AM-93-542

Inferred limitations to the oxidation of Fe in chlorite: A high-temperature single-crystal X-ray study

Daniel O. Nelson, Stephen Guggenheim

For deposit: Table 4

American Mineralogist, 78, 11-12, 1197-1207.

Day Book Brady Chlorite
high T data
Nelson & Guggenheim

Table 4
For deposit

h	k	l	Fo	sigFo	Fc
0	0	5	92.28	0.11	91.34
0	0	6	20.85	0.26	17.37
0	0	7	69.63	0.13	70.64
0	0	8	22.76	0.35	23.47
0	0	9	31.99	0.31	26.30
0	0	11	20.76	0.57	19.62
0	0	14	58.45	0.26	54.25
0	0	19	20.92	0.92	17.21
0	-2	19	5.11	0.70	8.28
0	-2	12	10.83	0.83	11.37
0	-2	11	12.48	0.75	14.51
0	-2	9	14.03	0.55	16.56
0	-2	8	20.19	0.33	21.92
0	-2	7	7.10	0.81	4.19
0	-2	6	27.67	0.20	35.53
0	-2	5	22.69	0.20	21.20
0	-2	4	25.98	0.18	24.65
0	-2	2	12.91	0.31	10.30
0	-2	1	66.96	0.09	60.64
0	2	0	41.90	0.09	43.83
0	2	1	53.21	0.09	60.41
0	2	2	50.76	0.11	50.44
0	2	3	14.67	0.31	7.87
0	2	4	45.34	0.13	56.95
0	2	5	12.63	0.37	11.25
0	2	6	26.46	0.20	23.57
0	2	7	21.53	0.31	25.76
0	2	8	10.22	0.66	10.77
0	2	9	19.21	0.46	19.37
0	2	10	12.59	0.72	14.83
0	2	12	12.08	0.83	12.17
0	2	18	11.64	1.16	8.62
0	-4	15	12.26	0.72	16.39
0	-4	8	27.76	0.33	31.30
0	-4	7	32.58	0.24	38.77
0	-4	6	24.29	0.29	28.56
0	-4	5	35.85	0.18	38.86
0	-4	4	11.18	0.48	6.85
0	-4	3	35.15	0.15	41.37
0	-4	2	7.98	0.53	5.58
0	-4	1	26.31	0.18	21.16
0	4	0	15.28	0.26	8.07
0	4	1	18.81	0.22	20.09
0	4	2	21.84	0.22	26.84
0	4	3	22.23	0.22	17.27
0	4	4	25.78	0.22	27.13
0	4	5	36.44	0.18	41.39
0	4	6	19.93	0.35	26.13
0	4	7	38.46	0.24	39.00
0	4	9	42.54	0.26	46.00
0	4	10	13.46	0.79	11.43
0	4	11	29.77	0.37	33.91
0	4	12	25.96	0.44	24.19
0	4	13	14.84	0.75	10.94
0	4	14	23.72	0.50	23.14
0	4	16	17.39	0.77	15.68
0	4	18	10.37	1.36	6.50
0	4	19	13.18	1.10	8.17

0	-6	8	29.36	0.35	31.39
0	-6	7	22.19	0.46	21.46
0	-6	6	49.88	0.22	49.85
0	-6	5	40.65	0.24	39.00
0	-6	4	57.12	0.20	55.87
0	-6	3	55.93	0.18	53.13
0	-6	2	100.81	0.13	96.55
0	-6	1	27.19	0.31	23.72
0	6	0	205.22	0.11	214.49
0	6	3	52.51	0.20	50.38
0	6	4	57.38	0.20	57.13
0	6	5	40.67	0.26	43.56
0	6	6	47.42	0.24	46.52
0	6	7	24.67	0.42	23.95
0	6	8	28.77	0.37	30.62
0	6	10	76.43	0.20	77.57
0	6	11	38.57	0.31	36.10
0	6	12	47.86	0.29	47.05
0	6	13	27.65	0.46	28.09
0	6	14	43.41	0.33	41.24
0	6	15	19.01	0.70	16.13
0	6	16	54.75	0.33	47.21
0	6	17	9.45	1.49	6.30
0	-8	14	17.17	0.79	14.97
0	-8	12	17.41	0.75	15.66
0	-8	11	19.47	0.64	21.89
0	-8	9	25.65	0.46	25.89
0	-8	6	14.80	0.68	14.77
0	8	1	8.44	1.10	1.92
0	8	2	7.98	1.21	8.96
0	8	3	12.59	0.79	11.51
0	8	5	23.26	0.44	24.14
0	8	6	8.00	1.25	3.57
0	8	8	15.96	0.70	16.81
0	8	9	17.54	0.61	17.65
0	8	10	25.02	0.48	23.44
0	8	12	18.75	0.72	22.13
0	8	13	12.61	1.01	8.44
0	8	14	14.12	0.96	10.69
0	8	15	12.89	1.10	12.16
0	-10	12	9.25	1.53	11.31
0	-10	10	12.78	1.05	9.47
0	10	9	14.43	0.92	11.57
0	10	11	10.74	1.29	12.56
0	10	12	10.52	1.34	5.44
1	-11	10	10.11	1.45	9.95
-1	9	10	33.55	0.44	39.17
-1	9	9	81.01	0.24	81.97
1	-9	8	17.69	0.68	13.54
1	-9	10	42.32	0.35	41.93
1	-9	11	37.71	0.42	37.88
1	-9	12	12.63	1.12	13.14
1	-9	13	19.25	0.77	18.98
1	-9	14	13.77	1.05	11.17
-1	7	16	9.56	1.51	8.28
-1	7	15	10.87	1.29	7.60
-1	7	13	8.90	1.43	11.64
-1	7	4	23.81	0.44	26.44
-1	7	2	34.27	0.31	35.55
-1	7	1	20.06	0.50	20.27

-1	7	0	24.34	0.39	22.24
1	-7	1	40.08	0.26	39.82
1	-7	2	13.22	0.72	8.06
1	-7	3	35.48	0.31	36.66
1	-7	4	18.40	0.55	17.96
1	-7	5	24.78	0.42	23.42
1	-7	6	22.67	0.46	24.29
1	-7	7	9.32	1.07	9.09
1	-7	8	21.53	0.50	22.00
1	-7	10	12.98	0.86	13.54
1	-7	11	11.42	1.05	11.30
-1	5	16	11.60	1.16	6.25
-1	5	13	10.02	1.21	10.39
-1	5	11	14.84	0.72	15.04
-1	5	10	16.71	0.66	18.07
-1	5	8	24.99	0.42	26.08
-1	5	7	17.30	0.55	16.82
-1	5	6	22.96	0.42	24.79
-1	5	5	32.65	0.26	32.80
-1	5	4	11.55	0.66	5.21
-1	5	3	46.88	0.18	49.33
-1	5	2	20.22	0.35	17.86
-1	5	1	36.66	0.22	34.56
-1	5	0	40.21	0.20	39.97
1	-5	1	11.03	0.64	13.03
1	-5	2	43.24	0.20	40.07
1	-5	3	11.88	0.64	12.98
1	-5	4	23.99	0.35	22.94
1	-5	5	21.38	0.42	20.07
1	-5	6	8.55	1.05	3.10
1	-5	14	9.14	1.32	5.56
-1	3	19	44.55	0.44	35.57
-1	3	18	13.20	1.21	13.22
-1	3	16	33.15	0.44	26.73
-1	3	15	30.61	0.46	29.04
-1	3	13	27.30	0.44	25.52
-1	3	12	14.89	0.77	14.08
-1	3	11	14.19	0.79	12.42
-1	3	10	66.52	0.20	63.45
-1	3	8	31.51	0.29	33.58
-1	3	7	66.59	0.15	71.68
-1	3	5	147.08	0.11	155.22
-1	3	4	34.64	0.18	32.78
-1	3	3	101.45	0.09	99.21
-1	3	1	6.45	0.72	3.92
-1	3	0	25.85	0.20	14.23
1	-3	2	153.28	0.09	135.29
1	-3	3	102.06	0.11	95.51
1	-3	4	39.99	0.15	38.28
1	-3	5	90.90	0.11	89.89
1	-3	6	43.08	0.20	45.23
1	-3	8	26.66	0.35	31.39
1	-3	9	21.31	0.46	25.60
1	-3	11	54.53	0.24	59.95
1	-3	12	18.24	0.57	18.54
1	-3	13	35.96	0.33	36.61
1	-3	14	20.57	0.55	18.28
-1	1	16	9.08	1.38	8.25
-1	1	12	10.44	1.10	11.25
-1	1	10	13.57	0.77	15.77

-1	1	9	18.44	0.48	21.58
-1	1	7	26.86	0.26	26.69
-1	1	6	15.94	0.33	20.65
-1	1	5	32.12	0.18	37.84
-1	1	4	46.31	0.13	41.36
-1	1	3	18.42	0.26	5.64
-1	1	2	76.52	0.09	77.88
-1	1	1	28.44	0.15	14.79
1	-1	1	62.95	0.09	62.56
1	-1	2	36.22	0.15	35.14
1	-1	3	55.08	0.11	50.16
1	-1	4	12.94	0.39	15.49
1	-1	5	33.61	0.18	39.21
1	-1	6	18.44	0.35	17.24
1	-1	7	14.45	0.46	10.16
1	-1	8	19.73	0.42	25.42
1	-1	10	9.52	1.05	10.85
1	-1	11	16.03	0.66	15.97
1	-1	14	9.38	1.16	8.82
-1	-1	13	11.12	0.96	12.70
-1	-1	12	10.22	1.07	3.33
-1	-1	11	13.51	0.81	15.74
-1	-1	10	14.71	0.66	18.72
-1	-1	9	7.65	1.12	3.13
-1	-1	8	20.61	0.39	22.95
-1	-1	7	17.54	0.39	20.84
-1	-1	6	18.11	0.31	23.67
-1	-1	5	39.68	0.15	38.70
-1	-1	4	10.44	0.46	6.50
-1	-1	3	57.82	0.11	66.39
-1	-1	2	39.01	0.13	30.56
-1	-1	1	44.05	0.11	36.98
1	1	0	75.45	0.09	74.86
1	1	1	20.87	0.22	20.03
1	1	2	54.37	0.11	57.56
1	1	3	22.32	0.24	30.15
1	1	4	33.24	0.18	40.10
1	1	5	28.46	0.22	30.48
1	1	6	9.43	0.66	5.59
1	1	7	24.78	0.33	29.88
1	1	8	10.72	0.81	10.71
1	1	9	10.37	0.99	10.16
1	1	10	17.45	0.66	20.88
1	1	13	8.99	1.40	13.75
-1	-3	15	26.57	0.39	28.27
-1	-3	14	38.06	0.31	33.22
-1	-3	13	24.80	0.39	24.59
-1	-3	12	12.17	0.83	16.28
-1	-3	11	14.03	0.72	13.48
-1	-3	10	60.89	0.20	64.34
-1	-3	8	29.16	0.29	28.41
-1	-3	7	63.34	0.15	68.19
-1	-3	5	149.88	0.09	155.92
-1	-3	4	33.13	0.18	31.33
-1	-3	2	143.19	0.09	133.02
-1	-3	1	10.11	0.39	3.86
1	3	0	26.46	0.18	19.42
1	3	1	99.54	0.09	101.28
1	3	2	135.24	0.09	130.63
1	3	3	88.97	0.09	92.33

1	3	4	35.80	0.15	34.79
1	3	5	85.16	0.11	90.57
1	3	6	39.97	0.20	43.38
1	3	8	28.52	0.31	33.63
1	3	9	21.22	0.46	24.06
1	3	10	78.34	0.18	80.96
1	3	11	61.81	0.20	62.01
1	3	12	19.10	0.53	20.18
1	3	13	34.75	0.33	33.76
1	3	14	22.58	0.50	19.65
1	3	16	33.85	0.42	28.45
-1	-5	15	8.84	1.25	6.22
-1	-5	7	23.77	0.37	25.81
-1	-5	6	8.33	0.99	8.77
-1	-5	5	34.29	0.24	35.42
-1	-5	4	27.43	0.26	24.88
-1	-5	3	16.84	0.39	15.13
-1	-5	2	45.58	0.18	47.50
-1	-5	1	8.68	0.70	3.13
1	5	0	40.47	0.18	39.51
1	5	1	25.87	0.26	28.93
1	5	2	18.75	0.35	20.32
1	5	3	31.44	0.24	34.85
1	5	4	8.33	0.86	5.77
1	5	5	20.98	0.39	23.18
1	5	6	11.27	0.77	14.01
1	5	8	15.17	0.66	18.76
1	5	9	9.65	0.96	6.93
1	5	11	13.90	0.72	15.33
1	5	14	9.01	1.32	7.54
1	5	16	10.11	1.34	9.63
-1	-7	6	7.78	1.25	7.05
-1	-7	5	22.19	0.46	23.63
-1	-7	3	27.67	0.35	26.72
-1	-7	2	23.11	0.42	23.22
-1	-7	1	16.55	0.55	16.43
1	7	12	9.67	1.21	6.24
1	7	13	8.99	1.36	6.69
-1	-9	11	13.55	0.96	14.36
-1	-9	10	35.80	0.39	37.40
-1	-9	9	79.13	0.24	77.71
1	9	8	18.00	0.72	18.80
1	9	10	41.90	0.35	36.17
1	9	11	39.99	0.39	38.45
1	9	12	13.64	1.03	12.57
1	9	13	18.37	0.81	16.26
-2	10	11	19.65	0.72	16.31
2	-10	10	15.19	0.96	19.41
-2	8	15	9.65	1.53	4.13
-2	8	2	23.90	0.46	22.85
-2	8	1	21.75	0.48	23.50
-2	8	0	10.35	1.01	11.14
2	-8	1	25.39	0.42	26.08
2	-8	2	11.03	0.92	9.15
2	-8	12	9.91	1.45	12.05
2	-8	14	9.73	1.45	5.34
-2	6	12	44.62	0.33	44.78
-2	6	11	42.27	0.33	40.22
-2	6	10	22.14	0.55	20.99
-2	6	9	41.94	0.31	40.09

-2	6	8	101.89	0.18	102.20
-2	6	7	58.74	0.24	61.82
-2	6	6	90.86	0.18	87.35
-2	6	5	18.18	0.59	14.24
-2	6	4	35.58	0.33	31.95
-2	6	3	103.25	0.15	97.96
-2	6	1	10.39	0.94	1.35
-2	6	0	42.49	0.26	41.58
2	-6	3	14.54	0.72	13.44
2	-6	4	73.84	0.20	71.35
2	-6	12	16.84	0.77	14.34
2	-6	13	15.17	0.92	15.36
2	-6	14	22.58	0.61	23.81
-2	4	19	10.59	1.56	8.30
-2	4	14	8.84	1.45	9.05
-2	4	6	30.70	0.31	29.85
-2	4	5	26.66	0.31	30.22
-2	4	4	27.63	0.29	32.42
-2	4	3	42.07	0.20	41.13
-2	4	1	47.29	0.18	49.63
-2	4	0	25.30	0.29	22.94
2	-4	1	30.70	0.24	28.59
2	-4	2	34.27	0.24	37.25
2	-4	3	8.22	0.90	2.10
2	-4	4	27.82	0.31	27.45
2	-4	5	13.75	0.64	14.44
2	-4	6	10.24	0.94	12.43
2	-4	7	15.83	0.64	15.05
2	-4	9	9.47	1.16	12.77
2	-4	10	12.67	0.90	13.23
2	-4	11	8.59	1.36	5.92
-2	2	19	10.72	1.53	11.28
-2	2	17	16.05	0.90	16.00
-2	2	16	11.03	1.23	9.54
-2	2	15	15.57	0.86	15.56
-2	2	14	23.64	0.53	23.35
-2	2	13	12.23	0.94	13.18
-2	2	12	35.08	0.35	37.54
-2	2	11	10.55	1.07	8.04
-2	2	10	36.94	0.33	40.34
-2	2	9	27.21	0.39	28.08
-2	2	8	30.94	0.33	33.96
-2	2	7	37.01	0.24	35.46
-2	2	6	20.83	0.35	17.60
-2	2	5	45.54	0.18	46.57
-2	2	4	11.99	0.46	10.12
-2	2	3	37.10	0.15	27.79
-2	2	2	10.30	0.46	2.24
-2	2	1	27.19	0.20	23.91
-2	2	0	17.52	0.29	19.93
2	-2	2	30.81	0.20	26.89
2	-2	3	34.23	0.20	31.05
2	-2	4	32.56	0.22	35.08
2	-2	5	40.30	0.22	36.82
2	-2	6	18.35	0.46	15.72
2	-2	7	44.66	0.24	47.89
2	-2	8	10.70	0.99	5.25
2	-2	9	38.30	0.33	42.45
2	-2	10	17.28	0.72	18.88
2	-2	11	23.68	0.48	26.20

2	-2	12	24.03	0.50	25.52
2	-2	13	10.13	1.10	9.33
2	-2	14	17.21	0.64	18.20
-2	0	15	20.63	0.61	20.63
-2	0	14	36.53	0.35	36.31
-2	0	13	18.70	0.64	19.69
-2	0	12	57.18	0.24	59.61
-2	0	11	78.91	0.20	83.86
-2	0	10	22.52	0.50	25.09
-2	0	9	26.38	0.39	29.46
-2	0	7	42.62	0.22	44.30
-2	0	6	90.68	0.13	91.69
-2	0	5	41.57	0.18	37.80
-2	0	4	103.14	0.11	94.94
2	0	0	11.31	0.44	6.01
2	0	1	158.13	0.09	137.98
2	0	3	35.34	0.18	30.06
2	0	4	159.16	0.11	156.61
2	0	5	87.66	0.13	94.53
2	0	6	67.77	0.15	70.77
2	0	7	33.85	0.29	33.33
2	0	9	58.94	0.24	62.85
2	0	10	11.75	1.01	10.74
2	0	11	13.66	0.83	15.51
2	0	12	24.75	0.50	25.57
2	0	13	34.97	0.39	33.20
2	0	14	23.61	0.57	27.61
2	0	15	32.73	0.48	27.98
-2	-2	14	26.97	0.46	24.41
-2	-2	13	18.35	0.64	18.16
-2	-2	12	20.41	0.61	23.73
-2	-2	11	37.89	0.35	39.47
-2	-2	10	10.70	1.07	8.55
-2	-2	9	40.17	0.29	43.60
-2	-2	8	14.01	0.68	14.84
-2	-2	7	43.21	0.22	47.20
-2	-2	6	19.14	0.39	20.60
-2	-2	5	32.23	0.22	29.96
-2	-2	4	29.58	0.22	34.40
-2	-2	3	22.47	0.24	22.92
-2	-2	2	19.86	0.26	16.85
-2	-2	1	25.87	0.20	16.77
2	2	0	7.87	0.61	11.14
2	2	1	26.84	0.20	29.03
2	2	2	5.96	0.88	3.61
2	2	3	35.15	0.20	36.71
2	2	4	17.43	0.39	18.37
2	2	5	38.13	0.22	44.80
2	2	6	20.61	0.44	22.74
2	2	7	28.85	0.35	29.06
2	2	8	34.51	0.35	35.82
2	2	9	20.04	0.59	18.25
2	2	10	36.75	0.35	39.12
2	2	12	29.27	0.46	28.15
2	2	13	11.14	1.25	14.40
2	2	14	12.21	1.16	12.09
2	2	15	16.40	0.90	14.21
2	2	16	10.59	1.40	5.20
2	2	17	12.39	1.34	13.43
-2	-4	19	5.50	0.77	3.82

-2	-4	2	41.24	0.20	44.44
-2	-4	1	30.45	0.24	28.34
2	4	0	24.05	0.29	23.08
2	4	1	37.32	0.22	42.09
2	4	2	7.24	0.96	2.54
2	4	3	28.44	0.29	28.55
2	4	4	17.80	0.46	19.09
2	4	5	11.84	0.75	12.31
2	4	6	16.38	0.59	15.91
2	4	8	13.70	0.75	12.27
2	4	9	11.95	0.88	11.64
2	4	17	10.11	1.51	7.86
-2	-6	14	29.58	0.44	27.34
-2	-6	12	40.89	0.33	38.39
-2	-6	11	39.90	0.31	39.16
-2	-6	10	22.08	0.48	21.54
-2	-6	9	35.91	0.31	33.48
-2	-6	8	94.96	0.18	93.66
-2	-6	7	53.54	0.24	55.25
-2	-6	6	79.52	0.18	77.32
-2	-6	5	15.02	0.66	12.29
-2	-6	4	34.34	0.31	32.70
-2	-6	3	93.03	0.15	90.94
-2	-6	2	121.93	0.13	120.04
2	6	0	36.77	0.26	36.38
2	6	1	73.45	0.18	71.86
2	6	2	112.59	0.15	111.04
2	6	3	9.06	1.12	10.12
2	6	4	64.57	0.20	63.69
2	6	5	69.63	0.20	71.04
2	6	6	63.82	0.22	64.26
2	6	13	14.27	0.92	14.77
2	6	14	24.78	0.57	21.97
2	6	15	13.20	1.12	13.10
-2	-8	11	15.15	0.81	12.67
-2	-8	9	8.81	1.34	12.54
-2	-8	3	23.24	0.44	25.73
-2	-8	2	9.25	1.03	7.35
-2	-8	1	22.14	0.46	23.35
2	8	0	13.22	0.77	12.98
2	8	1	14.01	0.70	18.29
2	8	2	21.62	0.48	22.04
2	8	7	12.98	0.86	14.01
2	8	10	12.26	0.96	12.71
2	8	12	10.00	1.34	6.75
-2	-10	12	18.61	0.79	13.47
2	10	9	17.28	0.83	17.21
2	10	11	12.85	1.18	10.16
-3	9	13	25.59	0.66	27.79
-3	9	12	25.10	0.68	28.07
-3	9	11	54.66	0.33	57.10
3	-9	9	43.68	0.39	46.72
3	-9	10	28.59	0.57	33.05
3	-9	11	33.55	0.50	35.96
-3	7	9	11.88	1.05	14.94
-3	7	2	29.07	0.39	31.83
-3	7	1	12.28	0.88	9.24
-3	7	0	18.48	0.59	17.55
3	-7	1	22.67	0.48	23.79
3	-7	9	12.26	1.07	11.83

-3	5	14	11.82	1.14	8.09
-3	5	13	9.19	1.43	11.51
-3	5	8	13.92	0.75	12.63
-3	5	7	13.24	0.83	15.51
-3	5	5	26.11	0.44	28.29
-3	5	4	14.67	0.72	12.22
-3	5	3	27.95	0.39	28.12
-3	5	2	35.50	0.31	34.30
-3	3	17	50.27	0.37	49.86
-3	3	16	17.93	0.81	17.52
-3	3	15	41.35	0.37	41.56
-3	3	14	26.51	0.50	28.13
-3	3	13	47.93	0.31	49.59
-3	3	12	40.56	0.33	38.91
-3	3	11	77.13	0.22	79.29
-3	3	2	32.58	0.29	26.29
-3	3	0	29.16	0.31	24.93
3	-3	2	63.76	0.18	56.99
3	-3	3	66.78	0.18	59.10
3	-3	4	47.21	0.24	41.45
3	-3	5	54.77	0.22	48.33
3	-3	6	27.10	0.42	27.33
3	-3	7	31.99	0.37	32.21
3	-3	8	10.39	0.99	5.53
3	-3	9	78.40	0.22	78.79
3	-3	10	39.68	0.35	38.45
3	-3	11	48.67	0.31	49.78
3	-3	12	27.78	0.48	26.42
3	-3	13	40.06	0.39	42.12
3	-3	14	11.40	1.07	15.61
-3	1	15	9.52	1.38	11.34
-3	1	13	12.43	0.96	13.59
-3	1	10	14.76	0.77	15.96
-3	1	9	11.34	0.99	12.32
-3	1	7	22.56	0.44	22.97
-3	1	6	17.56	0.53	16.53
-3	1	5	20.35	0.42	17.69
-3	1	4	38.48	0.22	38.16
-3	1	2	49.24	0.18	41.74
-3	1	1	34.47	0.22	33.58
-3	1	0	34.09	0.24	33.60
3	-1	1	47.45	0.18	41.67
3	-1	2	10.79	0.70	3.89
3	-1	3	47.40	0.22	47.67
3	-1	4	19.40	0.48	17.09
3	-1	5	21.27	0.48	17.52
3	-1	6	25.15	0.44	27.40
3	-1	8	22.32	0.53	22.83
3	-1	9	10.92	1.05	13.47
3	-1	10	8.59	1.32	7.41
3	-1	11	10.15	1.23	14.39
-3	-1	16	9.01	1.34	10.40
-3	-1	14	9.25	1.47	8.46
-3	-1	13	10.35	1.23	11.38
-3	-1	11	12.83	0.92	12.52
-3	-1	10	10.98	1.07	12.62
-3	-1	8	18.15	0.59	18.81
-3	-1	7	17.72	0.57	16.02
-3	-1	6	9.21	1.03	8.16
-3	-1	5	29.91	0.31	33.17

-3	-1	4	12.59	0.64	9.20
-3	-1	3	36.33	0.24	32.86
-3	-1	2	35.48	0.22	37.47
-3	-1	1	17.41	0.44	18.88
3	1	0	43.54	0.20	43.20
3	1	1	13.83	0.53	13.17
3	1	2	41.81	0.22	42.92
3	1	3	25.74	0.35	26.39
3	1	4	10.74	0.90	12.04
3	1	5	29.62	0.37	32.91
3	1	7	21.09	0.55	21.95
3	1	8	13.83	0.86	16.00
3	1	10	14.08	0.86	16.61
3	1	11	10.22	1.21	7.35
-3	-3	16	12.32	1.05	14.49
-3	-3	15	37.45	0.42	38.63
-3	-3	14	26.49	0.50	24.74
-3	-3	13	50.03	0.31	47.64
-3	-3	12	36.97	0.35	36.23
-3	-3	11	69.57	0.22	73.18
-3	-3	10	12.32	0.83	9.22
-3	-3	9	31.73	0.37	31.06
-3	-3	8	22.78	0.53	25.54
-3	-3	7	50.32	0.24	50.51
-3	-3	6	41.88	0.26	38.23
-3	-3	5	55.49	0.20	55.55
-3	-3	4	54.18	0.20	54.03
-3	-3	3	92.00	0.15	95.43
-3	-3	2	30.37	0.29	25.95
-3	-3	1	203.51	0.11	211.16
3	3	1	90.16	0.15	88.03
3	3	2	52.77	0.22	50.80
3	3	3	55.89	0.20	57.03
3	3	4	39.93	0.29	38.32
3	3	5	42.36	0.26	44.16
3	3	6	25.67	0.44	25.67
3	3	7	24.82	0.44	27.90
3	3	9	71.78	0.22	75.02
3	3	10	34.95	0.37	34.28
3	3	11	44.29	0.33	47.44
3	3	12	24.93	0.57	26.05
3	3	13	44.97	0.35	39.95
3	3	14	18.75	0.81	13.96
3	3	15	53.43	0.35	45.89
-3	-5	13	8.99	1.45	10.72
-3	-5	4	25.15	0.42	27.41
-3	-5	3	10.04	0.96	2.50
-3	-5	2	29.25	0.35	30.21
-3	-5	1	27.06	0.37	25.97
3	5	0	24.49	0.42	25.83
3	5	1	31.24	0.35	34.72
3	5	3	33.22	0.33	36.24
3	5	4	13.94	0.79	17.42
3	5	5	17.91	0.59	20.03
3	5	6	18.90	0.59	19.63
-3	-7	11	11.36	1.12	10.67
-3	-7	10	12.96	0.92	13.32
-3	-7	3	24.95	0.42	25.72
-3	-7	2	13.68	0.75	14.02
-3	-7	1	13.77	0.72	11.50

3	7	0	20.98	0.48	22.40
3	7	7	10.41	1.10	11.69
3	7	8	11.03	1.10	11.51
3	7	10	9.89	1.27	13.25
3	7	11	9.98	1.34	7.02
-3	-9	13	26.60	0.59	24.48
-3	-9	12	26.86	0.57	25.26
-4	8	12	19.14	0.83	21.77
4	-8	9	17.43	0.90	17.65
-4	6	15	22.76	0.72	23.68
-4	6	14	12.32	1.23	13.62
-4	6	13	16.07	0.90	12.81
4	-6	12	19.58	0.81	19.36
4	-6	13	15.59	1.01	12.46
-4	4	14	12.32	1.16	18.53
-4	4	13	18.04	0.70	18.43
-4	4	12	13.57	0.92	12.47
-4	4	11	26.09	0.48	30.98
-4	4	9	22.76	0.53	23.46
-4	4	7	19.12	0.53	20.79
-4	4	6	19.84	0.50	20.82
-4	4	4	13.86	0.70	13.87
-4	4	3	8.35	1.18	8.87
4	-4	6	15.59	0.70	12.66
4	-4	7	18.48	0.61	18.43
4	-4	8	23.94	0.55	25.67
4	-4	9	11.75	1.07	8.89
4	-4	10	24.32	0.59	25.93
4	-4	11	10.06	1.36	8.68
4	-4	12	9.95	1.45	14.60
4	-4	13	11.07	1.32	10.61
-4	2	16	9.82	1.51	3.90
-4	2	12	11.99	1.05	13.81
-4	2	11	16.25	0.75	18.50
-4	2	9	24.34	0.48	27.67
-4	2	8	13.57	0.81	13.35
-4	2	7	23.66	0.48	24.78
-4	2	6	31.77	0.37	33.39
-4	2	5	12.12	0.90	11.32
-4	2	4	43.57	0.29	42.59
-4	2	3	15.87	0.68	12.07
-4	2	2	34.64	0.33	35.94
-4	2	1	34.18	0.33	31.35
-4	2	0	15.83	0.68	16.28
4	-2	1	35.45	0.33	33.63
4	-2	2	9.91	1.10	6.08
4	-2	3	23.04	0.48	20.48
4	-2	4	16.12	0.72	15.39
4	-2	6	13.75	0.83	11.99
4	-2	9	10.70	1.21	10.34
4	-2	10	8.95	1.43	9.80
-4	0	16	22.67	0.70	23.60
-4	0	15	13.79	1.07	13.98
-4	0	14	14.87	0.94	16.95
-4	0	12	18.61	0.70	20.53
-4	0	11	28.77	0.46	30.48
-4	0	10	97.59	0.20	100.80
-4	0	9	40.10	0.33	41.48
-4	0	8	66.46	0.22	62.98
-4	0	7	77.55	0.20	77.14

-4	0	6	75.23	0.20	67.36
-4	0	5	14.95	0.79	13.00
-4	0	3	89.26	0.18	82.65
-4	0	2	42.62	0.29	39.28
4	0	0	131.84	0.15	131.91
4	0	1	99.15	0.18	92.28
4	0	2	34.47	0.35	33.16
4	0	3	16.25	0.72	12.79
4	0	4	89.50	0.20	86.14
4	0	5	56.59	0.26	56.66
4	0	6	96.08	0.20	96.22
4	0	7	39.90	0.33	39.66
4	0	8	21.25	0.61	20.45
4	0	9	38.63	0.37	41.60
4	0	10	42.01	0.35	41.40
4	0	12	27.19	0.55	27.20
4	0	15	19.40	0.86	15.86
-4	-2	13	10.81	1.23	9.54
-4	-2	11	16.12	0.79	19.05
-4	-2	10	15.90	0.77	15.84
-4	-2	9	11.01	1.01	8.14
-4	-2	8	26.05	0.44	29.18
-4	-2	6	32.89	0.37	35.05
-4	-2	5	21.64	0.53	23.47
-4	-2	4	16.73	0.66	18.38
-4	-2	3	40.10	0.31	42.67
-4	-2	2	12.63	0.83	5.20
-4	-2	1	33.02	0.35	36.15
4	2	0	20.85	0.53	20.31
4	2	1	20.22	0.55	22.55
4	2	2	22.10	0.53	27.27
4	2	4	15.92	0.72	16.61
4	2	5	9.23	1.21	8.40
4	2	6	9.14	1.18	6.46
4	2	9	9.36	1.29	4.93
4	2	10	10.52	1.25	11.80
4	2	13	11.16	1.38	7.72
4	2	14	10.35	1.47	1.86
-4	-4	16	12.26	1.16	9.55
-4	-4	15	10.37	1.45	10.57
-4	-4	14	17.91	0.81	17.04
-4	-4	12	25.70	0.53	26.61
-4	-4	11	10.96	1.14	9.44
-4	-4	10	20.11	0.61	18.73
-4	-4	9	20.26	0.59	21.13
4	4	2	15.33	0.70	18.50
4	4	4	19.54	0.57	22.47
4	4	6	12.21	0.92	10.24
4	4	7	24.18	0.50	27.11
4	4	9	24.99	0.53	24.12
4	4	10	12.04	1.14	13.25
4	4	11	11.73	1.18	11.56
4	4	12	16.69	0.92	15.87
4	4	14	11.95	1.38	11.74
-4	-6	15	22.63	0.70	18.69
-4	-6	14	11.45	1.29	10.21
-4	-6	13	15.39	0.90	12.31
-4	-6	12	16.33	0.81	15.47
-4	-6	11	36.55	0.42	37.15
-4	-6	10	81.43	0.24	76.12

4	6	7	14.43	1.01	19.08
4	6	9	40.54	0.37	37.09
4	6	10	39.82	0.42	37.99
4	6	11	15.19	0.99	12.32
4	6	12	16.05	0.99	15.01
-4	-8	13	11.25	1.32	7.99
-4	-8	12	11.25	1.25	6.62
4	8	8	12.80	1.12	12.02
4	8	10	17.65	0.86	15.71
-5	5	11	9.95	1.45	13.72
5	-5	8	11.88	1.25	17.84
-5	3	16	15.48	1.07	14.72
-5	3	15	20.11	0.81	18.56
-5	3	14	15.81	0.99	14.15
-5	3	13	39.88	0.44	39.66
-5	3	12	44.27	0.37	45.55
-5	3	10	17.61	0.77	15.26
5	-3	7	87.50	0.24	88.76
5	-3	8	39.36	0.39	41.33
5	-3	9	10.85	1.38	12.54
5	-3	10	13.64	1.16	13.59
5	-3	11	11.64	1.40	12.22
5	-3	12	22.91	0.75	21.32
-5	1	16	10.24	1.56	5.24
-5	1	10	11.27	1.16	12.09
-5	1	4	24.45	0.48	23.51
-5	1	2	22.87	0.50	20.55
-5	1	1	20.39	0.55	21.61
-5	1	0	10.77	1.10	14.30
5	-1	1	27.17	0.44	26.58
5	-1	6	15.35	0.86	17.63
5	-1	8	14.80	0.88	14.37
5	-1	13	10.11	1.40	3.16
-5	-1	16	10.63	1.47	7.15
-5	-1	13	11.45	1.23	9.99
-5	-1	11	10.20	1.29	10.98
-5	-1	10	14.01	0.90	12.45
-5	-1	4	8.90	1.25	9.87
-5	-1	3	18.86	0.57	19.23
-5	-1	2	20.32	0.57	24.96
5	1	0	23.94	0.46	28.09
5	1	1	13.40	0.81	14.00
5	1	6	10.61	1.23	9.16
5	1	7	14.01	0.94	11.11
5	1	8	15.22	0.86	15.23
5	1	10	9.84	1.47	8.42
5	-3	16	13.26	1.23	13.80
5	-3	15	20.83	0.75	17.93
5	-3	14	15.11	0.99	12.11
5	-3	13	36.68	0.44	35.31
5	-3	12	42.18	0.37	42.04
5	3	7	75.20	0.26	79.40
5	3	8	31.35	0.48	34.67
5	3	9	11.91	1.21	10.42
5	3	10	14.27	1.03	11.57
5	3	11	12.26	1.29	12.61
5	3	12	19.05	0.90	19.17
-5	12	12.80	1.14	10.58	
5	8	10.57	1.32	10.43	
5	10	10.20	1.43	2.41	