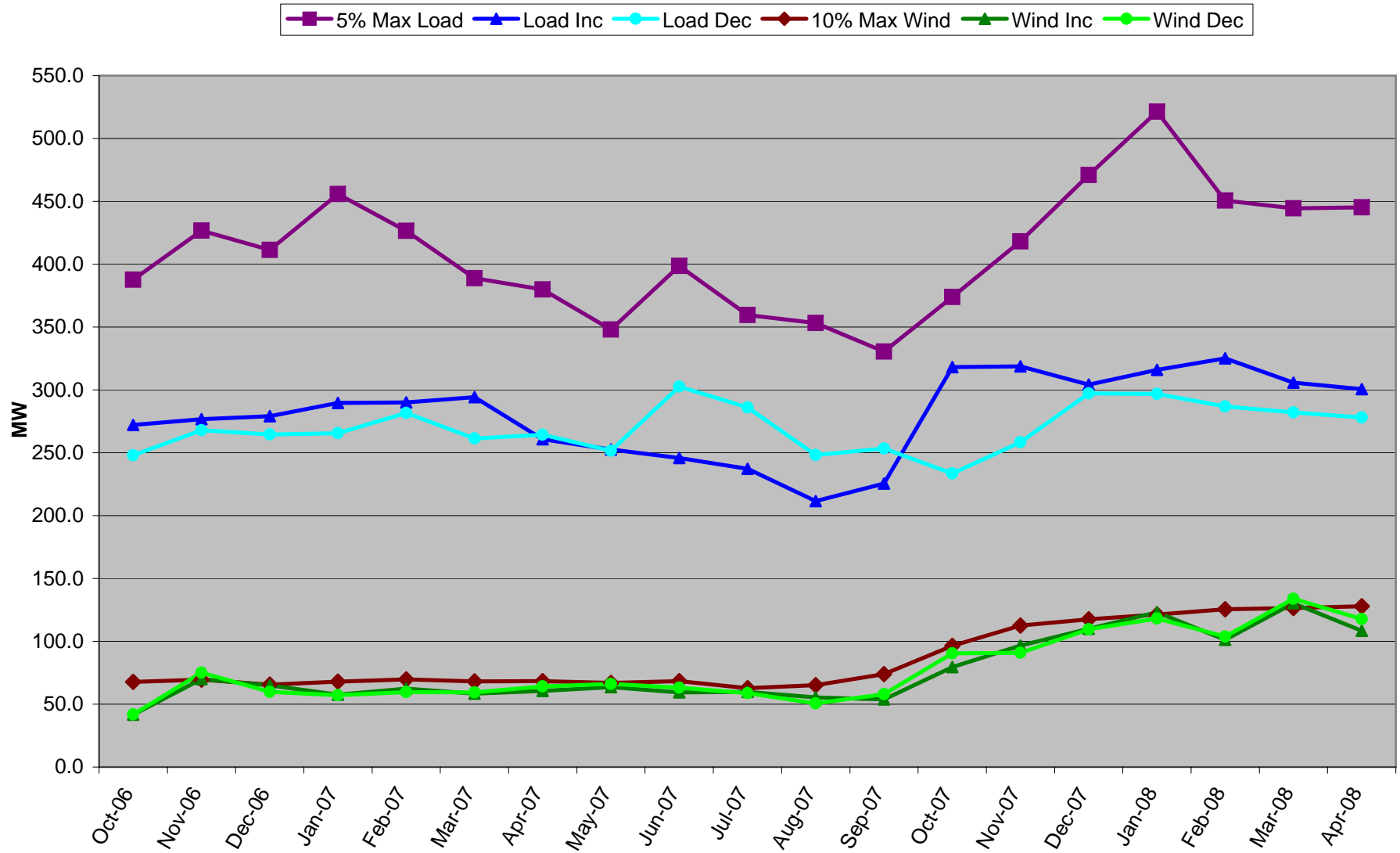


Bonneville Power Administration

Increasing Capacity Reserves Requirement with Increasing Wind



99.5 Percentile for each month based on Perfect Schedule
(ignores top 20 to 22 values depending on days in the month)

Month	Proportional Load				Proportional Wind			
	Load Following Inc	Regulation Inc	Load Following Dec	Regulation Dec	Load Following Inc	Regulation Inc	Load Following Dec	Regulation Dec
October-06	170.1	102.0	-153.3	-94.8	26.1	15.4	-26.4	-15.5
November-06	172.0	104.7	-162.4	-105.5	46.2	23.7	-51.4	-23.6
December-06	173.6	105.5	-160.9	-103.7	44.9	20.0	-41.4	-18.4
January-07	182.3	107.4	-162.3	-103.2	38.6	19.0	-35.6	-21.5
February-07	179.0	111.0	-172.7	-109.0	42.6	19.7	-39.5	-20.0
March-07	180.5	113.7	-160.9	-100.5	38.0	20.5	-38.6	-20.9
April-07	164.4	96.3	-157.4	-107.0	40.1	20.4	-42.6	-21.6
May-07	157.2	95.4	-144.2	-107.4	40.7	22.8	-44.8	-21.4
June-07	149.3	96.5	-197.8	-104.9	37.9	21.5	-42.5	-20.6
July-07	146.8	90.5	-180.1	-105.9	37.9	22.0	-38.5	-20.2
August-07	133.4	78.2	-161.3	-86.8	34.4	21.0	-33.2	-17.5
September-07	135.3	90.3	-164.3	-89.2	35.2	18.5	-38.0	-20.0
October-07	205.8	112.2	-138.5	-95.0	52.3	27.1	-63.0	-27.4
November-07	211.4	107.3	-158.3	-100.0	64.6	32.0	-61.9	-28.9
December-07	183.8	120.4	-188.8	-108.4	74.5	35.6	-75.0	-34.6
January-08	194.4	121.6	-180.6	-116.1	85.8	37.2	-79.3	-38.8
February-08	196.4	128.7	-178.6	-108.3	70.1	31.1	-71.1	-32.7
March-08	189.7	116.2	-176.4	-105.6	85.8	44.4	-90.9	-42.9
April-08	183.6	117.0	-172.3	-105.7	73.1	35.4	-79.6	-38.1
Max	211.4	128.7	-188.8	-116.1	85.8	44.4	-90.9	-42.9

Month	Load Inc	Load Dec	Wind Inc	Wind Dec	Max Wind	10% Max Wind	Max Load	5% Max Load	Avg Wind
October-06	272.1	248.1	41.6	41.9	677.2	67.7	7,754.5	387.7	168.0
November-06	276.7	267.9	69.9	75.0	696.2	69.6	8,534.9	426.7	285.7
December-06	279.1	264.6	64.9	59.8	656.2	65.6	8,227.1	411.4	119.5
January-07	289.7	265.6	57.6	57.1	678.7	67.9	9,114.1	455.7	167.9
February-07	290.0	281.7	62.3	59.5	697.4	69.7	8,528.8	426.4	201.0
March-07	294.2	261.3	58.5	59.4	680.5	68.0	7,777.8	388.9	246.4
April-07	260.8	264.4	60.5	64.2	683.9	68.4	7,598.5	379.9	258.2
May-07	252.6	251.7	63.5	66.2	668.9	66.9	6,961.2	348.1	241.9
June-07	245.9	302.7	59.4	63.1	682.4	68.2	7,973.4	398.7	281.1
July-07	237.3	286.1	59.8	58.7	626.9	62.7	7,192.0	359.6	211.8
August-07	211.6	248.1	55.3	50.6	652.3	65.2	7,063.4	353.2	223.2
September-07	225.6	253.5	53.7	58.0	738.8	73.9	6,608.7	330.4	245.3
October-07	318.0	233.5	79.5	90.4	964.7	96.5	7,479.2	374.0	257.9
November-07	318.7	258.4	96.6	90.8	1,126.4	112.6	8,362.2	418.1	215.9
December-07	304.2	297.2	110.0	109.6	1,175.4	117.5	9,416.9	470.8	443.6
January-08	316.0	296.8	123.0	118.1	1,214.1	121.4	10,424.7	521.2	404.5
February-08	325.1	286.9	101.3	103.8	1,254.4	125.4	9,013.8	450.7	420.0
March-08	305.8	282.0	130.2	133.8	1,264.7	126.5	8,886.5	444.3	513.7
April-08	300.6	278.1	108.4	117.7	1,278.2	127.8	8,904.6	445.2	575.8

99.5 Percentile for each month based on Estimated Schedule (includes GI)
 (ignores top 20 to 22 values depending on days in the month)

Month	Proportional Load				Proportional Wind			
	Load Following Inc	Regulation Inc	Load Following Dec	Regulation Dec	Load Following Inc	Regulation Inc	Load Following Dec	Regulation Dec
October-06	213.5	75.8	-746.4	-153.4	53.0	13.5	-211.0	-30.7
November-06	200.0	76.0	-1,171.4	-143.3	97.3	19.2	-268.4	-39.0
December-06	202.6	42.5	-1,174.8	-134.7	40.0	7.2	-267.5	-28.2
January-07	167.0	53.5	-1,415.7	-149.9	17.6	7.1	-262.0	-28.4
February-07	328.0	81.3	-1,191.3	-160.4	30.4	8.1	-249.8	-33.7
March-07	305.5	65.9	-1,441.3	-162.9	105.0	14.6	-227.2	-38.8
April-07	431.2	109.1	-676.8	-146.7	135.3	28.2	-195.3	-48.5
May-07	408.0	103.4	-658.1	-141.2	100.7	26.8	-196.8	-50.1
June-07	442.0	117.5	-673.0	-166.0	90.3	19.1	-191.9	-57.8
July-07	673.8	104.6	-724.5	-120.2	104.7	24.9	-174.0	-43.5
August-07	331.7	94.1	-604.9	-138.3	98.1	23.0	-172.6	-43.7
September-07	395.3	117.3	-631.0	-135.4	110.9	26.4	-243.3	-38.6
October-07	244.9	89.6	-626.2	-123.7	204.3	44.7	-360.8	-41.6
November-07	377.2	82.6	-891.7	-135.2	128.3	45.7	-391.0	-44.1
December-07	481.0	94.7	-1,199.2	-139.1	174.9	48.1	-416.6	-57.3
January-08	151.2	67.4	-1,028.8	-168.1	122.8	51.8	-430.9	-53.6
February-08	189.0	46.0	-905.1	-152.3	94.3	31.6	-433.0	-47.6
March-08	252.8	67.4	-818.6	-147.2	200.2	67.3	-490.3	-64.2
April-08	286.6	95.1	-715.8	-143.5	283.4	58.0	-516.1	-64.4
Max	481.0	95.1	-1,199.2	-168.1	283.4	67.3	-516.1	-64.4

Month	Load Inc	Load Dec	Wind Inc	Wind Dec
October-06	289.3	899.8	66.5	241.6
November-06	276.0	1,314.7	116.5	307.4
December-06	245.1	1,309.5	47.2	295.7
January-07	220.5	1,565.7	24.7	290.4
February-07	409.3	1,351.7	38.5	283.5
March-07	371.5	1,604.2	119.5	266.0
April-07	540.3	823.5	163.5	243.8
May-07	511.4	799.3	127.5	246.9
June-07	559.5	839.0	109.4	249.7
July-07	778.5	844.7	129.7	217.5
August-07	425.8	743.2	121.1	216.3
September-07	512.6	766.4	137.2	281.8
October-07	334.5	749.9	249.0	402.5
November-07	459.9	1,027.0	173.9	435.1
December-07	575.6	1,338.3	223.0	473.9
January-08	218.6	1,196.9	174.6	484.5
February-08	235.0	1,057.5	125.9	480.7
March-08	320.2	965.8	267.5	554.4
April-08	381.7	859.3	341.3	580.5

GI impact for each month
(Estimate minus Perfect Schedule)

Month	Proportional Load				Proportional Wind			
	Load Following Inc	Regulation Inc	Load Following Dec	Regulation Dec	Load Following Inc	Regulation Inc	Load Following Dec	Regulation Dec
October-06	43.4	-26.3	-593.1	-58.6	26.9	-2.0	-184.5	-15.2
November-06	28.0	-28.7	-1,009.0	-37.8	51.1	-4.5	-217.0	-15.5
December-06	29.0	-63.0	-1,013.9	-31.0	-4.8	-12.8	-226.1	-9.8
January-07	-15.2	-53.9	-1,253.4	-46.7	-21.1	-11.9	-226.4	-6.9
February-07	149.0	-29.7	-1,018.6	-51.4	-12.2	-11.6	-210.4	-13.7
March-07	125.1	-47.8	-1,280.5	-62.4	67.0	-5.9	-188.7	-17.9
April-07	266.8	12.8	-519.4	-39.7	95.2	7.8	-152.7	-26.9
May-07	250.8	8.0	-513.9	-33.8	60.0	4.0	-152.0	-28.7
June-07	292.6	21.0	-475.2	-61.1	52.4	-2.3	-149.4	-37.2
July-07	527.0	14.1	-544.4	-14.2	66.9	3.0	-135.5	-23.3
August-07	198.4	15.9	-443.6	-51.5	63.7	2.0	-139.4	-26.3
September-07	260.0	27.0	-466.7	-46.3	75.6	7.9	-205.2	-18.6
October-07	39.1	-22.6	-487.7	-28.7	152.0	17.6	-297.8	-14.2
November-07	165.8	-24.6	-733.4	-35.2	63.7	13.7	-329.2	-15.1
December-07	297.2	-25.7	-1,010.5	-30.6	100.4	12.6	-341.6	-22.7
January-08	-43.2	-54.2	-848.1	-52.0	37.0	14.6	-351.6	-14.8
February-08	-7.4	-82.7	-726.5	-44.0	24.2	0.4	-362.0	-14.9
March-08	63.1	-48.8	-642.2	-41.6	114.4	22.9	-399.3	-21.3
April-08	103.1	-21.9	-543.4	-37.8	210.3	22.6	-436.5	-26.3
Average	88.2	-40.1	-713.1	-38.6	100.3	14.9	-359.7	-18.5

Month	Load Inc	Load Dec	Wind Inc	Wind Dec
October-06	17.1	651.7	24.9	199.7
November-06	-0.7	1,046.8	46.6	232.4
December-06	-34.0	1,044.9	-17.7	235.9
January-07	-69.2	1,300.1	-32.9	233.3
February-07	119.3	1,070.0	-23.9	224.1
March-07	77.3	1,342.9	61.1	206.6
April-07	279.6	559.1	103.0	179.7
May-07	258.8	547.7	64.0	180.7
June-07	313.6	536.3	50.0	186.6
July-07	541.1	558.6	69.8	158.8
August-07	214.3	495.1	65.8	165.6
September-07	287.0	512.9	83.5	223.8
October-07	16.4	516.4	169.5	312.0
November-07	141.2	768.6	77.4	344.3
December-07	271.5	1,041.1	113.0	364.3
January-08	-97.4	900.1	51.5	366.4
February-08	-90.2	770.5	24.6	376.9
March-08	14.4	683.8	137.2	420.6
April-08	81.1	581.3	232.9	462.8



Maximum Monthly 99.5 Percentile 10 Minute Regulation (10/1/07 to 5/1/08 - 7 Months)				
Hour	Prop Load Inc	Prop Load Dec	Prop Wind Inc	Prop Wind Dec
1	220.8	-537.7	116.5	-154.6
2	85.6	-194.6	128.9	-144.9
3	91.8	-137.6	172.3	-291.8
4	122.3	-209.7	134.3	-164.3
5	242.2	-222.2	112.1	-115.9
6	327.4	-365.6	127.3	-155.6
7	323.7	-517.9	118.3	-107.8
8	237.8	-687.4	139.4	-132.6
9	249.6	-239.6	120.2	-143.4
10	258.4	-211.7	125.8	-109.7
11	202.8	-509.8	121.4	-190.3
12	238.5	-1,703.2	135.1	-146.6
13	438.7	-181.2	167.0	-198.8
14	487.2	-397.2	133.3	-129.4
15	412.9	-299.9	238.1	-302.8
16	321.3	-254.7	164.2	-135.6
17	342.1	-363.1	151.1	-152.8
18	269.1	-340.5	157.7	-121.8
19	199.9	-169.2	160.3	-140.5
20	207.5	-218.7	224.8	-194.4
21	187.6	-240.7	121.6	-146.3
22	219.3	-284.6	137.0	-110.7
23	267.8	-360.3	376.3	-393.9
24	4,996.2	-269.5	184.8	-251.3
Maximum	487.2	-687.4	376.3	-393.9

Cal_Year_Nbr	Cal_Month_Nbr	Hour_Nbr	Prop_Load_Inc	Prop_Load_Dec	Prop_Wind_Inc	Prop_Wind_Dec
2007	10	1	66.26522222	-119.9774316	50.32873283	-53.47186488
2007	10	2	69.1401231	-140.4234921	52.80516667	-94.02702671
2007	10	3	53.45543674	-115.6678426	56.18952014	-53.25815593
2007	10	4	100.3796667	-120.6038639	99.49605929	-138.4018051
2007	10	5	202.4323522	-186.7223198	68.10268841	-71.03666832
2007	10	6	327.3538333	-204.8312222	41.88761362	-57.15489236
2007	10	7	323.6734819	-202.1811569	74.39278165	-62.3013743
2007	10	8	170.894972	-138.7456667	139.3660096	-132.5502299
2007	10	9	152.5975253	-145.2596924	47.4259449	-97.49160903
2007	10	10	94.46937392	-140.3403333	38.49275694	-52.02421856
2007	10	11	110.9793333	-182.3370847	70.98315465	-69.63051788
2007	10	12	117.9876645	-148.3273333	55.5400372	-59.68028633
2007	10	13	438.7030556	-180.7728253	53.38361111	-72.32545139
2007	10	14	487.1734444	-153.1937222	45.29069167	-77.79211951
2007	10	15	156.1233714	-179.817196	62.79539984	-62.12591521
2007	10	16	203.55325	-117.8744186	73.53960431	-45.91274139
2007	10	17	138.2309431	-149.5875965	93.58874028	-89.3048358
2007	10	18	222.1357538	-147.478799	98.70125381	-98.60702185
2007	10	19	199.9485556	-169.1597778	83.37567258	-51.94703056
2007	10	20	134.5471625	-93.90564931	70.69589236	-79.00066358
2007	10	21	86.50270903	-178.2025556	96.73345949	-89.63774469
2007	10	22	214.4788963	-224.6989208	129.2065278	-105.1024088
2007	10	23	163.6421313	-235.4623375	50.42298729	-65.44634627
2007	10	24	129.2235	-178.6796955	99.34583333	-98.04542614
2007	11	1	75.56243727	-161.5820271	98.28156875	-94.13403547
2007	11	2	61.43309763	-194.6378633	56.87765556	-78.72141782
2007	11	3	75.13041667	-93.48849603	81.7394252	-80.63938075
2007	11	4	98.73583333	-101.50755	87.45619787	-92.77813943
2007	11	5	242.1821667	-143.5619978	112.0846194	-115.9123302
2007	11	6	316.9805	-258.995125	58.08461111	-53.54038889
2007	11	7	305.0315063	-265.8329583	87.55465972	-72.10983833
2007	11	8	169.1389411	-123.8593333	113.4868958	-107.994521
2007	11	9	135.4187904	-239.6464513	60.01445892	-91.96412716
2007	11	10	218.1833711	-169.6586417	73.97736111	-71.74868465
2007	11	11	127.2429875	-399.3204618	62.6608601	-61.44301732
2007	11	12	117.9159333	-169.9884542	58.34343162	-77.95657034
2007	11	13	115.3483333	-150.7496667	68.03891295	-57.24388889
2007	11	14	114.7496514	-297.2739545	105.4358299	-124.4534722
2007	11	15	88.97317429	-144.7895935	86.14802828	-87.73394378
2007	11	16	172.7591389	-199.6134161	86.96396825	-135.6283754
2007	11	17	327.1102117	-234.2076496	109.4493549	-96.83348892
2007	11	18	207.8840727	-154.6507702	84.37055556	-38.02136042
2007	11	19	125.0906389	-104.9010278	65.7110061	-54.75831445
2007	11	20	81.55555556	-127.1449121	71.01047915	-61.09713252
2007	11	21	177.8349363	-202.6593877	56.85402968	-62.75652778
2007	11	22	193.742087	-284.5938333	72.16375302	-88.93712963
2007	11	23	197.5352083	-223.2264769	151.4275023	-155.7378637
2007	11	24	128.2720278	-269.520047	53.18059054	-56.68497801

2007	12	1	220.7520833	-537.6640083	116.4896472	-154.6016177
2007	12	2	79.98892404	-126.0616269	102.8396242	-144.8668165
2007	12	3	61.32361111	-137.6344271	66.12173494	-69.5660283
2007	12	4	90.24527778	-209.7045347	98.19118065	-67.643534
2007	12	5	203.9751389	-219.452103	47.38431386	-79.32019097
2007	12	6	301.2588661	-286.8778008	91.94484964	-155.6149826
2007	12	7	257.0913889	-517.8808371	118.3396389	-88.66676389
2007	12	8	200.2765903	-687.3596307	68.59986111	-68.68347222
2007	12	9	249.6377951	-177.8991255	56.06909117	-48.78085311
2007	12	10	213.2852311	-179.486934	108.3435805	-109.683384
2007	12	11	132.8818174	-128.7839099	121.3868072	-190.3029896
2007	12	12	156.0885714	-142.3214165	135.0785767	-146.5642812
2007	12	13	248.3761389	-168.9835799	66.28451736	-52.02534476
2007	12	14	306.0186514	-121.5016521	65.12011788	-66.33095278
2007	12	15	97.84728531	-139.8699695	48.39083333	-57.15230556
2007	12	16	160.9499834	-169.3631493	63.09685141	-51.39597222
2007	12	17	342.0942778	-363.1017764	47.11815278	-48.31475694
2007	12	18	168.4487505	-160.9512627	79.79181544	-103.3771771
2007	12	19	100.3683333	-115.5865174	130.5988889	-127.1411209
2007	12	20	200.1511111	-156.2967222	104.2167923	-102.4420176
2007	12	21	165.3237148	-178.3895911	95.45986111	-85.34180556
2007	12	22	219.0273611	-278.6852222	91.42895486	-103.9087578
2007	12	23	239.4736111	-261.9631424	97.34695262	-106.2070878
2007	12	24	198.3651908	-242.1026146	97.07930453	-81.80413163
2008	1	1	94.40138889	-180.8516622	68.74715972	-62.46471688
2008	1	2	85.58419542	-99.05374617	104.3193368	-120.6445833
2008	1	3	91.75205121	-106.1067102	107.2766719	-73.95060586
2008	1	4	122.3173611	-174.4804722	134.2717699	-100.7532485
2008	1	5	202.4830556	-216.9668216	54.53097222	-52.69664505
2008	1	6	306.6190278	-365.6175281	119.400409	-103.4135833
2008	1	7	287.819934	-318.3565278	78.05798843	-81.21289583
2008	1	8	200.1370833	-227.5530738	62.08475852	-61.64222222
2008	1	9	157.0647222	-224.0011111	120.1756996	-143.3899403
2008	1	10	170.7598432	-211.6951389	91.90090013	-98.44335429
2008	1	11	175.4658333	-509.7913523	102.1093646	-94.49215007
2008	1	12	238.4584722	-381.6133889	113.9827778	-112.9701562
2008	1	13	137.3570833	-161.37625	142.9974012	-198.7957325
2008	1	14	135.6093571	-167.5488847	83.10877145	-120.4368264
2008	1	15	412.9009722	-188.660427	134.0420938	-118.3143457
2008	1	16	181.6978388	-201.1376094	68.06058819	-85.46616592
2008	1	17	264.6361759	-265.1642499	102.4998639	-140.9854308
2008	1	18	230.8752679	-276.3344954	74.503778	-117.4019655
2008	1	19	116.5520625	-130.2563903	108.857181	-80.17777778
2008	1	20	117.5893288	-163.7948611	130.1154422	-70.30027778
2008	1	21	187.6030987	-240.7306059	105.4363589	-108.1108556
2008	1	22	219.2857674	-231.0022222	82.17869792	-108.2341742
2008	1	23	247.67	-216.4467986	235.7613889	-248.5893277
2008	1	24	168.3173232	-184.3873438	122.98125	-138.5265421
2008	2	1	78.9775	-96.69459722	77.01860899	-95.89529167
2008	2	2	54.04393401	-65.27164177	128.8522569	-86.085136
2008	2	3	62.66526479	-115.3229583	60.22972222	-70.48194444
2008	2	4	90.69638889	-121.5552778	70.49415972	-59.04027778
2008	2	5	195.7645833	-211.4357146	82.24412153	-70.47697639
2008	2	6	309.9895833	-354.9525029	115.9974554	-94.87467083
2008	2	7	282.3829277	-295.6502778	57.07263889	-72.83827904
2008	2	8	145.6254438	-159.4311205	85.76390257	-113.973125
2008	2	9	145.5336111	-205.9247222	72.20269474	-74.79759902

2008	2	10	258.3578079	-165.8895833	102.2567775	-98.95613624
2008	2	11	202.7741667	-150.6872564	58.8615032	-75.81724861
2008	2	12	175.2019108	-1703.17375	90.58136875	-90.12316389
2008	2	13	141.6974469	-153.5676285	83.95246385	-124.457191
2008	2	14	109.280082	-203.9870133	133.26475	-118.9626815
2008	2	15	136.0672222	-211.6193206	68.44069444	-59.16763889
2008	2	16	321.285	-206.9649988	60.29522917	-69.15965255
2008	2	17	213.8198785	-154.8427035	68.13722039	-78.39085311
2008	2	18	269.1170833	-340.5095833	44.97906669	-68.03793867
2008	2	19	148.0980938	-152.6748952	86.42666667	-96.8111946
2008	2	20	126.3692309	-218.7027299	102.2524066	-80.8284886
2008	2	21	134.3818056	-156.8181944	76.93711111	-98.18965551
2008	2	22	181.2612201	-280.9666667	64.13722222	-86.29003125
2008	2	23	218.7622222	-360.3063243	93.27182876	-73.77594731
2008	2	24	171.1654167	-153.0985903	184.8404167	-176.1721651
2008	3	1	92.23520597	-112.2687187	72.63911806	-65.34039955
2008	3	2	57.83424488	-94.10203537	64.62081336	-84.39333333
2008	3	3	74.5597728	-130.6598267	78.50375	-81.015878
2008	3	4	88.77569444	-112.4743056	120.8433796	-109.523187
2008	3	5	179.9716667	-214.5246684	100.4795521	-72.09530942
2008	3	6	294.9346605	-325.2090972	127.3438125	-111.6034722
2008	3	7	296.9093056	-304.4715729	113.3335681	-107.7510347
2008	3	8	172.9065937	-193.5683333	87.69108742	-75.91286164
2008	3	9	248.8942402	-185.225	76.65489583	-63.22855865
2008	3	10	201.03	-208.3163542	85.49797931	-96.77758333
2008	3	11	177.6881181	-199.5152675	81.65322302	-78.4073607
2008	3	12	147.5644444	-215.8537951	118.6539236	-114.1791072
2008	3	13	155.2155126	-181.2280521	119.4001043	-97.78585829
2008	3	14	125.2599537	-198.3627693	69.49825879	-92.48796493
2008	3	15	144.7358056	-198.3114757	238.1358333	-302.8475
2008	3	16	96.70562909	-254.7053566	164.2283542	-115.2598355
2008	3	17	120.3517091	-133.7700731	151.0950537	-152.762066
2008	3	18	200.472498	-230.4077902	157.6705035	-120.4594946
2008	3	19	161.3727778	-166.7656944	85.49657986	-86.26401534
2008	3	20	201.7416667	-198.118033	224.7782599	-194.4093278
2008	3	21	133.7800729	-138.7095965	121.5893364	-146.3292292
2008	3	22	210.6302118	-194.3651389	136.9906424	-110.7475
2008	3	23	261.9314939	-205.8676389	376.2513548	-393.8535486
2008	3	24	175.0802778	-190.4920833	94.16601223	-251.2784097
2008	4	1	81.36014642	-97.75764387	102.3711118	-92.05007722
2008	4	2	54.94494041	-106.3444392	93.89117621	-128.8588275
2008	4	3	73.9968253	-123.132066	172.2608125	-291.7764938
2008	4	4	89.59375	-118.5442852	90.17603935	-164.2915646
2008	4	5	189.5112579	-222.1683333	81.98816319	-76.14930556
2008	4	6	297.2590682	-310.332765	65.44972222	-76.14194444
2008	4	7	244.4504167	-283.0263438	92.78041667	-95.45260069
2008	4	8	237.844874	-123.584184	68.87352807	-65.88319028
2008	4	9	213.02	-196.7095373	61.17647387	-63.38413542
2008	4	10	245.2620833	-187.2482736	125.8232753	-90.01013889
2008	4	11	148.8423889	-194.0699771	83.00626389	-71.03717229
2008	4	12	133.8505556	-151.4370025	99.48229494	-92.09484375
2008	4	13	202.7877632	-150.9220278	166.995	-182.8265688
2008	4	14	191.6085139	-397.1757766	83.60643462	-129.4331944
2008	4	15	110.5972222	-299.9380781	91.37657003	-94.176139
2008	4	16	114.3242656	-154.7399354	116.7229167	-122.3017094
2008	4	17	112.7996963	-129.9241667	92.193278	-127.502309
2008	4	18	226.9066736	-144.5065278	92.43293344	-121.8431456

2008	4	19	95.44805556	-122.1430898	160.3346855	-140.4961838
2008	4	20	207.4809722	-182.0479618	69.00639509	-79.75145334
2008	4	21	143.9053472	-138.8251389	84.72273794	-100.9058646
2008	4	22	196.1427176	-206.6733333	91.51631013	-110.6777397
2008	4	23	267.797644	-231.8111389	51.44805122	-89.97661033
2008	4	24	4996.223333	-210.6481875	93.67847222	-102.9318877