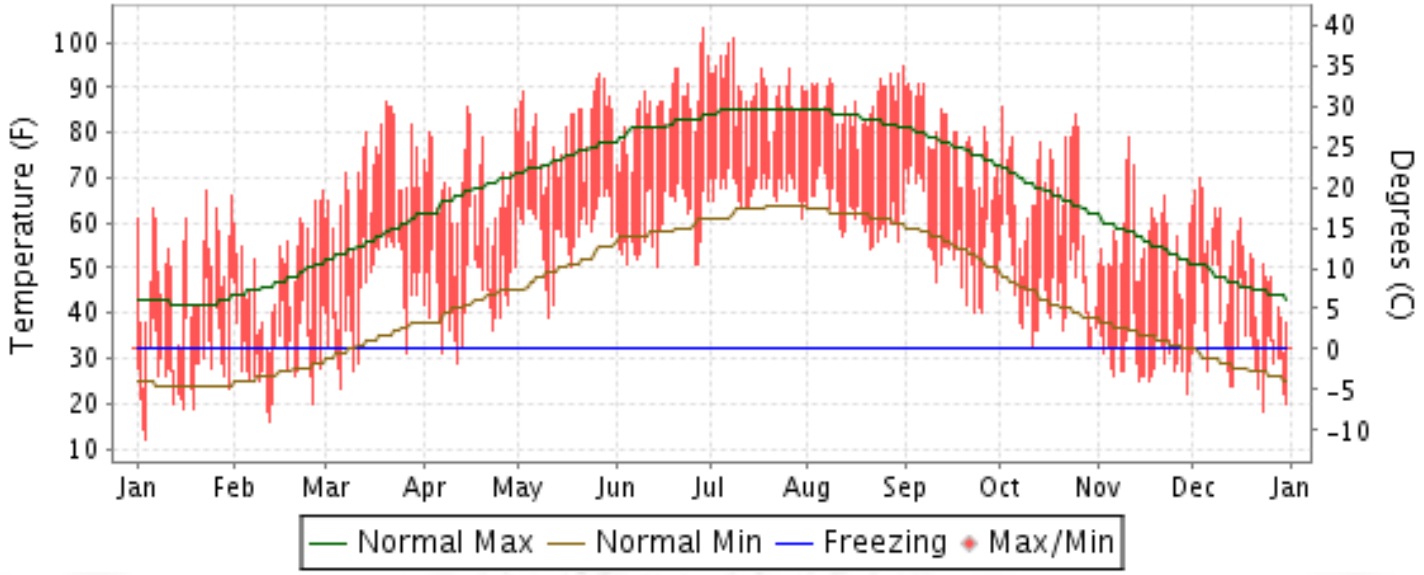
2012
LOCAL CLIMATOLOGICAL DATA
ANNUAL SUMMARY WITH COMPARATIVE DATA

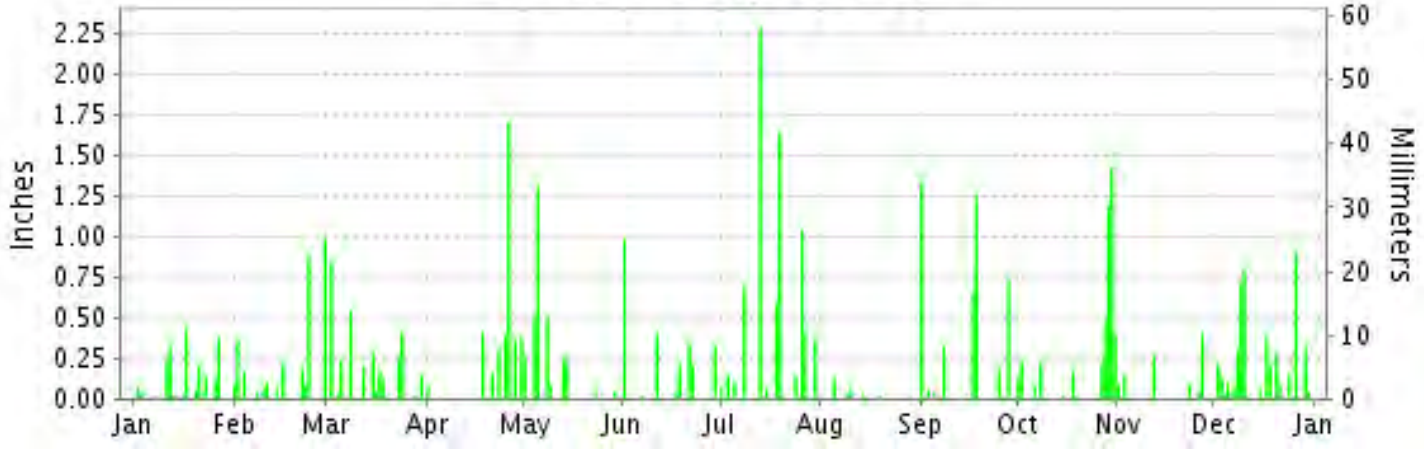
ISSN 0198-5604

CHARLESTON,
WEST VIRGINIA (KCRW)

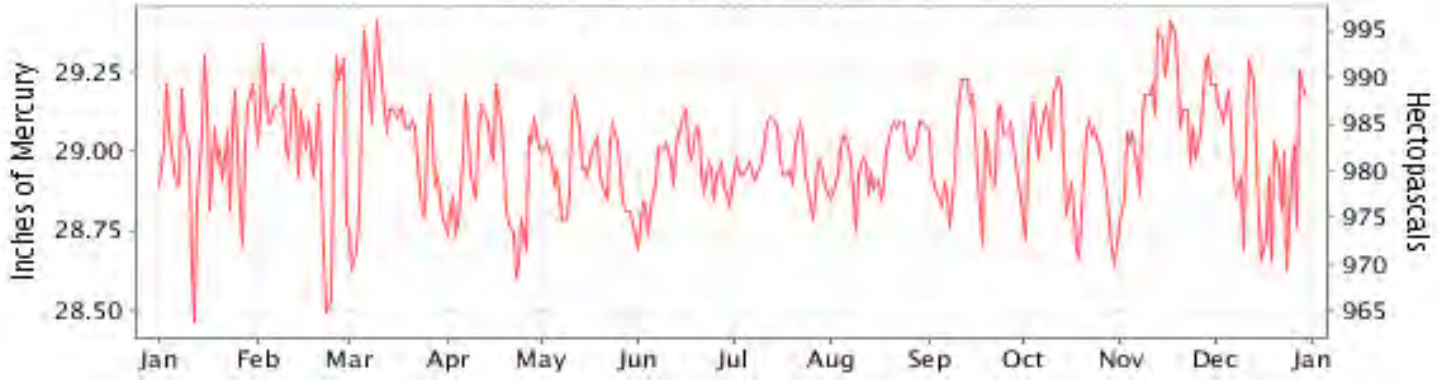
Daily Max/Min Temperature



Daily Precipitation



Daily Station Pressure



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Thomas R. Karl

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METEOROLOGICAL DATA FOR 2012
CHARLESTON (KCRW)

LATITUDE: 38° 22'N **LONGITUDE:** 81° 35'W **ELEVATION (FT):** GRND: 910 BARO: 1026 **TIME ZONE:** EASTERN (UTC -5) **WBAN:** 13866

	ELEMENT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	MEAN DAILY MAXIMUM	49.0	49.3	68.8	67.6	80.6	85.6	89.4	86.9	78.7	66.0	55.9	51.2	69.1
	HIGHEST DAILY MAXIMUM	67	67	87	86	93	103	101	95	91	86	79	70	103
	DATE OF OCCURRENCE	23	29	20	15	27	29	08	31	07+	02	11	03	JUN 29
	MEAN DAILY MINIMUM	28.5	30.3	44.3	43.4	58.3	59.4	67.6	62.0	55.4	44.4	30.1	34.1	46.5
	LOWEST DAILY MINIMUM	12	16	23	29	39	50	61	54	40	32	22	18	12
	DATE OF OCCURRENCE	04	12	06	12	11	14	30	21	25+	30+	29	23	JAN 04
	AVERAGE DRY BULB	38.8	39.8	56.6	55.5	69.5	72.5	78.5	74.5	67.1	55.2	43.0	42.7	57.8
	MEAN WET BULB	34.5	36.1	49.4	46.9				65.8	60.0	50.3	36.7		
	MEAN DEW POINT	27.5	29.6	42.4	37.8				61.4	55.5	45.5	29.1		
	NUMBER OF DAYS WITH:													
	MAXIMUM >= 90°	0	0	0	0	3	7	17	13	4	0	0	0	44
	MAXIMUM <= 32°	3	2	0	0	0	0	0	0	0	0	0	1	6
	MINIMUM <= 32°	23	18	7	3	0	0	0	0	0	2	20	17	90
	MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0
H/C	HEATING DEGREE DAYS	805	724	284	298	29	5	0	0	65	321	653	684	3868
	COOLING DEGREE DAYS	0	0	32	18	175	239	426	303	133	22	0	0	1348
RH	MEAN (PERCENT)	68	69	64	58	73	65	74	70	72	73	64	77	69
	HOUR 01 LST	76	76	73	69	91	82	91	90	88	86	78	83	82
	HOUR 07 LST	79	83	78	72	83	73	81	85	87	85	82	82	81
	HOUR 13 LST	57	54	48	42	53	44	54	46	49	56	42	66	51
	HOUR 19 LST	63	64	58	51	74	63	74	67	77	72	57	74	66
W/O	NUMBER OF DAYS WITH:													
	HEAVY FOG(VISBY <= 1/4 MI)	0	0	0	1	0	0	0	0	0	0	0	0	1
	THUNDERSTORMS	2	3	9	4	7	6	17	2	3	1	0	2	56
PR	MEAN STATION PRESS. (IN.)	28.99	29.03	29.03	28.93	28.95	28.94	28.97	28.96	29.00	28.96	29.14	28.97	28.99
	MEAN SEA-LEVEL PRESS. (IN.)	30.05	30.11	30.09	29.98	30.00	29.96	29.98	29.99	30.04	30.00	30.21	30.03	30.04
WINDS	RESULTANT SPEED (MPH)	4.1	2.6	2.0	2.5	1.0	0.7	1.4	0.9	0.8	2.3	1.0	2.4	1.7
	RES. DIR. (TENS OF DEGS.)	24	26	25	30	23	26	23	22	24	25	26	24	26
	MEAN SPEED (MPH)	6.8	4.9	4.8	5.4	2.6	3.4	3.4	2.5	2.7	4.3	2.6	4.8	4.0
	PREVAIL.DIR.(TENS OF DEGS.)	24	24	27	23	25	24	23	22	22	24	24	27	24
	MAXIMUM 2-MINUTE WIND													
	SPEED (MPH)	35	33	30	38	24	52	40	23	28	25	26	31	52
	DIR. (TENS OF DEGS.)	27	29	24	25	34	33	34	25	20	20	18	24	33
	DATE OF OCCURRENCE	01	24	28	30	02	29	05	09	17	18	12	21	JUN 29
	MAXIMUM 3-SECOND WIND:													
	SPEED (MPH)	51	52	41	60	35	79	59	32	35	35	35	45	79
	DIR. (TENS OF DEGS.)	28	27	25	23	32	34	36	24	20	26	26	27	34
	DATE OF OCCURRENCE	01	24	28	30	01	29	05	01	17	30	12	21	JUN 29
PRECIPITATION	WATER EQUIVALENT:													
	TOTAL (IN.)	2.11	3.25	3.37	3.83	3.29	2.59	7.59	0.31	4.63	4.61	1.05	4.86	41.49
	GREATEST 24-HOUR (IN.)	0.47	0.98	0.84	2.11	1.49	1.00	2.30	0.13	1.91	1.57	0.45	0.93	2.30
	DATE OF OCCURRENCE	16-17	29	02	25-26	04-05	01	13-14	05	17-18	29-30	26-27	26-27	JUL 13-14
	NUMBER OF DAYS WITH:													
	PRECIPITATION 0.01	15	13	14	9	10	8	15	7	11	12	6	20	140
	PRECIPITATION 0.10	7	7	10	7	6	6	10	1	6	9	3	12	84
	PRECIPITATION 1.00	0	0	0	1	1	1	3	0	2	2	0	0	10
SNOWFALL	SNOW,ICE PELLETS,HAIL	5.4	2.9	3.4	0.0	0.0	0.0	T	0.0	0.0	10.1	T	2.5	24.3
	TOTAL (IN.)	2.2	1.7	3.2	0.0	0.0	0.0	T	0.0	0.0	9.4	T	1.2	9.4
	GREATEST 24-HOUR (IN.)	03	11	05				08			30	24	21	OCT 30
	DATE OF OCCURRENCE	2	2	3	0	0	0	0	0	0	6	0	1	6
	MAXIMUM SNOW DEPTH (IN.)	04+	12+	05							30		30+	OCT 30
	DATE OF OCCURRENCE													
	NUMBER OF DAYS WITH:													
	SNOWFALL >= 1.0	3	1	1	0	0	0	0	0	0	1	0	1	7

NORMALS, MEANS, AND EXTREMES
CHARLESTON (KCRW)

LATITUDE: 38° 22'N **LONGITUDE:** 81° 35'W **ELEVATION (FT):** GRND: 910 BARO: 1026 **TIME ZONE:** EASTERN (UTC -5) **WBAN:** 13866

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	42.5	46.6	56.2	67.7	74.8	82.2	85.2	84.2	77.8	67.7	57.0	45.6	65.6
	MEAN DAILY MAXIMUM	64	43.0	46.6	56.3	67.8	75.8	82.7	85.7	84.6	78.5	68.0	56.6	46.3	66.0
	HIGHEST DAILY MAXIMUM	65	79	79	89	94	94	103	104	104	102	93	85	80	104
	YEAR OF OCCURRENCE		1950	2000	1990	1990	2011	2012	1988	2007	1953	2007	1993	1982	AUG 2007
	MEAN OF EXTREME MAXS.	64	67.0	69.1	79.3	86.3	89.0	92.3	94.0	93.0	90.5	83.4	76.9	68.5	82.4
	NORMAL DAILY MINIMUM	30	26.3	28.7	35.4	44.5	52.7	61.6	65.7	64.5	56.9	45.4	36.9	29.2	45.7
	MEAN DAILY MINIMUM	64	25.2	27.3	34.7	43.6	52.1	60.1	64.6	63.4	56.3	44.6	35.7	28.5	44.7
	LOWEST DAILY MINIMUM	65	-16	-12	0	19	26	33	46	41	34	17	6	-12	-16
	YEAR OF OCCURRENCE		1994	1996	1980	1982	1966	1972	1963	1965	1983	1962	1950	1989	JAN 1994
	MEAN OF EXTREME MINS.	64	3.8	7.8	17.3	26.8	35.7	46.5	53.4	52.1	41.4	28.9	19.1	9.6	28.5
	NORMAL DRY BULB	30	34.4	37.7	45.8	56.1	63.7	71.9	75.4	74.3	67.3	56.5	47.0	37.4	55.6
	MEAN DRY BULB	64	34.1	37.0	45.5	55.7	64.0	71.5	75.1	74.0	67.4	56.3	46.2	37.4	55.4
	MEAN WET BULB	27	30.4	32.5	38.5	46.6	56.6	64.9	68.7	67.5	60.8	50.1	40.6	33.6	49.2
	MEAN DEW POINT	27	27.0	28.3	34.8	42.5	53.9	62.6	66.4	65.6	58.7	47.5	37.0	29.2	46.1
	NORMAL NO. DAYS WITH:														
	MAXIMUM >= 90	30	0.0	0.0	0.0	0.3	0.3	2.6	6.0	5.3	1.4	0.1	0.0	0.0	16.0
	MAXIMUM <= 32	30	6.5	3.7	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.4	4.0	15.5
	MINIMUM <= 32	30	21.5	18.2	12.4	3.1	0.1	0.0	0.0	0.0	0.0	2.1	10.9	19.5	87.8
	MINIMUM <= 0	30	0.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.9
H/C	NORMAL HEATING DEG. DAYS	30	948	766	600	294	117	13	0	2	56	282	544	856	4478
	NORMAL COOLING DEG. DAYS	30	0	0	5	27	78	220	324	292	127	21	2	1	1097
RH	NORMAL (PERCENT)	30	72	69	63	60	70	74	77	78	78	74	70	73	72
	HOUR 01 LST	30	76	74	69	68	82	87	90	92	91	86	77	76	81
	HOUR 07 LST	30	79	78	77	77	85	88	91	93	93	89	82	79	84
	HOUR 13 LST	30	65	60	53	47	53	56	59	60	59	55	57	63	57
	HOUR 19 LST	30	67	61	53	48	57	63	67	71	74	68	63	67	63
S	PERCENT POSSIBLE SUNSHINE														
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	49	3.0	2.2	2.1	2.4	6.0	8.3	10.7	14.4	13.9	8.5	3.0	2.2	76.7
	THUNDERSTORMS	64	0.5	0.9	2.5	4.0	6.9	8.3	9.6	7.1	3.1	1.1	0.7	0.3	45.0
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
	CLEAR	1	1.0				7.0	12.0	1.0	7.0	4.0	6.0		3.0	
	PARTLY CLOUDY														
	CLOUDY	1	8.0	10.0	8.0		12.0	5.0	2.0	1.0	7.0	4.0		14.0	
PR	MEAN STATION PRESSURE(IN)	29	29.04	29.03	28.99	28.93	28.96	28.96	28.96	29.00	29.03	29.06	29.06	29.06	29.01
	MEAN SEA-LEVEL PRES. (IN)	29	30.11	30.09	30.05	29.98	30.00	29.99	30.01	30.03	30.07	30.11	30.12	30.13	30.06
WINDS	MEAN SPEED (MPH)	29	5.7	5.6	5.7	5.7	4.3	3.9	3.6	3.1	3.3	3.6	4.5	5.2	4.5
	PREVAIL.DIR(TENS OF DEGS)	33	24	24	24	23	23	23	23	23	23	24	24	24	24
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	18	36	39	53	38	36	52	48	38	30	38	38	46	53
	DIR. (TENS OF DEGS)		27	30	30	25	28	33	26	32	25	26	26	25	30
	YEAR OF OCCURRENCE		2008	2011	2008	2012	2001	2012	2007	2006	2008	2003	2006	2009	MAR 2008
	MAXIMUM 3-SECOND														
	SPEED (MPH)	18	52	63	84	60	54	79	76	62	44	51	46	74	84
	DIR. (TENS OF DEGS)		27	29	29	23	28	34	25	27	24	26	27	25	29
	YEAR OF OCCURRENCE		2008	2011	2008	2012	2001	2012	2007	2010	2008	2003	2003	2009	MAR 2008
PRECIPITATION	NORMAL (IN)	30	3.00	3.19	3.91	3.24	4.80	4.29	4.94	3.74	3.25	2.67	3.73	3.27	44.03
	MAXIMUM MONTHLY (IN)	65	9.11	7.46	8.35	6.46	8.76	10.56	13.54	10.45	7.69	6.49	9.12	8.02	13.54
	YEAR OF OCCURRENCE		1950	2003	1997	1965	2001	1998	1961	1958	2004	1983	2003	1978	JUL 1961
	MINIMUM MONTHLY (IN)	65	1.09	0.64	1.30	0.50	0.84	0.70	1.98	0.31	0.65	0.09	0.64	0.45	0.09
	YEAR OF OCCURRENCE		1981	1968	1987	1976	1977	1966	1993	2012	1959	1963	1965	1965	OCT 1963
	MAXIMUM IN 24 HOURS (IN)	65	2.45	2.71	2.86	2.72	3.31	2.73	5.60	4.17	4.17	2.48	3.66	2.47	5.60
	YEAR OF OCCURRENCE		1994	2003	1967	1948	1982	2003	1961	1958	2004	1961	2003	1978	JUL 1961
	NORMAL NO. DAYS WITH:														
	PRECIPITATION >= 0.01	30	15.0	13.4	14.4	13.6	14.1	12.7	12.1	10.3	9.3	9.7	11.7	14.4	150.7
	PRECIPITATION >= 1.00	30	0.4	0.4	0.7	0.3	0.9	0.9	1.4	1.0	0.8	0.3	0.8	0.3	8.2
SNOWFALL	NORMAL (IN)	30	11.3	9.8	5.8	1.4	0.0	0.0	0.0	0.0	0.0	0.1	1.3	6.7	36.4
	MAXIMUM MONTHLY (IN)	57	39.5	25.6	20.4	20.7	0.6	T	T	T	T	10.1	25.8	21.9	39.5
	YEAR OF OCCURRENCE		1978	2010	1993	1987	1989	1994	2012	2008	2006	2012	1950	1995	JAN 1978
	MAXIMUM IN 24 HOURS (IN)	57	15.8	11.2	17.1	11.3	0.6	T	T	T	T	9.4	15.1	11.2	17.1
	YEAR OF OCCURRENCE'		1978	1983	1993	1987	1989	1994	2012	1989	1994	2012	1950	1967	MAR 1993
	MAXIMUM SNOW DEPTH (IN)	52	23	13	9	17	T	0	0	0	0	6	19	11	23
	YEAR OF OCCURRENCE		1978	1985	1980	1987	1989					2012	1950	2009	JAN 1978
	NORMAL NO. DAYS WITH:														
	SNOWFALL >= 1.0	30	3.0	3.0	1.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.5	10.9

PRECIPITATION (inches) 2012 CHARLESTON (KCRW)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1983	1.24	2.72	3.15	3.96	5.98	2.77	4.19	2.54	1.33	6.49	4.80	3.19	42.36
1984	1.67	2.56	2.72	4.00	3.71	2.56	4.37	4.57	2.95	3.28	4.73	3.78	40.90
1985	3.07	2.32	4.23	1.84	5.88	3.07	3.22	2.02	0.71	3.65	8.45	2.71	41.17
1986	2.12	4.35	1.87	1.39	4.86	2.36	7.61	4.71	3.51	2.20	6.88	3.89	45.75
1987	3.23	3.34	1.30	4.05	2.49	3.38	4.23	3.56	3.89	1.10	2.71	4.13	37.41
1988	1.62	2.50	2.71	2.17	2.59	0.94	3.00	2.86	3.46	1.87	5.02	2.66	31.40
1989	2.92	6.05	5.81	4.13	6.79	7.54	3.04	5.62	7.28	4.09	2.87	1.83	57.97
1990	2.86	3.74	1.94	2.89	4.87	3.01	5.35	2.54	4.26	3.51	2.07	7.01	44.05
1991	2.68	2.98	6.07	3.49	1.47	2.49	2.84	2.95	5.51	1.10	5.00	5.89	42.47
1992	1.94	2.72	4.79	2.93	4.66	3.21	6.41	4.41	1.38	0.94	3.15	3.50	40.04
1993	1.87	2.98	6.68	1.78	1.98	5.01	1.98	2.71	5.99	3.50	3.95	3.23	41.66
1994	6.42	5.56	7.73	3.78	3.98	4.43	3.71	6.20	1.95	1.13	1.95	2.52	49.36
1995	6.02	2.98	2.73	2.59	6.15	4.93	2.91	5.81	2.70	2.61	3.31	2.79	45.53
1996	5.18	2.82	4.32	3.77	7.40	3.59	8.50	2.82	7.37	2.49	4.36	2.04	54.66
1997	1.76	1.76	8.35	2.77	3.60	5.24	5.83	4.14	1.94	0.84	2.96	1.57	40.76
1998	3.43	4.23	3.41	4.77	5.27	10.56	3.65	3.70	2.50	1.67	1.89	3.18	48.26
1999	4.81	2.67	3.70	2.20	1.90	1.30	5.37	2.97	1.81	3.43	4.53	2.55	37.24
2000	1.41	4.25	2.26	4.67	4.75	3.38	6.06	4.35	2.87	0.87	1.27	2.10	38.24
2001	2.43	1.90	3.28	1.30	8.76	4.19	10.06	2.74	1.85	1.36	1.43	2.47	41.77
2002	3.15	0.89	5.92	4.49	4.86	3.61	3.67	1.72	3.24	6.11	4.12	2.94	44.72
2003	1.79	7.46	1.78	3.40	4.99	9.93	5.89	6.53	4.77	2.46	9.12	2.89	61.01
2004	3.74	2.38	4.45	4.96	8.09	5.70	3.73	3.92	7.69	3.48	4.29	2.91	55.34
2005	3.04	3.12	3.51	4.43	3.01	3.35	4.91	5.62	1.07	3.34	3.56	2.65	41.61
2006	3.85	1.20	1.90	3.85	1.68	3.72	8.44	5.78	4.56	4.37	2.07	1.99	43.41
2007	2.66	1.50	4.49	3.81	2.12	1.10	5.18	2.82	1.34	3.64	3.13	5.64	37.43
2008	2.43	4.62	4.44	3.21	6.12	5.46	5.16	2.97	1.16	1.92	2.71	5.08	45.28
2009	5.20	1.13	2.90	2.97	7.92	4.65	5.32	3.25	4.42	2.65	0.74	4.86	46.01
2010	2.59	2.97	3.86	2.20	8.01	3.55	7.74	3.32	1.08	2.17	4.81	2.43	44.73
2011	2.95	3.65	4.32	6.00	5.54	3.63	2.83	3.25	5.94	4.37	4.88	3.43	50.79
2012	2.11	3.25	3.37	3.83	3.29	2.59	7.59	0.31	4.63	4.61	1.05	4.86	41.49
POR= 64 YRS	3.34	3.16	3.93	3.40	4.23	3.83	5.19	3.88	3.24	2.72	3.33	3.31	43.56

WBAN : 13866

AVERAGE TEMPERATURE (°F) 2012 CHARLESTON (KCRW)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1983	34.0	37.7	47.0	52.1	61.1	71.6	77.0	78.0	68.4	58.1	47.4	32.0	55.4
1984	30.6	41.5	41.1	54.2	61.4	75.3	73.2	74.9	65.4	64.4	44.6	46.9	56.1
1985	27.2	34.0	49.4	60.8	66.3	71.0	75.8	74.0	69.6	62.3	55.5	33.8	56.6
1986	34.1	40.5	47.1	57.9	65.3	72.2	77.2	71.9	69.5	57.9	46.4	36.4	56.4
1987	33.0	37.2	47.0	52.7	68.4	73.5	77.1	77.0	67.1	50.3	49.0	39.8	56.0
1988	31.1	35.2	46.1	54.1	63.2	71.0	78.6	77.4	66.6	49.3	47.0	37.4	54.8
1989	41.1	34.9	47.8	52.8	59.4	71.7	75.7	73.2	67.0	56.7	46.4	26.0	54.4
1990	42.3	45.2	51.7	55.1	62.9	72.3	75.8	74.1	68.7	58.2	50.7	43.6	58.4
1991	36.5	40.3	47.4	60.3	71.7	73.9	77.9	75.2	68.4	59.1	45.8	41.3	58.2
1992	35.6	41.8	45.4	55.7	61.2	68.8	76.0	70.9	67.4	54.1	47.4	37.9	55.2
1993	40.2	34.0	41.8	55.0	64.9	71.4	79.0	76.4	66.6	55.1	47.1	36.6	55.7
1994	28.1	38.7	45.3	60.5	59.7	74.2	76.1	72.4	65.4	54.8	50.6	41.2	55.6
1995	34.7	34.0	46.9	55.2	61.9	71.4	76.4	77.6	64.6	56.9	40.8	32.5	54.4
1996	32.1	35.5	39.6	54.0	64.7	71.9	71.6	72.8	65.9	55.8	40.2	41.4	53.8
1997	35.6	43.8	47.1	50.8	58.7	70.1	74.5	70.8	65.0	55.1	42.2	36.5	54.2
1998	41.0	42.0	45.9	55.4	65.8	70.3	73.7	73.9	70.2	56.1	46.7	40.4	56.8
1999	38.3	39.4	40.1	58.5	64.0	72.9	79.1	72.3	65.8	54.8	48.9	38.2	56.0
2000	32.1	43.2	49.2	54.1	66.0	72.3	71.3	71.8	65.7	57.7	43.3	28.6	54.6
2001	33.2	40.6	40.3	59.1	64.0	70.6	72.4	74.8	64.6	55.1	50.4	42.3	55.6
2002	38.4	38.1	45.7	57.8	60.5	72.8	76.3	75.9	71.2	57.0	43.9	37.6	56.3
2003	28.2	33.9	48.6	57.4	62.2	67.6	73.2	74.4	65.1	54.8	49.7	36.3	54.3
2004	30.9	36.8	48.1	55.8	69.0	70.8	74.5	71.7	68.4	58.9	50.0	37.8	56.1
2005	38.4	39.7	41.7	56.3	59.8	73.9	77.1	77.7	70.4	57.6	48.3	33.4	56.2
2006	43.2	36.1	45.1	59.8	61.7	70.1	75.9	76.9	64.6	54.9	48.0	42.4	56.6
2007	38.8	28.2	51.5	54.1	67.1	73.8	74.0	79.4	70.9	62.6	46.1	41.1	57.3
2008	34.7	38.0	46.3	57.3	61.3	73.2	74.2	72.8	70.9	55.7	43.3	38.2	55.5
2009	31.2	38.1	47.9	56.9	64.3	71.6	71.3	73.8	68.1	54.5	49.4	35.7	55.2
2010	30.1	30.6	46.6	59.9	67.5	75.8	77.5	77.1	69.2	57.8	47.2	29.0	55.7
2011	30.9	41.2	46.4	60.3	65.2	73.5	79.2	75.4	67.9	55.0	50.9	42.5	57.4
2012	38.8	39.8	56.6	55.5	69.5	72.5	78.5	74.5	67.1	55.2	43.0	42.7	57.8
POR= 64 YRS	34.1	37.0	45.5	55.7	64.0	71.5	75.1	74.0	67.4	56.3	46.2	37.4	55.3

HEATING DEGREE DAYS (base 65°F) 2012 CHARLESTON (KCRW)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1983-84	4	0	66	227	521	1019	1059	674	734	346	171	5	4826
1984-85	1	0	98	74	613	563	1164	860	488	192	54	18	4125
1985-86	0	0	51	127	294	960	954	679	554	249	83	7	3958
1986-87	0	23	23	255	550	880	989	770	549	374	63	4	4480
1987-88	0	0	37	447	473	774	1043	859	577	326	112	38	4686
1988-89	2	0	37	484	534	849	735	837	536	367	221	2	4604
1989-90	0	7	72	270	553	1203	697	549	446	323	111	8	4239
1990-91	0	0	59	230	428	655	876	685	558	192	21	1	3705
1991-92	0	0	80	229	576	729	904	670	602	319	170	24	4303
1992-93	0	1	67	335	522	834	760	862	713	306	73	24	4497
1993-94	0	0	64	307	540	873	1136	732	607	191	197	3	4650
1994-95	0	4	34	308	424	729	932	861	555	306	138	7	4298
1995-96	0	0	72	262	721	999	1008	848	779	357	105	4	5155
1996-97	2	0	59	278	743	727	908	592	547	429	213	23	4521
1997-98	0	6	53	324	676	877	733	639	626	283	60	38	4315
1998-99	0	0	29	290	541	758	821	711	763	213	74	13	4213
1999-00	0	1	56	312	475	821	1014	627	490	320	51	14	4181
2000-01	0	0	94	250	644	1122	978	681	759	249	82	13	4872
2001-02	0	0	95	309	433	699	822	748	591	256	198	0	4151
2002-03	0	0	14	280	624	843	1135	865	503	244	106	34	4648
2003-04	0	0	61	312	451	883	1053	811	523	293	43	6	4436
2004-05	0	5	21	187	446	837	820	702	713	259	180	2	4172
2005-06	0	0	11	245	502	974	667	806	611	181	161	10	4168
2006-07	0	0	74	318	502	695	808	1022	441	351	64	0	4275
2007-08	0	0	28	163	562	735	932	777	572	245	132	0	4146
2008-09	0	0	3	295	644	823	1039	746	533	283	98	10	4474
2009-10	0	1	26	325	460	898	1073	956	563	192	43	0	4537
2010-11	0	0	23	228	527	1111	1051	660	574	191	117	2	4484
2011-12	0	0	39	303	419	688	805	724	284	298	29	5	3594
2012-	0	0	65	321	653	684							

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COOLING DEGREE DAYS (base 65°F) 2012 CHARLESTON (KCRW)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1983	0	0	2	6	39	222	385	407	177	18	0	0	1256
1984	0	0	0	27	64	318	261	312	116	65	7	8	1178
1985	0	0	9	72	105	204	339	285	194	52	14	0	1274
1986	0	0	4	41	100	227	384	244	167	43	0	0	1210
1987	0	0	0	13	177	268	381	379	108	0	2	0	1328
1988	0	0	3	9	64	225	430	392	91	4	3	0	1221
1989	0	0	11	6	55	211	339	273	140	23	2	0	1060
1990	0	0	41	33	54	232	342	286	174	28	7	0	1197
1991	0	0	17	60	236	273	408	324	190	53	5	0	1566
1992	0	0	2	47	57	143	347	192	145	4	0	0	937
1993	0	0	0	14	76	222	444	364	119	7	8	0	1254
1994	0	0	4	62	37	288	353	240	51	0	1	0	1036
1995	1	0	1	20	51	209	363	401	69	23	2	0	1140
1996	0	0	0	34	105	214	213	247	93	2	5	0	913
1997	1	5	0	11	23	182	302	195	61	23	0	0	803
1998	0	0	39	3	93	205	275	283	194	20	0	4	1116
1999	0	0	0	24	48	254	443	236	89	1	0	0	1095
2000	0	0	5	3	93	241	201	218	122	27	0	0	910
2001	0	0	0	80	56	185	235	310	93	12	0	0	971
2002	0	0	0	48	64	241	360	344	208	42	0	0	1307
2003	0	0	1	22	26	120	260	297	72	1	1	0	800
2004	1	0	8	22	173	188	303	219	131	7	3	0	1055
2005	0	0	0	6	23	278	383	400	182	24	8	0	1304
2006	0	0	2	31	65	168	345	373	68	11	0	0	1063
2007	0	0	29	31	134	269	283	454	209	97	0	0	1506
2008	0	0	0	20	25	254	294	252	188	12	0	0	1045
2009	0	0	8	48	82	214	203	284	125	9	0	0	973
2010	0	0	0	44	131	331	396	383	155	11	0	0	1451
2011	0	0	5	58	129	262	447	332	133	1	3	0	1370
2012	0	0	32	18	175	239	426	303	133	22	0	0	1348

SNOWFALL (inches) 2012 CHARLESTON (KCRW)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1983-84	0.0	0.0	0.0	0.0	0.3	3.8	12.8	9.7	2.4	0.0	0.0	0.0	29.0
1984-85	0.0	0.0	0.0	0.0	T	3.7	17.6	20.1	0.9	1.7	0.0	0.0	44.0
1985-86	0.0	0.0	0.0	0.0	0.0	8.9	13.1	17.7	3.7	T	0.0	0.0	43.4
1986-87	0.0	0.0	0.0	0.0	0.2	0.1	16.3	9.7	3.9	20.7	0.0	0.0	50.9
1987-88	0.0	0.0	0.0	T	2.4	5.7	8.3	7.8	4.6	T	0.0	0.0	28.8
1988-89	0.0	0.0	0.0	T	T	6.9	1.7	4.6	T	1.4	0.6	0.0	15.2
1989-90	0.0	T	T	T	2.0	14.1	11.0	3.8	6.6	1.1	0.0	0.0	38.6
1990-91	T	0.0	0.0	0.0	0.0	1.2	3.5	6.5	5.3	T	0.0	0.0	16.5
1991-92	0.0	0.0	0.0	0.0	4.1	0.7	5.6	1.1	8.6	3.6	T	T	23.7
1992-93	0.0	0.0	0.0	T	2.5	3.7	0.4	12.0	20.4	T	0.0	T	39.0
1993-94	0.0	0.0	0.0	1.5	0.4	12.4	34.2	7.0	3.1	0.0	0.0	T	58.6
1994-95	0.0	0.0	T	0.0	T	T	9.1	7.9	8.7	0.0	0.0	0.0	25.7
1995-96	0.0	0.0	0.0	0.0	13.6	21.9	35.1	14.2	20.4	0.8	0.0	T	106.0
1996-97	0.0	0.0	0.0										
1997-98													
1998-99													
1999-00													
2000-01													
2001-02													
2002-03													
2003-04													
2004-05						4.8	6.8	6.0	8.8	0.7	0.0	0.0	
2005-06	0.0	0.0	0.0	0.0	0.9	4.7	3.1	8.5	0.5	T	0.0	0.0	17.7
2006-07	0.0	0.0	T	T	T	0.4	4.0	9.4	2.4	0.8	0.0	0.0	17.0
2007-08	0.0	0.0	0.0	0.0	0.0	3.6	7.0	7.8	3.9	0.0	0.0	0.0	22.3
2008-09	0.0	T	0.0	T	1.3	4.7	14.3	8.0	3.4	T	0.0	0.0	31.7
2009-10	0.0	0.0	0.0	0.0	T	17.2	18.2	25.6	0.3	0.0	0.0	0.0	61.3
2010-11	0.0	0.0	0.0	0.0	T	18.4	13.9	2.7	2.1	T	0.0	0.0	37.1
2011-12	0.0	0.0	0.0	0.0	T	T	5.4	2.9	3.4	0.0	0.0	0.0	11.7
2012-	T	0.0	0.0	10.1	T	2.5							
POR= 64 YRS	T	T	T	0.3	1.8	4.8	9.3	7.7	4.5	0.7	T	T	29.1

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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.
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
CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS.
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 SATION HISTORY INFORMATION GO TO "Historical Observing Metadata Repository", URL IS:
http://www.ncdc.noaa.gov/homr/
SNOWFALL STOPPED MONTH & YEAR INDICATED ABOVE. NO FURTHER YEARS INCLUDED UNLESS RESTARTED.

NOTE:

The "Period of Record:(POR)" for all "averages" is based on "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.

The 2012 Annual Publications were reproduced on 6/05/13 to correct two problems that occurred when the Publications were first produced on 02/28/13.

1) A small number of stations did not correctly show number of days with thunderstorms and heavy fog.
2) Climate Normals in the Annual Publications were based on a first edition of the 1981-2010 Normals release. With the release of Service Pack 1 (SP1) new normals for 83 stations are available and now included. Additional information on SP1 is available at: http://www1.ncdc.noaa.gov/pub/data/normals/1981-2010/status.txt.

2012
CHARLESTON
WEST VIRGINIA (KCRW)

Charleston lies at the junction of the Kanawha and Elk Rivers in the western foothills of the Appalachian Mountains. The main urban and business areas have developed along the two river valleys, while some residential areas are in nearby valleys and on the surrounding hills. The hilltops are around 1,100 feet above sea level, about 500 feet higher than the valleys. The Kanawha Airport is just over 2 miles northeast of the center-city area, on an artificial plateau constructed from several hilltops.

Weather records are maintained at the Kanawha Airport by National Weather Service personnel. This site tends to be slightly cooler than the river valleys during the afternoons. Conversely, the valleys can become cooler than the hilltops during clear, calm nights. The weather at Charleston is highly changeable, especially from mid-autumn through the spring.

Winters can vary greatly from one season to the next. Snow does not favor any given winter month, heavy snowstorms are infrequent, and most snowfalls are in the 4-inch or less category. Snow and ice usually do not persist on valley roads, but can linger longer on nearby hills and outlying rural roads.

Afternoon temperatures in the 40s and morning readings in the 20s are common during the winter. Yet, every winter typically has two or three extended cold spells when temperatures stay below freezing for a few consecutive days. Northwesterly winds are associated with the cold weather. Air reaching Charleston from the northwest can cause cloudiness and flurries, even when there is no nearby organized storm system. Winter conditions are much more severe over the higher mountains less than 50 miles to the northeast through the southeast. Temperatures warm rapidly in the spring and are accompanied by low daytime humidities.

Summer and early autumn have more day-to-day consistency in the weather. Sunshine is more abundant than in winter. Summer precipitation falls mostly in brief, but sometimes heavy, showers. Flash flooding can occur along small streams, but flooding is rare on the dam-controlled Kanawha and Elk Rivers.

Afternoon summer temperatures are mostly in the 80s. Readings above 95 degrees are rare. However, during a hot spell, haze and humidity can add to the unpleasantness and indoor air conditioning is recommended. Cooler and less humid air often penetrates the area from the north to end a hot spell.

Early morning fog is common from late June into October. Industrial and vehicular pollutants can contribute to limited visibility any time of the year, especially when cooler air becomes trapped in the valleys. Autumn foliage is generally at its peak during the second and third weeks of October. By the end of October, the first 32 degree temperature has usually arrived.

Ample precipitation is well distributed throughout the year. July is quite often the wettest month of the year, while October averages the least rain. Droughts severe enough to limit water use are scarce. Any dry spells during the spring or autumn can cause conditions favorable for brush fires in outlying areas.

Station History

CHARLESTON, WV

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
CHARLESTON KANAWHA AP	1948-08-01	1960-12-07	38° 22'	-81° 36'	950		AIRWAYS,COOP
CHARLESTON KANAWHA AP	1960-12-07	1973-01-01	38° 22'	-81° 36'	939		AIRWAYS,COOP
CHARLESTON YEAGER AP	1995-06-30	2007-05-23	38° 22'	-81° 35'	910		ASOS,COOP
CHARLESTON YEAGER AP	2007-05-23	Present	38° 22'	-81° 35'	910		ASOS,COOP
CHARLESTON KANAWHA AP	1947-12-01	1948-08-01	38° 22'	-81° 36'	950		AIRWAYS
CHARLESTON YEAGER AP	1994-10-01	1995-06-30	38° 22'	-81° 35'	910	.75 MI N	ASOS,COOP
CHARLESTON KANAWHA AP	1989-08-03	1994-10-01	38° 22'	-81° 36'	1016		COOP
CHARLESTON KANAWHA AP	1973-01-01	1981-12-31	38° 22'	-81° 36'	939		COOP,WXSVC
CHARLESTON KANAWHA AP	1981-12-31	1989-08-03	38° 22'	-81° 36'	939		COOP

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
TEMP	1935-10-01	1979-05-01	DAILY	2400			
PRECIP	1991-03-30	1994-10-01	DAILY	2400	UNIV	RCRD	
PRECIP	2007-05-23	Present	HOURLY	2400	AWPAG	RCRD;HTD	
PRECIP	2007-05-23	Present	DAILY	2400	PCPNX		
PRECIP	1935-10-01	1979-05-01	DAILY	2400	UNIV	RCRD	
TEMP	1991-03-30	1994-10-01	DAILY	2400	MXMN		
PRECIP	1994-10-01	2007-05-23	DAILY	2400	TB	RCRD	
PRECIP	1994-10-01	2007-05-23	HOURLY	2400	TB	RCRD	
TEMP	1994-10-01	2007-05-23	DAILY	2400	HYGR		
PRECIP	1991-03-30	1994-10-01	HOURLY	2400			
TEMP	2007-05-23	Present	DAILY	2400	ATEMP		
PRECIP	1979-05-01	1991-03-30	DAILY	2400	UNIV	RCRD	
TEMP	1979-05-01	1991-03-30	DAILY	2400			
PRECIP	1979-05-01	1991-03-30	HOURLY	2400			

* 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.orders@noaa.gov

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