

2003

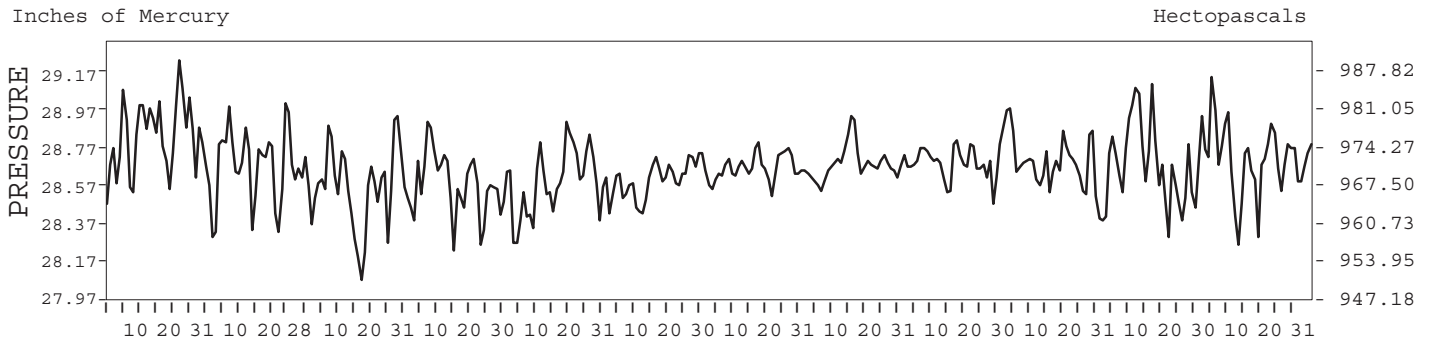
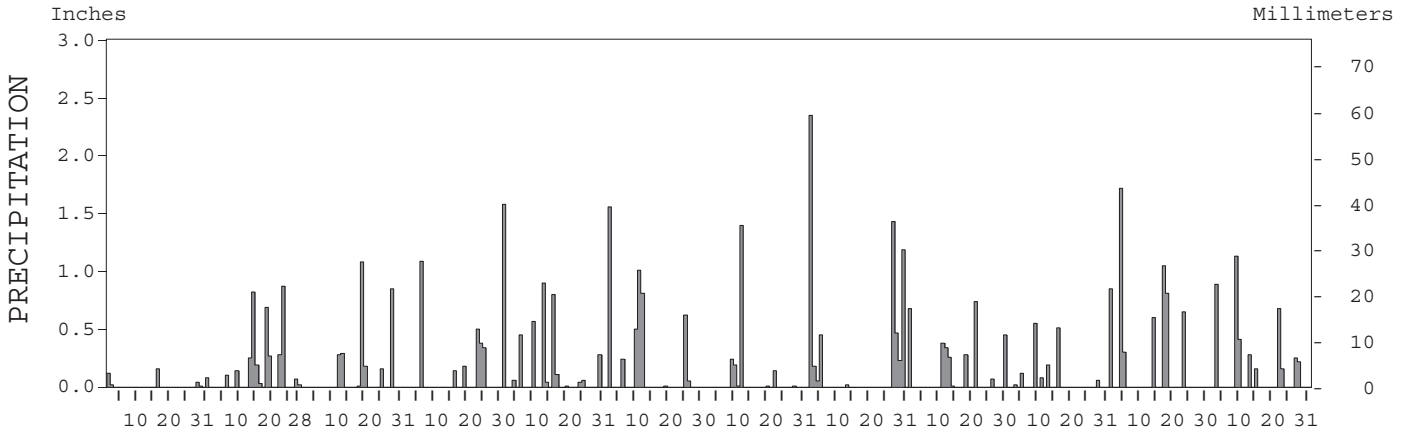
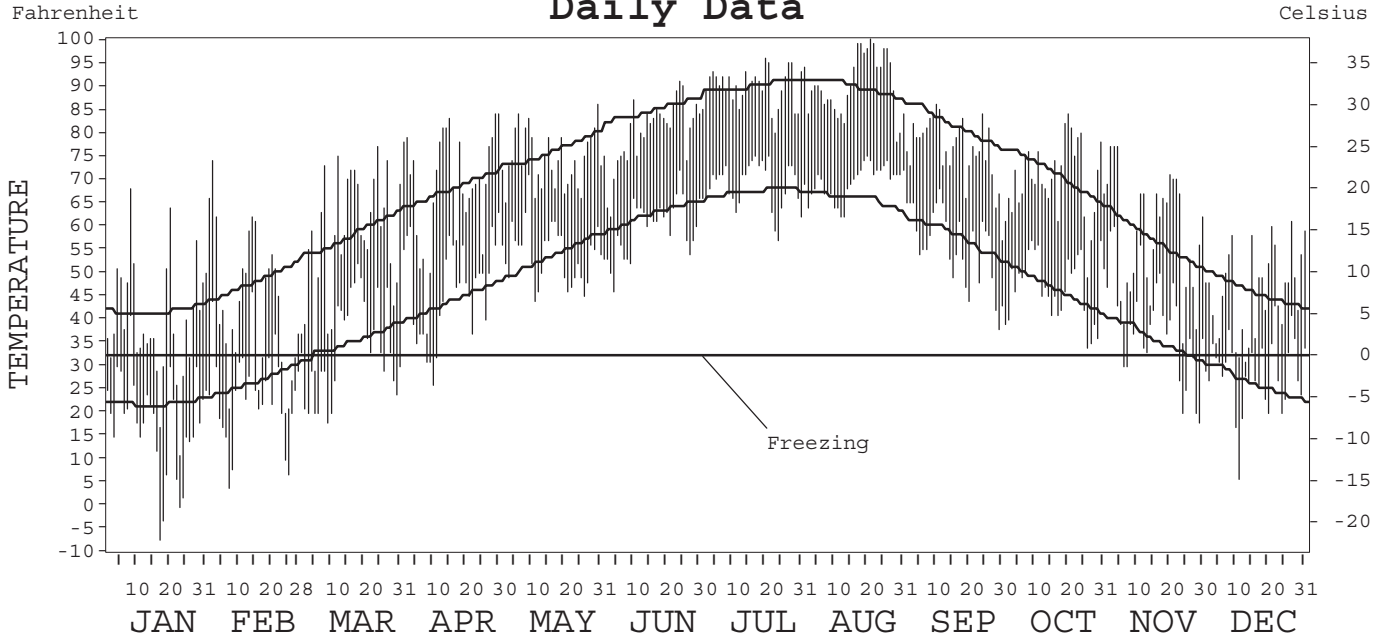
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-2923

SPRINGFIELD,
MISSOURI (SGF)

Daily Data



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.

Thomas R. Karl

NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION	NATIONAL ENVIRONMENTAL SATELLITE, DATA, AND INFORMATION SERVICE	NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NORTH CAROLINA	DIRECTOR NATIONAL CLIMATIC DATA CENTER
---	---	---	---

METEOROLOGICAL DATA FOR 2003

SPRINGFIELD, MO (SGF)

LATITUDE: 37° 14' 23" N LONGITUDE: 93° 23' 23" W ELEVATION (FT): GRND: 1277 BARO: 1280 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	39.6	43.3	58.0	68.8	74.3	80.0	89.7	90.5	76.5	70.0	58.1	46.1	66.2	
	HIGHEST DAILY MAXIMUM	68	74	77	87	86	91	96	100	86	84	77	61	100	
	DATE OF OCCURRENCE	08	02	24	29	30	24	20	21	10	20	04+	27	AUG 21	
	MEAN DAILY MINIMUM	17.9	24.0	33.8	46.4	54.0	59.5	68.7	69.4	55.7	47.0	38.4	28.6	45.3	
	LOWEST DAILY MINIMUM	-7	4	18	26	44	46	57	62	38	34	18	6	-7	
	DATE OF OCCURRENCE	17	07	09	10	11	04	24	13+	29	26	29	11	JAN 17	
	AVERAGE DRY BULB	28.8	33.7	45.9	57.6	64.2	69.8	79.2	80.0	66.1	58.5	48.3	37.4	55.8	
	MEAN WET BULB	26.1	31.1	40.9		59.4	63.8		71.7		53.0	44.2	34.1		
	MEAN DEW POINT	19.2	26.5	35.0		55.6	60.2		68.0		48.7	39.1	28.4		
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	2	18	16	0	0	0	0	0	36
	MAXIMUM ≤ 32°	8	8	1	0	0	0	0	0	0	0	0	2	19	
	MINIMUM ≤ 32°	30	25	14	4	0	0	0	0	0	0	8	20	101	
MINIMUM ≤ 0°	3	0	0	0	0	0	0	0	0	0	0	0	3		
H/C	HEATING DEGREE DAYS	1117	872	584	247	76	24	0	0	65	209	501	846	4541	
	COOLING DEGREE DAYS	0	0	0	34	57	174	449	470	107	15	7	0	1313	
RH	MEAN (PERCENT)	68	77	70	67	75	74	70	71	75	73	73	72	72	
	HOUR 00 LST	73	79	76	75	84	85	82	81	86	81	78	78	80	
	HOUR 06 LST	79	84	84	82	87	88	88	90	90	88	81	79	85	
	HOUR 12 LST	58	71	60	55	64	61	56	56	60	60	66	64	61	
	HOUR 18 LST	63	72	56	54	63	60	55	56	67	68	70	67	63	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	2	7	2	1	5	2	1	0	2	5	5	2	34	
	THUNDERSTORMS	0	0	3	1	3	6	3	3	0	1	0	0	21	
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.)	28.84	28.68	28.57	28.58	28.59	28.61	28.67	28.70	28.71	28.67	28.71	28.71	28.67	
	MEAN SEA-LEVEL PRESS. (IN.)	30.23	30.06	29.93		29.92	29.93		30.01	30.04	30.01		30.09		
WINDS	RESULTANT SPEED (MPH)	1.3		2.8		1.4	2.8		2.3	2.4	2.1	3.7	4.3		
	RES. DIR. (TENS OF DEGS.)	31		16		11	15		16	14	16	18	17		
	MEAN SPEED (MPH)	9.0	9.2	10.1	11.3	8.3	7.7	7.3	6.3	8.1	7.4	10.4	11.9	8.9	
	PREVAIL. DIR. (TENS OF DEGS.)	17	15	15	15	16	16	18	16	15	15	16	15	15	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	26	25	32	33	49	35	36	32	24	32	35	32	49	
	DIR. (TENS OF DEGS.)	15	19	16	18	20	20	34	34	34	18	33	15	20	
	DATE OF OCCURRENCE	15	02	27	16+	06	10	09	02+	28+	30+	18	27+	MAY 06	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	32	31	38	41	63	44	43	46	30	38	51	39	63	
DIR. (TENS OF DEGS.)	01	32	17	19	20	19	34	33	33	35	25	01	20		
DATE OF OCCURRENCE	09	03+	27+	16+	06	10	09	02	28	16	23	23+	MAY 06		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	0.43	3.73	2.85	2.63	4.90	4.80	2.00	6.37	3.21	1.53	5.98	4.18	42.61	
	GREATEST 24-HOUR (IN.)	0.16	1.07	1.08	1.09	1.58	1.56	1.40	2.38	0.74	0.55	1.72	1.54	2.38	
	DATE OF OCCURRENCE	16	13-14	19	06	01	02	12	02-03	21	09	17-18+	09-10	AUG 02-03	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	6	12	7	6	12	8	7	9	9	7	7	9	99	
PRECIPITATION ≥ 0.10	2	9	6	6	7	6	4	7	7	4	7	9	74		
PRECIPITATION ≥ 1.00	0	0	1	1	1	2	1	3	0	0	2	1	12		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	3.9	13.6	0.6	T	0.0	T	0.0	0.0	0.0	0.0	T	11.4	29.5	
	GREATEST 24-HOUR (IN.)	2.8	7.5	0.6	T	0.0	T	0.0	0.0	0.0	0.0	T	7.2	7.5	
	DATE OF OCCURRENCE	16	23	28	09+		12					23	10	FEB 23	
	MAXIMUM SNOW DEPTH (IN.)	2	7	0	0	0	0	0	0	0	0	0	7	7	
	DATE OF OCCURRENCE	18+	24										13	DEC 13	
	NUMBER OF DAYS WITH:														
SNOWFALL ≥ 1.0	1	4	0	0	0	0	0	0	0	0	0	2	7		

NORMALS, MEANS, AND EXTREMES

SPRINGFIELD, MO (SGF)

LATITUDE: 37° 14' 23" N LONGITUDE: 93° 23' 23" W ELEVATION (FT): GRND: 1277 BARO: 1280 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	41.6	47.7	57.8	67.7	75.9	84.6	89.9	89.5	81.2	70.6	56.4	45.5	67.4
	MEAN DAILY MAXIMUM	63	42.4	47.2	56.0	67.5	75.3	83.7	88.7	88.3	80.3	70.0	55.7	45.2	66.7
	HIGHEST DAILY MAXIMUM	58	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.	63	65.3	69.6	77.9	83.9	87.2	93.0	97.5	97.8	92.7	85.6	74.7	67.3	82.7
	NORMAL DAILY MINIMUM	30	21.8	26.4	34.9	43.6	53.4	62.2	67.1	65.6	57.4	46.1	35.3	25.9	45.0
	MEAN DAILY MINIMUM	63	22.1	26.5	34.0	44.5	53.9	62.6	66.9	65.6	57.5	46.8	35.1	26.0	45.1
	LOWEST DAILY MINIMUM	58	-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.	63	0.6	6.7	14.2	28.0	38.2	48.9	55.6	53.3	40.1	29.4	17.0	5.7	28.1
	NORMAL DRY BULB	30	31.7	37.1	46.3	55.6	64.7	73.4	78.5	77.6	69.3	58.4	45.9	35.7	56.2
	MEAN DRY BULB	63	32.2	36.8	45.0	56.0	64.6	73.2	77.8	76.9	69.0	58.3	45.3	35.8	55.9
	MEAN WET BULB	20	29.9	32.3	40.5	49.9	59.4	66.9	70.6	69.3	61.5	51.8	39.5	32.5	50.3
	MEAN DEW POINT	20	24.1	27.7	33.7	43.6	55.1	63.6	67.4	65.4	57.2	46.7	34.3	27.3	45.5
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.1	0.2	6.1	16.5	14.8	4.6	0.2	0.0	0.0	42.5	
MAXIMUM ≤ 32°	30	7.5	4.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.6	18.0	
MINIMUM ≤ 32°	30	25.2	19.5	12.5	2.9	0.1	0.0	0.0	0.0	0.1	2.0	12.0	22.6	96.9	
MINIMUM ≤ 0°	30	2.1	0.9	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	3.9	
H/C	NORMAL HEATING DEG. DAYS	30	1034	790	581	300	100	8	1	1	62	248	578	899	4602
	NORMAL COOLING DEG. DAYS	30	0	0	3	20	83	258	415	379	179	28	1	0	1366
RH	NORMAL (PERCENT)	30	71	69	66	66	73	74	72	70	72	69	71	72	70
	HOUR 00 LST	30	75	74	72	73	82	85	83	81	82	78	76	77	78
	HOUR 06 LST	30	79	79	78	80	86	88	88	88	88	83	81	80	83
	HOUR 12 LST	30	64	61	56	56	60	60	57	55	58	56	61	64	59
	HOUR 18 LST	30	67	62	56	54	61	61	58	56	62	63	67	69	61
S	PERCENT POSSIBLE SUNSHINE	57	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)	58	3.5	2.7	1.5	0.9	1.4	1.3	1.0	1.0	1.4	1.8	2.0	2.9	21.4
	THUNDERSTORMS	58	0.9	1.4	3.7	6.3	8.1	8.9	7.6	7.5	5.0	3.3	2.3	1.1	56.1
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)	31	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)	20	30.13	30.10	30.02	29.95	29.95	29.95	30.00	30.02	30.04	30.08	30.08	30.14	30.04
WINDS	MEAN SPEED (MPH)	47	11.2	11.5	12.4	11.8	10.1	9.3	8.4	8.3	9.0	9.9	10.8	11.3	10.3
	PREVAIL. DIR (TENS OF DEGS)	32	16	16	16	16	16	16	16	16	16	16	16	16	16
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	8	38	39	39	41	49	47	40	39	40	32	43	37	49
	DIR. (TENS OF DEGS)		18	15	13	34	20	36	34	29	01	18	10	13	20
	YEAR OF OCCURRENCE		1996	2001	1999	1996	2003	1996	1996	2001	1998	2003	1998	2001	MAY 2003
	MAXIMUM 5-SECOND:														
	SPEED (MPH)	8	48	53	48	52	63	61	51	55	47	41	51	47	63
DIR. (TENS OF DEGS)		18	28	12	34	20	35	02	30	01	17	25	21	20	
YEAR OF OCCURRENCE		1996	2001	1999	1996	2003	1996	2001	2001	1998	2001	2003	2001	MAY 2003	
PRECIPITATION	NORMAL (IN)	30	2.11	2.28	3.82	4.31	4.57	5.02	3.56	3.37	4.83	3.47	4.46	3.17	44.97
	MAXIMUM MONTHLY (IN)	58	6.77	5.77	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	2001	1973	1994	1990	1975	1958	1982	1993	1967	1985	1982	JUL 1958
	MINIMUM MONTHLY (IN)	58	0.08	0.35	0.50	0.15	1.54	0.23	0.33	0.34	0.20	0.43	0.19	0.13	0.08
	YEAR OF OCCURRENCE		1961	1947	1956	1989	1969	1991	1953	2000	1952	1963	1989	1950	JAN 1961
	MAXIMUM IN 24 HOURS (IN)	58	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	8.8	7.9	10.8	11.1	11.3	10.4	7.4	8.0	8.3	9.1	9.3	8.8	111.2	
PRECIPITATION ≥ 1.00	30	0.4	0.5	1.1	1.1	0.9	1.4	1.1	0.9	1.6	1.1	1.3	1.0	12.4	
SNOWFALL	NORMAL (IN)	30	6.6	4.4	2.9	0.4	0.0	0.0	0.0	0.0	0.0	0.*	1.7	4.0	20.0
	MAXIMUM MONTHLY (IN)	58	23.1	19.2	23.9	7.1	T	T	T	T	0.0	1.2	19.5	20.5	23.9
	YEAR OF OCCURRENCE		1979	1980	1970	1971	1996	1993	1995	2001		1993	1951	2002	MAR 1970
	MAXIMUM IN 24 HOURS (IN)	58	13.5	16.1	15.7	6.9	T	T	T	T	0.0	1.1	12.5	14.3	16.1
	YEAR OF OCCURRENCE		1995	1980	1970	1971	1996	1993	1995	2001		1993	1951	2000	FEB 1980
	MAXIMUM SNOW DEPTH (IN)	60	14	16	17	3	0	0	0	0	0	1	14	13	17
	YEAR OF OCCURRENCE		1995	1980	1970	1971						1993	1951	2000	MAR 1970
	NORMAL NO. DAYS WITH:														
SNOWFALL ≥ 1.0	30	2.0	1.0	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.2	5.3	

PRECIPITATION (inches) 2003 SPRINGFIELD, MO (SGF)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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
2000	1.16	1.69	2.92	1.06	3.46	8.40	6.77	0.34	2.26	2.46	3.24	1.60	35.36
2001	1.45	5.77	0.85	1.88	5.19	6.60	4.87	5.29	3.20	4.24	2.43	3.52	45.29
2002	3.47	0.79	3.38	4.21	9.46	0.99	3.58	4.27	0.56	3.26	0.96	2.89	37.82
2003	0.43	3.73	2.85	2.63	4.90	4.80	2.00	6.37	3.21	1.53	5.98	4.18	42.61
POR= 116 YRS	2.20	2.20	3.42	4.09	4.92	4.90	3.62	3.71	3.90	3.22	3.07	2.56	41.81

WBAN : 13995

AVERAGE TEMPERATURE (°F) 2003 SPRINGFIELD, MO (SGF)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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
2000	34.8	44.2	49.6	54.2	66.7	70.0	76.1	80.9	70.1	61.3	39.5	23.3	55.9
2001	30.8	37.5	41.4	61.6	65.6	72.9	79.3	77.7	67.0	56.6	50.5	38.8	56.6
2002	35.3	37.9	42.8	58.4	61.9	74.4	78.6	78.1	72.7	55.3	43.6	35.8	56.2
2003	28.8	33.7	45.9	57.6	64.2	69.8	79.2	80.0	66.1	58.5	48.3	37.4	55.8
POR= 116 YRS	32.9	36.2	45.2	56.1	64.6	73.1	77.5	76.7	69.5	58.4	45.6	36.0	56.0

HEATING DEGREE DAYS (base 65°F) 2003 SPRINGFIELD, MO (SGF)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
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
1999-00	0	0	77	213	342	792	932	594	471	319	69	16	3825
2000-01	0	0	67	167	762	1287	1053	760	726	171	67	5	5065
2001-02	0	0	61	265	426	803	914	754	682	232	132	1	4270
2002-03	0	0	10	330	636	897	1117	872	584	247	76	24	4793
2003-	0	0	65	209	501	846							

WBAN : 13995

COOLING DEGREE DAYS (base 65°F) 2003 SPRINGFIELD, MO (SGF)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
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
2000	0	0	1	4	128	172	352	501	226	60	4	0	1448
2001	0	0	0	72	91	249	447	400	125	11	0	0	1395
2002	0	0	0	41	45	292	429	414	248	37	1	0	1507
2003	0	0	0	34	57	174	449	470	107	15	7	0	1313

SNOWFALL (inches) 2003 SPRINGFIELD, MO (SGF)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
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	0.0
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
1999-00	0.0	0.0	0.0	0.0	0.0	T	3.7	0.3	4.6	0.0	0.0	0.0	8.6
2000-01	0.0	0.0	0.0	0.0	T	18.1	2.6	0.9	T	0.0	0.0	T	21.6
2001-02	0.0	T	0.0				4.6	3.4	2.8	0.0	T	0.0	
2002-03	T	0.0	0.0	0.0	0.0	20.5	3.9	13.6	0.6	T	0.0	T	38.6
2003-	0.0	0.0	0.0	0.0	T	11.4							
POR= 57 YRS	T	0.0	0.0	0.0	1.6	3.5	4.7	3.9	3.2	0.4	T	T	17.3

WBAN : 13995

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.</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 EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
---	--

2003
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.

STATION LOCATION

SPRINGFIELD, MISSOURI

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE										AUTOMATIC OBSERVING EQUIPMENT *	* TYPE M = AMOS T = AUTOB S = ASOS W = AWOS REMARKS
						GROUND											
						SEA LEVEL	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET	WINDHOLE GAUGE	8 INCH RAIN GAUGE	HYGROMETER			
*NOTE: <u>AIRPORT</u>																	
Administration Building (New in 1963) Municipal Airport	10/1/63	11/1/94	225 ft. NE	37°14'	93°23'	1268	e20	f4 #	4 #	13	4 #	4 #	4 #	e5 g5		e. Not moved 10/1/63. f. Added 10/17/80. g. Type change 7/22/85. #. Eff. 5/16/86, instrument exposure is poor due to addition of terminal bldg. to E of site. h. Moved 55' N 08/25/88.	
Regional Airport	11/1/94	11/01/95	9 mi. W	37°14'	93°24'	1278	i30	h4 i4	h4 i4	i10	h4 i4	h4 i4	h4 i4	i5		i. Station moved 11/1/94.	
Regional Airport	11/01/95	Present	NA	37°14'	93°23'	j1277									S	ASOS Commissioned 11/01/95 j. Ground Elevation	

For Hard Copy Subscription:

Price and ordering information: NCDC Subscribing Service Center, 310 State Route 956, Building 300, Rocket Center, WV 26726.

INQUIRIES/COMMENTS CALL: Toll Free (866) 742-3322

Visit our Web Site for other weather data: www.ncdc.noaa.gov

Non-Subscription Request:

NCDC Customer Services;
Phone: 828-271-4800
Fax: 828-271-4876
Email: ncdc.orders@noaa.gov

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
CHANGE SERVICE REQUESTED

**FIRST CLASS
POSTAGE & FEES PAID
United States Department of Commerce
NOAA Permit No. G - 19**

* NOTES: For earlier station history see previous editions.