



JULY 2002

# 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	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	93	77	85	12	70	74	0	20	TSRA RA BR VCTS  TS	0		0.0	0.00	29.28	29.94	10.8	21	11.5	28	23	22	23	01	
02	92	73	83	9	67	72	0	18		0		0.0	0.00	29.31	29.98	9.5	23	10.3	23	22	20	24	02	
03	89	68	79	5	70	73	0	14		0		0.0	0.14	29.29	29.96	4.1	23	6.1	23	34	18	35	03	
04	88	61	75	1	58	65	0	10		0		0.0	0.00	29.39	30.07	2.7	06	4.6	15	02	10	13	04	
05	81	65	73	-1	58	63	0	8		0		0.0	0.00	29.48	30.16	8.0	12	8.3	20	08	16	09	05	
06	82	66	74	0	66	69	0	9	TS TSRA RA FG BR VCTS	0		0.0	0.73	29.49	30.18	5.8	15	7.1	22	21	18	21	06	
07	89	70	80	6	71	73	0	15	BR	0		0.0	0.00	29.45	30.13	5.7	19	6.8	14	20	10	20	07	
08	93	76	85	11	73	76	0	20	TS RA BR HZ	0		0.0	0.05	29.28	29.94	5.1	24	10.6	21	31	17	31	08	
09	88	74	81	7	68	72	0	16	BR	0		0.0	0.00	29.34	30.01	4.1	07	6.9	18	10	16	11	09	
10	76	65	71	-3	59	63	0	6	RA	0		0.0	T	29.44	30.12	7.6	12	8.6	25	12	18	11	10	
11	79	58	69	-5	52	59	0	4	RA	0		0.0	T	29.49	30.18	6.8	11	7.5	22	13	16	13	11	
12	82	52*	67*	-7	48	57	0	2	RA HZ	0		0.0	T	29.39		0.3	22	3.2	14	08	12	09	12	
13	84	55	70	-4	57	62	0	5		0		0.0	0.00	29.32	30.00	1.3	34	4.0	13	31	10	30	13	
14	86	58	72	-2	50	60	0	7		0		0.0	0.00	29.33	30.01	0.4	08	3.8	13	32	9	29	14	
15	87	62	75	1	64	68	0	10	BR	0		0.0	0.00	29.37	30.05	2.5	18	4.3	15	20	10	22	15	
16	90	63	77	3	64	69	0	12	BR	0		0.0	0.00	29.35	30.02	6.5	19	7.3	18	20	15	20	16	
17	92	70	81	7	66	71	0	16		0		0.0	0.00	29.29	29.96	4.2	19	6.0	17	23	13	24	17	
18	91	71	81	7	60	68	0	16	RA BR HZ VCTS	0		0.0	0.10	29.22	29.89	0.8	11	3.8	13	25	10	25	18	
19	86	71	79	5	70	72	0	14	BR HZ	0		0.0	0.00	29.23	29.90	5.1	12	5.9	14	11	12	11	19	
20	85	70	78	4	73	74	0	13	RA BR HZ VCTS	0		0.0	0.19	29.21	29.88	8.2	17	9.7	28	35	24	36	20	
21	99*	73	86*	12	74	77	0	21	TSRA RA BR VCTS	0		0.0	1.33	29.12	29.78	8.5	21	11.1	33	34	26	34	21	
22	86	64	75	1	64	68	0	10	RA	0		0.0	T	29.27	29.93	8.4	33	9.7	24	32	20	34	22	
23	77	61	69	-5	53	59	0	4		0		0.0	0.00	29.53	30.22	3.4	07	6.0	16	08	13	07	23	
24	79	62	71	-3	57	62	0	6	RA	0		0.0	T	29.48	30.17	3.6	15	5.7	15	19	13	22	24	
25	79	66	73	-1	65	68	0	8	RA BR	0		0.0	0.02	29.23	29.91	7.5	18	8.1	20	19	16	20	25	
26	90	68	79	5	69	72	0	14	TS FG+ BR	0		0.0	0.00	29.15	29.82	4.9	20	6.0	16	23	14	20	26	
27	84	71	78	4	71	73	0	13	TSRA RA BR VCTS	0		0.0	0.07	29.03	29.69	5.3	18	6.6	26	20	23	20	27	
28	94	68	81	7	71	74	0	16	TSRA RA BR VCTS	0		0.0	0.67	29.04	29.71	6.1	20	8.3	33	32	26	33	28	
29	85	68	77	3	67	70	0	12	RA	0		0.0	0.27	29.11	29.78	2.9	27	6.0	18	30	16	30	29	
30	96	66	81	7	69	72	0	16	TSRA RA VCTS	0		0.0	0.17	29.22	29.89	7.4	20	9.9	51*	27	43*	28	30	
31	92	69	81	7	71	74	0	16	RA	0		0.0	0.01	29.18	29.84	10.1	19	10.7	28	18	22	19	31	
86.9 66.5 76.7 ■■										< MONTHLY AVERAGES		TOTALS->		0.0	3.75	29.30		2.4	18	7.2	<- MONTHLY AVERAGES			
1.7 3.7 2.7 ■■										<-----DEPARTURE FROM NORMAL----->		- .50	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3											
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 1.33 DATE: 21						SEA LEVEL PRESSURE DATE TIME									
MONTHLY									GREATEST 24-HR SNOWFALL: 0.0 DATE: 11						MAXIMUM									
TOTAL DEPARTURE									GREATEST SNOW DEPTH: 0 DATE: 11						MINIMUM									
HEATING: 0 -6									NUMBER OF DAYS WITH →						PRECIPITATION ≥ 0.01 INCH : 12									
COOLING: 371 99									MAXIMUM TEMP ≥ 90: 11						PRECIPITATION ≥ 0.10 INCH : 8									
SEASON TO DATE									MAXIMUM TEMP ≤ 32 : 0						SNOWFALL ≥ 1.0 INCH : 0									
TOTAL DEPARTURE									MINIMUM TEMP ≤ 0 : 0															
658 167									THUNDERSTORMS : 9															

JULY 2002  
LA CROSSE, WI

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

LA CROSSE, WI

JULY 2002

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	T												01													01			0.00
02													02													0.00			
03													03													0.00			
04													04													0.14			
05													05													0.00			
06													06													0.00			
07													07													0.73			
08													08													0.00			
09													09													0.05			
10													10													0.00			
11				T	T	T	T						11														11	T	
12													12														T		
13													13														0.00		
14													14														0.00		
15													15														0.00		
16													16														16	0.00	
17													17														0.00		
18													18														0.10		
19													19														0.00		
20													20														0.19		
21	T	0.01											21															21	1.33
22													22															T	
23													23															0.00	
24													24															T	
25													25															0.02	
26					T	0.05	0.01	T		T			26															26	0.00
27													27															0.07	
28													28															0.67	
29													29															0.27	
30													30															0.17	
31	0.14	0.12	0.01						0.01				31					0.14	0.03	T					31	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)	.25	.40	.45	.50	.66	.74	.80	1.05	1.12	1.17	1.23	1.29
Ending Date	21	21	21	21	21	21	21	21	21	21	21	21
Ending Time (Hour/Min)	2017	2018	2022	2017	2018	2025	2044	2108	2126	2144	2214	2245

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.

\* = 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

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

## WEATHER NOTATIONS

**LA CROSSE, WI**  
**JULY 2002**

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.

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							10.00	10.00	
03							1.75	10.00	
04							10.00	10.00	
05							10.00	10.00	
06							.50	10.00	
07							2.50	10.00	
08							2.50	10.00	
09							6.00	10.00	
10							10.00	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							10.00	10.00	
14							9.00	10.00	
15							5.00	10.00	
16							6.00	10.00	
17							7.00	10.00	
18							4.00	10.00	
19							2.00	10.00	
20							1.75	10.00	
21							1.00	10.00	
22							10.00	10.00	
23							10.00	10.00	
24							10.00	10.00	
25							6.00	10.00	
26							.25	10.00	
27							6.00	10.00	
28							2.00	10.00	
29							8.00	10.00	
30							4.00	10.00	
31							10.00	10.00	
<b>MONTHLY AVGS</b>							6.73	10.00	
<p align="center"><b>SUNSHINE (MINUTES)</b></p> <p>Total:                  Possible:</p> <p align="center">Percent Possible:</p>									
<p align="center"><b>NUMBER OF DAYS WITH:</b></p> <p align="center"><b>SKY CONDITION</b></p> <p align="center">CLR   PTLY CLDY   CLOUDY   MISSING</p> <p align="center">31</p> <p align="center"><b>MINIMUM VISIBILITY (MILES)</b></p> <p align="center">&lt;=0.25      &lt;=3.0      &gt;=7.0</p> <p align="center">1                    6                    16</p>									

## OBSERVATIONS AT 3-HOURLY INTERVALS

LA CROSSE, WI

JULY 2002

LSE

WBAN # 14920

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: 0427				JUL 01	SUNSET: 1951										SUNRISE: 0430				JUL 07	SUNSET: 1950								
03	CLR	NC			10.00		79	71	74	77	13	19	29.29	29.94	03	OVC	005			4.00	BR	71	70	70	96	6	21	29.48	30.16		
06	CLR	NC			10.00		78	70	73	76	8	20	29.32	29.98	06	CLR	NC			8.00		72	69	70	91	8	19	29.50	30.18		
09	CLR	NC			10.00		85	71	75	63	8	21	29.32	29.98	09	CLR	NC			10.00		78	69	72	74	5	VR	29.51	30.19		
12	CLR	NC			10.00		90	73	78	58	14	19	29.29	29.95	12	CLR	NC			10.00		85	71	75	63	3	VR	29.48	30.16		
15	FEW	NC			10.00		92	70	77	49	16	21	29.26	29.91	15	CLR	NC			10.00		88	70	76	55	9	19	29.43	30.10		
18	CLR	NC			10.00		89	68	75	50	10	21	29.26	29.91	18	CLR	NC			10.00		88	71	76	57	10	20	29.39	30.06		
21	CLR	NC			10.00		83	68	73	61	14	21	29.26	29.91	21	CLR	NC			10.00		82	70	74	67	8	17	29.39	30.07		
24	CLR	NC			10.00		79	66	70	65	6	VR	29.28	29.93	24	CLR	NC			10.00		78	73	75	85	7	17	29.38	30.05		
			SUNRISE: 0427				JUL 02	SUNSET: 1951										SUNRISE: 0431				JUL 08	SUNSET: 1949								
03	CLR	NC			10.00		75	64	68	69	8	22	29.32	29.98	03	CLR	NC			9.00		77	72	74	85	13	19	29.34	30.01		
06	CLR	NC			10.00		74	64	68	71	9	21	29.35	30.02	06	CLR	NC			6.00	HZ	78	71	73	79	14	19	29.32	29.98		
09	CLR	NC			10.00		82	66	71	58	12	25	29.34	30.01	09	FEW	NC			5.00	-RA	81	68	72	65	7	17	29.32	29.98		
12	CLR	NC			10.00		89	67	74	48	15	23	29.33	30.00	12	CLR	NC			6.00	HZ	87	75	78	67	12	18	29.26	29.92		
15	FEW	NC			10.00		91	69	76	49	13	22	29.31	29.97	15	SCT	NC			9.00		90	74	78	59	10	25	29.22	29.88		
18	CLR	NC			10.00		87	68	74	53	8	21	29.28	29.94	18	SCT	NC			10.00		85	72	76	65	15	32	29.23	29.89		
21	BKN	060			10.00		82	68	73	63	9	21	29.28	29.94	21	BKN	030			10.00		80	73	75	79	10	33	29.25	29.91		
24	OVC	090			10.00		80	66	71	62	12	21	29.30	29.95	24	OVC	048			8.00		78	74	75	87	7	34	29.27	29.93		
			SUNRISE: 0428				JUL 03	SUNSET: 1951										SUNRISE: 0432				JUL 09	SUNSET: 1949								
03	FEW	NC			10.00		77	67	70	71	8	17	29.29	29.95	03	OVC	020			10.00		75	72	73	90	9	35	29.29	29.95		
06	CLR	NC			10.00		77	67	70	71	7	26	29.29	29.95	06	OVC	012			6.00	BR	75	72	73	90	5	36	29.31	29.98		
09	FEW	NC			10.00		81	69	73	67	10	22	29.31	29.97	09	OVC	024			10.00		80	69	73	69	6	08	29.34	30.01		
12	BKN	034			10.00		84	71	75	65	5	VR	29.30	29.96	12	SCT	NC			10.00		85	68	73	57	5	VR	29.36	30.03		
15	CLR	NC			10.00		87	72	76	61	5	25	29.27	29.93	15	CLR	NC			10.00		87	62	71	43	8	06	29.34	30.01		
18	BKN	048			10.00	-RA	78	75	76	90	5	24	29.26	29.93	18	CLR	NC			10.00		86	65	72	50	3	13	29.35	30.02		
21	CLR	NC			9.00		75	74	74	96	0	00	29.29	29.95	21	CLR	NC			10.00		77	70	72	79	7	10	29.38	30.06		
24	CLR	NC			5.00	BR	69	68	68	96	3	06	29.33	30.01	24	CLR	NC			10.00		74	62	66	67	13	12	29.40	30.07		
			SUNRISE: 0428				JUL 04	SUNSET: 1951										SUNRISE: 0433				JUL 10	SUNSET: 1948								
03	CLR	NC			10.00		63	61	62	93	0	00	29.35	30.03	03	CLR	NC			10.00		71	62	65	73	6	13	29.41	30.08		
06	CLR	NC			10.00		66	63	64	90	3	04	29.40	30.08	06	BKN	048			10.00	-RA	66	56	60	70	8	15	29.44	30.13		
09	CLR	NC			10.00		76	54	63	47	5	VR	29.40	30.09	09	BKN	110			10.00		67	57	61	71	6	15	29.46	30.14		
12	CLR	NC			10.00		84	52	65	33	6	VR	29.40	30.08	12	BKN	044			10.00		72	61	65	69	9	13	29.41	30.10		
15	CLR	NC			10.00		87	51	65	29	7	VR	29.38	30.06	15	OVC	040			10.00		74	63	67	69	9	13	29.43	30.11		
18	CLR	NC			10.00		85	56	67	37	5	07	29.37	30.05	18	OVC	065			10.00		72	58	63	61	12	11	29.43	30.12		
21	CLR	NC			10.00		74	64	68	71	5	10	29.41	30.09	21	OVC	100			10.00		69	57	62	66	12	10	29.46	30.15		
24	CLR	NC			10.00		72	60	65	66	9	13	29.44	30.11	24	OVC	085			10.00		68	51	58	55	3	VR	29.49	30.18		
			SUNRISE: 0429				JUL 05	SUNSET: 1950										SUNRISE: 0433				JUL 11	SUNSET: 1948								
03	CLR	NC			10.00		68	55	60	63	6	13	29.46	30.14	03	CLR	NC			10.00		65	50	57	59	12	09	29.47	30.16		
06	FEW	NC			10.00		65	48	56	54	10	13	29.49	30.17	06	CLR	NC			10.00		64	52	57	65	8	08	29.52	30.21		
09	BKN	037			10.00		69	50	58	51	10	11	29.50	30.19	09	CLR	NC			10.00		68	47	57	47	9	10	29.55	30.24		
12	CLR	NC			10.00		75	57	64	54	12	12	29.49	30.18	12	CLR	NC			10.00		74	50	60	43	13	14	29.54	30.22		
15	CLR	NC			10.00		79	63	69	58	8	12	29.47	30.16	15	FEW	NC			10.00		78	50	62	37	9	09	29.49	30.17		
18	CLR	NC			10.00		77	64	69	64	9	11	29.46	30.15	18	CLR	NC			10.00		76	51	62	42	7	14	29.45	30.14		
21	CLR	NC			10.00		72	63	66	73	3	16	29.47	30.16	21	CLR	NC			10.00		65	55	59	70	5	13	29.45	30.14		
24	CLR	NC			10.00		69	63	65	81	7	12	29.48	30.16	24	CLR	NC			10.00		59	54	56	83	5	12	29.45	30.14		
			SUNRISE: 0430				JUL 06	SUNSET: 1950										SUNRISE: 0434				JUL 12	SUNSET: 1947								
03	CLR	NC			10.00		70	61	64	73	9	11	29.48	30.16	03	CLR	NC			10.00		56	31	45	39	3	13	29.44	30.13		
06	FEW	NC			10.00		69	60	64	73	7	12	29.49	30.18	06	CLR	NC			10.00		57	31	45	37	0	00	29.45	30.14		
09	OVC	048			10.00	-TSRA	67	62	64	84	9	21	29.53	30.22	09	CLR	NC			10.00											
12	BKN	050			9.00	TS	72	69	70	91	7	04	29.54	30.22	12	CLR	NC			10.00		77	50	61	39	3	VR	29.39	30.09		
15	CLR	NC			10.00		78	69	72	74	5	17	29.47	30.16	15	CLR															

## OBSERVATIONS AT 3-HOURLY INTERVALS

LA CROSSE, WI

JULY 2002

LSE

WBAN # 14920

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	STATION	SEA LEVEL					
SUNRISE: 0435				JUL 13				SUNSET: 1947				SUNRISE: 0440				JUL 19				SUNSET: 1943											
03	CLR	NC			10.00		57	54	55	90	0	00	29.32	30.01	03	OVC	012			7.00	72	69	70	91	6	09	29.21	29.87			
06	CLR	NC			10.00		58	55	56	90	3	12	29.35	30.03	06	OVC	012			3.00	BR	72	69	70	91	6	09	29.24	29.91		
09	CLR	NC			10.00		71	61	65	71	0	00	29.34	30.03	09	OVC	011			4.00	BR	74	70	71	88	6	13	29.24	29.91		
12	CLR	NC			10.00		81	54	65	39	9	32	29.32	30.00	12	OVC	021			6.00	HZ	78	70	73	76	6	11	29.25	29.92		
15	CLR	NC			10.00		83	55	66	38	8	32	29.31	29.99	15	BKN	041			9.00		84	70	74	63	7	12	29.22	29.89		
18	CLR	NC			10.00		81	56	66	42	6	31	29.29	29.96	18	CLR	NC			7.00		83	71	75	67	9	12	29.22	29.89		
21	CLR	NC			10.00		69	62	65	78	0	00	29.30	29.97	21	CLR	NC			6.00	HZ	76	70	72	82	5	14	29.25	29.92		
24	CLR	NC			10.00		64	60	62	87	3	12	29.31	29.99	24	FEW	NC			5.00	BR	72	69	70	91	5	14	29.26	29.93		
SUNRISE: 0436				JUL 14				SUNSET: 1946				SUNRISE: 0441				JUL 20				SUNSET: 1942											
03	CLR	NC			10.00		60	57	58	90	3	12	29.32	29.99	03	BKN	050			5.00	BR	71	68	69	90	6	15	29.25	29.92		
06	FEW	NC			9.00		61	30	47	31	0	00	29.34	30.03	06	CLR	NC			4.00	BR	71	68	69	90	7	12	29.24	29.91		
09	CLR	NC			10.00		74	31	53	21	0	00	29.35	30.04	09	FEW	NC			8.00		82	72	75	72	13	19	29.24	29.90		
12	CLR	NC			10.00						5	VR	29.34		12	OVC	065			4.00	VCTS RA BR	73	71	72	94	6	09	29.30	29.98		
15	CLR	NC			10.00		84	57	67	40	5	VR	29.32	30.01	15	CLR	NC			10.00		77	71	73	82	13	17	29.20	29.87		
18	CLR	NC			10.00		83	58	67	43	5	34	29.32	29.99	18	CLR	NC			10.00		84	74	77	72	20	19	29.16	29.82		
21	CLR	NC			10.00		72	63	66	73	0	00	29.32	30.01	21	CLR	NC			9.00		83	79	80	88	7	15	29.15	29.81		
24	CLR	NC			10.00		67	63	64	87	5	13	29.35		24	CLR	NC			10.00		82	78	79	88	10	19	29.14	29.80		
SUNRISE: 0437				JUL 15				SUNSET: 1946				SUNRISE: 0442				JUL 21				SUNSET: 1941											
03	CLR	NC			10.00	BR	63	61	62	93	3	15	29.35	30.03	03	CLR	NC			10.00		80	75	77	85	9	17	29.13	29.80		
06	CLR	NC			5.00		67	64	65	91	5	17	29.40	30.08	06	CLR	NC			10.00		80	74	76	82	6	16	29.16	29.82		
09	CLR	NC			10.00		77	62	68	60	5	VR	29.42	30.10	09	CLR	NC			10.00		88	74	78	63	12	20	29.16	29.81		
12	FEW	NC			10.00		84	63	70	49	5	VR	29.39	30.07	12	CLR	NC			10.00		95	74	80	51	18	22	29.11	29.76		
15	CLR	NC			10.00		85	63	71	48	6	VR	29.36	30.04	15	CLR	NC			10.00		99	74	81	45	16	21	29.06	29.71		
18	CLR	NC			10.00		84	63	70	49	0	00	29.35	30.03	18	CLR	NC			10.00		92	76	80	60	7	23	29.02	29.68		
21	FEW	NC			10.00		77	68	71	74	0	00	29.35	30.03	21	OVC	027			5.00	VCTS RA BR	73	72	72	96	8	03	29.21	29.87		
24	CLR	NC			10.00		72	64	67	76	6	19	29.35	30.03	24	CLR	NC			10.00		73	72	72	96	6	22	29.17	29.83		
SUNRISE: 0437				JUL 16				SUNSET: 1945				SUNRISE: 0443				JUL 22				SUNSET: 1940											
03	CLR	NC			9.00		67	64	65	91	6	14	29.35	30.03	03	BKN	013			10.00		73	71	72	94	3	19	29.16	29.82		
06	CLR	NC			7.00		67	65	66	93	6	17	29.39	30.07	06	SCT	NC			10.00		73	71	72	94	8	01	29.19	29.85		
09	CLR	NC			10.00		78	64	69	62	8	17	29.38	30.06	09	CLR	NC			10.00		77	68	71	74	7	30	29.25	29.92		
12	CLR	NC			10.00		86	64	71	48	12	18	29.36	30.03	12	CLR	NC			10.00		85	60	69	43	14	33	29.25	29.92		
15	CLR	NC			10.00		89	63	72	42	10	20	29.32	30.00	15	CLR	NC			10.00		84	58	68	41	15	32	29.27	29.94		
18	CLR	NC			10.00		86	63	71	46	9	21	29.32	29.98	18	FEW	NC			10.00		79	60	67	52	13	36	29.30	29.97		
21	CLR	NC			10.00		78	64	69	62	6	21	29.32	29.99	21	CLR	NC			10.00		70	58	63	66	10	35	29.37	30.06		
24	CLR	NC			10.00		74	67	69	79	6	15	29.32	29.99	24	FEW	NC			10.00		64	59	61	84	7	35	29.42	30.10		
SUNRISE: 0438				JUL 17				SUNSET: 1944				SUNRISE: 0444				JUL 23				SUNSET: 1939											
03	FEW	NC			9.00		72	66	68	82	6	18	29.32	29.98	03	OVC	042			10.00		64	59	61	84	7	35	29.48	30.16		
06	FEW	NC			7.00		72	65	67	79	5	16	29.33	30.01	06	FEW	NC			10.00		62	57	59	84	8	02	29.52	30.21		
09	CLR	NC			9.00		79	66	70	65	8	19	29.32	30.00	09	CLR	NC			10.00		66	49	57	54	8	13	29.57	30.26		
12	CLR	NC			10.00		88	67	74	50	6	VR	29.30	29.96	12	CLR	NC			10.00		73	46	58	38	9	10	29.58	30.27		
15	FEW	NC			10.00		92	61	72	36	12	23	29.26	29.92	15	CLR	NC			10.00		75	48	60	39	9	11	29.52	30.21		
18	CLR	NC			10.00		89	63	72	42	5	27	29.25	29.91	18	CLR	NC			10.00		74	49	60	41	6	14	29.52	30.21		
21	CLR	NC			10.00		79	68	72	69	3	15	29.26	29.93	21	CLR	NC			10.00		65	58	61	78	0	00	29.53	30.22		
24	CLR	NC			7.00		75	70	72	84	7	16	29.24	29.91	24	CLR	NC			10.00		63	55	58	76	7	13	29.54	30.23		
SUNRISE: 0439				JUL 18				SUNSET: 1943				SUNRISE: 0445				JUL 24				SUNSET: 1938											
03	CLR	NC			7.00		72	65	67	79	0	00	29.23	29.89	03	CLR	NC			10.00		64	54	58	70	5	11	29.54	30.23		
06	CLR	NC			5.00	HZ	72	25	50	17	5	12	29.25	29.91	06	FEW	NC			10.00		62	54	58	75	3	13	29.55	30.24		
09	CLR	NC			7.00		80	32	56	17	5	17	29.25	29.92	09	CLR	NC			10.00		68	56	61	66	7	13	29.53	30.22		
12	SCT	NC			10.00		86	69	74	57	3	VR	29.23	29.89	12	CLR	NC			10.00		77	55	64	47	9	18	29.51	30.19		
15	FEW	NC			10.00		87	68	74	53	6	33	29.21	29.87	15	CLR	NC			10.00		76	54	63	47	10	15	29.46	30.14		
18	CLR	NC			8.00		76	73	74	91	3	24	29.17	29.85	18	FEW	NC			10.00	-RA	72	59	64	64	0	00	29.42	30.11		
21	OVC	080			6.00	RA BR	75	74	74	96	3	27	29.22	29.89	21	CLR	NC			10.0											

## OBSERVATIONS AT 3-HOURLY INTERVALS

LA CROSSE, WI

JULY 2002

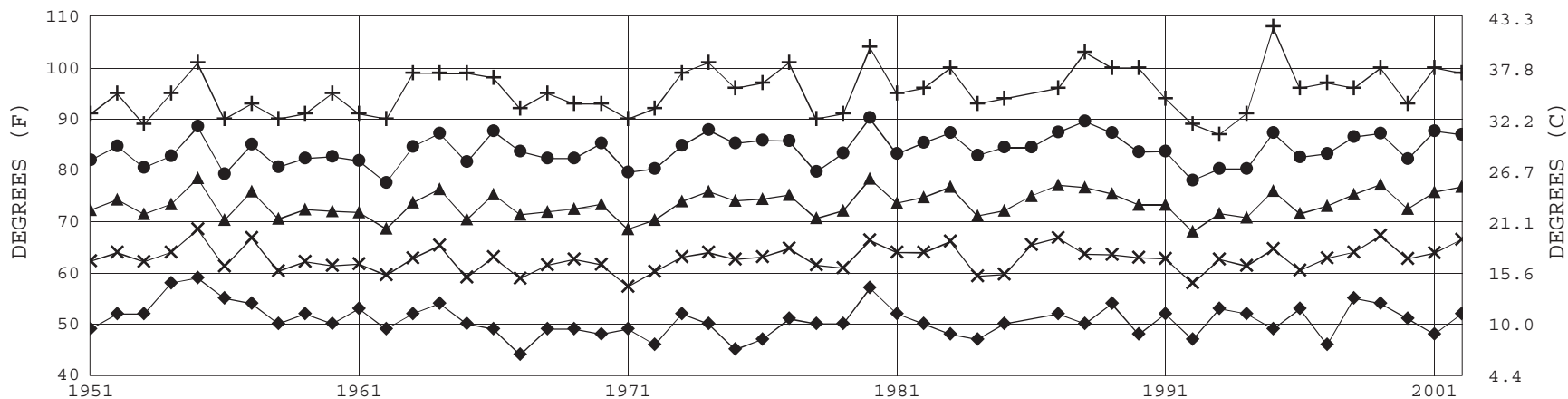
LSE

WBAN # 14920

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		OBSERVATION TIME (LST)	EFF CLD AMT Okta	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		OBSERVATION TIME (LST)	EFF CLD AMT Okta	VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)	
				DRY BULB	DEW POINT					WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION		SEA LEVEL	DRY BULB	DEW POINT	WET BULB					SPEED (MPH)	DIRECTION TENS OF DEG					STATION	SEA LEVEL							
SUNRISE: 0446 JUL 25 SUNSET: 1937										SUNRISE: 0452 JUL 31 SUNSET: 1931																											
03	FEW	NC						10.00	-RA	67	57	61	71	9	16	29.32	30.00	03	CLR	NC							10.00			73	67	69	81	6	13	29.20	29.86
06	CLR	NC						10.00		67	55	60	66	10	16	29.29	29.96	06	CLR	NC							10.00			72	69	70	91	0	00	29.23	29.90
09	BKN	100						10.00		72	63	66	73	10	17	29.26	29.93	09	FEW	NC							10.00			76	71	73	85	5	16	29.23	29.91
12	CLR	NC						10.00		74	67	69	79	9	21	29.23	29.90	12	CLR	NC							10.00			86	72	76	63	13	18	29.20	29.87
15	BKN	085						10.00		77	67	70	71	13	21	29.20	29.87	15	CLR	NC							10.00			91	71	77	52	16	21	29.15	29.81
18	BKN	050						10.00		78	71	73	79	7	20	29.16	29.83	18	CLR	NC							10.00			87	74	78	65	18	20	29.11	29.77
21	CLR	NC						10.00	74	72	73	94	3	20	29.17	29.84	21	CLR	NC							10.00			82	73	76	74	12	18	29.12	29.78	
24	CLR	NC						7.00	72	71	71	97	8	18	29.17	29.84	24	CLR	NC							10.00			80	72	74	76	14	19	29.12	29.78	
SUNRISE: 0447 JUL 26 SUNSET: 1936										3-HOURLY OBSERVATION NOTES																											
03	CLR	NC						4.00	BR	68	68	68	100	3	17	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 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.																			
06	BKN	003						0.75	BR	68	68	68	100	3	17	29.17	29.84																				
09	CLR	NC						10.00		76	70	72	82	5	30	29.18	29.85																				
12	CLR	NC						10.00		85	67	73	55	7	20	29.18	29.84																				
15	CLR	NC						10.00		90	70	76	52	14	20	29.14	29.81																				
18	SCT	NC						10.00		87	70	75	57	8	23	29.13	29.79																				
21	CLR	NC						10.00		81	70	73	69	9	20	29.13	29.80																				
24	CLR	NC						10.00		73	71	72	94	3	17	29.10	29.77																				
SUNRISE: 0448 JUL 27 SUNSET: 1935										SUMMARY BY HOUR																											
03	CLR	NC						10.00	-RA	71	69	70	94	5	13	29.09	29.75	HOUR (LST)	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	RESULTANT WIND (MPH)								
06	OVC	027					7.00	-RA		71	70	70	96	12	20	29.12	29.78								STATION	SEA LEVEL											
09	BKN	014					10.00	-RA		72	70	71	94	3	VR	29.07	29.73	01			71	65	67	83	29.30	29.97	9.32	5	3	15							
12	FEW	NC					10.00			82	69	73	65	13	18	29.02	29.69	02			70	65	67	84	29.30	29.97	9.16	5	3	15							
15	OVC	029					10.00			81	72	75	74	9	22	28.98	29.65	03			69	63	66	83	29.30	29.97	9.16	6	4	15							
18	CLR	NC					10.00			83	74	77	74	0	00	28.97	29.64	04			69	61	64	79	29.31	29.98	8.99	6	3	16							
21	CLR	NC					10.00		79	76	77	90	8	18	28.97	29.64	05			68	60	64	79	29.31	29.99	8.49	6	4	15								
24	CLR	NC					10.00		74	68	70	82	8	20	28.99	29.65	06			69	61	64	78	29.32	30.00	8.31	6	3	15								
SUNRISE: 0449 JUL 28 SUNSET: 1934																																					
03	CLR	NC						10.00	-RA BR RA BR	69	68	68	96	6	17	29.00	29.67	07			71	61	65	74	29.33	30.01	8.65	6	4	17							
06	CLR	NC					10.00	70		67	68	90	7	17	29.06	29.73	08			74	62	67	70	29.33	30.00	9.13	6	4	16								
09	CLR	NC					10.00	80		72	74	76	9	20	29.06	29.72	09			76	62	68	66	29.33	30.00	9.45	6	4	18								
12	CLR	NC					10.00	90		75	79	62	6	21	29.05	29.71	10			78	64	69	64	29.32	30.00	9.48	6	3	19								
15	CLR	NC					10.00	93		75	80	56	13	19	29.02	29.68	11			80	64	70	60	29.32	29.99	9.52	7	3	19								
18	FEW	NC					10.00	88		75	79	66	14	19	29.01	29.67	12			82	65	71	58	29.31	29.99	9.52	7	4	18								
21	OVC	036					6.00	-RA BR	70	68	69	93	7	03	29.08	29.75	13			84	64	71	54	29.30	29.97	9.65	9	4	20								
24	OVC	025					5.00	RA BR	69	69	69	100	3	13	29.08	29.74	14			85	65	71	53	29.29	29.96	9.87	9	4	20								
SUNRISE: 0450 JUL 29 SUNSET: 1933																																					
03	FEW	NC						10.00	TSRA	69	68	68	96	10	20	28.99	29.65	15			85	64	72	52	29.28	29.95	9.94	9	5	21							
06	OVC	065					10.00	69		68	68	96	5	01	29.07	29.74	16			85	65	72	53	29.27	29.94	9.87	9	5	21								
09	OVC	020					10.00	72		67	69	84	0	00	29.08	29.76	17			84	65	72	56	29.27	29.94	9.55	10	5	21								
12	OVC	018					10.00	74		67	69	79	6	31	29.11	29.78	18			82	66	71	59	29.27	29.94	9.65	8	4	21								
15	FEW	NC					10.00	83		67	72	59	8	31	29.12	29.79	19			80	66	71	64	29.27	29.94	9.74	7	3	19								
18	CLR	NC					10.00	82		66	71	58	9	29	29.14	29.81	20			77	67	70	72	29.28	29.95	9.32	6	3	18								
21	CLR	NC					10.00	73	67	69	81	3	26	29.18	29.86	21			75	67	70	78	29.29	29.96	9.39	6	2	16									
24	CLR	NC					10.00	69	68	68	96	7	21	29.21	29.88	22			73	67	69	82	29.29	29.97	9.29	6	2	16									
SUNRISE: 0451 JUL 30 SUNSET: 1932																																					
03	CLR	NC						10.00	TSRA	67	66	66	97	6	12	29.24	29.91	23			72	66	69	82	29.30	29.97	9.10	6	3	17							
06	CLR	NC					10.00	68		67	67	96	5	14	29.26	29.93	24			71	66	68	83	29.30	29.97	9.06	6	4	16								
09	CLR	NC					10.00	83		70	74	65	6	19	29.23	29.89																					
12	CLR	NC					10.00	93		73	79	52	12	22	29.20	29.86																					
15	CLR	NC					10.00	95		72	79	47	15	23	29.18	29.84																					
18	OVC	110					4.00	73		65	68	76	24	26	29.25	29.93																					
21	CLR	NC					10.00	74	64	68	71	0	00	29.24	29.91																						
24	CLR	NC					10.00	69	65	66	87	8	13	29.22	29.89																						



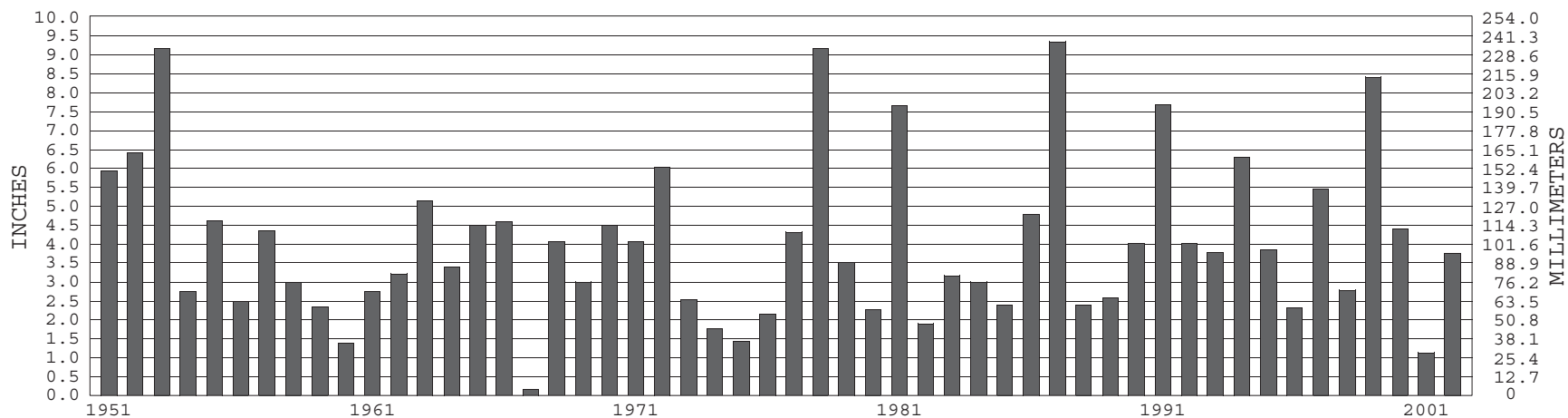
# LA CROSSE, WI JULY TEMPERATURES



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

Long-Term (1951-2002) Mean: 73.4    1961-1990 Normal: 74.0

# LA CROSSE, WI JULY PRECIPITATION



Long-Term (1951-2002) Mean Monthly Total: 4.04

1961-1990 Normal: 4.25



JULY 2002

LA CROSSE, 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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