



MARCH 1998

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): 858 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	35	30	33	7	26	30	32	0	SN BR	0		0.5	0.05	28.86	29.81	1.3	20	3.1	14	17	10	19	01										
02	36	30	33	7	30	32	32	0	DZ SN BR	T		1.0	0.08	28.83	29.77	4.9	31	5.5	14	30	10	35	02										
03	32	29	31	4	26	29	34	0	SN	T		0.1	0.01	28.82	29.77	5.8	04	7.0	15	04	13	05	03										
04	33	27	30	3	21	27	35	0	SN	T		T		29.02	29.98	5.3	34	5.6	16	01	11	33	04										
05	36	29	33	6	26	30	32	0	SN	T		0.3	0.03	29.21	30.17	4.2	06	5.6	11	07	10	08	05										
06	36	28	32	4	25	29	33	0	SN BR	3		2.2	0.22	29.17	30.13	3.2	25	5.2	15	21	11	24	06										
07	42	22	32	4	23	29	33	0		0		0.0	0.00	29.17	30.12	9.3	06	10.4	22	07	18	05	07										
08	35	31	33	4	29	31	32	0	RA SN PE BLSN	1		6.8	0.67	28.80	29.75	21.5	03	22.0	40	03	34*	01	08										
09	32	13	23	-6	12	21	42	0		6		0.0	0.00	28.98	29.94	18.2	35	18.5	39	01	29	36	09										
10	18	7	13	-17	-2	10	52	0		6		0.0	0.00	29.46	30.45	7.9	31	8.6	21	34	16	34	10										
11	18	4*	11*	-19	-2	9	54	0		5		0.0	0.00	29.65	30.65	7.6	32	8.8	22	31	16	29	11										
12	23	5	14	-17	2	12	51	0	SN	4		T	T	29.50	30.49	6.4	23	7.6	21	19	16	20	12										
13	37	17	27	-4	19	24	38	0	SN	3		0.1	T	28.98	29.94	9.8	24	13.2	32	32	25	31	13										
14	27	13	20	-11	10	18	45	0	SN	3		T	T	29.33	30.30	8.8	31	9.1	30	33	21	32	14										
15	27	11	19	-13	15	18	46	0	SN BR	4		0.4	0.03	29.53	30.51	5.7	05	6.1	14	07	13	07	15										
16	33	7	20	-12	17	21	45	0	SN	4		T	T	29.47	30.45	6.0	08	7.5	18	11	16	11	16										
17	34	22	28	-5	28	30	37	0	RA DZ BR	2		0.0	0.33	29.17	30.13	12.2	06	12.7	28	06	24	05	17										
18	36	33	35	2	34	34	30	0	RA DZ BR	T		0.0	0.38	28.93	29.88	13.1	04	13.4	23	05	18	05	18										
19	33	30	32	-2	28	31	33	0	RA DZ SN BR	T		0.6	0.06	29.02	29.97	14.2	02	14.4	30	03	24	03	19										
20	36	29	33	-1	22	28	32	0	SN	1		T	T	29.06	30.02	18.5	02	18.7	31	02	26	02	20										
21	41	23	32	-2	20	28	33	0		T		0.0	0.00	29.07	30.03	9.9	01	10.3	23	02	21	02	21										
22	44	21	33	-2	20	29	32	0		T		0.0	0.00	29.05	30.00	3.9	32	4.6	22	34	16	34	22										
23	44	28	36	1	21	30	29	0		0		0.0	0.00	29.10	30.05	3.1	35	5.1	15	05	14	05	23										
24	48	23	36	0	25	33	29	0	RA	0		0.0	T	29.24	30.20	6.0	18	6.1	21	18	16	19	24										
25	59	40	50	14	41	46	15	0	RA	0		0.0	T	29.02	29.95	15.3	18	15.5	29	18	23	17	25										
26	73	55	64	27	53	58	1	0		0		0.0	0.00	28.79	29.70	12.7	21	12.9	30	22	22	20	26										
27	72	55	64*	27	53	58	1	0		0		0.0	0.00	28.74	29.65	13.2	19	13.8	41*	18	32	18	27										
28	60	45	53	15	47	50	12	0	RA BR	0		0.0	0.03	28.68	29.60	4.9	24	7.5	23	28	16	28	28										
29	78*	39	59	21	52	56	6	0	TS TSRA BCFG	0		0.0	0.02	28.78	29.70	11.2	17	13.0	36	17	29	17	29										
30	66	51	59	21	56	58	6	0	TS TSRA RA BR	0		0.0	2.78	28.65	29.56	1.3	16	8.0	28	30	21	31	30										
31	55	40	48	9	44	45	17	0	RA BR	0		0.0	0.77	28.56	29.48	6.9	08	13.6	34	09	29	09	31										
41.3										27.0	34.2	■ ■	26.5	31.8	30.6	0.0	< MONTHLY AVERAGES		TOTALS-->			12.0	5.46	29.05	30.00	2.3	02	10.1	<- MONTHLY AVERAGES				
-.2										4.0	1.9	■ ■	<----- DEPARTURE FROM NORMAL ----->										3.29	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3									
DEGREE DAYS									GREATEST 24-HR PRECIPITATION:		3.01	DATE: 30-31		SEA LEVEL PRESSURE		DATE		TIME															
MONTHLY									GREATEST 24-HR SNOWFALL:		6.8	DATE: 08		MAXIMUM		:		30.72		11		1015											
SEASON TO DATE									GREATEST SNOW DEPTH:		6	DATE: 10+		MINIMUM		:		29.36		31		1758											
TOTAL DEPARTURE									949		-65		5901		-822		NUMBER OF DAYS WITH		➔		MAXIMUM TEMP ≥ 90:		0		MINIMUM TEMP ≤ 32:		23		PRECIPITATION ≥ 0.01 INCH :		14		
HEATING:									0		0		5901		-822		THUNDERSTORMS		:		2		HEAVY FOG		:		0		PRECIPITATION ≥ 0.10 INCH :		6		
COOLING:									0		0		0		0		0		0		0		0		0		0		SNOWFALL ≥ 1.0 INCH :		3		

MARCH 1998
MADISON, WI

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

MADISON, WI

MARCH 1998

MSN

WBAN # 14837

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note 2)	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	0.02		0.05	
02	T	T	T	T	T		0.01	0.01	T	T	T	T	02	T	T	T	T			T	0.01	T	0.01	T	0.02	02	0.05		0.08
03	T	0.01	T	T	T	T	T	T	T	T	T	T	03	T	T	T	T	T	T	T									0.01
04													04																T
05													05	T									T	T	0.01	05	0.01		0.03
06	0.02	0.03	0.01	T	T	T	T	T					06	T	T	T	T									06	0.06		0.22
07													07													07			0.00
08				0.01	T	0.04	0.03	0.03	0.02	0.04	0.05	0.04	08	0.02	0.05	0.01	0.01	0.01	T	T	T	T	T	T	T	08	0.36		0.67
09													09													09			0.00
10													10													10			0.00
11													11													11			0.00
12													12													12			T
13	T				T	T							13	T						T	T	T	T		T	13			T
14			T										14													14			T
15													15			T	T	T	0.01	T	T	T				15	0.01		0.03
16													16		T											16			T
17													17	T	0.03	0.04	0.03	0.05	0.03	0.04	0.02	0.08	0.01	T	T	17			0.33
18	0.04	0.02	0.02	0.08	0.03	T	0.03	0.05	0.05	T	T	T	18	0.02	T	0.01	0.01	0.01	T	T	T	T	T	T	T	18			0.38
19	T	T	0.01	0.01	0.03	T	T	0.01	T	T	T	T	19						T	T	T					19			0.06
20		T	T	T	T	T							20								T	T				20			T
21													21													21			0.00
22													22													22			0.00
23													23													23			0.00
24													24													24			T
25													25										T	T	T	25			T
26													26													26			0.00
27													27													27			0.00
28							T	0.03	T				28													28			0.03
29					0.01		0.01						29													29			0.02
30						T	0.02	0.07	T	T			30	0.10	T	0.02			0.15	T	0.32	0.66	0.43	0.52	0.21	30	2.50		2.78
31	0.16	0.01		0.01	0.01	0.06	0.06	0.02	0.04	0.16	0.05	0.02	31	0.01	0.03	0.03	0.01	T	T	0.08	T	0.01			31			0.77	

MAXIMUM SHORT DURATION PRECIPITATION (See Note 1)

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 1: NCDC derives these data from one-minute ASOS values. The table is not printed when inconsistent with ASOS hourly totals.

Note 2: 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

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

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).

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.

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 at constant pressure by evaporation of moisture into it, to 100% relative humidity.

ADDITIONAL NOTES:

SUNSHINE (MINUTES)

Total: Possible:
Percent Possible:

NUMBER OF DAYS WITH:

CLR PTLY CLDY CLOUDY MISSING
31

MINIMUM VISIBILITY (MILES)		
<=0.25	<=3.0	>=7.0
0	12	17

OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

MARCH 1998

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 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: 0640 MAR 01						SUNSET: 1751						SUNRISE: 0630 MAR 07						SUNSET: 1759											
03	OVC	013			8.00 -SN	32	28	30	85	5	20	28.81	29.75	03	OVC	120			10.00	26	20	24	78	5	01	29.19	30.15		
06	OVC	070			3.00 -SN	30	28	29	92	3	16	28.82	29.76	06	SCT	NC			10.00	23	19	22	85	5	35	29.22	30.19		
09	OVC	007			2.50 -SN	30	28	29	92	6	19	28.85	29.80	09	OVC	180			9.00	29	22	27	75	7	04	29.23	30.19		
12	OVC	033			10.00	34	26	31	73	7	16	28.87	29.81	12	OVC	180			10.00	39	24	33	55	12	08	29.21	30.17		
15	OVC	049			10.00	35	23	31	61	0	00	28.86	29.80	15	BKN	100			10.00	40	25	34	55	16	07	29.13	30.09		
18	OVC	040			10.00	34	27	31	76	0	00	28.89	29.84	18	BKN	090			10.00	36	25	32	64	14	07	29.13	30.09		
21	OVC	070			10.00	33	25	30	72	0	00	28.92	29.86	21	OVC	080			10.00	34	26	31	73	14	06	29.12	30.07		
24	OVC	055			8.00 -SN	31	28	30	89	3	34	28.90	29.85	24	OVC	060			10.00	33	27	31	78	15	05	29.04	29.99		
SUNRISE: 0638 MAR 02						SUNSET: 1752						SUNRISE: 0628 MAR 08						SUNSET: 1760											
03	OVC	037			3.00 -SN BR	31	29	30	92	3	31	28.87	29.82	03	OVC	060			10.00	35	28	32	76	17	05	28.95	29.90		
06	OVC	008			4.00 -SN BR	31	29	30	92	5	29	28.86	29.80	06	VV	007			0.75 -SN	31	30	31	96	16	04	28.92	29.86		
09	OVC	006			2.50 BR	33	31	32	92	6	32	28.85	29.79	09	VV	002			0.50 SN BLSN	31	30	31	96	25	03	28.81	29.76		
12	OVC	013			3.00 -SN BR	34	31	33	89	6	31	28.83	29.78	12	VV	002			0.50 SN BLSN	32	31	32	96	26	03	28.71	29.66		
15	OVC	021			4.00 -SN	36	31	34	82	6	32	28.79	29.74	15	OVC	008			0.50 SN BLSN	32	30	31	92	20	03	28.68	29.63		
18	OVC	035			10.00	35	30	33	82	6	32	28.80	29.74	18	OVC	010			1.00 -SN BLSN	31	29	30	92	17	01	28.73	29.68		
21	OVC	027			5.00 -SN	33	31	32	92	3	VR	28.79	29.74	21	OVC	017			4.00 -SN BLSN	31	28	30	89	25	01	28.74	29.69		
24	OVC	006			3.00 -SN	32	31	32	96	7	34	28.77	29.72	24	OVC	021			10.00	31	26	29	82	25	02	28.77	29.72		
SUNRISE: 0636 MAR 03						SUNSET: 1754						SUNRISE: 0626 MAR 09						SUNSET: 1801											
03	OVC	100			10.00	31	29	30	92	6	33	28.76	29.70	03	OVC	027			8.00	30	24	28	79	24	36	28.73	29.68		
06	OVC	028			9.00 -SN	30	27	29	88	6	36	28.77	29.72	06	OVC	029			10.00	29	22	27	75	23	35	28.76	29.71		
09	OVC	022			9.00 -SN	29	24	27	82	12	05	28.80	29.75	09	OVC	034			10.00	26	17	23	69	16	35	28.84	29.79		
12	OVC	019			8.00 -SN	31	25	29	79	8	07	28.82	29.77	12	BKN	200			10.00	25	12	21	58	22	34	28.93	29.88		
15	OVC	023			9.00 -SN	32	24	29	73	6	04	28.82	29.76	15	BKN	200			10.00	25	11	21	55	20	32	29.01	29.97		
18	OVC	024			8.00 -SN	31	25	29	79	9	05	28.86	29.81	18	BKN	230			10.00	19	3	15	49	15	34	29.15	30.12		
21	OVC	032			10.00	29	24	27	82	7	06	28.88	29.83	21	SCT	NC			10.00	16	0	12	49	15	34	29.26	30.24		
24	OVC	028			10.00	29	24	27	82	5	05	28.91	29.85	24	FEW	NC			10.00	13	-2	10	51	14	33	29.31	30.28		
SUNRISE: 0635 MAR 04						SUNSET: 1755						SUNRISE: 0624 MAR 10						SUNSET: 1802											
03	OVC	070			10.00	28	19	25	69	3	33	28.92	29.87	03	FEW	NC			10.00	11	-6	8	46	12	33	29.35	30.33		
06	OVC	075			10.00	28	21	26	75	5	34	28.95	29.90	06	SCT	NC			10.00	8	-4	6	57	9	32	29.42	30.41		
09	BKN	036			10.00	30	21	27	69	8	34	28.99	29.94	09	FEW	NC			10.00	11	-1	9	58	12	32	29.48	30.47		
12	OVC	029			10.00	31	22	28	69	6	34	29.01	29.97	12	FEW	NC			10.00	15	0	12	51	10	29	29.49	30.48		
15	OVC	028			10.00	32	22	28	66	7	31	29.03	29.99	15	FEW	NC			10.00	18	0	14	45	9	31	29.47	30.47		
18	OVC	025			10.00	32	24	29	73	7	35	29.08	30.03	18	FEW	NC			10.00	16	1	13	51	6	28	29.49	30.49		
21	OVC	031			10.00	31	23	28	72	3	31	29.12	30.08	21	CLR	NC			10.00	12	-3	9	51	5	28	29.52	30.52		
24	OVC	029			10.00	31	22	28	69	3	34	29.15	30.11	24	BKN	200			10.00	7	-3	5	63	3	29	29.54	30.53		
SUNRISE: 0633 MAR 05						SUNSET: 1756						SUNRISE: 0623 MAR 11						SUNSET: 1803											
03	OVC	041			10.00	30	24	28	79	0	00	29.17	30.14	03	BKN	200			10.00	7	-7	5	52	6	34	29.57	30.57		
06	OVC	040			10.00	30	25	28	82	3	36	29.21	30.17	06	FEW	NC			10.00	5	-4	3	66	8	34	29.63	30.63		
09	OVC	046			10.00	31	23	28	72	5	04	29.24	30.20	09	FEW	NC			10.00	9	1	7	70	12	35	29.70	30.70		
12	OVC	028			9.00 -SN	34	24	30	67	7	03	29.24	30.20	12	FEW	NC			10.00	15	-1	12	49	12	33	29.70	30.70		
15	OVC	026			10.00	36	25	32	64	5	06	29.22	30.17	15	CLR	NC			10.00	17	-2	13	43	14	29	29.66	30.66		
18	OVC	046			10.00	34	26	31	73	7	07	29.20	30.16	18	CLR	NC			10.00	16	-2	12	45	9	29	29.65	30.65		
21	OVC	048			10.00	33	28	31	82	7	11	29.21	30.17	21	CLR	NC			10.00	12	-2	9	53	5	VR	29.65	30.65		
24	VV	009			1.25 -SN	31	30	31	96	6	11	29.19	30.15	24	CLR	NC			10.00	10	-1	8	61	7	27	29.64	30.64		
SUNRISE: 0631 MAR 06						SUNSET: 1757						SUNRISE: 0621 MAR 12						SUNSET: 1805											
03	OVC	007			1.25 -SN	31	30	31	96	6	15	29.17	30.12	03	CLR	NC			10.00	7	-4	5	60	6	29	29.62	30.62		
06	OVC	021			6.00 -SN	30	28	29	92	0	00	29.18	30.14	06	CLR	NC			10.00	5	0	4	79	0	00	29.62	30.62		
09	OVC	016			9.00	30	27	29	88	5	29	29.18	30.14	09	CLR	NC			10.00	12	3	10	67	6	29	29.62	30.62		
12	OVC	025			10.00	32	22	28	66	7	25	29.16	30.12	12	SCT	NC			10.00	21	2	16	43	8	23	29.55	30.55		
15	BKN	038			9.00 -SN	36	24	32	62	8	23	29.14	30.10	15	SCT	NC			10.00	23	2	18	40	10	22	29.45	30.44		
18	FEW	NC			10.00	33	24	30	70	5	27	29.14	30.10	18	BKN	220			10.00	21	1	16	41	13	22	29.39	30.38		
21	FEW	NC			10.00	31	20	27	64	5	28	29.17	30.13	21	BKN	220			10.00	20	5	16	52	9	21	29.34	30.32		
24	OVC	150			10.00	28	18	25	66	6	34	29.19	30.15	24	OVC	029			9.00 -SN	17	7	15	64	12	21	29.30	30.27		

OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

MARCH 1998

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 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: 0619						MAR 13						SUNSET: 1806						SUNRISE: 0609						MAR 19						SUNSET: 1813					
03	OVC	075			10.00	17	8	15	68	12	21	29.20	30.17	03	OVC	005			3.00	-RA	BR	32	32	32	100	14	01	28.95	29.89						
06	OVC	036			10.00	19	14	18	81	12	19	29.10	30.07	06	OVC	009			5.00	-SN	BR	32	31	32	96	12	01	28.98	29.92						
09	OVC	070			10.00	24	15	21	68	13	21	29.03	30.00	09	OVC	011			3.00	-SN	BR	32	30	31	92	17	02	29.01	29.96						
12	OVC	130			10.00	29	19	26	66	13	22	28.95	29.91	12	OVC	012			8.00			32	27	30	82	21	02	29.02	29.98						
15	BKN	085			10.00	35	25	31	67	16	23	28.82	29.78	15	OVC	019			10.00			32	26	30	79	13	03	29.03	29.98						
18	OVC	026			6.00	34	29	32	82	12	27	28.79	29.74	18	OVC	028			10.00			31	26	29	82	12	03	29.05	30.01						
21	OVC	035			9.00	32	24	29	73	15	30	28.86	29.82	21	OVC	022			10.00			31	27	29	85	14	03	29.07	30.03						
24	BKN	033			10.00	25	15	22	66	16	31	28.99	29.95	24	OVC	017			9.00			31	27	29	85	15	03	29.07	30.03						
SUNRISE: 0618						MAR 14						SUNSET: 1807						SUNRISE: 0607						MAR 20						SUNSET: 1814					
03	FEW	NC			10.00	21	7	17	54	14	33	29.11	30.08	03	OVC	021			9.00	-SN		30	24	28	79	20	02	29.04	30.00						
06	CLR	NC			10.00	17	8	15	68	12	32	29.23	30.20	06	OVC	023			9.00	-SN		29	23	27	78	17	01	29.06	30.02						
09	CLR	NC			10.00	19	8	16	62	12	30	29.34	30.31	09	SCT	NC			10.00			30	23	28	75	21	02	29.06	30.02						
12	SCT	NC			10.00	24	10	20	55	9	29	29.37	30.34	12	SCT	NC			10.00			33	24	30	70	23	03	29.05	30.01						
15	BKN	230			10.00	27	10	22	49	9	30	29.38	30.35	15	FEW	NC			10.00			35	23	31	61	20	02	29.04	30.00						
18	BKN	230			10.00	25	9	21	50	6	29	29.42	30.40	18	CLR	NC			10.00			34	21	29	59	22	02	29.06	30.01						
21	BKN	230			10.00	20	11	17	68	5	32	29.44	30.42	21	CLR	NC			10.00			31	19	27	61	14	01	29.08	30.04						
24	BKN	230			10.00	14	9	13	80	0	00	29.46	30.45	24	CLR	NC			10.00			29	18	25	64	13	01	29.06	30.02						
SUNRISE: 0616						MAR 15						SUNSET: 1808						SUNRISE: 0605						MAR 21						SUNSET: 1815					
03	FEW	NC			10.00	17	9	15	70	8	05	29.50	30.48	03	CLR	NC			10.00			26	17	23	69	8	36	29.05	30.01						
06	BKN	120			10.00	14	9	13	80	3	35	29.53	30.52	06	CLR	NC			10.00			23	15	21	72	8	34	29.09	30.05						
09	OVC	230			10.00	20	12	18	71	7	03	29.55	30.54	09	CLR	NC			10.00			32	21	28	64	14	01	29.11	30.06						
12	OVC	150			10.00	24	15	21	68	8	08	29.55	30.54	12	CLR	NC			10.00			38	23	32	55	15	36	29.08	30.03						
15	OVC	021			2.00	26	20	24	78	7	03	29.51	30.50	15	CLR	NC			10.00			40	24	34	53	17	02	29.04	30.00						
18	OVC	029			1.50	25	23	24	92	9	03	29.52	30.51	18	FEW	NC			10.00			35	23	31	61	9	02	29.06	30.02						
21	CLR	NC			10.00	19	17	18	92	6	07	29.51	30.50	21	SCT	NC			10.00			30	21	27	69	8	05	29.07	30.03						
24	FEW	NC			10.00	12	10	12	92	5	01	29.53	30.52	24	SCT	NC			10.00			26	20	24	78	5	33	29.06	30.01						
SUNRISE: 0614						MAR 16						SUNSET: 1809						SUNRISE: 0603						MAR 22						SUNSET: 1817					
03	BKN	085			10.00	13	9	12	84	5	36	29.52	30.51	03	CLR	NC			10.00			24	19	22	81	0	00	29.04	30.00						
06	SCT	NC			10.00	11	7	10	84	6	36	29.52	30.51	06	SCT	NC			10.00			23	18	21	81	3	35	29.07	30.03						
09	SCT	NC			10.00	21	15	19	78	8	07	29.53	30.51	09	OVC	075			10.00			32	22	28	66	6	29	29.09	30.05						
12	BKN	030			10.00	31	21	28	67	10	11	29.52	30.50	12	FEW	NC			10.00			40	20	33	45	9	30	29.05	30.01						
15	OVC	036			10.00	33	24	30	70	10	10	29.44	30.42	15	SCT	NC			10.00			43	20	34	40	9	31	29.02	29.97						
18	OVC	031			10.00	31	24	28	76	9	10	29.42	30.40	18	OVC	070			10.00			40	18	32	41	0	00	29.02	29.98						
21	CLR	NC			10.00	26	20	24	78	7	09	29.40	30.39	21	OVC	080			10.00			35	23	31	61	0	00	29.04	29.99						
24	BKN	200			10.00	23	18	21	81	6	02	29.36	30.32	24	OVC	080			10.00			33	24	30	70	0	00	29.01	29.96						
SUNRISE: 0612						MAR 17						SUNSET: 1811						SUNRISE: 0602						MAR 23						SUNSET: 1818					
03	OVC	200			10.00	23	18	21	81	3	35	29.31	30.27	03	OVC	050			10.00			32	22	28	66	3	27	29.01	29.96						
06	OVC	060			10.00	26	22	25	84	5	06	29.29	30.25	06	SCT	NC			10.00			29	21	26	72	5	32	29.04	29.99						
09	OVC	037			7.00	32	27	30	82	15	07	29.23	30.19	09	CLR	NC			10.00			36	25	32	64	10	04	29.09	30.05						
12	OVC	039			8.00	34	29	32	82	16	07	29.17	30.13	12	FEW	NC			10.00			40	19	32	43	3	VR	29.11	30.06						
15	OVC	026			3.00	33	31	32	92	21	05	29.08	30.04	15	SCT	NC			10.00			41	17	32	38	7	31	29.11	30.06						
18	OVC	009			2.00	33	32	33	96	15	07	29.07	30.03	18	FEW	NC			10.00			39	17	31	41	6	34	29.13	30.08						
21	OVC	007			2.00	34	32	33	92	16	06	29.04	30.00	21	FEW	NC			10.00			33	19	28	56	3	31	29.18	30.14						
24	OVC	005			1.50	34	33	34	97	15	06	28.99	29.95	24	FEW	NC			10.00			30	22	27	72	0	00	29.20	30.16						
SUNRISE: 0611						MAR 18						SUNSET: 1812						SUNRISE: 0558						MAR 24						SUNSET: 1819					
03	OVC	005			5.00	34	33	34	97	17	06	28.95	29.89	03	CLR	NC			10.00			29	22	27	75	0	00	29.23	30.18						
06	OVC	007			7.00	34	33	34	97	15	05	28.94	29.88	06	CLR	NC			10.00			24	21	23	88	0	00	29.26	30.22						
09	OVC	007			7.00	34	33	34	97	13	05	28.94	29.88	09	CLR	NC			10.00			37	24	32	60	0	00	29.30	30.26						
12	OVC	005			7.00	35	34	35	96	12	05	28.93	29.87	12	FEW	NC			10.00			43	22	35	43	8	17	29.28	30.24						
15	OVC	007			7.00	35	34	35	96	13	05	28.90	29.85	15	CLR	NC			10.00			46	25	38	44	12	18	29.22	30.18						
18	OVC	007			3.00	35	34	35	96	13	05	28.93	29.87	18	FEW	NC			10.00			45	26	37	48	8	19	29.21	30.16						
21	OVC	005			2.50	34	33	34	97	12	03	28.95	29.89	21	BKN	085			10.00			43	31	38	63	10	18	29.22	30.16						
24	OVC	005			2.00	33	32	33	96	13	02	28.95	29.89	24	OVC	055			10.00			41	34	38	76	10	18	29.20	30.15						

OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

MARCH 1998

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 Oktas		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		DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
			SUNRISE: 0556		MAR 25	SUNSET: 1820										SUNRISE: 0546		MAR 31	SUNSET: 1827									
03	OVC	060		10.00		40	33	37	77	13	16	29.16	30.10	03	OVC	006		10.00			46	45	46	96	12	02	28.65	29.57
06	OVC	055		10.00		41	32	37	70	16	17	29.12	30.06	06	OVC	006		7.00	-RA		42	41	42	96	20	05	28.63	29.56
09	OVC	050		10.00		45	34	40	66	16	17	29.09	30.03	09	OVC	007		10.00	-RA		41	40	41	96	15	07	28.61	29.54
12	OVC	050		10.00		52	39	46	61	15	18	29.07	30.01	12	OVC	007		4.00	-RA BR		44	42	43	93	17	07	28.54	29.46
15	FEW	NC		10.00		55	45	50	69	16	17	28.95	29.88	15	OVC	005		2.50	-RA BR		48	47	47	96	9	10	28.50	29.41
18	BKN	120		10.00		56	47	51	72	14	19	28.89	29.82	18	OVC	023		10.00			55	51	53	87	16	15	28.45	29.36
21	BKN	023		9.00		56	50	53	81	8	19	28.91	29.84	21	OVC	047		10.00			48	45	47	89	15	17	28.50	29.42
24	OVC	100		10.00		58	53	55	84	17	18	28.83	29.75	24	BKN	041		10.00			46	41	44	83	14	19	28.52	29.44
			SUNRISE: 0555		MAR 26	SUNSET: 1821										3-HOURLY OBSERVATION NOTES												
03	CLR	NC		10.00		57	52	54	83	16	19	28.79	29.70	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	FEW	NC		10.00		56	50	53	81	9	20	28.81	29.73															
09	CLR	NC		10.00		64	52	57	65	12	21	28.84	29.76															
12	BKN	037		10.00		69	54	60	59	17	20	28.78	29.69															
15	OVC	047		10.00		71	53	61	53	15	20	28.73	29.64															
18	BKN	055		10.00		70	54	61	57	10	21	28.74	29.65															
21	BKN	050		10.00		68	55	60	63	12	20	28.76	29.67															
24	BKN	046		10.00		65	54	59	68	13	24	28.83	29.74															
			SUNRISE: 0553		MAR 27	SUNSET: 1823										SUMMARY BY HOUR												
03	SCT	NC		10.00		61	53	57	75	10	18	28.80	29.72	AVERAGES												RESULTANT WIND (MPH)		
06	OVC	065		10.00		62	52	56	70	16	19	28.80	29.71															
09	CLR	NC		10.00		66	54	59	65	21	19	28.75	29.66	HOUR (LST)	CEILOMETER	EFF CLD AMT	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY	PRESSURE (INCHES, HG)		VISIBILITY (MILES)	WIND SPEED (MPH)	SPEED	DIRECTION		
12	OVC	039		10.00		67	54	59	63	15	20	28.79	29.70								STATION	SEA LEVEL						
15	OVC	095		10.00		69	54	60	59	9	21	28.71	29.62	01			32	26	30	79	29.06	30.01	8.69	9	3	36		
18	BKN	065		10.00		67	53	59	61	8	17	28.66	29.57	02			31	25	29	80	29.06	30.01	8.70	9	3	1		
21	BKN	090		10.00		65	52	58	63	22	18	28.65	29.56	03			31	24	29	78	29.05	30.00	8.94	9	3	1		
24	CLR	NC		10.00		55	47	51	74	12	18	28.62	29.53	04			31	25	29	80	29.05	30.00	9.10	8	2	34		
			SUNRISE: 0551		MAR 28	SUNSET: 1824								05			30	25	28	82	29.06	30.01	9.00	8	2	1		
03	CLR	NC		10.00		49	45	47	86	8	18	28.57	29.47	06			30	25	28	82	29.06	30.02	8.57	8	3	36		
06	OVC	011		10.00		50	48	49	93	5	23	28.54	29.44	07			30	25	29	82	29.07	30.03	7.88	9	3	2		
09	OVC	012		9.00		54	51	52	90	7	24	28.55	29.45	08			32	26	30	79	29.08	30.03	8.06	10	3	2		
12	OVC	022		10.00		57	49	53	75	12	23	28.60	29.50	09			33	26	31	76	29.08	30.03	8.44	11	4	2		
15	OVC	026		10.00		58	48	53	70	12	27	28.68	29.60	10			35	27	32	72	29.07	30.03	8.84	12	4	1		
18	FEW	NC		10.00		57	46	51	67	9	31	28.79	29.71	11			37	27	33	68	29.07	30.02	8.55	12	3	3		
21	FEW	NC		10.00		49	45	47	86	3	27	28.90	29.83	12			38	27	34	66	29.06	30.01	8.95	12	2	3		
24	CLR	NC		10.00		47	45	46	93	0	00	28.96	29.89	13			38	27	34	65	29.04	29.99	8.80	12	2	2		
			SUNRISE: 0549		MAR 29	SUNSET: 1825								14			39	27	35	65	29.03	29.98	9.24	11	1	34		
03	BKN	120		10.00	BCFG	43	42	43	97	0	00	28.92	29.84	15			40	28	35	64	29.02	29.98	8.61	12	2	35		
06	BKN	075		8.00	TSRA	46	45	46	96	5	02	28.96	29.88	16			40	27	35	63	29.02	29.97	9.13	12	2	36		
09	SCT	NC		10.00		56	49	52	77	12	14	28.91	29.84	17			40	27	35	64	29.02	29.97	8.85	12	3	1		
12	CLR	NC		10.00		68	56	61	66	17	16	28.80	29.72	18			38	28	34	68	29.03	29.98	8.73	10	2	3		
15	FEW	NC		10.00		78	57	65	48	22	19	28.68	29.59	19			37	27	33	70	29.04	29.99	8.79	10	2	3		
18	FEW	NC		10.00		74	57	64	56	22	18	28.61	29.52	20			36	27	33	71	29.04	30.00	8.73	10	2	3		
21	CLR	NC		10.00		69	58	62	68	15	20	28.60	29.51	21			35	27	32	73	29.05	30.00	8.95	9	2	4		
24	CLR	NC		10.00		62	56	59	81	9	17	28.63	29.54	22			34	27	32	76	29.05	30.01	8.90	9	2	2		
			SUNRISE: 0548		MAR 30	SUNSET: 1826								23			34	26	31	75	29.05	30.00	8.85	9	2	2		
03	BKN	033		10.00		61	55	58	81	10	17	28.64	29.54	24			33	26	30	78	29.05	30.00	8.67	9	2	1		
06	OVC	032		7.00	-RA	62	59	60	90	7	22	28.67	29.58															
09	OVC	080		3.00	BR	62	60	61	93	8	25	28.71	29.62															
12	OVC	070		10.00		64	53	58	68	3	VR	28.70	29.61															
15	BKN	080		10.00		62	58	60	86	6	15	28.63	29.54															
18	OVC	048		9.00	-RA	59	57	58	93	8	07	28.60	29.51															
21	OVC	042		6.00	-TSRA BR	56	54	55	93	14	05	28.62	29.54															
24	OVC	042		5.00	RA BR	51	50	51	96	10	05	28.62	29.53															

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 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.

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			32	26	30	79	29.06	30.01	8.69	9	3	36
02			31	25	29	80	29.06	30.01	8.70	9	3	1
03			31	24	29	78	29.05	30.00	8.94	9	3	1
04			31	25	29	80	29.05	30.00	9.10	8	2	34
05			30	25	28	82	29.06	30.01	9.00	8	2	1
06			30	25	28	82	29.06	30.02	8.57	8	3	36
07			30	25	29	82	29.07	30.03	7.88	9	3	2
08			32	26	30	79	29.08	30.03	8.06	10	3	2
09			33	26	31	76	29.08	30.03	8.44	11	4	2
10			35	27	32	72	29.07	30.03	8.84	12	4	1
11			37	27	33	68	29.07	30.02	8.55	12	3	3
12			38	27	34	66	29.06	30.01	8.95	12	2	3
13			38	27	34	65	29.04	29.99	8.80	12	2	2
14			39	27	35	65	29.03	29.98	9.24	11	1	34
15			40	28	35	64	29.02	29.98	8.61	12	2	35
16			40	27	35	63	29.02	29.97	9.13	12	2	36
17			40	27	35	64	29.02	29.97	8.85	12	3	1
18			38	28	34	68	29.03	29.98	8.73	10	2	3
19			37	27	33	70	29.04	29.99	8.79	10	2	3
20			36	27	33	71	29.04	30.00	8.73	10	2	3
21			35	27	32	73	29.05	30.00	8.95	9	2	4
22			34	27	32	76	29.05	30.01	8.90	9	2	2
23			34	26	31	75	29.05	30.00	8.85	9	2	2
24			33	26	30	78	29.05	30.00	8.67	9	2	1

SUPPLEMENTARY HOURLY PRECIPITATION

UNIVERSAL RAIN GAUGE (WATER EQUIVALENT IN INCHES)

MARCH 1998
MADISON, WI

LATITUDE 43° 8'N
LONGITUDE -89° 20'W

DATE	A.M. HOUR (L.S.T.) ENDING AT												DATE	P.M. HOUR (L.S.T.) ENDING AT												DATE	DAILY TOTAL	
	1	2	3	4	5	6	7	8	9	10	11	12		1	2	3	4	5	6	7	8	9	10	11	12			
01													01												01	0.00		
02				T	T	T	T	0.01					02							0.01	T	0.01	0.01	0.01	02	0.05		
03		T	T	T	T	0.01							03												03	0.01		
04													04												04	0.00		
05													05										0.01		05	0.01		
06	0.01	0.03	0.01	0.01									06												06	0.06		
07													07												07	0.00		
08					0.01	0.01	0.08	0.07	0.04	0.11	0.07	0.08	08	0.06	0.06	0.08	0.04	0.04	0.03	0.02	0.02	0.01	0.01	0.01	08	0.85		
09													09												09	0.00		
10													10												10	0.00		
11													11												11	0.00		
12													12												12	0.00		
13													13												13	0.00		
14													14												14	0.00		
15													15			T	0.01	0.01	T						15	0.02		
16													16												16	0.00		
17													17	T	0.04	0.03	0.05	0.05	0.05	0.03	0.05	0.09	0.01		17	0.40		
18	0.05	0.03	0.03	0.09	0.03	0.01	0.05	0.05	0.06	0.01	T	0.01	18	0.02	0.01	0.01	0.02	0.01	T	0.01	T		0.01	T	18	0.52		
19	T	0.01	0.01	0.02	0.05			0.02	0.02				19	0.01											19	0.14		
20													20												20	0.00		
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							0.02						28												28	0.02		
29													29					T	0.01	0.01					29	0.02		
30						0.01	0.06	0.01				0.05	30	0.03	0.02		0.13	0.01	0.01	0.97	0.23	0.47	0.43	0.17	30	2.60		
31	0.12	0.01	0.02	0.01	0.01	0.06	0.04	0.05	0.01	0.18	0.04	0.01	31	0.02	T	0.04	0.01		0.07	0.01					31	0.71		
PUBLISHED BY: NCDC, ASHEVILLE, NC.																								MONTHLY TOTAL				5.41

SUPPLEMENTARY MAXIMUM SHORT DURATION PRECIPITATION (MSDP)

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)			0.48	0.56	0.68	0.84	0.97	0.99	1.12	1.20	1.50	1.67
ENDED: DATE			30	30	30	30	30	30	30	30	30	30
ENDED: TIME			1945	1945	1945	2000	2000	2020	2040	2100	2130	2200

The time indicated is the ending time of the interval.
Date and time are not entered for trace amounts.

The National Weather Service has determined that the ASOS Heated Tipping-Bucket (HTB) rain gauge may not measure water equivalent precipitation accurately during frozen precipitation events. Precipitation data from a nearby site is provided on this page to supplement the ASOS HTB data. M = Missing Data.
* = Data distribution unknown.
First HPD value that follows is the total accumulated amount.



**MARCH 1998
MADISON, 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.

DIRECTOR

NOTICE

Effective July 1, 1996, the National Weather Service & Federal Aviation Administration began using the METAR format for Hourly Observations.

We welcome your questions or comments, please contact us at
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704-271-4010(TDD)
or orders@ncdc.noaa.gov

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