

1999

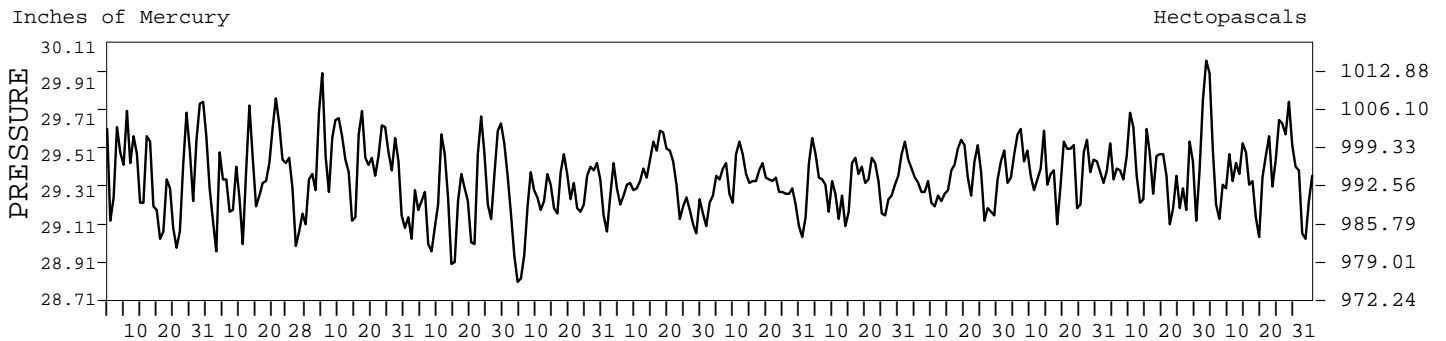
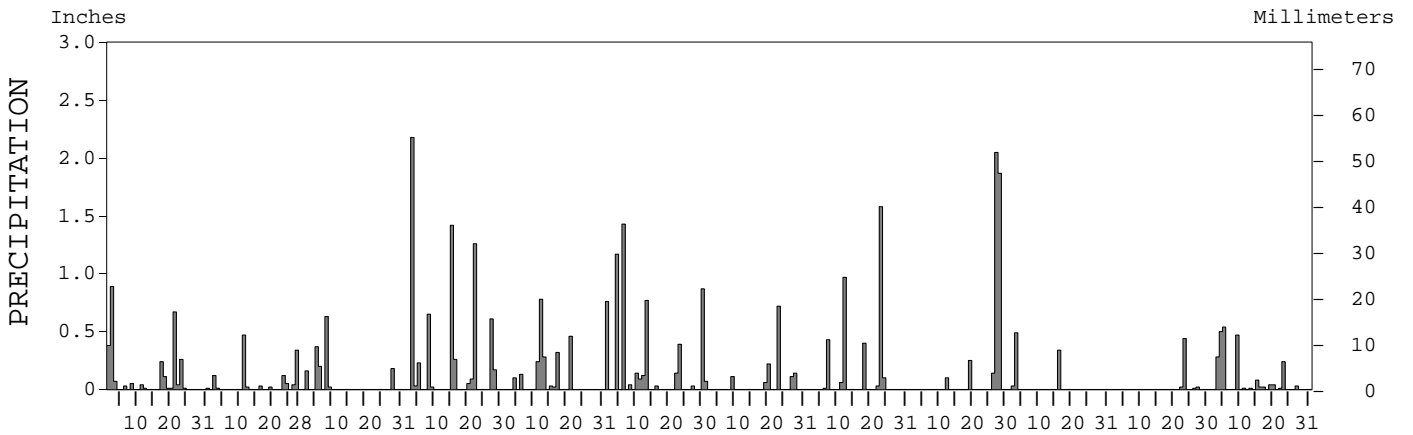
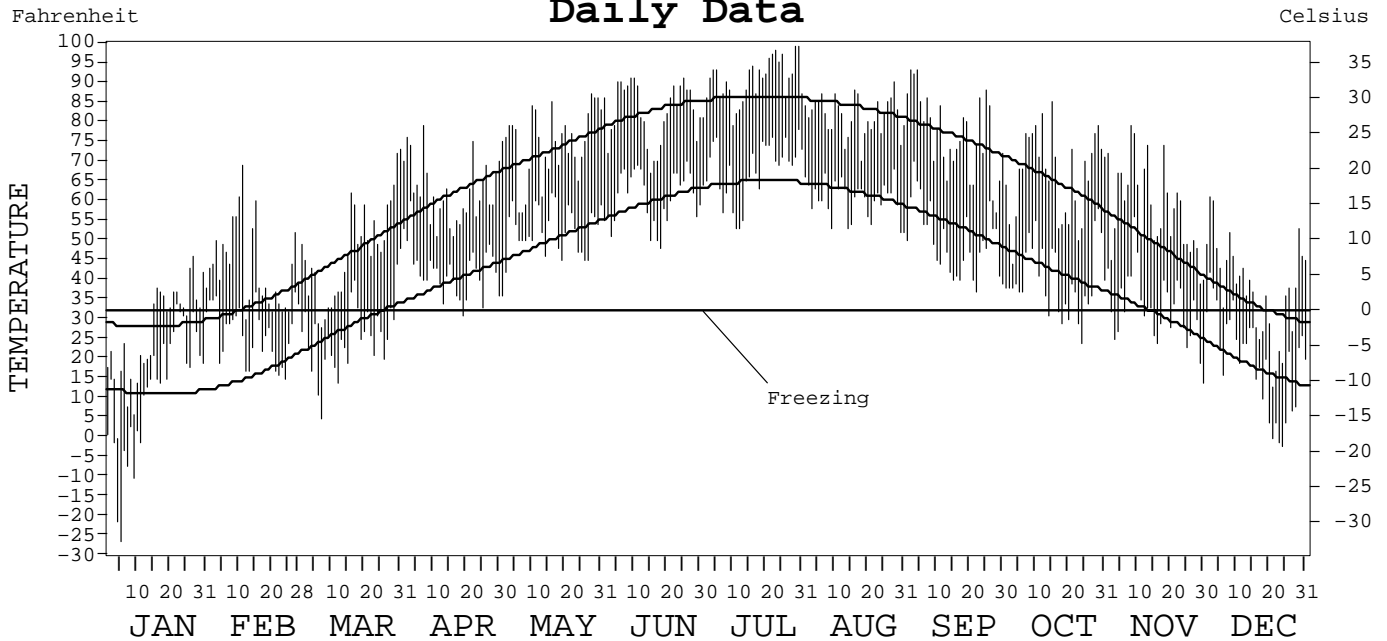
LOCAL CLIMATOLOGICAL DATA  
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-1862

MOLINE,  
ILLINOIS (MLI)

Daily Data



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NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION  
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 ASHEVILLE, NORTH CAROLINA

# METEOROLOGICAL DATA FOR 1999

## MOLINE, IL (MLI)

LATITUDE: 41° 27' 55" N      LONGITUDE: 90° 31' 24" W      ELEVATION (FT): GRND: 605      BARO: 605      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	27.1	43.5	47.5	62.4	74.5	82.5	90.3	81.5	76.8	66.6	58.1	37.8	62.4	
	HIGHEST DAILY MAXIMUM	46	69	73	79	87	91	99	90	93	85	79	61	99	
	DATE OF OCCURRENCE	27	11	31	07	28	25+	30+	28	04+	15	08	02	JUL 30+	
	MEAN DAILY MINIMUM	12.8	26.3	26.1	42.2	52.2	60.7	67.7	60.4	49.8	40.2	32.8	19.5	40.9	
	LOWEST DAILY MINIMUM	-26	15	5	31	36	48	53	52	37	24	14	-2	-26	
	DATE OF OCCURRENCE	05	24	07	19	01	18	12+	31+	22	24	30	24	JAN 05	
	AVERAGE DRY BULB	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	
	MEAN WET BULB	19.6	32.2	32.5		57.0	65.2			56.2	47.1	40.0	28.0		
	MEAN DEW POINT	16.1	27.1	25.0		51.6	61.3			50.9	40.5	32.6	24.1		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	5	18	1	3	0	0	0	0	27
	MAXIMUM ≤ 32°	16	4	3	0	0	0	0	0	0	0	0	9	32	
	MINIMUM ≤ 32°	30	21	25	1	0	0	0	0	0	6	15	27	125	
MINIMUM ≤ 0°	7	0	0	0	0	0	0	0	0	0	0	3	10		
H/C	HEATING DEGREE DAYS	1390	837	869	376	103	18	0	2	129	361	581	1118	5784	
	COOLING DEGREE DAYS	0	0	0	2	61	223	440	192	83	9	2	0	1012	
RH	MEAN (PERCENT)	82	74	64	72	68	73	73	76	68	65	64	80	72	
	HOUR 00 LST	84	80	71	80	79	86	84	89	81	74	73	84	80	
	HOUR 06 LST	85	82	78	86	83	87	86	91	88	82	79	85	84	
	HOUR 12 LST	78	65	54	63	53	57	57	61	49	49	48	75	59	
	HOUR 18 LST	82	69	54	63	56	64	59	65	58	58	59	80	64	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	6	2	1	1	2	2	1	3	0	3	1	4	26	
	THUNDERSTORMS	1	2	1	5	4	8	8	4	3	2	0	0	38	
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	29.37	29.49	29.28	29.28	29.35	29.34	29.37	29.37	29.46	29.46	29.42	29.38	
	MEAN SEA-LEVEL PRESS. (IN.)	30.09	30.02	30.14		29.91	29.98			30.00	30.10	30.12	30.09		
WINDS	RESULTANT SPEED (MPH)	0.9	2.5	0.6	3.6	1.5	1.4	2.5		1.5	2.3	3.0	2.0		
	RES. DIR. (TENS OF DEGS.)	01	22	05	09	23	17	26		26	24	24	25		
	MEAN SPEED (MPH)	9.7	10.1	9.4	10.6	9.1	6.7	7.6	6.0	6.6	7.8	7.9	7.6	8.3	
	PREVAIL. DIR. (TENS OF DEGS.)	08	31	08	08	15	17	21	01	10	32	32	19	10	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	34	31	38	36	39	38	37	30	26	28	29	26	39	
	DIR. (TENS OF DEGS.)	26	27	10	24	17	24	27	16	24	34	25	32	17	
	DATE OF OCCURRENCE	18	11	08	06	04	06	23	12	30	22	19	26	MAY 04	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	39	43	45	43	47	46	53	34	32	37	36	49	53	
DIR. (TENS OF DEGS.)	26	26	10	24	17	25	26	30	27	34	19	30	26		
DATE OF OCCURRENCE	18	11	08	06	04	10+	23	23+	30	22	18	26	JUL 23		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	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	
	GREATEST 24-HOUR (IN.)	0.89	0.47	0.63	2.18	0.96	1.43	0.72	1.61	3.50	0.49	0.46	1.02	3.50	
	DATE OF OCCURRENCE	02	11	08	03	12-13	06	23	22-23	27-28	03	22-23	04-05	SEP 27-28	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	16	10	6	12	9	13	7	8	5	3	4	14	107	
PRECIPITATION ≥ 0.10	6	4	5	8	7	9	5	5	5	2	1	5	62		
PRECIPITATION ≥ 1.00	0	0	0	3	0	2	0	1	2	0	0	0	8		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	19.0	2.6	11.2	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	11.0	43.8	
	GREATEST 24-HOUR (IN.)	9.5	1.4	7.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	4.8	9.5	
	DATE OF OCCURRENCE	02	23	08			04						23	JAN 02	
	MAXIMUM SNOW DEPTH (IN.)	12													
	DATE OF OCCURRENCE	03													
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	5	1	3	0	0	0	0	0	0	0	0	2	11		

# NORMALS, MEANS, AND EXTREMES

## MOLINE, IL (MLI)

LATITUDE: 41° 27' 55" N      LONGITUDE: 90° 31' 24" W      ELEVATION (FT): GRND: 605      BARO: 605      TIME ZONE: CENTRAL (UTC + 6)      WBAN: 14923

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	28.4	33.7	46.7	61.4	72.8	82.5	85.9	83.5	75.9	64.2	48.4	33.4	59.7
	MEAN DAILY MAXIMUM	56	29.6	34.7	46.3	61.1	72.4	82.0	85.7	83.6	76.0	64.9	47.8	34.5	59.9
	HIGHEST DAILY MAXIMUM	67	69	71	88	93	104	104	105	106	100	93	80	71	106
	YEAR OF OCCURRENCE		1989	1976	1986	1986	1934	1988	1940	1936	1939	1997	1933	1998	AUG 1936
	MEAN OF EXTREME MAXS.	56	51.1	55.0	72.4	82.2	88.8	94.2	96.0	94.5	90.7	82.7	68.9	56.4	77.7
	NORMAL DAILY MINIMUM	30	11.3	15.9	28.1	39.4	49.9	59.6	64.5	61.8	53.3	41.8	30.7	17.5	39.5
	MEAN DAILY MINIMUM	56	12.4	17.6	27.7	39.4	49.9	59.9	64.2	62.3	53.2	42.0	30.1	18.6	39.8
	LOWEST DAILY MINIMUM	67	-27	-28	-19	7	26	39	46	40	24	16	-9	-24	-28
	YEAR OF OCCURRENCE		1979	1996	1960	1982	1966	1993	1971	1986	1942	1988	1976	1989	FEB 1996
	MEAN OF EXTREME MINS.	56	-11.2	-5.7	8.4	23.9	34.4	45.9	51.9	49.5	36.8	26.8	12.2	-4.4	22.4
	NORMAL DRY BULB	30	19.9	24.8	37.4	50.4	61.4	71.1	75.2	72.7	64.7	53.0	39.6	25.4	49.6
	MEAN DRY BULB	56	21.0	26.1	37.0	50.2	61.1	71.0	74.9	73.0	64.6	53.5	39.0	26.4	49.8
	MEAN WET BULB	16	21.3	25.8	34.7	44.5	55.0	64.2	63.9	62.5	58.7	47.4	35.4	25.3	44.9
	MEAN DEW POINT	16	16.6	20.7	28.3	37.2	48.9	59.4	60.3	59.5	54.7	41.8	30.4	21.0	39.9
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.1	1.3	5.0	8.4	5.7	1.8	0.1	0.0	0.0	22.4	
MAXIMUM ≤ 32°	30	18.1	12.6	3.6	0.2	0.0	0.0	0.0	0.0	0.0	0.0	2.0	13.2	49.7	
MINIMUM ≤ 32°	30	29.5	25.2	20.6	7.4	0.7	0.0	0.0	0.0	0.2	5.7	18.3	27.3	134.9	
MINIMUM ≤ 0°	30	8.2	4.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.0	17.0	
H/C	NORMAL HEATING DEG. DAYS	30	1398	1126	856	438	188	10	0	11	73	384	762	1228	6474
	NORMAL COOLING DEG. DAYS	30	0	0	0	0	76	193	316	250	64	12	0	0	911
RH	NORMAL (PERCENT)	30	70	70	68	64	65	66	70	73	73	68	71	74	69
	HOUR 00 LST	30	72	74	74	72	75	76	82	84	83	76	76	76	77
	HOUR 06 LST	30	74	75	78	78	79	80	85	89	88	81	79	78	80
	HOUR 12 LST	30	65	63	60	54	53	53	57	58	57	54	62	69	59
	HOUR 18 LST	30	69	66	62	54	52	53	58	62	66	63	69	73	62
S	PERCENT POSSIBLE SUNSHINE	53	48	50	50	53	57	63	68	66	62	58	42	40	55
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	65	2.4	2.0	2.0	0.7	0.8	0.6	0.7	1.9	1.6	1.8	1.1	1.9	17.5
	THUNDERSTORMS	66	0.3	0.5	2.2	4.4	6.8	8.3	8.2	6.9	4.2	2.5	1.3	0.7	46.3
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	1						5.6							7.2
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
CLEAR	1	1.0	2.0	8.0		5.0	9.0								
PARTLY CLOUDY	1			3.0		3.0	3.0								
CLOUDY	1	4.0	6.0	7.0		9.0	9.0								
PR	MEAN STATION PRESSURE (IN)	28	29.50	29.50	29.41	29.31	29.31	29.31	29.41	29.40	29.41	29.42	29.40	29.46	29.40
	MEAN SEA-LEVEL PRES. (IN)	16	30.11	30.10	30.05	30.01	30.02	30.01	29.98	30.02	30.03	30.06	30.07	30.13	30.05
WINDS	MEAN SPEED (MPH)	43	10.6	10.4	11.8	11.6	10.0	8.7	5.9	5.7	5.9	6.5	6.8	6.3	8.4
	PREVAIL. DIR (TENS OF DEGS)	28	29	29	29	08	18	18	24	18	18	18	29	29	29
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	4	37	33	43	49	40	41	37	57	32	40	49	29	57
	DIR. (TENS OF DEGS)		21	27	23	26	10	01	27	02	15	26	26	22	02
	YEAR OF OCCURRENCE		1996	1996	1998	1997	1996	1998	1999	1997	1996	1996	1998	1998	AUG 1997
	MAXIMUM 5-SECOND:														
SPEED (MPH)	4	43	48	53	60	47	53	53	79	45	55	61	49	79	
DIR. (TENS OF DEGS)		21	29	23	26	17	02	26	02	29	26	24	30	02	
YEAR OF OCCURRENCE		1996	1996	1998	1997	1999	1998	1999	1997	1997	1996	1998	1999	AUG 1997	
PRECIPITATION	NORMAL (IN)	30	1.54	1.23	2.98	3.90	4.30	4.27	4.95	4.22	4.02	2.93	2.51	2.23	39.08
	MAXIMUM MONTHLY (IN)	70	4.39	3.53	7.43	11.30	11.43	13.21	11.76	15.23	14.18	9.41	6.77	4.99	15.23
	YEAR OF OCCURRENCE		1974	1997	1973	1973	1974	1993	1992	1987	1970	1941	1992	1982	AUG 1987
	MINIMUM MONTHLY (IN)	70	0.31	0.17	0.31	0.68	0.31	1.02	0.41	0.35	0.02	0.01	0.29	0.23	0.01
	YEAR OF OCCURRENCE		1961	1933	1958	1946	1992	1963	1991	1971	1979	1964	1933	1929	OCT 1964
	MAXIMUM IN 24 HOURS (IN)	70	2.07	1.90	2.42	5.81	3.68	5.02	5.41	5.13	6.29	4.89	2.73	3.38	6.29
	YEAR OF OCCURRENCE		1960	1948	1985	1973	1970	1967	1963	1987	1961	1954	1961	1942	SEP 1961
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	9.4	8.0	11.3	11.1	11.9	9.9	10.1	9.0	8.9	8.6	9.2	10.3	117.7	
PRECIPITATION ≥ 1.00	30	0.3	0.1	0.6	1.0	1.2	1.1	1.4	1.3	1.1	0.8	0.6	0.3	9.8	
SNOWFALL	NORMAL (IN)	30	9.0	6.8	6.0	1.6	T	0.0	0.0	0.0	0.4	2.8	8.1	34.7	
	MAXIMUM MONTHLY (IN)	67	26.7	20.7	19.8	13.0	0.3	T	T	0.0	0.1	6.6	15.6	21.7	26.7
	YEAR OF OCCURRENCE		1979	1994	1972	1982	1935	1992	1994	1942	1967	1974	1978	1978	JAN 1979
	MAXIMUM IN 24 HOURS (IN)	65	16.4	10.1	11.0	8.2	0.3	T	T	0.1	6.5	8.5	11.4	16.4	
	YEAR OF OCCURRENCE		1971	1975	1972	1970	1935	1992	1994	1942	1967	1975	1987	1987	JAN 1971
	MAXIMUM SNOW DEPTH (IN)	55	28	17	15	6	0	0	0	0	0	4	8	11	28
	YEAR OF OCCURRENCE		1979	1979	1960	1982						1967	1975	1987	JAN 1979
	NORMAL NO. DAYS WITH:														
SNOWFALL ≥ 1.0	30	2.9	2.3	1.8	0.4	0.0	0.0	0.0	0.0	0.0	0.1	0.9	2.5	10.9	

PRECIPITATION (inches) 1999 MOLINE, IL (MLI)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0.54	0.57	2.62	4.66	11.07	3.25	6.27	3.61	14.18	1.75	1.25	1.95	51.72
1971	1.79	1.57	1.99	1.86	3.14	2.36	11.22	0.35	4.54	2.64	2.21	4.77	38.44
1972	1.19	1.24	3.73	5.19	4.24	8.66	3.79	8.20	3.29	2.39	2.75	1.98	46.65
1973	2.53	1.94	7.43	11.30	6.96	6.58	2.63	2.30	6.74	3.06	1.15	3.74	56.36
1974	4.39	1.57	2.94	5.08	11.43	8.83	1.73	3.37	1.08	1.99	2.59	1.83	46.83
1975	1.50	1.75	3.30	2.88	3.23	3.50	2.71	3.23	1.99	0.90	2.98	0.98	28.95
1976	0.88	1.11	3.67	4.21	4.13	2.02	3.34	0.60	1.89	2.13	0.65	0.34	24.97
1977	0.87	0.62	4.61	1.57	2.66	5.18	6.04	6.98	4.80	4.09	2.78	1.76	41.96
1978	0.59	0.67	0.78	3.02	4.65	3.50	3.24	2.47	3.91	1.95	3.32	3.17	31.27
1979	2.72	1.02	2.77	4.01	2.86	2.85	4.40	6.94	0.02	2.51	2.13	2.27	34.50
1980	1.31	1.55	1.74	2.34	4.01	4.97	3.46	9.09	2.94	1.63	0.70	2.75	36.49
1981	0.32	2.45	0.69	4.48	1.48	5.51	3.07	6.90	4.20	4.42	2.42	0.72	36.66
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	0.88	0.71	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
POR= 71 YRS	1.60	1.36	2.65	3.68	4.01	4.41	4.06	3.86	3.48	2.72	2.25	1.78	35.86

WBAN : 14923

AVERAGE TEMPERATURE (°F) 1999 MOLINE, IL (MLI)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	13.1	24.7	33.6	51.8	64.9	70.7	75.7	72.9	65.2	53.9	39.2	28.9	49.6
1971	14.8	25.9	34.7	50.9	58.0	76.6	70.7	71.9	68.7	59.9	40.0	31.6	50.3
1972	18.6	20.7	36.0	48.0	63.0	69.4	74.6	74.0	66.7	50.2	37.3	22.3	48.4
1973	27.1	28.7	45.4	49.7	57.6	72.3	74.9	75.1	65.7	57.3	40.4	23.7	51.5
1974	21.6	26.8	38.5	53.3	58.8	67.5	77.3	70.3	60.4	53.7	40.1	28.6	49.7
1975	24.9	25.0	30.6	45.1	63.8	72.3	75.0	75.1	60.9	56.2	45.0	30.3	50.4
1976	19.1	35.2	41.2	52.9	57.5	70.5	75.8	71.8	63.0	46.8	30.1	19.6	48.6
1977	8.2	27.1	43.6	56.6	68.9	70.0	77.5	71.0	65.5	51.2	38.7	21.7	50.0
1978	12.4	14.1	33.0	50.8	60.2	71.0	74.0	73.2	69.2	51.5	39.2	22.7	47.6
1979	6.3	13.2	36.3	47.4	61.9	71.2	73.5	72.0	64.3	52.1	37.0	31.7	47.2
1980	23.4	19.2	33.5	49.1	62.7	69.2	77.6	75.8	65.7	48.6	39.7	26.6	49.3
1981	23.4	27.1	39.4	54.3	57.5	71.0	73.3	71.2	63.5	49.9	41.1	25.3	49.8
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
POR= 68 YRS	21.5	26.4	36.8	50.3	61.3	71.2	75.3	73.1	65.0	53.5	39.1	26.7	50.0

## HEATING DEGREE DAYS (base 65°F) 1999 MOLINE, IL (MLI)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0	2	92	350	764	1111	1556	1088	931	425	242	0	6561
1971-72	17	3	94	195	740	1026	1434	1280	893	504	155	25	6366
1972-73	8	7	80	459	824	1319	1170	1013	598	452	223	1	6154
1973-74	0	0	78	258	733	1274	1338	1061	812	360	235	32	6181
1974-75	0	8	180	349	739	1122	1235	1114	1058	593	117	14	6529
1975-76	9	0	162	297	594	1072	1413	855	731	385	235	2	5755
1976-77	0	5	123	569	1038	1403	1755	1059	656	286	54	15	6963
1977-78	0	5	50	420	780	1337	1625	1417	986	423	229	13	7285
1978-79	1	4	59	415	767	1305	1820	1445	884	521	172	12	7405
1979-80	5	22	95	415	831	1027	1280	1324	966	481	129	27	6602
1980-81	0	1	77	503	755	1180	1281	1055	783	322	253	3	6213
1981-82	12	9	91	459	710	1226	1682	1214	936	604	62	35	7040
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-	0	2	129	361	581	1118							

WBAN : 14923

## COOLING DEGREE DAYS (base 65°F) 1999 MOLINE, IL (MLI)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	32	119	198	341	256	105	15	0	0	1066
1971	0	0	0	9	32	355	203	225	212	44	0	0	1080
1972	0	0	0	3	102	165	312	294	138	6	0	0	1020
1973	0	0	0	2	2	226	312	323	103	27	0	0	995
1974	0	0	0	17	50	113	389	180	45	3	0	0	797
1975	0	0	0	1	85	241	325	319	44	29	0	0	1044
1976	0	0	0	26	12	175	341	221	72	13	0	0	860
1977	0	0	0	44	182	173	397	199	73	0	0	0	1068
1978	0	0	1	0	87	202	288	267	195	5	0	0	1045
1979	0	0	0	0	83	206	272	245	79	22	0	0	907
1980	0	0	0	11	65	158	395	343	107	1	0	0	1080
1981	0	0	0	8	27	191	275	209	50	0	0	0	760
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

SNOWFALL (inches) 1999 MOLINE, IL (MLI)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	0.0	0.0	0.2	2.2	17.7	2.6	7.8	T	0.0	0.0	30.5
1971-72	0.0	0.0	0.0	0.0	5.9	0.3	11.8	13.7	19.8	2.6	0.0	0.0	54.1
1972-73	0.0	0.0	0.0	2.0	6.7	6.6	0.4	8.6	0.5	0.9	0.0	0.0	25.7
1973-74	0.0	0.0	0.0	0.0	T	11.4	12.7	7.4	3.0	0.6	0.0	0.0	35.1
1974-75	0.0	0.0	0.0	0.0	15.6	8.8	7.6	19.3	12.2	6.2	0.0	0.0	69.7
1975-76	0.0	0.0	0.0	0.0	9.9	2.5	8.6	0.1	0.6	0.0	T	0.0	21.7
1976-77	0.0	0.0	0.0	0.0	7.7	4.1	12.3	2.5	10.8	1.0	0.0	0.0	38.4
1977-78	0.0	0.0	0.0	0.0	4.8	20.8	6.1	6.8	6.5	T	0.0	0.0	45.0
1978-79	0.0	0.0	0.0	0.0	7.1	21.7	26.7	4.5	3.4	0.6	0.0	0.0	64.0
1979-80	0.0	0.0	0.0	T	1.9	0.8	4.2	13.1	7.5	9.5	0.0	0.0	37.0
1980-81	0.0	0.0	0.0	2.4	1.1	4.5	5.3	5.6	T	0.0	0.0	0.0	18.9
1981-82	0.0	0.0	0.0	T	3.3	4.3	13.6	4.5	6.6	13.0	0.0	0.0	45.3
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-	0.0	0.0	0.0	0.0	0.0	11.0							
POR= 66 YRS	T	0.0	0.0	0.2	2.2	7.0	8.3	5.8	5.7	1.0	0.0	T	30.2

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 (1961 - 1990). 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.</p>	<p>GENERAL CONTINUED: 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. 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.</p> <p>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 EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
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1999  
MOLINE,  
ILLINOIS (MLI)

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 LOCATION

MOLINE, ILLINOIS

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE											* Type M = AMOS T = AUTOB S = ASOS W = AWOS																			
						SEA LEVEL	GROUND																													
							G	W	E	P	S	T	R	W	8	H		A																		
NE Corner, Moline AP 4.5 miles S of Moline Post Office	10/1/26	12/27/39	NA	41°27'	90°31'	589	53	3	3																											
Administration Building Quad City Airport	12/27/39	4/3/61	1200 ft. W	41°27'	90°31'	589 h582	f25	b36 c36	a36 c36	Unk			4 e5	15	g4																				a - Moved to roof site 12/1/54. bb - Moved to roof site 5/31/55. c - Moved to field site 6/7/56. d - Moved to roof site 4/16/58. e - Effective 4/16/58. f - Moved to field site 11/13/58. g - Telescychrometer (5') 6/7/56-3/1/60. Hygro. comm. 3/1/60. h - Effective 3/1/60.	
Terminal Building Quad City Airport	4/4/61	07/01/95	200 ft. SE	41°27'	90°31'	582	i25 n30	17 n4	17 n4	27 n7	NA k16 n4	i5 j16 n4	15 n4	i4 m4 n4	NA																					i - Not moved 4/4/61. j - Effective 7/22/63. k - Added 6/1/64. m - Type change 6/27/85. n - Moved to field site 1/5/91.
Quad City Airport	07/01/95	Present	NA	41°28'	90°31'	605									S																			S ASOS Commissioned 07/01/95		

SUBSCRIPTION: Price and ordering information available through: National Climatic Data Center, Federal Building, Asheville, North Carolina 28801.  
INQUIRIES/COMMENTS CALL: (828) 271-4800

National Climatic Data Center  
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