



SEPTEMBER 2002

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

MADISON, WI

DANE COUNTY REGIONAL AIRPORT (MSN)

Lat: 43°08' N Long: 89°20' W Elev (Ground): 857 Feet

Time Zone: CENTRAL WBAN: 14837 ISSN #:0198-5736

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	84	57	71	6	62	66	0	6	MIFG BCFG BR HZ	0		0.0	0.00	29.16	30.07	6.7	19	7.0	20	19	16	17	01														
02	82	62	72	7	65	68	0	7	TSRA RA BR HZ	0		0.0	0.79	28.91	29.81	8.4	18	13.1	32*	18	26*	18	02														
03	78	55	67	2	53	59	0	2		0		0.0	0.00	29.09	30.00	4.4	30	5.6	22	29	16	33	03														
04	83	51	67	3	57	61	0	2	MIFG	0		0.0	0.00	29.26	30.19	0.3	34	1.4	13	33	10	33	04														
05	80	53	67	3	57	61	0	2	MIFG BR	0		0.0	0.00	29.25	30.17	4.7	14	6.1	16	13	15	12	05														
06	84	53	69	5	59	63	0	4	MIFG BR	0		0.0	0.00	29.15	30.06	6.3	17	6.7	28	15	23	15	06														
07	88	62	75	12	60	66	0	10	BR	0		0.0	0.00	29.20	30.11	5.2	18	5.4	15	19	13	15	07														
08	90*	58	74	11	65	68	0	9	BCFG BR HZ	0		0.0	0.00	29.23	30.15	3.1	19	3.4	17	16	14	17	08														
09	89	66	78*	15	68	71	0	13	BR	0		0.0	0.00	29.17	30.09	3.9	22	4.6	15	22	12	22	09														
10	80	51	66	3	61	64	0	1	RA BR HZ	0		0.0	0.13	29.07	29.99	4.1	31	7.5	22	31	16	32	10														
11	76	47	62	0	51	55	3	0	MIFG	0		0.0	0.00	29.19	30.12	1.7	36	2.5	14	29	12	02	11														
12	76	47	62	0	51	56	3	0	MIFG BR	0		0.0	0.00	29.15	30.07	1.3	24	2.7	16	24	13	23	12														
13	75	50	63	1	52	57	2	0		0		0.0	0.00	29.07	29.99	1.6	20	2.6	14	23	10	19	13														
14	71	61	66	4	57	60	0	1	RA DZ BR HZ	0		0.0	0.02	28.99	29.91	0.5	26	3.8	15	01	12	36	14														
15	71	48	60	-1	49	53	5	0		0		0.0	0.00	29.21	30.14	6.2	01	6.9	23	01	20	02	15														
16	75	41	58	-3	47	53	7	0	MIFG BR	0		0.0	0.00	29.16	30.09	2.1	22	3.1	13	21	10	21	16														
17	79	49	64	4	53	58	1	0		0		0.0	0.00	29.06	29.98	3.1	18	4.2	21	19	14	16	17														
18	77	57	67	7	61	64	0	2	RA BR HZ	0		0.0	0.01	28.83	29.74	5.8	16	6.7	21	16	17	16	18														
19	80	68	74	14	67	69	0	9	TSRA RA BR HZ	0		0.0	0.86	28.70	29.60	8.1	18	9.3	30	16	22	16	19														
20	71	62	67	8	62	64	0	2	RA BR	0		0.0	0.48	28.67	29.58	7.2	20	8.6	23	22	14	23	20														
21	69	52	61	2	45	52	4	0	RA	0		0.0	T	29.01	29.93	4.0	31	5.9	18	31	14	32	21														
22	62	42	52	-7	39	46	13	0		0		0.0	0.00	29.17	30.11	4.8	28	5.8	23	30	17	30	22														
23	67	38	53	-5	38	45	12	0	RA	0		0.0	T	29.20	30.14	6.2	23	9.3	31	26	23	19	23														
24	61	34*	48*	-10	37	44	17	0		0		0.0	0.00	29.37	30.31	1.1	22	3.9	14	15	10	17	24														
25	71	48	60	3	45	52	5	0	RA	0		0.0	T	29.26	30.19	8.6	17	8.9	22	16	20	17	25														
26	76	47	62	5	48	54	3	0	BR	0		0.0	0.00	29.01	29.93	2.2	05	5.1	17	01	14	01	26														
27	59	41	50	-7	48	50	15	0	DZ BR	0		0.0	T	29.00	29.93	7.9	02	8.1	20	01	16	02	27														
28	68	38	53	-3	49	52	12	0	RA BCFG BR HZ	0		0.0	0.06	29.17	30.11	2.0	15	4.3	18	15	17	15	28														
29	80	59	70	14	62	64	0	5	TSRA RA BR HZ	0		0.0	0.39	29.05	29.97	7.8	16	9.0	23	16	21	16	29														
30	84	67	76	21	61	66	0	11		0		0.0	0.00	28.93	29.84	10.7	18	11.3	29	18	24	19	30														
< MONTHLY AVERAGES										TOTALS-->			0.0	2.74	29.09	30.01	2.0	17	6.1	<- MONTHLY AVERAGES																	
4.8										2.2		3.5				<-----DEPARTURE FROM NORMAL----->										- .34		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.86 DATE: 19				SEA LEVEL PRESSURE				DATE				TIME																
MONTHLY									GREATEST 24-HR SNOWFALL: 0.0 DATE:				MAXIMUM				: 30.37				24 0853																
SEASON TO DATE									GREATEST SNOW DEPTH: 0 DATE:				MINIMUM				: 29.49				20 1153																
TOTAL DEPARTURE									NUMBER OF DAYS WITH →				MAXIMUM TEMP ≥ 90: 1				MINIMUM TEMP ≤ 32: 0				PRECIPITATION ≥ 0.01 INCH : 8																
HEATING: 102 -81 110 -118													MAXIMUM TEMP ≤ 32: 0				MINIMUM TEMP ≤ 0: 0				PRECIPITATION ≥ 0.10 INCH : 5																
COOLING: 86 38 747 169													THUNDERSTORMS : 3				HEAVY FOG : 0				SNOWFALL ≥ 1.0 INCH : 0																

SEPTEMBER 2002
MADISON, WI

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

MADISON, WI

SEPTEMBER 2002

MSN

WBAN # 14837

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.
0201				0.18	0.09	0.27	0.10	0.15					01												01			0.00	
0202													02									T			02			0.79	
0303													03												03			0.00	
0404													04												04			0.00	
0505													05												05			0.00	
0606													06												06			0.00	
0707													07												07			0.00	
0808													08												08			0.00	
0909													09												09			0.00	
1010												0.06	10	0.07	T										10			0.13	
1111													11												11			0.00	
1212													12												12			0.00	
1313													13												13			0.00	
1414												T	14		T	T	0.01	0.01	T					14			0.02		
1515													15												15			0.00	
1616													16												16			0.00	
1717													17												17			0.00	
1818					T	0.01	T						18				T								18			0.01	
1919	0.45	0.02	0.03	0.15	0.02	0.19	0.04	T	0.06	0.12		0.02	19	0.19	T		T							19			0.86		
2020				0.02	0.02								20	T	T	T	T		T					20			0.48		
2121													21				T	T	T					21			T		
2222													22												22			0.00	
2323													23	T	T										23			T	
2424													24												24			0.00	
2525					T	T							25												25			T	
2626													26												26			0.00	
2727					T	T	T						27												27			T	
2828													28												28			0.06	
2929	T	0.18	0.09	0.01	0.10	0.01							29								T	0.04	0.02	T	29			0.39	
3030													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)	.19	.24	.26	.28	.43	.45	.45	.46	.47	.48	.52	.55
Ending Date	19	19	19	19	19	19	19	19	19	19	02	19
Ending Time (Hour/Min)	0037	0040	0040	0036	0040	0047	0047	0120	0141	0154	0718	0307

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

**MADISON, WI
SEPTEMBER 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).

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							1.50	10.00	
02							2.00	10.00	
03							10.00	10.00	
04							8.00	10.00	
05							6.00	10.00	
06							1.50	10.00	
07							6.00	10.00	
08							3.00	10.00	
09							6.00	10.00	
10							3.00	10.00	
11							10.00	10.00	
12							1.75	10.00	
13							8.00	10.00	
14							1.50	10.00	
15							10.00	10.00	
16							1.25	10.00	
17							8.00	10.00	
18							2.50	10.00	
19							1.25	10.00	
20							1.25	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							10.00	10.00	
24							10.00	10.00	
25							10.00	10.00	
26							3.00	10.00	
27							1.25	10.00	
28							1.25	10.00	
29							1.00	10.00	
30							7.00	10.00	
MONTHLY AVGS							5.61	10.00	
<div style="text-align: center;">SUNSHINE (MINUTES)</div> <p>Total: Possible: Percent Possible:</p>									
<div style="text-align: center;">NUMBER OF DAYS WITH:</div> <div style="text-align: center;"> SKY CONDITION CLR PTLY CLDY CLOUDY MISSING 30 </div> <div style="text-align: center;"> MINIMUM VISIBILITY (MILES) <=0.25 <=3.0 >=7.0 0 13 13 </div>									

OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

SEPTEMBER 2002

MSN

WBAN # 14837

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 <small>Okta</small>		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB		RELATIVE HUMIDITY (PCT)					STATION	SEA LEVEL		OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>		VISIBILITY (MILES)		DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)		STATION	SEA LEVEL
	SKY COVER	CEILING 100'S OF FT		SKY COVER										CEILING 100'S OF FT																
			SUNRISE: 0522				SEP 01	SUNSET: 1834							SUNRISE: 0528				SEP 07	SUNSET: 1824										
03	CLR	NC			4.00	BR		58	58	58	100	0	00	29.26	30.18	03	CLR	NC		10.00			67	60	63	79	6	17	29.16	30.07
06	CLR	NC			3.00	BR BCFG		61	59	60	93	5	15	29.25	30.17	06	CLR	NC		9.00			66	59	62	78	3	21	29.20	30.11
09	CLR	NC			7.00			74	64	68	71	7	16	29.23	30.15	09	CLR	NC		10.00			76	60	66	58	7	21	29.22	30.14
12	FEW	NC			10.00			81	63	69	54	8	21	29.18	30.09	12	CLR	NC		10.00			84	61	69	46	7	21	29.20	30.12
15	FEW	NC			10.00			83	62	69	49	15	18	29.10	30.01	15	CLR	NC		10.00			88	56	68	34	8	18	29.18	30.09
18	CLR	NC			8.00			79	63	69	58	8	19	29.07	29.98	18	CLR	NC		10.00			82	61	69	49	9	18	29.18	30.10
21	CLR	NC			6.00	HZ		74	65	68	74	7	17	29.05	29.97	21	CLR	NC		10.00			68	62	64	81	0	00	29.22	30.14
24	CLR	NC			6.00	HZ		72	64	67	76	8	17	29.02	29.93	24	CLR	NC		6.00	BR		63	60	61	90	0	00	29.23	30.15
			SUNRISE: 0523				SEP 02	SUNSET: 1832							SUNRISE: 0529				SEP 08	SUNSET: 1822										
03	OVC	080			5.00	HZ		72	65	67	79	5	VR	29.01	29.92	03	CLR	NC		5.00	BR		61	59	60	93	0	00	29.23	30.14
06	OVC	038			3.00	-TSRA BR		63	61	62	93	16	11	28.98	29.89	06	CLR	NC		3.00	BCFG BR		58	58	58	100	0	00	29.27	30.19
09	BKN	070			10.00			66	64	65	93	16	19	28.93	29.83	09	CLR	NC		8.00			76	63	68	64	6	16	29.28	30.20
12	SCT	NC			10.00			74	66	69	76	22	18	28.89	29.79	12	CLR	NC		10.00			87	68	74	53	8	16	29.24	30.15
15	FEW	NC			10.00			80	68	72	67	16	19	28.82	29.72	15	SCT	NC		10.00			90	67	74	47	8	18	29.20	30.12
18	FEW	NC			8.00			82	71	74	69	12	20	28.78	29.69	18	CLR	NC		10.00			83	69	74	63	3	23	29.20	30.12
21	BKN	060			9.00			79	71	74	77	10	22	28.84	29.75	21	CLR	NC		10.00			72	69	70	91	0	00	29.23	30.14
24	CLR	NC			10.00			66	56	60	70	7	32	28.98	29.88	24	CLR	NC		6.00	BR		69	67	68	93	0	00	29.23	30.15
			SUNRISE: 0524				SEP 03	SUNSET: 1831							SUNRISE: 0530				SEP 09	SUNSET: 1820										
03	CLR	NC			10.00			61	55	58	81	3	29	28.99	29.90	03	CLR	NC		6.00	BR		68	67	67	96	0	00	29.22	30.14
06	CLR	NC			10.00			61	55	58	81	5	VR	29.05	29.97	06	CLR	NC		6.00	BR		72	68	69	87	3	21	29.23	30.14
09	CLR	NC			10.00			69	55	61	61	7	27	29.09	30.00	09	CLR	NC		10.00			80	69	73	69	3	VR	29.22	30.14
12	CLR	NC			10.00			75	49	60	40	12	30	29.10	30.01	12	FEW	NC		10.00			87	66	73	50	7	24	29.19	30.11
15	CLR	NC			10.00			78	49	61	36	12	33	29.09	30.01	15	FEW	NC		10.00			88	64	72	45	7	23	29.14	30.05
18	CLR	NC			10.00			73	52	61	48	0	00	29.11	30.03	18	CLR	NC		10.00			83	68	73	61	5	22	29.12	30.03
21	CLR	NC			10.00			60	54	57	80	0	00	29.14	30.07	21	CLR	NC		10.00			77	69	72	77	5	22	29.12	30.03
24	CLR	NC			10.00			56	52	54	87	0	00	29.18	30.10	24	CLR	NC		7.00			75	67	70	76	6	22	29.09	30.00
			SUNRISE: 0525				SEP 04	SUNSET: 1829							SUNRISE: 0531				SEP 10	SUNSET: 1818										
03	CLR	NC			10.00			53	52	52	96	0	00	29.21	30.13	03	CLR	NC		8.00			73	65	68	76	5	21	29.06	29.96
06	CLR	NC			8.00	MIFG		52	51	52	97	0	00	29.26	30.19	06	CLR	NC		6.00	HZ		72	65	67	79	7	22	29.03	29.94
09	CLR	NC			10.00			71	57	63	61	3	VR	29.30	30.22	09	CLR	NC		10.00			77	65	69	66	8	28	29.01	29.92
12	CLR	NC			10.00			80	58	66	47	5	VR	29.30	30.22	12	OVC	016		5.00	-RA BR		70	68	69	93	8	31	29.04	29.96
15	CLR	NC			10.00			83	57	67	41	5	VR	29.26	30.19	15	BKN	022		10.00			68	61	64	78	13	33	29.06	29.98
18	CLR	NC			10.00			75	61	66	62	0	00	29.25	30.18	18	BKN	043		10.00			67	56	60	68	10	35	29.09	30.01
21	CLR	NC			10.00			62	60	61	93	0	00	29.27	30.19	21	CLR	NC		10.00			58	52	55	81	5	34	29.15	30.07
24	CLR	NC			10.00			59	58	58	96	0	00	29.27	30.19	24	CLR	NC		10.00			51	50	51	96	3	33	29.16	30.09
			SUNRISE: 0526				SEP 05	SUNSET: 1827							SUNRISE: 0532				SEP 11	SUNSET: 1816										
03	CLR	NC			10.00			59	55	57	87	0	00	29.26	30.18	03	CLR	NC		10.00			49	49	49	100	0	00	29.17	30.10
06	CLR	NC			10.00			54	53	53	97	0	00	29.28	30.21	06	CLR	NC		10.00	MIFG		49	48	48	97	3	35	29.22	30.15
09	FEW	NC			10.00			70	61	64	73	10	19	29.31	30.23	09	CLR	NC		10.00			65	53	58	66	6	01	29.24	30.16
12	FEW	NC			10.00			77	58	65	52	6	12	29.28	30.21	12	FEW	NC		10.00			73	50	60	44	7	06	29.21	30.14
15	CLR	NC			10.00			80	55	65	42	3	VR	29.24	30.16	15	SCT	NC		10.00			74	47	59	38	7	28	29.17	30.10
18	CLR	NC			10.00			75	59	65	58	10	12	29.20	30.12	18	FEW	NC		10.00			63	56	59	78	0	00	29.15	30.09
21	CLR	NC			10.00			65	56	60	73	9	15	29.20	30.12	21	FEW	NC		10.00			56	53	54	90	0	00	29.18	30.10
24	CLR	NC			10.00			61	55	58	81	7	15	29.19	30.11	24	CLR	NC		10.00			52	51	52	97	0	00	29.17	30.10
			SUNRISE: 0527				SEP 06	SUNSET: 1825							SUNRISE: 0534				SEP 12	SUNSET: 1815										
03	CLR	NC			10.00			59	56	57	90	6	15	29.16	30.08	03	CLR	NC		4.00	BR		50	49	49	96	0	00	29.17	30.09
06	CLR	NC			5.00	BR		55	54	54	96	0	00	29.18	30.11	06	CLR	NC		5.00	MIFG		48	48	48	100	0	00	29.19	30.12
09	CLR	NC			10.00			68	60	63	76	5	22	29.22	30.14	09	CLR	NC		10.00			69	53	60	57	5	23	29.19	30.11
12	CLR	NC			10.00			80	60	67	51	22	15	29.10	30.01	12	FEW	NC		10.00			74	49	60					

OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

SEPTEMBER 2002

MSN

WBAN # 14837

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 <small>Okta</small>		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 <small>Okta</small>	VISIBILITY (MILES)	DRY BULB		DEW POINT	WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0535 SEP 13 SUNSET: 1813						SUNRISE: 0541 SEP 19 SUNSET: 1802																							
03	CLR	NC			10.00	54	51	52	90	0	00	29.09	30.01	03	OVC	012			6.00	-TSRA	BR	69	67	68	93	17	20	28.73	29.64
06	CLR	NC			8.00	51	50	51	96	0	00	29.11	30.04	06	OVC	006			3.00	BR		70	68	69	93	15	16	28.69	29.59
09	CLR	NC			10.00	68	53	59	59	3	23	29.12	30.05	09	OVC	012			5.00	BR		74	70	71	88	10	18	28.71	29.61
12	FEW	NC			10.00	73	50	60	44	5	VR	29.09	30.01	12	BKN	100			10.00			78	67	71	69	12	20	28.67	29.57
15	FEW	NC			10.00	73	51	60	46	8	22	29.05	29.97	15	SCT	NC			10.00			77	68	71	74	10	20	28.65	29.55
18	FEW	NC			10.00	63	56	59	78	0	00	29.02	29.95	18	BKN	047			10.00			74	65	68	74	8	23	28.68	29.58
21	FEW	NC			10.00	57	53	55	87	0	00	29.01	29.94	21	BKN	047			10.00			70	66	67	87	0	00	28.71	29.61
24	FEW	NC			10.00	65	52	58	63	5	17	28.99	29.90	24	OVC	031			10.00			70	66	67	87	5	17	28.71	29.62
SUNRISE: 0536 SEP 14 SUNSET: 1811						SUNRISE: 0542 SEP 20 SUNSET: 1758																							
03	BKN	120			10.00	63	53	57	70	5	16	28.98	29.89	03	OVC	016			4.00	-RA	BR	69	66	67	90	7	14	28.67	29.57
06	BKN	080			10.00	63	52	57	68	6	16	28.98	29.90	06	OVC	007			1.25	+RA	BR	70	68	69	93	8	17	28.65	29.56
09	FEW	NC			10.00	66	52	58	61	5	VR	28.98	29.90	09	OVC	049			10.00			68	65	66	90	8	19	28.63	29.54
12	BKN	070			10.00	67	58	62	73	0	00	28.96	29.87	12	OVC	024			5.00	-RA	BR	67	64	65	91	12	22	28.60	29.51
15	OVC	050			6.00 HZ	67	62	64	84	0	00	28.95	29.86	15	OVC	030			10.00			66	58	61	75	9	24	28.62	29.53
18	OVC	016			3.00 BR	63	61	62	93	5	VR	28.99	29.91	18	OVC	080			10.00			62	59	60	90	7	24	28.67	29.58
21	OVC	028			4.00 BR	63	61	62	93	6	33	29.05	29.97	21	OVC	090			10.00			63	59	61	87	7	22	28.74	29.65
24	OVC	013			7.00	62	59	60	90	10	36	29.11	30.03	24	CLR	NC			10.00			62	56	59	81	10	21	28.77	29.68
SUNRISE: 0537 SEP 15 SUNSET: 1809						SUNRISE: 0543 SEP 21 SUNSET: 1757																							
03	FEW	NC			10.00	53	49	51	86	7	35	29.17	30.10	03	CLR	NC			10.00			61	51	56	70	6	VR	28.83	29.74
06	FEW	NC			10.00	50	48	49	93	8	35	29.23	30.16	06	CLR	NC			10.00			55	51	53	87	0	00	28.94	29.85
09	FEW	NC			10.00	60	51	55	72	13	04	29.25	30.18	09	CLR	NC			10.00			62	46	54	56	5	31	28.99	29.91
12	BKN	042			10.00	68	50	58	53	10	04	29.24	30.17	12	FEW	NC			10.00			68	42	54	39	7	34	29.02	29.94
15	SCT	NC			10.00	69	47	57	45	7	VR	29.20	30.13	15	FEW	NC			10.00			68	40	54	36	7	34	29.02	29.95
18	FEW	NC			10.00	61	46	53	58	3	05	29.19	30.12	18	BKN	100			10.00			57	43	50	60	7	32	29.10	30.03
21	CLR	NC			10.00	50	47	48	89	0	00	29.21	30.14	21	BKN	120			10.00			54	43	48	67	6	29	29.12	30.05
24	CLR	NC			10.00	48	46	47	93	0	00	29.19	30.12	24	CLR	NC			10.00			52	43	48	72	3	VR	29.13	30.06
SUNRISE: 0538 SEP 16 SUNSET: 1807						SUNRISE: 0545 SEP 22 SUNSET: 1755																							
03	CLR	NC			8.00	44	43	44	96	0	00	29.19	30.12	03	BKN	110			10.00			52	45	48	77	0	00	29.15	30.08
06	CLR	NC			7.00 MIFG BR	42	41	42	96	0	00	29.20	30.14	06	CLR	NC			10.00			49	45	47	86	0	00	29.16	30.09
09	CLR	NC			10.00	63	51	56	65	7	18	29.21	30.14	09	FEW	NC			10.00			57	38	48	49	12	30	29.17	30.10
12	CLR	NC			10.00	70	45	56	41	5	VR	29.18	30.11	12	BKN	060			10.00			60	36	48	41	12	29	29.14	30.08
15	CLR	NC			10.00	75	45	58	34	6	VR	29.13	30.06	15	BKN	070			10.00			61	34	48	36	16	27	29.15	30.08
18	CLR	NC			10.00	71	48	58	44	6	21	29.09	30.02	18	CLR	NC			10.00			54	34	45	47	6	VR	29.17	30.11
21	CLR	NC			10.00	66	51	58	59	3	20	29.10	30.02	21	CLR	NC			10.00			45	39	42	80	3	26	29.21	30.15
24	CLR	NC			10.00	53	50	51	89	0	00	29.11	30.03	24	CLR	NC			10.00			42	37	40	82	0	00	29.23	30.17
SUNRISE: 0539 SEP 17 SUNSET: 1806						SUNRISE: 0546 SEP 23 SUNSET: 1753																							
03	CLR	NC			10.00	53	49	51	86	0	00	29.10	30.02	03	CLR	NC			10.00			39	37	38	93	0	00	29.24	30.18
06	CLR	NC			10.00	49	48	48	97	0	00	29.12	30.05	06	CLR	NC			10.00			46	38	42	73	6	19	29.24	30.17
09	CLR	NC			10.00	70	56	62	61	7	19	29.13	30.05	09	CLR	NC			10.00			58	37	48	46	9	19	29.21	30.15
12	CLR	NC			10.00	78	55	64	45	10	19	29.08	30.00	12	OVC	095			10.00			61	38	50	43	17	19	29.14	30.08
15	CLR	NC			10.00	76	54	63	47	7	18	29.01	29.93	15	BKN	060			10.00			65	41	53	42	15	21	29.09	30.03
18	CLR	NC			10.00	71	54	61	55	6	18	28.99	29.92	18	FEW	NC			10.00			56	38	47	51	13	27	29.16	30.10
21	CLR	NC			10.00	61	55	58	81	0	00	28.99	29.90	21	BKN	039			10.00			50	35	43	57	9	30	29.25	30.18
24	CLR	NC			8.00	60	53	56	78	3	10	28.96	29.87	24	CLR	NC			10.00			43	35	40	74	6	VR	29.30	30.24
SUNRISE: 0540 SEP 18 SUNSET: 1804						SUNRISE: 0547 SEP 24 SUNSET: 1751																							
03	BKN	120			5.00 BR	58	54	56	87	0	00	28.92	29.83	03	CLR	NC			10.00			39	35	37	86	6	30	29.35	30.29
06	OVC	120			3.00 BR	61	57	59	87	5	13	28.89	29.80	06	CLR	NC			10.00			37	35	36	93	5	24	29.38	30.34
09	SCT	NC			5.00 HZ	66	60	62	81	3	VR	28.88	29.80	09	CLR	NC			10.00			49	40	45	71	6	30	29.41	30.36
12	BKN	033			10.00	74	60	65	62	12	18	28.85	29.75	12	FEW	NC			10.00			56	36	47	47	3	VR	29.40	30.35
15	SCT	NC			10.00	74	62	66	67	13	17	28.77	29.68	15	CLR	NC			10.00			60	36	49	41	5	VR	29.35	30.29
18	CLR	NC			3.00 HZ	70	65	67	84	7	13	28.77	29.68	18	CLR	NC			10.00										

OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

SEPTEMBER 2002

MSN

WBAN # 14837

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: 0548	SEP 25		SUNSET: 1749																				
03	BKN	100				50	42	46	74	8	16	29.36	30.29															
06	BKN	100				51	45	48	80	10	18	29.35	30.29															
09	BKN	110				60	45	52	58	14	17	29.32	30.25															
12	FEW	NC				66	42	54	42	12	18	29.27	30.21															
15	CLR	NC				70	43	56	38	13	19	29.19	30.11															
18	FEW	NC				65	48	56	54	5	15	29.18	30.11															
21	SCT	NC				63	47	54	56	9	16	29.15	30.08															
24	CLR	NC				57	46	51	67	6	17	29.13	30.05															
					SUNRISE: 0549	SEP 26		SUNSET: 1748																				
03	CLR	NC				54	47	50	77	0	00	29.11	30.03															
06	CLR	NC				47	46	46	97	0	00	29.09	30.02															
09	CLR	NC				62	50	55	65	7	16	29.06	29.98															
12	SCT	NC				73	44	57	36	5	23	29.01	29.94															
15	CLR	NC				75	43	58	32	3	06	28.95	29.86															
18	CLR	NC				63	54	58	73	9	04	28.93	29.85															
21	BKN	006			5.00 BR	54	52	53	93	12	02	28.96	29.88															
24	OVC	006			3.00 BR	54	52	53	93	10	02	28.93	29.84															
					SUNRISE: 0550	SEP 27		SUNSET: 1746																				
03	OVC	008			4.00 BR	55	52	53	90	9	35	28.91	29.82															
06	OVC	002			1.25 -DZ BR	51	50	51	96	12	03	28.92	29.84															
09	OVC	008			6.00 BR	52	48	50	86	10	02	28.96	29.88															
12	OVC	012			10.00	54	49	51	83	10	36	28.98	29.91															
15	OVC	022			10.00	58	50	54	75	10	01	28.99	29.92															
18	BKN	045			10.00	55	46	50	72	3	04	29.06	30.00															
21	SCT	NC			10.00	46	44	45	93	0	00	29.11	30.05															
24	CLR	NC			10.00	41	40	41	96	0	00	29.14	30.08															
					SUNRISE: 0551	SEP 28		SUNSET: 1744																				
03	CLR	NC			10.00	40	39	40	97	0	00	29.18	30.12															
06	CLR	NC			6.00 BR BCFG	38	38	38	100	0	00	29.22	30.17															
09	CLR	NC			10.00	58	48	53	70	8	14	29.24	30.18															
12	FEW	NC			10.00	67	51	58	57	10	19	29.19	30.12															
15	BKN	065			9.00	67	54	59	63	3	24	29.13	30.07															
18	BKN	065			6.00 HZ	62	56	59	81	3	03	29.14	30.07															
21	OVC	060			5.00 -RA	60	55	57	84	3	31	29.17	30.09															
24	BKN	100			1.25 BR	59	58	58	96	6	05	29.12	30.05															
					SUNRISE: 0552	SEP 29		SUNSET: 1742																				
03	OVC	025			1.50 -TSRA BR	60	58	59	93	9	11	29.12	30.04															
06	SCT	NC			2.50 BR	60	59	59	96	10	14	29.11	30.03															
09	FEW	NC			7.00	66	61	63	84	12	15	29.09	30.02															
12	FEW	NC			8.00	73	63	67	71	13	16	29.06	29.98															
15	CLR	NC			10.00	79	64	69	60	6	22	29.01	29.93															
18	CLR	NC			9.00	72	64	67	76	6	17	28.99	29.91															
21	CLR	NC			10.00	70	62	65	76	6	17	28.99	29.91															
24	CLR	NC			10.00	72	63	66	73	9	19	28.99	29.89															
					SUNRISE: 0554	SEP 30		SUNSET: 1741																				
03	CLR	NC			10.00	70	63	66	79	0	00	29.00	29.91															
06	BKN	100			10.00	69	63	65	81	3	VR	29.01	29.93															
09	CLR	NC			10.00	71	62	65	73	10	17	28.99	29.89															
12	CLR	NC			10.00	79	62	68	56	16	18	28.93	29.83															
15	CLR	NC			10.00	84	58	68	41	20	19	28.86	29.76															
18	FEW	NC			10.00	76	60	66	58	10	17	28.84	29.75															
21	CLR	NC			10.00	75	59	65	58	16	19	28.88	29.78															
24	FEW	NC			10.00	73	57	63	57	9	20	28.90	29.80															

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 Visiblity = 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			
	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES,HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	WIND (MPH)	
							STATION	SEA LEVEL			SPEED	DIRECTION
01			58	54	56	86	29.10	30.02	8.52	4	1	17
02			58	53	55	86	29.10	30.02	8.30	4	2	17
03			57	53	55	87	29.10	30.02	8.02	3	1	18
04			56	53	54	90	29.10	30.02	7.72	3	1	15
05			55	53	54	90	29.11	30.03	8.02	3	1	14
06			56	53	54	90	29.11	30.04	6.93	4	2	15
07			59	55	56	86	29.12	30.04	7.52	5	3	16
08			63	56	59	77	29.12	30.05	8.63	6	3	18
09			66	55	60	68	29.12	30.04	9.27	7	3	19
10			69	55	61	62	29.11	30.04	9.53	7	3	20
11			71	55	62	57	29.10	30.02	9.80	8	4	20
12			72	54	62	55	29.09	30.01	9.60	9	5	19
13			73	54	62	52	29.08	29.99	9.83	9	5	20
14			74	54	62	52	29.06	29.98	9.93	7	3	21
15			74	54	62	50	29.05	29.97	9.83	8	5	21
16			74	54	62	52	29.05	29.97	9.65	8	4	21
17			72	54	62	56	29.05	29.98	9.42	7	3	21
18			69	55	61	64	29.06	29.98	9.23	5	2	19
19			65	56	60	72	29.06	29.99	9.30	4	2	19
20			63	56	59	77	29.07	29.99	9.20	4	2	19
21			62	55	58	79	29.08	30.00	9.10	4	2	21
22			62	55	58	78	29.08	30.00	8.93	5	2	20
23			61	54	57	81	29.09	30.01	8.68	5	2	20
24			59	54	56	83	29.09	30.01	8.71	4	1	18

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 Visiblity = 8/8.

Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.

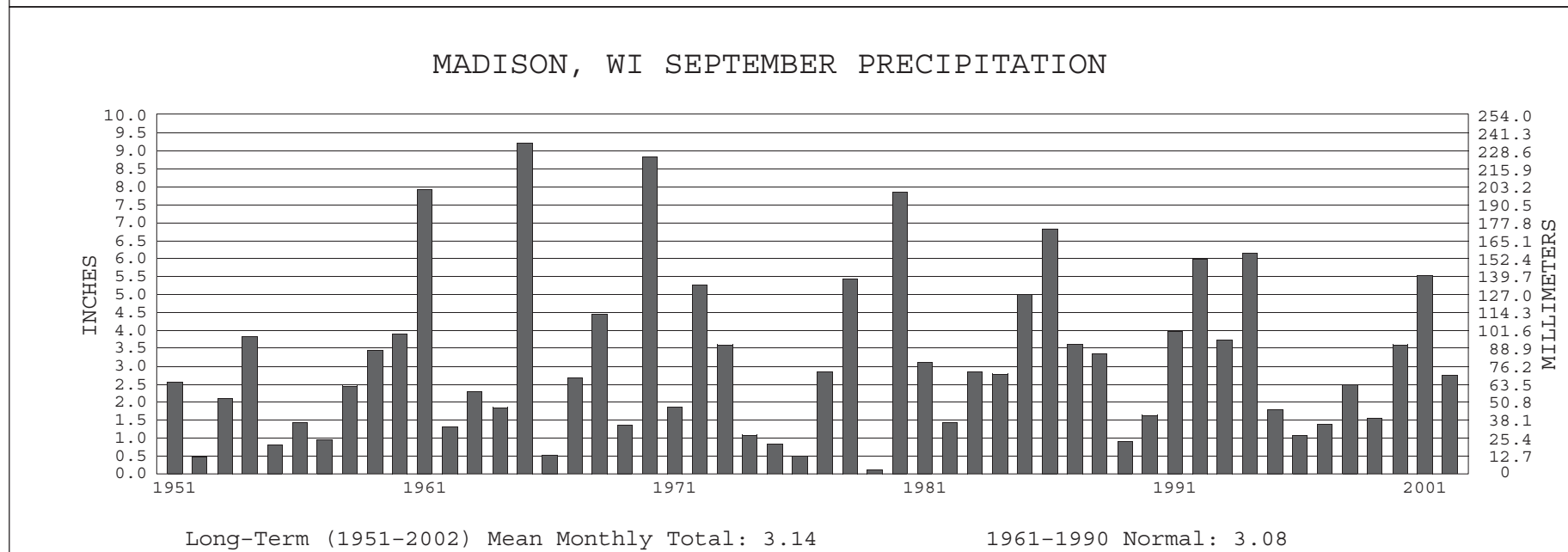
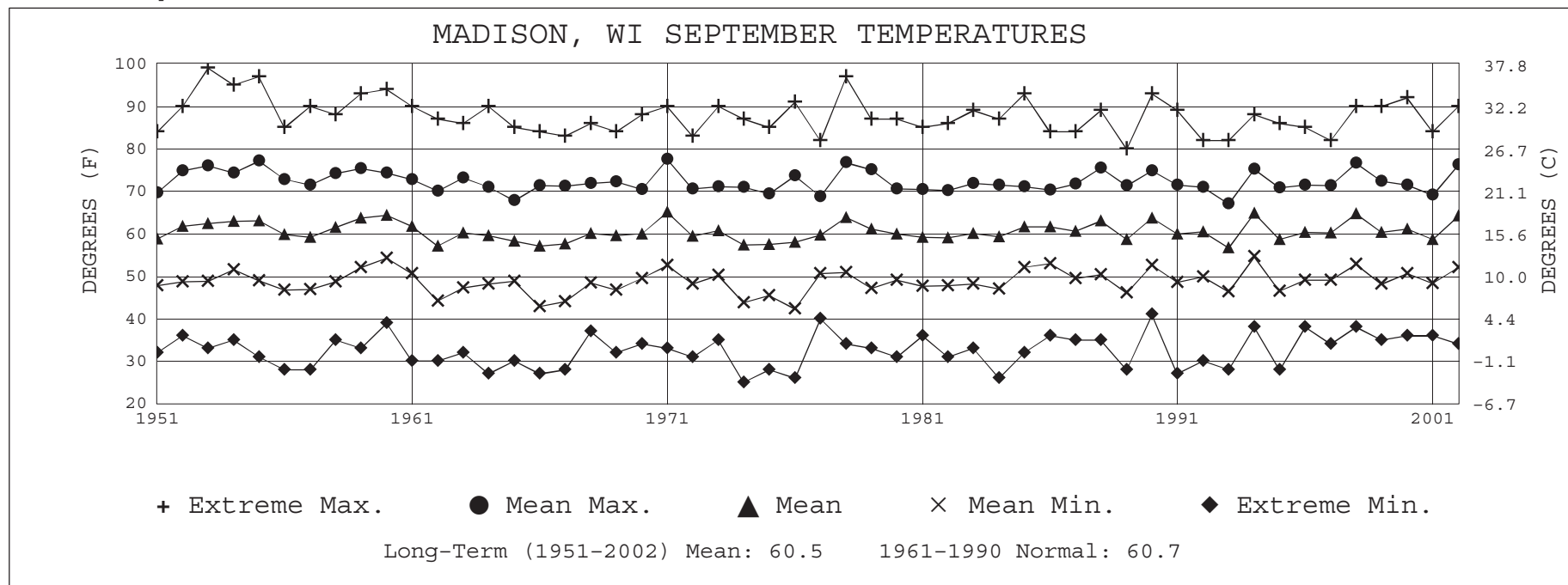
NC= No ceiling detected.

& = 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			58	54	56	86	29.10	30.02	8.52	4	1	17
02			58	53	55	86	29.10	30.02	8.30	4	2	17
03			57	53	55	87	29.10	30.02	8.02	3	1	18
04			56	53	54	90	29.10	30.02	7.72	3	1	15
05			55	53	54	90	29.11	30.03	8.02	3	1	14
06			56	53	54	90	29.11	30.04	6.93	4	2	15
07			59	55	56	86	29.12	30.04	7.52	5	3	16
08			63	56	59	77	29.12	30.05	8.63	6	3	18
09			66	55	60	68	29.12	30.04	9.27	7	3	19
10			69	55	61	62	29.11	30.04	9.53	7	3	20
11			71	55	62	57	29.10	30.02	9.80	8	4	20
12			72	54	62	55	29.09	30.01	9.60	9	5	19
13			73	54	62	52	29.08	29.99	9.83	9	5	20
14			74	54	62	52	29.06	29.98	9.93	7	3	21
15			74	54	62	50	29.05	29.97	9.83	8	5	21
16			74	54	62	52	29.05	29.97	9.65	8	4	21
17			72	54	62	56	29.05	29.98	9.42	7	3	21
18			69	55	61	64	29.06	29.98	9.23	5	2	19
19			65	56	60	72	29.06	29.99	9.30	4	2	19
20			63	56	59	77	29.07	29.99	9.20	4	2	19
21			62	55	58	79	29.08	30.00	9.10	4	2	21
22			62	55	58	78	29.08	30.00	8.93	5	2	20
23			61	54	57	81	29.09	30.01	8.68	5	2	20
24			59	54	56	83	29.09	30.01	8.71	4	1	18





SEPTEMBER 2002

MADISON, WI

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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