



# NOVEMBER 2002

## LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

## DUBUQUE, IA

MUNICIPAL AIRPORT (DBQ)

Lat: 42°23' N Long: 90°42' W Elev (Ground): 1069 Feet

Time Zone: CENTRAL WBAN: 94908 ISSN #:0198-2087

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	37	20	29	-14	18	25	36	0				0.0	0.00	29.10	30.30	11.9	28	12.2	28	30	23	27	01						
02	45	25	35	-7	21	28	30	0				0.0	0.00	28.96	30.16	9.0	26	9.6	23	26	18	26	02						
03	42	23	33	-9	27	30	32	0	BR			0.0	0.00	28.87	30.06	8.3	23	8.8	21	22	17	22	03						
04	37	26	32	-9	25	29	33	0	BR HZ			0.0	0.00	28.93	30.12	3.0	33	5.2	16	33	14	34	04						
05	37	30	34	-7	32	34	31	0	SN BR UP HZ			T	T	28.68	29.86	2.9	35	5.8	15	32	13	32	05						
06	45	31	38	-2	33	36	27	0	BR HZ			0.0	0.00	28.83	30.01	9.7	28	10.5	24	27	20	28	06						
07	60	24	42	2	34	39	23	0	BR HZ			0.0	0.00	28.74	29.91	12.5	20	12.7	30	21	24	21	07						
08	63	44	54*	15	40	46	11	0				0.0	0.00	28.43	29.58	11.6	20	12.2	25	21	23	21	08						
09	63*	43	53	14	49	51	12	0	BR			0.0	0.00	28.26	29.39	11.6	18	12.1	24	17	21	19	09						
10	58	36	47	9	42	44	18	0	FG+ BR			0.0	0.00	28.26	29.40	10.1	27	11.2	28	27	23	27	10						
11	39	32	36	-2	32	34	29	0	RA SN BR UP			T	0.03	28.79	29.96	6.9	30	8.3	22	27	17	27	11						
12	46	26	36	-1	28	33	29	0	BR			0.0	0.00	29.00	30.19	7.1	23	8.2	22	22	18	25	12						
13	53	25	39	2	32	38	26	0	FZFG BR FU			0.0	0.00	28.80	29.98	8.0	19	8.7	28	20	21	21	13						
14	41	34	38	2	33	36	27	0	HZ			0.0	0.00	28.74	29.91	5.9	35	7.7	16	34	14	34	14						
15	37	30	34	-2	24	29	31	0	HZ			0.0	0.00	28.97	30.16	7.9	01	8.2	18	02	15	02	15						
16	33	28	31	-4	24	28	34	0	SN BR			T	T	29.04	30.24	5.6	04	6.4	13	08	10	09	16						
17	36	19	28	-7	18	25	37	0				0.0	0.00	28.92	30.11	2.7	07	5.1	13	05	12	16	17						
18	38	24	31	-3	29	32	34	0	RA SN BR UP HZ			T	0.12	28.80	29.99	5.5	17	8.6	22	14	18	14	18						
19	49	27	38	4	31	34	27	0	BR			0.0	0.00	28.84	30.03	8.5	21	8.5	22	23	18	24	19						
20	54	33	44	10	34	39	21	0				0.0	0.00	28.78	29.95	2.6	28	4.4	17	34	15	33	20						
21	39	33	36	3	30	33	29	0	SN BR			T	0.02	28.77	29.95	11.7	34	12.2	32	01	28	01	21						
22	37	25	31	-2	20	28	34	0				0.0	0.00	28.91	30.10	3.7	34	8.4	25	36	20	36	22						
23	46	29	38	6	26	33	27	0				0.0	0.00	28.79	29.97	9.4	27	13.2	26	28	23	30	23						
24	36	21	29	-3	18	25	36	0				0.0	0.00	29.02	30.21	10.1	33	10.3	20	34	17	33	24						
25	30	12	21	-10	13	20	44	0				0.0	0.00	29.17	30.38	4.0	33	4.9	18	33	15	33	25						
26	31	13	22	-9	15	20	43	0	BR			0.0	0.00	29.22	30.44	6.5	36	7.2	15	01	12	01	26						
27	27	14	21*	-9	13	18	44	0	HZ			0.0	0.00	29.16	30.38	3.9	24	6.1	20	26	14	26	27						
28	37	13	25	-5	19	24	40	0	BR HZ			0.0	0.00	28.87	30.07	10.6	21	10.9	26	22	23	22	28						
29	46	36	41	12	27	36	24	0	SN			T	T	28.40	29.56	18.2	27	19.2	38	30	31	29	29						
30	36	10*	23	-6	8	18	42	0	SN			T	T	28.79	29.98	18.5	31	18.9	39*	30	32*	33	30						
42.6 26.2 34.4 ■■										26.5 31.5 30.4 0.0		< MONTHLY AVERAGES TOTALS->			T	0.17	28.83	30.01	4.4	27	9.5	<- MONTHLY AVERAGES							
-1.0 -1.6 -1.3 ■■										<-----DEPARTURE FROM NORMAL----->										-2.32		SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3							
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.12 DATE :18				SEA LEVEL PRESSURE DATE TIME																
MONTHLY TOTAL DEPARTURE									GREATEST 24-HR SNOWFALL: T DATE :30+				MAXIMUM : 30.47 26 0955																
SEASON TO DATE TOTAL DEPARTURE									GREATEST SNOW DEPTH: DATE :				MINIMUM : 29.21 10 0155																
HEATING: 911 32 1615 84									NUMBER OF DAYS WITH →				MAXIMUM TEMP ≥ 90: 0				PRECIPITATION ≥ 0.01 INCH : 3												
COOLING: 0 0 767 111									MAXIMUM TEMP ≤ 32 : 3				MINIMUM TEMP ≤ 0 : 0				PRECIPITATION ≥ 0.10 INCH : 1												
									THUNDERSTORMS : 0				HEAVY FOG : 1				SNOWFALL ≥ 1.0 INCH : 0												

NOVEMBER 2002  
DUBUQUE, IA

# HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

DUBUQUE, IA

NOVEMBER 2002

DBQ

WBAN # 94908

DATE	FOR HOUR (LST) ENDING AT												DATE	FOR HOUR (LST) ENDING AT												DATE	Sum if Different (See Note)	2400 LST
	1	2	3	4	5	6	7	8	9	10	11	12		13	14	15	16	17	18	19	20	21	22	23	24			Water Equiv.
01													01												01			0.00
02													02												02			0.00
03													03												03			0.00
04													04	T	T										04			0.00
05									T	T		T	05												05			T
06													06												06			0.00
07													07												07			0.00
08													08												08			0.00
09													09												09			0.00
10													10												10			0.00
11				T	0.01	0.01	0.01	T					11												11			0.03
12													12												12			0.00
13													13												13			0.00
14													14												14			0.00
15													15												15			0.00
16					T		T	T	T	T	T	T	16	T											16			T
17													17												17			0.00
18													18		0.02	0.01	T	0.02	0.06	0.01	T				18			0.12
19													19												19			0.00
20													20												20			0.00
21					T	T	0.01	0.01	T	T	T		21												21			0.02
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													28												28			0.00
29					T	T	T	T	T	T	T	T	29												29	T		T
30													30	T											30			T

## MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.02	.03	.04	.04	.05	.06	.07	.08	.08	.08	.09	.09
Ending Date	18	18	18	18	18	18	18	18	18	18	18	18
Ending Time (Hour/Min)	1733	1738	1738	1738	1738	1738	1738	1738	1738	1836	1836	1836

Date and time are not entered for TRACE amounts.

Note : The sum of the hourly totals is given when it differs from the daily total. NWS does not edit ASOS hourly values but may edit daily and monthly totals. Hourly, daily, and monthly totals are printed as reported by the ASOS site.

\* = Extreme for the month (last occurrence if more than one)  
T = Trace precipitation amount  
+ = also occurs on earlier date  
FG+ = Heavy fog, visibility .25 miles or less  
BLANK entries denote missing or unreported data

Wind direction is recorded in tens of degrees (2 digits) clockwise from true north. '00' = calm, 'VR' = variable.

Water Equivalent of snow on the ground is reported only when the depth is 2 or more inches.

## WEATHER NOTATIONS

**DUBUQUE, IA  
NOVEMBER 2002**

Satellite data are used to derive cloudiness above 12,000 feet. Effective Cloud Amount is based on the cloud cover and the transparency of the clouds within the satellite field of view (approx. 31x31 miles).

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.

A Heating (Cooling) Degree Day is the difference between the average daily temperature and 65 degrees F. The HDD season begins July 1, the CDD season begins January 1.

Dew Point is the temperature to which the air must be cooled to achieve 100% relative humidity. Wet Bulb is the temperature the air would have if cooled to saturation at constant pressure by evaporation of water into it.

Snow Depth, Snowfall, and Sunshine data may come from nearby sites that the National Weather Service deems Climatologically representative of this site.

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR-SS		MN-MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							10.00	10.00	
02							10.00	10.00	
03							5.00	10.00	
04							5.00	8.00	
05							1.25	6.00	
06							4.00	10.00	
07							3.00	10.00	
08							10.00	10.00	
09							5.00	10.00	
10							.25	10.00	
11							3.00	10.00	
12							5.00	10.00	
13							.50	10.00	
14							5.00	10.00	
15							6.00	10.00	
16							5.00	10.00	
17							7.00	10.00	
18							2.00	10.00	
19							5.00	10.00	
20							7.00	10.00	
21							.75	10.00	
22							10.00	10.00	
23							9.00	10.00	
24							10.00	10.00	
25							8.00	10.00	
26							6.00	10.00	
27							6.00	10.00	
28							4.00	10.00	
29							10.00	10.00	
30							6.00	10.00	
<b>MONTHLY AVGS</b>							5.66	9.80	
<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">1                      7                      11</p>									

## OBSERVATIONS AT 3-HOURLY INTERVALS

DUBUQUE, IA

NOVEMBER 2002

DBQ

WBAN # 94908

HOUR (LST)				SATELLITE		WEATHER	TEMPERATURE °F				WIND	PRESSURE (INCHES, HG)		HOUR (LST)				SATELLITE		WEATHER	TEMPERATURE °F				WIND	PRESSURE (INCHES, HG)				
	SKY COVER	CEILING	100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB		RELATIVE HUMIDITY (PCT)	SPEED (MPH)		DIRECTION TENS OF DEG	STATION	SEA LEVEL	OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>		VISIBILITY (MILES)	DRY BULB	DEW POINT	WET BULB		RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
				SUNRISE: 0636			NOV 01	SUNSET: 1656										SUNRISE: 0644			NOV 07	SUNSET: 1649								
03	CLR	NC				10.00		22	17	20	82	8	30	29.09	30.30	03	CLR	NC			3.00	BR	28	26	27	92	3	18	28.94	30.12
06	CLR	NC				10.00		21	17	20	85	9	29	29.13	30.34	06	CLR	NC			4.00	BR	29	27	28	92	8	18	28.90	30.09
09	CLR	NC				10.00		25	19	23	78	10	28	29.16	30.37	09	CLR	NC			4.00	BR	37	33	35	86	15	18	28.86	30.04
12	CLR	NC				10.00		34	18	29	52	17	28	29.14	30.34	12	CLR	NC			10.00		53	37	46	55	18	20	28.78	29.95
15	CLR	NC				10.00		37	17	30	44	17	28	29.09	30.29	15	CLR	NC			10.00		60	37	49	42	21	20	28.63	29.80
18	CLR	NC				10.00		31	17	26	56	8	26	29.08	30.28	18	CLR	NC			10.00		53	38	46	57	17	19	28.58	29.74
21	CLR	NC				10.00		30	18	26	61	13	26	29.06	30.26	21	CLR	NC			10.00		51	39	45	64	14	20	28.56	29.71
24	CLR	NC				10.00		28	19	25	69	16	28	29.02	30.22	24	CLR	NC			10.00		50	39	45	66	16	21	28.51	29.65
				SUNRISE: 0637			NOV 02	SUNSET: 1655											SUNRISE: 0645			NOV 08	SUNSET: 1648							
03	CLR	NC				10.00		27	19	24	72	13	28	29.00	30.19	03	CLR	NC			10.00		50	38	44	63	17	21	28.48	29.62
06	CLR	NC				10.00		25	17	22	72	10	26	28.98	30.18	06	CLR	NC			10.00		48	39	44	71	15	21	28.47	29.61
09	CLR	NC				10.00		31	18	27	59	14	28	28.99	30.19	09	CLR	NC			10.00		51	40	46	66	18	21	28.49	29.63
12	CLR	NC				10.00		41	23	34	49	15	27	28.95	30.14	12	CLR	NC			10.00		59	41	50	51	14	22	28.44	29.58
15	CLR	NC				10.00		43	22	35	43	15	25	28.92	30.11	15	CLR	NC			10.00		63	42	52	47	16	19	28.39	29.53
18	CLR	NC				10.00		33	22	29	64	6	25	28.94	30.14	18	CLR	NC			10.00		53	41	47	64	12	16	28.38	29.52
21	CLR	NC				10.00		29	22	27	75	5	22	28.94	30.13	21	SCT	NC			10.00		50	40	45	68	5	19	28.39	29.53
24	CLR	NC				10.00		26	22	25	84	7	21	28.94	30.13	24	CLR	NC			10.00		44	37	41	76	7	18	28.36	29.51
				SUNRISE: 0639			NOV 03	SUNSET: 1654											SUNRISE: 0646			NOV 09	SUNSET: 1647							
03	CLR	NC				9.00		25	21	24	85	7	21	28.92	30.10	03	CLR	NC			10.00		44	38	41	79	10	18	28.34	29.48
06	CLR	NC				7.00		23	20	22	88	5	20	28.91	30.10	06	CLR	NC			10.00		46	42	44	86	14	18	28.32	29.47
09	FEW	NC				5.00	BR	31	29	30	92	7	23	28.91	30.10	09	CLR	NC			10.00		53	48	50	83	16	19	28.33	29.48
12	OVC	055				8.00		39	29	35	67	13	22	28.87	30.05	12	CLR	NC			10.00		61	53	57	75	17	20	28.29	29.42
15	OVC	047				10.00		41	30	36	65	16	23	28.82	30.00	15	FEW	NC			10.00		63	53	57	70	15	16	28.21	29.34
18	OVC	037				10.00		38	31	35	76	10	23	28.83	30.01	18	OVC	044			9.00		59	53	56	81	8	15	28.20	29.33
21	CLR	NC				8.00		30	27	29	88	6	21	28.82	30.01	21	OVC	075			6.00	BR	57	54	55	90	14	15	28.16	29.29
24	CLR	NC				8.00		31	26	29	82	6	30	28.85	30.03	24	CLR	NC			5.00	BR	52	51	51	97	6	17	28.12	29.24
				SUNRISE: 0640			NOV 04	SUNSET: 1653											SUNRISE: 0647			NOV 10	SUNSET: 1646							
03	CLR	NC				7.00		28	24	27	85	12	31	28.90	30.09	03	CLR	NC			1.75	BR	48	48	48	100	7	20	28.10	29.23
06	OVC	020				7.00		30	25	28	82	8	35	28.92	30.11	06	CLR	NC			2.00	BR	48	48	48	100	3	21	28.15	29.28
09	OVC	020				7.00		32	24	29	73	6	01	28.99	30.19	09	CLR	NC			2.00	BR	50	50	50	100	12	29	28.20	29.34
12	SCT	NC				7.00		33	24	30	70	5	25	28.98	30.18	12	CLR	NC			10.00		56	47	51	72	12	29	28.26	29.39
15	CLR	NC				7.00		37	26	33	65	6	19	28.92	30.11	15	CLR	NC			10.00		55	43	49	64	13	26	28.27	29.41
18	CLR	NC				6.00	HZ	28	23	26	81	0	00	28.92	30.12	18	CLR	NC			9.00		37	31	35	79	17	27	28.37	29.52
21	CLR	NC				5.00	BR	27	23	26	85	0	00	28.89	30.08	21	OVC	028			10.00		37	32	35	82	15	28	28.41	29.57
24	FEW	NC				5.00	BR	30	27	29	88	0	00	28.87	30.05	24	OVC	026			10.00		36	31	34	82	17	27	28.44	29.59
				SUNRISE: 0641			NOV 05	SUNSET: 1651											SUNRISE: 0649			NOV 11	SUNSET: 1645							
03	OVC	110				6.00	BR	31	28	30	89	5	32	28.81	29.99	03	OVC	008			3.00	BR	34	33	34	97	9	27	28.51	29.67
06	OVC	070				5.00	BR	32	29	31	88	3	04	28.72	29.91	06	OVC	006			6.00	-RA BR	35	34	35	96	8	33	28.59	29.75
09	OVC	039				2.00	UP BR	34	32	33	92	5	12	28.68	29.86	09	OVC	024			9.00		38	37	38	97	7	35	28.71	29.88
12	OVC	006				1.75	UP BR	37	34	36	89	0	00	28.62	29.80	12	OVC	017			10.00		39	34	37	82	9	33	28.81	29.98
15	OVC	006				1.25	BR	37	36	37	96	6	33	28.59	29.75	15	OVC	019			10.00		37	31	35	79	5	31	28.89	30.07
18	OVC	006				3.00	BR	36	34	35	93	9	32	28.61	29.79	18	OVC	027			10.00		36	31	34	82	5	31	28.95	30.14
21	OVC	008				4.00	BR	34	33	34	97	9	33	28.65	29.83	21	OVC	021			10.00		35	30	33	82	9	27	29.01	30.19
24	OVC	021				5.00	BR	36	34	35	93	7	29	28.69	29.87	24	OVC	019			10.00		32	26	30	79	7	28	29.04	30.22
				SUNRISE: 0642			NOV 06	SUNSET: 1650											SUNRISE: 0650			NOV 12	SUNSET: 1644							
03	OVC	010				4.00	BR	36	35	36	97	8	29	28.72	29.90	03	OVC	017			8.00		32	25	29	75	3	28	29.06	30.25
06	OVC	017				6.00	BR	37	34	36	89	9	28	28.76	29.94	06	BKN	021			10.00		29	25	28	85	7	26	29.07	30.27
09	OVC	012																												

## OBSERVATIONS AT 3-HOURLY INTERVALS

DUBUQUE, IA

NOVEMBER 2002

DBQ

WBAN # 94908

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: 0651 NOV 13 SUNSET: 1643						SUNRISE: 0659 NOV 19 SUNSET: 1638																							
03	CLR	NC			6.00	BR	33	31	32	92	0	00	28.92	30.11	03	CLR	NC			5.00	BR	28	27	28	96			28.84	30.02
06	CLR	NC			10.00		27	27	27	100	0	00	28.93	30.12	06	CLR	NC			9.00		28	25	27	88	7	20	28.85	30.03
09	CLR	NC			8.00		38	35	37	89	6	14	28.92	30.10	09	CLR	NC			10.00		34	30	32	85	9	22	28.86	30.04
12	CLR	NC			8.00		49	36	43	61	13	18	28.83	30.00	12	CLR	NC			10.00		47	35	42	63	14	23	28.84	30.01
15	FEW	NC			10.00		52	34	44	50	17	19	28.72	29.89	15	CLR	NC			10.00		48	36	43	63	14	24	28.82	29.99
18	SCT	NC			10.00		52	32	43	47	16	21	28.66	29.83	18	CLR	NC			10.00		37	33	35	86	6	21	28.86	30.04
21	BKN	085			10.00		48	34	42	58	10	21	28.66	29.83	21	BKN	120			10.00		36	32	34	86	6	21	28.86	30.05
24	CLR	NC			10.00		40	33	37	77	6	22	28.67	29.83	24	OVC	110			9.00		36	31	34	82	0	00	28.86	30.03
SUNRISE: 0652 NOV 14 SUNSET: 1642						SUNRISE: 0660 NOV 20 SUNSET: 1637																							
03	FEW	NC			10.00		36	32	34	86	7	22	28.66	29.83	03	OVC	100			10.00		36	32	34	86	0	00	28.83	29.99
06	CLR	NC			10.00		39	34	37	82	3	03	28.69	29.85	06	OVC	110			10.00		35	32	34	89	0	00	28.81	29.99
09	CLR	NC			8.00		39	35	37	86	7	33	28.75	29.92	09	BKN	065			10.00		39	36	38	89	0	00	28.82	29.99
12	OVC	015			6.00	HZ	41	35	38	79	8	01	28.74	29.91	12	OVC	070			10.00		50	39	45	66	7	23	28.78	29.95
15	OVC	017			5.00	HZ	39	33	37	79	10	03	28.74	29.92	15	CLR	NC			10.00		53	34	44	49	8	24	28.74	29.91
18	OVC	019			7.00		37	31	35	79	8	36	28.78	29.96	18	OVC	095			10.00		43	35	40	74	0	00	28.75	29.93
21	OVC	017			9.00		35	30	33	82	7	36	28.80	29.98	21	CLR	NC			10.00		42	35	39	76	12	32	28.75	29.92
24	OVC	017			10.00		34	29	32	82	8	35	28.84	30.01	24	CLR	NC			10.00		39	33	37	79	14	33	28.74	29.91
SUNRISE: 0654 NOV 15 SUNSET: 1641						SUNRISE: 0701 NOV 21 SUNSET: 1636																							
03	OVC	029			10.00		33	27	31	78	9	01	28.85	30.03	03	OVC	095			8.00		36	32	34	86	7	36	28.69	29.86
06	OVC	017			10.00		31	26	29	82	7	01	28.89	30.07	06	OVC	018			3.00	-SN BR	34	32	33	92	6	35	28.67	29.85
09	SCT	NC			10.00		32	24	29	73	10	04	28.95	30.14	09	OVC	003			1.75	-SN BR	33	33	33	100	10	36	28.69	29.87
12	SCT	NC			10.00		35	24	31	64	12	04	28.98	30.17	12	OVC	034			10.00		35	31	33	85	16	35	28.73	29.91
15	OVC	110			10.00		35	21	30	57	8	02	28.99	30.19	15	OVC	042			10.00		37	27	33	67	23	34	28.80	29.98
18	OVC	065			10.00		32	21	28	64	7	35	29.04	30.24	18	OVC	048			10.00		36	28	33	73	15	33	28.87	30.05
21	OVC	070			10.00		31	20	27	64	6	03	29.07	30.26	21	OVC	048			10.00		35	29	33	78	12	33	28.88	30.06
24	OVC	030			10.00		30	21	27	69	6	01	29.08	30.27	24	OVC	044			10.00		35	24	31	64	14	33	28.88	30.06
SUNRISE: 0655 NOV 16 SUNSET: 1640						SUNRISE: 0702 NOV 22 SUNSET: 1636																							
03	OVC	027			10.00		30	24	28	79	8	03	29.07	30.26	03	OVC	040			10.00		32	18	27	56	12	36	28.91	30.09
06	OVC	015			7.00		29	27	28	92	8	04	29.07	30.27	06	CLR	NC			10.00		27	20	25	75	9	34	28.94	30.13
09	OVC	012			5.00	-SN BR	30	27	29	88	7	05	29.08	30.28	09	CLR	NC			10.00		30	19	26	64	13	36	28.96	30.16
12	OVC	018			7.00	-SN	31	24	28	76	8	09	29.06	30.26	12	CLR	NC			10.00		35	20	30	54	7	01	28.95	30.14
15	OVC	029			10.00		32	23	29	69	3	VR	29.02	30.22	15	CLR	NC			10.00		36	20	30	52	5	25	28.92	30.11
18	OVC	060			10.00		30	24	28	79	5	36	29.01	30.21	18	CLR	NC			10.00		29	20	26	69	0	00	28.91	30.10
21	OVC	055			10.00		29	23	27	78	5	03	29.00	30.20	21	SCT	NC			10.00		31	22	28	69	8	20	28.87	30.05
24	OVC	050			10.00		28	22	26	78	7	03	28.98	30.17	24	OVC	075			10.00		32	23	29	69	12	19	28.83	30.01
SUNRISE: 0656 NOV 17 SUNSET: 1639						SUNRISE: 0703 NOV 23 SUNSET: 1635																							
03	OVC	048			9.00		27	22	25	81	7	03	28.95	30.15	03	OVC	065			10.00		34	24	30	67	17	19	28.73	29.91
06	CLR	NC			7.00		21	18	20	88	6	01	28.95	30.15	06	CLR	NC			10.00		33	26	30	75	12	20	28.71	29.90
09	CLR	NC			8.00		27	22	25	81	6	04	28.96	30.16	09	CLR	NC			10.00		35	28	32	76	13	29	28.75	29.93
12	CLR	NC			10.00		33	16	27	49	9	03	28.92	30.11	12	CLR	NC			10.00		45	30	39	56	21	30	28.77	29.94
15	CLR	NC			10.00		35	17	29	48	0	00	28.88	30.07	15	CLR	NC			10.00		45	26	37	48	18	29	28.77	29.95
18	CLR	NC			9.00		27	16	23	63	5	11	28.88	30.08	18	CLR	NC			10.00		38	26	33	62	13	28	28.83	30.01
21	CLR	NC			10.00		25	17	22	72	7	14	28.88	30.08	21	BKN	120			10.00		35	26	32	70	12	29	28.88	30.06
24	CLR	NC			10.00		25	18	23	75	8	18	28.87	30.06	24	SCT	NC			10.00		35	25	31	67	8	30	28.91	30.08
SUNRISE: 0657 NOV 18 SUNSET: 1638						SUNRISE: 0705 NOV 24 SUNSET: 1634																							
03	CLR	NC			10.00		28	19	25	69	13	16	28.83	30.01	03	BKN	120			10.00		34	22	30	61	10	30	28.93	30.12
06	OVC	120			9.00		30	22	27	72	9	15	28.80	29.99	06	OVC	090			10.00		32	21	28	64	8	33	28.95	30.14
09	SCT	NC			6.00	HZ	33	27	31	78	10	15	28.79	29.98	09	OVC	090			10.00		30	17	26	59	9	34	29.01	30.20
12	FEW	NC			6.00	HZ	37	30	34	76	10	16	28.78	29.97	12	BKN	043			10.00		30	17	26	59	10	34	29.01	30.20
15	BKN	065			3.00	BR	37	35	36	93	3	14	28.75	29.93	15	OVC	041			10.00		29	15	25	56	10	34	29.02	30.21
18	OVC	040			2.50	BR	36	36	36	100	0	00	28.80	29.99	18	OVC	100			10.00		27	15	23	61	8	33	29.05	30.25
21	OVC	042			5.00	BR	36	34	35	93	9	29	28.82	30.00	21	FEW	NC			10.00		25	16	22	69	8	34	29.09	30.29
24	CLR	NC			6.00	BR	30	29	30	96	6	27	28.83	30.01	24	OVC	029			10.00		25	15	22	66	14	33	29.10	30.30

## OBSERVATIONS AT 3-HOURLY INTERVALS

DUBUQUE, IA

NOVEMBER 2002

DBQ

WBAN # 94908

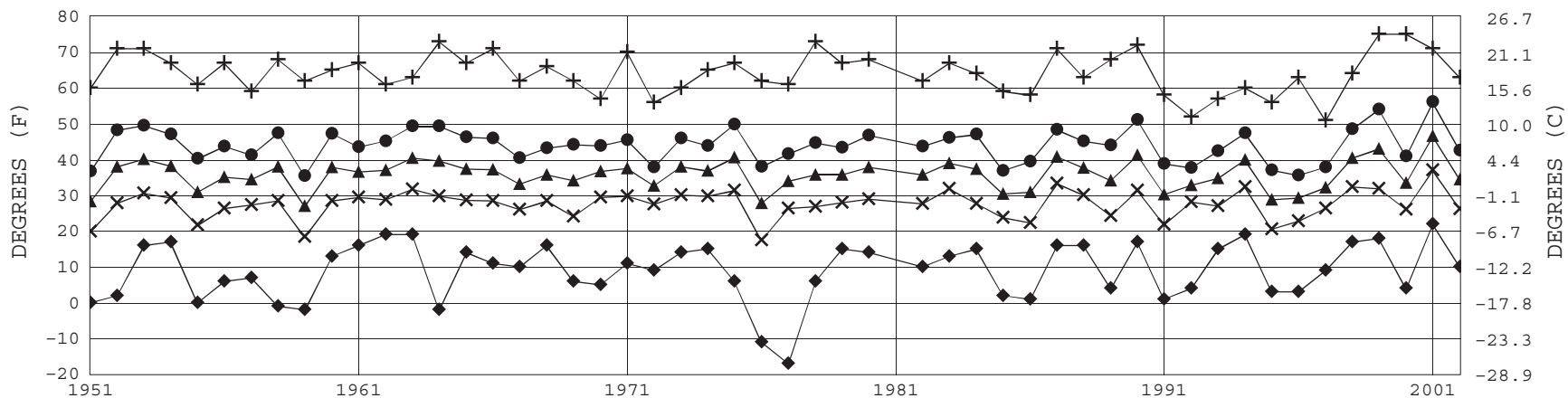
HOUR (LST)	SKY COVER		CEILING 100'S OFFT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F			RELATIVE HUMIDITY (PCT)	WIND		PRESSURE (INCHES,HG)	
				OBSERVATION TIME (LST)	EFF CLD AMT <i>Oktas</i>			DRY BULB	DEW POINT	WET BULB		SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
03	CLR	NC				10.00		19	14	18	81	7	31	29.12	30.33
06	OVC	028				10.00		23	14	20	68	13	33	29.14	30.35
09	OVC	026				10.00		24	14	21	65	12	32	29.18	30.39
12	FEW	NC				10.00		28	14	24	56	8	30	29.17	30.38
15	CLR	NC				10.00		28	14	24	56	0	00	29.15	30.36
18	CLR	NC				10.00		19	12	17	74	0	00	29.18	30.40
21	CLR	NC				10.00		16	11	15	80	0	00	29.20	30.42
24	CLR	NC				8.00		12	7	11	80	6	03	29.20	30.42
SUNRISE: 0706 NOV 25 SUNSET: 1634															
03	CLR	NC				6.00	BR	17	15	17	92	5	03	29.22	30.43
06	BKN	110				6.00	BR	18	15	17	88	7	02	29.22	30.43
09	CLR	NC				8.00		21	18	20	88	6	01	29.23	30.45
12	FEW	NC				10.00		27	17	24	66	12	33	29.23	30.45
15	CLR	NC				10.00		30	16	25	56	8	03	29.19	30.40
18	CLR	NC				10.00		22	14	20	71	8	32	29.21	30.43
21	CLR	NC				10.00		20	14	18	78	8	33	29.23	30.45
24	CLR	NC				10.00		20	12	18	71	5	34	29.22	30.43
SUNRISE: 0707 NOV 26 SUNSET: 1633															
03	CLR	NC				10.00		19	12	17	74	5	34	29.21	30.42
06	OVC	036				10.00		20	15	19	81	6	30	29.22	30.43
09	OVC	035				10.00		22	17	20	82	0	00	29.21	30.43
12	SCT	NC				10.00		25	12	21	58	9	22	29.18	30.39
15	OVC	028				8.00		25	13	21	60	9	25	29.13	30.34
18	CLR	NC				7.00		16	11	15	80	6	19	29.11	30.33
21	CLR	NC				7.00		18	14	17	84	6	20	29.12	30.34
24	CLR	NC				6.00	HZ	15	9	14	77	6	18	29.09	30.30
SUNRISE: 0708 NOV 27 SUNSET: 1633															
03	FEW	NC				5.00	BR	14	10	13	84	5	19	29.04	30.26
06	OVC	031				5.00	BR	20	16	19	85	7	19	29.02	30.24
09	CLR	NC				4.00	BR	23	19	22	85	9	20	28.98	30.20
12	CLR	NC				8.00		32	21	28	64	13	22	28.92	30.11
15	CLR	NC				8.00		35	20	30	54	16	24	28.84	30.04
18	CLR	NC				9.00		30	21	27	69	12	20	28.77	29.97
21	CLR	NC				10.00		34	22	30	61	23	22	28.63	29.82
24	CLR	NC				10.00		36	25	32	64	18	21	28.52	29.69
SUNRISE: 0709 NOV 28 SUNSET: 1632															
03	CLR	NC				10.00		38	30	35	73	17	24	28.40	29.57
06	CLR	NC				10.00		39	33	37	79	16	26	28.40	29.56
09	CLR	NC				10.00		40	30	36	68	17	27	28.39	29.55
12	SCT	NC				10.00		46	27	38	47	25	27	28.37	29.53
15	CLR	NC				10.00		44	26	37	49	18	26	28.39	29.55
18	BKN	065				10.00		41	25	35	53	17	26	28.39	29.55
21	SCT	NC				10.00		42	23	35	47	21	29	28.41	29.57
24	OVC	085				10.00		36	22	31	57	29	29	28.41	29.57
SUNRISE: 0710 NOV 29 SUNSET: 1632															
03	CLR	NC				10.00		38	30	35	73	17	24	28.40	29.57
06	CLR	NC				10.00		39	33	37	79	16	26	28.40	29.56
09	CLR	NC				10.00		40	30	36	68	17	27	28.39	29.55
12	SCT	NC				10.00		46	27	38	47	25	27	28.37	29.53
15	CLR	NC				10.00		44	26	37	49	18	26	28.39	29.55
18	BKN	065				10.00		41	25	35	53	17	26	28.39	29.55
21	SCT	NC				10.00		42	23	35	47	21	29	28.41	29.57
24	OVC	085				10.00		36	22	31	57	29	29	28.41	29.57
SUNRISE: 0711 NOV 30 SUNSET: 1632															
03	OVC	037				10.00		27	16	23	63	30	31	28.52	29.69
06	OVC	043				9.00		24	13	21	62	22	31	28.66	29.84
09	OVC	039				8.00	-SN	24	13	21	62	21	32	28.74	29.93
12	OVC	034				9.00	-SN	23	11	20	60	24	30	28.80	29.99
15	SCT	NC				10.00		23	6	19	48	22	32	28.86	30.06
18	CLR	NC				10.00		19	-4	14	36	15	33	28.93	30.14
21	CLR	NC				10.00		16	-4	12	41	13	31	28.99	30.21
24	CLR	NC				10.00		10	-1	8	61	6	22	28.98	30.19

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.

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			32	26	30	78	28.82	30.00	8.80	9
02			31	25	29	79	28.82	30.00	8.60	9
03			31	25	29	81	28.82	30.00	8.03	9
04			30	25	28	83	28.82	30.00	7.97	9
05			30	26	29	84	28.82	30.01	7.74	8
06			30	26	29	83	28.83	30.01	8.07	8
07			30	26	28	84	28.83	30.02	7.81	8
08			31	27	29	84	28.84	30.03	6.96	9
09			33	28	31	80	28.85	30.04	7.62	10
10			36	28	33	74	28.86	30.04	8.08	11
11			38	28	34	69	28.85	30.03	8.53	11
12			39	28	35	65	28.84	30.02	8.93	12
13			40	27	35	61	28.82	30.00	9.13	12
14			41	27	36	60	28.81	29.99	9.04	12
15			41	27	36	60	28.81	29.99	8.97	11
16			40	27	35	62	28.81	29.99	8.89	10
17			37	27	33	68	28.82	30.00	8.90	8
18			35	26	32	71	28.82	30.01	8.95	8
19			34	26	31	72	28.83	30.01	9.03	8
20			34	26	31	74	28.83	30.02	9.02	8
21			34	26	31	75	28.83	30.01	9.13	9
22			33	26	30	76	28.83	30.01	9.07	8
23			32	25	30	75	28.83	30.01	9.00	9
24			32	25	29	77	28.82	30.00	8.93	9



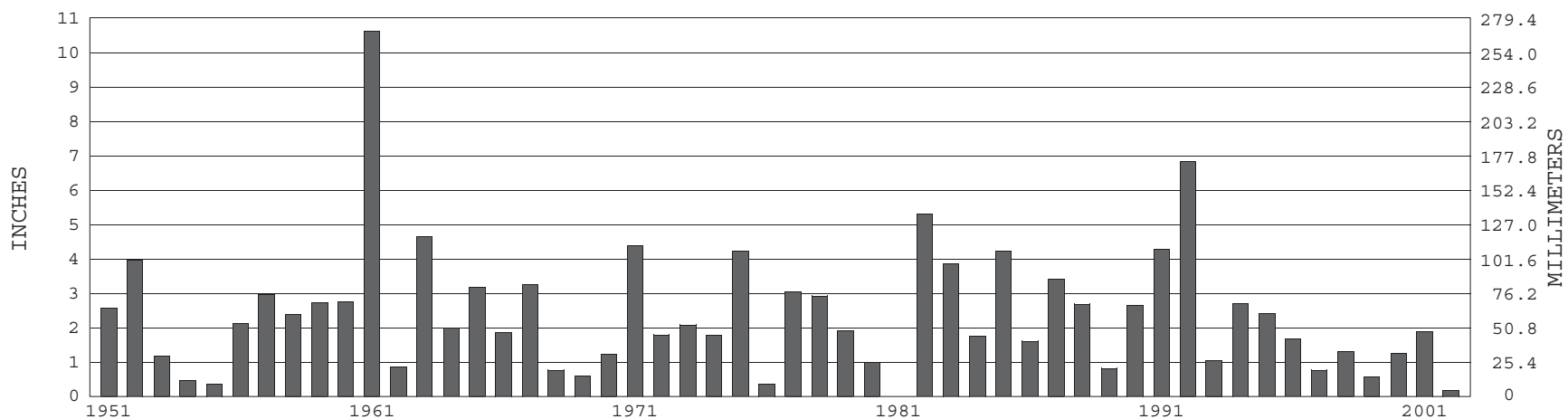
# DUBUQUE, IA NOVEMBER TEMPERATURES



+ Extreme Max.    ● Mean Max.    ▲ Mean    × Mean Min.    ◆ Extreme Min.

Long-Term (1951-2002) Mean: 35.1    1961-1990 Normal: 35.7

# DUBUQUE, IA NOVEMBER PRECIPITATION



Long-Term (1951-2002) Mean Monthly Total: 2.41

1961-1990 Normal: 2.49



NOVEMBER 2002

DUBUQUE, IA

# 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.*

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