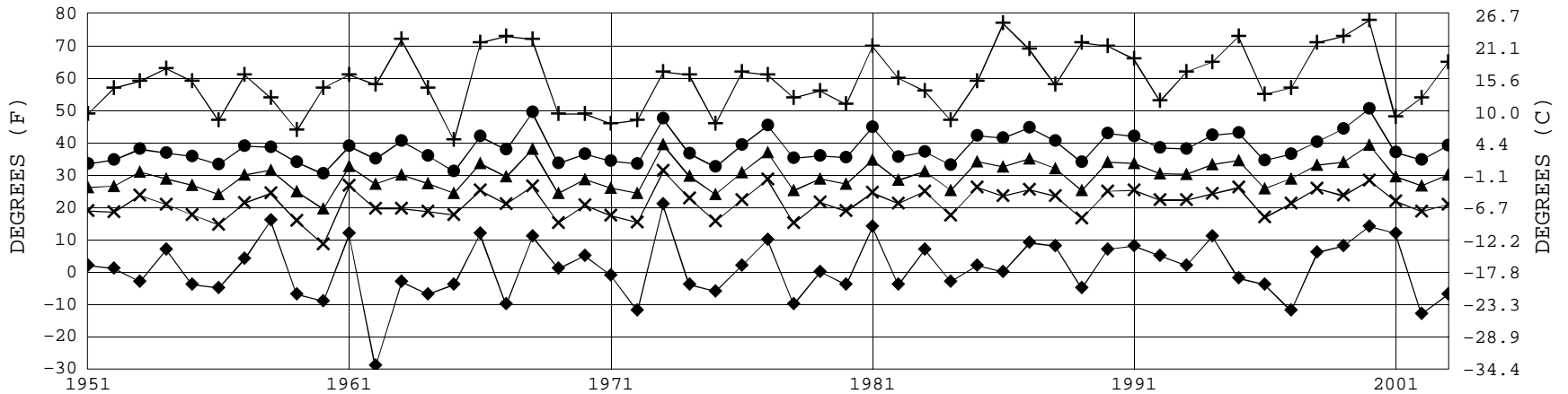
WBAN # 14898

HOUR (LST)	SKY COVER		CEILING	100'S OF FT	SATELLITE		OBSERVATION TIME (LST)	EFF CLD AMT Okta	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING	100'S OF FT	SATELLITE		OBSERVATION TIME (LST)	EFF CLD AMT Okta	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				
					SUNRISE: 0547      MAR 25      SUNSET: 1810																																
03	CLR	NC						10.00			42	31	37	65	9	24	29.03	29.79	03	SCT	NC						10.00			23	20	22	88	9	04	29.38	30.16
06	CLR	NC						10.00			37	29	34	73	9	27	29.09	29.85	06	CLR	NC						10.00			21	18	20	88	5	05	29.39	30.18
09	CLR	NC						10.00			45	33	40	63	14	28	29.14	29.90	09	CLR	NC						10.00			29	22	27	75	7	12	29.37	30.16
12	SCT	NC						10.00			50	34	43	54	13	27	29.13	29.89	12	SCT	NC						10.00			37	29	34	73	12	19	29.30	30.07
15	SCT	NC						10.00			52	34	44	50	13	28	29.11	29.87	15	CLR	NC						10.00			39	32	36	76	16	14	29.17	29.94
18	CLR	NC						10.00			48	32	41	54	9	28	29.15	29.91	18	OVC	014						1.25	-SN	BR	33	32	33	96	14	15	29.09	29.87
21	CLR	NC						10.00							7	35	29.20	29.96	21	OVC	021						5.00	BR	34	33	34	97	15	16	28.96	29.74	
24	CLR	NC						10.00							3	36	29.20	29.97	24	CLR	NC						5.00	BR	35	34	35	96	7	18	28.84	29.60	
SUNRISE: 0545      MAR 26      SUNSET: 1811																		<b>3-HOURLY OBSERVATION NOTES</b>																			
03	FEW	NC						8.00							0	00	29.20	29.97	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.																		
06	OVC	065						10.00						5	05	29.23	30.00																				
09	BKN	085						7.00			39	32	36	76	7	04	29.22	29.99																			
12	OVC	080						10.00			47	31	40	54	7	05	29.21	29.98																			
15	SCT	NC						10.00			49	26	39	41	5	VR	29.17	29.94																			
18	OVC	080						10.00			43	32	38	65	10	13	29.18	29.95																			
21	CLR	NC						10.00			34	27	31	76	0	00	29.20	29.97																			
24	CLR	NC						7.00			31	30	31	96	0	00	29.20	29.97																			
SUNRISE: 0543      MAR 27      SUNSET: 1812																																					
03	CLR	NC						10.00			31	27	29	85	9	04	29.19	29.96																			
06	OVC	044						10.00			32	30	31	92	3	08	29.21	29.97																			
09	OVC	035						4.00	-RA BR		35	34	35	96	7	09	29.24	30.01																			
12	OVC	004						0.50	SN FG		33	33	33	100	9	09	29.20	29.98																			
15	OVC	008						4.00	BR		37	36	37	96	14	07	29.11	29.88																			
18	OVC	008						3.00	-RA BR		37	36	37	96	20	05	29.04	29.81																			
21	OVC	013						5.00	-RA BR		38	37	38	97	14	05	29.04	29.81																			
24	OVC	003						2.50	UP BR		36	36	36	100	14	04	28.95	29.72																			
SUNRISE: 0541      MAR 28      SUNSET: 1813																																					
03	OVC	055						4.00	-RA BR		36	35	36	97	13	03	28.84	29.60																			
06	OVC	015						2.50	-RA BR		37	36	37	96	10	02	28.80	29.55																			
09	OVC	003						1.25	-RA BR		37	37	37	100	8	01	28.74	29.49																			
12	OVC	005						9.00	-RA		38	37	38	97	14	33	28.73	29.48																			
15	OVC	011						6.00	-RA BR		38	36	37	93	12	31	28.77	29.53																			
18	OVC	011						10.00	-RA		36	35	36	97	13	28	28.84	29.61																			
21	OVC	012						9.00			33	32	33	96	14	29	28.92	29.70																			
24	OVC	024						10.00			31	24	28	76			29.02	29.79																			
SUNRISE: 0540      MAR 29      SUNSET: 1815																																					
03	OVC	041						10.00			28	17	25	63			29.10	29.88																			
06	BKN	047						10.00			26	17	23	69			29.17	29.95																			
09	OVC	039						10.00			27	17	24	66			29.26	30.04																			
12	OVC	027						10.00			29	21	26	72			29.33	30.11																			
15	OVC	023						5.00	HZ		31	26	29	82	15	33	29.38	30.17																			
18	BKN	055						10.00			33	20	29	59	13	33	29.44	30.23																			
21	CLR	NC						10.00			29	18	25	64	7	33	29.52	30.30																			
24	CLR	NC						10.00			26	22	25	84	0	00	29.52	30.31																			
SUNRISE: 0538      MAR 30      SUNSET: 1816																																					
03	CLR	NC						10.00			25	22	24	88	0	00	29.50	30.29																			
06	FEW	NC						10.00			25	20	23	81	5	22	29.48	30.27																			
09	OVC	055						10.00			32	22	28	66	9	21	29.45	30.24																			
12	OVC	060						10.00			39	26	34	60	10	22	29.40	30.19																			
15	SCT	NC						10.00			38	29	34	70	0	00	29.36	30.15																			
18	SCT	NC						10.00			33	30	32	89	5	34	29.37	30.16																			
21	SCT	NC						10.00			29	27	28	92	7	01	29.40	30.19																			
24	CLR	NC						10.00			26	22	25	84	9	05	29.39	30.18																			

## 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			28	23	26	82	29.17	29.95	6.73	8	0	0
02			27	22	26	83	29.17	29.94	6.60	8	1	35
03			26	21	25	82	29.16	29.94	6.85	9	2	1
04			26	20	24	81	29.17	29.95	7.02	8	1	2
05			25	20	23	82	29.18	29.95	7.75	8	2	36
06			24	19	23	82	29.18	29.96	7.93	8	1	36
07			25	20	23	82	29.19	29.97	7.39	9	2	35
08			26	21	25	80	29.20	29.98	7.23	10	2	35
09			28	22	26	77	29.20	29.98	6.98	11	2	32
10			30	23	28	74	29.20	29.98	7.06	11	1	29
11			32	23	29	72	29.19	29.97	7.29	12	1	30
12			34	24	30	70	29.18	29.96	7.60	13	2	25
13			35	25	31	69	29.16	29.94	7.26	13	3	26
14			36	25	32	68	29.15	29.93	7.44	12	2	24
15			36	25	32	66	29.14	29.92	7.68	12	2	25
16			37	25	33	66	29.14	29.92	7.99	11	2	22
17			36	25	32	66	29.14	29.92	8.19	11	2	23
18			33	25	31	73	29.14	29.92	7.51	10	1	19
19			32	25	29	76	29.15	29.93	7.99	10	2	20
20			31	24	29	78	29.16	29.94	7.72	9	2	21
21			30	24	28	79	29.16	29.94	7.98	9	2	23
22			29	24	28	80	29.16	29.94	7.43	8	1	22
23			29	23	27	80	29.16	29.95	7.46	8	0	0
24			28	23	27	82	29.15	29.93	7.10	8	0	0

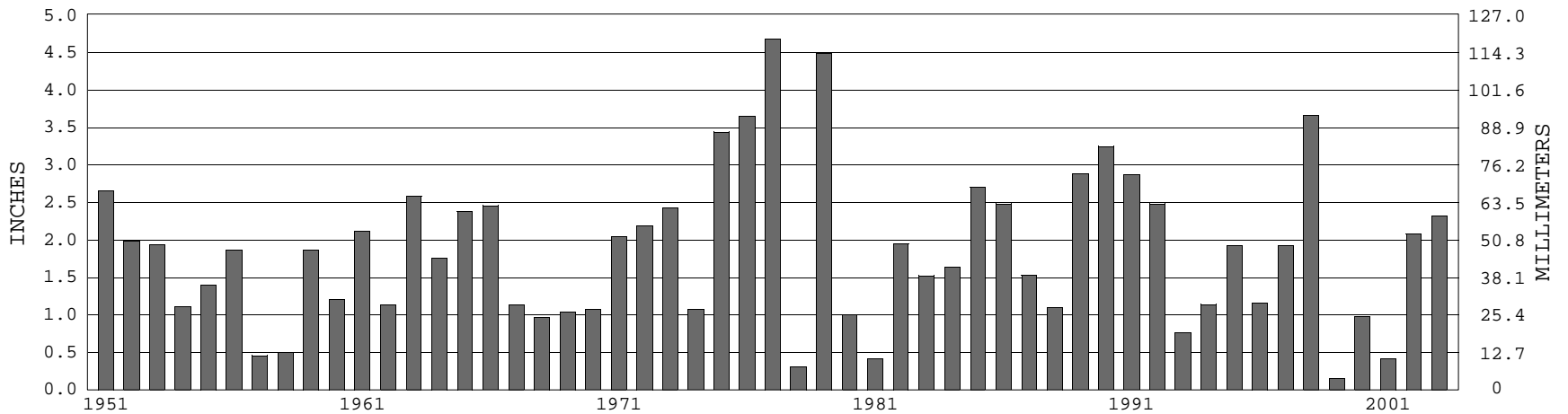
### GREEN BAY, WI MARCH TEMPERATURES



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

Long-Term (1951-2003) Mean: 29.8      1961-1990 Normal: 31.3

### GREEN BAY, WI MARCH PRECIPITATION



Long-Term (1951-2003) Mean Monthly Total: 1.85

1961-1990 Normal: 2.06



MARCH 2003

GREEN BAY, WI

# 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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