



# OCTOBER 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	57	37	47	-8	37	42	18	0		0		0.0	0.00	29.26	30.20	4.7	32	5.6	18	30	14	31	01					
02	54	35	45	-9	39	42	20	0	RA	0		0.0	0.16	29.24	30.19	3.1	08	3.4	11	07	10	07	02					
03	53	45	49	-5	47	48	16	0	RA DZ BR	0		0.0	0.26	29.23	30.17	10.0	06	10.2	22	08	18	07	03					
04	60	50	55	1	48	51	10	0		0		0.0	0.00	29.25	30.19	12.3	10	12.9	26	11	22	10	04					
05	67	54	61	8	59	59	4	0	TS TSRA RA BR	0		0.0	1.35	29.02	29.95	13.0	12	13.8	34*	12	26	11	05					
06	67	50	59	6	55	56	6	0	RA DZ BR	0		0.0	0.13	28.97	29.89	6.2	21	8.0	21	28	16	28	06					
07	55	48	52	0	46	48	13	0	RA BR	0		0.0	T	29.13	30.07	3.9	27	6.2	16	28	13	28	07					
08	59	40	50	-2	41	46	15	0		0		0.0	0.00	29.33	30.27	2.3	36	3.8	13	08	11	36	08					
09	62	35	49	-3	43	46	16	0	MIFG BR	0		0.0	0.00	29.26	30.21	3.3	19	3.7	20	16	14	18	09					
10	65	38	52	1	44	47	13	0	BCFG	0		0.0	0.00	29.23	30.17	2.4	17	2.6	13	16	10	17	10					
11	67	36	52	1	45	49	13	0	BCFG BR	0		0.0	0.00	29.24	30.18	5.7	16	5.8	20	15	16	16	11					
12	59	41	50	-1	43	47	15	0	BR HZ	0		0.0	0.00	29.17	30.11	6.2	27	7.7	23	28	17	29	12					
13	52	35	44	-6	34	39	21	0		0		0.0	0.00	29.17	30.12	5.9	31	6.7	23	32	17	32	13					
14	53	30	42	-8	37	40	23	0		0		0.0	0.00	29.17	30.11	2.4	08	4.3	13	13	11	05	14					
15	67	47	57	8	47	51	8	0	RA	0		0.0	T	29.15	30.08	11.4	14	11.7	25	15	20	13	15					
16	75*	55	65	16	56	60	0	0		0		0.0	0.00	29.10	30.02	10.5	18	10.7	23	18	20	17	16					
17	69	61	65*	16	63	64	0	0	RA BR	0		0.0	0.89	28.90	29.81	14.4	18	14.8	33	13	26*	14	17					
18	65	40	53	5	42	45	12	0	RA	0		0.0	0.09	29.02	29.95	7.9	26	8.7	26	26	18	26	18					
19	59	37	48	0	33	42	17	0		0		0.0	0.00	29.26	30.20	5.4	28	6.4	21	28	16	27	19					
20	57	37	47	0	32	40	18	0		0		0.0	0.00	29.34	30.29	6.3	29	6.9	25	29	17	28	20					
21	51	29	40*	-7	32	38	25	0	RA	0		0.0	T	29.38	30.33	6.0	34	7.2	25	01	20	01	21					
22	56	25*	41	-6	30	37	24	0		0		0.0	0.00	29.55	30.51	3.2	25	4.3	16	30	11	29	22					
23	64	40	52	6	39	46	13	0		0		0.0	0.00	29.40		5.2	22	4.6	18	25	14	23	23					
24	65	45	55	9	40	48	10	0		0		0.0	0.00	29.28	30.22	7.8	21	8.1	20	22	14	22	24					
25	65	45	55	10	46	51	10	0	RA	0		0.0	T	29.22	30.16	5.0	19	5.5	16	18	13	19	25					
26	72	42	57	12	50	53	8	0	HZ	0		0.0	0.00	29.21	30.14	2.4	22	2.7	10	23	8	25	26					
27	62	53	58	14	58	59	7	0	RA DZ BR	0		0.0	0.29	29.07	30.00	4.5	20	6.9	23	18	18	18	27					
28	62	41	52	8	44	49	13	0	BR	0		0.0	0.00	29.09	30.02	4.5	02	5.8	15	32	11	01	28					
29	59	37	48	4	48	50	17	0	RA BR HZ	0		0.0	0.02	29.01	29.95	7.8	12	8.1	23	13	20	12	29					
30	59	50	55	12	53	54	10	0	RA DZ FG+ BR	0		0.0	0.01	29.08	30.01	3.4	33	5.3	16	33	13	32	30					
31	52	49	51	8	48	49	14	0	RA DZ BR	0		0.0	T	29.28	30.22	5.9	36	6.7	15	03	13	31	31					
60.9		42.2	51.6	■ ■	44.5	48.3	13.2	0.0	< MONTHLY AVERAGES		TOTALS-->			0.0	3.20	29.19		1.6	18	7.1	<- MONTHLY AVERAGES							
1.0		4.5	2.7	■ ■	<----- DEPARTURE FROM NORMAL ----->										1.03	SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3												
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 1.35 DATE: 05					SEA LEVEL PRESSURE DATE TIME														
MONTHLY TOTAL DEPARTURE									GREATEST 24-HR SNOWFALL: 0.0 DATE: 05					MAXIMUM : 30.60 22 0900														
SEASON TO DATE TOTAL DEPARTURE									GREATEST SNOW DEPTH: 0 DATE: 05					MINIMUM : 29.61 18 0105														
HEATING: 409 -90									NUMBER OF DAYS WITH →					MAXIMUM TEMP ≥ 90: 0					PRECIPITATION ≥ 0.01 INCH : 9									
COOLING: 0 0														MAXIMUM TEMP ≤ 32 : 0					PRECIPITATION ≥ 0.10 INCH : 6									
														THUNDERSTORMS : 1					HEAVY FOG : 1					SNOWFALL ≥ 1.0 INCH : 0				

OCTOBER 1998  
MADISON, WI

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

MADISON, WI

OCTOBER 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			0.00		
02													02						T	T	0.02	0.06	0.04	0.02	0.02	02			0.16	
03	0.01	0.01	T	0.01			T	0.12	0.07	T	T	0.01	03	T		T		T	T	0.01	T	0.01	0.01	T	03			0.26		
04													04												04			0.00		
05		0.18	0.30	0.14	0.10	0.03	T						05	0.01	T		0.04	0.02	0.46	0.07	T				05			1.35		
06								0.02	0.02	T	0.01	0.01	06	0.03	0.02	T	0.01	0.01				T			06			0.13		
07													07						T						07			T		
08													08												08			0.00		
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						T							15												15			0.00		
16													16												16			T		
17													17												17			0.00		
18	0.09	T	0.01	0.09	0.02						0.18	0.01	18	0.27	0.01	T	0.01	0.08	0.06	0.11	0.02	0.01	T	T	0.01	18			0.89	
19													19												19			0.09		
20													20												20			0.00		
21													21												21			0.00		
22				T									22												22			T		
23													23												23			0.00		
24													24												24			0.00		
25									T	T			25												25			0.00		
26													26												26			T		
27			T	0.05	0.05	0.02			0.01	0.04	0.02	0.03	27	0.03	0.03	T		0.01	T	T	T	T	T	T	27			0.29		
28													28												28			0.00		
29													29												29			0.02		
30				T	0.01	T		T	T	T	0.02		30												30			0.01		
31													31	T							T	T	T	T	31			T		

## 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  
OCTOBER 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							8.00	10.00	
03							2.50	10.00	
04							10.00	10.00	
05							1.00	10.00	
06							2.00	10.00	
07							6.00	10.00	
08							10.00	10.00	
09							5.00	10.00	
10							7.00	10.00	
11							.75	10.00	
12							5.00	10.00	
13							10.00	10.00	
14							9.00	10.00	
15							8.00	10.00	
16							7.00	10.00	
17							1.00	10.00	
18							10.00	10.00	
19							10.00	10.00	
20							10.00	10.00	
21							10.00	10.00	
22							10.00	10.00	
23							10.00	10.00	
24							10.00	10.00	
25							7.00	10.00	
26							6.00	10.00	
27							2.00	8.00	
28							6.00	10.00	
29							2.50	10.00	
30							.25	10.00	
31							4.00	10.00	
<b>MONTHLY AVGS</b>							6.45	9.94	
<p align="center"><b>SUNSHINE (MINUTES)</b></p> <p>Total:                  Possible:</p> <p align="center">Percent Possible:</p>									
<p align="center"><b>NUMBER OF DAYS WITH:</b></p> <p align="center"><b>SKY CONDITION</b></p> <p align="center">CLR   PTLY CLDY   CLOUDY   MISSING</p> <p align="center">31</p> <p align="center"><b>MINIMUM VISIBILITY (MILES)</b></p> <p align="center">&lt;=0.25       &lt;=3.0       &gt;=7.0</p> <p align="center">1                      8                      17</p>									

## OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

OCTOBER 1998

MSN

WBAN # 14837

HOUR (LST)	SKY COVER CEILING 100'S OF FT		SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER CEILING 100'S OF FT		SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE ° F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES, HG)		
			OBSERVATION TIME (LST)	EFF CLD AMT Okta			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL				OBSERVATION TIME (LST)	EFF CLD AMT Okta			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	
			SUNRISE: 0555																											
03	CLR	NC			10.00		43	39	41	86	8	33	29.23	30.17	03	BKN	015				10.00		49	47	48	93	7	24	29.03	29.97
06	CLR	NC			10.00		40	37	39	89	6	33	29.30	30.24	06	SCT	NC				10.00		49	47	48	93	5	21	29.07	30.01
09	CLR	NC			10.00		48	37	43	66	6	35	29.32	30.26	09	BKN	025				10.00		53	48	50	83	8	25	29.11	30.05
12	CLR	NC			10.00		55	33	45	44	10	28	29.30	30.24	12	OVC	030				10.00		54	45	49	72	7	28	29.11	30.05
15	FEW	NC			10.00		56	34	46	44	8	27	29.24	30.18	15	OVC	031				10.00		52	45	48	77	5	28	29.13	30.07
18	FEW	NC			10.00		50	37	44	61	0	00	29.23	30.17	18	OVC	032				10.00		50	44	47	80	7	32	29.17	30.11
21	CLR	NC			10.00		41	38	40	89	3	29	29.25	30.19	21	OVC	038				10.00		50	44	47	80	5	VR	29.23	30.17
24	CLR	NC			10.00		39	37	38	93	5	01	29.24	30.19	24	OVC	044				10.00		49	44	47	83	6	33	29.27	30.21
			SUNRISE: 0556																											
03	CLR	NC			10.00		36	35	36	97	0	00	29.23	30.18	03	OVC	048				10.00		48	42	45	80	7	33	29.29	30.23
06	CLR	NC			10.00		37	37	37	100	0	00	29.27	30.22	06	BKN	044				10.00		42	41	42	96	5	33	29.33	30.27
09	CLR	NC			10.00		47	43	45	86	0	00	29.29	30.24	09	FEW	NC				10.00		53	42	48	66	7	01	29.37	30.31
12	CLR	NC			10.00		53	35	45	51	6	10	29.27	30.21	12	SCT	NC				10.00		56	40	48	55	7	04	29.37	30.31
15	CLR	NC			10.00		53	35	45	51	8	10	29.22	30.16	15	FEW	NC				10.00		59	42	50	54	3	VR	29.33	30.26
18	OVC	060			10.00	-RA	50	38	44	63	6	08	29.22	30.16	18	CLR	NC				10.00		48	43	46	83	0	00	29.32	30.27
21	OVC	055			10.00	RA	45	43	44	93	5	07	29.24	30.19	21	CLR	NC				10.00		43	41	42	93	0	00	29.34	30.28
24	OVC	033			10.00		45	44	45	97	7	06	29.22	30.16	24	CLR	NC				10.00		40	40	40	100	0	00	29.33	30.27
			SUNRISE: 0557																											
03	OVC	027			10.00	-RA	46	44	45	93	9	04	29.19	30.13	03	CLR	NC				5.00	BR	38	38	38	100	0	00	29.32	30.26
06	OVC	019			10.00		48	46	47	93	9	08	29.20	30.14	06	CLR	NC				8.00		36	36	36	100	0	00	29.32	30.27
09	OVC	008			6.00	-RA BR	50	49	49	96	10	05	29.21	30.15	09	CLR	NC				10.00		52	47	49	83	10	17	29.33	30.27
12	OVC	026			9.00	DZ	51	48	50	89	15	07	29.23	30.17	12	FEW	NC				10.00		59	45	52	60	10	17	29.27	30.21
15	OVC	033			10.00		53	47	50	80	10	07	29.22	30.16	15	CLR	NC				10.00		62	44	53	52	8	22	29.22	30.15
18	OVC	028			10.00	-RA	51	47	49	86	12	06	29.24	30.18	18	CLR	NC				10.00		55	46	50	72	3	20	29.19	30.14
21	OVC	043			10.00	-RA	50	47	48	89	9	04	29.28	30.22	21	CLR	NC				10.00		46	45	46	96	0	00	29.20	30.14
24	OVC	037			10.00		50	47	48	89	7	03	29.29	30.22	24	CLR	NC				9.00		43	43	43	100	0	00	29.21	30.14
			SUNRISE: 0558																											
03	OVC	033			10.00		51	48	50	89	8	08	29.28	30.22	03	CLR	NC				10.00		42	41	42	96	0	00	29.21	30.15
06	OVC	029			10.00		51	49	50	92	8	07	29.31	30.24	06	CLR	NC				9.00	BCFG	39	38	39	96	0	00	29.25	30.19
09	OVC	025			10.00		54	48	51	80	17	10	29.33	30.27	09	CLR	NC				10.00		55	47	51	74	7	17	29.26	30.20
12	OVC	026			10.00		56	48	52	75	16	10	29.30	30.23	12	CLR	NC				10.00		63	48	55	58	8	15	29.24	30.17
15	FEW	NC			10.00		59	47	53	64	21	11	29.23	30.17	15	CLR	NC				10.00		65	46	55	51	5	17	29.20	30.14
18	FEW	NC			10.00		54	47	50	77	13	09	29.18	30.12	18	CLR	NC				10.00		52	48	50	86	0	00	29.20	30.14
21	BKN	031			10.00		52	48	50	86	8	10	29.17	30.10	21	CLR	NC				10.00		45	45	45	100	0	00	29.21	30.15
24	BKN	025			10.00		56	50	53	81	16	12	29.11	30.04	24	CLR	NC				10.00		41	41	41	100	0	00	29.24	30.18
			SUNRISE: 0559																											
03	OVC	017			2.50	TSRA BR	54	54	54	100	13	10	29.11	30.04	03	CLR	NC				7.00	BCFG	38	38	38	100	0	00	29.26	30.19
06	OVC	009			8.00		56	54	55	93	20	11	29.04	29.98	06	CLR	NC				1.50	BCFG BR	36	36	36	100	0	00	29.28	30.23
09	OVC	009			10.00		58	56	57	93	13	13	29.05	29.98	09	CLR	NC				7.00		55	49	52	80	8	15	29.29	30.23
12	OVC	007			3.00	BR	60	58	59	93	20	14	29.04	29.97	12	FEW	NC				10.00		63	48	55	58	13	16	29.28	30.22
15	OVC	005			1.50	BR	61	60	60	97	10	11	29.01	29.94	15	CLR	NC				10.00		66	49	57	54	14	13	29.20	30.14
18	OVC	005			2.50	TSRA BR	62	61	61	96	14	11	28.96	29.88	18	CLR	NC				10.00		55	48	51	77	0	00	29.20	30.14
21	BKN	085			3.00	BR	65	64	64	97	12	16	28.98	29.89	21	CLR	NC				10.00		56	50	53	81	9	17	29.20	30.13
24	OVC	026			4.00	BR	66	66	66	100	13	16	28.95	29.86	24	CLR	NC				7.00		52	48	50	86	8	17	29.17	30.10
			SUNRISE: 0600																											
03	OVC	016			9.00		67	65	66	93	9	17	28.93	29.84	03	OVC	043				6.00	BR	53	50	51	89	5	17	29.14	30.07
06	OVC	014			10.00		65	63	64	93	9	18	28.91	29.83	06	OVC	090				5.00	HZ	56	51	53	84	7	VR	29.14	30.07
09	OVC	027			3.00	DZ BR	54	53	53																					

## OBSERVATIONS AT 3-HOURLY INTERVALS

MADISON, WI

OCTOBER 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
			SUNRISE: 0608			OCT 13	SUNSET: 1718								SUNRISE: 0616			OCT 19	SUNSET: 1708								
03	CLR	NC			10.00	41	36	39	82	3	29	29.15	30.09	03	CLR	NC			10.00	39	37	38	93	0	00	29.20	30.14
06	CLR	NC			10.00	38	34	36	86	8	29	29.17	30.11	06	FEW	NC			10.00	48	42	45	80	7	24	29.23	30.17
09	FEW	NC			10.00	43	32	38	65	16	31	29.18	30.13	09	FEW	NC			10.00	50	42	46	74	10	30	29.28	30.22
12	FEW	NC			10.00	48	31	41	52	6	VR	29.18	30.12	12	FEW	NC			10.00	56	34	46	44	12	30	29.27	30.21
15	FEW	NC			10.00	52	33	43	49	12	32	29.15	30.09	15	CLR	NC			10.00	58	27	44	31	9	29	29.24	30.19
18	CLR	NC			10.00	45	33	40	63	6	33	29.17	30.11	18	CLR	NC			10.00	52	24	41	34	6	VR	29.26	30.20
21	CLR	NC			10.00	36	34	35	93	0	00	29.20	30.15	21	CLR	NC			10.00	48	27	39	44	5	27	29.30	30.24
24	CLR	NC			10.00	35	33	34	93	0	00	29.18	30.13	24	CLR	NC			10.00	45	28	38	52	6	27	29.32	30.26
			SUNRISE: 0610			OCT 14	SUNSET: 1716								SUNRISE: 0617			OCT 20	SUNSET: 1707								
03	CLR	NC			10.00	32	31	32	96	3	29	29.18	30.13	03	CLR	NC			10.00	40	30	36	68	5	26	29.34	30.29
06	FEW	NC			10.00	32	32	32	100	0	00	29.19	30.14	06	CLR	NC			10.00	37	31	35	79	3	28	29.38	30.32
09	SCT	NC			10.00	44	38	41	79	12	05	29.20	30.15	09	FEW	NC			10.00	46	34	41	63	9	31	29.40	30.35
12	SCT	NC			10.00	49	38	44	66	3	01	29.18	30.13	12	CLR	NC			10.00	53	32	44	45	9	27	29.38	30.32
15	CLR	NC			10.00	52	39	46	61	8	06	29.11	30.05	15	CLR	NC			10.00	56	27	43	33	16	30	29.33	30.27
18	CLR	NC			10.00	47	39	43	74	5	10	29.12	30.07	18	CLR	NC			10.00	44	32	39	63	0	00	29.33	30.28
21	CLR	NC			10.00	45	41	43	86	7	10	29.15	30.09	21	BKN	110			10.00	48	33	41	56	7	28	29.31	30.26
24	OVC	060			9.00	47	42	45	83	8	14	29.16	30.10	24	OVC	100			10.00	47	36	42	66	8	26	29.28	30.22
			SUNRISE: 0611			OCT 15	SUNSET: 1715								SUNRISE: 0618			OCT 21	SUNSET: 1705								
03	OVC	034			10.00	48	44	46	86	7	11	29.15	30.09	03	OVC	095			10.00	46	39	43	77	8	26	29.25	30.19
06	OVC	060			8.00	49	46	47	90	8	13	29.16	30.10	06	OVC	100			10.00	46	37	42	71	9	34	29.28	30.23
09	OVC	060			10.00	53	46	49	77	10	15	29.19	30.13	09	SCT	NC			10.00	46	36	42	68	12	35	29.35	30.30
12	CLR	NC			10.00	63	47	54	56	12	15	29.15	30.09	12	SCT	NC			10.00	50	30	41	46	10	35	29.38	30.33
15	CLR	NC			10.00	66	47	56	50	18	13	29.10	30.03	15	SCT	NC			10.00	50	24	40	36	16	32	29.40	30.35
18	BKN	049			10.00	61	49	54	65	15	13	29.13	30.07	18	CLR	NC			10.00	43	27	37	53	6	34	29.45	30.41
21	CLR	NC			10.00	57	50	53	78	13	12	29.14	30.08	21	CLR	NC			10.00	33	29	31	85	0	00	29.50	30.46
24	CLR	NC			10.00	58	48	53	70	14	16	29.13	30.06	24	CLR	NC			10.00	29	27	28	92	0	00	29.53	30.50
			SUNRISE: 0612			OCT 16	SUNSET: 1713								SUNRISE: 0619			OCT 22	SUNSET: 1704								
03	CLR	NC			10.00	58	50	54	75	10	18	29.13	30.06	03	CLR	NC			10.00	27	26	27	96	0	00	29.57	30.53
06	FEW	NC			9.00	56	50	53	81	7	18	29.15	30.08	06	CLR	NC			10.00	26	25	26	96	0	00	29.60	30.57
09	CLR	NC			9.00	64	54	58	70	10	18	29.15	30.08	09	CLR	NC			10.00	43	31	38	63	3	VR	29.63	30.60
12	CLR	NC			8.00	72	58	63	61	13	18	29.11	30.03	12	CLR	NC			10.00	52	29	42	41	5	VR	29.60	30.56
15	CLR	NC			10.00	75	58	65	55	12	19	29.07	29.98	15	CLR	NC			10.00	56	30	44	37	8	24	29.53	30.49
18	CLR	NC			8.00	68	57	61	68	9	17	29.05	29.97	18	CLR	NC			10.00	52	32	43	47	8	23	29.49	30.46
21	CLR	NC			8.00	67	61	63	81	12	17	29.04	29.96	21	CLR	NC			10.00	50	33	43	52	7	22	29.49	30.45
24	BKN	015			7.00	68	64	66	87	15	18	29.01	29.93	24	CLR	NC			10.00	48	34	42	58	6	25	29.46	30.41
			SUNRISE: 0613			OCT 17	SUNSET: 1712								SUNRISE: 0621			OCT 23	SUNSET: 1702								
03	OVC	037			7.00	67	63	64	87	13	18	28.98	29.88	03	CLR	NC			10.00	43	34	39	71	0	00	29.45	30.40
06	OVC	012			7.00	66	63	64	90	14	19	28.98	29.89	06	CLR	NC			10.00	45	34	40	66	5	21	29.45	
09	OVC	013			10.00	67	64	65	91	17	18	28.97	29.88	09	CLR	NC			10.00	53	40	47	61	6	23	29.46	
12	OVC	017			4.00	67	64	65	91	10	18	28.96	29.87	12	CLR	NC			10.00	62	42	52	48	7	VR	29.41	30.35
15	BKN	095			10.00	64	62	63	93	15	18	28.90	29.81	15	CLR	NC			10.00	63	42	52	47	12	24	29.37	30.30
18	OVC	090			9.00	61	60	60	97	23	16	28.84	29.75	18	CLR	NC			10.00	57	42	50	58	5	20	29.35	30.29
21	OVC	012			10.00	63	62	62	97	15	18	28.77	29.68	21	CLR	NC			10.00	53	37	46	55	6	21	29.35	30.29
24	OVC	022			6.00	65	63	64	93	15	19	28.71	29.62	24	CLR	NC			10.00	50	37	44	61	6	21	29.34	30.28
			SUNRISE: 0615			OCT 18	SUNSET: 1710								SUNRISE: 0622			OCT 24	SUNSET: 1701								
03	OVC	015			10.00	53	49	51	86	14	26	28.78	29.70	03	CLR	NC			10.00	47	37	42	69	8	21	29.33	30.27
06	BKN	020			10.00	45	38	42	77	14	27	28.90	29.83	06	CLR	NC			10.00	46	36	42	68	7	21	29.33	30.27
09	OVC	020			10.00	46	39	43	77	12	28	28.99	29.93	09	FEW	NC			10.00	52	39	46	61	8	20	29.33	30.27
12	BKN	022			10.00	50	42	46	74	12	25	29.03	29.96	12	FEW	NC			10.00	61	44	52	54	8	19	29.28	30.22
15	FEW	NC			10.00	52	41	47	66	12	27	29.06	29.99	15	FEW	NC			10.00	64	42	53	45	9	23	29.24	30.17
18	CLR	NC			10.00	48	39	44	71	5	24	29.13	30.08	18	CLR	NC			10.00	58	42	50	56	6	20	29.23	30.17
21	CLR	NC			10.00	46	40	43	79	0	00	29.19	30.13	21	CLR	NC			10.00	55	40	48	57	10	21	29.25	30.18
24	CLR	NC			10.00	40	38	39	93	0	00	29.21	30.15	24	CLR	NC			10.00	53	42	48	66	5	VR	29.25	30.18



# SUPPLEMENTARY HOURLY PRECIPITATION

## UNIVERSAL RAIN GAUGE (WATER EQUIVALENT IN INCHES)

OCTOBER 1998  
MADISON, WI

LATITUDE 43° 8'N  
LONGITUDE 89° 20'

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													02						0.02	0.02	0.05	0.02	0.03	T	02	0.14		
03	0.01	T	T	T			0.04	0.10	0.01	T			03						T	T	0.01	0.02	T		03	0.19		
04													04												04	0.00		
05		0.37	0.20	0.10	0.11	T							05				0.48	0.07	T	T					05	1.33		
06													06	0.05	T										06	0.10		
07								0.03	T			0.02	07												07	0.00		
08													08												08	0.00		
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												15	0.00		
16													16												16	0.00		
17			T	0.04	0.05	T					0.20	0.01	17	0.33	T	T	T	0.05	0.06	0.11	0.03	T			17	0.88		
18	0.10	T											18												18	0.10		
19													19												19	0.00		
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				0.05	0.05	T				0.03	0.05	0.01	27	0.03	0.03	T									27	0.25		
28													28												28	0.00		
29											0.02		29												29	0.02		
30													30												30	0.00		
31				T	0.01	T							31												31	0.01		
PUBLISHED BY: NCDC, ASHEVILLE, NC.														MONTHLY TOTAL														3.02

### SUPPLEMENTARY MAXIMUM SHORT DURATION PRECIPITATION (MSDP)

TIME PERIOD (MINUTES)	5	10	15	20	30	45	60	80	100	120	150	180
PRECIPITATION (INCHES)					0.38	0.43	0.48	0.49	0.50	0.50	0.50	0.55
ENDED: DATE					05	05	05	05	05	05	05	05
ENDED: TIME					1700	1700	1700	1730	1750	1750	1750	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.



**OCTOBER 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)  
Local Climatological Data is available at [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)

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151 PATTON AVE RM 120  
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