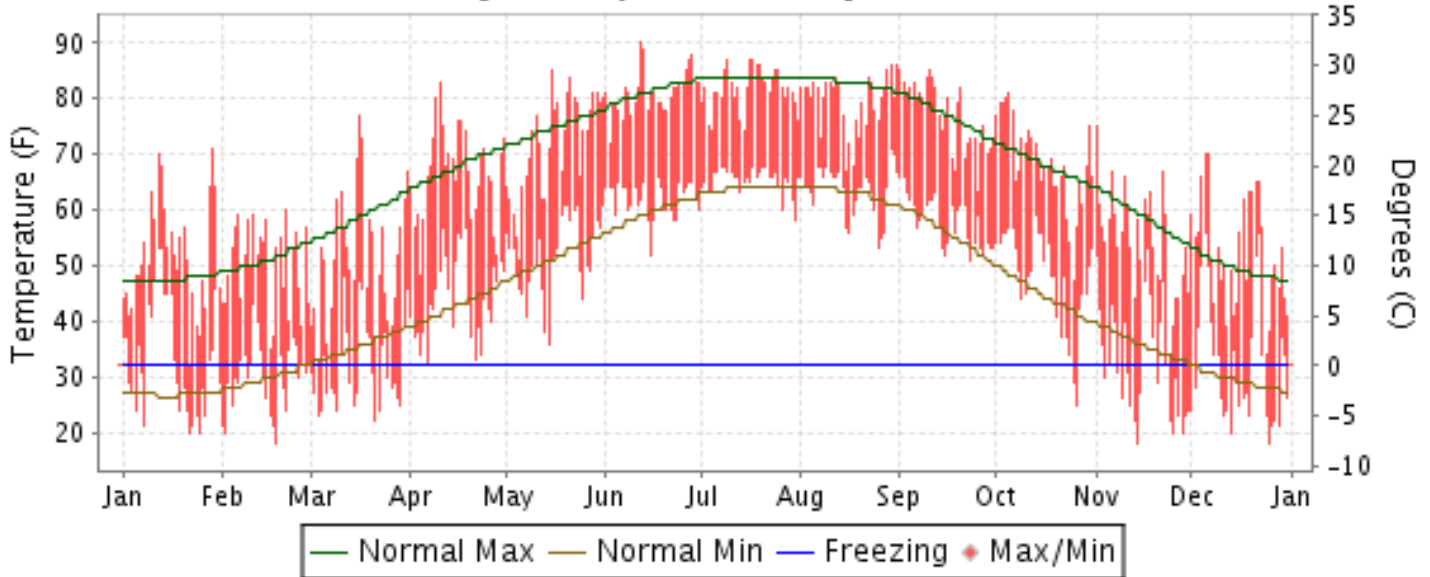




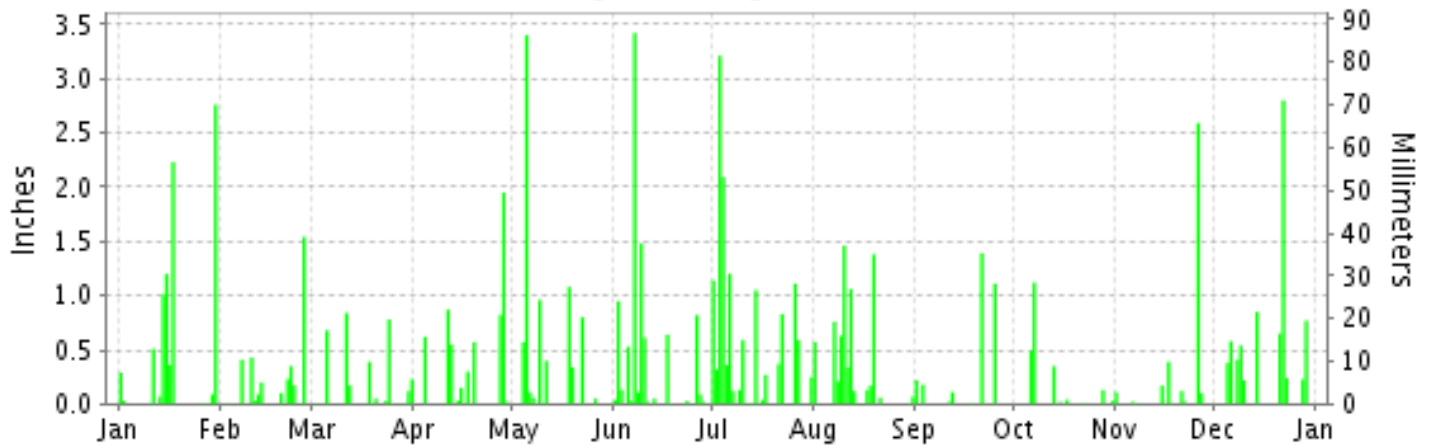
2013 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

ISSN 0198-3695

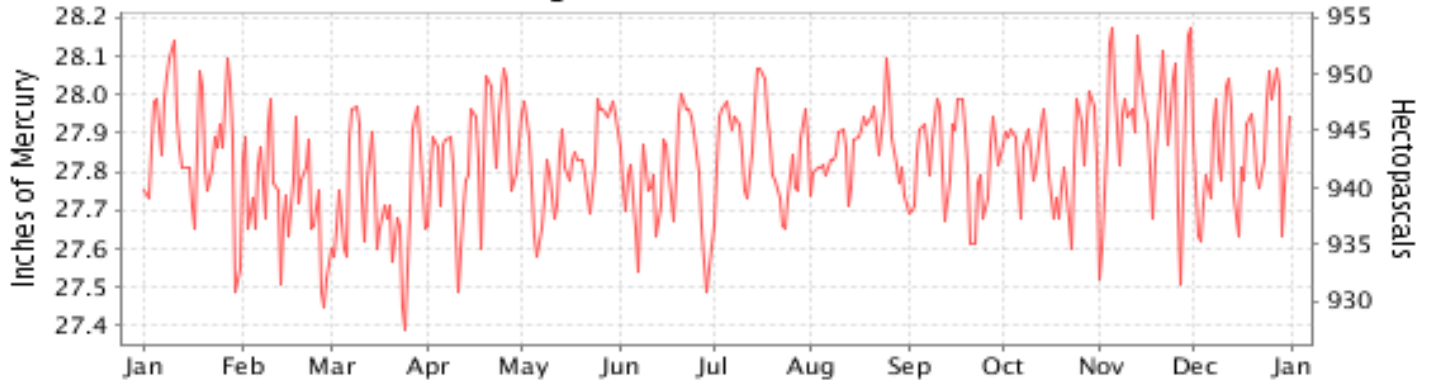
ASHEVILLE, NORTH CAROLINA (KAVL) Daily Max/Min Temperature



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 2013

ASHEVILLE (KAVL)

LATITUDE: 35° 25'N LONGITUDE: 82° 32'W ELEVATION (FT): GRND: 2117 BARO: 2174 TIME ZONE: EASTERN (UTC -5) WBAN: 03812

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	51.6	50.2	51.8	66.7	71.9	81.2	81.6	79.5	76.9	68.5	54.6	52.4	65.6	
	HIGHEST DAILY MAXIMUM	71	60	77	83	85	90	87	86	85	81	75	70	90	
	DATE OF OCCURRENCE	29	21	16	10	15	12	17+	31+	10+	05	01	06+	JUN 12	
	MEAN DAILY MINIMUM	33.2	29.9	31.9	44.1	51.7	61.8	65.4	63.5	58.0	47.7	32.9	32.1	46.0	
	LOWEST DAILY MINIMUM	20	18	22	32	36	52	58	53	51	25	18	18	18	
	DATE OF OCCURRENCE	25+	18	21	06	14	15	30	25	23	26	14	25	DEC 25	
	AVERAGE DRY BULB	42.4	40.1	41.8	55.4	61.8	71.5	73.5	71.5	67.4	58.1	43.8	42.2	55.8	
	MEAN WET BULB	38.9	33.9	35.4	48.8	56.0	65.5	67.9	66.3		53.0	38.2	38.2		
	MEAN DEW POINT	33.4	25.7	27.0	42.1	51.6	62.5	65.8	64.0		49.3	31.1	32.8		
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	0	1	0	0	0	0	0	0	0	1
MAXIMUM <= 32°	1	0	0	0	0	0	0	0	0	0	0	0	0	1	
MINIMUM <= 32°	16	19	19	1	0	0	0	0	0	2	18	17	92		
MINIMUM <= 0°	0	0	0	0	0	0	0	0	0	0	0	0	0		
H/C	HEATING DEGREE DAYS	690	694	710	287	139	0	0	5	24	222	632	697	4100	
	COOLING DEGREE DAYS	0	0	0	5	46	202	270	215	105	17	0	0	860	
RH	MEAN (PERCENT)	74	64	62	65	73	78	82	82	79	77	66	74	73	
	HOUR 01 LST	81	74	73	78	88	92	93	94	92	92	77	82	85	
	HOUR 07 LST	81	76	72	75	82	85	90	89	90	88	78	84	83	
	HOUR 13 LST	62	49	46	48	54	59	65	67	59	54	49	57	56	
	HOUR 19 LST	74	61	59	61	70	78	85	83	81	79	64	72	72	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	0	3	1	1	6	0	1	3	9	8	0	0	32	
	THUNDERSTORMS	0	0	0	2	1	3	6	5	0	0	0	0	17	
PR	MEAN STATION PRESS. (IN.)	27.87	27.73	27.72	27.83	27.83	27.77	27.86	27.86	27.83	27.84	27.93	27.85	27.83	
	MEAN SEA-LEVEL PRESS. (IN.)	30.16	30.03	30.01	30.09	30.07	29.98	30.07	30.09	30.06	30.09	30.23	30.15	30.09	
WINDS	RESULTANT SPEED (MPH)	2.5	3.7	6.0	0.6	0.0	0.6	0.2	1.0	1.2	1.8	4.0	2.4	1.9	
	RES. DIR. (TENS OF DEGS.)	34	34	34	25	16	29	23	33	34	34	34	34	34	
	MEAN SPEED (MPH)	7.3	7.8	9.5	7.0	5.2	4.6	4.4	4.0	3.8	4.2	7.3	7.1	6.0	
	PREVAIL.DIR.(TENS OF DEGS.)	34	35	34	34	35	34	34	35	34	35	34	35	34	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	33	33	37	29	35	30	22	25	24	32	37	28	37	
	DIR. (TENS OF DEGS.)	17	33	34	33	33	33	34	31	33	18	33	33	33	
	DATE OF OCCURRENCE	30	16	06	20	24	14	03	12	21	31	27	10	NOV 27	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	45	47	48	37	40	37	26	38	31	43	47	37	48	
DIR. (TENS OF DEGS.)	17	27	33	18	33	34	16	31	33	18	33	28	33		
DATE OF OCCURRENCE	30	01	06	11	24	14	06	12	21	31	27	17	MAR 06		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	8.58	3.56	3.32	5.88	7.78	8.97	13.69	6.98	3.05	2.19	3.55	7.67	75.22	
	GREATEST 24-HOUR (IN.)	2.85	1.54	1.01	1.96	3.50	3.44	3.45	1.47	1.40	1.61	2.62	2.85	3.50	
	DATE OF OCCURRENCE	29-30	26	11-12	27-28	04-05	07-08	03-04	18-19	21-22	06-07	26-27	22-23	MAY 04-05	
	NUMBER OF DAYS WITH:														
PRECIPITATION 0.01	13	11	12	10	11	16	19	15	8	8	11	11	145		
PRECIPITATION 0.10	7	8	7	8	8	9	16	11	5	4	6	11	100		
PRECIPITATION 1.00	4	1	0	1	2	2	6	3	2	1	1	1	24		
SNOWFALL	SNOW,ICE PELLETS,HAIL	T	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	T	0.2	0.0	0.7	
	TOTAL (IN.)	T	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	T	0.2	0.0	0.3	
	GREATEST 24-HOUR (IN.)	25	16	20							25	27		MAR 20	
	DATE OF OCCURRENCE	0	0	T	0	0	0	0	0	0	0	0	0	T	
	MAXIMUM SNOW DEPTH (IN.)			21										MAR 21	
	DATE OF OCCURRENCE														
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	0	0	0	0	0	0	0	0	0	0	0	0	0		

NORMALS, MEANS, AND EXTREMES ASHEVILLE (KAVL)

LATITUDE:
35° 25'N

LONGITUDE:
82° 32'W

ELEVATION (FT):
GRND: 2117 BARO: 2174

TIME ZONE:
EASTERN (UTC -5)

WBAN: 03812

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	47.4	51.0	58.7	67.7	74.8	81.3	84.0	82.9	76.9	68.1	58.8	49.5	66.8
	MEAN DAILY MAXIMUM	62	47.8	50.5	58.5	68.1	75.2	81.3	84.1	83.2	77.0	68.2	58.4	50.3	66.9
	HIGHEST DAILY MAXIMUM	49	80	78	83	89	93	98	98	100	92	86	81	78	100
	YEAR OF OCCURRENCE		1999	1996	1985	1972	1996	2012	2012	1983	1998	1986	2004	1971	AUG 1983
	MEAN OF EXTREME MAXS.	62	66.2	68.9	76.7	83.0	86.0	90.1	91.7	90.5	86.9	80.8	73.8	67.1	80.1
	NORMAL DAILY MINIMUM	30	26.7	29.7	35.5	42.8	51.4	59.6	63.7	62.9	55.8	44.6	35.8	29.3	44.8
	MEAN DAILY MINIMUM	62	26.6	28.2	34.7	42.4	50.8	58.3	62.8	61.8	55.1	43.4	34.3	28.6	43.9
	LOWEST DAILY MINIMUM	49	-16	-2	2	20	28	35	44	42	30	21	8	-7	-16
	YEAR OF OCCURRENCE		1985	1967	1993	2007	1989	1966	1988	1986	1967	1976	1970	1983	JAN 1985
	MEAN OF EXTREME MINS.	62	8.6	12.5	19.7	27.9	35.8	46.2	54.7	52.7	41.7	28.0	19.6	12.7	30.0
	NORMAL DRY BULB	30	37.1	40.3	47.1	55.2	63.1	70.5	73.8	72.9	66.3	56.4	47.3	39.4	55.8
	MEAN DRY BULB	62	37.3	39.4	46.6	55.3	63.0	69.9	73.5	72.5	66.1	55.8	46.4	39.5	55.4
	MEAN WET BULB	30	31.4	33.4	39.5	46.7	55.9	63.3	66.8	66.1	60.2	49.6	40.4	33.7	48.9
	MEAN DEW POINT	30	28.7	30.3	36.3	43.6	54.0	62.1	65.7	65.2	58.9	47.8	38.1	31.0	46.8
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.0	0.1	1.2	3.1	2.6	0.4	0.0	0.0	0.0	7.4
	MAXIMUM <= 32	30	2.5	0.9	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.4	5.1
MINIMUM <= 32	30	21.9	17.1	11.2	3.1	0.1	0.0	0.0	0.0	0.0	2.9	11.5	20.3	88.1	
MINIMUM <= 0	30	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	
H/C	NORMAL HEATING DEG. DAYS	30	866	690	555	300	109	14	0	2	55	278	532	794	4195
	NORMAL COOLING DEG. DAYS	30	0	0	1	7	50	177	275	247	95	10	1	0	863
RH	NORMAL (PERCENT)	30	73	70	68	65	75	79	81	83	82	77	74	73	75
	HOURLY 01 LST	30	81	78	78	77	88	93	94	96	95	90	85	82	86
	HOURLY 07 LST	30	85	84	84	84	91	93	95	97	96	93	87	85	90
	HOURLY 13 LST	30	59	56	53	49	56	60	62	62	62	55	56	59	57
	HOURLY 19 LST	30	69	62	59	55	65	70	73	77	79	73	69	69	68
S	PERCENT POSSIBLE SUNSHINE	32	55	59	61	66	61	62	60	54	56	62	58	55	59
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	49	3.9	2.7	2.2	2.4	5.3	7.3	7.9	11.8	10.4	7.6	3.7	4.1	69.3
	THUNDERSTORMS	55	0.4	0.7	2.1	2.9	5.8	7.8	8.5	7.3	2.7	0.6	0.6	0.3	39.7
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)	32	5.0	4.8	4.9	4.6	5.0	5.0	5.0	5.0	4.8	4.0	4.3	4.7	4.8
	MIDNIGHT-MIDNIGHT (OKTAS)	32	4.9	4.7	4.7	4.4	4.8	4.7	4.8	5.0	4.7	4.0	4.1	4.5	4.6
	MEAN NO. DAYS WITH: CLEAR	32	9.1	8.7	8.8	9.6	7.2	6.2	5.0	4.8	6.7	11.6	10.2	9.3	97.2
	PARTLY CLOUDY	32	7.3	6.4	8.1	8.5	10.4	12.0	13.4	13.1	10.2	7.8	6.9	7.0	111.1
	CLOUDY	32	14.6	13.2	14.1	11.8	13.3	11.8	11.7	12.2	12.2	10.7	11.9	13.7	151.2
PR	MEAN STATION PRESSURE(IN)	30	27.81	27.79	27.78	27.76	27.79	27.81	27.84	27.85	27.85	27.86	27.86	27.84	27.82
	MEAN SEA-LEVEL PRES. (IN)	30	30.12	30.08	30.05	30.01	30.03	30.03	30.05	30.06	30.08	30.11	30.14	30.14	30.08
WINDS	MEAN SPEED (MPH)	30	8.6	8.5	8.3	7.8	6.2	5.2	4.9	4.6	4.8	5.8	7.2	7.8	6.6
	PREVAIL.DIR(TENS OF DEGS)	42	35	35	35	35	35	35	35	35	35	35	35	35	35
	MAXIMUM 2-MINUTE: SPEED (MPH)	17	46	43	47	49	44	41	41	41	45	39	38	40	49
	DIR. (TENS OF DEGS)		33	33	32	34	33	33	33	30	36	34	33	33	34
	YEAR OF OCCURRENCE		2003	2001	2001	2007	2008	2011	2001	2000	1999	2012	2003	2010	APR 2007
	MAXIMUM 3-SECOND SPEED (MPH)	17	53	49	56	66	52	51	55	53	54	49	47	51	66
	DIR. (TENS OF DEGS)		33	32	31	33	33	33	16	30	36	33	33	33	33
YEAR OF OCCURRENCE		2003	2001	2001	2007	2008	2011	2007	2000	1999	2012	2013	2010	APR 2007	
PRECIPITATION	NORMAL (IN)	30	3.67	3.76	3.83	3.33	3.66	4.65	4.31	4.40	3.81	2.91	3.65	3.59	45.57
	MAXIMUM MONTHLY (IN)	49	9.96	8.07	9.86	8.70	9.18	10.73	13.69	11.28	13.71	8.82	7.76	9.16	13.71
	YEAR OF OCCURRENCE		1998	1990	1975	1998	2009	1989	2013	1967	2004	1990	1979	2009	SEP 2004
	MINIMUM MONTHLY (IN)	49	0.45	0.44	0.77	0.25	0.96	0.85	0.46	0.52	0.16	0.00	0.85	0.16	0.00
	YEAR OF OCCURRENCE		1981	1978	1985	1976	2007	2008	1986	1981	1984	2000	2012	1965	OCT 2000
	MAXIMUM IN 24 HOURS (IN)	49	4.67	3.47	5.13	3.06	4.95	4.36	4.02	5.10	4.23	4.22	4.18	2.85	5.13
	YEAR OF OCCURRENCE		1998	1982	1968	1973	1973	1997	1969	1990	2004	1995	2010	2013	MAR 1968
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	10.0	9.5	11.0	10.2	11.9	12.7	12.9	12.7	9.5	8.2	9.7	9.7	128.0
PRECIPITATION >= 1.00	30	0.9	1.0	1.0	0.8	0.7	1.2	0.9	1.0	0.9	0.7	1.2	0.9	11.2	
SNOWFALL	NORMAL (IN)	30	4.1	2.2	1.9	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.9	9.9
	MAXIMUM MONTHLY (IN)	49	17.6	25.5	18.2	11.5	T	T	T	T	0.0	T	9.6	16.3	25.5
	YEAR OF OCCURRENCE		1966	1969	1993	1987	1993	1995	1994	1990		2013	1968	1971	FEB 1969
	MAXIMUM IN 24 HOURS (IN)	49	14.0	11.7	16.5	11.5	T	T	T	T	0.0	T	5.7	16.3	16.5
	YEAR OF OCCURRENCE		1988	1969	1993	1987	1993	1995	1994	1990		2013	1968	1971	MAR 1993
	MAXIMUM SNOW DEPTH (IN)	54	14	13	18	12	0	0	0	0	0	0	5	14	18
	YEAR OF OCCURRENCE		1988	1969	1993	1987							1968	1971	MAR 1993
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	0.9	0.7	0.4	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	2.7	

PRECIPITATION (inches) 2013 ASHEVILLE (KAVL)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	2.36	6.43	4.82	4.05	6.62	3.69	5.88	5.02	0.16	2.73	2.61	1.34	45.71
1985	2.95	4.74	0.77	2.74	1.59	1.47	4.37	7.04	1.25	3.41	4.91	0.70	35.94
1986	1.11	1.85	2.75	0.57	3.55	1.28	0.46	6.10	3.15	4.19	5.28	4.28	34.57
1987	3.49	6.17	2.85	3.67	1.87	8.94	1.86	1.79	6.79	0.36	3.09	2.33	43.21
1988	3.71	0.88	1.31	3.46	1.06	0.94	2.65	1.78	2.79	3.12	3.47	1.41	26.58
1989	1.65	4.61	2.91	3.17	5.54	10.73	8.33	4.98	8.17	2.98	4.27	3.29	60.63
1990	3.27	8.07	5.95	1.96	5.09	0.90	6.55	7.78	1.43	8.82	1.55	4.50	55.87
1991	3.25	1.66	6.13	5.38	2.41	5.27	6.07	3.83	1.27	0.19	3.34	4.86	43.66
1992	3.08	3.66	3.52	3.99	6.18	6.62	1.10	7.64	3.15	4.15	7.24	3.71	54.04
1993	3.82	2.03	6.16	3.21	4.59	1.12	2.07	5.29	1.56	1.21	3.32	3.59	37.97
1994	5.35	5.11	7.52	3.30	1.74	5.89	6.76	6.01	5.33	4.27	3.15	3.03	57.46
1995	7.03	2.93	2.42	0.98	6.04	8.89	3.61	9.22	1.95	7.23	3.66	1.43	55.39
1996	7.22	2.71	3.36	2.00	2.55	3.54	4.83	6.68	5.22	0.68	4.45	3.92	47.16
1997	4.44	5.29	5.48	5.26	2.91	8.29	2.97	1.37	4.89	3.90	1.60	2.98	49.38
1998	9.96	6.38	3.71	8.70	2.22	3.64	1.97	2.23	1.62	1.79	2.76	3.04	48.02
1999	6.38	3.29	2.82	2.44	2.53	4.39	3.85	3.37	2.20	3.29	3.31	1.98	39.85
2000	3.10	2.33	3.82	5.11	1.27	2.78	2.84	4.45	3.27	0.00	4.25	2.37	35.59
2001	2.63	2.73	5.00	1.32	2.47	2.91	5.50	3.20	4.37	0.60	1.42	2.34	34.49
2002	3.64	1.30	4.36	1.73	3.42	6.13	1.98	2.09	6.05	3.14	4.23	6.40	44.47
2003	1.19	4.47	4.34	5.25	8.36	6.16	10.88	6.80	3.01	2.33	3.89	2.78	59.46
2004	0.83	4.20	2.02	2.95	3.23	7.39	4.68	3.79	13.71	1.11	5.02	3.43	52.36
2005	2.00	2.57	3.33	2.86	1.65	10.09	10.26	5.71	0.34	1.20	3.74	3.51	47.26
2006	3.58	2.55	0.91	4.58	1.69	5.16	2.81	7.12	7.80	2.93	4.52	4.64	48.29
2007	3.35	1.45	4.29	1.77	0.96	2.91	4.85	2.84	3.40	3.02	1.49	4.06	34.39
2008	2.56	3.79	4.51	2.84	1.33	0.85	4.02	5.84	1.70	1.84	1.61	4.74	35.63
2009	2.40	1.87	4.07	3.54	9.18	6.41	2.88	3.69	8.17	5.50	5.26	9.16	62.13
2010	7.00	3.35	4.18	2.24	4.89	1.75	3.54	3.47	4.15	2.94	5.49	1.26	44.26
2011	2.12	2.97	6.95	4.33	2.95	3.83	3.33	3.00	3.74	2.39	5.32	5.11	46.04
2012	3.85	1.59	2.72	4.66	5.82	1.68	5.78	3.39	5.93	4.01	0.85	4.38	44.66
2013	8.58	3.56	3.32	5.88	7.78	8.97	13.69	6.98	3.05	2.19	3.55	7.67	75.22
POR= 62 YRS	3.68	3.51	4.40	3.53	4.05	4.29	4.62	4.46	3.78	3.14	3.55	3.66	46.67

WBAN : 03812

AVERAGE TEMPERATURE (°F) 2013 ASHEVILLE (KAVL)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	34.0	40.5	44.8	51.7	59.9	70.0	70.6	71.6	62.8	62.7	43.1	46.3	54.8
1985	30.5	38.3	48.1	56.6	62.6	69.8	72.2	70.9	64.2	60.5	56.0	34.7	55.4
1986	35.0	42.2	46.0	56.0	63.3	71.7	76.1	70.9	68.0	57.4	50.7	39.8	56.4
1987	35.3	38.9	46.5	52.6	66.7	71.2	74.7	74.7	66.5	50.1	47.0	42.2	55.5
1988	32.1	37.1	47.1	54.6	61.1	69.3	73.8	74.6	66.3	50.2	46.7	38.7	54.3
1989	42.1	39.8	50.3	54.5	59.4	70.0	73.3	71.9	65.8	56.1	46.2	31.6	55.1
1990	42.8	45.6	50.4	54.2	63.3	70.9	73.8	73.9	67.6	57.8	49.9	45.5	58.0
1991	39.2	42.5	49.6	58.4	67.3	70.3	75.2	72.1	67.3	57.0	45.5	43.4	57.3
1992	40.7	44.2	46.3	55.9	59.9	68.1	74.9	70.4	67.8	54.4	46.2	39.2	55.7
1993	42.0	38.0	43.0	52.6	63.2	71.4	78.0	73.9	67.8	55.0	46.0	36.8	55.6
1994	32.4	40.6	47.3	58.5	60.2	72.6	73.1	71.4	64.6	55.9	50.1	43.6	55.9
1995	38.9	38.4	49.4	56.4	64.1	68.5	75.0	75.3	65.4	56.8	43.3	37.1	55.7
1996	35.3	39.5	41.4	53.6	66.1	69.6	72.0	71.5	64.4	55.8	42.3	40.5	54.3
1997	36.5	43.2	51.5	51.5	58.4	66.5	73.4	70.6	66.1	55.4	42.3	36.9	54.4
1998	41.3	42.2	43.9	54.1	66.5	71.7	74.9	73.4	70.3	58.3	49.2	43.9	57.5
1999	41.7	42.4	42.9	58.5	61.9	69.3	74.3	74.1	65.6	56.0	51.3	41.9	56.7
2000	36.0	43.3	49.9	53.0	66.2	70.6	72.8	71.7	65.2	57.2	44.6	32.5	55.3
2001	36.7	44.5	44.6	58.2	64.0	70.5	72.9	73.8	64.5	53.9	51.7	44.8	56.7
2002	41.1	40.3	47.5	59.1	62.2	70.8	74.6	73.3	68.8	59.7	44.8	38.6	56.7
2003	33.7	39.6	50.1	55.2	62.8	68.1	72.0	73.7	65.2	54.8	51.4	36.6	55.3
2004	35.9	38.3	49.5	55.2	66.3	70.5	72.9	70.8	66.5	61.0	50.3	38.5	56.3
2005	40.8	41.8	45.4	54.5	60.6	69.5	74.5	74.0	68.4	58.5	48.3	36.6	56.1
2006	43.2	39.0	47.5	58.6	61.5	69.5	73.6	74.3	64.3	54.2	47.0	42.6	56.3
2007	39.5	36.3	52.0	53.1	63.5	71.3	71.4	76.7	68.1	59.6	45.5	43.9	56.7
2008	36.4	42.5	46.1	55.3	62.9	72.5	72.9	72.8	67.1	54.1	43.0	42.0	55.6
2009	36.9	39.5	47.3	54.9	63.9	71.7	70.8	72.4	66.9	55.0	49.0	36.6	55.4
2010	32.4	32.8	44.8	58.1	66.0	74.3	76.2	75.7	68.5	56.6	46.9	30.6	55.2
2011	33.2	43.4	48.5	59.1	64.6	73.7	76.9	75.1	67.1	54.3	48.9	44.3	57.4
2012	41.0	44.2	56.4	58.5	67.1	70.7	76.8	72.3	67.2	55.7	45.1	43.8	58.2
2013	42.4	40.1	41.8	55.4	61.8	71.5	73.5	71.5	67.4	58.1	43.8	42.2	55.8
POR= 62 YRS	37.3	39.4	46.6	55.3	63.0	69.9	73.5	72.5	66.1	55.8	46.4	39.5	55.4

HEATING DEGREE DAYS (base 65°F) 2013 ASHEVILLE (KAVL)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	1	0	107	91	648	576	1064	737	520	249	109	19	4121
1985-86	0	6	111	156	266	932	923	633	581	273	91	2	3974
1986-87	0	32	16	268	419	774	913	725	567	369	40	1	4124
1987-88	0	0	47	452	532	702	1013	802	545	308	132	31	4564
1988-89	5	0	33	453	544	808	702	698	454	331	200	4	4232
1989-90	1	8	74	279	558	1028	679	535	446	321	91	3	4023
1990-91	0	0	55	229	445	601	793	627	472	204	53	16	3495
1991-92	0	1	64	242	578	663	748	596	573	274	169	25	3933
1992-93	0	0	34	324	558	794	708	751	677	365	82	9	4302
1993-94	0	0	44	310	563	866	1005	676	544	206	165	0	4379
1994-95	0	1	52	276	441	656	803	736	474	264	87	17	3807
1995-96	0	0	50	255	645	856	912	735	725	341	78	20	4617
1996-97	0	0	76	284	673	753	876	601	412	400	212	64	4351
1997-98	0	5	35	292	675	863	727	631	647	322	71	23	4291
1998-99	0	0	11	214	465	649	718	627	680	210	100	7	3681
1999-00	6	0	56	274	405	705	893	621	460	353	41	11	3825
2000-01	1	1	88	238	607	998	872	566	628	222	63	1	4285
2001-02	0	0	97	340	391	620	735	687	536	201	130	1	3738
2002-03	0	0	10	202	600	811	966	705	454	289	88	19	4144
2003-04	0	0	52	309	411	874	894	767	478	295	49	1	4130
2004-05	0	3	21	128	436	817	744	644	602	309	143	22	3869
2005-06	0	0	4	215	496	877	668	724	537	203	149	10	3883
2006-07	0	0	68	332	531	684	785	796	393	352	81	0	4022
2007-08	0	0	34	198	576	650	880	645	579	288	97	0	3947
2008-09	1	0	35	330	653	706	863	708	543	298	76	0	4213
2009-10	0	0	23	309	474	873	1003	898	617	208	53	0	4458
2010-11	0	0	16	259	536	1057	980	600	506	195	108	1	4258
2011-12	0	0	38	323	479	634	734	598	259	199	36	9	3309
2012-13	0	0	26	286	594	651	690	694	710	287	139	0	4077
2013-	0	5	24	222	632	697							

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COOLING DEGREE DAYS (base 65°F) 2013 ASHEVILLE (KAVL)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1984	0	0	0	0	25	165	180	211	49	27	0	0	657
1985	0	0	5	2	43	170	229	194	90	25	4	0	762
1986	0	0	0	8	43	209	353	222	112	38	0	0	985
1987	0	0	0	7	97	192	310	309	97	0	0	0	1012
1988	0	0	0	0	18	168	282	304	79	3	0	0	854
1989	0	0	5	23	34	159	264	229	107	11	0	0	832
1990	0	0	0	3	48	187	279	283	141	11	0	0	952
1991	0	0	3	13	132	181	324	227	139	3	0	0	1022
1992	0	0	0	7	20	125	313	174	125	0	0	0	764
1993	0	0	0	0	37	210	411	285	133	5	0	0	1081
1994	0	0	0	15	21	233	259	205	43	2	0	0	778
1995	0	0	1	12	65	127	315	325	68	8	0	0	921
1996	0	0	0	6	120	164	224	209	64	5	0	0	792
1997	0	0	0	0	13	116	265	184	76	1	0	0	655
1998	0	0	0	1	124	230	315	269	178	14	0	0	1131
1999	0	0	0	23	9	143	304	291	78	3	0	0	851
2000	0	0	0	0	83	187	251	215	103	4	1	0	844
2001	0	0	0	24	42	172	249	282	87	1	0	0	857
2002	0	0	0	32	50	181	305	267	130	47	0	0	1012
2003	0	0	0	0	29	117	223	281	65	0	9	0	724
2004	0	0	0	8	96	173	254	189	71	9	4	0	804
2005	0	0	0	0	14	167	302	285	112	20	0	0	900
2006	0	0	0	18	45	153	274	297	54	4	0	0	845
2007	0	0	0	1	42	192	208	370	133	38	0	0	984
2008	0	0	0	0	39	232	253	245	104	2	0	0	875
2009	0	0	0	4	50	209	186	237	84	4	0	0	774
2010	0	0	0	5	91	288	357	336	128	7	0	0	1212
2011	0	0	1	27	103	270	375	319	106	0	0	0	1201
2012	0	0	1	13	110	185	375	232	102	4	0	0	1022
2013	0	0	0	5	46	202	270	215	105	17	0	0	860

SNOWFALL (inches) 2013 ASHEVILLE (KAVL)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0.0	0.0	0.0	0.0	0.0	T	4.5	3.1	0.1	0.4	0.0	0.0	8.1
1985-86	0.0	0.0	0.0	0.0	0.0	0.4	0.8	3.7	0.1	T	0.0	0.0	5.0
1986-87	0.0	0.0	0.0	0.0	T	T	15.0	2.7	0.3	11.5	0.0	0.0	29.5
1987-88	0.0	0.0	0.0	0.0	0.3	0.5	14.2	T	T	1.2	0.0	0.0	16.2
1988-89	0.0	0.0	0.0	0.0	0.0	T	1.2	6.0	T	1.0	0.0	0.0	8.2
1989-90	0.0	0.0	0.0	T	T	3.0	T	T	T	0.0	0.0	0.0	3.0
1990-91	0.0	T	0.0	0.0	0.0	T	T	0.4	3.1	0.0	0.0	T	3.5
1991-92	0.0	0.0	0.0	0.0	1.0	0.0	T	T	0.5	0.0	T	0.0	1.5
1992-93	0.0	0.0	0.0	0.0	T	T	T	3.0	18.2	T	T	0.0	21.2
1993-94	0.0	0.0	0.0	T	T	8.0	2.6	0.3	0.1	T	0.0	0.0	11.0
1994-95	T	0.0	0.0	0.0	0.0	T	0.2	3.2	T	0.0	0.0	T	3.4
1995-96	0.0	0.0	0.0	0.0	T	0.1	15.7	4.4	1.5	T	0.0	T	21.7
1996-97	0.0	0.0	0.0	0.0	0.1	2.5	3.8	1.9	T	T	0.0	0.0	8.3
1997-98	0.0	0.0	0.0	0.0	T	4.5	12.7	T	0.4	0.0	0.0	0.0	17.6
1998-99	0.0	0.0	0.0	0.0	0.0	0.4	1.6	T	4.2	0.0	0.0	0.0	6.2
1999-00	0.0	0.0	0.0	0.0	0.1	T	6.2	T	T	0.1	0.0	0.0	6.4
2000-01	0.0	0.0	0.0	0.0	2.0	6.1	T	0.8	6.4	0.2	0.0	0.0	15.5
2001-02	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.3	T	0.0	0.0	0.0	1.6
2002-03	0.0	0.0	0.0	0.0	T	4.0	4.2	3.7	2.0	4.0	T	0.0	17.9
2003-04	T	0.0	0.0	0.0	T	3.5	4.0	6.8	T	T	0.0	0.0	14.3
2004-05	0.0	0.0	0.0	0.0	0.0	0.6	1.6	4.0	0.3	0.1	0.0	0.0	6.6
2005-06	0.0	0.0	0.0	0.0	T	T	T	1.4	T	0.0	0.0	0.0	1.4
2006-07	0.0	0.0	0.0	0.0	T	T	0.9	1.0	T	1.3	0.0	0.0	3.2
2007-08	0.0	0.0	0.0	0.0	T	0.1	3.7	T	0.0	0.0	0.0	0.0	3.8
2008-09	0.0	0.0	0.0	T	T	T	1.0	T	5.1	T	0.0	0.0	6.1
2009-10	0.0	0.0	0.0	0.0	0.0	10.4	13.2	5.8	9.8	0.0	0.0	0.0	39.2
2010-11	0.0	0.0	0.0	0.0	T	10.8	9.4	0.6	T	0.0	0.0	0.0	20.8
2011-12	0.0	0.0	0.0	0.0	T	T	T	T	T	0.0	0.0	0.0	T
2012-13	0.0	0.0	0.0	0.0	0.0	T	T	0.2	0.3	0.0	0.0	0.0	0.5
2013-	0.0	0.0	0.0	T	0.2	0.0							
POR= 62 YRS	T	T	0.0	T	0.5	1.7	3.9	3.0	1.9	0.4	T	T	11.4

WBAN : 03812

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. 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.</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</p>	<p>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 EIGHTHS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER. STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED STATION 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.</p> <p>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.</p>
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2013 ASHEVILLE NORTH CAROLINA (KAVL)

The city of Asheville is located on both banks of the French Broad River, near the center of the French Broad Basin. Upstream from Asheville, the valley runs south for 18 miles and then curves toward the south-southwest. Downstream from the city, the valley is oriented toward the north-northwest. Two miles upstream from the principal section of Asheville, the Swannanoa River joins the French Broad from the east. The entire valley is known as the Asheville Plateau, having an average elevation near 2,200 feet above sea level, and is flanked by mountain ridges to the east and west, whose peaks range from 2,000 to 4,400 feet above the valley floor. At the Carolina-Tennessee border, about 25 miles north-northwest of Asheville, a relatively high ridge of mountains blocks the northern end of the valley. Thirty miles south, the Blue Ridge Mountains form an escarpment, having a general elevation of about 2,700 feet above sea level. The tallest peaks near Asheville are Mt. Mitchell, 6,684 feet above sea level, 20 miles northeast of the city, and Big Pisgah Mountain, 5,721 feet above sea level, 16 miles to the southwest.

Asheville has a temperate, but invigorating, climate. Considerable variation in temperature often occurs from day to day in summer, as well as during the other seasons.

While the office was located in the city, the combination of roof exposure conditions and a smoke blanket, caused by inversions in temperature in the valley on quiet nights, resulted in higher early morning temperatures at City Office sites than were experienced nearer ground level in nearby rural areas. The growing season in this area is of sufficient length for commercial crops, the average length of freeze-free period being about 195 days. The average last occurrence in spring of a temperature 32 degrees or lower is mid-April and the average first occurrence in fall of 32 degrees is late October.

The orientation of the French Broad Valley appears to have a pronounced influence on the wind direction. Prevailing winds are from the northwest during all months of the year. Also, the shielding effect of the nearby mountain barriers apparently has a direct bearing on the annual amount of precipitation received in this vicinity. In an area northwest of Asheville, the average annual precipitation is the lowest in North Carolina. Precipitation increases sharply in all other directions, especially to the south and southwest.

Destructive events caused directly by meteorological conditions are infrequent. The most frequent, occurring at approximately 12-year intervals, are floods on the French Broad River. These floods are usually associated with heavy rains caused by storms moving out of the Gulf of Mexico. Snowstorms which have seriously disrupted normal life in this community are infrequent. Hailstorms that cause property damage are extremely rare.

Station History

ASHEVILLE, NC

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
ASHEVILLE HENDERSONVILLE AP	1946-01-01	1948-08-01	35° 25'	-82° 28'			AIRWAYS
ASHEVILLE HENDERSONVILLE AP	1959-04-30	1960-12-31	35° 25'	-82° 28'			AIRWAYS
ASHEVILLE REGIONAL AP	1996-06-01	2011-04-15	35° 25'	-82° 32'	2117	500 YD S	ASOS, COOP, WXSVC
ASHEVILLE HENDERSONVILLE AP	1940-11-01	1942-05-31	35° 25'	-82° 28'			AIRWAYS
ASHEVILLE HENDERSONVILLE AP	1948-08-01	1956-01-01	35° 25'	-82° 28'	2100		AIRWAYS, COOP
ASHEVILLE HENDERSONVILLE AP	1956-01-01	1959-04-30	35° 25'	-82° 28'	2093		AIRWAYS, COOP
ASHEVILLE REGIONAL AP	2011-04-15	Present	35° 25'	-82° 32'	2117		ASOS, COOP, WXSVC
ASHEVILLE AP	1964-09-01	1980-07-01	35° 25'	-82° 33'	2140		COOP, WXSVC
ASHEVILLE REGIONAL AP	1980-07-01	1996-06-01	35° 25'	-82° 33'	2140		COOP, WXSVC

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	1990-01-06	1995-07-01	DAILY	2400	UNIV	RCRD	
TEMP	1995-07-01	1996-06-01	DAILY	2400	MXMN		
PRECIP	1995-07-01	1996-06-01	DAILY	2400	UNIV	RCRD	
PRECIP	1975-06-01	1990-01-06	DAILY	2400			
PRECIP	1964-09-01	1975-06-01	DAILY	2400			
TEMP	1996-06-01	Present	DAILY	2400	HYGR		
PRECIP	1996-06-01	Present	DAILY	2400	PCPN1		
PRECIP	1996-06-01	Present	HOURLY	2400	AWPAG	RCRD;HTD	
TEMP	1964-09-01	1975-06-01	DAILY	2400			
PRECIP	1975-06-01	1990-01-06	HOURLY	2400			
TEMP	1975-06-01	1990-01-06	DAILY	2400			
PRECIP	1990-01-06	1995-07-01	HOURLY	2400			
TEMP	1990-01-06	1995-07-01	DAILY	2400	MXMN		
PRECIP	1995-07-01	1996-06-01	HOURLY		UNIV	RCRD	

* For explanation of codes and abbreviations 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

NOAA/National Climatic Data Center

Attn: User Engagement & Services Branch

151 Patton Avenue

Asheville, NC 28801-5001

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