

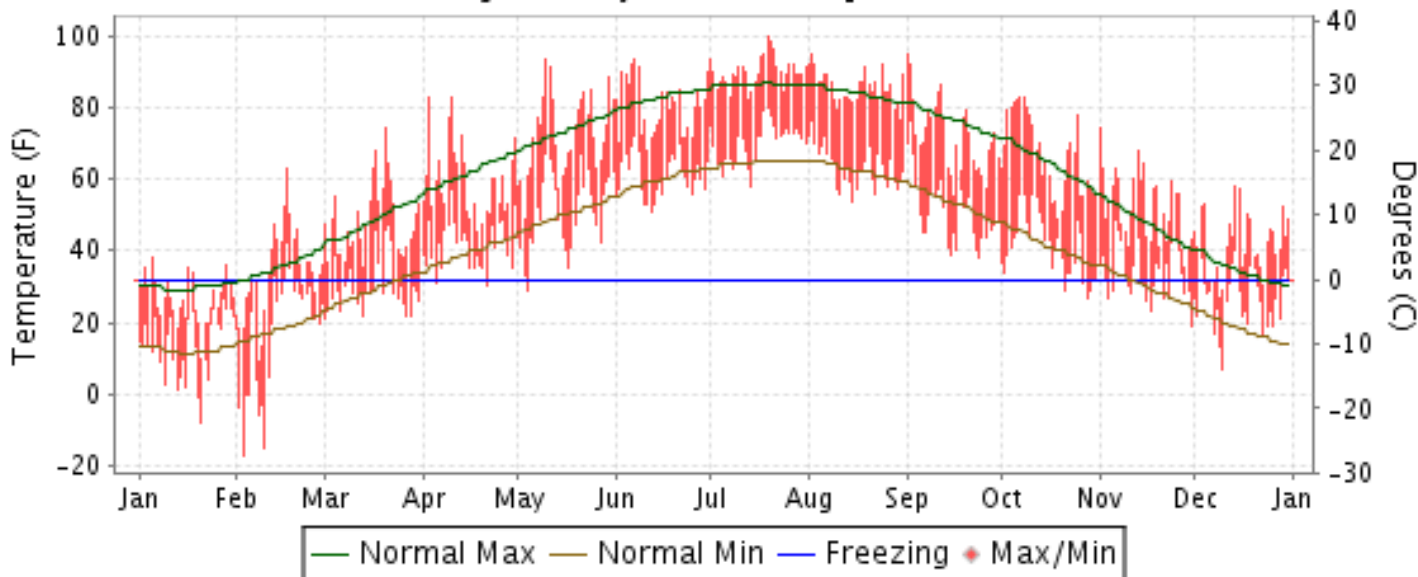


# 2011 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

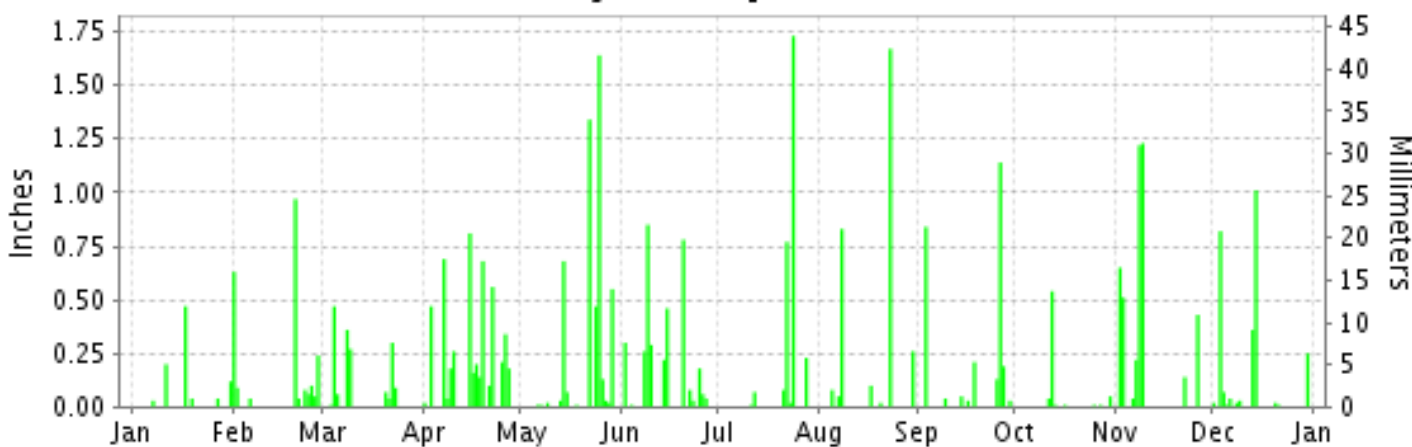
ISSN 0198-1862

## MOLINE, ILLINOIS (KMLI)

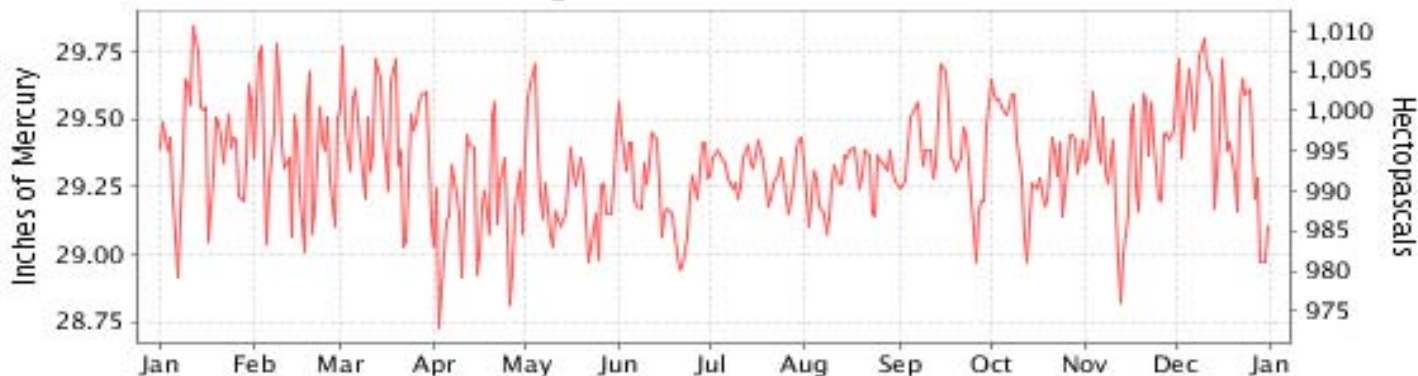
### Daily Max/Min Temperature



### Daily Precipitation



### Daily Station Pressure



I CERTIFY THAT THIS IS AN OFFICIAL PUBLICATION OF THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, AND IS COMPILED FROM RECORDS ON FILE AT THE NATIONAL CLIMATIC DATA CENTER.

NATIONAL  
OCEANIC AND  
ATMOSPHERIC ADMINISTRATION

NATIONAL  
ENVIRONMENTAL SATELLITE, DATA  
AND INFORMATION SERVICE

NATIONAL  
CLIMATIC DATA CENTER  
ASHEVILLE, NORTH CAROLINA

*Thomas R. Karl*  
DIRECTOR  
NATIONAL CLIMATIC DATA CENTER

# METEOROLOGICAL DATA FOR 2011

## MOLINE (KMLI)

LATITUDE: 41° 27'N      LONGITUDE: -90° 31'W      ELEVATION (FT): GRND: 592 BARO: 607      TIME ZONE: CENTRAL (UTC -6)      WBAN: 14923

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	26.8	34.0	48.5	59.0	72.4	80.1	89.8	85.4	72.0	66.5	52.2	41.8	60.7	
	HIGHEST DAILY MAXIMUM	38	63	74	83	93	93	100	95	95	83	74	58	100	
	DATE OF OCCURRENCE	05	17	20	10+	10	07	19	02	01	08+	01	14	JUL 19	
	MEAN DAILY MINIMUM	13.8	17.2	30.2	41.6	50.9	61.0	70.0	63.1	50.8	41.2	33.7	26.4	41.7	
	LOWEST DAILY MINIMUM	-8	-17	21	30	29	51	58	54	38	27	19	7	-17	
	DATE OF OCCURRENCE	21	03	01	21	04	12	14	15	24	28	30	10	FEB 03	
	AVERAGE DRY BULB	20.3	25.6	39.4	50.3	61.7	70.6	79.9	74.3	61.4	53.9	43.0	34.1	51.2	
	MEAN WET BULB	18.6		35.2	45.4	55.1	65.7	73.1	67.4	55.8	47.3	38.9	31.7		
	MEAN DEW POINT	13.5		28.8	39.9	49.8	62.3	69.6	63.6	51.2	41.0	32.6	27.5		
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	2	5	15	5	2	0	0	0	0	29
	MAXIMUM <= 32°	26	12	0	0	0	0	0	0	0	0	0	6	44	
MINIMUM <= 32°	31	25	24	2	1	0	0	0	0	6	15	24	128		
MINIMUM <= 0°	2	7	0	0	0	0	0	0	0	0	0	0	9		
H/C	HEATING DEGREE DAYS	1378	1096	788	441	189	12	0	0	167	348	654	950	6023	
	COOLING DEGREE DAYS	0	0	0	6	92	186	470	294	67	11	0	0	1126	
RH	MEAN (PERCENT)	74	74	69	70	68	75	72	71	71	66	68	77	71	
	HOUR 00 LST	77	78	77	76	78	85	84	84	83	76	73	80	79	
	HOUR 06 LST	78	79	80	80	81	86	85	87	86	83	76	84	82	
	HOUR 12 LST	70	69	60	63	56	65	57	55	58	50	61	70	61	
	HOUR 18 LST	72	72	61	61	56	66	64	59	60	59	67	76	64	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	1	1	1	0	2	1	0	2	1	0	0	0	9	
	THUNDERSTORMS	0	2	4	5	4	7	5	3	3	2	0	0	35	
CLOUDINESS	SUNRISE-SUNSET: (OKTAS)														
	CEILOMETER (<= 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
	MIDNIGHT-MIDNIGHT: (OKTAS)														
	CEILOMETER (<= 12,000 FT.)														
SATELLITE (> 12,000 FT.)															
NUMBER OF DAYS WITH:															
CLEAR															
PARTLY CLOUDY															
CLOUDY															
PR	MEAN STATION PRESS. (IN.)	29.42	29.39	29.44	29.16	29.24	29.25	29.31	29.28	29.37	29.37	29.34	29.47	29.34	
	MEAN SEA-LEVEL PRESS. (IN.)	30.09	30.05	30.10	29.81	29.88	29.88	29.93	29.90	30.01	30.01	29.99	30.13	29.98	
WINDS	RESULTANT SPEED (MPH)	3.7		2.7	0.9	1.1	2.5	2.0	0.4	2.3	2.4	2.0	3.1		
	RES. DIR. (TENS OF DEGS.)	29		06	02	12	18	15	24	32	26	23	25		
	MEAN SPEED (MPH)	8.5	9.4	9.2	11.7	8.7	7.8	5.3	5.0	6.3	6.5	9.7	7.8	8.0	
	PREVAIL.DIR.(TENS OF DEGS.)	30	28	08	08	12	28	10	09	02	27	18	20	30	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	30	30	33	44	41	41	38	38	39	40	39	29	44	
	DIR. (TENS OF DEGS.)	26	03	28	27	27	10	32	25	31	26	26	30	27	
	DATE OF OCCURRENCE	01	01	12	10	29	26	11	07	29	14	13	15	APR 10	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	37	46	43	55	60	49	53	52	51	40	48	40	60	
DIR. (TENS OF DEGS.)	26	35	30	28	30	10	30	25	31	26	24	30	30		
DATE OF OCCURRENCE	01	01	12	10	29	26	11	07	29	14	13	15	MAY 29		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.90	2.30	1.67	5.04	5.01	3.56	2.91	3.01	2.66	0.67	4.44	2.66	34.83	
	GREATEST 24-HOUR (IN.)	0.47	0.97	0.63	0.95	1.76	1.11	1.73	1.67	1.14	0.55	1.36	1.37	1.76	
	DATE OF OCCURRENCE	17	20	08-09	15-16	25-26	08-09	24	23	26	11-12	08-09	13-14	MAY 25-26	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	6	10	9	16	14	13	7	7	9	7	8	12	118	
PRECIPITATION 0.10	3	4	4	14	6	8	3	4	5	1	7	4	63		
PRECIPITATION 1.00	0	0	0	0	2	0	1	1	1	0	2	1	8		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	8.6	20.7	T	T	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.1	30.7	
	GREATEST 24-HOUR (IN.)	2.6	14.8	T	T	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	14.8	
	DATE OF OCCURRENCE	11	01	23+	16+							09	06	FEB 01	
	MAXIMUM SNOW DEPTH (IN.)														
DATE OF OCCURRENCE															
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	3	4	0	0	0	0	0	0	0	0	0	0	7		

# NORMALS, MEANS, AND EXTREMES MOLINE (KMLI)

**LATITUDE:** 41° 27'N      **LONGITUDE:** -90° 31'W      **ELEVATION (FT):** GRND: 592 BARO: 607      **TIME ZONE:** CENTRAL (UTC -6)      **WBAN: 14923**

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
<b>TEMPERATURE °F</b>	NORMAL DAILY MAXIMUM	30	29.8	35.6	48.3	61.7	73.3	82.7	86.1	83.9	76.5	64.4	48.0	34.5	60.4
	MEAN DAILY MAXIMUM	78	30.3	33.5	46.8	61.2	72.8	81.8	86.0	83.5	76.2	64.8	48.3	33.7	59.9
	HIGHEST DAILY MAXIMUM	79	69	71	88	93	104	95	105	106	100	95	80	71	106
	YEAR OF OCCURRENCE		1989	2000	1986	1986	1934	2009	1940	1936	1939	2006	2000	1998	AUG 1936
	MEAN OF EXTREME MAXS.	82	51.6	55.2	72.5	82.6	88.8	94.0	95.8	94.6	90.8	83.0	69.6	56.1	77.9
	NORMAL DAILY MINIMUM	30	12.3	18.2	29.0	39.3	50.0	59.7	64.5	62.4	53.4	41.6	30.1	18.3	39.9
	MEAN DAILY MINIMUM	78	13.6	16.6	27.9	39.5	50.3	59.9	64.5	62.0	53.2	42.1	30.3	17.9	39.8
	LOWEST DAILY MINIMUM	79	-27	-28	-19	7	25	-27	46	40	24	16	-9	-24	-28
	YEAR OF OCCURRENCE		2009	1996	1960	1982	2005	1979	1971	1986	1942	1988	1976	1989	FEB 1996
	MEAN OF EXTREME MINS.	82	-10.1	-5.0	9.2	24.4	34.6	46.3	52.3	50.0	37.2	26.7	13.1	-3.7	22.9
	NORMAL DRY BULB	30	21.1	26.9	38.7	50.5	61.7	71.2	75.3	73.2	65.0	53.0	39.1	26.4	50.2
	MEAN DRY BULB	78	21.9	25.1	37.3	50.4	61.5	70.9	75.2	72.8	64.7	53.5	39.3	25.8	49.9
	MEAN WET BULB	27	20.9	24.8	33.8	43.9	53.8	63.4	67.9	66.4	57.9	46.2	35.1	24.5	44.9
	MEAN DEW POINT	27	17.8	21.4	30.1	39.8	50.5	60.4	65.5	64.6	55.5	43.2	32.3	21.9	41.9
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.1	1.2	5.3	8.9	6.0	2.0	0.1	0.0	0.0	23.6
MAXIMUM <= 32	30	17.4	11.5	3.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.7	12.1	47.0	
MINIMUM <= 32	30	29.2	24.4	19.9	7.3	0.5	0.0	0.0	0.0	0.3	5.9	18.5	27.7	133.7	
MINIMUM <= 0	30	7.3	4.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.4	15.2	
<b>H/C</b>	NORMAL HEATING DEG. DAYS	30	1374	1083	831	450	172	19	3	8	108	394	782	1191	6415
	NORMAL COOLING DEG. DAYS	30	0	0	1	12	62	205	322	254	101	12	0	0	969
<b>RH</b>	NORMAL (PERCENT)	30	73	73	69	64	66	67	72	75	73	69	72	75	71
	HOURLY 00 LST	30	76	77	75	71	76	78	83	86	83	77	77	78	78
	HOURLY 06 LST	30	77	78	79	78	80	81	86	90	88	82	80	80	82
	HOURLY 12 LST	30	67	65	59	54	53	54	57	60	56	55	64	70	60
	HOURLY 18 LST	30	72	70	61	53	53	55	59	64	65	64	70	75	63
<b>S</b>	PERCENT POSSIBLE SUNSHINE	53	48	50	50	53	57	48	68	66	62	58	42	40	54
<b>W/O</b>	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	48	2.0	1.9	1.7	0.6	0.9	0.7	0.8	1.6	1.4	1.1	1.2	2.3	16.2
	THUNDERSTORMS	68	0.3	0.6	2.1	4.4	6.5	8.0	7.6	6.8	4.2	2.3	1.1	0.4	44.3
<b>CLOUDINESS</b>	MEAN: SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH: CLEAR	1	1.0												
	PARTLY CLOUDY														
	CLOUDY	1	4.0												
<b>PR</b>	MEAN STATION PRESSURE(IN)	28	29.45	29.45	29.39	29.30	29.31	29.31	29.35	29.38	29.40	29.41	29.40	29.45	29.38
	MEAN SEA-LEVEL PRES. (IN)	28	30.11	30.11	30.05	29.95	29.94	29.94	29.97	30.01	30.03	30.05	30.06	30.11	30.03
<b>WINDS</b>	MEAN SPEED (MPH)	28	9.7	9.5	10.4	10.6	8.9	7.5	6.6	6.1	6.8	8.2	9.4	9.1	8.6
	PREVAIL.DIR(TENS OF DEGS)	40	30	30	31	09	09	20	21	19	19	20	30	30	30
	MAXIMUM 2-MINUTE: SPEED (MPH)	16	37	40	53	49	41	48	60	57	45	41	49	45	60
	DIR. (TENS OF DEGS)		21	26	16	26	27	27	31	02	19	29	26	22	31
	YEAR OF OCCURRENCE		1996	2001	2006	1997	2011	2010	2008	1997	2010	2008	1998	2001	JUL 2008
	MAXIMUM 3-SECOND SPEED (MPH)	16	48	52	107	60	60	63	81	79	69	56	61	55	107
	DIR. (TENS OF DEGS)		29	26	22	26	30	27	31	02	19	30	24	23	22
YEAR OF OCCURRENCE		2008	2001	2006	1997	2011	2010	2008	1997	2010	2008	1998	2001	MAR 2006	
<b>PRECIPITATION</b>	NORMAL (IN)	30	1.58	1.51	2.92	3.82	4.25	4.63	4.03	4.41	3.16	2.80	2.73	2.20	38.04
	MAXIMUM MONTHLY (IN)	82	4.39	3.53	7.43	11.30	11.43	8.67	11.76	15.23	14.18	9.41	6.77	4.99	15.23
	YEAR OF OCCURRENCE		1974	1997	1973	1973	1974	2010	1992	1987	1970	1941	1992	1982	AUG 1987
	MINIMUM MONTHLY (IN)	82	0.31	0.17	0.31	0.68	0.31	0.41	0.35	0.02	0.01	0.27	0.23	0.01	0.01
	YEAR OF OCCURRENCE		1961	1933	1958	1946	1992	1961	1991	1971	1979	1964	2002	1929	OCT 1964
	MAXIMUM IN 24 HOURS (IN)	82	2.07	1.90	2.45	5.81	3.68	3.42	5.41	5.13	6.32	4.89	2.73	3.38	6.32
	YEAR OF OCCURRENCE		1960	1948	2009	1973	1970	2008	1963	1987	2008	1954	1961	1942	SEP 2008
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	9.8	8.0	10.6	11.0	12.1	10.6	10.0	10.1	8.1	8.8	10.2	10.0	119.3
PRECIPITATION >= 1.00	30	0.3	0.2	0.6	1.0	1.3	1.3	0.8	1.5	0.8	0.5	0.4	0.4	9.1	
<b>SNOWFALL</b>	NORMAL (IN)	30	10.2	7.0	4.9	1.3	0.*	0.0	0.0	0.0	0.0	0.2	3.0	8.4	35.0
	MAXIMUM MONTHLY (IN)	79	26.7	20.7	19.8	13.0	0.3	26.7	T	0.0	0.1	6.6	15.6	32.9	32.9
	YEAR OF OCCURRENCE		1979	2011	1972	1982	1935	1979	1994		1942	1967	1974	2000	DEC 2000
	MAXIMUM IN 24 HOURS (IN)	77	16.4	14.8	11.0	8.2	0.3	16.4	T	0.0	0.1	6.5	8.5	11.4	16.4
	YEAR OF OCCURRENCE		1971	2011	1972	1970	1935	1971	1994		1942	1967	1975	1987	JUN 1971
	MAXIMUM SNOW DEPTH (IN)	56	28	17	15	6	0	28	0	0	0	4	8	11	28
	YEAR OF OCCURRENCE		1979	1979	1960	1982		1979				1967	1975	1987	JUN 1979
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	3.1	2.1	1.5	0.3	0.0	0.0	0.0	0.0	0.0	0.1	1.0	2.5	10.6	

**PRECIPITATION (inches) 2011 MOLINE (KMLI)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1982	2.08	0.45	3.85	3.33	5.03	3.61	8.83	2.89	1.94	3.38	3.64	4.99	44.02
1983	0.55	1.50	2.88	4.88	2.06	5.21	2.79	0.96	5.30	2.36	5.78	2.55	36.82
1984	0.84	0.79	3.45	4.31	4.97	3.75	4.63	1.31	2.32	6.60	2.91	3.51	39.39
1985	1.04	2.80	4.71	2.14	3.46	2.26	3.33	2.76	1.71	8.54	6.35	2.21	41.31
1986	0.38	2.53	1.35	3.15	5.54	5.10	6.34	3.24	5.63	4.23	1.03	1.95	40.47
1987	0.91	0.89	2.57	1.49	3.35	1.54	1.91	15.23	1.11	0.79	3.33	4.46	37.58
1988	1.74	1.08	2.36	1.36	2.32	1.16	1.79	4.89	1.97	2.37	3.14	1.57	25.75
1989	1.21	1.21	1.85	3.62	3.42	3.31	3.10	6.17	5.42	1.18	0.71	0.73	31.93
1990	1.66	1.99	6.68	3.50	7.68	9.59	3.56	6.42	1.04	2.35	2.87	3.07	50.41
1991	1.19	0.43	6.31	3.69	3.87	1.32	0.41	2.06	2.52	5.80	5.03	1.86	34.49
1992	1.18	1.91	1.07	2.88	0.31	2.11	11.76	1.70	4.80	1.49	6.77	3.96	39.94
1993	2.01	0.92	4.87	5.48	3.61	13.21	5.82	7.76	4.11	0.37	1.50	1.13	50.79
1994	1.04	2.69	0.64	2.64	1.67	4.83	5.69	3.40	1.53	1.67	4.71	1.64	32.15
1995	3.26	0.54	1.41	6.19	7.05	2.86	3.07	2.48	1.92	1.83	3.16	0.50	34.27
1996	2.34	1.11	1.49	1.94	9.26	2.35	2.77	2.11	1.10	1.77	.88	.71	27.83
1997	1.96	3.53	1.15	2.30	4.87	2.92	1.46	8.15	3.69	1.73	1.40	1.76	34.92
1998	2.54	3.14	5.01	4.94	3.31	7.30	1.67	5.36	3.55	7.61	2.76	1.18	48.37
1999	2.83	1.22	1.56	6.97	2.36	5.98	1.43	3.58	4.41	0.86	0.49	2.29	33.98
2000	1.40	3.30	0.82	4.28	4.68	6.47	4.97	1.38	5.28	1.24	1.81	2.25	37.88
2001	2.10	3.33	1.77	2.78	9.60	2.61	4.05	3.93	3.45	4.16	1.49	0.98	40.25
2002	0.89	1.13	2.25	4.42	5.31	4.37	6.17	4.35	0.18	2.85	0.27	0.69	32.88
2003	0.43	0.47	1.72	3.94	4.98	2.76	5.51	1.70	3.38	1.22	2.76	2.87	31.74
2004	1.09	0.93	4.20	1.91	9.14	2.12	1.70	5.83	1.05	4.95	2.75	0.89	36.56
2005	2.46	0.64	1.06	0.98	2.86	1.41	1.40	1.89	1.96	0.46	1.70	1.04	17.86
2006	2.81	0.98	4.21	5.08	1.71	2.14	4.68	6.87	1.25	2.32	2.26	3.03	37.34
2007	0.92	2.01	5.38	2.83	1.72	5.79	8.57	7.34	1.09	2.24	0.73	3.63	42.25
2008	1.24	3.12	2.01	3.89	5.24	8.34	4.77	1.15	10.91	2.02	1.33	4.57	48.59
2009	0.79	1.95	5.60	4.74	3.74	6.15	7.78	8.06	1.38	5.94	1.60	3.52	51.25
2010	2.12	1.12	2.94	4.09	4.98	8.67	5.72	5.72	4.47	2.34	1.28	1.68	45.13
2011	0.90	2.30	1.67	5.04	5.01	3.56	2.91	3.01	2.66	0.67	4.44	2.66	34.83
POR= 82 YRS	1.57	1.20	2.70	3.69	4.10	4.40	4.22	3.88	3.52	2.70	2.26	1.68	35.92

WBAN : 14923

**AVERAGE TEMPERATURE (°F) 2011 MOLINE (KMLI)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1982	10.6	21.4	34.6	44.7	66.1	66.2	75.4	71.3	64.2	54.7	39.2	35.3	48.6
1983	26.9	32.0	38.9	45.5	57.8	72.9	79.4	79.6	65.6	53.1	42.9	14.0	50.7
1984	19.6	34.5	31.2	49.1	58.2	73.6	73.1	75.2	62.9	55.1	39.3	31.1	50.2
1985	14.3	21.8	42.5	57.1	64.9	69.4	74.2	69.7	66.1	53.6	35.2	14.9	48.6
1986	25.1	22.9	42.5	54.6	63.0	71.7	77.6	68.3	67.3	53.4	34.8	30.0	50.9
1987	25.2	34.4	42.2	52.6	66.8	74.6	79.4	72.9	64.4	47.4	44.0	31.0	52.9
1988	20.2	21.7	38.7	50.6	64.1	73.1	78.2	77.8	67.0	47.3	40.3	29.0	50.7
1989	32.7	17.4	37.0	49.9	58.8	69.2	76.2	72.2	61.9	54.6	38.6	15.6	48.7
1990	32.7	31.3	42.8	50.0	57.3	71.3	74.2	73.7	66.9	51.7	44.2	24.6	51.7
1991	18.4	31.7	41.8	54.2	67.3	74.6	75.3	73.9	64.8	53.3	33.9	31.0	51.7
1992	29.1	34.3	41.3	49.2	61.0	68.6	70.5	67.4	62.5	52.2	37.5	27.4	50.1
1993	24.8	23.5	34.7	48.5	63.0	70.3	75.6	74.9	61.0	51.0	37.2	29.4	49.5
1994	14.7	22.7	39.4	52.2	60.6	72.9	72.9	70.2	66.0	55.6	43.6	33.3	50.3
1995	21.5	26.7	41.2	47.6	59.2	73.0	76.5	78.6	62.2	52.5	32.2	25.9	49.8
1996	20.0	25.1	32.7	47.5	58.2	70.8	72.1	72.9	63.4	53.4	32.6	24.8	47.8
1997	17.2	29.0	40.3	46.9	56.1	71.2	74.8	70.8	65.7	54.2	36.7	28.9	49.3
1998	27.1	37.7	38.8	51.0	66.5	69.7	75.1	74.4	69.3	54.2	43.6	32.7	53.3
1999	20.0	34.9	36.8	52.3	63.4	71.6	79.0	71.0	63.3	53.4	45.5	28.7	51.7
2000	23.8	34.3	45.3	50.6	64.0	68.6	73.4	75.0	66.4	56.8	36.0	13.2	50.6
2001	23.0	24.4	34.4	56.4	63.0	69.5	76.6	73.7	63.0	52.6	49.8	32.7	51.6
2002	31.8	32.1	35.8	51.1	57.6	72.9	77.6	73.5	68.6	49.8	38.1	31.4	51.7
2003	21.6	22.8	37.3	52.5	59.4	68.4	74.7	75.8	63.3	53.6	41.0	32.0	50.2
2004	21.1	27.6	43.3	53.1	64.0	70.0	73.1	68.6	67.2	54.0	43.9	29.7	51.3
2005	24.4	34.0	39.0	55.2	59.6	76.1	77.3	75.0	70.2	55.8	42.7	22.5	52.7
2006	35.3	27.7	39.8	55.7	62.3	71.0	79.2	74.5	63.6	50.3	43.6	33.9	53.1
2007	26.6	18.4	45.7	48.9	68.4	72.4	74.3	77.3	69.0	59.1	40.1	25.3	52.1
2008	22.3	21.2	36.7	50.5	59.1	72.0	73.9	70.8	65.4	52.6	40.1	21.0	48.8
2009	16.0	29.2	40.3	49.7	61.5	71.3	69.3	70.4	64.3	48.6	45.7	25.5	49.3
2010	17.9	22.8	43.4	58.5	63.1	73.9	77.9	76.5	66.4	56.1	42.2	21.1	51.7
2011	20.3	25.6	39.4	50.3	61.7	70.6	79.9	74.3	61.4	53.9	43.0	34.1	51.2
POR= 78 YRS	21.9	25.1	37.3	50.4	61.5	70.9	75.2	72.8	64.7	53.5	39.3	25.8	49.9

**HEATING DEGREE DAYS (base 65°F) 2011 MOLINE (KMLI)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1982-83	0	14	110	333	765	916	1175	917	802	578	228	17	5855
1983-84	1	0	110	377	654	1578	1406	880	1039	482	225	2	6754
1984-85	3	4	171	303	761	1042	1568	1203	692	293	66	25	6131
1985-86	0	4	133	347	888	1546	1231	1174	705	338	104	9	6479
1986-87	0	30	55	358	898	1078	1227	850	701	385	101	4	5687
1987-88	0	23	84	540	627	1046	1384	1250	807	427	90	15	6293
1988-89	1	9	45	544	736	1109	998	1326	863	461	240	28	6360
1989-90	0	4	138	334	785	1527	995	937	691	483	241	18	6153
1990-91	2	0	97	422	622	1248	1437	928	719	339	107	0	5921
1991-92	0	0	147	370	927	1049	1107	884	726	473	181	27	5891
1992-93	3	33	147	405	819	1158	1241	1156	936	488	116	53	6555
1993-94	0	1	153	433	827	1096	1557	1178	789	403	175	13	6625
1994-95	0	14	74	298	637	973	1343	1065	733	517	182	8	5844
1995-96	1	0	146	385	975	1206	1387	1151	995	519	253	27	7045
1996-97	0	0	110	356	966	1238	1474	1000	757	537	277	4	6719
1997-98	5	2	61	395	838	1110	1169	758	819	414	57	53	5681
1998-99	0	0	29	333	638	993	1390	837	869	376	103	18	5586
1999-00	0	2	129	361	581	1118	1268	883	606	427	112	29	5516
2000-01	0	0	98	263	866	1600	1292	1129	940	274	137	40	6639
2001-02	0	0	119	380	448	993	1020	915	898	460	265	12	5510
2002-03	0	1	44	478	800	1034	1343	1175	851	392	188	48	6354
2003-04	0	1	122	350	714	1015	1357	1078	667	374	120	17	5815
2004-05	2	29	38	340	625	1086	1254	862	798	301	201	0	5536
2005-06	0	0	35	325	662	1313	914	1039	773	283	171	22	5537
2006-07	0	0	95	483	636	958	1180	1299	602	498	32	2	5785
2007-08	0	0	50	236	741	1222	1318	1261	867	430	202	1	6328
2008-09	0	1	61	387	741	1360	1514	996	760	451	144	16	6431
2009-10	9	16	56	505	573	1218	1453	1176	662	218	154	0	6040
2010-11	0	0	49	281	677	1351	1378	1096	788	441	189	12	6262
2011-	0	0	167	348	654	950							

WBAN : 14923

**COOLING DEGREE DAYS (base 65°F) 2011 MOLINE (KMLI)**

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1982	0	0	0	0	102	78	327	215	95	20	0	0	837
1983	0	0	0	1	12	260	453	459	138	14	0	0	1337
1984	0	0	0	9	21	268	261	327	116	3	0	0	1005
1985	0	0	0	64	71	165	292	154	172	0	0	0	918
1986	0	0	12	31	48	216	396	143	133	4	0	0	983
1987	0	0	0	20	162	298	453	277	71	0	3	0	1284
1988	0	0	0	0	69	263	416	410	112	3	0	0	1273
1989	0	0	4	13	53	159	356	236	52	20	0	0	893
1990	0	0	10	40	8	216	294	280	159	18	3	0	1028
1991	0	0	6	21	183	297	324	284	149	16	0	0	1280
1992	0	0	0	6	61	143	181	115	77	13	0	0	596
1993	0	0	0	0	60	217	335	317	39	8	0	0	976
1994	0	0	0	26	43	256	250	182	114	15	1	0	887
1995	0	0	0	0	11	256	365	427	69	6	0	0	1134
1996	0	0	0	0	46	208	229	253	69	6	0	0	811
1997	0	0	0	1	11	196	315	186	87	66	0	0	862
1998	0	0	11	0	109	201	321	297	166	4	0	0	1109
1999	0	0	0	2	61	223	440	192	83	9	2	0	1012
2000	0	0	1	0	88	142	266	317	146	18	3	0	981
2001	0	0	0	25	83	185	365	275	64	6	0	0	1003
2002	0	0	0	47	41	255	398	271	161	11	0	0	1184
2003	0	0	0	22	21	157	306	343	78	3	0	0	930
2004	0	0	0	25	97	173	257	148	111	6	0	0	817
2005	0	0	0	13	40	342	386	316	197	48	0	0	1342
2006	0	0	0	10	96	194	447	302	59	33	0	0	1141
2007	0	0	12	19	140	230	294	387	176	60	0	0	1318
2008	0	0	0	4	28	215	283	187	77	8	1	0	803
2009	0	0	0	0	41	214	148	193	46	1	0	0	643
2010	0	0	1	30	100	274	406	362	100	12	0	0	1285
2011	0	0	0	6	92	186	470	294	67	11	0	0	1126

**SNOWFALL (inches) 2011 MOLINE (KMLD)**

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1982-83	0.0	0.0	0.0	0.0	T	0.5	4.7	6.2	12.7	0.7	0.0	0.0	24.8
1983-84	0.0	0.0	0.0	T	0.9	18.9	9.9	1.9	13.6	0.1	0.0	0.0	45.3
1984-85	0.0	0.0	0.0	0.0	T	9.3	13.4	7.5	0.2	T	0.0	0.0	30.4
1985-86	0.0	0.0	0.0	0.0	3.1	11.5	3.7	7.8	0.2	0.4	0.0	0.0	26.7
1986-87	0.0	0.0	0.0	0.0	2.2	0.2	9.1	T	0.1	0.0	0.0	0.0	11.6
1987-88	0.0	0.0	0.0	T	0.6	15.9	2.7	16.4	0.5	0.0	0.0	0.0	36.1
1988-89	0.0	0.0	0.0	T	1.0	2.5	T	13.8	0.4	T	T	0.0	17.7
1989-90	0.0	0.0	0.0	T	0.1	8.2	6.3	10.3	T	T	0.0	T	24.9
1990-91	0.0	0.0	0.0	0.0	T	7.5	11.1	1.5	5.4	0.0	0.0	0.0	25.5
1991-92	0.0	0.0	T	T	1.0	6.7	5.2	1.4	3.6	T	0.0	T	17.9
1992-93	0.0	0.0	0.0	T	0.6	7.2	7.0	6.4	3.0	1.0	T	0.0	25.2
1993-94	0.0	0.0	0.0	T	3.6	5.2	13.4	20.7	T	0.2	0.0	0.0	43.1
1994-95	T	0.0	0.0	0.0	T	1.8	22.2	0.9	3.5	0.1	T	0.0	28.5
1995-96	0.0	0.0	0.0	0.0	3.8	6.8	13.7	1.4	2.1	T	0.0	0.0	27.8
1996-97	0.0	0.0	0.0	0.0	2.1	6.9							
1997-98							8.5	0.2	4.1	T	0.0	0.0	
1998-99	0.0	0.0	0.0	0.0	2.6	2.7	19.0	2.6	11.2	0.0	0.0	T	38.1
1999-00	0.0	0.0	0.0	0.0	0.0	11.0	16.6	10.9	0.6	2.0	T	0.0	41.1
2000-01	0.0	0.0	0.0	0.0	0.8	32.9	4.1	3.4	4.8	T	0.0	0.0	46.0
2001-02	0.0	0.0	0.0	0.0	T	1.2	11.4	1.9	9.4	4.0	0.0	0.0	27.9
2002-03	0.0	0.0	0.0	0.0	1.0	T	2.7	6.5	6.9	1.6	0.0	0.0	18.7
2003-04	0.0	0.0	0.0	0.0	T	6.1	15.2	6.4	6.0	0.0	0.0	0.0	33.7
2004-05	0.0	0.0	0.0	0.0	2.7	0.7	7.2	3.8	3.2	T	0.0	0.0	17.6
2005-06	0.0	0.0	0.0	0.0	T	13.5	3.1	0.7	4.8	0.0	0.0	0.0	22.1
2006-07	0.0	0.0	0.0	T	T	8.3	6.7	16.6	2.0	0.4	0.0	0.0	34.0
2007-08	0.0	0.0	0.0	0.0	T	19.6	11.0	18.1	2.8	T	0.0	0.0	51.5
2008-09	0.0	0.0	0.0	T	3.9	21.3	14.0	3.8	3.2	1.1	0.0	0.0	47.3
2009-10	0.0	0.0	0.0	T	T	18.0	9.6	16.4	2.9	0.0	0.0	0.0	46.9
2010-11	0.0	0.0	0.0	0.0	0.3	17.0	8.6	20.7	T	T	0.0	0.0	46.6
2011-	0.0	0.0	0.0	0.0	0.3	1.1							
POR= 68 YRS	T	0.0	T	0.2	2.1	8.2	8.8	6.8	5.5	1.0	T	T	32.6

WBAN : 14923

**REFERENCE NOTES :**

<p>PAGE 1: THE TEMPERATURE GRAPH SHOWS NORMAL MAXIMUM AND NORMAL MINIMUM DAILY TEMPERATURES (SOLID CURVES) AND THE ACTUAL DAILY HIGH AND LOW TEMPERATURES (VERTICAL BARS).</p> <p>PAGE 2 AND 3: H/C INDICATES HEATING AND COOLING DEGREE DAYS. RH INDICATES RELATIVE HUMIDITY W/O INDICATES WEATHER AND OBSTRUCTIONS S INDICATES SUNSHINE. PR INDICATES PRESSURE. CLOUDINESS ON PAGE 3 IS THE SUM OF THE CEILOMETER AND SATELLITE DATA NOT TO EXCEED EIGHT EIGHTHS(OKTAS).</p> <p>GENERAL: T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE. + INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES. BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA. NORMALS ARE 30-YEAR AVERAGES (1971 - 2000). ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM. PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH. POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING. WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED. 0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05. CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET. THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD. CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED.</p>	<p>GENERAL CONTINUED: WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH. RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION. AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2. SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN PRECIPITATION, INCLUDING HAIL. A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65 F. DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR. DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY. WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY. ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER. STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED HISTORY GO TO "MULTI-NETWORK MEDADATA SYSTEM", URL IS: <a href="https://mi3.ncdc.noaa.gov/mi3qry/login.cfm">https://mi3.ncdc.noaa.gov/mi3qry/login.cfm</a> SNOWFALL STOPPED MONTH &amp; YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.</p> <p><b>NOTE:</b> The "Period of Record:(POR) for all "averages" is based on the "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.</p>
--	--

# 2011 MOLINE ILLINOIS (KMLI)

The locality is in the heart of the Corn Belt. Agricultural crops include many important staple products in addition to corn. Cattle, hogs, horses, and poultry produced in Iowa and Illinois rank high in the nation. Close to the Mississippi River there is large scale truck gardening and considerable dairying. Field production of grains and livestock attains greater development farther away from the large streams, where the countryside is rolling prairie. Damaging droughts are not common. This, together with the variety of agricultural products, has led to designating the section as the Bread Basket of America.

The climate is favorable for many industries as evidenced by the large number and variety of manufacturing and other enterprises which have located and developed in the community. Among these are some of the largest producers of agricultural machinery in the world.

This area has a temperate continental climate, with a wide temperature range throughout the year. There are some intensely hot, unusually humid, periods in summer and severely cold periods in winter. Maxima of 90 degrees or more have occurred in summer as frequently as 55 days and zero or lower readings have occurred during every winter.

Freezing temperatures have occurred as late in spring as late May and as early in autumn as late September. Precipitation is usually well distributed throughout the year with the greatest amounts falling during the 177-day average crop growing season. Substantial weather changes frequently occur at three or four day intervals, as a direct result of proximity to some of the most important storm tracks.

# Station History

MOLINE, IL

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
MOLINE QUAD CITY AP	1928-07-01	1928-12-31	41° 27'	-90° 31'			AIRWAYS
MOLINE QUAD CITY AP	1940-01-01	1948-01-01	41° 27'	-90° 31'	581		AIRWAYS
MOLINE QUAD CITY AP	1981-12-31	1988-02-26	41° 27'	-90° 30'	582		COOP
MOLINE QUAD CITY AP	1988-02-26	1992-09-02	41° 27'	-90° 30'	580		COOP
MOLINE QUAD CITY AP	1929-08-01	1940-01-01	41° 27'	-90° 31'			AIRWAYS
MOLINE QUAD CITY AP	1992-09-02	1995-07-01	41° 25'	-90° 30'	580		COOP
MOLINE QUAD CITY AP	1973-01-01	1981-12-31	41° 27'	-90° 30'	582		COOP, WXSVC
MOLINE QUAD CITY INTL AP	1995-07-01	Present	41° 27'	-90° 31'	592		ASOS, COOP, WXSVC
MOLINE QUAD CITY AP	1948-01-01	1973-01-01	41° 27'	-90° 30'	582		AIRWAYS, COOP

# Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1987-03-01	1995-07-01	HOURLY	2400			
PRECIP	1995-07-01	1997-04-15	DAILY	2400	UNIV	RCRD	
PRECIP	1928-07-01	1970-10-01	DAILY	2400	UNIV	RCRD	
PRECIP	1997-04-15	Present	HOURLY	2400	TB	RCRD	
PRECIP	1997-04-15	Present	DAILY	2400	TB	RCRD	
PRECIP	1970-10-01	1987-03-01	DAILY	2400	UNIV	RCRD	
PRECIP	1970-10-01	1987-03-01	HOURLY	2400			
TEMP	1970-10-01	1987-03-01	DAILY	2400			
TEMP	1995-07-01	1997-04-15	DAILY	2400	MXMN		
PRECIP	1987-03-01	1995-07-01	DAILY	2400	UNIV	RCRD	
PRECIP	1995-07-01	1997-04-15	HOURLY	2400	UNIV	RCRD	
TEMP	1997-04-15	Present	DAILY	2400	HYGR		
TEMP	1928-07-01	1970-10-01	DAILY	2400			
TEMP	1987-03-01	1995-07-01	DAILY	2400	MXMN		

\* For explanation of codes and abbreviations see Station Metadata link below.

Other Station Information can be found at:

ASOS Implementation by NWS: <http://www.nws.noaa.gov/ops2/Surface/asosimplementation.htm>

Station Metadata website: <http://www.ncdc.noaa.gov/homr>

INQUIRES/COMMENTS CALL: (828) 271-4800, option 2

Fax Number : (828) 271-4876

TDD : (828) 271-4010

Email : [ncdc.info@noaa.gov](mailto:ncdc.info@noaa.gov)

NOAA/National Climatic Data Center

Attn: User Engagement & Services Branch

151 Patton Avenue

Asheville, NC 28801-5001

Visit our Web Site for other weather data: [www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)