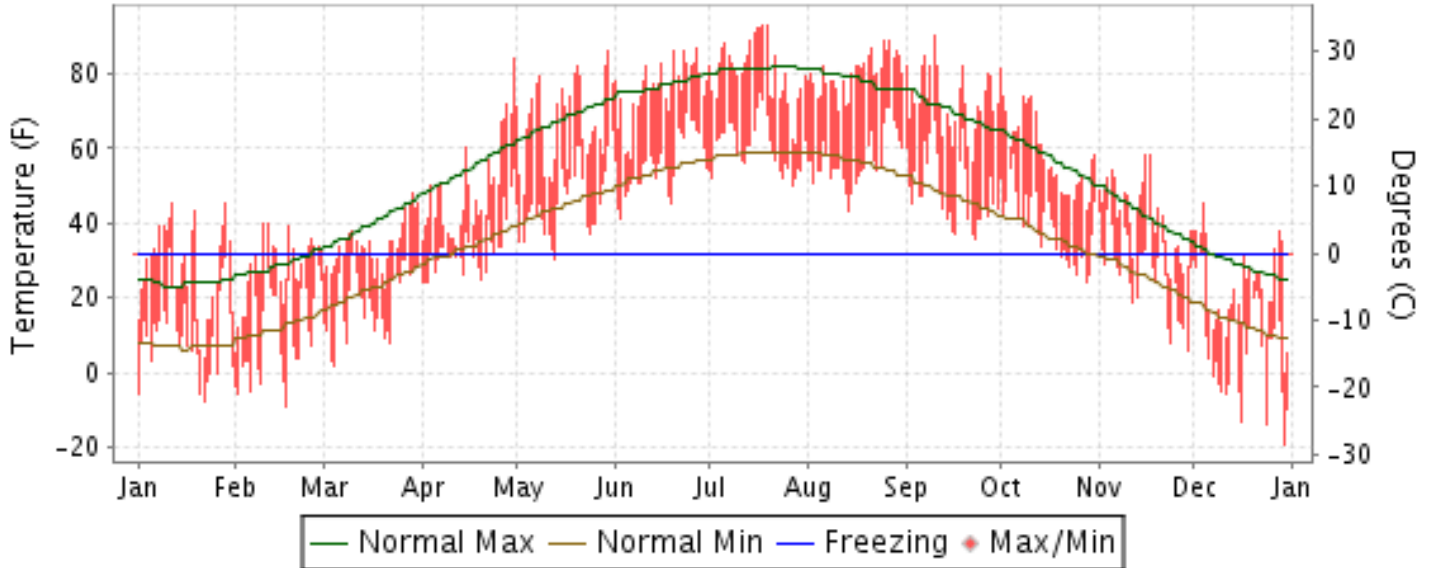


2013 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

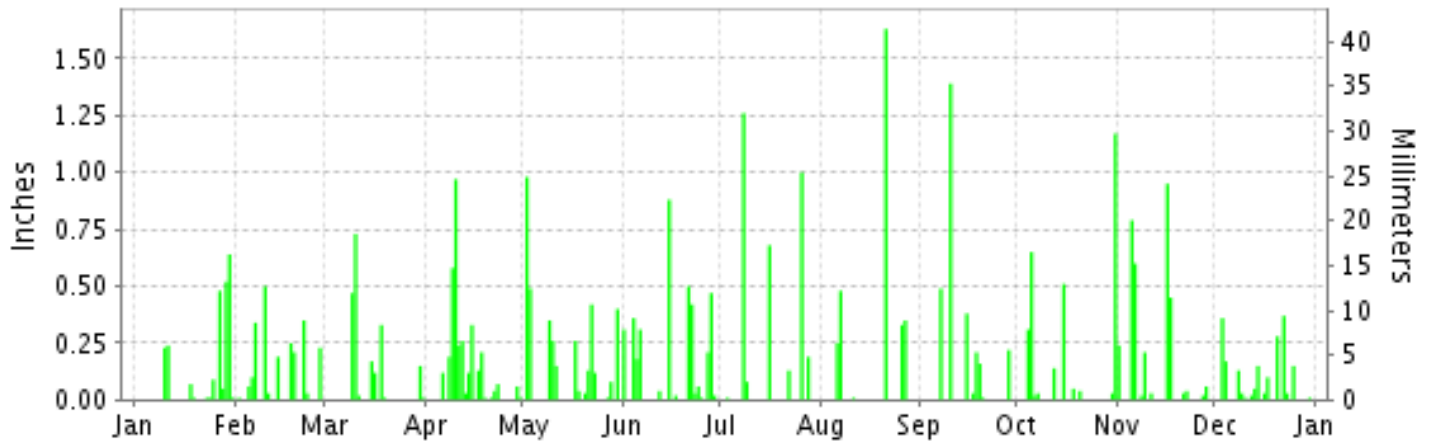
ISSN 0198-568X

GREEN BAY, WISCONSIN (KGRB)

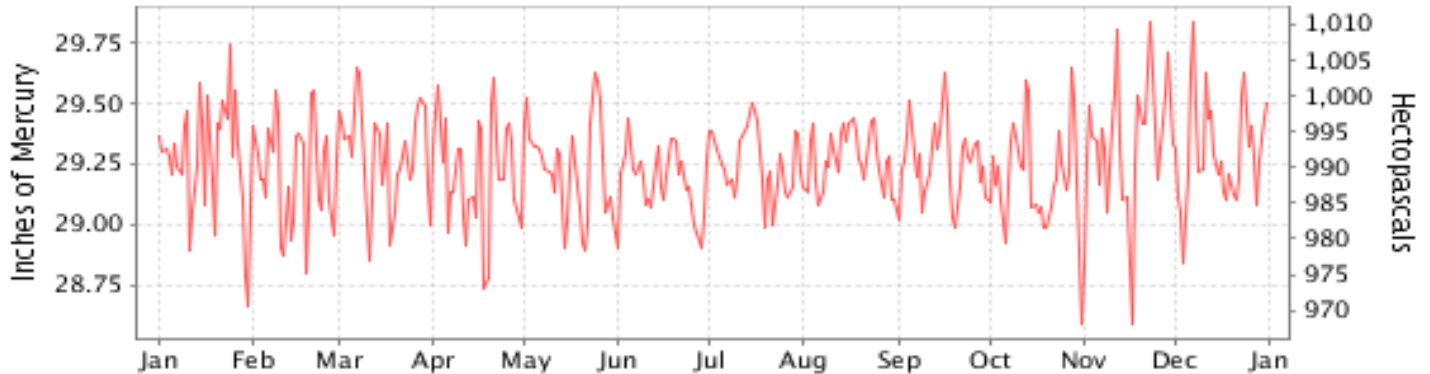
Daily Max/Min Temperature



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
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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

GREEN BAY (KGRB)

LATITUDE: 44° 28'N LONGITUDE: 88° 8'W ELEVATION (FT): GRND: 687 BARO: 685 TIME ZONE: CENTRAL (UTC -6) WBAN: 14898

ELEMENT		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR	
TEMPERATURE °F	MEAN DAILY MAXIMUM	27.9	27.8	33.9	48.7	66.9	75.6	80.5	80.1	72.9	58.9	41.5	22.7	53.1	
	HIGHEST DAILY MAXIMUM	45	40	48	84	86	87	93	89	90	81	58	45	93	
	DATE OF OCCURRENCE	29+	11+	29	30	30	27	19+	27+	10	01	17+	04	JUL 19+	
	MEAN DAILY MINIMUM	10.5	10.5	18.9	33.4	45.7	56.0	60.4	57.2	48.8	39.2	27.1	7.3	34.6	
	LOWEST DAILY MINIMUM	-8	-9	2	24	30	41	50	43	36	24	6	-19	-19	
	DATE OF OCCURRENCE	22	17	04	03+	13	03	27	14	23	28	29	30	DEC 30	
	AVERAGE DRY BULB	19.2	19.2	26.4	41.0	56.3	65.8	70.5	68.6	60.9	49.1	34.3	15.0	43.9	
	MEAN WET BULB	17.2		24.1	37.1	50.7	59.7	64.2	63.0	57.0	45.1	31.9			
	MEAN DEW POINT	11.2		17.9	31.1	45.1	55.8	60.0	59.5	53.9	40.8	26.7			
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	0	0	0	5	0	1	0	0	0	6
	MAXIMUM <= 32°	19	17	13	0	0	0	0	0	0	0	6	23	78	
	MINIMUM <= 32°	30	28	31	17	1	0	0	0	0	8	21	31	167	
MINIMUM <= 0°	6	6	0	0	0	0	0	0	0	0	0	11	23		
H/C	HEATING DEGREE DAYS	1414	1278	1188	716	295	72	22	18	171	487	913	1544	8118	
	COOLING DEGREE DAYS	0	0	0	5	33	105	198	137	55	2	0	0	535	
RH	MEAN (PERCENT)	72	75	70	70	69	72	70	74	78	76	74	77	73	
	HOUR 00 LST	74	78	75	74	80	82	82	88	90	83	78	81	80	
	HOUR 06 LST	76	81	77	78	79	81	82	91	94	87	82	83	83	
	HOUR 12 LST	67	72	65	64	58	62	57	59	61	62	66	72	64	
	HOUR 18 LST	71	72	66	61	59	62	60	62	73	73	73	74	67	
W/O	NUMBER OF DAYS WITH:														
	HEAVY FOG(VISBY <= 1/4 MI)	0	0	0	0	0	0	0	0	0	0	0	0	0	
	THUNDERSTORMS	0	0	0	0	2	5	4	4	3	3	0	0	21	
PR	MEAN STATION PRESS. (IN.)	29.27	29.21	29.29	29.22	29.23	29.18	29.26	29.27	29.26	29.20	29.34	29.31	29.25	
	MEAN SEA-LEVEL PRESS. (IN.)	30.12	30.01	30.10	30.00	29.99	29.92	30.01	30.03	30.01	29.99	30.10	30.10	30.03	
WINDS	RESULTANT SPEED (MPH)	6.2	3.4	3.9	0.6	3.3	1.2	2.1	1.7	1.0	2.4	5.1	3.7	1.7	
	RES. DIR. (TENS OF DEGS.)	26	32	34	29	05	04	22	24	19	26	25	29	29	
	MEAN SPEED (MPH)	9.9	10.0	9.6	11.3	9.8	7.6	7.2	6.0	6.7	8.2	10.4	10.0	8.9	
	PREVAIL.DIR.(TENS OF DEGS.)	29	29	04	04	04	04	18	21	18	27	21	27	04	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	40	37	37	32	33	37	39	41	25	29	37	31	41	
	DIR. (TENS OF DEGS.)	28	03	04	28	32	14	30	30	16	03	29	26	30	
	DATE OF OCCURRENCE	19	26	10	19	11	21	16	21	28	28	17	04	AUG 21	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	49	46	47	42	43	43	47	62	37	36	49	41	62	
DIR. (TENS OF DEGS.)	30	03	04	03	33	14	29	31	02	03	28	26	31		
DATE OF OCCURRENCE	19	26	10	10	11	21	16	21	07	28	17	09	AUG 21		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	2.36	2.30	2.01	3.38	3.72	3.82	3.35	3.05	2.89	2.95	3.44	1.89	35.16	
	GREATEST 24-HOUR (IN.)	0.64	0.53	0.73	1.55	1.33	0.88	1.26	1.63	1.39	1.17	1.38	0.37	1.63	
	DATE OF OCCURRENCE	30	10-11	10	09-10	02-03	15	08	21	10	31	05-06	22	AUG 21	
	NUMBER OF DAYS WITH:														
PRECIPITATION 0.01	12	12	9	17	14	15	7	6	8	10	12	15	137		
PRECIPITATION 0.10	5	8	6	10	10	9	5	5	6	5	6	8	83		
PRECIPITATION 1.00	0	0	0	0	0	0	2	1	1	1	0	0	5		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	14.8	18.9	8.4	7.8	0.0	0.0	0.0	0.0	0.0	T	1.2	26.4	77.5	
	GREATEST 24-HOUR (IN.)	8.2	4.4	4.8	2.5	0.0	0.0	0.0	0.0	0.0	T	0.7	6.0	8.2	
	DATE OF OCCURRENCE	30	22	18	10						24+	28	22	JAN 30	
	MAXIMUM SNOW DEPTH (IN.)	9	11	10	3	0	0	0	0	0	0	T	15	15	
	DATE OF OCCURRENCE	03+	23	02+	13+							30+	26	DEC 26	
	NUMBER OF DAYS WITH:														
SNOWFALL >= 1.0	3	6	3	3	0	0	0	0	0	0	0	9	24		

NORMALS, MEANS, AND EXTREMES GREEN BAY (KGRB)

LATITUDE:
44° 28'N

LONGITUDE:
88° 8'W

ELEVATION (FT):
GRND: 687 BARO: 685

TIME ZONE:
CENTRAL (UTC -6)

WBAN: 14898

	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	24.3	28.2	39.2	53.9	66.0	75.3	79.8	77.7	69.9	56.6	42.2	28.5	53.5
	MEAN DAILY MAXIMUM	64	24.1	28.2	38.7	54.1	66.8	76.2	81.0	78.7	70.3	58.2	42.6	29.1	54.0
	HIGHEST DAILY MAXIMUM	64	53	61	82	89	91	98	103	99	95	88	74	64	103
	YEAR OF OCCURRENCE		2002	2000	2012	1980	1959	1988	1995	1988	1955	1963	2008	2001	JUL 1995
	MEAN OF EXTREME MAXS.	64	41.2	43.9	60.1	77.1	84.4	90.0	91.5	90.2	86.0	77.0	62.0	46.4	70.8
	NORMAL DAILY MINIMUM	30	9.0	12.4	22.4	33.8	44.0	54.1	58.4	56.9	48.5	37.7	26.9	14.4	34.9
	MEAN DAILY MINIMUM	64	7.8	11.1	21.7	34.0	44.2	53.9	58.7	56.8	48.3	38.3	27.0	14.2	34.7
	LOWEST DAILY MINIMUM	64	-31	-28	-29	7	21	32	40	38	24	15	-9	-27	-31
	YEAR OF OCCURRENCE		1951	1996	1962	1954	1966	1958	1965	1967	1949	1966	1976	1983	JAN 1951
	MEAN OF EXTREME MINS.	64	-14.3	-10.3	0.8	20.3	30.5	40.6	46.8	44.4	33.1	24.2	9.7	-7.9	18.2
	NORMAL DRY BULB	30	16.6	20.3	30.8	43.9	55.0	64.7	69.1	67.3	59.2	47.1	34.6	21.5	44.2
	MEAN DRY BULB	64	16.0	19.7	30.2	44.0	55.5	65.2	69.9	67.7	59.3	48.3	34.8	21.7	44.4
	MEAN WET BULB	30	15.7	19.1	27.6	38.0	48.8	58.8	63.2	62.0	54.5	43.0	31.6	20.8	40.3
	MEAN DEW POINT	30	13.6	15.3	24.4	34.6	46.3	56.8	61.6	60.5	52.7	40.8	29.5	18.1	37.9
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.0	0.0	1.1	1.4	0.6	0.0	0.0	0.0	0.0	3.1
	MAXIMUM <= 32	30	22.8	17.6	7.2	0.6	0.0	0.0	0.0	0.0	0.0	0.1	5.3	18.4	72.0
	MINIMUM <= 32	30	30.3	26.8	26.3	12.4	1.9	0.0	0.0	0.0	0.6	8.5	21.1	28.9	156.8
MINIMUM <= 0	30	8.1	5.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	4.8	19.3	
H/C	NORMAL HEATING DEG. DAYS	30	1499	1251	1060	637	326	92	23	40	207	556	914	1350	7955
	NORMAL COOLING DEG. DAYS	30	0	0	0	2	16	83	150	111	33	3	0	0	398
RH	NORMAL (PERCENT)	30	76	75	73	67	67	70	74	77	77	75	76	78	74
	HOURLY 00 LST	30	77	78	78	75	76	80	84	88	87	82	81	80	81
	HOURLY 06 LST	30	79	80	82	79	79	82	86	90	90	85	83	81	83
	HOURLY 12 LST	30	71	68	64	57	55	57	59	63	62	62	68	73	63
	HOURLY 18 LST	30	74	71	67	59	57	59	62	67	71	72	75	77	68
S	PERCENT POSSIBLE SUNSHINE	59	49	52	54	56	61	65	66	62	56	48	37	40	54
W/O	MEAN NO. DAYS WITH: HEAVY FOG(VISBY <= 1/4 MI)	50	1.4	1.9	2.8	1.5	1.3	1.2	1.2	2.3	2.4	2.1	1.7	2.3	22.1
	THUNDERSTORMS	64	0.1	0.1	1.1	2.1	3.8	6.1	6.3	5.5	3.6	1.7	0.4	0.1	30.9
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)	47	5.3	5.2	5.4	5.4	5.1	4.8	4.5	4.6	4.8	5.1	5.8	5.6	5.1
	MIDNIGHT-MIDNIGHT (OKTAS)	32	5.1	4.9	5.1	5.2	4.8	4.6	4.2	4.3	4.5	4.9	5.6	5.3	4.9
	MEAN NO. DAYS WITH: CLEAR	47	7.7	7.2	7.0	6.2	7.0	7.5	8.0	8.4	8.1	7.1	4.8	6.3	85.3
	PARTLY CLOUDY	47	6.6	6.5	7.6	7.8	9.5	10.9	12.2	10.7	9.4	8.5	6.5	6.1	102.3
	CLOUDY	47	16.7	14.6	16.4	16.0	14.5	11.6	10.8	11.9	12.5	15.4	18.8	18.6	177.8
PR	MEAN STATION PRESSURE(IN)	30	29.27	29.29	29.28	29.21	29.20	29.19	29.22	29.26	29.26	29.25	29.26	29.27	29.25
	MEAN SEA-LEVEL PRES. (IN)	30	30.06	30.08	30.06	29.97	29.96	29.93	29.96	30.01	30.02	30.02	30.03	30.06	30.01
WINDS	MEAN SPEED (MPH)	30	9.6	9.5	9.7	10.4	9.3	7.9	7.2	6.8	7.6	8.8	9.5	9.2	8.8
	PREVAIL.DIR.(TENS OF DEGS)	37	28	22	05	05	05	22	22	22	22	22	22	28	28
	MAXIMUM 2-MINUTE: SPEED (MPH)	17	40	38	44	41	41	41	51	41	40	39	45	43	51
	DIR. (TENS OF DEGS)		28	03	29	22	29	01	29	30	25	21	20	01	29
	YEAR OF OCCURRENCE		2013	2011	2002	1997	2011	2005	2006	2013	2011	2010	1998	2010	JUL 2006
	MAXIMUM 3-SECOND SPEED (MPH)	17	49	52	54	54	53	66	62	62	55	52	59	53	66
	DIR. (TENS OF DEGS)		30	03	29	23	28	09	28	31	26	18	21	36	09
YEAR OF OCCURRENCE		2013	2011	2002	1997	2011	2007	2006	2013	2011	2010	1998	2010	JUN 2007	
PRECIPITATION	NORMAL (IN)	30	1.13	1.11	1.85	2.63	2.93	3.88	3.50	3.37	3.04	2.44	2.13	1.51	29.52
	MAXIMUM MONTHLY (IN)	64	3.65	3.56	4.68	6.24	8.31	10.29	9.51	9.04	7.80	5.16	5.32	3.72	10.29
	YEAR OF OCCURRENCE		2008	1953	1977	2011	2004	1990	2010	1975	1965	2009	1992	2008	JUN 1990
	MINIMUM MONTHLY (IN)	64	0.12	0.04	0.15	0.49	0.06	0.31	0.83	0.59	0.28	T	0.11	T	0.04
	YEAR OF OCCURRENCE		1981	1969	1999	1989	1988	1976	1981	2008	1976	1952	2007	1952	FEB 1969
	MAXIMUM IN 24 HOURS (IN)	64	1.14	1.78	1.83	3.24	3.28	4.90	4.65	4.60	2.99	3.68	2.30	1.55	4.90
	YEAR OF OCCURRENCE		1980	1966	1998	1994	1973	1990	2000	1975	1964	1954	1985	1959	JUN 1990
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	9.9	8.4	10.6	11.1	11.4	10.3	10.4	10.4	9.7	10.5	10.0	10.3	123.0
	PRECIPITATION >= 1.00	30	0.0	0.1	0.3	0.4	0.4	1.1	1.0	0.6	0.7	0.4	0.2	0.1	5.3
SNOWFALL	NORMAL (IN)	30	13.0	9.9	8.1	2.9	0.2	0.0	0.0	0.0	0.0	0.2	4.0	13.1	51.4
	MAXIMUM MONTHLY (IN)	64	31.5	24.5	24.2	11.8	4.3	T	T	T	T	1.8	17.1	45.6	45.6
	YEAR OF OCCURRENCE		1996	2008	1989	1977	1990	1992	2006	1993	2006	2002	1995	2008	DEC 2008
	MAXIMUM IN 24 HOURS (IN)	64	15.3	9.4	13.0	10.2	4.3	T	T	T	T	1.6	10.1	14.4	15.3
	YEAR OF OCCURRENCE		1996	2011	1997	1977	1990	1992	2006	1993	1995	1989	1995	1990	JAN 1996
	MAXIMUM SNOW DEPTH (IN)	63	25	24	19	11	2	0	0	0	0	1	11	19	25
	YEAR OF OCCURRENCE		1979	1979	1962	1977	1990					1992	1977	2008	JAN 1979
NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	4.1	3.1	2.6	1.1	0.0	0.0	0.0	0.0	0.0	0.1	1.1	3.7	15.8	

PRECIPITATION (inches) 2013 GREEN BAY (KGRB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	0.59	1.59	1.64	3.33	1.65	5.60	3.17	3.78	5.66	4.92	2.55	1.72	36.20
1985	0.86	2.55	2.70	2.24	2.58	2.21	4.03	8.03	3.65	2.72	4.96	1.83	38.36
1986	0.60	0.83	2.48	2.26	1.15	4.06	4.95	3.85	7.51	1.89	1.27	0.48	31.33
1987	0.47	0.39	1.53	2.33	2.58	1.83	2.18	3.41	1.57	1.76	3.07	2.04	23.16
1988	1.79	0.73	1.10	2.53	0.06	0.67	2.34	3.47	4.11	1.96	4.43	0.84	24.03
1989	0.41	0.38	2.88	0.49	4.22	1.56	2.27	1.05	0.58	4.76	1.25	0.55	20.40
1990	0.64	0.58	3.25	1.28	3.99	10.29	2.93	2.51	5.13	2.34	1.61	2.10	36.65
1991	0.57	0.37	2.87	2.77	2.42	1.08	4.16	2.11	2.55	3.50	2.72	1.42	26.54
1992	0.72	0.55	2.48	3.01	1.54	1.61	4.18	2.10	5.61	0.92	5.32	2.27	30.31
1993	1.42	0.34	0.76	3.99	4.28	6.82	6.83	2.30	2.78	2.29	1.56	0.44	33.81
1994	1.47	1.11	1.14	5.91	1.69	2.84	7.00	3.69	2.19	0.98	1.43	0.34	29.79
1995	0.65	0.39	1.92	2.22	2.88	1.80	1.15	7.31	2.76	4.80	3.32	1.25	30.45
1996	1.77	0.76	1.16	3.85	1.40	5.57	2.49	1.40	1.40	2.93	.80	1.89	25.42
1997	1.81	1.40	1.92	1.67	2.60	5.51	2.11	5.73	2.76	0.93	0.30	0.61	27.35
1998	2.21	0.80	3.66	1.85	2.21	6.17	1.86	2.93	3.54	1.56	1.67	0.30	28.76
1999	2.37	1.10	0.15	2.11	3.77	3.98	5.67	1.32	1.24	0.67	1.57	0.83	24.78
2000	0.87	1.04	0.98	2.15	4.41	5.33	6.27	3.38	3.94	0.46	1.25	1.16	31.24
2001	1.19	1.26	0.42	3.66	4.74	5.17	0.85	3.42	2.35	1.71	1.70	1.23	27.70
2002	0.60	1.50	2.08	3.02	2.81	4.69	2.16	4.01	2.67	3.26	0.44	0.73	27.97
2003	0.58	0.56	2.32	2.36	3.17	3.71	4.26	4.15	3.32	1.05	3.83	1.68	30.99
2004	1.24	1.62	3.58	1.56	8.31	4.87	1.78	2.00	0.47	3.70	1.80	2.26	33.19
2005	1.60	1.33	1.33	1.53	2.52	3.44	1.46	4.23	3.08	1.59	3.07	1.04	26.22
2006	1.64	1.34	1.16	1.97	5.90	2.83	3.14	2.11	3.33	3.14	1.23	2.88	30.67
2007	0.63	1.39	2.74	1.72	2.39	3.71	2.41	2.72	3.16	3.62	0.11	2.54	27.14
2008	3.65	2.30	2.52	4.61	1.43	4.77	4.71	0.59	1.89	1.59	1.49	3.72	33.27
2009	0.66	1.55	2.59	2.62	3.01	2.53	1.33	3.33	1.22	5.16	1.38	2.28	27.66
2010	0.67	1.05	0.31	3.63	1.99	6.73	9.51	4.42	4.48	2.12	1.33	1.91	38.15
2011	1.23	1.34	3.08	6.24	2.81	5.12	5.30	1.71	4.54	1.66	3.42	1.40	37.85
2012	1.40	1.12	2.21	2.39	3.43	1.71	6.01	3.66	1.09	4.92	1.05	2.54	31.53
2013	2.36	2.30	2.01	3.38	3.72	3.82	3.35	3.05	2.89	2.95	3.44	1.89	35.16
POR= 64 YRS	1.21	1.11	1.91	2.74	3.02	3.52	3.49	3.21	3.05	2.28	1.96	1.49	28.99

WBAN : 14898

AVERAGE TEMPERATURE (°F) 2013 GREEN BAY (KGRB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1984	12.7	28.3	25.3	44.5	51.7	67.4	68.6	69.5	57.5	51.0	34.8	24.0	44.6
1985	12.2	17.6	34.2	47.6	58.5	62.3	69.1	66.4	60.8	48.3	30.9	9.4	43.1
1986	16.7	18.1	32.5	48.1	57.7	63.9	71.5	64.3	59.3	48.0	29.7	24.8	44.6
1987	21.6	27.9	35.1	49.1	58.8	69.0	73.0	67.6	61.1	43.2	37.6	27.1	47.6
1988	12.5	15.0	32.1	44.1	59.8	68.3	73.4	72.3	61.0	42.4	37.1	20.7	44.9
1989	25.5	13.0	25.3	41.9	54.9	63.4	70.9	68.7	59.0	49.6	31.4	11.2	42.9
1990	26.5	22.3	34.0	47.6	52.5	66.0	68.6	67.6	61.8	47.2	40.0	21.1	46.3
1991	13.8	23.5	33.6	47.9	61.4	69.2	69.8	69.9	58.5	48.2	30.2	24.5	45.9
1992	22.9	27.1	30.4	42.0	56.6	62.3	64.9	64.3	58.5	46.8	32.8	23.7	44.4
1993	19.6	19.0	30.2	40.4	56.2	62.8	70.3	70.3	55.4	45.9	33.7	25.3	44.1
1994	6.2	14.5	33.3	44.5	57.1	67.9	69.8	65.9	63.7	51.2	39.4	29.7	45.3
1995	21.4	20.5	34.6	40.5	56.0	70.8	73.1	73.9	58.3	49.2	27.8	18.9	45.4
1996	13.7	18.1	25.8	40.7	52.9	66.2	65.8	68.0	59.5	46.7	28.5	21.7	42.3
1997	15.1	21.1	28.9	42.3	49.1	64.3	66.4	63.7	60.0	47.7	31.9	27.9	43.2
1998	22.2	31.3	33.1	46.9	60.5	64.9	69.4	69.5	63.5	50.9	39.4	27.4	48.3
1999	14.9	28.3	34.0	45.9	58.1	65.4	72.2	65.4	58.6	46.1	40.0	24.1	46.1
2000	15.6	24.5	39.4	42.3	56.8	63.8	67.0	67.1	58.0	50.7	33.9	11.4	44.2
2001	20.3	17.4	29.5	47.8	57.3	65.6	70.6	70.7	58.3	47.3	43.4	30.1	46.5
2002	25.9	27.0	26.7	44.8	50.5	66.7	73.2	67.7	62.6	43.7	33.9	26.3	45.8
2003	16.4	14.0	30.0	41.5	53.1	63.2	67.9	69.1	60.4	48.0	36.1	28.0	44.0
2004	12.2	21.6	35.2	45.4	53.6	63.3	67.6	64.3	64.6	50.0	39.1	23.2	45.0
2005	17.0	26.1	27.2	47.4	54.1	71.0	70.5	69.0	64.4	51.6	36.9	19.8	46.3
2006	30.6	19.1	33.0	49.3	57.8	65.6	73.3	67.7	58.0	45.1	39.4	30.5	47.5
2007	23.0	15.3	35.8	44.6	59.7	67.5	69.6	69.3	62.6	54.8	34.8	21.5	46.5
2008	17.0	15.9	27.6	46.2	53.9	67.2	70.8	68.8	61.2	48.3	34.7	15.0	43.9
2009	7.6	21.4	31.0	43.6	55.2	64.5	65.4	65.9	61.3	44.3	41.8	20.4	43.5
2010	18.2	22.6	37.8	50.3	58.8	65.3	72.6	72.6	58.3	50.2	37.5	20.1	47.0
2011	13.9	20.0	28.5	42.1	54.7	64.8	75.1	69.2	57.7	51.4	39.2	29.1	45.5
2012	23.7	29.2	46.4	46.2	61.1	70.5	76.1	68.5	58.4	47.0	36.8	28.7	49.4
2013	19.2	19.2	26.4	41.0	56.3	65.8	70.5	68.6	60.9	49.1	34.3	15.0	43.9
POR= 64 YRS	16.0	19.7	30.2	44.0	55.5	65.2	69.9	67.7	59.3	48.3	34.8	21.7	44.4

HEATING DEGREE DAYS (base 65°F) 2013 GREEN BAY (KGRB)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	18	20	237	430	899	1262	1632	1324	949	533	204	114	7622
1985-86	9	34	196	508	1016	1719	1491	1307	1002	508	244	90	8124
1986-87	12	65	191	519	1052	1240	1341	1033	918	478	240	36	7125
1987-88	18	44	132	673	815	1167	1623	1447	1012	624	201	74	7830
1988-89	4	23	146	694	830	1365	1216	1451	1224	687	315	98	8053
1989-90	7	19	200	475	1000	1666	1189	1191	952	547	380	55	7681
1990-91	24	28	157	547	744	1357	1579	1154	967	516	220	23	7316
1991-92	17	17	250	515	1038	1248	1296	1093	1067	683	275	122	7621
1992-93	44	87	209	560	960	1274	1398	1281	1071	731	277	108	8000
1993-94	1	16	292	585	930	1226	1818	1409	974	609	267	59	8186
1994-95	15	55	102	423	760	1087	1342	1237	937	730	275	43	7006
1995-96	8	0	229	483	1110	1419	1583	1356	1208	721	385	73	8575
1996-97	32	20	199	561	1089	1335	1541	1224	1114	676	486	87	8364
1997-98	52	88	163	533	988	1145	1319	937	985	535	175	118	7038
1998-99	5	5	98	431	760	1160	1546	1022	954	569	223	101	6874
1999-00	5	46	226	576	744	1259	1526	1170	785	672	275	94	7378
2000-01	39	30	229	435	929	1657	1377	1324	1094	513	247	87	7961
2001-02	19	8	217	540	639	1074	1205	1061	1180	611	453	77	7084
2002-03	2	13	124	661	928	1191	1501	1420	1078	698	364	93	8073
2003-04	16	7	182	522	862	1140	1629	1254	915	579	355	97	7558
2004-05	30	89	82	458	770	1288	1480	1083	1168	521	337	17	7323
2005-06	9	15	90	440	833	1397	1060	1279	983	465	263	52	6886
2006-07	6	20	218	613	761	1066	1295	1386	897	607	200	42	7111
2007-08	19	20	145	341	899	1341	1481	1415	1155	559	337	31	7743
2008-09	3	10	140	513	904	1542	1773	1215	1049	636	302	116	8203
2009-10	33	59	126	634	690	1375	1444	1180	835	441	241	49	7107
2010-11	2	7	212	451	819	1386	1578	1253	1126	679	335	73	7921
2011-12	0	3	245	419	766	1106	1273	1031	582	556	163	29	6173
2012-13	0	13	229	550	841	1118	1414	1278	1188	716	295	72	7714
2013-	22	18	171	487	913	1544							

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COOLING DEGREE DAYS (base 65°F) 2013 GREEN BAY (KGRB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1984	0	0	0	0	3	94	136	165	17	0	0	0	415
1985	0	0	0	16	11	41	141	85	79	0	0	0	373
1986	0	0	0	8	25	65	220	48	27	0	0	0	393
1987	0	0	0	7	56	161	274	133	23	0	0	0	654
1988	0	0	0	0	46	182	270	255	33	0	0	0	786
1989	0	0	0	0	7	55	199	141	27	0	0	0	429
1990	0	0	0	34	0	92	140	116	70	0	0	0	452
1991	0	0	0	8	115	155	171	177	60	0	0	0	686
1992	0	0	0	0	22	49	49	69	23	1	0	0	213
1993	0	0	0	0	13	48	173	187	11	0	0	0	432
1994	0	0	0	0	30	154	172	89	71	3	0	0	519
1995	0	0	0	0	3	224	265	282	33	1	0	0	808
1996	0	0	0	0	15	115	64	120	38	0	0	0	352
1997	0	0	0	0	0	70	103	55	20	7	0	0	255
1998	0	0	0	0	44	121	145	150	60	2	0	0	522
1999	0	0	0	0	15	122	237	66	40	0	0	0	480
2000	0	0	0	0	29	65	107	104	25	0	0	0	330
2001	0	0	0	2	16	113	202	190	23	0	0	0	546
2002	0	0	0	9	11	135	262	104	58	6	0	0	585
2003	0	0	0	0	0	46	113	142	49	1	0	0	351
2004	0	0	0	0	9	51	116	73	78	0	0	0	327
2005	0	0	0	1	3	203	186	147	77	31	0	0	648
2006	0	0	0	0	46	76	271	110	14	3	0	0	520
2007	0	0	2	3	46	124	168	160	80	33	0	0	616
2008	0	0	0	0	0	104	188	138	33	3	0	0	466
2009	0	0	0	0	6	106	49	92	22	0	0	0	275
2010	0	0	0	9	55	67	243	248	20	0	0	0	642
2011	0	0	0	0	22	71	320	139	33	6	0	0	591
2012	0	0	12	0	51	199	352	131	41	0	0	0	786
2013	0	0	0	5	33	105	198	137	55	2	0	0	535

SNOWFALL (inches) 2013 GREEN BAY (KGRB)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1984-85	0.0	0.0	0.0	0.0	2.0	15.9	13.8	15.1	17.7	6.2	0.0	0.0	70.7
1985-86	0.0	0.0	0.0	0.0	16.5	22.7	6.8	9.9	6.8	0.5	0.0	0.0	63.2
1986-87	0.0	0.0	0.0	T	9.1	5.2	7.8	1.6	10.8	1.6	0.0	0.0	36.1
1987-88	0.0	0.0	0.0	T	1.8	15.8	20.6	8.9	1.8	0.4	0.0	0.0	49.3
1988-89	0.0	0.0	0.0	T	11.5	5.8	1.5	8.6	24.2	0.3	T	0.0	51.9
1989-90	0.0	0.0	0.0	1.6	1.5	15.3	10.7	6.9	2.7	2.7	4.3	0.0	45.7
1990-91	0.0	0.0	0.0	T	1.2	26.9	8.8	6.9	5.3	7.5	0.0	0.0	56.6
1991-92	0.0	0.0	0.0	T	8.7	10.7	4.3	7.4	9.0	2.8	0.0	T	42.9
1992-93	0.0	T	0.0	1.2	8.5	15.5	11.8	5.6	7.2	7.2	T	0.0	57.0
1993-94	0.0	T	0.0	T	1.6	1.9	30.0	16.4	8.1	3.6	0.0	0.0	61.6
1994-95	0.0	0.0	0.0	T	1.3	4.3	9.8	6.8	7.1	1.9	T	0.0	31.2
1995-96	0.0	0.0	T	T	17.1	11.2	31.5	2.9	4.8	10.0	T	0.0	77.5
1996-97	0.0	0.0	0.0	T	3.7	19.4	17.2	15.5	20.7	0.3	0.2	0.0	77.0
1997-98	0.0	0.0	0.0	0.2	0.7	6.2	24.2	1.2	11.5	2.1	0.0	0.0	46.1
1998-99	0.0	0.0	T	0.0	0.3	5.4	21.2	2.2	4.4	T	0.0	0.0	33.5
1999-00	0.0	0.0	T	0.0	0.0	5.4	15.4	11.3	2.1	2.5	0.0	0.0	36.7
2000-01	0.0	T	0.0	T	7.8	28.9	5.6	7.8	4.7	1.9	0.0	0.0	56.7
2001-02	0.0	0.0	0.0	T	T	1.8	12.0	8.5	17.1	7.5	T	T	46.9
2002-03	0.0	0.0	0.0	1.8	0.9	3.3	9.6	9.2	9.1	5.0	0.0	0.0	38.9
2003-04	0.0	0.0	0.0	T	0.3	2.5	16.3	16.6	8.4	0.7	T	0.0	44.8
2004-05	0.0	0.0	0.0	T	T	14.7	17.8	11.1	12.0	T	T	0.0	55.6
2005-06	0.0	0.0	0.0	T	4.1	12.7	2.0	15.7	3.5	0.0	T	0.0	38.0
2006-07	T	0.0	T	T	1.5	4.3	9.8	18.0	8.9	6.8	T	0.0	49.3
2007-08	0.0	0.0	0.0	T	0.7	24.1	28.5	24.5	4.3	5.3	0.0	0.0	87.4
2008-09	0.0	0.0	0.0	T	6.7	45.6	10.2	15.7	9.1	0.4	0.0	0.0	87.7
2009-10	0.0	0.0	0.0	T	T	20.7	5.5	16.8	0.0	5.8	1.0	0.0	49.8
2010-11	0.0	0.0	0.0	0.0	0.3	22.2	19.1	17.8	22.3	10.9	T	0.0	92.6
2011-12	0.0	0.0	0.0	T	2.0	2.9	10.7	8.0	8.1	T	T	0.0	31.7
2012-13	0.0	0.0	0.0	0.0	1.5	22.8	14.8	18.9	8.4	7.8	0.0	0.0	74.2
2013-	0.0	0.0	0.0	T	1.2	26.4							
POR= 64 YRS	T	T	T	0.2	4.0	11.9	12.1	9.5	8.9	2.7	0.1	T	49.4

WBAN : 14898

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). 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</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 GREEN BAY WISCONSIN (KGRB)

The Green Bay climate is modified by surrounding topography. The modification is caused by the Bay of Green Bay, Lakes Michigan, and Superior, and to a lesser extent, the slightly higher surrounding terrain terminating in the Fox River Valley. The city of Green Bay is located at the mouth of the Fox River, one of the largest rivers flowing northward in the United States. It empties into the south end of the Bay.

The modified continental climate of Green Bay is shown by the few occurrences of 90 degree temperatures in the summer season and the few occurrences of sub-zero temperatures in the winter season. The narrow temperature range stems from the lake effects and the limited hours of sunshine caused by cloudiness.

Precipitation normally falls in the five-month period May through September. Three-fifths of the annual total is in the growing season, most often falling during thunderstorms. During the winter months, snowfall is less than in nearby communities where the ground is slightly higher.

The comparatively low range in temperature along with the greater portion of the precipitation falling during the growing season is conducive to the development of the dairy industry. Cherry and apple orchards are important crops in nearby lake communities. The growing of potatoes and canning vegetables are predominant inland. Paper products are the major manufacturing industry.

High winds, excessive precipitation, and electrical storms cause occasional damage. Snowstorms are the principal winter hazard. While the winters are long in Green Bay, the extremes are never as severe as the northern latitude location would indicate.

Based on the 1951-1980 period, the average first occurrence of 32 degrees Fahrenheit in the fall is October 2 and the average last occurrence in the spring is May 12.

Station History

GREEN BAY, WI

NAME	Begin Date	End Date	Latitude	Longitude	Elevation Feet	Relocation	Platform
GREEN BAY AUSTIN STRAUBEL FIELD	1973-01-01	1989-11-15	44° 28'	-88° 7'	682		COOP, WXSVC
GREEN BAY AUSTIN STRAUBEL FIELD	1989-11-15	1994-04-05	44° 28'	-88° 7'	702	.5 MI NE	COOP, WXSVC
GREEN BAY AUSTIN STRAUBEL FIELD	1994-04-05	1994-04-17	44° 30'	-88° 7'	702	500 FT N	COOP, WXSVC
GREEN BAY AUSTIN STRAUBEL FIELD	1948-01-01	1949-08-01	44° 28'	-88° 7'			AIRWAYS
GREEN BAY AUSTIN STRAUBEL FIELD	1965-01-01	1973-01-01	44° 28'	-88° 7'	682		AIRWAYS, COOP
GREEN BAY AUSTIN STRAUBEL FIELD	1949-08-01	1965-01-01	44° 28'	-88° 7'	699		AIRWAYS, COOP
GREEN BAY AUSTIN STRAUBEL INTL AP	1996-07-01	2009-03-13	44° 28'	-88° 8'	687	1.7 MI SSW	ASOS, COOP, WXSVC
GREEN BAY AUSTIN STRAUBEL FIELD	1994-04-17	1996-07-01	44° 30'	-88° 7'	702		COOP, WXSVC
GREEN BAY AUSTIN STRAUBEL INTL AP	2009-03-13	Present	44° 28'	-88° 8'	687		ASOS, COOP, WXSVC

Element History

Element	Begin Date	End Date	Frequency	Time Of Observation	Equipment *	Equipment * Modifications	Equipment Exposure
PRECIP	2009-03-13	2010-08-01	DAILY	2400	PCPNX		
TEMP	2010-08-01	2012-01-25	DAILY	2400	ATEMP		
PRECIP	2012-01-25	Present	DAILY	VAR	PCPNX	SHLD	
TEMPATOB	2000-06-14	2003-09-10	TWICE DAILY - AM/PM	1700			
PRECIP	2000-06-14	2009-03-13	HOURLY	2400	TB	RCRD	
PRECIP	2009-03-13	2010-08-01	HOURLY	2400	AWPAG	SHLD; RCRD; HTD	
PRECIP	2010-08-01	2012-01-25	HOURLY	2400	AWPAG	SHLD; RCRD; HTD	
TEMP	2012-01-25	Present	DAILY	VAR	ATEMP		
PRECIP	2012-01-25	Present	HOURLY	VAR	AWPAG	SHLD; RCRD; HTD	
TEMP	2000-06-14	2009-03-13	DAILY	2400	ATEMP		
TEMP	2009-03-13	2010-08-01	DAILY	2400	ATEMP		
PRECIP	2010-08-01	2012-01-25	DAILY	2400	PCPNX	SHLD	
PRECIP	1948-01-01	1961-11-01	DAILY	2400	UNIV	RCRD	
PRECIP	1995-07-01	1996-07-01	HOURLY	2400	UNIV	RCRD	
TEMP	1995-07-01	1996-07-01	DAILY	2400	HYGR		
TEMP	1996-07-01	2000-06-14	DAILY	2400	ATEMP		
WIND	2010-08-01	2012-01-25	DAILY	2400	REMOTE		
WIND	2012-01-25	Present	DAILY	VAR	REMOTE		
PRECIP	1961-11-01	1995-07-01	HOURLY	2400			
TEMP	1961-11-01	1995-07-01	DAILY	2400	HYGR		
PRECIP	1961-11-01	1995-07-01	DAILY	2400	UNIV	RCRD	
PRECIP	1995-07-01	1996-07-01	DAILY	2400	UNIV	RCRD	
TEMP	1948-01-01	1961-11-01	DAILY	2400	HYGR		
PRECIP	1996-07-01	2000-06-14	DAILY	2400	TB	RCRD	
WIND	2009-03-13	2010-08-01	DAILY	2400	REMOTE		
PRECIP	1996-07-01	2000-06-14	HOURLY	2400	TB	RCRD	
PRECIP	2000-06-14	2009-03-13	DAILY	2400	TB	RCRD	
TEMPATOB	2000-06-14	2003-09-10	TWICE DAILY - AM/PM	0800			

* 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

Visit our Web Site for other weather data: www.ncdc.noaa.gov