

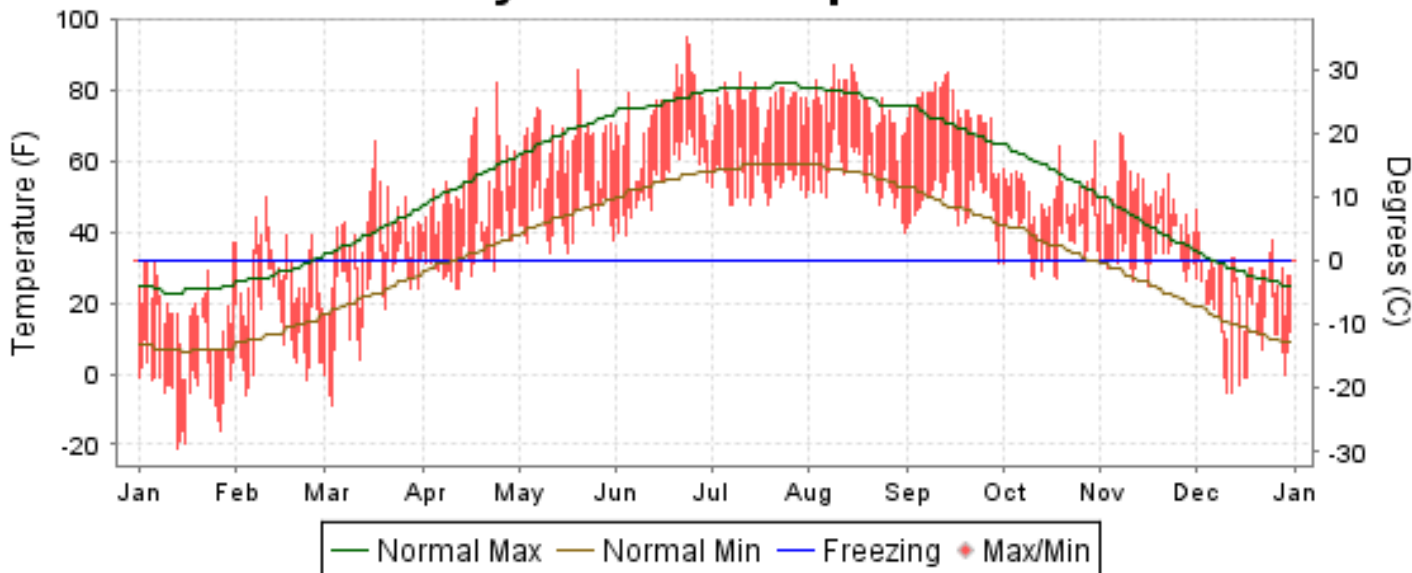


2009 LOCAL CLIMATOLOGICAL DATA ANNUAL SUMMARY WITH COMPARATIVE DATA

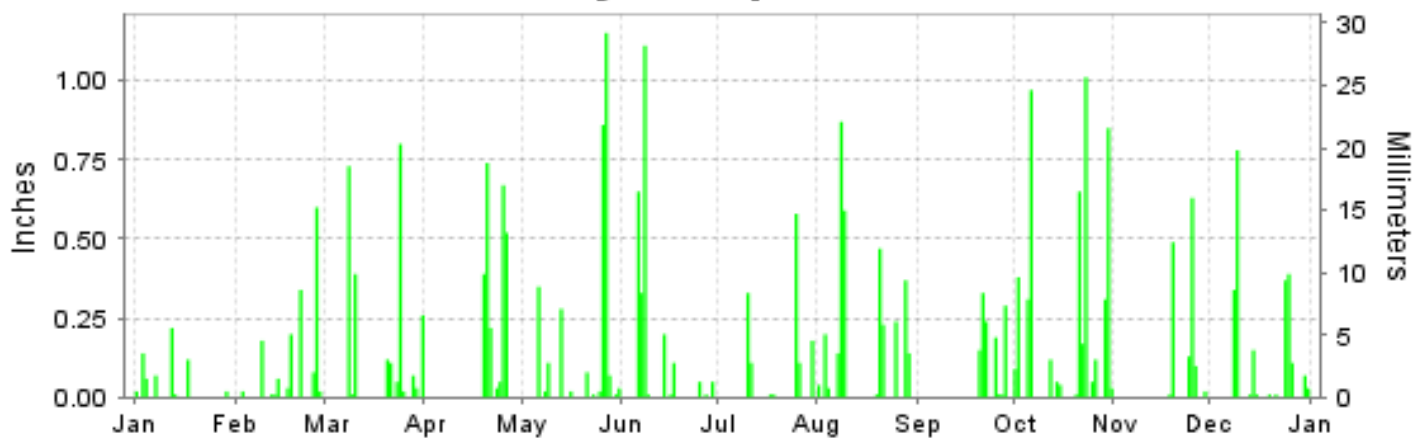
ISSN 0198-568X

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
ATMOSPHERIC ADMINISTRATION

NATIONAL
ENVIRONMENTAL SATELLITE, DATA
AND INFORMATION SERVICE

NATIONAL
CLIMATIC DATA CENTER
ASHEVILLE, NORTH CAROLINA

Thomas R. Karl
DIRECTOR
NATIONAL CLIMATIC DATA CENTER

METEOROLOGICAL DATA FOR 2009

GREEN BAY (KGRB)

LATITUDE: 44° 30'N LONGITUDE: -88° 7'W ELEVATION (FT): GRND: 688 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	17.7	29.8	39.3	53.7	66.0	74.1	76.6	76.4	73.9	51.0	49.8	27.7	53.0	
	HIGHEST DAILY MAXIMUM	37	50	66	82	86	95	85	87	85	66	68	46	95	
	DATE OF OCCURRENCE	31	10	17	24	20	23	10	14+	14+	30	07	01	JUN 23	
	MEAN DAILY MINIMUM	-2.6	13.0	22.6	33.4	44.3	54.8	54.1	55.4	48.6	37.5	33.7	13.1	34.0	
	LOWEST DAILY MINIMUM	-21	-6	-9	24	34	39	48	40	31	27	25	-5	-21	
	DATE OF OCCURRENCE	13	04	03	12+	17+	04	19+	31	30	18+	16	12+	JAN 13	
	AVERAGE DRY BULB	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	
	MEAN WET BULB	8.4			37.6	48.7	58.2	58.8	61.0		41.3	38.6	19.4		
	MEAN DEW POINT	2.5			29.3	41.8	53.5	53.7	57.5		37.4	34.2	14.7		
	NUMBER OF DAYS WITH:														
	MAXIMUM >= 90°	0	0	0	0	0	2	0	0	0	0	0	0	0	2
	MAXIMUM <= 32°	30	17	6	0	0	0	0	0	0	0	0	25	78	
	MINIMUM <= 32°	31	26	26	15	0	0	0	0	1	9	16	31	155	
MINIMUM <= 0°	21	4	3	0	0	0	0	0	0	0	0	7	35		
H/C	HEATING DEGREE DAYS	1773	1215	1049	636	302	116	33	59	126	634	690	1375	8008	
	COOLING DEGREE DAYS	0	0	0	0	6	106	49	92	22	0	0	0	275	
RH	MEAN (PERCENT)	72	72	71	62	63	70	68	76	74	79	76	77	72	
	HOUR 00 LST	74	76	76	68	74	80	83	88	90	84	82	78	79	
	HOUR 06 LST	78	79	79	75	75	83	84	91	94	88	84	80	83	
	HOUR 12 LST	69	66	64	54	50	58	53	61	54	70	65	71	61	
	HOUR 18 LST	68	68	66	53	53	58	54	65	65	76	74	75	65	
S	PERCENT POSSIBLE SUNSHINE	57	61	68	65	77	50	53	52	66					
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	3	1	2	3	3	0	0	0	0	12	
CLOUDNESS	SUNRISE-SUNSET: (OKTAS)														
	CEILOMETER (<= 12,000 FT.)														
	SATELLITE (> 12,000 FT.)														
	MIDNIGHT-MIDNIGHT: (OKTAS)														
	CEILOMETER (<= 12,000 FT.)														
SATELLITE (> 12,000 FT.)															
NUMBER OF DAYS WITH:															
CLEAR															
PARTLY CLOUDY															
CLOUDY															
PR	MEAN STATION PRESS. (IN.)	29.23	29.29	29.34	29.22	29.20	29.13	29.17	29.21	29.28	29.19	29.30	29.25	29.23	
	MEAN SEA-LEVEL PRESS. (IN.)	30.04	30.13	30.12	29.98	29.97	29.88	29.92	29.96	30.04	29.97	30.07	30.07	30.01	
WINDS	RESULTANT SPEED (MPH)	4.5		0.4	3.6	1.6	0.4	3.4	2.7	0.6	0.9	1.6	2.5		
	RES. DIR. (TENS OF DEGS.)	27		17	01	24	31	28	23	34	31	23	33		
	MEAN SPEED (MPH)	7.9	9.8	9.8	10.5	9.6	7.3	6.9	6.7	4.7	8.1	7.0	8.8	8.1	
	PREVAIL.DIR.(TENS OF DEGS.)	28	27	04	04	21	29	29	20	05	27	18	35	04	
	MAXIMUM 2-MINUTE WIND														
	SPEED (MPH)	25	32	37	30	33	30	28	32	32	31	24	39	39	
	DIR. (TENS OF DEGS.)	31	01	26	33	28	29	28	32	31	24	16	03	03	
	DATE OF OCCURRENCE	23	27	10	21	16	29	15	09	28	31	06	09	DEC 09	
	MAXIMUM 3-SECOND WIND:														
	SPEED (MPH)	33	45	46	38	44	38	35	45	46	45	36	48	48	
DIR. (TENS OF DEGS.)	32	02	14	30	29	27	32	32	30	23	17	03	03		
DATE OF OCCURRENCE	23	26	24	21	16	28	10	09	28	30	06	09	DEC 09		
PRECIPITATION	WATER EQUIVALENT:														
	TOTAL (IN.)	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	
	GREATEST 24-HOUR (IN.)	0.22	0.60	0.82	0.93	1.26	1.11	0.65	1.14	0.48	1.28	0.63	0.78	1.28	
	DATE OF OCCURRENCE	12	26	24-25	19-20	26-27	08	25-26	08-09	20-21	05-06	25	09	OCT 05-06	
	NUMBER OF DAYS WITH:														
	PRECIPITATION 0.01	8	11	11	7	13	10	7	12	7	16	6	12	120	
PRECIPITATION 0.10	3	4	6	5	5	5	5	9	5	10	4	6	67		
PRECIPITATION 1.00	0	0	0	0	1	1	0	0	0	1	0	0	3		
SNOWFALL	SNOW,ICE PELLETS,HAIL														
	TOTAL (IN.)	10.2	15.7	9.1	0.4	0.0	0.0	0.0	0.0	0.0	T	T	20.7	56.1	
	GREATEST 24-HOUR (IN.)	3.6	5.6	6.0	0.2	0.0	0.0	0.0	0.0	0.0	T	T	11.2	11.2	
	DATE OF OCCURRENCE	12	26	08	21+						15+	29+	09	DEC 09	
	MAXIMUM SNOW DEPTH (IN.)	16	12	7	T	0	0	0	0	0	0	0	13	16	
	DATE OF OCCURRENCE	19+	05+	09+	21								12+	JAN 19+	
NUMBER OF DAYS WITH:															
SNOWFALL >= 1.0	3	4	2	0	0	0	0	0	0	0	0	5	14		

NORMALS, MEANS, AND EXTREMES GREEN BAY (KGRB)

LATITUDE:
44 ° 30'N

LONGITUDE:
-88 ° 7 'W

ELEVATION (FT):
GRND: 688 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	24.1	28.9	40.0	54.6	68.0	76.8	81.2	78.5	70.2	57.9	42.4	29.0	54.3
	MEAN DAILY MAXIMUM	60	23.9	28.0	38.4	54.1	66.7	76.2	80.8	78.5	70.3	58.1	42.5	29.0	53.9
	HIGHEST DAILY MAXIMUM	60	53	61	78	89	91	98	103	99	95	88	74	64	103
	YEAR OF OCCURRENCE		2002	2000	2007	1980	1959	1988	1995	1988	1955	1963	2008	2001	JUL 1995
	MEAN OF EXTREME MAXS.	60	41.0	44.0	59.8	77.0	84.2	90.0	91.4	90.3	86.1	77.0	62.1	46.3	70.8
	NORMAL DAILY MINIMUM	30	7.1	12.1	22.6	33.9	44.7	54.0	58.6	56.5	47.5	36.9	25.6	13.3	34.4
	MEAN DAILY MINIMUM	60	7.6	10.8	21.4	33.8	44.0	53.7	58.4	56.7	48.4	38.3	26.8	14.0	34.5
	LOWEST DAILY MINIMUM	60	-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.	60	-14.6	-10.5	0.5	19.9	30.3	40.4	46.5	44.3	32.9	24.1	9.5	-8.1	17.9
	NORMAL DRY BULB	30	15.6	20.5	31.3	44.2	56.4	65.4	69.9	67.5	58.8	47.4	34.0	21.2	44.4
	MEAN DRY BULB	60	15.8	19.4	29.9	44.0	55.4	65.1	69.6	67.6	59.4	48.2	34.6	21.5	44.2
	MEAN WET BULB	26	16.2	19.1	27.8	38.6	49.3	59.3	63.3	62.3	55.1	43.3	31.9	20.8	40.6
	MEAN DEW POINT	26	13.0	15.3	23.6	34.1	45.4	56.2	60.8	60.2	52.4	40.2	28.8	17.8	37.3
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	0.0	0.0	0.0	0.0	0.1	1.9	2.9	1.4	0.2	0.0	0.0	0.0	6.5
	MAXIMUM <= 32	30	23.0	17.3	7.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	5.3	17.8	71.3
MINIMUM <= 32	30	30.5	27.0	26.1	13.8	2.0	0.0	0.0	0.0	0.7	8.7	22.6	29.5	160.9	
MINIMUM <= 0	30	10.7	6.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	5.4	23.7	
H/C	NORMAL HEATING DEG. DAYS	30	1537	1262	1060	638	301	85	19	38	208	540	925	1350	7963
	NORMAL COOLING DEG. DAYS	30	0	0	0	3	24	95	177	126	36	2	0	0	463
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)	46	1.6	2.0	3.0	1.6	1.4	1.3	1.3	2.5	2.6	2.2	1.9	2.5	23.9
	THUNDERSTORMS	60	0.1	0.1	1.2	2.1	3.8	6.2	6.3	5.6	3.6	1.8	0.4	0.1	31.3
CLOUDNESS	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)	26	29.27	29.29	29.28	29.21	29.20	29.19	29.22	29.27	29.27	29.26	29.25	29.27	29.25
	MEAN SEA-LEVEL PRES. (IN)	26	30.06	30.08	30.06	29.98	29.96	29.94	29.96	30.01	30.02	30.03	30.03	30.06	30.02
WINDS	MEAN SPEED (MPH)	26	9.7	9.6	9.8	10.4	9.3	8.0	7.3	6.9	7.7	8.9	9.5	9.3	8.9
	PREVAIL.DIR.(TENS OF DEGS)	33	28	22	22	05	05	22	22	22	22	22	22	28	28
	MAXIMUM 2-MINUTE: SPEED (MPH)	13	39	37	44	41	39	41	51	32	39	36	45	39	51
	DIR. (TENS OF DEGS)		04	30	29	22	33	01	29	32	26	28	20	03	29
	YEAR OF OCCURRENCE		1999	2007	2002	1997	2006	2005	2006	2009	2005	2001	1998	2009	JUL 2006
	MAXIMUM 3-SECOND SPEED (MPH)	13	48	49	54	54	51	66	62	46	54	47	59	52	66
	DIR. (TENS OF DEGS)		27	04	29	23	27	09	28	24	26	27	21	27	09
YEAR OF OCCURRENCE		2008	2006	2002	1997	1997	2007	2006	2004	2005	2001	1998	2003	JUN 2007	
PRECIPITATION	NORMAL (IN)	30	1.21	1.01	2.06	2.56	2.75	3.43	3.44	3.77	3.11	2.17	2.27	1.41	29.19
	MAXIMUM MONTHLY (IN)	60	3.65	3.56	4.68	5.91	8.31	10.29	7.00	9.04	7.80	5.16	5.32	3.72	10.29
	YEAR OF OCCURRENCE		2008	1953	1977	1994	2004	1990	1994	1975	1965	2009	1992	2008	JUN 1990
	MINIMUM MONTHLY (IN)	60	0.12	0.04	0.15	0.49	0.06	0.31	0.83	0.59	0.28	T	0.11	T	T
	YEAR OF OCCURRENCE		1981	1969	1999	1989	1988	1976	1981	2008	1976	1952	2007	1952	DEC 1952
	MAXIMUM IN 24 HOURS (IN)	60	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	10.7	8.5	10.8	11.1	10.1	10.1	10.4	11.3	10.0	9.7	10.3	10.6	123.6
PRECIPITATION >= 1.00	30	0.0	0.1	0.2	0.3	0.5	0.9	0.9	0.8	0.8	0.3	0.4	0.1	5.3	
SNOWFALL	NORMAL (IN)	30	13.9	8.7	9.2	2.9	0.2	0.0	0.0	0.0	0.*	0.2	5.4	12.6	53.1
	MAXIMUM MONTHLY (IN)	60	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)	60	15.3	9.2	13.0	10.2	4.3	T	T	T	T	1.6	10.1	14.4	15.3
	YEAR OF OCCURRENCE'		1996	1959	1997	1977	1990	1992	2006	1993	1995	1989	1995	1990	JAN 1996
	MAXIMUM SNOW DEPTH (IN)	59	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	4.5	2.8	2.8	1.0	0.0	0.0	0.0	0.0	0.0	0.1	1.5	3.2	15.9	

PRECIPITATION (inches) 2009 GREEN BAY (KGRB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	1.92	0.35	1.00	2.73	1.77	3.82	1.87	7.31	3.42	1.79	1.25	1.35	28.58
1981	0.12	2.76	0.42	4.22	0.56	2.63	0.83	3.37	3.25	3.44	1.08	1.10	23.78
1982	1.34	0.14	1.95	2.66	2.74	2.67	5.10	2.91	1.43	1.20	4.51	2.50	29.15
1983	0.72	1.46	1.52	1.39	4.80	1.82	3.76	5.27	3.59	2.24	2.63	1.18	30.38
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
POR= 60 YRS	1.19	1.08	1.91	2.66	3.02	3.47	3.32	3.21	3.04	2.23	1.93	1.46	28.52

WBAN : 14898

AVERAGE TEMPERATURE (°F) 2009 GREEN BAY (KGRB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANNUAL
1980	17.7	17.2	27.2	45.1	58.3	62.6	70.6	69.1	59.1	43.4	35.0	19.7	43.8
1981	15.3	22.9	34.7	45.7	53.6	65.6	69.3	68.2	56.8	45.0	36.9	22.9	44.7
1982	6.7	15.8	28.4	40.3	60.8	59.3	70.8	65.1	57.6	49.3	33.3	28.0	43.0
1983	21.4	26.3	31.1	40.5	48.8	64.5	72.9	70.8	59.8	48.5	36.5	10.6	44.3
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
POR= 60 YRS	15.8	19.4	29.9	44.0	55.4	65.1	69.6	67.6	59.4	48.2	34.6	21.5	44.2

HEATING DEGREE DAYS (base 65°F) 2009 GREEN BAY (KGRB)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1980-81	11	11	189	661	893	1398	1538	1175	932	573	350	45	7776
1981-82	26	21	248	614	839	1300	1805	1373	1127	733	152	178	8416
1982-83	3	75	250	483	946	1140	1344	1077	1046	727	495	100	7686
1983-84	17	2	210	507	847	1682	1617	1055	1223	611	406	13	8190
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-	33	59	126	634	690	1375							

WBAN : 14898

COOLING DEGREE DAYS (base 65°F) 2009 GREEN BAY (KGRB)

YEAR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	TOTAL
1980	0	0	0	5	27	64	192	146	18	0	0	0	452
1981	0	0	0	0	5	71	168	127	9	0	0	0	380
1982	0	0	0	0	30	16	187	85	35	4	0	0	357
1983	0	0	0	0	0	95	270	188	60	4	0	0	617
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

SNOWFALL (inches) 2009 GREEN BAY (KGRB)

YEAR	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	TOTAL
1980-81	0.0	0.0	0.0	T	3.4	14.5	2.3	7.5	2.5	T	0.0	0.0	30.2
1981-82	0.0	0.0	0.0	1.0	2.7	11.4	28.0	2.0	6.0	2.9	0.0	0.0	54.0
1982-83	0.0	0.0	0.0	T	2.6	1.3	8.5	15.3	11.4	0.6	0.0	0.0	39.7
1983-84	0.0	0.0	0.0	0.0	7.2	12.7	10.5	1.8	6.5	T	0.0	0.0	38.7
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-	0.0	0.0	0.0	T	T	20.7							
POR= 60 YRS	T	T	T	0.2	4.2	11.5	12.1	9.1	8.8	2.5	0.1	T	48.5

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).</p> <p>GENERAL: T INDICATES TRACE PRECIPITATION, AN AMOUNT GREATER THAN ZERO BUT LESS THAN THE LOWEST REPORTABLE VALUE. + INDICATES THE VALUE ALSO OCCURS ON EARLIER DATES. BLANK ENTRIES DENOTE MISSING OR UNREPORTED DATA. NORMALS ARE 30-YEAR AVERAGES (1971 - 2000). ASOS INDICATES AUTOMATED SURFACE OBSERVING SYSTEM. PM INDICATES THE LAST DAY OF THE PREVIOUS MONTH. POR (PERIOD OF RECORD) BEGINS WITH THE JANUARY DATA MONTH AND IS THE NUMBER OF YEARS USED TO COMPUTE THE MEAN. INDIVIDUAL MONTHS WITHIN THE POR MAY BE MISSING. WHEN THE POR FOR A NORMAL IS LESS THAN 30 YEARS, THE NORMAL IS PROVISIONAL AND IS BASED ON THE NUMBER OF YEARS INDICATED. 0.* OR * INDICATES THE VALUE OR MEAN-DAYS-WITH IS BETWEEN 0.00 AND 0.05. CLOUDINESS FOR ASOS STATIONS DIFFERS FROM THE NON-ASOS OBSERVATION TAKEN BY A HUMAN OBSERVER. ASOS STATION CLOUDINESS IS BASED ON TIME-AVERAGED CEILOMETER DATA FOR CLOUDS AT OR BELOW 12,000 FEET AND ON SATELLITE DATA FOR CLOUDS ABOVE 12,000 FEET. THE NUMBER OF DAYS WITH CLEAR, PARTLY CLOUDY, AND CLOUDY CONDITIONS FOR ASOS STATIONS IS THE SUM OF THE CEILOMETER AND SATELLITE DATA FOR THE SUNRISE TO SUNSET PERIOD. CLEAR INDICATES 0 - 2 OKTAS, PARTLY CLOUDY INDICATES 3 - 6 OKTAS, AND CLOUDY INDICATES 7 OR 8 OKTAS. WHEN AT LEAST ONE OF THE ELEMENTS (CEILOMETER OR SATELLITE) IS MISSING, THE DAILY CLOUDINESS IS NOT COMPUTED.</p>	<p>GENERAL CONTINUED: WIND DIRECTION IS RECORDED IN TENS OF DEGREES (2 DIGITS) CLOCKWISE FROM TRUE NORTH. "00" INDICATES CALM. "36" INDICATES TRUE NORTH. RESULTANT WIND IS THE VECTOR AVERAGE OF THE SPEED AND DIRECTION. AVERAGE TEMPERATURE IS THE SUM OF THE MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE DIVIDED BY 2. SNOWFALL DATA COMPRISE ALL FORMS OF FROZEN PRECIPITATION, INCLUDING HAIL. A HEATING (COOLING) DEGREE DAY IS THE DIFFERENCE BETWEEN THE AVERAGE DAILY TEMPERATURE AND 65 F. DRY BULB IS THE TEMPERATURE OF THE AMBIENT AIR. DEW POINT IS THE TEMPERATURE TO WHICH THE AIR MUST BE COOLED TO ACHIEVE 100 PERCENT RELATIVE HUMIDITY. WET BULB IS THE TEMPERATURE THE AIR WOULD HAVE IF THE MOISTURE CONTENT WAS INCREASED TO 100 PERCENT RELATIVE HUMIDITY. ON JULY 1, 1996, THE NATIONAL WEATHER SERVICE BEGAN USING THE "METAR" OBSERVATION CODE THAT WAS ALREADY EMPLOYED BY MOST OTHER NATIONS OF THE WORLD. THE MOST NOTICEABLE DIFFERENCE IN THIS ANNUAL PUBLICATION WILL BE THE CHANGE IN UNITS FROM TENTHS TO EIGHTS(OKTAS) FOR REPORTING THE AMOUNT OF SKY COVER. STATION HISTORY STOPPED WITH THE 2009 ANNUAL. IF YOU NEED HISTORY GO TO "MULTI-NETWORK METADATA SYSTEM", URL IS: https://mi3.ncdc.noaa.gov/mi3qry/login.cfm</p> <p>NOTE: The "Period of Record:(POR) for all "averages" is based on the "Summary of the Day First Order Station" and "Cooperative Summary of the Day" archives.</p>
--	---

2009 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.

Non-Subscription Request:

NCDC Customer Services;

Phone: 828-271-4800

Fax: 828-271-4876

Email: ncdc.orders@noaa.gov

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE \$300

CHANGE SERVICE REQUESTED

FIRST CLASS
POSTAGE & FEES PAID
United States Department of Commerce
NOAA Permit No. G - 19

INQUIRES/COMMENTS CALL: Toll Free (866) 742-3322

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

For Hard Copy Subscription:

Price and ordering information: NCDC Subscribing Service Center, 310 State Route 956, Building 300, Rocket Center, WV 26726.