



# SEPTEMBER 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	82	55	69	5	63	66	0	4	FG+ BR HZ	0		0.0	0.00	29.32	30.07	6.4	19	6.5	20	18	15	18	01			
02	80	63	72	8	66	68	0	7	TS TSRA RA BR	0		0.0	0.79	29.02	29.76	10.2	23	12.4	39*	28	30*	29	02			
03	76	57	67	3	56	60	0	2		0		0.0	0.00	29.19	29.94	10.1	27	10.3	28	28	23	28	03			
04	79	52	66	3	57	60	0	1		0		0.0	0.00	29.42	30.17	2.3	29	4.6	12	32	9	13	04			
05	78	54	66	4	61	62	0	1	BR	0		0.0	0.00	29.44	30.19	2.4	14	4.4	14	17	13	15	05			
06	80	51	66	4	62	63	0	1	TSRA RA BR	0		0.0	0.13	29.32	30.07	6.5	17	6.7	21	16	17	16	06			
07	85	63	74	13	66	69	0	9	BR	0		0.0	0.00	29.35	30.10	7.0	19	7.1	16	20	14	20	07			
08	87	57	72	11	66	68	0	7	BR HZ	0		0.0	0.00	29.39	30.14	5.2	19	5.5	13	20	12	20	08			
09	88*	61	75*	14	69	71	0	10	RA FG+ BR	0		0.0	T	29.31	30.06	4.1	22	4.6	16	21	13	24	09			
10	76	51	64	3	61	63	1	0	RA BR	0		0.0	0.01	29.21	29.96	6.3	30	9.2	28	34	21	35	10			
11	76	48	62	2	53	57	3	0		0		0.0	0.00	29.34	30.09	2.4	30	4.9	16	03	12	32	11			
12	77	48	63	3	53	58	2	0		0		0.0	0.00	29.27	30.02	6.6	24	6.8	22	24	17	27	12			
13	79	53	66	6	58	61	0	1	RA	0		0.0	T	29.21	29.96	3.8	22	4.8	14	21	10	23	13			
14	68	53	61	2	59	60	4	0	RA BR	0		0.0	0.16	29.15	29.90	2.1	29	6.5	25	02	20	02	14			
15	66	44	55	-4	49	52	10	0		0		0.0	0.00	29.39	30.15	5.8	03	7.1	21	03	17	04	15			
16	74	40	57	-2	49	53	8	0	BR	0		0.0	0.00	29.29	30.05	5.1	22	5.7	22	21	16	21	16			
17	81	49	65	7	56	59	0	0	BR	0		0.0	0.00	29.22	29.97	3.0	19	4.3	15	20	13	22	17			
18	72	54	63	5	62	63	2	0	RA BR HZ	0		0.0	0.02	29.02	29.76	4.0	14	4.6	14	17	12	16	18			
19	81	66	74	16	69	70	0	9	RA BR	0		0.0	0.46	28.85	29.58	8.4	19	9.2	23	18	18	22	19			
20	71	59	65	8	65	66	0	0	RA BR	0		0.0	1.00	28.80	29.54	6.1	21	7.8	23	24	17	24	20			
21	68	50	59	2	49	53	6	0	RA	0		0.0	T	29.13	29.89	7.2	27	8.4	23	28	20	28	21			
22	62	41	52	-5	43	47	13	0		0		0.0	0.00	29.29	30.05	9.9	27	10.2	28	26	23	26	22			
23	60	35*	48*	-8	41	46	17	0	RA	0		0.0	0.01	29.32	30.09	5.8	23	9.3	33	26	25	29	23			
24	59	39	49	-7	40	44	16	0		0		0.0	0.00	29.52	30.29	4.2	25	7.7	17	30	14	27	24			
25	71	48	60	4	48	53	5	0	RA	0		0.0	0.03	29.42	30.18	6.5	19	6.8	21	19	17	18	25			
26	61	48	55	0	51	52	10	0	RA BR	0		0.0	T	29.23	29.98	7.6	03	7.9	22	05	18	05	26			
27	63	39	51	-4	46	48	14	0	RA BR	0		0.0	0.01	29.19	29.94	5.7	02	6.3	17	05	15	03	27			
28	66	37	52	-2	46	50	13	0	BR	0		0.0	0.00	29.37	30.13	3.4	14	3.8	22	16	15	16	28			
29	74	56	65	11	60	61	0	0	RA FG+ BR HZ	0		0.0	0.04	29.24	29.99	3.9	11	5.0	14	15	12	14	29			
30	83	58	71	17	61	65	0	6	TS RA BR	0		0.0	0.01	29.07	29.81	10.5	20	11.8	30	19	20	20	30			
74.1 51.0 62.6 ■■										< MONTHLY AVERAGES		TOTALS-->		0.0	2.67	29.24	30.00	2.0	22	7.0	<- MONTHLY AVERAGES					
3.9 3.5 3.8 ■■										<-----DEPARTURE FROM NORMAL----->		- .44	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3													
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 1.13 DATE: 19-20				GREATEST 24-HR SNOWFALL: 0.0 DATE:				GREATEST SNOW DEPTH: 0 DATE:				SEA LEVEL PRESSURE DATE TIME					
MONTHLY TOTAL DEPARTURE									MAXIMUM				MINIMUM				: 30.35 24 0856				: 29.42 20 1256					
HEATING: 124 -84									NUMBER OF DAYS WITH →				MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 0				PRECIPITATION ≥ 0.01 INCH : 12					
COOLING: 58 22									MAXIMUM TEMP ≤ 32 : 0				MINIMUM TEMP ≤ 0 : 0				PRECIPITATION ≥ 0.10 INCH : 5				SNOWFALL ≥ 1.0 INCH : 0					
SEASON TO DATE TOTAL DEPARTURE									139 -126				579 118													

SEPTEMBER 2002  
GREEN BAY, WI

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

GREEN BAY, WI

SEPTEMBER 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		T	0.48	0.06	0.01								02								0.24	T			02			0.79	
03													03												03			0.00	
04													04												04			0.00	
05													05												05			0.00	
06			0.01										06	T		0.01	0.02	0.01	0.03	0.04	0.02				06	0.14		0.13	
07													07												07			0.00	
08													08												08			0.00	
09													09								T				09			T	
10											T	0.01	10												10			0.01	
11													11												11			0.00	
12													12												12			0.00	
13													13					T	T						13			T	
14								T	T		0.01	0.02	14	0.02	0.02	0.03	0.03	0.01	0.02					14			0.16		
15													15												15			0.00	
16													16												16			0.00	
17													17												17			0.00	
18													18	0.02	T								T	T	18			0.02	
19			0.01	0.07	0.15	0.01	0.01	0.07	T	T			19	T		0.21	T								19	0.01		0.46	
20						T	T				0.06	0.08	20	0.46	0.25		0.05					T	0.03	T	20			1.00	
21							0.01						21					T	T						21			T	
22													22												22	0.01		0.00	
23													23	T	T	T	0.01	T	T						23			0.01	
24													24												24			0.00	
25	0.01	0.01	T	T	T	T					0.01		25									T	T	T	25			0.03	
26													26											T	26			T	
27		T	0.01				T		T				27												27			0.01	
28													28												28			0.00	
29	0.01	T	T	T		0.03							29												29			0.04	
30	T	T				T							30									0.01			30			0.01	

## 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 SEPTEMBER 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	528	66					.25	10.00	
02	247	31					1.75	10.00	
03	754	96					10.00	10.00	
04	750	96					10.00	10.00	
05	625	80					1.50	10.00	
06	316	41					1.75	10.00	
07	586	76					4.00	10.00	
08	680	88					.75	10.00	
09	644	84					.25	10.00	
10	132	17					6.00	10.00	
11	571	75					10.00	10.00	
12	629	83					8.00	10.00	
13	389	51					10.00	10.00	
14	0	0					2.00	10.00	
15	667	89					10.00	10.00	
16	714	95					1.75	10.00	
17	565	76					4.00	10.00	
18	115	15					1.75	10.00	
19	68	9					1.75	10.00	
20	0	0					1.25	10.00	
21	364	50					7.00	10.00	
22	361	49					10.00	10.00	
23	328	45					10.00	10.00	
24	486	67					10.00	10.00	
25	58	8					10.00	10.00	
26	130	18					1.50	10.00	
27	60	8					1.75	10.00	
28	0	0					.75	10.00	
29	300	42					.25	10.00	
30	300	42					2.00	10.00	
MONTHLY AVGS							5.66	10.00	
SUNSHINE (MINUTES)									
Total: 11367    Possible: 22522									
Percent Possible: 50									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR   PTLY CLDY   CLOUDY   MISSING									
30									
MINIMUM VISIBILITY (MILES)									
<=0.25    <=3.0    >=7.0									
3                    11                    13									

## OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

SEPTEMBER 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: 0515 SEP 01						SUNSET: 1831						SUNRISE: 0522 SEP 07						SUNSET: 1820											
03	VV	001			0.25	FG	56	56	56	100	0	00	29.43	30.19	03	CLR	NC			5.00	BR	65	63	64	93	6	20	29.31	30.05
06	CLR	NC			3.00	BR	57	57	57	100	0	00	29.41	30.17	06	CLR	NC			4.00	BR	64	62	63	93	7	19	29.33	30.09
09	CLR	NC			7.00		73	66	69	79	5	20	29.39	30.14	09	CLR	NC			10.00		76	66	69	72	9	20	29.37	30.12
12	FEW	NC			9.00		80	66	71	62	9	21	29.34	30.09	12	CLR	NC			10.00		82	70	74	67	9	21	29.35	30.10
15	FEW	NC			9.00		81	64	70	57	13	19	29.26	30.01	15	CLR	NC			10.00		85	70	75	61	8	20	29.33	30.08
18	CLR	NC			9.00		75	68	70	79	8	17	29.24	29.98	18	CLR	NC			10.00		78	71	73	79	6	18	29.34	30.09
21	CLR	NC			8.00		68	65	66	90	7	18	29.22	29.96	21	CLR	NC			9.00		70	65	67	84	6	19	29.38	30.13
24	SCT	NC			7.00		69	65	66	87	10	18	29.17	29.91	24	CLR	NC			5.00	BR	64	62	63	93	3	20	29.39	30.14
SUNRISE: 0516 SEP 02						SUNSET: 1829						SUNRISE: 0523 SEP 08						SUNSET: 1818											
03	OVC	014			7.00	+TSRA	64	63	63	96	8	30	29.15	29.89	03	CLR	NC			3.00	BR	62	61	61	96	3	22	29.38	30.13
06	BKN	095			10.00		65	64	64	97	7	28	29.07	29.81	06	CLR	NC			1.75	BR	59	59	59	100	0	00	29.42	30.18
09	SCT	NC			10.00		71	65	67	81	12	21	29.05	29.80	09	CLR	NC			6.00	HZ	76	69	71	79	5	18	29.43	30.18
12	CLR	NC			10.00		76	67	70	74	20	21	29.01	29.75	12	CLR	NC			10.00		85	69	74	59	8	22	29.41	30.16
15	CLR	NC			10.00		80	69	73	69	20	21	28.92	29.66	15	CLR	NC			10.00		87	67	73	51	7	18	29.36	30.11
18	BKN	055			9.00		79	70	73	74	10	22	28.91	29.65	18	CLR	NC			8.00		77	71	73	82	8	15	29.35	30.11
21	CLR	NC			10.00	TS	68	65	66	90	8	25	28.98	29.73	21	CLR	NC			7.00		72	66	68	82	7	20	29.38	30.13
24	CLR	NC			10.00		63	61	62	93	9	28	29.07	29.82	24	CLR	NC			4.00	BR	66	64	65	93	5	18	29.38	30.13
SUNRISE: 0517 SEP 03						SUNSET: 1827						SUNRISE: 0524 SEP 09						SUNSET: 1816											
03	CLR	NC			10.00		60	57	58	90	8	26	29.10	29.84	03	CLR	NC			0.25	FG	62	62	62	100	0	00	29.36	30.11
06	CLR	NC			10.00		58	56	57	93	8	26	29.16	29.91	06	CLR	NC			1.00	BR	62	62	62	100	0	00	29.37	30.12
09	CLR	NC			10.00		69	59	63	70	10	28	29.18	29.93	09	CLR	NC			9.00		80	72	74	76	8	25	29.36	30.11
12	CLR	NC			10.00		74	56	63	54	18	28	29.19	29.93	12	CLR	NC			10.00		87	72	76	61	10	24	29.32	30.07
15	CLR	NC			10.00		75	55	63	50	15	29	29.19	29.94	15	CLR	NC			10.00		88	73	77	61	9	21	29.28	30.02
18	CLR	NC			10.00		70	56	62	61	7	25	29.22	29.97	18	CLR	NC			10.00		80	73	75	79	3	21	29.26	30.01
21	CLR	NC			10.00		61	55	58	81	7	27	29.27	30.02	21	CLR	NC			9.00		73	70	71	90	3	21	29.26	30.00
24	CLR	NC			10.00		57	54	55	90	7	27	29.30	30.05	24	CLR	NC			8.00		71	69	70	94	5	21	29.22	29.96
SUNRISE: 0518 SEP 04						SUNSET: 1825						SUNRISE: 0525 SEP 10						SUNSET: 1814											
03	CLR	NC			10.00		53	52	52	96	8	28	29.34	30.10	03	CLR	NC			6.00	BR	68	68	68	100	5	19	29.17	29.91
06	CLR	NC			10.00		54	53	53	97	5	29	29.41	30.17	06	CLR	NC			6.00	BR	70	67	68	90	6	21	29.14	29.88
09	CLR	NC			10.00		69	57	62	66	3	VR	29.44	30.20	09	CLR	NC			10.00		75	68	70	79	10	25	29.12	29.86
12	CLR	NC			10.00		75	57	64	54	6	29	29.44	30.20	12	BKN	055			10.00		68	63	65	84	15	32	29.16	29.91
15	CLR	NC			10.00		77	58	65	52	0	00	29.43	30.19	15	OVC	034			10.00		68	57	61	68	16	35	29.22	29.97
18	CLR	NC			10.00		71	64	67	79	3	18	29.42	30.18	18	CLR	NC			10.00		63	53	57	70	8	35	29.28	30.02
21	CLR	NC			10.00		61	57	59	87	3	16	29.45	30.20	21	CLR	NC			10.00		53	51	52	93	6	30	29.31	30.06
24	CLR	NC			10.00		56	55	55	97	0	00	29.45	30.20	24	CLR	NC			10.00		51	50	51	96	6	31	29.32	30.07
SUNRISE: 0520 SEP 05						SUNSET: 1824						SUNRISE: 0527 SEP 11						SUNSET: 1813											
03	CLR	NC			10.00		57	56	56	96	0	00	29.46	30.21	03	CLR	NC			10.00		53	50	51	89	8	33	29.32	30.07
06	CLR	NC			7.00		55	55	55	100	0	00	29.47	30.23	06	CLR	NC			10.00		49	49	49	100	0	00	29.36	30.13
09	BKN	110			10.00		70	64	66	82	8	18	29.50	30.25	09	CLR	NC			10.00		67	55	60	66	6	35	29.38	30.14
12	CLR	NC			10.00		76	64	68	67	3	09	29.47	30.23	12	CLR	NC			10.00		74	51	61	45	9	01	29.36	30.11
15	FEW	NC			10.00		76	67	70	74	9	11	29.43	30.19	15	FEW	NC			10.00		75	54	63	48	8	34	29.32	30.07
18	CLR	NC			10.00		69	63	65	81	7	15	29.38	30.14	18	CLR	NC			10.00		67	57	61	71	3	24	29.31	30.06
21	CLR	NC			10.00		59	58	58	96	0	00	29.37	30.13	21	CLR	NC			10.00		59	53	56	81	8	19	29.32	30.08
24	CLR	NC			9.00		56	55	55	97	0	00	29.37	30.13	24	CLR	NC			10.00		53	51	52	93	0	00	29.32	30.08
SUNRISE: 0521 SEP 06						SUNSET: 1822						SUNRISE: 0528 SEP 12						SUNSET: 1811											
03	CLR	NC			8.00		53	53	53	100	3	13	29.35	30.11	03	CLR	NC			8.00		50	50	50	100	0	00	29.32	30.06
06	CLR	NC			3.00	BR	54	54	54	100	0	00	29.37	30.12	06	CLR	NC			10.00		51	50	51	96	5	22	29.33	30.09
09	CLR	NC			10.00		68	66	67	93	8	19	29.36	30.12	09	CLR	NC			10.00		67	55	60	66	9	24	29.32	30.07
12	CLR	NC			10.00		76	64	68	67	15	17	29.29	30.04	12	CLR	NC			10.00		74	54	62	50	12	22	29.27	30.02
15	BKN	110			9.00	-RA	73	68	70	84	12	17	29.27	30.02	15	CLR	NC			10.00		76	54	63	47	15	26	29.24	29.98
18	OVC	095			7.00	-TSRA	68	65	66	90	12	18	29.27	30.02	18	CLR	NC			10.00		68	55	60	63	3	23	29.22	29.97
21	CLR	NC			10.00		66																						

## OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

SEPTEMBER 2002

GRB

WBAN # 14898

HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES,HG)		HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES,HG)					
			OBSERVATION TIME (LST)	EFF CLD AMT Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB			RELATIVE HUMIDITY (PCT)	SPEED (MPH)				DIRECTION TENS OF DEG	STATION		SEA LEVEL	OBSERVATION TIME (LST)	EFF CLD AMT Oktas	VISIBILITY (MILES)			DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG
			SUNRISE: 0529		SEP 13	SUNSET: 1809										SUNRISE: 0536		SEP 19	SUNSET: 1756												
03	CLR	NC			10.00		58	54	56	87	6	24	29.21	29.96	03	BKN	020			6.00	-RA	BR		69	68	68	96	10	17	28.85	29.59
06	CLR	NC			10.00		53	52	52	96	0	00	29.25	30.00	06	BKN	046			10.00	-RA			69	68	68	96	9	16	28.84	29.58
09	CLR	NC			10.00		66	58	61	75	6	27	29.27	30.02	09	BKN	014			10.00				74	70	71	88	15	19	28.85	29.60
12	CLR	NC			10.00		76	60	66	58	3	VR	29.23	29.98	12	BKN	090			9.00				78	72	74	82	13	20	28.83	29.56
15	CLR	NC			10.00		78	60	67	54	8	27	29.21	29.95	15	BKN	025			9.00	-RA			72	70	71	94	9	23	28.81	29.54
18	CLR	NC			10.00		66	63	64	90	0	00	29.18	29.93	18	SCT	NC			10.00				72	69	70	91	8	19	28.81	29.54
21	CLR	NC			10.00		64	59	61	84	6	18	29.17	29.92	21	OVC	070			10.00				70	68	69	93	6	24	28.86	29.60
24	CLR	NC			10.00		61	57	59	87	6	18	29.15	29.89	24	OVC	055			10.00				69	67	68	93	6	20	28.87	29.61
			SUNRISE: 0530		SEP 14	SUNSET: 1807										SUNRISE: 0537		SEP 20	SUNSET: 1754												
03	BKN	095			9.00		61	56	58	84	5	19	29.13	29.88	03	FEW	NC			7.00				66	66	66	100	5	18	28.85	29.59
06	BKN	070			6.00	BR	61	58	59	90	5	29	29.14	29.88	06	OVC	039			9.00	-RA			67	67	67	100	3	VR	28.84	29.57
09	OVC	080			9.00		65	59	61	81	3	26	29.13	29.87	09	OVC	021			8.00				71	69	70	94	12	18	28.82	29.55
12	SCT	NC			10.00	-RA	64	60	62	87	6	22	29.11	29.85	12	OVC	021			6.00	RA	BR		69	68	68	96	10	14	28.75	29.48
15	OVC	037			6.00	-RA BR	64	63	63	96	5	25	29.11	29.85	15	OVC	014			10.00				70	67	68	90	7	19	28.70	29.44
18	OVC	011			3.00	BR	63	63	63	100	7	32	29.15	29.89	18	BKN	090			10.00				65	63	64	93	9	21	28.75	29.48
21	OVC	012			10.00		59	57	58	93	18	02	29.24	29.99	21	OVC	027			10.00				64	61	62	90	8	25	28.81	29.54
24	CLR	NC			10.00		53	50	51	89	10	36	29.31	30.06	24	BKN	095			9.00				59	58	58	96	8	24	28.88	29.62
			SUNRISE: 0531		SEP 15	SUNSET: 1805										SUNRISE: 0538		SEP 21	SUNSET: 1752												
03	CLR	NC			10.00		49	47	48	93	3	36	29.35	30.11	03	CLR	NC			8.00				56	56	56	100	6	20	28.92	29.67
06	CLR	NC			10.00		47	45	46	93	3	35	29.41	30.18	06	CLR	NC			8.00				54	54	54	100	7	29	29.04	29.79
09	CLR	NC			10.00		61	51	56	70	13	03	29.44	30.21	09	CLR	NC			10.00				61	51	56	70	7	30	29.13	29.88
12	SCT	NC			10.00		66	52	58	61	13	05	29.44	30.20	12	CLR	NC			10.00				67	45	55	45	14	32	29.16	29.91
15	CLR	NC			10.00		66	51	58	59	8	06	29.39	30.15	15	BKN	110			10.00				63	39	51	41	13	29	29.19	29.94
18	CLR	NC			10.00		59	50	54	72	5	08	29.37	30.14	18	BKN	110			10.00				57	45	51	64	6	22	29.22	29.98
21	CLR	NC			10.00		48	47	47	96	3	26	29.37	30.14	21	CLR	NC			10.00				54	45	49	72	8	25	29.27	30.02
24	CLR	NC			10.00		46	45	46	96	0	00	29.35	30.12	24	FEW	NC			10.00				50	47	48	89	6	26	29.28	30.03
			SUNRISE: 0532		SEP 16	SUNSET: 1803										SUNRISE: 0539		SEP 22	SUNSET: 1750												
03	CLR	NC			6.00	BR	42	42	42	100	3	24	29.33	30.10	03	CLR	NC			10.00				50	47	48	89	7	26	29.26	30.02
06	CLR	NC			6.00	BR	42	42	42	100	0	00	29.35	30.12	06	CLR	NC			10.00				48	46	47	93	8	27	29.28	30.04
09	CLR	NC			10.00		62	54	57	75	9	22	29.34	30.11	09	CLR	NC			10.00				56	44	50	65	12	29	29.28	30.03
12	CLR	NC			10.00		71	50	59	47	7	VR	29.31	30.06	12	SCT	NC			10.00				60	41	51	50	14	26	29.26	30.02
15	CLR	NC			10.00		74	50	60	43	14	22	29.25	30.00	15	BKN	095			10.00				59	40	50	49	20	27	29.25	30.01
18	CLR	NC			10.00		67	54	59	63	5	23	29.23	29.98	18	SCT	NC			10.00				51	42	47	71	7	31	29.30	30.06
21	CLR	NC			10.00		58	51	54	78	5	21	29.26	30.01	21	CLR	NC			10.00				44	41	43	89	5	25	29.33	30.10
24	CLR	NC			10.00		50	48	49	93	3	18	29.25	30.00	24	CLR	NC			10.00				43	40	42	89	7	27	29.36	30.13
			SUNRISE: 0534		SEP 17	SUNSET: 1759										SUNRISE: 0541		SEP 23	SUNSET: 1748												
03	CLR	NC			10.00		50	49	49	96	0	00	29.26	30.01	03	CLR	NC			10.00				40	38	39	93	0	00	29.38	30.15
06	CLR	NC			7.00		49	49	49	100	3	19	29.28	30.03	06	CLR	NC			10.00				36	36	36	100	0	00	29.39	30.16
09	CLR	NC			10.00		67	57	61	71	3	VR	29.29	30.03	09	CLR	NC			10.00				54	44	49	69	6	21	29.37	30.14
12	CLR	NC			10.00		78	59	66	52	6	VR	29.24	29.99	12	BKN	090			10.00				59	41	50	51	13	19	29.31	30.07
15	CLR	NC			10.00		81	57	66	44	6	17	29.18	29.93	15	OVC	065			10.00				56	45	50	67	12	16	29.24	30.00
18	CLR	NC			10.00		68	58	62	70	7	16	29.17	29.92	18	CLR	NC			10.00				55	42	49	62	15	26	29.23	30.00
21	CLR	NC			8.00		62	59	60	90	8	17	29.17	29.92	21	OVC	035			10.00				50	41	46	71	18	29	29.31	30.07
24	CLR	NC			4.00	BR	56	55	55	97	3	17	29.15	29.89	24	OVC	030			10.00				46	39	43	77	14	29	29.38	30.15
			SUNRISE: 0535		SEP 18	SUNSET: 1758										SUNRISE: 0542		SEP 24	SUNSET: 1746												
03	CLR	NC			4.00	BR	55	54	54	96	0	00	29.12	29.86	03	CLR	NC			10.00				42	39	41	89	9	28	29.45	30.22
06	CLR	NC			3.00	BR	57	57	57	100	3	06	29.08	29.83	06	CLR	NC			10.00				39	37	38	93	9	29	29.52	30.29
09	FEW	NC			10.00		70	63	66	79	8	13	29.05	29.80	09</																

## OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

SEPTEMBER 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 OFFT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas		DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL		SKY COVER	CEILING 100'S OFFT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas		DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
					SUNRISE: 0543	SEP 25		SUNSET: 1744																			
03	OVC	095			10.00	-RA																					
06	OVC	085			10.00																						
09	OVC	080			10.00																						
12	BKN	090			10.00																						
15	CLR	NC			10.00																						
18	CLR	NC			10.00																						
21	OVC	110			10.00																						
24	BKN	110			10.00																						
					SUNRISE: 0544	SEP 26		SUNSET: 1743																			
03	CLR	NC			8.00																						
06	CLR	NC			5.00	BR																					
09	OVC	005			1.50	BR																					
12	OVC	009			9.00																						
15	OVC	007			10.00																						
18	OVC	013			10.00																						
21	OVC	009			10.00																						
24	OVC	007			10.00																						
					SUNRISE: 0545	SEP 27		SUNSET: 1741																			
03	OVC	007			10.00																						
06	OVC	090			10.00																						
09	OVC	012			10.00																						
12	BKN	090			10.00																						
15	CLR	NC			10.00																						
18	CLR	NC			10.00																						
21	CLR	NC			1.75	BR																					
24	CLR	NC			6.00	BR																					
					SUNRISE: 0547	SEP 28		SUNSET: 1739																			
03	CLR	NC			6.00	BR																					
06	CLR	NC			6.00	BR																					
09	CLR	NC			10.00																						
12	CLR	NC			10.00																						
15	OVC	060			10.00																						
18	OVC	060			10.00																						
21	FEW	NC			10.00																						
24	OVC	037			9.00																						
					SUNRISE: 0548	SEP 29		SUNSET: 1737																			
03	BKN	021			4.00	-RA BR																					
06	OVC	010			2.50	BR																					
09	OVC	005			4.00	BR																					
12	FEW	NC			9.00																						
15	FEW	NC			9.00																						
18	CLR	NC			6.00	BR																					
21	VV	001			0.25	FG																					
24	VV	001			1.00	BR																					
					SUNRISE: 0549	SEP 30		SUNSET: 1735																			
03	OVC	065			10.00																						
06	SCT	NC			10.00																						
09	CLR	NC			10.00																						
12	CLR	NC			10.00																						
15	CLR	NC			10.00																						
18	CLR	NC			10.00																						
21	CLR	NC			10.00																						
24	CLR	NC			10.00																						

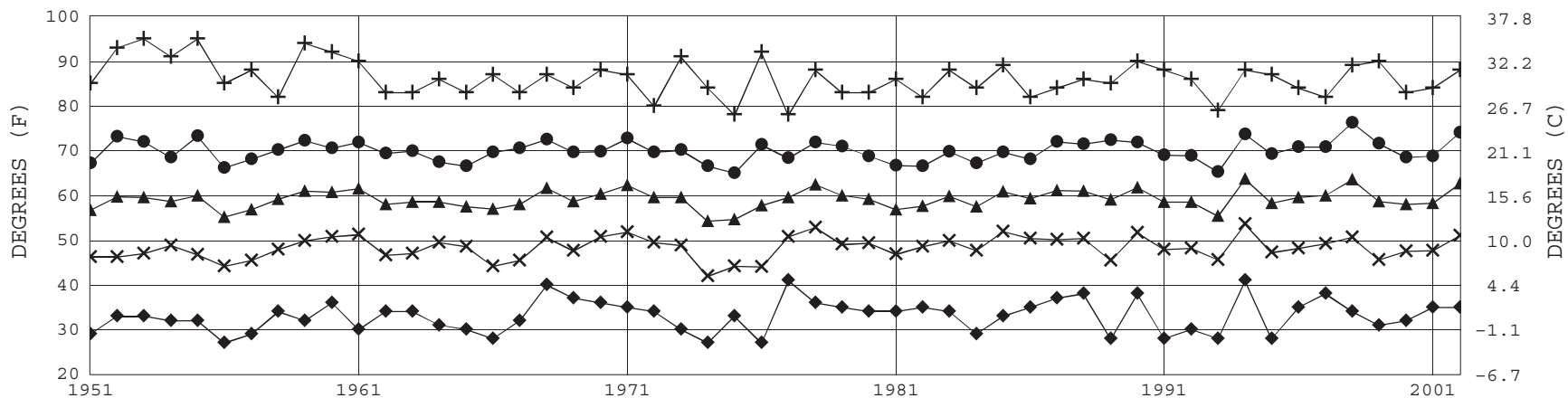
3-HOURLY OBSERVATION NOTES  
Sky Cover is the amount of the sky obscured. CLR or SKC = 0, FEW = 1/8-2/8, SCT = 3/8-4/8, BKN = 5/8-7/8, OVC = 8/8, VV = Vertical Visibilty = 8/8.  
Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.  
NC= No ceiling detected.  
& = Original observation contained additional weather elements.  
See page 3 for additional notes.

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			57	55	56	93	29.26	30.01	8.17	5	3	26
02			56	54	55	94	29.25	30.01	7.69	5	2	26
03			55	53	54	95	29.25	30.00	7.52	4	2	24
04			54	53	53	96	29.25	30.01	7.28	4	2	22
05			54	53	53	96	29.26	30.01	7.62	4	2	23
06			54	53	54	96	29.27	30.02	7.28	4	2	25
07			58	56	57	92	29.27	30.03	7.91	5	2	22
08			62	58	60	84	29.27	30.03	8.76	7	3	22
09			66	58	61	77	29.27	30.03	9.15	8	3	21
10			69	58	63	71	29.27	30.02	9.50	9	4	22
11			70	58	63	67	29.26	30.01	9.50	9	4	23
12			71	57	63	64	29.24	30.00	9.67	10	4	21
13			72	58	63	63	29.23	29.98	9.01	10	4	24
14			72	57	63	61	29.22	29.97	9.67	9	4	24
15			72	57	63	62	29.21	29.96	9.67	10	5	22
16			71	57	63	63	29.21	29.95	9.57	9	4	21
17			70	58	62	67	29.21	29.96	9.60	8	4	21
18			66	58	61	77	29.21	29.96	9.37	7	3	19
19			63	57	59	83	29.22	29.97	9.30	7	4	20
20			61	56	58	85	29.23	29.98	9.24	7	5	21
21			60	55	57	86	29.23	29.99	8.90	7	4	22
22			58	55	56	88	29.24	29.99	8.94	7	3	23
23			58	55	56	90	29.24	29.99	8.68	6	3	24
24			57	54	55	91	29.24	29.99	8.47	6	3	23



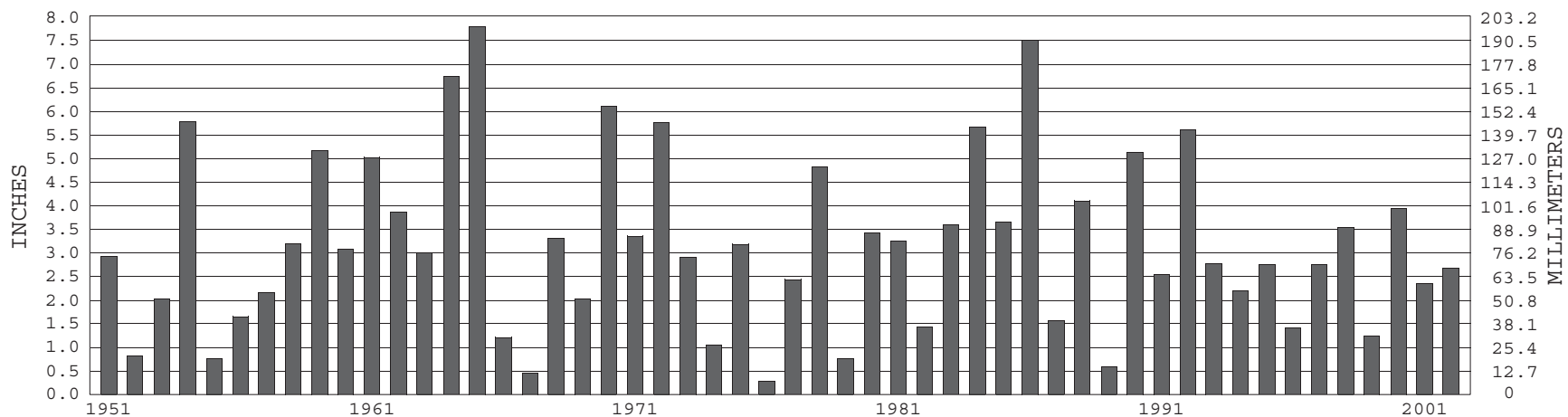
# GREEN BAY, WI SEPTEMBER TEMPERATURES



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

Long-Term (1951-2002) Mean: 59.1    1961-1990 Normal: 58.8

# GREEN BAY, WI SEPTEMBER PRECIPITATION



Long-Term (1951-2002) Mean Monthly Total: 3.18

1961-1990 Normal: 3.11



SEPTEMBER 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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