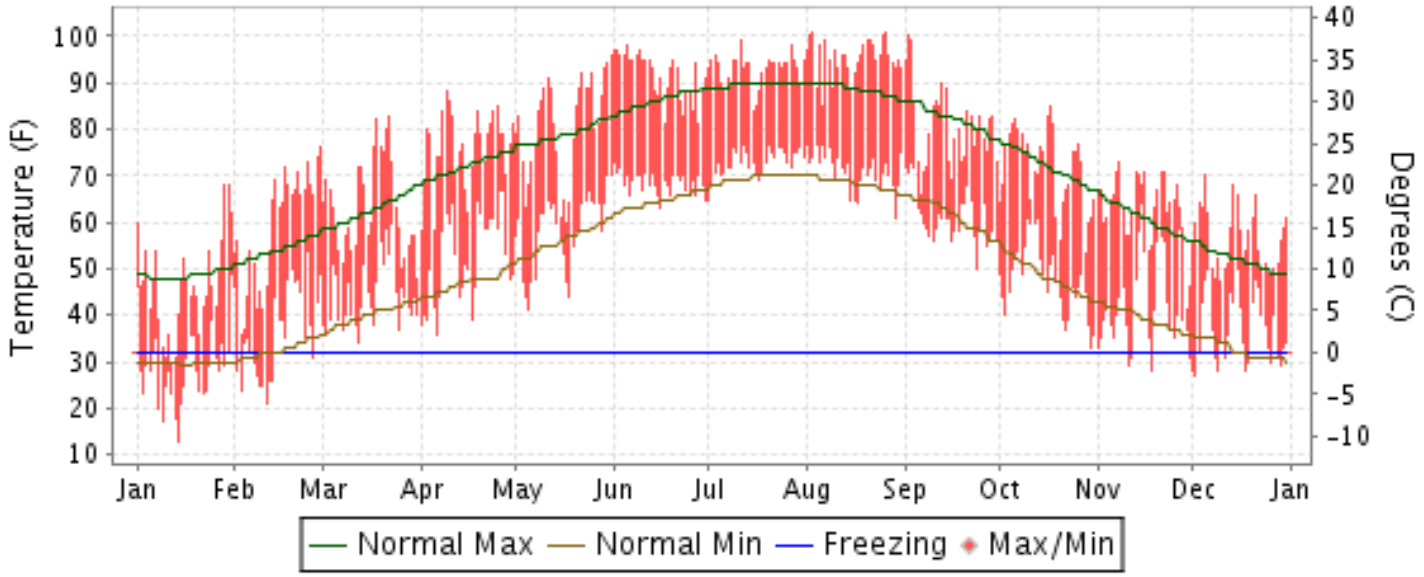
2011
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA

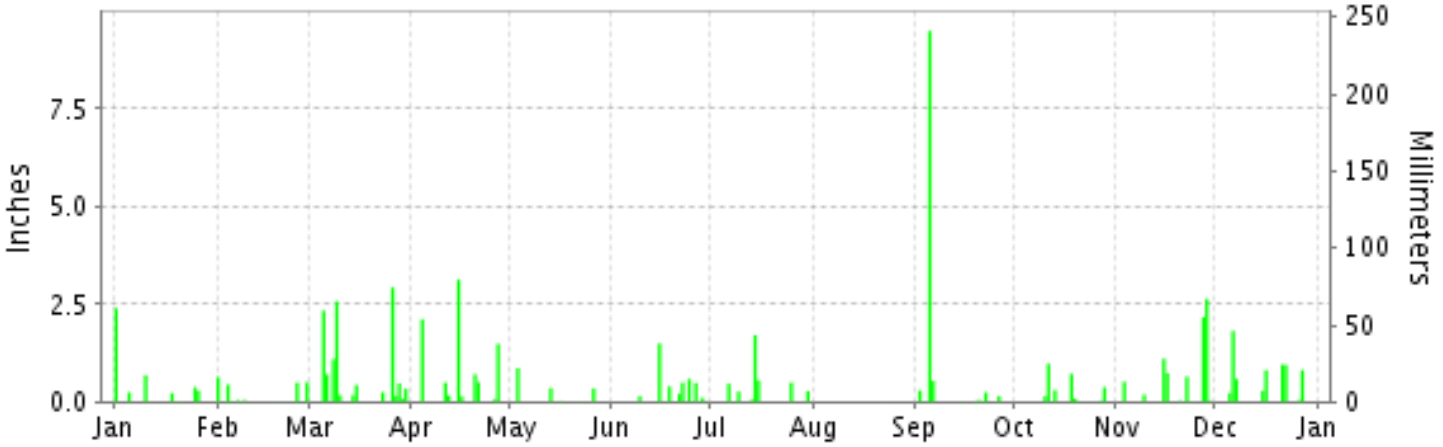
ISSN 0198-4780

CHATTANOOGA, TENNESSEE (KCHA)

Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure

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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 2011
CHATTANOOGA (KCHA)

LATITUDE: 35° 1'N **LONGITUDE:** -85° 12'W **ELEVATION (FT):** GRND: 671 BARO: 691 **TIME ZONE:** EASTERN (UTC -5) **WBAN:** 13882

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	MEAN DAILY MAXIMUM	46.4	59.0	63.4	76.2	80.8	91.5	92.8	95.3	80.7	71.7	63.3	56.3	73.1
	HIGHEST DAILY MAXIMUM	68	76	83	88	96	98	99	101	100	85	73	70	101
	DATE OF OCCURRENCE	30+	28	22	09	31	05	11	26+	02	17	08	05	AUG 26+
	MEAN DAILY MINIMUM	28.5	36.6	44.2	52.4	58.1	68.5	73.1	71.2	61.2	47.5	42.2	36.8	51.7
	LOWEST DAILY MINIMUM	13	21	34	36	41	63	65	61	50	33	28	27	13
	DATE OF OCCURRENCE	14	11	12	06	05	16	01	29	24	30	18	02	JAN 14
	AVERAGE DRY BULB	37.5	47.8	53.8	64.3	69.5	80.0	83.0	83.3	71.0	59.6	52.8	46.6	62.4
	MEAN WET BULB	33.1	40.9	47.4	55.9	61.7	69.9	73.7	70.3	63.7	52.4	47.4	42.6	54.9
	MEAN DEW POINT	26.5	32.0	41.4	48.8	56.5	65.4	70.0	63.5	59.4	46.8	42.1	38.2	49.2
	NUMBER OF DAYS WITH:													
	MAXIMUM >= 90°	0	0	0	0	6	19	26	27	4	0	0	0	82
	MAXIMUM <= 32°	3	0	0	0	0	0	0	0	0	0	0	0	3
	MINIMUM <= 32°	24	11	0	0	0	0	0	0	0	0	4	11	50
	MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0
H/C	HEATING DEGREE DAYS	847	474	352	105	68	0	0	0	3	178	360	566	2953
	COOLING DEGREE DAYS	0	0	11	91	213	457	564	573	188	16	1	0	2114
RH	MEAN (PERCENT)	69	59	67	62	67	67	70	56	72	69	72	75	67
	HOUR 01 LST	77	70	77	77	83	84	83	72	86	85	80	84	80
	HOUR 07 LST	81	72	79	77	77	75	79	68	83	85	82	85	79
	HOUR 13 LST	54	45	53	44	48	48	53	36	53	44	57	60	50
	HOUR 19 LST	67	54	62	52	59	59	65	47	70	69	72	74	63
S	PERCENT POSSIBLE SUNSHINE													
W/O	NUMBER OF DAYS WITH:													
	HEAVY FOG(VISBY <= 1/4 MI)	2	0	1	1	1	0	2	0	4	0	3	5	19
	THUNDERSTORMS	1	2	7	6	2	8	9	3	2	1	1	1	43
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.)	29.34	29.37	29.35	29.23	29.24	29.26	29.26	29.20	29.26	29.33	29.40	29.47	29.31
	MEAN SEA-LEVEL PRESS. (IN.)	30.09	30.11	30.09	29.97	29.97	29.97	29.97	29.91	29.98	30.06	30.15	30.23	30.04
WINDS	RESULTANT SPEED (MPH)	2.0	1.5	0.8	3.6	1.4	0.4	0.5	1.5	0.8	1.4	1.2	0.5	0.8
	RES. DIR. (TENS OF DEGS.)	31	26	29	20	23	28	23	33	35	32	22	26	27
	MEAN SPEED (MPH)	4.7	6.9	6.1	6.5	4.4	4.1	3.0	4.4	3.9	4.1	4.9	3.8	4.7
	PREVAIL.DIR.(TENS OF DEGS.)	34	18	01	17	18	17	18	33	19	03	18	17	17
	MAXIMUM 2-MINUTE WIND													
	SPEED (MPH)	28	38	36	46	32	36	31	25	36	22	22	30	46
	DIR. (TENS OF DEGS.)	33	21	12	31	26	35	34	22	02	35	19	23	31
	DATE OF OCCURRENCE	07	25	09	27	26	18	06	08	06	01	13	27	APR 27
	MAXIMUM 3-SECOND WIND:													
	SPEED (MPH)	38	51	49	69	43	56	41	35	49	32	36	47	69
	DIR. (TENS OF DEGS.)	33	20	13	23	25	20	32	33	02	26	23	22	23
	DATE OF OCCURRENCE	07	25	09	27	26	21	06	26	05	14	13	27	APR 27
PRECIPITATION	WATER EQUIVALENT:													
	TOTAL (IN.)	4.27	2.24	11.77	8.84	1.62	3.95	3.87	0.01	10.85	2.70	8.14	6.53	64.79
	GREATEST 24-HOUR (IN.)	2.40	0.64	3.30	3.27	0.87	1.50	2.27	0.01	9.50	1.13	2.64	2.02	9.50
	DATE OF OCCURRENCE	01	01	08-09	15-16	03	15	14-15	21	05-06	10-11	28	06-07	SEP 05-06
	NUMBER OF DAYS WITH:													
	PRECIPITATION 0.01	8	10	13	9	5	8	9	1	10	8	11	9	101
	PRECIPITATION 0.10	6	4	12	8	3	8	6	0	5	5	7	8	72
	PRECIPITATION 1.00	1	0	4	3	0	1	1	0	1	0	3	1	15
SNOWFALL	SNOW,ICE PELLETS,HAIL	8.5	1.2	0.0	T	0.0	T	0.0	0.0	0.0	0.0	T	0.0	9.7
	TOTAL (IN.)	8.4	1.2	0.0	T	0.0	T	0.0	0.0	0.0	0.0	T	0.0	8.4
	GREATEST 24-HOUR (IN.)	10	09		27		15					29		JAN 10
	DATE OF OCCURRENCE	6	1	0	0	0	0	0	0	0	0	0	0	6
	MAXIMUM SNOW DEPTH (IN.)	11+	10											JAN 11+
	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:													
	SNOWFALL >= 1.0	1	1	0	0	0	0	0	0	0	0	0	0	2

NORMALS, MEANS, AND EXTREMES
CHATTANOOGA (KCHA)

LATITUDE: 35° 1'N **LONGITUDE:** -85° 12'W **ELEVATION (FT):** GRND: 671 BARO: 691 **TIME ZONE:** EASTERN (UTC -5) **WBAN:** 13882

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	48.8	54.1	62.8	72.1	79.1	86.2	89.8	88.7	82.5	72.3	61.1	52.0	70.8
	MEAN DAILY MAXIMUM	84	49.8	52.8	62.3	71.9	80.0	86.4	89.7	89.2	82.6	73.0	60.7	51.8	70.9
	HIGHEST DAILY MAXIMUM	72	78	79	88	93	99	104	106	105	102	94	84	78	106
	YEAR OF OCCURRENCE		1949	1989	2007	1942	1941	1952	1952	2007	1954	1954	2005	1951	JUL 1952
	MEAN OF EXTREME MAXS.	84	67.7	72.0	79.5	86.5	89.9	94.8	96.8	96.1	92.8	84.6	76.5	68.7	83.8
	NORMAL DAILY MINIMUM	30	29.9	32.6	40.0	47.0	56.2	64.6	69.4	68.3	61.7	48.5	39.5	32.7	49.2
	MEAN DAILY MINIMUM	84	31.1	32.5	40.1	47.9	56.8	64.6	69.1	68.3	61.3	49.2	38.8	32.8	49.4
	LOWEST DAILY MINIMUM	72	-10	1	8	25	34	41	51	50	36	22	4	-2	-10
	YEAR OF OCCURRENCE		1985	1958	1960	1992	1971	1972	1972	1946	1967	1952	1950	1983	JAN 1985
	MEAN OF EXTREME MINS.	84	12.1	16.1	23.8	32.1	42.0	53.7	60.4	59.8	47.9	33.0	23.5	16.3	35.1
	NORMAL DRY BULB	30	39.4	43.4	51.4	59.6	67.7	75.4	79.6	78.5	72.1	60.4	50.3	42.4	60.0
	MEAN DRY BULB	84	40.5	42.6	51.2	59.9	68.4	75.6	79.4	78.7	72.0	61.1	49.8	42.3	60.1
	MEAN WET BULB	28	35.1	37.7	44.4	52.0	61.0	68.1	71.2	70.4	64.5	54.1	45.0	37.6	53.4
	MEAN DEW POINT	28	32.0	34.5	40.4	48.3	58.6	66.3	69.6	68.9	62.6	51.9	42.1	34.6	50.8
	NORMAL NO. DAYS WITH:														
	MAXIMUM >= 90	30	0.0	0.0	0.0	0.2	1.3	9.0	17.1	14.0	4.7	0.1	0.0	0.0	46.4
	MAXIMUM <= 32	30	2.3	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	4.4
	MINIMUM <= 32	30	18.8	14.6	6.9	1.4	0.0	0.0	0.0	0.0	0.0	0.6	8.6	16.6	67.5
	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	*	0.1
H/C	NORMAL HEATING DEG. DAYS	30	797	618	432	195	48	2	0	0	16	180	442	697	3427
	NORMAL COOLING DEG. DAYS	30	0	0	5	32	124	312	450	418	229	35	2	1	1608
RH	NORMAL (PERCENT)	30	72	69	66	65	72	74	74	75	76	75	74	73	72
	HOUR 01 LST	30	79	77	76	78	87	87	87	88	89	88	83	80	83
	HOUR 07 LST	30	81	82	82	85	89	90	90	92	92	91	86	83	87
	HOUR 13 LST	30	63	58	55	49	55	57	57	58	59	55	59	62	57
	HOUR 19 LST	30	66	58	53	49	58	60	62	64	66	68	68	68	62
S	PERCENT POSSIBLE SUNSHINE	66	43	49	53	61	65	65	62	63	64	63	53	44	57
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	48	2.8	1.4	1.2	1.3	2.1	1.5	1.5	1.8	3.3	4.7	3.3	2.4	27.3
	THUNDERSTORMS	64	1.3	2.0	3.6	4.8	7.1	9.0	10.9	8.7	3.9	1.4	1.5	0.6	54.8
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
	CLEAR	1	1.0	2.0	4.0		13.0	10.0							
	PARTLY CLOUDY			2.0	1.0		5.0	6.0							
	CLOUDY	1	8.0	6.0	8.0		2.0	5.0							
PR	MEAN STATION PRESSURE(IN)	28	29.41	29.37	29.33	29.28	29.28	29.28	29.27	29.30	29.32	29.37	29.40	29.42	29.34
	MEAN SEA-LEVEL PRES. (IN)	28	30.16	30.12	30.08	30.01	30.01	30.00	30.02	30.02	30.04	30.10	30.14	30.17	30.07
WINDS	MEAN SPEED (MPH)	28	5.8	6.2	6.5	6.1	5.2	4.4	4.2	4.0	4.1	4.2	4.7	5.3	5.1
	PREVAIL.DIR(TENS OF DEGS)	43	36	36	19	19	19	19	19	19	02	36	19	19	19
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	16	35	38	44	46	37	48	44	43	36	35	33	31	48
	DIR. (TENS OF DEGS)		26	21	32	31	29	25	30	06	02	29	25	24	25
	YEAR OF OCCURRENCE		2008	2011	1997	2011	2004	2009	1997	1996	2011	2001	2000	2009	JUN 2009
	MAXIMUM 3-SECOND														
	SPEED (MPH)	16	46	51	54	69	51	63	53	53	49	49	41	47	69
	DIR. (TENS OF DEGS)		28	20	31	23	28	20	31	02	02	25	27	22	23
	YEAR OF OCCURRENCE		2008	2011	1997	2011	2004	2009	1997	2002	2011	2010	2003	2011	APR 2011
PRECIPITATION	NORMAL (IN)	30	5.40	4.85	6.19	4.23	4.28	3.99	4.73	3.59	4.31	3.26	4.88	4.81	54.52
	MAXIMUM MONTHLY (IN)	72	12.28	11.03	16.32	11.92	11.19	9.40	11.93	7.54	14.18	9.91	13.59	13.68	16.32
	YEAR OF OCCURRENCE		1947	1944	1980	1964	2003	1949	1994	1975	1977	1949	1948	1961	MAR 1980
	MINIMUM MONTHLY (IN)	72	0.90	0.62	1.17	0.44	0.54	0.63	0.20	0.01	0.34	0.22	0.93	0.86	0.01
	YEAR OF OCCURRENCE		1986	1941	1967	1942	1941	1988	1957	2011	1941	1991	1953	1965	AUG 2011
	MAXIMUM IN 24 HOURS (IN)	72	4.44	4.39	6.53	4.11	4.23	4.85	5.77	3.91	9.50	4.19	4.56	5.25	9.50
	YEAR OF OCCURRENCE		1949	1995	1973	2000	2003	1949	1979	2008	2011	1995	1948	1942	SEP 2011
	NORMAL NO. DAYS WITH:														
	PRECIPITATION >= 0.01	30	11.8	10.0	12.2	9.4	10.6	10.6	11.2	9.6	8.7	7.1	9.8	11.2	122.2
	PRECIPITATION >= 1.00	30	1.8	1.5	1.7	1.2	1.1	1.1	1.4	1.0	1.2	1.0	1.6	1.4	16.0
SNOWFALL	NORMAL (IN)	30	2.0	1.3	1.2	0.2	0.0	0.0	0.0	0.0	0.0	0.*	0.*	0.1	4.8
	MAXIMUM MONTHLY (IN)	74	10.2	10.4	20.0	2.8	T	T	0.0	0.0	T	T	2.8	9.1	20.0
	YEAR OF OCCURRENCE		1988	1960	1993	1987	2006	2011			2006	2008	1950	1963	MAR 1993
	MAXIMUM IN 24 HOURS (IN)	74	10.2	8.7	20.0	2.8	T	T	0.0	0.0	T	T	2.8	8.9	20.0
	YEAR OF OCCURRENCE'		1988	1960	1993	1987	1944	2011			2006	1993	1950	1963	MAR 1993
	MAXIMUM SNOW DEPTH (IN)	56	47	6	19	2	0	0	0	0	0	0	2	3	47
	YEAR OF OCCURRENCE		1948	1960	1993	1987							1950	1963	JAN 1948
	NORMAL NO. DAYS WITH:														
	SNOWFALL >= 1.0	30	0.5	0.3	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1

PRECIPITATION (inches) 2011 CHATTANOOGA (KCHA)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1982	8.29	5.95	4.80	4.48	1.44	2.76	4.79	6.42	1.34	1.98	7.65	8.05	57.95
1983	2.65	4.52	3.66	6.40	6.65	3.29	2.52	1.34	1.15	2.64	9.57	8.34	52.73
1984	3.25	4.40	3.75	6.28	6.57	2.52	6.32	2.48	0.51	6.38	3.44	1.84	47.74
1985	3.45	4.95	2.27	2.81	4.36	2.22	3.10	4.93	0.93	4.83	3.34	2.36	39.55
1986	0.90	3.78	1.42	1.28	3.14	1.64	2.61	2.78	5.86	6.66	7.60	4.82	42.49
1987	6.29	7.16	5.13	1.66	4.97	5.12	1.84	3.53	4.07	1.13	2.40	3.25	46.55
1988	7.10	1.87	1.83	3.30	2.20	0.63	5.85	4.07	6.76	2.10	4.64	3.54	43.89
1989	5.30	7.16	5.86	3.99	4.56	9.19	9.93	3.46	11.22	1.77	5.45	3.71	71.60
1990	7.46	9.74	9.47	2.86	6.49	3.35	4.69	2.29	3.69	4.45	3.73	10.34	68.56
1991	2.71	8.12	6.58	6.78	4.58	4.11	3.59	4.00	2.37	0.22	4.88	8.02	55.96
1992	4.33	4.63	4.89	2.08	1.99	8.87	5.33	3.07	4.71	4.48	5.88	5.60	55.86
1993	5.16	3.69	7.40	3.34	3.37	1.64	1.30	2.12	1.68	1.80	3.33	5.26	40.09
1994	6.36	7.41	11.02	5.79	3.28	7.26	11.93	5.05	2.94	5.05	3.74	3.87	73.70
1995	5.27	6.52	3.64	2.22	3.77	3.42	4.23	4.88	5.53	7.13	4.54	3.83	54.98
1996	7.99	2.63	8.90	3.87	1.98	3.52	5.55	3.63	7.19	1.37	5.47	3.45	55.55
1997	6.14	5.28	5.11	4.22	5.82	5.99	4.16	3.50	5.56	5.24	1.97	3.30	56.29
1998	6.64	5.91	7.29	6.95	1.41	5.82	4.75	2.86	1.47	0.67	3.16	6.31	53.24
1999	9.80	3.75	3.99	4.17	5.03	6.97	2.82	0.45	0.62	3.79	4.20	1.83	47.42
2000	5.08	2.43	4.52	8.54	1.49	4.63	3.37	4.72	3.59	0.51	7.15	2.09	48.12
2001	5.40	4.72	5.38	3.02	4.37	5.71	7.36	2.61	4.51	1.98	4.84	5.08	54.98
2002	5.42	1.83	6.64	1.55	5.16	2.22	2.09	3.74	6.19	3.35	5.77	6.74	50.70
2003	1.83	8.56	3.56	5.80	11.19	5.64	8.61	3.43	6.01	1.20	5.36	4.38	65.57
2004	3.60	4.88	4.36	1.93	3.92	4.16	7.47	2.74	8.28	4.62	7.61	6.60	60.17
2005	2.80	5.46	4.27	3.56	1.99	7.05	6.05	5.00	1.92	0.75	3.57	3.85	46.27
2006	5.19	2.05	1.94	5.93	3.48	2.20	4.47	4.74	4.10	5.67	3.48	3.42	46.67
2007	2.91	1.65	1.74	4.19	1.34	2.16	7.18	1.83	1.93	3.63	6.56	3.50	38.62
2008	3.18	4.44	6.54	3.22	2.28	2.87	4.40	4.42	0.89	2.69	2.65	9.75	47.33
2009	5.11	2.87	5.28	3.27	7.44	0.73	4.32	2.98	12.38	7.03	3.74	7.44	62.59
2010	5.78	3.75	3.82	2.40	5.38	2.24	2.62	3.05	1.13	2.31	8.00	1.43	41.91
2011	4.27	2.24	11.77	8.84	1.62	3.95	3.87	0.01	10.85	2.70	8.14	6.53	64.79
POR= 84 YRS	5.13	4.88	5.84	4.35	4.05	3.85	4.95	3.50	3.87	3.15	4.44	5.01	53.02

WBAN : 13882

AVERAGE TEMPERATURE (°F) 2011 CHATTANOOGA (KCHA)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1982	36.0	43.4	53.4	55.9	70.2	74.2	79.6	76.7	70.0	60.5	50.9	48.0	59.9
1983	38.8	42.8	50.5	54.3	65.9	73.5	80.4	81.9	71.2	60.8	48.5	37.0	58.8
1984	35.5	43.2	48.2	56.8	64.4	77.4	76.2	76.6	68.0	66.7	46.5	49.0	59.0
1985	32.8	40.2	52.9	60.8	67.6	74.9	78.4	76.6	69.4	64.7	58.8	36.7	59.5
1986	38.4	47.1	51.8	61.0	70.2	78.4	82.8	78.0	74.0	62.0	54.8	41.5	61.7
1987	39.3	44.7	51.9	58.0	73.1	77.1	81.2	80.5	71.4	54.9	52.0	45.5	60.8
1988	35.1	41.0	52.0	60.3	67.0	76.9	79.0	80.5	72.4	55.3	51.7	42.3	59.5
1989	45.3	43.2	54.5	59.6	65.4	74.8	78.9	78.4	71.7	60.9	50.7	35.0	59.9
1990	46.8	51.5	54.6	60.5	67.5	76.9	79.4	80.2	74.6	61.3	53.4	46.4	62.8
1991	42.6	45.8	54.1	63.7	72.9	77.1	81.5	79.6	74.0	61.4	47.7	45.2	62.1
1992	42.1	46.9	49.9	59.2	64.3	71.4	78.2	73.5	71.3	58.3	49.3	42.5	58.9
1993	45.8	43.0	48.8	58.5	68.9	78.2	85.2	82.5	74.4	61.4	50.5	43.0	61.7
1994	36.2	46.0	50.7	64.0	66.1	77.7	77.6	77.1	70.5	61.4	54.4	47.3	60.8
1995	42.1	42.1	54.6	62.1	69.2	74.9	80.7	81.6	70.3	59.7	45.0	39.9	60.2
1996	38.7	41.1	46.8	57.2	70.7	75.9	79.0	76.8	69.4	60.4	47.0	44.7	59.0
1997	41.5	47.4	57.1	56.2	63.7	72.3	79.9	76.6	72.5	60.4	46.0	41.0	59.6
1998	44.5	46.4	50.7	58.9	72.5	78.4	81.4	79.2	77.2	64.9	53.2	47.8	62.9
1999	45.1	47.9	48.7	64.5	68.6	76.8	81.3	81.7	73.4	62.2	55.5	45.1	62.6
2000	41.2	48.9	56.2	59.2	72.6	76.9	80.5	79.7	71.7	63.6	49.3	36.2	61.3
2001	37.7	47.8	48.5	63.4	69.5	74.7	79.5	78.8	71.1	59.1	56.1	47.8	61.2
2002	44.3	44.5	53.1	65.1	67.7	77.4	81.2	80.9	76.1	64.8	48.0	41.9	62.1
2003	36.4	42.8	54.1	61.7	68.7	73.6	77.6	79.3	71.3	60.7	54.9	40.5	60.1
2004	39.8	42.3	55.8	60.2	71.9	76.1	78.1	75.8	72.2	66.0	54.4	41.8	61.2
2005	45.5	46.9	50.5	59.5	65.5	76.3	80.0	80.6	75.5	62.8	52.3	39.0	61.2
2006	47.0	42.2	53.1	65.3	67.6	76.7	80.7	82.7	71.0	59.8	51.1	46.2	62.0
2007	43.6	41.8	59.4	58.4	71.3	78.9	78.4	85.7	76.3	66.3	51.4	49.0	63.4
2008	40.1	45.0	52.2	61.0	68.4	78.4	79.8	79.3	74.6	61.3	47.7	45.1	61.1
2009	40.0	45.7	53.3	60.1	69.6	79.8	78.4	79.1	73.3	59.6	52.6	41.1	61.1
2010	36.4	37.4	49.5	63.9	72.5	81.4	83.5	84.1	76.8	62.9	52.2	35.9	61.4
2011	37.5	47.8	53.8	64.3	69.5	80.0	83.0	83.3	71.0	59.6	52.8	46.6	62.4
POR= 84 YRS	40.5	42.6	51.2	59.9	68.4	75.6	79.4	78.7	72.0	61.1	49.8	42.3	60.1

HEATING DEGREE DAYS (base 65°F) 2011 CHATTANOOGA (KCHA)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1982-83	0	0	29	202	418	528	807	616	447	321	42	0	3410
1983-84	0	0	38	146	487	863	910	626	515	246	100	2	3933
1984-85	0	0	27	40	550	488	990	687	381	158	28	4	3353
1985-86	0	0	32	67	198	869	818	497	402	148	23	0	3054
1986-87	0	1	0	148	306	722	789	562	399	238	0	0	3165
1987-88	0	0	4	309	384	597	919	688	396	164	26	1	3488
1988-89	0	0	1	312	391	697	602	608	333	220	92	0	3256
1989-90	0	0	29	164	423	924	561	371	325	171	48	0	3016
1990-91	0	0	19	154	344	571	689	534	349	75	7	0	2742
1991-92	0	0	17	142	513	610	701	520	457	207	98	3	3268
1992-93	0	0	8	202	465	689	586	612	496	197	21	0	3276
1993-94	0	0	15	155	439	675	888	526	437	116	39	0	3290
1994-95	0	0	7	121	310	544	700	636	326	128	35	1	2808
1995-96	0	0	22	192	595	772	809	687	559	237	28	1	3902
1996-97	0	0	17	167	534	623	723	488	248	271	80	7	3158
1997-98	0	0	0	194	561	738	630	516	459	193	14	2	3307
1998-99	0	0	0	74	348	535	613	470	497	96	9	0	2642
1999-00	0	0	8	121	279	611	731	460	269	174	0	0	2653
2000-01	0	0	13	102	474	885	839	477	503	115	7	0	3415
2001-02	0	0	25	200	263	529	635	568	379	100	60	0	2759
2002-03	0	0	0	88	512	710	878	614	333	114	3	0	3252
2003-04	0	0	21	142	309	754	777	655	284	180	34	0	3156
2004-05	0	0	2	44	321	713	598	501	446	167	69	0	2861
2005-06	0	0	0	155	383	800	552	634	372	73	57	0	3026
2006-07	0	0	11	204	414	575	655	644	214	234	6	0	2957
2007-08	0	0	0	79	401	489	763	571	387	150	17	0	2857
2008-09	0	0	0	171	510	610	767	535	362	181	19	0	3155
2009-10	0	0	7	183	364	736	881	763	472	79	15	0	3500
2010-11	0	0	2	103	383	896	847	474	352	105	68	0	3230
2011-	0	0	3	178	360	566							

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COOLING DEGREE DAYS (base 65°F) 2011 CHATTANOOGA (KCHA)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1982	0	0	19	9	184	283	460	368	187	68	1	7	1586
1983	0	0	2	6	78	264	485	529	230	22	0	0	1616
1984	0	0	0	8	86	379	356	367	124	102	0	0	1422
1985	0	0	12	38	118	310	422	366	171	64	16	0	1517
1986	0	0	0	33	192	409	558	414	276	63	7	0	1952
1987	0	0	0	34	261	372	508	488	202	0	0	0	1865
1988	0	0	2	27	95	364	442	486	230	17	0	0	1663
1989	0	2	16	68	109	300	437	424	236	43	0	0	1635
1990	0	0	13	42	133	363	455	480	312	45	3	0	1846
1991	0	0	20	43	258	370	518	460	295	37	0	2	2003
1992	0	0	0	40	81	202	414	273	202	0	0	0	1212
1993	0	0	4	12	152	401	632	547	305	49	10	0	2112
1994	0	0	0	93	79	389	397	383	177	16	2	0	1536
1995	0	0	10	47	174	304	491	521	187	35	0	0	1769
1996	0	0	0	12	211	334	440	373	156	29	2	0	1557
1997	1	0	7	12	48	232	470	365	231	60	0	0	1426
1998	1	0	22	16	252	409	511	448	373	76	0	7	2115
1999	3	0	0	88	130	360	512	525	267	42	0	0	1927
2000	3	0	3	5	242	365	485	464	221	65	10	0	1863
2001	0	0	0	72	154	301	456	435	214	25	6	0	1663
2002	0	0	17	113	152	377	510	498	341	92	8	0	2108
2003	0	0	3	23	123	265	398	452	216	18	11	0	1509
2004	2	0	6	40	255	338	414	342	223	80	10	0	1710
2005	0	0	1	8	93	344	472	492	320	94	11	0	1835
2006	0	0	10	89	142	359	493	554	199	50	4	0	1900
2007	0	0	46	41	209	426	421	645	345	125	0	0	2258
2008	0	0	0	39	129	406	467	452	295	67	0	0	1855
2009	0	0	8	45	170	451	422	444	261	21	0	0	1822
2010	0	0	0	52	254	499	584	598	363	43	1	0	2394
2011	0	0	11	91	213	457	564	573	188	16	1	0	2114

SNOWFALL (inches) 2011 CHATTANOOGA (KCHA)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1982-83	0.0	0.0	0.0	0.0	0.0	T	1.0	0.9	0.6	0.0	0.0	0.0	2.5
1983-84	0.0	0.0	0.0	0.0	0.0	T	0.6	1.8	T	0.0	0.0	0.0	2.4
1984-85	0.0	0.0	0.0	0.0	0.0	T	3.8	1.1	0.0	0.0	0.0	0.0	4.9
1985-86	0.0	0.0	0.0	0.0	0.0	0.3	2.0	T	0.0	0.0	0.0	0.0	2.3
1986-87	0.0	0.0	0.0	0.0	T	T	6.5	0.0	0.9	2.8	0.0	0.0	10.2
1987-88	0.0	0.0	0.0	0.0	0.0	T	10.2	T	T	0.0	0.0	0.0	10.2
1988-89	0.0	0.0	0.0	0.0	0.0	0.8	1.5	0.1	0.0	0.0	0.0	0.0	2.4
1989-90	0.0	0.0	0.0	0.0	0.3	0.3	T	0.0	0.0	0.0	0.0	0.0	0.6
1990-91	0.0	0.0	0.0	0.0	0.0	T	T	0.2	2.0	0.0	0.0	0.0	2.2
1991-92	0.0	0.0	0.0	0.0	T	0.0	T	0.0	T	0.0	0.0	0.0	T
1992-93	0.0	0.0	0.0	0.0	0.0	T	T	2.7	20.0	T	0.0	0.0	22.7
1993-94	0.0	0.0	0.0	T	0.0	T	T	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	0.1	1.0	0.0	0.0	0.0	T	1.1
1995-96	0.0	0.0	0.0	0.0			4.5						
1996-97													
1997-98						1.9					0.0		
1998-99													
1999-00													
2000-01													
2001-02													
2002-03													
2003-04							T	0.4	0.0	T	0.0	0.0	
2004-05	0.0	0.0	0.0	0.0	0.0	T	T	T	T	0.0	T	0.0	T
2005-06	0.0	0.0	0.0	0.0	0.0	0.0	T	0.2	0.0	T	T	0.0	0.2
2006-07	0.0	0.0	T	0.0	T	T	0.0	2.1	0.0	0.0	0.0	0.0	2.1
2007-08	0.0	0.0	0.0	0.0	0.0	T	1.6	T	0.6	0.0	0.0	T	2.2
2008-09	0.0	0.0	0.0	T	T	T	T	T	T	T	0.0	0.0	T
2009-10	0.0	0.0	0.0	0.0	0.0	0.7	5.3	1.1	2.9	0.0	0.0	0.0	10.0
2010-11	0.0	0.0	0.0	0.0	0.0	2.9	8.5	1.2	0.0	T	0.0	T	12.6
2011-	0.0	0.0	0.0	0.0	T	0.0							
POR= 83 YRS	0.0	0.0	T	T	0.1	0.7	1.7	1.0	0.6	T	T	T	4.1

WBAN : 13882

REFERENCE NOTES :

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).

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).

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.

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 MEDADATA SYSTEM", URL IS: https://mi3.ncdc.noaa.gov/mi3qry/login.cfm
SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.

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.

2011
CHATTANOOGA
TENNESSEE (KCHA)

Chattanooga is located in the southern portion of the Great Valley of Tennessee, an area of the Tennessee River between the Cumberland Mountains to the west and the Appalachian Mountains to the east. Local topography is complex with a number of minor valleys and ridges giving a local relief of as much as 500 feet. The Tennessee River approaches Chattanooga from the northeast and forms a loop southwest to west to northwest of the city at an elevation of about 630 feet above mean sea level. Most of the city lies on the south side of the river. On the north and southwest sides, the terrain rises abruptly to about l,200 feet above the river. This complex topography results in marked variations in air drainage, wind, and minimum temperatures within short distances. In winter the Cumberland Mountains have a moderating influence on the local climate by retarding the flow of cold air from the north and west.

Chattanooga enjoys a moderate climate, characterized by cool winters and quite warm summers. Because of the sheltering effect of the mountains, winter temperatures average about 3.0 degrees warmer than at stations on the southern Cumberland Plateau section of the state. Winter weather is changeable and alternates between cool spells with an occasional cold period, but extreme cold is rare. Temperatures fall as low as the freezing point on a little over one-half of the winter days, but temperatures below zero rarely occur. Snowfall from year to year is highly variable with some winters having little or none. Heavy snowfalls have occurred, but any accumulation of snow seldom remains on the ground more than a few days. Ice storms of freezing rain or glaze are not uncommon, occasionally midwinter icing becomes severe enough to do some damage in the area.

Summer temperatures are either in the high 80s or low 90s and temperatures over 100 degrees are unusual. Most afternoon temperatures are modified by thunderstorms. Temperatures frequently plunge l0 to l5 degrees in a matter of minutes during one of these showers.

Precipitation in the Chattanooga area is well distributed throughout the year with the greater amounts in wintertime when cyclonic storms from the Gulf of Mexico reach the area with greater intensity and frequency. A second peak rainfall period generally occurs in July, principally from thunderstorms that move into the area from the south and southwest. During any year there are usually a few of these storms that can be classified as severe, with hail and damaging winds.

The growing season averages 228 days. The average occurrence of last freezing temperature in spring is early April and the average first freezing temperature in the fall is early November.

Spring and autumn are very enjoyable seasons in Chattanooga, with many days being nearly ideal in temperature. To many, the fall months of September, October, and November are the most pleasant. Rainfall is at a minimum, sunshine at a relative maximum and the temperature range is comfortable.

Station History

CHATTANOOGA, TN

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
CHATTANOOGA LOVELL FIELD AP	1975-08-26	1995-04-01	35° 1'	-85° 13'	665		COOP,WXSVC
CHATTANOOGA LOVELL FIELD AP	1995-10-01	2006-09-20	35° 1'	-85° 12'	689	.5 MI N	ASOS,COOP,WXSVC
CHATTANOOGA LOVELL FIELD AP	1948-08-01	1969-01-01	35° 1'	-85° 12'	672		AIRWAYS,COOP
CHATTANOOGA LOVELL FIELD AP	2006-09-20	2008-04-08	35° 1'	-85° 12'	671		AIRSAMPLE,ASOS,COOP,WXSVC
CHATTANOOGA LOVELL FIELD AP	1969-01-01	1975-08-26	35° 1'	-85° 12'	672		COOP,WXSVC
CHATTANOOGA LOVELL FIELD AP	1995-04-01	1995-09-01	35° 1'	-85° 12'	665		COOP,WXSVC
CHATTANOOGA LOVELL FIELD AP	1933-01-01	1948-08-01	35° 1'	-85° 12'	672		AIRWAYS
CHATTANOOGA LOVELL FIELD AP	1995-09-01	1995-10-01	35° 1'	-85° 12'	689		ASOS,COOP,WXSVC
CHATTANOOGA LOVELL FIELD AP	2008-04-08	Present	35° 1'	-85° 12'	671		AIRSAMPLE,AIRWAYS,ASOS,COOP,WXSVC

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
TEMP	2008-04-08	Present	DAILY	2400	HYGR		
PRECIP	2008-04-08	Present	HOURLY	2400	TB	RCRD	
TEMP	1987-04-01	1995-07-01	DAILY	2400	HYGR		
PRECIP	2006-09-20	2008-04-08	DAILY	2400	PCPNX		ROOF
PRECIP	1995-07-01	1995-10-01	DAILY	2400	UNIV	RCRD	
PRECIP	1995-07-01	1995-10-01	HOURLY	2400	UNIV	RCRD	
PRECIP	1995-10-01	2001-03-29	DAILY	2400	TB	RCRD	
PRECIP	2001-03-29	2006-09-20	DAILY	2400			
PRECIP	1930-08-07	1975-09-01	DAILY	2400	UNIV	RCRD	
TEMP	2006-09-20	2008-04-08	DAILY	2400	HYGR		
PRECIP	1975-09-01	1987-04-01	DAILY	2400	UNIV	RCRD	
PRECIP	1995-10-01	2001-03-29	HOURLY	2400	TB	RCRD	
TEMP	1995-10-01	2001-03-29	DAILY	2400	HYGR		
TEMP	2001-03-29	2006-09-20	DAILY	2400	HYGR		
PRECIP	2006-09-20	2008-04-08	HOURLY	2400	TB	RCRD	
PRECIP	2001-03-29	2006-09-20	HOURLY	2400	TB	RCRD	
TEMP	1930-08-07	1975-09-01	DAILY	2400			
PRECIP	1975-09-01	1987-04-01	HOURLY	2400			
TEMP	1975-09-01	1987-04-01	DAILY	2400			
PRECIP	1987-04-01	1995-07-01	DAILY	2400	UNIV	RCRD	
PRECIP	1987-04-01	1995-07-01	HOURLY	2400			
TEMP	1995-07-01	1995-10-01	DAILY	2400	HYGR		
PRECIP	2008-04-08	Present	DAILY	2400	PCPN1		

* For explanation of codes and abbrevitions see Station Metadata link below.

Other Station Information can be found at:
ASOS Implementation by NWS: http://www.nws.noaa.gov/ops2/Surface/asosimplementation.htm
Station Metadata website: http://www.ncdc.noaa.gov/homr

INQUIRES/COMMENTS CALL: (828) 271-4800, option 2
Fax Number : (828) 271-4876
TDD : (828) 271-4010
Email : ncdc.info@noaa.gov

NOAA/National Climatic Data Center
Attn: User Engagement & Services Branch
151 Patton Avenue
Asheville, NC 28801-5001