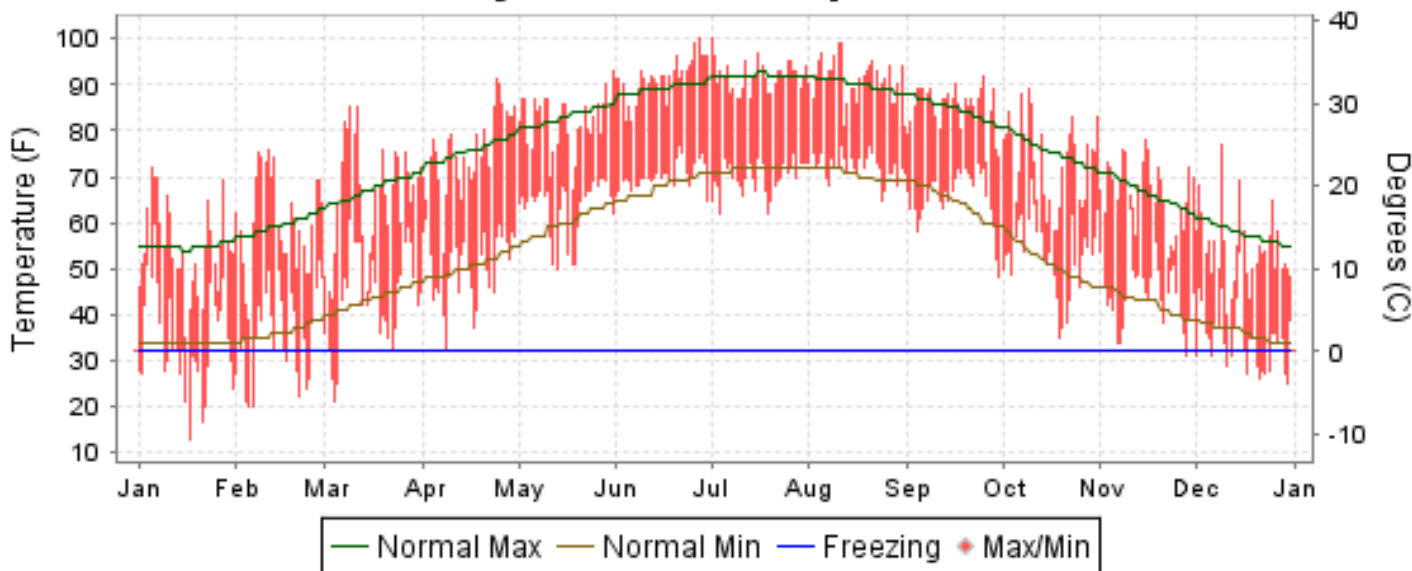




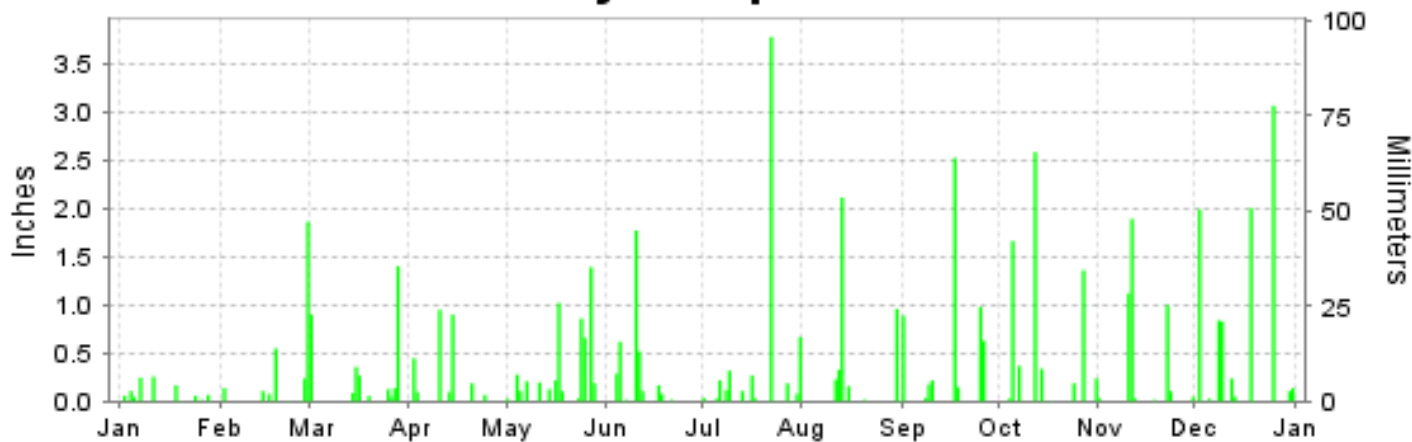
2009 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

ISSN 0198-4640

COLUMBIA, SOUTH CAROLINA (KCAE) Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



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.

NATIONAL
OCEANIC AND
ATMOSPHERIC ADMINISTRATION

NATIONAL
ENVIRONMENTAL SATELLITE, DATA
AND INFORMATION SERVICE

NATIONAL
CLIMATIC DATA CENTER
ASHEVILLE, NORTH CAROLINA

Thomas R. Karl
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 2009

COLUMBIA (KCAE)

LATITUDE: 33° 56'N LONGITUDE: -81° 7'W ELEVATION (FT): GRND: 225 BARO: 243 TIME ZONE: EASTERN (UTC -5) WBAN: 13883

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	54.6	60.4	66.1	75.7	82.0	91.5	91.8	91.0	85.0	73.4	66.4	54.2	74.3	
	HIGHEST DAILY MAXIMUM	72	76	85	91	93	100	100	99	92	89	78	77	100	
	DATE OF OCCURRENCE	05	11	11+	24	31	27	01	11+	25	09	15	09	JUL 01	
	MEAN DAILY MINIMUM	34.3	35.7	43.7	50.4	63.4	70.3	69.8	72.2	65.7	53.3	44.6	34.5	53.2	
	LOWEST DAILY MINIMUM	13	20	21	32	50	65	62	65	48	35	31	25	13	
	DATE OF OCCURRENCE	17	06+	04	08	13	30	19+	24	30	19	28	30	JAN 17	
	AVERAGE DRY BULB	44.5	48.1	54.9	63.1	72.7	80.9	80.8	81.6	75.4	63.4	55.5	44.4	63.8	
	MEAN WET BULB			48.3	55.0	65.0	71.4	71.3	73.3	67.6	58.5				
	MEAN DEW POINT			40.5	46.5	60.3	66.9	66.6	69.7	63.3	55.0				
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	2	2	24	22	21	2	0	0	0	0	73
	MAXIMUM <= 32°	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MINIMUM <= 32°	17	11	4	1	0	0	0	0	0	0	1	13	47		
MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	631	466	323	105	13	0	0	0	5	113	276	630	2562	
	COOLING DEGREE DAYS	0	0	18	52	257	485	499	524	322	67	0	0	2224	
RH	MEAN (PERCENT)	62	54	63	58	69	66	67	72	70	77	76	69	67	
	HOUR 01 LST	69	67	77	74	82	82	82	87	84	88	86	78	80	
	HOUR 07 LST	75	68	76	69	75	75	74	84	82	84	85	78	77	
	HOUR 13 LST	51	37	46	38	52	47	49	52	50	60	58	52	49	
	HOUR 19 LST	60	54	59	52	69	66	64	71	68	80	82	69	66	
S	PERCENT POSSIBLE SUNSHINE														
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	1	0	0	0	0	0	0	0	0	0	0	0	1	
	THUNDERSTORMS	0	2	2	2	6	6	9	4	0	0	0	0	31	
CLOUDNESS	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.)	29.84	29.92	29.91	29.78	29.79	29.63	29.73	29.79	29.80	29.79	29.82	29.86	29.81	
	MEAN SEA-LEVEL PRESS. (IN.)	30.09	30.18	30.15	30.02	30.03	29.86	29.97	30.03	30.04	30.03	30.07	30.09	30.05	
WINDS	RESULTANT SPEED (MPH)	2.6	2.8	0.4	3.6	1.0	1.0	1.9	0.8	1.8	0.6	1.9	1.2	0.8	
	RES. DIR. (TENS OF DEGS.)	25	25	07	23	14	28	21	21	05	01	35	32	26	
	MEAN SPEED (MPH)	6.1	6.9	6.4	7.9	6.7	4.8	5.2	4.1	4.8	4.8	4.4	5.2	5.6	
	PREVAIL.DIR.(TENS OF DEGS.)	27	20	05	27	23	29	22	25	03	07	36	27	27	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	39	33	33	33	23	37	36	28	26	22	21	25	39	
	DIR. (TENS OF DEGS.)	27	28	26	28	02	26	28	28	27	27	29	30	27	
	DATE OF OCCURRENCE	07	22	29	06	19	11	31	30	28	24	26	09	JAN 07	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	49	43	40	40	31	44	44	39	32	28	28	32	49	
DIR. (TENS OF DEGS.)	27	28	26	29	03	27	29	25	25	28	34	31	27		
DATE OF OCCURRENCE	07	22	29	10	19	11	31	30	28	24	13	09	JAN 07		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	1.07	3.00	3.41	2.76	5.45	3.61	5.87	3.82	5.61	6.79	4.25	9.31	54.95	
	GREATEST 24-HOUR (IN.)	0.26	2.09	1.40	0.95	1.39	2.29	3.77	2.39	2.67	2.58	2.81	3.06	3.77	
	DATE OF OCCURRENCE	11	27-28	28	10	27	10-11	22	12-13	17-18	12	10-11	25	JUL 22	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	11	8	10	7	15	10	14	7	8	10	8	12	120	
PRECIPITATION 0.10	4	5	6	6	12	6	8	5	7	7	4	8	78		
PRECIPITATION 1.00	0	1	1	0	2	1	1	1	1	3	3	3	17		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	T	T	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	
	GREATEST 24-HOUR (IN.)	T	T	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	
	DATE OF OCCURRENCE	20	04	02+										MAR 02+	
	MAXIMUM SNOW DEPTH (IN.)	T	0	0	0	0	0	0	0	0	0	0	0	T	
	DATE OF OCCURRENCE	20												JAN 20	
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0		

NORMALS, MEANS, AND EXTREMES COLUMBIA (KCAE)

LATITUDE:
33 ° 56'N

LONGITUDE:
-81 ° 7 'W

ELEVATION (FT):
GRND: 225 BARO: 243

TIME ZONE:
EASTERN (UTC -5)

WBAN: 13883

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	55.1	59.5	67.4	75.7	83.1	89.1	92.1	90.0	84.8	75.8	66.7	57.8	74.8
	MEAN DAILY MAXIMUM	62	56.4	60.2	67.6	76.6	83.9	89.5	92.2	90.7	85.1	76.3	67.2	58.5	75.4
	HIGHEST DAILY MAXIMUM	62	84	84	91	94	101	107	107	107	101	101	90	83	107
	YEAR OF OCCURRENCE		1975	1997	1974	1986	2000	1954	1952	2007	1954	1954	1961	1978	AUG 2007
	MEAN OF EXTREME MAXS.	62	74.3	77.2	84.0	89.7	94.0	98.7	99.7	98.7	94.7	88.3	81.4	75.7	88.0
	NORMAL DAILY MINIMUM	30	34.0	36.3	43.5	50.7	60.0	67.9	71.8	70.6	64.6	51.5	42.6	36.1	52.5
	MEAN DAILY MINIMUM	62	33.7	35.9	42.4	50.3	59.1	66.8	70.8	69.9	63.9	51.1	41.3	35.0	51.7
	LOWEST DAILY MINIMUM	62	-1	5	4	26	34	44	54	53	40	23	12	4	-1
	YEAR OF OCCURRENCE		1985	1973	1980	2007	1963	1984	1951	1969	1967	1952	1970	1958	JAN 1985
	MEAN OF EXTREME MINS.	62	16.6	19.8	25.1	33.1	43.6	55.0	62.5	61.0	49.5	33.8	24.6	18.3	36.9
	NORMAL DRY BULB	30	44.6	47.9	55.4	63.2	71.6	78.5	82.0	80.3	74.7	63.7	54.7	47.0	63.6
	MEAN DRY BULB	62	45.1	48.0	55.0	63.5	71.5	78.3	81.5	80.4	74.5	63.7	54.2	46.8	63.5
	MEAN WET BULB	25	39.5	42.3	47.5	54.0	62.3	69.4	72.5	72.2	66.7	57.2	49.0	41.3	56.2
	MEAN DEW POINT	25	34.3	36.4	42.5	49.1	58.6	66.7	70.2	70.0	64.2	54.1	44.8	36.6	52.3
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.1	1.6	6.2	15.8	22.9	18.1	8.9	0.6	0.0	0.0	74.2
	MAXIMUM <= 32	30	0.4	0.2	*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7
	MINIMUM <= 32	30	15.5	12.0	5.7	1.0	0.0	0.0	0.0	0.0	0.0	0.8	7.0	13.6	55.6
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	
H/C	NORMAL HEATING DEG. DAYS	30	628	485	321	131	23	0	0	0	8	121	325	552	2594
	NORMAL COOLING DEG. DAYS	30	2	4	20	69	211	390	519	467	296	76	15	5	2074
RH	NORMAL (PERCENT)	30	70	66	65	62	68	70	73	76	75	73	73	71	70
	HOURLY 01 LST	30	78	77	77	77	83	85	86	89	89	88	85	81	83
	HOURLY 07 LST	30	83	83	84	84	85	86	88	92	92	91	89	84	87
	HOURLY 13 LST	30	55	50	48	43	48	51	53	56	55	50	51	54	51
	HOURLY 19 LST	30	65	58	54	50	56	61	65	69	72	73	71	69	64
S	PERCENT POSSIBLE SUNSHINE	45	55	59	64	70	68	67	66	66	64	67	63	59	64
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	46	2.6	2.1	1.7	1.3	1.2	1.2	1.2	1.9	2.3	2.0	2.7	2.6	22.8
	THUNDERSTORMS	62	1.0	1.4	2.5	3.6	5.9	9.2	12.3	9.4	3.6	1.2	0.9	0.4	51.4
CLOUDNESS	MEAN: SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH: CLEAR	1	2.0	4.0	5.0		12.0	8.0							
	PARTLY CLOUDY			2.0	3.0		5.0	8.0							
	CLOUDY	1	5.0	3.0	8.0		4.0	4.0							
PR	MEAN STATION PRESSURE(IN)	26	29.89	29.86	29.82	29.76	29.73	29.76	29.78	29.78	29.80	29.85	29.84	29.90	29.81
	MEAN SEA-LEVEL PRES. (IN)	26	30.14	30.11	30.06	30.00	30.00	29.99	30.01	30.02	30.04	30.09	30.12	30.15	30.06
WINDS	MEAN SPEED (MPH)	26	6.9	7.2	7.6	7.7	6.8	6.1	5.8	5.2	5.8	5.4	5.5	6.1	6.3
	PREVAIL.DIR(TENS OF DEGS)	38	25	26	26	25	25	24	24	25	03	03	26	27	24
	MAXIMUM 2-MINUTE: SPEED (MPH)	14	39	38	45	44	48	47	41	48	35	29	33	41	48
	DIR. (TENS OF DEGS)		27	28	31	28	26	27	19	30	18	27	27	26	26
	YEAR OF OCCURRENCE		2009	2003	2000	1997	2006	2001	2007	2002	2004	2001	2004	2000	MAY 2006
	MAXIMUM 3-SECOND SPEED (MPH)	14	49	45	52	56	71	58	75	64	46	35	43	49	75
	DIR. (TENS OF DEGS)		27	27	26	25	25	27	19	29	18	27	33	26	19
	YEAR OF OCCURRENCE		2009	1999	1999	1997	2006	2000	2007	2002	2004	2003	1999	2000	JUL 2007
PRECIPITATION	NORMAL (IN)	30	4.66	3.84	4.59	2.98	3.17	4.99	5.54	5.41	3.94	2.89	2.88	3.38	48.27
	MAXIMUM MONTHLY (IN)	62	9.26	8.68	10.89	6.85	9.39	14.81	17.46	16.72	8.78	12.09	7.20	9.31	17.46
	YEAR OF OCCURRENCE		1978	1961	1973	1979	2002	1973	1991	1949	1953	1959	1957	2009	JUL 1991
	MINIMUM MONTHLY (IN)	62	0.84	0.87	0.56	0.29	0.29	0.49	0.57	0.22	0.07	T	0.41	0.32	T
	YEAR OF OCCURRENCE		1981	1976	1985	1994	1951	2002	1977	1997	2005	1963	1973	1955	OCT 1963
	MAXIMUM IN 24 HOURS (IN)	62	3.15	3.69	3.59	3.66	5.57	5.44	5.81	7.66	6.23	5.46	2.81	3.18	7.66
	YEAR OF OCCURRENCE		1993	1962	1960	1956	1967	1973	1959	1949	1953	1964	2009	1970	AUG 1949
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	11.0	9.1	10.0	7.7	8.6	10.3	11.5	10.3	8.1	6.4	7.5	9.6	110.1
	PRECIPITATION >= 1.00	30	1.3	1.2	1.3	0.8	0.8	1.4	1.9	1.9	1.4	0.9	1.0	0.9	14.8
SNOWFALL	NORMAL (IN)	30	0.6	1.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.1
	MAXIMUM MONTHLY (IN)	61	4.3	16.0	4.1	T	T	T	T	T	0.0	0.0	T	9.1	16.0
	YEAR OF OCCURRENCE		1988	1973	1980	1992	2001	2008	2005	1993			2006	1958	FEB 1973
	MAXIMUM IN 24 HOURS (IN)	61	4.3	15.7	4.1	T	T	T	T	T	0.0	0.0	T	8.8	15.7
	YEAR OF OCCURRENCE		1988	1973	1980	1992	2001	2007	2005	1993			1976	1958	FEB 1973
	MAXIMUM SNOW DEPTH (IN)	60	4	14	4	0	0	0	0	0	0	0	0	8	14
	YEAR OF OCCURRENCE		2000	1973	1980									1958	FEB 1973
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	

PRECIPITATION (inches) 2009 COLUMBIA (KCAE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	4.72	1.88	10.72	2.02	4.51	2.27	1.24	3.29	7.25	1.58	1.72	1.33	42.53
1981	0.84	4.08	2.25	1.87	3.38	5.28	5.42	4.65	0.39	1.90	1.47	8.54	40.07
1982	3.74	4.39	1.65	6.44	2.92	4.23	9.98	5.88	3.32	1.47	2.62	3.72	50.36
1983	3.66	5.38	7.35	5.68	0.70	2.85	0.73	3.36	3.25	2.22	3.63	6.58	45.39
1984	3.99	4.88	5.54	3.75	4.29	6.47	8.69	3.23	0.67	1.03	0.78	1.75	45.07
1985	3.27	7.15	0.56	1.29	3.13	3.96	7.47	5.65	0.07	8.44	5.98	0.88	47.85
1986	1.05	1.46	3.21	0.35	1.13	0.88	1.25	9.55	0.56	6.04	6.26	2.52	34.26
1987	8.36	5.39	5.38	0.40	1.12	6.49	3.95	10.81	5.27	0.99	4.55	1.50	54.21
1988	4.10	2.02	1.98	3.01	2.08	1.66	3.24	11.75	7.53	3.68	1.59	0.75	43.39
1989	1.90	3.30	4.89	4.27	4.44	5.99	9.41	3.19	5.16	2.25	1.85	5.28	51.93
1990	2.44	2.56	2.28	1.26	4.03	1.27	5.14	6.51	2.64	11.66	2.04	1.64	43.47
1991	5.48	1.87	7.57	4.69	6.96	3.56	17.46	7.77	2.45	0.54	1.46	2.62	62.43
1992	3.14	4.16	3.38	3.16	1.93	6.37	2.15	9.61	4.60	4.22	4.02	3.26	50.00
1993	7.49	3.29	6.01	1.63	2.98	0.74	2.02	2.34	3.90	4.29	1.94	2.39	39.02
1994	4.16	4.06	4.49	0.29	1.99	11.10	3.70	5.31	3.27	4.74	3.08	5.83	52.02
1995	4.49	6.70	1.70	0.98	1.69	10.74	7.86	6.69	5.51	3.61	2.89	2.19	55.05
1996	2.90	1.16	6.52	2.38	2.68	1.57	3.54	3.76	2.50	2.37	1.44	2.34	33.16
1997	4.25	4.87	1.19	4.07	1.61	5.10	8.16	0.22	4.55	4.47	4.75	4.39	47.63
1998	6.92	6.23	4.26	6.12	2.22	2.06	4.91	3.52	6.58	0.25	1.11	2.29	46.47
1999	3.94	2.35	2.36	3.96	1.03	4.63	2.56	1.31	3.58	2.08	0.75	1.42	29.97
2000	8.88	1.18	3.95	1.47	0.84	2.71	2.95	3.68	6.31	T	3.27	0.97	36.21
2001	1.85	1.92	5.33	0.61	4.59	3.75	3.27	2.84	1.84	0.17	0.69	1.18	28.04
2002	2.47	1.90	3.55	1.60	9.39	0.63	3.37	5.09	7.36	4.97	2.77	4.16	47.26
2003	1.43	3.54	7.42	6.65	5.49	7.56	9.05	3.62	4.28	4.06	1.22	2.13	56.45
2004	1.19	4.77	0.87	0.76	4.61	10.36	3.11	4.62	7.23	0.59	2.31	1.22	41.64
2005	1.94	4.11	4.87	2.16	2.69	5.63	11.86	3.36	T	2.48	2.82	4.09	46.01
2006	2.79	3.33	0.89	1.08	1.32	8.05	3.25	8.16	2.63	2.97	5.67	3.05	43.19
2007	3.06	2.62	3.45	1.39	0.40	6.69	2.26	3.04	0.72	1.60	0.46	5.68	31.37
2008	3.19	3.69	3.03	3.48	1.80	2.79	3.52	8.82	2.34	3.21	5.01	3.40	44.28
2009	1.07	3.00	3.41	2.76	5.45	3.61	5.87	3.82	5.61	6.79	4.25	9.31	54.95
POR= 62 YRS	3.93	3.84	4.47	3.12	3.46	4.49	5.43	5.54	3.99	2.86	2.67	3.37	47.17

WBAN : 13883

AVERAGE TEMPERATURE (°F) 2009 COLUMBIA (KCAE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	44.2	41.4	49.8	61.5	69.0	75.7	81.9	80.5	76.8	60.2	51.7	44.7	61.5
1981	38.7	46.7	51.2	66.9	68.0	81.4	80.9	76.1	71.4	61.8	53.2	43.3	61.6
1982	40.7	49.8	56.5	60.2	72.0	77.4	80.3	77.9	71.8	61.9	55.0	51.3	62.9
1983	40.9	45.3	53.6	57.8	69.9	75.3	83.3	82.7	73.2	63.7	52.3	43.3	61.8
1984	41.7	48.0	53.6	59.6	70.1	79.1	78.7	79.2	71.7	70.4	50.6	53.4	63.0
1985	39.5	47.0	57.5	65.3	71.5	78.7	79.9	77.7	72.4	68.4	62.5	42.9	63.6
1986	41.2	51.4	55.0	63.8	72.2	82.0	86.1	79.8	76.4	65.0	59.3	46.7	64.9
1987	43.5	45.7	53.4	60.4	74.3	79.4	83.1	83.2	75.2	56.5	54.9	49.0	63.2
1988	39.6	44.8	54.5	62.5	69.4	77.0	82.0	82.6	75.5	58.7	56.0	46.0	62.4
1989	49.6	49.8	56.5	62.3	69.0	79.8	80.9	80.4	74.8	64.7	55.8	41.0	63.7
1990	52.1	56.2	59.4	63.4	71.9	79.9	83.6	81.7	76.0	66.4	55.7	51.7	66.5
1991	46.3	51.7	58.3	67.1	75.4	79.0	83.0	80.2	75.0	64.7	52.2	50.0	65.2
1992	46.3	51.0	54.4	62.3	67.6	75.9	83.8	78.8	74.9	61.6	55.1	45.8	63.1
1993	48.5	45.4	51.2	58.9	71.5	79.9	86.2	81.9	76.6	63.6	54.5	45.0	63.6
1994	42.6	50.1	58.5	67.5	69.3	80.2	81.2	78.3	72.5	63.2	56.9	50.2	64.2
1995	45.5	46.3	57.7	65.6	74.2	76.9	83.1	82.4	74.2	66.9	50.8	42.9	63.9
1996	43.6	48.8	51.0	62.3	74.1	78.5	82.0	78.8	74.2	62.6	49.9	48.1	62.8
1997	46.4	51.3	61.5	60.2	68.0	75.0	81.4	79.3	74.8	62.9	50.4	45.5	63.1
1998	48.5	49.7	52.7	62.7	75.0	82.3	83.8	81.0	76.4	65.6	57.5	51.9	65.6
1999	49.3	49.9	51.5	66.4	69.7	76.8	81.7	83.4	72.8	62.9	56.4	46.8	64.0
2000	43.1	50.1	58.2	61.4	75.5	80.2	81.5	80.4	73.2	62.7	52.3	38.4	63.1
2001	44.0	51.7	53.0	65.2	72.6	78.7	80.4	82.2	72.7	61.6	58.7	51.6	64.4
2002	47.6	47.5	57.1	69.0	69.7	79.2	83.9	81.0	77.5	67.4	52.4	44.5	64.7
2003	42.2	47.6	58.0	61.8	71.3	76.8	79.7	80.7	72.9	63.7	58.9	42.5	63.0
2004	43.4	44.6	57.9	63.7	75.6	79.7	81.9	78.4	74.7	66.8	56.3	45.9	64.1
2005	48.4	48.8	53.6	61.8	68.6	77.4	82.2	81.8	78.5	65.7	55.4	44.1	63.9
2006	50.8	46.3	54.7	67.0	70.9	77.7	82.0	82.1	73.4	61.7	54.3	50.1	64.3
2007	48.0	45.8	59.1	61.9	70.8	78.6	79.4	85.9	77.3	69.2	53.7	52.3	65.2
2008	44.6	53.5	56.4	62.1	70.8	81.8	81.1	79.6	74.6	61.4	49.4	51.5	63.9
2009	44.5	48.1	54.9	63.1	72.7	80.9	80.8	81.6	75.4	63.4	55.5	44.4	63.8
POR= 62 YRS	45.1	48.0	55.0	63.5	71.5	78.3	81.5	80.4	74.5	63.7	54.2	46.8	63.5

HEATING DEGREE DAYS (base 65°F) 2009 COLUMBIA (KCAE)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1980-81	0	0	14	178	394	622	809	506	424	59	43	0	3049
1981-82	0	0	13	131	349	665	748	425	283	179	5	0	2798
1982-83	0	0	18	162	306	440	739	546	352	230	24	1	2818
1983-84	0	0	21	89	373	666	717	485	355	190	31	2	2929
1984-85	0	0	12	22	444	355	792	503	262	79	9	0	2478
1985-86	0	0	16	45	110	676	731	374	319	115	21	0	2407
1986-87	0	2	0	110	207	565	657	532	362	187	5	0	2627
1987-88	0	0	0	259	298	495	780	579	322	114	20	1	2868
1988-89	0	0	2	218	274	583	469	435	289	165	50	0	2485
1989-90	0	0	9	110	283	738	393	265	220	115	6	0	2139
1990-91	0	0	8	95	277	414	571	376	233	51	4	0	2029
1991-92	0	0	6	79	392	477	574	402	323	150	47	2	2452
1992-93	0	0	17	133	305	587	509	543	422	200	9	0	2725
1993-94	0	0	14	110	334	614	687	420	227	48	31	0	2485
1994-95	0	0	0	94	250	452	596	518	240	77	6	0	2233
1995-96	0	0	11	77	429	679	655	465	424	130	25	0	2895
1996-97	0	0	2	117	452	523	567	390	151	166	31	10	2409
1997-98	0	0	3	143	428	599	512	420	395	102	1	0	2603
1998-99	0	0	0	66	233	412	485	416	412	88	14	0	2126
1999-00	0	0	14	125	260	558	672	425	218	135	1	0	2408
2000-01	0	0	10	117	394	815	645	366	365	109	0	0	2821
2001-02	0	0	16	168	212	410	537	488	277	44	44	0	2196
2002-03	0	0	0	64	376	628	700	483	226	123	4	0	2604
2003-04	0	0	11	77	224	690	661	585	235	113	10	0	2606
2004-05	0	0	1	40	293	586	514	450	352	121	29	0	2386
2005-06	0	0	0	118	290	643	433	516	333	70	25	0	2428
2006-07	0	0	5	156	318	454	523	530	204	163	8	0	2361
2007-08	0	0	0	52	333	394	624	336	265	123	8	0	2135
2008-09	0	0	1	165	461	418	631	466	323	105	13	0	2583
2009-	0	0	5	113	276	630							

WBAN : 13883

COOLING DEGREE DAYS (base 65°F) 2009 COLUMBIA (KCAE)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1980	0	0	0	47	159	328	530	487	376	35	2	0	1964
1981	0	0	6	119	143	497	499	349	213	41	0	2	1869
1982	0	4	26	39	229	377	484	406	226	74	11	20	1896
1983	0	0	6	21	184	319	573	558	270	58	0	0	1989
1984	0	0	10	33	194	430	436	448	219	199	18	3	1990
1985	9	2	38	94	215	417	468	402	244	155	45	0	2089
1986	0	0	17	85	249	516	660	471	347	118	44	5	2512
1987	0	0	10	58	300	440	571	571	315	2	4	6	2277
1988	0	0	5	47	162	367	536	555	323	29	11	0	2035
1989	0	19	37	91	180	451	500	482	309	107	14	0	2190
1990	0	25	54	74	228	454	583	524	343	146	6	9	2446
1991	0	12	32	119	331	427	565	476	313	77	15	18	2385
1992	0	3	3	75	134	337	591	435	320	33	14	0	1945
1993	2	0	0	22	221	452	663	532	369	72	27	0	2360
1994	0	9	34	129	170	463	511	418	232	44	12	2	2024
1995	1	3	19	100	299	362	571	543	290	144	12	0	2344
1996	0	3	0	58	313	412	533	437	284	47	5	4	2096
1997	0	12	50	28	130	317	512	451	306	85	0	0	1891
1998	7	0	24	39	318	526	590	501	345	92	12	16	2470
1999	2	0	0	136	169	360	525	576	252	65	8	0	2093
2000	0	0	15	31	332	461	518	485	260	54	20	0	2176
2001	0	0	2	121	241	420	482	540	253	68	31	3	2161
2002	7	5	37	170	197	434	593	501	380	144	8	0	2476
2003	0	0	18	32	208	362	464	495	254	42	47	0	1922
2004	2	0	24	82	346	449	532	425	298	103	36	0	2297
2005	6	0	8	32	144	381	541	530	411	145	10	0	2208
2006	0	0	20	136	214	389	536	536	264	57	5	0	2157
2007	6	0	30	77	195	414	454	657	373	190	1	7	2404
2008	1	7	7	41	195	506	505	462	296	59	0	5	2084
2009	0	0	18	52	257	485	499	524	322	67	0	0	2224

SNOWFALL (inches) 2009 COLUMBIA (KCAE)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1980-81	0.0	0.0	0.0	0.0	0.0	0.3	T	T	0.0	0.0	0.0	0.0	0.3
1981-82	0.0	0.0	0.0	0.0	0.0	T	3.5	0.8	0.0	0.0	0.0	0.0	4.3
1982-83	0.0	0.0	0.0	0.0	0.0	0.0	0.1	T	0.4	0.0	0.0	0.0	0.5
1983-84	0.0	0.0	0.0	0.0	0.0	0.0	T	T	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	0.0	0.0	0.0	T
1985-86	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
1986-87	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.1	0.0	0.0	0.0	1.0
1987-88	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	4.3
1988-89	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	0.0	0.0	0.0	4.3
1989-90	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	T	0.0	0.0	T
1990-91	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
1991-92	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	T	T	0.0	0.0	0.8
1992-93	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	1.2	0.0	0.0	0.0	1.2
1993-94	0.0	T	0.0	0.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	0.0	2.3
1994-95	0.0	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
1995-96	0.0	0.0	0.0	0.0	0.0	0.0	T	0.9	0.0	0.0	0.0	0.0	0.9
1996-97	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	0.0	T
1997-98	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	T	0.0	0.0	0.0	T
1998-99	0.0	0.0	0.0	0.0	0.0	T	T	0.5	0.0	T	0.0	0.0	0.5
1999-00	0.0	0.0	0.0	0.0	0.0	0.0	4.3	0.0	T	T	0.0	0.0	4.3
2000-01	0.0	0.0	0.0	0.0	0.0	T	0.0	T	0.0	0.0	T	0.0	T
2001-02	0.0	0.0	0.0	0.0	0.0	0.0	5.0	0.0	0.0	0.0	T	0.0	5.0
2002-03	0.0	0.0	0.0	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	3.4
2003-04	0.0	0.0	0.0	0.0	0.0	0.0	T	0.4	0.0	0.0	0.0	0.0	0.4
2004-05	0.0	0.0	0.0	0.0	0.0	T	T	T	0.0	0.0	0.0	0.0	T
2005-06	T	0.0	0.0	0.0	0.0	0.0	0.0	T	0.0	0.0	0.0	0.0	T
2006-07	0.0	0.0	0.0	0.0	T	0.0	0.0	0.2	0.0	0.0	0.0	T	0.2
2007-08	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	T	0.3
2008-09	0.0	0.0	0.0	0.0	0.0	0.0	T	T	T	0.0	0.0	0.0	T
2009-	0.0	0.0	0.0	0.0	0.0	0.0							
POR= 62 YRS	T	T	0.0	0.0	T	0.2	0.5	0.6	0.2	T	T	T	1.5

WBAN : 13883

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. 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.</p>	<p>GENERAL CONTINUED: 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. 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. STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED HISTORY GO TO "MULTI-NETWORK METADATA SYSTEM", URL IS: https://mi3.ncdc.noaa.gov/mi3qry/login.cfm</p> <p>NOTE: The "Period of Record:(POR) for all "averages" is based on the "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.</p>
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2009 COLUMBIA SOUTH CAROLINA (KCAE)

Columbia is centrally located within the state of South Carolina and lies on the Congaree River near the confluence of the Broad and Saluda Rivers. The surrounding terrain is rolling, sloping from about 350 feet above sea level in northern Columbia to about 200 feet in the southeastern part of the city.

The climate in the Columbia area is relatively temperate. The Appalachian Mountain chain, some 150 miles to the northwest, frequently retards the approach of unseasonable cold weather in the winter. The terrain offers little moderating effect on the summer heat.

Long summers are prevalent with warm weather usually lasting from sometime in May into September. In summer the Bermuda high is the greatest single weather factor influencing the area. This permanent high more or less blocks the entry of cold fronts so that many stall before reaching central South Carolina. Also, the southwestern flow around the offshore Bermuda high pressure supplies moisture for the many summer thunderstorms. There are relatively few breaks in the heat during midsummer. The typical summer has about six days with 100 degrees or more. Thunderstorm activity usually shows a decided increase during June, decreasing about the first of September. About once or twice a year, passing tropical storms produce strong winds and heavy rains. The incidence of these storms is greatest in September, although they represent a possible threat from midsummer to late fall. Damage from tropical storms is usually minor in the Columbia area.

Fall is the most pleasant time of the year. Rainfall during the late fall is at an annual minimum, while the sunshine is at a relative maximum. Winters are mild with the cold weather usually lasting from late November to mid-March. The winter weather at Columbia is largely made up of polar air outbreaks that reach this area in a much modified form. On rare occasions in winter, Arctic air masses push southward as far as central South Carolina and cause some of the coldest temperatures. Disruption of activities from snowfall is unusual, in fact, more than three days of sustained snow cover is rare.

Spring is the most changeable season of the year. The temperature varies from an occasional cold snap in March to generally warm and pleasant in May. While tornadoes are infrequent, they occur most often in the spring. Hailstorms are not frequent, with the annual incidence at a maximum in spring and early summer. The average occurrence of the last spring freeze is very late March, and the first fall freeze is early November, for a growing period of about 218 days.

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