

Table S2. Map of wheat obtained by mapping individual chromosomes as assigned in GrainGenes, with correction by simulated annealing of ends.

Marker	Recombination Fraction	Deletion Frequency	Name
38	6.129	57.000	XksuE11-1A.2
28	6.641	60.226	Xwg241-1A
27	3.288	69.838	Xcdo393-1A
26	9.806	70.981	XksuE11-1A.1
25	18.387	69.091	Xmwg912-1A
24	11.943	65.143	Xmwg632-1A
37	46.018	60.054	Xcdo1160-1A
23	2.131	68.811	XksuH14-1A
36	6.772	67.982	XksuH9-1A
22	17.709	61.302	Xcmwg706-1A
21	5.481	66.500	Xbcd265-1A
20	4.302	65.890	Xcmwg733-1A
31	3.109	69.838	Xbcd808-1A.1
33	8.143	66.584	Xbcd1889-1A
35	7.255	67.593	Xbcd1930-1A
34	12.667	59.568	Xbcd808-1A.2
32	25.618	66.594	XksuE3-1A
19	20.188	53.050	Glu-1A
18	24.971	53.774	Xcdo312-1A
30	13.115	34.301	Xbcd1407-1A
17	13.232	44.000	Xcdo473-1A
15	1.046	48.857	Xabg452-1A
16	2.073	48.270	Xwg605-1A
13	5.089	49.875	Xcdo98-1A
12	2.235	54.478	Xbcd1072-1A
14	13.484	59.235	Xabg373-1A
11	6.706	52.529	Xrz244-1A
10	8.291	50.324	Xcdo580-1A
9	8.444	52.460	Xmwg67-1A
29	7.600	52.294	Xbcd98.2-1A
8	6.275	49.156	XksuG9-1A
7	9.589	48.425	Xbcd98-1A.1
6	5.067	46.879	XksuE18-1A
5	8.143	44.660	XGli3-1A
4	19.000	40.303	Xabc156-1A
3	18.804	52.294	Xcdo426-1A
2	7.125	47.880	XksuD14-1A.2
1	10.962	58.056	XGli1-1A
0	--	61.222	XksuD14-1A.1

39	10.962	52.778	XksuD14-1A.1
40	7.125	55.944	XGli1-1A
41	19.979	66.120	XksuD14-1A.2
42	17.812	59.615	Xcdo426-1A
43	6.786	70.242	Xabc156-1A
44	5.067	69.340	XGli3-1A
45	9.589	67.121	XksuE18-1A
46	7.321	65.575	Xbcd98-1A.1
68	6.514	61.706	Xbcd98.2-1A
47	9.500	57.523	XksuG9-1A
48	4.145	61.540	Xmwg67-1A
49	6.706	59.568	Xcdo580-1A
50	11.400	59.235	Xrz244-1A
54	0.000	61.071	Xabg452-1A
55	0.000	61.622	Xwg605-1A
52	2.036	61.071	Xcdo98-1A
51	2.235	59.522	Xbcd1072-1A
53	12.294	54.765	Xabg373-1A
56	14.124	67.000	Xcdo473-1A
69	24.971	79.699	Xbcd1407-1A
57	20.188	60.226	Xcdo312-1A
58	25.618	60.950	Glu-1A
71	12.667	47.406	XksuE3-1A
73	12.436	54.432	Xbcd808-1A.2
72	3.109	47.416	Xbcd1889-1A
70	2.073	44.162	Xbcd808-1A.1
74	4.222	45.398	Xbcd1930-1A
59	4.385	48.110	Xcmwg733-1A
60	16.602	46.444	Xbcd265-1A
61	6.772	52.698	Xcmwg706-1A
75	2.131	46.018	XksuH9-1A
62	44.972	44.162	XksuH14-1A
76	11.943	49.875	Xcdo1160-1A
63	18.387	46.686	Xmwg632-1A
64	7.355	42.606	Xmwg912-1A
65	3.288	43.019	XksuE11-1A.1
66	6.641	44.162	Xcdo393-1A
67	6.129	53.774	Xwg241-1A
77	--	57.000	XksuE11-1A.2
32	44.045	54.522	Xmwg837-1B.1
31	4.222	53.339	XGli1-1B
0	9.030	47.416	XksuD14-1B
33	18.136	50.294	Xwhs179-1B
1	7.277	54.625	Xmwg938-1B
35	9.212	57.514	Xcdo388-1B
34	1.326	43.588	Xmwg68-1B

36	1.253	45.355	Xabc156-1B
2	3.138	46.216	XGli3-1B-1B
37	6.162	45.804	XksuF43-1B.1
3	4.560	38.679	XksuF43-1B.2
4	2.303	38.000	XksuE18-1B
40	12.871	46.636	XksuE19-1B
39	12.469	48.364	Xbcd1124-1B
41	11.505	47.064	Xrz166-1B
12	2.151	50.000	Xbcd338-1B
46	1.075	51.623	Xcdo92-1B
14	0.000	50.442	Xcdo98-1B
13	4.515	48.556	Xwg605-1B
44	14.929	40.868	Xabg373-1B
38	10.857	33.303	Xbcd340-1B
5	4.471	51.623	Nor-1B
42	4.515	49.745	Xbcd1796-1B
43	4.957	51.029	Xcdo1340-1B
9	3.420	49.020	Xcdo127-1B
7	0.000	49.434	Xcdo618-1B
11	0.000	49.875	Xbcd200-1B
10	3.109	50.324	Xwg811-1B
8	4.222	52.929	Xbcd762-1B
6	9.679	47.064	Xcdo1173-1B
48	14.250	49.156	Xbcd386-1B
51	9.614	46.699	Xcmwg645-1B
47	5.044	51.000	Xmwg837-1B.2
45	2.073	47.416	Xbcd1449-1B
49	1.036	48.270	Xcdo278-1B
15	2.426	47.416	Xbcd12-1B
52	18.387	47.298	Xcmwg758-1B
50	17.944	45.398	Xglk136-1B
16	15.935	53.339	Xcdo637-1B
17	7.953	64.639	Xbcd1150-1B.1
53	9.402	55.307	Glu-1B
18	15.057	43.527	Xbcd1150-1B.2
19	12.436	46.636	Xcmwg733-1B
20	18.159	40.354	Xbcd442-1B
54	3.000	42.000	Xbcd441-1B
21	5.481	43.000	Xbcd304-1B
55	2.280	37.269	Xmwg69-1B
22	10.556	39.743	XksuG34-1B
57	31.189	48.857	XksuE11-1B.1
56	4.560	44.333	Xbcd1562-1B
23	9.402	46.245	Xbcd508-1B
24	1.140	50.913	Xbcd1514-1B
25	0.000	53.405	Xbcd1261-1B
26	21.111	53.405	Xcdo1189-1B

27	23.009	57.514	Xcdo346-1B
30	4.108	52.929	XksuI27-1B
29	2.280	54.478	XksuE11-1B.2
28	--	60.420	Xmwg912-1B
87	7.980	52.460	XksuE11-1B.2
86	8.143	49.020	Xmwg912-1B
88	23.009	61.071	XksuI27-1B
85	21.111	56.486	Xcdo346-1B
84	0.000	60.595	Xcdo1189-1B
83	2.280	60.595	Xbcd1261-1B
82	12.928	59.767	Xbcd1514-1B
114	1.140	65.444	Xbcd1562-1B
81	27.143	67.755	Xbcd508-1B
115	10.556	65.143	XksuE11-1B.1
80	2.280	74.257	XksuG34-1B
113	6.577	76.731	Xmwg69-1B
79	1.000	70.000	Xbcd304-1B
112	17.150	71.000	Xbcd441-1B
78	13.473	68.602	Xbcd442-1B
77	19.358	63.218	Xcmwg733-1B
76	9.402	70.473	Xbcd1150-1B.2
111	7.953	58.693	Glu-1B
75	15.935	49.361	Xbcd1150-1B.1
74	16.889	60.661	Xcdo637-1B
108	18.387	66.584	Xglk136-1B
110	3.638	65.489	Xcmwg758-1B
73	4.145	66.584	Xbcd12-1B
107	4.145	62.649	Xcdo278-1B
103	10.556	65.575	Xbcd1449-1B
106	11.875	61.706	Xbcd386-1B
67	6.196	61.560	Xcdo127-1B
101	9.000	61.886	Xcdo1340-1B
109	8.241	63.181	Xcmwg645-1B
105	3.167	63.000	Xmwg837-1B.2
71	1.056	64.389	Xwg605-1B
72	3.054	61.540	Xcdo98-1B
66	2.036	61.071	Xbcd762-1B
65	0.000	62.549	Xcdo618-1B
68	0.000	62.649	Xwg811-1B
69	1.046	62.089	Xbcd200-1B
100	2.151	61.145	Xbcd1796-1B
64	4.385	66.936	Xcdo1173-1B
63	10.857	62.377	Nor-1B
96	14.929	80.697	Xbcd340-1B
102	5.700	73.132	Xabg373-1B
104	2.151	62.377	Xcdo92-1B

70	11.505	64.000	Xbcd338-1B
99	12.469	66.936	Xrz166-1B
97	12.871	65.636	Xbcd1124-1B
98	5.758	63.218	XksuE19-1B
62	4.560	76.000	XksuE18-1B
61	6.196	75.321	XksuF43-1B.2
94	1.253	68.645	Xabc156-1B
60	2.092	67.784	XGli3-1B-1B
95	2.257	66.161	XksuF43-1B.1
92	9.212	70.412	Xmwg68-1B
93	7.277	56.486	Xcdo388-1B
59	18.136	59.375	Xmwg938-1B
91	9.030	63.706	Xwhs179-1B
58	3.167	65.575	XksuD14-1B
89	44.045	60.661	XGli1-1B
90	--	59.478	Xmwg837-1B.1
7	10.364	53.339	Xabc156-1D
5	3.403	54.522	Xmwg837-1D
6	17.812	55.371	Xcn17-1D
0	17.371	49.472	XGli1-1D
3	0.000	55.487	XksuD14-1D.2
2	7.125	56.496	Xbcd1434-1D
1	5.327	63.558	XksuD14-1D.1
20	6.706	54.889	Xwhs179-1D.1
4	7.389	61.222	Xmwg938-1D
21	43.768	65.000	Xwhs179-1D.2
22	34.898	85.500	Xcdo89-1D
8	15.278	61.560	Xcdo312-1D
9	5.758	58.541	XksuG55-1D
23	5.700	58.693	Glu-1D
10	6.218	58.513	XksuD49-1D
11	16.286	65.730	XksuG2-1D
12	6.641	63.333	Xcmwg733-1D
24	26.308	70.073	Xbcd1930-1D
13	2.400	69.600	Xcmwg701-1D
14	17.882	64.000	XAdh-1D
25	36.774	65.941	XATPase-1D
26	11.068	39.086	Xbcd508-1D
15	6.577	47.243	Xbcd1261-1D
27	22.562	51.623	Xcmwg693-1D
28	18.816	56.447	Xcdo1420-1D
16	3.027	42.000	XksuE11-1D
17	7.062	43.381	XksuI27-1D.1
18	8.367	48.425	XksuI27-1D.2
19	--	49.745	Xwg241-1D

36	10.364	60.661	Xabc156-1D
34	3.403	59.478	Xmwg837-1D
35	17.812	58.629	Xcn17-1D
29	15.802	64.528	XGli1-1D
49	5.327	59.111	Xwhs179-1D.1
30	4.071	50.442	XksuD14-1D.1
31	1.018	54.478	Xbcd1434-1D
32	8.523	56.496	XksuD14-1D.2
33	6.333	51.722	Xmwg938-1D
50	43.768	49.000	Xwhs179-1D.2
51	34.898	28.500	Xcdo89-1D
37	15.278	52.440	Xcdo312-1D
38	5.758	55.459	XksuG55-1D
52	5.700	55.307	Glu-1D
39	6.218	55.487	XksuD49-1D
40	18.112	48.270	XksuG2-1D
53	1.107	43.927	Xbcd1930-1D
41	25.333	45.389	Xcmwg733-1D
42	3.600	44.400	Xcmwg701-1D
43	16.765	45.000	XAdh-1D
54	28.500	48.059	XATPase-1D
44	8.769	64.703	Xbcd1261-1D
56	14.970	62.377	Xcmwg693-1D
55	26.681	74.914	Xbcd508-1D
57	18.816	57.553	Xcdo1420-1D
45	3.027	72.000	XksuE11-1D
46	7.062	70.619	XksuI27-1D.1
47	8.367	65.575	XksuI27-1D.2
48	--	64.255	Xwg241-1D
0	10.101	60.562	Xbcd348-2A.1
3	2.714	67.648	Xcmwg682-2A
1	0.000	59.192	Xfba82-2A
2	2.280	60.109	Xcdo456-2A.1
4	2.327	57.000	Xfba70-2A.1
5	29.381	49.745	Xcdo447-2A
6	22.800	26.220	Xcdo456-2A.2
8	12.436	39.000	Xbcd348-2A.2
7	12.436	51.818	Xfba70-2A.2
12	2.151	47.673	Xfbb72-2A
15	2.151	49.472	Xfbb289-2A
17	0.000	51.623	Xfba280-2A
11	0.000	39.652	Xcdo1090-2A
14	0.000	50.667	Xfbb61-2A
13	3.167	44.333	Xbcd1970-2A
10	3.000	47.000	Xcdo57-2A
9	9.000	48.000	Xbcd718-2A

16	23.222	51.000	XksuD18-2A
19	0.000	48.556	Xfba178-2A
18	13.412	48.556	Xfba198-2A
21	2.235	51.412	Xfba300-2A
22	2.111	47.673	Xfba272-2A
20	6.453	50.667	Xfbb329-2A
23	23.222	47.416	Xbcd1184-2A
24	10.364	49.745	Xfbb226-2A
29	0.000	54.478	Xbcd1688-2A
34	0.000	57.000	Xfbb359-2A
35	2.192	54.889	Xfba374-2A
28	3.000	53.774	Xfba106-2A
27	2.591	49.227	Xcdo1281-2A
32	2.131	51.000	Xbcd855-2A
30	1.086	51.140	Xcdo405-2A
31	4.145	50.893	Xbcd161-2A
36	11.505	47.839	Xcdo1376-2A
25	15.057	41.081	Xbcd152-2A
26	9.589	54.385	Xwsu1-2A
33	12.436	44.786	Xrz395-2A
37	16.582	51.818	Xfbb212-2A
39	2.151	53.000	Xbcd543-2A
38	6.453	53.774	Xfbb353-2A
41	4.145	53.891	Xfbb284-2A
42	8.071	49.000	XksuE16-2A
43	11.097	49.434	XksuD22-2A
44	10.364	50.000	Xbcd1095-2A
45	19.000	53.891	Xfba276-2A
40	41.040	53.469	XksuG5-2A
47	15.960	51.412	Xfba385-2A
56	6.453	53.774	Xfba314-2A
54	10.556	51.818	Xfba8-2A
53	3.353	57.504	XksuH16-2A
52	6.706	60.353	Xbcd410-2A
51	6.218	56.000	Xbcd292-2A
49	3.353	53.891	Xcdo1410-2A
48	2.850	55.340	Xcdo678-2A
50	11.633	53.200	XksuF41-2A
46	25.333	42.537	Xpsr934-2A
55	--	60.109	XksuF11-2A
57	10.101	53.438	Xbcd348-2A.1
60	2.714	46.352	Xcmwg682-2A
58	0.000	54.808	Xfba82-2A
59	2.280	53.891	Xcdo456-2A.1
61	2.327	57.000	Xfba70-2A.1
62	29.381	64.255	Xcdo447-2A

63	22.800	87.780	Xcdo456-2A.2
65	12.436	75.000	Xbcd348-2A.2
64	12.436	62.182	Xfba70-2A.2
69	2.151	66.327	Xfbb72-2A
72	2.151	64.528	Xfbb289-2A
74	0.000	62.377	Xfba280-2A
68	0.000	74.348	Xcdo1090-2A
71	0.000	63.333	Xfbb61-2A
70	3.167	69.667	Xbcd1970-2A
67	2.000	67.000	Xcdo57-2A
66	10.000	65.000	Xbcd718-2A
73	23.222	63.000	XksuD18-2A
76	0.000	65.444	Xfba178-2A
75	15.057	65.444	Xfba198-2A
77	6.453	63.333	Xfbb329-2A
80	4.222	66.584	Xbcd1184-2A
79	2.235	66.327	Xfba272-2A
78	15.647	62.588	Xfba300-2A
81	11.400	64.255	Xfbb226-2A
84	2.923	63.477	Xcdo1281-2A
91	0.000	57.000	Xfbb359-2A
86	1.009	59.522	Xbcd1688-2A
89	0.000	58.000	Xbcd855-2A
87	0.000	60.729	Xcdo405-2A
92	2.192	59.111	Xfba374-2A
88	4.145	63.107	Xbcd161-2A
93	10.654	66.161	Xcdo1376-2A
83	15.057	59.615	Xwsu1-2A
82	9.413	72.919	Xbcd152-2A
90	2.151	64.125	Xrz395-2A
85	8.604	60.226	Xfba106-2A
94	18.655	62.182	Xfbb212-2A
96	4.302	59.000	Xbcd543-2A
95	6.453	60.226	Xfbb353-2A
98	6.218	60.109	Xfbb284-2A
99	4.035	60.000	XksuE16-2A
100	12.106	64.566	XksuD22-2A
101	12.436	59.000	Xbcd1095-2A
102	23.222	60.109	Xfba276-2A
97	41.040	56.496	XksuG5-2A
104	15.960	62.588	Xfba385-2A
113	6.453	60.226	Xfba314-2A
111	10.556	62.182	Xfba8-2A
110	2.235	56.496	XksuH16-2A
109	4.471	52.529	Xbcd410-2A
108	3.320	56.000	Xbcd292-2A
105	2.235	58.660	Xcdo678-2A

106	5.182	59.073	Xcdo1410-2A
107	11.633	60.800	XksuF41-2A
103	25.333	71.463	Xpsr934-2A
112	--	53.891	XksuF11-2A
58	8.550	64.255	Xfba310-2B
59	25.169	67.688	Xbcd1231-2B
57	10.729	67.059	Xcdo36-2B
56	11.720	62.089	XksuD23-2B
55	6.980	63.798	Xg1k558-2B
54	9.306	54.808	Xfba385-2B
52	5.135	62.649	Xcdo678-2B
53	10.364	64.000	Xmwg660-2B
51	25.811	60.109	Xfba359-2B
50	27.962	73.132	Xfbb113-2B
49	6.218	50.324	Xmwg546-2B
48	4.471	55.964	Xfba116-2B
46	8.523	42.617	Xbcd135-2B
47	4.183	46.407	Xwsu2-2B
45	2.192	46.018	Xbcd1095-2B
42	4.302	53.891	Xfba276-2B
44	2.151	55.925	Xfba345-2B
41	0.000	51.818	Xfba62-2B.2
43	2.111	50.667	Xfba61-2B
40	7.125	53.891	Xfbb284-2B
39	8.523	49.009	Xmwg2025-2B
38	14.124	48.425	Xbcd307-2B
37	9.500	48.000	Xbcd1779-2B
35	11.400	53.833	Xcdo684-2B
36	13.412	57.000	Xcn16-2B
33	0.000	60.226	Xfba199-2B
32	6.577	58.036	Xfbb335-2B
34	20.541	51.351	Xbcd445-2B
31	6.218	49.000	Xbcd1119-2B
30	9.327	50.782	Xcdo388-2B
29	10.000	49.000	Xwg996-2B
23	1.000	43.000	Xcdo370-2B
24	5.000	42.000	Xbcd260-2B
22	5.044	45.000	XksuF11-2B
20	2.111	44.389	Xbcd1709-2B
21	2.235	43.278	Xtam18-2B
25	0.000	48.556	Xfbb75-2B
26	0.000	47.321	Xfbb21-2B
27	0.000	46.038	Xfbb4-2B
28	4.145	47.673	Xfbb226-2B
18	0.000	51.818	Xfba374-2B
17	2.375	51.184	Xfbb47-2B

19	10.179	44.786	Xbcd152-2B
16	3.455	47.000	Xwsu1-2B
15	15.545	51.818	Xcdo405-2B
12	13.959	54.808	Xfba106-2B
13	8.523	41.081	Xmwig950-2B
14	15.346	49.156	Xtam72-2B
6	2.111	51.818	Xfbb40-2B
7	2.111	50.667	Xfbb121-2B
8	2.073	51.818	Xfba4-2B
9	13.000	43.000	Xbcd18-2B
10	9.771	50.000	Xrz69-2B
11	8.941	52.114	Xrz444-2B
5	6.218	53.891	Xfba272-2B
4	0.000	47.673	Xfbb62-2B
3	4.145	47.673	Xfba29-2B
2	17.538	54.000	Xbcd1184-2B
1	8.941	52.615	Xfba280-2B
0	--	57.000	Xfbb274-2B
118	8.550	49.745	Xfba310-2B
119	25.169	46.312	Xbcd1231-2B
117	10.729	46.941	Xcdo36-2B
116	11.720	51.911	XksuD23-2B
115	6.980	50.202	Xg1k558-2B
114	9.306	59.192	Xfba385-2B
112	5.135	51.351	Xcdo678-2B
113	10.364	50.000	Xmwig660-2B
111	25.811	53.891	Xfba359-2B
110	27.962	40.868	Xfbb113-2B
109	6.218	63.676	Xmwig546-2B
108	4.471	58.036	Xfba116-2B
106	7.458	70.318	Xbcd135-2B
107	4.183	67.593	Xwsu2-2B
105	2.192	67.982	Xbcd1095-2B
102	4.302	60.109	Xfba276-2B
104	2.151	58.075	Xfba345-2B
101	0.000	62.182	Xfba62-2B.2
103	2.111	63.333	Xfba61-2B
100	7.125	60.109	Xfbb284-2B
99	8.523	64.991	Xmwig2025-2B
98	16.142	65.575	Xbcd307-2B
97	19.000	63.000	Xbcd1779-2B
96	11.400	57.000	Xcn16-2B
95	10.857	59.111	Xcdo684-2B
94	6.840	62.649	Xbcd445-2B
93	0.000	53.774	Xfba199-2B
92	12.436	55.964	Xfbb335-2B

91	5.182	60.000	Xbcd1119-2B
90	9.327	63.218	Xcdo388-2B
89	11.000	65.000	Xwg996-2B
84	3.000	72.000	Xbcd260-2B
83	4.000	69.000	Xcdo370-2B
82	3.167	69.000	XksuF11-2B
81	2.235	70.722	Xtam18-2B
85	0.000	65.444	Xfbb75-2B
86	0.000	66.679	Xfbb21-2B
87	0.000	67.962	Xfbb4-2B
88	4.145	66.327	Xfbb226-2B
78	0.000	62.182	Xfba374-2B
77	2.375	62.816	Xfbb47-2B
79	4.108	69.214	Xbcd152-2B
80	12.106	68.602	Xbcd1709-2B
76	5.758	63.000	Xwsu1-2B
75	8.312	62.182	Xcdo405-2B
74	8.523	64.844	Xtam72-2B
73	13.959	72.919	Xmwg950-2B
72	19.731	59.192	Xfba106-2B
65	8.291	60.109	Xfba272-2B
62	6.218	54.000	Xbcd1184-2B
64	0.000	66.327	Xfbb62-2B
63	6.706	66.327	Xfba29-2B
71	9.771	61.886	Xrz444-2B
70	12.000	64.000	Xrz69-2B
69	2.073	70.000	Xbcd18-2B
68	0.000	62.182	Xfba4-2B
66	2.111	62.182	Xfbb40-2B
67	17.882	63.333	Xfbb121-2B
61	8.941	61.385	Xfba280-2B
60	--	57.000	Xfbb274-2B
21	48.857	52.778	Xfba65-2D
67	48.511	48.857	Xfba272-2D
10	49.472	30.113	Xfbb274-2D
45	24.588	22.800	Xfba209-2D.1
49	17.882	53.339	XksuH16-2D
52	15.200	58.036	Xfba311-2D
48	4.606	54.720	Xbcd410-2D
46	6.333	53.946	Xrz444-2D
53	0.000	49.745	Xfba209-2D.2
47	6.453	47.321	Xfbb377-2D
51	17.100	41.455	Xfba314-2D
50	11.753	39.551	Xcdo36-2D
44	2.054	48.857	XksuD23-2D
43	3.081	50.442	Xglk558-2D

42	12.667	51.911	XksuH9-2D
41	10.364	53.891	Xfbb72-2D
40	8.444	60.109	Xfbb251-2D
39	2.111	52.778	Xfbb9-2D
38	12.436	51.818	Xfba116-2D
37	8.604	59.000	Xcdo1008-2D
36	12.906	58.075	Xfbb68-2D
33	0.000	49.745	Xfbb284-2D
32	0.000	49.745	Xfba341-2D.2
34	0.000	49.745	Xfba61-2D
28	0.000	49.472	Xfba62-2D
29	0.000	49.745	Xfbb122-2D
35	0.000	49.745	Xfba64-2D
31	0.000	47.321	Xfbb32-2D
30	12.667	49.745	Xfba111-2D
25	4.385	50.442	Xtam8-2D
26	2.151	49.472	Xfbb99-2D
27	12.906	49.745	Xfba74-2D
24	4.145	57.000	Xbcd111-2D
23	15.405	56.486	Xbcd120-2D
22	4.750	53.000	Xbcd260-2D
20	19.404	40.375	Xfba38-2D
17	12.667	53.946	Xwsu1-2D
18	2.426	52.440	Xcdo405-2D
19	18.655	49.745	Xfba341-2D.1
16	16.889	51.818	Xfbb279-2D
15	14.124	49.434	Xbcd262-2D
14	28.000	51.000	Xcdo1479-2D
12	11.830	53.000	Xcdo1379-2D
11	20.520	41.943	Xbcd611-2D
9	2.073	45.600	Xfba88-2D
8	15.545	47.673	Xfba400-2D
7	12.000	52.347	Xbcd102-2D
6	7.600	41.167	Xbcd718-2D
5	4.145	46.636	Xbcd1970-2D
4	11.400	48.000	Xbcd18-2D
2	14.710	48.709	Xcdo456-2D
1	17.348	65.814	Xcmwg682-2D
3	20.727	45.600	Xfba83-2D
0	--	61.000	W2I-2D
75	48.857	61.222	Xfba65-2D
13	48.511	65.143	Xfba272-2D
64	--	83.887	Xfbb274-2D
106	35.236	55.964	Xfba311-2D
99	26.945	91.200	Xfba209-2D.1

105	6.453	72.545	Xfba314-2D
101	0.000	66.679	Xfbb377-2D
107	14.250	64.255	Xfba209-2D.2
104	15.766	72.122	Xcdo36-2D
103	9.402	58.569	XksuH16-2D
102	4.560	59.280	Xbcd410-2D
98	2.054	60.054	XksuD23-2D
100	5.135	60.054	Xrz444-2D
96	3.081	59.036	XksuH9-2D
97	12.667	60.531	Xg1k558-2D
95	10.364	60.109	Xfbb72-2D
94	8.444	53.891	Xfbb251-2D
93	2.111	61.222	Xfbb9-2D
92	12.436	62.182	Xfba116-2D
91	8.604	54.000	Xcdo1008-2D
90	12.906	55.925	Xfbb68-2D
87	0.000	64.255	Xfbb284-2D
86	0.000	64.255	Xfba341-2D.2
88	0.000	64.255	Xfba61-2D
82	0.000	64.528	Xfba62-2D
83	0.000	64.255	Xfbb122-2D
89	0.000	64.255	Xfba64-2D
85	0.000	66.679	Xfbb32-2D
84	12.667	64.255	Xfba111-2D
79	4.385	62.549	Xtam8-2D
80	2.151	64.528	Xfbb99-2D
81	12.906	64.255	Xfba74-2D
78	3.109	54.964	Xbcd111-2D
77	15.405	57.514	Xbcd120-2D
76	4.750	61.000	Xbcd260-2D
74	19.404	73.625	Xfba38-2D
71	12.667	60.054	Xwsu1-2D
72	2.426	61.560	Xcdo405-2D
73	18.655	64.255	Xfba341-2D.1
70	16.889	62.182	Xfbb279-2D
69	14.124	64.566	Xbcd262-2D
68	28.000	63.000	Xcdo1479-2D
66	11.830	61.000	Xcdo1379-2D
65	20.520	72.057	Xbcd611-2D
63	2.073	68.400	Xfba88-2D
62	15.545	66.327	Xfba400-2D
61	12.000	61.653	Xbcd102-2D
60	9.771	72.833	Xbcd718-2D
59	6.218	64.255	Xbcd1970-2D
58	10.364	65.000	Xbcd18-2D
56	13.484	61.145	Xcdo456-2D
55	17.348	48.186	Xcmwg682-2D

57	20.727	68.400	Xfba83-2D
54	--	53.000	W2I-2D
52	7.321	50.202	Xbcd372-3A
53	36.812	48.000	Xmwg30-3A
35	36.000	33.250	Xbcd1145-3A
74	15.960	24.115	Xfbb293-3A.4
73	6.453	44.094	Xmwg12-3A
75	0.000	46.407	Xmwg11-3A
76	8.941	39.462	Xfbb237-3A
72	4.385	45.170	Xfbb293-3A.3
71	30.475	47.416	Xabc172-3A.1
70	28.500	78.235	Xabc172-3A.2
69	21.714	62.067	Xtam63-3A
66	12.214	39.462	Xfba347-3A
64	20.727	56.034	XgbxG242-3A
67	9.771	48.857	Xgwm391-3A
68	7.277	48.000	Xbcd1773-3A
65	24.255	46.085	Xfbb293-3A.2
63	13.412	48.231	Xfba167-3A
62	5.607	45.265	Xgwm666-3A.2
61	8.341	46.061	Xgwm480-3A
60	8.550	47.500	Xfbb293-3A.1
57	2.375	58.693	Xwg184-3A
56	4.145	46.821	Xfbb250-3A
55	6.218	43.527	Xfbb260-3A
59	6.333	44.786	Xbcd1431-3A.2
58	22.374	52.294	Xbcd1431-3A.1
54	29.739	48.857	Xmwg570-3A
42	9.913	36.383	Xfbb353-3A
46	2.073	50.893	Xbcd115-3A
47	9.500	51.911	Xbcd2044-3A
41	7.355	41.115	XgbxG499-3A
44	2.151	47.321	Xfbb271-3A
45	4.000	56.000	Xmwg961-3A
43	14.378	52.000	Xtam33-3A
51	7.189	55.459	Xbcd452-3A
50	3.027	56.000	Xwg177-3A
48	3.054	52.460	Xcdo281-3A
49	8.444	54.478	Xksuh2-3A
37	14.870	47.673	Xfbb277-3A
28	7.600	52.114	Xbcd1127-3A
31	1.009	53.469	Xbcd828-3A
32	6.453	53.000	Xcdo1174-3A
29	7.901	48.396	Xcdo118-3A
26	4.302	55.431	XATPase-3A
27	4.183	52.378	Xabg396-3A

33	11.297	51.911	Xbcd366-3A
30	13.680	44.786	Xmwg802-3A
34	7.600	60.353	XgbxG034-3A
24	3.800	56.034	Xgwm666-3A.1
40	13.412	52.615	Xfbb332-3A
36	7.862	41.654	Xfba175-3A
23	0.000	49.645	Xgwm30-3A
38	6.909	46.821	Xfba127-3A
25	9.702	45.600	Xgwm32-3A
22	7.953	57.671	Xpsr903-3A
39	9.500	51.412	Xgwm5-3A
18	4.222	54.720	Xgwm2-3A
19	5.700	55.787	XgbxG406-3A
20	8.400	50.667	Xksua6-3A
21	16.734	52.855	Xcdo638-3A
14	6.053	57.504	Xbcd706-3A
15	2.018	53.469	Xbcd1532-3A
17	1.009	54.000	Xmwg22-3A
16	4.606	52.460	Xcdo1435-3A
10	6.404	46.740	Xcdo1164-3A
9	5.938	48.186	Xabg460-3A
13	1.018	50.893	Xbcd1823-3A
12	2.054	51.000	Xcdo1345-3A
11	17.208	52.378	Xabg471-3A
8	16.889	57.000	Xfba091-3A
6	6.453	54.889	Xfba366-3A
5	10.000	55.904	Xcdo460-3A
7	15.458	54.369	Xgwm369-3A
3	9.030	53.050	Xtam47-3A
4	21.963	58.000	Xtam61-3A
0	14.388	47.064	Xbcd15-3A
1	2.111	54.336	Xglk683-3A
2	46.531	53.891	Xfbb370-3A
157	32.386	65.143	Xbcd451-3A
156	16.467	64.125	Xcdo482-3A
152	4.302	65.604	Xmwg12-3A
154	0.000	67.593	Xmwg11-3A
155	8.941	74.538	Xfbb237-3A
151	4.385	68.830	Xfbb293-3A.3
150	22.353	65.575	Xabc172-3A.1
153	36.000	89.885	Xfbb293-3A.4
114	37.174	80.750	Xbcd1145-3A
131	10.459	63.798	Xbcd372-3A
132	--	61.000	Xmwg30-3A
143	12.214	57.966	XgbxG242-3A
145	4.851	74.538	Xfba347-3A

144	10.605	67.915	Xfbb293-3A.2
146	8.686	65.143	Xgwm391-3A
147	19.000	61.000	Xbcd1773-3A
148	19.950	39.267	Xtam63-3A
149	35.625	35.765	Xabc172-3A.2
142	13.412	65.769	Xfba167-3A
141	9.344	68.735	Xgwm666-3A.2
140	8.341	63.333	Xgwm480-3A
139	8.550	66.500	Xfbb293-3A.1
136	2.375	55.307	Xwg184-3A
135	4.145	67.179	Xfbb250-3A
134	6.218	70.473	Xfbb260-3A
138	6.333	69.214	Xbcd1431-3A.2
137	22.374	61.706	Xbcd1431-3A.1
133	29.739	65.143	Xmwg570-3A
121	18.136	77.617	Xfbb353-3A
130	7.189	58.541	Xbcd452-3A
129	3.027	58.000	Xwg177-3A
128	2.036	59.522	Xksuh2-3A
127	6.333	58.513	Xcdo281-3A
116	8.604	66.327	Xfbb277-3A
126	4.145	62.089	Xbcd2044-3A
125	5.089	58.018	Xbcd115-3A
124	4.000	55.000	Xmwg961-3A
122	2.151	59.000	Xtam33-3A
123	7.355	66.679	Xfbb271-3A
120	11.793	72.885	XgbxG499-3A
119	3.800	61.385	Xfbb332-3A
103	7.600	57.966	Xgwm666-3A.1
113	9.120	53.647	XgbxG034-3A
109	2.192	61.071	Xmwg802-3A
108	4.343	62.377	Xcdo118-3A
110	3.054	60.531	Xbcd828-3A
112	4.071	57.000	Xbcd366-3A
111	4.183	61.000	Xcdo1174-3A
105	4.302	58.569	XATPase-3A
106	7.824	61.622	Xabg396-3A
107	13.256	61.886	Xbcd1127-3A
118	12.128	62.588	Xgwm5-3A
115	7.862	72.346	Xfba175-3A
102	0.000	64.355	Xgwm30-3A
117	6.909	67.179	Xfba127-3A
104	9.702	68.400	Xgwm32-3A
101	10.857	56.329	Xpsr903-3A
97	4.222	59.280	Xgwm2-3A
98	5.700	58.213	XgbxG406-3A
99	8.400	63.333	Xksua6-3A

100	16.979	61.145	Xcdo638-3A
88	4.750	65.814	Xabg460-3A
90	2.054	61.622	Xabg471-3A
91	5.700	63.000	Xcdo1345-3A
89	4.606	67.260	Xcdo1164-3A
95	2.018	60.531	Xcdo1435-3A
94	6.053	60.531	Xbcd1532-3A
93	5.044	56.496	Xbcd706-3A
96	3.054	57.000	Xmwg22-3A
92	18.655	60.054	Xbcd1823-3A
87	16.889	57.000	Xfba091-3A
85	6.453	59.111	Xfba366-3A
84	6.000	55.904	Xcdo460-3A
86	15.458	59.631	Xgwm369-3A
82	9.030	60.950	Xtam47-3A
83	21.963	56.000	Xtam61-3A
79	14.388	66.936	Xbcd15-3A
80	4.222	58.598	Xg1k683-3A
81	46.531	60.109	Xfbb370-3A
78	33.682	48.857	Xbcd451-3A
77	--	48.688	Xcdo482-3A
66	37.174	67.059	Xfbb274-3B
55	5.534	64.673	Xbcd147-3B
56	2.151	68.196	Xbcd141-3B
57	6.840	66.679	Xbcd1555-3B
58	4.385	71.529	Xfbb147-3B.2
60	5.262	61.385	XgbxG773-3B
59	3.738	64.225	XgbxG037-3B
61	3.931	65.410	XgbxG065-3B
62	12.667	64.528	Xfbb168-3B
63	6.333	42.130	Xgwm108-3B
64	22.304	61.385	Xfbb378-3B
65	23.750	63.087	Xabc174-3B
67	2.111	67.556	Xfba133-3B.1
68	20.939	69.667	Xfba360-3B
70	2.426	65.143	Xfba008Hb-3B
71	11.400	71.529	Xfba167-3B
69	10.483	59.879	Xbg131-3B
75	9.402	50.294	Xgwm299-3B
76	15.600	52.347	Xgwm114-3B
77	18.612	56.436	Xgwm547-3B
74	8.444	59.111	Xfba235-3B
73	2.111	64.255	Xfba217-3B
72	13.959	65.444	Xfbb316-3B
82	17.100	50.423	Xtam63-3B
84	11.032	45.070	Xgwm181-3B

83	11.400	26.681	Xgwm247-3B
81	2.235	69.294	Xfbb293-3B
79	0.000	63.333	Xfba133-3B.3
80	4.222	63.333	Xfba310-3B
78	3.257	67.556	Xfba133-3B.2
85	42.130	61.254	Xgwm340-3B
149	6.333	71.870	Xgwm108-3B
150	22.304	52.615	Xfbb378-3B
151	23.750	50.913	Xabc174-3B
153	2.111	46.444	Xfba133-3B.1
154	20.939	44.333	Xfba360-3B
156	2.426	48.857	Xfba008Hb-3B
157	11.176	42.471	Xfba167-3B
158	2.111	48.556	Xfbb316-3B
159	8.444	49.745	Xfba217-3B
160	9.306	54.889	Xfba235-3B
161	7.862	55.882	Xgwm299-3B
155	12.361	52.970	Xbg131-3B
162	16.800	58.163	Xgwm114-3B
163	17.538	57.564	Xgwm547-3B
168	17.100	63.577	Xtam63-3B
170	14.250	68.930	Xgwm181-3B
167	2.235	44.706	Xfbb293-3B
165	0.000	50.667	Xfba133-3B.3
166	4.222	50.667	Xfba310-3B
164	3.257	46.444	Xfba133-3B.2
171	41.234	52.746	Xgwm340-3B
169	36.000	60.638	Xgwm247-3B
4	15.960	54.720	Xfbb147-3B.1
7	9.500	52.778	Xfbb166-3B
6	19.000	49.875	Xfba190-3B
0	8.769	48.556	Xfba311-3B
1	3.677	51.351	Xbcd907-3B
2	12.871	53.323	Xgwm389-3B
3	9.913	52.870	Xgwm533-3B.1
5	17.390	48.857	Xksug53-3B
8	10.556	40.576	Xgwm493-3B
9	8.769	51.412	Xcdo460-3B
10	6.577	49.745	Xfbb185-3B
11	19.358	52.778	Xtam47-3B
12	27.636	53.405	Xtam61-3B
13	12.667	57.851	Xgwm533-3B.2
14	10.556	58.036	Xfba091-3B
16	0.000	61.222	Xfbb142-3B
15	2.151	61.222	Xfbb315-3B
17	3.455	58.075	Xfbb024-3B
18	8.769	68.400	XgbxR080-3B

19	3.167	66.757	Xabg471-3B
20	6.840	66.327	Xcdo1164-3B
40	2.478	64.528	Xgwm284-3B
39	5.067	64.862	Xgwm566-3B
22	2.426	57.000	Xpsr903-3B
41	1.966	59.898	Xgwm72-3B
23	10.364	66.161	Xpsr689-3B
21	15.200	73.286	XgbxG392-3B
38	21.111	46.444	Xfbb117-3B
36	11.297	41.363	Xbcd1418-3B
35	21.509	44.162	Xcdo583-3B
31	8.941	53.891	XgbxG469-3B
30	9.500	58.056	Xcdo718-3B
34	10.962	59.192	Xgwm131-3B
33	0.000	62.182	Xfbb177-3B
32	4.471	60.353	Xfba242-3B
48	0.000	64.255	Xfbb235-3B
46	0.000	63.577	Xfba214-3B
47	2.151	65.444	Xfbb110-3B
51	0.000	65.444	Xfbb348-3B
49	0.000	65.444	Xfba213-3B
50	2.280	65.444	Xfba220-3B
53	5.182	72.960	Xfbb283-3B
29	9.120	64.528	Xbcd809-3B
28	8.047	65.604	XATPase-3B.1
27	3.800	57.626	Xcdo1283-3B.1
26	10.755	57.000	Xbcd1380-3B.2
45	9.243	57.000	Xfbb156-3B
44	7.475	59.478	Xgwm77-3B
43	1.932	63.541	Xgwm285-3B
42	3.619	59.714	Xgwm376-3B
24	5.229	67.593	Xksuh7-3B
25	6.552	72.165	Xbcd1380-3B.1
52	5.922	77.670	Xcdo1283-3B.2
54	36.383	79.562	XATPase-3B.2
37	--	47.839	Xmwg818-3B
152	37.224	46.941	Xfbb274-3B
144	4.385	42.471	Xfbb147-3B.2
146	5.262	52.615	XgbxG773-3B
145	3.738	49.775	XgbxG037-3B
147	3.931	48.590	XgbxG065-3B
148	9.500	49.472	Xfbb168-3B
141	4.653	46.038	Xbcd147-3B
143	1.075	47.321	Xbcd1555-3B
142	24.873	44.786	Xbcd141-3B
123	14.250	47.839	Xmwg818-3B

115	7.824	49.472	Xbcd809-3B
116	6.706	50.667	Xcdo718-3B
117	9.120	60.109	XgbxG469-3B
114	8.047	48.396	XATPase-3B.1
113	3.800	56.374	Xcdo1283-3B.1
112	10.755	57.000	Xbcd1380-3B.2
131	9.243	57.000	Xfbb156-3B
130	7.475	54.522	Xgwm77-3B
129	1.932	50.459	Xgwm285-3B
128	3.619	54.286	Xgwm376-3B
110	5.229	46.407	Xksuh7-3B
111	6.552	41.835	Xbcd1380-3B.1
138	5.922	36.330	Xcdo1283-3B.2
140	9.000	34.438	XATPase-3B.2
139	2.280	41.040	Xfbb283-3B
136	0.000	48.556	Xfba220-3B
135	0.000	48.556	Xfba213-3B
137	2.151	48.556	Xfbb348-3B
133	0.000	48.556	Xfbb110-3B
132	0.000	50.423	Xfba214-3B
134	4.471	49.745	Xfbb235-3B
118	0.000	53.647	Xfba242-3B
119	10.962	51.818	Xfbb177-3B
120	15.647	54.808	Xgwm131-3B
121	11.297	69.838	Xcdo583-3B
122	21.111	72.637	Xbcd1418-3B
124	15.200	67.556	Xfbb117-3B
107	10.364	40.714	XgbxG392-3B
109	1.966	47.839	Xpsr689-3B
127	2.426	54.102	Xgwm72-3B
108	5.067	57.000	Xpsr903-3B
125	2.478	49.138	Xgwm566-3B
126	6.840	49.472	Xgwm284-3B
106	3.167	47.673	Xcdo1164-3B
105	8.769	47.243	Xabg471-3B
104	3.455	45.600	XgbxR080-3B
103	2.151	55.925	Xfbb024-3B
101	0.000	52.778	Xfbb315-3B
102	10.556	52.778	Xfbb142-3B
100	12.667	55.964	Xfba091-3B
99	27.636	56.149	Xgwm533-3B.2
98	19.358	60.595	Xtam61-3B
97	6.577	61.222	Xtam47-3B
96	8.769	64.255	Xfbb185-3B
95	8.444	62.588	Xcdo460-3B
94	15.458	71.492	Xgwm493-3B
91	9.913	65.143	Xksug53-3B

89	11.032	61.130	Xgwm533-3B.1
88	5.516	58.839	Xgwm389-3B
87	6.577	60.595	Xbcd907-3B
86	18.240	65.444	Xfba311-3B
90	15.960	59.280	Xfbb147-3B.1
93	9.500	61.222	Xfbb166-3B
92	--	64.125	Xfba190-3B
55	32.412	52.114	Xksug59-3D
27	27.143	58.541	Xbcd288-3D
40	19.322	51.722	Xbcd515-3D
41	19.000	51.484	Xgwm383-3D
42	10.364	51.818	Xksud19-3D
43	7.600	55.487	Xksuh15-3D
45	4.800	51.029	Xbcd361-3D
44	9.306	57.553	Xgwm314-3D
51	0.000	50.667	Xfba389-3D
50	11.176	49.745	Xfba027-3D
54	6.840	59.111	Xksue14-3D
52	2.426	57.000	Xfbb316-3D
53	7.125	56.436	Xgwm3-3D
49	2.192	51.818	Xfbb269-3D
48	16.979	54.808	Xfbb147-3D
47	16.625	60.490	Xfbb117-3D
46	7.125	43.019	Xfba310-3D
38	3.619	47.048	Xgbx3864-3D
39	5.135	53.469	Xwg110-3D
37	4.302	57.514	Xbcd1555-3D
35	4.302	52.778	Xbcd372-3D
36	7.901	54.964	Xbcd22-3D
34	6.840	57.553	Xgwm664-3D
32	2.280	49.745	Xfba330-3D
33	14.951	55.904	Xgwm645-3D
31	3.455	47.642	XgbxR187-3D
30	0.000	40.235	Xfbb237-3D
29	12.906	40.111	Xfbb023-3D
26	13.154	46.821	Xcdo1406-3D
28	14.710	49.472	Xfba159-3D
25	8.291	51.818	XgbxG305-3D
24	15.833	49.297	Xabc176-3D
21	8.769	43.527	Xbcd134-3D
20	3.167	46.941	Xgwm456-3D
23	0.000	54.808	Xgwm52-3D
19	0.000	63.840	Xgwm497-3D
22	3.677	52.440	Xfbb324-3D
18	5.344	55.219	Xgwm341-3D
17	24.182	51.911	Xmwg688-3D

16	8.341	61.560	Xksua6-3D
15	4.560	51.412	Xgwm2-3D
14	7.125	54.964	Xcdo407-3D
13	6.453	53.000	Xmwg22-3D
12	5.377	55.925	Xcdo1435-3D
11	6.218	62.549	Xbcd1532-3D
10	17.538	49.745	Xfba241-3D
9	19.655	57.000	Xfba091-3D
7	0.000	58.900	Xgwm161-3D
5	0.000	50.423	Xfbb278-3D
3	0.000	55.324	Xgwm71-3D
4	3.738	52.615	XgbxG265-3D
2	4.560	52.019	Xbcd907-3D
6	0.000	46.444	Xfbb370-3D
8	2.923	48.231	Xfba190-3D
1	21.976	50.214	Xbcd1802-3D
0	--	54.964	Xcdo549-3D
56	19.358	59.036	Xcdo549-3D
62	4.560	67.556	Xfbb370-3D
58	3.738	61.981	Xbcd907-3D
60	0.000	61.385	XgbxG265-3D
59	0.000	58.676	Xgwm71-3D
61	0.000	63.577	Xfbb278-3D
63	0.000	55.100	Xgwm161-3D
64	2.923	65.769	Xfba190-3D
57	28.500	63.786	Xbcd1802-3D
65	22.244	57.000	Xfba091-3D
72	12.667	47.880	Xksua6-3D
70	4.560	53.946	Xcdo407-3D
71	8.941	62.588	Xgwm2-3D
66	6.218	64.255	Xfba241-3D
67	5.377	51.451	Xbcd1532-3D
68	6.453	58.075	Xcdo1435-3D
69	26.945	61.000	Xmwg22-3D
77	11.633	70.473	Xbcd134-3D
79	0.000	59.192	Xgwm52-3D
76	0.000	63.706	Xgwm456-3D
75	0.000	50.160	Xgwm497-3D
78	3.677	61.560	Xfbb324-3D
74	7.125	58.781	Xgwm341-3D
73	37.224	54.964	Xmwg688-3D
103	16.979	53.510	Xfbb117-3D
104	4.385	59.192	Xfbb147-3D
107	0.000	63.333	Xfba389-3D
106	2.073	64.255	Xfba027-3D
105	7.125	62.182	Xfbb269-3D

109	2.426	56.436	Xgwm3-3D
108	6.840	57.000	Xfbb316-3D
110	18.612	54.889	Xksue14-3D
100	6.000	52.019	Xgwm314-3D
101	8.941	62.971	Xbcd361-3D
102	7.125	70.981	Xfba310-3D
94	8.143	66.952	Xgbx3864-3D
97	17.100	60.677	Xgwm383-3D
98	11.400	62.182	Xksud19-3D
99	13.850	57.504	Xksuh15-3D
96	8.523	59.111	Xbcd515-3D
95	8.291	58.513	Xwg110-3D
88	6.333	64.255	Xfba330-3D
93	4.302	56.486	Xbcd1555-3D
91	4.302	61.222	Xbcd372-3D
92	5.644	59.036	Xbcd22-3D
90	12.175	54.233	Xgwm664-3D
89	18.689	47.135	Xgwm645-3D
87	3.455	66.358	XgbxR187-3D
86	0.000	73.765	Xfbb237-3D
85	15.057	73.889	Xfbb023-3D
82	14.509	64.125	Xcdo1406-3D
81	6.218	62.182	XgbxG305-3D
80	13.154	58.541	Xabc176-3D
84	10.755	64.528	Xfba159-3D
83	32.412	55.459	Xbcd288-3D
111	--	61.886	Xksug59-3D
0	17.538	51.818	Xfbb1-4A
1	4.471	54.808	Xfbb332-4A
2	8.444	46.444	Xfba40-4A
3	16.582	53.271	Xfba78-4A
15	4.302	51.818	Xfba43-4A
14	11.633	49.472	Xfba211-4A
10	7.255	54.927	Xrz574-4A
11	6.218	53.000	XksuF8-4A
13	0.000	53.891	Xfba359-4A
12	2.151	53.891	Xfbb176-4A
5	0.000	55.925	Xfba320-4A
4	6.218	55.964	Xfbb227-4A
6	4.071	59.000	Xcdo1387-4A
8	1.018	55.982	Xbcd1652-4A
7	4.035	58.000	Xcdo959-4A
9	9.161	62.549	Xbcd1738-4A
16	14.400	59.522	Xfba147-4A
17	8.769	51.062	Xbcd402-4A
18	11.633	58.598	Xbcd8-4A

21	10.133	54.808	Xfba65-4A
20	6.772	54.233	Xwg622-4A
19	39.382	54.964	XksuG12-4A
45	--	57.000	Xbcd1230-4A
44	19.000	54.286	Xbcd129-4A
43	8.941	59.522	Xbcd588-4A
42	27.918	64.824	Xfba253-4A
41	11.633	46.038	Xfba243-4A
40	33.981	62.860	Xbcd1975-4A
36	4.183	48.709	Xcdo545-4A
37	10.364	49.434	Xtam72-4A
38	10.962	47.673	Xfba282-4A
39	23.265	48.231	Xfbb114-4A
35	15.346	49.009	Xcdo665-4A
34	8.291	55.964	Xfbb154-4A
33	4.302	51.818	Xfba231-4A
32	7.458	46.821	Xbcd130-4A
31	9.589	47.500	XksuD9-4A
30	6.218	52.460	Xcdo475-4A
29	5.534	45.189	Xcdo780-4A
28	11.875	51.623	Xmwig710-4A
27	2.073	55.964	Xfba4-4A
26	5.481	48.000	Xbcd1670-4A
25	2.280	43.846	Xpsr115-4A
24	7.673	50.075	Xabg390-4A
23	21.235	47.321	Xmwig549-4A
22	--	60.661	XksuE3-4A
90	19.000	59.714	Xbcd129-4A
89	8.941	54.478	Xbcd588-4A
88	27.918	49.176	Xfba253-4A
87	11.633	67.962	Xfba243-4A
86	33.981	51.140	Xbcd1975-4A
82	4.183	65.291	Xcdo545-4A
83	10.364	64.566	Xtam72-4A
84	10.962	66.327	Xfba282-4A
85	25.592	65.769	Xfbb114-4A
81	17.538	63.925	Xcdo665-4A
80	8.291	58.036	Xfbb154-4A
79	4.302	62.182	Xfba231-4A
78	7.458	67.179	Xbcd130-4A
77	9.589	66.500	XksuD9-4A
76	3.109	61.540	Xcdo475-4A
75	5.534	65.730	Xcdo780-4A
74	11.875	62.377	Xmwig710-4A
73	4.145	58.036	Xfba4-4A

72	4.385	64.000	Xbcd1670-4A
71	4.560	64.673	Xpsr115-4A
70	5.481	63.925	Xabg390-4A
69	21.235	64.528	Xmwg549-4A
68	--	53.339	XksuE3-4A
91	42.343	54.964	Xbcd1230-4A
49	6.333	59.664	Xfba78-4A
48	4.471	67.556	Xfba40-4A
47	15.346	59.192	Xfbb332-4A
61	4.302	62.182	Xfba43-4A
60	19.358	64.528	Xfba211-4A
46	12.436	62.182	Xfbb1-4A
50	0.000	58.036	Xfbb227-4A
51	2.151	58.075	Xfba320-4A
58	0.000	60.109	Xfbb176-4A
59	6.218	60.109	Xfba359-4A
57	5.000	59.000	XksuF8-4A
53	1.018	56.000	Xcdo959-4A
54	4.071	58.018	Xbcd1652-4A
52	5.044	53.000	Xcdo1387-4A
55	5.229	51.451	Xbcd1738-4A
56	10.459	52.855	Xrz574-4A
62	14.400	54.478	Xfba147-4A
63	8.769	62.938	Xbcd402-4A
64	11.633	55.402	Xbcd8-4A
67	9.120	59.192	Xfba65-4A
65	6.772	59.036	XksuG12-4A
66	--	59.767	Xwg622-4A
35	13.959	57.000	Xbcd402-4B
33	12.436	45.600	Xfba177-4B
34	6.218	49.745	Xfbb255-4B
32	20.520	51.818	Xfbb67-4B
21	7.277	54.336	XksuG10-4B
31	0.000	46.531	Xfbb182-4B
28	2.151	52.929	Xcdo20-4B
30	1.075	51.140	Xwg114-4B
29	8.867	50.442	Xcdo1528-4B
27	0.000	57.626	XksuE2-4B
26	2.192	57.514	Xcdo1312-4B
24	2.111	50.667	Xfbb58-4B
25	0.000	49.745	Xfba41-4B
22	0.000	54.889	Xmwg2025-4B
23	2.111	49.745	Xfbb178-4B
19	3.211	53.405	Xcdo1401-4B
20	9.120	52.986	Xcn17-4B

0	6.577	46.444	Xfba78-4B
1	8.769	46.444	Xfbb22-4B
18	19.178	47.839	Xbcd1265-4B
9	12.416	54.889	Xbcd1250-4B
7	4.701	53.271	Xcdo1128-4B
14	2.235	53.647	Xwg110-4B
16	2.036	52.000	Xrz251-4B
13	2.131	50.893	Xabg484-4B
12	2.280	50.202	Xcdo938-4B
4	0.000	45.600	Xfba8-4B
3	0.000	45.600	Xfbb121-4B
10	3.138	46.216	Xbcd749-4B
11	3.320	48.857	Xbcd1262-4B
5	3.288	50.423	Xcsu25-4B
15	8.143	55.000	Xrz672-4B
17	2.036	50.893	Xbcd1051-4B
8	1.009	50.000	Xfba147-4B
6	12.324	50.442	Xbcd2026-4B
2	--	48.857	Xcdo795-4B
38	12.324	65.143	Xcdo795-4B
42	1.009	63.558	Xbcd2026-4B
44	1.018	64.000	Xfba147-4B
53	6.706	62.089	Xbcd1051-4B
41	3.288	59.192	Xcsu25-4B
51	4.071	59.000	Xrz672-4B
49	2.131	63.107	Xabg484-4B
48	2.280	63.798	Xcdo938-4B
40	0.000	68.400	Xfba8-4B
39	0.000	68.400	Xfbb121-4B
46	3.138	67.784	Xbcd749-4B
47	11.830	65.143	Xbcd1262-4B
45	12.416	59.111	Xbcd1250-4B
43	4.701	60.729	Xcdo1128-4B
50	2.235	60.353	Xwg110-4B
52	10.179	62.000	Xrz251-4B
54	13.154	63.107	Xbcd1265-4B
36	6.577	67.556	Xfba78-4B
37	6.453	67.556	Xfbb22-4B
55	2.111	60.595	Xcdo1401-4B
59	0.000	64.255	Xfbb178-4B
58	0.000	59.111	Xmwg2025-4B
61	2.280	64.255	Xfba41-4B
57	3.403	59.664	XksuG10-4B
56	4.886	61.014	Xcnl7-4B
62	0.000	56.486	Xcdo1312-4B
63	2.111	56.374	XksuE2-4B

60	6.577	63.333	Xfbb58-4B
66	2.478	62.860	Xwg114-4B
67	2.375	67.469	Xfbb182-4B
65	1.027	56.496	Xcdo1528-4B
64	21.509	57.000	Xcdo20-4B
68	6.218	62.182	Xfbb67-4B
70	12.436	64.255	Xfbb255-4B
69	13.959	68.400	Xfba177-4B
71	--	57.000	Xbcd402-4B
17	2.018	73.646	Xcdo949-4D
16	12.667	71.000	Xbcd1431-4D.2
15	21.111	59.111	Xfba177-4D
14	23.222	49.745	Xfbb226-4D
13	4.071	54.478	Xcdo1081-4D
12	19.339	55.487	Xbcd1431-4D.1
11	16.889	58.513	Xcdo1312-4D
10	12.906	43.527	Xfbb178-4D
9	17.047	52.378	Xbcd15-4D
8	17.538	54.927	Xbcd1117-4D
7	2.073	51.818	Xfbb336-4D
4	8.291	49.745	Xfbb251-4D
6	10.022	53.000	XksuF8-4D
5	15.405	57.626	Xbcd327-4D
2	10.364	47.673	Xfbb13-4D
3	26.945	48.000	Xbcd265-4D
1	37.269	48.709	Xcdo669-4D
0	--	61.222	Xmwg634-4D
35	2.018	40.354	Xcdo949-4D
34	12.667	43.000	Xbcd1431-4D.2
33	21.111	54.889	Xfba177-4D
32	23.222	64.255	Xfbb226-4D
31	4.071	59.522	Xcdo1081-4D
30	21.375	58.513	Xbcd1431-4D.1
29	14.778	53.469	Xcdo1312-4D
28	12.906	70.473	Xfbb178-4D
27	17.047	61.622	Xbcd15-4D
26	17.538	57.000	Xbcd1117-4D
25	2.073	62.182	Xfbb336-4D
22	8.291	64.255	Xfbb251-4D
24	8.769	61.000	XksuF8-4D
23	15.405	55.121	Xbcd327-4D
20	14.509	66.327	Xfbb13-4D
21	27.982	62.000	Xbcd265-4D
19	37.269	60.109	Xcdo669-4D
18	--	52.778	Xmwg634-4D

39	26.400	62.938	Xmwg2112-5A
36	4.071	57.000	Xcdo1528-5A
37	3.109	60.000	Xwg114-5A
35	13.959	59.073	Xcdo20-5A
34	11.176	44.706	Xfbb249-5A
38	11.176	48.231	Xfbb330-5A
31	4.385	57.000	Xbcd1235-5A.2
30	2.235	50.547	Xcdo457-5A
29	9.865	54.927	Xabg391-5A
33	10.755	58.598	Xabg366-5A
32	34.919	51.911	Xcdo1312-5A
24	11.176	55.982	Xcdo1326-5A
25	10.962	63.577	Xfba68-5A
27	8.941	60.109	Xfba351-5A
28	4.560	58.118	Xfbb209-5A
26	15.647	53.647	Xfbb199-5A
23	26.945	58.541	Xrz395-5A
21	8.291	62.182	Xfbb255-5A
19	8.444	53.891	Xfba166-5A
22	18.612	58.513	Xbcd183-5A
20	34.200	54.720	Xfba190-5A
18	14.509	61.540	Xbcd1235-5A.1
17	5.429	49.745	Xfbb2-5A
16	13.780	56.374	Xmwg624-5A
15	10.755	55.944	Xmwg522-5A
13	5.897	49.875	Xbcd1088-5A
14	7.729	57.966	Xcdo1090-5A
11	5.429	51.000	Xbcd926-5A
10	6.840	54.286	Xbcd981-5A
12	8.523	47.944	Xbcd1949-5A
9	15.133	51.451	Xcdo57-5A
8	12.906	53.000	Xcdo412-5A
5	0.000	51.623	Xpsr128-5A
6	4.035	52.000	Xbcd157-5A
7	13.282	49.434	Xbcd1355-5A
4	25.186	47.135	Xcdo785-5A
1	7.773	58.800	Xcdo749-5A
2	4.145	55.964	Xfba131-5A
3	12.436	55.964	Xfba352-5A
0	--	53.000	Xbcd1871-5A
79	26.400	51.062	Xmwg2112-5A
76	2.036	54.964	Xcdo1528-5A
77	3.109	54.000	Xwg114-5A
75	13.959	54.927	Xcdo20-5A
74	11.176	69.294	Xfbb249-5A

78	11.875	65.769	Xfbb330-5A
70	2.235	62.377	Xcdo457-5A
69	5.278	59.073	Xabg391-5A
71	3.109	57.000	Xbcd1235-5A.2
72	7.528	59.036	Xcdo1312-5A
73	38.717	55.402	Xabg366-5A
64	11.176	58.018	Xcdo1326-5A
65	10.962	50.423	Xfba68-5A
67	8.941	53.891	Xfba351-5A
68	4.560	55.882	Xfbb209-5A
66	13.412	60.353	Xfbb199-5A
63	24.873	54.432	Xrz395-5A
61	8.291	51.818	Xfbb255-5A
59	8.444	60.109	Xfba166-5A
62	23.265	52.460	Xbcd183-5A
60	34.200	59.280	Xfba190-5A
58	14.509	52.460	Xbcd1235-5A.1
57	5.429	64.255	Xfbb2-5A
56	15.033	56.374	Xmwig624-5A
55	9.500	58.056	Xmwig522-5A
51	2.131	61.000	Xbcd926-5A
52	7.862	64.991	Xbcd1949-5A
54	5.897	56.034	Xcdo1090-5A
53	6.641	64.125	Xbcd1088-5A
50	13.029	59.714	Xbcd981-5A
49	18.159	62.549	Xcdo57-5A
48	13.115	58.000	Xcdo412-5A
47	4.035	64.566	Xbcd1355-5A
46	0.000	62.000	Xbcd157-5A
45	14.103	62.377	Xpsr128-5A
44	17.208	64.673	Xcdo785-5A
42	4.145	58.036	Xfba131-5A
43	10.364	58.036	Xfba352-5A
41	13.200	50.400	Xcdo749-5A
40	--	61.000	Xbcd1871-5A
47	40.235	73.211	Xabc310-5B
46	26.308	38.717	Xfbb323-5B
44	8.444	41.835	Xcdo584-5B
45	9.120	41.455	Xfba351-5B
43	2.375	50.667	Xcdo348-5B
41	4.385	40.868	Xfbb328-5B
42	23.411	44.786	Xcdo1326-5B
40	3.054	42.372	Xcdo504-5B
39	11.097	46.407	Xbcd450-5B
38	2.073	48.000	Xbcd1030-5B
37	21.375	43.527	Xfba332-5B

33	2.478	55.925	Xwg583-5B
34	2.151	49.472	Xfba348-5B
36	6.577	51.818	Xfba166-5B
35	11.176	54.808	Xfbb237-5B
32	12.324	53.469	Xbcd9-5B
30	10.784	50.160	Xmwg914-5B
31	24.429	57.504	Xbcd307-5B
29	6.162	51.451	Xbcd508-5B
27	4.560	57.000	Xcdo1192-5B
28	4.606	58.118	Xabg473-5B
26	10.755	54.432	Xmwg52-5B
23	6.840	53.891	Xfbb121-5B.2
25	15.200	48.396	Xbcd1140-5B
17	3.288	48.270	Xpsr574-5B
16	3.638	52.615	Xpsr128-5B
15	9.402	56.424	Xmwg561-5B
13	7.458	49.875	Xabc164-5B
22	5.278	52.778	XksuA1-5B
20	9.243	57.000	Xwg889-5B
21	10.270	57.514	Xtam72-5B
19	9.000	54.000	Xcdo412-5B
18	6.218	53.000	Xbcd157-5B
24	4.145	58.036	Xfba127-5B
14	12.667	52.000	Xwg909-5B
11	6.980	59.111	Xfba232-5B
12	2.621	59.235	Xpsr929-5B
10	9.068	57.000	Xcdo749-5B
9	10.556	58.056	Xabg705-5B
8	6.218	54.000	Xbcd1871-5B
7	4.145	53.891	Xfba342-5B
6	16.582	58.036	Xfba393-5B
4	2.073	66.327	Xfbb121-5B.1
5	20.727	64.255	Xfba367-5B
3	12.324	49.000	Xcdo959-5B
2	6.333	56.486	Xbcd873-5B
0	47.321	58.036	Xfbb277-5B
48	49.472	43.019	Xfbb322-5B
50	--	60.109	Xfba276-5B
96	40.235	40.789	Xabc310-5B
95	26.308	75.283	Xfbb323-5B
93	8.444	67.982	Xcdo584-5B
94	9.120	72.545	Xfba351-5B
92	2.375	63.333	Xcdo348-5B
90	4.385	73.132	Xfbb328-5B
91	24.429	67.179	Xcdo1326-5B
89	2.036	66.584	Xcdo504-5B

88	11.097	67.593	Xbcd450-5B
87	2.073	66.000	Xbcd1030-5B
86	20.727	70.473	Xfba332-5B
85	6.577	62.182	Xfba166-5B
84	9.120	59.192	Xfbb237-5B
83	7.435	64.528	Xfba348-5B
82	5.429	55.925	Xwg583-5B
81	8.143	56.496	Xbcd9-5B
80	10.784	56.496	Xbcd307-5B
79	23.471	63.840	Xmwg914-5B
77	7.980	52.529	Xabg473-5B
76	3.081	57.000	Xcdo1192-5B
78	3.109	58.513	Xbcd508-5B
75	10.962	59.568	Xmwg52-5B
74	6.840	65.604	Xbcd1140-5B
72	15.057	60.109	Xfbb121-5B.2
70	11.297	56.486	Xtam72-5B
68	8.000	57.000	Xcdo412-5B
67	2.073	57.000	Xbcd157-5B
73	4.145	55.964	Xfba127-5B
63	4.000	58.000	Xwg909-5B
69	5.278	56.000	Xwg889-5B
71	7.458	61.222	XksuA1-5B
62	9.402	64.125	Xabc164-5B
64	9.212	57.576	Xmwg561-5B
66	7.673	56.486	Xpsr574-5B
65	16.286	47.135	Xpsr128-5B
60	6.980	54.889	Xfba232-5B
61	1.310	54.765	Xpsr929-5B
59	10.364	54.467	Xcdo749-5B
58	11.611	52.778	Xabg705-5B
57	6.218	60.000	Xbcd1871-5B
56	4.145	60.109	Xfba342-5B
55	16.582	55.964	Xfba393-5B
53	2.073	47.673	Xfbb121-5B.1
54	22.800	49.745	Xfba367-5B
52	10.270	63.000	Xcdo959-5B
51	6.333	57.514	Xbcd873-5B
49	47.321	55.964	Xfbb277-5B
97	49.472	70.981	Xfbb322-5B
1	--	53.891	Xfba276-5B
25	2.780	54.467	Xbcd87-5D
28	4.145	51.818	Xfba11-5D
26	1.018	51.911	Xcdo506-5D
27	16.889	51.000	Xbcd197-5D
24	6.577	46.444	Xfba364-5D

23	26.389	53.339	Xbcd1421-5D
22	27.444	43.381	Xbcd1670-5D
21	0.000	60.109	Xfbb213-5D
20	19.000	60.109	Xfbb100-5D
19	24.225	48.000	Xcdo346-5D
18	20.267	37.200	Xbcd1103-5D
17	4.222	43.927	Xmwg922-5D
15	24.055	48.709	Xmwg900-5D
14	5.278	42.372	Xbcd450-5D
13	20.727	41.835	Xrz395-5D
16	26.945	43.527	Xfba209-5D
11	25.080	53.891	Xfbb26-5D
12	40.558	43.846	Xcdo1508-5D
10	10.270	53.405	Xbcd1874-5D
9	12.667	50.442	Xcdo57-5D
8	24.873	58.036	Xfbb156-5D
7	14.657	47.000	Xcdo412-5D
6	17.273	60.257	Xmwg561-5D
5	6.641	52.019	Xcmwg770-5D
4	10.755	45.000	XksuD30-5D
3	11.400	58.075	Xfba137-5D
2	13.154	48.231	Xfbb238-5D
1	6.218	51.818	Xfba114-5D
0	--	49.745	Xfba393-5D
29	6.218	64.255	Xfba393-5D
30	13.154	62.182	Xfba114-5D
31	11.400	65.769	Xfbb238-5D
32	16.286	55.925	Xfba137-5D
34	5.534	59.767	Xcmwg770-5D
33	14.657	62.000	XksuD30-5D
35	14.657	53.743	Xmwg561-5D
36	18.655	64.000	Xcdo412-5D
37	12.667	55.964	Xfbb156-5D
38	10.270	63.558	Xcdo57-5D
39	40.558	60.595	Xbcd1874-5D
41	25.080	70.154	Xcdo1508-5D
40	25.333	60.109	Xfbb26-5D
43	7.389	70.619	Xbcd450-5D
42	16.582	69.028	Xrz395-5D
45	23.660	70.473	Xfba209-5D
46	2.111	65.890	Xmwg922-5D
44	25.055	65.291	Xmwg900-5D
47	25.650	76.800	Xbcd1103-5D
48	27.143	57.600	Xcdo346-5D
50	0.000	53.891	Xfbb213-5D
49	25.333	53.891	Xfbb100-5D

51	21.509	68.602	Xbcd1670-5D
53	6.577	67.556	Xfba364-5D
52	20.118	60.661	Xbcd1421-5D
54	2.780	59.533	Xbcd87-5D
57	4.145	62.182	Xfba11-5D
55	1.018	62.089	Xcdo506-5D
56	--	60.000	Xbcd197-5D
58	7.600	62.637	Xmwig573-6A
57	10.364	59.522	Xmwig2053-6A
56	6.453	53.405	XksuD27-6A
55	4.145	57.000	Xfbb70-6A
54	0.000	53.891	Xfbb82-6A
53	8.143	52.929	Xfbb221-6A
51	0.000	52.929	Xfbb40-6A
46	4.222	50.667	Xfba20-6A
50	4.145	48.857	Xfbb191-6A
48	1.036	49.297	Xcdo836-6A
49	2.192	52.460	Xbcd1510-6A
52	17.208	51.623	Xfba8-6A
47	30.400	63.107	Xfba111-6A
45	6.000	53.868	Xcsb112(Dhn5)-6A
44	28.500	60.000	Xmwig934-6A
43	4.471	59.073	Xcdo388-6A
41	4.071	54.808	Xfbb170-6A
42	3.677	46.216	Xbcd506-6A
29	0.000	50.893	Xfbb192-6A
30	4.957	52.043	Xfbb215-6A
31	11.633	43.019	Xfbb283-6A
40	7.277	52.440	Xtam36-6A
39	5.067	57.533	Xpsr915-6A
38	7.862	56.400	Xpsr463(Prk)-6A
37	5.588	54.808	Xcdo772-6A
33	2.054	52.929	Xbcd758-6A
36	4.851	54.964	Xbcd1860-6A
35	2.714	58.800	Xcdo204-6A
34	2.151	46.821	Xfba367-6A
27	0.000	47.321	Xfba397-6A
28	6.333	48.857	Xfbb95-6A
26	0.000	55.459	Xcdo29-6A
25	2.192	46.444	Xfba234-6A
32	23.222	51.911	Xcdo1428-6A
23	10.231	62.278	Xcdo270-6A
24	10.059	70.370	Xcdo1315-6A
22	14.509	49.745	Xfba148-6A
21	20.727	46.821	Xfbb145-6A
20	28.500	54.988	Xpsr312-6A

19	0.000	44.786	Xfba152-6A
18	10.364	44.786	Xfba85-6A
17	21.375	55.487	XksuH4-6A
16	16.432	55.487	Xpsr10(Gli-2)-6A
12	4.222	61.622	Xcmwg652-6A
13	10.364	46.821	Xfbb166-6A
14	2.092	62.549	XksuG48-6A
15	5.377	64.255	Xmwig67-6A
11	6.706	64.255	Xpsr8(Cxp3)-6A
10	12.906	53.774	Xfba307-6A
7	4.302	44.333	Xfbb209-6A
8	6.706	45.170	Xfbb147-6A
9	4.385	43.019	Xfbb194-6A
6	4.750	51.818	Xfba65-6A
5	2.923	52.306	Xcdo476-6A
4	5.588	49.806	Xbcd21-6A
3	7.435	50.893	Xbcd1821-6A
2	3.843	57.000	Xpsr889-6A
1	7.980	61.385	Xbcd342-6A
0	--	57.000	Xpsr167-6A
117	7.600	51.363	Xmwig573-6A
116	11.400	53.469	Xmwig2053-6A
115	6.453	60.595	XksuD27-6A
114	4.145	57.000	Xfbb70-6A
113	0.000	60.109	Xfbb82-6A
112	8.143	61.071	Xfbb221-6A
110	0.000	61.071	Xfbb40-6A
105	4.222	63.333	Xfba20-6A
109	2.073	65.143	Xfbb191-6A
107	2.073	63.676	Xcdo836-6A
108	2.192	59.522	Xbcd1510-6A
111	17.208	62.377	Xfba8-6A
106	30.400	50.893	Xfba111-6A
104	6.000	60.132	Xcsb112(Dhn5)-6A
103	28.500	54.000	Xmwig934-6A
102	4.471	54.927	Xcdo388-6A
100	4.071	59.192	Xfbb170-6A
101	3.677	67.784	Xbcd506-6A
88	0.000	63.107	Xfbb192-6A
89	4.957	61.957	Xfbb215-6A
90	2.235	70.981	Xfbb283-6A
92	5.588	57.000	Xbcd758-6A
96	9.172	58.096	Xcdo772-6A
97	5.067	57.600	Xpsr463(Prk)-6A
98	7.277	56.467	Xpsr915-6A
99	10.469	61.560	Xtam36-6A

95	6.064	59.036	Xbcd1860-6A
94	2.714	54.000	Xcdo204-6A
93	2.151	67.179	Xfba367-6A
86	0.000	66.679	Xfba397-6A
87	8.444	65.143	Xfbb95-6A
91	2.192	62.089	Xcdo1428-6A
84	0.000	67.556	Xfba234-6A
85	19.178	56.486	Xcdo29-6A
82	10.231	51.722	Xcdo270-6A
83	10.059	43.630	Xcdo1315-6A
81	14.509	64.255	Xfba148-6A
80	20.727	67.179	Xfbb145-6A
79	28.500	54.988	Xpsr312-6A
78	0.000	69.214	Xfba152-6A
77	12.436	69.214	Xfba85-6A
76	19.339	56.496	XksuH4-6A
75	22.800	58.513	Xpsr10(Gli-2)-6A
72	8.444	67.179	Xfbb166-6A
71	6.706	47.243	Xcmwg652-6A
69	6.706	60.226	Xfba307-6A
70	5.377	49.745	Xpsr8(Cxp3)-6A
74	2.092	49.745	Xmwg67-6A
73	12.906	51.451	XksuG48-6A
66	4.302	69.667	Xfbb209-6A
67	6.706	68.830	Xfbb147-6A
68	4.385	70.981	Xfbb194-6A
65	4.750	62.182	Xfba65-6A
63	2.923	60.874	Xbcd21-6A
64	4.071	61.694	Xcdo476-6A
62	6.196	59.036	Xbcd1821-6A
61	2.562	52.149	Xpsr889-6A
60	5.700	51.519	Xbcd342-6A
59	--	53.833	Xpsr167-6A
2	10.022	59.478	Xcdo476-6B
1	12.667	58.513	Xbcd342-6B
0	33.957	59.615	Xpsr167-6B
3	15.200	66.990	Xrz995-6B
6	8.941	48.857	Xtam60-6B
4	6.980	49.297	XksuH4-6B
5	4.560	54.720	Xfbb16-6B
7	12.214	54.964	Xfba152-6B
8	18.612	50.893	Xfba357-6B
9	17.449	56.447	Nor-B2-6B
16	6.840	52.778	XksuH14-6B
14	0.000	59.111	Xfba345-6B
13	0.000	60.226	Xfba344-6B

11	2.192	61.222	Xfba328-6B
12	4.222	67.556	Xfba399-6B
10	10.179	61.071	Xfba67-6B
19	2.111	59.036	Xfba359-6B
20	5.327	54.432	Xbcd1495-6B
15	1.107	47.673	Xglk479-6B
17	2.192	47.321	Xpsr141-6B
18	3.508	47.839	Xbcd1383-6B
22	1.754	57.877	Xcnl3-6B
23	2.054	57.514	Xbcd1299-6B
21	1.390	56.496	Xcdo524-6B
24	4.171	51.439	Xbcd102-6B
25	4.145	56.486	Xbcd1716-6B
26	16.582	58.018	Xbcd357-6B
27	24.873	42.108	Xbcd1407-6B
29	4.071	65.143	Xbcd2014-6B
28	6.577	61.071	Xcdo507-6B
30	19.404	59.111	Xfbb364-6B
32	7.052	51.818	Xmwg934-6B
31	6.218	57.000	Xcdo341-6B
33	7.773	52.929	Xfbb164-6B
34	5.182	59.822	Xwg341-6B
35	0.000	54.964	Xfbb57-6B
36	6.218	53.891	Xfbb169-6B
37	10.755	61.071	Xfba42-6B
41	9.306	58.075	Xfbb130-6B
42	4.471	60.353	Xfbb377-6B
40	4.222	59.036	Xfba111-6B
38	5.011	58.018	XksuG30-6B
39	25.024	53.283	Xabg473-6B
44	0.000	67.179	Xfbb359-6B
43	20.462	65.444	Xfbb327-6B
45	5.846	57.671	Xmwg74-6B
46	12.667	63.333	Xfbb82-6B
49	4.071	63.107	Xfba251-6B
47	0.000	63.107	Xfbb70-6B
48	6.333	63.107	Xfbb59-6B
50	--	60.595	Xmwg2053-6B
53	11.275	54.522	Xcdo476-6B
52	11.611	54.478	Xbcd342-6B
51	33.957	54.385	Xpsr167-6B
54	13.933	47.010	Xrz995-6B
57	7.824	64.057	Xtam60-6B
55	9.306	60.595	XksuH4-6B
56	4.560	59.280	Xfbb16-6B
58	12.214	59.036	Xfba152-6B

59	18.612	63.107	Xfba357-6B
60	17.449	57.553	Nor-B2-6B
67	6.840	61.222	XksuH14-6B
65	0.000	54.889	Xfba345-6B
64	0.000	53.774	Xfba344-6B
62	2.192	52.778	Xfba328-6B
63	4.222	46.444	Xfba399-6B
61	12.667	52.929	Xfba67-6B
77	4.145	55.982	Xbcd357-6B
76	1.754	57.514	Xbcd1716-6B
73	1.754	56.123	Xcn13-6B
74	2.054	56.486	Xbcd1299-6B
72	1.390	56.496	Xcdo524-6B
75	7.500	62.561	Xbcd102-6B
68	2.214	65.604	Xpsr141-6B
66	2.111	66.327	Xglk479-6B
69	5.182	66.161	Xbcd1383-6B
71	2.111	59.568	Xbcd1495-6B
70	10.556	54.964	Xfba359-6B
81	6.577	54.889	Xfbb364-6B
79	4.071	52.929	Xcdo507-6B
80	20.317	48.857	Xbcd2014-6B
85	7.773	54.178	Xwg341-6B
84	6.218	61.071	Xfbb164-6B
82	7.052	57.000	Xcdo341-6B
83	7.125	59.879	Xmwg934-6B
86	0.000	59.036	Xfbb57-6B
87	6.218	60.109	Xfbb169-6B
88	10.755	52.929	Xfba42-6B
92	9.306	55.925	Xfbb130-6B
93	4.471	53.647	Xfbb377-6B
91	4.222	54.964	Xfba111-6B
89	6.264	55.982	XksuG30-6B
90	25.024	59.478	Xabg473-6B
95	0.000	46.821	Xfbb359-6B
94	20.462	48.556	Xfbb327-6B
96	5.846	56.329	Xmwg74-6B
97	12.667	50.667	Xfbb82-6B
100	4.071	50.893	Xfba251-6B
98	0.000	50.893	Xfbb70-6B
99	6.333	50.893	Xfbb59-6B
101	--	53.405	Xmwg2053-6B
78	--	71.892	Xbcd1407-6B
45	15.057	43.135	Xmwg2053-6D
44	0.000	59.036	Xfbb70-6D

43	4.222	60.109	Xfbb59-6D
42	30.265	50.442	XksuD27-6D
41	25.333	55.000	Xbcd1510-6D
39	11.515	57.000	Xcdo836-6D
38	8.489	54.765	XksuD1-6D
40	10.260	49.943	Xbcd1319-6D
37	20.939	50.667	XksuE14-6D
35	10.364	59.192	Xfbb169-6D
34	3.677	50.258	Xcsb112(Dhn5)-6D
36	8.854	44.972	Xtam28-6D
33	20.267	47.135	Xcmwg669-6D
32	27.360	49.472	Xfba81-6D
31	17.208	55.925	Xfbb231.2-6D
30	13.680	51.818	Xfba381-6D
29	22.574	47.592	Xabc175-6D
28	2.073	51.911	Xbcd357-6D
27	5.377	53.891	Xbcd1716-6D
26	1.036	50.782	Xabg20-6D
23	0.000	53.469	Xtam31-6D
22	3.027	54.000	Xcdo534-6D
25	2.151	55.487	Xbcd1398-6D
24	8.769	59.111	Xfba336-6D
21	13.902	59.111	Xabc173-6D
20	14.250	53.114	Xcdo270-6D
17	6.453	66.679	Xfbb283-6D
15	12.906	68.830	Xfbb231.1-6D
14	12.214	73.286	Xfbb222-6D
13	2.151	65.143	Xfba85-6D
12	2.235	62.377	Xfbb319-6D
11	15.057	62.377	Xfbb354-6D
10	6.333	73.286	Xfba187-6D
8	8.941	65.444	Xfba1-6D
9	7.321	60.595	XksuG48-6D
7	17.618	58.018	Xpsr8(Cxp3)-6D
5	9.120	52.855	Xpsr964-6D
4	13.412	53.774	Xfba307-6D
3	14.250	51.351	Xbcd342-6D
0	10.688	45.367	Xpsr889-6D
1	6.840	49.875	Xbcd1821-6D
2	31.532	55.882	Xabg466-6D
6	43.067	69.486	Xmwg549-6D
19	5.846	59.938	Xpsr627-6D
16	6.552	59.533	Xpsr106-6D
18	--	63.218	Xmwg916-6D
91	15.057	70.865	Xmwg2053-6D
90	0.000	54.964	Xfbb70-6D

89	10.556	53.891	Xfbb59-6D
88	31.274	57.504	XksuD27-6D
87	25.333	58.000	Xbcd1510-6D
85	9.212	55.944	Xcdo836-6D
84	9.702	57.000	XksuD1-6D
86	12.540	62.971	Xbcd1319-6D
83	14.414	62.278	XksuE14-6D
80	4.903	62.516	Xcsb112(Dhn5)-6D
82	8.854	69.028	Xtam28-6D
79	16.979	64.673	Xcmwg669-6D
81	25.592	54.808	Xfbb169-6D
78	27.360	64.528	Xfba81-6D
77	17.208	58.075	Xfbb231.2-6D
76	9.120	62.182	Xfba381-6D
75	18.059	57.553	Xabc175-6D
74	2.073	62.089	Xbcd357-6D
73	5.377	60.109	Xbcd1716-6D
72	1.036	63.218	Xabg20-6D
69	0.000	60.531	Xtam31-6D
68	3.027	60.000	Xcdo534-6D
71	6.453	56.496	Xbcd1398-6D
70	8.769	54.889	Xfba336-6D
67	13.902	54.889	Xabc173-6D
66	14.250	60.886	Xcdo270-6D
63	6.453	47.321	Xfbb283-6D
61	12.906	45.170	Xfbb231.1-6D
60	12.214	40.714	Xfbb222-6D
59	2.151	48.857	Xfba85-6D
58	2.235	51.623	Xfbb319-6D
57	15.057	51.623	Xfbb354-6D
56	6.453	40.714	Xfba187-6D
55	8.941	53.405	XksuG48-6D
54	6.453	48.556	Xfba1-6D
53	14.509	53.946	Xpsr8(Cxp3)-6D
51	9.120	60.109	Xpsr964-6D
50	11.176	60.226	Xfba307-6D
49	14.250	58.541	Xbcd342-6D
46	13.062	67.469	Xpsr889-6D
47	12.540	62.089	Xbcd1821-6D
48	36.383	52.529	Xabg466-6D
52	44.333	38.000	Xmwg549-6D
65	5.846	54.062	Xpsr627-6D
62	11.793	54.467	Xpsr106-6D
64	--	44.564	Xmwg916-6D
83	22.304	79.304	Xfba382-7A
85	12.436	64.255	Xfba350-7A

86	5.089	61.000	Xwg380-7A
84	8.367	62.089	Xfba204-7A
87	7.389	60.595	XksuD2-7A
89	2.073	57.514	Xrz682-7A
88	16.889	57.504	Xmwig938-7A
90	0.000	62.182	Xfbb18-7A
91	19.000	62.182	Xfbb145-7A
82	6.333	65.444	Xfba97-7A
81	27.444	62.182	Xfba69-7A
79	20.357	71.250	XksuG12-7A
78	10.364	69.000	Xcdo962-7A
77	0.000	66.327	Xfba337-7A
75	2.151	66.327	Xfbb218-7A
76	17.208	64.528	Xfba234-7A
80	16.582	64.255	Xfba354-7A
73	4.222	68.400	Xfbb343-7A
72	6.772	68.851	Xcdo17-7A
70	1.000	62.000	Xbcd1066-7A
71	19.731	61.000	Xcdo595-7A
69	28.500	50.423	Xfbb264-7A
68	21.509	62.182	Xfba340-7A
67	17.538	62.377	Xfba248-7A
66	28.500	71.509	Xabc158-7A
65	18.424	83.389	Xcdo1395-7A
64	19.731	67.314	Xfba42-7A
63	14.509	55.487	Xcdo475-7A
62	0.000	58.036	Xfbb67-7A
61	6.218	58.036	Xfbb186-7A
60	16.582	55.964	Xfba109-7A
59	31.920	60.109	Xfba127-7A
58	2.280	47.880	Xfba72-7A
55	2.151	53.891	Xfbb9-7A
53	4.302	58.075	Xfbb278-7A
52	6.218	60.109	Xfbb156-7A
57	2.073	58.036	Xfba311-7A
56	2.073	55.964	Xfba321-7A
54	2.192	53.891	Xfba17-7A
50	2.192	52.615	Xfba93-7A
74	2.192	55.964	Xfbb193-7A
48	3.386	57.000	Xcdo545-7A
49	4.957	57.543	Xbcd907-7A
51	47.721	46.531	Xfbb121-7A
47	18.136	53.647	XksuH9-7A
46	14.250	63.840	Xfbb238-7A
45	17.882	58.075	Xfba134-7A
44	30.692	71.109	Xcdo347-7A
34	6.333	48.556	Xfba97-7A

33	24.873	51.818	Xfba69-7A
43	0.000	51.818	Xfbb145-7A
42	10.962	51.818	Xfbb18-7A
41	2.073	52.378	Xrz682-7A
40	11.297	50.442	Xmwg938-7A
39	8.367	53.405	XksuD2-7A
36	5.089	51.911	Xfba204-7A
38	12.436	53.000	Xwg380-7A
37	22.304	49.745	Xfba350-7A
35	--	34.696	Xfba382-7A
92	17.882	42.891	Xcdo347-7A
93	14.250	55.925	Xfba134-7A
94	18.136	50.160	Xfbb238-7A
95	47.721	60.353	XksuH9-7A
3	4.957	67.469	Xfbb121-7A
1	3.386	56.457	Xbcd907-7A
0	6.577	57.000	Xcdo545-7A
4	4.302	53.891	Xfbb156-7A
5	2.151	55.925	Xfbb278-7A
9	2.073	55.964	Xfba311-7A
8	4.145	58.036	Xfba321-7A
26	2.192	58.036	Xfbb193-7A
2	2.192	61.385	Xfba93-7A
6	0.000	60.109	Xfba17-7A
7	2.280	60.109	Xfbb9-7A
10	31.920	66.120	Xfba72-7A
11	16.582	53.891	Xfba127-7A
12	6.218	58.036	Xfba109-7A
13	0.000	55.964	Xfbb186-7A
14	14.509	55.964	Xfbb67-7A
15	19.731	58.513	Xcdo475-7A
16	18.424	46.686	Xfba42-7A
17	28.500	30.611	Xcdo1395-7A
18	17.538	42.491	Xabc158-7A
19	21.509	51.623	Xfba248-7A
20	22.800	51.818	Xfba340-7A
32	16.889	49.745	Xfba354-7A
31	21.375	41.732	XksuG12-7A
30	10.364	45.000	Xcdo962-7A
29	2.151	47.673	Xfba337-7A
28	2.151	49.472	Xfba234-7A
27	10.364	47.673	Xfbb218-7A
25	4.222	45.600	Xfbb343-7A
24	7.901	44.020	Xcdo17-7A
22	2.000	52.000	Xbcd1066-7A
23	19.731	52.000	Xcdo595-7A

21	--	63.577	Xfbb264-7A
34	--	32.097	Xtam50-7B
40	29.640	80.660	XksuE18-7B
36	0.000	53.891	Xfba21-7B
35	18.612	52.778	Xfbb189-7B
37	13.062	63.980	Xrz508-7B
38	15.833	61.071	Xcdo414-7B
39	32.062	61.750	Xcn12-7B
33	11.633	60.353	XksuD2-7B
32	30.113	62.182	Xfbb67-7B
29	25.909	60.226	Xfba259-7B
24	8.143	60.000	Xcdo686-7B
25	0.000	58.118	Xfba305-7B
26	2.235	53.774	Xfbb352-7B
27	8.604	55.459	Xwg686-7B
28	4.145	53.891	Xfbb175-7B
23	4.145	58.036	Xfbb179-7B
21	8.444	62.182	Xfbb258-7B
30	8.444	59.111	Xfba301-7B
22	6.453	62.182	Xfba354-7B
20	13.282	64.125	Xwg514-7B
18	9.194	55.371	Xrz476-7B
19	9.913	62.783	Xcn17-7B
17	8.367	61.145	Xbcd178-7B
14	4.145	64.566	Xabc455-7B
12	3.081	61.622	Xbcd349-7B
11	3.109	59.000	Xbcd98-7B
13	7.528	59.073	Xcdo551-7B
8	7.255	66.327	Xbcd385-7B
9	16.582	67.000	Xbcd1338-7B
16	4.302	58.036	Xfba311-7B
10	0.000	60.226	Xfba371-7B
15	8.291	62.182	Xfbb193-7B
7	10.364	58.036	Xfbb195-7B
1	7.435	55.964	Xfbb150-7B
4	7.435	57.000	Xfba32-7B
5	8.604	55.964	Xfbb226-7B
6	7.189	60.054	Xwg180-7B
2	6.514	54.478	Xbcd310-7B
3	29.739	57.803	Xcn18-7B
0	42.606	71.529	Xfba42-7B
31	--	64.255	Xabc310-7B
81	29.640	33.340	XksuE18-7B
77	0.000	60.109	Xfba21-7B

76	20.939	61.222	Xfbb189-7B
78	10.688	48.857	Xrz508-7B
79	14.250	49.875	Xcdo414-7B
80	32.062	52.250	Xcnl2-7B
74	11.633	53.647	XksuD2-7B
73	30.113	51.818	Xfbb67-7B
70	38.760	53.774	Xfba259-7B
72	42.606	49.745	Xabc310-7B
41	29.739	42.471	Xfba42-7B
44	6.514	56.197	Xcnl8-7B
43	8.216	58.513	Xbcd310-7B
47	8.604	53.946	Xwg180-7B
46	7.435	58.036	Xfbb226-7B
45	7.435	57.000	Xfba32-7B
42	14.509	58.036	Xfbb150-7B
50	7.255	47.000	Xbcd1338-7B
49	6.577	47.673	Xbcd385-7B
48	12.436	55.964	Xfbb195-7B
57	4.145	55.964	Xfba311-7B
56	0.000	51.818	Xfbb193-7B
51	4.302	53.774	Xfba371-7B
52	4.145	49.000	Xbcd98-7B
54	6.393	52.855	Xcdo551-7B
53	3.109	48.270	Xbcd349-7B
55	7.321	49.434	Xabc455-7B
58	11.565	51.818	Xbcd178-7B
60	9.194	51.217	Xcnl7-7B
59	12.175	57.543	Xrz476-7B
61	6.453	49.875	Xwg514-7B
63	8.444	51.818	Xfba354-7B
71	8.444	54.889	Xfba301-7B
62	4.145	51.818	Xfbb258-7B
64	4.145	55.964	Xfbb179-7B
69	8.604	60.109	Xfbb175-7B
68	2.235	58.541	Xwg686-7B
67	0.000	60.226	Xfbb352-7B
66	8.143	55.882	Xfba305-7B
65	31.091	54.000	Xcdo686-7B
75	--	76.369	Xtam50-7B
17	17.047	64.389	Xfba204-7D
16	12.667	62.549	Xwg420-7D
18	12.667	70.473	Xfbb325-7D
15	12.667	63.107	Xmwg975-7D
14	6.218	74.618	Xfbb79-7D
13	6.218	76.691	Xfba264-7D
12	37.174	70.473	Xfba69-7D

11	16.931	62.481	Xcdo775-7D
9	9.306	59.568	Xwg719-7D
10	25.080	69.294	Xfbb112-7D
8	29.556	64.566	Xbcd707-7D
7	37.174	66.327	Xfba377-7D
6	28.194	55.371	Xrz2-7D
5	12.796	60.490	Xmwig710-7D
3	21.375	63.000	Xbcd1438-7D
4	33.366	65.906	Xcnl6-7D
0	26.512	73.765	Xfba8-7D
2	24.736	63.453	Xwg834-7D
1	38.000	64.000	Xbcd1872-7D
41	26.824	59.111	Xfbb189-7D
40	--	62.377	XksuE3-7D
19	26.824	51.623	XksuE3-7D
20	38.000	54.889	Xfbb189-7D
22	26.755	50.000	Xbcd1872-7D
26	12.796	53.510	Xmwig710-7D
24	21.375	51.000	Xbcd1438-7D
25	25.119	48.094	Xcnl6-7D
23	23.860	47.321	Xwg834-7D
21	37.224	40.235	Xfba8-7D
38	17.047	49.611	Xfba204-7D
37	12.667	51.451	Xwg420-7D
39	12.667	43.527	Xfbb325-7D
36	12.667	50.893	Xmwig975-7D
35	6.218	39.382	Xfbb79-7D
34	6.218	37.309	Xfba264-7D
33	37.174	43.527	Xfba69-7D
32	16.931	51.519	Xcdo775-7D
30	9.306	54.432	Xwg719-7D
31	25.080	44.706	Xfbb112-7D
29	29.556	49.434	Xbcd707-7D
28	37.174	47.673	Xfba377-7D
27	--	58.629	Xrz2-7D