



# JANUARY 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

JANUARY 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	27	17	22	5	16	20	43	0	SN				29.41	30.21	14.6	03	14.9	29	03	24	03	01												
02	27	22	25	9	18	22	40	0	SN BR UP HZ				29.37	30.16	14.2	02	14.4	30	03	24	03	02												
03	32	13	23	7	12	19	42	0					29.29	30.08	3.5	34	4.2	17	36	14	36	03												
04	34	11	23	7	17	21	42	0	SN BR				29.19	29.98	1.4	14	1.9	13	17	10	17	04												
05	33	26	30	14	28	30	35	0	SN FG FZFG BR				29.23	30.01	2.8	02	3.7	15	35	13	35	05												
06	30	12	21	5	17	22	44	0					29.53	30.33	6.9	30	9.7	23	34	20	34	06												
07	41	27	34	18	28	32	31	0					28.97	29.74	13.7	26	14.1	25	26	21	26	07												
08	49*	33	41*	25	31	37	24	0					28.63	29.39	13.3	27	14.2	32	26	25	26	08												
09	40	20	30	15	22	28	35	0	SN BR				28.79	29.56	12.0	30	14.4	29	29	24	28	09												
10	22	10	16	1	4	14	49	0	SN				29.11	29.89	17.0	29	17.3	33*	31	28*	30	10												
11	19	6	13	-2	3	10	52	0					29.37	30.17	14.2	28	14.4	28	30	23	30	11												
12	26	8	17	2	5	15	48	0					29.34	30.14	10.1	24	12.2	30	31	24	32	12												
13	20	6	13	-2	0	9	52	0					29.41	30.21	12.4	30	12.7	28	31	23	31	13												
14	16	4	10	-5	-3	7	55	0					29.44	30.25	11.2	28	11.4	25	27	22	27	14												
15	22	3	13	-2	-2	8	52	0					29.51	30.32	9.7	28	10.1	21	30	17	29	15												
16	28	8	18	3	-1	12	47	0					29.39	30.19	8.5	31	10.9	30	36	23	35	16												
17	20	6	13	-2	1	10	52	0					29.42	30.22	7.0	27	11.0	20	33	16	34	17												
18	23	4	14	-1	4	12	51	0	SN BR				29.03	29.82	11.1	27	13.3	29	30	24	30	18												
19	18	3	11	-4	1	8	54	0	SN				28.97	29.76	10.6	26	12.3	29	29	24	28	19												
20	13	2	8	-7	-5	5	57	0					29.26	30.06	10.3	29	10.5	21	29	18	29	20												
21	11	-4	4	-11	-8	2	61	0					29.47	30.28	9.6	29	9.9	18	27	16	28	21												
22	11	-5	3	-12	-9	1	62	0					29.60	30.42	10.8	32	11.0	22	32	20	30	22												
23	12	-6	3	-12	-9	0	62	0					29.70	30.52	12.1	30	12.6	26	30	22	30	23												
24	15	2	9	-7	-3	7	56	0	SN				29.57	30.38	8.5	24	9.1	24	24	18	24	24												
25	22	7	15	-1	9	14	50	0	SN BR HZ				29.33	30.13	8.4	28	10.4	22	30	17	32	25												
26	7	-7	0*	-16	-10	0	65	0					29.62	30.43	11.6	30	11.9	23	32	20	32	26												
27	18	-10*	4	-12	-3	4	61	0	SN FG+ FZFG BR				29.46	30.27	9.7	19	10.4	24	20	21	17	27												
28	25	15	20	4	16	20	45	0	SN BR				29.27	30.07	2.7	32	6.1	21	01	17	02	28												
29	18	3	11	-5	2	9	54	0					29.56	30.37	3.0	32	6.7	15	01	13	36	29												
30	30	9	20	4	16	21	45	0	SN BR HZ				29.32	30.11	10.9	20	11.1	26	19	22	20	30												
31	32	27	30	14	29	30	35	0	SN FG+ FZFG BR				29.12	29.90	4.4	02	7.4	18	01	16	02	31												
23.9											8.8	16.4	■ ■	7.3	14.5	48.4	0.0	< MONTHLY AVERAGES		TOTALS->		9.6	0.58	29.31	30.11	7.0	29	10.8	<- MONTHLY AVERAGES					
- .2											1.7	0.8	■ ■	<-----DEPARTURE FROM NORMAL----->										- .63	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.34 DATE :30-31			SEA LEVEL PRESSURE			DATE			TIME																
MONTHLY TOTAL DEPARTURE									GREATEST 24-HR SNOWFALL: 5.4 DATE :31			MAXIMUM			: 30.57			23 1053																
SEASON TO DATE TOTAL DEPARTURE									GREATEST SNOW DEPTH: 5 DATE :31			MINIMUM			: 29.18			08 1553																
HEATING: 1501				-36				4420				-197				NUMBER OF DAYS WITH				MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 30				PRECIPITATION ≥ 0.01 INCH : 9						
COOLING: 0				0				0				0				THUNDERSTORMS : 0				MAXIMUM TEMP ≤ 32 :26				MINIMUM TEMP ≤ 0 : 5				PRECIPITATION ≥ 0.10 INCH : 2						
																HEAVY FOG : 2				SNOWFALL ≥ 1.0 INCH : 3														

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

# GREEN BAY, WI

JANUARY 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	T		
02													02												02	T	0.01		
03													03												03		0.00		
04													04												04	T	0.01		
05	T				0.01	T	T	T	T	0.01	T		05			0.01	0.02	0.01	T	T	T	T	T	05	0.06	0.10			
06													06												06		0.00		
07													07												07		0.00		
08													08												08		0.00		
09													09	0.01	T										09		0.01		
10				T									10												10		T		
11													11												11		0.00		
12													12												12		0.00		
13													13												13		0.00		
14													14												14		0.00		
15													15												15		0.00		
16													16												16		0.00		
17													17												17		0.00		
18				T	T	T	T						18												18		T		
19													19	T	T	T									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		T		
25				T	T	T	T	T	T	T	T		25	T	T	T	T	T	T					25	T	0.02			
26													26												26		0.00		
27													27			T									27	T	0.01		
28													28	T	0.01	0.01	T	T							28		0.03		
29													29												29		0.00		
30													30												30	0.06	0.08		
31	0.01	0.01	0.02	0.05	0.04	0.03	0.03	0.04	0.03	0.01	T	0.01	31	T	T									31	0.28	0.31			

### MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.01	.02	.02	.03	.03	.04	.05	.06	.08	.09	.11	.12
Ending Date	31	31	31	31	31	31	31	31	31	31	31	31
Ending Time (Hour/Min)	1059	0326	0758	0326	0758	0820	0506	0526	0431	0506	0506	0615

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 JANUARY 2003

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	65	12					7.00	10.00	
02	0	0					.75	10.00	
03	536	100					9.00	10.00	
04	78	15					1.25	10.00	
05	0	0					.50	10.00	
06	539	100					10.00	10.00	
07	298	55					7.00	10.00	
08	433	80					10.00	10.00	
09	36	6					.75	10.00	
10	318	58					10.00	10.00	
11	199	36					10.00	10.00	
12	477	87					10.00	10.00	
13	397	72					10.00	10.00	
14	487	88					10.00	10.00	
15	553	100					10.00	10.00	
16	383	69					10.00	10.00	
17	463	83					10.00	10.00	
18	446	80					1.00	10.00	
19	0	0					2.50	10.00	
20	437	78					10.00	10.00	
21	457	80					10.00	10.00	
22	453	79					10.00	10.00	
23	362	59					10.00	10.00	
24	179	31					10.00	10.00	
25	20	3					.75	10.00	
26	550	100					10.00	10.00	
27	0	0					.25	10.00	
28	0	0					.75	10.00	
29	542	93					10.00	10.00	
30	290	50					.75	10.00	
31	0	0					.25	6.00	
<b>MONTHLY AVGS</b>							6.69	9.87	
<b>SUNSHINE (MINUTES)</b>									
Total: 8998 Possible: 17294 Percent Possible: 52									
<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 0 11 20									

# OBSERVATIONS AT 3-HOURLY INTERVALS

# GREEN BAY, WI

JANUARY 2003

GRB

WBAN # 14898

HOUR (LST)	SATELLITE		OBSERVATION TIME (LST)	EFF CLD AMT Okta	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	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
<b>SUNRISE: 0729 JAN 01 SUNSET: 1623</b>																													
03	CLR	NC		10.00			18	10	16	71	12	02	29.40	30.19	03	OVC	070		10.00			28	21	26	75	10	23	29.24	30.02
06	CLR	NC		10.00			18	10	16	71	14	03	29.40	30.20	06	OVC	020		10.00			30	23	28	75	16	25	29.12	29.90
09	OVC	022		10.00			20	13	18	74	15	02	29.43	30.23	09	FEW	NC		7.00			32	26	30	79	16	26	29.05	29.83
12	OVC	022		10.00			24	18	22	77	17	04	29.41	30.20	12	BKN	090		10.00			36	29	33	76	17	26	28.94	29.72
15	OVC	023		10.00			25	18	23	75	18	03	29.41	30.20	15	CLR	NC		10.00			41	31	37	67	18	26	28.82	29.57
18	BKN	021		10.00			25	18	23	75	14	03	29.42	30.22	18	CLR	NC		10.00			40	31	36	70	14	28	28.82	29.58
21	OVC	024		10.00			27	19	24	72	17	04	29.43	30.22	21	CLR	NC		10.00			40	32	37	73	16	27	28.81	29.57
24	OVC	022		10.00			26	20	24	78	15	04	29.42	30.21	24	CLR	NC		10.00			39	32	36	76	12	27	28.82	29.57
<b>SUNRISE: 0729 JAN 02 SUNSET: 1624</b>																													
03	OVC	029		10.00			24	17	22	75	16	02	29.41	30.20	03	CLR	NC		10.00			39	32	36	76	14	28	28.83	29.58
06	OVC	014		8.00			24	20	23	84	14	01	29.39	30.19	06	CLR	NC		10.00			37	31	35	79	14	27	28.83	29.58
09	OVC	012		1.00		-SN BR	24	21	23	88	13	02	29.41	30.20	09	CLR	NC		10.00			35	31	33	85	8	22	28.76	29.52
12	OVC	011		10.00			25	22	24	88	16	04	29.37	30.16	12	CLR	NC		10.00			42	34	39	73	10	22	28.56	29.31
15	OVC	024		6.00		HZ	26	21	24	81	23	03	29.34	30.14	15	CLR	NC		10.00			49	33	42	55	15	27	28.45	29.20
18	OVC	025		10.00			25	17	23	72	15	01	29.34	30.13	18	CLR	NC		10.00			45	29	38	54	20	28	28.48	29.23
21	FEW	NC		10.00			24	12	21	60	13	36	29.32	30.11	21	CLR	NC		10.00			44	27	37	51	21	29	28.52	29.27
24	OVC	026		10.00			22	10	19	60	12	36	29.32	30.10	24	CLR	NC		10.00			40	27	35	60	18	28	28.58	29.33
<b>SUNRISE: 0729 JAN 03 SUNSET: 1625</b>																													
03	CLR	NC		10.00			17	9	15	70	5	04	29.31	30.09	03	CLR	NC		10.00			37	28	33	70	17	27	28.63	29.39
06	CLR	NC		10.00			15	8	13	74	5	35	29.32	30.10	06	CLR	NC		10.00			35	28	32	76	15	28	28.65	29.41
09	CLR	NC		10.00			18	11	16	74	8	31	29.33	30.13	09	OVC	031		10.00			36	29	33	76	10	27	28.67	29.42
12	CLR	NC		10.00			28	17	25	63	6	34	29.28	30.06	12	OVC	028		10.00			36	32	34	86	14	29	28.68	29.44
15	CLR	NC		10.00			31	14	26	49	5	34	29.26	30.05	15	OVC	033		10.00			30	20	27	66	17	34	28.84	29.60
18	CLR	NC		10.00			24	15	21	68	0	00	29.29	30.07	18	CLR	NC		10.00			24	11	20	57	15	33	28.97	29.75
21	CLR	NC		10.00			18	15	17	88	0	00	29.28	30.07	21	BKN	040		10.00			20	11	17	68	8	31	29.02	29.79
24	CLR	NC		10.00			14	9	13	80	0	00	29.27	30.05	24	OVC	100		10.00			22	10	19	60	15	30	29.00	29.78
<b>SUNRISE: 0729 JAN 04 SUNSET: 1626</b>																													
03	CLR	NC		10.00			11	9	10	92	0	00	29.24	30.03	03	BKN	055		10.00			20	9	17	62	15	30	29.00	29.78
06	CLR	NC		10.00			12	9	11	87	0	00	29.24	30.03	06	BKN	038		10.00			16	5	13	62	16	29	29.04	29.83
09	OVC	065		10.00			21	16	20	81	0	00	29.23	30.02	09	CLR	NC		10.00			16	4	13	59	20	31	29.08	29.87
12	OVC	060		10.00			28	20	25	72	0	00	29.19	29.98	12	BKN	047		10.00			20	5	16	52	18	30	29.09	29.88
15	BKN	090		10.00			33	16	27	49	8	13	29.15	29.93	15	SCT	NC		10.00			19	5	16	54	21	29	29.11	29.89
18	OVC	060		10.00			31	20	27	64	3	12	29.15	29.94	18	CLR	NC		10.00			15	2	12	56	13	28	29.17	29.96
21	OVC	010		1.50		-SN BR	29	25	28	85	5	19	29.17	29.95	21	CLR	NC		10.00			13	1	10	59	16	29	29.21	30.00
24	OVC	026		1.75		-SN BR	26	25	26	96	0	00	29.13	29.91	24	CLR	NC		10.00			10	0	8	63	15	28	29.22	30.01
<b>SUNRISE: 0729 JAN 05 SUNSET: 1627</b>																													
03	OVC	019		2.50		BR	28	26	27	92	3	04	29.12	29.90	03	CLR	NC		10.00			9	-1	7	64	15	28	29.25	30.04
06	OVC	015		1.25		-SN BR	28	27	28	96	0	00	29.14	29.92	06	CLR	NC		10.00			7	-1	5	70	13	28	29.27	30.07
09	OVC	031		0.75		-SN BR	30	28	29	92	0	00	29.17	29.95	09	CLR	NC		10.00			8	-1	6	66	14	28	29.31	30.11
12	OVC	009		1.00		BR	32	30	31	92	0	00	29.18	29.95	12	OVC	029		10.00			15	4	12	61	14	29	29.33	30.14
15	OVC	016		0.75		-SN BR	32	32	32	100	3	01	29.23	30.01	15	OVC	047		10.00			19	5	16	54	18	29	29.38	30.18
18	OVC	065		4.00		-SN BR	30	28	29	92	6	05	29.30	30.08	18	BKN	045		10.00			17	5	14	59	18	29	29.46	30.27
21	OVC	032		4.00		BR	31	28	30	89	5	33	29.36	30.15	21	OVC	041		10.00			15	6	13	67	13	29	29.52	30.32
24	FEW	NC		10.00			29	24	27	82	9	34	29.41	30.19	24	CLR	NC		10.00			12	5	10	73	12	25	29.55	30.35
<b>SUNRISE: 0729 JAN 06 SUNSET: 1628</b>																													
03	OVC	030		10.00			29	19	26	66	14	34	29.50	30.28	03	CLR	NC		10.00			10	4	9	76	8	23	29.54	30.35
06	CLR	NC		10.00			17	11	15	77	8	32	29.56	30.36	06	CLR	NC		10.00			8	2	7	76	8	23	29.53	30.33
09	CLR	NC		10.00			19	14	18	81	8	32	29.62	30.42	09	CLR	NC		10.00			11	3	9	70	10	22	29.50	30.31
12	CLR	NC		10.00			25	16	22	69	14	30	29.61	30.40	12	CLR	NC		10.00			20	2	16	45	15	23	29.38	30.18
15	CLR	NC		10.00			28	17	25	63	12	28	29.57	30.36	15	CLR	NC		10.00			25	4	19	40	21	21	29.22	30.01
18	CLR	NC		10.00			25	15	22	66	5	23	29.56	30.36	18	CLR	NC		10.00			25	9	20	50	10	21	29.13	29.92
21	FEW	NC		10.00			23	18	21	81	7	22	29.47	30.27	21	CLR	NC		10.00			23	11	20	60	9	25	29.10	29.89
24	OVC	110		10.00			27	20	25	75	13	22	29.33	30.12	24	CLR	NC		10.00			20	6	16	55	18	33	29.20	29.99

# OBSERVATIONS AT 3-HOURLY INTERVALS

# GREEN BAY, WI

JANUARY 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)		
	SKY COVER	CEILING		OBSERVATION	EFF CLD AMT					DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		SKY COVER	CEILING		OBSERVATION	EFF CLD AMT					DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
SUNRISE: 0727 JAN 13 SUNSET: 1636									SUNRISE: 0723 JAN 19 SUNSET: 1644																											
03	CLR	NC						10.00		12	0	10	58	15	31	29.32	30.11	03	CLR	NC							10.00		4	-4	3	69	12	26	29.13	29.92
06	CLR	NC						10.00		8	-1	6	66	13	30	29.37	30.17	06	CLR	NC							10.00		4	-4	3	69	9	22	29.03	29.82
09	CLR	NC						10.00		8	-1	6	66	15	28	29.43	30.23	09	CLR	NC							10.00		6	-2	5	69	13	22	28.94	29.73
12	CLR	NC						10.00		14	-1	11	51	17	30	29.42	30.22	12	OVC	033						6.00	-SN	14	5	12	67	13	24	28.84	29.64	
15	CLR	NC						10.00		16	-1	12	47	16	30	29.41	30.22	15	OVC	026						10.00		17	7	15	64	21	28	28.83	29.61	
18	FEW	NC						10.00		13	0	10	56	8	29	29.46	30.27	18	OVC	041						10.00		16	5	13	62	13	30	28.91	29.70	
21	CLR	NC						10.00		11	0	9	61	9	32	29.48	30.29	21	FEW	NC						10.00		12	4	10	70	14	32	28.99	29.79	
24	CLR	NC						10.00		11	1	9	64	9	31	29.47	30.27	24	CLR	NC						10.00		8	-2	6	63	8	31	29.08	29.87	
SUNRISE: 0726 JAN 14 SUNSET: 1637									SUNRISE: 0722 JAN 20 SUNSET: 1645																											
03	CLR	NC						10.00		7	0	6	73	8	28	29.48	30.28	03	CLR	NC						10.00		5	-4	3	66	8	28	29.15	29.95	
06	CLR	NC						10.00		5	-1	4	76	12	30	29.47	30.28	06	CLR	NC						10.00		3	-5	2	69	9	30	29.22	30.02	
09	CLR	NC						10.00		6	-2	5	69	12	28	29.48	30.29	09	CLR	NC						10.00		5	-4	3	66	14	28	29.28	30.08	
12	CLR	NC						10.00		13	-5	9	44	15	28	29.43	30.24	12	CLR	NC						10.00		11	-4	8	51	10	26	29.29	30.09	
15	CLR	NC						10.00		15	-5	11	40	16	27	29.38	30.19	15	CLR	NC						10.00		13	-6	9	42	12	28	29.25	30.04	
18	CLR	NC						10.00		12	-3	9	51	12	27	29.40	30.22	18	CLR	NC						10.00		8	-6	6	52	9	29	29.30	30.10	
21	CLR	NC						10.00		8	-3	6	60	10	28	29.43	30.24	21	CLR	NC						10.00		5	-6	3	60	10	30	29.33	30.14	
24	CLR	NC						10.00		5	-4	3	66	8	27	29.43	30.24	24	CLR	NC						10.00		3	-6	2	66	8	31	29.39	30.20	
SUNRISE: 0726 JAN 15 SUNSET: 1638									SUNRISE: 0722 JAN 21 SUNSET: 1646																											
03	CLR	NC						10.00		4	-4	3	69	12	29	29.47	30.28	03	CLR	NC						10.00		0	-8	-1	69	8	31	29.43	30.24	
06	CLR	NC						10.00		4	-4	3	69	9	27	29.49	30.30	06	CLR	NC						10.00		-2	-10	-3	68	9	31	29.43	30.24	
09	CLR	NC						10.00		6	-3	4	66	13	27	29.52	30.33	09	CLR	NC						10.00		1	-8	0	65	13	30	29.49	30.30	
12	CLR	NC						10.00		16	-1	12	47	14	28	29.52	30.33	12	CLR	NC						10.00		9	-7	6	48	12	30	29.48	30.29	
15	CLR	NC						10.00		21	-1	16	38	14	26	29.50	30.30	15	CLR	NC						10.00		10	-8	7	43	13	27	29.44	30.26	
18	CLR	NC						10.00		15	-1	12	49	8	28	29.53	30.34	18	CLR	NC						10.00		6	-7	4	54	7	29	29.47	30.29	
21	CLR	NC						10.00		11	0	9	61	5	23	29.54	30.35	21	CLR	NC						10.00		3	-8	1	60	8	29	29.50	30.32	
24	CLR	NC						10.00		10	1	8	67	5	24	29.52	30.33	24	CLR	NC						10.00		0	-8	-1	69	8	29	29.52	30.33	
SUNRISE: 0725 JAN 16 SUNSET: 1640									SUNRISE: 0721 JAN 22 SUNSET: 1647																											
03	CLR	NC						10.00		9	1	7	70	3	20	29.49	30.29	03	CLR	NC						10.00		-1	-9	-2	68	9	30	29.53	30.35	
06	CLR	NC						10.00		11	1	9	64	5	24	29.43	30.23	06	CLR	NC						10.00		-3	-8	-4	79	8	32	29.56	30.38	
09	CLR	NC						10.00		14	1	11	56	10	27	29.40	30.21	09	CLR	NC						10.00		1	-6	0	72	9	33	29.60	30.42	
12	CLR	NC						10.00		23	-1	17	35	12	27	29.33	30.13	12	SCT	NC						10.00		9	-5	6	52	13	32	29.60	30.42	
15	CLR	NC						10.00		27	-4	20	26	10	29	29.25	30.04	15	SCT	NC						10.00		9	-8	6	46	15	34	29.59	30.41	
18	CLR	NC						10.00		21	-6	15	30	15	35	29.31	30.10	18	FEW	NC						10.00		4	-10	2	52	10	32	29.63	30.45	
21	CLR	NC						10.00		13	0	10	56	13	35	29.41	30.21	21	CLR	NC						10.00		0	-13	-1	54	12	31	29.66	30.47	
24	CLR	NC						10.00		10	-1	8	61	14	35	29.46	30.26	24	CLR	NC						10.00		-3	-14	-4	58	13	30	29.66	30.47	
SUNRISE: 0724 JAN 17 SUNSET: 1641									SUNRISE: 0720 JAN 23 SUNSET: 1649																											
03	CLR	NC						10.00		7	-1	5	70	12	34	29.50	30.30	03	CLR	NC						10.00		-5	-14	-6	64	14	30	29.65	30.47	
06	OVC	034						10.00		8	-1	6	66	12	33	29.53	30.34	06	CLR	NC						10.00		-6	-15	-7	64	15	31	29.68	30.50	
09	CLR	NC						10.00		9	0	7	67	9	30	29.56	30.36	09	BKN	032						10.00		-4	-13	-5	65	15	30	29.72	30.54	
12	CLR	NC						10.00		16	3	13	56	14	28	29.51	30.31	12	OVC	028						10.00		6	-8	4	52	15	32	29.72	30.54	
15	CLR	NC						10.00		20	2	16	45	13	24	29.41	30.21	15	CLR	NC						10.00		12	-5	9	46	12	29	29.70	30.52	
18	CLR	NC						10.00		15	1	12	53	9	22	29.34	30.15	18	CLR	NC						10.00		8	-5	6	55	8	29	29.72	30.54	
21	CLR	NC						10.00		13	1	10	59	12	22	29.24	30.03	21	CLR	NC						10.00		5	-4	3	66	9	30	29.73	30.55	
24	CLR	NC						10.00		11	1	9	64	13	21	29.12	29.91	24	CLR	NC						10.00		1	-5	0	75	3	19	29.73	30.54	
SUNRISE: 0724 JAN 18 SUNSET: 1642									SUNRISE: 0719 JAN 24 SUNSET: 1650																											
03	FEW	NC						10.00		12	0	9	58	14	22	29.02	29.80	03	CLR	NC						10.00		3	-3	2	76	3	20	29.68	30.49	
06	OVC	012						3.00	-SN BR	12	8	11	84	12	23	28.96	29.75	06	CLR	NC						10.00		2	-4	1	76	8	27	29.68	30.50	
09	CLR	NC						10.00		14	9	13	80	14	26	28.95	29.75	09	CLR	NC						10.00		6	-4	4	63	10	27	29.67	30.49	
12	SCT	NC						10.00		23	10	19	57	20	31	28.95	29.74	12	SCT	NC						10.00		11	-5	8	48	10	25	29.60	30.42	
15	FEW	NC						10.00		20	4	16	50	16	31	28.99	29.78	15	OVC	090						10.00		14	-5	10	42	9	22	29.51	30.32	
18	CLR	NC						10.00		13	3	11	64	10	29	29.09	29.88	18	OVC	050						10.00		14	-5	10	42	10	23	29.48	30.29	
21	CLR	NC						10.00		11	0	9	61	12	30	29.13	29.93	21	OVC	036						10.00		13	1	10	59	14	24	29.45	30.26	
24	CLR	NC						10.00		4	-2	3	76	7	29	29.14	29.93	24	OVC	0																

# OBSERVATIONS AT 3-HOURLY INTERVALS

# GREEN BAY, WI

JANUARY 2003

GRB

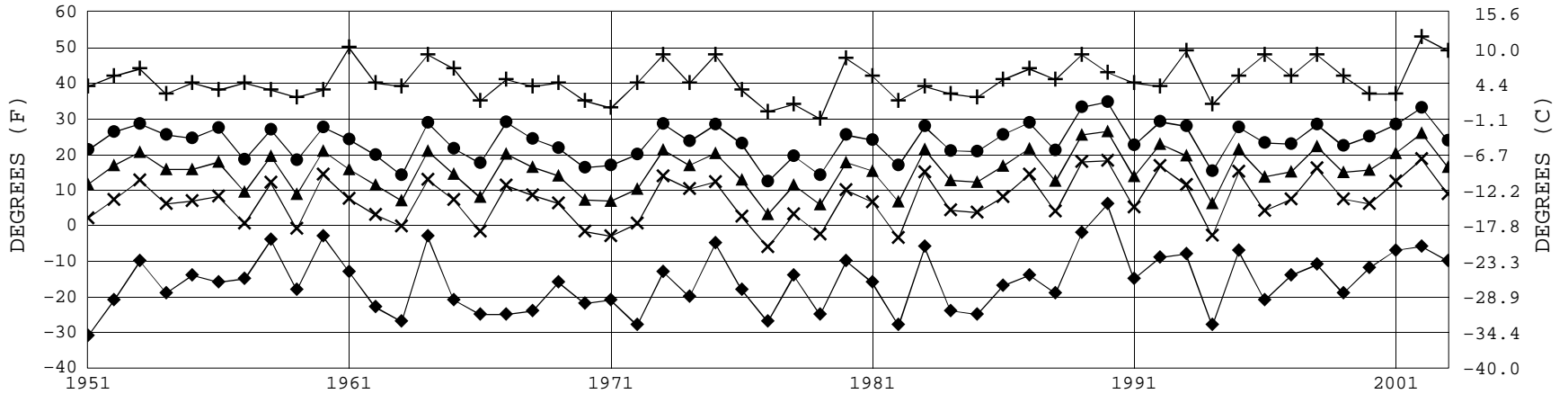
WBAN # 14898

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 Otktas	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 Otktas	VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
				<b>SUNRISE: 0718</b>		<b>JAN 25</b>		<b>SUNSET: 1652</b>								<b>SUNRISE: 0712</b>		<b>JAN 31</b>		<b>SUNSET: 1660</b>							
03	OVC	028			10.00	15	8	13	74	8	26	29.35	30.15	03	OVC	007	0.50	SN	FZFG	29	28	29	96	6	15	29.15	29.93
06	OVC	028			6.00	15	10	14	80	7	23	29.33	30.13	06	OVC	007	0.50	SN	FZFG	29	29	29	100	5	14	29.12	29.90
09	OVC	032			1.50	17	13	16	84	8	23	29.32	30.12	09	OVC	007	0.50	SN	FZFG	31	30	31	96	5	04	29.09	29.87
12	OVC	018			2.00	20	15	19	81	10	24	29.27	30.06	12	OVC	004	1.50	SN	BR	32	31	32	96	9	02	29.07	29.85
15	VV	017			1.00	20	14	18	78	14	30	29.25	30.04	15	OVC	009	4.00	BR		31	28	30	89	13	02	29.08	29.86
18	OVC	038			10.00	17	8	15	68	15	31	29.32	30.11	18	OVC	009	4.00	BR		31	28	30	89	10	35	29.14	29.92
21	CLR	NC			10.00	10	1	8	67	12	32	29.39	30.19	21	OVC	015	6.00	BR		31	27	29	85	9	36	29.17	29.94
24	CLR	NC			10.00	8	-3	6	60	15	31	29.44	30.24	24	OVC	021	5.00	BR		29	25	28	85	5	31	29.17	29.95
				<b>SUNRISE: 0717</b>		<b>JAN 26</b>		<b>SUNSET: 1653</b>								<b>3-HOURLY OBSERVATION NOTES</b>											
03	CLR	NC			10.00	2	-8	0	63	13	30	29.51	30.31	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.													
06	CLR	NC			10.00	-1	-10	-2	65	15	30	29.56	30.37	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.													
09	CLR	NC			10.00	-1	-10	-2	65	17	30	29.61	30.43	NC= No ceiling detected.													
12	CLR	NC			10.00	4	-9	2	54	17	32	29.63	30.44	& = Original observation contained additional weather elements.													
15	CLR	NC			10.00	6	-10	4	47	13	31	29.63	30.45	See page 3 for additional notes.													
18	CLR	NC			10.00	2	-10	0	57	8	27	29.68	30.50														
21	CLR	NC			10.00	-3	-12	-4	65	6	28	29.71	30.53														
24	CLR	NC			10.00	-6	-13	-7	71	6	27	29.70	30.52														
				<b>SUNRISE: 0716</b>		<b>JAN 27</b>		<b>SUNSET: 1654</b>																			
03	CLR	NC			10.00	-9	-15	-10	75	0	00	29.68	30.50														
06	CLR	NC			10.00	-6	-12	-7	75	5	22	29.67	30.49														
09	BKN	110			10.00	1	-6	0	72	13	18	29.60	30.42														
12	OVC	070			10.00	9	-4	7	55	16	18	29.46	30.28														
15	OVC	060		BR	5.00	11	7	10	84	17	17	29.32	30.13														
18	OVC	042			10.00	14	5	12	67	13	18	29.28	30.09														
21	OVC	034			10.00	16	5	13	62	12	19	29.25	30.05														
24	OVC	026			10.00	18	9	16	68	10	21	29.22	30.02														
				<b>SUNRISE: 0715</b>		<b>JAN 28</b>		<b>SUNSET: 1656</b>																			
03	OVC	020			10.00	20	11	17	68	6	21	29.21	30.01														
06	OVC	014			9.00	20	13	18	74	0	00	29.21	30.00														
09	OVC	021			7.00	22	15	20	75	0	00	29.25	30.03														
12	VV	008			0.75	24	21	23	88	6	32	29.25	30.04														
15	OVC	010			1.00	24	21	23	88	6	31	29.26	30.05														
18	SCT	NC			4.00	19	18	19	96	5	36	29.31	30.10														
21	OVC	023			5.00	23	19	22	85	10	01	29.36	30.16														
24	OVC	035			10.00	15	7	13	70	9	35	29.43	30.23														
				<b>SUNRISE: 0714</b>		<b>JAN 29</b>		<b>SUNSET: 1657</b>																			
03	OVC	035			10.00	14	7	12	73	9	35	29.49	30.29														
06	CLR	NC			10.00	4	0	3	83	7	33	29.55	30.36														
09	CLR	NC			10.00	9	1	7	70	9	36	29.62	30.42														
12	CLR	NC			10.00	17	3	14	54	3	01	29.63	30.43														
15	CLR	NC			10.00	17	4	14	56	5	26	29.61	30.41														
18	CLR	NC			10.00	8	-1	6	66	5	20	29.59	30.41														
21	CLR	NC			10.00	5	-1	4	76	6	21	29.54	30.35														
24	OVC	060			10.00	9	3	8	77	7	20	29.49	30.30														
				<b>SUNRISE: 0713</b>		<b>JAN 30</b>		<b>SUNSET: 1658</b>																			
03	BKN	019			10.00	11	4	9	73	9	21	29.45	30.26														
06	OVC	021			10.00	16	9	14	74	9	22	29.41	30.22														
09	OVC	015			6.00	20	15	19	81	14	20	29.38	30.19														
12	BKN	090			10.00	26	14	22	60	17	21	29.32	30.12														
15	OVC	070			8.00	29	20	26	69	14	20	29.24	30.03														
18	OVC	060			9.00	28	21	26	75	8	20	29.22	30.01														
21	OVC	016			5.00	28	23	26	81	10	19	29.21	29.99														
24	OVC	011			1.00	27	25	26	92	5	18	29.21	29.99														

## 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			14	6	12	71	29.32	30.11	9.49	10	6	29
02			14	6	12	71	29.33	30.12	9.41	10	7	29
03			13	6	11	72	29.33	30.12	9.45	10	6	29
04			13	5	11	73	29.32	30.12	9.09	10	7	29
05			12	6	11	75	29.33	30.12	9.01	10	6	29
06			12	5	11	75	29.33	30.13	8.96	9	7	29
07			12	6	10	76	29.33	30.13	9.10	9	6	28
08			12	6	11	77	29.34	30.13	8.65	9	6	28
09			14	7	13	73	29.34	30.14	8.51	11	7	28
10			16	8	15	69	29.34	30.13	8.48	12	8	29
11			18	8	16	66	29.33	30.12	8.36	12	9	28
12			20	9	18	63	29.30	30.10	8.75	12	8	29
13			21	9	18	61	29.28	30.07	8.12	13	8	29
14			22	9	19	59	29.27	30.06	8.02	14	9	29
15			22	9	19	58	29.27	30.06	8.57	14	8	29
16			22	8	19	58	29.28	30.07	8.98	13	8	29
17			20	8	17	60	29.29	30.08	8.95	11	7	29
18			19	8	16	62	29.30	30.10	9.39	10	6	29
19			18	8	16	64	29.31	30.10	9.45	10	6	28
20			18	8	15	65	29.31	30.11	9.29	11	7	29
21			17	8	15	68	29.31	30.11	9.08	10	7	29
22			16	7	14	68	29.31	30.11	9.15	10	7	29
23			16	7	13	69	29.32	30.11	9.28	10	6	29
24			15	7	13	70	29.32	30.11	9.28	10	6	29

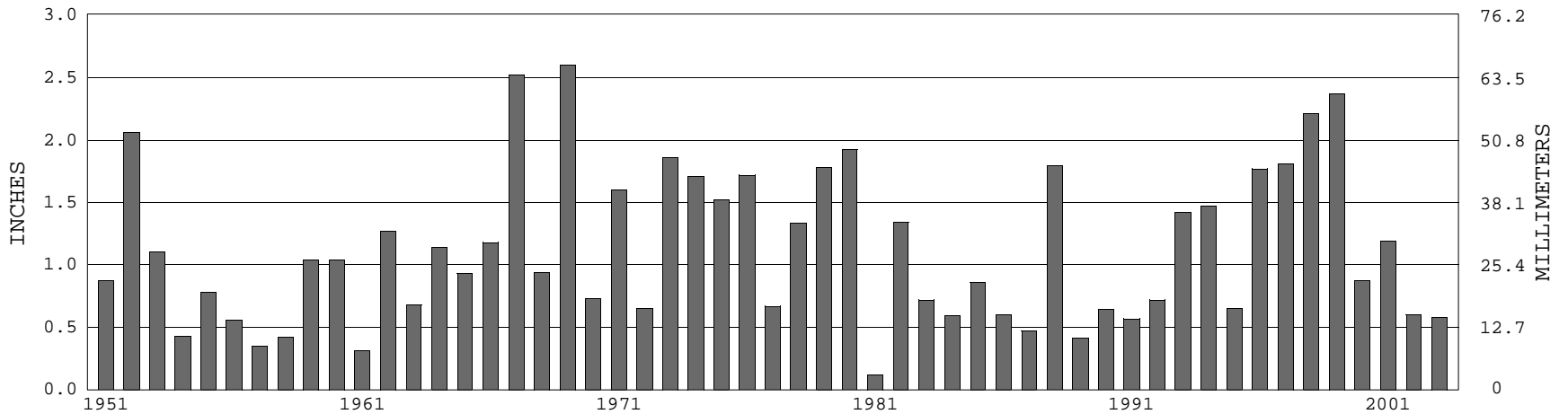
### GREEN BAY, WI JANUARY TEMPERATURES



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

Long-Term (1951-2003) Mean: 15.4      1961-1990 Normal: 15.6

### GREEN BAY, WI JANUARY PRECIPITATION



Long-Term (1951-2003) Mean Monthly Total: 1.12

1961-1990 Normal: 1.21



JANUARY 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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