



# NOVEMBER 2002

## 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

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								
																			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	38	23	31	-10	19	27	34	0	RA BR	0		0.0	0.00	29.35	30.13	13.6	28	13.8	26	28	22	27	01						
02	45	28	37	-3	24	31	28	0		0		0.0	0.00	29.28	30.05	6.2	30	9.7	24	25	17	32	02						
03	46	22	34	-6	27	32	31	0		0		0.0	0.00	29.20	29.98	6.5	22	6.9	20	24	16	24	03						
04	43	29	36	-3	25	31	29	0		0		0.0	0.00	29.31	30.09	2.4	32	5.5	16	36	14	36	04						
05	40	31	36	-3	34	36	29	0		0		0.0	0.18	29.10	29.87	1.4	23	4.8	14	30	12	29	05						
06	44	25	35	-3	30	33	30	0	BR UP	0		T	T	29.16	29.93	8.9	30	11.6	24	27	20	27	06						
07	54	22	38	0	29	35	27	0	0	0.0		0.00	29.06	29.83	10.3	20	10.8	30	21	24	21	07							
08	59	42	51*	14	40	45	14	0	BR	0		0.0	0.00	28.80	29.56	4.7	21	7.8	22	25	18	25	08						
09	62*	37	50	13	46	48	15	0	FG+ BR	0		0.0	0.00	28.67	29.42	5.7	18	7.8	25	21	22	20	09						
10	55	40	48	11	46	47	17	0	RA FG+ BR	0		0.0	0.09	28.60	29.34	4.1	36	6.6	26	01	23	01	10						
11	40	33	37	1	28	32	28	0	RA BR	0		0.0	0.00	29.17	29.95	6.6	35	8.0	22	36	18	02	11						
12	42	31	37	1	28	34	28	0		0		0.0	0.00	29.34	30.12	8.6	24	9.4	22	23	17	23	12						
13	48	26	37	2	29	34	28	0		0		0.0	T	29.18	29.95	5.1	22	8.1	20	18	16	15	13						
14	47	23	35	0	27	32	30	0		0		0.0	0.00	29.15	29.92	8.6	36	10.5	18	01	16	01	14						
15	35	21	28	-6	18	25	37	0		SN		0	T	T	29.44	30.23	9.8	04	10.9	20	03	17	03	15					
16	34	20	27	-7	21	25	38	0	SN BR	0		0.4	0.01	29.50	30.29	7.0	03	7.9	18	05	15	05	16						
17	35	17	26	-7	15	23	39	0	SN BR HZ	T		0.2	T	29.32	30.11	4.3	35	5.2	16	02	13	03	17						
18	40	16	28	-5	25	28	37	0	RA SN BR UP	0		0.1	0.16	29.23	30.02	4.2	18	5.0	17	17	16	17	18						
19	50	26	38	6	30	34	27	0	FG+ FZFG BR	0		0.0	0.00	29.14	29.91	6.2	25	6.6	26	26	22	26	19						
20	47	26	37	5	31	34	28	0	RA	0		0.0	T	29.18	29.96	0.7	33	4.1	15	03	12	04	20						
21	42	30	36	5	27	32	29	0	SN	0		T	T	29.15	29.92	8.8	36	9.3	29	02	24	02	21						
22	37	24	31	0	23	28	34	0		0		0.0	0.00	29.28	30.06	6.3	34	7.6	22	36	18	36	22						
23	45	29	37	6	25	32	28	0	SN BR	0		0.1	T	29.09	29.86	9.3	27	12.3	31	29	25	29	23						
24	34	24	29	-1	17	25	36	0		0		0.0	0.00	29.36	30.14	10.0	30	10.4	20	30	16	30	24						
25	33	17	25	-5	16	22	40	0		0		0.0	0.00	29.53	30.33	9.1	29	9.2	22	30	17	30	25						
26	33	16	25	-4	17	22	40	0	SHSN	0		0.0	0.00	29.63	30.43	5.9	01	6.3	14	01	13	02	26						
27	29	11*	20*	-9	14	19	45	0		0		T	T	29.53	30.33	3.3	26	4.7	15	24	12	26	27						
28	34	22	28	0	18	25	37	0		0		0.0	0.00	29.18	29.96	11.9	23	12.2	28	23	22	22	28						
29	47	34	41	13	28	35	24	0		RA SHSN		0	T	T	28.57	29.33	15.3	26	16.4	44*	30	31*	29	29					
30	34	14	24	-3	10	19	41	0		SN UP		0	0.1	T	29.06	29.83	16.7	32	17.1	32	32	26	31	30					
42.4 25.3 33.9 ■■										< MONTHLY AVERAGES TOTALS->			0.9	0.44	29.19	29.96	4.0	29	8.9	<- MONTHLY AVERAGES									
0.0 -.3 -.1 ■■										<-----DEPARTURE FROM NORMAL----->										-1.83 SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.18 DATE :05				SEA LEVEL PRESSURE DATE TIME																
MONTHLY TOTAL DEPARTURE									GREATEST 24-HR SNOWFALL: 0.4 DATE :16				MAXIMUM : 30.47 26 0953																
SEASON TO DATE TOTAL DEPARTURE									GREATEST SNOW DEPTH: T DATE : 17				MINIMUM : 29.19 10 0653																
HEATING: 928 3 1728 -2									NUMBER OF DAYS WITH ➡ MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32 : 25				PRECIPITATION ≥ 0.01 INCH : 4												
COOLING: 0 0 585 122									MAXIMUM TEMP ≤ 32 : 1				MINIMUM TEMP ≤ 0 : 0				PRECIPITATION ≥ 0.10 INCH : 2												
									THUNDERSTORMS : 0				HEAVY FOG : 3				SNOWFALL ≥ 1.0 INCH : 0												

NOVEMBER 2002  
GREEN BAY, WI

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

GREEN BAY, WI

NOVEMBER 2002

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													02												02			0.00
03													03												03			0.00
04													04												04			0.00
05								T	T	T	0.01	T	05	T	0.01	T	0.01			0.01	0.01	0.01	0.01	0.01	05	0.09		0.18
06	0.01		0.01	0.01	0.01		0.01						06								T	T			06	0.05		T
07													07												07			0.00
08													08												08			0.00
09													09												09			0.00
10	T	T		T	T				0.08	T	T		10	0.01	T										10			0.09
11													11												11			0.00
12													12												12			0.00
13													13												13			T
14													14												14			0.00
15													15				T	T							15			T
16												T	16							T				T	16			0.01
17	T	T											17	T	T	T					T	T			17	T		T
18													18				T	T	0.04	0.01	0.02	0.02	0.03	0.02	18	0.14		0.16
19													19												19			0.00
20													20					T							20			T
21													21								T	T			21			T
22													22												22			0.00
23	T	T											23												23			T
24													24												24			0.00
25													25												25			0.00
26													26												26			0.00
27													27												27	0.00		T
28													28												28			0.00
29		T	T	T	T	T	T	T	T	T			29										T		29			T
30													30	T	T										30			T

## MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)												
Ending Date												
Ending Time (Hour/Min)												

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		
DESCRIPTOR	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	
PR Partial	RA Rain	PY Spray	SQ Squalls
SH Shower(s)	SG Snow Grains	SA Sand	SS Sandstorm
TS Thunderstorm	SN Snow	VA Volcanic Ash	GL Glaze
VC In the Vicinity	UP Unknown Precipitation		
Intensity (as indicated on pages 4 to 6): '+' = Heavy    ' ' = Moderate    '–' = Light			

## GREEN BAY, WI NOVEMBER 2002

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	456	75					10.00	10.00	
02	534	88					10.00	10.00	
03	321	53					10.00	10.00	
04	348	58					10.00	10.00	
05	0	0					3.00	10.00	
06	105	18					4.00	10.00	
07	407	68					9.00	10.00	
08	260	44					6.00	10.00	
09	378	64					.25	10.00	
10	0	0					.25	10.00	
11	0	0					10.00	10.00	
12	400	83					10.00	10.00	
13	581	100					6.00	10.00	
14	0	0					10.00	10.00	
15	493	86					9.00	10.00	
16	325	57					2.00	10.00	
17	573	100					5.00	10.00	
18	240	42					1.50	10.00	
19	521	92					.25	10.00	
20	115	20					10.00	10.00	
21	157	20					9.00	10.00	
22	356	63					10.00	10.00	
23	337	60					4.00	10.00	
24	463	83					10.00	10.00	
25	556	100					10.00	10.00	
26	9	2					10.00	10.00	
27	291	53					10.00	10.00	
28	277	50					8.00	10.00	
29	419	76					10.00	10.00	
30	175	32					5.00	10.00	
MONTHLY AVGS							7.14	10.00	
SUNSHINE (MINUTES)									
Total: 9097    Possible: 17294									
Percent Possible: 53									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR    PTLY CLDY    CLOUDY    MISSING									
30									
MINIMUM VISIBILITY (MILES)									
<=0.25    <=3.0    >=7.0									
1                    6                    18									

## OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

NOVEMBER 2002

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
					SUNRISE: 0630	NOV 01			SUNSET: 1642										SUNRISE: 0638	NOV 07			SUNSET: 1634						
03	CLR	NC			10.00		25	19	23	78	12	28	29.34	30.13	03	CLR	NC			10.00		23	20	22	88	0	00	29.33	30.11
06	CLR	NC			10.00		24	18	22	77	12	28	29.38	30.16	06	CLR	NC			10.00		24	21	23	88	5	16	29.29	30.07
09	CLR	NC			10.00		29	20	26	69	15	29	29.41	30.20	09	OVC	095			10.00		33	28	31	82	13	19	29.22	29.99
12	CLR	NC			10.00		35	18	29	50	16	28	29.38	30.17	12	CLR	NC			9.00		44	32	39	63	21	21	29.07	29.84
15	CLR	NC			10.00		37	20	31	50	18	29	29.35	30.13	15	CLR	NC			10.00		53	33	44	47	16	21	28.90	29.67
18	OVC	090			10.00		34	20	29	56	13	27	29.33	30.12	18	CLR	NC			10.00		50	32	42	50	14	21	28.85	29.62
21	OVC	100			10.00		34	17	28	50	14	27	29.29	30.06	21	CLR	NC			10.00		48	37	43	66	10	21	28.84	29.60
24	OVC	100			10.00		34	19	29	54	15	27	29.23	30.00	24	CLR	NC			10.00		47	38	43	71	10	20	28.80	29.55
					SUNRISE: 0631	NOV 02			SUNSET: 1640										SUNRISE: 0639	NOV 08			SUNSET: 1633						
03	OVC	110			10.00		34	22	30	61	14	26	29.22	29.99	03	CLR	NC			10.00		46	38	42	73	12	21	28.76	29.51
06	CLR	NC			10.00		31	24	28	76	10	26	29.23	30.01	06	CLR	NC			10.00		43	38	41	82	8	21	28.78	29.53
09	CLR	NC			10.00		36	25	32	64	17	28	29.27	30.04	09	CLR	NC			10.00		50	42	46	74	8	24	28.82	29.57
12	CLR	NC			10.00		41	25	35	53	13	32	29.27	30.03	12	CLR	NC			10.00		57	42	50	58	9	22	28.80	29.54
15	CLR	NC			10.00		44	25	37	47	12	31	29.28	30.04	15	CLR	NC			10.00		57	42	50	58	8	18	28.80	29.55
18	CLR	NC			10.00		33	22	29	64	0	00	29.32	30.09	18	CLR	NC			10.00		46	40	43	79	0	00	28.84	29.59
21	CLR	NC			10.00		29	25	28	85	5	09	29.34	30.13	21	CLR	NC			10.00		44	40	42	85	0	00	28.84	29.60
24	CLR	NC			10.00		28	23	26	81	5	06	29.34	30.12	24	OVC	004			6.00	BR	44	43	44	96	13	05	28.82	29.56
					SUNRISE: 0633	NOV 03			SUNSET: 1639										SUNRISE: 0641	NOV 09			SUNSET: 1632						
03	FEW	NC			10.00		27	24	26	89	0	00	29.32	30.09	03	VV	001			0.50	FG	43	43	43	100	7	05	28.78	29.52
06	CLR	NC			10.00		24	22	23	91	0	00	29.29	30.07	06	VV	001			0.25	FG	40	40	40	100	0	00	28.74	29.49
09	CLR	NC			10.00		35	30	33	82	7	21	29.27	30.04	09	CLR	NC			8.00		44	43	44	96	5	16	28.71	29.46
12	SCT	NC			10.00		45	28	38	52	10	19	29.18	29.95	12	CLR	NC			10.00		58	46	52	65	20	20	28.66	29.40
15	OVC	055			10.00		45	28	38	52	13	23	29.11	29.89	15	CLR	NC			10.00		61	49	54	65	10	20	28.62	29.36
18	CLR	NC			10.00		40	29	36	65	9	23	29.12	29.90	18	CLR	NC			10.00		56	50	53	81	8	18	28.61	29.36
21	BKN	050			10.00		37	29	34	73	9	22	29.12	29.89	21	BKN	023			9.00		53	50	51	89	6	15	28.59	29.34
24	CLR	NC			10.00		32	27	30	82	9	26	29.15	29.92	24	OVC	075			5.00	BR	53	51	52	93	5	18	28.54	29.28
					SUNRISE: 0634	NOV 04			SUNSET: 1638										SUNRISE: 0642	NOV 10			SUNSET: 1630						
03	BKN	035			10.00		32	27	30	82	6	31	29.21	29.98	03	BKN	090			0.75	BR	49	49	49	100	0	00	28.49	29.23
06	OVC	035			10.00		35	26	32	70	8	31	29.28	30.05	06	OVC	055			1.50	BR	50	50	50	100	3	15	28.46	29.21
09	OVC	035			10.00		38	24	33	57	12	36	29.33	30.11	09	OVC	007			1.00	-RA BR	54	53	53	97	7	25	28.46	29.21
12	FEW	NC			10.00		41	25	35	53	9	30	29.35	30.13	12	OVC	020			10.00		50	47	48	89	9	33	28.56	29.31
15	CLR	NC			10.00		42	25	35	51	3	VR	29.33	30.11	15	OVC	029			10.00		51	45	48	80	7	36	28.61	29.35
18	CLR	NC			10.00		34	25	31	70	5	15	29.34	30.13	18	OVC	035			10.00		47	42	45	83	10	35	28.71	29.46
21	CLR	NC			10.00		30	25	28	82	5	17	29.36	30.14	21	OVC	027			10.00		45	40	43	83	7	34	28.74	29.49
24	OVC	031			10.00		32	27	30	82	0	00	29.33	30.11	24	OVC	032			10.00		40	36	38	86	15	05	28.82	29.57
					SUNRISE: 0635	NOV 05			SUNSET: 1637										SUNRISE: 0643	NOV 11			SUNSET: 1629						
03	BKN	035			10.00		33	30	32	89	0	00	29.30	30.07	03	OVC	031			10.00		37	31	35	79	14	36	28.90	29.66
06	OVC	041			10.00		37	32	35	82	7	10	29.21	29.98	06	OVC	020			10.00		34	28	32	79	15	01	28.99	29.75
09	OVC	015			6.00	-RA BR	39	37	38	93	5	13	29.13	29.91	09	OVC	020			10.00		34	28	32	79	8	36	29.10	29.87
12	OVC	019			6.00	-RA BR	40	37	39	89	3	11	29.04	29.82	12	OVC	020			10.00		35	27	32	72	6	36	29.19	29.96
15	OVC	013			5.00	-RA BR	39	37	38	93	3	22	28.98	29.75	15	OVC	022			10.00		35	27	32	72	5	27	29.27	30.05
18	OVC	016			3.00	BR	37	36	37	96	3	28	28.99	29.75	18	OVC	022			10.00		34	28	32	79	5	28	29.33	30.12
21	OVC	029			6.00	BR	36	34	35	93	8	29	28.99	29.75	21	OVC	024			10.00		34	28	32	79	5	29	29.37	30.16
24	OVC	019			6.00	BR	35	34	35	96	8	27	29.00	29.77	24	OVC	028			10.00		34	26	31	73	7	27	29.40	30.19
					SUNRISE: 0637	NOV 06			SUNSET: 1635										SUNRISE: 0645	NOV 12			SUNSET: 1628						
03	BKN	021			8.00		33	30	32	89	10	27	29.02	29.79	03	OVC	030			10.00		34	26	31	73	7	26	29.42	30.20
06	OVC	013			7.00		34	31	33	89	12	29	29.05	29.82	06	OVC	030			10.00		33	25	30	72	7	23	29.42	30.21
09	OVC	021			6.00	BR	37	33	35	86	12	27	29																

## OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

NOVEMBER 2002

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
SUNRISE: 0646					NOV 13	SUNSET: 1627					SUNRISE: 0654					NOV 19	SUNSET: 1622												
03	CLR	NC			10.00	30	28	29	92	7	30	29.30	30.07	03	VV	001			1.00	BR	27	25	26	92	0	00	29.14	29.92	
06	CLR	NC			9.00	27	26	27	96	6	29	29.30	30.08	06	CLR	NC			6.00	BR	28	26	27	92	0	00	29.13	29.91	
09	CLR	NC			10.00	32	29	31	88	5	29	29.32	30.09	09	CLR	NC			6.00	BR	33	31	32	92	9	22	29.13	29.90	
12	CLR	NC			10.00	40	27	35	60	8	22	29.25	30.02	12	CLR	NC			10.00		44	35	40	71	14	24	29.07	29.84	
15	FEW	NC			10.00	41	30	37	65	7	17	29.18	29.95	15	CLR	NC			10.00		49	32	42	52	15	26	29.08	29.85	
18	OVC	100			10.00	41	32	37	70	12	14	29.06	29.83	18	CLR	NC			10.00		40	28	35	63	8	27	29.17	29.94	
21	OVC	080			10.00	45	32	39	61	13	19	28.94	29.71	21	CLR	NC			10.00		36	28	33	73	8	26	29.21	29.98	
24	OVC	065			10.00	47	32	40	56	10	24	28.94	29.70	24	CLR	NC			10.00		31	27	29	85	0	00	29.22	29.99	
SUNRISE: 0647					NOV 14	SUNSET: 1626					SUNRISE: 0655					NOV 20	SUNSET: 1621												
03	OVC	031			10.00	44	32	39	63	8	29	29.00	29.77	03	CLR	NC			10.00		28	25	27	88	3	21	29.23	30.00	
06	OVC	025			10.00	39	31	36	73	14	36	29.08	29.84	06	BKN	080			10.00		30	28	29	92	3	19	29.23	30.00	
09	OVC	023			10.00	36	28	33	73	14	01	29.14	29.90	09	OVC	075			10.00		34	31	33	89	5	23	29.22	29.99	
12	OVC	031			10.00	37	32	35	82	9	01	29.18	29.95	12	FEW	NC			10.00		44	35	40	71	5	27	29.18	29.95	
15	OVC	029			10.00	36	32	34	86	6	01	29.18	29.95	15	BKN	070			10.00		47	33	41	59	0	00	29.13	29.90	
18	OVC	036			10.00	31	22	28	69	10	03	29.23	30.01	18	OVC	060			10.00		41	35	38	79	0	00	29.16	29.93	
21	CLR	NC			10.00	26	17	23	69	14	01	29.25	30.03	21	OVC	025			10.00		37	34	36	89	7	02	29.17	29.95	
24	CLR	NC			10.00	24	17	22	75	10	36	29.30	30.07	24	SCT	NC			10.00		32	31	32	96	3	33	29.14	29.91	
SUNRISE: 0649					NOV 15	SUNSET: 1625					SUNRISE: 0657					NOV 21	SUNSET: 1620												
03	CLR	NC			10.00	22	16	20	78	9	36	29.32	30.10	03	OVC	035			10.00		32	31	32	96	0	00	29.11	29.88	
06	CLR	NC			10.00	22	15	20	75	9	01	29.35	30.14	06	OVC	037			10.00		33	30	32	89	7	02	29.11	29.88	
09	OVC	034			10.00	27	16	24	63	9	01	29.41	30.20	09	OVC	043			10.00		34	28	32	79	10	36	29.13	29.91	
12	FEW	NC			10.00	34	20	29	56	12	05	29.44	30.23	12	BKN	050			10.00		38	20	31	48	20	02	29.11	29.88	
15	OVC	048			10.00	33	25	30	72	16	04	29.46	30.25	15	BKN	060			10.00		40	24	34	53	14	34	29.14	29.91	
18	OVC	029			10.00	31	20	27	64	13	06	29.51	30.30	18	OVC	043			10.00		36	28	33	73	12	34	29.19	29.96	
21	OVC	055			10.00	30	15	25	54	14	06	29.53	30.32	21	OVC	065			9.00		33	27	31	78	10	36	29.22	30.00	
24	OVC	055			10.00	29	19	26	66	10	07	29.55	30.33	24	OVC	060			10.00		32	27	30	82	7	34	29.23	30.01	
SUNRISE: 0650					NOV 16	SUNSET: 1624					SUNRISE: 0658					NOV 22	SUNSET: 1619												
03	CLR	NC			10.00	25	19	23	78	8	06	29.54	30.33	03	OVC	050			10.00		32	25	29	75	12	35	29.26	30.03	
06	CLR	NC			10.00	23	15	21	72	5	04	29.54	30.34	06	OVC	039			10.00		31	21	28	67	14	36	29.30	30.08	
09	SCT	NC			10.00	29	20	26	69	8	01	29.55	30.34	09	CLR	NC			10.00		31	21	28	67	13	35	29.32	30.10	
12	OVC	023			10.00	32	22	28	66	13	03	29.51	30.30	12	SCT	NC			10.00		35	22	30	59	10	36	29.30	30.07	
15	SCT	NC			10.00	30	24	28	79	6	04	29.47	30.26	15	OVC	032			10.00		34	22	30	61	7	36	29.30	30.08	
18	BKN	035			10.00	26	23	25	88	6	02	29.46	30.25	18	CLR	NC			10.00		28	23	26	81	0	00	29.29	30.07	
21	OVC	035			5.00	-SN BR	27	24	26	89	7	36	29.44	30.23	21	CLR	NC			10.00		26	23	25	88	0	00	29.27	30.05
24	SCT	NC			10.00	24	21	23	88	5	33	29.40	30.19	24	OVC	070			10.00		29	23	27	78	3	20	29.24	30.02	
SUNRISE: 0651					NOV 17	SUNSET: 1623					SUNRISE: 0659					NOV 23	SUNSET: 1619												
03	OVC	045			10.00	24	18	22	77	6	34	29.38	30.17	03	OVC	080			10.00		30	27	29	88	9	18	29.16	29.93	
06	CLR	NC			10.00	20	10	17	65	9	01	29.37	30.16	06	OVC	043			10.00		32	25	29	75	8	19	29.07	29.85	
09	CLR	NC			10.00	26	15	23	63	8	01	29.36	30.15	09	OVC	060			10.00		34	26	31	73	9	23	29.04	29.82	
12	CLR	NC			10.00	33	17	28	52	8	01	29.32	30.10	12	CLR	NC			10.00		42	29	37	60	17	29	29.00	29.78	
15	CLR	NC			10.00	34	16	28	48	8	33	29.28	30.06	15	BKN	050			10.00		43	27	37	53	16	29	29.03	29.79	
18	CLR	NC			10.00	25	16	22	69	5	22	29.29	30.07	18	OVC	055			10.00		39	23	33	53	16	29	29.10	29.88	
21	CLR	NC			10.00	24	15	21	68	0	00	29.28	30.06	21	OVC	050			10.00		38	22	32	53	14	28	29.13	29.91	
24	CLR	NC			10.00	18	15	17	88	0	00	29.28	30.06	24	OVC	050			10.00		34	21	29	59	9	28	29.19	29.96	
SUNRISE: 0653					NOV 18	SUNSET: 1622					SUNRISE: 0700					NOV 24	SUNSET: 1618												
03	CLR	NC			10.00	18	15	17	88	3	19	29.28	30.06	03	CLR	NC			10.00		31	20	27	64	10	30	29.25	30.02	
06	CLR	NC			10.00	17	15	17	92	0	00	29.29	30.07	06	CLR	NC			10.00		29	18	25	64	15	31	29.31	30.08	
09	CLR	NC			10.00	28	22	26	78	5	17	29.30	30.08	09	CLR	NC			10.00		30	17	26	59	12	32	29.36	30.14	
12	CLR	NC			10.00	39	24	33	55	13	15	29.26	30.03	12	SCT	NC			10.00		31	17	26	56	7	31	29.37	30.15	
15	OVC	045			10.00	39	25	34	57	10	15	29.20	29.98	15	CLR	NC			10.00		30	15	25	54	14	32	29.37	30.16	
18	OVC	012			5.00	-RA BR	36	35	36	97	7	22																	

## OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

NOVEMBER 2002

GRB

WBAN # 14898

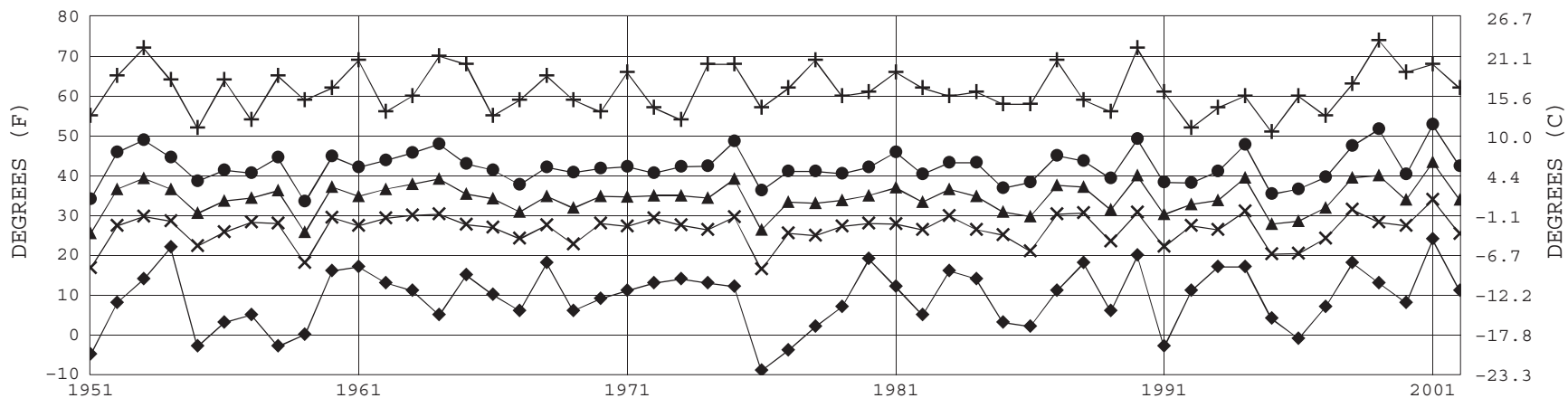
HOUR (LST)	SKY COVER		CEILING 100'S OFF	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)	
				OBSERVATION TIME (LST)	EFF CLD AMT <i>Okta</i>			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0702 NOV 25 SUNSET: 1617															
03	CLR	NC				10.00		22	17	20	82	12	30	29.44	30.23
06	CLR	NC				10.00		21	17	20	85	13	30	29.46	30.25
09	OVC	060				10.00		23	17	21	78	13	31	29.52	30.31
12	CLR	NC				10.00		30	17	26	59	10	29	29.53	30.32
15	CLR	NC				10.00		32	15	27	50	12	28	29.53	30.33
18	CLR	NC				10.00		24	15	21	68	7	28	29.58	30.38
21	CLR	NC				10.00		19	14	18	81	7	29	29.62	30.42
24	CLR	NC				10.00		18	14	17	84	0	00	29.65	30.44
SUNRISE: 0703 NOV 26 SUNSET: 1617															
03	CLR	NC				10.00		19	15	18	85	7	36	29.66	30.45
06	CLR	NC				10.00		20	16	19	85	8	02	29.65	30.45
09	OVC	048				10.00		24	18	22	77	9	02	29.67	30.47
12	OVC	060				10.00		31	19	27	61	6	05	29.64	30.43
15	OVC	075				10.00		31	20	27	64	7	02	29.61	30.40
18	OVC	075				10.00		28	19	25	69	7	36	29.61	30.41
21	FEW	NC				10.00		21	14	19	74	6	33	29.61	30.40
24	CLR	NC				10.00		20	15	19	81	7	34	29.61	30.40
SUNRISE: 0704 NOV 27 SUNSET: 1616															
03	CLR	NC				10.00		17	14	16	88	0	00	29.58	30.37
06	CLR	NC				10.00		14	12	13	92	3	24	29.59	30.39
09	BKN	043				10.00		21	17	20	85	3	27	29.59	30.38
12	OVC	026				10.00		27	17	24	66	7	VR	29.54	30.34
15	OVC	032				10.00		27	15	23	61	9	27	29.50	30.29
18	CLR	NC				10.00		22	14	20	71	3	21	29.47	30.27
21	CLR	NC				10.00		22	12	19	66	7	24	29.47	30.27
24	OVC	080				10.00		21	14	19	74	7	22	29.44	30.23
SUNRISE: 0705 NOV 28 SUNSET: 1616															
03	OVC	110				10.00		23	14	20	68	9	24	29.38	30.18
06	OVC	095				10.00		23	15	21	72	9	24	29.35	30.14
09	CLR	NC				8.00		25	17	23	72	13	24	29.32	30.11
12	OVC	022				9.00		28	19	25	69	14	25	29.25	30.03
15	CLR	NC				10.00		32	20	28	61	15	24	29.15	29.93
18	CLR	NC				10.00		29	20	26	69	9	22	29.05	29.83
21	CLR	NC				10.00		32	20	28	61	16	21	28.93	29.70
24	CLR	NC				10.00		34	24	30	67	18	22	28.71	29.47
SUNRISE: 0706 NOV 29 SUNSET: 1615															
03	CLR	NC				10.00		37	28	33	70	12	24	28.59	29.35
06	CLR	NC				10.00		34	30	32	85	9	22	28.58	29.34
09	CLR	NC				10.00		42	32	38	68	15	26	28.56	29.32
12	CLR	NC				10.00		46	29	39	51	18	27	28.52	29.27
15	CLR	NC				10.00		46	26	38	46	20	26	28.53	29.28
18	OVC	080				10.00		43	25	36	49	20	27	28.57	29.32
21	FEW	NC				10.00		40	25	34	55	20	28	28.58	29.34
24	OVC	049				10.00		34	23	30	64	14	31	28.66	29.41
SUNRISE: 0708 NOV 30 SUNSET: 1615															
03	OVC	038				10.00		27	18	24	69	18	33	28.77	29.53
06	OVC	023				7.00	-SN	25	21	24	85	16	32	28.87	29.64
09	OVC	050				10.00		25	14	22	63	21	31	28.99	29.76
12	OVC	047				10.00		25	9	20	50	21	33	29.06	29.83
15	BKN	060				10.00		22	7	18	52	16	32	29.14	29.92
18	CLR	NC				10.00		17	3	14	54	10	32	29.26	30.04
21	CLR	NC				10.00		16	4	13	59	14	30	29.29	30.08
24	OVC	100				10.00		15	1	12	53	13	29	29.28	30.06

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 Visibilty = 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.

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			31	25	29	80	29.18	29.95	8.97	8	4	29
02			31	25	29	81	29.18	29.96	9.12	7	4	29
03			30	25	28	81	29.18	29.96	9.01	7	4	30
04			30	25	28	81	29.18	29.96	9.12	7	4	31
05			29	24	28	82	29.19	29.96	9.09	7	3	30
06			29	24	28	82	29.19	29.97	9.03	8	4	31
07			29	24	27	81	29.19	29.97	8.89	7	4	30
08			31	25	29	80	29.20	29.98	8.72	8	4	30
09			33	26	31	76	29.20	29.98	9.17	10	5	29
10			36	27	32	70	29.21	29.98	9.57	11	6	30
11			37	27	33	66	29.20	29.97	9.73	11	5	28
12			39	27	34	62	29.18	29.96	9.80	12	5	29
13			40	27	35	61	29.17	29.95	9.80	12	6	27
14			40	27	35	60	29.16	29.94	9.57	12	6	28
15			40	27	35	61	29.16	29.94	9.83	11	5	28
16			38	27	34	64	29.17	29.94	9.77	10	5	28
17			36	26	33	67	29.18	29.95	9.70	8	3	28
18			35	26	32	71	29.18	29.96	9.60	8	3	28
19			34	26	31	72	29.19	29.97	9.50	8	3	27
20			34	25	31	72	29.19	29.97	9.60	9	3	29
21			33	25	30	73	29.19	29.96	9.47	9	3	28
22			33	25	30	75	29.19	29.96	9.52	9	3	30
23			32	25	30	77	29.18	29.96	9.42	8	3	30
24			31	25	29	78	29.18	29.95	9.33	8	3	29



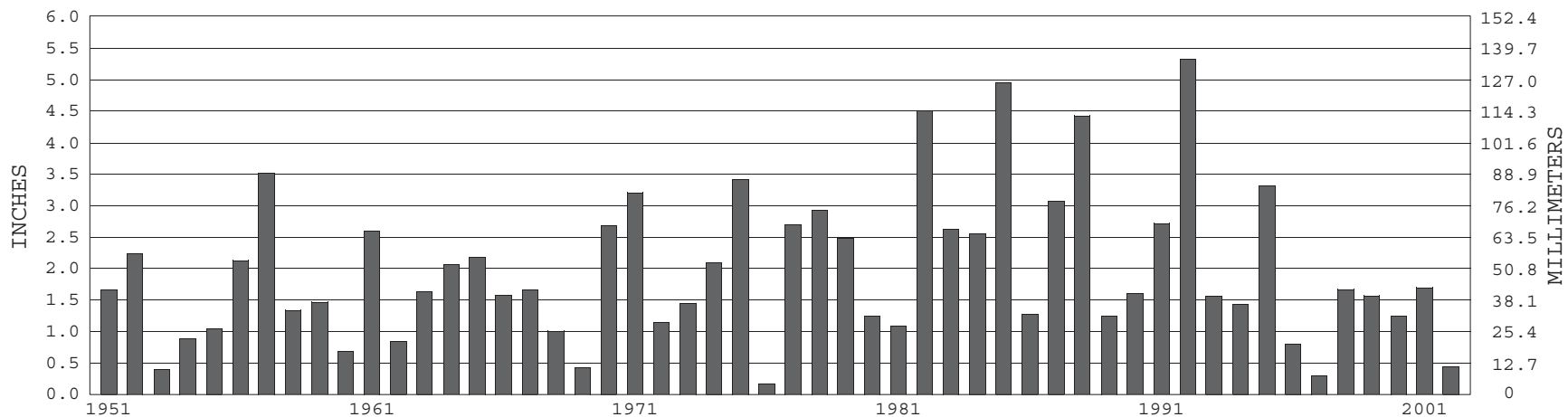
# GREEN BAY, WI NOVEMBER TEMPERATURES



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

Long-Term (1951-2002) Mean: 34.4    1961-1990 Normal: 34.0

# GREEN BAY, WI NOVEMBER PRECIPITATION



Long-Term (1951-2002) Mean Monthly Total: 1.97

1961-1990 Normal: 2.27



NOVEMBER 2002

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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