



JANUARY 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	41	14	28	11	23	29	37	0		3		0.0	0.00	28.95	29.90	12.6	21	13.0	29	22	21	23	01				
02	45	34	40	23	36	38	25	0	BR	1		0.0	0.00	28.91	29.85	12.0	19	12.1	25	19	22	19	02				
03	51*	30	41*	24	39	41	24	0	DZ FZDZ BR	0		0.0	T	29.03	29.97	1.3	01	10.7	29	03	23	05	03				
04	34	25	30	14	28	29	35	0	RA DZ FZRA FZDZ FZFG BR	0		0.0	0.36	29.18	30.14	9.7	05	10.0	25	05	22	04	04				
05	36	32	34	18	33	34	31	0	RA DZ FZRA FG+ BR	0		0.0	0.21	29.05	30.00	3.9	03	5.4	13	05	11	06	05				
06	37	32	35	19	34	34	30	0	RA DZ BR	0		0.0	0.01	29.11	30.06	3.4	36	4.3	17	36	14	36	06				
07	33	29	31	15	29	30	34	0	DZ SN BR	0		T	T	29.15	30.11	16.4	03	16.7	32	02	25	03	07				
08	30	27	29	13	25	27	36	0	SN BR BLSN	0		5.3	0.07	28.78	29.73	20.2	02	20.7	34*	01	28*	01	08				
09	33	6	20	4	20	24	45	0	SN BLSN	5		0.4	T	28.76	29.71	8.8	28	10.2	26	29	20	27	09				
10	13	1	7	-9	-4	5	58	0		5		0.0	0.00	29.14	30.12	9.3	26	9.8	26	25	20	24	10				
11	13	-5	4	-12	-1	5	61	0	SN	4		T	T	29.26	30.25	0.6	10	3.2	10	12	8	12	11				
12	18	2	10	-6	8	12	55	0	FZDZ SN BR BLSN	4		0.5	0.01	29.11	30.09	4.0	32	6.1	20	30	15	30	12				
13	5	-7*	-1*	-17	-12	-2	66	0		4		0.0	0.00	29.43	30.44	4.3	30	6.4	21	28	15	29	13				
14	22	5	14	-1	11	14	51	0	SN BR BLSN	4		2.8	0.04	29.26	30.24	6.3	10	7.4	24	11	21	11	14				
15	24	13	19	4	18	19	46	0	SN BR	6		0.1	T	29.06	30.03	4.3	36	5.9	17	05	14	05	15				
16	28	15	22	7	21	23	43	0	SN BR	6		T	T	28.97	29.93	4.0	13	4.9	18	10	16	10	16				
17	26	12	19	4	18	21	46	0	SN BR	5		0.1	T	28.96	29.92	3.6	24	4.9	17	25	13	23	17				
18	22	8	15	0	14	16	50	0	BR	4		0.0	0.00	29.13	30.11	4.2	30	4.8	14	32	11	30	18				
19	26	20	23	7	18	21	42	0	SN BR	4		T	T	29.14	30.11	1.7	30	3.9	9	04	8	04	19				
20	25	21	23	7	17	21	42	0	SN	4		T	T	29.21	30.18	7.3	08	7.6	17	07	15	08	20				
21	30	25	28	12	26	27	37	0	SN BLSN	8		6.0	0.05	29.18	30.14	13.2	07	13.6	22	08	18	07	21				
22	30	28	29	13	27	28	36	0	FZDZ SN BR BLSN	9		1.1	0.07	29.15	30.11	9.5	06	10.2	18	07	15	07	22				
23	29	24	27	11	24	26	38	0	SN BR	11		0.8	0.01	29.02	29.98	3.5	29	3.9	14	28	10	28	23				
24	28	10	19	3	18	21	46	0	SN BR	10		0.4	0.03	29.10	30.07	1.4	34	2.0	9	01	8	01	24				
25	28	10	19	3	20	22	46	0	SN BR	9		1.1	0.02	29.10	30.07	5.4	15	6.4	18	17	15	17	25				
26	33	26	30	14	27	29	35	0	SN BR	9		0.1	T	29.16	30.12	3.2	06	4.2	10	04	10	04	26				
27	33	22	28	12	27	30	37	0	FZDZ SN FZFG BR	8		T	T	29.08	30.04	3.1	22	4.4	13	20	9	20	27				
28	33	29	31	15	31	31	34	0	DZ FZDZ SN FG+ FZFG BR	7		T	T	28.91	29.86	2.3	16	5.3	13	11	11	11	28				
29	32	27	30	14	28	30	35	0	DZ FZDZ SN FG BR	6		0.2	T	28.96	29.91	7.4	34	7.9	17	36	15	36	29				
30	27	24	26	9	23	25	39	0	FZDZ SN BR	6		T	T	29.11	30.07	1.6	24	4.3	14	18	11	18	30				
31	37	26	32	15	29	30	33	0	FG+ FZFG BR	6		0.0	0.00	29.03	29.98	11.6	19	11.6	23	18	18	18	31				
29.1 18.2 23.7 ■■										< MONTHLY AVERAGES		TOTALS-->		18.9	0.88	29.08	30.04	1.1	03	7.8	<-- MONTHLY AVERAGES						
4.3 11.0 7.7 ■■										<----- DEPARTURE FROM NORMAL ----->										- .19				SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3			
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.36 DATE: 04				GREATEST 24-HR SNOWFALL: 6.0 DATE: 21				GREATEST SNOW DEPTH: 11 DATE: 23				SEA LEVEL PRESSURE DATE TIME						
MONTHLY									TOTAL DEPARTURE				TOTAL DEPARTURE				MAXIMUM				MINIMUM						
HEATING: 1273									-246				4077				30.55				13 2324						
COOLING: 0									0				0				29.52				09 0033						
									NUMBER OF DAYS WITH ➔		MAXIMUM TEMP ≥ 90: 0				MINIMUM TEMP ≤ 32: 30				PRECIPITATION ≥ 0.01 INCH: 11								
											MAXIMUM TEMP ≤ 32: 19				MINIMUM TEMP ≤ 0: 2				PRECIPITATION ≥ 0.10 INCH: 2								
											THUNDERSTORMS: 0				HEAVY FOG: 3				SNOWFALL ≥ 1.0 INCH: 5								

JANUARY 1998
MADISON, WI

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

MADISON, WI

JANUARY 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	0.18		0.00	
02													02												02			0.00	
03													03												03			T	
04	T		T	T	T	T	T		T	T	T	T	04	0.01	0.02	T	0.12	0.08	0.05	0.04	0.05	T	T	T	T		04		0.36
05	T	T											05			0.05		0.08	0.02	T		T	T	T	05			0.21	
06													06	T	T	T	T		T	T		T	0.01	T	T	06			0.01
07	T	T	T	T	T	T	T						07	T	T				T	T					07			T	
08													08	0.01	T	T	0.02	0.01	0.02	T	T	T			08			0.07	
09												0.01	09			T	T	T	T				T		09			T	
10													10												10			0.00	
11													11												11			T	
12													12	T	T	T	T	T	T						12			0.01	
13													13												13			0.00	
14													14	T	0.01	0.01	T	T	T	0.01	T	T	T	T	14			0.04	
15	T	T	T	T	T	T	T	T	T	T	T	T	15												15			T	
16													16	T	T	T	T								16			T	
17													17												17			T	
18													18												18			0.00	
19													19												19			T	
20													20	T	T	T									20			T	
21	T	T	T	0.01	T	0.02	T	0.01	T	0.01	T	T	21	T	T	T	T	T	T	T	T	T	T	T	T	21	0.06		0.05
22	T	T	T	T	T	T			T	T	T	T	22	T	T	T	0.01	T	0.01	0.01	T	T	T	T	22			0.07	
23													23											0.01	T	23			0.01
24	T	0.01	0.01	0.01	T								24	T							0.01	T			24			0.03	
25													25	T					T	T	0.01	T	T	T	25			0.02	
26													26	T	T										26			T	
27													27												27			T	
28													28												28			T	
29	T	T	T	T	T								29												29			T	
30	T	T	T										30	T	T										30			T	
31													31												31			0.00	

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

**MADISON, WI
JANUARY 1998**

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

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							4.00	10.00	
03							1.00	9.00	
04							.50	10.00	
05							.25	10.00	
06							.50	4.00	
07							3.00	10.00	
08							.25	10.00	
09							1.50	10.00	
10							10.00	10.00	
11							10.00	10.00	
12							.75	10.00	
13							10.00	10.00	
14							.25	10.00	
15							1.50	10.00	
16							2.50	8.00	
17							1.00	10.00	
18							4.00	9.00	
19							4.00	10.00	
20							6.00	10.00	
21							.25	9.00	
22							.75	9.00	
23							1.50	10.00	
24							.75	10.00	
25							1.00	6.00	
26							1.00	4.00	
27							.50	10.00	
28							<.25	1.50	
29							1.50	10.00	
30							2.00	9.00	
31							<.25	6.00	
MONTHLY AVGS							2.60	8.85	
<p align="center">SUNSHINE (MINUTES)</p> <p>Total: Possible:</p> <p align="center">Percent Possible:</p>									
<p align="center">NUMBER OF DAYS WITH:</p> <p align="center">SKY CONDITION</p> <p align="center">CLR PTLY CLDY CLOUDY MISSING</p> <p align="center">31</p> <p align="center">MINIMUM VISIBILITY (MILES)</p> <p align="center"><=0.25 <=3.0 >=7.0</p> <p align="center">6 23 4</p>									

OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

JANUARY 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: 0729	JAN 01			SUNSET: 1633										SUNRISE: 0729	JAN 07									
03	BKN	150			10.00		18	12	16	77	15	20	29.07	30.04	03	OVC	006			6.00	BR	33	32	33	96	12	36	29.18	30.14
06	BKN	200			10.00		24	17	22	75	12	20	28.98	29.95	06	OVC	025			8.00		32	31	32	96	13	01	29.19	30.14
09	SCT	NC			10.00		26	20	24	78	10	19	28.92	29.88	09	OVC	009			9.00		31	29	30	92	17	04	29.20	30.15
12	SCT	NC			10.00		39	27	34	62	17	22	28.86	29.81	12	OVC	007		-SN	9.00		29	27	28	92	15	04	29.20	30.16
15	BKN	250			10.00		41	29	36	62	16	23	28.85	29.80	15	OVC	007			8.00		30	27	29	88	23	02	29.15	30.11
18	OVC	220			10.00		39	29	35	67	15	23	28.91	29.86	18	OVC	009			10.00		30	27	29	88	18	03	29.12	30.08
21	OVC	220			10.00		38	30	35	73	9	22	28.96	29.90	21	OVC	011			10.00		30	27	29	88	16	03	29.09	30.05
24	SCT	NC			10.00		35	29	33	78	7	20	28.98	29.92	24	OVC	009			10.00		30	26	29	85	21	02	29.04	30.00
					SUNRISE: 0729	JAN 02			SUNSET: 1634										SUNRISE: 0728	JAN 08									
03	FEW	NC			10.00		35	31	33	85	7	20	28.98	29.92	03	OVC	013			10.00		29	25	28	85	22	03	28.97	29.92
06	SCT	NC			10.00		36	31	34	82	9	20	28.97	29.91	06	OVC	150			10.00		29	24	27	82	21	02	28.88	29.83
09	OVC	022			10.00		38	34	36	86	10	19	28.95	29.90	09	OVC	015			10.00		29	25	28	85	20	04	28.87	29.82
12	OVC	033			10.00		41	33	38	74	12	19	28.91	29.85	12	OVC	006		0.50	SN BLSN	29	27	28	92	23	01	28.78	29.73	
15	OVC	034			10.00		42	36	39	79	14	18	28.85	29.80	15	OVC	014		0.75	-SN BLSN	29	26	28	89	25	01	28.70	29.65	
18	OVC	038			10.00		44	40	42	85	15	20	28.86	29.79	18	OVC	004		0.75	-SN BLSN	27	25	26	92	20	36	28.68	29.63	
21	OVC	009			7.00		45	42	44	90	14	19	28.86	29.79	21	OVC	018		9.00	-SN	28	24	27	85	18	36	28.63	29.58	
24	OVC	007			4.00	BR	45	43	44	93	17	19	28.85	29.78	24	OVC	016			10.00		28	24	27	85	20	01	28.59	29.52
					SUNRISE: 0729	JAN 03			SUNSET: 1635										SUNRISE: 0728	JAN 09									
03	OVC	005			3.00	BR	46	44	45	93	10	19	28.86	29.80	03	OVC	014			9.00		28	24	27	85	12	34	28.60	29.54
06	OVC	003			3.00	BR	48	46	47	93	10	20	28.88	29.81	06	OVC	014			10.00		27	24	26	89	8	31	28.62	29.57
09	OVC	003			1.25	BR	49	48	48	97	5	18	28.92	29.85	09	OVC	017			10.00		28	23	26	81	8	27	28.69	29.65
12	OVC	017			1.00	BR	50	49	49	96	3	21	28.96	29.89	12	OVC	019			10.00		31	24	28	76	10	25	28.73	29.68
15	OVC	014			3.00	BR	40	31	36	70	9	35	29.06	30.00	15	OVC	023			10.00		33	26	30	75	8	25	28.77	29.72
18	OVC	023			8.00		36	30	34	79	9	36	29.17	30.12	18	OVC	015			3.00		28	23	26	81	9	24	28.84	29.80
21	OVC	011			6.00	DZ BR	34	31	33	89	16	03	29.23	30.18	21	OVC	019			10.00		15	8	13	74	16	27	28.93	29.89
24	OVC	009			9.00	FZDZ	30	28	29	92	21	06	29.28	30.23	24	CLR	NC			10.00		6	-4	4	63	10	28	29.00	29.97
					SUNRISE: 0729	JAN 04			SUNSET: 1636										SUNRISE: 0728	JAN 10									
03	OVC	017			8.00	-FZRA	26	22	25	84	15	04	29.32	30.28	03	CLR	NC			10.00		3	-7	1	62	8	27	29.06	30.04
06	OVC	011			10.00	FZDZ	26	23	25	88	15	04	29.28	30.24	06	CLR	NC			10.00		1	-8	0	65	10	24	29.10	30.07
09	OVC	009			2.00	FZDZ BR	29	27	28	92	9	08	29.30	30.26	09	FEW	NC			10.00		4	-6	2	63	10	25	29.14	30.12
12	OVC	005			2.50	BR	30	28	29	92	10	06	29.24	30.20	12	FEW	NC			10.00		10	-4	7	53	9	26	29.13	30.11
15	OVC	001			0.50	-FZRA FZFG	31	31	31	100	12	05	29.13	30.09	15	FEW	NC			10.00		13	-2	10	51	9	27	29.14	30.13
18	OVC	005			5.00	-RA BR	33	33	33	100	10	06	29.08	30.04	18	CLR	NC			10.00		10	-1	8	61	10	25	29.17	30.16
21	OVC	003			2.50	DZ BR	34	32	33	92	6	05	29.02	29.97	21	CLR	NC			10.00		9	-1	7	64	7	26	29.21	30.20
24	OVC	001			1.00	-RA BR	34	31	33	89	0	00	29.00	29.96	24	CLR	NC			10.00		5	-1	4	76	3	VR	29.23	30.22
					SUNRISE: 0729	JAN 05			SUNSET: 1637										SUNRISE: 0728	JAN 11									
03	OVC	006			7.00		36	36	36	100	5	23	29.05	30.01	03	SCT	NC			10.00		4	-2	3	76	6	27	29.27	30.26
06	OVC	002			3.00	BR	33	33	33	100	3	29	29.07	30.02	06	FEW	NC			10.00		-2	-5	-2	87	0	00	29.27	30.27
09	OVC	050			5.00	BR	33	33	33	100	6	01	29.08	30.03	09	SCT	NC			10.00		3	-4	2	72	5	31	29.31	30.30
12	OVC	039			10.00	-RA	36	34	35	93	7	04	29.05	30.01	12	OVC	110			10.00		9	-2	7	61	0	00	29.29	30.28
15	OVC	006			2.00	-RA BR	36	35	36	97	9	05	29.00	29.96	15	OVC	200			10.00		10	-1	8	61	3	12	29.25	30.24
18	OVC	005			5.00	-RA BR	33	32	33	96	9	04	29.02	29.98	18	OVC	100			10.00		11	0	9	61	3	13	29.26	30.25
21	OVC	005			7.00		33	31	32	92	6	02	29.03	29.99	21	OVC	048			10.00		12	3	10	67	5	12	29.23	30.22
24	OVC	003			1.50	DZ BR	33	32	33	96	3	09	29.06	30.01	24	OVC	038			10.00		12	5	10	73	3	02	29.20	30.19
					SUNRISE: 0729	JAN 06			SUNSET: 1638										SUNRISE: 0727	JAN 12									
03	OVC	001			1.25	BR	33	33	33	100	0	00	29.06	30.02	03	OVC	040			10.00		13	7	12	77	7	07	29.16	30.14
06	OVC	001			0.75	DZ BR	33	33	33	100	0	00	29.07	30.03	06	OVC	028			10.00		15	8	13	74	0	00	29.10	30.08
09	OVC	003			1.25	BR	34	34	34	100	6	17	29.12	30.07	09														

OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

JANUARY 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)	
			OBSERVATION TIME (LST)	EFF CLD AMT Oktas		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL				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: 0727 JAN 13 SUNSET: 1645																													
03	CLR	NC			10.00	-3	-13	-4	61	9	29	29.29	30.28	03	OVC	085			5.00	BR	20	17	19	89	5	27	29.14	30.11	
06	CLR	NC			10.00	-6	-17	-7	58	10	29	29.37	30.37	06	OVC	080			5.00	BR	20	17	19	89	0	00	29.14	30.11	
09	CLR	NC			10.00	-6	-17	-7	58	6	28	29.44	30.45	09	OVC	075			4.00	BR	21	17	20	85	5	28	29.15	30.12	
12	CLR	NC			10.00	-1	-15	-2	51	5	29	29.47	30.48	12	OVC	070			5.00	BR	24	19	22	81	5	VR	29.14	30.11	
15	SCT	NC			10.00	5	-10	3	49	6	27	29.49	30.50	15	OVC	075			7.00		26	19	24	75	6	28	29.11	30.08	
18	BKN	230			10.00	0	-8	-1	69	0	00	29.49	30.50	18	OVC	018			8.00		25	20	23	81	0	00	29.14	30.11	
21	OVC	140			10.00	2	-4	1	76	0	00	29.50	30.51	21	OVC	018			10.00		25	18	23	75	3	VR	29.17	30.14	
24	OVC	100			10.00	5	-5	3	63	8	07	29.49	30.50	24	OVC	018			10.00		24	18	22	77	7	03	29.16	30.13	
SUNRISE: 0727 JAN 14 SUNSET: 1647																													
03	OVC	140			10.00	5	-5	3	63	3	04	29.48	30.49	03	OVC	018			10.00		23	17	21	78	0	00	29.18	30.15	
06	OVC	010			10.00	6	-2	5	69	6	08	29.43	30.44	06	OVC	018			10.00		23	17	21	78	3	15	29.20	30.17	
09	OVC	020			8.00	11	6	10	81	13	08	29.35	30.34	09	OVC	022			10.00		22	17	20	82	6	08	29.22	30.19	
12	OVC	006			0.25	19	17	18	92	14	11	29.24	30.22	12	OVC	020			6.00	-SN	23	18	21	81	8	10	29.23	30.20	
15	VV	010			0.50	21	18	20	88	16	12	29.11	30.09	15	OVC	022			9.00		23	18	21	81	12	07	29.20	30.17	
18	OVC	036			7.00	21	19	20	92	5	12	29.11	30.09	18	OVC	120			10.00		22	16	20	78	10	07	29.21	30.18	
21	OVC	004			2.00	22	21	22	96	0	00	29.08	30.06	21	OVC	017			10.00		23	17	21	78	9	07	29.22	30.19	
24	OVC	004			1.50	21	20	21	96	3	33	29.05	30.02	24	OVC	019			10.00		25	20	23	81	13	07	29.21	30.18	
SUNRISE: 0726 JAN 15 SUNSET: 1648																													
03	OVC	005			5.00	20	19	20	96	6	30	29.03	30.01	03	OVC	010			0.75	-SN	26	24	25	92	12	07	29.18	30.14	
06	OVC	005			3.00	20	18	19	92	6	31	29.06	30.03	06	VV	004			0.75	-SN BLSN	27	26	27	96	13	08	29.17	30.14	
09	OVC	009			2.00	22	20	21	92	7	36	29.06	30.03	09	OVC	013			1.50	-SN BLSN	28	26	27	92	17	08	29.16	30.12	
12	BKN	011			10.00	24	20	23	84	9	03	29.07	30.03	12	OVC	012			4.00	-SN	29	27	28	92	16	07	29.15	30.11	
15	OVC	011			10.00	23	19	22	85	9	06	29.08	30.05	15	OVC	010			1.50	-SN	29	27	28	92	15	05	29.15	30.11	
18	FEW	NC			9.00	18	17	18	96	5	36	29.07	30.05	18	OVC	011			2.00	-SN BLSN	28	26	27	92	14	05	29.19	30.16	
21	BKN	026			8.00	13	12	13	96	3	36	29.05	30.03	21	OVC	011			5.00	-SN BLSN	28	26	27	92	13	05	29.20	30.16	
24	OVC	018			8.00	15	14	15	95	0	00	29.03	30.00	24	OVC	008			7.00	-SN	29	25	28	85	12	06	29.20	30.16	
SUNRISE: 0726 JAN 16 SUNSET: 1649																													
03	OVC	016			8.00	18	15	17	88	3	34	29.02	29.99	03	OVC	015			7.00	-SN	28	25	27	88	13	04	29.20	30.16	
06	OVC	016			7.00	21	19	20	92	3	06	28.99	29.96	06	OVC	012			8.00		29	26	28	89	10	05	29.23	30.19	
09	OVC	016			4.00	25	21	24	85	3	20	29.00	29.98	09	OVC	012			3.00	-SN	29	26	28	89	14	09	29.23	30.19	
12	OVC	014			2.50	27	23	26	85	5	16	28.99	29.95	12	OVC	013			2.50	-SN BR	30	26	29	85	15	08	29.19	30.15	
15	OVC	016			6.00	28	23	26	81	8	15	28.94	29.90	15	OVC	035			1.50	-SN BR	29	27	28	92	10	06	29.13	30.09	
18	OVC	018			6.00	27	24	26	89	3	10	28.94	29.90	18	OVC	010			1.00	-SN BR	28	27	28	96	8	04	29.09	30.05	
21	OVC	016			7.00	26	24	25	92	8	13	28.93	29.88	21	OVC	008			2.00	-SNFZDZ BR	28	27	28	96	9	03	29.06	30.02	
24	OVC	009			6.00	26	24	25	92	3	13	28.93	29.89	24	VV	003			0.75	-SN BR	29	28	29	96	3	33	29.01	29.97	
SUNRISE: 0725 JAN 17 SUNSET: 1650																													
03	OVC	009			5.00	26	24	25	92	0	00	28.92	29.87	03	OVC	014			5.00	-SN BR	26	25	26	96	6	32	28.99	29.95	
06	OVC	013			2.50	25	24	25	96	0	00	28.92	29.88	06	OVC	007			7.00		25	23	24	92	3	29	28.99	29.95	
09	BKN	150			1.00	23	22	23	96	5	24	28.95	29.91	09	OVC	023			2.50	BR	25	23	24	92	5	29	29.01	29.98	
12	SCT	NC			4.00	26	21	24	81	7	21	28.94	29.89	12	OVC	070			9.00		28	23	26	81	7	28	29.03	29.98	
15	OVC	013			4.00	25	20	23	81	12	22	28.93	29.89	15	OVC	022			10.00		29	22	27	75	5	27	29.00	29.96	
18	FEW	NC			10.00	19	10	17	68	8	24	28.97	29.93	18	OVC	020			8.00		27	22	25	81	3	29	29.03	30.00	
21	BKN	055			10.00	13	6	11	74	5	27	29.02	30.00	21	OVC	030			4.00	-SN	27	24	26	89	0	00	29.04	30.01	
24	SCT	NC			8.00	13	7	11	77	6	28	29.04	30.01	24	OVC	019			2.00	-SN	26	25	26	96	0	00	29.04	30.00	
SUNRISE: 0724 JAN 18 SUNSET: 1651																													
03	OVC	008			8.00	10	6	9	84	3	26	29.08	30.06	03	OVC	011			0.75	-SN	26	25	26	96	0	00	29.03	30.00	
06	OVC	008			8.00	14	11	13	88	7	29	29.11	30.08	06	OVC	014			1.25	-SN BR	25	24	25	96	0	00	29.05	30.01	
09	FEW	NC			4.00	12	9	11	87	6	29	29.14	30.13	09	OVC	026			2.00	BR	25	22	24	88	5	34	29.11	30.08	
12	OVC	009			5.00	18	14	17	84	7	30	29.16	30.14	12	BKN	028			10.00		26	19	24	75	5	36	29.12	30.08	
15	OVC	007			5.00	20	17	19	89	7	30	29.14	30.12	15	FEW	NC			10.00		27	18	24	69	3	VR	29.11	30.08	
18	OVC	009			9.00	22	18	21	85	5	33	29.17	30.15	18	FEW	NC			10.00		19	15	18	85	0	00	29.13	30.09	
21	OVC	085			7.00	21	18	20	88	3	27	29.15	30.13	21	FEW	NC			7.00		12	10	12	92	0	00	29.13	30.10	
24	OVC	080			7.00	21	17	20	85	5	29	29.15	30.12	24	BKN	200			6.00	BR	10	7	9	87	0	00	29.14	30.12	

OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

JANUARY 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: 0719						JAN 25						SUNSET: 1700						SUNRISE: 0714						JAN 31						SUNSET: 1708											
03	OVC	014			6.00 BR	13	11	12	92	0	00	29.13	30.11	03	OVC	002			1.50 BR	26	25	26	96	6	20	29.10	30.06	03	OVC	002			1.50 BR	26	25	26	96	6	20	29.10	30.06
06	OVC	009			4.00 BR	22	19	21	89	10	17	29.11	30.08	06	OVC	001			0.25 FZFG	27	26	27	96	10	18	29.08	30.04	06	OVC	001			0.25 FZFG	27	26	27	96	10	18	29.08	30.04
09	OVC	011			1.75 -SN BR	21	19	20	92	10	16	29.11	30.09	09	OVC	001			0.25 FZFG	28	27	28	96	14	19	29.08	30.04	09	OVC	001			0.25 FZFG	28	27	28	96	14	19	29.08	30.04
12	OVC	011			3.00 -SN BR	24	20	23	84	9	15	29.07	30.04	12	OVC	003			2.00 BR	30	29	30	96	14	20	29.04	30.00	12	OVC	003			2.00 BR	30	29	30	96	14	20	29.04	30.00
15	OVC	015			5.00 BR	27	23	26	85	10	16	29.03	30.00	15	BKN	230			6.00 BR	34	30	32	85	10	18	28.99	29.93	15	BKN	230			6.00 BR	34	30	32	85	10	18	28.99	29.93
18	OVC	017			4.00 -SN	28	24	27	85	3	12	29.08	30.05	18	BKN	230			3.00 BR	33	31	32	92	9	19	28.99	29.93	18	BKN	230			3.00 BR	33	31	32	92	9	19	28.99	29.93
21	OVC	038			2.50 -SN BR	28	25	27	88	5	08	29.12	30.08	21	BKN	230			5.00 BR	35	32	34	89	15	18	28.95	29.90	21	BKN	230			5.00 BR	35	32	34	89	15	18	28.95	29.90
24	OVC	028			4.00 BR	27	25	26	92	3	06	29.12	30.09	24	OVC	050			4.00 BR	37	35	36	93	13	19	28.93	29.87	24	OVC	050			4.00 BR	37	35	36	93	13	19	28.93	29.87
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)																															
							STATION	SEA LEVEL																																	
01			23	20	22	86	29.08	30.04	6.15	6	1	1																													
02			23	19	22	87	29.08	30.04	6.37	7	1	35																													
03			23	20	22	87	29.08	30.05	6.24	7	2	34																													
04			23	20	22	88	29.08	30.04	6.47	7	1	36																													
05			23	20	22	88	29.08	30.04	6.29	7	1	35																													
06			23	20	23	88	29.08	30.04	6.22	7	1	34																													
07			23	20	22	88	29.08	30.05	5.77	7	0	0																													
08			23	20	23	88	29.09	30.05	5.01	7	1	1																													
09			24	21	23	87	29.09	30.06	4.77	8	1	6																													
10			25	21	24	86	29.10	30.07	4.81	9	1	7																													
11			26	22	25	84	29.10	30.06	5.02	8	1	7																													
12			27	22	25	83	29.08	30.04	5.46	8	1	7																													
13			27	22	26	82	29.06	30.02	5.74	9	1	1																													
14			28	22	26	82	29.05	30.01	5.75	9	1	36																													
15			28	22	26	81	29.05	30.01	5.88	9	2	3																													
16			28	22	26	81	29.06	30.02	5.83	9	1	36																													
17			27	22	26	83	29.06	30.02	5.90	8	2	4																													
18			26	22	25	84	29.07	30.03	6.61	7	1	1																													
19			25	21	24	85	29.07	30.04	6.76	6	1	2																													
20			25	21	24	86	29.07	30.04	6.84	7	2	2																													
21			25	21	24	86	29.07	30.04	6.61	7	1	2																													
22			25	21	24	86	29.07	30.04	6.02	7	2	4																													
23			24	21	23	86	29.08	30.04	6.00	8	1	2																													
24			24	21	23	86	29.07	30.04	5.98	8	2	2																													

SUPPLEMENTARY HOURLY PRECIPITATION

UNIVERSAL RAIN GAUGE (WATER EQUIVALENT IN INCHES)

JANUARY 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	T	T	T	T	T	T	T	0.01					01	0.01	0.04	0.02	0.10	0.08	0.07	0.06	0.05	0.02	0.01	0.01	T	01	0.00																								
02													02													0.00																									
03													03													0.00																									
04													04													0.42																									
05													05													0.23																									
06													0.01													T	0.01									0.08	06	0.05	0.05	0.07	0.14	0.15	0.10	0.06	0.02		0.01		06	0.03	
07																																					07												0.00		
08																																					08												0.72		
09																																					09												0.01		
10																																					10												0.00		
11													11	T	0.01	T	0.02									11	0.00																								
12													12													0.04																									
13													13													0.00																									
14													14													0.11																									
15													15													0.03																									
16																																					16												16	0.00	
17																																					17												0.00		
18																																					18												0.00		
19																																					19												0.00		
20																																					20												0.00		
21	0.01	T		0.02	T	0.01	0.01	0.01	T	0.01	T	T	21	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	T	0.02	0.03	21	0.09																								
22													22													0.14																									
23													23													0.01																									
24													24													0.06																									
25													25													0.02																									
26													T																								26	T	T											26	0.02
27																																					27													0.00	
28																																					28													0.00	
29																																					29													0.00	
30																																					30													0.00	
31	31	0.00																																																	
PUBLISHED BY: NCDC, ASHEVILLE, NC.													MONTHLY TOTAL												1.93																										

SUPPLEMENTARY MAXIMUM SHORT DURATION PRECIPITATION (MSDP)

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)			0.06	0.07	0.09	0.12	0.15	0.21	0.25	0.29	0.36	0.39
ENDED: DATE			08	08	08	08	08	08	08	08	08	08
ENDED: TIME			1615	1620	1630	1645	1700	1700	1700	1700	1730	1800

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.



**JANUARY 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.

ACTING 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
704-271-4800 (voice), 704-271-4876 (fax),
704-271-4010(TDD)
or orders@ncdc.noaa.gov

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151 PATTON AVE RM 120
ASHEVILLE, NC 28801-5001

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