

AM-88-385

Refinement of the substructure and superstructure of romanechite

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For deposit: Table 3 and Table 6

American Mineralogist, 73, 9-10, 1155-1161. pp (18)

Table 3. Structure factor table for the romanechite subcell.

H	K	L	G	C	F OBS	F CALC	H	K	L	G	C	F OBS	F CALC
0	0	1	1		14.11	13.98	5	1	-3	1		13.48	12.27
2	0	0	1		42.40	37.66	6	0	-4	1		202.97	205.62
2	0	-1	1		31.85	27.82	8	0	1	1		46.47	50.02
2	0	1	1		43.23	42.57	3	1	4	1		102.28	100.29
0	0	2	1		50.79	50.45	5	1	3	1		8.77	3.30
2	0	-2	1		59.94	50.10	4	0	5	1		23.77	22.25
2	0	2	1		98.53	100.07	8	0	-2	1		25.43	25.58
4	0	0	1		123.13	123.17	6	0	4	1		210.85	217.67
4	0	-1	1		128.72	132.69	7	1	0	1		20.21	20.62
4	0	1	1		106.48	113.87	7	1	-1	1		33.18	34.21
0	0	3	1		52.57	52.52	8	0	2	1		22.57	27.26
2	0	-3	1		115.57	114.50	0	0	6	1		22.88	24.15
4	0	-2	1		99.23	102.80	7	1	1	1		36.55	35.49
2	0	3	1		158.09	157.69	1	1	-5	1		49.84	47.45
1	1	0	1	L	4.51	1.34	1	1	5	1		22.82	22.73
4	0	2	1		64.14	53.71	2	0	-6	1	L	4.07	0.38
1	1	-1	1		43.10	42.43	7	1	-2	1		205.96	207.43
1	1	1	1		56.70	50.83	5	1	-4	1		29.88	31.20
3	1	0	1		80.16	85.28	8	0	-3	1		10.04	9.00
1	1	-2	1		62.17	54.94	2	0	6	1		39.48	41.06
0	0	4	1		52.57	49.76	7	1	2	1		90.90	93.47
4	0	-3	1		65.16	53.94	3	1	-5	1		83.97	84.41
1	1	2	1		158.41	145.54	6	0	-5	1		34.20	34.90
3	1	-1	1		134.13	139.49	5	1	4	1		39.67	33.97
3	1	1	1		73.87	53.59	8	0	3	1		37.06	40.55
6	0	0	1		19.07	19.32	3	1	5	1		148.30	145.53
4	0	3	1		46.85	47.01	4	0	-6	1		60.83	64.05
2	0	-4	1		103.04	103.11	7	1	-3	1		7.56	3.92
6	0	-1	1		69.35	73.11	6	0	5	1		18.31	23.81
2	0	4	1		171.50	170.12	8	0	-4	1		62.30	54.39
6	0	1	1		59.44	65.21	4	0	6	1		26.89	25.41
3	1	-2	1		184.60	180.14	7	1	3	1		50.54	51.17
3	1	2	1		123.51	113.83	0	2	0	1		280.78	253.33
6	0	-2	1		53.40	55.02	0	2	1	1		12.01	3.73
1	1	-3	1		74.95	74.17	5	1	-5	1		102.09	103.11
1	1	3	1		23.52	24.18	1	1	-6	1		217.72	217.65
6	0	2	1	L	7.56	3.28	2	2	0	1		31.72	25.26
4	0	-4	1		96.37	94.61	1	1	6	1		46.21	44.14
5	1	0	1		19.20	19.24	10	0	0	1	L	7.37	9.64
5	1	-1	1	L	5.09	3.53	2	2	-1	1		18.05	17.70
3	1	-3	1		87.91	83.92	10	0	-1	1		24.28	23.23
4	0	4	1		64.84	65.02	8	0	4	1		17.42	13.44
5	1	1	1		37.44	37.59	2	2	1	1		27.46	25.59
0	0	5	1		72.59	75.61	0	0	7	1		52.06	52.91
3	1	3	1		48.06	43.58	7	1	-4	1		12.71	13.86
6	0	-3	1		7.69	3.40	0	2	2	1		32.23	31.69
2	0	-5	1		22.82	23.80	10	0	1	1	L	5.85	12.45
5	1	-2	1		87.02	83.65	5	1	5	1		20.47	19.53
6	0	3	1		37.76	33.77	2	0	-7	1		11.38	11.09
2	0	5	1		65.92	63.89	9	1	0	1		97.89	105.10
1	1	-4	1		20.72	20.64	3	1	-6	1		10.49	13.21
5	1	2	1		188.35	185.68	9	1	-1	1		57.78	64.23
1	1	4	1		11.19	11.68	10	0	-2	1		44.31	50.93
8	0	0	1		99.74	101.44	6	0	-6	1		16.85	17.92
3	1	-4	1		78.44	72.55	2	2	-2	1		37.76	33.72
8	0	-1	1		39.67	42.72	2	0	7	1		66.17	67.72
4	0	-5	1		23.39	25.25	2	2	2	1		67.00	54.09

H	K	L	S	C	F OBS	F CALC	H	K	L	S	C	F OBS	F CALC
9	1	1	1		108.26	111.45	4	0	-8	1		77.23	77.10
7	1	4	1	L	4.96	1.66	11	1	-1	1		43.73	44.55
3	1	6	1		62.74	62.05	10	0	-5	1		60.52	62.04
10	0	2	1		54.79	53.39	4	2	4	1		43.04	41.57
4	2	0	1		85.88	84.46	5	1	-7	1		30.96	31.89
9	1	-2	1		39.41	39.76	0	2	5	1		56.13	55.14
8	0	-5	1		38.52	39.59	6	2	-3	1		10.81	11.72
4	2	-1	1		89.82	85.89	12	0	1	1		16.08	2.64
4	2	1	1		78.51	77.20	11	1	1	1	L	5.98	2.10
0	2	3	1		34.58	33.88	2	2	-5	1		18.24	17.79
4	0	-7	1		132.66	135.43	12	0	-2	1		16.46	15.54
6	0	6	1		39.92	41.58	11	1	-2	1		67.83	69.59
10	0	-3	1		117.47	121.73	9	1	-5	1		76.15	75.68
9	1	2	1		96.50	97.87	6	2	3	1		24.54	24.96
2	2	-3	1		75.39	77.59	2	2	5	1		52.32	51.60
4	2	-2	1		65.66	63.47	7	1	6	1		76.41	74.37
2	2	3	1		110.73	105.42	4	0	8	1		77.68	73.88
5	1	-6	1		77.81	77.49	5	1	7	1		61.34	61.40
4	2	2	1		46.53	45.17	12	0	2	1		43.67	45.55
9	1	-3	1		28.10	23.77	11	1	2	1		39.92	41.56
7	1	-5	1		26.13	24.64	1	1	-8	1		45.51	45.43
8	0	5	1	L	7.25	11.64	10	0	5	1		39.54	41.04
4	0	7	1		82.00	83.03	1	1	8	1		24.28	23.43
10	0	3	1		79.71	83.84	12	0	-3	1	L	6.36	3.55
1	1	-7	1		40.49	41.71	8	0	-7	1		68.72	63.39
9	1	3	1		77.87	79.33	8	2	0	1		76.79	75.03
5	1	6	1		21.23	21.37	11	1	-3	1		28.80	29.36
1	1	7	1		31.72	31.70	8	2	-1	1		32.04	32.41
0	2	4	1		49.14	45.12	4	2	-5	1		16.97	13.57
4	2	-3	1		47.93	49.90	6	2	-4	1		141.69	144.79
10	0	-4	1		88.61	89.83	8	2	1	1		41.32	39.85
7	1	5	1		51.62	52.67	9	1	5	1		46.53	47.62
6	2	0	1		33.50	31.10	3	1	-8	1		32.23	32.75
4	2	3	1		36.55	33.62	6	0	-8	1		47.10	47.33
2	2	-4	1		78.82	79.05	4	2	5	1		18.05	15.63
3	1	-7	1		11.63	11.72	8	2	-2	1		20.60	19.90
6	2	-1	1		49.46	49.86	6	2	4	1		150.19	153.88
6	0	-7	1		11.63	13.73	12	0	3	1		37.19	37.35
0	0	8	1		98.53	101.34	11	1	3	1		16.65	13.38
8	0	-6	1	L	5.09	5.44	10	0	-6	1		66.11	65.08
2	2	4	1		108.57	105.88	0	0	9	1		19.20	21.79
9	1	-4	1		32.61	34.55	3	1	8	1		31.66	32.41
6	2	1	1		48.31	47.82	7	1	-7	1		61.34	61.72
2	0	-8	1		24.66	24.68	8	2	2	1		22.25	21.36
3	1	7	1		48.25	43.41	0	2	6	1		18.43	13.76
6	2	-2	1		34.20	35.96	2	0	-9	1		53.91	55.37
10	0	4	1		47.74	47.66	12	0	-4	1		41.32	41.76
2	0	8	1		65.66	65.12	2	2	-6	1	L	4.64	1.56
6	2	2	1	L	5.47	1.91	8	0	7	1		102.15	104.39
4	2	-4	1		53.21	53.87	11	1	-4	1		30.13	23.86
9	1	4	1		36.49	39.21	9	1	-6	1		55.24	55.04
7	1	-6	1		21.93	21.78	2	0	9	1	L	8.58	11.57
6	0	7	1		19.58	17.02	6	0	8	1		56.32	55.55
12	0	0	1		151.48	153.24	8	2	-3	1	L	6.04	5.38
8	0	6	1		69.73	72.47	2	2	6	1		32.17	32.28
12	0	-1	1	L	6.04	3.74	5	1	-8	1		20.34	13.97
11	1	0	1		12.52	11.68	6	2	-5	1		24.54	23.42

H	K	L	G	C	F OBS	F CALC	H	K	L	G	C	F OBS	F CALC
4	0	-9	1		31.15	31.60	6	0	9	1		62.93	64.38
7	1	7	1		7.56	3.10	5	1	-9	1		38.08	37.65
8	2	3	1		31.28	30.63	11	1	-6	1	L	8.33	3.29
10	0	6	1		20.09	19.92	7	1	8	1	L	5.34	5.30
4	2	-6	1		46.53	47.13	2	0	10	1		42.78	42.77
12	0	4	1		42.91	41.44	9	1	7	1	L	5.59	4.41
11	1	4	1		24.85	24.30	1	3	0	1	L	5.98	1.33
9	1	6	1		21.87	20.93	8	2	5	1	L	5.34	7.34
5	1	8	1	L	5.28	7.16	4	2	7	1		63.95	63.38
6	2	5	1		16.85	17.11	13	1	3	1		10.55	10.77
8	2	-4	1		45.64	45.28	1	3	-1	1		21.04	20.84
4	0	9	1	L	5.53	0.58	1	3	1	1		24.92	25.91
4	2	6	1		21.61	19.24	10	2	3	1		64.01	64.28
12	0	-5	1		30.26	30.24	4	0	-10	1		28.29	23.39
8	0	-8	1		103.81	103.56	13	1	-4	1		36.81	37.35
11	1	-5	1		22.63	21.31	14	0	3	1		46.72	45.87
1	1	-9	1		12.71	10.04	5	1	9	1		40.87	42.17
13	1	0	1		11.76	3.37	3	3	0	1		44.12	43.29
10	0	-7	1		67.19	67.05	1	3	-2	1		43.04	33.75
13	1	-1	1		47.17	45.84	14	0	-4	1		78.95	73.58
1	1	9	1		89.88	90.00	1	3	2	1		88.80	84.30
10	2	0	1		12.33	5.48	10	0	-8	1		45.01	44.29
10	2	-1	1		22.18	22.38	10	2	-4	1		65.86	65.76
8	2	4	1		13.86	11.58	8	0	-9	1		17.67	14.82
14	0	0	1		37.63	35.59	3	3	-1	1		73.93	77.33
0	2	7	1		38.33	39.90	3	3	1	1		40.43	39.21
13	1	1	1		12.52	9.48	11	1	6	1		94.02	94.50
14	0	-1	1	L	8.71	5.01	12	0	6	1	L	6.67	9.50
3	1	-9	1		92.55	91.71	6	2	-7	1	L	8.01	10.41
6	0	-9	1		38.52	39.31	0	2	8	1		78.63	73.73
13	1	-2	1		41.00	40.05	8	2	-6	1		7.76	4.67
10	2	1	1	L	9.03	10.48	4	0	10	1		24.28	24.92
7	1	-8	1		41.13	40.01	9	1	-8	1		16.65	15.41
2	2	-7	1		11.12	9.63	2	2	-8	1		23.01	20.24
9	1	-7	1		15.00	15.28	3	3	-2	1		79.14	82.81
14	0	1	1	L	6.55	2.05	1	1	-10	1		22.25	20.28
10	2	-2	1		36.81	37.18	3	3	2	1		46.40	45.61
14	0	-2	1	L	6.23	3.11	13	1	4	1	L	6.42	5.10
6	2	-6	1		14.68	13.52	1	3	-3	1		40.62	40.39
2	2	7	1		54.10	52.58	10	2	4	1		37.95	33.23
12	0	5	1		55.86	65.02	7	1	-9	1		25.24	24.58
11	1	5	1		38.01	33.31	1	1	10	1		55.62	54.53
3	1	9	1		52.51	51.65	2	2	8	1		50.73	43.57
13	1	2	1		97.77	93.55	1	3	3	1		13.54	14.41
8	0	8	1		55.49	55.34	12	0	-7	1		35.60	35.65
10	2	2	1		45.96	44.42	14	0	4	1		53.52	54.02
8	2	-5	1		28.99	29.90	6	0	-10	1		8.14	9.61
13	1	-3	1		49.90	50.36	3	1	-10	1		25.05	25.80
0	0	10	1		24.22	25.70	13	1	-5	1		24.98	20.29
14	0	2	1		37.89	37.20	11	1	-7	1	L	5.72	4.79
2	0	-10	1		16.15	14.50	6	2	7	1		14.49	12.27
4	2	-7	1		100.75	103.45	5	3	0	1	L	6.99	10.04
14	0	-3	1		38.14	40.71	12	2	0	1		117.92	113.37
6	2	6	1		31.66	31.19	8	2	6	1		55.62	55.19
10	2	-3	1		89.25	92.43	14	0	-5	1	L	6.87	4.93
10	0	7	1		31.78	31.90	12	2	-1	1		8.90	9.42
12	0	-6	1		16.91	14.75	4	2	-8	1		57.34	59.52

H	K	L	G	C	F OBS	F CALC	H	K	L	G	C	F OBS	F CALC
5	3	-1	1	L	9.85	0.73	2	2	-9	1		43.54	43.69
3	3	-3	1		50.15	51.65	12	0	-8	1		56.38	55.20
8	0	9	1		31.72	31.99	7	3	1	1		20.66	17.85
10	2	-5	1		47.29	43.40	1	3	-5	1		25.30	23.12
5	3	1	1		22.69	21.86	12	2	-4	1		33.69	33.92
3	3	3	1		25.94	25.09	1	3	5	1		16.21	14.75
10	0	8	1		12.71	12.00	11	1	-8	1		18.43	17.23
12	2	1	1	L	6.93	1.82	8	2	7	1		83.21	82.93
3	1	10	1	L	5.66	1.88	16	0	2	1		33.56	32.78
12	2	-2	1		9.54	10.99	2	2	9	1	L	7.69	3.79
5	3	-2	1		45.13	43.98	7	3	-2	1		115.18	113.09
9	1	8	1		36.36	35.10	16	0	-3	1		26.51	23.41
1	3	-4	1		13.48	12.96	5	3	-4	1		16.02	17.30
4	2	8	1		63.82	62.11	6	2	8	1		48.31	45.94
5	3	2	1		100.82	102.47	7	1	-10	1		93.51	93.58
1	3	4	1	L	5.28	5.56	4	0	11	1	L	5.91	7.16
7	1	9	1		25.24	23.59	3	3	-5	1		48.63	47.70
15	1	0	1		17.99	14.80	7	3	2	1		53.08	54.26
15	1	-1	1		49.14	47.21	15	1	3	1	L	6.80	5.14
5	1	-10	1		33.56	32.78	5	3	4	1		21.42	21.09
12	2	2	1		34.83	33.72	1	1	-11	1		49.07	47.44
6	0	10	1		22.44	22.49	4	2	-9	1		26.00	25.60
0	0	11	1		11.25	10.95	15	1	-4	1		39.54	40.31
2	0	-11	1		52.51	52.61	3	3	5	1		86.77	85.49
13	1	5	1	L	6.55	1.30	10	2	6	1		17.48	15.15
10	2	5	1		31.72	31.41	13	1	6	1		36.30	35.14
15	1	1	1		21.23	17.50	1	1	11	1		18.69	17.07
12	2	-3	1	L	6.67	2.50	12	2	4	1		35.60	34.98
15	1	-2	1		49.90	50.23	7	3	-3	1	L	6.36	4.99
8	2	-7	1		52.70	53.42	10	0	9	1		26.95	27.09
3	3	-4	1		43.10	45.29	6	0	-11	1		60.07	53.93
5	3	-3	1		10.43	7.44	3	1	-11	1		15.51	13.23
11	1	7	1	L	6.48	11.33	16	0	3	1		30.77	23.52
12	0	7	1		23.77	23.90	14	0	6	1	L	7.37	1.03
16	0	0	1		42.02	41.08	8	0	10	1		9.41	7.46
14	0	5	1		23.58	21.65	16	0	-4	1		26.06	25.82
16	0	-1	1		53.91	51.89	9	1	9	1		75.39	75.59
3	3	4	1		55.75	55.19	4	2	9	1	L	7.31	0.37
10	0	-9	1		12.65	13.53	13	1	-7	1		26.25	23.13
2	0	11	1		95.67	97.14	12	2	-5	1		26.51	24.08
6	2	-8	1		38.08	33.10	7	3	3	1		28.41	27.92
13	1	-6	1		112.96	107.61	8	2	-8	1		82.64	83.00
5	3	3	1	L	5.66	2.29	14	0	-7	1		18.18	15.21
16	0	1	1		68.08	55.47	5	3	-5	1		58.80	61.99
14	0	-6	1	L	7.06	5.37	3	1	11	1		16.46	17.74
16	0	-2	1		56.51	54.96	11	1	8	1		34.71	35.43
15	1	2	1		20.60	13.37	10	2	-7	1		55.56	55.26
4	0	-11	1		61.34	57.86	1	3	-6	1		124.72	125.68
8	0	-10	1		25.05	24.43	12	0	8	1		69.22	67.49
12	2	3	1		30.19	23.64	7	1	10	1		10.62	4.34
5	1	10	1		92.94	92.14	15	1	4	1		53.21	52.91
15	1	-3	1		34.39	32.84	1	3	6	1		26.63	23.78
10	2	-6	1		51.81	52.08	14	2	0	1		30.89	27.90
7	3	0	1	L	7.06	11.82	14	2	-1	1	L	6.36	4.32
0	2	9	1		18.12	15.77	15	1	-5	1		38.71	35.85
9	1	-9	1		35.72	33.70	7	3	-4	1		9.03	7.86
7	3	-1	1		20.02	13.82	6	2	-9	1		32.17	31.57

H	K	L	G	C	F OBS	F CALC
5	1	-11	1	L	5.59	5.01
5	3	5	1	L	8.65	7.92
9	3	0	1		55.49	52.08
14	2	1	1	L	6.93	2.28
6	0	11	1		35.98	35.67
3	3	-6	1	L	6.17	5.38
19	0	-10	1		11.12	15.04
9	3	-1	1		35.53	33.92
14	2	-2	1	L	6.36	2.73
16	0	4	1	L	7.18	2.54
9	3	1	1		63.25	57.14
12	2	5	1		51.55	52.99
16	0	-5	1		11.06	7.53
0	0	12	1		20.28	21.14
7	3	4	1	L	5.98	1.84
12	0	-9	1	L	6.55	5.50
8	2	8	1		44.69	44.19
3	3	6	1		37.57	37.61
2	0	-12	1		76.79	77.69
9	3	-2	1		21.99	21.35
11	1	-9	1		86.77	84.97
9	1	-10	1	L	6.17	5.60
0	2	10	1		21.61	21.12
14	2	2	1		29.62	27.95
2	2	-10	1	L	10.74	12.34
8	0	-11	1	L	5.98	4.04
14	2	-3	1		31.08	32.76
12	2	-6	1	L	9.98	11.98
10	2	7	1		27.72	27.12
9	3	2	1		55.30	57.67
6	2	9	1		50.85	52.01
13	1	7	1		33.12	32.88
2	0	12	1		15.51	15.56
5	1	11	1		26.76	25.04
2	2	10	1		34.20	34.74
4	0	-12	1		30.32	31.19
5	3	-6	1		44.88	43.74
14	0	7	1		25.24	22.95
15	1	5	1		63.06	64.12
9	3	-3	1		18.82	13.96
7	3	-5	1		16.53	14.35
15	1	-6	1	L	9.98	5.98
17	1	-1	1	L	6.36	5.27
17	1	0	1		26.89	25.92
13	1	-8	1	L	10.87	11.21
4	2	-10	1		23.65	23.50
7	1	-11	1		35.72	35.14
14	2	3	1		38.52	33.34
1	3	-7	1		24.03	25.72
14	0	-8	1		19.83	15.60
9	3	3	1		48.06	51.23
5	3	6	1		19.64	17.55
1	3	7	1		18.94	13.57
17	1	1	1		25.87	24.82
17	1	-2	1		9.34	11.08
14	2	-4	1		61.98	64.41
16	0	5	1	L	7.12	3.01

H	K	L	G	C	F OBS	F CALC
10	2	-8	1		35.53	34.98
8	2	-9	1		13.41	12.83
7	3	5	1		31.02	33.35
16	0	-6	1		10.55	14.17
10	0	10	1	L	12.01	11.47
4	0	12	1	L	5.91	1.40
3	3	-7	1	L	5.72	7.31
1	1	-12	1		30.83	27.76
12	2	6	1	L	6.80	3.50
9	1	10	1		8.52	7.92
4	2	10	1		22.06	21.55
9	3	-4	1		24.28	22.86
18	0	-1	1		24.22	22.38
18	0	0	1		35.22	27.55
11	1	9	1	L	6.36	3.35
1	1	12	1		7.69	2.56
12	0	9	1	L	6.87	3.29
17	1	2	1		46.34	44.97
17	1	-3	1	L	6.67	5.21
8	0	11	1		37.57	37.49
6	0	-12	1		34.39	35.36
3	3	7	1		29.94	31.01
3	1	-12	1	L	5.78	5.77
18	0	-2	1		21.68	17.66
18	0	1	1		26.76	23.02
12	2	-7	1		29.18	31.07
6	2	-10	1		8.52	3.22
14	2	4	1		44.69	44.27
9	3	4	1		26.51	25.85
7	3	-6	1		20.09	17.04
7	1	11	1		20.15	21.98
15	1	6	1		26.51	25.26
14	2	-5	1	L	6.93	4.57
11	3	0	1	L	9.54	7.35
11	3	-1	1		28.03	23.98
8	2	9	1		26.38	25.03
3	1	12	1	L	5.85	7.43
5	3	-7	1		20.34	21.35
18	0	-3	1	L	7.25	11.00
18	0	2	1		14.49	12.05
12	0	-10	1	L	6.87	5.34
19	2	8	1		12.90	11.31
17	1	3	1	L	7.18	7.21
10	0	-11	1		65.16	64.39
15	1	-7	1	L	6.87	5.39
11	3	1	1	L	6.55	2.61
13	1	8	1		9.28	5.98
17	1	-4	1		17.74	13.41
11	1	-10	1		36.55	35.89
5	1	-12	1		15.70	13.85
11	3	-2	1		42.84	45.70
9	3	-5	1		48.38	51.21
7	3	6	1		51.36	47.16
14	0	8	1	L	11.63	13.37
16	0	6	1		24.92	23.75
6	0	12	1		36.36	35.53
9	1	-11	1		19.39	17.98

H	K	L	G	C	F OBS	F CALC	H	K	L	G	C	F OBS	F CALC
5	3	7	1		39.28	37.92	1	1	-13	1		29.05	23.21
16	0	-7	1		59.37	57.25	16	0	-8	1		28.86	23.06
6	2	10	1		18.43	17.39	10	2	9	1		22.12	21.98
11	3	2	1		26.83	27.13	6	2	-11	1		51.17	47.58
0	2	11	1		9.85	11.40	8	0	12	1		25.81	24.75
1	3	-8	1		30.64	31.06	13	1	9	1		31.91	33.71
13	1	-9	1	L	6.99	3.02	17	1	5	1	L	7.12	0.42
2	2	-11	1		43.67	43.67	17	1	-6	1		31.59	32.76
1	3	8	1		16.08	14.89	16	2	3	1		27.78	25.15
18	0	-4	1		53.46	53.10	9	3	6	1		9.98	12.09
14	0	-9	1		40.11	37.21	14	2	6	1	L	7.06	1.18
11	3	-3	1		19.64	17.26	8	2	10	1		8.26	3.42
18	0	3	1		11.19	11.28	5	3	8	1	L	5.98	5.29
0	0	13	1		37.50	37.88	16	2	-4	1		19.26	21.57
12	2	7	1		18.56	17.71	1	1	13	1		34.71	32.29
16	2	0	1		33.69	33.71	6	0	-13	1	L	6.23	3.38
8	0	-12	1	L	6.29	2.87	3	1	-13	1		22.31	21.84
14	2	5	1		19.13	17.42	12	0	-11	1		15.64	14.33
16	2	-1	1		43.80	43.45	14	0	9	1	L	7.31	11.88
2	0	-13	1		23.65	21.62	0	4	0	1		123.00	125.96
9	3	5	1		33.69	34.07	11	3	-5	1		16.46	17.29
10	2	-9	1	L	6.36	12.27	14	2	-7	1	L	7.37	12.54
3	3	-8	1		20.09	21.48	11	1	-11	1		19.90	17.29
2	2	11	1		82.32	81.65	1	3	-9	1	L	6.23	3.12
17	1	4	1	L	6.99	7.57	7	1	12	1		18.56	15.80
5	1	12	1		37.70	35.53	0	4	1	1	L	5.47	4.86
17	1	-5	1		64.84	62.80	13	3	0	1	L	5.72	3.40
16	2	1	1		55.43	54.42	13	3	-1	1		29.69	31.39
16	2	-2	1		45.26	45.00	12	2	8	1		56.07	55.98
14	2	-6	1	L	9.73	5.94	10	0	-12	1		14.81	15.05
4	2	-11	1		53.91	51.94	13	1	-10	1		17.10	17.38
8	2	-10	1		19.96	21.02	19	1	-1	1		18.56	15.26
11	3	3	1		11.70	11.35	19	1	0	1		16.02	15.30
2	0	13	1		19.64	21.96							
3	3	8	1		21.93	22.22							
7	3	-7	1		38.71	41.80							
12	2	-8	1		46.53	45.71							
4	0	-13	1	L	6.29	5.47							
7	1	-12	1		32.61	31.62							
11	3	-4	1		19.20	17.09							
9	3	-6	1		34.39	35.06							
15	1	7	1		36.87	33.92							
16	2	2	1		30.39	28.35							
16	2	-3	1		22.69	21.28							
10	0	11	1		40.94	41.85							
18	0	-5	1	L	7.63	1.05							
11	1	10	1		18.31	15.77							
12	0	10	1		17.42	17.41							
18	0	4	1		71.39	65.94							
5	3	-8	1		13.29	12.79							
4	2	11	1		8.45	3.91							
15	1	-8	1	L	7.06	1.05							
9	1	11	1		24.79	24.36							
7	3	7	1	L	6.04	4.34							
16	0	7	1		39.22	41.19							
4	0	13	1		35.92	37.40							
11	3	4	1		16.08	15.49							

Table 6. Structure factor table for the romanechite supercell.

H	K	L	G	C	F OBS	F CALC	H	K	L	G	C	F OBS	F CALC
0	0	1	1		42.71	43.00	1	1	-4	1	L	8.46	3.02
1	1	0	1	L	10.39	2.12	-5	1	-2	1		33.67	36.73
2	0	0	1		128.32	113.74	-1	1	-4	1		8.66	7.06
1	1	-1	1		24.82	29.36	6	0	-1	1		209.89	221.55
2	0	-1	1		96.38	83.44	2	0	4	1		519.05	511.13
1	1	1	1		18.28	25.42	6	0	1	1		179.88	196.69
2	0	1	1		130.82	128.99	3	3	-2	1		558.68	539.36
0	0	2	1		153.71	151.21	3	3	2	1		373.80	339.97
0	2	0	1	L	35.01	36.43	0	4	0	1		45.59	38.35
-3	1	0	1		11.74	9.03	6	0	-2	1		161.60	168.50
1	1	-2	1		38.67	40.75	1	3	-3	1		226.82	222.17
2	0	-2	1		181.42	181.24	-3	1	4	1		8.85	4.40
1	1	2	1		30.97	38.97	0	2	4	1		34.24	28.55
0	2	1	1		25.20	24.12	4	2	-3	1		28.28	21.89
2	0	2	1		298.19	299.75	1	3	3	1		71.18	72.04
-3	1	1	1		33.86	33.63	-5	1	3	1	L	13.08	21.83
-3	1	-1	1		15.97	22.71	0	4	1	1		27.51	25.84
2	2	0	1		36.94	36.94	6	0	2	1	L	22.89	14.72
4	0	0	1		372.65	385.44	-3	1	-4	1		9.04	7.62
2	2	-1	1		29.05	23.80	2	4	0	1		38.09	36.72
2	2	1	1		25.59	29.51	6	2	0	1		40.98	32.96
4	0	-1	1		389.58	399.50	4	2	3	1		16.35	15.60
4	0	1	1		322.24	356.45	2	2	-4	1		35.59	32.04
0	0	3	1		159.10	157.15	4	0	-4	1		291.65	285.20
-3	1	2	1		37.71	35.81	6	2	-1	1		25.20	16.84
-3	1	-2	1		32.32	39.27	-5	1	-3	1		31.17	33.17
2	0	-3	1		349.75	343.20	2	4	-1	1		33.09	25.67
1	1	-3	1		25.97	27.20	2	2	4	1		38.09	37.08
-1	1	-3	1		23.86	24.14	2	4	1	1		28.86	28.09
4	0	-2	1		300.31	308.27	5	3	0	1		58.10	57.21
2	0	3	1		478.46	473.58	6	2	1	1		31.94	28.36
1	3	0	1	L	13.66	4.38	5	3	-1	1	L	15.39	10.27
4	0	2	1		194.11	207.11	3	3	-3	1		266.07	267.67
4	2	0	1		30.01	34.24	4	0	4	1		196.23	198.95
1	3	-1	1		130.44	125.82	5	3	1	1		113.31	113.75
1	3	1	1		171.61	151.64	-7	1	0	1		13.27	8.97
-5	1	0	1		12.12	9.60	0	0	5	1		219.70	226.99
4	2	-1	1		20.20	17.67	6	0	-3	1		23.28	26.50
-5	1	1	1	L	23.47	28.29	3	3	3	1		145.44	146.47
4	2	1	1		28.28	29.11	-7	1	1	1	L	26.36	29.32
-3	1	3	1		21.55	18.52	-7	1	-1	1	L	16.54	16.16
0	2	3	1		22.12	17.86	2	0	-5	1		69.07	71.31
-5	1	-1	1	L	14.81	22.69	1	1	-5	1		25.39	22.68
-3	1	-3	1		27.70	27.35	5	3	-2	1		263.37	265.29
2	2	-3	1		29.43	26.99	-1	1	-5	1		23.09	18.71
3	3	0	1		242.60	256.97	6	0	3	1		114.28	118.35
1	3	-2	1		188.15	167.12	2	0	5	1		199.50	206.70
0	0	4	1		159.10	150.00	1	3	-4	1		62.72	61.70
4	0	-3	1		197.19	206.76	-7	1	2	1		31.94	30.21
1	3	2	1		479.42	435.81	5	3	2	1		570.03	558.25
2	2	3	1		24.05	19.87	-5	1	4	1		9.62	14.88
3	3	-1	1		405.93	418.19	1	3	4	1		33.86	34.70
-5	1	2	1		32.51	35.90	-7	1	-2	1		33.86	32.33
3	3	1	1		223.55	205.99	-3	1	5	1	L	20.78	16.45
6	0	0	1		57.71	55.86	-5	1	-4	1		9.81	10.13
4	0	3	1		141.79	140.28	8	0	0	1		301.85	307.17
2	0	-4	1		311.85	309.31	3	3	-4	1		237.40	238.76

H	K	L	G	C	F OBS	F CALC
8	0	-1	1		120.05	129.97
-3	1	-5	1		23.66	17.06
4	0	-5	1		70.80	78.94
5	3	-3	1		40.79	37.49
6	0	-4	1		614.28	620.66
8	0	1	1		140.63	151.73
6	2	3	1	L	15.97	11.31
1	5	0	1	L	11.16	1.33
3	3	4	1		309.54	301.07
2	2	5	1		22.12	22.20
4	4	2	1	L	10.39	2.33
7	1	-3	1	L	10.77	6.43
5	3	3	1		26.55	24.70
1	5	-1	1		25.59	20.35
1	5	1	1	L	16.54	17.84
4	0	5	1		71.95	66.42
8	0	-2	1		76.95	80.29
6	0	4	1		638.13	656.65
7	1	3	1		30.59	25.63
7	3	0	1		61.18	61.82
7	3	-1	1		100.42	103.49
8	0	2	1		68.30	82.42
0	0	6	1		69.26	72.32
8	2	0	1		29.24	31.99
3	5	0	1	L	13.47	6.10
1	5	-2	1		37.90	31.04
0	4	4	1		31.36	31.97
4	4	-3	1		24.63	22.32
8	2	-1	1	L	12.50	14.15
7	3	1	1		110.62	110.80
1	5	2	1		34.63	30.61
4	2	-5	1	L	11.35	18.83
1	3	-5	1		150.83	147.82
5	1	-5	1		21.93	25.82
6	2	-4	1	L	12.12	23.41
3	5	-1	1		24.43	20.80
2	0	-6	1	L	12.31	1.38
1	3	5	1		69.07	68.94
1	1	-6	1		25.59	26.87
8	2	1	1		28.47	26.98
3	5	1	1	L	12.31	14.06
6	4	0	1		36.94	34.11
4	4	3	1	L	15.97	13.77
2	4	-4	1		33.09	28.41
1	1	6	1		29.43	31.08
7	3	-2	1		623.32	624.72
5	3	-4	1		90.42	94.11
8	0	-3	1		30.40	25.96
6	4	-1	1		24.63	18.40
2	0	6	1		119.47	123.57
2	4	4	1		37.90	34.32
4	2	5	1		18.08	19.81
8	2	-2	1		22.32	11.58
6	4	1	1	L	19.82	24.10
7	1	-4	1	L	10.20	5.71
5	1	5	1	L	14.43	15.20
6	2	4	1		27.13	30.12

H	K	L	G	C	F OBS	F CALC
7	3	2	1		275.11	280.08
3	3	-5	1		254.14	254.23
3	5	-2	1		35.78	28.01
9	1	0	1	L	12.50	12.19
3	1	-6	1		28.47	26.92
6	0	-5	1		103.50	104.71
3	5	2	1		30.01	30.14
5	3	4	1		120.05	116.81
9	1	-1	1		20.97	23.64
8	2	2	1	L	18.28	17.66
0	2	6	1	L	9.23	3.93
6	4	-2	1	L	11.35	7.64
8	0	3	1		112.16	121.11
1	5	-3	1		24.05	20.57
1	5	3	1		15.58	15.99
3	3	5	1		448.83	440.35
9	1	1	1	L	12.70	7.40
4	0	-6	1		184.11	192.71
2	2	-6	1	L	9.62	11.77
7	1	4	1	L	11.35	2.53
6	4	2	1	L	12.31	11.28
3	1	6	1		23.47	23.76
7	3	-3	1		22.89	20.23
4	4	-4	1		33.09	29.51
9	1	-2	1		20.20	23.77
8	2	-3	1	L	16.54	22.58
2	2	6	1	L	9.62	5.38
6	0	5	1		55.41	71.69
5	5	0	1	L	14.43	11.67
5	5	-1	1		25.01	21.29
3	5	-3	1		22.89	14.54
8	0	-4	1		188.54	193.16
4	0	6	1		81.38	79.54
4	4	4	1		36.36	34.92
7	3	3	1		152.94	154.25
5	5	1	1		21.55	18.90
9	1	2	1		24.63	27.98
0	4	5	1		23.28	23.96
6	2	-5	1	L	10.77	10.59
6	4	-3	1		29.24	28.28
3	5	3	1		22.51	21.24
0	6	0	1	L	849.76	768.97
8	2	3	1	L	12.89	17.63
2	4	-5	1		27.70	18.41
5	3	-5	1		308.97	310.35
0	6	1	1		36.36	26.81
4	2	-6	1	L	9.62	4.67
5	5	-2	1		32.13	31.14
5	1	-6	1	L	12.31	23.30
1	3	-6	1		658.91	654.52
9	1	-3	1	L	12.50	16.06
7	1	-5	1	L	11.74	14.72
6	4	3	1	L	11.93	12.60
2	4	5	1		25.97	21.42
2	6	0	1		96.00	76.82
10	0	0	1	L	22.32	30.67
1	5	-4	1	L	10.00	3.19

H	K	L	G	C	F OBS	F CALC	H	K	L	G	C	F OBS	F CALC
1	3	6	1		139.86	133.66	0	6	3	1		104.66	100.34
10	0	-1	1		73.49	83.97	2	2	-7	1	L	10.58	14.02
5	5	2	1		31.74	31.44	6	4	4	1		26.74	30.11
8	0	4	1		52.71	56.58	6	0	6	1		120.82	125.16
1	5	4	1	L	10.20	2.32	10	0	-3	1		355.52	368.64
2	6	-1	1		54.64	53.38	9	3	2	1		292.04	296.09
0	0	7	1		157.56	158.95	7	5	0	1	L	14.81	9.04
2	6	1	1		83.11	80.10	3	1	7	1		22.70	19.22
6	2	5	1		21.74	20.03	10	2	-2	1	L	13.47	7.76
7	3	-4	1		38.48	41.35	7	5	-1	1		26.93	22.03
10	0	1	1	L	17.70	36.59	8	4	2	1	L	13.47	13.66
5	3	5	1		61.95	58.85	6	2	-6	1	L	10.39	12.15
2	0	-7	1		34.44	33.28	0	4	6	1	L	10.20	0.33
8	2	-4	1	L	13.27	24.11	2	6	-3	1		228.17	231.87
0	6	2	1		97.54	95.28	2	2	7	1	L	10.58	9.45
4	2	6	1	L	10.39	0.68	7	5	1	1	L	14.43	15.23
1	1	-7	1	L	11.35	13.72	1	5	-5	1	L	18.08	14.54
9	3	0	1		296.27	316.35	4	6	-2	1		198.73	204.90
3	3	-6	1		31.74	39.46	2	6	3	1		335.13	315.28
9	1	3	1		26.16	26.58	2	4	-6	1	L	10.39	10.32
5	1	6	1		31.94	32.60	1	5	5	1	L	11.16	18.08
10	0	-2	1		134.09	152.89	5	3	-6	1		235.48	233.45
9	3	-1	1		174.88	192.25	9	3	-3	1		85.03	86.31
1	1	7	1	L	15.97	23.59	7	3	-5	1		79.07	75.03
6	0	-6	1		50.98	53.82	8	0	5	1	L	21.93	32.20
8	4	0	1		32.32	28.93	4	0	7	1		248.17	250.48
3	5	-4	1	L	10.77	8.13	4	6	2	1		140.82	138.47
2	0	7	1		200.27	204.41	9	1	4	1	L	12.50	12.90
2	6	-2	1		114.28	116.72	7	1	-6	1	L	13.08	19.69
8	4	-1	1		18.28	12.17	10	2	2	1	L	15.01	6.47
7	1	5	1	L	10.97	8.66	8	2	-5	1	L	12.12	13.77
4	4	-5	1		21.93	18.68	7	5	-2	1		31.36	27.16
9	3	1	1		327.63	333.86	5	5	-4	1	L	11.35	9.32
5	5	-3	1		20.78	14.84	10	0	3	1		241.25	253.94
2	6	2	1		202.77	192.39	8	4	-3	1		17.89	18.26
6	4	-4	1		30.97	24.95	2	4	6	1	L	10.58	11.02
7	3	4	1	L	15.01	5.06	11	1	0	1	L	13.27	13.04
8	4	1	1		30.59	28.73	11	1	-1	1		28.47	26.92
3	3	6	1		189.88	186.25	4	2	-7	1	L	15.78	14.73
3	5	4	1	L	10.58	4.94	5	1	-7	1	L	11.35	7.04
3	1	-7	1	L	16.93	16.32	7	5	2	1		19.62	26.21
10	2	0	1		31.55	27.76	3	5	-5	1		17.31	13.24
10	0	2	1		165.83	176.04	6	2	6	1	L	11.16	9.72
8	0	-5	1		116.58	119.22	1	3	-7	1		122.55	122.62
9	3	-2	1		119.28	120.90	10	2	-3	1		21.74	21.00
10	2	-1	1	L	13.47	5.92	6	4	-5	1	L	11.35	10.50
8	2	4	1		32.90	30.01	9	3	3	1		235.67	239.73
4	6	0	1		259.91	252.82	5	5	4	1	L	11.35	8.08
5	5	3	1		26.74	24.79	11	1	1	1	L	13.47	13.57
0	2	7	1	L	14.62	14.00	5	3	6	1		64.26	61.47
9	1	-4	1	L	11.74	14.11	1	3	7	1		96.00	92.29
4	4	5	1		24.43	22.38	8	4	3	1	L	13.27	18.17
8	4	-2	1	L	13.27	7.61	10	0	-4	1		268.18	272.33
4	6	-1	1		271.84	260.72	0	6	4	1		148.71	141.22
10	2	1	1	L	19.43	16.79	4	6	-3	1		145.06	150.98
4	0	-7	1		401.50	408.62	7	3	5	1		156.22	158.97
4	6	1	1		237.59	237.35	3	5	5	1		15.97	14.08

H	K	L	G	C	F OBS	F CALC
11	1	-2	1		20.39	17.55
9	1	-5	1	L	13.47	22.61
4	4	-6	1	L	10.77	0.31
1	7	0	1	L	12.89	3.68
8	2	5	1		30.01	24.05
7	1	6	1		34.24	29.69
4	2	7	1		21.35	16.00
7	5	-3	1	L	12.31	8.11
6	6	0	1		101.39	96.14
4	6	3	1		110.62	101.64
2	6	-4	1		238.56	237.85
3	3	-7	1		35.21	32.39
6	0	-7	1		35.21	41.43
0	0	8	1		298.19	301.52
8	0	-6	1	L	15.39	16.78
10	2	3	1	L	13.47	13.12
6	6	-1	1		149.67	149.97
1	7	-1	1		27.32	22.16
5	1	7	1		23.28	20.63
1	7	1	1	L	16.74	19.51
9	3	-4	1		98.69	103.76
2	6	4	1		328.59	315.60
6	4	5	1		23.86	22.73
6	6	1	1		146.21	144.38
11	1	2	1		32.71	24.55
2	0	-8	1		74.64	74.79
1	1	-8	1	L	10.58	7.28
8	4	-4	1		29.24	23.65
4	4	6	1	L	11.16	2.00
7	5	3	1		25.78	23.04
3	3	7	1		146.02	146.10
1	1	8	1	L	10.77	8.59
10	0	4	1		144.48	144.18
11	1	-3	1	L	13.47	8.30
2	0	8	1		198.73	199.69
6	6	-2	1		103.50	107.59
10	2	-4	1	L	14.04	15.25
3	7	0	1	L	14.81	6.29
1	7	-2	1		34.05	33.50
1	7	2	1		35.40	32.09
5	5	-5	1		24.24	23.18
9	1	5	1	L	12.12	7.44
3	7	-1	1		27.13	24.33
1	5	-6	1		25.20	26.67
3	1	-8	1	L	10.77	7.12
6	6	2	1	L	16.54	6.58
3	7	1	1	L	19.24	19.27
9	3	4	1		110.43	118.62
7	3	-6	1		66.37	65.67
10	4	0	1		30.40	26.70
6	0	7	1		59.25	51.47
1	5	6	1		30.40	29.90
4	6	-4	1		161.02	159.30
6	2	-7	1		17.12	12.84
0	2	8	1		19.82	21.84
10	4	-1	1	L	14.43	7.12
8	2	-0	1	L	11.16	12.49

H	K	L	G	C	F OBS	F CALC
8	4	4	1		28.86	26.37
12	0	0	1		458.45	464.41
0	4	7	1	L	17.89	13.93
8	0	6	1		211.04	219.12
12	0	-1	1	L	18.28	12.08
4	0	-8	1		233.75	239.24
11	3	0	1		37.90	31.87
7	5	-4	1	L	11.74	8.31
2	2	-8	1		25.78	27.73
11	3	-1	1		132.36	135.12
10	4	1	1	L	14.81	15.50
10	0	-5	1		183.15	187.75
5	5	5	1	L	11.74	11.04
5	3	-7	1		93.69	95.92
11	1	3	1	L	14.43	18.47
2	4	-7	1	L	15.58	11.22
4	6	4	1		130.24	121.44
3	7	-2	1		34.24	32.15
3	1	8	1	L	10.97	0.37
7	1	-7	1	L	12.31	13.17
9	5	0	1		20.20	11.85
0	6	5	1		169.87	169.38
12	0	1	1		48.67	7.99
3	5	-6	1		30.01	23.33
6	6	-3	1		32.71	33.09
3	7	2	1		31.17	32.78
11	3	1	1	L	18.08	6.31
10	4	-2	1	L	14.04	9.33
9	5	-1	1		20.78	22.20
10	2	4	1		20.20	20.12
6	4	-6	1	L	11.35	2.75
2	2	8	1		27.70	27.09
12	0	-2	1		49.83	47.34
1	7	-3	1		25.01	19.16
2	4	7	1		23.09	14.12
1	7	3	1	L	16.74	22.92
2	6	-5	1		55.21	53.87
11	3	-2	1		205.27	210.57
9	5	1	1	L	14.43	8.26
9	3	-5	1		230.47	232.05
11	1	-4	1	L	12.70	9.70
9	1	-6	1	L	13.08	14.75
7	5	4	1	L	12.70	1.75
3	5	6	1	L	20.20	21.07
4	0	8	1		235.09	238.13
6	6	3	1		74.26	74.19
7	3	6	1		231.24	224.53
2	6	5	1		158.33	155.94
6	2	7	1	L	11.54	12.44
10	4	2	1	L	14.04	5.64
8	4	-5	1	L	12.31	13.33
9	5	-2	1	L	14.81	19.96
5	3	7	1		185.65	185.32
12	2	0	1	L	19.62	17.05
8	2	6	1	L	12.12	10.69
12	0	2	1		132.17	140.86
5	7	0	1	L	15.58	2.71

H	K	L	G	C	F OBS	F CALC
12	2	-1	1	L	14.04	5.56
4	2	-8	1		18.08	15.40
5	1	-8	1	L	10.58	7.37
11	3	2	1		120.82	122.53
10	2	-5	1	L	12.50	0.80
1	3	-8	1		137.75	137.74
4	4	-7	1	L	11.93	18.47
5	7	-1	1	L	22.12	21.09
3	7	-3	1		17.12	16.60
6	4	6	1	L	11.54	12.14
10	4	-3	1	L	20.78	20.37
10	0	5	1		119.66	120.99
9	5	2	1		31.55	24.60
5	7	1	1		21.35	17.56
12	2	1	1		20.58	22.93
12	0	-3	1	L	19.24	10.64
1	3	8	1		73.49	71.36
8	0	-7	1		207.97	207.26
3	7	3	1		27.13	22.19
7	1	7	1		18.85	18.44
11	3	-3	1		87.15	88.56
8	6	0	1		232.40	229.84
12	2	-2	1	L	13.85	15.06
8	6	-1	1		96.96	98.03
4	6	-5	1		51.37	55.61
6	6	-4	1		428.82	435.13
9	3	5	1		140.82	143.71
11	1	4	1	L	13.66	14.68
5	7	-2	1		32.32	28.88
5	5	-6	1		28.28	24.72
3	3	-8	1		97.54	99.27
8	6	1	1		125.05	121.46
6	0	-8	1		142.56	143.64
9	5	-3	1	L	14.04	13.92
7	5	-5	1	L	12.50	13.92
4	2	8	1		27.13	25.59
8	4	5	1		20.39	21.75
4	4	7	1	L	12.31	13.61
1	7	-4	1	L	11.16	0.11
5	7	2	1		30.20	29.55
9	1	6	1		28.67	26.31
10	4	3	1	L	14.04	7.31
1	7	4	1	L	11.16	0.63
5	1	8	1	L	11.54	10.65
12	2	2	1	L	14.04	15.30
4	6	5	1		54.64	50.45
8	6	-2	1		62.33	60.26
12	0	3	1		112.54	113.86
10	0	-6	1		200.08	200.93
11	3	3	1		50.40	55.70
6	6	4	1		484.81	462.47
0	0	9	1		58.10	63.21
1	5	-7	1	L	11.93	12.21
3	3	8	1		95.81	97.66
10	2	5	1	L	21.35	23.21
7	3	-7	1		185.65	186.31
11	1	-5	1	L	14.04	9.32

H	K	L	G	C	F OBS	F CALC
12	2	-3	1	L	14.62	14.89
9	5	3	1	L	21.35	22.95
8	2	-7	1		18.08	16.44
5	5	6	1		27.32	31.63
2	0	-9	1		163.14	167.08
1	5	7	1		19.82	17.84
8	6	2	1		67.33	64.25
0	8	0	1		20.20	27.37
0	6	6	1		55.79	55.85
1	1	-9	1	L	11.35	8.37
10	4	-4	1		19.24	17.55
3	7	-4	1	L	11.74	4.69
12	0	-4	1		125.05	122.93
7	5	5	1	L	12.50	12.25
13	1	0	1	L	13.66	3.51
5	7	-3	1	L	16.93	19.59
0	8	1	1	L	18.66	15.27
13	1	-1	1	L	20.97	10.17
8	0	7	1		309.16	315.99
1	1	9	1		15.97	10.48
11	3	-4	1		91.19	87.46
2	6	-6	1	L	14.04	1.06
9	3	-6	1		167.18	166.54
6	2	-8	1	L	18.28	19.53
3	7	4	1	L	11.54	9.94
2	0	9	1	L	25.97	32.32
2	8	0	1		31.55	27.22
6	0	8	1		170.45	172.32
3	5	-7	1	L	11.93	12.69
6	4	-7	1		18.47	12.87
0	4	8	1		24.82	21.74
13	1	1	1	L	13.27	0.45
8	4	-6	1	L	12.12	10.73
8	6	-3	1	L	18.28	19.15
5	7	3	1		27.13	25.96
2	6	6	1		97.35	96.80
2	8	-1	1	L	17.70	16.26
3	1	-9	1	L	12.31	16.51
9	5	-4	1	L	13.08	15.91
2	8	1	1	L	13.47	18.52
5	3	-8	1		61.56	57.01
13	1	-2	1		22.89	16.69
2	4	-8	1		27.70	25.31
7	1	-8	1	L	11.74	3.06
12	2	3	1	L	14.04	4.36
9	1	-7	1	L	12.31	4.63
10	2	-0	1	L	12.12	6.63
0	8	2	1	L	11.54	0.61
0	2	9	1	L	11.54	6.42
7	7	0	1	L	16.54	9.70
3	5	7	1	L	11.93	14.97
4	0	-9	1		94.27	95.13
6	6	-5	1		74.26	69.93
2	2	-9	1		18.66	15.07
7	3	7	1		22.89	24.53
7	7	-1	1	L	24.05	25.66
10	4	4	1	L	20.97	21.58

H	K	L	G	C	F OBS	F CALC	H	K	L	G	C	F OBS	F CALC
2	4	8	1		26.55	24.78	10	2	6	1	L	12.89	6.59
8	6	3	1		94.65	92.73	9	1	7	1	L	19.24	13.50
10	0	6	1		60.79	60.28	3	7	5	1	L	12.12	15.11
2	8	-2	1	L	11.93	3.92	13	3	0	1		35.59	10.21
12	2	-4	1	L	15.39	14.19	11	5	-2	1	L	21.93	17.34
11	1	5	1	L	13.85	9.94	10	0	-7	1		203.35	202.81
7	7	1	1	L	21.35	12.01	4	8	-2	1	L	13.27	7.53
1	7	-5	1		17.51	22.15	2	8	3	1	L	12.31	14.60
3	1	9	1	L	11.54	5.75	13	3	-1	1		142.75	141.85
2	8	2	1	L	12.12	2.51	12	2	4	1	L	22.51	21.40
8	2	7	1	L	12.12	9.10	9	5	-5	1	L	19.24	16.80
12	0	4	1		129.86	124.84	1	3	9	1		272.03	271.67
13	1	2	1	L	14.81	19.82	4	4	8	1	L	19.62	21.86
4	6	-6	1		140.82	142.44	13	1	3	1	L	15.01	16.63
11	3	4	1		75.22	73.53	7	5	0	1		27.70	27.69
1	7	5	1	L	12.31	15.55	7	7	-3	1	L	13.47	6.51
2	2	9	1	L	12.12	14.65	4	8	2	1	L	13.47	3.36
9	5	4	1	L	14.24	10.35	10	6	0	1		37.32	19.65
7	5	-6	1		20.01	16.85	14	0	0	1		113.89	108.90
6	2	8	1	L	17.51	19.91	14	0	-1	1	L	26.36	17.42
6	4	7	1	L	12.70	10.43	10	6	-1	1		67.14	67.87
13	1	-3	1	L	14.62	0.40	13	3	1	1		37.90	28.87
7	7	-2	1	L	23.09	25.07	8	6	4	1		41.94	34.50
5	7	-4	1	L	11.74	10.72	5	5	7	1		17.51	19.14
9	3	6	1		66.18	63.35	0	6	7	1		116.01	118.98
4	8	0	1	L	15.97	25.67	6	0	-9	1		116.58	118.33
5	3	8	1	L	15.97	20.90	3	3	-9	1		280.11	276.85
12	4	0	1	L	15.97	17.88	12	4	2	1		20.20	15.81
8	4	6	1	L	12.70	12.17	13	3	-2	1		124.09	121.36
6	6	5	1		50.98	51.01	11	5	2	1	L	21.55	24.93
12	4	-1	1	L	14.43	4.05	13	1	-4	1	L	14.62	7.81
4	4	-8	1	L	12.70	15.65	4	2	9	1	L	17.51	16.42
11	5	0	1	L	14.62	12.89	7	3	-8	1		124.47	121.48
4	8	-1	1	L	14.24	13.98	9	3	-7	1		45.40	48.83
4	0	9	1	L	1.674	1.73	10	6	1	1	L	27.32	31.62
11	5	-1	1	L	15.58	23.23	1	5	-8	1	L	11.93	0.61
10	4	-5	1	L	13.08	1.07	12	2	-5	1	L	13.85	9.85
4	8	1	1	L	15.01	20.02	2	6	-7	1		33.67	30.05
12	0	-5	1		91.57	91.26	8	2	-8	1	L	13.27	13.67
0	8	3	1	L	17.89	11.86	14	0	1	1	L	19.82	6.85
5	5	-7	1	L	12.31	7.15	10	4	5	1		26.16	24.79
8	0	-8	1		314.16	313.30	7	7	3	1	L	21.93	22.05
8	6	-4	1		138.13	138.90	12	4	-3	1	L	15.20	12.61
4	6	6	1		65.41	58.68	5	1	9	1	L	11.93	9.52
7	7	2	1	L	23.66	28.11	14	0	-2	1	L	18.85	9.56
3	7	-5	1	L	12.12	14.44	1	5	8	1	L	11.74	4.24
12	4	1	1		23.66	22.19	8	4	-7	1		26.36	17.54
5	1	-9	1	L	12.50	7.62	10	6	-2	1		111.39	118.06
11	3	-5	1		68.49	64.43	6	6	-6	1		44.44	40.95
4	2	-9	1	L	12.31	6.86	11	5	-3	1	L	14.62	11.47
11	1	-6	1	L	14.43	13.91	2	6	7	1		163.72	160.14
5	7	4	1	L	12.12	8.62	12	0	5	1		199.31	199.57
11	5	1	1	L	14.62	11.00	0	8	4	1		24.82	23.42
7	1	8	1	L	11.93	8.61	4	8	-3	1	L	12.50	16.12
1	3	-9	1		38.48	29.34	11	3	5	1		115.05	115.76
12	4	-2	1	L	14.81	9.25	10	2	-7	1	L	13.08	6.86
2	8	-3	1	L	17.51	18.46	3	3	9	1		158.91	157.02

H	K	L	G	C	F OBS	F CALC
5	7	-5	1	L	17.70	20.85
8	0	8	1		167.95	167.96
13	3	2	1		295.89	283.22
9	5	5	1	L	13.85	6.85
1	7	-6	1		27.70	23.51
3	5	-8	1	L	11.93	5.98
6	4	-8	1	L	19.24	18.17
6	8	0	1		23.28	25.67
4	8	3	1	L	12.70	13.40
11	1	6	1	L	23.66	17.49
2	8	-4	1		25.59	27.75
10	6	2	1		139.09	134.58
1	7	6	1		27.70	25.77
14	2	0	1	L	14.62	10.95
8	6	-5	1		87.73	89.96
13	3	-3	1		151.02	152.65
14	2	-1	1	L	14.04	13.62
0	0	10	1		73.30	78.06
6	8	-1	1	L	16.16	11.94
9	1	-8	1	L	12.12	9.92
14	0	2	1		114.66	112.66
6	2	-9	1	L	12.70	10.59
2	8	4	1		30.59	29.60
2	0	-10	1		48.87	43.14
6	8	1	1	L	16.35	20.48
7	7	-4	1	L	13.27	2.30
12	4	3	1	L	15.20	6.44
1	1	-10	1	L	12.89	17.64
14	0	-3	1		115.43	123.39
4	6	-7	1		304.93	311.30
10	4	-6	1	L	12.89	0.44
10	0	7	1		96.19	97.29
12	0	-6	1		51.17	44.92
5	7	5	1	L	12.70	15.59
11	5	3	1	L	15.39	17.98
6	0	9	1		190.46	194.79
0	4	9	1	L	12.12	10.86
14	2	1	1	L	14.43	18.53
6	6	6	1		95.81	94.44
10	6	-3	1		270.11	278.93
3	5	8	1	L	11.74	1.13
7	5	-7	1	L	13.27	12.57
13	1	4	1	L	14.43	11.69
9	7	0	1	L	16.16	7.88
5	3	-9	1		115.24	114.08
11	3	-6	1	L	25.20	9.36
14	2	-2	1	L	14.81	14.57
3	7	-6	1	L	20.01	26.85
7	1	-9	1	L	12.70	11.45
1	1	10	1	L	17.89	20.83
2	4	-9	1	L	17.31	15.82
9	7	-1	1	L	24.63	15.00
7	3	8	1	L	16.16	16.49
6	8	-2	1	L	14.24	8.85
2	0	10	1		129.47	130.59
12	2	5	1	L	20.97	15.77
12	4	-4	1		25.01	15.90

H	K	L	G	C	F OBS	F CALC
9	3	7	1	L	16.93	13.07
9	7	1	1	L	15.39	7.70
8	4	7	1	L	12.50	10.52
8	2	8	1		27.32	21.18
3	1	-10	1	L	12.70	12.51
11	5	-4	1	L	14.81	13.38
9	5	-6	1		25.01	17.65
13	1	-5	1	L	15.39	12.75
7	7	4	1	L	13.47	1.00
6	8	2	1	L	14.62	7.47
3	7	6	1		25.01	23.87
11	1	-7	1	L	13.66	5.60
8	6	5	1	L	16.16	21.34
13	3	3	1		31.94	32.38
1	9	0	1	L	18.08	4.23
2	4	9	1		19.05	16.10
4	6	7	1		193.54	190.43
6	4	8	1		24.63	21.03
4	8	-4	1		29.05	24.77
9	7	-2	1	L	15.78	24.30
0	2	10	1	L	11.93	1.64
10	6	3	1		193.73	193.74
1	9	-1	1		63.68	61.51
14	2	2	1	L	14.43	8.98
4	0	-10	1		85.61	85.80
1	9	1	1		75.41	80.20
5	5	-8	1	L	12.70	9.54
2	2	-10	1	L	11.93	5.46
14	0	3	1		141.40	141.89
13	3	-4	1		111.39	113.75
14	2	-3	1	L	15.39	13.27
12	2	-6	1	L	13.47	13.49
10	2	7	1	L	13.66	7.34
6	2	9	1	L	12.89	16.65
4	8	4	1		22.70	28.18
9	7	2	1	L	24.63	24.86
0	8	5	1	L	12.70	15.84
4	4	-9	1	L	12.70	7.61
5	3	9	1		123.70	126.84
3	1	10	1		28.47	24.01
14	0	-4	1		238.94	237.48
6	8	-3	1	L	13.85	16.84
7	5	7	1	L	13.27	15.00
10	0	-8	1		136.21	134.62
8	0	-9	1		53.48	45.53
10	6	-4	1		199.31	200.21
2	2	10	1	L	17.12	7.00
3	9	0	1		133.51	145.70
10	4	6	1	L	13.85	5.67
1	9	-2	1		130.24	119.14
2	8	-5	1	L	12.89	10.41
1	9	2	1		268.76	254.10
9	1	8	1	L	13.47	6.23
12	4	4	1		26.16	20.62
11	5	4	1	L	15.39	13.87
3	9	-1	1		223.74	232.41
5	7	-6	1	L	13.27	19.94

H	K	L	G	C	F OBS	F CALC	H	K	L	G	C	F OBS	F CALC
9	7	-3	1	L	14.81	14.87	6	8	-4	1	L	18.85	21.40
3	9	1	1		122.36	118.79	1	5	9	1	L	12.50	11.72
7	7	-5	1	L	13.66	11.69	3	3	-10	1		75.80	79.84
6	8	3	1	L	14.04	9.85	13	1	-6	1	L	15.20	6.73
7	1	9	1	L	12.89	10.58	13	3	-5	1		75.61	61.34
2	8	5	1		18.28	16.34	8	8	1	1		25.78	17.84
12	0	6	1	L	20.20	28.89	11	3	-7	1	L	17.31	13.99
11	3	6	1		284.53	286.27	12	2	6	1	L	14.81	4.47
15	1	0	1	L	14.24	16.62	3	7	-7	1		19.82	17.44
15	1	-1	1		27.90	16.39	6	6	7	1		43.86	35.87
4	0	10	1		73.49	76.33	14	4	0	1	L	15.20	12.24
6	6	-7	1	L	24.24	31.73	4	2	10	1	L	12.31	2.83
0	6	8	1		237.98	237.16	14	4	-1	1	L	14.62	11.97
8	6	-6	1		23.47	14.19	13	5	1	1	L	14.81	3.96
9	5	6	1		26.55	23.74	14	0	-5	1	L	20.78	15.36
5	5	8	1	L	12.70	6.46	15	1	2	1	L	14.81	15.08
5	1	-10	1	L	13.66	16.18	12	6	0	1		356.87	357.06
9	3	-8	1		50.40	46.51	6	4	-9	1	L	13.27	14.78
4	2	-10	1	L	11.93	0.75	3	5	-9	1		18.08	16.13
2	6	-8	1		69.64	61.68	8	6	6	1		168.34	166.99
14	2	3	1	L	14.81	5.70	9	7	-4	1	L	13.85	6.50
4	4	9	1		21.35	19.12	4	8	5	1	L	12.70	15.66
1	3	-10	1		67.33	62.36	5	9	0	1	L	21.16	30.27
12	4	-5	1	L	14.81	11.57	12	6	-1	1		26.93	6.90
13	1	5	1	L	14.81	10.56	4	6	-8	1		173.53	178.43
8	4	-8	1	L	13.27	8.75	8	8	-2	1	L	15.39	9.76
15	1	1	1	L	14.04	1.98	8	0	9	1		96.00	96.96
3	9	-2	1		239.52	244.00	13	5	-2	1	L	16.16	14.17
1	7	-7	1	L	12.70	13.73	5	1	10	1		19.62	17.01
13	3	4	1	L	19.43	18.61	15	1	-3	1	L	14.81	1.27
15	1	-2	1	L	15.78	9.41	7	5	-8	1	L	12.70	6.98
11	5	-5	1	L	14.24	11.01	9	5	-7	1	L	13.08	4.09
9	7	3	1		23.86	22.69	10	6	-5	1		143.13	146.04
14	2	-4	1	L	15.97	10.69	5	9	-1	1	L	29.82	2.05
7	3	-9	1		76.38	74.09	9	1	-9	1	L	13.27	6.55
3	9	2	1		140.44	132.18	3	9	-3	1		151.79	156.17
1	3	10	1		168.34	165.24	6	8	4	1		26.16	24.02
5	7	6	1		27.70	26.32	10	0	8	1		38.48	37.54
1	7	7	1		24.43	22.30	14	4	1	1	L	15.20	14.91
10	6	4	1		114.85	116.23	5	9	1	1		68.68	65.60
10	2	-8	1	L	14.24	9.68	12	6	1	1	L	20.97	5.37
8	2	-9	1	L	13.08	0.23	3	7	7	1	L	19.82	21.09
8	8	0	1		34.44	27.36	14	4	-2	1	L	15.39	11.55
2	6	8	1		153.52	145.47	3	3	10	1	L	17.12	6.79
1	5	-9	1	L	12.70	5.80	3	9	3	1		78.49	77.64
11	1	7	1	L	14.62	21.41	8	8	2	1	L	16.16	14.12
1	9	-3	1		122.93	121.84	0	8	6	1	L	12.12	0.30
7	7	5	1	L	15.01	6.40	12	6	-2	1		28.86	33.00
8	8	-1	1	L	16.16	12.06	12	4	5	1	L	15.58	13.54
1	9	3	1		40.98	43.96	11	1	-8	1	L	13.47	7.10
4	8	-5	1	L	13.08	13.84	11	5	5	1	L	15.20	10.37
12	0	-7	1		107.73	110.26	12	2	-7	1		20.97	15.65
13	5	0	1	L	14.62	4.15	9	3	8	1		110.04	106.70
10	4	-7	1	L	13.47	6.81	3	5	9	1	L	12.70	9.56
14	0	4	1		161.99	162.79	14	2	4	1	L	15.58	14.40
13	5	-1	1	L	15.39	14.31	6	2	-10	1	L	12.50	11.89
6	0	-10	1		24.63	28.81	8	4	8	1	L	13.85	18.66

H	K	L	G	C	F OBS	F CALC
13	5	2	1	L	21.35	18.18
2	8	-6	1	L	12.50	5.55
5	9	-2	1		136.59	136.43
4	6	8	1		193.15	187.80
7	3	9	1		76.38	78.16
9	7	4	1	L	14.81	14.46
7	7	-6	1		25.97	22.34
1	9	-4	1		40.79	38.34
15	3	0	1		54.44	44.93
15	3	-1	1		148.71	141.86
13	5	-3	1	L	15.78	0.83
0	4	10	1	L	12.31	0.80
5	9	2	1		305.12	307.37
8	8	-3	1		29.82	20.56
1	9	4	1	L	15.97	18.81
14	2	-5	1	L	15.20	0.98
5	3	-10	1		101.58	99.19
2	8	6	1	L	12.50	2.17
14	4	2	1	L	14.62	8.10
6	0	10	1		67.91	68.35
7	1	-10	1	L	13.27	7.98
0	0	11	1		34.05	33.57
12	6	2	1		105.43	107.84
8	2	9	1	L	13.47	17.17
11	7	0	1	L	15.58	10.41
2	4	-10	1	L	12.31	3.03
15	1	3	1	L	15.39	9.59
11	7	-1	1	L	23.47	23.33
2	0	-11	1		158.91	159.42
14	4	-3	1		22.89	15.50
10	4	7	1	L	13.85	5.65
12	4	-6	1	L	14.24	10.58
5	7	-7	1	L	13.47	7.19
13	3	5	1	L	19.82	4.71
6	4	9	1	L	19.05	18.57
10	2	8	1		28.67	24.20
15	3	1	1		64.26	59.19
1	1	-11	1	L	12.89	13.17
10	6	5	1		96.00	95.48
15	3	-2	1		151.02	151.72
15	1	-4	1	L	14.81	8.24
5	5	-9	1	L	13.08	7.81
12	6	-3	1	L	20.20	7.07
11	5	-6	1		23.47	16.12
6	8	-5	1	L	13.27	10.90
8	6	-7	1		159.49	160.80
11	7	1	1	L	15.78	13.01
7	5	8	1	L	13.08	9.36
8	8	3	1	L	15.58	13.75
13	1	6	1	L	15.39	13.88
12	0	7	1		71.95	72.40
11	3	7	1	L	19.62	34.70
1	1	11	1	L	13.27	9.38
3	9	-4	1		130.44	135.54
16	0	0	1		127.17	124.40
2	4	10	1	L	12.70	10.73
14	0	5	1		71.37	64.47

H	K	L	G	C	F OBS	F CALC
16	0	-1	1		163.14	158.32
9	5	7	1	L	14.04	13.37
11	7	-2	1	L	16.35	17.02
10	0	-9	1		38.28	41.72
5	9	-3	1		31.55	23.03
2	0	11	1		289.54	293.91
9	7	-5	1		29.63	21.06
4	8	-6	1	L	12.89	4.30
13	3	-6	1		341.86	332.43
3	1	-11	1	L	13.08	6.10
6	6	-8	1		115.24	115.45
13	5	3	1	L	23.28	14.26
7	7	6	1		22.32	25.77
3	9	4	1		168.72	165.95
16	0	1	1		206.04	198.61
14	0	-6	1	L	21.35	19.63
16	0	-2	1		171.03	166.74
5	9	3	1	L	17.12	5.14
15	3	2	1		62.33	55.30
4	4	-10	1	L	12.50	7.35
5	7	7	1	L	13.47	17.40
6	2	10	1	L	18.47	1.92
9	1	9	1	L	13.47	6.40
0	2	11	1	L	12.70	10.51
4	0	-11	1		185.65	182.84
6	8	5	1		19.43	15.09
8	0	-10	1		75.80	74.37
5	3	10	1		281.26	279.00
11	7	2	1	L	16.16	20.85
14	4	3	1	L	15.20	4.85
15	3	-3	1		104.08	99.71
13	1	-7	1	L	14.62	3.59
13	5	-4	1	L	15.78	8.13
12	6	3	1		91.38	85.80
2	2	-11	1	L	13.08	7.42
1	7	-8	1	L	12.70	12.32
9	3	-9	1		108.12	103.17
10	6	-6	1		156.79	157.79
8	8	-4	1		29.05	20.83
0	6	9	1		54.83	50.28
4	8	6	1	L	13.08	3.79
7	9	0	1	L	21.35	35.78
5	5	9	1	L	13.47	7.31
1	7	8	1	L	12.70	6.71
14	4	-4	1	L	16.16	7.65
12	0	-8	1		170.64	170.05
2	6	-9	1		131.78	132.31
7	9	-1	1		60.60	56.24
10	4	-8	1	L	14.43	13.77
8	4	-9	1	L	13.47	2.10
0	10	0	1	L	30.59	31.08
11	7	-3	1	L	15.39	4.48
12	2	7	1	L	14.81	2.10
3	1	11	1	L	13.27	10.72
16	2	0	1	L	14.81	9.39
14	2	5	1	L	15.97	17.80
11	1	8	1	L	14.04	16.62

H	K	L	G	C	F OBS	F CALC
16	2	-1	1	L	14.43	2.78
11	3	-8	1		55.79	58.16
12	6	-4	1		101.96	103.25
7	9	1	1		62.52	59.15
7	1	10	1	L	13.66	20.67
1	9	-5	1		76.57	82.91
10	2	-9	1	L	13.66	8.21
0	10	1	1	L	19.05	19.53
8	6	7	1		251.83	249.78
2	2	11	1	L	12.89	9.38
15	1	4	1	L	15.58	9.01
16	0	2	1		101.58	100.35
9	7	5	1	L	14.62	8.25
1	9	5	1		49.06	45.53
3	7	-8	1	L	12.70	2.81
16	0	-3	1		80.22	71.81
2	6	9	1	L	23.28	26.13
12	4	6	1	L	15.39	6.84
2	10	0	1		30.59	29.70
11	5	6	1	L	15.39	18.77
6	6	8	1		146.21	139.34
10	8	0	1	L	16.54	22.60
15	1	-5	1	L	15.78	9.34
4	4	10	1	L	12.89	3.64
16	2	1	1	L	15.01	13.11
7	9	-2	1		348.60	353.60
10	8	-1	1	L	16.93	5.29
5	9	-4	1		48.48	52.11
8	8	4	1		24.24	26.51
16	2	-2	1	L	14.81	5.09
14	2	-6	1	L	14.81	5.05
9	5	-8	1	L	13.47	12.38
2	10	-1	1		20.39	19.95
0	8	7	1	L	12.89	12.67
7	3	-10	1		283.00	283.30
5	1	-11	1	L	13.85	11.52
4	0	11	1	L	17.89	28.43
4	2	-11	1	L	13.27	2.29
2	10	1	1	L	15.39	19.05
8	2	-10	1	L	12.70	3.91
15	3	3	1	L	20.58	17.09
10	8	1	1	L	16.16	16.53
1	5	-10	1		18.66	17.09
11	7	3	1	L	16.54	15.10
2	8	-7	1	L	13.27	15.02
0	10	2	1	L	12.70	6.53
7	9	2	1		160.64	161.67
3	9	-5	1		147.17	149.88
1	3	-11	1		148.52	149.60
15	3	-4	1		119.66	122.41
4	6	-9	1		78.68	77.70
5	9	4	1		64.83	63.53
13	3	6	1		109.85	108.35
1	3	11	1		56.56	51.78
10	6	6	1		52.91	48.06
3	9	5	1		262.60	258.51
12	6	4	1		107.73	106.23

H	K	L	G	C	F OBS	F CALC
10	0	9	1		81.57	81.60
6	0	-11	1		181.80	178.82
3	3	-11	1		46.94	39.80
7	9	-3	1	L	19.24	15.20
16	0	3	1		93.11	87.58
14	0	6	1	L	22.32	3.00
8	0	10	1		28.47	27.95
16	0	-4	1		78.88	78.29
9	3	9	1		228.17	228.76
13	3	-7	1		79.45	70.43
4	6	9	1	L	22.12	1.10
12	6	-5	1		80.22	72.50
8	6	-8	1		250.10	250.39
7	9	3	1		86.00	90.82
14	0	-7	1		55.02	49.34
3	3	11	1		49.83	53.78
11	3	8	1		105.04	108.36
12	0	8	1		209.51	204.56
7	3	10	1		32.13	12.78
10	6	-7	1		168.14	167.46
5	9	-5	1		177.95	185.71
15	3	4	1		161.02	160.86
1	9	-6	1		377.46	378.22
1	9	6	1		80.61	79.79
14	6	0	1		93.50	91.46
15	3	-5	1		117.16	110.70
14	6	-1	1	L	19.24	12.08
6	6	-9	1		97.35	95.37
5	3	-11	1	L	16.93	17.96
7	9	-4	1		27.32	30.32
6	0	11	1		108.89	107.50
5	9	5	1	L	26.16	28.41
10	0	-10	1		33.67	48.46
14	6	1	1	L	20.97	6.97
9	9	0	1		167.95	186.19
14	6	-2	1	L	19.24	8.08
3	9	-6	1	L	18.66	18.98
16	0	4	1	L	21.74	9.51
9	9	-1	1		107.54	115.49
16	0	-5	1		33.47	28.39
0	0	12	1		61.37	63.06
12	6	5	1		156.02	160.13
12	0	-9	1	L	19.82	17.49
9	9	1	1		191.42	201.26
2	0	-12	1		232.40	236.40
8	6	8	1		135.25	133.75
7	9	4	1	L	18.08	3.70
11	3	-9	1		262.60	258.31
3	9	6	1		113.70	113.05
9	3	-10	1	L	18.66	20.95
9	9	-2	1		66.56	59.55
0	6	10	1		65.41	64.45
14	6	2	1		89.65	91.00
8	0	-11	1	L	18.08	12.25
2	6	-10	1	L	32.51	36.48
2	0	12	1		46.94	45.52
14	6	-3	1		94.08	98.73

H	K	L	G	C	F OBS	F CALC	H	K	L	G	C	F OBS	F CALC
13	3	7	1		100.23	99.22	7	3	11	1		60.99	63.56
12	6	-6	1	L	30.20	36.42	9	9	4	1		80.22	81.02
10	6	7	1		83.88	83.05	7	9	-6	1		60.79	60.26
6	6	9	1		153.91	158.01	15	3	6	1		80.22	76.42
5	3	11	1		80.99	79.20	14	6	-5	1	L	20.97	14.54
9	9	2	1		167.37	172.10	3	3	12	1	L	17.70	22.80
4	0	-12	1		91.77	90.24	8	6	9	1		79.84	79.39
2	6	10	1		103.50	106.34	18	0	-3	1	L	21.93	30.53
14	0	7	1		76.38	70.49	11	9	0	1	L	28.86	21.25
15	3	5	1		190.84	195.16	18	0	2	1		43.86	36.48
5	9	-6	1		135.82	147.34	12	0	-10	1	L	20.78	17.29
9	9	-3	1		56.95	57.15	11	9	-1	1		84.84	88.61
7	9	-5	1		50.02	43.06	10	0	-11	1		197.19	195.17
15	3	-6	1	L	30.20	22.09	5	9	-7	1		61.56	61.81
17	3	-1	1	L	19.24	20.27	17	3	3	1	L	21.74	26.00
17	3	0	1		81.38	78.27	10	6	8	1		39.05	34.73
13	3	-8	1	L	32.90	30.80	15	3	-7	1	L	20.78	18.78
4	6	-10	1		71.57	70.80	17	3	-4	1		53.67	56.91
7	3	-11	1		108.12	107.84	13	3	8	1		28.09	18.64
14	0	-8	1		60.02	51.12	11	3	-10	1		110.62	111.82
14	6	3	1		116.58	115.48	11	9	1	1	L	19.82	8.27
1	9	-7	1		72.72	76.06	5	3	-12	1		47.52	42.81
17	3	1	1		78.30	74.73	11	9	-2	1		129.67	139.20
17	3	-2	1		28.28	35.57	14	0	8	1	L	35.21	39.50
16	0	5	1	L	21.55	23.10	16	0	6	1		75.41	72.07
14	6	-4	1		187.57	194.43	9	9	-5	1		147.94	155.94
9	9	3	1		145.44	152.47	6	0	12	1		110.04	109.94
5	9	6	1		59.45	54.55	9	3	-11	1		58.68	60.31
10	6	-8	1		107.54	105.03	7	9	6	1		155.45	150.17
1	9	7	1		57.33	57.04	16	0	-7	1		179.69	173.38
8	6	-9	1		40.59	39.36	5	9	7	1		118.89	121.98
16	0	-6	1		31.94	42.89	6	6	10	1		55.79	58.41
10	0	10	1	L	36.36	35.97	0	6	11	1		29.82	32.18
4	0	12	1	L	17.89	4.30	13	3	-9	1	L	21.16	25.57
7	9	5	1		93.88	100.05	11	9	2	1		81.19	87.79
1	3	-12	1		93.31	90.02	2	6	-11	1		132.17	131.69
12	6	6	1	L	20.58	25.35	1	9	-8	1		92.73	91.59
9	3	10	1		25.78	28.96	18	0	-4	1		161.79	160.82
3	9	-7	1	L	17.31	20.91	14	0	-9	1		121.39	119.68
4	6	10	1		66.76	63.33	18	0	3	1		33.86	35.12
18	0	-1	1		73.30	68.80	1	9	8	1		48.67	45.89
18	0	0	1		106.58	85.58	0	0	13	1		113.51	115.52
11	3	9	1	L	19.24	24.70	8	0	-12	1	L	19.05	8.75
1	3	12	1		23.28	9.11	11	9	-3	1		59.45	58.01
12	0	9	1	L	20.78	26.14	2	0	-13	1		71.57	66.36
9	9	-4	1		73.49	69.05	12	6	7	1		56.18	58.79
8	0	11	1		113.70	115.03	16	6	0	1		101.96	101.46
17	3	2	1		140.25	134.73	16	6	-1	1		132.55	131.79
17	3	-3	1	L	20.20	16.94	14	6	5	1		57.91	52.54
6	0	-12	1		104.08	106.48	10	6	-9	1	L	19.24	37.74
3	3	-12	1	L	17.51	21.15	2	6	11	1		249.14	246.30
18	0	-2	1		65.60	59.97	9	9	5	1		101.96	104.72
18	0	1	1		80.99	73.63	3	9	-8	1		60.79	65.31
3	9	7	1		90.61	94.99	17	3	4	1	L	21.16	29.17
12	6	-7	1		88.30	90.42	5	3	12	1		114.08	112.04
6	6	-10	1		25.78	24.62	17	3	-5	1		196.23	191.18
14	6	4	1		135.25	133.33	16	6	1	1		167.76	164.47

H	K	L	G	C	F OBS	F CALC
16	6	-2	1		136.98	139.55
14	6	-6	1	L	29.43	18.27
4	6	-11	1		163.14	159.03
8	6	-10	1		60.41	64.23
2	0	13	1		59.45	63.55
11	9	3	1		35.40	36.21
3	9	8	1		66.37	66.26
4	0	-13	1	L	19.05	17.73
7	9	-7	1		117.16	123.76
12	6	-8	1		140.82	141.26
7	3	-12	1		98.69	93.64
15	3	7	1		111.58	117.57
16	6	2	1		91.96	86.23
10	0	11	1		123.89	127.08
11	9	-4	1		58.10	58.26
9	9	-6	1		104.08	109.14
16	6	-3	1		68.68	66.04
18	0	-5	1	L	23.09	0.15
11	3	10	1		55.41	49.09
12	0	10	1		52.71	53.09
18	0	4	1		216.05	200.73
15	3	-8	1	L	21.35	3.96
9	3	11	1		75.03	74.09
4	6	11	1		25.59	28.07
5	9	-8	1		40.21	38.10
16	0	7	1		118.70	121.87
7	9	7	1	L	18.28	14.71
4	0	13	1		108.70	113.69
16	0	-8	1		87.34	85.43
1	3	-13	1		87.92	84.84
8	0	12	1		78.11	73.77
10	6	9	1		66.95	66.87
6	6	-11	1		154.87	150.07
11	9	4	1		48.67	47.07
13	3	9	1		96.58	101.83
17	3	5	1	L	21.55	1.80
17	3	-6	1		95.61	98.86
16	6	3	1		84.07	77.72
14	6	6	1	L	21.35	3.29
8	6	10	1		25.01	24.57
1	3	13	1		105.04	99.46
6	0	-13	1	L	18.85	10.03
16	6	-4	1		58.29	61.13
9	9	6	1		30.20	36.98
5	9	8	1	L	18.08	18.28
3	3	-13	1		67.53	63.80
12	0	-11	1		47.33	44.67
14	0	9	1	L	22.12	35.27
11	3	-11	1		60.22	58.39
7	3	12	1		56.18	49.77
14	6	-7	1	L	22.32	37.08
11	9	-5	1		49.83	53.48
0	12	0	1	L	372.26	374.19
1	9	-9	1	L	18.85	13.86
12	6	8	1		169.68	173.22
10	0	-12	1		44.83	47.69
13	9	0	1	L	17.31	9.83

H	K	L	G	C	F OBS	F CALC
13	3	-10	1		51.75	53.61
0	12	1	1	L	20.01	13.83
13	9	-1	1		89.84	91.03
19	3	-1	1		56.18	48.55
19	3	0	1		48.48	45.70