



JULY 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

JULY 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	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
01	83	56	70	1	60	64	0	5	BR	0		0.0	0.00	29.29		2.1	19	3.7	14	15	12	15	01		
02	84	60	72	3	64	67	0	7	RA BR HZ	0		0.0	T			4.9	23	5.8	23	36	20	36	02		
03	90*	64	77*	8	68	71	0	12	BR HZ	0		0.0	0.00	28.99	29.73	5.6	24	7.6	24	24	20	24	03		
04	84	66	75	6	67	69	0	10	TS TSRA RA BR HZ	0		0.0	0.01	29.04	29.78	6.3	27	7.6	23	28	20	27	04		
05	85	65	75	6	60	66	0	10		0		0.0	0.00	29.13	29.87	4.1	28	5.9	15	28	13	29	05		
06	78	62	70	1	66	68	0	5	RA FG+ BR	0		0.0	0.18	29.11	29.85	3.9	18	4.2	14	17	12	17	06		
07	85	61	73	4	65	67	0	8	FG+ BR HZ	0		0.0	0.00	29.09	29.83	5.7	25	8.2	23	29	20	25	07		
08	75	56	66	-3	58	61	0	1	RA	0		0.0	T	29.24	29.99	2.3	30	4.3	13	05	10	06	08		
09	69	54	62	-7	55	59	3	0	RA	0		0.0	T	29.24	29.99	6.9	08	7.4	16	07	13	06	09		
10	69	58	64	-5	60	61	1	0	TSRA RA BR VCTS	0		0.0	1.28	28.95	29.69	4.8	36	10.4	22	29	17	31	10		
11	69	56	63	-7	55	58	2	0	RA	0		0.0	T	29.01	29.75	11.3	30	12.1	25	31	21	29	11		
12	81	56	69	-1	57	61	0	4	TSRA RA	0		0.0	0.04	29.22	29.96	4.3	28	6.6	23	03	20	03	12		
13	81	54	68	-2	60	63	0	3	BR	0		0.0	0.00	29.29	30.04	5.0	21	5.7	15	21	13	21	13		
14	80	59	70	0	61	65	0	5	RA BR HZ VCTS	0		0.0	0.03	29.23	29.98	9.3	19	9.6	23	20	18	20	14		
15	78	56	67	-3	61	64	0	2	RA BR	0		0.0	0.09	29.11	29.85	8.5	30	10.4	26	34	22	33	15		
16	82	52	67	-3	60	63	0	2		0		0.0	0.00	29.32	30.08	5.0	25	5.9	17	28	14	24	16		
17	72	51	62	-8	58	61	3	0	RA BR	0		0.0	0.22	29.37	30.12	6.1	05	8.7	23	05	21	04	17		
18	76	46*	61*	-9	48	55	4	0		0		0.0	0.00	29.39	30.15	2.3	33	5.3	16	04	13	02	18		
19	81	50	66	-4	56	60	0	1	RA	0		0.0	T	29.28	30.04	5.4	24	6.3	18	23	14	24	19		
20	84	60	72	2	65	68	0	7	RA BR VCTS	0		0.0	0.06	29.04	29.78	5.5	25	7.2	21	21	17	19	20		
21	74	58	66	-5	61	63	0	1	RA BR	0		0.0	0.05	29.01	29.75	8.5	03	11.1	26	05	22	01	21		
22	72	54	63	-8	55	59	2	0	RA	0		0.0	T	29.23	29.98	8.8	02	9.5	21	01	17	01	22		
23	76	51	64	-7	53	58	1	0		0		0.0	0.00	29.33	30.09	6.3	03	7.3	20	02	16	05	23		
24	80	50	65	-6	56	61	0	0		0		0.0	0.00	29.32	30.07	5.0	21	5.8	17	24	13	19	24		
25	82	56	69	-2	62	66	0	4	RA	0		0.0	T	29.28	30.02	11.6	20	11.8	31	19	23	19	25		
26	82	66	74	3	68	70	0	9	TS TSRA RA BR HZ VCTS	0		0.0	0.45	29.16	29.90	8.2	20	10.1	26	24	18	24	26		
27	81	59	70	-1	64	67	0	5	BR	0		0.0	0.00	29.24	29.98	6.6	02	8.9	22	02	17	01	27		
28	75	55	65	-6	54	59	0	0		0		0.0	0.00	29.29	30.04	2.5	01	4.0	14	05	9	02	28		
29	83	52	68	-2	58	62	0	3	BR	0		0.0	0.00	29.23	29.98	4.5	21	5.7	15	19	12	19	29		
30	80	60	70	0	63	64	0	5	TS TSRA RA BR HZ	0		0.0	1.75	29.21	29.96	5.3	19	8.1	37*	26	24*	26	30		
31	79	59	69	-1	64	66	0	4	RA BR HZ	0		0.0	0.10	29.18	29.93	4.9	18	6.5	16	20	14	20	31		
79.0 56.8 67.9 ■■										60.1 63.4 0.5 3.6 < MONTHLY AVERAGES TOTALS->				0.0 4.26				1.2 26 7.5 <- MONTHLY AVERAGES							
-2.2 -1.8 -2.0 ■■										<-----DEPARTURE FROM NORMAL----->				0.82				SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3							
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 1.75 DATE: 30				SEA LEVEL PRESSURE				DATE TIME								
MONTHLY TOTAL DEPARTURE									GREATEST 24-HR SNOWFALL: 0.0 DATE:				MAXIMUM				: 30.19 18 0553								
SEASON TO DATE TOTAL DEPARTURE									GREATEST SNOW DEPTH: 0 DATE:				MINIMUM				: 29.61 11 0253								
HEATING: 16 -3 16 -3									NUMBER OF DAYS WITH =>				MAXIMUM TEMP ≥ 90: 1				MINIMUM TEMP ≤ 32: 0				PRECIPITATION ≥ 0.01 INCH: 12				
COOLING: 113 -64 159 -140													MAXIMUM TEMP ≤ 32: 0				MINIMUM TEMP ≤ 0: 0				PRECIPITATION ≥ 0.10 INCH: 6				
													THUNDERSTORMS: 5				HEAVY FOG: 2				SNOWFALL ≥ 1.0 INCH: 0				

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

GREEN BAY, WI

JULY 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													02	T	T										02		T	
03													03												03		0.00	
04													04												04		0.01	
05													05												05		0.00	
06													06				0.01	T	0.09	0.08					06		0.18	
07													07												07		0.00	
08													08	T	T										08		T	
09													09				T	T	T						09		T	
10	T	T	0.20	T	T	T	0.29	0.08	0.08				10							T	0.32	0.27	0.04	T	10		1.28	
11													11												11		T	
12													12												12		0.04	
13													13												13		0.00	
14													14												14		0.03	
15	T	0.08	T										15				0.01	T							15		0.09	
16													16												16		0.00	
17													17	0.05	0.17	T									17		0.22	
18													18												18		0.00	
19													19							T					19		T	
20													20							T					20		0.06	
21													21				T	T							21		0.05	
22													22												22		T	
23													23												23		0.00	
24													24												24		0.00	
25													25												25		T	
26													26												26		0.45	
27													27	T											27		0.00	
28													28												28		0.00	
29													29												29		0.00	
30													30												30		1.75	
31													31				T	0.04	0.83	T	0.02	0.30	0.35	0.02	0.03	0.02	0.08	0.10

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.21	.37	.46	.52	.63	.77	.87	.87	.87	.87	.87	.88
Ending Date	30	30	30	30	30	30	30	30	30	30	30	30
Ending Time (Hour/Min)	1619	1619	1624	1628	1639	1643	1648	1648	1648	1648	1648	1841

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 JULY 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	882	90					.00	10.00	
02	820	88					4.00	10.00	
03	728	78					2.00	10.00	
04	643	69					1.00	10.00	
05	771	83					8.00	10.00	
06	705	76					<.25	10.00	
07	674	73					<.25	10.00	
08	857	93					9.00	10.00	
09	833	90					10.00	10.00	
10	391	43					1.25	10.00	
11	711	77					10.00	10.00	
12	790	86					10.00	10.00	
13	859	94					4.00	10.00	
14	742	81					3.00	10.00	
15	802	88					2.50	10.00	
16	817	90					10.00	10.00	
17	389	43					1.25	10.00	
18	736	81					10.00	10.00	
19	741	82					10.00	10.00	
20	763	84					5.00	10.00	
21	673	75					1.75	10.00	
22	739	82					10.00	10.00	
23	846	94					10.00	10.00	
24	838	94					7.00	10.00	
25	701	78					8.00	10.00	
26	701	78					1.00	10.00	
27	740	83					5.00	10.00	
28	775	87					10.00	10.00	
29	826	93					5.00	10.00	
30	389	44					.50	10.00	
31	741	84					2.00	10.00	
MONTHLY AVGS							5.79	10.00	
SUNSHINE (MINUTES)									
Total: 22623 Possible: 28179 Percent Possible: 80									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 31									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 2 10 14									

OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

JULY 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	SEA LEVEL
SUNRISE: 0412						JUL 01	SUNSET: 1941						SUNRISE: 0415						JUL 07	SUNSET: 1939									
03	CLR	NC			4.00	BR	58	58	58	100	0	00	29.32	30.08	03	OVC	001			1.25	BR	64	64	64	100	5	15	29.06	29.80
06	FEW	NC			7.00		62	62	62	100	0	00	29.35	30.11	06	OVC	001			0.50	FG	64	64	64	100	5	19	29.09	29.83
09													29.34		09	SCT	NC			2.50	BR	69	67	68	93	13	16	29.05	29.79
12	FEW	NC			10.00		82	59	68	46	6	VR	29.31	30.05	12	FEW	NC			6.00	HZ	79	71	74	77	6	25	29.05	29.80
15	FEW	NC			10.00		82	61	69	49	8	19	29.26	30.00	15	FEW	NC			10.00		84	71	75	65	10	23	29.05	29.79
18	CLR	NC			10.00		80	62	69	54	5	14	29.21	29.96	18	CLR	NC			10.00		80	68	72	67	17	29	29.08	29.82
21	CLR	NC			10.00		68	58	62	70	3	18	29.22		21	CLR	NC			10.00		70	58	63	66	12	29	29.14	29.88
24	CLR	NC			10.00		64	57	59	78	5	18			24	CLR	NC			10.00		61	57	59	87	8	28	29.19	29.93
SUNRISE: 0412						JUL 02	SUNSET: 1941						SUNRISE: 0416						JUL 08	SUNSET: 1939									
03	FEW	NC			6.00	BR	61	58	59	90	0	00			03	CLR	NC			10.00		58	56	57	93	5	18	29.21	29.96
06	CLR	NC			6.00	HZ	67	60	63	79	5	22	29.17	29.90	06	CLR	NC			10.00		61	58	59	90	5	30	29.25	29.99
09	CLR	NC			10.00		78	62	68	58	8	25	29.17	29.91	09	FEW	NC			10.00		69	60	64	73	7	29	29.27	30.01
12	SCT	NC			10.00		83	65	71	55	10	26	29.15	29.89	12	CLR	NC		-RA	10.00		68	59	63	73	0	00	29.26	30.01
15	CLR	NC			10.00		83	66	72	57	8	22	29.04	29.78	15	BKN	130			10.00		73	58	64	59	6	34	29.20	29.95
18	CLR	NC			10.00		82	66	71	58	8	25	29.03	29.77	18	CLR	NC			10.00		73	58	64	59	7	01	29.22	29.97
21	CLR	NC			8.00		71	69	70	94	7	17	29.04	29.78	21	CLR	NC			10.00		61	59	60	93	0	00	29.24	29.98
24	CLR	NC			4.00	BR	65	64	64	97	0	00	29.05	29.79	24	CLR	NC			10.00		59	56	57	90	3	13	29.27	30.02
SUNRISE: 0413						JUL 03	SUNSET: 1941						SUNRISE: 0417						JUL 09	SUNSET: 1939									
03	CLR	NC			4.00	BR	67	66	66	97	6	19	29.02	29.76	03	CLR	NC			10.00		59	53	56	81	9	07	29.27	30.01
06	FEW	NC			3.00	BR	70	67	68	90	7	21	29.05	29.78	06	CLR	NC			10.00		59	56	57	90	5	05	29.30	30.05
09	CLR	NC			9.00		79	67	71	67	13	23	28.95	29.69	09	CLR	NC			10.00		66	56	60	70	9	08	29.31	30.06
12	CLR	NC			10.00		87	67	73	51	14	27	28.97	29.71	12	CLR	NC			10.00		67	56	61	68	10	11	29.28	30.03
15	FEW	NC			10.00		88	70	75	55	9	26	28.96	29.70	15	FEW	NC			10.00		67	53	59	61	10	07	29.24	29.99
18	SCT	NC			10.00		87	70	75	57	5	36	28.97	29.71	18	CLR	NC			10.00		67	55	60	66	6	11	29.20	29.95
21	CLR	NC			10.00		74	71	72	91	0	00	29.00	29.74	21	CLR	NC			10.00		61	54	57	78	7	08	29.16	29.91
24	CLR	NC			7.00		70	69	69	97	0	00	29.01	29.75	24	OVC	050			10.00		64	57	60	78	6	06	29.10	29.85
SUNRISE: 0413						JUL 04	SUNSET: 1940						SUNRISE: 0417						JUL 10	SUNSET: 1938									
03	CLR	NC			3.00	BR	68	68	68	100	5	22	29.00	29.74	03	OVC	024		8.00	VCTS -RA	61	59	60	93	8	09	29.04	29.79	
06	CLR	NC			1.50	BR	69	69	69	100	3	24	29.04	29.78	06	OVC	008		3.00	RA BR	61	60	60	97	13	07	28.99	29.74	
09	OVC	095			10.00		69	67	68	93	14	33	29.02	29.76	09	OVC	006		2.50	BR	62	61	61	96	10	05	28.94	29.69	
12	CLR	NC			10.00		81	68	72	65	9	22	29.03	29.76	12	OVC	012		10.00		64	61	62	90	12	03	28.93	29.68	
15	FEW	NC			10.00		84	70	74	63	18	27	29.02	29.76	15	OVC	008		7.00		64	61	62	90	8	32	28.91	29.66	
18	CLR	NC			10.00		82	66	71	58	9	29	29.02	29.76	18	OVC	022		10.00		67	62	64	84	8	28	28.89	29.63	
21	CLR	NC			10.00		74	67	69	79	6	23	29.08	29.82	21	OVC	024		2.50	+RA BR	63	62	62	97	10	29	28.89	29.64	
24	CLR	NC			10.00		66	63	64	90	5	29	29.07	29.80	24	OVC	110		10.00		58	55	56	90	17	31	28.89	29.64	
SUNRISE: 0414						JUL 05	SUNSET: 1940						SUNRISE: 0418						JUL 11	SUNSET: 1938									
03	CLR	NC			10.00		65	62	63	90	6	30	29.07	29.81	03	OVC	022		10.00		57	53	55	87	18	29	28.86	29.61	
06	FEW	NC			10.00		68	63	65	84	8	24	29.12	29.86	06	OVC	037		10.00		57	53	55	87	14	30	28.93	29.68	
09	CLR	NC			10.00		77	61	67	58	6	31	29.13	29.87	09	OVC	019		10.00		61	55	58	81	14	30	28.99	29.73	
12	CLR	NC			10.00		83	55	66	38	9	27	29.14	29.88	12	OVC	075		10.00		65	57	60	76	10	32	29.02	29.77	
15	CLR	NC			10.00		85	54	66	35	7	33	29.14	29.88	15	OVC	080		10.00		68	56	61	66	9	34	29.03	29.78	
18	CLR	NC			10.00		83	54	65	37	0	00	29.13	29.87	18	CLR	NC			10.00		69	55	61	61	12	34	29.05	29.80
21	CLR	NC			10.00		70	63	66	79	5	15	29.15	29.89	21	BKN	095		10.00		61	55	58	81	3	34	29.11	29.85	
24	CLR	NC			8.00		68	64	66	87	6	21	29.15	29.89	24	OVC	100		10.00		58	55	56	90	8	28	29.12	29.87	
SUNRISE: 0415						JUL 06	SUNSET: 1940						SUNRISE: 0419						JUL 12	SUNSET: 1937									
03	CLR	NC			7.00		65	63	64	93	6	18	29.13	29.87	03	OVC	100		10.00		58	53	55	84	10	28	29.13	29.88	
06	CLR	NC			6.00	BR	69	65	66	87	5	18	29.15	29.89	06	FEW	NC			10.00		60	55	57	84	3	VR	29.18	29.93
09	CLR	NC			9.00		75	68	70	79	5	20	29.17	29.91	09	CLR	NC			10.00		70	57	62	64	7	31	29.22	29.96
12	CLR	NC			10.00		77	68	71	74	9	18	29.12	29.86	12	CLR	NC			10.00		77	59	66	54	8	34	29.24	29.98
15	BKN	070			7.00	-RA	75	69	71	82	0	00	29.09	29.83	15	BKN	065			10.00		79	56	65	45	9	25	29.24	29.98
18	CLR	NC			9.00		71	69	70	94	7	17	29.07	29.81	18	BKN	075			10.00		73	58	64	59	6	20	29.24	29.98
21	CLR	NC			1.75	BR	66	66	66	100	0	00	29.08	29.83	21	CLR	NC			10.00		63	59	61	87	7	22	29.27	30.01
24	OVC	001			<.25	FG	63	63	63	100	0	00	29.09	29.83	24	CLR	NC			10.00		61	57	59	87	6	22	29.28	30.03

OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

JULY 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		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		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0420				JUL 13				SUNSET: 1937				SUNRISE: 0425				JUL 19				SUNSET: 1932			
03	CLR	NC		56	55	55	97	3	24	29.29	30.03	03	CLR	NC		50	49	49	96	0	00	29.34	30.10
06	CLR	NC		60	58	59	93	3	18	29.32	30.06	06	CLR	NC		56	53	54	90	3	25	29.36	30.12
09	CLR	NC		73	63	67	71	6	22	29.32	30.08	09	FEW	NC		70	58	63	66	5	VR	29.34	30.10
12	CLR	NC		80	60	67	51	6	24	29.32	30.06	12	CLR	NC		79	60	67	52	8	26	29.30	30.05
15	CLR	NC		81	62	69	53	8	21	29.30	30.04	15	CLR	NC		81	56	66	42	14	26	29.26	30.01
18	CLR	NC		77	60	66	56	6	19	29.28	30.02	18	BKN	110		75	56	64	52	5	23	29.21	29.96
21	SCT	NC		66	62	64	87	7	17	29.28	30.03	21	SCT	NC		66	59	62	78	5	21	29.21	29.96
24	CLR	NC		64	60	62	87	6	20	29.29	30.03	24	FEW	NC		65	58	61	78	5	22	29.18	29.92
SUNRISE: 0421				JUL 14				SUNSET: 1936				SUNRISE: 0426				JUL 20				SUNSET: 1932			
03	CLR	NC		61	60	60	97	6	21	29.30	30.04	03	BKN	110		64	58	60	81	7	24	29.13	29.87
06	CLR	NC		64	62	63	93	3	21	29.31	30.05	06	BKN	090		64	62	63	93	6	22	29.08	29.82
09	CLR	NC		75	65	69	71	10	19	29.28	30.02	09	CLR	NC		74	68	70	82	14	28	29.07	29.81
12	CLR	NC		79	60	67	52	16	20	29.28	30.02	12	CLR	NC		83	69	74	63	9	31	29.04	29.78
15	SCT	NC		78	58	66	50	13	19	29.23	29.98	15	CLR	NC		80	69	73	69	8	23	29.02	29.76
18	CLR	NC		74	60	65	62	13	17	29.17	29.92	18	CLR	NC		80	67	71	64	10	24	28.97	29.71
21	CLR	NC		70	62	65	76	6	17	29.13	29.88	21	CLR	NC		68	65	66	90	0	00	29.00	29.74
24	SCT	NC		69	64	66	84	13	19	29.06	29.80	24	CLR	NC		64	63	63	96	5	14	28.95	29.69
SUNRISE: 0422				JUL 15				SUNSET: 1935				SUNRISE: 0427				JUL 21				SUNSET: 1931			
03	BKN	065		67	65	66	93	7	20	29.01	29.75	03	BKN	110		62	60	61	93	9	14	28.92	29.66
06	SCT	NC		67	65	66	93	8	25	29.02	29.76	06	BKN	085		62	60	61	93	6	29	28.93	29.67
09	CLR	NC		74	67	69	79	14	30	29.03	29.77	09	FEW	NC		70	63	66	79	8	02	28.94	29.68
12	FEW	NC		76	63	68	64	17	30	29.08	29.82	12	OVC	048		66	64	65	93	8	35	28.99	29.73
15	OVC	044		67	63	64	87	10	33	29.13	29.88	15	OVC	048		68	63	65	84	13	04	29.01	29.76
18	CLR	NC		72	55	62	55	12	33	29.18	29.93	18	SCT	NC		69	60	64	73	15	04	29.05	29.80
21	CLR	NC		58	56	57	93	6	28	29.24	29.98	21	OVC	039		65	58	61	78	17	02	29.12	29.86
24	CLR	NC		56	54	55	93	8	29	29.25	30.00	24	BKN	055		60	56	58	86	9	01	29.15	29.90
SUNRISE: 0423				JUL 16				SUNSET: 1935				SUNRISE: 0428				JUL 22				SUNSET: 1930			
03	CLR	NC		53	52	52	96	0	00	29.30	30.05	03	CLR	NC		57	55	56	93	7	36	29.16	29.91
06	CLR	NC		58	56	57	93	0	00	29.33	30.09	06	SCT	NC		58	53	55	84	14	01	29.20	29.95
09	CLR	NC		72	61	65	69	9	28	29.33	30.09	09	CLR	NC		67	56	60	68	9	01	29.23	29.97
12	CLR	NC		79	59	67	50	6	25	29.34	30.09	12	BKN	060		70	58	63	66	8	06	29.24	29.99
15	CLR	NC		81	61	68	51	9	25	29.32	30.06	15	BKN	100		68	59	63	73	10	05	29.25	29.99
18	CLR	NC		79	64	69	60	9	24	29.33	30.08	18	OVC	090		68	58	62	70	10	01	29.25	29.99
21	SCT	NC		70	65	67	84	5	21	29.33	30.09	21	CLR	NC		57	55	56	93	7	33	29.29	30.04
24	SCT	NC		67	63	64	87	5	20	29.33	30.08	24	CLR	NC		54	51	52	90	7	34	29.31	30.06
SUNRISE: 0423				JUL 17				SUNSET: 1934				SUNRISE: 0429				JUL 23				SUNSET: 1929			
03	BKN	100		65	63	64	93	5	23	29.32	30.07	03	CLR	NC		54	50	52	87	7	35	29.31	30.06
06	BKN	055		68	65	66	90	6	23	29.33	30.08	06	CLR	NC		57	52	54	83	7	36	29.34	30.10
09	OVC	015		67	62	64	84	16	04	29.37	30.12	09	CLR	NC		67	55	60	66	9	02	29.35	30.11
12	OVC	015		63	58	60	84	20	05	29.38	30.14	12	CLR	NC		73	57	63	57	13	04	29.35	30.11
15	OVC	029		67	60	63	79	14	05	29.37	30.13	15	CLR	NC		75	54	63	48	13	08	29.33	30.09
18	OVC	039		67	56	61	68	8	09	29.38	30.14	18	CLR	NC		73	52	61	48	8	06	29.32	30.06
21	BKN	049		62	46	54	56	8	06	29.38	30.14	21	CLR	NC		58	55	56	90	0	00	29.32	30.08
24	CLR	NC		52	49	50	89	0	00	29.38	30.15	24	CLR	NC		54	53	53	97	0	00	29.33	30.09
SUNRISE: 0424				JUL 18				SUNSET: 1933				SUNRISE: 0430				JUL 24				SUNSET: 1928			
03	CLR	NC		47	47	47	100	5	31	29.41	30.17	03	CLR	NC		54	53	53	97	0	00	29.33	30.08
06	CLR	NC		53	48	50	83	3	36	29.42	30.19	06	CLR	NC		57	55	56	93	0	00	29.35	30.11
09	CLR	NC		67	47	56	49	9	05	29.42	30.18	09	CLR	NC		72	57	63	60	9	22	29.35	30.11
12	CLR	NC		73	48	59	41	7	07	29.41	30.16	12	CLR	NC		78	58	66	50	8	25	29.33	30.09
15	CLR	NC		75	42	57	31	6	VR	29.38	30.14	15	FEW	NC		79	56	65	45	9	22	29.30	30.05
18	CLR	NC		71	52	60	51	5	26	29.35	30.11	18	CLR	NC		76	57	64	52	8	19	29.28	30.03
21	CLR	NC		58	51	54	78	7	28	29.34	30.10	21	CLR	NC		65	58	61	78	8	18	29.31	30.06
24	CLR	NC		54	50	52	87	0	00	29.34	30.10	24	CLR	NC		62	57	59	84	7	20	29.32	30.06

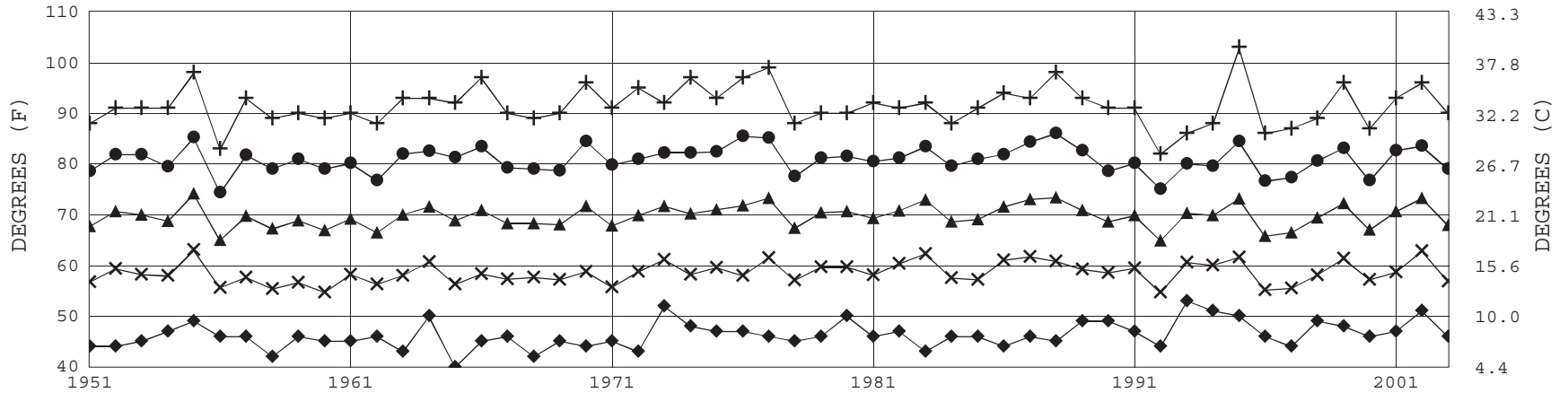
OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

JULY 2003 GRB WBAN # 14898

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		
	SKY COVER	CEILING 100'S OF FT		OBSERVATION TIME (LST)	EFF CLD AMT Okta			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 Okta			DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
SUNRISE: 0431 JUL 25 SUNSET: 1927																SUNRISE: 0438 JUL 31 SUNSET: 1920																
03	CLR	NC			10.00			58	57	57	97	5	19	29.30	30.05	03	CLR	NC			9.00				60	59	59	96	8	18	29.20	29.94
06	CLR	NC			9.00			61	59	60	93	7	18	29.32	30.06	06	CLR	NC			6.00		BR		63	61	62	93	9	19	29.20	29.95
09	CLR	NC			10.00			74	61	66	64	14	21	29.32	30.07	09	OVC	015			5.00		BR		72	68	69	87	6	23	29.22	29.97
12	CLR	NC			10.00			79	63	69	58	16	21	29.29	30.03	12	CLR	NC			7.00				77	68	71	74	7	19	29.19	29.93
15	CLR	NC			10.00			81	63	69	54	20	20	29.24	29.98	15	CLR	NC			8.00				75	69	71	82	7	18	29.17	29.92
18	CLR	NC			10.00			79	65	70	62	12	20	29.24	29.98	18	CLR	NC			10.00				72	63	66	73	7	19	29.15	29.89
21	BKN	120			10.00			74	68	70	82	5	19	29.28	30.03	21	BKN	100			9.00				67	64	65	91	3	VR	29.16	29.91
24	CLR	NC			10.00			74	65	68	74	12	20	29.25	29.99	24	SCT	NC			7.00				65	64	64	97	8	08	29.13	29.87
SUNRISE: 0432 JUL 26 SUNSET: 1926																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.																																
SUNRISE: 0433 JUL 27 SUNSET: 1925																SUMMARY BY HOUR																
AVERAGES																RESULTANT WIND (MPH)																
HOUR (LST)	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	DIRECTION																					
							STATION	SEA LEVEL			SPEED	DIRECTION																				
01			61	58	60	90	29.19	29.94	8.81	6	1	24																				
02			61	58	59	92	29.19	29.93	8.36	6	2	22																				
03			60	58	59	93	29.19	29.93	8.04	6	2	23																				
04			60	58	59	93	29.19	29.93	7.72	6	2	24																				
05			60	58	59	93	29.20	29.94	7.10	5	2	23																				
06			63	59	61	90	29.20	29.95	7.55	6	2	24																				
07			65	60	62	84	29.21	29.95	8.17	8	2	27																				
08			69	61	64	78	29.21	29.95	8.68	8	2	28																				
09			71	62	65	73	29.21	29.95	8.97	10	2	29																				
10			73	61	66	68	29.21	29.95	9.43	9	2	29																				
11			75	61	66	65	29.21	29.95	9.52	9	3	29																				
12			76	61	67	63	29.20	29.95	9.39	9	2	27																				
13			76	61	67	61	29.19	29.94	9.35	10	3	28																				
14			77	61	67	60	29.19	29.93	9.48	10	3	26																				
15			76	61	67	61	29.18	29.93	9.35	9	2	25																				
16			77	61	67	60	29.17	29.92	9.69	10	4	27																				
17			76	60	66	61	29.17	29.92	9.52	9	2	26																				
18			75	61	66	63	29.17	29.92	9.90	8	1	25																				
19			72	61	65	69	29.17	29.92	9.52	7	2	21																				
20			68	61	63	79	29.18	29.92	9.24	5	1	22																				
21			65	60	62	84	29.19	29.94	9.10	5	2	22																				
22			64	60	62	85	29.19	29.94	9.06	6	2	22																				
23			63	59	61	87	29.19	29.94	9.17	6	2	22																				
24			62	59	60	89	29.19	29.93	8.94	5	2	23																				

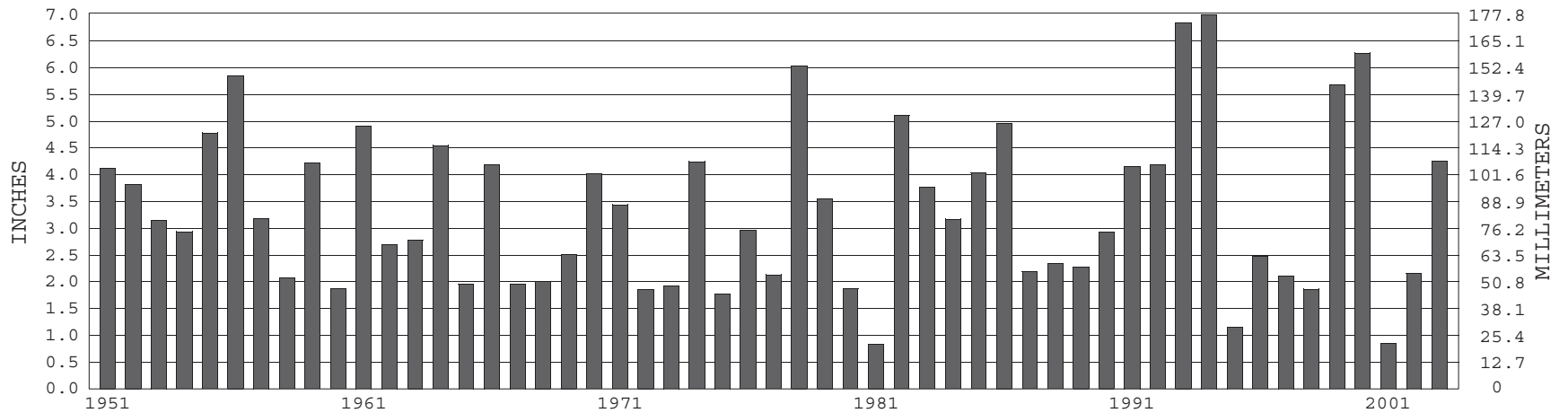
GREEN BAY, WI JULY TEMPERATURES



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

Long-Term (1951-2003) Mean: 69.7 1961-1990 Normal: 69.9

GREEN BAY, WI JULY PRECIPITATION



Long-Term (1951-2003) Mean Monthly Total: 3.36

1961-1990 Normal: 3.44



JULY 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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