



JUNE 2003

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

LA CROSSE, WI

MUNICIPAL AIRPORT (LSE)
 Lat: 43° 45' N Long: 91° 15' W Elev (Ground): 655 Feet
 Time Zone: CENTRAL WBAN: 14920 ISSN #:0198-571X

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	
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	74	41*	58	-8	42	50	7	0	RA	0		0.0	T	29.34	30.04	3.8	15	5.0	14	18	10	18	01	
02	68	48	58	-9	45	51	7	0	RA	0		0.0	T	29.28	29.98	3.6	20	6.6	21	26	18	26	02	
03	73	52	63	-4	49	55	2	0	RA	0		0.0	T	29.24	29.94	2.3	34	4.7	16	18	13	17	03	
04	76	51	64	-3	46	54	1	0		0		0.0	0.00	29.23	29.91	1.4	32	3.6	15	31	12	29	04	
05	80	49	65	-2	50	57	0	0	RA	0		0.0	0.02	29.23	29.92	3.5	19	5.8	25	23	22	23	05	
06	65	57	61	-6	57	58	4	0	RA BR VCTS	0		0.0	0.44	29.11	29.79	5.9	16	6.9	23	17	20	15	06	
07	70	56	63	-5	56	59	2	0	RA BR VCTS	0		0.0	0.21	29.04	29.72	1.1	20	3.9	22	23	18	22	07	
08	69	54	62	-6	56	58	3	0	RA BR	0		0.0	0.54	28.94	29.63	3.1	33	6.6	23	34	17	34	08	
09	76	51	64	-4	54	59	1	0	TS RA BR VCTS	0		0.0	0.17	29.12	29.80	0.8	06	3.5	12	12	10	12	09	
10	78	61	70	2	61	63	0	5	RA BR VCTS	0		0.0	0.24	28.95	29.63	1.1	36	7.6	18	34	14	35	10	
11	63	52	58*	-11	54	57	7	0	RA BR	0		0.0	T	29.16	29.85	5.8	09	6.5	16	08	14	10	11	
12	76	52	64	-5	58	61	1	0	BR	0		0.0	0.00	29.11	29.80	3.5	14	4.2	15	20	13	15	12	
13	84	60	72	3	62	66	0	7	BR HZ	0		0.0	0.00	29.13	29.81	1.0	01	3.3	16	33	14	34	13	
14	83	61	72	2	58	64	0	7		0		0.0	0.00	29.32	30.00	4.2	01	5.2	15	03	13	03	14	
15	84	60	72	2	60	65	0	7		0		0.0	0.00	29.41	30.09	3.5	12	4.6	12	16	9	13	15	
16	86	59	73	3	57	63	0	8		0		0.0	0.00	29.42	30.10	3.1	12	4.5	13	04	9	08	16	
17	87	55	71	1	60	65	0	6		0		0.0	0.00	29.30	29.97	5.0	18	6.6	18	20	15	22	17	
18	88	65	77	7	60	66	0	12	RA	0		0.0	T	29.20	29.87	5.2	01	7.1	31	01	26	01	18	
19	79	54	67	-3	67	70	0	2		0		0.0	0.00			5.9	22	03	16	03	16	03	19	
20	81	49	65	-5	46	55	0	0		0		0.0	0.00	29.42	30.12	4.4	17	6.3	16	22	13	20	20	
21	85	51	68	-3	51	59	0	3		0		0.0	0.00	29.29	29.97	7.8	17	9.1	22	18	18	18	21	
22	87	62	75	4	57	64	0	10		0		0.0	0.00	29.18	29.86	10.1	17	10.4	24	16	21	16	22	
23	86	71	79	8	65	70	0	14		0		0.0	0.00	29.14	29.80	9.5	18	10.0	29	18	23	19	23	
24	92*	69	81*	9	72	75	0	16	TSRA RA BR VCTS	0		0.0	0.21	29.17	29.84	9.6	19	11.8	62*	23	44*	24	24	
25	82	61	72	0	68	70	0	7	TSRA RA BR	0		0.0	0.21	29.14	29.81	5.8	22	10.2	30	30	23	31	25	
26	70	56	63	-9	51	56	2	0	RA	0		0.0	T	29.18	29.87	12.4	29	13.8	33	30	25	31	26	
27	80	55	68	-4	55	61	0	3	RA	0		0.0	0.18	29.17	29.86	2.5	32	6.7	18	27	15	25	27	
28	80	62	71	-1	61	64	0	6	TSRA RA BR VCTS	0		0.0	0.23	29.15	29.83	2.3	22	7.0	20	29	16	28	28	
29	82	56	69	-3	57	62	0	4		0		0.0	0.00	29.33	30.01	3.8	34	6.2	17	33	15	34	29	
30	85	59	72	-1	58	63	0	7		0		0.0	0.00	29.42	30.10	0.5	23	4.6	12	30	10	36	30	

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LA CROSSE, WI

79.0	56.3	67.7	■ ■		1.2	4.1	< MONTHLY AVERAGES TOTALS->		0.0	2.45							6.6	<- MONTHLY AVERAGES			
-2.3	-1.6	-1.9	■ ■	<-----DEPARTURE FROM NORMAL----->						-1.55	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3										
DEGREE DAYS								GREATEST 24-HR PRECIPITATION: 0.75 DATE: 07-08				SEA LEVEL PRESSURE DATE TIME									
MONTHLY TOTAL DEPARTURE				SEASON TO DATE TOTAL DEPARTURE				GREATEST 24-HR SNOWFALL: 0.0 DATE:				MAXIMUM MINIMUM : 30.20 20 0653									
HEATING: 37 -1				7315 -25				GREATEST SNOW DEPTH: 0 DATE:				MINIMUM MINIMUM : 29.55 10 1253									
COOLING: 124 -38				144 -75				NUMBER OF DAYS WITH →		MAXIMUM TEMP ≥ 90: 1		MINIMUM TEMP ≤ 32: 0		PRECIPITATION ≥ 0.01 INCH : 10							
								MAXIMUM TEMP ≤ 32 : 0		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 9									
								THUNDERSTORMS : 4		HEAVY FOG : 0		SNOWFALL ≥ 1.0 INCH : 0									

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

LA CROSSE, WI

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LSE

WBAN # 14920

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			T		
02													02												02			T		
03													03												03			T		
04	T												04												04			T		
05													05		0.01	T									05			0.01	T	0.00
06													06												06					0.44
07													07	T	T	0.06	0.04	0.18	0.06	0.01				07					0.21	
08	0.01	T	0.03	0.01	0.24	0.05	0.01	0.06	0.03	T		08	T		0.10									08					0.54	
09													09												09					0.17
10	0.03	0.09	0.04	0.01	0.01	0.01		0.04	0.01	T		10												10					0.24	
11													11												11					T
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				T								18					T
19													19												19					0.00
20													20												20					0.00
21													21												21					0.00
22													22												22					0.00
23													23												23					0.00
24													24												24					0.21
25													25	T	T	T									25					0.21
26	T	T											26												26					T
27													27												27					0.18
28													28												28					0.23
29													29												29					0.00
30													30												30					0.00

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.11	.16	.17	.18	.20	.23	.26	.28	.29	.29	.31	.33
Ending Date	08	08	08	08	08	08	08	08	08	08	10	10
Ending Time (Hour/Min)	0407	0411	0416	0421	0429	0443	0501	0519	0533	0533	0200	0200

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	SQ Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC In the Vicinity	UP Unknown Precipitation		

Intensity (as indicated on pages 4 to 6):
'+' = Heavy ' ' = Moderate '-' = Light

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Ceilorometer (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							10.00	10.00	
02							9.00	10.00	
03							8.00	10.00	
04							7.00	10.00	
05							7.00	10.00	
06							2.50	10.00	
07							4.00	10.00	
08							1.75	10.00	
09							1.50	10.00	
10							5.00	10.00	
11							6.00	10.00	
12							1.50	10.00	
13							2.00	10.00	
14							10.00	10.00	
15							10.00	10.00	
16							10.00	10.00	
17							10.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							9.00	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							10.00	10.00	
24							4.00	10.00	
25							5.00	10.00	
26							7.00	10.00	
27							7.00	10.00	
28							10.00	10.00	
29							9.00	10.00	
30							10.00	10.00	
MONTHLY AVGS							7.60	10.00	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING 30									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0 0 3 21									

OBSERVATIONS AT 3-HOURLY INTERVALS

LA CROSSE, WI

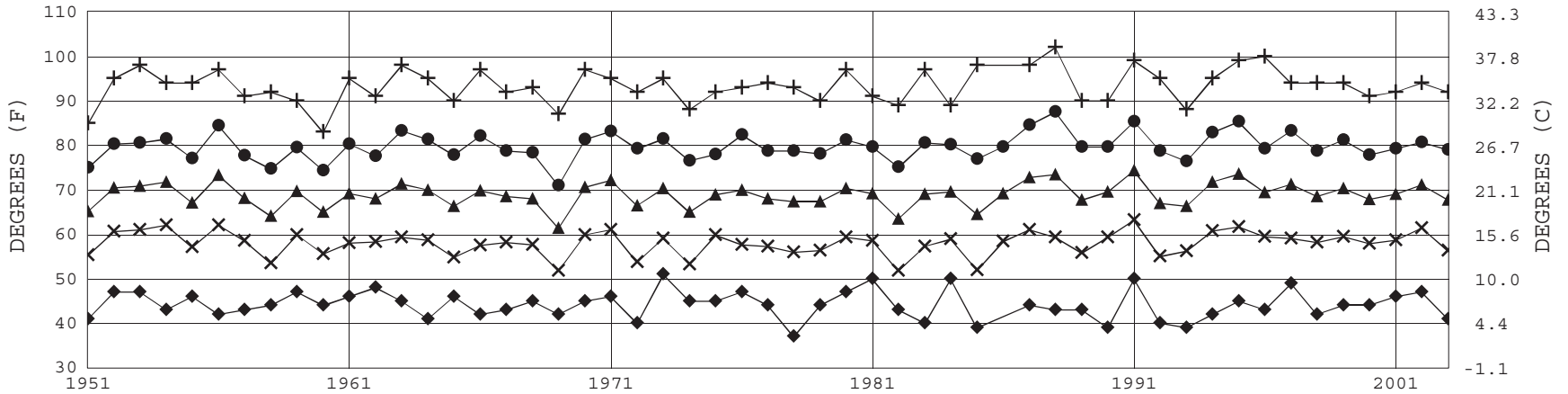
JUNE 2003

LSE

WBAN # 14920

HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES,HG)		HOUR (LST)	SKY COVER	CEILING 100'S OF FT	SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES,HG)	
			OBSERVATION TIME (LST)	EFF CLD AMT Oktas		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		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0424 JUN 25						SUNSET: 1951						SUNRISE: JUN 31						SUNSET:									
03	CLR	NC		10.00	RA	80	73	75	79	10	20	29.15	29.80														
06	CLR	NC		10.00		76	67	70	74	8	28	29.20	29.87														
09	CLR	NC		10.00		78	69	72	74	7	15	29.21	29.87														
12	SCT	NC		10.00		72	70	71	94	21	14	29.10	29.77														
15	CLR	NC		10.00		73	67	69	81	6	19	29.06	29.73														
18	CLR	NC		10.00		73	66	69	79	13	19	29.09	29.76														
21	OVC	020		10.00		73	68	70	84	12	21	29.10	29.77														
24	OVC	024		10.00		61	59	60	93	16	29	29.15	29.83														
SUNRISE: 0424 JUN 26						SUNSET: 1951						3-HOURLY OBSERVATION NOTES															
03	OVC	029		10.00		59	54	56	83	15	29	29.15	29.83	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.													
06	CLR	NC		10.00		57	51	54	81	10	29	29.20	29.88														
09	OVC	041		10.00		64	51	57	63	15	30	29.19	29.86														
12	OVC	060		10.00		68	49	57	51	21	29	29.17	29.86														
15	OVC	060		10.00		65	50	57	59	17	29	29.18	29.87														
18	CLR	NC		10.00		69	50	58	51	10	29	29.18	29.86														
21	CLR	NC		10.00		62	50	55	65	12	27	29.20	29.89														
24	FEW	NC		10.00		57	50	53	78	7	14	29.19	29.87														
SUNRISE: 0425 JUN 27						SUNSET: 1951						SUMMARY BY HOUR															
03	CLR	NC		10.00		56	50	53	81	6	13	29.17	29.86	AVERAGES													
06	CLR	NC		10.00		63	50	56	63	3	36	29.20	29.88	HOURS (LST)													
09	CLR	NC		10.00		70	53	60	55	13	26	29.19	29.87	CEILOMETER													
12	CLR	NC		10.00		76	56	64	50	9	35	29.18	29.86	EFF CLD AMT													
15	CLR	NC		10.00		79	55	64	44	8	34	29.16	29.83	DRY BULB													
18	SCT	NC		10.00		75	57	64	54	7	01	29.14	29.81	DEW POINT													
21	OVC	027		7.00	RA	65	63	64	93	5	31	29.20	29.88	WET BULB													
24	BKN	120		10.00		63	61	62	93	5	11	29.17	29.84	RELATIVE HUMIDITY													
SUNRISE: 0425 JUN 28						SUNSET: 1951						PRESSURE (INCHES,HG)															
03	OVC	085		10.00		62	60	61	93	5	18	29.12	29.79	STATION						VISIBILITY (MILES)				WIND SPEED (MPH)			
06	OVC	021		10.00		63	61	62	93	10	20	29.13	29.81	SEA LEVEL						WIND DIRECTION							
09	OVC	029		10.00		66	62	64	87	7	21	29.13	29.81	PRESSURE (INCHES,HG)						RESULTANT WIND (MPH)							
12	OVC	047		10.00		73	63	67	71	7	12	29.14	29.82	VISIBILITY (MILES)						SPEED							
15	FEW	NC		10.00		80	60	67	51	13	30	29.15	29.82	WIND SPEED (MPH)						DIRECTION							
18	FEW	NC		10.00		75	60	66	60	5	32	29.16	29.83	PRESSURE (INCHES,HG)						SPEED							
21	CLR	NC		10.00		68	60	63	76	3	04	29.21	29.89	VISIBILITY (MILES)						DIRECTION							
24	CLR	NC		10.00		64	62	63	93	8	20	29.19	29.86	WIND SPEED (MPH)						DIRECTION							
SUNRISE: 0425 JUN 29						SUNSET: 1951						SUMMARY BY HOUR (CONTINUED)															
03	CLR	NC		10.00		57	57	57	100	0	00	29.24	29.91	HOURS (LST)						CEILOMETER							
06	CLR	NC		10.00		62	60	61	93	0	00	29.29	29.97	EFF CLD AMT						DRY BULB							
09	CLR	NC		10.00		74	57	64	56	10	33	29.32	30.01	DEW POINT						WET BULB							
12	CLR	NC		10.00		79	56	65	45	14	35	29.34	30.03	RELATIVE HUMIDITY						PRESSURE (INCHES,HG)							
15	FEW	NC		10.00		79	53	64	41	9	33	29.35	30.04	VISIBILITY (MILES)						WIND SPEED (MPH)							
18	CLR	NC		10.00		79	55	64	44	6	32	29.35	30.04	PRESSURE (INCHES,HG)						SPEED							
21	CLR	NC		10.00		69	57	62	66	5	20	29.39	30.07	VISIBILITY (MILES)						DIRECTION							
24	CLR	NC		10.00		62	59	60	90	6	15	29.41	30.10	WIND SPEED (MPH)						DIRECTION							
SUNRISE: 0426 JUN 30						SUNSET: 1951						SUMMARY BY HOUR (CONTINUED)															
03	CLR	NC		10.00		62	60	61	93	7	17	29.42	30.11	HOURS (LST)						CEILOMETER							
06	CLR	NC		10.00		62	60	61	93	8	19	29.45	30.14	EFF CLD AMT						DRY BULB							
09	CLR	NC		10.00		74	59	65	60	5	30	29.46	30.14	DEW POINT						WET BULB							
12	CLR	NC		10.00		82	55	66	40	6	35	29.45	30.13	RELATIVE HUMIDITY						PRESSURE (INCHES,HG)							
15	CLR	NC		10.00		84	54	66	36	7	35	29.41	30.10	VISIBILITY (MILES)						WIND SPEED (MPH)							
18	CLR	NC		10.00		83	54	65	37	5	34	29.37	30.06	PRESSURE (INCHES,HG)						SPEED							
21	CLR	NC		10.00		71	60	64	68	3	12	29.39	30.07	VISIBILITY (MILES)						DIRECTION							
24	CLR	NC		10.00		64	59	61	84	5	13	29.40	30.09	WIND SPEED (MPH)						DIRECTION							

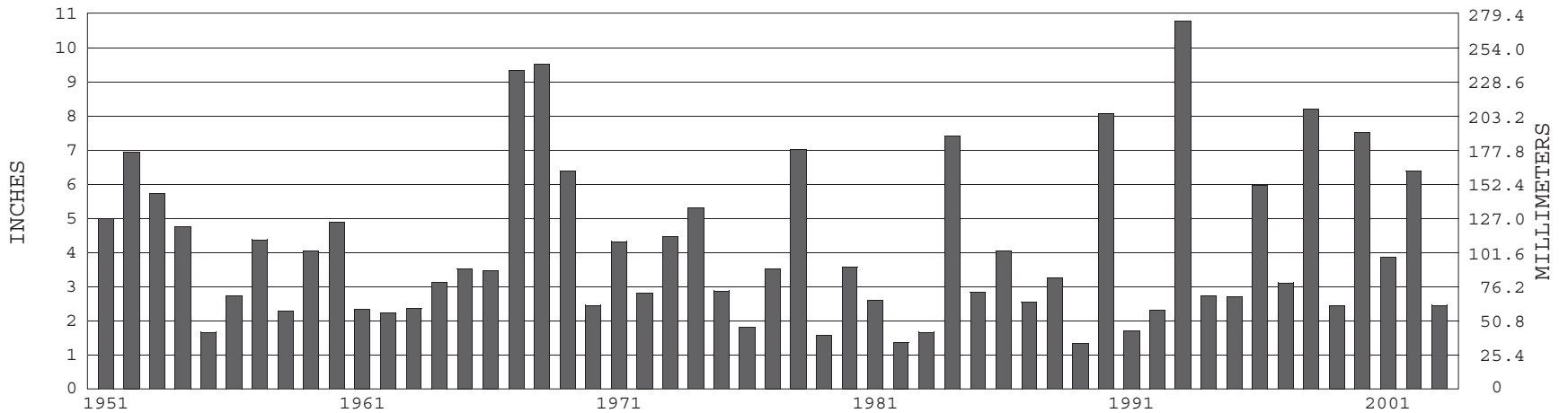
LA CROSSE, WI JUNE TEMPERATURES



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

Long-Term (1951-2003) Mean: 68.9 1961-1990 Normal: 69.6

LA CROSSE, WI JUNE PRECIPITATION



Long-Term (1951-2003) Mean Monthly Total: 4.15

1961-1990 Normal: 4.00



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LA CROSSE, WI

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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DIRECTOR

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