



MARCH 2003

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			
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	33	21	27	-2	23	27	38	0	SN BR HZ			0.1	0.01	28.78	29.97	5.3	23	6.3	16	26	13	26	01	
02	30	8	19	-10	6	16	46	0	SN BR HZ			0.1	T	28.87	30.07	11.6	33	12.3	26	30	23	34	02	
03	29	11	20	-10	12	18	45	0	SN BR			1.0	0.05	28.73	29.94	10.7	18	11.8	30	18	24	18	03	
04	29	11	20	-10	14	16	45	0	SN FG+ FZFG BR			5.7	0.27	28.69	29.89	10.4	01	11.1	25	01	21	02	04	
05	20	5	13	-17	1	11	52	0	SN BR UP			T	T	28.80	30.02	8.1	02	8.6	25	02	21	01	05	
06	25	12	19	-12	13	18	46	0				0.0	0.00	28.80	30.01	11.2	16	11.6	31	17	25	17	06	
07	34	15	25	-6	23	26	40	0	SN BR HZ			T	T	28.79	29.98	6.7	23	9.0	22	19	18	20	07	
08	25	5	15	-16	12	16	50	0	SN FZFG BR UP			0.5	0.03	28.81	30.01	10.9	35	11.9	33	02	25	01	08	
09	9	-2	4*	-28	-9	2	61	0				0.0	0.00	29.11	30.35	14.9	29	15.6	30	29	24	28	09	
10	15	-5*	5	-27	-3	5	60	0				0.0	0.00	29.08	30.32	5.3	25	6.9	15	26	12	21	10	
11	38	14	26	-7	18	24	39	0	HZ			0.0	0.00	28.72	29.92	13.4	20	13.6	31	21	26	22	11	
12	44	27	36	3	28	32	29	0	BR HZ			0.0	0.00	28.77	29.95	8.1	05	10.1	22	05	20	04	12	
13	40	27	34	1	24	29	31	0	BR HZ			0.0	0.00	29.05	30.24	7.0	07	10.6	26	03	22	04	13	
14	48	26	37	3	30	33	28	0	BR HZ			0.0	0.00	28.91	30.10	12.3	18	12.5	22	18	18	19	14	
15	56	34	45	11	39	41	20	0	BR HZ			0.0	0.00	28.72	29.89	12.4	18	12.6	22	18	18	19	15	
16	67	37	52	17	46	49	13	0	BR HZ			0.0	0.00	28.57	29.73	12.4	18	12.6	22	17	18	16	16	
17	73*	42	58*	23	47	51	7	0	BR HZ			0.0	0.00	28.54	29.69	5.6	16	8.0	18	05	16	06	17	
18	51	40	46	10	42	44	19	0	FG+ BR HZ			0.0	0.00	28.68	29.84	16.7	05	16.8	29	06	24	04	18	
19	42	34	38	2	35	37	27	0	RA FG BR UP HZ			0.0	0.30	28.57	29.73	18.2	05	18.4	32	05	28	04	19	
20	48	38	43	7	41	42	22	0	RA FG+ BR			0.0	T	28.50	29.66	7.2	36	8.4	18	31	15	31	20	
21	41	33	37	0	33	35	28	0	RA BR			0.0	T	28.57	29.74	15.2	28	15.5	35	28	29	28	21	
22	54	34	44	7	36	40	21	0	BR HZ			0.0	0.00	28.74	29.91	8.2	29	8.7	21	28	18	28	22	
23	66	31	49	11	33	42	16	0	BR			0.0	0.00	28.71	29.87	10.6	19	11.0	26	20	21	19	23	
24	65	46	56	18	36	46	9	0	RA			0.0	T	28.64	29.78	4.3	29	12.2	25	17	22	33	24	
25	56	32	44	6	28	38	21	0				0.0	0.00	28.81	29.97	8.3	31	9.4	25	31	23	30	25	
26	55	29	42	3	31	39	23	0	RA			0.0	0.08	28.79	29.95	4.0	01	7.3	18	27	16	27	26	
27	59	41	50	11	35	43	15	0	RA BR			0.0	0.05	28.52	29.67	11.7	13	13.5	36*	13	29*	15	27	
28	47	34	41	1	34	37	24	0	RA SN BR			T	0.11	28.52	29.67	11.2	31	12.5	26	32	23	32	28	
29	38	24	31	-9	22	28	34	0	SN BR			T	T	28.98	30.17	10.9	33	11.2	26	33	22	33	29	
30	45	20	33	-8	19	28	32	0				0.0	0.00	29.05	30.25	6.6	28	7.7	26	29	22	29	30	
31	54	26	40	-1	27	36	25	0	RA			0.0	T	28.75	29.93	10.7	18	10.9	29	20	24	19	31	

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43.1	24.2	33.7	■ ■	25.0	30.6	31.2	0.0	< MONTHLY AVERAGES	TOTALS->	7.4	0.90	28.76	29.94	1.2	27	11.3	<- MONTHLY AVERAGES										
- .2				-2.0				-1.1				■ ■				->				-1.67				SUNSHINE, CLOUD, & VISIBILITY TABLES ON PAGE 3			
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 0.30 DATE :19			GREATEST 24-HR SNOWFALL: 5.7 DATE :04			GREATEST SNOW DEPTH:			SEA LEVEL PRESSURE		DATE		TIME					
MONTHLY TOTAL DEPARTURE			SEASON TO DATE TOTAL DEPARTURE			NUMBER OF DAYS WITH			MAXIMUM TEMP ≥ 90: 0			MAXIMUM TEMP ≤ 32 : 8			MINIMUM TEMP ≤ 32 : 20			MINIMUM TEMP ≤ 0 : 2			PRECIPITATION ≥ 0.01 INCH : 8		PRECIPITATION ≥ 0.10 INCH : 3		SNOWFALL ≥ 1.0 INCH : 2		
HEATING: 966			17			6477			9			0			0			0									
COOLING: 0			0			0			0			0			0			0									

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

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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	T	0.01	
02													02												02	T	T	
03													03												03	T	0.05	
04													04												04	0.07	0.27	
05	T	T	T	T	T	T							05	T	T	T	0.01	0.02	0.01	0.01	0.01	T	0.01	T	T		T	
06													06												06		0.00	
07													07												07		T	
08													08												08	T	0.03	
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													17												17		0.00	
18													18												18		0.00	
19													19												19		0.30	
20													20	0.05	0.02	0.01	T	0.14	0.01	0.01				20		T		
21													21												21		T	
22													22												22		0.00	
23													23												23		0.00	
24													24												24		T	
25													25												25		0.00	
26													26												26		0.08	
27													27												27		0.05	
28													28												28		0.11	
29													29												29		T	
30													30												30		0.00	
31													31												31		T	

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.05	.08	.09	.10	.12	.14	.14	.14	.15	.16	.16	.16
Ending Date	19	19	19	19	19	19	19	19	19	19	19	19
Ending Time (Hour/Min)	1621	1624	1628	1628	1637	1648	1648	1648	1743	1804	1804	1804

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.

REFERENCE NOTES & SUPPLEMENTAL SUMMARIES

* = 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

Resultant wind is the vector sum of the wind speeds and directions divided by the number of observations.

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

Precipitation is for the 24-hour period ending at the time indicated in the column heading.

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

NORMALS ARE FOR THE YEARS 1971–2000

WEATHER NOTATIONS

QUALIFIER	WEATHER PHENOMENA		
	PRECIPITATION	OBSCURATION	OTHER
BC Patches	DZ Drizzle	BR Mist	DS Duststorm
BL Blowing	GR Hail	DU Widespread Dust	FC Funnel Cloud
DR Low Drifting	GS Small Hail and/or Snow Pellets	FG Fog	+FC Tornado Waterspout
FZ Freezing	IC Ice Crystals	FU Smoke	PO Well-Developed Dust/Sand Whirls
MI Shallow	PL Ice Pellets	HZ Haze	SQ Squalls
PR Partial	RA Rain	PY Spray	SS Sandstorm
SH Shower(s)	SG Snow Grains	SA Sand	GL Glaze
TS Thunderstorm	SN Snow	VA Volcanic Ash	
VC In the Vicinity	UP Unknown Precipitation		

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

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Ceilometer (30-second) data are used to derive cloudiness at or below 12,000 feet. This cloudiness is the mean cloud cover detected during sunrise to sunset (SR–SS), or midnight to midnight (MN–MN).

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.

ADDITIONAL NOTES:

DATE	SUNSHINE		CLOUDINESS (OKTAS)				VISIBILITY (MILES)		RESERVED
	TOTAL MINUTES	PERCENT POSSIBLE	SR–SS		MN–MN		MINIMUM	MAXIMUM	
			CEILOMETER	SATELLITE	CEILOMETER	SATELLITE			
01							1.50	8.00	
02							2.00	10.00	
03							1.00	10.00	
04							.25	10.00	
05							2.00	10.00	
06							7.00	10.00	
07							1.75	10.00	
08							.50	10.00	
09							10.00	10.00	
10							10.00	10.00	
11							6.00	10.00	
12							4.00	9.00	
13							6.00	10.00	
14							2.00	9.00	
15							1.00	7.00	
16							1.25	7.00	
17							3.00	9.00	
18							.25	5.00	
19							.50	7.00	
20							<.25	5.00	
21							6.00	10.00	
22							6.00	10.00	
23							5.00	10.00	
24							10.00	10.00	
25							10.00	10.00	
26							7.00	10.00	
27							4.00	10.00	
28							1.50	10.00	
29							1.00	10.00	
30							10.00	10.00	
31							10.00	10.00	
MONTHLY AVGS							4.35	9.19	
SUNSHINE (MINUTES)									
Total: Possible: Percent Possible:									
NUMBER OF DAYS WITH:									
SKY CONDITION									
CLR PTLY CLDY CLOUDY MISSING									
31									
MINIMUM VISIBILITY (MILES)									
<=0.25 <=3.0 >=7.0									
3 15 8									

OBSERVATIONS AT 3-HOURLY INTERVALS

DUBUQUE, IA

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DBQ

WBAN # 94908

HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)					
	SKY COVER	CEILING 100'S OF FT			OBSERVATION TIME (LST)	EFF CLD AMT Otktas	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL			SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Otktas	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0639 MAR 01 SUNSET: 1752																													
03	OVC	110	8.00		24	14	21	65	0	00	28.85	30.04	03	OVC	039	7.00		27	24	26	89	16	19	28.71	29.91				
06	OVC	060	6.00	HZ	23	18	21	81	5	21	28.84	30.03	06	OVC	020	2.00	-SN BR	27	25	26	92	13	20	28.72	29.92				
09	OVC	028	1.75	BR	28	24	27	85	5	20	28.83	30.02	09	OVC	004	1.75	BR	29	28	29	96	8	26	28.76	29.96				
12	OVC	014	5.00	HZ	31	25	29	79	12	20	28.78	29.98	12	OVC	016	5.00	HZ	33	27	31	78	8	29	28.81	30.00				
15	OVC	016	4.00	HZ	32	26	30	79	8	22	28.73	29.92	15	CLR	NC	8.00		32	25	29	75	10	24	28.82	30.00				
18	OVC	018	3.00	BR	31	28	30	89	7	27	28.71	29.91	18	CLR	NC	5.00	HZ	28	23	26	81	7	23	28.83	30.02				
21	OVC	028	3.00	BR	30	27	29	88	8	26	28.72	29.91	21	CLR	NC	5.00	BR	22	19	21	89	3	27	28.88	30.07				
24	OVC	040	4.00	BR	30	27	29	88	10	26	28.71	29.89	24	CLR	NC	5.00	BR	18	16	17	92	6	11	28.80	29.99				
SUNRISE: 0637 MAR 02 SUNSET: 1753																													
03	OVC	015	5.00	HZ	30	24	28	79	14	31	28.71	29.89	03	CLR	NC	4.00	BR	16	14	15	92	0	00	28.80	29.99				
06	OVC	018	9.00		23	17	21	78	16	33	28.78	29.97	06	CLR	NC	2.50	BR	18	17	18	96	9	01	28.75	29.95				
09	OVC	024	10.00		18	8	15	65	18	35	28.89	30.08	09	BKN	022	2.00	BR	22	20	21	92	9	02	28.67	29.87				
12	CLR	NC	10.00		20	-2	15	38	14	35	28.92	30.13	12	OVC	007	0.50	SN FZFG	23	20	22	88	23	01	28.67	29.87				
15	CLR	NC	10.00		20	-7	14	30	7	34	28.92	30.12	15	OVC	014	10.00	UP	21	15	19	78	21	35	28.74	29.95				
18	CLR	NC	10.00		16	-5	12	39	9	33	28.92	30.13	18	OVC	026	10.00		18	9	16	68	12	33	28.91	30.11				
21	CLR	NC	10.00		10	-3	8	55	8	33	28.93	30.16	21	CLR	NC	10.00		10	-1	8	61	16	32	28.98	30.20				
24	CLR	NC	10.00		10	-1	8	61	5	03	28.92	30.13	24	CLR	NC	10.00		5	-7	3	57	12	31	29.05	30.27				
SUNRISE: 0635 MAR 03 SUNSET: 1755																													
03	BKN	080	10.00		13	-1	10	54	5	14	28.89	30.10	03	CLR	NC	10.00		1	-13	-1	51	16	33	29.05	30.27				
06	OVC	100	10.00		13	1	10	59	10	15	28.85	30.06	06	FEW	NC	10.00		-2	-15	-3	53	12	30	29.13	30.36				
09	OVC	050	10.00		17	1	13	49	18	18	28.79	30.00	09	FEW	NC	10.00		0	-12	-1	57	14	28	29.16	30.40				
12	OVC	028	3.00	-SN	20	14	18	78	21	18	28.72	29.93	12	CLR	NC	10.00		5	-9	3	52	18	30	29.16	30.40				
15	OVC	015	3.00	-SN BR	24	20	23	84	15	19	28.63	29.83	15	CLR	NC	10.00		8	-7	5	50	20	28	29.10	30.34				
18	OVC	014	2.00	-SN BR	24	22	23	91	12	20	28.61	29.81	18	CLR	NC	10.00		8	-7	5	50	18	28	29.09	30.33				
21	OVC	028	8.00		26	24	25	92	6	18	28.62	29.82	21	CLR	NC	10.00		5	-6	3	60	14	29	29.10	30.34				
24	OVC	028	8.00		28	24	27	85	7	30	28.67	29.86	24	CLR	NC	10.00		2	-8	0	63	8	29	29.10	30.35				
SUNRISE: 0634 MAR 04 SUNSET: 1756																													
03	CLR	NC	2.00	BR	19	16	18	88	5	29	28.65	29.85	03	CLR	NC	10.00		-4	-11	-5	71	6	19	29.13	30.37				
06	CLR	NC	6.00	BR	15	13	14	91	0	00	28.66	29.86	06	CLR	NC	10.00		-3	-10	-4	71	8	30	29.17	30.41				
09	BKN	110	7.00		22	18	21	85	10	35	28.74	29.94	09	CLR	NC	10.00		3	-5	2	69	7	36	29.16	30.41				
12	OVC	032	10.00		20	12	18	71	15	02	28.72	29.92	12	CLR	NC	10.00		8	-6	6	52	8	23	29.14	30.38				
15	VV	005	0.50	SN FZFG	17	14	16	88	10	36	28.67	29.87	15	CLR	NC	10.00		13	0	10	56	10	29	29.07	30.31				
18	VV	003	0.50	SN FZFG	15	12	14	88	15	01	28.68	29.89	18	SCT	NC	10.00		12	1	10	61	7	26	29.02	30.26				
21	OVC	008	1.25	-SN BR	13	10	12	88	16	01	28.69	29.90	21	OVC	060	10.00		14	5	12	67	8	20	28.97	30.20				
24	OVC	014	1.50	-SN BR	11	8	10	88	15	36	28.69	29.90	24	OVC	075	10.00		14	6	12	71	9	20	28.92	30.14				
SUNRISE: 0632 MAR 05 SUNSET: 1757																													
03	OVC	080	10.00	-SN BR	10	0	8	63	15	01	28.72	29.93	03	OVC	100	10.00		15	8	13	74	12	19	28.85	30.06				
06	CLR	NC	9.00		7	-2	5	66	9	01	28.78	30.00	06	OVC	046	10.00		17	9	15	70	16	21	28.80	30.01				
09	CLR	NC	10.00		9	-2	7	61	14	01	28.84	30.06	09	CLR	NC	10.00		22	10	19	60	22	20	28.75	29.95				
12	CLR	NC	10.00	UP	16	4	13	59	10	02	28.86	30.07	12	SCT	NC	10.00		34	19	29	54	20	21	28.69	29.89				
15	FEW	NC	10.00		19	2	15	47	6	04	28.82	30.03	15	BKN	110	10.00		37	24	32	60	22	20	28.63	29.83				
18	OVC	090	10.00		18	2	14	49	7	06	28.83	30.04	18	CLR	NC	9.00		35	27	32	72	12	20	28.64	29.83				
21	OVC	070	10.00		16	1	13	51	6	04	28.82	30.04	21	CLR	NC	8.00		31	25	29	79	5	17	28.66	29.85				
24	OVC	070	10.00		16	3	13	56	5	05	28.81	30.02	24	SCT	NC	6.00	HZ	30	25	28	82	5	21	28.66	29.85				
SUNRISE: 0630 MAR 06 SUNSET: 1758																													
03	OVC	070	10.00		14	8	13	77	3	18	28.82	30.02	03	OVC	110	6.00	HZ	32	27	30	82	5	21	28.67	29.85				
06	OVC	065	9.00		13	9	12	84	3	11	28.82	30.03	06	CLR	NC	5.00	BR	28	24	27	85	10	01	28.70	29.88				
09	OVC	042	10.00		16	11	15	80	12	16	28.86	30.07	09	CLR	NC	5.00	HZ	33	28	31	82	15	04	28.78	29.96				
12	OVC	090	10.00		21	14	19	74	14	17	28.86	30.07	12	CLR	NC	8.00		40	30	36	68	7	05	28.79	29.97				
15	SCT	NC	10.00		24	15	21	68	16	17	28.81	30.01	15	CLR	NC	6.00	HZ	43	31	38	63	8	08	28.77	29.94				
18	CLR	NC	10.00		22	15	20	75	15	15	28.76	29.97	18	CLR	NC	4.00	HZ	38	30	35	73	9	07	28.83	30.01				
21	CLR	NC	9.00		22	17	20	82	17	16	28.72	29.92	21	FEW	NC	6.00	BR	33	29	31	85	12	04	28.84	30.02				
24	BKN	110	8.00		24	21	23	88	15	19	28.73	29.93	24	OVC	017	6.00	BR	31	27	29	85	15	05	28.84	30.02				

OBSERVATIONS AT 3-HOURLY INTERVALS

DUBUQUE, IA

MARCH 2003

DBQ

WBAN # 94908

HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)					
	SKY COVER	CEILING 100'S OF FT			OBSERVATION TIME (LST)	EFF CLD AMT Oktas	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL			SKY COVER	CEILING 100'S OF FT	OBSERVATION TIME (LST)	EFF CLD AMT Oktas	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL
SUNRISE: 0619					MAR 13				SUNSET: 1805				SUNRISE: 0608					MAR 19				SUNSET: 1812							
03	OVC	013	6.00	BR	29	25	28	85	22	03	28.90	30.08	03	OVC	100	5.00	BR	39	35	37	86	18	04	28.66	29.83				
06	OVC	033	7.00		28	24	27	85	9	04	28.99	30.18	06	OVC	016	7.00		38	33	36	83	22	05	28.62	29.79				
09	CLR	NC	10.00		30	22	27	72	12	05	29.08	30.28	09	OVC	016	4.00	-RA BR	35	32	34	89	25	04	28.61	29.78				
12	CLR	NC	10.00		35	24	31	64	9	03	29.12	30.32	12	OVC	009	3.00	UP BR	35	34	35	96	23	04	28.56	29.72				
15	CLR	NC	10.00		39	25	34	57	7	08	29.10	30.30	15	OVC	012	2.50	-RA BR	38	36	37	93	20	04	28.49	29.65				
18	CLR	NC	10.00		34	26	31	73	6	14	29.11	30.31	18	OVC	006	2.50	-RA BR	38	37	38	97	20	06	28.51	29.67				
21	CLR	NC	9.00		31	26	29	82	10	16	29.10	30.30	21	OVC	004	2.00	BR	39	38	39	96	10	05	28.52	29.68				
24	CLR	NC	8.00		29	24	27	82	14	17	29.07	30.27	24	OVC	002	0.50	FG	39	39	39	100	6	06	28.52	29.69				
SUNRISE: 0617					MAR 14				SUNSET: 1807				SUNRISE: 0607					MAR 20				SUNSET: 1814							
03	CLR	NC	7.00		27	22	25	81	9	17	29.03	30.22	03	VV	001	<.25	FG	38	38	38	100	12	02	28.49	29.66				
06	CLR	NC	4.00	BR	26	22	25	84	9	18	29.02	30.22	06	VV	001	<.25	FG	39	38	39	96	10	03	28.50	29.66				
09	CLR	NC	4.00	BR	31	27	29	85	14	17	28.99	30.19	09	VV	001	<.25	FG	42	42	42	100	3	04	28.52	29.67				
12	OVC	007	2.00	BR	34	31	33	89	17	18	28.95	30.14	12	OVC	003	1.25	-RA BR	46	45	46	96	0	00	28.52	29.68				
15	CLR	NC	6.00	HZ	47	37	42	69	13	18	28.85	30.03	15	OVC	005	2.50	BR	48	46	47	93	8	36	28.48	29.64				
18	CLR	NC	5.00	HZ	43	36	40	76	15	18	28.80	29.98	18	OVC	003	1.50	BR	44	43	44	96	9	34	28.49	29.65				
21	CLR	NC	5.00	BR	39	35	37	86	14	19	28.77	29.95	21	OVC	003	2.50	BR	42	41	42	96	12	31	28.51	29.67				
24	CLR	NC	4.00	BR	36	34	35	93	10	19	28.77	29.95	24	OVC	035	5.00	BR	38	35	37	89	13	31	28.51	29.66				
SUNRISE: 0615					MAR 15				SUNSET: 1808				SUNRISE: 0605					MAR 21				SUNSET: 1815							
03	CLR	NC	4.00	BR	35	33	34	93	9	17	28.77	29.94	03	OVC	010	7.00		36	33	35	89	12	31	28.49	29.65				
06	CLR	NC	2.00	BR	35	33	34	93	12	18	28.76	29.94	06	OVC	009	7.00		34	32	33	92	13	27	28.50	29.67				
09	CLR	NC	1.75	BR	41	38	40	89	13	18	28.77	29.94	09	OVC	014	10.00		37	32	35	82	18	28	28.54	29.70				
12	CLR	NC	3.00	BR	45	41	43	86	15	16	28.75	29.92	12	OVC	030	10.00		40	31	36	70	18	28	28.57	29.74				
15	CLR	NC	5.00	HZ	54	45	49	72	15	16	28.69	29.85	15	OVC	033	10.00		40	30	36	68	22	28	28.61	29.77				
18	CLR	NC	6.00	HZ	51	42	47	71	15	16	28.67	29.84	18	OVC	025	10.00		38	33	36	83	15	27	28.62	29.79				
21	CLR	NC	4.00	BR	43	40	42	89	15	18	28.66	29.83	21	OVC	029	10.00		38	33	36	83	15	28	28.64	29.82				
24	CLR	NC	2.00	BR	41	40	41	96	15	19	28.64	29.80	24	OVC	050	10.00		37	33	35	86	14	28	28.64	29.81				
SUNRISE: 0614					MAR 16				SUNSET: 1809				SUNRISE: 0603					MAR 22				SUNSET: 1816							
03	CLR	NC	1.75	BR	38	37	38	97	9	19	28.62	29.78	03	OVC	015	9.00		38	33	36	83	10	30	28.65	29.83				
06	CLR	NC	3.00	BR	41	39	40	93	12	19	28.61	29.77	06	OVC	060	7.00		38	34	36	86	15	29	28.67	29.85				
09	CLR	NC	3.00	BR	45	42	44	90	12	18	28.61	29.77	09	OVC	010	6.00	BR	39	35	37	86	12	31	28.74	29.92				
12	CLR	NC	5.00	HZ	59	49	54	69	16	19	28.59	29.74	12	BKN	014	7.00		44	37	41	76	6	29	28.77	29.94				
15	CLR	NC	6.00	HZ	67	52	58	59	15	17	28.53	29.68	15	OVC	034	10.00		54	41	48	62	13	28	28.74	29.91				
18	SCT	NC	5.00	HZ	62	52	56	70	13	18	28.51	29.65	18	OVC	046	10.00		52	39	46	61	8	28	28.77	29.94				
21	CLR	NC	6.00	HZ	56	49	52	77	13	18	28.54	29.68	21	CLR	NC	10.00		39	35	37	86	0	00	28.79	29.96				
24	CLR	NC	5.00	HZ	50	45	47	83	9	19	28.53	29.67	24	CLR	NC	6.00	BR	37	34	36	89	0	00	28.78	29.96				
SUNRISE: 0612					MAR 17				SUNSET: 1810				SUNRISE: 0601					MAR 23				SUNSET: 1817							
03	CLR	NC	5.00	BR	45	42	44	90	7	18	28.52	29.66	03	CLR	NC	6.00	BR	34	33	34	97	5	21	28.76	29.93				
06	CLR	NC	4.00	BR	42	40	41	92	7	19	28.53	29.68	06	CLR	NC	9.00		33	28	31	82	6	20	28.76	29.92				
09	CLR	NC	5.00	HZ	55	47	51	74	9	20	28.55	29.69	09	CLR	NC	10.00		47	32	40	56	9	21	28.76	29.93				
12	FEW	NC	7.00		68	52	59	57	5	21	28.54	29.68	12	CLR	NC	10.00		61	32	47	34	14	20	28.72	29.88				
15	CLR	NC	9.00		72	51	60	48	9	18	28.52	29.66	15	CLR	NC	10.00		65	33	50	31	15	20	28.66	29.82				
18	CLR	NC	6.00	HZ	64	51	57	63	5	13	28.54	29.68	18	CLR	NC	10.00		59	34	47	39	12	18	28.66	29.82				
21	CLR	NC	7.00		52	46	49	80	9	10	28.57	29.72	21	CLR	NC	10.00		53	34	44	49	15	17	28.65	29.81				
24	CLR	NC	3.00	BR	50	46	48	86	15	06	28.61	29.75	24	CLR	NC	10.00		52	32	43	47	20	19	28.61	29.76				
SUNRISE: 0610					MAR 18				SUNSET: 1811				SUNRISE: 0560					MAR 24				SUNSET: 1818							
03	OVC	002	0.50	FG	45	45	45	100	12	04	28.64	29.78	03	CLR	NC	10.00		51	35	44	54	20	18	28.57	29.71				
06	OVC	002	1.00	BR	40	40	40	100	16	04	28.66	29.81	06	CLR	NC	10.00		50	38	44	63	13	20	28.56	29.71				
09	VV	001	0.25	FG	42	41	42	96	16	04	28.70	29.86	09	CLR	NC	10.00		57	42	49	58	9	27	28.61	29.75				
12	OVC	005	3.00	BR	48	44	46	86	17	05	28.70	29.85	12	CLR	NC	10.00		63	39	51	41	13	36	28.63	29.78				
15	BKN	009	2.00	BR	49	45	47	86	18	04	28.67	29.84	15	CLR	NC	10.00		64	29	48	27	12	31	28.62	29.77				
18	FEW	NC	4.00	HZ	47	41	44	80	23	04	28.68	29.85	18	OVC	090	10.00		55	32	45	42	14	33	28.67	29.83				
21	OVC	013	5.00	HZ	44	39	42	83	17	05	28.71	29.88	21	OVC	075	10.00		50	34	43	54	5	32	28.71	29.86				
24	OVC	013	5.00	HZ	42	37	40	82	15	05	28.71	29.88	24	OVC	080	10.00		46	36	41	68	5	18	28.73	29.88				

OBSERVATIONS AT 3-HOURLY INTERVALS

DUBUQUE, IA

MARCH 2003

DBQ

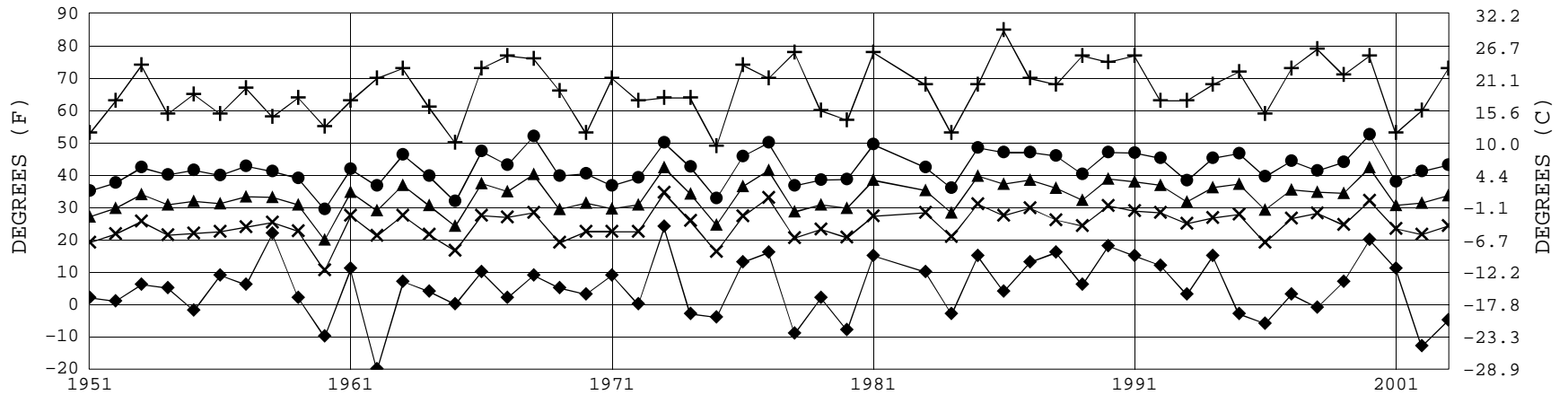
WBAN # 94908

HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)		HOUR (LST)	SKY COVER		CEILING 100'S OF FT	SATELLITE		VISIBILITY (MILES)	WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES, HG)																	
	DRY BULB	DEW POINT		WET BULB	RELATIVE HUMIDITY (PCT)			SPEED (MPH)	DIRECTION TENS OF DEG	STATION	SEA LEVEL	DRY BULB	DEW POINT	WET BULB	RELATIVE HUMIDITY (PCT)		SPEED (MPH)	DIRECTION TENS OF DEG		STATION	SEA LEVEL																										
SUNRISE: 0558								MAR 25								SUNSET: 1819								SUNRISE: 0548								MAR 31								SUNSET: 1826							
03	CLR	NC				10.00		40	33	37	77	3	26	28.74	29.90	03	CLR	NC				10.00		27	21	25	78	3	19	28.95	30.14																
06	CLR	NC				10.00		32	28	30	85	0	00	28.80	29.97	06	CLR	NC				10.00		26	19	24	75	5	20	28.93	30.12																
09	CLR	NC				10.00		49	29	40	46	15	34	28.83	29.99	09	OVC	090				10.00		40	22	33	49	9	20	28.92	30.11																
12	CLR	NC				10.00		54	28	43	37	22	30	28.83	29.99	12	CLR	NC				10.00		51	18	38	27	18	18	28.82	29.99																
15	CLR	NC				10.00		56	29	44	36	17	32	28.80	29.96	15	BKN	065				10.00		54	25	42	33	20	19	28.68	29.85																
18	CLR	NC				10.00		51	28	41	41	10	30	28.82	29.99	18	BKN	085				10.00		51	34	43	52	17	18	28.58	29.75																
21	CLR	NC				10.00		42	24	35	49	7	30	28.84	30.01	21	FEW	NC				10.00		51	37	44	59	12	21	28.51	29.67																
24	CLR	NC				10.00		32	24	29	73	0	00	28.82	29.99	24	CLR	NC				10.00		46	38	42	73	12	19	28.46	29.60																
SUNRISE: 0556								MAR 26								SUNSET: 1820								3-HOURLY OBSERVATION NOTES																							
03	OVC	085				10.00		41	27	35	57	7	36	28.83	29.99	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.																															
06	FEW	NC				10.00		36	28	33	73	9	16	28.80	29.97	Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.																															
09	BKN	095				10.00		46	33	40	61	9	03	28.83	29.99	NC = No ceiling detected.																															
12	CLR	NC				10.00		52	31	43	45	7	VR	28.80	29.97	& = Original observation contained additional weather elements.																															
15	SCT	NC				10.00		53	28	42	38	10	27	28.77	29.93	See page 3 for additional notes.																															
18	BKN	100				10.00		49	31	41	50	7	36	28.76	29.93																																
21	OVC	035				7.00	RA	45	37	41	74	3	VR	28.76	29.93																																
24	OVC	090				9.00		42	39	41	89	9	05	28.69	29.85																																
SUNRISE: 0554								MAR 27								SUNSET: 1822																															
03	BKN	090				10.00		43	37	40	80	14	11	28.64	29.80																																
06	OVC	050				6.00	-RA	42	36	39	79	13	13	28.65	29.81																																
09	SCT	NC				8.00		47	38	43	71	9	11	28.61	29.76																																
12	CLR	NC				10.00		58	30	45	35	23	17	28.53	29.68																																
15	FEW	NC				10.00		59	29	45	32	23	13	28.39	29.54																																
18	BKN	090				10.00		54	30	43	40	9	15	28.42	29.57																																
21	OVC	075				10.00		52	33	43	49	7	12	28.43	29.58																																
24	OVC	070				10.00		46	39	43	77	8	01	28.37	29.52																																
SUNRISE: 0553								MAR 28								SUNSET: 1823																															
03	OVC	050				5.00	BR	44	40	42	85	8	03	28.32	29.47																																
06	OVC	070				2.50	-RA BR	41	39	40	93	12	34	28.35	29.50																																
09	OVC	007				3.00	-RA BR	40	38	39	93	12	30	28.42	29.57																																
12	OVC	009				9.00		37	34	36	89	15	30	28.48	29.63																																
15	OVC	013				9.00		35	32	34	89	17	30	28.56	29.72																																
18	OVC	019				10.00		35	29	33	78	13	31	28.65	29.83																																
21	OVC	042				10.00		34	28	32	79	14	30	28.70	29.88																																
24	OVC	046				10.00		34	28	32	79	10	30	28.75	29.93																																
SUNRISE: 0551								MAR 29								SUNSET: 1824																															
03	OVC	042				10.00		31	25	29	79	8	31	28.79	29.98																																
06	OVC	025				10.00		31	24	28	76	14	31	28.85	30.03																																
09	OVC	013				1.75	-SN BR	29	26	28	89	13	35	28.93	30.13																																
12	OVC	048				9.00		34	24	30	67	16	33	28.99	30.18																																
15	OVC	044				10.00		37	21	31	52	15	34	29.03	30.23																																
18	CLR	NC				10.00		36	18	30	48	9	35	29.08	30.27																																
21	CLR	NC				10.00		28	19	25	69	5	29	29.14	30.34																																
24	CLR	NC				10.00		27	16	24	63	6	35	29.14	30.34																																
SUNRISE: 0549								MAR 30								SUNSET: 1825																															
03	CLR	NC				10.00		21	17	20	85	0	00	29.12	30.32																																
06	OVC	065				10.00		23	18	21	81	5	20	29.11	30.31																																
09	CLR	NC				10.00		36	20	30	52	12	23	29.09	30.29																																
12	BKN	060				10.00		44	19	35	37	17	28	29.05	30.24																																
15	OVC	060				10.00		42	18	33	38	16	30	29.01	30.20																																
18	OVC	095				10.00		41	19	33	41	13	31	28.99	30.19																																
21	FEW	NC				10.00		30	21	27	69	0	00	29.00	30.19																																
24	OVC	075				10.00		27	22	25	81	0	00	28.98	30.17																																

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			30	24	28	79	28.76	29.94	7.30	9	1	27
02			29	24	27	80	28.76	29.94	7.19	8	1	30
03			29	23	27	80	28.75	29.93	7.04	9	0	0
04			29	23	27	80	28.75	29.94	7.03	9	1	32
05			28	23	26	81	28.76	29.94	7.15	9	0	0
06			28	23	26	82	28.76	29.95	6.71	10	1	27
07			28	23	27	81	28.77	29.96	6.09	11	2	34
08			30	25	28	80	28.78	29.96	6.01	11	2	33
09			32	25	30	75	28.79	29.97	6.59	12	2	31
10			35	25	31	71	28.78	29.97	7.20	13	1	33
11			36	26	32	68	28.78	29.97	7.27	14	2	30
12			38	26	33	64	28.78	29.96	7.44	14	2	27
13			39	26	34	63	28.76	29.94	7.48	14	3	27
14			40	26	35	62	28.75	29.93	7.44	14	3	26
15			41	26	35	60	28.74	29.92	7.85	14	3	26
16			41	26	35	60	28.74	29.92	7.80	14	2	27
17			40	26	34	62	28.74	29.92	7.75	13	2	27
18			38	26	33	66	28.75	29.93	7.53	12	1	27
19			35	26	32	70	28.75	29.94	8.13	10	1	27
20			34	26	31	73	28.76	29.94	7.91	10	1	25
21			34	26	31	74	28.76	29.94	7.67	10	1	24
22			33	25	30	75	28.76	29.94	7.66	11	1	24
23			32	25	30	77	28.75	29.93	7.52	10	1	22
24			31	25	29	79	28.75	29.93	7.29	9	1	24

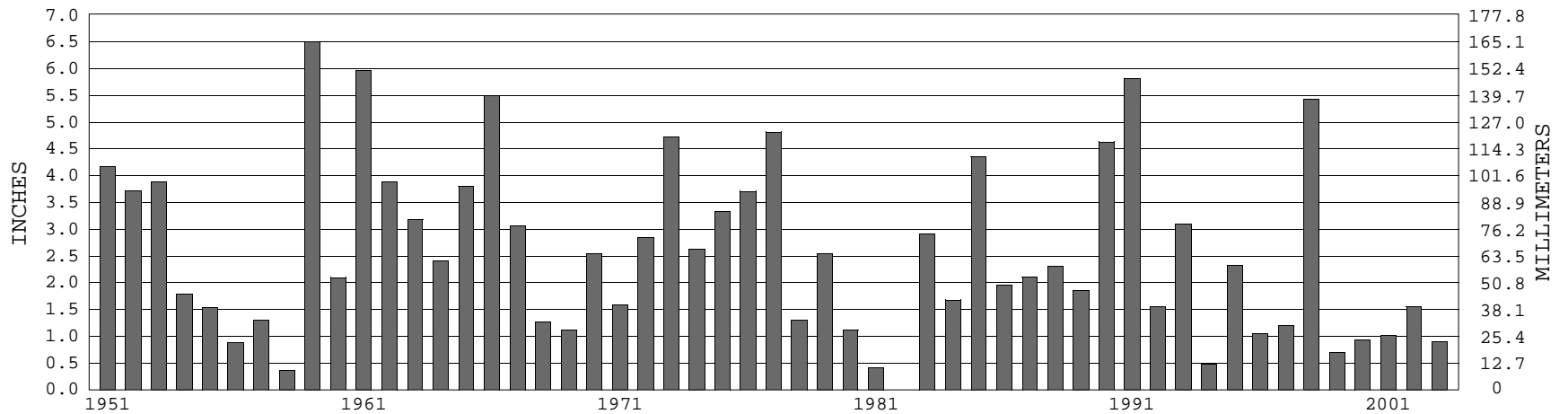
DUBUQUE, IA MARCH TEMPERATURES



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

Long-Term (1951-2003) Mean: 32.7 1961-1990 Normal: 34.8

DUBUQUE, IA MARCH PRECIPITATION



Long-Term (1951-2003) Mean Monthly Total: 2.56

1961-1990 Normal: 2.57



MARCH 2003

DUBUQUE, IA

LOCAL CLIMATOLOGICAL DATA

NOAA, National Climatic Data Center

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