



# APRIL 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	47	36	42	3	35	38	23	0	RA BR	0		0.0	0.07	28.60	29.53	7.7	22	8.9	24	22	20	18	01						
02	44	37	41	1	36	39	24	0		0		0.0	0.00	29.00	29.94	4.1	31	5.2	16	32	11	31	02						
03	42	37	40	0	34	38	25	0		0		0.0	0.00	29.09	30.04	10.2	04	11.1	26	01	21	05	03						
04	53	33	43	2	31	38	22	0		0		0.0	0.00	29.18	30.13	9.5	04	10.2	22	06	18	05	04						
05	56	27*	42	1	27	36	23	0		0		0.0	0.00	29.12	30.07	2.9	09	4.3	15	05	11	11	05						
06	61	36	49	7	32	41	16	0		0		0.0	0.00	28.97	29.90	7.2	13	8.0	21	15	16	11	06						
07	63	38	51	9	33	42	14	0	RA BR HZ	0		0.0	0.32	28.73	29.66	14.9	10	15.4	33	12	28	11	07						
08	46	41	44	2	41	41	21	0	RA DZ BR	0		0.0	0.52	28.68	29.60	16.8	06	17.1	30	04	26	06	08						
09	50	38	44	1	32	38	21	0	RA BR	0		0.0	0.20	28.84	29.78	16.6	03	16.8	34	03	29	02	09						
10	57	30	44	1	27	37	21	0		0		0.0	0.00	29.14	30.08	3.4	33	4.4	18	36	11	35	10						
11	65	32	49	5	37	44	16	0		0		0.0	0.00	29.15	30.09	4.9	19	5.5	21	18	17	19	11						
12	72	50	61*	17	40	51	4	0	RA	0		0.0	T	28.94	29.86	19.5	17	19.6	41	16	34	16	12						
13	62	51	57	12	48	52	8	0	RA BR	0		0.0	0.57	28.70	29.62	9.7	17	12.1	33	16	28	17	13						
14	66	47	57	12	43	49	8	0	BR	0		0.0	0.00	28.81	29.73	7.3	32	7.8	23	32	18	30	14						
15	49	38	44	-1	42	43	21	0	TSRA RA BR	0		0.0	1.51	28.83	29.76	11.7	06	12.7	43*	07	36*	07	15						
16	40	34	37*	-9	34	36	28	0	RA DZ SN BR	0		T	0.15	28.79	29.73	10.0	01	11.6	32	36	28	36	16						
17	55	32	44	-2	28	38	21	0		0		0.0	0.00	29.08	30.03	6.5	28	7.8	22	31	16	33	17						
18	61	42	52	6	34	43	13	0		0		0.0	0.00	29.21	30.15	6.5	22	6.9	18	19	15	20	18						
19	62	36	49	2	37	44	16	0		0		0.0	0.00	29.12	30.06	0.2	14	2.1	13	05	9	18	19						
20	61	38	50	3	41	45	15	0	RA BR	0		0.0	0.25	29.11	30.05	4.0	13	6.7	23	16	18	19	20						
21	56	41	49	1	44	46	16	0	RA BR HZ	0		0.0	0.23	29.17	30.11	7.6	04	8.8	20	06	17	08	21						
22	66	34	50	2	40	47	15	0	BCFG BR	0		0.0	0.00	29.18	30.12	1.0	22	3.1	14	32	9	33	22						
23	71	40	56	8	37	47	9	0		0		0.0	0.00	29.03	29.96	2.8	29	4.4	16	28	13	28	23						
24	76*	43	60	11	39	48	5	0		0		0.0	0.00	28.95	29.88	2.4	11	6.2	24	10	21	10	24						
25	67	40	54	5	44	49	11	0	RA BR	0		0.0	T	28.91	29.84	11.9	10	12.7	26	13	22	15	25						
26	53	38	46	-4	38	43	19	0	RA DZ BR	0		0.0	0.28	29.03	29.96	17.0	07	17.6	36	07	29	09	26						
27	57	32	45	-5	29	38	20	0		0		0.0	0.00	29.42	30.37	10.6	06	11.0	23	04	18	07	27						
28	61	30	46	-4	31	40	19	0		0		0.0	0.00	29.39	30.34	5.0	09	6.5	22	09	17	09	28						
29	63	40	52	1	44	48	13	0	RA BR HZ	0		0.0	T	29.17	30.11	5.4	10	6.8	24	10	17	10	29						
30	66	46	56	5	52	54	9	0	FG BR HZ	0		0.0	0.00	28.96	29.88	4.1	08	5.3	15	10	13	10	30						
58.3 37.9 48.1 ■■										< MONTHLY AVERAGES		TOTALS-->			T	4.10	29.01	29.95	3.7	08	9.2	<- MONTHLY AVERAGES							
1.6 3.8 2.7 ■■										<----- DEPARTURE FROM NORMAL ----->										1.24		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3							
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 1.57			DATE :15-16			SEA LEVEL PRESSURE				DATE TIME										
MONTHLY TOTAL DEPARTURE 496 -92									GREATEST 24-HR SNOWFALL: T			DATE :16			MAXIMUM : 30.44				28 0714										
SEASON TO DATE TOTAL DEPARTURE 6397 -914									GREATEST SNOW DEPTH: 0			DATE :			MINIMUM : 29.43				01 0351										
HEATING: 496 COOLING: 0 0									NUMBER OF DAYS WITH →		MAXIMUM TEMP ≥ 90: 0		MINIMUM TEMP ≤ 32: 6		PRECIPITATION ≥ 0.01 INCH : 10														
											MAXIMUM TEMP ≤ 32 : 0		MINIMUM TEMP ≤ 0 : 0		PRECIPITATION ≥ 0.10 INCH : 9														
											THUNDERSTORMS : 1		HEAVY FOG : 0		SNOWFALL ≥ 1.0 INCH : 0														

APRIL 1998  
MADISON, WI

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

MADISON, WI

APRIL 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 02 03 04 05	T	T		0.01	0.05	T		0.01					01 02 03 04 05					T	T							01 02 03 04 05			0.07 0.00 0.00 0.00 0.00	
06 07 08 09 10													06 07 08 09 10					T	0.05 0.02	0.05 0.02	0.08 0.01	0.01 0.03	T 0.02	0.02 0.01	0.06 0.03	0.04 T	06 07 08 09 10	0.31 0.53	0.00 0.32 0.52 0.20 0.00	
11 12 13 14 15													11 12 13 14 15														11 12 13 14 15			0.00 T 0.57 0.00 1.51
16 17 18 19 20													16 17 18 19 20														16 17 18 19 20			0.15 0.00 0.00 0.00 0.25
21 22 23 24 25													21 22 23 24 25														21 22 23 24 25			0.23 0.00 0.00 0.00 T
26 27 28 29 30													26 27 28 29 30														26 27 28 29 30			0.28 0.00 0.00 T 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**  
**APRIL 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							9.00	10.00	
02							10.00	10.00	
03							10.00	10.00	
04							10.00	10.00	
05							8.00	10.00	
06							10.00	10.00	
07							2.50	10.00	
08							2.00	10.00	
09							4.00	10.00	
10							10.00	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							1.50	10.00	
14							3.00	10.00	
15							1.25	10.00	
16							2.50	10.00	
17							10.00	10.00	
18							10.00	10.00	
19							8.00	10.00	
20							5.00	10.00	
21							2.00	10.00	
22							2.50	10.00	
23							10.00	10.00	
24							10.00	10.00	
25							2.50	10.00	
26							1.50	10.00	
27							10.00	10.00	
28							10.00	10.00	
29							5.00	10.00	
30							.50	6.00	
<b>MONTHLY AVGS</b>							6.36	9.87	
<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">30</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">0                11             16</p>									

## OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

APRIL 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		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
			SUNRISE: 0544		APR 01	SUNSET: 1828										SUNRISE: 0534		APR 07	SUNSET: 1835									
03	SCT	NC		10.00		41	35	38	79	12	18	28.52	29.44	03	CLR	NC		10.00		43	31	38	63	9	12	28.78	29.78	
06	BKN	060		10.00		39	33	37	79	8	19	28.53	29.45	06	CLR	NC		10.00		41	31	37	67	6	12	28.81	29.74	
09	OVC	090		10.00		41	35	38	79	12	20	28.54	29.46	09	BKN	110		10.00		53	31	43	43	15	11	28.77	29.69	
12	OVC	090		10.00		44	35	40	71	10	19	28.56	29.48	12	BKN	090		10.00		61	30	47	31	22	11	28.71	29.63	
15	OVC	043		10.00		44	33	39	65	9	23	28.60	29.52	15	OVC	048		10.00		58	30	45	35	20	12	28.67	29.60	
18	OVC	030		10.00		42	35	39	76	8	26	28.65	29.59	18	OVC	055	2.50	-RA	48	31	41	52	22	09	28.67	29.60		
21	OVC	070		10.00		40	35	38	83	6	24	28.73	29.67	21	OVC	050	7.00		48	42	45	80	21	08	28.65	29.57		
24	SCT	NC		10.00		39	35	37	86	9	28	28.77	29.70	24	OVC	070	6.00	-RA BR	46	44	45	93	22	09	28.60	29.53		
			SUNRISE: 0542		APR 02	SUNSET: 1830										SUNRISE: 0532		APR 08	SUNSET: 1837									
03	BKN	055		10.00		39	36	38	89	8	28	28.84	29.78	03	OVC	008		3.00	RA BR	43	42	43	97	15	07	28.60	29.52	
06	BKN	020		10.00		38	35	37	89	3	28	28.90	29.84	06	OVC	010		2.00	RA BR	41	41	41	100	16	06	28.61	29.54	
09	OVC	016		10.00		40	35	38	83	8	31	28.99	29.92	09	OVC	010		3.00	BR	42	40	41	92	16	05	28.65	29.58	
12	OVC	018		10.00		42	35	39	76	8	33	29.01	29.96	12	OVC	008		8.00		43	41	42	93	16	06	28.68	29.61	
15	OVC	022		10.00		44	36	40	73	6	32	29.04	29.98	15	OVC	008		2.50	DZ BR	42	40	41	92	23	06	28.70	29.63	
18	OVC	022		10.00		43	35	40	74	0	00	29.07	30.01	18	OVC	010		7.00	-RA	42	40	41	92	18	05	28.72	29.65	
21	OVC	023		10.00		43	36	40	76	3	35	29.11	30.06	21	OVC	010		9.00	-RA	42	40	41	92	18	05	28.75	29.69	
24	OVC	031		10.00		43	36	40	76	0	00	29.13	30.07	24	OVC	012		10.00	-RA	41	39	40	93	18	04	28.71	29.65	
			SUNRISE: 0541		APR 03	SUNSET: 1831										SUNRISE: 0530		APR 09	SUNSET: 1838									
03	OVC	035		10.00		41	37	39	86	5	36	29.09	30.04	03	OVC	027		10.00		41	40	41	96	23	05	28.70	29.64	
06	SCT	NC		10.00		38	34	36	86	7	07	29.10	30.04	06	OVC	025		9.00	-RA	38	37	38	97	14	02	28.73	29.67	
09	OVC	032		10.00		40	34	37	79	13	08	29.12	30.07	09	OVC	027		4.00	-RA BR	39	36	38	89	18	02	28.78	29.72	
12	OVC	022		10.00		41	34	38	76	15	04	29.09	30.03	12	OVC	055		10.00		44	32	39	63	22	03	28.81	29.74	
15	OVC	024		10.00		41	33	38	74	13	03	29.08	30.03	15	OVC	075		10.00		50	30	41	46	22	04	28.85	29.78	
18	BKN	035		10.00		41	33	38	74	12	03	29.07	30.02	18	OVC	110		10.00		48	26	39	42	14	03	28.92	29.85	
21	CLR	NC		10.00		39	32	36	76	15	03	29.08	30.03	21	CLR	NC		10.00		40	27	35	60	8	04	28.99	29.93	
24	OVC	042		10.00		39	32	36	76	14	04	29.10	30.05	24	CLR	NC		10.00		38	27	34	65	9	03	28.94	29.99	
			SUNRISE: 0539		APR 04	SUNSET: 1832										SUNRISE: 0528		APR 10	SUNSET: 1839									
03	BKN	040		10.00		35	31	33	85	13	01	29.14	30.09	03	CLR	NC		10.00		33	24	30	70	3	31	29.07	30.02	
06	CLR	NC		10.00		33	30	32	89	12	01	29.19	30.14	06	CLR	NC		10.00		33	24	30	70	3	31	29.13	30.08	
09	CLR	NC		10.00		43	33	39	68	12	03	29.23	30.19	09	CLR	NC		10.00		42	25	35	51	5	01	29.17	30.12	
12	FEW	NC		10.00		49	33	42	55	16	04	29.21	30.16	12	CLR	NC		10.00		51	27	41	39	10	01	29.17	30.11	
15	CLR	NC		10.00		52	30	42	43	14	05	29.18	30.12	15	CLR	NC		10.00		56	23	42	28	9	32	29.14	30.08	
18	CLR	NC		10.00		48	28	40	46	9	06	29.17	30.12	18	CLR	NC		10.00		54	21	41	28	6	31	29.13	30.08	
21	CLR	NC		10.00		40	27	35	60	7	09	29.18	30.13	21	CLR	NC		10.00		42	30	37	62	0	00	29.15	30.10	
24	CLR	NC		10.00		34	30	32	85	0	00	29.19	30.14	24	CLR	NC		10.00		38	34	36	86	0	00	29.17	30.11	
			SUNRISE: 0537		APR 05	SUNSET: 1833										SUNRISE: 0527		APR 11	SUNSET: 1840									
03	CLR	NC		10.00		30	29	30	96	0	00	29.19	30.14	03	SCT	NC		10.00		34	30	32	85	0	00	29.17	30.11	
06	CLR	NC		8.00		27	25	26	92	0	00	29.19	30.14	06	SCT	NC		10.00		35	32	34	89	0	00	29.20	30.14	
09	CLR	NC		10.00		45	23	36	42	5	VR	29.20	30.14	09	SCT	NC		10.00		52	37	45	57	5	17	29.21	30.16	
12	CLR	NC		10.00		51	26	41	38	5	VR	29.14	30.09	12	FEW	NC		10.00		61	40	50	46	8	18	29.17	30.11	
15	CLR	NC		10.00		55	27	43	34	5	09	29.08	30.03	15	FEW	NC		10.00		63	39	51	41	9	23	29.13	30.07	
18	CLR	NC		10.00		51	29	42	43	9	10	29.03	29.98	18	FEW	NC		10.00		61	38	50	43	12	18	29.08	30.02	
21	CLR	NC		10.00		43	31	38	63	10	11	29.04	29.99	21	FEW	NC		10.00		53	40	47	61	8	16	29.09	30.03	
24	CLR	NC		10.00		39	24	33	55	6	15	29.05	29.99	24	BKN	110		10.00		52	40	46	64	8	17	29.09	30.02	
			SUNRISE: 0535		APR 06	SUNSET: 1834										SUNRISE: 0525		APR 12	SUNSET: 1841									
03	BKN	110		10.00		38	25	33	60	5	17	29.03	29.97	03	OVC	085		10.00		54	41	48	62	12	16	29.06	29.98	
06	BKN	100		10.00		37	25	32	62	3	09	29.02	29.97	06	FEW	NC		10.00		50	40	45	68	9	17	29.05	29.98	
09	OVC	100		10.00		43	22	35	43	5	13	29.02	29.96	09	CLR	NC		10.00		60	41	50	50	17	18	29.02	29.96	
12	CLR	NC		10.00		56	35	46	46	13	14	28.99	29.92	12	CLR	NC		10.00		69	42	55	38	24	17	28.95	29.86	
15	CLR	NC		10.00		60	38	49	44	9	14	28.91	29.84	15	CLR	NC		10.00		71	36	53	28	25	18	28.87	29.79	
18	FEW	NC		10.00		57	41	49	55	8	11	28.89	29.83	18	FEW	NC		10.00		67	38	52	35	25	17	28.82	29.74	
21	CLR	NC		10.00		48	36	43	63	10	11	28.90	29.83	21	BKN	100		10.00		64	41	52	43	21	17	28.86	29.77	
24	SCT	NC		10.00		44	35	40	71	6	08	28.90	29.83	24	OVC	100		10.00		62	40	51	44	25	17	28.82	29.73	

## OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

APRIL 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: 0523 APR 13						SUNSET: 1842						SUNRISE: 0514 APR 19						SUNSET: 1849											
03	FEW	NC			10.00	59	39	49	48	21	17	28.76	29.67	03	CLR	NC			9.00	38	38	38	100	0	00	29.16	30.10		
06	BKN	085			10.00	55	40	48	57	14	16	28.74	29.66	06	CLR	NC			10.00	36	35	36	97	0	00	29.16	30.10		
09	OVC	070			6.00	51	48	50	89	13	19	28.77	29.69	09	CLR	NC			10.00	56	37	47	49	3	35	29.13	30.07		
12	OVC	023			2.50	53	52	52	96	15	16	28.72	29.64	12	SCT	NC			10.00	60	35	48	39	3	VR	29.12	30.06		
15	OVC	032			9.00	55	52	53	90	8	18	28.67	29.59	15	SCT	NC			10.00	60	33	47	36	0	00	29.08	30.02		
18	OVC	009			5.00	55	54	54	96	6	11	28.64	29.56	18	FEW	NC			10.00	57	34	46	42	5	19	29.07	30.02		
21	OVC	003			1.50	54	54	54	100	3	01	28.63	29.55	21	CLR	NC			10.00	48	40	44	74	0	00	29.11	30.05		
24	OVC	025			2.50	54	53	53	97	7	30	28.64	29.56	24	CLR	NC			9.00	44	40	42	85	0	00	29.11	30.05		
SUNRISE: 0522 APR 14						SUNSET: 1844						SUNRISE: 0512 APR 20						SUNSET: 1851											
03	OVC	055			8.00	53	50	51	89	8	31	28.68	29.60	03	CLR	NC			10.00	42	41	42	96	0	00	29.11	30.05		
06	SCT	NC			10.00	49	43	46	80	9	33	28.75	29.68	06	FEW	NC			10.00	38	36	37	93	0	00	29.12	30.06		
09	CLR	NC			10.00	52	42	47	69	16	33	28.80	29.73	09	CLR	NC			10.00	55	38	47	53	5	19	29.12	30.06		
12	CLR	NC			10.00	60	45	52	58	10	29	28.83	29.75	12	BKN	100			10.00	60	37	49	42	12	17	29.11	30.04		
15	CLR	NC			10.00	65	40	52	40	9	31	28.82	29.74	15	BKN	060			10.00	54	43	48	67	13	19	29.08	30.02		
18	CLR	NC			10.00	62	39	51	43	3	32	28.85	29.77	18	OVC	039			5.00	-RA BR	47	45	46	93	10	15	29.10	30.04	
21	CLR	NC			10.00	51	44	48	77	0	00	28.89	29.81	21	OVC	042			7.00	-RA	47	46	46	97	12	08	29.13	30.06	
24	CLR	NC			10.00	48	39	44	71	0	00	28.91	29.83	24	OVC	039			6.00	-RA BR	46	45	46	96	12	05	29.13	30.06	
SUNRISE: 0520 APR 15						SUNSET: 1845						SUNRISE: 0511 APR 21						SUNSET: 1852											
03	CLR	NC			10.00	46	43	45	89	3	01	28.89	29.81	03	OVC	039			5.00	-RA BR	46	45	46	96	13	07	29.13	30.06	
06	OVC	060			8.00	46	44	45	93	0	00	28.85	29.78	06	OVC	065			2.00	BR	45	44	45	97	9	36	29.14	30.08	
09	OVC	049			1.75	46	45	46	96	13	08	28.87	29.80	09	BKN	080			9.00	48	40	44	74	12	04	29.17	30.11		
12	OVC	007			3.00	46	45	46	96	17	06	28.84	29.77	12	SCT	NC			10.00	52	43	48	72	9	03	29.18	30.12		
15	OVC	029			2.50	42	41	42	96	26	09	28.76	29.70	15	BKN	055			10.00	55	45	50	69	14	03	29.15	30.09		
18	OVC	012			10.00	42	40	41	92	14	05	28.78	29.71	18	BKN	046			10.00	53	44	49	72	10	10	29.18	30.12		
21	OVC	010			10.00	41	39	40	93	16	05	28.76	29.69	21	CLR	NC			6.00	BR	45	44	45	97	0	00	29.20	30.15	
24	OVC	008			5.00	38	36	37	93	16	02	28.75	29.68	24	SCT	NC			10.00	42	42	42	100	3	34	29.20	30.14		
SUNRISE: 0519 APR 16						SUNSET: 1846						SUNRISE: 0509 APR 22						SUNSET: 1853											
03	OVC	010			10.00	37	35	36	93	18	05	28.66	29.59	03	SCT	NC			7.00	BCFG	38	38	38	100	0	00	29.19	30.14	
06	OVC	008			2.50	35	34	35	96	18	02	28.68	29.62	06	CLR	NC			2.50	BR	40	40	40	100	0	00	29.23	30.17	
09	OVC	012			6.00	34	33	34	97	21	36	28.67	29.60	09	CLR	NC			9.00	55	46	50	72	7	04	29.24	30.17		
12	OVC	012			10.00	37	34	36	89	13	01	28.76	29.70	12	FEW	NC			10.00	63	44	53	50	3	VR	29.20	30.14		
15	OVC	014			10.00	39	36	38	89	12	34	28.81	29.75	15	SCT	NC			10.00	63	38	51	40	6	22	29.16	30.09		
18	OVC	045			10.00	40	34	37	79	7	34	28.86	29.80	18	FEW	NC			10.00	63	35	49	35	5	20	29.12	30.06		
21	CLR	NC			10.00	35	34	35	96	3	27	28.92	29.86	21	CLR	NC			10.00	53	39	46	59	5	18	29.13	30.07		
24	CLR	NC			10.00	34	31	33	89	5	30	28.95	29.89	24	CLR	NC			10.00	48	39	44	71	3	19	29.11	30.05		
SUNRISE: 0517 APR 17						SUNSET: 1847						SUNRISE: 0507 APR 23						SUNSET: 1854											
03	CLR	NC			10.00	33	25	30	72	7	28	28.96	29.91	03	CLR	NC			10.00	41	38	40	89	3	26	29.09	30.02		
06	CLR	NC			10.00	33	25	30	72	7	29	29.02	29.97	06	CLR	NC			10.00	43	35	40	74	0	00	29.09	30.03		
09	CLR	NC			10.00	44	27	37	51	8	28	29.08	30.03	09	CLR	NC			10.00	63	36	50	37	7	28	29.09	30.02		
12	FEW	NC			10.00	50	26	40	39	9	30	29.09	30.04	12	CLR	NC			10.00	68	35	52	30	5	VR	29.04	29.97		
15	SCT	NC			10.00	53	26	42	35	9	30	29.09	30.04	15	CLR	NC			10.00	70	33	52	26	10	31	28.99	29.92		
18	FEW	NC			10.00	53	27	42	37	8	27	29.11	30.06	18	CLR	NC			10.00	68	33	51	27	6	29	28.97	29.89		
21	CLR	NC			10.00	47	34	41	61	7	22	29.16	30.11	21	CLR	NC			10.00	54	46	50	75	3	21	28.97	29.89		
24	CLR	NC			10.00	45	34	40	66	6	22	29.19	30.13	24	CLR	NC			10.00	47	39	43	74	0	00	28.95	29.87		
SUNRISE: 0515 APR 18						SUNSET: 1848						SUNRISE: 0506 APR 24						SUNSET: 1855											
03	CLR	NC			10.00	43	33	39	68	6	23	29.19	30.13	03	CLR	NC			10.00	45	38	42	77	0	00	28.94	29.86		
06	CLR	NC			10.00	44	30	38	58	8	23	29.23	30.17	06	SCT	NC			10.00	47	41	44	80	3	24	28.97	29.89		
09	CLR	NC			10.00	54	33	44	45	7	22	29.27	30.20	09	CLR	NC			10.00	63	40	51	43	7	26	28.96	29.88		
12	FEW	NC			10.00	59	32	47	36	10	23	29.25	30.18	12	FEW	NC			10.00	71	40	55	32	3	VR	28.94	29.86		
15	CLR	NC			10.00	60	33	47	36	9	22	29.18	30.12	15	SCT	NC			10.00	73	46	58	38	7	VR	28.91	29.83		
18	BKN	070			10.00	58	33	46	39	7	20	29.18	30.12	18	SCT	NC			10.00	62	39	51	43	16	11	28.93	29.85		
21	CLR	NC			10.00	51	35	44	54	6	18	29.18	30.12	21	CLR	NC			10.00	52	34	44	50	9	11	28.99	29.92		
24	CLR	NC			10.00	43	39	41	86	0	00	29.16	30.10	24	CLR	NC			10.00	47	34	41	61	7	08	29.02	29.95		

## MADISON, WI

**APRIL 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
03	CLR	NC			10.00		43	36	40	76	7	07	29.01	29.93															
06	CLR	NC			10.00		41	37	39	86	6	06	28.98	29.91															
09	CLR	NC			10.00		55	41	48	59	13	10	28.97	29.89															
12	CLR	NC			10.00		63	45	53	52	14	11	28.90	29.82															
15	CLR	NC			9.00		65	48	56	54	16	12	28.86	29.78															
18	OVC	070			9.00	-RA	59	48	53	67	15	09	28.84	29.77															
21	OVC	020			8.00		53	47	50	80	20	08	28.85	29.78															
24	OVC	009			5.00	BR	53	51	52	93	14	11	28.82	29.74															
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 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.																													
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			43	36	40	79	29.00	29.93	8.86	7	3	8																	
02			42	36	39	79	29.00	29.93	8.97	7	3	8																	
03			41	36	39	83	28.99	29.93	9.00	7	3	7																	
04			41	36	39	82	29.00	29.93	9.05	7	3	5																	
05			40	35	38	85	29.00	29.94	8.54	7	3	4																	
06			40	35	38	83	29.01	29.95	8.22	7	3	4																	
07			43	36	40	77	29.02	29.96	8.25	8	4	5																	
08			46	36	42	71	29.03	29.97	8.66	9	3	6																	
09			49	37	43	66	29.03	29.97	8.53	10	4	5																	
10			51	37	45	61	29.03	29.97	9.12	11	5	6																	
11			53	37	46	58	29.03	29.96	9.05	12	4	7																	
12			54	38	46	57	29.02	29.95	9.25	11	5	8																	
13			55	38	47	55	29.01	29.94	9.50	11	4	9																	
14			56	37	47	54	29.00	29.94	9.42	12	4	8																	
15			56	37	47	53	28.99	29.93	9.27	12	4	8																	
16			55	37	47	55	28.99	29.93	9.33	12	5	9																	
17			55	37	46	55	28.99	29.93	9.13	12	5	9																	
18			53	37	46	58	28.99	29.93	8.95	10	5	9																	
19			51	38	45	64	29.00	29.94	8.77	8	5	9																	
20			48	38	44	69	29.01	29.95	8.98	8	4	9																	
21			47	38	43	73	29.02	29.95	8.92	8	5	9																	
22			46	38	42	76	29.02	29.95	8.80	7	4	8																	
23			45	38	42	77	29.01	29.95	8.77	7	3	8																	
24			44	37	41	79	29.01	29.95	8.78	7	3	7																	

# SUPPLEMENTARY HOURLY PRECIPITATION

## UNIVERSAL RAIN GAUGE (WATER EQUIVALENT IN INCHES)

APRIL 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		0.01	0.05			0.01					01						T	T					01	0.07	
02													02												02	0.00	
03													03												03	0.00	
04													04												04	0.00	
05													05												05	0.00	
06													06												06	0.00	
07													07					0.05	0.05	0.08	0.02		0.07	0.05	07	0.32	
08	0.05	0.05	0.08	0.05	0.01	0.01	0.03	0.01					08			0.02	0.02	0.02	0.01	0.03	0.02	0.01	0.03	0.03	08	0.45	
09	0.01	T	T	0.03	0.05	0.05	0.03	0.03	0.03				09												09	0.23	
10										T			10												10	0.00	
11													11												11	0.00	
12													12												12	0.00	
13									0.02	0.07	0.11	0.10	13					0.01	0.09	0.10	0.05	0.05	0.03	T	13	0.63	
14													14												14	0.00	
15					0.05	0.05	0.15	0.25	0.20	0.10	0.12	0.05	15	0.05	0.04	0.28	0.05	0.03	T	T			0.03	15	1.45		
16	0.10	0.05									0.02	0.02	16	0.05											16	0.24	
17													17												17	0.00	
18													18												18	0.00	
19													19												19	0.00	
20													20					0.05	0.01		T	0.04	0.10	0.07	20	0.27	
21	0.06	0.05	0.08	0.03	T	T							21												21	0.22	
22													22												22	0.00	
23													23												23	0.00	
24													24												24	0.00	
25													25												25	0.00	
26	0.23												26												26	0.23	
27													27												27	0.00	
28													28												28	0.00	
29													29												29	0.00	
30													30												30	0.00	
PUBLISHED BY: NCDC, ASHEVILLE, NC.														MONTHLY TOTAL												4.11	

### SUPPLEMENTARY MAXIMUM SHORT DURATION PRECIPITATION (MSDP)

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)			0.23	0.23	0.23	0.23	0.28	0.30	0.40	0.45	0.60	0.60
ENDED: DATE			26	26	26	26	15	15	15	15	15	15
ENDED: TIME			0100	0100	0100	0100	1600	1615	0900	0900	0900	0900

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.



**APRIL 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  
704–271–4800 (voice), 704–271–4876 (fax),  
704–271–4010(TDD)  
or [orders@ncdc.noaa.gov](mailto:orders@ncdc.noaa.gov)

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