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The crystal structure of a Mg-rich carpholite

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Abstract

The crystal structure of a magnesium-rich carpholite with the chemical formula $(Mg_{0.795}Fe^{2+}_{0.203}Mn_{0.002})Al_2Si_2O_6(OH)_4$ and with the lattice constants a = 13.714(2), b = 20.079(2), c = 5.105(1) (space group *Ccca*) has been refined by the least-squares method using 1163 reflections measured on a computer controlled automatic single-crystal diffractometer, using monochromatic Mo$K\alpha$ radiation. The unweighted R-factor is 0.044. The structure very closely resembles that of ferrocarpholite and Mn-carpholite, thus suggesting the likelihood of complete miscibility between the three end-members. The inter-atomic bond distances and angles of the SiO_4-tetrahedra and the AlO_6-octahedra further demonstrate the crystal–chemical similarities between pyroxenes and Mn-carpholites, thereby emphasizing the similarity in bonding in all carpholites.

Introduction

The comparatively recent discoveries of a large number of Fe- and Mg-rich carpholites in different parts of the world and their characteristic occurrence in geological units subjected to high pressure/low temperature metamorphism has aroused the interest of mineralogists and crystallographers in their structure and crystal–chemical relationships. Though the chemical compositions of carpholites can be represented by the end-members manganocarpholite, $MnAl_2Si_2O_6(OH)_4$, ferrocarpholite, $FeAl_2Si_2O_6(OH)_4$, and magnesiocarpholite, $MgAl_2Si_2O_6(OH)_4$, it has been observed that carpholites occur preferentially as binary solid solutions, the third component being generally less than 5% (Mottana and Schreyer, 1977; Viswanathan and Seidel, 1979). In order to understand the nature of the solid solutions and the crystal–chemical relationships a knowledge of the structure of the end-members is necessary. MacGillavry *et al.* (1956) first defined the basic structural principles of carpholites by determining the structure of an iron-rich carpholite, $(Fe^{2+}_{0.8},Mg_{0.2})(Al_{0.95}Fe^{3+}_{0.05})Si_2O_6(OH)_4$, by conventional film methods. Later Naumova *et al.* (1975) and recently Lindemann *et al.* (1979) determined the structure of an almost pure manganocarpholite by more modern automatic diffractometer methods, and arrived at almost identical results. Under these circumstances it was considered relevant to determine the structure of the remaining end-member, magnesiocarpholite, and compare it with the others. Unfortunately good crystals of the almost pure magnesiocarpholite from central Crete (specimen 77/5, Viswanathan and Seidel, 1979) could not be obtained because it is finely intergrown with pyrophyllite and muscovite. Hence another magnesium-rich specimen which was collected by Dr. E. Seidel in southeast Sfinari, West Crete (specimen KRH 2, Viswanathan and Seidel, 1979) was chosen for structure determination.

Experimental and results

A typical feature of most of the carpholite crystals is their acicular habit, often tending to become fibrous. The needle axis is parallel to the crystallographic c axis. Specimens containing such magnesium-rich carpholites sometimes show such fibers bent during tectonic deformation. Most of the single crystals examined under the microscope appear as if they are made up of such fibers. Precession photographs of such crystals invariably showed splitting of reflections because of lack of parallel alignment of the fragile needles. Precession photographs of the crystal finally selected for the structure determination did not show any such effects. It had a needle shape with an approximate triangular cross section, the lengths of the sides of the triangle being 0.105 ×

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CALCULATED AND OBSERVED STRUCTURE FACTORS OF MG-CARPHOLITE

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
2	0	0	53.9019	78.9469	-78.9469	0.0000	-25.0450	1.0780
4	0	0	188.6567	203.9888	203.9888	0.0000	-15.3322	1.0780
6	0	0	36.6533	23.3653	-23.3653	0.0000	13.2880	1.0780
8	0	0	100.2575	105.7674	-105.7674	0.0000	-5.5098	1.0780
10	0	0	283.5240	293.5855	293.5855	0.0000	-10.0615	1.0780
12	0	0	99.1795	104.6779	104.6779	0.0000	-5.4984	1.0780
14	0	0	61.4482	58.4655	58.4655	0.0000	2.9826	1.0780
16	0	0	166.0179	157.7226	157.7226	0.0000	8.2953	1.0780
0	2	0	3.2341	20.0373	20.0373	0.0000	-16.8032	1.0780
2	2	0	205.9053	206.2633	206.2633	0.0000	-0.3580	1.0780
4	2	0	98.1015	102.5467	102.5467	0.0000	-4.4453	1.0780
6	2	0	53.9019	57.3500	-57.3500	0.0000	-3.4481	1.0780
8	2	0	81.9309	84.4438	84.4438	0.0000	-2.5129	1.0780
10	2	0	95.9454	92.6751	-92.6751	0.0000	3.2703	1.0780
12	2	0	103.4917	108.7803	108.7803	0.0000	-5.2886	1.0780
14	2	0	66.8384	66.1491	66.1491	0.0000	0.6892	1.0780
16	2	0	49.5898	47.0627	47.0627	0.0000	2.5270	1.0780
0	4	0	172.4861	208.9212	-208.9212	0.0000	-36.4351	1.0780
2	4	0	56.0580	65.4439	65.4439	0.0000	-9.3859	1.0780
4	4	0	86.2430	85.3111	-85.3111	0.0000	0.9319	1.0780
6	4	0	7.5463	11.7164	-11.7164	0.0000	-4.1701	1.0780
8	4	0	25.8729	26.3850	-26.3850	0.0000	-0.5121	1.0780
10	4	0	66.8384	65.4277	-65.4277	0.0000	1.4107	1.0780
12	4	0	39.8874	41.0193	-41.0193	0.0000	-1.1319	1.0780
14	4	0	6.4682	8.0684	8.0684	0.0000	-1.6001	1.0780
16	4	0	42.0435	40.9948	-40.9948	0.0000	1.0486	1.0780
0	6	0	150.9253	155.7033	-155.7033	0.0000	-4.7780	1.0780
2	6	0	145.5351	148.8837	148.8837	0.0000	-3.3485	1.0780
4	6	0	95.9454	92.3594	-92.3594	0.0000	3.5860	1.0780
6	6	0	26.9510	28.7183	28.7183	0.0000	-1.7673	1.0780
8	6	0	37.7313	40.8733	40.8733	0.0000	-3.1420	1.0780
10	6	0	10.7804	9.4953	9.4953	0.0000	1.2851	1.0780
12	6	0	35.5753	37.5184	-37.5184	0.0000	-1.9431	1.0780
14	6	0	31.2631	32.4905	32.4905	0.0000	-1.2274	1.0780
0	8	0	90.5552	106.6640	106.6640	0.0000	-16.1088	1.0780
2	8	0	32.3411	34.9541	-34.9541	0.0000	-2.6130	1.0780
4	8	0	79.7748	76.7892	76.7892	0.0000	2.9856	1.0780
6	8	0	194.0469	198.6274	198.6274	0.0000	-4.5806	1.0780
8	8	0	121.8183	126.1897	-126.1897	0.0000	-4.3714	1.0780
10	8	0	114.2720	112.9267	112.9267	0.0000	1.3453	1.0780
14	8	0	5.3902	4.3142	4.3142	0.0000	1.0760	1.0780
0	10	0	148.7693	141.7601	141.7601	0.0000	7.0091	1.0780
2	10	0	106.7258	107.4772	-107.4772	0.0000	-0.7514	1.0780
4	10	0	31.2631	33.1531	-33.1531	0.0000	-1.8900	1.0780
6	10	0	150.9253	151.1602	-151.1602	0.0000	-0.2348	1.0780
8	10	0	8.6243	8.1111	-8.1111	0.0000	0.5132	1.0780
10	10	0	15.0925	15.1945	15.1945	0.0000	-0.1020	1.0780
12	10	0	6.4682	7.7390	-7.7390	0.0000	-1.2707	1.0780
14	10	0	21.5608	20.8194	-20.8194	0.0000	0.7413	1.0780
0	12	0	219.9198	221.1591	-221.1591	0.0000	-1.2393	1.0780
2	12	0	119.6622	123.0259	-123.0259	0.0000	-3.3637	1.0780

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
4	12	0	84.0870	89.5823	-89.5823	0.0000	-5.4954	1.0780
6	12	0	143.3791	147.0353	-147.0353	0.0000	-3.6563	1.0780
8	12	0	28.0290	30.0381	30.0381	0.0000	-2.0091	1.0780
10	12	0	170.3300	170.9646	-170.9646	0.0000	-0.6346	1.0780
12	12	0	5.3902	5.7366	-5.7366	0.0000	-0.3464	1.0780
14	12	0	108.8818	103.1208	-103.1208	0.0000	5.7610	1.0780
0	14	0	247.9488	243.2748	-243.2748	0.0000	4.6740	1.0780
2	14	0	59.2921	63.7874	-63.7874	0.0000	-4.4953	1.0780
4	14	0	5.3902	4.7168	-4.7168	0.0000	0.6734	1.0780
6	14	0	21.5608	19.5207	-19.5207	0.0000	2.0401	1.0780
8	14	0	76.5407	79.8295	79.8295	0.0000	-3.2888	1.0780
10	14	0	107.8038	104.9690	-104.9690	0.0000	2.8348	1.0780
12	14	0	48.5117	48.4186	-48.4186	0.0000	0.0931	1.0780
0	16	0	104.5697	103.2325	103.2325	0.0000	1.3372	1.0780
2	16	0	89.4772	94.1903	-94.1903	0.0000	-4.7132	1.0780
6	16	0	137.9889	139.4413	139.4413	0.0000	-1.4524	1.0780
8	16	0	75.4627	73.6025	-73.6025	0.0000	1.8602	1.0780
10	16	0	159.5496	153.7399	153.7399	0.0000	5.8097	1.0780
12	16	0	70.0725	67.3137	-67.3137	0.0000	2.7588	1.0780
0	18	0	107.8038	110.3905	-110.3905	0.0000	-2.5867	1.0780
2	18	0	17.2486	20.2996	20.2996	0.0000	-3.0510	1.0780
4	18	0	28.0290	28.7712	-28.7712	0.0000	-0.7422	1.0780
6	18	0	40.9654	39.9327	39.9327	0.0000	1.0327	1.0780
8	18	0	18.3266	17.2893	-17.2893	0.0000	1.0374	1.0780
10	18	0	9.7023	7.7758	-7.7758	0.0000	1.9266	1.0780
0	20	0	9.7023	9.1789	-9.1789	0.0000	0.5235	1.0780
2	20	0	23.7168	24.1059	-24.1059	0.0000	-0.3890	1.0780
4	20	0	44.1996	43.4520	-43.4520	0.0000	0.7476	1.0780
6	20	0	65.7603	62.2808	-62.2808	0.0000	3.4795	1.0780
8	20	0	24.7949	25.3135	-23.3135	0.0000	1.4814	1.0780
0	22	0	48.5117	46.0737	-46.0737	0.0000	2.4380	1.0780
2	22	0	81.9309	77.6015	77.6015	0.0000	4.3294	1.0780
4	22	0	9.7023	6.4305	6.4305	0.0000	3.2719	1.0780
6	22	0	60.3701	56.2219	-56.2219	0.0000	4.1482	1.0780
0	24	0	144.4571	129.5351	129.5351	0.0000	14.9220	1.0780
1	1	1	88.3991	79.2149	-79.2149	0.0000	9.1842	1.0780
3	1	1	33.4192	40.3499	-40.3499	0.0000	-6.9308	1.0780
5	1	1	9.7023	8.6580	8.6580	0.0000	1.0443	1.0780
7	1	1	51.7458	53.5951	-53.5951	0.0000	-1.8493	1.0780
9	1	1	34.4972	36.4900	-36.4900	0.0000	-1.9927	1.0780
11	1	1	48.5117	48.9563	-48.9563	0.0000	-0.4445	1.0780
15	1	1	8.6243	8.8552	8.8552	0.0000	-0.2309	1.0780
2	2	1	112.1160	123.7085	-123.7085	0.0000	-11.5925	1.0780
4	2	1	170.3300	174.4470	174.4470	0.0000	-4.1169	1.0780
6	2	1	150.9253	154.7456	-154.7456	0.0000	-3.8202	1.0780
8	2	1	60.3701	60.9228	60.9228	0.0000	-0.5526	1.0780
10	2	1	44.1996	46.0493	46.0493	0.0000	-1.8497	1.0780
12	2	1	62.5262	63.4831	-63.4831	0.0000	-0.9569	1.0780
14	2	1	65.7603	64.2259	64.2259	0.0000	1.5344	1.0780
16	2	1	64.6823	62.5161	-62.5161	0.0000	2.1662	1.0780
1	3	1	76.5407	74.6816	74.6816	0.0000	1.8591	1.0780
3	3	1	122.8963	127.5580	-127.5580	0.0000	-4.6616	1.0780
5	3	1	34.4972	37.7411	37.7411	0.0000	-3.2438	1.0780
7	3	1	70.0725	71.9912	-71.9912	0.0000	-1.9187	1.0780
9	3	1	15.0925	14.8871	-14.8871	0.0000	0.2054	1.0780

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
11	3	1	83.0089	87.1086	87.1086	0.0000	-4.0997	1.0780
13	3	1	67.9164	67.4909	-67.4909	0.0000	0.4255	1.0780
15	3	1	28.0290	28.8634	28.8634	0.0000	-0.8344	1.0780
2	4	1	25.8729	24.2990	-24.2990	0.0000	1.5739	1.0780
4	4	1	73.3066	66.4878	-66.4878	0.0000	6.8188	1.0780
6	4	1	97.0234	98.5626	98.5626	0.0000	-1.5391	1.0780
8	4	1	17.2486	15.2093	15.2093	0.0000	2.0393	1.0780
10	4	1	11.8584	9.6697	9.6697	0.0000	2.1887	1.0780
12	4	1	43.1215	42.5304	-42.5304	0.0000	0.5911	1.0780
14	4	1	36.6533	34.7527	-34.7527	0.0000	1.9006	1.0780
1	5	1	65.7603	67.8166	67.8166	0.0000	-2.0563	1.0780
3	5	1	208.0614	214.2174	214.2174	0.0000	-6.1560	1.0780
5	5	1	12.9365	12.6852	12.6852	0.0000	0.2512	1.0780
7	5	1	170.3300	178.8192	178.8192	0.0000	-8.4892	1.0780
9	5	1	118.5842	122.9801	122.9801	0.0000	-4.3959	1.0780
11	5	1	28.0290	27.4128	27.4128	0.0000	0.6162	1.0780
13	5	1	113.1940	111.4261	111.4261	0.0000	1.7679	1.0780
2	6	1	192.9688	188.7302	188.7302	0.0000	4.2386	1.0780
4	6	1	78.6968	70.9717	70.9717	0.0000	7.7251	1.0780
6	6	1	44.1996	50.5914	50.5914	0.0000	-6.3918	1.0780
8	6	1	53.9019	54.4030	-54.4030	0.0000	-0.5011	1.0780
10	6	1	97.0234	101.5378	-101.5378	0.0000	-4.5144	1.0780
12	6	1	47.4337	49.2171	49.2171	0.0000	-1.7835	1.0780
14	6	1	38.8094	36.0305	-36.0305	0.0000	2.7789	1.0780
1	7	1	18.3266	24.3576	24.3576	0.0000	-6.0309	1.0780
3	7	1	98.1015	102.6655	102.6655	0.0000	-4.5640	1.0780
5	7	1	218.8417	224.5145	224.5145	0.0000	-5.6727	1.0780
7	7	1	142.3010	150.7670	150.7670	0.0000	-8.4660	1.0780
9	7	1	85.1650	87.9998	87.9998	0.0000	-2.8348	1.0780
11	7	1	51.7458	50.4752	50.4752	0.0000	1.2706	1.0780
13	7	1	42.0435	40.6827	40.6827	0.0000	1.3608	1.0780
15	7	1	50.6678	50.0655	50.0655	0.0000	0.6022	1.0780
2	8	1	139.0669	139.1169	139.1169	0.0000	-0.0500	1.0780
4	8	1	43.1215	44.7010	44.7010	0.0000	-1.5795	1.0780
6	8	1	84.0870	89.2399	89.2399	0.0000	-5.1529	1.0780
8	8	1	61.4482	66.2980	-66.2980	0.0000	-4.8499	1.0780
10	8	1	53.9019	58.3972	-58.3972	0.0000	-4.4953	1.0780
12	8	1	16.1706	15.7665	-15.7665	0.0000	0.4041	1.0780
14	8	1	18.3266	15.8024	-15.8024	0.0000	2.5243	1.0780
1	9	1	26.9510	26.4081	-26.4081	0.0000	0.5428	1.0780
3	9	1	25.8729	25.2617	25.2617	0.0000	0.6112	1.0780
5	9	1	54.9799	57.0005	-57.0005	0.0000	-2.0206	1.0780
7	9	1	49.5898	51.3709	51.3709	0.0000	-1.7811	1.0780
9	9	1	37.7313	39.3347	39.3347	0.0000	-1.6034	1.0780
11	9	1	8.6243	6.8634	-6.8634	0.0000	1.7609	1.0780
2	10	1	56.0580	59.9649	-59.9649	0.0000	-3.9069	1.0780
4	10	1	125.0524	128.2128	128.2128	0.0000	-3.1603	1.0780
6	10	1	46.3556	46.8632	-46.8632	0.0000	-0.5076	1.0780
8	10	1	33.4192	32.9744	32.9744	0.0000	0.4448	1.0780
10	10	1	9.7023	8.2722	8.2722	0.0000	1.4301	1.0780
12	10	1	93.7893	91.2699	-91.2699	0.0000	2.5194	1.0780
14	10	1	48.5117	46.9489	46.9489	0.0000	1.5628	1.0780
1	11	1	7.5463	8.2106	8.2106	0.0000	-0.6643	1.0780
3	11	1	132.5987	137.5622	-137.5622	0.0000	-4.9635	1.0780
5	11	1	112.1160	116.8555	116.8555	0.0000	-4.7396	1.0780

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
7	11	1	83.0089	84.2722	-84.2722	0.0000	-1.2633	1.0780
9	11	1	20.4827	19.3422	-19.3422	0.0000	1.1405	1.0780
11	11	1	40.9654	40.1236	40.1236	0.0000	0.8418	1.0780
13	11	1	77.6187	72.9447	-72.9447	0.0000	4.6740	1.0780
2	12	1	18.3266	20.6316	-20.6316	0.0000	-2.3050	1.0780
4	12	1	66.8384	65.5309	65.5309	0.0000	1.3074	1.0780
6	12	1	61.4482	61.6430	-61.6430	0.0000	-0.1948	1.0780
8	12	1	18.3266	19.7630	19.7630	0.0000	-1.4364	1.0780
10	12	1	14.0145	14.6643	14.6643	0.0000	-0.6498	1.0780
12	12	1	11.8584	12.6875	-12.6875	0.0000	-0.8291	1.0780
1	13	1	20.4827	20.1604	20.1604	0.0000	0.3223	1.0780
3	13	1	114.2720	118.4057	118.4057	0.0000	-4.1337	1.0780
5	13	1	50.6678	52.5137	-52.5137	0.0000	-1.8459	1.0780
7	13	1	66.8384	67.3499	67.3499	0.0000	-0.5116	1.0780
9	13	1	29.1070	29.2833	29.2833	0.0000	-0.1763	1.0780
13	13	1	78.6968	75.1358	75.1358	0.0000	3.5609	1.0780
2	14	1	34.4972	37.2904	37.2904	0.0000	-2.7932	1.0780
4	14	1	141.2230	143.1831	-143.1831	0.0000	-1.9601	1.0780
6	14	1	109.9599	112.1949	112.1949	0.0000	-2.2350	1.0780
8	14	1	12.9365	13.4500	-13.4500	0.0000	-0.5135	1.0780
10	14	1	7.5463	7.4254	-7.4254	0.0000	0.1209	1.0780
12	14	1	43.1215	41.4034	41.4034	0.0000	1.7181	1.0780
1	15	1	34.4972	35.7105	35.7105	0.0000	-1.2132	1.0780
3	15	1	6.4682	8.2180	8.2180	0.0000	-1.7498	1.0780
5	15	1	7.5463	7.4478	-7.4478	0.0000	0.0985	1.0780
7	15	1	15.0925	14.1522	14.1522	0.0000	0.9404	1.0780
9	15	1	16.1706	15.9456	15.9456	0.0000	0.2250	1.0780
11	15	1	24.7949	24.3856	24.3856	0.0000	0.4093	1.0780
2	16	1	24.7949	22.4549	22.4549	0.0000	2.3400	1.0780
8	16	1	6.4682	3.1550	-3.1550	0.0000	3.3132	1.0780
10	16	1	30.1851	28.3290	-28.3290	0.0000	1.8561	1.0780
1	17	1	106.7258	106.3675	-106.3675	0.0000	0.3583	1.0780
3	17	1	37.7313	37.1416	-37.1416	0.0000	0.5898	1.0780
5	17	1	53.9019	51.4356	-51.4356	0.0000	2.4663	1.0780
7	17	1	37.7313	36.3562	-36.3562	0.0000	1.3751	1.0780
9	17	1	58.2141	57.3072	-57.3072	0.0000	0.9068	1.0780
11	17	1	87.3211	80.8104	-80.8104	0.0000	6.5106	1.0780
2	18	1	17.2486	16.0817	-16.0817	0.0000	1.1669	1.0780
4	18	1	57.1360	55.5063	55.5063	0.0000	1.6298	1.0780
6	18	1	47.4337	47.0186	-47.0186	0.0000	0.4151	1.0780
8	18	1	17.2486	14.7993	-14.7993	0.0000	2.4493	1.0780
10	18	1	23.7168	21.8559	21.8559	0.0000	1.8610	1.0780
1	19	1	31.2631	30.2770	-30.2770	0.0000	0.9861	1.0780
3	19	1	132.5987	128.1879	-128.1879	0.0000	4.4108	1.0780
5	19	1	12.9365	12.4152	-12.4152	0.0000	0.5213	1.0780
7	19	1	99.1795	94.9683	-94.9683	0.0000	4.2112	1.0780
9	19	1	65.7603	62.5195	-62.5195	0.0000	3.2408	1.0780
2	20	1	65.7603	62.3485	-62.3485	0.0000	3.4118	1.0780
4	20	1	5.3902	3.3504	3.3504	0.0000	2.0398	1.0780
6	20	1	34.4972	33.5039	-33.5039	0.0000	0.9933	1.0780
8	20	1	31.2631	30.5095	30.5095	0.0000	0.7536	1.0780
3	21	1	23.7168	22.3118	22.3118	0.0000	1.4051	1.0780
5	21	1	48.5117	44.7140	-44.7140	0.0000	3.7977	1.0780
7	21	1	15.0925	16.0290	-16.0290	0.0000	-0.9364	1.0780
4	22	1	68.9944	65.6131	-65.6131	0.0000	3.3813	1.0780

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
1	23	1	11.8584	12.2022	12.2022	0.0000	-0.3437	1.0780
3	23	1	18.3266	17.6506	17.6506	0.0000	0.6760	1.0780
0	0	2	36.6533	43.6491	-43.6491	0.0000	-6.9959	1.0780
2	0	2	108.8818	106.3843	-106.3843	0.0000	2.4976	1.0780
4	0	2	190.8127	183.6791	-183.6791	0.0000	7.1336	1.0780
6	0	2	158.4716	160.7456	-160.7456	0.0000	-2.2740	1.0780
8	0	2	200.5151	207.5551	-207.5551	0.0000	-7.0400	1.0780
10	0	2	48.5117	48.8607	-48.8607	0.0000	-0.3489	1.0780
12	0	2	108.8818	108.4571	-108.4571	0.0000	0.4247	1.0780
14	0	2	14.0145	13.5015	-13.5015	0.0000	0.5130	1.0780
1	1	2	142.3010	125.0586	125.0586	0.0000	17.2425	1.0780
3	1	2	163.8618	148.7805	148.7805	0.0000	15.0813	1.0780
5	1	2	8.6243	10.9292	10.9292	0.0000	-2.3049	1.0780
7	1	2	74.3846	76.3224	76.3224	0.0000	-1.9378	1.0780
9	1	2	164.9398	174.1556	-174.1556	0.0000	-9.2158	1.0780
11	1	2	38.8094	38.2137	38.2137	0.0000	0.5956	1.0780
13	1	2	32.3411	30.3120	-30.3120	0.0000	2.0291	1.0780
15	1	2	14.0145	15.0321	15.0321	0.0000	-1.0176	1.0780
2	2	2	21.5608	22.8089	-22.8089	0.0000	-1.2481	1.0780
4	2	2	99.1795	97.1373	-97.1373	0.0000	2.0422	1.0780
6	2	2	34.4972	37.8885	-37.8885	0.0000	-3.3913	1.0780
8	2	2	125.0524	133.6345	-133.6345	0.0000	-8.5821	1.0780
10	2	2	19.4047	18.3950	-18.3950	0.0000	1.0097	1.0780
12	2	2	26.9510	26.9982	-26.9982	0.0000	-0.0473	1.0780
14	2	2	32.3411	32.0221	-32.0221	0.0000	0.3190	1.0780
1	3	2	163.8618	157.0078	-157.0078	0.0000	6.8539	1.0780
3	3	2	25.8729	23.7738	23.7738	0.0000	2.0991	1.0780
5	3	2	34.4972	34.5137	34.5137	0.0000	-0.0164	1.0780
7	3	2	12.9365	11.8365	-11.8365	0.0000	1.1000	1.0780
9	3	2	98.1015	99.8507	99.8507	0.0000	-1.7493	1.0780
11	3	2	93.7893	95.0560	-95.0560	0.0000	-1.2667	1.0780
13	3	2	17.2486	16.9277	-16.9277	0.0000	0.3209	1.0780
15	3	2	7.5463	8.2844	8.2844	0.0000	-0.7382	1.0780
0	4	2	49.5898	52.2638	-52.2638	0.0000	-2.6740	1.0780
2	4	2	115.3501	114.3936	114.3936	0.0000	0.9565	1.0780
4	4	2	57.1360	58.1204	58.1204	0.0000	-0.9844	1.0780
6	4	2	51.7458	52.1325	-52.1325	0.0000	-0.3866	1.0780
8	4	2	132.5987	136.3513	136.3513	0.0000	-3.7526	1.0780
10	4	2	74.3846	75.8827	-75.8827	0.0000	-1.4981	1.0780
12	4	2	47.4337	46.9834	46.9834	0.0000	0.4502	1.0780
14	4	2	42.0435	39.9927	39.9927	0.0000	2.0508	1.0780
1	5	2	53.9019	46.5930	46.5930	0.0000	7.3089	1.0780
3	5	2	25.8729	22.4624	-22.4624	0.0000	3.4105	1.0780
5	5	2	62.5262	61.7688	61.7688	0.0000	0.7574	1.0780
7	5	2	111.0379	114.2160	-114.2160	0.0000	-3.1780	1.0780
9	5	2	81.9309	82.6376	82.6376	0.0000	-0.7067	1.0780
11	5	2	22.6388	21.1897	-21.1897	0.0000	1.4491	1.0780
13	5	2	17.2486	17.7621	17.7621	0.0000	-0.5135	1.0780
0	6	2	97.0234	92.6160	92.6160	0.0000	4.4074	1.0780
2	6	2	101.3356	100.5107	-100.5107	0.0000	0.8248	1.0780
4	6	2	44.1996	44.2273	44.2273	0.0000	-0.0278	1.0780
6	6	2	5.3902	4.6190	4.6190	0.0000	0.7712	1.0780
8	6	2	23.7168	24.1523	-24.1523	0.0000	-0.4355	1.0780
10	6	2	8.6243	6.0535	6.0535	0.0000	2.5708	1.0780
12	6	2	8.6243	7.3748	-7.3748	0.0000	1.2495	1.0780

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
14	6	2	28.0290	28.6158	-28.6158	0.0000	-0.5868	1.0780
1	7	2	36.6533	35.6751	35.6751	0.0000	0.9782	1.0780
3	7	2	85.1650	86.5809	-86.5809	0.0000	-1.4159	1.0780
5	7	2	11.8584	12.5048	12.5048	0.0000	-0.6464	1.0780
7	7	2	26.9510	26.7241	26.7241	0.0000	0.2268	1.0780
9	7	2	16.1706	18.9097	18.9097	0.0000	-2.7391	1.0780
11	7	2	12.9365	14.8489	-14.8489	0.0000	-1.9125	1.0780
13	7	2	12.9365	13.7038	13.7038	0.0000	-0.7673	1.0780
0	8	2	74.3846	72.9810	-72.9810	0.0000	1.4036	1.0780
2	8	2	33.4192	33.8756	-33.8756	0.0000	-0.4564	1.0780
4	8	2	45.2776	45.0689	-45.0689	0.0000	0.2087	1.0780
6	8	2	54.9799	56.2962	-56.2962	0.0000	-1.3163	1.0780
8	8	2	19.4047	16.9827	-16.9827	0.0000	2.4220	1.0780
10	8	2	46.3556	46.1933	-46.1933	0.0000	0.1624	1.0780
12	8	2	12.9365	12.2526	-12.2526	0.0000	0.6839	1.0780
14	8	2	29.1070	27.2686	-27.2686	0.0000	1.8385	1.0780
1	9	2	94.8674	98.9236	98.9236	0.0000	-4.0562	1.0780
3	9	2	29.1070	29.2050	-29.2050	0.0000	-0.0980	1.0780
5	9	2	12.9365	12.4864	-12.4864	0.0000	0.4500	1.0780
7	9	2	70.0725	71.3352	71.3352	0.0000	-1.2627	1.0780
9	9	2	99.1795	101.5639	-101.5639	0.0000	-2.3844	1.0780
11	9	2	47.4337	47.4538	47.4538	0.0000	-0.0201	1.0780
13	9	2	9.7023	10.8845	-10.8845	0.0000	-1.1821	1.0780
0	10	2	139.0669	143.4868	143.4868	0.0000	-4.4199	1.0780
2	10	2	22.6388	24.1841	-24.1841	0.0000	-1.5453	1.0780
4	10	2	34.4972	35.1264	35.1264	0.0000	-0.6292	1.0780
6	10	2	85.1650	87.6569	87.6569	0.0000	-2.4919	1.0780
8	10	2	50.6678	52.0623	-52.0623	0.0000	-1.3945	1.0780
10	10	2	116.4281	115.9280	115.9280	0.0000	0.5002	1.0780
12	10	2	5.3902	8.3196	-8.3196	0.0000	-2.9294	1.0780
1	11	2	43.1215	42.8745	-42.8745	0.0000	0.2470	1.0780
3	11	2	97.0234	99.9850	99.9850	0.0000	-2.9615	1.0780
5	11	2	28.0290	29.1542	-29.1542	0.0000	-1.1252	1.0780
7	11	2	38.8094	39.9753	-39.9753	0.0000	-1.1660	1.0780
9	11	2	23.7168	24.4373	-24.4373	0.0000	-0.7205	1.0780
11	11	2	22.6388	22.8072	22.8072	0.0000	-0.1684	1.0780
13	11	2	11.8584	9.9203	9.9203	0.0000	1.9382	1.0780
0	12	2	67.9164	67.4947	-67.4947	0.0000	0.4217	1.0780
2	12	2	215.6076	223.2152	223.2152	0.0000	-7.6076	1.0780
4	12	2	61.4482	60.3817	60.3817	0.0000	1.0665	1.0780
6	12	2	74.3846	74.7163	74.7163	0.0000	-0.3316	1.0780
8	12	2	175.7202	177.7017	177.7017	0.0000	-1.9815	1.0780
10	12	2	17.2486	16.4931	16.4931	0.0000	0.7555	1.0780
12	12	2	87.3211	85.1749	85.1749	0.0000	2.1462	1.0780
1	13	2	175.7202	179.2309	-179.2309	0.0000	-3.5107	1.0780
5	13	2	40.9654	44.2457	-44.2457	0.0000	-3.2803	1.0780
7	13	2	15.0925	15.1403	-15.1403	0.0000	-0.0478	1.0780
9	13	2	105.6477	106.2286	106.2286	0.0000	-0.5808	1.0780
11	13	2	33.4192	31.6668	-31.6668	0.0000	1.7524	1.0780
0	14	2	37.7313	39.5241	39.5241	0.0000	-1.7928	1.0780
2	14	2	6.4682	1.2854	1.2854	0.0000	5.1828	1.0780
4	14	2	57.1360	56.6254	56.6254	0.0000	0.5106	1.0780
6	14	2	94.8674	94.5218	94.5218	0.0000	0.3455	1.0780
8	14	2	33.4192	35.2711	35.2711	0.0000	-1.8520	1.0780
10	14	2	61.4482	58.8667	58.8667	0.0000	2.5815	1.0780

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
12	14	2	7.5463	7.4602	7.4602	0.0000	0.0861	1.0780
1	15	2	48.5117	50.2348	50.2348	0.0000	-1.7231	1.0780
3	15	2	83.0089	85.6145	-85.6145	0.0000	-2.6055	1.0780
5	15	2	28.0290	30.7834	-30.7834	0.0000	-2.7544	1.0780
7	15	2	12.9365	11.3154	11.3154	0.0000	1.6211	1.0780
11	15	2	66.8384	65.7378	65.7378	0.0000	1.1005	1.0780
0	16	2	26.9510	25.9233	-25.9233	0.0000	1.0277	1.0780
2	16	2	53.9019	55.4050	-55.4050	0.0000	-1.5031	1.0780
4	16	2	11.8584	12.0995	12.0995	0.0000	-0.2411	1.0780
6	16	2	3.2341	4.2593	-4.2593	0.0000	-1.0252	1.0780
8	16	2	19.4047	19.6086	19.6086	0.0000	-0.2040	1.0780
10	16	2	8.6243	7.9926	-7.9926	0.0000	0.6317	1.0780
1	17	2	68.9944	65.9391	65.9391	0.0000	3.0553	1.0780
3	17	2	71.1505	72.2653	-72.2653	0.0000	-1.1147	1.0780
5	17	2	14.0145	14.2552	-14.2552	0.0000	-0.2407	1.0780
7	17	2	20.4827	19.6552	19.6552	0.0000	0.8275	1.0780
9	17	2	10.7804	10.2774	-10.2774	0.0000	0.5030	1.0780
0	18	2	61.4482	59.9211	59.9211	0.0000	1.5271	1.0780
2	18	2	43.1215	42.2727	-42.2727	0.0000	0.8488	1.0780
4	18	2	28.0290	25.2959	25.2959	0.0000	2.7331	1.0780
6	18	2	37.7313	34.5720	34.5720	0.0000	3.1593	1.0780
8	18	2	12.9365	11.9462	-11.9462	0.0000	0.9903	1.0780
3	19	2	21.5608	20.9443	-20.9443	0.0000	0.6165	1.0780
5	19	2	20.4827	19.1618	19.1618	0.0000	1.3209	1.0780
7	19	2	11.8584	12.2799	-12.2799	0.0000	-0.4214	1.0780
0	20	2	11.8584	10.5422	-10.5422	0.0000	1.3162	1.0780
2	20	2	67.9164	65.4308	65.4308	0.0000	2.4856	1.0780
4	20	2	26.9510	26.9428	26.9428	0.0000	0.0082	1.0780
6	20	2	10.7804	11.4184	-11.4184	0.0000	-0.6381	1.0780
1	21	2	46.3556	42.3909	-42.3909	0.0000	3.9648	1.0780
3	21	2	72.2286	69.0254	69.0254	0.0000	3.2031	1.0780
5	21	2	9.7023	9.2015	9.2015	0.0000	0.5009	1.0780
0	22	2	30.1851	27.4332	-27.4332	0.0000	2.7519	1.0780
2	22	2	5.3902	2.4889	2.4889	0.0000	2.9013	1.0780
1	1	3	101.3356	90.4795	90.4795	0.0000	10.8561	1.0780
3	1	3	134.7548	125.8042	-125.8042	0.0000	8.9506	1.0780
5	1	3	233.9343	231.0957	231.0957	0.0000	2.8386	1.0780
7	1	3	89.4772	89.1762	-89.1762	0.0000	0.3010	1.0780
9	1	3	14.0145	14.2305	14.2305	0.0000	-0.2160	1.0780
11	1	3	87.3211	86.6202	86.6202	0.0000	0.7009	1.0780
13	1	3	62.5262	61.9520	-61.9520	0.0000	0.5742	1.0780
2	2	3	21.5608	20.0470	-20.0470	0.0000	1.5137	1.0780
6	2	3	7.5463	7.7585	7.7585	0.0000	-0.2122	1.0780
8	2	3	14.0145	14.1991	14.1991	0.0000	-0.1846	1.0780
10	2	3	6.4682	6.8550	-6.8550	0.0000	-0.3868	1.0780
12	2	3	19.4047	19.1220	-19.1220	0.0000	0.2827	1.0780
1	3	3	47.4337	44.9409	44.9409	0.0000	2.4928	1.0780
3	3	3	8.6243	9.3769	-9.3769	0.0000	-0.7526	1.0780
5	3	3	23.7168	24.9275	-24.9275	0.0000	-1.2107	1.0780
7	3	3	14.0145	14.1639	-14.1639	0.0000	-0.1494	1.0780
9	3	3	17.2486	18.0842	18.0842	0.0000	-0.8356	1.0780
11	3	3	49.5898	47.8255	47.8255	0.0000	1.7643	1.0780
2	4	3	58.2141	54.1575	54.1575	0.0000	4.0566	1.0780
4	4	3	18.3266	17.3576	17.3576	0.0000	0.9691	1.0780
8	4	3	37.7313	38.8852	-38.8852	0.0000	-1.1538	1.0780

					A	B	OBS-CALC	SIG(O)
12	4	3	9.7023	9.3855	9.3855	0.0000	0.3168	1.0780
14	4	3	9.7023	7.5192	7.5192	0.0000	2.1831	1.0780
1	5	3	152.0034	143.6660	-143.6660	0.0000	8.3374	1.0780
3	5	3	106.7258	107.3336	-107.3336	0.0000	-0.6078	1.0780
5	5	3	95.9454	94.3439	-94.3439	0.0000	1.6015	1.0780
7	5	3	38.8094	38.0452	-38.0452	0.0000	0.7642	1.0780
9	5	3	48.5117	48.4227	-48.4227	0.0000	0.0890	1.0780
11	5	3	64.6823	64.5840	-64.5840	0.0000	0.0983	1.0780
13	5	3	62.5262	61.4087	-61.4087	0.0000	1.1175	1.0780
2	6	3	28.0290	27.7242	-27.7242	0.0000	0.3048	1.0780
6	6	3	4.3122	6.0567	6.0567	0.0000	-1.7446	1.0780
8	6	3	24.7949	26.0350	26.0350	0.0000	-1.2401	1.0780
10	6	3	8.6243	5.5751	-5.5751	0.0000	3.0492	1.0780
12	6	3	16.1706	16.1896	-16.1896	0.0000	-0.0190	1.0780
1	7	3	277.0558	270.5023	-270.5023	0.0000	6.5535	1.0780
3	7	3	11.8584	7.9232	7.9232	0.0000	3.9352	1.0780
5	7	3	118.5842	119.8668	-119.8668	0.0000	-1.2826	1.0780
7	7	3	50.6678	54.5992	54.5992	0.0000	-3.9314	1.0780
9	7	3	37.7313	38.0941	-38.0941	0.0000	-0.3627	1.0780
11	7	3	177.8763	177.3332	-177.3332	0.0000	0.5431	1.0780
13	7	3	7.5463	8.2335	-8.2335	0.0000	-0.6872	1.0780
2	8	3	10.7804	10.2650	10.2650	0.0000	0.5154	1.0780
6	8	3	4.3122	7.4317	7.4317	0.0000	-3.1196	1.0780
1	9	3	12.9365	11.6918	-11.6918	0.0000	1.2447	1.0780
3	9	3	87.3211	88.2146	-88.2146	0.0000	-0.8935	1.0780
5	9	3	68.9944	65.8499	65.8499	0.0000	3.1445	1.0780
7	9	3	18.3266	21.6997	21.6997	0.0000	-3.3730	1.0780
9	9	3	8.6243	9.2048	9.2048	0.0000	-0.5805	1.0780
11	9	3	61.4482	58.9717	58.9717	0.0000	2.4765	1.0780
2	10	3	20.4827	20.3101	20.3101	0.0000	0.1726	1.0780
4	10	3	19.4047	18.4298	18.4298	0.0000	0.9749	1.0780
6	10	3	7.5463	7.7628	-7.7628	0.0000	-0.2165	1.0780
8	10	3	12.9365	11.3554	-11.3554	0.0000	1.5811	1.0780
10	10	3	8.6243	7.6137	-7.6137	0.0000	1.0106	1.0780
12	10	3	6.4682	5.1037	5.1037	0.0000	1.3646	1.0780
1	11	3	29.1070	26.0153	26.0153	0.0000	3.0917	1.0780
3	11	3	49.5898	51.5255	-51.5255	0.0000	-1.9358	1.0780
5	11	3	102.4136	103.0891	103.0891	0.0000	-0.6755	1.0780
7	11	3	35.5753	36.5009	-36.5009	0.0000	-0.9257	1.0780
9	11	3	34.4972	34.6641	34.6641	0.0000	-0.1669	1.0780
11	11	3	32.3411	30.8489	30.8489	0.0000	1.4923	1.0780
2	12	3	18.3266	19.1191	-19.1191	0.0000	-0.7925	1.0780
6	12	3	8.6243	8.1843	8.1843	0.0000	0.4401	1.0780
8	12	3	17.2486	17.3170	17.3170	0.0000	-0.0684	1.0780
10	12	3	4.3122	7.4460	-7.4460	0.0000	-3.1338	1.0780
1	13	3	21.5608	20.9809	-20.9809	0.0000	0.5799	1.0780
3	13	3	23.7168	23.0774	-23.0774	0.0000	0.6395	1.0780
5	13	3	58.2141	59.3554	-59.3554	0.0000	-1.1414	1.0780
7	13	3	28.0290	26.5050	-26.5050	0.0000	1.5240	1.0780
9	13	3	39.8874	38.5844	-38.5844	0.0000	1.3030	1.0780
2	14	3	24.7949	25.1514	25.1514	0.0000	-0.3565	1.0780
6	14	3	5.3902	2.2034	2.2034	0.0000	3.1868	1.0780
8	14	3	21.5608	22.4399	-22.4399	0.0000	-0.8791	1.0780
10	14	3	6.4682	3.3300	3.3300	0.0000	3.1382	1.0780
1	15	3	40.9654	40.9851	-40.9851	0.0000	-0.0196	1.0780

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
3	15	3	91.6332	90.4885	90.4885	0.0000	1.1448	1.0780
5	15	3	145.5351	142.4795	-142.4795	0.0000	3.0556	1.0780
7	15	3	48.5117	46.5342	46.5342	0.0000	1.9775	1.0780
9	15	3	12.9365	12.9122	12.9122	0.0000	0.0242	1.0780
2	16	3	10.7804	11.4538	-11.4538	0.0000	-0.6734	1.0780
4	16	3	5.3902	2.8502	-2.8502	0.0000	2.5400	1.0780
8	16	3	9.7023	9.8909	9.8909	0.0000	-0.1885	1.0780
1	17	3	57.1360	55.6747	55.6747	0.0000	1.4614	1.0780
5	17	3	157.3936	154.0872	154.0872	0.0000	3.3064	1.0780
7	17	3	24.7949	23.3424	23.3424	0.0000	1.4524	1.0780
2	18	3	11.8584	11.0991	-11.0991	0.0000	0.7593	1.0780
4	18	3	14.0145	13.1902	-13.1902	0.0000	0.8243	1.0780
1	19	3	85.1650	81.9092	81.9092	0.0000	3.2559	1.0780
3	19	3	44.1996	43.8000	43.8000	0.0000	0.3996	1.0780
5	19	3	60.3701	57.6097	57.6097	0.0000	2.7605	1.0780
2	20	3	9.7023	9.6885	9.6885	0.0000	0.0139	1.0780
2	0	4	113.1940	102.5550	102.5550	0.0000	10.6390	1.0780
4	0	4	137.9889	127.9509	127.9509	0.0000	10.0380	1.0780
6	0	4	180.0324	177.0844	177.0844	0.0000	2.9479	1.0780
8	0	4	92.7113	91.8831	91.8831	0.0000	0.8281	1.0780
10	0	4	48.5117	47.6119	47.6119	0.0000	0.8998	1.0780
12	0	4	43.1215	40.4213	40.4213	0.0000	2.7003	1.0780
1	1	4	166.0179	149.9814	149.9814	0.0000	16.0364	1.0780
3	1	4	8.6243	9.0376	-9.0376	0.0000	-0.4132	1.0780
5	1	4	65.7603	67.6542	67.6542	0.0000	-1.8939	1.0780
7	1	4	20.4827	19.0923	19.0923	0.0000	1.3904	1.0780
9	1	4	79.7748	79.2057	-79.2057	0.0000	0.5692	1.0780
11	1	4	12.9365	13.7637	-13.7637	0.0000	-0.8272	1.0780
2	2	4	95.9454	90.1601	90.1601	0.0000	5.7853	1.0780
4	2	4	18.3266	15.9584	15.9584	0.0000	2.3682	1.0780
6	2	4	14.0145	13.0731	13.0731	0.0000	0.9414	1.0780
8	2	4	90.5552	89.4224	89.4224	0.0000	1.1328	1.0780
10	2	4	30.1851	29.7304	29.7304	0.0000	0.4547	1.0780
12	2	4	28.0290	28.1861	28.1861	0.0000	-0.1571	1.0780
1	3	4	93.7893	89.2882	-89.2882	0.0000	4.5012	1.0780
3	3	4	80.8529	73.6813	73.6813	0.0000	7.1715	1.0780
5	3	4	23.7168	23.7554	23.7554	0.0000	-0.0386	1.0780
7	3	4	42.0435	39.4614	-39.4614	0.0000	2.5820	1.0780
9	3	4	60.3701	60.1597	60.1597	0.0000	0.2104	1.0780
11	3	4	68.9944	67.5453	-67.5453	0.0000	1.4491	1.0780
0	4	4	106.7258	99.7558	99.7558	0.0000	6.9700	1.0780
2	4	4	113.1940	106.2684	-106.2684	0.0000	6.9256	1.0780
4	4	4	11.8584	11.2861	-11.2861	0.0000	0.5723	1.0780
6	4	4	10.7804	8.5661	8.5661	0.0000	2.2143	1.0780
8	4	4	101.3356	99.7635	-99.7635	0.0000	1.5721	1.0780
10	4	4	48.5117	45.6352	45.6352	0.0000	2.8765	1.0780
12	4	4	21.5608	20.2368	-20.2368	0.0000	1.3239	1.0780
1	5	4	76.5407	71.9740	-71.9740	0.0000	4.5668	1.0780
3	5	4	33.4192	34.0372	34.0372	0.0000	-0.6181	1.0780
5	5	4	11.8584	12.8039	-12.8039	0.0000	-0.9454	1.0780
9	5	4	25.8729	24.3849	24.3849	0.0000	1.4880	1.0780
11	5	4	11.8584	11.8496	11.8496	0.0000	0.0088	1.0780
0	6	4	30.1851	27.5912	-27.5912	0.0000	2.5939	1.0780
2	6	4	21.5608	20.0691	20.0691	0.0000	1.4917	1.0780
4	6	4	29.1070	28.3210	28.3210	0.0000	0.7860	1.0780

6	6	4	32.3411	31.4577	-31.4577	0.0000	0.8835	1.0780
8	6	4	35.5753	35.7259	35.7259	0.0000	-0.1507	1.0780
10	6	4	43.1215	42.3965	-42.3965	0.0000	0.7250	1.0780
1	7	4	16.1706	19.1558	-19.1558	0.0000	-2.9853	1.0780
3	7	4	18.3266	17.4760	17.4760	0.0000	0.8507	1.0780
5	7	4	44.1996	44.0064	-44.0064	0.0000	0.1931	1.0780
7	7	4	52.8239	52.0698	52.0698	0.0000	0.7540	1.0780
9	7	4	36.6533	35.2615	[illegible].2615	0.0000	1.3918	1.0780
11	7	4	23.7168	23.4283	23.4283	0.0000	0.2885	1.0780
0	8	4	75.4627	72.3627	72.3627	0.0000	3.1000	1.0780
2	8	4	36.6533	33.9198	33.9198	0.0000	2.7335	1.0780
4	8	4	11.8584	11.5292	11.5292	0.0000	0.3292	1.0780
6	8	4	9.7023	9.1569	9.1569	0.0000	0.5454	1.0780
8	8	4	42.0435	41.1072	41.1072	0.0000	0.9363	1.0780
10	8	4	38.8094	38.9404	38.9404	0.0000	-0.1311	1.0780
1	9	4	97.0234	95.4199	95.4199	0.0000	1.6035	1.0780
3	9	4	40.9654	41.5895	-41.5895	0.0000	-0.6240	1.0780
7	9	4	43.1215	41.1227	41.1227	0.0000	1.9988	1.0780
9	9	4	74.3846	72.2836	-72.2836	0.0000	2.1010	1.0780
0	10	4	155.2375	153.1976	-153.1976	0.0000	2.0399	1.0780
2	10	4	9.7023	7.7041	7.7041	0.0000	1.9982	1.0780
4	10	4	19.4047	19.3621	-19.3621	0.0000	0.0426	1.0780
6	10	4	17.2486	15.9725	-15.9725	0.0000	1.2761	1.0780
8	10	4	16.1706	16.5391	16.5391	0.0000	-0.3685	1.0780
10	10	4	83.0089	80.6277	-80.6277	0.0000	2.3812	1.0780
1	11	4	6.4682	8.9885	8.9885	0.0000	-2.5203	1.0780
3	11	4	20.4827	18.4736	-18.4736	0.0000	2.0091	1.0780
5	11	4	30.1851	28.8762	28.8762	0.0000	1.3088	1.0780
7	11	4	58.2141	58.2688	-58.2688	0.0000	-0.0547	1.0780
9	11	4	40.9654	39.8764	39.8764	0.0000	1.0890	1.0780
0	12	4	5.3902	1.6187	-1.6187	0.0000	3.7715	1.0780
2	12	4	135.8328	132.1303	-132.1303	0.0000	3.7025	1.0780
4	12	4	86.2430	84.1739	-84.1739	0.0000	2.0692	1.0780
6	12	4	25.8729	25.3853	-25.3853	0.0000	0.4877	1.0780
8	12	4	150.9253	148.9848	-148.9848	0.0000	1.9406	1.0780
1	13	4	91.6332	89.7782	-89.7782	0.0000	1.8551	1.0780
3	13	4	4.3122	5.2641	-5.2641	0.0000	-0.9519	1.0780
7	13	4	72.2286	71.1622	-71.1622	0.0000	1.0663	1.0780
0	14	4	26.9510	26.4566	-26.4566	0.0000	0.4944	1.0780
4	14	4	60.3701	59.0899	-59.0899	0.0000	1.2802	1.0780
6	14	4	76.5407	75.1095	-75.1095	0.0000	1.4313	1.0780
1	15	4	20.4827	20.5191	20.5191	0.0000	-0.0364	1.0780
3	15	4	67.9164	66.9449	-66.9449	0.0000	0.9715	1.0780
5	15	4	42.0435	41.1243	-41.1243	0.0000	0.9192	1.0780
0	16	4	14.0145	14.5253	14.5253	0.0000	-0.5108	1.0780
2	16	4	6.4682	6.2844	6.2844	0.0000	0.1839	1.0780
4	16	4	29.1070	27.9282	27.9282	0.0000	1.1788	1.0780
3	17	4	17.2486	17.6964	-17.6964	0.0000	-0.4478	1.0780
0	18	4	29.1070	28.5587	-28.5587	0.0000	0.5483	1.0780
3	1	5	43.1215	39.1363	-39.1363	0.0000	3.9852	1.0780
5	1	5	23.7168	20.6578	-20.6578	0.0000	3.0591	1.0780
7	1	5	46.3556	44.9885	-44.9885	0.0000	1.3671	1.0780
9	1	5	17.2486	15.1768	15.1768	0.0000	2.0718	1.0780
2	2	5	67.9164	61.6320	61.6320	0.0000	6.2844	1.0780
4	2	5	85.1650	77.8255	-77.8255	0.0000	7.3395	1.0780

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
6	2	5	84.0870	79.8099	79.8099	0.0000	4.2771	1.0780
8	2	5	29.1070	28.3735	-28.3735	0.0000	0.7335	1.0780
1	3	5	5.3902	8.4269	8.4269	0.0000	-3.0367	1.0780
3	3	5	67.9164	62.9520	-62.9520	0.0000	4.9644	1.0780
5	3	5	66.8384	62.7682	62.7682	0.0000	4.0702	1.0780
7	3	5	22.6388	21.7012	-21.7012	0.0000	0.9376	1.0780
9	3	5	16.1706	14.2135	-14.2135	0.0000	1.9571	1.0780
2	4	5	21.5608	22.3023	22.3023	0.0000	-0.7416	1.0780
4	4	5	21.5608	21.8605	21.8605	0.0000	-0.2997	1.0780
6	4	5	30.1851	28.4902	-28.4902	0.0000	1.6949	1.0780
8	4	5	15.0925	15.4898	-15.4898	0.0000	-0.3973	1.0780
1	5	5	21.5608	21.9054	21.9054	0.0000	-0.3447	1.0780
3	5	5	134.7548	125.6369	125.6369	0.0000	9.1179	1.0780
5	5	5	20.4827	19.1096	19.1096	0.0000	1.3731	1.0780
7	5	5	117.5062	113.0150	113.0150	0.0000	4.4912	1.0780
2	6	5	94.8674	89.0946	-89.0946	0.0000	5.7727	1.0780
4	6	5	15.0925	12.2927	12.2927	0.0000	2.7998	1.0780
6	6	5	48.5117	46.3680	-46.3680	0.0000	2.1438	1.0780
8	6	5	38.8094	38.0566	38.0566	0.0000	0.7528	1.0780
1	7	5	62.5262	59.7437	59.7437	0.0000	2.7825	1.0780
3	7	5	47.4337	45.0545	45.0545	0.0000	2.3792	1.0780
5	7	5	86.2430	84.2844	84.2844	0.0000	1.9587	1.0780
7	7	5	75.4627	75.4238	75.4238	0.0000	0.0389	1.0780
2	8	5	53.9019	51.8679	-51.8679	0.0000	2.0340	1.0780
4	8	5	15.0925	14.8342	-14.8342	0.0000	0.2583	1.0780
6	8	5	35.5753	34.9084	-34.9084	0.0000	0.6668	1.0780
1	9	5	48.5117	46.8310	-46.8310	0.0000	1.6807	1.0780
3	9	5	37.7313	35.3480	35.3480	0.0000	2.3833	1.0780
5	9	5	5.3902	3.2640	-3.2640	0.0000	2.1262	1.0780
7	9	5	58.2141	55.7071	55.7071	0.0000	2.5070	1.0780
2	10	5	49.5898	47.3528	47.3528	0.0000	2.2370	1.0780
4	10	5	76.5407	73.5508	-73.5508	0.0000	2.9899	1.0780
6	10	5	43.1215	42.2471	42.2471	0.0000	0.8744	1.0780
1	11	5	19.4047	18.9341	18.9341	0.0000	0.4706	1.0780
3	11	5	99.1795	96.8055	-96.8055	0.0000	2.3740	1.0780
5	11	5	74.3846	73.1931	73.1931	0.0000	1.1915	1.0780
2	12	5	15.0925	14.8161	14.8161	0.0000	0.2765	1.0780
4	12	5	28.0290	27.1014	-27.1014	0.0000	0.9276	1.0780
1	13	5	7.5463	5.3182	5.3182	0.0000	2.2281	1.0780
3	13	5	68.9944	71.5109	71.5109	0.0000	-2.5164	1.0780
0	0	6	246.8707	243.2322	-243.2322	0.0000	3.6385	1.0780
2	0	6	28.0290	24.7613	-24.7613	0.0000	3.2677	1.0780
2	2	6	111.0379	100.7046	-100.7046	0.0000	10.3333	1.0780
1	3	6	7.5463	5.4100	5.4100	0.0000	2.1363	1.0780
0	4	6	45.2776	42.6407	42.6407	0.0000	2.6369	1.0780
18	0	0	63.5459	63.9777	-63.9777	0.0000	-0.4318	1.1990
20	0	0	101.9132	94.6676	94.6676	0.0000	7.2456	1.1990
18	2	0	29.9745	28.0243	28.0243	0.0000	1.9502	1.1990
20	2	0	17.9847	15.5391	-15.5391	0.0000	2.4456	1.1990
18	4	0	47.9592	48.3711	48.3711	0.0000	-0.4119	1.1990
20	4	0	35.9694	32.9451	-32.9451	0.0000	3.0243	1.1990
0	6	0	141.4795	155.7033	-155.7033	0.0000	-14.2238	1.1990
16	6	0	58.7500	56.2255	-56.2255	0.0000	2.5245	1.1990
18	6	0	69.5408	67.5033	67.5033	0.0000	2.0374	1.1990
20	6	0	4.7959	6.2302	-6.2302	0.0000	-1.4343	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
16	8	0	109.1071	104.0258	104.0258	0.0000	5.0813	1.1990
18	8	0	59.9489	56.6812	-56.6812	0.0000	3.2677	1.1990
20	8	0	20.3826	18.4359	18.4359	0.0000	1.9467	1.1990
16	10	0	50.3571	47.4846	-47.4846	0.0000	2.8726	1.1990
18	10	0	45.5612	41.8061	-41.8061	0.0000	3.7551	1.1990
16	12	0	64.7449	60.2631	-60.2631	0.0000	4.4818	1.1990
18	12	0	31.1735	30.8491	-30.8491	0.0000	0.3244	1.1990
14	14	0	33.5714	32.7865	-32.7865	0.0000	0.7849	1.1990
16	14	0	69.5408	64.7172	-64.7172	0.0000	4.8236	1.1990
18	14	0	21.5816	20.0256	20.0256	0.0000	1.5560	1.1990
14	16	0	43.1632	41.3955	-41.3955	0.0000	1.7677	1.1990
16	16	0	27.5765	25.0229	25.0229	0.0000	2.5536	1.1990
12	18	0	23.9796	21.8781	-21.8781	0.0000	2.1015	1.1990
14	18	0	7.1939	6.4153	6.4153	0.0000	0.7786	1.1990
16	18	0	14.3877	14.4620	-14.4620	0.0000	-0.0742	1.1990
10	20	0	11.9898	10.1429	-10.1429	0.0000	1.8469	1.1990
12	20	0	9.5918	8.9327	-8.9327	0.0000	0.6592	1.1990
8	22	0	107.9081	104.0317	104.0317	0.0000	3.8764	1.1990
10	22	0	63.5459	60.7435	-60.7435	0.0000	2.8024	1.1990
12	22	0	67.1428	63.4242	63.4242	0.0000	3.7186	1.1990
0	24	0	134.2856	129.5351	129.5351	0.0000	4.7505	1.1990
2	24	0	38.3673	37.6311	-37.6311	0.0000	0.7362	1.1990
4	24	0	105.5101	100.8341	100.8341	0.0000	4.6760	1.1990
6	24	0	97.1173	94.0173	94.0173	0.0000	3.1000	1.1990
8	24	0	9.5918	9.2640	-9.2640	0.0000	0.3278	1.1990
10	24	0	65.9438	61.7925	61.7925	0.0000	4.1513	1.1990
12	24	0	10.7908	10.1374	10.1374	0.0000	0.6535	1.1990
0	26	0	64.7449	61.5543	61.5543	0.0000	3.1906	1.1990
2	26	0	19.1837	17.6624	17.6624	0.0000	1.5212	1.1990
4	26	0	21.5816	20.7570	20.7570	0.0000	0.8246	1.1990
6	26	0	20.3826	18.8446	18.8446	0.0000	1.5380	1.1990
8	26	0	5.9949	3.1583	3.1583	0.0000	2.8366	1.1990
10	26	0	43.1632	40.5814	40.5814	0.0000	2.5819	1.1990
0	28	0	29.9745	28.1331	-28.1331	0.0000	1.8414	1.1990
2	28	0	49.1581	45.1817	45.1817	0.0000	3.9765	1.1990
4	28	0	31.1735	27.7428	-27.7428	0.0000	3.4306	1.1990
6	28	0	8.3929	9.8760	-9.8760	0.0000	-1.4831	1.1990
8	28	0	20.3826	18.5300	-18.5300	0.0000	1.8527	1.1990
0	30	0	14.3877	11.1861	-11.1861	0.0000	3.2016	1.1990
2	30	0	67.1428	58.7017	58.7017	0.0000	8.4412	1.1990
17	1	1	29.9745	29.8109	-29.8109	0.0000	0.1636	1.1990
19	1	1	9.5918	10.0889	-10.0889	0.0000	-0.4970	1.1990
18	2	1	4.7959	3.0787	-3.0787	0.0000	1.7172	1.1990
20	2	1	39.5663	37.4989	37.4989	0.0000	2.0674	1.1990
17	3	1	17.9847	17.4632	-17.4632	0.0000	0.5215	1.1990
19	3	1	29.9745	29.2018	-29.2018	0.0000	0.7727	1.1990
16	4	1	22.7806	20.9067	20.9067	0.0000	1.8739	1.1990
18	4	1	7.1939	6.1017	6.1017	0.0000	1.0922	1.1990
20	4	1	29.9745	26.9341	26.9341	0.0000	3.0404	1.1990
17	5	1	39.5663	38.9108	38.9108	0.0000	0.6555	1.1990
19	5	1	64.7449	61.4482	61.4482	0.0000	3.2967	1.1990
16	6	1	29.9745	29.8675	29.8675	0.0000	0.1070	1.1990
18	6	1	32.3724	30.2370	30.2370	0.0000	2.1354	1.1990
20	6	1	34.7704	31.1523	-31.1523	0.0000	3.6181	1.1990
17	7	1	52.7551	52.4041	52.4041	0.0000	0.3510	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
19	7	1	37.1683	35.7585	35.7585	0.0000	1.4099	1.1990
16	8	1	46.7602	45.4955	45.4955	0.0000	1.2646	1.1990
18	8	1	16.7857	15.6043	15.6043	0.0000	1.1814	1.1990
15	9	1	37.1683	37.5106	-37.5106	0.0000	-0.3422	1.1990
17	9	1	5.9949	4.3370	4.3370	0.0000	1.6579	1.1990
19	9	1	17.9847	16.2673	16.2673	0.0000	1.7174	1.1990
16	10	1	15.5867	15.9371	-15.9371	0.0000	-0.3504	1.1990
18	10	1	15.5867	15.5083	15.5083	0.0000	0.0784	1.1990
15	11	1	40.7653	40.7878	40.7878	0.0000	-0.0225	1.1990
17	11	1	23.9796	22.0300	-22.0300	0.0000	1.9496	1.1990
19	11	1	31.1735	30.5331	-30.5331	0.0000	0.6404	1.1990
14	12	1	19.1837	19.9807	19.9807	0.0000	-0.7970	1.1990
16	12	1	38.3673	37.5027	-37.5027	0.0000	0.8646	1.1990
15	13	1	7.1939	8.4446	-8.4446	0.0000	-1.2508	1.1990
17	13	1	11.9898	10.9058	10.9058	0.0000	1.0840	1.1990
14	14	1	77.9336	75.6969	-75.6969	0.0000	2.2368	1.1990
16	14	1	39.5663	36.2117	36.2117	0.0000	3.3546	1.1990
15	15	1	7.1939	5.9553	-5.9553	0.0000	1.2386	1.1990
17	15	1	9.5918	7.0192	7.0192	0.0000	2.5726	1.1990
12	16	1	25.1786	25.5807	25.5807	0.0000	-0.4021	1.1990
16	16	1	5.9949	4.2830	4.2830	0.0000	1.7119	1.1990
13	17	1	27.5765	28.1081	-28.1081	0.0000	-0.5316	1.1990
15	17	1	27.5765	24.3983	-24.3983	0.0000	3.1782	1.1990
17	17	1	25.1786	22.9127	-22.9127	0.0000	2.2659	1.1990
12	18	1	22.7806	23.5793	-23.5793	0.0000	-0.7987	1.1990
14	18	1	47.9592	46.1083	46.1083	0.0000	1.8509	1.1990
16	18	1	9.5918	6.6887	-6.6887	0.0000	2.9031	1.1990
13	19	1	86.3265	83.4976	-83.4976	0.0000	2.8289	1.1990
15	19	1	11.9898	11.0733	-11.0733	0.0000	0.9165	1.1990
10	20	1	28.7755	29.2048	29.2048	0.0000	-0.4293	1.1990
12	20	1	21.5816	19.9193	-19.9193	0.0000	1.6623	1.1990
14	20	1	23.9796	21.1909	21.1909	0.0000	2.7887	1.1990
11	21	1	26.3775	24.9900	-24.9900	0.0000	1.3875	1.1990
13	21	1	29.9745	28.8460	28.8460	0.0000	1.1285	1.1990
6	22	1	4.7959	5.6318	5.6318	0.0000	-0.8359	1.1990
10	22	1	10.7908	11.2306	11.2306	0.0000	-0.4398	1.1990
12	22	1	58.7500	54.1852	54.1852	0.0000	4.5648	1.1990
14	22	1	23.9796	21.5984	-21.5984	0.0000	2.3812	1.1990
5	23	1	10.7908	9.7169	-9.7169	0.0000	1.0739	1.1990
9	23	1	19.1837	16.7870	-16.7870	0.0000	2.3966	1.1990
13	23	1	25.1786	23.5265	23.5265	0.0000	1.6521	1.1990
2	24	1	9.5918	7.8579	7.8579	0.0000	1.7340	1.1990
4	24	1	79.1326	78.9493	-78.9493	0.0000	0.1834	1.1990
6	24	1	40.7653	39.1043	39.1043	0.0000	1.6610	1.1990
8	24	1	4.7959	7.9748	-7.9748	0.0000	-3.1789	1.1990
10	24	1	15.5867	15.4208	15.4208	0.0000	0.1659	1.1990
12	24	1	35.9694	33.4641	33.4641	0.0000	2.5053	1.1990
1	25	1	17.9847	16.5468	-16.5468	0.0000	1.4379	1.1990
5	25	1	58.7500	57.3764	-57.3764	0.0000	1.3736	1.1990
7	25	1	15.5867	16.8192	-16.8192	0.0000	-1.2325	1.1990
9	25	1	11.9898	10.8409	-10.8409	0.0000	1.1489	1.1990
11	25	1	22.7806	21.9902	-21.9902	0.0000	0.7904	1.1990
2	26	1	37.1683	35.3888	-35.3888	0.0000	1.7795	1.1990
4	26	1	47.9592	45.1841	45.1841	0.0000	2.7751	1.1990
6	26	1	45.5612	44.2166	-44.2166	0.0000	1.3446	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
8	26	1	21.5816	20.3600	20.3600	0.0000	1.2216	1.1990
1	27	1	5.9949	4.6646	-4.6646	0.0000	1.3303	1.1990
3	27	1	55.1530	52.7765	-52.7765	0.0000	2.3765	1.1990
5	27	1	52.7551	48.5258	48.5258	0.0000	4.2292	1.1990
7	27	1	31.1735	29.2283	-29.2283	0.0000	1.9452	1.1990
9	27	1	19.1837	18.9172	-18.9172	0.0000	0.2665	1.1990
2	28	1	3.5969	2.0972	2.0972	0.0000	1.4997	1.1990
4	28	1	34.7704	33.1632	33.1632	0.0000	1.6072	1.1990
6	28	1	20.3826	20.9534	-20.9534	0.0000	-0.5708	1.1990
1	29	1	17.9847	14.6263	14.6263	0.0000	3.3584	1.1990
3	29	1	50.3571	45.7227	45.7227	0.0000	4.6344	1.1990
5	29	1	3.5969	3.7960	3.7960	0.0000	-0.1991	1.1990
2	30	1	7.1939	6.9201	6.9201	0.0000	0.2737	1.1990
16	0	2	61.1479	62.4960	-62.4960	0.0000	-1.3481	1.1990
18	0	2	55.1530	52.2652	-52.2652	0.0000	2.8878	1.1990
20	0	2	45.5612	42.2021	-42.2021	0.0000	3.3591	1.1990
17	1	2	43.1632	41.0511	41.0511	0.0000	2.1121	1.1990
19	1	2	9.5918	10.0867	-10.0867	0.0000	-0.4949	1.1990
16	2	2	11.9898	11.0318	11.0318	0.0000	0.9580	1.1990
18	2	2	37.1683	36.5140	-36.5140	0.0000	0.6543	1.1990
20	2	2	27.5765	25.3538	-25.3538	0.0000	2.2227	1.1990
1	3	2	148.6734	157.0078	-157.0078	0.0000	-8.3345	1.1990
17	3	2	10.7908	8.8540	-8.8540	0.0000	1.9368	1.1990
19	3	2	50.3571	46.9292	46.9292	0.0000	3.4279	1.1990
16	4	2	23.9796	24.0747	-24.0747	0.0000	-0.0951	1.1990
18	4	2	58.7500	57.4619	57.4619	0.0000	1.2881	1.1990
17	5	2	49.1581	47.5159	-47.5159	0.0000	1.6423	1.1990
19	5	2	10.7908	10.4667	10.4667	0.0000	0.3241	1.1990
16	6	2	29.9745	31.0335	31.0335	0.0000	-1.0591	1.1990
18	6	2	23.9796	19.7044	-19.7044	0.0000	4.2752	1.1990
15	7	2	44.3622	45.3248	-45.3248	0.0000	-0.9626	1.1990
17	7	2	43.1632	42.1984	42.1984	0.0000	0.9648	1.1990
19	7	2	17.9847	16.8986	-16.8986	0.0000	1.0861	1.1990
16	8	2	5.9949	11.4069	-11.4069	0.0000	-5.4121	1.1990
18	8	2	25.1786	22.9582	-22.9582	0.0000	2.2204	1.1990
17	9	2	50.3571	46.3558	46.3558	0.0000	4.0014	1.1990
19	9	2	35.9694	33.2137	-33.2137	0.0000	2.7556	1.1990
14	10	2	23.9796	23.2096	23.2096	0.0000	0.7700	1.1990
16	10	2	28.7755	27.9172	27.9172	0.0000	0.8583	1.1990
18	10	2	14.3877	14.6372	-14.6372	0.0000	-0.2494	1.1990
15	11	2	44.3622	43.9803	43.9803	0.0000	0.3819	1.1990
17	11	2	47.9592	44.4453	-44.4453	0.0000	3.5138	1.1990
14	12	2	67.1428	67.3849	67.3849	0.0000	-0.2421	1.1990
16	12	2	14.3877	11.3388	-11.3388	0.0000	3.0489	1.1990
18	12	2	86.3265	82.1446	82.1446	0.0000	4.1819	1.1990
13	13	2	5.9949	4.9029	-4.9029	0.0000	1.0919	1.1990
15	13	2	20.3826	20.3503	20.3503	0.0000	0.0324	1.1990
17	13	2	51.5561	47.7846	-47.7846	0.0000	3.7715	1.1990
16	14	2	22.7806	21.8001	21.8001	0.0000	0.9805	1.1990
13	15	2	8.3929	7.7005	7.7005	0.0000	0.6924	1.1990
15	15	2	23.9796	23.8590	-23.8590	0.0000	0.1206	1.1990
17	15	2	13.1888	12.1706	-12.1706	0.0000	1.0181	1.1990
12	16	2	21.5816	21.1637	-21.1637	0.0000	0.4179	1.1990
14	16	2	22.7806	23.4388	-23.4388	0.0000	-0.6582	1.1990
16	16	2	2.3980	8.7277	-8.7277	0.0000	-6.3297	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
14	4	3	8.3929	7.5192	7.5192	0.0000	0.8736	1.1990
18	4	3	7.1939	8.3128	-8.3128	0.0000	-1.1190	1.1990
15	5	3	82.7295	82.6763	-82.6763	0.0000	0.0533	1.1990
17	5	3	39.5663	38.1410	-38.1410	0.0000	1.4253	1.1990
14	6	3	5.9949	6.0780	-6.0780	0.0000	-0.0831	1.1990
18	6	3	15.5867	14.2271	14.2271	0.0000	1.3596	1.1990
15	7	3	107.9081	108.2304	-108.2304	0.0000	-0.3223	1.1990
17	7	3	34.7704	32.2356	-32.2356	0.0000	2.5348	1.1990
14	8	3	7.1939	7.0674	-7.0674	0.0000	0.1265	1.1990
16	8	3	4.7959	4.6873	4.6873	0.0000	0.1086	1.1990
13	9	3	88.7244	90.9015	-90.9015	0.0000	-2.1771	1.1990
15	9	3	13.1888	11.8288	-11.8288	0.0000	1.3600	1.1990
13	11	3	26.3775	27.6297	-27.6297	0.0000	-1.2522	1.1990
15	11	3	46.7602	45.9692	45.9692	0.0000	0.7910	1.1990
17	11	3	32.3724	30.7769	-30.7769	0.0000	1.5956	1.1990
12	12	3	16.7857	16.2770	-16.2770	0.0000	0.5087	1.1990
14	12	3	4.7959	3.2974	-3.2974	0.0000	1.4985	1.1990
16	12	3	7.1939	5.7921	5.7921	0.0000	1.4018	1.1990
15	13	3	27.5765	26.0956	-26.0956	0.0000	1.4809	1.1990
17	13	3	14.3877	12.4602	-12.4602	0.0000	1.9275	1.1990
12	14	3	8.3929	8.4482	8.4482	0.0000	-0.0553	1.1990
14	14	3	7.1939	6.1056	6.1056	0.0000	1.0883	1.1990
11	15	3	63.5459	63.6221	-63.6221	0.0000	-0.0762	1.1990
13	15	3	67.1428	67.0137	67.0137	0.0000	0.1291	1.1990
15	15	3	69.5408	66.5395	-66.5395	0.0000	3.0013	1.1990
12	16	3	3.5969	2.4585	-2.4585	0.0000	1.1384	1.1990
9	17	3	27.5765	27.5808	27.5808	0.0000	-0.0043	1.1990
11	17	3	43.1632	44.3813	44.3813	0.0000	-1.2180	1.1990
13	17	3	14.3877	13.1475	-13.1475	0.0000	1.2402	1.1990
15	17	3	75.5357	71.5719	71.5719	0.0000	3.9638	1.1990
8	18	3	4.7959	5.8166	5.8166	0.0000	-1.0207	1.1990
10	18	3	3.5969	5.2113	5.2113	0.0000	-1.6144	1.1990
14	18	3	4.7959	4.2317	-4.2317	0.0000	0.5642	1.1990
7	19	3	33.5714	34.[illegible]814	34.5814	0.0000	-1.0100	1.1990
9	19	3	31.1735	30.8099	30.8099	0.0000	0.3635	1.1990
11	19	3	61.1479	59.9234	59.9234	0.0000	1.2246	1.1990
13	19	3	15.5867	15.8668	15.8668	0.0000	-0.2801	1.1990
6	20	3	9.5918	10.3961	-10.3961	0.0000	-0.8042	1.1990
8	20	3	8.3929	8.5355	-8.5355	0.0000	-0.1427	1.1990
12	20	3	13.1888	13.1321	13.1321	0.0000	0.0567	1.1990
1	21	3	52.7551	53.2353	53.2353	0.0000	-0.4803	1.1990
3	21	3	20.3826	19.8938	-19.8938	0.0000	0.4889	1.1990
5	21	3	20.3826	19.9777	19.9777	0.0000	0.4050	1.1990
7	21	3	50.3571	51.7205	-51.7205	0.0000	-1.3633	1.1990
11	21	3	22.7806	22.4523	22.4523	0.0000	0.3283	1.1990
2	22	3	13.1888	14.1254	-14.1254	0.0000	-0.9367	1.1990
8	22	3	13.1888	12.6653	12.6653	0.0000	0.5235	1.1990
1	23	3	11.9898	11.6682	-11.6682	0.0000	0.3216	1.1990
3	23	3	91.1224	89.3675	89.3675	0.0000	1.7549	1.1990
5	23	3	109.1071	108.3845	-108.3845	0.0000	0.7226	1.1990
7	23	3	22.7806	21.3909	21.3909	0.0000	1.3897	1.1990
9	23	3	23.9796	24.4974	-24.4974	0.0000	-0.5178	1.1990
11	23	3	44.3622	41.3159	-41.3159	0.0000	3.0463	1.1990
4	24	3	3.5969	6.2014	-6.2014	0.0000	-2.6044	1.1990
8	24	3	7.1939	7.5354	-7.5354	0.0000	-0.3415	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
11	17	2	27.5765	27.1271	27.1271	0.0000	0.4494	1.1990
13	17	2	29.9745	30.4667	30.4667	0.0000	-0.4922	1.1990
15	17	2	52.7551	48.3774	-48.3774	0.0000	4.3776	1.1990
10	18	2	28.7755	29.5640	29.5640	0.0000	-0.7885	1.1990
12	18	2	10.7908	12.0810	12.0810	0.0000	-1.2901	1.1990
14	18	2	26.3775	26.5222	-26.5222	0.0000	-0.1447	1.1990
9	19	2	15.5867	15.7034	15.7034	0.0000	-0.1167	1.1990
11	19	2	22.7806	21.2007	-21.2007	0.0000	1.5799	1.1990
15	19	2	13.1888	12.1757	12.1757	0.0000	1.0130	1.1990
8	20	2	68.3418	69.0241	69.0241	0.0000	-0.6823	1.1990
12	20	2	28.7755	28.8143	28.8143	0.0000	-0.0388	1.1990
14	20	2	41.9643	39.6849	39.6849	0.0000	2.2793	1.1990
7	21	2	56.3520	57.3848	-57.3848	0.0000	-1.0327	1.1990
9	21	2	16.7857	15.6990	15.6990	0.0000	1.0868	1.1990
11	21	2	17.9847	17.5496	-17.5496	0.0000	0.4351	1.1990
13	21	2	14.3877	13.4160	13.4160	0.0000	0.9718	1.1990
4	22	2	33.5714	33.4360	-33.4360	0.0000	0.1354	1.1990
8	22	2	23.9796	23.7294	-23.7294	0.0000	0.2501	1.1990
10	22	2	9.5918	7.8806	-7.8806	0.0000	1.7112	1.1990
1	23	2	37.1683	36.3509	-36.3509	0.0000	0.8175	1.1990
3	23	2	7.1939	7.8709	7.8709	0.0000	-0.6770	1.1990
5	23	2	23.9796	22.8678	-22.8678	0.0000	1.1118	1.1990
7	23	2	29.9745	28.8838	28.8838	0.0000	1.0907	1.1990
11	23	2	3.5969	2.0846	2.0846	0.0000	1.5123	1.1990
0	24	2	62.3469	60.6786	-60.6786	0.0000	1.6684	1.1990
2	24	2	44.3622	42.9117	-42.9117	0.0000	1.4506	1.1990
4	24	2	52.7551	50.8290	-50.8290	0.0000	1.9260	1.1990
6	24	2	37.1683	36.9174	-36.9174	0.0000	0.2510	1.1990
8	24	2	52.7551	49.4655	-49.4655	0.0000	3.2896	1.1990
10	24	2	33.5714	31.5305	-31.5305	0.0000	2.0409	1.1990
1	25	2	51.5561	50.4346	50.4346	0.0000	1.1215	1.1990
3	25	2	35.9694	34.4532	-34.4532	0.0000	1.5162	1.1990
5	25	2	14.3877	14.1234	-14.1234	0.0000	0.2643	1.1990
7	25	2	56.3520	52.6352	52.6352	0.0000	3.7168	1.1990
9	25	2	50.3571	48.2982	-48.2982	0.0000	2.0589	1.1990
0	26	2	26.3775	26.5975	26.5975	0.0000	-0.2200	1.1990
2	26	2	58.7500	55.6777	-55.6777	0.0000	3.0723	1.1990
4	26	2	15.5867	14.7997	-14.7997	0.0000	0.7870	1.1990
6	26	2	4.7959	2.4558	-2.4558	0.0000	2.3401	1.1990
8	26	2	61.1479	59.2947	-59.2947	0.0000	1.8532	1.1990
1	27	2	3.5969	6.4824	6.4824	0.0000	-2.8854	1.1990
3	27	2	17.9847	17.7308	17.7308	0.0000	0.2539	1.1990
5	27	2	15.5867	14.1445	14.1445	0.0000	1.4422	1.1990
7	27	2	19.1837	17.4623	-17.4623	0.0000	1.7214	1.1990
0	28	2	23.9796	21.2858	-21.2858	0.0000	2.6938	1.1990
2	28	2	39.5663	37.4886	37.4886	0.0000	2.0777	1.1990
6	28	2	35.9694	32.9879	-32.9879	0.0000	2.9814	1.1990
1	29	2	19.1837	14.2564	-14.2564	0.0000	4.9272	1.1990
3	29	2	14.3877	13.4357	13.4357	0.0000	0.9520	1.1990
15	1	3	95.9183	97.8430	97.8430	0.0000	-1.9247	1.1990
17	1	3	19.1837	18.3256	-18.3256	0.0000	0.8581	1.1990
19	1	3	22.7806	23.0879	-23.0879	0.0000	-0.3073	1.1990
18	2	3	13.1888	13.3750	13.3750	0.0000	-0.1862	1.1990
17	3	3	19.1837	18.0669	-18.0669	0.0000	1.1167	1.1990
19	3	3	20.3826	18.8842	-18.8842	0.0000	1.4985	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
10	24	3	5.9949	3.2181	3.2181	0.0000	2.7768	1.1990
1	25	3	52.7551	50.3155	50.3155	0.0000	2.4396	1.1990
5	25	3	23.9796	24.5632	24.5632	0.0000	-0.5836	1.1990
7	25	3	8.3929	8.6586	-8.6586	0.0000	-0.2658	1.1990
6	26	3	9.5918	7.6561	-7.6561	0.0000	1.9357	1.1990
1	27	3	8.3929	8.6205	8.6205	0.0000	-0.2277	1.1990
3	27	3	19.1837	16.2171	-16.2171	0.0000	2.9666	1.1990
5	27	3	62.3469	59.5138	59.5138	0.0000	2.8331	1.1990
14	0	4	56.3520	58.6949	58.6949	0.0000	-2.3429	1.1990
16	0	4	51.5561	51.0244	51.0244	0.0000	0.5317	1.1990
15	1	4	16.7857	18.1279	-18.1279	0.0000	-1.3422	1.1990
17	1	4	69.5408	65.9003	65.9003	0.0000	3.6405	1.1990
14	2	4	23.9796	24.1680	24.1680	0.0000	-0.1884	1.1990
16	2	4	19.1837	18.1483	-18.1483	0.0000	1.0354	1.1990
15	3	4	10.7908	10.1448	10.1448	0.0000	0.6460	1.1990
17	3	4	17.9847	17.0657	-17.0657	0.0000	0.9190	1.1990
14	4	4	32.3724	33.1628	-33.1628	0.0000	-0.7903	1.1990
16	4	4	32.3724	32.3769	32.3769	0.0000	-0.0045	1.1990
13	5	4	40.7653	42.2496	-42.2496	0.0000	-1.4843	1.1990
15	5	4	35.9694	36.1118	36.1118	0.0000	-0.1424	1.1990
17	5	4	50.3571	51.3430	-51.3430	0.0000	-0.9858	1.1990
12	6	4	25.1786	25.3325	25.3325	0.0000	-0.1539	1.1990
14	6	4	19.1837	20.2659	20.2659	0.0000	-1.0823	1.1990
13	7	4	4.7959	6.3885	-6.3885	0.0000	-1.5926	1.1990
15	7	4	16.7857	15.4290	-15.4290	0.0000	1.3567	1.1990
17	7	4	8.3929	8.9997	8.9997	0.0000	-0.6069	1.1990
12	8	4	27.5765	28.6581	28.6581	0.0000	-1.0816	1.1990
14	8	4	4.7959	5.5669	-5.5669	0.0000	-0.7710	1.1990
16	8	4	4.7959	4.5446	4.5446	0.0000	0.2513	1.1990
11	9	4	37.1683	38.5578	38.5578	0.0000	-1.3895	1.1990
15	9	4	14.3877	13.5292	-13.5292	0.0000	0.8585	1.1990
12	10	4	29.9745	30.5711	-30.5711	0.0000	-0.5966	1.1990
16	10	4	28.7755	28.5803	-28.5803	0.0000	0.1952	1.1990
11	11	4	21.5816	22.9052	-22.9052	0.0000	-1.3235	1.1990
13	11	4	28.7755	28.3840	28.3840	0.0000	0.3915	1.1990
15	11	4	9.5918	7.8110	7.8110	0.0000	1.7809	1.1990
10	12	4	3.5969	6.4910	6.4910	0.0000	-2.8941	1.1990
12	12	4	77.9336	80.7567	-80.7567	0.0000	-2.8231	1.1990
14	12	4	51.5561	52.7581	-52.7581	0.0000	-1.2020	1.1990
9	13	4	101.9132	108.3058	108.3058	0.0000	-6.3926	1.1990
11	13	4	41.9643	43.7672	-43.7672	0.0000	-1.8030	1.1990
13	13	4	40.7653	8.4901	38.4901	0.0000	2.2752	1.1990
8	14	4	22.7806	24.4562	-24.4562	0.0000	-1.6756	1.1990
10	14	4	26.3775	27.0887	-27.0887	0.0000	-0.7112	1.1990
12	14	4	5.9949	8.4352	-8.4352	0.0000	-2.4403	1.1990
14	14	4	9.5918	8.5679	-8.5679	0.0000	1.0239	1.1990
7	15	4	33.5714	34.9467	34.9467	0.0000	-1.3753	1.1990
9	15	4	13.1888	13.9302	-13.9302	0.0000	-0.7415	1.1990
11	15	4	65.9438	68.0345	68.0345	0.0000	-2.0907	1.1990
13	15	4	14.3877	14.5144	-14.5144	0.0000	-0.1266	1.1990
6	16	4	7.1939	4.4907	4.4907	0.0000	2.7032	1.1990
10	16	4	16.7857	17.6160	-17.6160	0.0000	-0.8303	1.1990
12	16	4	25.1786	22.7716	22.7716	0.0000	2.4070	1.1990
14	16	4	16.7857	17.4583	17.4583	0.0000	-0.6726	1.1990
5	17	4	52.7551	56.1093	-56.1093	0.0000	-3.3542	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
7	17	4	53.9541	54.6356	54.6356	0.0000	-0.6816	1.1990
9	17	4	39.5663	39.0967	-39.0967	0.0000	0.4696	1.1990
11	17	4	51.5561	51.0701	51.0701	0.0000	0.4860	1.1990
2	18	4	20.3826	21.0259	21.0259	0.0000	-0.6433	1.1990
4	18	4	15.5867	16.5361	-16.5361	0.0000	-0.9494	1.1990
6	18	4	50.3571	52.5946	-52.5946	0.0000	-2.2375	1.1990
8	18	4	40.7653	41.9128	41.9128	0.0000	-1.1475	1.1990
10	18	4	31.1735	31.0084	-31.0084	0.0000	0.1650	1.1990
12	18	4	9.5918	10.7875	10.7875	0.0000	-1.1957	1.1990
1	19	4	14.3877	14.3801	-14.3801	0.0000	0.0076	1.1990
3	19	4	9.5918	12.0790	12.0790	0.0000	-2.4872	1.1990
5	19	4	9.5918	8.8173	-8.8173	0.0000	0.7745	1.1990
9	19	4	8.3929	8.8733	-8.8733	0.0000	-0.4805	1.1990
11	19	4	13.1888	10.2299	10.2299	0.0000	2.9589	1.1990
0	20	4	8.3929	8.4595	8.4595	0.0000	-0.0667	1.1990
2	20	4	67.1428	69.8264	-69.8264	0.0000	-2.6836	1.1990
4	20	4	10.7908	9.0444	-9.0444	0.0000	1.7464	1.1990
6	20	4	21.5816	20.4868	20.4868	0.0000	1.0948	1.1990
8	20	4	55.1530	56.8879	-56.8879	0.0000	-1.7348	1.1990
10	20	4	4.7959	4.7638	4.7638	0.0000	0.0321	1.1990
1	21	4	29.9745	29.1490	-29.1490	0.0000	0.8254	1.1990
3	21	4	20.3826	22.8519	22.8519	0.0000	-2.4692	1.1990
5	21	4	23.9796	23.1308	23.1308	0.0000	0.8488	1.1990
7	21	4	49.1581	48.9467	-48.9467	0.0000	0.2114	1.1990
9	21	4	38.3673	37.1804	37.1804	0.0000	1.1870	1.1990
0	22	4	7.1939	7.9523	-7.9523	0.0000	-0.7585	1.1990
2	22	4	19.1837	19.3647	19.3647	0.0000	-0.1810	1.1990
4	22	4	14.3877	14.2641	14.2641	0.0000	0.1236	1.1990
6	22	4	20.3826	19.4798	19.4798	0.0000	0.9028	1.1990
8	22	4	7.1939	7.7245	7.7245	0.0000	-0.5306	1.1990
3	23	4	11.9898	9.8405	-9.8405	0.0000	2.1493	1.1990
5	23	4	11.9898	11.8657	11.8657	0.0000	0.1241	1.1990
7	23	4	13.1888	13.8633	-13.8633	0.0000	-0.6746	1.1990
0	24	4	58.7500	58.7116	58.7116	0.0000	0.0383	1.1990
2	24	4	56.3520	55.6190	55.6190	0.0000	0.7330	1.1990
4	24	4	17.9847	17.6856	17.6856	0.0000	0.2991	1.1990
6	24	4	28.7755	27.5645	27.5645	0.0000	1.2110	1.1990
1	25	4	63.5459	61.6216	61.6216	0.0000	1.9243	1.1990
3	25	4	43.1632	41.4741	-41.4741	0.0000	1.6891	1.1990
5	25	4	7.1939	3.0186	3.0186	0.0000	4.1753	1.1990
0	26	4	22.7808	22.4159	-22.4159	0.0000	0.3647	1.1990
11	1	5	10.7908	11.4307	-11.4307	0.0000	-0.6399	1.1990
13	1	5	15.5867	16.9109	-16.9109	0.0000	-1.3242	1.1990
15	1	5	5.9949	9.3416	-9.3416	0.0000	-3.3467	1.1990
10	2	5	35.9694	38.5898	-38.5898	0.0000	-2.6204	1.1990
12	2	5	43.1632	45.3122	45.3122	0.0000	-2.1490	1.1990
14	2	5	41.9643	43.6320	-43.6320	0.0000	-1.6678	1.1990
11	3	5	39.5663	40.3869	40.3869	0.0000	-0.8206	1.1990
13	3	5	44.3622	44.7664	-44.7664	0.0000	-0.4042	1.1990
15	3	5	19.1837	18.2180	18.2180	0.0000	0.9656	1.1990
10	4	5	9.5918	10.5546	-10.5546	0.0000	-0.9627	1.1990
12	4	5	27.5765	27.3626	27.3626	0.0000	0.2139	1.1990
14	4	5	16.7857	17.7973	17.7973	0.0000	-1.0116	1.1990
9	5	5	68.3418	71.3444	71.3444	0.0000	-3.0026	1.1990
11	5	5	7.1939	7.6920	7.6920	0.0000	-0.4981	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
13	5	5	71.9387	74.5254	74.5254	0.0000	-2.5867	1.1990
10	6	5	52.7551	54.5647	54.5647	0.0000	-1.8097	1.1990
12	6	5	39.5563	40.7299	-40.7299	0.0000	-1.1636	1.1990
14	6	5	26.3775	25.4059	25.4059	0.0000	0.9716	1.1990
9	7	5	77.9336	81.4400	81.4400	0.0000	-3.5064	1.1990
11	7	5	52.7551	54.2408	54.2408	0.0000	-1.4858	1.1990
13	7	5	17.9847	18.7936	18.7936	0.0000	-0.8089	1.1990
15	7	5	14.3877	15.9225	15.9225	0.0000	-1.5348	1.1990
8	8	5	28.7755	29.7439	29.7439	0.0000	-0.9684	1.1990
10	8	5	35.9694	37.4267	37.4267	0.0000	-1.4574	1.1990
14	8	5	11.9898	10.1186	10.1186	0.0000	1.8712	1.1990
11	9	5	16.7857	16.8364	-16.8364	0.0000	-0.0507	1.1990
13	9	5	7.1939	5.2601	5.2601	0.0000	1.9338	1.1990
8	10	5	23.9796	24.6897	-24.6897	0.0000	-0.7101	1.1990
10	10	5	8.3929	8.2244	-8.2244	0.0000	0.1685	1.1990
12	10	5	57.5510	58.0591	58.0591	0.0000	-0.5082	1.1990
14	10	5	29.9745	30.0233	-30.0233	0.0000	-0.0488	1.1990
7	11	5	55.1570	57.2071	-57.2071	0.0000	-2.0540	1.1990
9	11	5	8.3929	8.5931	8.5931	0.0000	-0.2002	1.1990
11	11	5	35.9694	37.1478	37.1478	0.0000	-1.1785	1.1990
13	11	5	63.5459	63.8639	-63.8639	0.0000	-0.3180	1.1990
6	12	5	32.3724	33.3743	33.3743	0.0000	-1.0018	1.1990
8	12	5	9.5918	10.0954	-10.0954	0.0000	-0.5036	1.1990
10	12	5	15.5867	16.2320	-16.2320	0.0000	-0.6453	1.1990
3	13	5	70.7398	71.5109	71.5109	0.0000	-0.7711	1.1990
5	13	5	37.1683	38.2937	-38.2937	0.0000	-1.1253	1.1990
7	13	5	50.3571	52.3459	52.3459	0.0000	-1.9888	1.1990
9	13	5	22.7806	22.8098	22.8098	0.0000	-0.0292	1.1990
13	13	5	47.9592	48.5011	48.5011	0.0000	-0.5419	1.1990
2	14	5	20.3826	21.8860	-21.8860	0.0000	-1.5033	1.1990
4	14	5	80.3316	84.1005	84.1005	0.0000	-3.7689	1.1990
6	14	5	62.3469	66.1039	-66.1039	0.0000	-3.7569	1.1990
12	14	5	26.3775	26.6149	-26.6149	0.0000	-0.2374	1.1990
3	15	5	13.1888	14.3543	14.3543	0.0000	-1.1655	1.1990
5	15	5	13.1888	12.5656	12.5656	0.0000	0.6232	1.1990
7	15	5	11.9898	12.6643	12.6643	0.0000	-0.6746	1.1990
9	15	5	4.7959	3.6487	-3.6487	0.0000	1.1472	1.1990
2	16	5	21.5816	23.2594	-23.2594	0.0000	-1.6778	1.1990
6	16	5	9.5918	8.2584	-8.2584	0.0000	1.3334	1.1990
8	16	5	10.7908	11.0305	11.0305	0.0000	-0.2397	1.1990
10	16	5	17.9847	18.1473	18.1473	0.0000	-0.1626	1.1990
1	17	5	33.5714	35.3002	-35.3002	0.0000	-1.7288	1.1990
3	17	5	33.5714	35.0322	-35.0322	0.0000	-1.4608	1.1990
5	17	5	53.9541	57.0900	-57.0900	0.0000	-3.1359	1.1990
7	17	5	43.1632	44.8515	-44.8515	0.0000	-1.6882	1.1990
9	17	5	21.5816	20.7606	-20.7606	0.0000	0.8210	1.1990
2	18	5	2.3980	10.7479	10.7479	0.0000	-8.3499	1.1990
4	18	5	45.5612	48.0664	-48.0664	0.0000	-2.5052	1.1990
6	18	5	35.9694	35.5797	35.5797	0.0000	0.3897	1.1990
8	18	5	8.3929	9.9994	9.9994	0.0000	-1.6066	1.1990
10	18	5	10.7908	9.5820	-9.5820	0.0000	1.2088	1.1990
1	19	5	25.1786	27.5288	-27.5288	0.0000	-2.3503	1.1990
3	19	5	71.9387	73.5404	-73.5404	0.0000	-1.6016	1.1990
7	19	5	56.3520	57.7506	-57.7506	0.0000	-1.3986	1.1990
9	19	5	62.3469	61.9787	-61.9787	0.0000	0.3682	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
2	20	5	40.7653	40.1768	40.1768	0.0000	0.5885	1.1990
4	20	5	3.5969	6.6776	-6.6776	0.0000	-3.0807	1.1990
6	20	5	21.5816	22.0830	22.0830	0.0000	-0.5014	1.1990
8	20	5	23.9796	23.9851	-23.9851	0.0000	-0.0055	1.1990
3	21	5	11.9898	11.1156	11.1156	0.0000	0.8742	1.1990
5	21	5	23.9796	23.1041	-23.1041	0.0000	0.8755	1.1990
4	22	5	45.5612	46.0556	46.0556	0.0000	-0.4944	1.1990
1	23	5	20.3826	20.0212	20.0212	0.0000	0.3615	1.1990
4	0	6	51.5561	50.5044	-50.5044	0.0000	1.0517	1.1990
6	0	6	104.3112	105.6145	-105.6145	0.0000	-1.3033	1.1990
8	0	6	100.7142	102.8171	102.8171	0.0000	-2.1028	1.1990
10	0	6	169.0560	173.5383	-173.5383	0.0000	-4.4823	1.1990
12	0	6	9.5918	9.9751	-9.9751	0.0000	-0.3833	1.1990
7	1	6	15.5867	16.1225	16.1225	0.0000	-0.5358	1.1990
13	1	6	16.7857	16.4856	-16.4856	0.0000	0.3001	1.1990
8	2	6	25.1786	26.9272	-26.9272	0.0000	-1.7487	1.1990
10	2	6	3.5969	5.8199	5.8199	0.0000	-2.2229	1.1990
12	2	6	40.7653	41.4778	-41.4778	0.0000	-0.7125	1.1990
3	3	6	40.7653	38.6900	38.6900	0.0000	2.0753	1.1990
7	3	6	23.9796	22.7934	-22.7934	0.0000	1.1861	1.1990
9	3	6	9.5918	9.5152	-9.5152	0.0000	0.0766	1.1990
11	3	6	8.3929	8.9916	-8.9916	0.0000	-0.5987	1.1990
13	3	6	16.7857	16.7659	16.7659	0.0000	0.0198	1.1990
6	4	6	39.5663	40.8011	40.8011	0.0000	-1.2348	1.1990
8	4	6	29.9745	30.2275	-30.2275	0.0000	-0.2530	1.1990
10	4	6	62.3469	63.1303	63.1303	0.0000	-0.7833	1.1990
1	5	6	8.3929	8.3726	8.3726	0.0000	0.0203	1.1990
3	5	6	22.7806	22.7107	-22.7107	0.0000	0.0699	1.1990
5	5	6	13.1888	13.1583	13.1583	0.0000	0.0305	1.1990
7	5	6	16.7857	16.5029	16.5029	0.0000	0.2828	1.1990
11	5	6	10.7908	10.2702	-10.2702	0.0000	0.5207	1.1990
0	6	6	21.5816	21.9507	21.9507	0.0000	-0.3691	1.1990
4	6	6	29.9745	31.9577	-31.9577	0.0000	-1.9833	1.1990
6	6	6	33.5714	33.6969	33.6969	0.0000	-0.1255	1.1990
8	6	6	63.5459	65.6428	-65.6428	0.0000	-2.0969	1.1990
10	6	6	47.9592	48.9703	48.9703	0.0000	-1.0111	1.1990
12	6	6	13.1888	14.1460	-14.1460	0.0000	-0.9572	1.1990
3	7	6	16.7857	16.6507	16.6507	0.0000	0.1350	1.1990
7	7	6	14.3877	14.7859	-14.7859	0.0000	-0.3982	1.1990
11	7	6	4.7959	6.0311	-6.0311	0.0000	-1.2351	1.1990
0	8	6	112.7040	118.5803	-118.5803	0.0000	-5.8763	1.1990
2	8	6	47.9592	48.9232	48.9232	0.0000	-0.9641	1.1990
4	8	6	33.5714	34.6114	-34.6114	0.0000	-1.0400	1.1990
6	8	6	58.7500	61.1563	-61.1563	0.0000	-2.4064	1.1990
8	8	6	51.5561	53.0306	53.0306	0.0000	-1.4746	1.1990
10	8	6	67.1428	68.1165	-68.1165	0.0000	-0.9737	1.1990
12	8	6	11.9898	9.3187	-9.3187	0.0000	2.6711	1.1990
3	9	6	5.9949	6.5361	-6.5361	0.0000	-0.5412	1.1990
5	9	6	5.9949	5.8681	-5.8681	0.0000	0.1268	1.1990
11	9	6	14.3877	13.8444	13.8444	0.0000	0.5434	1.1990
0	10	6	13.1888	13.8217	13.8217	0.0000	-0.6329	1.1990
2	10	6	13.1888	12.3408	12.3408	0.0000	0.8480	1.1990
4	10	6	37.1683	38.0795	38.0795	0.0000	-0.9111	1.1990
6	10	6	23.9796	23.9530	23.9530	0.0000	0.0265	1.1990
8	10	6	37.1683	38.1643	38.1643	0.0000	-0.9960	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
10	10	6	20.3826	19.6884	-19.6884	0.0000	0.6942	1.1990
1	11	6	15.5867	14.9772	-14.9772	0.0000	0.6095	1.1990
3	11	6	25.1786	25.7926	-25.7926	0.0000	-0.6140	1.1990
5	11	6	9.5918	10.0436	-10.0436	0.0000	-0.4518	1.1990
7	11	6	19.1837	18.9018	18.9018	0.0000	0.2818	1.1990
9	11	6	8.3929	10.0710	10.0710	0.0000	-1.6782	1.1990
0	12	6	135.4846	145.0598	145.0598	0.0000	-9.5752	1.1990
2	12	6	4.7959	3.8995	3.8995	0.0000	0.8965	1.1990
4	12	6	86.3265	90.9479	90.9479	0.0000	-4.6214	1.1990
6	12	6	37.1683	39.9964	39.9964	0.0000	-2.8280	1.1990
8	12	6	17.9847	19.5205	19.5205	0.0000	-1.5358	1.1990
10	12	6	56.3520	58.8569	58.8569	0.0000	-2.5048	1.1990
3	13	6	22.7806	22.2339	22.2339	0.0000	0.5467	1.1990
5	13	6	9.5918	9.0884	-9.0884	0.0000	0.5034	1.1990
7	13	6	19.1837	19.4327	-19.4327	0.0000	-0.2491	1.1990
0	14	6	111.5050	115.5556	115.5556	0.0000	-4.0506	1.1990
2	14	6	11.9898	12.2599	12.2599	0.0000	-0.2701	1.1990
4	14	6	22.7806	22.0315	22.0315	0.0000	0.7491	1.1990
6	14	6	13.1888	14.6163	14.6163	0.0000	-1.4276	1.1990
8	14	6	37.1683	38.0687	-38.0687	0.0000	-0.9004	1.1990
3	15	6	19.1837	20.9418	-20.9418	0.0000	-1.7581	1.1990
7	15	6	8.3929	8.1822	8.1822	0.0000	0.2106	1.1990
0	16	6	70.7398	74.6428	-74.6428	0.0000	-3.9030	1.1990
2	16	6	85.1275	87.5856	87.5856	0.0000	-2.4581	1.1990
4	16	6	38.3673	40.3537	-40.3537	0.0000	-1.9863	1.1990
6	16	6	53.9541	57.0939	-57.0939	0.0000	-3.1399	1.1990
1	17	6	8.3929	7.4722	-7.4722	0.0000	0.9207	1.1990
3	17	6	7.1939	5.7321	-5.7321	0.0000	1.4618	1.1990
0	18	6	8.3929	6.3618	6.3618	0.0000	2.0311	1.1990
2	18	6	22.7806	21.9463	21.9463	0.0000	0.8343	1.1990
4	18	6	7.1939	7.9175	-7.9175	0.0000	-0.7236	1.1990
1	19	6	8.3929	7.2429	7.2429	0.0000	1.1500	1.1990
1	1	7	21.5816	21.1293	21.1293	0.0000	0.4523	1.1990
5	1	7	14.3877	12.5825	12.5825	0.0000	1.8052	1.1990
7	1	7	11.9898	13.6505	13.6505	0.0000	-1.6607	1.1990
2	2	7	59.9489	57.5201	57.5201	0.0000	2.4288	1.1990
4	2	7	62.3469	60.4314	-60.4314	0.0000	1.9155	1.1990
6	2	7	51.5561	50.9099	50.9099	0.0000	0.6462	1.1990
8	2	7	40.7653	40.0743	-40.0743	0.0000	0.6909	1.1990
1	3	7	35.9694	36.5055	-36.5055	0.0000	-0.5362	1.1990
3	3	7	52.7551	50.2394	50.2394	0.0000	2.5156	1.1990
5	3	7	29.9745	30.2217	-30.2217	0.0000	-0.2472	1.1990
7	3	7	44.3622	45.0038	45.0038	0.0000	-0.6415	1.1990
2	4	7	23.9796	22.4228	-22.4228	0.0000	1.5568	1.1990
6	4	7	15.5867	16.0051	-16.0051	0.0000	-0.4184	1.1990
8	4	7	17.9847	19.7036	19.7036	0.0000	-1.7189	1.1990
1	5	7	32.3724	33.2024	-33.2024	0.0000	-0.8300	1.1990
3	5	7	82.7295	83.5182	-83.5182	0.0000	-0.7887	1.1990
7	5	7	61.1479	62.5841	-62.5841	0.0000	-1.4362	1.1990
2	6	7	40.7653	39.9496	-39.9496	0.0000	0.8156	1.1990
4	6	7	9.5918	11.6342	11.6342	0.0000	-2.0424	1.1990
6	6	7	38.3673	39.0999	-39.0999	0.0000	-0.7325	1.1990
1	7	7	20.3326	22.2833	-22.2833	0.0000	-1.9007	1.1990
3	7	7	49.1581	49.7704	-49.7704	0.0000	-0.6123	1.1990
5	7	7	67.1428	68.0405	-68.0405	0.0000	-0.8977	1.1990

H	K	L	Y(OBS)	Y(CALC)	A	B	OBS-CALC	SIG(O)
7	7	7	62.3469	63.7216	-63.7216	0.0000	-1.3747	1.1990
2	8	7	44.3622	44.1610	-44.1610	0.0000	0.2013	1.1990
4	8	7	8.3929	9.0532	-9.0532	0.0000	-0.6604	1.1990
6	8	7	33.5714	34.6042	-34.6042	0.0000	-1.0328	1.1990
3	9	7	5.9949	6.6199	-6.6199	0.0000	-0.6250	1.1990
5	9	7	10.7908	12.2450	12.2450	0.0000	-1.4542	1.1990
2	10	7	13.1888	13.5350	13.5350	0.0000	-0.3462	1.1990
4	10	7	65.9438	67.3820	-67.3820	0.0000	-1.4382	1.1990
1	11	7	10.7908	11.0989	-11.0989	0.0000	-0.3081	1.1990
3	11	7	43.1632	45.2233	45.2233	0.0000	-2.0600	1.1990
2	12	7	27.5765	29.5328	29.5328	0.0000	-1.9563	1.1990
1	13	7	13.1888	13.2162	-13.2162	0.0000	-0.0274	1.1990

END OF FOURIER TAPE PROCESSING

CARPHOLITE(NEW DATA) 0-65 DEGREES(FINAL PARAMETRS FOR LISTING

TIME FOR MATRIX SETUP WAS 91 SEC.
NUMBER OF OBSERVATIONS ACCEPTED IS 1163, NUMBER OF DEGREES OF FREEDOM IS 11
NUMBER OF PARAMETERS VARIED IN THIS CYCLE WAS 0, TOTAL NUMBER OF PARAMETER

********** MEASURES OF AGREEMENT BEFORE CYCLE 1 ***

	R(F)	R(F**2)	W
FOR REFLECTIONS			
ACCEPTED BY LOGIC			
ALL INTENSITIES (1163 REFLECTIONS)			
RATIO	0.0439	0.0743	0.0
NUMERATOR	0.225680365E 04	0.313663802E 06	0.93
DENOMINATOR	0.514585639E 05	0.422172752E 07	0.34
GREATER THAN YMIN = 0.00 (1163 REFLECTIONS)			
RATIO	0.0439	0.0743	0.0
NUMERATOR	0.225680365E 04	0.313663802E 06	0.93
DENOMINATOR	0.514585639E 05	0.422172752E 07	0.34
NO TEST ON LOGIC			
ALL INTENSITIES (1163 REFLECTIONS)			
RATIO	0.0439	0.0743	0.0
NUMERATOR	0.225680365E 04	0.313663802E 06	0.93
DENOMINATOR	0.514585639E 05	0.422172752E 07	0.34
GREATER THAN YMIN = 0.00 (1163 REFLECTIONS)			
RATIO	0.0439	0.0743	0.0
NUMERATOR	0.225680365E 04	0.313663802E 06	0.93
DENOMINATOR	0.514585639E 05	0.422172752E 07	0.34

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