

1999

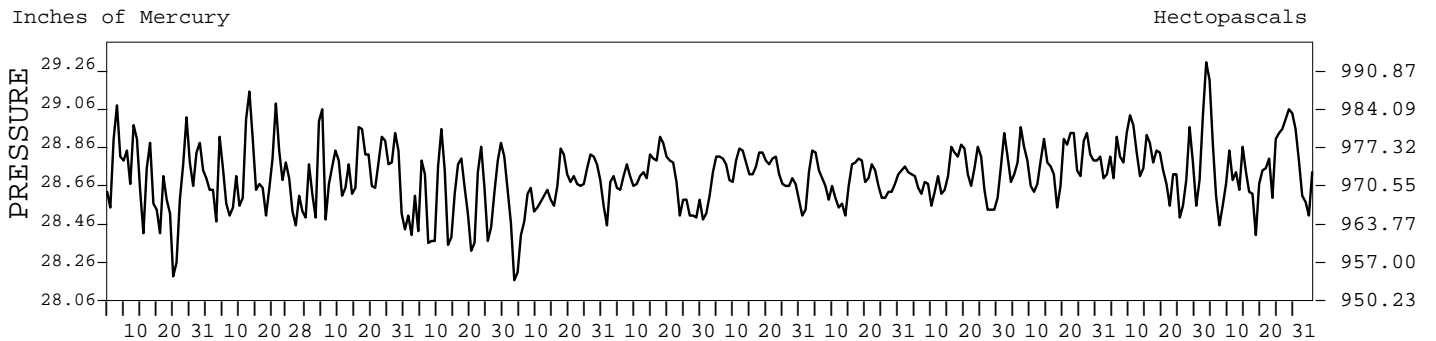
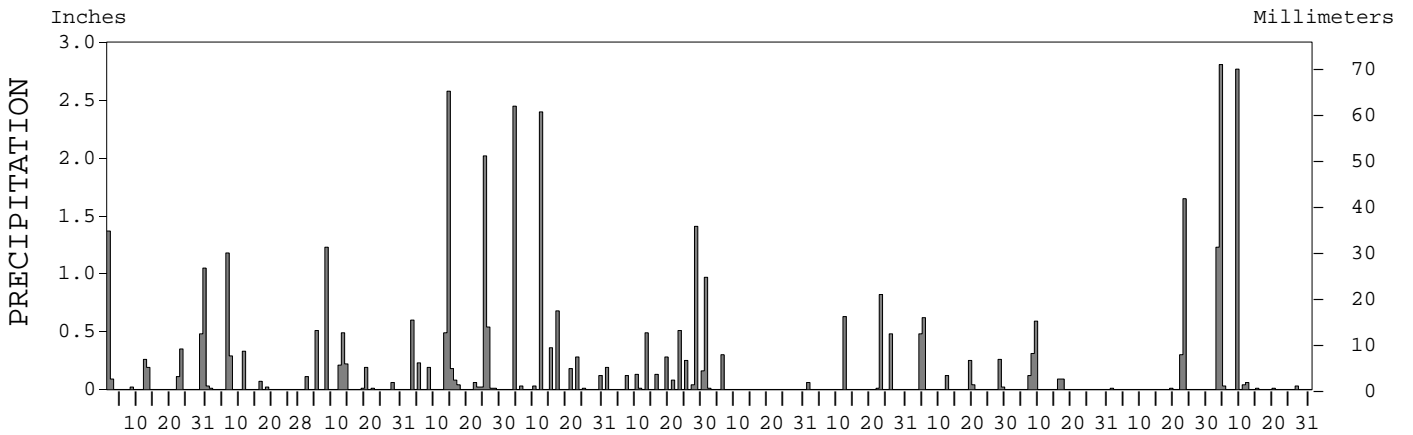
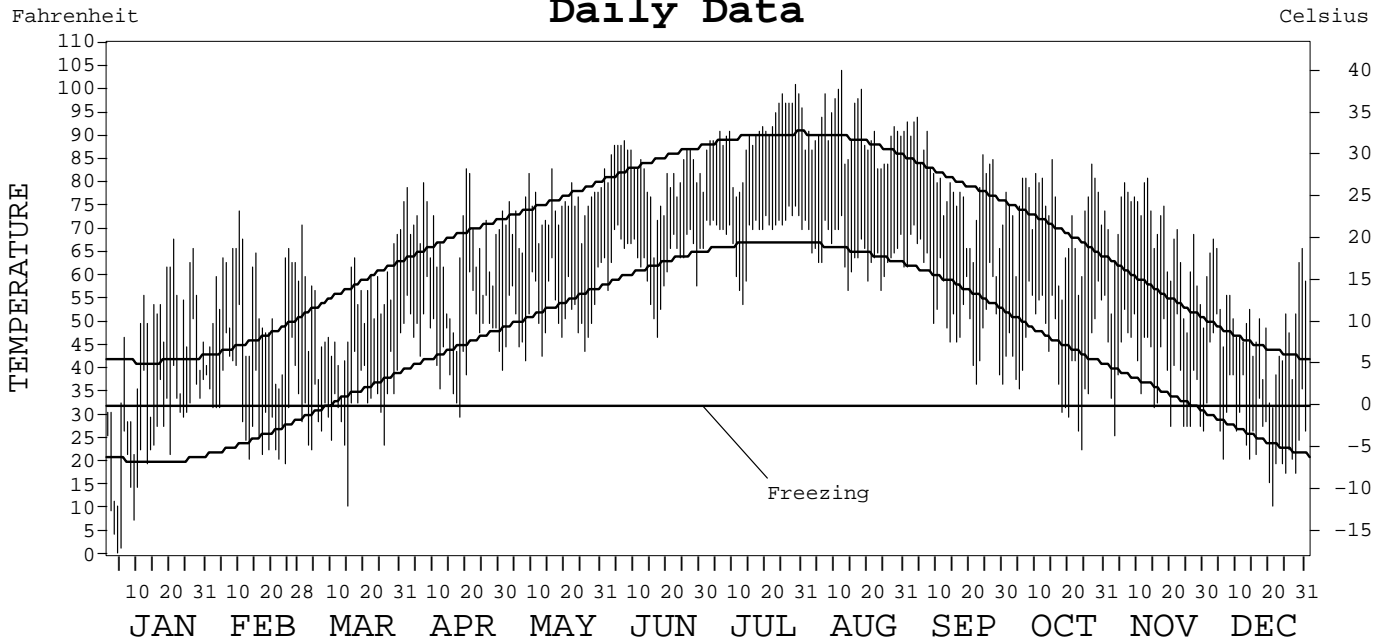
LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-2923

SPRINGFIELD, MISSOURI (SGF)

Daily Data



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METEOROLOGICAL DATA FOR 1999

SPRINGFIELD, MO (SGF)

LATITUDE: 37° 14' 23" N LONGITUDE: 93° 23' 23" W ELEVATION (FT): GRND: 1278 BARO: 1278 TIME ZONE: CENTRAL (UTC + 6) WBAN: 13995

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	44.1	55.2	53.6	66.7	74.2	81.8	90.2	90.9	79.2	73.0	67.3	50.2	68.9	
	HIGHEST DAILY MAXIMUM	68	74	71	83	83	89	101	104	94	85	81	68	104	
	DATE OF OCCURRENCE	21	10	01	20	16	07	29	12	04	15	13	03	AUG 12	
	MEAN DAILY MINIMUM	26.1	32.9	32.5	47.2	51.9	63.1	69.3	65.2	54.3	44.5	39.5	28.3	46.2	
	LOWEST DAILY MINIMUM	1	20	11	30	40	47	54	57	37	23	26	11	1	
	DATE OF OCCURRENCE	04	24	15	18	01	17	13	24+	30+	24	03	21	JAN 04	
	AVERAGE DRY BULB	35.1	44.1	43.1	57.0	63.1	72.5	79.8	78.1	66.8	58.8	53.4	39.3	57.6	
	MEAN WET BULB	32.2	39.3	37.9	52.1	58.3	67.3	72.6	68.7	59.8	51.6	46.6	35.5	51.8	
	MEAN DEW POINT	29.1	33.1	30.6	47.6	54.4	64.8	69.3	63.8	55.0	45.6	39.6	29.4	46.9	
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	0	19	17	5	0	0	0	0	41
	MAXIMUM ≤ 32°	8	0	0	0	0	0	0	0	0	0	0	1	9	
	MINIMUM ≤ 32°	20	17	13	1	0	0	0	0	0	5	8	22	86	
	MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/C	HEATING DEGREE DAYS	920	580	672	248	88	13	0	0	77	213	342	792	3945	
	COOLING DEGREE DAYS	0	0	0	14	36	247	462	412	138	25	2	0	1336	
RH	MEAN (PERCENT)	83	69	65	74	75	80	73	67	71	68	65	71	72	
	HOUR 00 LST	86	75	70	79	86	89	87	80	84	79	72	77	80	
	HOUR 06 LST	89	80	80	88	91	92	93	90	90	86	84	81	87	
	HOUR 12 LST	79	59	56	67	62	67	57	49	53	47	47	59	58	
	HOUR 18 LST	79	58	56	63	61	69	57	49	58	59	56	66	61	
S	PERCENT POSSIBLE SUNSHINE	23	44	54	50	71	61	81	85	69	76	79	58	63	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	2	2	2	1	2	2	0	1	3	1	1	0	17	
	THUNDERSTORMS	0	2	2	9	6	10	3	6	3	2	2	3	48	
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.)	28.68	28.68	28.73	28.57	28.61	28.66	28.70	28.67	28.69	28.76	28.79	28.72	28.69	
	MEAN SEA-LEVEL PRESS. (IN.)	30.06	30.04	30.09	29.91	29.93	29.98	30.01	29.98	30.02		30.15	30.10		
WINDS	RESULTANT SPEED (MPH)	1.0	3.2	3.0	3.0	1.6	2.8	1.4	0.7	0.9	2.0	3.3	1.8	1.6	
	RES. DIR. (TENS OF DEGS.)	14	18	09	18	15	10	06	08	16	15	17	18	15	
	MEAN SPEED (MPH)	9.8	10.7	10.3	10.9	8.1	7.5	6.7	6.8	6.5	7.8	8.9	9.6	8.6	
	PREVAIL. DIR. (TENS OF DEGS.)	16	15	15	16	15	15	16	15	15	15	15	15	15	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	26	30	39	36	33	30	28	33	23	26	32	30	39	
	DIR. (TENS OF DEGS.)	07	14	13	12	15	27	28	28	33	16	34	28	13	
	DATE OF OCCURRENCE	30	26	08	14	04	06	06+	12	29	07	01	15	MAR 08	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	31	39	48	45	40	40	39	43	26	34	43	38	48	
DIR. (TENS OF DEGS.)	07	27	12	13	18	28	28	28	34	14	33	27	12		
DATE OF OCCURRENCE	30+	11	08	14	04	06	06	12	29	07	02+	15	MAR 08		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	3.95	1.90	3.04	7.07	6.54	3.80	1.28	2.00	1.79	1.20	1.97	6.99	41.53	
	GREATEST 24-HOUR (IN.)	1.37	1.47	1.23	3.00	2.45	1.41	0.98	0.83	1.10	0.59	1.93	2.81	3.00	
	DATE OF OCCURRENCE	01	06-07	08	13-14	04	28	01-02	22-23	04-05	09	22-23	04	APR 13-14	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	10	6	10	15	10	13	3	5	7	5	4	9	97	
PRECIPITATION ≥ 0.10	7	3	7	8	7	10	2	3	5	3	2	3	60		
PRECIPITATION ≥ 1.00	2	1	1	2	2	1	0	0	0	0	1	3	13		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	7.0	T	14.3	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	21.3	
	GREATEST 24-HOUR (IN.)	4.5	T	7.5	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	7.5	
	DATE OF OCCURRENCE	23	23+	13	17+								27+	MAR 13	
	MAXIMUM SNOW DEPTH (IN.)	5	T	14	0	0	0	0	0	0	0	0	0	14	
	DATE OF OCCURRENCE	23	21	14										MAR 14	
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	3	0	2	0	0	0	0	0	0	0	0	0	5		

NORMALS, MEANS, AND EXTREMES

SPRINGFIELD, MO (SGF)

LATITUDE: 37° 14' 23" N LONGITUDE: 93° 23' 23" W ELEVATION (FT): GRND: 1278 BARO: 1278 TIME ZONE: CENTRAL (UTC + 6) WBAN: 13995

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	41.8	46.3	57.4	67.9	76.0	84.4	89.6	88.6	80.3	69.8	56.6	45.3	67.0
	MEAN DAILY MAXIMUM	59	42.3	47.2	56.0	67.4	75.4	83.9	88.8	88.2	80.2	70.1	55.7	45.3	66.7
	HIGHEST DAILY MAXIMUM	54	76	81	87	93	93	101	113	106	104	93	81	77	113
	YEAR OF OCCURRENCE		1950	1972	1974	1963	1972	1954	1954	1984	1947	1981	1999	1991	JUL 1954
	MEAN OF EXTREME MAXS.	59	65.3	69.4	78.1	84.0	87.2	93.1	97.6	97.7	92.6	85.5	74.7	67.5	82.7
	NORMAL DAILY MINIMUM	30	20.4	25.0	34.4	44.1	53.2	61.9	66.6	65.0	57.7	45.9	35.5	25.3	44.6
	MEAN DAILY MINIMUM	59	22.2	26.4	34.0	44.5	53.9	62.7	66.8	65.4	57.5	46.7	35.0	26.2	45.1
	LOWEST DAILY MINIMUM	54	-13	-17	-3	18	30	42	44	44	31	18	4	-16	-17
	YEAR OF OCCURRENCE		1985	1979	1948	1957	1970	1966	1972	1967	1984	1993	1959	1989	FEB 1979
	MEAN OF EXTREME MINS.	59	0.7	6.5	14.3	28.1	38.0	48.9	55.4	53.0	40.3	29.5	17.0	6.1	28.1
	NORMAL DRY BULB	30	31.1	35.7	46.0	56.0	64.6	73.2	78.1	76.8	69.0	57.8	46.0	35.3	55.8
	MEAN DRY BULB	59	32.2	36.8	45.0	55.9	64.6	73.4	77.8	76.8	68.9	58.3	45.3	35.9	55.9
	MEAN WET BULB	16	30.0	31.9	40.6	49.4	59.3	67.1	70.4	69.0	61.4	51.7	38.9	32.9	50.2
	MEAN DEW POINT	16	24.4	27.7	33.7	43.1	55.0	63.9	67.0	65.0	57.3	46.6	33.8	27.7	45.4
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.1	0.4	6.4	16.9	15.0	4.2	0.4	0.0	0.0	43.4	
MAXIMUM ≤ 32°	30	7.5	4.6	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	4.9	18.3	
MINIMUM ≤ 32°	30	26.0	20.6	13.6	3.3	0.3	0.0	0.0	0.0	0.1	2.4	12.4	23.1	101.8	
MINIMUM ≤ 0°	30	2.4	0.8	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.2	
H/C	NORMAL HEATING DEG. DAYS	30	1051	820	589	280	110	5	0	0	43	249	570	921	4638
	NORMAL COOLING DEG. DAYS	30	0	0	0	10	98	251	406	366	163	26	0	0	1320
RH	NORMAL (PERCENT)	30	68	68	65	64	71	72	70	70	73	68	70	71	69
	HOUR 00 LST	30	73	74	72	72	81	84	82	81	83	77	76	75	78
	HOUR 06 LST	30	77	78	78	78	84	86	87	87	87	82	80	79	82
	HOUR 12 LST	30	60	60	56	55	58	59	56	54	58	54	59	63	58
	HOUR 18 LST	30	64	62	55	54	60	61	57	56	64	62	66	68	61
S	PERCENT POSSIBLE SUNSHINE	54	50	52	56	59	60	65	71	71	67	64	52	48	60
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	54	3.5	2.6	1.5	0.9	1.3	1.3	0.9	1.0	1.4	1.7	1.9	2.9	20.9
	THUNDERSTORMS	54	0.9	1.3	3.8	6.4	8.2	9.1	7.7	7.6	5.2	3.4	2.3	1.1	57.0
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
CLEAR	1	3.0		10.0		7.0	11.0								
PARTLY CLOUDY	1	2.0		4.0		3.0	4.0								
CLOUDY	1	7.0	1.0	5.0		8.0	8.0								
PR	MEAN STATION PRESSURE (IN)	27	28.76	28.72	28.64	28.62	28.62	28.64	28.69	28.71	28.72	28.73	28.71	28.75	28.69
	MEAN SEA-LEVEL PRES. (IN)	16	30.13	30.10	30.02	29.95	29.95	29.95	30.00	30.02	30.04	30.07	30.08	30.14	30.04
WINDS	MEAN SPEED (MPH)	43	11.4	11.6	12.6	11.9	10.1	9.3	8.5	8.3	9.1	10.0	11.1	11.3	10.4
	PREVAIL. DIR (TENS OF DEGS)	28	16	16	16	16	16	16	16	16	16	16	16	16	16
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	4	38	34	39	41	36	47	40	37	40	30	43	34	47
	DIR. (TENS OF DEGS)		18	19	13	34	29	36	34	17	01	15	10	18	36
	YEAR OF OCCURRENCE		1996	1997	1999	1996	1998	1996	1996	1996	1998	1998	1998	1996	JUN 1996
	MAXIMUM 5-SECOND:														
SPEED (MPH)	4	48	45	48	52	53	61	51	45	47	39	48	45	61	
DIR. (TENS OF DEGS)		18	18	12	34	29	35	33	17	01	25	09	32	35	
YEAR OF OCCURRENCE		1996	1997	1999	1996	1998	1996	1996	1996	1998	1997	1998	1997	JUN 1996	
PRECIPITATION	NORMAL (IN)	30	1.79	2.17	3.89	4.18	4.38	5.09	2.92	3.51	4.62	3.58	3.75	3.16	43.04
	MAXIMUM MONTHLY (IN)	54	6.77	5.68	9.01	10.58	13.41	11.31	18.75	8.60	17.46	8.70	12.24	8.84	18.75
	YEAR OF OCCURRENCE		1950	1990	1973	1994	1990	1975	1958	1982	1993	1967	1985	1982	JUL 1958
	MINIMUM MONTHLY (IN)	54	0.08	0.35	0.50	0.15	1.54	0.23	0.33	0.50	0.20	0.43	0.19	0.13	0.08
	YEAR OF OCCURRENCE		1961	1947	1956	1989	1969	1991	1953	1955	1952	1963	1989	1950	JAN 1961
	MAXIMUM IN 24 HOURS (IN)	54	3.91	3.73	4.09	3.85	5.81	4.83	6.85	3.41	6.27	5.48	6.29	4.50	6.85
	YEAR OF OCCURRENCE		1950	1966	1974	1970	1989	1975	1958	1976	1993	1949	1987	1982	JUL 1958
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	7.8	8.3	10.5	10.6	10.5	9.9	6.9	8.4	8.9	8.5	8.8	9.1	108.2	
PRECIPITATION ≥ 1.00	30	0.3	0.3	1.2	1.1	1.1	1.4	0.8	1.1	1.5	1.2	1.0	1.0	12.0	
SNOWFALL	NORMAL (IN)	30	5.2	5.1	3.5	0.4	0.0	0.0	0.0	0.0	T	1.6	3.8	19.6	
	MAXIMUM MONTHLY (IN)	54	23.1	19.2	23.9	7.1	T	T	T	0.0	0.0	1.2	19.5	14.5	23.9
	YEAR OF OCCURRENCE		1979	1980	1970	1971	1996	1993	1995			1993	1951	1983	MAR 1970
	MAXIMUM IN 24 HOURS (IN)	54	13.5	16.1	15.7	6.9	T	T	T	0.0	0.0	1.1	12.5	7.5	16.1
	YEAR OF OCCURRENCE		1995	1980	1970	1971	1996	1993	1995			1993	1951	1966	FEB 1980
	MAXIMUM SNOW DEPTH (IN)	56	14	16	17	3	0	0	0	0	0	1	14	9	17
	YEAR OF OCCURRENCE		1995	1980	1970	1971						1993	1951	1983	MAR 1970
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	1.6	1.3	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.4	5.6	

PRECIPITATION (inches) 1999 SPRINGFIELD, MO (SGF)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0.58	0.67	3.79	5.14	2.58	6.39	0.74	3.62	9.87	4.68	1.59	2.19	41.84
1971	1.23	2.37	1.22	3.14	3.84	3.64	2.54	2.30	5.07	3.63	2.66	6.24	37.88
1972	0.45	1.23	0.95	4.82	1.96	1.62	2.24	3.34	6.41	5.96	8.08	1.70	38.76
1973	4.41	0.85	9.01	6.46	4.31	5.47	7.96	0.98	4.71	4.27	6.39	4.58	59.40
1974	2.12	1.87	7.20	3.04	4.69	5.79	1.87	6.04	4.82	4.32	5.43	2.68	49.87
1975	3.95	3.93	6.32	3.45	1.96	11.31	1.85	2.57	11.36	1.05	4.24	1.95	53.94
1976	0.52	1.14	2.51	5.42	3.83	3.16	4.55	4.61	1.90	2.43	0.23	0.99	31.29
1977	1.54	1.64	3.43	2.35	2.30	7.13	1.48	3.14	9.03	2.24	3.02	1.64	38.94
1978	1.54	1.49	5.83	3.96	4.13	4.07	4.63	3.42	2.91	2.18	6.13	3.66	43.95
1979	2.35	1.66	2.85	7.19	7.42	8.49	5.54	3.61	2.06	3.26	3.16	1.35	48.94
1980	0.85	2.55	3.94	2.92	2.41	3.59	0.69	1.21	1.85	4.04	1.28	2.03	27.36
1981	1.10	1.55	2.25	3.09	6.20	8.54	3.08	5.02	0.83	7.89	2.62	1.55	43.72
1982	4.51	0.40	2.15	3.42	4.83	5.91	1.01	8.60	1.15	2.59	4.26	8.84	47.67
1983	0.77	0.43	2.58	10.19	3.78	2.31	5.95	1.28	3.46	6.67	5.08	2.55	45.05
1984	1.08	3.46	5.01	5.05	2.11	3.19	2.46	1.34	4.84	5.70	4.67	6.87	45.78
1985	1.55	4.25	6.28	3.92	3.75	7.20	1.61	5.97	1.66	5.05	12.24	3.02	56.50
1986	0.09	1.95	2.07	3.83	3.05	3.23	1.29	4.82	11.65	4.11	2.85	1.25	40.19
1987	2.07	5.25	3.95	2.15	5.39	5.80	2.57	4.35	4.08	3.24	9.16	7.48	55.49
1988	1.34	2.18	5.87	3.75	4.40	5.35	4.80	5.14	5.14	1.91	5.48	3.10	48.46
1989	1.60	1.98	4.95	0.15	6.93	2.67	4.79	3.91	2.40	1.12	0.19	0.81	31.50
1990	5.26	5.68	7.87	2.51	13.41	4.66	3.01	1.46	5.84	5.02	2.41	6.06	63.19
1991	3.00	0.93	1.12	5.16	5.58	0.23	4.20	2.72	3.55	3.78	3.92	3.40	37.59
1992	0.87	2.20	2.24	2.45	2.03	6.03	6.84	3.86	7.36	0.80	9.11	4.25	48.04
1993	2.82	2.67	2.62	3.09	4.42	8.75	4.19	2.71	17.46	1.37	4.05	1.63	55.78
1994	1.40	2.75	3.00	10.58	3.54	3.25	4.48	4.81	1.86	4.68	7.57	1.10	49.02
1995	3.99	1.45	1.17	8.67	7.26	7.79	2.96	2.25	2.43	0.60	0.81	2.48	41.86
1996	3.70	0.61	1.68	5.18	5.10	2.44	2.90	1.92	7.48	5.08	8.06	0.71	44.86
1997	1.39	4.02	4.09	2.76	4.66	3.58	1.72	4.21	3.69	3.43	1.78	3.15	38.48
1998	2.67	4.28	6.54	2.58	3.85	3.16	7.39	3.26	5.81	3.97	3.60	1.36	48.47
1999	3.95	1.90	3.04	7.07	6.54	3.80	1.28	2.00	1.79	1.20	1.97	6.99	41.53
POR= 112 YRS	2.19	2.15	3.44	4.12	4.88	4.87	3.58	3.67	3.93	3.21	3.04	2.52	41.60

WBAN : 13995

AVERAGE TEMPERATURE (°F) 1999 SPRINGFIELD, MO (SGF)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	25.8	34.7	38.7	55.8	65.2	72.8	75.4	78.0	72.3	54.0	42.2	39.8	54.6
1971	31.4	34.4	44.0	55.9	62.5	77.6	76.0	76.2	71.6	62.4	46.1	42.8	56.7
1972	32.9	38.3	47.1	58.4	65.3	74.2	77.0	76.6	70.8	56.7	40.6	31.6	55.8
1973	33.2	35.9	51.6	53.2	60.9	72.7	77.0	77.3	71.1	62.2	49.8	34.7	56.6
1974	32.9	39.4	50.8	56.6	66.2	68.3	79.4	74.8	61.4	58.6	44.7	35.8	55.7
1975	36.4	34.3	40.4	54.6	66.5	74.5	77.5	76.5	63.3	58.5	47.6	38.6	55.7
1976	32.6	46.3	50.2	57.3	59.7	70.4	76.6	74.6	68.7	52.4	38.2	33.4	55.0
1977	18.9	37.9	49.4	59.7	69.1	75.8	80.2	79.3	72.6	57.7	47.4	35.5	57.0
1978	19.8	22.9	40.2	56.4	63.8	72.9	81.3	77.0	73.9	56.8	46.9	34.7	53.9
1979	17.6	27.1	45.3	53.6	62.3	70.5	75.1	75.6	68.7	60.9	43.7	41.3	53.5
1980	36.5	32.3	42.7	53.8	64.1	75.4	83.8	82.9	73.3	56.3	46.1	37.8	57.1
1981	33.6	38.5	47.2	62.6	61.8	75.8	80.2	75.4	69.8	57.1	49.1	34.2	57.1
1982	26.2	34.4	49.7	52.8	68.2	70.1	80.2	78.7	68.6	57.9	46.7	42.1	56.3
1983	34.9	40.4	46.7	50.6	61.9	72.2	79.6	83.4	71.0	60.5	48.7	21.5	56.0
1984	29.4	42.8	42.9	54.0	62.6	75.5	77.4	79.5	68.1	60.3	45.3	43.0	56.7
1985	24.4	30.8	50.1	59.0	67.1	72.6	79.5	75.6	69.0	59.4	46.1	28.0	55.1
1986	36.6	37.6	49.6	58.0	65.4	75.8	82.0	73.8	71.9	57.4	41.6	36.3	57.2
1987	32.7	41.5	48.5	56.7	70.8	74.7	78.5	79.1	67.6	52.9	46.9	37.2	57.3
1988	29.6	32.2	45.4	54.8	65.6	74.5	76.7	78.6	68.9	52.9	47.1	37.3	55.3
1989	39.6	27.4	45.5	57.0	62.5	69.6	75.3	75.4	63.7	59.5	46.6	25.7	54.0
1990	41.3	42.0	48.2	54.8	61.9	75.1	77.2	77.1	72.5	55.9	52.2	34.9	57.8
1991	30.5	42.6	48.6	57.8	68.9	75.0	78.5	78.3	68.0	59.3	42.4	40.2	57.5
1992	37.7	43.8	48.6	57.5	63.4	70.5	76.5	71.1	67.6	58.7	44.0	36.4	56.3
1993	33.5	33.9	42.9	52.7	63.8	73.1	80.1	79.2	66.0	54.2	41.8	37.9	54.9
1994	30.1	36.5	48.8	57.7	64.3	77.2	77.1	75.4	67.6	59.7	50.6	40.4	57.1
1995	33.7	39.1	48.5	56.0	62.3	72.1	78.2	82.2	66.6	59.0	43.0	34.2	56.2
1996	30.4	38.3	39.6	53.0	67.0	72.8	75.0	75.8	65.8	57.0	39.5	38.0	54.4
1997	29.1	40.0	47.3	50.6	59.8	70.8	77.8	73.9	69.0	57.7	42.6	35.1	54.5
1998	38.1	39.9	42.5	53.6	69.7	74.6	79.4	77.5	74.9	58.6	49.1	37.0	57.9
1999	35.1	44.1	43.1	57.0	63.1	72.5	79.8	78.1	66.8	58.8	53.4	39.3	57.6
POR= 112 YRS	32.9	36.1	45.2	56.0	64.6	73.1	77.5	76.7	69.5	58.4	45.6	36.1	56.0

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HEATING DEGREE DAYS (base 65°F) 1999 SPRINGFIELD, MO (SGF)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	8	0	28	344	677	771	1035	852	642	283	116	0	4756
1971-72	3	0	61	117	561	683	988	767	549	243	79	2	4053
1972-73	9	0	40	266	727	1029	981	808	409	359	145	1	4774
1973-74	0	0	31	147	454	933	987	708	454	268	64	18	4064
1974-75	0	0	144	211	600	899	878	851	757	334	55	3	4732
1975-76	0	0	152	245	515	815	997	533	460	245	186	3	4151
1976-77	0	0	41	415	797	975	1421	752	476	173	27	0	5077
1977-78	0	0	4	233	522	906	1396	1172	763	258	134	7	5395
1978-79	0	0	19	268	535	933	1463	1053	606	342	132	14	5365
1979-80	0	1	31	184	633	726	877	941	685	332	109	1	4520
1980-81	0	0	42	289	562	834	967	735	547	126	134	0	4236
1981-82	0	0	37	266	468	949	1200	850	474	367	33	26	4670
1982-83	0	0	68	265	551	704	925	680	563	435	133	16	4340
1983-84	0	0	59	162	489	1343	1097	641	680	338	133	0	4942
1984-85	0	0	106	168	584	678	1251	949	459	204	33	4	4436
1985-86	0	1	88	187	558	1139	874	760	474	226	64	0	4371
1986-87	0	12	16	249	692	882	998	651	505	291	1	1	4298
1987-88	0	1	38	370	540	857	1090	944	601	304	54	2	4801
1988-89	0	8	26	385	531	852	780	1049	601	303	156	22	4713
1989-90	2	1	130	204	546	1214	724	639	521	336	126	4	4447
1990-91	6	0	24	291	381	929	1059	620	508	226	48	0	4092
1991-92	0	0	102	202	670	762	842	607	503	261	112	8	4069
1992-93	0	6	66	203	622	878	970	867	681	361	94	12	4760
1993-94	0	2	70	340	692	836	1074	791	500	251	89	0	4645
1994-95	0	0	60	199	432	755	964	721	510	288	132	3	4064
1995-96	0	0	102	198	656	947	1064	768	779	355	78	17	4964
1996-97	0	0	71	252	756	827	1106	693	542	429	190	19	4885
1997-98	4	1	21	278	663	918	827	698	702	340	29	25	4506
1998-99	0	0	0	210	471	862	920	580	672	248	88	13	4064
1999-	0	0	77	213	342	792							

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COOLING DEGREE DAYS (base 65°F) 1999 SPRINGFIELD, MO (SGF)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	22	105	248	337	412	255	13	0	0	1392
1971	0	0	0	19	43	384	353	353	267	45	1	0	1465
1972	0	0	0	53	94	288	385	366	224	16	0	0	1426
1973	0	0	0	11	26	240	382	388	216	66	4	0	1333
1974	0	0	23	24	104	124	453	309	43	15	0	0	1095
1975	0	0	1	27	110	291	394	364	109	52	1	0	1349
1976	0	0	7	20	28	173	367	305	156	29	0	0	1085
1977	0	0	0	18	161	332	479	449	238	15	0	0	1692
1978	0	0	0	6	104	249	511	380	293	22	0	0	1565
1979	0	0	0	10	56	183	319	341	148	65	0	0	1122
1980	0	0	0	3	87	318	589	565	299	27	1	0	1889
1981	0	0	0	57	42	329	479	328	188	26	0	0	1449
1982	0	0	7	7	139	182	477	432	184	51	5	1	1485
1983	0	0	3	8	41	239	462	577	245	29	9	0	1613
1984	0	0	0	14	64	319	389	455	204	31	0	1	1477
1985	0	0	5	30	108	237	456	337	216	20	0	0	1409
1986	0	0	2	22	85	333	535	290	231	20	0	0	1518
1987	0	0	0	47	188	302	424	446	125	4	4	0	1540
1988	0	0	1	4	81	293	369	436	150	13	0	0	1347
1989	0	0	4	70	88	165	326	328	98	40	2	0	1121
1990	0	0	8	38	35	312	392	379	257	14	4	0	1439
1991	0	0	5	18	175	307	426	419	196	34	0	0	1580
1992	0	0	3	41	68	183	367	202	151	17	0	0	1032
1993	0	0	4	2	61	259	476	450	106	13	0	0	1371
1994	0	0	2	39	72	373	380	326	144	39	6	0	1381
1995	0	0	7	21	56	223	416	537	158	20	0	0	1438
1996	0	3	0	4	145	259	317	340	103	10	0	0	1181
1997	0	0	0	0	35	197	410	282	146	59	0	0	1129
1998	0	0	11	5	179	321	453	397	308	18	0	0	1692
1999	0	0	0	14	36	247	462	412	138	25	2	0	1336

SNOWFALL (inches) 1999 SPRINGFIELD, MO (SGF)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	0.0	0.0	T	2.9	0.1	7.1	2.8	7.1	0.0	0.0	20.0
1971-72	0.0	0.0	0.0	0.0	2.8	T	0.2	3.1	T	0.0	0.0	0.0	6.1
1972-73	0.0	0.0	0.0	0.0	11.5	1.5	7.4	0.1	T	0.9	0.0	0.0	21.4
1973-74	0.0	0.0	0.0	0.0	0.0	9.9	1.5	2.1	6.9	T	0.0	0.0	20.4
1974-75	0.0	0.0	0.0	0.0	7.9	0.1	0.4	13.0	11.5	T	0.0	0.0	32.9
1975-76	0.0	0.0	0.0	0.0	6.9	3.4	1.2	T	0.6	0.0	0.0	0.0	12.1
1976-77	0.0	0.0	0.0	T	0.3	1.9	17.4	1.0	0.0	0.2	0.0	0.0	20.8
1977-78	0.0	0.0	0.0	0.0	1.0	0.4	15.4	7.5	5.0	0.0	0.0	0.0	29.3
1978-79	0.0	0.0	0.0	0.0	T	3.5	23.1	1.8	T	T	0.0	0.0	28.4
1979-80	0.0	0.0	0.0	T	T	0.8	1.3	19.2	0.9	2.5	0.0	0.0	24.7
1980-81	0.0	0.0	0.0	T	9.2	T	2.6	6.4	0.0	0.0	0.0	0.0	18.2
1981-82	0.0	0.0	0.0	0.0	T	3.1	15.8	4.5	1.2	T	0.0	0.0	24.6
1982-83	0.0	0.0	0.0	0.0	T	T	3.7	0.4	1.5	T	0.0	0.0	5.6
1983-84	0.0	0.0	0.0	0.0	0.2	14.5	6.9	9.6	0.4	0.0	0.0	0.0	31.6
1984-85	0.0	0.0	0.0	0.0	1.4	4.5	13.7	6.0	T	0.0	0.0	0.0	25.6
1985-86	0.0	0.0	0.0	0.0	T	6.2	T	7.3	0.0	0.0	0.0	0.0	13.5
1986-87	0.0	0.0	0.0	0.0	T	0.1	11.7	2.1	T	0.0	0.0	0.0	13.9
1987-88	0.0	0.0	0.0	0.0	0.3	8.7	5.8	4.3	7.0	T	0.0	0.0	26.1
1988-89	0.0	0.0	0.0	0.0	3.0	6.8	0.8	2.7	15.0	0.0	0.0	T	28.3
1989-90	0.0	0.0	0.0	T	T	6.4	0.9	8.5	0.7	T	T	T	16.5
1990-91	T	0.0	0.0	0.0	T	8.2	2.1	4.6	T	T	T	0.0	14.9
1991-92	0.0	0.0	0.0	0.0	T	T	4.6	T	0.1	0.0	0.0	0.0	4.7
1992-93	0.0	0.0	0.0	0.0	0.4	3.5	3.2	14.1	1.5	1.0	0.0	T	23.7
1993-94	0.0	0.0	0.0	1.2	0.4	0.4	3.4	0.9	6.9	0.1	0.0	0.0	13.3
1994-95	0.0	0.0	0.0	0.0	0.0	T	15.0	0.2	1.0	T	T	0.0	16.2
1995-96	T	0.0	0.0	0.0	1.4	7.2	13.0	1.8	T	T	T	0.0	14.3
1996-97	0.0	0.0	0.0	T	1.0	0.7	10.8	1.8	0.0	T	T	0.0	14.3
1997-98	0.0	0.0	0.0	T	1.7	3.5	4.3	0.3	5.4	0.0	0.0	T	15.2
1998-99	0.0	0.0	0.0	0.0	0.0	0.1	7.0	T	14.3	T	0.0	0.0	21.4
1999-	0.0	0.0	0.0	0.0	0.0	T							
POR= 53 YRS	T	0.0	0.0	0.0	1.6	2.8	4.7	3.9	3.3	0.4	T	T	16.7

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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
SPRINGFIELD,
MISSOURI (SGF)

The entire metropolitan area, airport, and surrounding territory consists of comparatively flat or very gently rolling tableland, practically atop the crest of the Missouri Ozark Mountain plateau. The average elevation of the city proper is slightly over 1,300 feet above sea level. There are no serious problems of instrumental exposure.

As a result of this advantageous location, the city and surrounding territory enjoy what is described as a plateau climate. The winter season in the Ozarks has temperatures considerably milder than in the upland, plain or prairie, and in the summer the Ozarks are appreciably cooler.

The city of Springfield also occupies a unique location with regard to natural water drainage. The line separating two major water sheds crosses the north-central part of the city. Drainage north of this line flows north into the Gasconade and Missouri Rivers. To the south of the line, drainage is to the south into the White and Mississippi Rivers.

The average annual temperature range is over 140 degrees with lowest temperatures below -25 and and highest temperatures above 115 degrees.

The growing season extends over a period of 199 days. Agriculture is greatly diversified, practically every farm product of the temperate zone is grown in this area. It is a noted livestock and poultry production and distribution center. The climate permits green pasturage the year around in varying quantity, resulting in ever increasing cattle production for both meat and dairy products.

The air is remarkably free from palls of industrial smoke, and the altitude of the city also tends to prevent other than few amounts of either radiation or advection fogs.

