



JULY 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	88	71	80	9	69	72	0	15	BR RA TSRA RA FG+ BR FG+ BR HZ TS TSRA RA BR HZ SQ RA BR HZ RA BR		12	0.0	0.00	28.92	30.05	10.0	21	10.4	24	21	20	22	01																			
02	88	65	77	6	66	70	0	12				0.0	0.00	28.94	30.07	9.9	22	10.4	23	20	18	23	02																			
03	87	67	77	6	70	73	0	12				0.0	0.00	28.89	30.02	6.2	23	6.7	16	22	13	22	03																			
04	89	70	80	9	66	71	0	15				0.0	0.00	28.94	30.07	5.3	04	7.4	22	10	17	10	04																			
05	86	63	75	3	62	66	0	10				0.0	0.09	29.03	30.17	5.6	11	7.6	33	22	28	22	05																			
06	77	64	71	-1	66	67	0	6	TSRA RA FG+ BR FG+ BR HZ TS TSRA RA BR HZ SQ RA BR HZ RA BR		12	0.0	1.57	29.07	30.22	2.9	14	4.7	23	09	20	09	06																			
07	85	65	75	3	69	71	0	10				0.0	0.00	29.05	30.19	2.6	19	2.9	9	19	8	19	07																			
08	90	71	81	9	73	74	0	16				0.0	0.09	28.90	30.03	9.6	21	9.7	43*	23	37*	23	08																			
09	85	70	78	6	71	73	0	13				0.0	0.01	28.90	30.03	5.3	03	8.2	17	01	14	08	09																			
10	75	63	69	-3	60	63	0	4				0.0	0.09	28.98	30.13	10.3	08	11.6	30	11	24	11	10																			
11	75	56	66	-6	53	59	0	1	RA BR BR		12	0.0	0.02	29.02	30.16	10.9	08	11.1	23	09	18	08	11																			
12	78	54	66	-6	55	60	0	1				0.0	0.00	28.93	30.08	5.1	05	6.0	16	09	13	06	12																			
13	80	54	67	-5	57	61	0	2				0.0	0.00	28.88	30.02	2.4	04	3.5	15	02	13	02	13																			
14	82	56	69	-4	59	63	0	4				0.0	0.00	28.91	30.05	2.1	34	3.1	12	31	9	30	14																			
15	82	58	70	-3	61	65	0	5				0.0	0.00	28.96	30.10	2.1	25	3.4	13	25	9	24	15																			
16	83	60	72	-1	63	66	0	7	BR HZ BR HZ TS TSRA RA BR HZ RA BR HZ BR HZ		12	0.0	0.00	28.95	30.09	4.4	20	4.6	15	21	14	21	16																			
17	86	62	74	1	66	69	0	9				0.0	0.00	28.90	30.03	4.1	22	4.6	15	23	13	21	17																			
18	88	66	77	4	69	71	0	12				0.0	0.74	28.80	29.93	2.2	18	4.9	40	02	31	02	18																			
19	83	68	76	3	71	72	0	11				0.0	0.20	28.81	29.94	2.6	11	4.9	17	29	14	29	19																			
20	87	69	78	5	73	75	0	13				0.0	0.00	28.83	29.95	9.0	16	9.9	22	15	16	16	20																			
21	90*	72	81*	8	75	77	0	16	RA TSRA RA BR BR		12	0.0	T	28.76	29.88	11.8	20	12.8	26	21	22	32	21																			
22	80	64	72	-1	66	69	0	7				0.0	0.44	28.83	29.97	5.5	32	8.2	28	34	23	02	22																			
23	76	60	68	-5	58	62	0	3				0.0	0.00	29.06	30.21	7.3	03	7.8	16	02	14	02	23																			
24	77	54*	66*	-7	58	62	0	1				0.0	0.00	29.04	30.19	3.7	10	5.6	14	12	12	13	24																			
25	82	62	72	-1	65	68	0	7				0.0	0.00	28.83	29.96	8.9	18	9.6	18	17	16	19	25																			
26	85	69	77	4	70	72	0	12	BR HZ TSRA RA BR RA FG BR HZ RA BR BR		12	0.0	0.00	28.75	29.88	2.0	22	3.5	16	23	14	23	26																			
27	86	69	78	5	73	74	0	13				0.0	0.57	28.64	29.77	8.6	19	10.3	26	21	23	21	27																			
28	88	71	80	8	74	76	0	15				0.0	T	28.65	29.77	8.0	20	8.6	39	20	31	22	28																			
29	81	66	74	2	68	70	0	9				0.0	0.30	28.71	29.84	5.4	24	7.7	20	16	16	16	29																			
30	89	64	77	5	70	72	0	12				0.0	0.00	28.86	29.99	7.6	20	8.5	20	19	18	20	30																			
31	88	67	78	6	70	73	0	13				0.0	0.00	28.81	29.94	10.4	19	10.7	22	18	18	18	31																			
83.7											64.2		74.0		66.0		68.9		0.0		9.2		< MONTHLY AVERAGES		TOTALS->		0.0		4.12		28.89		30.02		1.6		23		7.4		<- MONTHLY AVERAGES	
1.6											1.8		1.7		66.0		68.9		0.0		9.2		< MONTHLY AVERAGES		TOTALS->		0.0		4.12		28.89		30.02		1.6		23		7.4		<- MONTHLY AVERAGES	
DEGREE DAYS									GREATEST 24-HR PRECIPITATION: 1.66		DATE :05-06		SEA LEVEL PRESSURE		DATE		TIME																									
MONTHLY									GREATEST 24-HR SNOWFALL: 0.0		DATE :		MAXIMUM		:		30.27		06		0855																					
SEASON TO DATE									GREATEST SNOW DEPTH:		DATE :		MINIMUM		:		29.67		27		1555																					
TOTAL DEPARTURE									NUMBER OF DAYS WITH ➡		MAXIMUM TEMP ≥ 90: 2		MINIMUM TEMP ≤ 32: 0		PRECIPITATION ≥ 0.01 INCH : 11																											
HEATING: 0 -8											MAXIMUM TEMP ≤ 32: 0		MINIMUM TEMP ≤ 0: 0		PRECIPITATION ≥ 0.10 INCH : 6																											
COOLING: 286 53											THUNDERSTORMS : 5		HEAVY FOG : 2		SNOWFALL ≥ 1.0 INCH : 0																											

HOURLY PRECIPITATION

(WATER EQUIVALENT IN INCHES)

DUBUQUE, IA

JULY 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													0.00				
03													03													0.00				
04													04													0.00				
05													05													0.00				
06													06													0.09				
07													07													1.57				
08													08													0.00				
09													09													0.09				
10													10													0.01				
11													11															11	0.02	
12													12															0.00		
13													13															0.00		
14													14															0.00		
15													15															0.00		
16													16															0.00		
17													17															0.00		
18													18															0.74		
19													19															0.20		
20													20															0.00		
21													21																21	T
22													22																0.44	
23													23																0.00	
24													24																0.00	
25													25																0.00	
26													26																0.00	
27													27																0.57	
28													28																T	
29													29																0.30	
30													30																0.00	
31	31	0.00																												

MAXIMUM SHORT DURATION PRECIPITATION (See Note)

Time Period (Minutes)	5	10	15	20	30	45	60	80	100	120	150	180
Precipitation (Inches)	.28	.46	.71	.85	1.09	1.19	1.26	1.35	1.44	1.46	1.49	1.53
Ending Date	06	06	06	06	06	06	06	06	06	06	06	06
Ending Time (Hour/Min)	0834	0839	0844	0844	0849	0857	0911	0929	0951	1007	1040	1101

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
JULY 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							7.00	10.00	
02							10.00	10.00	
03							6.00	10.00	
04							8.00	10.00	
05							8.00	10.00	
06							.25	10.00	
07							< .25	10.00	
08							1.50	10.00	
09							2.50	10.00	
10							5.00	10.00	
11							10.00	10.00	
12							10.00	10.00	
13							5.00	10.00	
14							8.00	10.00	
15							6.00	10.00	
16							4.00	10.00	
17							1.75	8.00	
18							.75	10.00	
19							3.00	10.00	
20							2.50	10.00	
21							9.00	10.00	
22							1.50	10.00	
23							10.00	10.00	
24							8.00	10.00	
25							4.00	10.00	
26							1.75	10.00	
27							2.00	10.00	
28							.50	10.00	
29							2.00	10.00	
30							6.00	10.00	
31							8.00	10.00	
MONTHLY AVGS							5.20	9.94	
<p align="center">SUNSHINE (MINUTES)</p> <p>Total: Possible:</p> <p align="center">Percent Possible:</p>									
<p align="center">NUMBER OF DAYS WITH:</p> <p align="center">SKY CONDITION</p> <p align="center">CLR PTLY CLDY CLOUDY MISSING</p> <p align="center">31</p> <p align="center">MINIMUM VISIBILITY (MILES)</p> <p align="center"><=0.25 <=3.0 >=7.0</p> <p align="center">1 11 11</p>									

OBSERVATIONS AT 3-HOURLY INTERVALS

DUBUQUE, IA

JULY 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)	
			OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>		VISIBILITY (MILES)	DRY BULB	DEW POINT		WET BULB	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	SPEED (MPH)	DIRECTION TENS OF DEG
	SKY COVER	CEILING 100'S OF FT													SKY COVER	CEILING 100'S OF FT											
			SUNRISE: 0430		JUL 01	SUNSET: 1944										SUNRISE: 0433		JUL 07	SUNSET: 1942								
03	CLR	NC		8.00		72	70	71	94	6	19	28.92	30.04	03	OVC	008		0.25	FG	66	66	66	100	0	00	29.06	30.20
06	CLR	NC		8.00		73	70	71	90	6	22	28.94	30.08	06	BKN	001		0.50	FG	67	67	67	100	0	00	29.08	30.23
09	CLR	NC		9.00		82	69	73	65	12	22	28.94	30.08	09	CLR	NC		5.00	HZ	77	67	72	77	5	21	29.09	30.23
12	CLR	NC		9.00		86	70	75	59	15	22	28.92	30.06	12	SCT	NC		10.00		80	70	73	71	6	23	29.07	30.22
15	CLR	NC		10.00		87	68	74	53	16	22	28.91	30.03	15	CLR	NC		10.00		84	70	74	63	0	00	29.03	30.17
18	CLR	NC		10.00		85	69	74	59	12	20	28.90	30.02	18	FEW	NC		10.00		82	72	75	72	5	17	29.00	30.14
21	CLR	NC		10.00		76	69	71	79	9	20	28.91	30.03	21	CLR	NC		7.00		75	72	73	90	3	20	29.01	30.15
24	CLR	NC		10.00		74	65	68	74	12	22	28.92	30.05	24	CLR	NC		5.00	BR	72	70	71	94	5	19	28.99	30.13
			SUNRISE: 0430		JUL 02	SUNSET: 1943										SUNRISE: 0434		JUL 08	SUNSET: 1942								
03	CLR	NC		10.00		67	63	64	87	7	20	28.94	30.07	03	CLR	NC		3.00	BR	72	70	71	94	7	20	28.98	30.11
06	CLR	NC		10.00		69	63	65	81	7	21	28.98	30.11	06	CLR	NC		1.50	BR	73	71	72	94	8	19	28.96	30.09
09	CLR	NC		10.00		79	64	69	60	14	24	28.97	30.11	09	CLR	NC		5.00	HZ	81	72	75	74	14	20	28.94	30.08
12	CLR	NC		10.00		86	66	73	51	15	25	28.96	30.09	12	CLR	NC		6.00	HZ	87	76	79	70	15	20	28.90	30.03
15	CLR	NC		10.00		87	68	74	53	16	21	28.93	30.07	15	CLR	NC		6.00	HZ	90	77	80	66	16	20	28.85	29.97
18	CLR	NC		10.00		85	69	74	59	8	21	28.91	30.04	18	FEW	NC		10.00	-TSRA	75	67	70	76	21	22	28.83	29.96
21	CLR	NC		10.00		75	69	71	82	8	19	28.91	30.04	21	CLR	NC		8.00		75	72	73	90	6	22	28.83	29.96
24	CLR	NC		10.00		72	67	69	84	9	20	28.91	30.04	24	BKN	036		5.00	BR	75	73	74	94	3	21	28.83	29.96
			SUNRISE: 0431		JUL 03	SUNSET: 1943										SUNRISE: 0435		JUL 09	SUNSET: 1941								
03	CLR	NC		9.00		69	67	68	93	3	21	28.91	30.04	03	CLR	NC		6.00	BR	72	71	71	97	5	24	28.84	29.96
06	CLR	NC		8.00		71	67	68	87	5	21	28.91	30.04	06	OVC	008		2.50	BR	74	73	73	97	6	30	28.85	29.98
09	CLR	NC		9.00		82	70	74	67	10	28	28.93	30.06	09	OVC	007		3.00	BR	77	74	75	90	8	02	28.88	30.01
12	FEW	NC		10.00		85	70	75	61	10	23	28.90	30.02	12	OVC	020		4.00	HZ	78	73	75	85	9	02	28.93	30.06
15	FEW	NC		10.00		86	71	76	61	9	24	28.88	30.00	15	FEW	NC		9.00		82	72	75	72	10	04	28.90	30.03
18	SCT	NC		10.00		85	72	76	65	7	22	28.85	29.98	18	CLR	NC		10.00		82	69	73	65	8	06	28.92	30.04
21	CLR	NC		10.00		77	72	74	85	3	21	28.87	29.99	21	CLR	NC		10.00		75	66	69	74	8	08	28.95	30.09
24	CLR	NC		9.00		73	70	71	90	3	21	28.89	30.02	24	CLR	NC		10.00		71	64	67	79	10	08	28.96	30.10
			SUNRISE: 0431		JUL 04	SUNSET: 1943										SUNRISE: 0435		JUL 10	SUNSET: 1941								
03	CLR	NC		10.00		75	70	72	84	9	33	28.90	30.03	03	CLR	NC		10.00		66	57	61	73	14	06	28.96	30.10
06	CLR	NC		10.00		74	69	71	85	8	02	28.92	30.06	06	CLR	NC		10.00		64	57	60	78	8	02	29.02	30.16
09	CLR	NC		10.00		81	63	69	54	8	04	28.95	30.09	09	BKN	110		10.00		68	62	64	81	6	11	29.01	30.15
12	CLR	NC		10.00		84	63	70	49	5	06	28.95	30.09	12	BKN	100		5.00	-RA BR	68	66	67	93	8	06	29.00	30.14
15	CLR	NC		10.00		88	70	75	55	5	01	28.92	30.05	15	BKN	095		10.00		75	64	68	69	13	11	28.95	30.10
18	CLR	NC		10.00		84	70	74	63	6	03	28.92	30.05	18	BKN	090		10.00		72	61	65	69	12	07	28.97	30.12
21	CLR	NC		10.00		76	65	69	69	8	04	28.96	30.10	21	CLR	NC		10.00		66	56	60	70	16	07	28.98	30.13
24	BKN	049		10.00		70	56	62	61	9	06	28.99	30.12	24	OVC	100		10.00		66	54	59	65	13	08	29.00	30.15
			SUNRISE: 0432		JUL 05	SUNSET: 1943										SUNRISE: 0436		JUL 11	SUNSET: 1941								
03	CLR	NC		10.00		66	49	57	54	7	08	29.00	30.14	03	BKN	100		10.00		66	53	59	63	13	09	28.99	30.13
06	CLR	NC		10.00		65	50	57	59	9	08	29.03	30.17	06	SCT	NC		10.00	-RA	62	55	58	78	8	08	29.03	30.18
09	CLR	NC		10.00		71	59	64	66	8	10	29.05	30.19	09	SCT	NC		10.00		64	53	58	68	10	10	29.06	30.21
12	CLR	NC		10.00		81	66	71	61	8	15	29.04	30.17	12	FEW	NC		10.00		72	54	61	53	18	09	29.05	30.20
15	FEW	NC		10.00		85	70	75	61	9	11	29.02	30.16	15	CLR	NC		10.00		74	53	62	48	17	09	29.01	30.15
18	CLR	NC		10.00		81	72	75	74	6	12	29.01	30.16	18	CLR	NC		10.00		72	53	61	52	10	07	28.98	30.13
21	CLR	NC		10.00	-RA	70	67	68	90	5	12	29.04	30.18	21	CLR	NC		10.00		62	50	55	65	8	08	28.99	30.15
24	SCT	NC		10.00		70	66	67	87	3	25	29.08	30.22	24	CLR	NC		10.00		56	51	53	84	6	05	29.00	30.15
			SUNRISE: 0433		JUL 06	SUNSET: 1942										SUNRISE: 0437		JUL 12	SUNSET: 1940								
03	CLR	NC		10.00		68	63	65	84	5	06	29.06	30.20	03	CLR	NC		10.00		55	51	53	87	7	04	28.97	30.12
06	FEW	NC		10.00		66	59	62	78	8	17	29.06	30.20	06	CLR	NC		10.00		57	53	55	87	7	04	28.97	30.12
09	OVC	010		1.25	TSRA BR	66	65	65	96	6	16	29.12	30.27	09	CLR	NC		10.00		69	56	61	63	5	VR	28.97	30.12
12	BKN	017		10.00		70	68	69	93	3	20	29.12	30.27	12	SCT	NC		10.00		75	56	63	52	8	09	28.94	30.09
15	CLR	NC		10.00		75	69	71	82	0	00	29.07	30.21	15	CLR	NC		10.00		77	56	64	48	8	05	28.92	30.06
18	CLR	NC		10.00		75	70	72	84	7	27	29.04	30.19	18	FEW	NC		10.00		75	57	64	54	8	02	28.88	30.02
21	CLR	NC		10.00		71	69	70	94	3	10	29.07	30.22	2													

OBSERVATIONS AT 3-HOURLY INTERVALS

DUBUQUE, IA

JULY 2002

DBQ

WBAN # 94908

HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES,HG)		HOUR (LST)			SATELLITE		WEATHER	TEMPERATURE °F				WIND		PRESSURE (INCHES,HG)	
			OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>		VISIBILITY (MILES)	RELATIVE HUMIDITY (PCT)	SPEED (MPH)	DIRECTION TENS OF DEG								STATION	SEA LEVEL		OBSERVATION TIME (LST)	EFF CLD AMT <small>Okta</small>	VISIBILITY (MILES)	RELATIVE HUMIDITY (PCT)				
	SKY COVER	CEILING 100'S OF FT								SKY COVER	CEILING 100'S OF FT																
			SUNRISE: 0438		JUL 13	SUNSET: 1940										SUNRISE: 0443		JUL 19	SUNSET: 1936								
03	CLR	NC		8.00	BR	58	54	56	87	0	00	28.89	30.02	03	OVC	080		7.00	BR	69	68	68	96	6	23	28.77	29.90
06	CLR	NC		6.00		60	56	58	86	0	00	28.90	30.04	06	BKN	080		4.00		70	69	69	97	0	00	28.82	29.95
09	CLR	NC		10.00		71	60	64	68	3	VR	28.91	30.05	09	FEW	NC		8.00		76	72	73	88	8	04	28.80	29.94
12	FEW	NC		10.00		77	57	65	50	6	VR	28.90	30.03	12	OVC	027		10.00		79	71	74	77	5	17	28.81	29.94
15	CLR	NC		10.00		79	54	64	42	7	06	28.88	30.01	15	OVC	029		8.00		81	73	75	77	7	10	28.80	29.93
18	CLR	NC		10.00		78	56	65	47	5	07	28.85	29.99	18	SCT	NC		6.00		81	73	75	77	6	09	28.79	29.92
21	CLR	NC		10.00		65	60	62	84	0	00	28.86	30.00	21	BKN	055		6.00		75	72	73	90	6	08	28.84	29.96
24	CLR	NC		10.00		60	56	58	86	0	00	28.88	30.02	24	CLR	NC		3.00		73	70	71	90	8	13	28.83	29.96
			SUNRISE: 0438		JUL 14	SUNSET: 1939										SUNRISE: 0444		JUL 20	SUNSET: 1935								
03	CLR	NC		8.00		59	56	57	90	0	00	28.88	30.01	03	CLR	NC		4.00	BR	71	69	70	94	5	13	28.84	29.97
06	CLR	NC		10.00		65	58	61	78	7	01	28.90	30.04	06	CLR	NC		4.00	HZ	70	65	67	84	13	15	28.84	29.97
09	CLR	NC		10.00		76	62	67	62	6	04	28.93	30.08	09	FEW	NC		8.00		76	69	71	79	14	16	28.85	29.98
12	CLR	NC		10.00		80	58	66	47	6	32	28.92	30.07	12	BKN	020		7.00		84	76	78	77	14	16	28.84	29.96
15	CLR	NC		10.00		81	55	65	41	3	VR	28.91	30.04	15	FEW	NC		7.00		86	79	81	80	6	12	28.85	29.97
18	CLR	NC		10.00		79	59	66	50	5	29	28.91	30.04	18	CLR	NC		9.00		84	77	79	80	12	16	28.79	29.92
21	CLR	NC		8.00		66	62	64	87	0	00	28.92	30.05	21	CLR	NC		10.00		77	73	74	88	8	20	28.79	29.92
24	CLR	NC		10.00		64	59	61	84	0	00	28.93	30.08	24	CLR	NC		9.00		78	76	77	93	12	20	28.79	29.91
			SUNRISE: 0439		JUL 15	SUNSET: 1938										SUNRISE: 0444		JUL 21	SUNSET: 1934								
03	CLR	NC		9.00		60	57	58	90	3	21	28.93	30.07	03	CLR	NC		9.00		77	75	76	94	13	20	28.76	29.88
06	CLR	NC		7.00		63	61	62	93	0	00	28.97	30.11	06	CLR	NC		9.00		77	74	75	90	10	21	28.79	29.91
09	CLR	NC		10.00		77	63	68	62	5	34	29.00	30.14	09	CLR	NC		10.00		85	75	78	72	15	22	28.80	29.92
12	SCT	NC		10.00		80	61	68	52	8	25	28.99	30.13	12	CLR	NC		10.00		89	76	80	65	15	22	28.79	29.91
15	CLR	NC		10.00		81	60	68	49	7	22	28.95	30.09	15	CLR	NC		10.00		90	78	81	68	17	19	28.74	29.86
18	CLR	NC		10.00		79	63	69	58	3	23	28.94	30.09	18	CLR	NC		10.00		87	77	80	72	15	19	28.68	29.80
21	CLR	NC		8.00		69	65	66	87	0	00	28.96	30.10	21	CLR	NC		10.00		80	75	77	85	9	19	28.74	29.86
24	CLR	NC		7.00		64	60	62	87	0	00	28.95	30.09	24	SCT	NC		10.00		72	68	69	87	9	04	28.79	29.91
			SUNRISE: 0440		JUL 16	SUNSET: 1938										SUNRISE: 0445		JUL 22	SUNSET: 1933								
03	CLR	NC		6.00	BR	62	59	60	90	0	00	28.94	30.08	03	CLR	NC		10.00	-RA	72	67	69	84	0	00	28.72	29.84
06	CLR	NC		5.00		63	59	61	87	0	00	28.97	30.12	06	OVC	035		7.00		71	70	70	96	7	03	28.77	29.90
09	CLR	NC		10.00		76	63	68	64	9	18	28.98	30.13	09	SCT	NC		10.00		76	71	73	85	6	29	28.80	29.93
12	BKN	043		10.00		80	63	69	56	6	23	28.97	30.11	12	BKN	023		10.00		76	69	71	79	12	35	28.85	29.98
15	SCT	NC		10.00		83	64	71	53	10	18	28.94	30.09	15	CLR	NC		10.00		78	67	71	69	6	26	28.86	29.99
18	CLR	NC		10.00		80	65	70	60	7	21	28.92	30.07	18	CLR	NC		10.00		78	60	67	54	12	32	28.87	30.00
21	CLR	NC		7.00		71	65	67	81	3	19	28.93	30.07	21	CLR	NC		10.00		69	60	64	73	9	33	28.91	30.05
24	CLR	NC		5.00		67	63	64	87	3	19	28.93	30.07	24	CLR	NC		10.00		64	60	62	87	7	34	28.96	30.11
			SUNRISE: 0441		JUL 17	SUNSET: 1937										SUNRISE: 0446		JUL 23	SUNSET: 1932								
03	CLR	NC		4.00	BR	64	61	62	90	0	00	28.92	30.04	03	CLR	NC		10.00		62	58	60	86	8	36	28.98	30.12
06	CLR	NC		2.00		63	61	62	93	0	00	28.93	30.07	06	CLR	NC		10.00		63	59	61	87	12	03	29.02	30.16
09	SCT	NC		3.00		76	69	71	79	6	21	28.94	30.08	09	OVC	016		10.00		65	60	62	84	10	03	29.09	30.24
12	SCT	NC		8.00		83	67	72	59	8	22	28.91	30.04	12	CLR	NC		10.00		72	59	64	64	8	04	29.10	30.25
15	FEW	NC		8.00		85	65	72	51	6	VR	28.88	30.01	15	CLR	NC		10.00		75	60	66	60	8	01	29.06	30.21
18	CLR	NC		8.00		82	68	73	63	6	23	28.85	29.98	18	CLR	NC		10.00		73	59	64	62	8	03	29.04	30.19
21	OVC	055		6.00		76	69	71	79	3	17	28.87	29.99	21	CLR	NC		10.00		63	56	59	78	6	05	29.09	30.24
24	CLR	NC		4.00		71	68	69	90	3	21	28.85	29.98	24	CLR	NC		10.00		61	53	57	75	7	05	29.11	30.26
			SUNRISE: 0442		JUL 18	SUNSET: 1936										SUNRISE: 0447		JUL 24	SUNSET: 1932								
03	CLR	NC		4.00	BR	70	68	69	93	5	18	28.81	29.94	03	CLR	NC		10.00		59	51	55	75	3	06	29.08	30.23
06	CLR	NC		2.50		69	68	68	96	3	16	28.84	29.96	06	CLR	NC		10.00		58	53	55	84	5	03	29.09	30.24
09	CLR	NC		7.00		80	73	75	79	0	00	28.84	29.97	09	CLR	NC		10.00		68	60	63	76	6	VR	29.09	30.24
12	FEW	NC		10.00		85	73	77	68	8	20	28.80	29.93	12	CLR	NC		10.00		73	59	64	62	7	12	29.09	30.24
15	BKN	055		10.00		80	70	73	71	0	00	28.77	29.90	15	SCT	NC		10.00		77	62	68	60	7	16	29.03	30.18
18	OVC	030		5.00		71	66	68	84	6	20	28.79	29.92	18	SCT	NC		10.00		75	63	67	66	0	00	29.00	30.15
21	FEW	NC		9.00		69	68	68	96	8	22	28.79	29.92	21	CLR	NC		8.00		68	63	65	84	5	12	28.95	30.10
24	OVC	049		6.00		69	67	68	93	6	12	28.77	29.89	24	BKN	037		10.00		66	57	61	73	8	14	28.96	30.11

DUBUQUE, IA

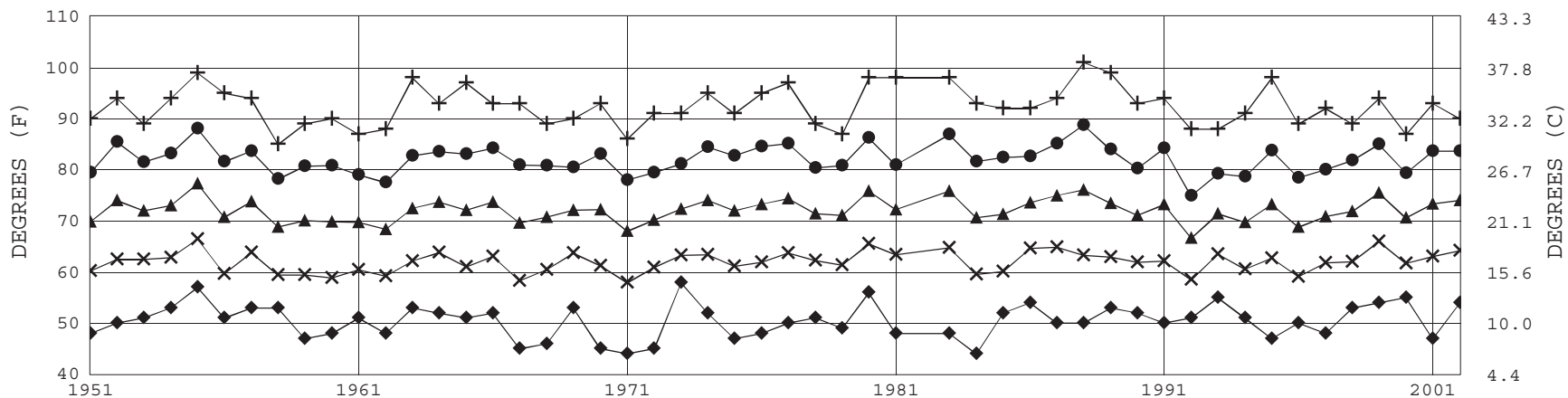
JULY 2002

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)																																																																																																																																																																																																																																																																																																																																																				
			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		Visibility (Miles)	Dry Bulb	Dew Point		Wet Bulb	Speed (MPH)	Direction Tens of Deg	Station	Sea Level																																																																																																																																																																																																																																																																																																																																																		
	Sky Cover	Ceiling 100'S OFF	Observation Time (LST)	Eff ClD AMT Okta		Visibility (Miles)	Dry Bulb	Dew Point		Wet Bulb	Relative Humidity (Pct)	Speed (MPH)	Direction Tens of Deg		Station	Sea Level	Sky Cover	Ceiling 100'S OFF		Observation Time (LST)	Eff ClD AMT Okta	Visibility (Miles)		Dry Bulb	Dew Point	Wet Bulb	Relative Humidity (Pct)	Speed (MPH)	Direction Tens of Deg	Station	Sea Level																																																																																																																																																																																																																																																																																																																																															
<div>SUNRISE: 0448 JUL 25 SUNSET: 1931</div>																																																																																																																																																																																																																																																																																																																																																																														
03	CLR	NC		10.00		65	54	59	68	15	14	28.89	30.02	03	CLR	NC		10.00		71	68	69	90	8	20	28.84	29.96																																																																																																																																																																																																																																																																																																																																																			
06	CLR	NC		7.00		64	60	62	87	12	15	28.89	30.03	06	CLR	NC		10.00		70	67	68	90	6	19	28.86	29.99																																																																																																																																																																																																																																																																																																																																																			
09	CLR	NC		8.00		71	66	68	84	13	17	28.86	29.99	09	CLR	NC		10.00		80	69	73	69	10	22	28.87	29.99																																																																																																																																																																																																																																																																																																																																																			
12	BKN	027		10.00		77	67	70	71	12	20	28.83	29.96	12	CLR	NC		10.00		85	71	75	63	14	20	28.83	29.96																																																																																																																																																																																																																																																																																																																																																			
15	FEW	NC		10.00		81	69	73	67	12	20	28.79	29.92	15	CLR	NC		10.00		87	70	75	57	16	18	28.79	29.92																																																																																																																																																																																																																																																																																																																																																			
18	BKN	085		9.00		79	71	74	77	8	19	28.76	29.89	18	CLR	NC		10.00		83	71	75	67	10	17	28.76	29.89																																																																																																																																																																																																																																																																																																																																																			
21	CLR	NC		6.00	BR	73	70	71	90	6	21	28.75	29.89	21	CLR	NC		10.00		76	71	73	85	10	16	28.76	29.88																																																																																																																																																																																																																																																																																																																																																			
24	SCT	NC		4.00	BR	71	69	70	94	5	20	28.76	29.88	24	CLR	NC		9.00		74	71	72	91	15	17	28.75	29.87																																																																																																																																																																																																																																																																																																																																																			
<div>SUNRISE: 0449 JUL 26 SUNSET: 1930</div>																																																																																																																																																																																																																																																																																																																																																																														
03	BKN	048		4.00	BR	72	70	71	94	5	21	28.74	29.87	<div>3-Hourly Observation Notes</div> <p>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.</p> <p>Ceiling is reported in hundreds of feet above ground level for clouds at or below 12,000 feet.</p> <p>NC= No ceiling detected.</p> <p>& = Original observation contained additional weather elements.</p> <p>See page 3 for additional notes.</p>																																																																																																																																																																																																																																																																																																																																																																
06	CLR	NC		2.00	BR	73	71	72	94	0	00	28.74	29.87																																																																																																																																																																																																																																																																																																																																																																	
09	BKN	016		4.00	HZ	77	72	74	85	3	VR	28.77	29.90																																																																																																																																																																																																																																																																																																																																																																	
12	SCT	NC		5.00	HZ	80	72	74	76	3	22	28.79	29.92																																																																																																																																																																																																																																																																																																																																																																	
15	CLR	NC		10.00		84	66	72	55	3	VR	28.76	29.88																																																																																																																																																																																																																																																																																																																																																																	
18	CLR	NC		10.00		80	70	73	71	6	23	28.75	29.88																																																																																																																																																																																																																																																																																																																																																																	
21	CLR	NC		9.00		72	69	70	91	3	19	28.75	29.88																																																																																																																																																																																																																																																																																																																																																																	
24	OVC	120		9.00		73	70	71	90	0	00	28.72	29.84																																																																																																																																																																																																																																																																																																																																																																	
<div>SUNRISE: 0450 JUL 27 SUNSET: 1929</div>																																																																																																																																																																																																																																																																																																																																																																														
03	BKN	032		4.00	-RA BR	72	71	71	97	8	25	28.71	29.84	<div>SUMMARY BY HOUR</div> <table><tr><th rowspan="3">Hour (LST)</th><th colspan="10">Averages</th><th colspan="2">Resultant Wind (MPH)</th></tr><tr><th rowspan="2">Ceilometer</th><th rowspan="2">Eff ClD AMT</th><th rowspan="2">Dry Bulb</th><th rowspan="2">Dew Point</th><th rowspan="2">Wet Bulb</th><th rowspan="2">Relative Humidity</th><th colspan="2">Pressure (Inches,Hg)</th><th rowspan="2">Visibility (Miles)</th><th rowspan="2">Wind Speed (MPH)</th><th rowspan="2">Speed</th><th rowspan="2">Direction</th></tr><tr><th>Station</th><th>Sea Level</th></tr><tr><td>01</td><td></td><td></td><td>69</td><td>64</td><td>66</td><td>86</td><td>28.88</td><td>30.02</td><td>8.01</td><td>6</td><td>3</td><td>16</td></tr><tr><td>02</td><td></td><td></td><td>68</td><td>64</td><td>65</td><td>87</td><td>28.88</td><td>30.01</td><td>7.81</td><td>6</td><td>3</td><td>17</td></tr><tr><td>03</td><td></td><td></td><td>67</td><td>63</td><td>65</td><td>88</td><td>28.88</td><td>30.01</td><td>7.62</td><td>6</td><td>2</td><td>17</td></tr><tr><td>04</td><td></td><td></td><td>67</td><td>63</td><td>64</td><td>89</td><td>28.89</td><td>30.02</td><td>7.31</td><td>5</td><td>1</td><td>14</td></tr><tr><td>05</td><td></td><td></td><td>66</td><td>63</td><td>64</td><td>90</td><td>28.90</td><td>30.03</td><td>6.41</td><td>6</td><td>1</td><td>16</td></tr><tr><td>06</td><td></td><td></td><td>67</td><td>64</td><td>65</td><td>88</td><td>28.90</td><td>30.04</td><td>6.84</td><td>6</td><td>2</td><td>14</td></tr><tr><td>07</td><td></td><td></td><td>70</td><td>65</td><td>67</td><td>84</td><td>28.91</td><td>30.05</td><td>7.30</td><td>8</td><td>2</td><td>15</td></tr><tr><td>08</td><td></td><td></td><td>73</td><td>66</td><td>68</td><td>80</td><td>28.91</td><td>30.05</td><td>7.69</td><td>8</td><td>2</td><td>15</td></tr><tr><td>09</td><td></td><td></td><td>75</td><td>67</td><td>70</td><td>76</td><td>28.91</td><td>30.05</td><td>8.23</td><td>8</td><td>3</td><td>19</td></tr><tr><td>10</td><td></td><td></td><td>77</td><td>67</td><td>71</td><td>72</td><td>28.92</td><td>30.05</td><td>8.76</td><td>8</td><td>2</td><td>20</td></tr><tr><td>11</td><td></td><td></td><td>79</td><td>67</td><td>71</td><td>68</td><td>28.91</td><td>30.05</td><td>8.81</td><td>8</td><td>4</td><td>19</td></tr><tr><td>12</td><td></td><td></td><td>80</td><td>67</td><td>72</td><td>67</td><td>28.91</td><td>30.04</td><td>8.94</td><td>9</td><td>5</td><td>20</td></tr><tr><td>13</td><td></td><td></td><td>81</td><td>68</td><td>72</td><td>65</td><td>28.89</td><td>30.03</td><td>9.16</td><td>9</td><td>5</td><td>19</td></tr><tr><td>14</td><td></td><td></td><td>82</td><td>68</td><td>73</td><td>63</td><td>28.88</td><td>30.02</td><td>9.45</td><td>10</td><td>5</td><td>20</td></tr><tr><td>15</td><td></td><td></td><td>82</td><td>68</td><td>73</td><td>62</td><td>28.88</td><td>30.01</td><td>9.61</td><td>9</td><td>4</td><td>18</td></tr><tr><td>16</td><td></td><td></td><td>82</td><td>67</td><td>72</td><td>61</td><td>28.87</td><td>30.00</td><td>9.52</td><td>9</td><td>4</td><td>19</td></tr><tr><td>17</td><td></td><td></td><td>82</td><td>68</td><td>73</td><td>64</td><td>28.86</td><td>29.99</td><td>9.58</td><td>9</td><td>4</td><td>19</td></tr><tr><td>18</td><td></td><td></td><td>80</td><td>68</td><td>72</td><td>67</td><td>28.86</td><td>30.00</td><td>9.58</td><td>8</td><td>3</td><td>20</td></tr><tr><td>19</td><td></td><td></td><td>77</td><td>68</td><td>71</td><td>75</td><td>28.87</td><td>30.00</td><td>9.06</td><td>6</td><td>2</td><td>17</td></tr><tr><td>20</td><td></td><td></td><td>74</td><td>68</td><td>70</td><td>82</td><td>28.87</td><td>30.00</td><td>9.06</td><td>6</td><td>2</td><td>17</td></tr><tr><td>21</td><td></td><td></td><td>72</td><td>67</td><td>69</td><td>84</td><td>28.88</td><td>30.01</td><td>8.97</td><td>6</td><td>2</td><td>15</td></tr><tr><td>22</td><td></td><td></td><td>71</td><td>66</td><td>68</td><td>85</td><td>28.88</td><td>30.02</td><td>8.65</td><td>7</td><td>3</td><td>16</td></tr><tr><td>23</td><td></td><td></td><td>70</td><td>65</td><td>67</td><td>85</td><td>28.89</td><td>30.02</td><td>8.59</td><td>6</td><td>3</td><td>15</td></tr><tr><td>24</td><td></td><td></td><td>69</td><td>65</td><td>66</td><td>86</td><td>28.88</td><td>30.02</td><td>8.21</td><td>6</td><td>2</td><td>15</td></tr></table>														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			69	64	66	86	28.88	30.02	8.01	6	3	16	02			68	64	65	87	28.88	30.01	7.81	6	3	17	03			67	63	65	88	28.88	30.01	7.62	6	2	17	04			67	63	64	89	28.89	30.02	7.31	5	1	14	05			66	63	64	90	28.90	30.03	6.41	6	1	16	06			67	64	65	88	28.90	30.04	6.84	6	2	14	07			70	65	67	84	28.91	30.05	7.30	8	2	15	08			73	66	68	80	28.91	30.05	7.69	8	2	15	09			75	67	70	76	28.91	30.05	8.23	8	3	19	10			77	67	71	72	28.92	30.05	8.76	8	2	20	11			79	67	71	68	28.91	30.05	8.81	8	4	19	12			80	67	72	67	28.91	30.04	8.94	9	5	20	13			81	68	72	65	28.89	30.03	9.16	9	5	19	14			82	68	73	63	28.88	30.02	9.45	10	5	20	15			82	68	73	62	28.88	30.01	9.61	9	4	18	16			82	67	72	61	28.87	30.00	9.52	9	4	19	17			82	68	73	64	28.86	29.99	9.58	9	4	19	18			80	68	72	67	28.86	30.00	9.58	8	3	20	19			77	68	71	75	28.87	30.00	9.06	6	2	17	20			74	68	70	82	28.87	30.00	9.06	6	2	17	21			72	67	69	84	28.88	30.01	8.97	6	2	15	22			71	66	68	85	28.88	30.02	8.65	7	3	16	23			70	65	67	85	28.89	30.02	8.59	6	3	15	24			69	65	66	86	28.88	30.02	8.21	6	2	15
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			69	64	66	86	28.88	30.02	8.01	6	3	16																																																																																																																																																																																																																																																																																																																																																																		
02			68	64	65	87	28.88	30.01	7.81	6	3	17																																																																																																																																																																																																																																																																																																																																																																		
03			67	63	65	88	28.88	30.01	7.62	6	2	17																																																																																																																																																																																																																																																																																																																																																																		
04			67	63	64	89	28.89	30.02	7.31	5	1	14																																																																																																																																																																																																																																																																																																																																																																		
05			66	63	64	90	28.90	30.03	6.41	6	1	16																																																																																																																																																																																																																																																																																																																																																																		
06			67	64	65	88	28.90	30.04	6.84	6	2	14																																																																																																																																																																																																																																																																																																																																																																		
07			70	65	67	84	28.91	30.05	7.30	8	2	15																																																																																																																																																																																																																																																																																																																																																																		
08			73	66	68	80	28.91	30.05	7.69	8	2	15																																																																																																																																																																																																																																																																																																																																																																		
09			75	67	70	76	28.91	30.05	8.23	8	3	19																																																																																																																																																																																																																																																																																																																																																																		
10			77	67	71	72	28.92	30.05	8.76	8	2	20																																																																																																																																																																																																																																																																																																																																																																		
11			79	67	71	68	28.91	30.05	8.81	8	4	19																																																																																																																																																																																																																																																																																																																																																																		
12			80	67	72	67	28.91	30.04	8.94	9	5	20																																																																																																																																																																																																																																																																																																																																																																		
13			81	68	72	65	28.89	30.03	9.16	9	5	19																																																																																																																																																																																																																																																																																																																																																																		
14			82	68	73	63	28.88	30.02	9.45	10	5	20																																																																																																																																																																																																																																																																																																																																																																		
15			82	68	73	62	28.88	30.01	9.61	9	4	18																																																																																																																																																																																																																																																																																																																																																																		
16			82	67	72	61	28.87	30.00	9.52	9	4	19																																																																																																																																																																																																																																																																																																																																																																		
17			82	68	73	64	28.86	29.99	9.58	9	4	19																																																																																																																																																																																																																																																																																																																																																																		
18			80	68	72	67	28.86	30.00	9.58	8	3	20																																																																																																																																																																																																																																																																																																																																																																		
19			77	68	71	75	28.87	30.00	9.06	6	2	17																																																																																																																																																																																																																																																																																																																																																																		
20			74	68	70	82	28.87	30.00	9.06	6	2	17																																																																																																																																																																																																																																																																																																																																																																		
21			72	67	69	84	28.88	30.01	8.97	6	2	15																																																																																																																																																																																																																																																																																																																																																																		
22			71	66	68	85	28.88	30.02	8.65	7	3	16																																																																																																																																																																																																																																																																																																																																																																		
23			70	65	67	85	28.89	30.02	8.59	6	3	15																																																																																																																																																																																																																																																																																																																																																																		
24			69	65	66	86	28.88	30.02	8.21	6	2	15																																																																																																																																																																																																																																																																																																																																																																		
<div>SUNRISE: 0451 JUL 28 SUNSET: 1928</div>																																																																																																																																																																																																																																																																																																																																																																														
03	CLR	NC		7.00		73	72	72	96	8	19	28.60	29.72	<div>SUMMARY BY HOUR</div> <table><tr><th rowspan="3">Hour (LST)</th><th colspan="10">Averages</th><th colspan="2">Resultant Wind (MPH)</th></tr><tr><th rowspan="2">Ceilometer</th><th rowspan="2">Eff ClD AMT</th><th rowspan="2">Dry Bulb</th><th rowspan="2">Dew Point</th><th rowspan="2">Wet Bulb</th><th rowspan="2">Relative Humidity</th><th colspan="2">Pressure (Inches,Hg)</th><th rowspan="2">Visibility (Miles)</th><th rowspan="2">Wind Speed (MPH)</th><th rowspan="2">Speed</th><th rowspan="2">Direction</th></tr><tr><th>Station</th><th>Sea Level</th></tr><tr><td>01</td><td></td><td></td><td>69</td><td>64</td><td>66</td><td>86</td><td>28.88</td><td>30.02</td><td>8.01</td><td>6</td><td>3</td><td>16</td></tr><tr><td>02</td><td></td><td></td><td>68</td><td>64</td><td>65</td><td>87</td><td>28.88</td><td>30.01</td><td>7.81</td><td>6</td><td>3</td><td>17</td></tr><tr><td>03</td><td></td><td></td><td>67</td><td>63</td><td>65</td><td>88</td><td>28.88</td><td>30.01</td><td>7.62</td><td>6</td><td>2</td><td>17</td></tr><tr><td>04</td><td></td><td></td><td>67</td><td>63</td><td>64</td><td>89</td><td>28.89</td><td>30.02</td><td>7.31</td><td>5</td><td>1</td><td>14</td></tr><tr><td>05</td><td></td><td></td><td>66</td><td>63</td><td>64</td><td>90</td><td>28.90</td><td>30.03</td><td>6.41</td><td>6</td><td>1</td><td>16</td></tr><tr><td>06</td><td></td><td></td><td>67</td><td>64</td><td>65</td><td>88</td><td>28.90</td><td>30.04</td><td>6.84</td><td>6</td><td>2</td><td>14</td></tr><tr><td>07</td><td></td><td></td><td>70</td><td>65</td><td>67</td><td>84</td><td>28.91</td><td>30.05</td><td>7.30</td><td>8</td><td>2</td><td>15</td></tr><tr><td>08</td><td></td><td></td><td>73</td><td>66</td><td>68</td><td>80</td><td>28.91</td><td>30.05</td><td>7.69</td><td>8</td><td>2</td><td>15</td></tr><tr><td>09</td><td></td><td></td><td>75</td><td>67</td><td>70</td><td>76</td><td>28.91</td><td>30.05</td><td>8.23</td><td>8</td><td>3</td><td>19</td></tr><tr><td>10</td><td></td><td></td><td>77</td><td>67</td><td>71</td><td>72</td><td>28.92</td><td>30.05</td><td>8.76</td><td>8</td><td>2</td><td>20</td></tr><tr><td>11</td><td></td><td></td><td>79</td><td>67</td><td>71</td><td>68</td><td>28.91</td><td>30.05</td><td>8.81</td><td>8</td><td>4</td><td>19</td></tr><tr><td>12</td><td></td><td></td><td>80</td><td>67</td><td>72</td><td>67</td><td>28.91</td><td>30.04</td><td>8.94</td><td>9</td><td>5</td><td>20</td></tr><tr><td>13</td><td></td><td></td><td>81</td><td>68</td><td>72</td><td>65</td><td>28.89</td><td>30.03</td><td>9.16</td><td>9</td><td>5</td><td>19</td></tr><tr><td>14</td><td></td><td></td><td>82</td><td>68</td><td>73</td><td>63</td><td>28.88</td><td>30.02</td><td>9.45</td><td>10</td><td>5</td><td>20</td></tr><tr><td>15</td><td></td><td></td><td>82</td><td>68</td><td>73</td><td>62</td><td>28.88</td><td>30.01</td><td>9.61</td><td>9</td><td>4</td><td>18</td></tr><tr><td>16</td><td></td><td></td><td>82</td><td>67</td><td>72</td><td>61</td><td>28.87</td><td>30.00</td><td>9.52</td><td>9</td><td>4</td><td>19</td></tr><tr><td>17</td><td></td><td></td><td>82</td><td>68</td><td>73</td><td>64</td><td>28.86</td><td>29.99</td><td>9.58</td><td>9</td><td>4</td><td>19</td></tr><tr><td>18</td><td></td><td></td><td>80</td><td>68</td><td>72</td><td>67</td><td>28.86</td><td>30.00</td><td>9.58</td><td>8</td><td>3</td><td>20</td></tr><tr><td>19</td><td></td><td></td><td>77</td><td>68</td><td>71</td><td>75</td><td>28.87</td><td>30.00</td><td>9.06</td><td>6</td><td>2</td><td>17</td></tr><tr><td>20</td><td></td><td></td><td>74</td><td>68</td><td>70</td><td>82</td><td>28.87</td><td>30.00</td><td>9.06</td><td>6</td><td>2</td><td>17</td></tr><tr><td>21</td><td></td><td></td><td>72</td><td>67</td><td>69</td><td>84</td><td>28.88</td><td>30.01</td><td>8.97</td><td>6</td><td>2</td><td>15</td></tr><tr><td>22</td><td></td><td></td><td>71</td><td>66</td><td>68</td><td>85</td><td>28.88</td><td>30.02</td><td>8.65</td><td>7</td><td>3</td><td>16</td></tr><tr><td>23</td><td></td><td></td><td>70</td><td>65</td><td>67</td><td>85</td><td>28.89</td><td>30.02</td><td>8.59</td><td>6</td><td>3</td><td>15</td></tr><tr><td>24</td><td></td><td></td><td>69</td><td>65</td><td>66</td><td>86</td><td>28.88</td><td>30.02</td><td>8.21</td><td>6</td><td>2</td><td>15</td></tr></table>														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			69	64	66	86	28.88	30.02	8.01	6	3	16	02			68	64	65	87	28.88	30.01	7.81	6	3	17	03			67	63	65	88	28.88	30.01	7.62	6	2	17	04			67	63	64	89	28.89	30.02	7.31	5	1	14	05			66	63	64	90	28.90	30.03	6.41	6	1	16	06			67	64	65	88	28.90	30.04	6.84	6	2	14	07			70	65	67	84	28.91	30.05	7.30	8	2	15	08			73	66	68	80	28.91	30.05	7.69	8	2	15	09			75	67	70	76	28.91	30.05	8.23	8	3	19	10			77	67	71	72	28.92	30.05	8.76	8	2	20	11			79	67	71	68	28.91	30.05	8.81	8	4	19	12			80	67	72	67	28.91	30.04	8.94	9	5	20	13			81	68	72	65	28.89	30.03	9.16	9	5	19	14			82	68	73	63	28.88	30.02	9.45	10	5	20	15			82	68	73	62	28.88	30.01	9.61	9	4	18	16			82	67	72	61	28.87	30.00	9.52	9	4	19	17			82	68	73	64	28.86	29.99	9.58	9	4	19	18			80	68	72	67	28.86	30.00	9.58	8	3	20	19			77	68	71	75	28.87	30.00	9.06	6	2	17	20			74	68	70	82	28.87	30.00	9.06	6	2	17	21			72	67	69	84	28.88	30.01	8.97	6	2	15	22			71	66	68	85	28.88	30.02	8.65	7	3	16	23			70	65	67	85	28.89	30.02	8.59	6	3	15	24			69	65	66	86	28.88	30.02	8.21	6	2	15
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			69	64	66	86	28.88	30.02	8.01	6	3	16																																																																																																																																																																																																																																																																																																																																																																		
02			68	64	65	87	28.88	30.01	7.81	6	3	17																																																																																																																																																																																																																																																																																																																																																																		
03			67	63	65	88	28.88	30.01	7.62	6	2	17																																																																																																																																																																																																																																																																																																																																																																		
04			67	63	64	89	28.89	30.02	7.31	5	1	14																																																																																																																																																																																																																																																																																																																																																																		
05			66	63	64	90	28.90	30.03	6.41	6	1	16																																																																																																																																																																																																																																																																																																																																																																		
06			67	64	65	88	28.90	30.04	6.84	6	2	14																																																																																																																																																																																																																																																																																																																																																																		
07			70	65	67	84	28.91	30.05	7.30	8	2	15																																																																																																																																																																																																																																																																																																																																																																		
08			73	66	68	80	28.91	30.05	7.69	8	2	15																																																																																																																																																																																																																																																																																																																																																																		
09			75	67	70	76	28.91	30.05	8.23	8	3	19																																																																																																																																																																																																																																																																																																																																																																		
10			77	67	71	72	28.92	30.05	8.76	8	2	20																																																																																																																																																																																																																																																																																																																																																																		
11			79	67	71	68	28.91	30.05	8.81	8	4	19																																																																																																																																																																																																																																																																																																																																																																		
12			80	67	72	67	28.91	30.04	8.94	9	5	20																																																																																																																																																																																																																																																																																																																																																																		
13			81	68	72	65	28.89	30.03	9.16	9	5	19																																																																																																																																																																																																																																																																																																																																																																		
14			82	68	73	63	28.88	30.02	9.45	10	5	20																																																																																																																																																																																																																																																																																																																																																																		
15			82	68	73	62	28.88	30.01	9.61	9	4	18																																																																																																																																																																																																																																																																																																																																																																		
16			82	67	72	61	28.87	30.00	9.52	9	4	19																																																																																																																																																																																																																																																																																																																																																																		
17			82	68	73	64	28.86	29.99	9.58	9	4	19																																																																																																																																																																																																																																																																																																																																																																		
18			80	68	72	67	28.86	30.00	9.58	8	3	20																																																																																																																																																																																																																																																																																																																																																																		
19			77	68	71	75	28.87	30.00	9.06	6	2	17																																																																																																																																																																																																																																																																																																																																																																		
20			74	68	70	82	28.87	30.00	9.06	6	2	17																																																																																																																																																																																																																																																																																																																																																																		
21			72	67	69	84	28.88	30.01	8.97	6	2	15																																																																																																																																																																																																																																																																																																																																																																		
22			71	66	68	85	28.88	30.02	8.65	7	3	16																																																																																																																																																																																																																																																																																																																																																																		
23			70	65	67	85	28.89	30.02	8.59	6	3	15																																																																																																																																																																																																																																																																																																																																																																		
24			69	65	66	86	28.88	30.02	8.21	6	2	15																																																																																																																																																																																																																																																																																																																																																																		
06	CLR	NC		4.00	BR	73	72	72	96	5	21	28.64	29.77																																																																																																																																																																																																																																																																																																																																																																	
09	FEW	NC		7.00		80	76	77	87	5	22	28.68	29.80																																																																																																																																																																																																																																																																																																																																																																	
12	CLR	NC		8.00		82	76	78	82	7	18	28.70	29.83																																																																																																																																																																																																																																																																																																																																																																	
15	CLR	NC		10.00		87	77	80	72	9	20	28.66	29.78																																																																																																																																																																																																																																																																																																																																																																	
18	CLR	NC		10.00		84	78	80	82	13	19	28.64	29.76																																																																																																																																																																																																																																																																																																																																																																	
21	CLR	NC		9.00		78	76	77	93	9	17	28.65	29.78																																																																																																																																																																																																																																																																																																																																																																	
24	CLR	NC		10.00		71	68	69	90	6	23	28.62	29.74																																																																																																																																																																																																																																																																																																																																																																	
<div>SUNRISE: 0452 JUL 29 SUNSET: 1927</div>																																																																																																																																																																																																																																																																																																																																																																														
03	OVC	070		9.00		70	69	69	97	6	23	28.66	29.78	<div>SUMMARY BY HOUR</div> <table><tr><th rowspan="3">Hour (LST)</th><th colspan="10">Averages</th><th colspan="2">Resultant Wind (MPH)</th></tr><tr><th rowspan="2">Ceilometer</th><th rowspan="2">Eff ClD AMT</th><th rowspan="2">Dry Bulb</th><th rowspan="2">Dew Point</th><th rowspan="2">Wet Bulb</th><th rowspan="2">Relative Humidity</th><th colspan="2">Pressure (Inches,Hg)</th><th rowspan="2">Visibility (Miles)</th><th rowspan="2">Wind Speed (MPH)</th><th rowspan="2">Speed</th><th rowspan="2">Direction</th></tr><tr><th>Station</th><th>Sea Level</th></tr><tr><td>01</td><td></td><td></td><td>69</td><td>64</td><td>66</td><td>86</td><td>28.88</td><td>30.02</td><td>8.01</td><td>6</td><td>3</td><td>16</td></tr><tr><td>02</td><td></td><td></td><td>68</td><td>64</td><td>65</td><td>87</td><td>28.88</td><td>30.01</td><td>7.81</td><td>6</td><td>3</td><td>17</td></tr><tr><td>03</td><td></td><td></td><td>67</td><td>63</td><td>65</td><td>88</td><td>28.88</td><td>30.01</td><td>7.62</td><td>6</td><td>2</td><td>17</td></tr><tr><td>04</td><td></td><td></td><td>67</td><td>63</td><td>64</td><td>89</td><td>28.89</td><td>30.02</td><td>7.31</td><td>5</td><td>1</td><td>14</td></tr><tr><td>05</td><td></td><td></td><td>66</td><td>63</td><td>64</td><td>90</td><td>28.90</td><td>30.03</td><td>6.41</td><td>6</td><td>1</td><td>16</td></tr><tr><td>06</td><td></td><td></td><td>67</td><td>64</td><td>65</td><td>88</td><td>28.90</td><td>30.04</td><td>6.84</td><td>6</td><td>2</td><td>14</td></tr><tr><td>07</td><td></td><td></td><td>70</td><td>65</td><td>67</td><td>84</td><td>28.91</td><td>30.05</td><td>7.30</td><td>8</td><td>2</td><td>15</td></tr><tr><td>08</td><td></td><td></td><td>73</td><td>66</td><td>68</td><td>80</td><td>28.91</td><td>30.05</td><td>7.69</td><td>8</td><td>2</td><td>15</td></tr><tr><td>09</td><td></td><td></td><td>75</td><td>67</td><td>70</td><td>76</td><td>28.91</td><td>30.05</td><td>8.23</td><td>8</td><td>3</td><td>19</td></tr><tr><td>10</td><td></td><td></td><td>77</td><td>67</td><td>71</td><td>72</td><td>28.92</td><td>30.05</td><td>8.76</td><td>8</td><td>2</td><td>20</td></tr><tr><td>11</td><td></td><td></td><td>79</td><td>67</td><td>71</td><td>68</td><td>28.91</td><td>30.05</td><td>8.81</td><td>8</td><td>4</td><td>19</td></tr><tr><td>12</td><td></td><td></td><td>80</td><td>67</td><td>72</td><td>67</td><td>28.91</td><td>30.04</td><td>8.94</td><td>9</td><td>5</td><td>20</td></tr><tr><td>13</td><td></td><td></td><td>81</td><td>68</td><td>72</td><td>65</td><td>28.89</td><td>30.03</td><td>9.16</td><td>9</td><td>5</td><td>19</td></tr><tr><td>14</td><td></td><td></td><td>82</td><td>68</td><td>73</td><td>63</td><td>28.88</td><td>30.02</td><td>9.45</td><td>10</td><td>5</td><td>20</td></tr><tr><td>15</td><td></td><td></td><td>82</td><td>68</td><td>73</td><td>62</td><td>28.88</td><td>30.01</td><td>9.61</td><td>9</td><td>4</td><td>18</td></tr><tr><td>16</td><td></td><td></td><td>82</td><td>67</td><td>72</td><td>61</td><td>28.87</td><td>30.00</td><td>9.52</td><td>9</td><td>4</td><td>19</td></tr><tr><td>17</td><td></td><td></td><td>82</td><td>68</td><td>73</td><td>64</td><td>28.86</td><td>29.99</td><td>9.58</td><td>9</td><td>4</td><td>19</td></tr><tr><td>18</td><td></td><td></td><td>80</td><td>68</td><td>72</td><td>67</td><td>28.86</td><td>30.00</td><td>9.58</td><td>8</td><td>3</td><td>20</td></tr><tr><td>19</td><td></td><td></td><td>77</td><td>68</td><td>71</td><td>75</td><td>28.87</td><td>30.00</td><td>9.06</td><td>6</td><td>2</td><td>17</td></tr><tr><td>20</td><td></td><td></td><td>74</td><td>68</td><td>70</td><td>82</td><td>28.87</td><td>30.00</td><td>9.06</td><td>6</td><td>2</td><td>17</td></tr><tr><td>21</td><td></td><td></td><td>72</td><td>67</td><td>69</td><td>84</td><td>28.88</td><td>30.01</td><td>8.97</td><td>6</td><td>2</td><td>15</td></tr><tr><td>22</td><td></td><td></td><td>71</td><td>66</td><td>68</td><td>85</td><td>28.88</td><td>30.02</td><td>8.65</td><td>7</td><td>3</td><td>16</td></tr><tr><td>23</td><td></td><td></td><td>70</td><td>65</td><td>67</td><td>85</td><td>28.89</td><td>30.02</td><td>8.59</td><td>6</td><td>3</td><td>15</td></tr><tr><td>24</td><td></td><td></td><td>69</td><td>65</td><td>66</td><td>86</td><td>28.88</td><td>30.02</td><td>8.21</td><td>6</td><td>2</td><td>15</td></tr></table>														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			69	64	66	86	28.88	30.02	8.01	6	3	16	02			68	64	65	87	28.88	30.01	7.81	6	3	17	03			67	63	65	88	28.88	30.01	7.62	6	2	17	04			67	63	64	89	28.89	30.02	7.31	5	1	14	05			66	63	64	90	28.90	30.03	6.41	6	1	16	06			67	64	65	88	28.90	30.04	6.84	6	2	14	07			70	65	67	84	28.91	30.05	7.30	8	2	15	08			73	66	68	80	28.91	30.05	7.69	8	2	15	09			75	67	70	76	28.91	30.05	8.23	8	3	19	10			77	67	71	72	28.92	30.05	8.76	8	2	20	11			79	67	71	68	28.91	30.05	8.81	8	4	19	12			80	67	72	67	28.91	30.04	8.94	9	5	20	13			81	68	72	65	28.89	30.03	9.16	9	5	19	14			82	68	73	63	28.88	30.02	9.45	10	5	20	15			82	68	73	62	28.88	30.01	9.61	9	4	18	16			82	67	72	61	28.87	30.00	9.52	9	4	19	17			82	68	73	64	28.86	29.99	9.58	9	4	19	18			80	68	72	67	28.86	30.00	9.58	8	3	20	19			77	68	71	75	28.87	30.00	9.06	6	2	17	20			74	68	70	82	28.87	30.00	9.06	6	2	17	21			72	67	69	84	28.88	30.01	8.97	6	2	15	22			71	66	68	85	28.88	30.02	8.65	7	3	16	23			70	65	67	85	28.89	30.02	8.59	6	3	15	24			69	65	66	86	28.88	30.02	8.21	6	2	15
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			69	64	66	86	28.88	30.02	8.01	6	3	16																																																																																																																																																																																																																																																																																																																																																																		
02			68	64	65	87	28.88	30.01	7.81	6	3	17																																																																																																																																																																																																																																																																																																																																																																		
03			67	63	65	88	28.88	30.01	7.62	6	2	17																																																																																																																																																																																																																																																																																																																																																																		
04			67	63	64	89	28.89	30.02	7.31	5	1	14																																																																																																																																																																																																																																																																																																																																																																		
05			66	63	64	90	28.90	30.03	6.41	6	1	16																																																																																																																																																																																																																																																																																																																																																																		
06			67	64	65	88	28.90	30.04	6.84	6	2	14																																																																																																																																																																																																																																																																																																																																																																		
07			70	65	67	84	28.91	30.05	7.30	8	2	15																																																																																																																																																																																																																																																																																																																																																																		
08			73	66	68	80	28.91	30.05	7.69	8	2	15																																																																																																																																																																																																																																																																																																																																																																		
09			75	67	70	76	28.91	30.05	8.23	8	3	19																																																																																																																																																																																																																																																																																																																																																																		
10			77	67	71	72	28.92	30.05	8.76	8	2	20																																																																																																																																																																																																																																																																																																																																																																		
11			79	67	71	68	28.91	30.05	8.81	8	4	19																																																																																																																																																																																																																																																																																																																																																																		
12			80	67	72	67	28.91	30.04	8.94	9	5	20																																																																																																																																																																																																																																																																																																																																																																		
13			81	68	72	65	28.89	30.03	9.16	9	5	19																																																																																																																																																																																																																																																																																																																																																																		
14			82	68	73	63	28.88	30.02	9.45	10	5	20																																																																																																																																																																																																																																																																																																																																																																		
15			82	68	73	62	28.88	30.01	9.61	9	4	18																																																																																																																																																																																																																																																																																																																																																																		
16			82	67	72	61	28.87	30.00	9.52	9	4	19																																																																																																																																																																																																																																																																																																																																																																		
17			82	68	73	64	28.86	29.99	9.58	9	4	19																																																																																																																																																																																																																																																																																																																																																																		
18			80	68	72	67	28.86	30.00	9.58	8	3	20																																																																																																																																																																																																																																																																																																																																																																		
19			77	68	71	75	28.87	30.00	9.06	6	2	17																																																																																																																																																																																																																																																																																																																																																																		
20			74	68	70	82	28.87	30.00	9.06	6	2	17																																																																																																																																																																																																																																																																																																																																																																		
21			72	67	69	84	28.88	30.01	8.97	6	2	15																																																																																																																																																																																																																																																																																																																																																																		
22			71	66	68	85	28.88	30.02	8.65	7	3	16																																																																																																																																																																																																																																																																																																																																																																		
23			70	65	67	85	28.89	30.02	8.59	6	3	15																																																																																																																																																																																																																																																																																																																																																																		
24			69	65	66	86	28.88	30.02	8.21	6	2	15																																																																																																																																																																																																																																																																																																																																																																		
06	FEW	NC		10.00		68	67	67	96	12	17	28.62	29.74																																																																																																																																																																																																																																																																																																																																																																	
09	BKN	045		10.00		71	68	69	90	7	21	28.65	29.78																																																																																																																																																																																																																																																																																																																																																																	
12	OVC	008		5.00	BR	71	70	70	96	10	21	28.70	29.83																																																																																																																																																																																																																																																																																																																																																																	
15	SCT	NC		10.00		79	69	72	72	13	30	28.72	29.85																																																																																																																																																																																																																																																																																																																																																																	
18	CLR	NC		10.00																																																																																																																																																																																																																																																																																																																																																																										

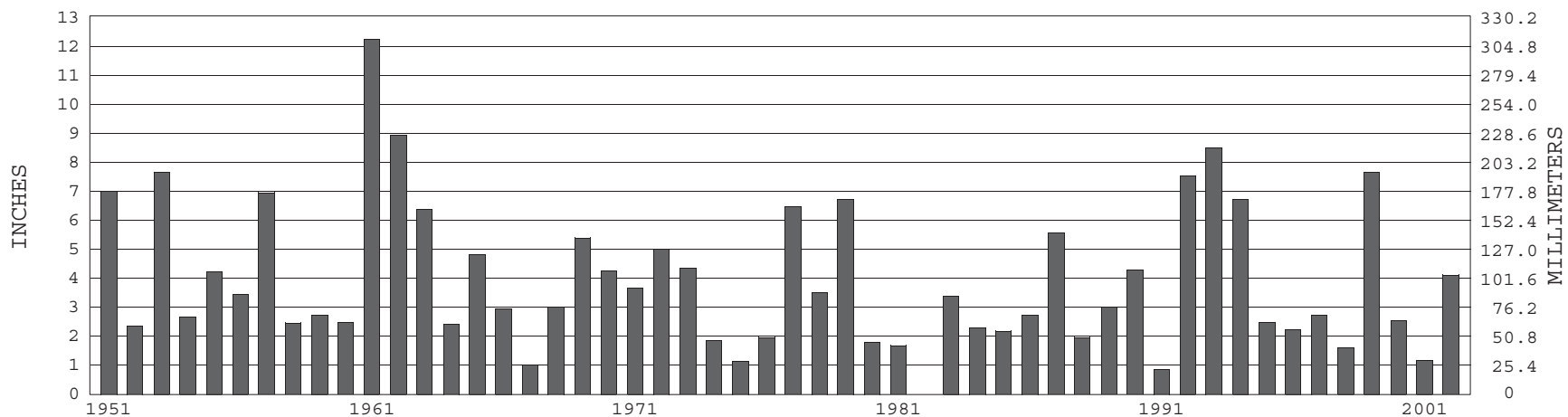
DUBUQUE, IA JULY TEMPERATURES



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

Long-Term (1951-2002) Mean: 70.7 1961-1990 Normal: 72.3

DUBUQUE, IA JULY PRECIPITATION



Long-Term (1951-2002) Mean Monthly Total: 3.94

1961-1990 Normal: 3.73



JULY 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.

DIRECTOR

NCDC now offers an annual online subscription for the **Edited Local Climatological Data Publication**. When you purchase this subscription service, you will have **immediate online access** to all previous publications back to July 1996 and all publications thereafter until the expiration of the subscription. Your subscription is valid for one year after purchase. **The total cost is \$29 for online delivery (including back issues) compared to \$34 for offline delivery.** To order this and other subscriptions online with your credit card, go to:
www.ncdc.noaa.gov and choose subscriptions.

We welcome your questions or comments, please contact us at
Toll Free Number (866) 742–3322 (voice)
Fax Number : (304) 726–4409
TDD : 828–271–4010
or Email : ncdc.info@noaa.gov
Local Climatological Data is available at www.ncdc.noaa.gov

For address correction, please return a photocopy of this page to Subscription Services indicating changes

NCDC Subscription Services Center
310 State Route 956 Building 300
Rocket Center, WV 26726

OFFICIAL BUSINESS. PENALTY FOR PRIVATE USE \$300

FIRST CLASS
POSTAGE AND FEES PAID
NOAA
PERMIT G-19