



MAY 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

MAY 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	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	25									
01	64	40	52	1	36	44	13	0	BR	0		0.0	0.00	29.15	29.91	10.5	05	11.4	31	05	25	05	01										
02	52	32	42*	-9	20	35	23	0		0		0.0	0.00	29.38	30.15	12.5	04	13.1	33	05	26	05	02										
03	59	28*	44	-8	27	37	21	0		0		0.0	0.00	29.44	30.21	3.0	09	5.6	21	14	13	12	03										
04	60	30	45	-7	36	43	20	0	RA	0		0.0	T	29.22	29.99	8.3	12	9.7	25	15	22	14	04										
05	52	44	48	-4	46	47	17	0	RA BR	0		0.0	0.83	28.80	29.55	10.6	06	12.1	30	07	23	08	05										
06	54	43	49	-4	45	46	16	0	BR	0		0.0	0.00	29.10	29.86	4.0	35	5.9	14	01	12	06	06										
07	50	40	45	-8	46	46	20	0	RA BR	0		0.0	0.34	29.21	29.98	3.9	06	5.4	21	09	17	07	07										
08	62	48	55	2	44	49	10	0	BR	0		0.0	0.00	29.25	30.01	7.8	06	9.2	21	10	17	04	08										
09	70	44	57	3	48	50	8	0	RA FG+ BR HZ	0		0.0	0.29	28.99	29.74	8.9	12	11.9	37	15	30	16	09										
10	70	42	56	2	49	51	9	0	TS TSRA RA FG+ BR VCTS	0		0.0	0.58	28.89	29.64	3.9	12	5.3	24	10	21	10	10										
11	59	43	51	-4	47	48	14	0	RA BR VCTS	0		0.0	0.20	28.44	29.18	10.0	28	19.2	41*	29	33*	30	11										
12	63	43	53	-2	38	45	12	0		0		0.0	0.00	29.04	29.80	14.3	32	15.1	33	33	26	33	12										
13	71	39	55	0	40	48	10	0		0		0.0	0.00	29.21	29.96	1.4	35	5.8	18	01	15	13	13										
14	63	43	53	-3	43	49	12	0	BR	0		0.0	0.00	29.17	29.93	1.7	17	2.9	13	18	12	18	14										
15	64	45	55	-1	45	50	10	0		0		0.0	0.00	29.24	30.00	8.4	04	9.0	20	05	16	04	15										
16	64	43	54	-3	49	52	11	0	BR	0		0.0	0.00	29.33	30.09	10.6	04	10.4	23	05	20	05	16										
17	64	49	57	0	52	53	8	0	BR HZ	0		0.0	0.00	29.41	30.17	9.0	05	9.1	17	06	15	06	17										
18	69	48	59	2	53	55	6	0	TS BR HZ	0		0.0	0.00	29.38	30.15	6.6	09	7.4	17	13	15	11	18										
19	68	55	62	4	59	60	3	0	RA BR HZ	0		0.0	0.15	29.27	30.03	10.1	16	10.6	24	21	17	22	19										
20	64	41	53	-5	42	48	12	0	RA BR	0		0.0	T	29.45	30.22	11.8	32	13.5	32	32	24	31	20										
21	58	34	46	-12	36	43	19	0		0		0.0	0.00	29.64	30.41	4.4	09	5.8	22	11	17	11	21										
22	61	35	48	-11	36	43	17	0		0		0.0	0.00	29.52	30.29	2.9	08	4.3	17	07	15	09	22										
23	65	41	53	-6	39	46	12	0		0		0.0	0.00	29.41	30.17	6.3	03	7.9	24	07	17	04	23										
24	70	41	56	-3	41	49	9	0		0		0.0	0.00	29.27	30.03	7.4	03	10.0	22	11	17	10	24										
25	72	40	56	-4	44	50	9	0	BR HZ	0		0.0	0.00	29.28	30.04	5.2	05	6.8	23	05	17	06	25										
26	71	42	57	-3	48	53	8	0		0		0.0	0.00	29.37	30.13	6.2	04	8.0	23	07	20	05	26										
27	77*	43	60	0	48	55	5	0	BR	0		0.0	0.00	29.34	30.10	2.0	24	4.8	13	19	12	24	27										
28	66	52	59	-1	52	55	6	0	RA FG BR	0		0.0	0.40	29.07	29.82	4.6	32	6.5	24	34	21	33	28										
29	73	51	62*	1	50	55	3	0	RA BR	0		0.0	0.01	29.05	29.80	5.0	03	9.3	28	01	22	36	29										
30	66	51	59	-2	53	55	6	0	RA BR	0		0.0	0.32	28.83	29.57	5.5	13	12.0	33	03	26	05	30										
31	60	39	50	-11	41	46	15	0	RA BR	0		0.0	0.05	29.19	29.95	13.2	02	14.0	33	01	28	04	31										
63.9											42.2	53.1	■ ■	43.7	48.6	11.7	0.0	< MONTHLY AVERAGES TOTALS->		0.0	3.17	29.20	29.96	4.0	04	9.1	<- MONTHLY AVERAGES						
-4.1				-2.5		-3.3		■ ■		->-----DEPARTURE FROM NORMAL-----<											0.42		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3										
DEGREE DAYS											GREATEST 24-HR PRECIPITATION: 0.83 DATE :05											SEA LEVEL PRESSURE DATE TIME											
MONTHLY TOTAL DEPARTURE											GREATEST 24-HR SNOWFALL: 0.0 DATE :											MAXIMUM : 30.48 21 0653											
SEASON TO DATE TOTAL DEPARTURE											GREATEST SNOW DEPTH: 0 DATE :											MINIMUM : 28.97 11 1153											
HEATING: 364			63			7980			102			NUMBER OF DAYS WITH →			MAXIMUM TEMP ≥ 90: 0			MINIMUM TEMP ≤ 32: 3			PRECIPITATION ≥ 0.01 INCH: 10												
COOLING: 0			-24			0			-27			MAXIMUM TEMP ≤ 32: 0			MINIMUM TEMP ≤ 0: 0			PRECIPITATION ≥ 0.10 INCH: 8															
												THUNDERSTORMS: 2			HEAVY FOG: 2			SNOWFALL ≥ 1.0 INCH: 0															

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

GREEN BAY, WI

MAY 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												02		0.00		
03													03												03		0.00		
04													04												04		0.00		
05	T	0.01	T	0.04	0.15	0.03	0.03	0.07	0.08	0.11	0.06	0.05	05	0.10	0.09	T		0.01		T	T				05		0.83		
06													06												06		0.00		
07								0.01	0.01	0.01	0.06	0.03	07	0.06	0.09	0.06	0.01	T	T					07		0.34			
08													08												08		0.00		
09		0.05	0.13	0.01	0.02	0.07	T			0.01			09												09		0.29		
10													10					0.02	0.03	0.01	0.08	0.25	0.08	0.11	10		0.58		
11	T	T		0.05							0.01	0.08	11	0.02	T	T									11		0.20		
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													18												18		0.00		
19													19							T					19		0.15		
20	T												20								T	0.14	0.01		20		T		
21													21												21		0.00		
22													22												22		0.00		
23													23												23		0.00		
24													24												24		0.00		
25													25												25		0.00		
26													26												26		0.00		
27													27												27		0.00		
28													28	T		0.01	0.35	0.04	T	T					28		0.40		
29			T	T	0.01	T	T						29												29		0.01		
30	0.01	0.02	0.01	0.01	T	T	0.01	0.03	0.01	T	0.01	T	30					0.02	0.04	0.08	T	0.04	0.08	30		0.32			
31													31												31		0.05		

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.21	.27	.28	.30	.32	.34	.36	.38	.39	.40	.44	.49
Ending Date	28	28	28	28	28	28	28	28	28	28	10	10
Ending Time (Hour/Min)	1507	1511	1514	1514	1514	1535	1547	1608	1615	1640	2318	2332

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 MAY 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	504	59					5.00	10.00	
02	757	89					10.00	10.00	
03	799	93					10.00	10.00	
04	198	23					8.00	10.00	
05	50	6					.75	10.00	
06	593	68					2.50	10.00	
07	219	25					2.50	10.00	
08	686	79					6.00	10.00	
09	258	30					.25	10.00	
10	370	42					<.25	10.00	
11	426	49					3.00	10.00	
12	412	47					10.00	10.00	
13	883	100					10.00	10.00	
14	60	7					6.00	10.00	
15	812	92					10.00	10.00	
16	820	92					6.00	10.00	
17	798	89					2.00	9.00	
18	838	94					3.00	9.00	
19	755	84					1.50	7.00	
20	790	89					10.00	10.00	
21	900	100					10.00	10.00	
22	827	92					10.00	10.00	
23	852	94					10.00	10.00	
24	849	94					10.00	10.00	
25	907	100					5.00	10.00	
26	856	94					10.00	10.00	
27	850	93					6.00	10.00	
28	819	90					.50	10.00	
29	809	88					5.00	10.00	
30	705	77					2.50	10.00	
31	767	84					2.00	10.00	
MONTHLY AVGS							6.09	9.84	
SUNSHINE (MINUTES)									
Total: 20169 Possible: 27523 Percent Possible: 73									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 31									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 2 10 13									

OBSERVATIONS AT 3-HOURLY INTERVALS

GREEN BAY, WI

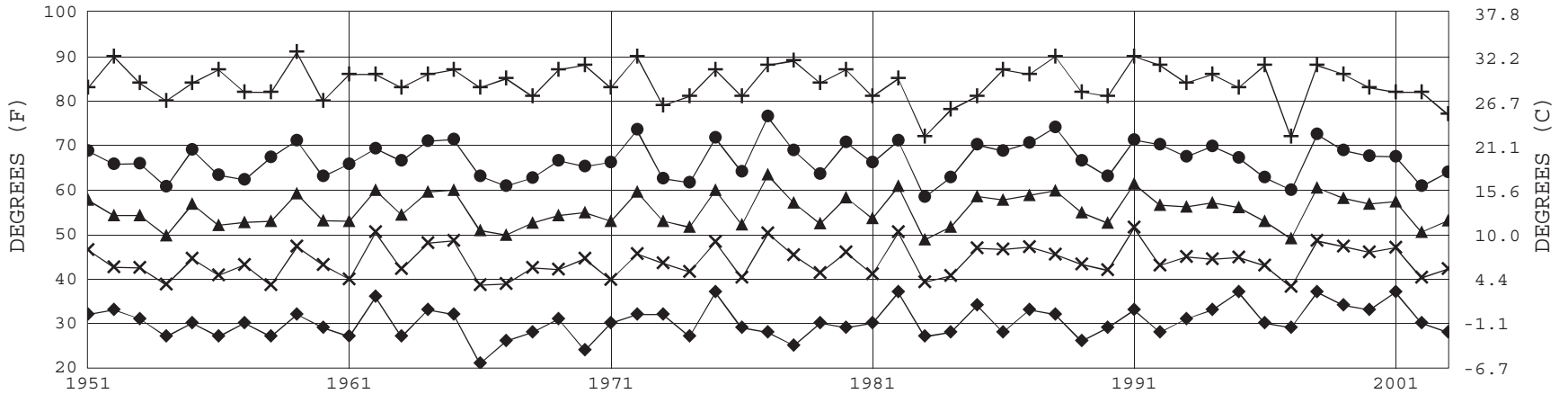
MAY 2003

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)																	
	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)			SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)		SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL																										
SUNRISE: 0416								MAY 25								SUNSET: 1923								SUNRISE: 0412								MAY 31								SUNSET: 1928							
03	CLR	NC				10.00		44	43	44	96	5	31	29.26	30.02	03	OVC	008				8.00	-RA	47	47	47	100	18	01	29.02	29.77																
06	CLR	NC				9.00		47	46	46	97	0	00	29.28	30.03	06	OVC	011				10.00		43	43	43	100	21	01	29.12	29.88																
09	CLR	NC				10.00		61	42	51	50	6	05	29.28	30.03	09	BKN	024				10.00		49	42	46	77	16	36	29.21	29.97																
12	CLR	NC				10.00		68	44	55	42	12	05	29.28	30.03	12	CLR	NC				10.00		56	39	48	53	17	02	29.24	29.99																
15	CLR	NC				10.00		72	45	57	38	12	07	29.26	30.01	15	CLR	NC				10.00		59	36	48	42	13	02	29.24	29.99																
18	CLR	NC				10.00		67	44	55	44	12	04	29.28	30.03	18	CLR	NC				10.00		55	40	48	57	9	05	29.25	30.01																
21	CLR	NC				6.00	BR	51	47	49	86	5	35	29.32	30.08	21	CLR	NC				10.00		46	38	42	73	3	11	29.30	30.06																
24	CLR	NC				10.00		47	44	46	90	5	30	29.32	30.08	24	CLR	NC				10.00		39	39	39	100	3	25	29.31	30.08																
SUNRISE: 0415								MAY 26								SUNSET: 1924								3-HOURLY OBSERVATION NOTES																							
03	BKN	095				10.00		47	39	43	74	7	33	29.32	30.09	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		52	40	46	64	6	36	29.37	30.13	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.																															
09	CLR	NC				10.00		63	48	55	58	10	03	29.39	30.15	NC= No ceiling detected.																															
12	CLR	NC				10.00		68	53	59	59	12	07	29.38	30.14	& = Original observation contained additional weather elements.																															
15	CLR	NC				10.00		70	51	59	51	14	04	29.36	30.12	See page 3 for additional notes.																															
18	CLR	NC				10.00		67	52	58	59	8	06	29.35	30.11																																
21	CLR	NC				10.00		56	51	53	84	0	00	29.38	30.14																																
24	CLR	NC				10.00		49	49	49	100	5	31	29.39	30.15																																
SUNRISE: 0414								MAY 27								SUNSET: 1925								SUMMARY BY HOUR																							
03	CLR	NC				8.00		44	44	44	100	0	00	29.40	30.16	AVERAGES																															
06	CLR	NC				9.00		52	50	51	93	0	00	29.43	30.20	RESULTANT WIND (MPH)																															
09	CLR	NC				10.00		68	50	58	53	6	35	29.42	30.18	HOUR (LST)																															
12	CLR	NC				10.00		75	49	60	40	8	27	29.37	30.13	CEILOMETER																															
15	SCT	NC				10.00		76	47	60	36	5	VR	29.32	30.08	EFF CLD AMT																															
18	CLR	NC				10.00		75	45	58	34	7	19	29.27	30.02	DRY BULB																															
21	CLR	NC				10.00		63	51	56	65	9	19	29.25	30.00	DEW POINT																															
24	CLR	NC				10.00		56	49	52	77	6	20	29.19	29.94	WET BULB																															
SUNRISE: 0414								MAY 28								SUNSET: 1926								HOUR (LST)																							
03	CLR	NC				9.00		53	49	51	86	3	18	29.13	29.87	PRESSURE (INCHES,HG)																															
06	FEW	NC				9.00		57	51	54	81	5	18	29.07	29.82	STATION																															
09	OVC	095				9.00		60	52	56	75	8	26	29.05	29.80	SEA LEVEL																															
12	BKN	080				8.00		63	54	58	73	6	35	29.04	29.79	VISIBILITY (MILES)																															
15	BKN	049				3.00	RA BR	63	59	61	87	9	31	29.03	29.78	WIND SPEED (MPH)																															
18	OVC	070				10.00	-RA	58	55	56	90	12	32	29.08	29.83	SPEED																															
21	OVC	085				10.00		55	51	53	87	6	34	29.07	29.82	DIRECTION																															
24	OVC	033				10.00		55	49	52	80	9	32	29.03	29.78																																
SUNRISE: 0413								MAY 29								SUNSET: 1926																															
03	OVC	017				5.00	-RA BR	53	51	52	93	17	35	29.02	29.77																																
06	OVC	034				10.00		52	51	52	97	5	35	29.07	29.83																																
09	CLR	NC				10.00		61	51	56	70	14	02	29.09	29.85																																
12	CLR	NC				10.00		71	49	59	46	16	05	29.09	29.84																																
15	CLR	NC				10.00		72	49	59	44	10	07	29.05	29.80																																
18	CLR	NC				10.00		71	50	59	47	3	08	29.02	29.77																																
21	CLR	NC				10.00		58	50	54	75	8	19	29.03	29.78																																
24	CLR	NC				10.00		54	48	51	80	7	18	28.99	29.74																																
SUNRISE: 0412								MAY 30								SUNSET: 1927																															
03	CLR	NC				10.00		54	51	52	90	5	17	28.93	29.68																																
06	CLR	NC				10.00		57	53	55	87	7	18	28.89	29.63																																
09	OVC	070				10.00		56	54	55	93	3	23	28.90	29.65																																
12	OVC	060				10.00		58	53	55	84	15	17	28.80	29.54																																
15	OVC	046				10.00		65	55	59	70	16	13	28.71	29.45																																
18	OVC	100				8.00		59	50	54	72	13	13	28.68	29.41																																
21	OVC	016				3.00	-RA BR	51	51	51	100	15	04	28.79	29.54																																
24	OVC	007				4.00	-RA BR	53	53	53	100	24	03	28.89	29.65																																

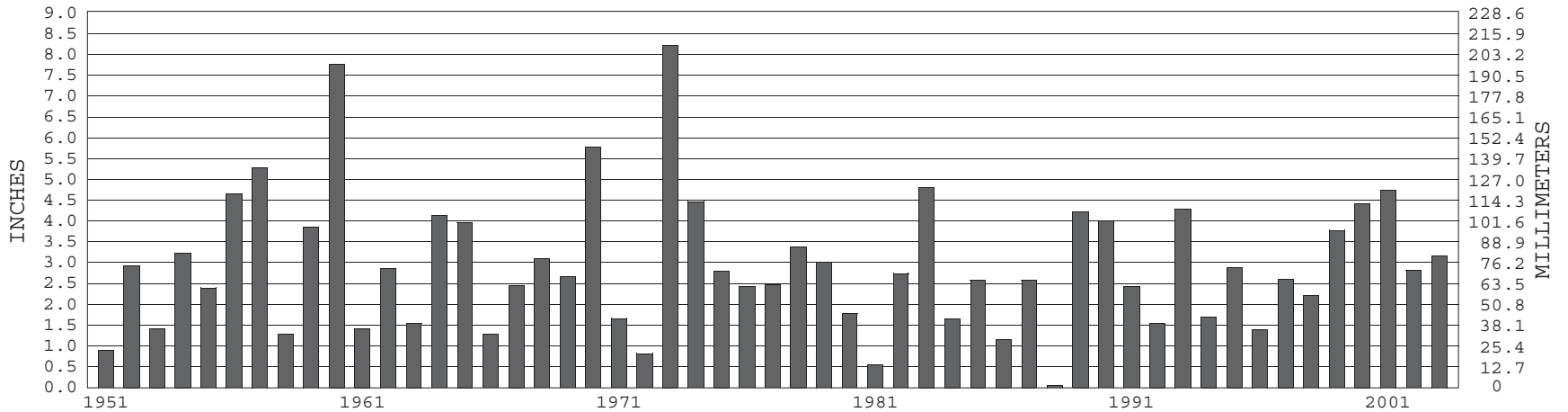
GREEN BAY, WI MAY TEMPERATURES



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

Long-Term (1951-2003) Mean: 55.4 1961-1990 Normal: 56.4

GREEN BAY, WI MAY PRECIPITATION



Long-Term (1951-2003) Mean Monthly Total: 2.94

1961-1990 Normal: 2.75



MAY 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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