

1999

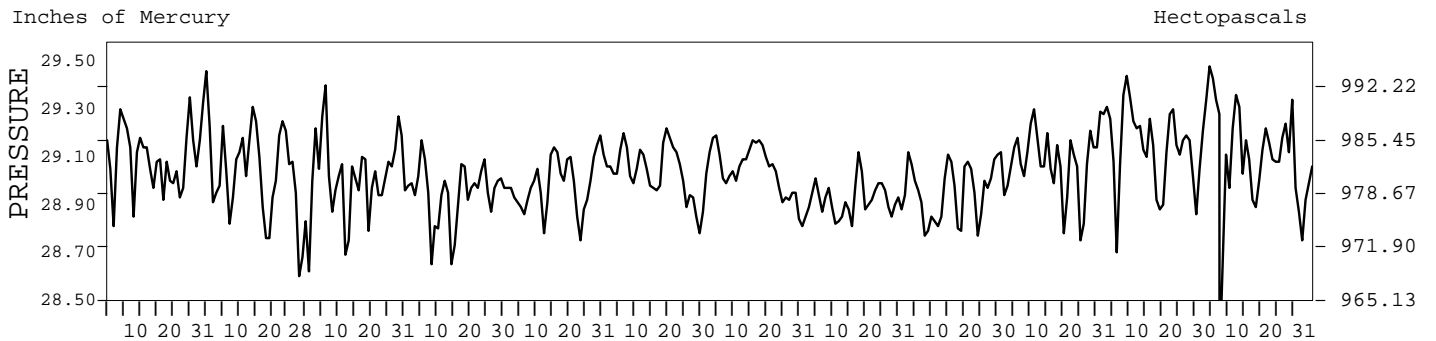
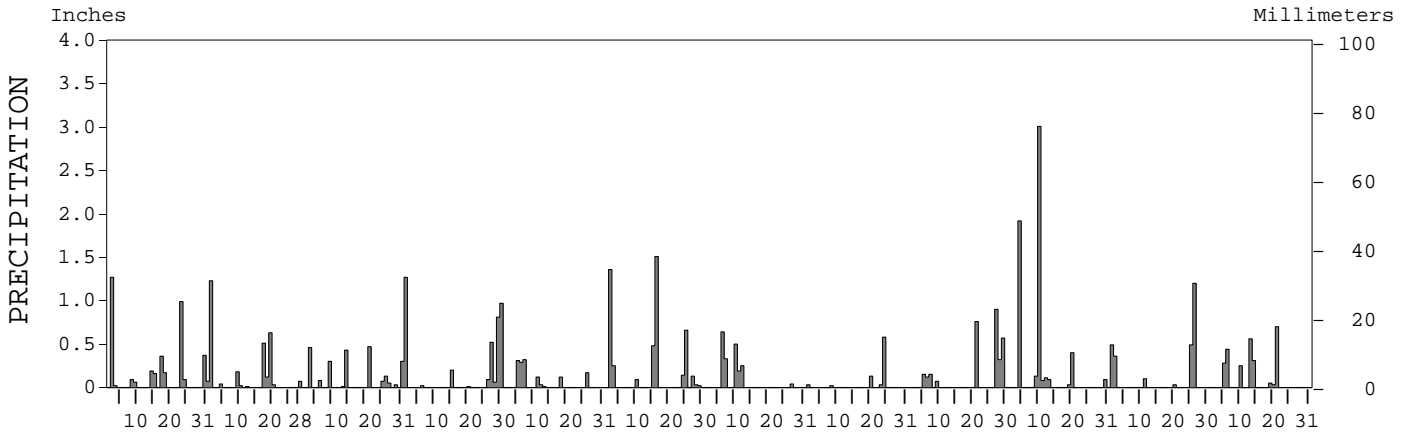
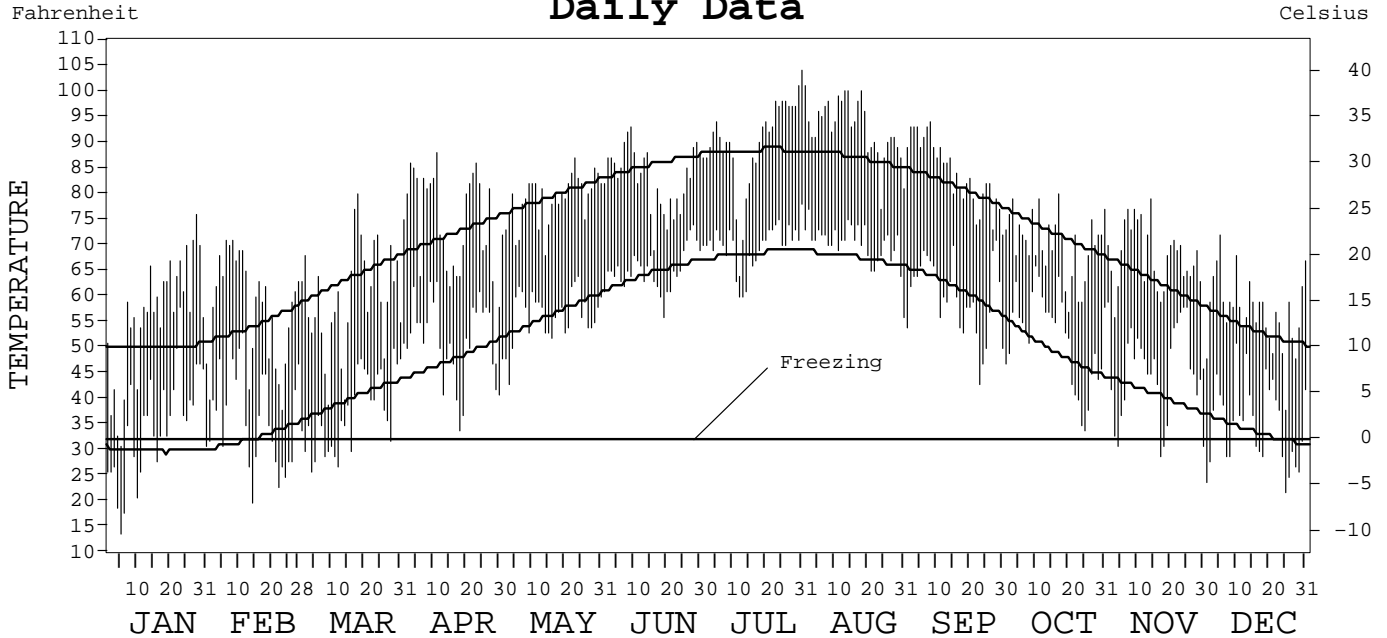
LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA



GREENVILLE-SPARTANBURG (GREER),
SOUTH CAROLINA (GSP)

ISSN 0198-4667

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 AND INFORMATION SERVICE	NATIONAL SATELLITE, DATA, AND INFORMATION SERVICE	NATIONAL CLIMATIC DATA CENTER ASHEVILLE, NORTH CAROLINA	DIRECTOR NATIONAL CLIMATIC DATA CENTER
-------------------------------------------------------	---------------------------------------------------	---------------------------------------------------------	---------------------------------------------------------------	-------------------------------------------

METEOROLOGICAL DATA FOR 1999

GRNVL-SPARTANBURG, SC (GSP)

LATITUDE: 34° 53' 58" N LONGITUDE: 82° 13' 09" W ELEVATION (FT): GRND: 941 BARO: 941 TIME ZONE: EASTERN (UTC + 5) WBAN: 03870

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	56.1	58.0	59.8	74.2	78.7	83.0	89.9	92.7	84.0	70.3	67.3	57.0	72.6	
	HIGHEST DAILY MAXIMUM	76	71	80	88	87	93	104	101	94	80	79	72	104	
	DATE OF OCCURRENCE	28	08+	18	11	23	09	31	01	08	17	14	05	JUL 31	
	MEAN DAILY MINIMUM	34.9	36.8	37.4	51.5	56.2	65.2	69.8	70.2	59.9	51.9	45.3	35.3	51.2	
	LOWEST DAILY MINIMUM	14	20	26	34	43	56	60	56	43	34	29	22	14	
	DATE OF OCCURRENCE	05	14	04	18	03	19	13+	31	23	25	17	25	JAN 05	
	AVERAGE DRY BULB	45.5	47.4	48.6	62.9	67.5	74.1	79.9	81.5	72.0	61.1	56.3	46.2	61.9	
	MEAN WET BULB	41.1	41.7	41.3	55.5	59.7	67.4	72.0	70.3	62.5	55.3	50.4			
	MEAN DEW POINT	35.2	33.9	31.3	49.0	53.7	63.8	68.7	64.9	56.2	50.7	44.2			
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	0	0	4	19	23	6	0	0	0	0	52
	MAXIMUM ≤ 32°	1	0	0	0	0	0	0	0	0	0	0	0	0	1
	MINIMUM ≤ 32°	11	12	10	0	0	0	0	0	0	0	4	14	51	
	MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0	
H/C	HEATING DEGREE DAYS	597	487	500	132	19	0	3	0	12	142	251	579	2722	
	COOLING DEGREE DAYS	0	0	0	74	102	280	470	518	229	29	0	0	1702	
RH	MEAN (PERCENT)	70	64	56	65	64	74	73	62	63	72	68	63	66	
	HOUR 01 LST	79	72	58	72	76	82	86	75	76	81	78	68	75	
	HOUR 07 LST	80	79	71	83	80	86	86	79	80	83	82	76	80	
	HOUR 13 LST	56	50	46	52	50	59	56	45	43	58	52	50	51	
	HOUR 19 LST	68	57	51	57	56	67	68	52	60	74	64	58	61	
S	PERCENT POSSIBLE SUNSHINE	53	56	65	64	75	55	56	79	73	71	70	64	65	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	5	3	1	1	0	2	0	0	2	2	4	2	22	
	THUNDERSTORMS	1	2	2	2	6	5	7	4	4	1	1	2	37	
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.)	29.11	29.04	29.00	28.95	28.99	29.03	29.04	28.93	28.95	29.10	29.15			
	MEAN SEA-LEVEL PRESS. (IN.)	30.15	30.07	30.04	29.96	30.00	30.04	30.04	29.92	29.96	30.13	30.15			
WINDS	RESULTANT SPEED (MPH)	1.5	2.2	2.2	2.6	0.6	0.6	1.0	1.7	2.4	2.9	1.3			
	RES. DIR. (TENS OF DEGS.)	25	27	01	27	22	14	17	05	05	05	36			
	MEAN SPEED (MPH)	7.2	7.6	7.6	9.4	7.0	6.7	5.4	5.9	5.4	5.4	5.9	6.6	6.7	
	PREVAIL. DIR. (TENS OF DEGS.)	25	25	05	25	25	05	25	05	05	05	05	25	05	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	32	31	25	33	32	32	29	26	29	24	28	28	33	
	DIR. (TENS OF DEGS.)	27	26	23	25	07	24	04	01	05	05	36	33	25	
	DATE OF OCCURRENCE	18	07	24+	09	01	02	27	20	15	17	15+	06	APR 09	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	43	41	31	44	38	38	36	34	37	29	34	33	44	
DIR. (TENS OF DEGS.)	25	23	35	24	05	25	02	01	03	35	36	25	24		
DATE OF OCCURRENCE	18	07	11	09	01	02	27	20	15	23	15+	14	APR 09		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	3.84	2.84	2.33	3.95	1.37	4.67	1.95	0.79	3.04	5.86	2.67	2.62	35.93	
	GREATEST 24-HOUR (IN.)	1.27	1.23	0.47	1.64	0.55	1.61	0.64	0.59	0.90	3.08	1.66	0.87	3.08	
	DATE OF OCCURRENCE	02	01	21	29-30	05-06	02-03	06	23-24	27	10-11	25-26	13-14	OCT 10-11	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	12	10	11	9	8	10	6	5	8	9	6	8	102	
PRECIPITATION ≥ 0.10	7	5	6	5	6	7	5	2	7	5	5	6	66		
PRECIPITATION ≥ 1.00	1	1	0	1	0	2	0	0	0	2	1	0	8		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)	0.8	T	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	
	GREATEST 24-HOUR (IN.)	0.7	T	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	
	DATE OF OCCURRENCE	31	28+	09										MAR 09	
	MAXIMUM SNOW DEPTH (IN.)	T	T	2	0	0	0	0	0	0	0	0	0	2	
	DATE OF OCCURRENCE	03	23	09										MAR 09	
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0	0	0	1	0	0	0	0	0	0	0	0	0	1		

NORMALS, MEANS, AND EXTREMES

GRNVL-SPARTANBURG, SC (GSP)

LATITUDE: 34° 53' 58" N LONGITUDE: 82° 13' 09" W ELEVATION (FT): GRND: 941 BARO: 941 TIME ZONE: EASTERN (UTC + 5) WBAN: 03870

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	50.1	54.3	63.5	72.0	79.4	85.5	88.2	86.8	81.1	71.9	62.5	53.2	70.7
	MEAN DAILY MAXIMUM	37	50.6	54.4	63.4	72.2	79.2	85.4	88.7	87.0	81.2	71.9	62.0	53.4	70.8
	HIGHEST DAILY MAXIMUM	37	79	81	89	93	97	100	104	103	96	92	85	76	104
	YEAR OF OCCURRENCE		1975	1996	1995	1986	1967	1985	1999	1983	1975	1986	1974	1998	JUL 1999
	MEAN OF EXTREME MAXS.	37	68.3	71.9	80.3	86.2	89.7	94.6	96.4	94.7	91.1	84.2	76.6	69.8	83.7
	NORMAL DAILY MINIMUM	30	30.0	32.4	39.9	47.6	56.4	64.4	68.3	67.4	61.2	49.0	40.5	33.4	49.2
	MEAN DAILY MINIMUM	37	30.7	32.8	39.9	47.7	56.4	64.4	68.5	67.5	61.2	49.1	40.1	33.8	49.3
	LOWEST DAILY MINIMUM	37	-6	8	11	25	31	40	54	52	36	25	12	5	-6
	YEAR OF OCCURRENCE		1966	1996	1993	1983	1989	1972	1979	1968	1967	1976	1970	1985	JAN 1966
	MEAN OF EXTREME MINS.	37	13.2	16.3	22.8	32.3	41.3	53.2	61.4	59.0	47.5	33.2	24.7	16.8	35.1
	NORMAL DRY BULB	30	40.1	43.4	51.7	59.8	67.9	75.0	78.2	77.1	71.2	60.5	51.6	43.3	60.0
	MEAN DRY BULB	37	40.6	43.6	51.6	60.0	67.8	75.0	78.6	77.2	71.2	60.4	51.2	43.7	60.1
	MEAN WET BULB	15	36.7	40.0	45.1	52.1	60.7	67.9	71.4	70.5	64.5	54.6	46.1	39.1	54.1
	MEAN DEW POINT	15	29.6	32.0	36.9	44.6	55.7	63.9	67.9	67.4	60.9	49.8	40.4	32.6	48.5
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.0	0.3	1.5	7.9	12.9	9.8	2.6	0.1	0.0	0.0	35.1	
MAXIMUM ≤ 32°	30	1.3	0.2	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.9	
MINIMUM ≤ 32°	30	19.0	15.3	7.2	1.0	*	0.0	0.0	0.0	0.0	0.9	6.6	15.4	65.4	
MINIMUM ≤ 0°	30	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	
H/C	NORMAL HEATING DEG. DAYS	30	772	605	412	177	49	0	0	0	7	175	402	673	3272
	NORMAL COOLING DEG. DAYS	30	0	0	0	21	139	300	409	375	193	36	0	0	1473
RH	NORMAL (PERCENT)	30	66	63	62	61	68	70	74	76	76	71	68	68	69
	HOUR 01 LST	30	72	70	70	70	80	83	85	87	86	82	77	74	78
	HOUR 07 LST	30	76	75	77	77	83	84	88	90	89	85	81	78	82
	HOUR 13 LST	30	54	51	50	47	52	54	58	59	59	52	53	55	54
	HOUR 19 LST	30	62	58	55	52	61	62	67	70	73	70	67	66	64
S	PERCENT POSSIBLE SUNSHINE	37	54	57	63	66	62	62	60	61	62	66	59	54	60
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	38	4.3	3.7	2.9	1.9	1.5	1.4	1.8	2.2	2.1	1.8	3.6	4.6	31.8
	THUNDERSTORMS	38	0.8	0.9	2.5	3.3	6.2	7.2	9.8	6.6	3.2	0.9	0.9	0.5	42.8
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	34	4.7	4.6	4.6	4.2	4.7	4.6	4.7	4.5	4.3	3.6	4.0	4.5	4.4
	MIDNIGHT-MIDNIGHT (OKTAS)	32	4.6	4.4	4.4	3.9	4.4	4.3	4.6	4.4	4.1	3.6	3.9	4.3	4.2
	MEAN NO. DAYS WITH:														
	CLEAR	34	10.3	9.8	10.2	11.1	8.4	8.3	7.1	8.0	10.0	14.0	12.4	11.0	120.6
PARTLY CLOUDY	34	5.9	5.5	7.6	8.4	10.0	10.9	12.5	12.3	8.6	6.7	5.8	5.8	100.0	
CLOUDY	34	14.7	13.0	13.2	10.5	12.5	10.8	11.4	10.7	11.4	10.3	11.8	14.2	144.5	
PR	MEAN STATION PRESSURE (IN)	26	29.10	29.09	29.00	29.00	29.00	29.00	29.00	29.00	29.08	29.10	29.09	29.09	29.05
	MEAN SEA-LEVEL PRES. (IN)	15	30.12	30.09	30.06	30.00	30.00	29.99	30.03	30.03	30.06	30.11	30.13	30.15	30.06
WINDS	MEAN SPEED (MPH)	20	8.0	8.4	8.6	8.5	7.5	6.8	6.4	6.1	6.4	6.7	7.2	7.5	7.3
	PREVAIL. DIR (TENS OF DEGS)	20	24	04	24	23	23	24	23	04	04	04	04	04	04
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	3	36	37	36	39	43	43	32	26	30	25	28	28	43
	DIR. (TENS OF DEGS)		25	22	25	29	36	30	33	01	23	36	23	33	30
	YEAR OF OCCURRENCE		1997	1998	1997	1998	1998	1998	1997	1999	1998	1997	1997	1999	JUN 1998
	MAXIMUM 5-SECOND:														
	SPEED (MPH)	3	46	41	45	54	53	62	44	34	37	33	34	33	62
DIR. (TENS OF DEGS)		26	22	26	29	01	29	34	01	03	01	36	25	29	
YEAR OF OCCURRENCE		1997	1998	1997	1998	1998	1998	1997	1999	1999	1997	1999	1999	JUN 1998	
PRECIPITATION	NORMAL (IN)	30	4.10	4.41	5.39	3.86	4.42	4.77	4.63	3.95	3.96	3.99	3.65	4.14	51.27
	MAXIMUM MONTHLY (IN)	37	7.19	7.43	11.37	11.30	8.89	10.12	13.57	17.37	11.65	10.24	7.85	8.45	17.37
	YEAR OF OCCURRENCE		1993	1971	1980	1964	1972	1994	1984	1995	1975	1964	1992	1983	AUG 1995
	MINIMUM MONTHLY (IN)	37	0.29	0.53	1.13	0.69	1.09	0.17	0.75	0.79	0.27	0.24	1.34	0.37	0.17
	YEAR OF OCCURRENCE		1981	1978	1985	1976	1965	1993	1993	1999	1978	1991	1973	1965	JUN 1993
	MAXIMUM IN 24 HOURS (IN)	37	3.30	3.57	4.45	3.76	3.79	4.80	3.89	12.32	6.21	4.93	2.83	3.00	12.32
	YEAR OF OCCURRENCE		1982	1984	1963	1963	1996	1980	1964	1995	1973	1990	1964	1972	AUG 1995
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	10.8	9.1	10.9	8.7	10.9	9.8	12.0	10.1	8.5	7.3	8.8	10.0	116.9	
PRECIPITATION ≥ 1.00	30	1.0	1.1	1.8	1.0	1.3	1.2	1.3	1.1	1.3	1.3	1.1	1.1	14.6	
SNOWFALL	NORMAL (IN)	30	2.6	2.1	1.0	0.*	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.6	6.4
	MAXIMUM MONTHLY (IN)	37	12.0	12.3	9.8	0.3	T	T	T	0.0	0.0	0.0	1.9	11.4	12.3
	YEAR OF OCCURRENCE		1988	1979	1993	1987	1996	1994	1996				1968	1971	FEB 1979
	MAXIMUM IN 24 HOURS (IN)	37	12.0	8.2	9.8	0.3	T	T	T	0.0	0.0	0.0	1.9	11.4	12.0
	YEAR OF OCCURRENCE		1988	1979	1993	1987	1996	1994	1995				1968	1971	JAN 1988
	MAXIMUM SNOW DEPTH (IN)	36	12	8	5	0	0	0	0	0	0	0	1	10	12
	YEAR OF OCCURRENCE		1988	1979	1983								1968	1971	JAN 1988
	NORMAL NO. DAYS WITH:														
SNOWFALL ≥ 1.0	30	0.7	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.*	0.1	1.7	

PRECIPITATION (inches) 1999 GREENVILLE-SPARTANBURG (GREER), SC (GSP)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	1.74	3.74	3.45	2.94	3.13	3.60	2.31	3.59	1.34	7.02	1.77	2.88	37.51
1971	3.33	7.43	5.52	3.09	5.72	2.19	5.64	2.44	3.28	9.51	4.22	3.79	56.16
1972	6.14	3.04	4.59	2.28	8.89	8.16	4.18	3.21	2.20	3.44	5.31	6.68	58.12
1973	4.33	4.88	8.73	4.04	5.59	3.87	3.70	2.03	7.56	0.98	1.34	7.55	54.60
1974	4.24	4.90	3.26	4.06	5.45	3.78	3.23	4.03	3.76	0.24	4.81	2.50	44.26
1975	5.42	5.78	8.64	1.14	7.81	5.39	4.79	3.21	11.65	7.45	3.98	3.07	68.33
1976	4.49	2.15	7.30	0.69	8.10	2.81	5.75	2.09	8.28	8.49	2.75	6.21	59.11
1977	3.53	2.00	8.47	3.23	2.71	2.88	0.80	4.99	9.44	6.39	4.43	3.55	52.42
1978	6.93	0.53	6.09	2.97	4.84	3.51	6.77	2.98	0.27	0.81	1.93	3.39	41.02
1979	7.19	6.11	4.19	10.15	5.69	3.74	8.66	4.34	7.50	3.33	3.91	1.25	66.06
1980	4.28	1.19	11.37	3.47	5.92	6.72	1.05	3.33	5.82	2.83	4.11	0.64	50.73
1981	0.29	3.86	3.22	0.88	4.15	1.29	5.30	1.17	2.08	4.40	1.66	7.19	35.49
1982	6.27	5.21	2.77	4.57	6.18	3.32	12.52	1.66	1.44	3.07	4.17	5.02	56.20
1983	2.70	5.26	6.26	4.66	5.80	4.67	1.13	3.27	3.59	3.05	5.29	8.45	54.13
1984	3.04	7.04	5.67	4.76	8.30	3.07	13.57	4.00	1.34	2.28	2.60	2.22	57.89
1985	4.94	4.29	1.13	1.31	2.42	2.85	6.96	5.93	1.62	4.55	7.52	1.44	44.96
1986	1.10	1.46	2.64	1.10	6.34	0.93	1.63	5.93	2.56	6.11	5.37	4.17	39.34
1987	4.65	7.33	5.01	2.30	1.31	6.68	3.58	2.79	3.33	0.37	2.81	4.62	44.78
1988	3.91	1.79	3.67	3.41	1.96	3.25	2.18	3.93	4.57	3.38	4.26	1.90	38.21
1989	1.51	4.93	4.48	3.15	3.64	6.00	5.11	4.71	5.42	3.10	3.74	4.76	50.55
1990	4.37	5.97	6.67	2.22	2.70	0.90	3.61	6.21	2.12	9.45	1.93	3.26	49.41
1991	4.72	2.24	5.82	5.65	6.37	1.72	5.74	9.02	1.44	0.24	1.39	2.90	47.25
1992	2.50	6.12	5.45	4.81	5.03	4.97	2.66	5.54	4.30	6.27	7.85	5.08	60.58
1993	7.19	3.56	10.27	2.91	3.08	0.17	0.75	0.87	1.71	2.07	3.73	2.94	39.25
1994	4.24	3.47	4.46	2.61	1.44	10.12	6.56	5.76	2.06	4.28	2.43	3.96	51.39
1995	6.42	5.08	2.30	1.58	4.53	4.84	2.69	17.37	2.13	5.96	5.13	2.05	60.08
1996	5.54	3.75	7.64	3.09	5.00	4.03	4.43	6.27	4.62	0.82	4.34	4.17	53.70
1997	4.82	6.07	2.67	4.11	3.37	6.02	6.02	0.92	3.26	4.85	3.70	4.25	50.06
1998	6.76	6.94	4.31	9.15	1.77	3.80	3.27	2.27	4.31	2.77	2.39	4.24	51.98
1999	3.84	2.84	2.33	3.95	1.37	4.67	1.95	0.79	3.04	5.86	2.67	2.62	35.93
POR= 37 YRS	4.30	4.28	5.31	3.80	4.28	4.48	4.43	4.20	3.79	3.96	3.57	3.80	50.20

WBAN : 03870

AVERAGE TEMPERATURE (°F) 1999 GREENVILLE-SPARTANBURG (GREER), SC (GSP)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	35.4	43.3	51.7	63.3	68.8	75.2	79.3	76.9	74.8	63.0	48.7	44.7	60.4
1971	39.5	41.9	46.3	59.2	65.3	76.2	76.7	75.8	72.9	64.9	48.9	50.4	59.8
1972	44.6	40.9	50.7	59.5	64.9	70.9	77.0	76.3	73.1	59.2	49.3	48.1	59.5
1973	41.1	42.0	54.5	57.8	65.8	74.6	78.2	76.9	74.5	61.8	51.9	41.8	60.1
1974	51.4	43.9	55.9	58.8	68.0	72.2	78.0	77.2	69.9	58.8	49.6	43.4	60.6
1975	45.8	46.8	48.5	58.7	70.5	74.4	76.5	78.6	70.0	62.6	53.0	42.7	60.7
1976	38.0	50.6	54.0	59.2	63.3	71.4	77.2	75.3	68.6	55.6	44.6	39.9	58.1
1977	30.7	42.4	54.5	62.4	71.5	77.5	81.9	78.7	74.4	59.9	54.8	42.8	61.0
1978	35.3	36.7	49.2	60.8	65.5	75.4	77.8	77.9	73.9	60.4	55.6	43.5	59.3
1979	37.3	39.2	54.2	61.4	69.6	72.0	74.7	76.6	70.5	59.2	52.7	45.4	59.4
1980	44.0	39.3	47.6	59.1	68.2	74.5	81.5	79.4	73.6	57.4	49.3	43.4	59.8
1981	38.1	43.3	49.1	64.2	66.3	80.3	80.1	75.4	69.3	58.0	50.8	39.3	59.5
1982	36.1	45.8	53.3	56.7	70.6	74.2	77.6	75.2	69.8	61.0	52.7	48.3	60.1
1983	39.2	42.1	51.4	54.7	66.3	73.1	79.7	79.5	69.0	59.4	49.2	39.2	58.6
1984	38.8	45.6	50.3	56.2	66.9	77.7	75.6	76.3	69.0	67.5	47.8	50.1	60.2
1985	36.2	44.6	54.2	61.8	67.9	76.7	76.4	75.1	69.6	64.3	58.6	38.9	60.4
1986	39.6	47.8	52.4	61.6	68.9	78.6	83.1	76.0	72.7	61.9	52.9	42.8	61.5
1987	39.5	43.0	50.5	58.3	71.1	76.6	80.4	79.8	71.4	55.2	52.9	45.5	60.4
1988	36.0	42.0	51.5	59.3	67.2	75.4	78.5	80.4	71.0	55.3	52.3	43.0	59.3
1989	45.8	45.4	52.9	58.6	64.4	75.5	78.3	76.8	70.3	61.6	50.8	36.9	59.8
1990	46.6	50.6	54.6	59.0	67.1	76.3	78.7	78.5	72.1	62.1	54.0	48.0	62.3
1991	41.8	46.4	53.5	62.1	71.5	75.2	80.5	76.7	71.8	61.6	49.3	47.4	61.5
1992	44.0	48.0	50.9	59.2	64.0	71.9	79.5	74.2	70.7	57.5	49.7	41.7	59.3
1993	44.2	41.9	46.9	55.6	67.3	76.3	83.2	78.8	71.9	60.3	50.4	41.4	59.9
1994	36.7	44.8	52.9	61.8	65.2	76.7	77.1	75.6	69.2	59.5	53.8	47.4	60.1
1995	42.0	42.2	54.5	62.3	69.6	75.0	82.0	80.4	70.8	61.5	46.9	40.9	60.7
1996	38.9	45.3	47.9	58.1	69.8	75.0	78.5	76.1	69.9	60.2	47.4	45.2	59.4
1997	42.7	47.6	57.2	56.5	64.7	71.4	78.8	76.6	72.0	60.3	46.9	41.9	59.7
1998	45.4	47.1	49.5	58.9	71.4	77.5	80.9	78.6	74.2	63.4	54.1	48.2	62.4
1999	45.5	47.4	48.6	62.9	67.5	74.1	79.9	81.5	72.0	61.1	56.3	46.2	61.9
POR= 37 YRS	40.6	43.6	51.5	59.9	67.7	75.0	78.6	77.2	71.2	60.5	51.2	43.7	60.1

HEATING DEGREE DAYS (base 65°F) 1999 GREENVILLE-SPARTANBURG (GREER), SC (GSP)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0	0	10	120	480	620	782	643	572	188	73	0	3488
1971-72	0	0	2	74	492	449	625	694	434	205	48	14	3037
1972-73	0	0	4	189	476	519	734	641	323	229	61	0	3176
1973-74	0	0	1	132	387	712	419	584	290	205	54	0	2784
1974-75	0	0	39	205	464	663	590	505	507	227	9	0	3209
1975-76	0	0	24	118	361	683	828	415	345	190	85	15	3064
1976-77	0	0	11	297	605	773	1057	626	319	117	19	0	3824
1977-78	0	0	2	184	322	681	916	787	486	143	88	0	3609
1978-79	0	0	6	152	276	658	851	715	336	129	15	3	3141
1979-80	1	0	9	193	362	600	647	737	532	199	27	0	3307
1980-81	0	0	27	246	462	663	829	602	491	91	50	0	3461
1981-82	0	0	26	229	422	791	887	533	365	249	12	0	3514
1982-83	0	0	24	177	370	515	796	631	414	307	43	1	3278
1983-84	0	0	59	179	467	792	807	553	452	271	67	1	3648
1984-85	0	0	37	32	508	454	884	565	341	141	32	0	2994
1985-86	0	0	38	101	194	800	783	475	392	154	26	0	2963
1986-87	0	7	3	160	361	682	786	610	441	225	15	0	3290
1987-88	0	0	4	296	356	596	892	660	417	180	34	3	3438
1988-89	0	0	2	308	373	674	589	543	386	229	104	0	3208
1989-90	0	0	35	152	420	863	564	395	333	199	41	0	3002
1990-91	0	0	23	131	328	518	713	515	358	125	20	0	2731
1991-92	0	0	22	138	471	547	646	487	433	205	94	5	3048
1992-93	0	0	19	226	455	713	639	640	555	276	34	0	3557
1993-94	0	0	27	179	440	721	868	559	371	138	73	0	3376
1994-95	0	0	8	179	331	538	706	632	329	128	24	0	2875
1995-96	0	0	23	150	537	739	803	567	523	213	43	2	3600
1996-97	0	0	11	162	526	606	684	480	242	253	73	24	3061
1997-98	0	0	8	182	538	708	602	496	486	193	15	3	3231
1998-99	0	0	1	94	315	518	597	487	500	132	19	0	2663
1999-	3	0	12	142	251	579							

WBAN : 03870

COOLING DEGREE DAYS (base 65°F) 1999 GREENVILLE-SPARTANBURG (GREER), SC (G

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	0	59	154	313	454	378	310	67	0	0	1735
1971	0	0	0	20	88	342	369	345	246	77	15	3	1505
1972	0	0	0	48	49	197	380	356	253	15	9	1	1308
1973	0	0	6	21	92	297	414	375	291	36	0	0	1532
1974	1	0	17	26	153	222	408	386	193	19	10	0	1435
1975	0	0	0	45	185	290	363	427	180	50	7	0	1547
1976	0	2	11	22	40	213	387	322	126	12	0	0	1135
1977	0	0	1	46	226	383	528	431	289	34	20	0	1958
1978	0	0	0	23	109	319	403	404	282	19	0	0	1559
1979	0	0	8	28	164	215	312	368	180	20	1	0	1296
1980	0	0	0	27	135	292	519	454	294	16	0	0	1737
1981	0	0	4	75	96	467	475	327	158	19	0	0	1621
1982	0	1	8	6	193	282	396	324	174	58	5	3	1450
1983	0	0	1	3	91	252	465	457	185	15	0	0	1469
1984	0	0	0	13	132	387	335	356	164	116	2	0	1505
1985	0	0	13	50	132	360	359	320	183	88	9	0	1514
1986	0	0	8	62	154	416	567	355	237	74	8	0	1881
1987	0	0	0	33	213	355	485	465	200	0	0	1	1752
1988	0	0	2	13	109	320	423	481	187	14	0	0	1549
1989	0	1	16	44	94	321	419	371	200	57	1	0	1524
1990	0	0	18	25	108	346	431	429	242	46	4	0	1649
1991	0	0	8	45	228	315	489	369	235	42	6	9	1746
1992	0	0	1	37	72	218	458	292	196	0	0	0	1274
1993	0	0	0	0	113	344	572	434	242	38	10	0	1753
1994	0	1	1	52	85	357	383	336	138	16	2	0	1371
1995	0	0	10	56	174	306	532	482	205	48	0	0	1813
1996	0	4	0	15	197	308	427	354	164	22	1	2	1494
1997	0	0	9	5	70	226	433	369	224	43	0	0	1379
1998	0	0	13	16	220	387	502	429	281	51	0	4	1903
1999	0	0	0	74	102	280	470	518	229	29	0	0	1702

SNOWFALL (inches) 1999 GREENVILLE-SPARTANBURG (GREER), SC (GSP)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0.0	0.0	0.0	0.0	0.0	2.9	T	1.0	6.6	0.0	0.0	0.0	10.5
1971-72	0.0	0.0	0.0	0.0	T	11.4	0.0	3.9	1.8	0.0	0.0	0.0	17.1
1972-73	0.0	0.0	0.0	0.0	T	0.0	4.6	0.0	0.0	0.0	0.0	0.0	4.6
1973-74	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.4	0.0	0.0	0.0	0.4
1974-75	0.0	0.0	0.0	0.0	0.0	T	T	1.3	T	0.0	0.0	0.0	1.3
1975-76	0.0	0.0	0.0	0.0	T	T	T	0.0	0.0	0.0	0.0	0.0	T
1976-77	0.0	0.0	0.0	0.0	0.1	0.0	6.9	0.0	0.0	0.0	0.0	0.0	7.0
1977-78	0.0	0.0	0.0	0.0	0.0	T	T	1.1	2.8	0.0	0.0	0.0	3.9
1978-79	0.0	0.0	0.0	0.0	0.0	0.0	0.9	12.3	0.0	0.0	0.0	0.0	13.2
1979-80	0.0	0.0	0.0	0.0	0.0	0.0	3.2	7.6	3.6	0.0	0.0	0.0	14.4
1980-81	0.0	0.0	0.0	0.0	0.0	T	1.0	0.0	T	0.0	0.0	0.0	1.0
1981-82	0.0	0.0	0.0	0.0	0.0	T	7.0	5.1	0.0	0.0	0.0	0.0	12.1
1982-83	0.0	0.0	0.0	0.0	0.0	0.0	4.4	3.0	9.3	0.1	0.0	0.0	16.8
1983-84	0.0	0.0	0.0	0.0	0.0	T	T	0.6	0.0	0.0	0.0	0.0	0.6
1984-85	0.0	0.0	0.0	0.0	0.0	0.0	1.2	0.3	0.0	0.0	0.0	0.0	1.5
1985-86	0.0	0.0	0.0	0.0	0.0	0.0	T	1.4	T	0.0	0.0	0.0	1.4
1986-87	0.0	0.0	0.0	0.0	0.0	T	0.0	10.8	0.9	T	0.3	0.0	12.0
1987-88	0.0	0.0	0.0	0.0	0.5	T	12.0	0.0	0.0	0.0	0.0	0.0	12.5
1988-89	0.0	0.0	0.0	0.0	0.0	0.0	T	2.5	0.0	0.0	0.0	0.0	2.5
1989-90	T	0.0	0.0	0.0	T	0.9	0.0	0.0	0.0	T	0.0	0.0	0.9
1990-91	0.0	0.0	0.0	0.0	0.0	T	3.8	0.0	0.0	0.0	0.0	0.0	3.8
1991-92	0.0	0.0	0.0	0.0	T	T	T	T	0.0	0.0	T	0.0	T
1992-93	0.0	0.0	0.0	0.0	0.0	T	0.0	0.4	9.8	0.0	0.0	0.0	10.2
1993-94	0.0	0.0	0.0	0.0	0.0	0.7	1.7	0.4	0.0	0.0	0.0	T	2.8
1994-95	0.0	0.0	0.0	0.0	0.0	T	0.4	T	0.0	0.0	0.0	0.0	0.4
1995-96	T	0.0	0.0	0.0	T	0.0	7.8	1.4	T	0.0	T	0.0	9.2
1996-97	T	0.0	0.0	0.0	T	2.0	0.1	0.3	T	0.0	0.0	0.0	0.0
1997-98	0.0	0.0	0.0	0.0	T	3.2	T	0.0	0.0	0.0	0.0	0.0	3.2
1998-99	0.0	0.0	0.0	0.0	0.0	T	0.8	T	1.1	0.0	0.0	0.0	1.9
1999-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
POR= 36 YRS	T	0.0	0.0	0.0	0.1	0.6	2.3	1.7	1.1	0.0	T	T	5.8

WBAN : 03870

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>
---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

1999
GREENVILLE-SPARTANBURG (GREER),
SOUTH CAROLINA (GSP)

This station, three miles south of Greer, South Carolina, is located in the Piedmont section, on the eastern slope of the Southern Appalachian Mountains. It is rolling country with the first ridge of the mountains about 20 miles to the northwest and the main ridge about 55 miles to the northwest. These mountains usually protect this area from the full force of the cold air masses which move southeastward from central Canada during the winter months.

At present, the National Weather Service Office is located at the Greenville-Spartanburg Jet Age Airport, on a level with, or slightly higher than, most of the surrounding countryside. No bodies of water are nearby. Temperatures are quite consistent with those in Greer, Greenville, and Spartanburg.

The elevation of the area, ranging from 800 to 1,100 feet is conducive to cool nights, especially during the summer months. Winters are quite pleasant, with the temperature remaining below freezing throughout the daylight hours only a few times during a normal year. There are usually two freezing rainstorms each winter and two or three small snowstorms.

Rainfall in this section is usually abundant and spread quite evenly through the months. Droughts have been experienced, but are usually of short duration.

The mountain ridges, which lie in a northeast-southwest direction, appear to have a definite overall influence on the direction of the wind. The prevailing directions are northeast and southwest, divided almost evenly, with fall and winter favoring northeast and spring and summer favoring southwest. Destructive winds occur occasionally, while tornadoes are infrequent in this vicinity.

In the southern two-thirds of Greenville and Spartanburg Counties, including the cities of the same names, the average occurrence of the last temperature of 32 degrees in spring is late March and the average occurrence of the first in fall is early November, giving an average growing season of 225 days. In a normal year some flowering shrubs bloom through the winter. In the higher elevations in the northern thirds of these counties, the growing season begins about one month later and ends about one month earlier.

STATION LOCATION

GREENVILLE-SPARTANBURG AIRPORT
GREER, SOUTH CAROLINA

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE											AUTOMATED STATION * * * * *	* Type M = AMOS T = AUTOB S = ASOS W = AWOS	REMARKS
						SEA LEVEL	GROUND												
							WIND	EMERGENCY	MEMORANDUM	SWITCH	TEMPERATURE	RAIN GAGE	WEIGHING RAIN GAGE	8 INCH RAIN GAGE	HOURLY	MINUTE			
Control Tower Bldg. Greenville-Spartanburg Airport, Greer, S. C.	10/15/62	04/01/96	NA	34° 54'	82° 13'	b957	23	NA	NA d16	20	16	NA c16	15	NA a4	NA	a - Installed 10/25/62. b - Established 10/25/62. c - Installed on roof 5/1/64. d - Installed on roof 11/8/71.			
Grnvl-Spartanburg AP	04/01/96	Present	NA	34°54'	82°13'	941									S	ASOS Commissioned 04/01/96.			

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
151 Patton Avenue, Rm 120
Asheville NC 28801-5001

OFFICIAL BUSINESS
PENALTY FOR PRIVATE USE \$300
FORWARD AND ADDRESS CORRECTION

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