

1999

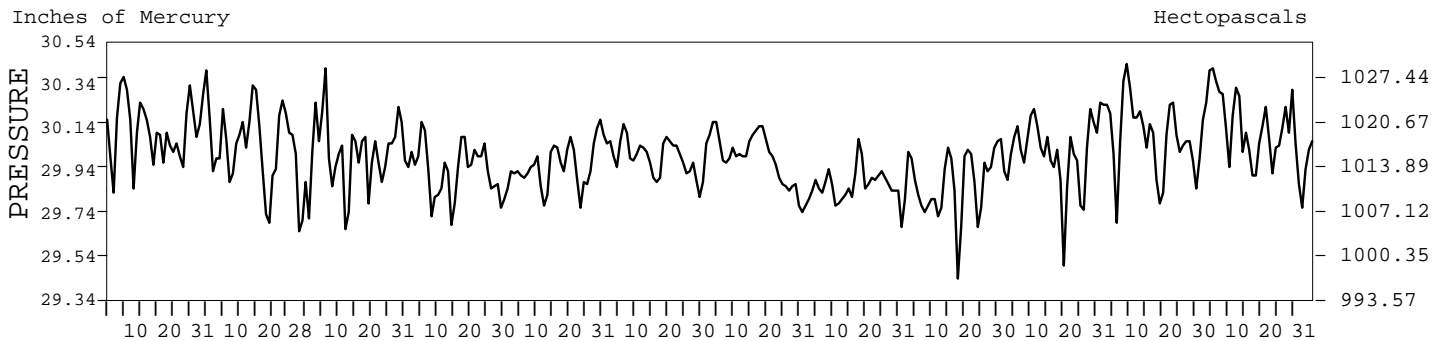
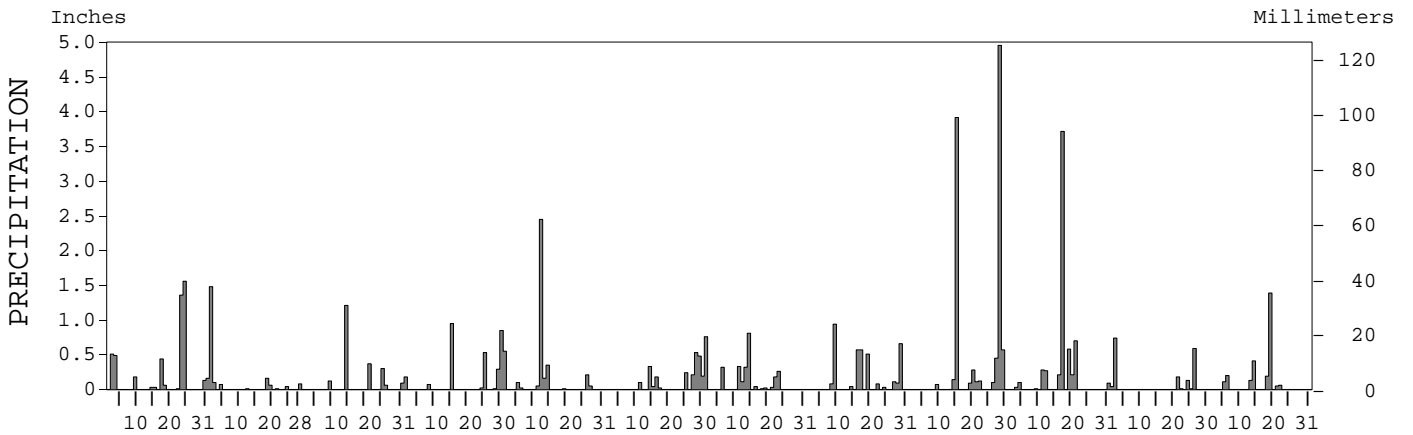
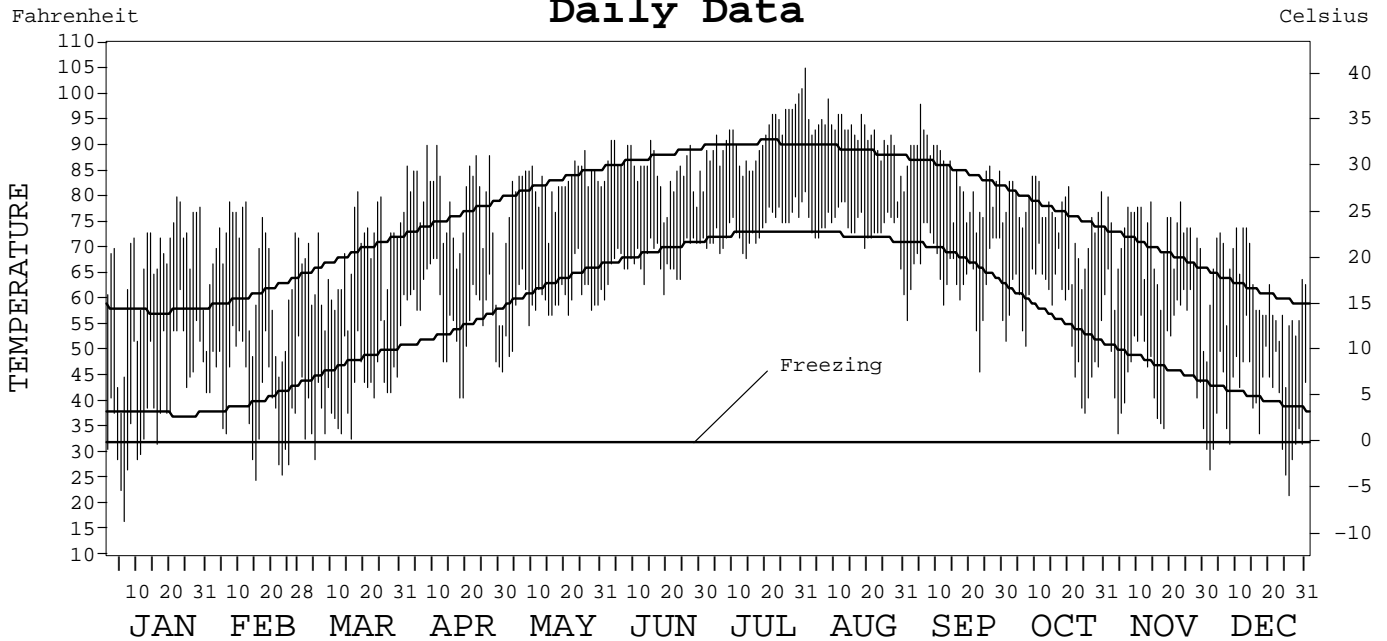
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA



ISSN 0198-4616

CHARLESTON,
SOUTH CAROLINA (CHS)

Daily Data



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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
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METEOROLOGICAL DATA FOR 1999

CHARLESTON, SC (CHS)

LATITUDE: 32° 53' 55" N LONGITUDE: 80° 02' 27" W ELEVATION (FT): GRND: 44 BARO: 44 TIME ZONE: EASTERN (UTC + 5) WBAN: 13880

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE ° F	MEAN DAILY MAXIMUM	66.1	65.9	67.5	78.3	81.4	85.2	91.2	92.2	84.3	76.2	71.2	61.5	76.8	
	HIGHEST DAILY MAXIMUM	80	79	81	90	89	91	101	105	98	84	80	74	105	
	DATE OF OCCURRENCE	22	07+	18	11+	26	15+	31	01	05	10+	01	13+	AUG 01	
	MEAN DAILY MINIMUM	41.0	41.3	42.2	57.3	59.4	67.6	73.7	74.1	65.0	56.6	48.4	39.4	55.5	
	LOWEST DAILY MINIMUM	17	25	29	41	46	60	68	61	46	38	34	22	17	
	DATE OF OCCURRENCE	06	15	05	19+	01	01	14	31	23	25	04	26	JAN 06	
	AVERAGE DRY BULB	53.6	53.6	54.9	67.8	70.4	76.4	82.5	83.2	74.7	66.4	59.8	50.5	66.2	
	MEAN WET BULB	48.7	48.0	48.1	60.6	63.8	70.6	76.2	76.0	68.4	61.8	55.0	46.8	60.3	
	MEAN DEW POINT	43.4	41.4	40.3	55.8	59.8	67.9	74.0	73.2	64.7	58.6	50.7	41.8	56.0	
	NUMBER OF DAYS WITH:														
	MAXIMUM ≥ 90°	0	0	0	2	0	6	18	26	8	0	0	0	0	60
	MAXIMUM ≤ 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINIMUM ≤ 32°	8	6	1	0	0	0	0	0	0	0	0	10	25		
MINIMUM ≤ 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	358	315	314	61	20	0	0	0	4	71	175	446	1764	
	COOLING DEGREE DAYS	10	1	6	153	193	351	548	571	303	122	25	1	2284	
RH	MEAN (PERCENT)	72	69	63	71	73	79	79	76	75	79	76	75	74	
	HOUR 01 LST	85	81	78	82	87	92	91	89	87	90	89	84	86	
	HOUR 07 LST	86	87	78	83	86	88	90	88	86	92	89	86	87	
	HOUR 13 LST	50	48	42	52	52	61	62	58	57	61	55	56	54	
	HOUR 19 LST	74	66	61	68	69	75	77	74	74	80	77	76	73	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	6	2	0	5	3	4	2	1	4	0	4	3	34	
	THUNDERSTORMS	4	0	3	6	5	5	11	12	3	0	1	0	50	
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.)	30.14	30.05	30.01	29.95	29.96	30.00	30.00	29.88	29.88	30.05	30.11	30.12	30.01	
	MEAN SEA-LEVEL PRESS. (IN.)	30.19	30.10	30.06	29.99	30.01	30.05	30.05	29.92	29.93	30.10	30.15	30.16	30.06	
WINDS	RESULTANT SPEED (MPH)	1.2	1.4	0.7	2.8	2.4	1.1	1.0	1.7	3.7	4.2	2.0	1.4	0.6	
	RES. DIR. (TENS OF DEGS.)	22	26	27	22	24	26	30	22	03	04	02	29	30	
	MEAN SPEED (MPH)	7.8	8.5	9.3	10.1	8.1	8.0	6.5	7.8	8.9	7.7	6.7	6.8	8.0	
	PREVAIL. DIR. (TENS OF DEGS.)	05	22	26	20	19	20	20	19	03	04	01	26	20	
	MAXIMUM 2-MINUTE WIND:														
	SPEED (MPH)	33	33	37	31	32	23	32	30	51	29	25	28	51	
	DIR. (TENS OF DEGS.)	18	26	19	20	02	22	12	32	36	32	33	21	36	
	DATE OF OCCURRENCE	18	28	03	15	14	15+	22	19	15	17	30+	10	SEP 15	
	MAXIMUM 5-SECOND WIND:														
	SPEED (MPH)	39	40	45	40	45	29	55	38	67	38	31	34	67	
DIR. (TENS OF DEGS.)	17	26	19	20	02	29	11	02	36	34	33	04	36		
DATE OF OCCURRENCE	23+	28	03	15	14	26+	22	29+	15	17	30+	19+	SEP 15		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	4.96	2.01	2.15	2.90	3.95	2.32	3.19	3.68	10.81	6.20	1.70	2.54	46.41	
	GREATEST 24-HOUR (IN.)	2.92	1.55	1.21	0.95	2.47	1.01	0.81	1.14	5.35	3.92	0.75	1.58	5.35	
	DATE OF OCCURRENCE	23-24	01-02	14	15	11-12	28-29	14	16-17	28-29	16-17	01-02	18-19	SEP 28-29	
	NUMBER OF DAYS WITH:														
	PRECIPITATION ≥ 0.01	12	9	6	8	10	10	12	11	11	11	7	8	115	
PRECIPITATION ≥ 0.10	8	3	4	5	6	8	8	6	9	8	4	6	75		
PRECIPITATION ≥ 1.00	2	1	1	0	1	0	0	0	2	1	0	1	9		
SNOWFALL	SNOW, ICE PELLETS, HAIL:														
	TOTAL (IN.)														
	GREATEST 24-HOUR (IN.)														
	DATE OF OCCURRENCE														
	MAXIMUM SNOW DEPTH (IN.)														
	DATE OF OCCURRENCE														
NUMBER OF DAYS WITH:															
SNOWFALL ≥ 1.0															

NORMALS, MEANS, AND EXTREMES

CHARLESTON, SC (CHS)

LATITUDE: 32° 53' 55" N LONGITUDE: 80° 02' 27" W ELEVATION (FT): GRND: 44 BARO: 44 TIME ZONE: EASTERN (UTC + 5) WBAN: 13880

ELEMENT		POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	57.8	61.0	68.6	75.8	82.7	87.6	90.2	89.0	84.9	77.2	69.5	61.6	75.5
	MEAN DAILY MAXIMUM	54	59.3	62.1	68.4	76.2	82.8	87.6	90.1	89.1	84.6	76.9	68.9	61.4	75.6
	HIGHEST DAILY MAXIMUM	57	83	87	90	94	98	103	104	105	99	94	88	83	105
	YEAR OF OCCURRENCE		1950	1989	1974	1989	1989	1944	1986	1999	1944	1986	1961	1972	AUG 1999
	MEAN OF EXTREME MAXS.	54	75.5	78.0	82.9	88.4	92.5	96.3	96.6	95.9	92.5	86.9	81.6	76.9	87.0
	NORMAL DAILY MINIMUM	30	37.7	40.0	47.5	53.9	62.9	69.1	72.7	72.2	67.9	56.3	47.2	40.7	55.7
	MEAN DAILY MINIMUM	54	38.0	39.9	46.0	53.1	61.8	68.7	72.2	71.5	67.0	55.8	46.1	39.4	55.0
	LOWEST DAILY MINIMUM	57	6	12	15	29	36	50	58	56	42	27	15	8	6
	YEAR OF OCCURRENCE		1985	1973	1980	1944	1963	1972	1952	1979	1967	1976	1950	1962	JAN 1985
	MEAN OF EXTREME MINS.	54	21.1	23.7	29.3	37.8	48.1	58.5	65.7	64.3	55.2	39.1	29.4	22.7	41.2
	NORMAL DRY BULB	30	47.8	50.5	58.1	64.9	72.8	78.3	81.5	80.6	76.4	66.8	58.4	51.2	65.6
	MEAN DRY BULB	54	48.6	51.0	57.2	64.7	72.4	78.1	81.1	80.4	75.8	66.3	57.6	50.4	65.3
	MEAN WET BULB	16	44.8	47.3	51.7	58.0	65.8	72.2	75.8	74.7	70.4	61.8	54.3	46.9	60.3
	MEAN DEW POINT	16	39.0	41.2	45.3	52.1	61.6	69.3	73.2	72.3	67.5	58.0	49.8	41.5	55.9
	NORMAL NO. DAYS WITH:														
MAXIMUM ≥ 90°	30	0.0	0.0	0.1	1.2	4.1	10.7	18.1	15.3	5.7	0.4	0.0	0.0	55.6	
MAXIMUM ≤ 32°	30	0.3	0.1	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.5	
MINIMUM ≤ 32°	30	12.2	8.6	2.5	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.9	9.2	35.6	
MINIMUM ≤ 0°	30	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	
H/C	NORMAL HEATING DEG. DAYS	30	548	414	239	66	0	0	0	0	74	233	439	2013	
	NORMAL COOLING DEG. DAYS	30	15	8	25	63	242	399	512	484	342	130	35	2266	
RH	NORMAL (PERCENT)	30	70	67	68	68	72	75	77	79	78	74	73	72	73
	HOUR 01 LST	30	78	77	80	81	86	87	88	89	89	86	84	80	84
	HOUR 07 LST	30	80	79	82	83	85	85	86	89	89	87	85	82	84
	HOUR 13 LST	30	55	52	50	47	53	58	60	63	61	54	52	55	55
	HOUR 19 LST	30	68	64	64	62	68	71	74	77	77	75	74	71	70
S	PERCENT POSSIBLE SUNSHINE	39	56	60	66	71	70	66	67	64	61	63	59	56	63
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISBY ≤ 1/4 MI)	50	4.1	2.2	2.4	2.1	2.2	1.5	0.7	1.2	1.9	2.5	3.6	3.7	28.1
	THUNDERSTORMS	57	0.9	1.1	2.2	3.0	6.5	10.0	13.3	11.2	5.3	1.5	0.8	0.6	56.4
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)	1			5.6		2.4	4.0							
	MIDNIGHT-MIDNIGHT (OKTAS)	1			5.6			4.0							
	MEAN NO. DAYS WITH:														
	CLEAR	1	3.0	4.0	11.0		13.0	9.0							
PARTLY CLOUDY	1	1.0	2.0	3.0		4.0	11.0								
CLOUDY	1	4.0	3.0	9.0		3.0	2.0								
PR	MEAN STATION PRESSURE (IN)	27	30.10	30.10	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00	30.09	30.10	30.03
	MEAN SEA-LEVEL PRES. (IN)	16	30.14	30.12	30.07	30.02	30.03	30.01	30.05	30.04	30.03	30.09	30.13	30.17	30.08
WINDS	MEAN SPEED (MPH)	47	8.9	9.7	10.0	9.7	8.4	8.1	7.7	7.3	7.7	7.9	8.0	8.4	8.5
	PREVAIL. DIR (TENS OF DEGS)	28	27	20	20	20	19	18	20	18	02	02	01	02	20
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	4	36	33	39	38	32	44	34	38	51	39	32	29	51
	DIR. (TENS OF DEGS)		31	10	26	20	30	17	03	27	36	21	20	31	36
	YEAR OF OCCURRENCE		1996	1998	1997	1998	1998	1997	1996	1997	1999	1996	1996	1996	SEP 1999
	MAXIMUM 5-SECOND:														
SPEED (MPH)	4	43	47	52	44	45	51	55	48	67	56	39	39	67	
DIR. (TENS OF DEGS)		21	25	24	20	02	18	11	26	36	21	20	32	36	
YEAR OF OCCURRENCE		1996	1997	1997	1998	1999	1997	1999	1997	1999	1996	1996	1996	SEP 1999	
PRECIPITATION	NORMAL (IN)	30	3.45	3.30	4.34	2.67	4.01	6.43	6.84	7.22	4.73	2.90	2.49	3.15	51.53
	MAXIMUM MONTHLY (IN)	57	8.92	10.17	11.11	9.50	9.28	27.24	18.46	16.99	17.31	12.11	7.35	7.09	27.24
	YEAR OF OCCURRENCE		1993	1998	1983	1958	1957	1973	1964	1974	1945	1994	1972	1953	JUN 1973
	MINIMUM MONTHLY (IN)	57	0.63	0.33	0.70	0.01	0.68	0.96	1.76	0.73	0.18	0.08	0.16	0.66	0.01
	YEAR OF OCCURRENCE		1950	1947	1995	1972	1944	1970	1972	1980	1990	1943	1998	1984	APR 1972
	MAXIMUM IN 24 HOURS (IN)	57	3.90	5.93	6.63	4.10	6.23	10.10	5.81	5.77	10.52	5.77	5.24	3.40	10.52
	YEAR OF OCCURRENCE		1993	1998	1959	1958	1967	1973	1960	1964	1998	1944	1969	1978	SEP 1998
	NORMAL NO. DAYS WITH:														
PRECIPITATION ≥ 0.01	30	10.0	8.9	9.4	7.1	8.7	11.1	12.4	13.2	9.3	5.7	6.7	8.4	110.9	
PRECIPITATION ≥ 1.00	30	0.8	0.6	1.3	0.7	1.1	2.0	2.1	2.3	1.3	1.0	0.6	0.9	14.7	
SNOWFALL	NORMAL (IN)	30	0.1	0.4	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	1.0	
	MAXIMUM MONTHLY (IN)	54	1.0	7.1	2.0	T	0.0	T	T	0.0	0.0	0.0	T	8.0	
	YEAR OF OCCURRENCE		1977	1973	1969	1985		1995	1993				1995	1989	DEC 1989
	MAXIMUM IN 24 HOURS (IN)	54	0.8	5.9	2.0	T	0.0	T	T	0.0	0.0	0.0	T	6.6	
	YEAR OF OCCURRENCE		1966	1973	1969	1985		1995	1993				1995	1989	DEC 1989
	MAXIMUM SNOW DEPTH (IN)	48	1	7	1	0	0	0	0	0	0	0	0	8	
	YEAR OF OCCURRENCE		1966	1973	1980									1989	DEC 1989
NORMAL NO. DAYS WITH:															
SNOWFALL ≥ 1.0	30	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	

PRECIPITATION (inches) 1999 CHARLESTON, SC (CHS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	2.51	2.86	7.72	1.34	3.78	0.96	5.93	10.64	2.53	4.08	0.67	2.90	45.92
1971	5.45	4.71	4.05	4.11	4.15	4.07	6.04	16.32	0.53	7.22	1.61	2.28	60.54
1972	4.13	5.18	2.52	0.01	5.67	5.29	1.76	4.52	1.82	0.25	7.35	4.36	42.86
1973	4.59	5.57	6.15	2.55	1.83	27.24	3.60	6.66	7.93	0.63	0.84	4.58	72.17
1974	1.42	2.96	3.04	0.86	4.82	9.45	3.09	16.99	4.80	0.40	3.78	3.00	54.61
1975	4.92	3.54	4.54	3.74	5.06	5.96	9.34	7.18	5.16	1.97	1.43	3.35	56.19
1976	1.62	0.95	2.33	0.62	8.87	5.59	4.48	5.22	6.03	4.10	3.57	5.12	48.50
1977	2.72	1.38	5.31	0.45	4.66	2.12	3.86	8.13	2.48	2.49	1.76	5.88	41.24
1978	4.31	1.82	3.25	1.97	4.68	3.42	6.19	4.01	5.06	0.18	1.87	4.13	40.89
1979	3.43	3.04	3.01	3.81	8.09	2.23	8.35	0.88	15.36	3.87	3.29	2.62	57.98
1980	3.99	1.25	7.99	3.43	5.85	3.15	6.97	0.73	2.60	1.52	2.19	1.25	40.92
1981	0.93	2.23	2.38	1.87	4.02	6.04	12.66	9.30	1.27	1.95	1.06	5.73	49.44
1982	2.18	3.64	1.26	6.51	3.04	9.16	5.40	4.10	3.92	2.42	1.19	4.20	47.02
1983	4.86	6.35	11.11	3.57	0.75	2.37	8.89	2.90	3.50	2.36	3.08	4.35	54.09
1984	5.12	3.51	5.63	6.30	6.89	2.96	4.87	1.96	5.27	1.67	1.39	0.66	46.23
1985	0.87	2.70	1.50	1.12	2.79	7.02	12.06	8.48	2.53	4.58	5.49	1.21	50.35
1986	2.05	4.17	2.67	0.83	0.93	2.51	5.07	13.41	4.60	2.95	4.03	5.21	48.43
1987	7.17	4.58	5.55	1.31	2.29	5.64	2.92	6.97	14.49	0.56	3.65	1.57	56.70
1988	2.76	2.38	1.78	3.21	1.86	2.32	4.13	11.88	9.72	0.73	1.08	0.72	42.57
1989	2.31	1.17	2.87	4.84	2.14	7.26	1.93	9.18	13.35	4.08	1.85	4.74	55.72
1990	3.96	1.68	6.63	1.65	1.91	3.12	5.95	6.32	0.18	7.29	3.75	2.69	45.13
1991	7.78	0.94	4.66	4.59	5.37	4.54	7.38	8.09	2.29	0.77	1.64	1.62	49.67
1992	4.93	2.23	3.59	2.75	5.07	6.22	4.36	9.55	3.04	4.87	5.76	1.50	53.87
1993	8.92	3.08	5.80	2.72	2.67	3.70	4.21	7.69	5.01	3.00	3.59	2.30	52.69
1994	7.50	1.23	4.44	0.39	2.35	11.71	8.07	5.39	8.08	12.11	2.92	6.35	70.54
1995	3.94	3.73	0.70	1.77	1.31	6.72	5.81	11.07	7.98	3.52	2.02	1.02	49.59
1996	1.05	1.36	4.04	2.70	1.72	4.04	7.34	5.73	8.77	5.07	1.74	2.14	45.70
1997	2.68	2.86	1.81	6.61	2.04	13.76	8.51	2.15	9.58	4.12	3.26	5.19	62.57
1998	7.58	10.17	5.51	4.01	4.63	3.41	6.74	4.44	14.74	1.99	0.16	4.34	67.72
1999	4.96	2.01	2.15	2.90	3.95	2.32	3.19	3.68	10.81	6.20	1.70	2.54	46.41
POR= 129 YRS	3.20	3.24	3.71	2.79	3.50	5.27	6.98	6.71	5.28	3.14	2.29	2.82	48.93

WBAN : 13880

AVERAGE TEMPERATURE (°F) 1999 CHARLESTON, SC (CHS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	41.0	48.5	57.1	66.3	72.7	78.4	82.5	80.6	77.3	67.5	54.1	52.1	64.8
1971	49.9	49.8	51.9	62.7	71.1	80.4	80.3	79.6	77.1	70.8	57.1	58.8	65.8
1972	54.8	48.9	56.9	64.0	69.8	74.0	80.1	80.4	76.4	67.3	56.8	55.7	65.4
1973	48.0	46.1	61.0	61.5	71.7	78.4	82.6	81.0	79.6	69.6	61.4	51.3	66.0
1974	61.8	51.5	62.0	63.6	74.0	75.4	78.2	79.3	75.0	61.8	55.5	51.0	65.8
1975	53.8	54.7	56.9	62.3	75.1	78.5	79.2	81.5	76.8	69.0	59.3	49.7	66.4
1976	44.8	55.9	62.3	64.0	70.3	75.8	81.0	77.2	73.9	61.4	50.9	48.8	63.9
1977	38.7	46.3	60.6	66.4	72.8	81.2	83.8	81.4	78.7	63.5	61.3	5.0	61.6
1978	43.5	42.7	55.2	66.5	72.0	78.6	81.1	81.3	77.4	65.7	63.3	52.7	65.0
1979	45.4	46.8	57.4	64.9	72.4	75.9	82.0	81.4	76.5	66.0	59.4	48.7	64.7
1980	48.7	45.9	54.6	64.3	71.4	78.4	82.4	82.1	79.8	65.0	55.4	47.5	64.6
1981	41.6	50.8	54.3	67.5	70.8	82.7	83.5	80.3	74.8	64.1	55.4	46.2	64.3
1982	45.1	51.5	59.2	61.8	72.2	78.8	81.2	80.0	74.5	65.1	60.9	57.0	65.6
1983	45.6	49.0	56.4	61.0	71.7	76.9	82.8	82.9	75.5	68.9	57.4	48.8	64.7
1984	46.1	52.8	57.6	64.0	71.7	78.8	79.9	81.1	73.0	71.3	54.2	57.2	65.6
1985	42.6	50.5	60.7	67.8	73.6	79.6	80.9	79.9	75.8	72.2	67.3	47.9	66.6
1986	45.8	55.5	58.0	66.1	74.3	81.4	86.1	79.9	78.6	68.8	63.1	52.8	67.5
1987	47.2	48.8	56.8	62.6	73.3	80.1	83.0	83.5	77.8	61.0	60.1	53.5	65.6
1988	43.2	49.2	57.4	64.4	71.9	76.7	81.8	82.0	76.3	62.7	61.0	50.6	64.8
1989	55.6	55.0	59.7	65.3	72.3	80.4	82.8	80.7	76.6	68.7	60.6	43.2	66.7
1990	55.4	59.2	62.5	66.0	74.4	81.0	83.6	82.5	79.2	70.5	60.4	56.4	69.3
1991	50.8	54.9	60.5	67.6	76.3	78.9	83.6	82.0	77.4	67.6	56.0	54.3	67.5
1992	49.5	55.0	57.9	63.6	70.3	77.5	83.9	80.6	76.2	65.1	60.4	51.0	65.9
1993	53.7	49.7	55.9	61.6	72.5	79.5	85.5	82.0	78.3	67.3	59.3	48.5	66.2
1994	46.5	53.4	61.3	68.3	71.1	79.8	82.0	80.0	75.7	66.4	62.5	54.4	66.8
1995	49.7	50.2	60.4	68.5	76.0	78.5	83.4	82.5	75.6	69.8	53.8	47.5	66.3
1996	48.0	51.8	53.7	64.2	74.4	78.3	81.9	78.7	75.4	65.8	54.6	52.3	64.9
1997	49.7	55.1	64.3	63.1	69.2	74.8	80.8	79.0	76.0	66.0	55.2	49.9	65.3
1998	52.5	53.7	56.2	65.2	75.1	82.8	83.8	81.2	77.3	68.6	62.4	55.7	67.9
1999	53.6	53.6	54.9	67.8	70.4	76.4	82.5	83.2	74.7	66.4	59.8	50.5	66.2
POR= 126 YRS	49.6	51.5	57.6	64.6	72.5	78.7	81.3	80.6	76.5	67.2	57.9	51.1	65.8

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HEATING DEGREE DAYS (base 65°F) 1999 CHARLESTON, SC (CHS)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1970-71	0	0	11	42	324	392	465	424	404	127	16	0	2205
1971-72	0	0	0	13	261	220	317	463	249	113	8	0	1644
1972-73	0	0	0	33	268	302	520	524	167	141	18	0	1973
1973-74	0	0	0	34	158	428	131	378	150	114	2	0	1395
1974-75	0	0	5	136	299	432	350	294	273	152	0	0	1941
1975-76	0	0	0	40	221	466	624	265	146	94	15	3	1874
1976-77	0	0	0	159	418	501	808	516	186	58	17	0	2663
1977-78	0	0	0	112	175	459	663	616	309	52	18	0	2404
1978-79	0	0	0	57	83	399	602	505	241	70	2	0	1959
1979-80	0	0	0	68	203	500	495	555	321	82	17	0	2241
1980-81	0	0	0	80	287	537	719	393	333	55	16	0	2420
1981-82	0	0	3	88	291	577	611	372	214	132	3	0	2291
1982-83	0	0	0	102	154	276	596	440	264	146	2	0	1980
1983-84	0	0	4	24	230	500	578	347	240	92	16	0	2031
1984-85	0	0	9	13	337	249	692	418	183	47	4	0	1952
1985-86	0	0	2	16	54	526	586	261	244	74	4	0	1767
1986-87	0	6	0	56	128	376	545	446	272	131	7	0	1967
1987-88	0	0	0	135	188	358	669	458	239	85	7	2	2141
1988-89	0	0	0	107	145	442	286	312	220	121	14	0	1647
1989-90	0	0	1	50	169	669	294	189	137	67	0	0	1576
1990-91	0	0	0	65	152	280	432	293	185	34	0	0	1441
1991-92	0	0	0	41	281	349	472	293	234	119	28	0	1817
1992-93	0	0	3	70	197	430	353	421	279	132	1	0	1886
1993-94	0	0	3	49	206	504	568	327	152	30	11	0	1850
1994-95	0	0	0	46	119	338	468	414	167	35	1	0	1588
1995-96	0	0	8	44	357	535	518	383	350	107	15	0	2317
1996-97	0	0	0	54	323	391	467	288	94	106	20	9	1752
1997-98	0	0	0	87	293	463	391	318	288	66	0	0	1906
1998-99	0	0	0	38	113	306	358	315	314	61	20	0	1525
1999-	0	0	4	71	175	446							

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COOLING DEGREE DAYS (base 65°F) 1999 CHARLESTON, SC (CHS)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1970	0	0	9	126	253	410	552	487	384	130	3	1	2355
1971	2	5	5	65	215	469	480	457	369	199	31	32	2329
1972	7	3	5	93	163	275	475	488	351	110	30	22	2022
1973	1	0	50	42	233	412	554	501	445	184	56	10	2488
1974	41	7	63	80	288	319	417	450	312	46	18	3	2044
1975	8	13	26	74	318	414	449	516	361	171	58	0	2408
1976	2	9	73	70	187	329	502	384	274	52	2	1	1885
1977	0	1	54	107	263	493	588	518	417	71	71	1	2584
1978	0	0	13	106	242	414	505	514	378	86	40	21	2319
1979	0	2	9	71	241	335	533	514	354	105	40	0	2204
1980	0	9	7	69	221	407	549	539	451	87	5	1	2345
1981	0	0	9	138	199	539	582	481	307	66	9	0	2330
1982	0	2	42	42	232	420	510	475	293	111	36	34	2197
1983	0	0	6	32	217	362	559	567	322	149	10	4	2228
1984	0	1	19	67	228	420	471	509	254	212	21	10	2212
1985	7	17	57	136	276	445	501	470	332	245	129	5	2620
1986	0	2	36	114	300	499	662	474	414	182	78	5	2766
1987	0	0	26	62	269	459	567	580	389	18	48	9	2427
1988	0	2	12	74	229	359	529	534	349	43	30	4	2165
1989	5	37	64	136	246	470	561	493	358	173	44	0	2587
1990	4	34	65	105	302	487	583	548	430	238	24	21	2841
1991	0	20	52	118	356	426	584	531	379	128	18	25	2637
1992	0	7	20	83	199	381	592	495	345	79	68	5	2274
1993	7	0	4	37	241	440	644	536	410	127	42	0	2488
1994	0	7	42	133	210	449	537	473	327	93	53	17	2341
1995	1	6	29	146	349	410	577	552	334	198	26	0	2628
1996	0	8	6	88	313	405	531	432	320	87	18	6	2214
1997	0	17	77	56	158	309	496	444	336	124	7	0	2024
1998	10	6	23	77	320	542	592	509	378	158	43	26	2684
1999	10	1	6	153	193	351	548	571	303	122	25	1	2284

SNOWFALL (inches) 1999 CHARLESTON, SC (CHS)

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	0.0	T	T	T	0.0	0.0	0.0	T
1971-72	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
1972-73	0.0	0.0	0.0	0.0	0.0	0.0	T	7.1	0.0	0.0	0.0	0.0	7.1
1973-74	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1974-75	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
1975-76	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.4
1976-77	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.3	0.0	0.0	0.0	0.0	1.3
1977-78	0.0	0.0	0.0	0.0	0.0	0.0	T	0.4	T	0.0	0.0	0.0	0.4
1978-79	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.8	0.0	0.0	0.0	0.0	1.8
1979-80	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	1.3	0.0	0.0	0.0	1.3
1980-81	0.0	0.0	0.0	0.0	0.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	3.8
1981-82	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	T
1982-83	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
1983-84	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	T
1984-85	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T	0.0	0.0	T
1985-86	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.5
1986-87	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	T	0.0	0.0	0.0	T
1987-88	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.4
1988-89	0.0	0.0	0.0	0.0	0.0	T	0.0	0.9	T	0.0	0.0	T	0.9
1989-90	0.0	0.0	0.0	0.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0	0.0	8.0
1990-91	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1991-92	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
1992-93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T
1993-94	T	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	0.0	T
1994-95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	T
1995-96	0.0	0.0	0.0	0.0	T	0.0	0.0						
1996-97													
1997-98													
1998-99													
1999-													
POR= 53 YRS	T	0.0	0.0	0.0	T	0.3	0.1	0.2	0.1	T	0.0	T	0.7

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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 EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER.</p>
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1999
CHARLESTON,
SOUTH CAROLINA (CHS)

Charleston is a peninsula city bounded on the west and south by the Ashley River, on the east by the Cooper River, and on the southeast by a spacious harbor. Weather records for the airport are from a site some 10 miles inland. The terrain is generally level, ranging in elevation from sea level to 20 feet on the peninsula, with gradual increases in elevation toward inland areas. The soil is sandy to sandy loam with lesser amounts of loam. The drainage varies from good to poor. Because of the very low elevation, a considerable portion of this community and the nearby coastal islands are vulnerable to tidal flooding.

The climate is temperate, modified considerably by the nearness to the ocean. The marine influence is noticeable during winter when the low temperatures are sometimes 10-15 degrees higher on the peninsula than at the airport. By the same token, high temperatures are generally a few degrees lower on the peninsula. The prevailing winds are northerly in the fall and winter, southerly in the spring and summer.

Summer is warm and humid. Temperatures of 100 degrees or more are infrequent. High temperatures are generally several degrees lower along the coast than inland due to the cooling effect of the sea breeze. Summer is the rainiest season with 41 percent of the annual total. The rain, except during occasional tropical storms, generally occurs as showers or thunderstorms.

The fall season passes through the warm Indian Summer period to the pre-winter cold spells which begin late in November. From late September to early November the weather is mostly sunny and temperature extremes are rare. Late summer and early fall is the period of maximum threat to the South Carolina coast from hurricanes.

The winter months, December through February, are mild with periods of rain. However, the winter rainfall is generally of a more uniform type. There is some chance of a snow flurry, with the best probability of its occurrence in January, but a significant amount is rarely measured. An average winter would experience less than one cold wave and severe freeze. Temperatures of 20 degrees or less on the peninsula and along the coast are very unusual.

The most spectacular time of the year, weatherwise, is spring with its rapid changes from windy and cold in March to warm and pleasant in May. Severe local storms are more likely to occur in spring than in summer.

The average occurrence of the first freeze in the fall is early December, and the average last freeze is late February, giving an average growing season of about 294 days.

STATION LOCATION

CHARLESTON, SOUTH CAROLINA

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE											AUTOMATED	* Type	REMARKS
						SEA LEVEL	GROUND												
							G	W	E	P	S	T	R	W	8	H			
<p><u>CITY</u> - - NOTE: For the period January 1871 through July 19, 1949, refer to previous editions.</p>																			
200 East Bay Street	7/19/49	Present	No change	32° 47'	79° 56'	9	92 X	6 X	5 X								X	There are some breaks in the record, especially during the Revolutionary War and the War between the States. Partial consolidation with AP November 1952; further consolidation of activities at AP in January 1957. Automatic wind, records continued at Custom House locations plus two visual observations daily for synoptic report. X - Office not manned, ments removed Dec. 1985. Handar equipment (installed 7/18/85) removes wind, precipitation, and temperature to Airport WSO.	
AIRPORT Administration Building Municipal Airport 10 miles NW of P. O. Weather Bureau Building Municipal Airport Weather Bureau Building Municipal Airport New Administration Bldg Municipal Airport+ International AP (Effective 1974)	12/28/31	7/29/41	NA	32° 54'	80° 02'	44	38	NA a4	4	NA	NA	NA	3	NA	NA	NA	a - Installed 5/25/35. Building Moved b - Effective 1/2/45. c - Raised 1/14/52. d - Installed 2/1/54. e - New inst. installed at center of airfield 2000' W of administration building 10/6/58. f - Installed on roof 12/31/58. g - Moved to evap. sta. 450' NE of admin. bldg. 3/12/59. h - Telepsychrometer (5") 10/1/48-10/8/59 & 12/4/59-12/12/59. i - Moved to evap. sta. 450 ft. NE of admin. bldg. 12/31/59. j - Moved to evap. sta. 450 ft. NE of admin. bldg. 6/1/60. k - Commissioned on field site 6/1/60. m - Effective 6/1/60. n - Moved to roof 6/1/64. p - Moved to roof 8/1976. q - Minor adjustment 7/1981. r - Not moved. t - Relocated to new site 5/26/82. u - Relocated to new site 6/1/82. v - Type change 6/5/85. w - Minor adjustment 10/15/87.		
NWS Building International AP	6/7/82	10/01/95	0.25 mi. S	32° 54'	80° 02'	40	r20 w20	t5	t5	u7	u4	t5	t5	t6 v6	NA	NA	ASOS Commissioned 10/01/95		
Charleston Int'l AP	10/01/95	Present	NA	32°54'	80°02'	44										S	ASOS Commissioned 10/01/95		

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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