



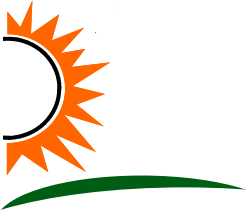
***Georgi Dobrovolski
Solar Observatory***

***OBSERVED, CORRECTED
& SMOOTHED
BECKINDICES
1983 - 2012***

**COMPILED BY HOWARD BARNES,
NEW ZEALAND.**

E-MAIL: gdso@earthling.net

**Second Edition,
Published, June MMXIV.**



SMOOTHING FORMULÆ.

The following are the three formulæ used in the smoothing of GDSO sunspot data. All are based on monthly means .

Data suffixed (S^{HBm}) are computed as:

$$((\bar{x}_{+3} + \bar{x}_{-3}) + 2(\bar{x}_{+2} + \bar{x}_{-2}) + 3(\bar{x}_{+1} + \bar{x}_{-1}) + 4\bar{x}_0) / 16$$

Data suffixed (S^{W}) are computed as:

$$\left(\sum_{-5}^{+5} \bar{x} + [\bar{x}_{+6} + \bar{x}_{-6}] / 2 \right) / 12$$

Data suffixed (S^{B13}) are computed as:

$$(0.75(x_{+6} + x_{-6}) + 2(x_{+5} + x_{-5}) + 3(x_{+4} + x_{-4}) + 4(x_{+3} + x_{-3}) + 5(x_{+2} + x_{-2}) + 6(x_{+1} + x_{-1}) + 6.5x_0) / 48$$

-oOo-

PLEASE NOTE:

All smoothed data are based on values rounded prior to smoothing.



Observed GDSO Beckindices (BX) are corrected for seeing conditions and seasonal effects to create the Corrected GDSO Beckindices (BX_{GD}).

These two series are smoothed (the observed by three methods, the corrected by two) to create the data in the unshaded columns.

DEFINITIONS:

$$BX_{GD} = k \left(\sum_{i=1}^g Z_i f_i \right)$$

where g = number of regions, f = number of sunspots, Z = region constant, & k = up- or downgrading figure to bring observatories to a world standard.

BX = observed Beckindex, same as above, but k = 1.

MONTH	BX	BX ^r (S ^{HBm})	BX ^r (S ^W)	BX ^r (S ^{B13})	BX _{GD}	BX _{GD} ^r (S ^W)	BX _{GD} ^r (S ^{B13})
1983 Jan	471.40	—	—	—	532.20	—	—
Feb	396.60	—	—	—	685.18	—	—
Mar	432.14	—	—	—	1589.49	—	—
Apr	446.38	525.1	—	—	873.76	—	—
May	740.60	557.4	—	—	1092.67	—	—
Jun	689.00	543.5	—	—	1111.28	—	—
Jul	455.42	484.9	391.8	426.0	808.38	709.0	748.1
Aug	378.75	400.5	395.9	393.8	621.80	723.0	677.4
Sep	269.25	302.8	407.3	367.6	332.07	715.7	613.8
Oct	267.00	246.0	427.7	353.2	467.70	729.1	587.2
Nov	66.50	231.0	450.4	357.1	79.58	768.3	605.8
Dec	97.86	273.0	440.7	376.6	234.42	752.6	648.0
1984 Jan	452.11	375.1	405.6	403.5	691.98	701.4	703.0
Feb	514.10	497.1	379.0	429.7	861.25	670.5	762.0
Mar	589.25	586.8	359.4	445.7	1237.85	653.8	805.2
Apr	779.55	610.4	338.9	443.1	1547.65	625.1	807.2
May	951.00	551.6	327.7	415.6	1358.07	611.0	762.3
Jun	246.43	404.3	324.3	362.9	469.47	609.0	678.0
Jul	54.67	259.0	306.0	295.6	221.69	585.5	571.9
Aug	141.00	147.1	270.9	228.1	467.70	536.2	461.6
Sep	36.50	68.1	228.2	166.6	83.77	455.4	352.4
Oct	9.14	49.1	178.0	115.0	27.50	347.5	256.7
Nov	54.11	47.0	115.6	77.5	181.51	242.5	191.1
Dec	29.94	43.8	72.4	60.5	84.35	183.8	161.0
1985 Jan	80.67	53.6	70.2	61.7	277.86	209.8	167.7
Feb	42.25	62.2	70.5	66.0	93.05	230.7	185.7
Mar	37.44	69.7	63.7	69.5	65.84	210.2	200.8
Apr	126.00	87.7	66.8	74.8	131.57	227.0	228.0
May	106.00	92.7	71.0	78.4	252.37	242.6	256.2
Jun	56.86	89.5	70.9	78.7	166.74	243.5	279.3
Jul	190.29	89.2	68.1	75.8	1148.88	237.5	288.6
Aug	12.13	70.4	76.5	74.2	42.77	250.1	284.9
Sep	1.78	60.2	89.4	76.2	17.04	278.1	282.5
Oct	117.92	56.9	90.9	78.3	496.52	284.5	276.8
Nov	46.69	62.2	87.2	79.9	87.82	278.3	262.6
Dec	35.31	78.1	81.0	81.2	199.21	263.4	242.9

MONTH	BX	$BX^r(S^{HBm})$	$BX^r(S^W)$	$BX^r(S^{B13})$	BX_{GD}	$BX_{GD}^r(S^W)$	$BX_{GD}^r(S^{B13})$
1986 Jan	8.80	98.3	71.8	82.9	19.53	211.8	218.5
Feb	316.25	118.4	65.5	84.2	652.65	169.2	201.4
Mar	71.08	106.3	65.9	81.2	178.20	170.6	187.6
Apr	129.67	90.1	68.2	74.3	173.79	161.8	163.9
May	13.30	61.2	70.6	67.4	61.17	160.2	146.0
Jun	0.00	31.3	69.2	60.6	0.00	158.9	133.8
Jul	28.14	32.1	68.4	54.6	77.17	151.9	123.0
Aug	23.09	36.7	56.0	47.0	92.25	125.6	110.0
Sep	0.00	46.6	42.9	42.7	0.00	94.8	101.6
Oct	174.89	58.8	44.2	44.7	302.64	98.2	106.5
Nov	47.42	49.5	59.0	51.4	243.86	128.3	119.5
Dec	0.94	40.1	72.7	60.2	11.61	155.4	133.7
1987 Jan	23.53	42.5	73.6	67.4	39.55	168.5	147.7
Feb	4.44	62.6	86.0	79.3	1.67	199.2	173.1
Mar	66.56	93.8	103.8	96.1	89.32	234.6	209.4
Apr	166.40	122.1	117.7	114.8	343.91	257.8	248.5
May	330.78	148.9	131.5	133.5	613.07	303.3	296.2
Jun	12.40	144.7	143.2	148.9	98.30	353.2	347.9
Jul	38.40	162.3	161.7	166.4	294.73	393.4	400.1
Aug	308.33	190.7	180.7	185.2	611.42	427.4	447.5
Sep	141.82	200.1	221.8	209.7	331.40	476.7	491.2
Oct	369.00	232.6	280.6	244.3	527.80	541.9	539.9
Nov	184.00	229.8	311.2	279.5	1108.91	574.3	581.0
Dec	145.00	262.5	357.9	328.0	345.74	644.2	629.6
1988 Jan	323.71	342.9	456.3	403.3	669.56	764.8	700.4
Feb	159.00	422.2	542.4	492.9	188.17	865.0	787.7
Mar	898.91	565.7	596.0	584.1	1085.29	947.6	890.5
Apr	745.00	698.1	664.8	676.2	912.13	1065.8	1012.0
May	488.00	807.5	755.0	774.6	822.62	1165.8	1143.3
Jun	974.60	923.5	886.3	892.2	1568.00	1286.1	1296.6
Jul	1437.29	1015.5	1052.0	1023.4	1718.27	1491.3	1478.3
Aug	977.57	1065.9	1222.0	1157.3	1593.61	1710.4	1667.3
Sep	758.22	1176.2	1321.0	1279.8	1331.24	1844.6	1836.5
Oct	1404.20	1364.7	1347.2	1387.4	2363.53	1893.9	1972.5
Nov	1311.86	1581.3	1403.7	1492.0	1673.67	1982.3	2093.8
Dec	2168.80	1795.6	1527.5	1599.5	2669.08	2145.3	2220.9

MONTH	BX	$BX^r(S^{HBm})$	$BX^r(S^W)$	$BX^r(S^{B13})$	BX_{GD}	$BX_{GD}^r(S^W)$	$BX_{GD}^r(S^{B13})$
1989 Jan	2278.22	1870.1	1593.6	1674.1	3270.91	2241.4	2315.6
Feb	2283.67	1798.8	1609.7	1702.9	2844.96	2311.3	2367.7
Mar	1150.45	1715.3	1733.4	1736.0	1649.85	2490.6	2432.8
Apr	1122.50	1634.5	1827.2	1770.0	1530.53	2574.7	2496.0
May	1466.14	1659.4	1892.4	1816.9	2326.08	2615.1	2571.0
Jun	2966.54	1826.9	1926.7	1859.9	3975.25	2648.1	2634.9
Jul	1032.79	1858.9	1873.7	1873.5	1618.13	2566.5	2647.2
Aug	1768.92	2008.5	1816.8	1895.4	3370.40	2477.6	2651.8
Sep	2934.40	2101.3	1823.2	1931.9	3858.44	2465.6	2646.3
Oct	1481.08	2023.4	1889.2	1956.8	1854.25	2503.1	2601.4
Nov	2797.80	2041.0	1954.2	1958.0	3152.00	2515.2	2518.0
Dec	1506.17	1902.3	1921.1	1922.3	1984.29	2408.8	2393.4
1990 Jan	1669.78	1798.2	1851.9	1874.7	1996.08	2305.3	2272.2
Feb	1525.44	1815.7	1864.3	1844.9	1987.97	2301.2	2189.7
Mar	2062.31	1815.6	1777.0	1788.3	2217.48	2177.5	2103.3
Apr	1796.60	1798.2	1675.4	1722.0	1863.20	2051.6	2033.6
May	2350.60	1778.5	1617.9	1654.0	2283.13	1993.0	1983.6
Jun	1287.50	1604.2	1567.0	1582.4	1465.45	1937.6	1943.6
Jul	1050.67	1453.0	1595.9	1543.6	1643.25	1973.5	1947.5
Aug	2050.00	1391.9	1649.8	1531.2	3248.46	2044.2	1973.1
Sep	557.47	1286.9	1682.8	1535.6	1010.11	2112.5	2005.4
Oct	1420.46	1400.8	1679.9	1564.6	1681.17	2164.3	2062.5
Nov	1478.75	1556.5	1621.2	1604.5	1919.93	2151.3	2128.5
Dec	1602.00	1727.9	1584.5	1656.8	1884.75	2168.2	2207.5
1991 Jan	2267.93	1929.2	1626.3	1719.2	2957.38	2252.8	2297.4
Feb	2221.47	1950.9	1630.5	1747.6	2723.14	2252.0	2350.3
Mar	2157.29	1886.9	1640.7	1746.3	3123.75	2234.7	2372.0
Apr	1632.08	1751.5	1700.9	1729.0	2198.70	2337.5	2390.4
May	1106.25	1606.4	1713.7	1691.8	1636.57	2389.8	2385.7
Jun	1650.75	1548.9	1751.5	1672.2	2516.79	2407.1	2375.0
Jul	1692.50	1553.6	1794.7	1673.0	2621.90	2443.3	2368.9
Aug	1507.77	1552.2	1791.7	1686.1	2252.07	2441.1	2362.7
Sep	1345.43	1643.1	1774.0	1722.4	1591.55	2427.5	2381.1
Oct	2076.94	1762.8	1721.0	1760.6	3564.81	2374.7	2403.9
Nov	1129.08	1874.3	1667.4	1784.3	1292.51	2317.3	2402.8
Dec	2859.30	2049.4	1593.4	1769.3	2927.23	2234.3	2366.5

MONTH	BX	$BX^r(S^{HBm})$	$BX^r(S^W)$	$BX^r(S^{B13})$	BX_{GD}	$BX_{GD}^r(S^W)$	$BX_{GD}^r(S^{B13})$
1992 Jan	2046.87	2019.6	1508.6	1702.6	2783.83	2128.6	2294.3
Feb	2371.67	1850.5	1428.1	1587.4	2843.90	2030.1	2184.5
Mar	1582.50	1543.6	1347.6	1427.9	2677.58	1946.4	2030.4
Apr	933.87	1162.4	1269.9	1247.3	1375.68	1832.8	1838.1
May	518.00	869.6	1214.1	1083.1	1081.88	1743.5	1663.0
Jun	462.47	671.0	1106.5	935.2	1080.19	1651.4	1510.9
Jul	845.91	629.1	940.3	807.3	1521.64	1473.9	1357.7
Aug	423.69	630.8	809.5	721.3	988.90	1312.3	1230.8
Sep	497.12	675.3	720.4	682.7	845.23	1175.6	1143.8
Oct	1058.80	710.0	682.8	682.7	1585.70	1094.9	1099.0
Nov	808.50	701.3	671.3	688.8	1127.21	1082.4	1073.7
Dec	597.38	697.8	666.0	685.5	882.57	1069.0	1044.0
1993 Jan	320.15	693.7	638.7	672.4	569.51	1010.5	1007.5
Feb	960.17	706.5	602.2	652.9	1178.27	941.3	972.3
Mar	855.06	692.8	578.8	619.8	1063.51	896.1	932.6
Apr	759.53	636.3	536.9	563.9	1051.52	844.0	877.9
May	415.93	533.3	488.1	501.6	1106.93	788.9	818.2
Jun	436.40	409.6	473.2	452.8	733.66	772.4	766.8
Jul	216.27	314.4	499.8	424.3	465.52	807.0	734.7
Aug	178.52	266.1	489.6	400.7	382.84	798.6	707.2
Sep	180.00	288.1	429.6	380.3	366.81	729.8	679.9
Oct	369.87	365.7	372.6	372.2	812.92	659.9	660.2
Nov	326.47	436.9	329.8	371.3	579.05	582.3	637.9
Dec	722.81	491.8	300.9	367.9	1034.58	518.3	611.7
1994 Jan	833.94	471.8	282.8	349.8	1246.76	494.0	575.4
Feb	199.73	363.9	277.9	316.0	300.61	487.9	521.3
Mar	177.12	258.9	273.8	274.5	289.25	477.1	458.3
Apr	68.00	161.1	270.8	235.4	148.51	467.5	402.5
May	82.00	108.3	260.3	201.5	147.49	449.1	360.1
Jun	75.76	105.3	228.3	172.0	156.73	409.6	330.2
Jul	143.59	127.3	173.5	149.1	458.97	337.5	309.2
Aug	132.73	148.1	139.6	142.2	244.21	296.1	307.9
Sep	126.11	168.5	138.0	148.0	244.31	309.6	326.7
Oct	353.13	181.5	142.7	154.6	707.19	330.3	347.2
Nov	90.05	165.5	150.0	157.8	241.72	348.3	359.7
Dec	191.25	158.0	153.9	157.3	423.48	360.8	364.1

MONTH	BX	$BX^r(S^{HBm})$	$BX^r(S^W)$	$BX^r(S^{B13})$	BX_{GD}	$BX_{GD}^r(S^W)$	$BX_{GD}^r(S^{B13})$
1995 Jan	51.17	146.5	151.5	153.8	129.45	354.5	361.5
Feb	167.83	145.3	144.5	148.4	423.24	335.8	354.9
Mar	171.23	152.1	136.8	140.7	490.44	321.5	342.4
Apr	187.05	146.2	121.4	128.7	444.11	294.7	317.4
May	138.94	132.6	107.8	115.9	284.69	268.4	288.3
Jun	112.05	105.8	98.1	102.7	318.05	245.3	256.8
Jul	50.17	81.2	90.0	88.9	146.12	228.6	223.6
Aug	57.65	62.8	82.5	75.3	109.48	209.9	189.4
Sep	17.00	50.1	70.4	61.9	35.98	175.8	155.8
Oct	90.92	45.6	57.4	50.6	272.46	142.0	128.4
Nov	27.06	37.6	46.0	41.3	45.12	117.2	106.7
Dec	20.62	31.5	38.6	35.1	65.04	99.1	90.7
1996 Jan	27.18	27.2	36.1	32.1	88.09	88.1	81.2
Feb	13.00	23.1	37.7	31.9	15.64	91.5	79.2
Mar	34.00	25.1	37.9	32.7	79.36	94.6	80.1
Apr	12.22	28.9	33.5	32.6	43.90	81.8	78.2
May	40.56	37.3	36.7	35.6	89.25	88.1	84.1
Jun	33.29	42.4	44.1	41.4	80.35	106.2	97.3
Jul	69.38	44.2	43.7	45.4	118.62	103.5	106.2
Aug	77.53	51.6	43.9	47.7	218.58	107.8	114.1
Sep	2.15	52.0	44.7	48.8	1.44	117.3	121.3
Oct	0.00	55.2	48.9	51.6	0.00	127.6	131.1
Nov	194.19	62.6	52.4	54.1	469.81	137.6	141.2
Dec	30.35	52.2	51.8	52.9	74.26	140.2	143.5
1997 Jan	9.47	49.9	50.2	50.3	13.19	139.9	142.7
Feb	33.40	48.0	52.3	50.4	194.59	144.8	146.3
Mar	33.36	44.3	71.6	58.7	127.28	194.1	168.0
Apr	114.53	50.1	90.9	70.5	244.40	247.6	198.8
May	21.62	54.3	99.0	81.9	128.75	271.9	229.1
Jun	38.67	79.5	113.3	100.0	101.93	301.2	271.6
Jul	24.50	108.0	129.4	123.9	91.01	332.3	324.3
Aug	174.33	153.7	142.3	148.7	363.36	358.8	379.3
Sep	367.75	202.0	172.0	176.4	1039.15	402.4	433.6
Oct	97.82	215.2	198.6	202.1	247.91	448.8	479.0
Nov	291.14	231.1	224.0	228.1	804.37	501.7	521.9
Dec	275.00	248.3	255.8	255.0	442.05	563.7	563.7

MONTH	BX	$BX^r(S^{HBm})$	$BX^r(S^W)$	$BX^r(S^{B13})$	BX_{GD}	$BX_{GD}^r(S^W)$	$BX_{GD}^r(S^{B13})$
1998 Jan	152.88	254.9	277.3	276.8	392.31	610.2	598.0
Feb	198.69	299.3	312.1	303.7	450.66	672.8	639.2
Mar	580.53	342.4	352.9	337.4	919.40	740.2	694.1
Apr	204.91	349.9	377.9	369.6	564.14	781.1	754.3
May	542.41	394.9	389.4	395.9	1078.33	797.7	807.3
Jun	280.22	430.8	413.1	423.3	640.67	833.2	860.6
Jul	300.00	461.5	453.4	458.5	670.16	894.2	922.3
Aug	733.38	515.2	478.4	489.4	1285.09	934.0	974.9
Sep	787.13	536.6	495.4	508.8	1734.52	955.8	1001.9
Oct	278.46	534.2	519.4	524.3	534.48	973.6	1007.4
Nov	387.77	533.4	542.3	543.4	915.78	990.0	1010.7
Dec	746.60	558.0	582.7	572.4	1182.50	1052.1	1033.3
1999 Jan	648.45	565.1	654.6	611.5	1116.49	1155.0	1072.5
Feb	303.33	591.5	712.1	655.6	682.19	1237.9	1121.2
Mar	882.79	658.3	714.8	697.8	1211.11	1233.7	1171.4
Apr	478.67	722.1	745.9	751.8	700.72	1260.5	1247.5
May	818.71	840.5	850.1	831.3	1334.80	1395.7	1368.7
Jun	974.38	928.4	929.1	913.9	1874.17	1477.0	1485.8
Jul	1330.19	995.3	948.3	977.6	1906.65	1481.5	1567.4
Aug	1084.24	1067.3	975.9	1024.5	2036.51	1499.9	1617.5
Sep	501.18	1106.9	1041.7	1073.2	882.67	1575.0	1660.5
Oct	1309.73	1177.8	1154.3	1147.0	2030.04	1714.4	1725.3
Nov	1858.18	1203.9	1251.5	1219.1	2665.56	1837.5	1780.7
Dec	1172.08	1195.6	1300.7	1265.1	1383.15	1876.0	1798.6
2000 Jan	684.38	1247.9	1401.8	1334.7	1024.41	1954.5	1846.8
Feb	928.38	1333.6	1471.6	1430.8	1215.35	2003.4	1935.5
Mar	1836.88	1483.2	1509.9	1528.6	2481.58	2029.5	2037.6
Apr	2227.00	1717.0	1536.9	1596.0	2774.23	2045.4	2109.8
May	1403.70	1803.7	1480.2	1610.4	2215.73	1949.2	2116.5
Jun	1569.50	1856.2	1426.8	1607.8	1917.00	1872.8	2102.6
Jul	3161.54	1825.7	1428.6	1583.1	3747.92	1860.0	2058.7
Aug	929.05	1572.5	1439.2	1506.4	1370.47	1852.5	1949.7
Sep	1576.23	1394.1	1429.2	1401.5	2175.59	1816.3	1799.6
Oct	881.79	1173.4	1381.5	1299.4	1117.16	1752.0	1651.9
Nov	924.40	990.2	1314.1	1213.8	1269.87	1674.0	1530.6
Dec	826.09	997.3	1276.9	1154.3	945.25	1648.3	1456.5

MONTH	BX	$BX^r(S^{HBm})$	$BX^r(S^W)$	$BX^r(S^{B13})$	BX_{GD}	$BX_{GD}^r(S^W)$	$BX_{GD}^r(S^{B13})$
2001 Jan	1073.35	1033.4	1154.6	1095.9	1154.60	1537.0	1401.0
Feb	794.23	1085.5	1055.4	1068.2	906.55	1427.6	1387.3
Mar	1731.30	1171.7	1100.1	1092.6	1921.82	1501.6	1454.4
Apr	1186.92	1133.3	1149.5	1125.0	1790.91	1592.5	1549.4
May	827.09	1071.0	1186.5	1158.1	1324.80	1656.7	1645.2
Jun	1251.56	1123.2	1235.4	1199.3	2193.42	1733.1	1740.4
Jul	545.24	1145.4	1277.1	1247.7	800.07	1799.1	1828.0
Aug	1164.13	1299.2	1319.6	1309.5	1692.37	1849.3	1912.3
Sep	2414.00	1472.9	1317.4	1355.9	3629.75	1849.5	1959.9
Oct	1229.17	1486.7	1298.2	1376.9	1843.85	1843.3	1960.9
Nov	1465.09	1515.4	1335.1	1399.4	2083.97	1881.7	1950.3
Dec	1458.27	1459.1	1344.3	1404.9	1964.76	1857.9	1911.9
2002 Jan	1442.42	1383.0	1406.6	1412.4	1718.50	1899.2	1879.3
Feb	1446.64	1368.9	1508.3	1426.3	1547.81	2019.6	1871.5
Mar	1024.62	1303.0	1505.9	1426.0	1285.83	2002.8	1860.2
Apr	1434.21	1354.3	1476.5	1438.7	2278.92	1934.5	1871.1
May	1465.36	1423.1	1467.9	1462.1	1757.82	1897.1	1895.3
Jun	833.46	1513.2	1420.1	1473.0	1189.08	1816.9	1904.4
Jul	2458.94	1658.9	1341.4	1462.8	2796.01	1717.8	1894.8
Aug	1690.89	1647.2	1261.2	1415.2	2586.34	1627.5	1838.5
Sep	1829.42	1539.0	1197.0	1329.4	2332.75	1555.1	1722.5
Oct	1109.33	1331.8	1141.3	1214.9	1500.20	1478.0	1562.2
Nov	1376.20	1060.1	1070.6	1080.1	1531.54	1387.2	1385.2
Dec	401.55	806.1	1054.5	957.8	590.22	1374.3	1233.7
2003 Jan	610.46	641.7	1025.9	856.1	715.69	1358.2	1114.2
Feb	353.78	556.4	945.1	784.5	383.19	1258.3	1031.9
Mar	576.12	574.6	846.7	746.3	712.02	1120.7	994.9
Apr	545.39	691.4	790.1	745.1	1004.54	1051.4	1011.0
May	657.06	818.6	754.5	769.9	852.95	1020.8	1058.6
Jun	1255.60	920.7	711.4	794.9	1783.03	975.0	1099.7
Jul	1351.33	967.9	709.6	806.7	1814.80	971.4	1115.9
Aug	858.00	904.3	703.2	786.7	1171.96	968.9	1088.1
Sep	300.75	791.8	700.0	750.9	443.71	967.0	1034.8
Oct	1279.61	719.0	690.5	704.8	1727.08	943.5	962.8
Nov	352.46	579.3	673.5	644.3	569.12	922.1	876.5
Dec	389.89	518.8	630.5	577.5	452.63	871.7	786.1

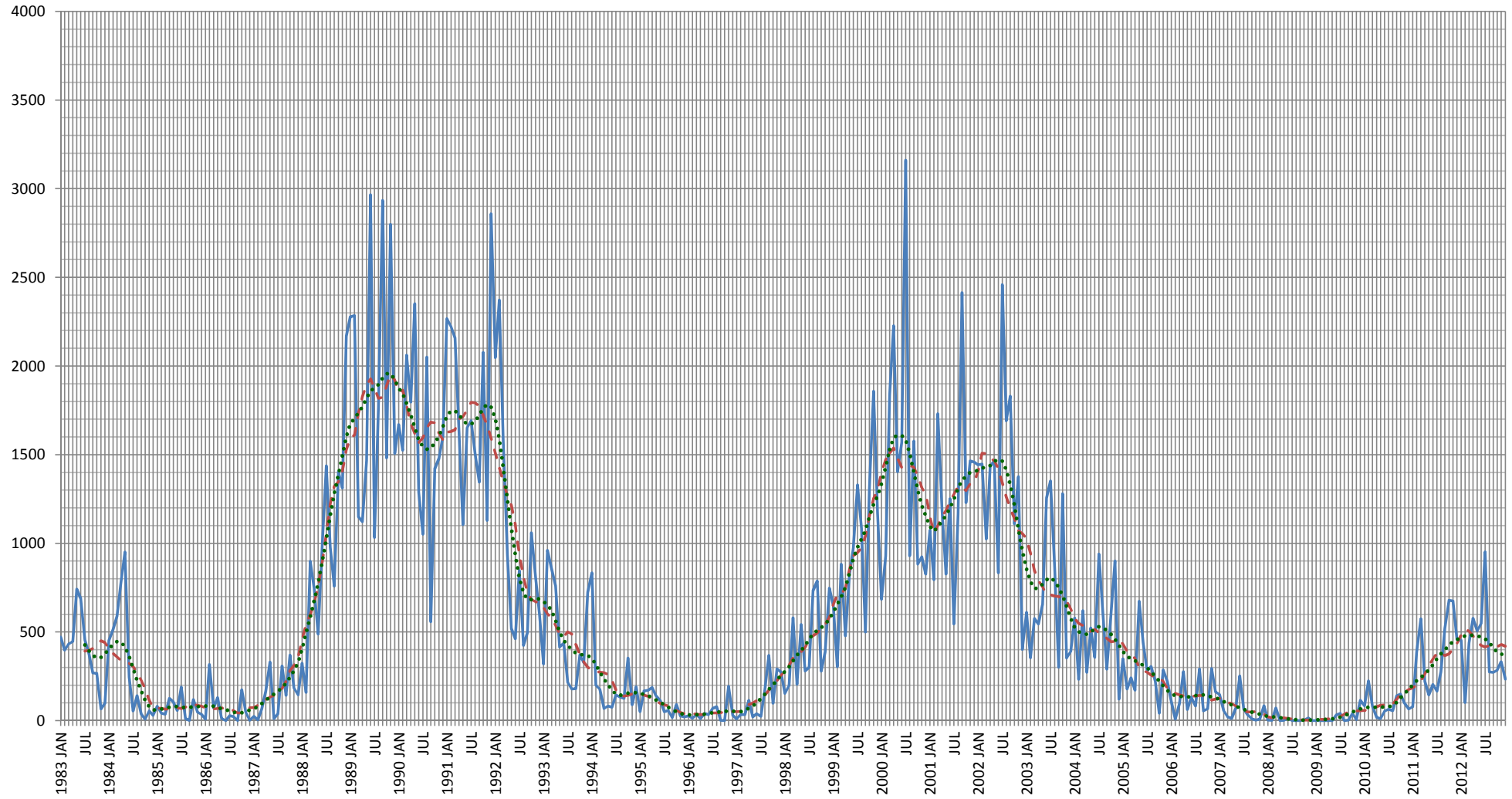
MONTH	BX	BX ^r (S ^{HBm})	BX ^r (S ^W)	BX ^r (S ^{B13})	BX _{GD}	BX _{GD} ^r (S ^W)	BX _{GD} ^r (S ^{B13})
2004 Jan	579.18	480.1	575.9	524.8	768.00	807.8	719.6
Feb	232.80	420.6	548.3	500.3	270.59	795.2	701.5
Mar	620.73	434.2	537.4	492.8	779.96	791.8	709.8
Apr	271.36	451.1	508.8	486.3	372.29	757.2	722.1
May	523.30	496.3	503.5	497.3	971.93	750.8	756.8
Jun	357.50	530.4	515.1	520.6	453.60	771.0	805.6
Jul	939.94	572.2	494.3	529.8	1609.78	758.6	834.3
Aug	606.75	591.5	482.4	526.0	1075.79	756.4	837.8
Sep	290.33	559.5	464.3	508.9	457.59	746.3	815.5
Oct	603.78	545.7	444.3	486.0	882.83	730.2	781.5
Nov	900.12	489.9	446.4	459.0	1260.01	725.1	737.3
Dec	121.50	395.4	456.1	426.5	246.53	729.7	686.3
2005 Jan	348.08	334.3	432.0	390.9	677.43	683.5	628.4
Feb	177.90	290.0	391.9	362.6	308.64	612.5	579.3
Mar	241.75	288.6	376.6	349.1	499.27	606.3	562.0
Apr	171.12	330.7	350.4	337.8	265.16	590.4	553.0
May	673.14	378.1	301.4	323.2	957.08	523.1	536.4
Jun	439.00	377.2	279.9	312.6	578.76	488.1	524.3
Jul	280.11	335.1	274.0	298.9	375.92	468.9	508.8
Aug	305.64	290.9	256.9	276.3	605.88	433.9	482.3
Sep	223.75	233.1	243.8	249.2	778.59	406.7	444.0
Oct	42.09	196.0	242.2	223.5	181.36	398.4	398.0
Nov	285.58	181.7	221.1	197.0	345.25	375.6	349.6
Dec	220.56	155.2	182.9	170.5	321.87	338.6	306.6
2006 Jan	107.38	137.4	161.9	151.3	139.67	322.9	276.4
Feb	8.40	124.2	153.1	140.4	7.63	304.3	255.1
Mar	96.67	120.9	145.5	137.1	148.22	265.9	243.2
Apr	275.92	128.4	139.5	135.8	415.11	237.2	242.2
May	63.29	133.5	140.9	134.5	261.31	244.4	250.1
Jun	132.75	140.8	138.9	135.4	387.20	253.5	259.1
Jul	81.93	136.3	138.1	140.6	189.02	258.1	267.8
Aug	291.46	146.0	141.8	145.9	346.78	265.4	273.3
Sep	55.14	146.6	140.7	145.0	116.61	264.1	270.2
Oct	67.67	153.5	126.5	139.1	154.68	243.7	259.5
Nov	294.75	163.8	115.9	133.3	544.60	228.0	248.2
Dec	161.60	143.7	121.1	127.9	339.68	223.7	234.6

MONTH	BX	BX ^r (S ^{HBm})	BX ^r (S ^W)	BX ^r (S ^{B13})	BX _{GD}	BX _{GD} ^r (S ^W)	BX _{GD} ^r (S ^{B13})
2007 Jan	148.18	122.4	125.5	119.7	231.88	224.2	219.3
Feb	56.57	90.4	114.0	107.5	92.61	216.8	203.4
Mar	20.82	71.4	101.3	96.5	30.59	200.9	188.3
Apr	12.92	72.3	96.8	89.1	44.06	191.1	177.0
May	70.08	83.7	82.1	80.6	255.73	163.2	162.7
Jun	252.50	96.2	66.9	72.5	288.45	131.9	147.8
Jul	66.14	80.9	57.6	64.2	300.84	113.0	133.2
Aug	31.60	59.1	49.3	54.9	58.06	99.8	115.4
Sep	10.36	39.4	49.1	48.1	23.51	98.4	98.7
Oct	3.38	23.0	50.7	42.5	12.22	98.7	83.3
Nov	8.00	22.0	47.3	36.3	17.00	86.5	66.4
Dec	83.11	28.7	34.4	28.9	115.63	64.3	49.9
2008 Jan	3.50	26.9	21.7	23.2	3.01	40.1	36.2
Feb	2.00	25.4	17.6	20.9	4.75	25.1	28.5
Mar	71.00	24.7	15.8	19.1	83.75	21.7	25.0
Apr	0.00	15.6	15.4	16.5	0.00	20.8	21.0
May	1.00	11.6	15.7	13.5	5.08	21.4	17.1
Jun	12.78	7.8	12.5	10.2	7.79	17.0	12.9
Jul	0.00	2.7	8.9	7.5	0.00	12.3	10.0
Aug	0.00	3.0	8.7	6.0	0.00	12.2	8.8
Sep	0.00	3.3	5.7	4.2	0.00	8.6	7.3
Oct	2.91	3.6	2.7	3.2	13.45	5.1	6.6
Nov	15.31	4.4	2.7	3.0	28.89	4.9	6.6
Dec	0.00	3.3	3.4	3.0	0.00	6.7	6.7
2009 Jan	0.53	2.2	5.9	3.9	5.60	12.1	8.5
Feb	0.00	1.1	7.6	5.2	0.00	15.3	10.8
Mar	0.00	2.1	7.8	6.4	0.00	15.6	12.7
Apr	0.00	6.6	9.5	8.3	0.00	18.2	15.7
May	0.00	11.1	10.7	10.5	0.00	19.6	19.5
Jun	31.86	15.9	15.0	14.3	58.02	25.0	25.3
Jul	41.17	19.2	23.2	19.7	77.80	43.4	35.7
Aug	0.00	17.8	36.1	27.7	0.00	68.9	51.2
Sep	3.56	23.5	48.8	38.4	6.22	95.7	72.7
Oct	40.36	33.9	52.9	48.6	69.30	111.3	95.9
Nov	5.89	55.4	54.1	57.8	6.79	114.3	116.7
Dec	114.29	83.7	55.5	65.9	151.40	115.6	135.8

MONTH	BX	BX ^r (S ^{HBm})	BX ^r (S ^W)	BX ^r (S ^{B13})	BX _{GD}	BX _{GD} ^r (S ^W)	BX _{GD} ^r (S ^{B13})
2010 Jan	83.17	98.9	57.4	72.4	297.36	119.2	151.7
Feb	225.10	104.6	60.7	75.7	320.36	126.8	161.2
Mar	80.40	88.0	68.7	75.8	321.97	142.2	163.3
Apr	17.82	65.8	78.9	74.9	51.97	161.7	160.9
May	11.78	52.0	87.2	75.5	20.78	183.9	161.5
Jun	53.27	50.7	89.0	76.5	67.61	197.3	165.0
Jul	64.85	66.1	86.8	77.8	154.67	191.0	167.6
Aug	56.36	84.4	93.3	84.7	107.04	208.6	183.6
Sep	139.00	100.9	120.7	104.0	268.54	276.8	229.5
Oct	149.75	105.7	149.8	130.1	273.56	349.5	295.1
Nov	96.00	119.4	163.8	153.5	336.27	392.6	360.5
Dec	65.73	160.9	175.6	176.3	143.97	421.0	421.5
2011 Jan	78.91	211.7	186.1	200.3	152.44	443.6	482.5
Feb	387.09	270.4	199.4	224.1	888.87	472.1	542.6
Mar	574.53	302.7	224.4	244.0	1389.10	527.2	591.7
Apr	222.25	279.6	262.3	261.8	729.46	613.9	630.3
May	145.00	249.9	308.4	285.6	379.71	704.4	670.3
Jun	203.17	239.6	348.9	315.5	388.09	771.8	716.1
Jul	165.91	270.5	380.8	348.1	378.48	831.8	768.1
Aug	274.45	358.7	384.5	376.0	567.14	837.0	810.6
Sep	520.50	455.1	366.9	398.9	1129.93	788.7	841.5
Oct	678.29	523.9	376.1	425.0	1493.23	793.3	880.8
Nov	674.50	526.8	405.9	446.6	1288.14	848.1	917.5
Dec	457.71	483.3	435.3	457.1	810.71	915.9	941.5
2012 Jan	453.38	435.8	482.4	467.7	925.25	1022.8	973.1
Feb	101.25	395.8	515.2	478.0	240.53	1090.8	1004.5
Mar	439.31	419.7	504.8	481.7	877.21	1064.8	1021.3
Apr	576.70	490.4	478.0	481.2	1353.23	1003.9	1028.7
May	505.67	534.7	447.3	477.3	1069.85	949.4	1031.1
Jun	547.67	561.2	423.8	472.0	1325.20	915.7	1028.3
Jul	952.67	543.3	414.9	461.0	2009.05		
Aug	274.33	454.5	421.9	440.6	567.80		
Sep	271.86	382.2	416.8	410.4	505.49		
Oct	284.11	336.4	417.5	385.8	655.24		
Nov	332.33	305.6	429.4	375.2	817.81		
Dec	234.88	302.6	419.2	369.2	471.78		

OBSERVED and SMOOTHED **GDSO BECKINDICES** (BX, BX[SW] and BX[SB13]) 1983-2012

SOLID = OBSERVED, DASHED = SW, DOTTED = SB13



CORRECTED and SMOOTHED GDSO BECKINDICES (BXGD, BXGD[SW], BXGD[SB13]) 1983-2012

SOLID = CORRECTED, DASHED = SW, DOTTED = SB13

