Table 4A: Fe lines used for deriving atmospheric parameters for the first 6 objects

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 55496	HD 89668	HD 92545	HD 104979	HD 107574	HD 111721
4062.440	Fe I	2.850	-0.860	-	-	110.3	-	-	-
4114.440		2.830	-1.300	-	-		-	-	-
4132.900		2.850	-1.010	-		-	-	-	-
4143.870		1.560	-0.510	-		-	-	-	-
4147.670		1.490	-2.100	-		-	-	-	-
4153.900		3.400	-0.320	-		-	-	-	-
4154.500		2.830	-0.690	-		-	-	-	-
4184.890		2.830	-0.870	-		151.2	143.1	-	-
4187.040		2.450	-0.550	-		56.11	-	-	-
4216.180		0.000	-3.360	-		-	-	-	-
4202.030		1.490	-0.710	-		-	-	-	-
4337.050		1.560	-1.700	-		-	-	-	-
4438.345		3.882	-1.630	-	-	-	67.9	-	-
4427.310		0.050	-2.920	-	-	-	-	-	-
4422.567		2.845	-1.110	-	-	-	-	-	-
4445.470		0.087	-5.380	-	65.4	-	82.2	-	-
4446.833		3.687	-1.330	-	106.5	-	93.3	-	-
4447.720		2.220	-1.340	-	-	-	-	-	-
4454.380		2.832	-1.250	-	-	-	120.1	-	75.13
4461.653		0.087	-3.210	-	-	74.46	-	-	-
4466.551		2.832	-0.590	-	-	-	165.7	-	-
4484.220		3.602	-0.720	-	133.5	-	-	-	-
4489.739		0.121	-3.966	-	-	-	-	-	-
4531.150		1.490	-2.150	-	-	102.0	-	-	-
4547.846		3.546	-0.780	-	123.9	-	-	-	58.14
4566.514		3.301	-2.250	-	57.5	-	50.9	-	-
4574.215		3.211	-2.500	-	65.7	-	-	-	-
4587.128		3.573	-1.780	-	-	27.92	88.3	-	-
4595.358		3.301	-1.720	-	109.4	-	-	-	29.79
4596.060		3.602	-1.640	-	-	96.88	-	-	-
4619.287		3.602	-1.120	-	-	-	99.8	-	53.22
4625.044		3.241	-1.340	-	138.7	-	-	-	49.25
4630.121		2.278	-2.600	45.83	106.8	32.3	113.6	-	45.12
4632.911		1.608	-2.913	-	156.8	-	-	-	-
4635.846		2.845	-2.420	-	65.9	-	72.4	-	
4643.463		3.654	-1.290	21.36	-	-	93.1	-	-
4690.140		3.686	-1.640	-	93.4	-	62.2	-	31.54
4710.280		3.018	-1.610	-	-	-		39.07	70.37
4733.591		1.484	-2.710	72.44	-	71.80	132.7	-	74.11
4736.772		3.211	-0.740	-	234.0	84.88	-	63.64	85.21
4741.529		2.832	-2.000	19.02	92.1	57.04	-	-	43.33
4745.800		3.654	-0.790	-	127.9	-	125.3	-	-
4768.319		3.686	-1.109	-	147.3	43.58	-	-	50.01
4787.833		3.000	-2.770	-	-	-	59.6	-	15.35
4788.760		3.237	-1.760	-	63.7	31.33	89.3	-	35.84
4789.650		3.546	-0.910	-	65.0	68.53	-	-	-
4842.788		4.104	-1.560	-	-	-	70.5	-	-
4871.318		2.865	-0.360	-	-	109.7	-	-	129.3
4875.870		3.332	-2.020	-	80.9	-	81.5	-	-
4882.140		3.417	-1.640	-	-	58.20	93.0	-	-
4896.440		3.884	-2.050	-	80.8	-	48.5	-	-
4903.310		2.883	-0.930	105.7	227.1	94.01	164.2	73.09	95.77
4907.737		3.430	-1.840	-	65.7	-	76.4	-	26.44
4908.029		4.217	-1.285	-	38.6	-	-	-	-
4917.229		4.191	-1.180	-	67.8	-	-	-	-
4924.770		2.279	-2.256	78.28	134.3	-	-	-	65.68
4930.315		3.959	-1.350	-	-	47.19	-	-	-
4939.690		0.859	-3.340	108.4	159.6	-	142.6	38.83	92.12
4967.890		4.191	-0.622	-	158.5	57.97	89.4	-	36.15
4969.916		4.216	-0.710	-	-	-	82.0	-	37.32
4985.250		3.928	-0.560	-	-	-	98.6	-	-
5001.860		3.881	0.090	78.63	147.9	89.45	-	-	-
5005.711		3.883	-0.180	66.08	-	88.81	-	61.52	74.94
5006.119		2.833	-0.610	115.5	-	118.7	171.0	97.03	119.0
5007.728		4.294	-1.502	-	46.5	-	31.5	-	
5022.235		3.984	-0.530	-	-	-	114.3	-	65.49
5028.126		3.573	-1.474	-	-	-	108.7	27.32	44.98
5031.915		4.372	-1.670	-	-	-	44.8	-	-
5044.210		2.851	-2.150	-	109.1	44.81	101.4	-	53.04

Table 4A: continued

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 55496	HD 89668	HD 92545	HD 104979	HD 107574	HD 111721
5049.820		2.279	-1.344	118.6	-	-	170.9	-	98.69
5051.635		0.915	-2.795	100.5	-	100.7	-	70.43	117.2
5054.640		3.639	-2.140	-	-	-	52.5	-	-
5079.224		2.198	-2.067	67.26	-	-	-	-	78.62
5083.338		0.958	-2.958	109.7	131.7	85.06	158.6	-	98.2
5088.166		4.155	-1.780	-	55.4	-	46.8	-	-
5109.650		4.301	-0.980	-	-	-	83.3	23.15	
5127.360		0.920	-3.310	-	175.0	70.38	-	32.36	88.05
5141.739		2.424	-2.150	-	145.3	-	114.3	-	67.43
5151.910		1.011	-3.320	-	-	-	144.6	35.53	86.64
5159.050		4.283	-0.820	-	-	-	64.2	-	-
5166.282		0.000	-4.195	122.1	-	66.62	157.4	95.68	
5171.600		1.485	-1.790	-	98.4	105.8	-	-	121.0
5192.343		3.000	-0.420	94.25	-	129.4	-	-	119.5
5187.914		4.143	-1.260	-	-	-	70.5	-	-
5194.941		1.557	-2.090	110.2	204.3	101.5	-	77.82	-
5195.468		4.220	-0.020	89.02	102.4	-	120.2	-	-
5198.711		2.223	-2.135	67.24	-	67.39	130.5	-	74.74
5215.179		3.266	-0.933	-	139.3	-	128.0	-	76.02
5228.403		4.221	-1.290	-	62.7	-	-	-	-
5226.862		3.038	-0.667	102.9	n	-	-	-	107.4
5232.939		2.940	-0.060	-	-	191.9	-	121.7	144.7
5250.645		2.198	-2.050	-	160.0	95.16	-	-	-
5247.050		0.087	-4.980	67.72	110.2	95.34	123.9	-	58.65
5242.490		3.630	-0.970	-	109.2	70.84	97.9	45.81	57.08
5253.461		3.283	-1.670	-	115.8	-	92.7	-	48.5
5263.305		3.265	-0.970	83.63	-	87.37	139.3	56.01	77.01
5266.555		2.998	-0.490	113.6	-	139.6	-	-	109.1
5281.800		3.040	-0.833	96.19	210.3	110.2	154.6	-	-
5283.630		3.240	-0.524	79.58	-	-	195.2	81.25	100.1
5324.178		3.211	-0.240	97.73	-	147.4	-	-	118.7
5307.370		1.610	-2.912	78.97	134.2	69.03	124.6	-	70.24
5321.110		4.434	-1.090	-	60.9	-	54.5	-	-
5322.040		2.279	-2.800	47.71	83.2	-	92.4	-	30.32
5328.040		0.915	-1.470	176.1	-	-	-	-	193.2
5339.928		3.266	-0.680	87.37	-	87.27	145.5	66.41	81.57
5364.858		4.446	0.220	56.42	157.5	96.47	115.5	-	67.88
5367.479		4.415	0.350	74.43	183.1	91.11	119.8	-	75.82
5369.958		4.371	0.350	82.33	-	-	126.1	-	76.30
5373.698		4.473	-0.860	-	-	34.77	68.8	-	
5379.574		3.694	-1.480	-	68.5	39.31	76.9	-	28.0
5383.369		4.312	0.500	112.5	-	114.2	141.9	97.05	88.71
5429.710		0.960	-1.881	162.3	-	-	-	128.8	166.7
5434.520		1.011	-2.130	149.9	-	137.1	-	112.6	130.2
5464.280		4.143	-1.400	25.18	50.2	-	67.7	-	-
5497.520		1.011	-2.830	144.6	-	119.3	-	-	112.1
5501.464		0.958	-2.950	109.1	-	79.34	167.6	55.93	104.0
5525.539		4.231	-1.330	-	85.2	-	64.3	-	
5543.937		4.217	-1.140	-	75.6	-	71.8	24.16	
5554.882		4.548	-0.440	-	115.9	-	103.0	41.99	42.76
5560.207		4.434	-1.190	-	52.8	33.54	58.9	16.59	
5567.392		2.608	-2.800	37.13		105.3	-	102.0	35.29
5569.618		3.417	-0.540	84.13	-	105.1	141.0	68.39	-
5576.090		3.430	-1.000	73.51	-	100.8	121.4	-	-
5586.756		3.364	-0.210	109.9	-	137.0	-	-	110.3
5615.660		3.330	0.050	121.1	-	144.5	-	106.9	115.2
5617.186		3.252	-2.880	-	-	-	36.7	-	-
5618.630		4.209	-1.270	-	49.4	-	58.3	-	14.97
5636.694		3.640	-2.610	-	27.0	-	28.4	-	-
5701.549		2.559	-2.216	58.70	128.7	56.2	115.7	-	56.10
5731.765		4.256	-1.300	-	76.3	-	70.4	-	-
5741.848		4.256	-1.730	-	46.3	15.7	42.1	-	-
5753.121		4.260	-0.760	25.21	98.6	-	87.6	-	34.17
5809.220		3.884	-1.610	-	67.5	-	70.6	-	-
5855.080		4.607	-1.480	-	31.6	-	27.8	-	-
5856.100		4.294	-1.560	-	45.9	-	45.4	-	-
5862.370		4.550	-0.250	24.93	102.4	-	92.4	-	40.95
5883.813		3.959	-1.360	-	90.9	73.80	85.5	-	20.0
5914.194		4.607	-0.050	-	151.4	-	-	59.44	66.58
5976.779		3.943	-1.310	17.72	104.6	-	81.9	-	-
6003.017		3.881	-1.120	-	118.6	-	94.5	40.10	44.11

Table 4A: continued

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 55496	HD 89668	HD 92545	HD 104979	HD 107574	HD 111721
6024.049		4.548	-0.102	79.3	140.1	86.95	107.4	58.23	51.30
6082.710		2.223	-3.550	-	67.3	-	70.8	-	-
6136.615		2.453	-1.400	118.4	-	-	163.8	73.74	101.6
6136.993		2.198	-2.950	71.58	117.3	-	106.6	-	-
6137.694		2.588	-1.400	91.47	-	111.6	168.6	77.24	-
6151.620		2.176	-3.370	26.90	77.5	-	83.0	-	27.71
6165.360		4.143	-1.460	-	50.3	-	54.3	-	-
6180.205		2.727	-2.780	-	-	-	88.4	-	30.41
6173.343		2.223	-2.880	55.67	100.4	45.06	103.7	-	46.56
6219.280		2.197	-2.430	80.12	127.0	-	119.2	-	-
6232.639		3.653	-1.270	33.87	125.2	66.45	94.7	25.63	-
6230.736		2.559	-1.280	110.4	-	102.5	-	87.74	106.6
6246.327		3.602	-0.960	60.30	174.8	-	122.2	-	72.33
6240.650		2.223	-3.170	16.99	76.7	-	82.5	-	30.54
6252.550		2.404	-1.690	-	181.8	102.3	152.8	69.90	95.11
6254.250		2.278	-2.400	83.28	134.7	78.26	136.9	-	-
6265.130		2.176	-2.540	62.39	134.1	54.91	124.5	-	64.32
6246.327		3.602	-0.960	-	174.1	-	122.2	-	72.43
6270.240		2.858	-2.710	-	74.7	-	81.1	-	-
6280.630		0.859	-4.390	-	-	-	-	-	-
6297.800		2.222	-2.740	74.39	108.0	-	107.6	-	-
6301.498		3.653	-0.740	-	-	92.22	118.8	50.97	-
6318.018		2.453	-2.330	-	161.4	82.63	137.2	49.56	79.8
6322.690		2.588	-2.402	40.87	103.6	-	102.5	-	50.44
6335.340		2.197	-2.230	95.92	-	66.56	135.0	54.37	72.94
6336.823		3.686	-1.050	77.48	-	70.62	117.5	-	61.45
6408.016		3.686	-1.040	71.32	138.9	65.25	112.9	38.94	57.96
6411.650		3.653	-0.820	86.17	-	88.77	-	55.76	-
6419.980		4.733	-0.240	24.58	105.2	66.44	-	46.48	-
6421.350		2.278	-2.030	81.90	171.4	-		-	86.51
6481.869		2.278	-2.984	-	95.5	-	99.8	-	-
6494.980		2.404	-1.273	129.9	-	108.8	-	96.24	-
6574.240		0.990	-5.040	-	73.8	-	76.8	-	
6575.022		2.588	-2.820	-	109.4	-	97.8	-	32.38
6593.880		2.432	-2.420	-	122.4	-	122.2	-	61.45
6597.557		4.796	-1.070	-	-	-	44.2	-	-
6627.540		4.548	-1.680	-	36.7	-	36.6	-	-
6677.989		2.692	-1.470	-	-	-	157.4	-	92.24
6713.750		4.795	-1.390	-	20.0	-	44.41	-	-
6725.360		4.103	-2.170	-	24.4	-	24.9	-	-
6739.520		1.557	-4.790	-	33.5	-	35.2	-	-
6750.150		2.424	-2.620	-	103.3	-	107.9	-	-
6752.711		4.640	-1.200	-	-	-	46.8	-	-
6793.260		4.076	-2.330	-	18.1	-	18.2	-	-
4233.172	Fe II	2.580	-2.000	-	-	-	-	-	-
4491.405		2.855	-2.700	53.50	-	-	91.8	-	-
4515.339		2.840	-2.480	66.22	-	-	-		49.69
4520.224		2.810	-2.600	-	-	116.5	100.5	-	-
4620.510		2.830	-3.290	-	-	-	66.8		-
4629.340		2.807	-2.280	75.87	110.3	88.28	120.2	112.7	89.17
4923.930		2.891	-1.320	121.3	75.5	16.06	163.3	160.2	117.8
5197.577		3.230	-2.100	43.95	-	80.14	99.6	100.6	51.03
5534.834		3.245	-2.930	-	-	62.77	77.6	57.18	38.64
6247.550		3.891	-2.510	-	10.7	73.73	56.0	59.54	32.52
6369.460		2.891	-4.020	-	-	70.79	27.3	-	-
6416.919		3.891	-2.740	-	30.9	-	41.0	-	-
6456.383		3.903	-2.075	-	-	-	69.9	68.85	50.06

Table 4B: Fe lines used for deriving atmospheric parameters for the next 6 objects

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 122202	HD 126681	HD 148897	HD 164922	HD 167768	HD 204613
4062.440	Fe I	2.850	-0.860	-	-	-	-	-	- 102.9
4114.440		2.830	-1.300	-	-	129.8	-	-	-
4132.900		2.850	-1.010	-	-	-	-	-	107.6
4143.870		1.560	-0.51	-	-	-	-	-	-
4147.670		1.490	-2.100	-	-	-	-	-	114.6
4153.900		3.400	-0.320	-	-	-	-	-	-
4154.500		2.830	-0.690	-	-	-	-	-	-
4184.890		2.830	-0.870	-	-	-	-	-	105.0
4187.040		2.450	-0.550	-	-	-	-	-	153.6
4216.180		0.000	-3.360	-	-	-	-	-	-
4202.030		1.490	-0.710	-	-	-	-	-	-
4337.050		1.560	-1.700	-	-	-	-	-	-
4438.345		3.882	-1.630	-	-	77.51	-	-	-
4427.310		0.050	-2.920	-	-	-	-	-	-
4422.567		2.845	-1.110	-	-	-	-	-	-
4445.470		0.087	-5.380	-	-	124.1	-	-	
4446.833		3.687	-1.330	-	-	96.9	81.7	-	60.45
4447.720		2.220	-1.340	-	-	-	-	-	137.3
4454.380		2.832	-1.250	-	75.6	134.9	-	108.6	93.72
4461.653		0.087	-3.210	-	-	-	-	167.2	119.5
4466.551		2.832	-0.590	-	-	-	-	-	126.6
4484.220		3.602	-0.720	23.5	-	101.3	-	98.5	81.1
4489.739		0.121	-3.966	-	-	-	-	-	88.1
4531.150		1.490	-2.150	-	-	-	-	-	-
4547.846		3.546	-0.780	54.6	-	105.4	-	89.75	75.77
4566.514		3.301	-2.250	-	-	57.4	-	-	28.9
4574.215		3.211	-2.500	-	-	56.66	-	27.10	
4587.128		3.573	-1.780	-	29.9	-	-	68.33	43.68
4595.358		3.301	-1.720	-	-	108.1	-	81.50	
4596.060		3.602	-1.640	-	-	100.7	-	-	-
4619.287		3.602	-1.120	-	-	103.8	91.2	-	72.53
4625.044		3.241	-1.340	-	53.8	-	-	97.2	82.7
4630.121		2.278	-2.600	-	-	130.2	-	84.6	58.3
4632.911		1.608	-2.913	54.2	-	-	-	-	-
4635.846		2.845	-2.420	-	-	84.01	-	64.73	37.4
4643.463		3.654	-1.290	-	-	86.7	-	73.42	56.7
4690.140		3.686	-1.640	-	-	67.9	-	-	44.4
4710.280		3.018	-1.610	-	-	-	-	-	-
4733.591		1.484	-2.710	-	-	170.8	108.1	119.9	
4736.772		3.211	-0.740	83.7	71.9	141.2	-	126.0	
4741.529		2.832	-2.000	-	-	113.2	85.5	-	
4745.800		3.654	-0.790	-	-	134.1	-	-	67.56
4768.319		3.686	-1.109	-	-	-	-	-	-
4787.833		3.000	-2.770	-	-	68.3	-	-	-
4788.760		3.237	-1.760	-	-	96.3	74.9	84.4	57.2
4789.650		3.546	-0.910	-	42.5	139.4	-	91.31	76.16
4842.788		4.104	-1.560	-	-	-	-	-	-
4871.318		2.865	-0.360	-	-	190.8	-	163.5	144.1
4875.870		3.332	-2.020	-	-	82.55	-	-	-
4882.140		3.417	-1.640	-	19.6	91.06	-	74.9	57.2
4896.440		3.884	-2.050	-	-	37.62	-	-	-
4903.310		2.883	-0.930	-	81.4	172.8	-	139.2	118.6
4907.737		3.430	-1.840	-	-	83.54	-	64.18	45.7
4908.029		4.217	-1.285	-	-	36.50	55.48	-	-
4917.229		4.191	-1.180	-	-	67.66	-	65.59	48.16
4924.770		2.279	-2.256	45.6	45.2	141.9	-	113.3	79.4
4930.315		3.959	-1.350	-	-	80.66	-	69.16	-
4939.690		0.859	-3.340	-	-	-	128.1	124.1	88.14
4967.890		4.191	-0.622	-	-	81.3	103.4	70.15	70.6
4969.916		4.216	-0.710	-	-	79.3	-	74.5	64.07
4985.250		3.928	-0.560	-	-	-	-	-	82.2
5001.860		3.881	0.090	-	-	-	-	-	106.7
5005.711		3.883	-0.180	-	54.6	125.0	-	105.0	
5006.119		2.833	-0.610	-	97.9 -	-	145.8	143.8	
5007.728		4.294	-1.502	-	-	-	-	-	-
5022.235		3.984	-0.530	76.1	40.3	115.2	128.0	96.74	85.08
5028.126		3.573	-1.474	-	30.5	109.6	-	88.66	-
5031.915		4.372	-1.670	-	-	21.32	-	-	-

Table 4B: Continued

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 122202	HD 126681	HD 148897	HD 164922	HD 167768	HD 204613
5044.210		2.851	-2.150	-	-	115.4	-	87.96	62.31
5049.820		2.279	-1.344	-	80.5	-	-	154.6	123.8
5051.635		0.915	-2.795	-	78.1	-	-	127.5	
5054.640		3.639	-2.140	-	-	47.86	-	27.44	24.43
5079.224		2.198	-2.067	-	48.9	-	-	-	-
5083.338		0.958	-2.958	-	80.6	130.6	136.4	99.72	
5088.166		4.155	-1.780	-	-	31.00	-	32.30	
5109.650		4.301	-0.980	-	-	-	-	68.5	
5127.360		0.920	-3.310	-	56.1	111.2	-	129.9	82.78
5141.739		2.424	-2.150	-	47.4	133.4	105.6	-	74.98
5151.910		1.011	-3.320	-	51.3	-	-	-	
5159.050		4.283	-0.820	-	25.8	72.94	72.97	67.61	53.60
5166.282		0.000	-4.195	-	-	-	-	139.0	-
5171.600		1.485	-1.790	-	-	-	-	-	158.1
5192.343		3.000	-0.420	153.0	102.9	-		-	-
5187.914		4.143	-1.260	-	-	64.59	-	60.68	39.10
5194.941		1.557	-2.090	75.7	74.4	-	-	-	106.2
5195.468		4.220	-0.020	-	-	113.7	-	100.9	81.07
5198.711		2.223	-2.135	-	59.8	163.0	-	116.0	82.81
5215.179		3.266	-0.933	-	60.7	128.3	-	111.5	98.50
5228.403		4.221	-1.290	-	-	69.40	61.83	-	50.38
5226.862		3.038	-0.667	-	92.9	-	-	-	-
5232.939		2.940	-0.060	-	-	-	-	-	-
5250.645		2.198	-2.050	-	55.4	-	-	-	-
5247.050		0.087	-4.980	-	-	178.3	81.04	-	49.23
5242.490		3.630	-0.970	-	40.8	104.6	96.82	87.56	75.79
5253.461		3.283	-1.670	-	21.4	94.80	-	77.61	62.28
5263.305		3.265	-0.970	-	65.3	143.9	-	105.7	99.18
5266.555		2.998	-0.490	-	111.4	-	-	-	152.4
5281.800		3.040	-0.833	72.7	-	154.7	-	131.8	114.3
5283.630		3.240	-0.524	-	94.7	-	-	134.0	
5324.178		3.211	-0.240	-	-	-	-	173.2	164.3
5307.370		1.610	-2.912	-	47.8	154.4	111.8	115.7	72.38
5321.110		4.434	-1.090	-	-	39.98 -	55.37	35.67	25.08
5322.040		2.279	-2.800	-	-	106.4 -	-	77.02	44.08
5328.040		0.915	-1.470	-	173.4	-	-	-	-
5339.928		3.266	-0.680	-	81.9	150.3	124.4	109.9	
5364.858		4.446	0.220	80.8	58.9	111.4	162.7	107.2	97.71
5367.479		4.415	0.350	-	68.1	116.7	164.9	111.1	106.7
5369.958		4.371	0.350	102.9	73.8	98.07 127.3	181.6	120.2	116.8
5373.698		4.473	-0.860	-	-	61.39	-	59.99	46.98
5379.574		3.694	-1.480	-	-	73.78	73.79	60.96	45.32
5383.369		4.312	0.500	101.3	73.9	135.8	-	128.9	125.5
5429.710		0.960	-1.881	155.5	-	-	-	-	
5434.520		1.011	-2.130	113.0	108.1	-	-	185.4	132.4
5464.280		4.143	-1.400	-	-	42.85	50.31	-	26.55
5497.520		1.011	-2.830	-	80.9	-	157.9	169.7	
5501.464		0.958	-2.950	77.2	69.3	150.1 -	149.1		
5525.539		4.231	-1.330	-	-	54.08 -	-	48.63	37.78
5543.937		4.217	-1.140	-	21.6	62.15	-	55.99	46.74
5554.882		4.548	-0.440	39.4	32.5	83.87	-	-	70.53
5560.207		4.434	-1.190	-	11.44	47.85	-	41.79	34.45
5567.392		2.608	-2.800	-	-	106.7	-	75.18	45.60
5569.618		3.417	-0.540	78.8	83.3	147.2	122.0	114.4	
5576.090		3.430	-1.000	-	58.3	127.7	107.1	94.39	
5586.756		3.364	-0.210	107.6	114.2	177.8	-	156.9	
5615.660		3.330	0.050	-	-	-	-	-	160.4
5617.186		3.252	-2.880	-	-	21.36	-	-	-
5618.630		4.209	-1.270	15.9	-	51.03	-	44.21	31.19
5636.694		3.640	-2.610	-	-	-	-	-	-
5701.549		2.559	-2.216	-	-	-	-	-	-
5731.765		4.256	-1.300	-	-	57.80	-	51.60	42.59
5741.848		4.256	-1.730	-	-	35.50	-	-	-
5753.121		4.260	-0.760	-	32.6	72.99	-	74.36	62.42
5809.220		3.884	-1.610	-	-	59.60	-	51.70	30.15
5855.080		4.607	-1.480	-	-	17.37	36.49	-	-
5856.100		4.294	-1.560	-	-	32.99	47.84	31.50	
5862.370		4.550	-0.250	-	34.6	79.08	104.7	66.79	66.29
5883.813		3.959	-1.360	-	-	81.05	-	-	49.83

Table 4B: Continued

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 122202	HD 126681	HD 148897	HD 164922	HD 167768	HD 204613
5914.194		4.607	-0.050	-	-	122.1	-	-	-
5976.779		3.943	-1.310	-	-	99.45	-	65.55	-
6003.017		3.881	-1.120	28.6	40.6		-	84.50	63.62
6024.049		4.548	-0.102	-	60.2	102.2	128.7	91.81	88.03
6082.710		2.223	-3.550	-	-	87.75	56.40	53.00	19.45
6136.615		2.453	-1.400	-	86.2	-	-	152.9	111.1
6136.993		2.198	-2.950	-	-	143.2	-	-	51.99
6137.694		2.588	-1.400	70.1	73.8	-	168.3	148.9	107.2
6151.620		2.176	-3.370	-	-	104.7	-	67.69	30.68
6165.360		4.143	-1.460	-	-	46.25	56.28	40.04	26.05
6180.205		2.727	-2.780	-	-	96.79	-	70.05	37.14
6173.343		2.223	-2.880	-	27.4	125.0	-	87.30	53.34
6219.280		2.197	-2.430	-	51.3	154.2	-	112.0	75.49
6232.639		3.653	-1.270	-	34.3	103.3	-	84.41	64.53
6230.736		2.559	-1.280	-	82.8	-	-	163.1	
6246.327		3.602	-0.960	-	-	126.0	-	110.9	
6240.650		2.223	-3.170	-	-	100.7	-	69.60	31.81
6252.550		2.404	-1.690	-	76.6	177.7	148.0	131.3	99.21
6254.250		2.278	-2.400	-	-	153.2	-	125.4	101.4
6265.130		2.176	-2.540	-	33.1	151.5	106.3	112.3	71.22
6246.327		3.602	-0.960	-	57.2	-	-	-	89.77
6270.240		2.858	-2.710	-	-	90.28	-	69.08	34.46
6280.630		0.859	-4.390	-	22.2	-	-	-	
6297.800		2.222	-2.740	-	35.1	136.3	-	-	79.08
6301.498		3.653	-0.740	-	58.4 -	-	103.9	90.92	
6318.018		2.453	-2.330	-	-	152.4	-	122.8	88.10
6322.690		2.588	-2.402	-	-	121.5	-	-	56.39
6335.340		2.197	-2.230	-	60.9	165.2	-	113.7	78.12
6336.823		3.686	-1.050	44.2	39.8	117.6	-	101.6	84.69
6408.016		3.686	-1.040	-	-	111.8	109.8	95.03	77.94
6411.650		3.653	-0.820	-	72.6	132.8	-	-	100.0
6419.980		4.733	-0.240	-	31.2	78.10	105.8	77.14	65.45
6421.350		2.278	-2.030	65.1	64.5	-	153.6	134.2	97.43
6481.869		2.278	-2.984	-	-	116.6	-	81.67	66.65
6494.980		2.404	-1.273	-	87.8	-	-	157.5	148.7
6574.240		0.990	-5.040	-	-	-	-	57.09	-
6575.022		2.588	-2.820	-	-	-	-	84.85	41.05
6593.880		2.432	-2.420	-	40.4	144.0	104.0	109.5	68.84
6597.557		4.796	-1.070	-	-	-	-	-	-
6627.540		4.548	-1.680	-	-	23.57	-	22.37	-
6677.989		2.692	-1.470	-	72.5	-	158.4	145.3	103.0
6713.750		4.795	-1.390	-	-	-	31.45	-	-
6725.360		4.103	-2.170	-	-	18.03	32.10	-	-
6739.520		1.557	-4.790	-	-	55.13	-	-	-
6750.150		2.424	-2.620	-	33.5	130.1	-	93.29	53.20
6752.711		4.640	-1.200	-	-	-	54.81	-	-
6793.260		4.076	-2.330	-	-	-	21.07	-	-
4233.172	Fe II	2.580	-2.000	-	-	-	-	-	-
4491.405		2.855	-2.700	-	38.4	90.32	-	87.95	71.78
4515.339		2.840	-2.480	106.3	46.5	-	98.81	90.04	
4520.224		2.810	-2.600	91.7	-	79.94	-	83.29	
4620.510		2.830	-3.290	-	-	-	-	-	-
4629.340		2.807	-2.280	85.7	-	-	99.58	101.5	
4923.930		2.891	-1.320	153.7	82.0	154.8	133.4	152.6	139.1
5197.577		3.230	-2.100	81.5	-	97.35	69.24	91.12	78.30
5534.834		3.245	-2.930	62.4	-	-	-	-	54.30
6247.550		3.891	-2.510	-	-	-	42.87	-	50.69
6369.460		2.891	-4.020	-	-	-	-	-	-
6416.919		3.891	-2.740	-	-	-	39.95	37.07	35.60
6456.383		3.903	-2.075	-	18.9	53.48	55.27	58.50	56.26

Table 8A: Equivalent widths in mÅ of lines used for the calculation of light element abundances for first 6 objects

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 55496	HD 89668	HD 92545	HD 104979	HD 107574	HD 111721
5682.650	Na I	2.100	-0.700	58.07	208.7	63.7	115.9	50.1	-
5688.220		2.100	-0.400	-	205.3	89.9	131.6	-	29.9
5889.950		0.000	0.100	275.5	-	-	450.2	253.8	263.3
5895.920		0.000	-0.200	-	-	225.4	379.5	226.1	245.6
4702.990	Mg I	4.350	-0.666	103.2	-	172.8	188.9	-	143.1
6318.720		5.108	-1.730	15.88	86.1	82.6	137.4	-	79.4
5528.000		4.350	-0.490	142.3	-	162.6	202.4	-	139.0
4098.500	Ca I	2.525	-0.540	-	-	-	-	-	-
4283.010		1.885	-0.224	-	-	-	-	-	-
4425.430		1.879	-0.385	-	-	-	154.6	-	-
4435.679		1.890	-0.520	-	-	-	-	-	-
4455.890		1.900	-0.510	-	-	-	180.4	-	114.8
4578.550		2.521	-0.560	-	-	59.5	94.79	-	-
5261.710		2.521	-0.730	51.41	188.5	63.4	111.8	55.9	74.9
5265.560		2.520	-0.110	-	-	-	-	-	-
5512.990		2.932	-0.290	-	181.2	55.1	93.58	-	-
5581.980		2.523	-0.710	69.85	175.4	72.9	111.0	49.5	80.4
5588.760		2.530	0.360	104.7	-	113.4	153.1	109.0	112.7
5590.130		2.521	-0.710	74.9	167	69.0	108.1	-	61.9
5594.470		2.520	0.100	94.9	-	-	-	-	62.1
5857.450		2.930	0.240	87.9	-	128.5	137.1	84.9	90.9
6162.170		1.900	-0.090	144.9	-	137.0	194.4	115.4	142.2
6439.070		2.530	0.390	-	-	118.6	-	110.1	120.7
6449.820		2.520	-0.550	-	-	83.5	-	50.9	-
6455.590		2.523	-1.350	58.94	119.7	-	-	-	31.8
6471.670		2.525	-0.590	-	168.4	62.2	111.1	55.8	-
6493.790		2.521	0.140	118.3	-	104.6	158.2	-	95.7
6499.650		2.523	-0.590	70.35	155.2	58.9	107.8	-	60.4
6717.690		2.709	-0.610	-	-	89.1	142.6	53.8	72.9
4431.110		6.035	-2.520	-	-	-	-	-	-
4400.389	Sc II	0.606	-0.510	-	-	-	-	-	-
5031.021		1.360	-0.260	-	26.1	-	115.6	-	55.7
6604.600		1.357	-1.480	47.35	37.3	-	73.27	-	74.7
6245.630		1.507	−1.03	-			69.39	25.7	31.9
4512.700	Ti I	0.836	-0.480	49.03	144.8	37.7	89.85	-	-
4453.710		1.873	-0.010	-	-	-	77.33	-	-
4533.239		0.848	0.476	86.5	-	-	139.9	-	92.4
4617.250		1.748	0.389	33.5	117.6	41.8	87.01	-	53.2
4656.468		0.000	-1.345	51.0	157.2	-	109.8	-	-
4759.272		2.255	0.514	-	91.7	-	67.37	-	-
4820.410		1.502	-0.441	-	92.5	-	102.0	-	45.2
4840.880		0.899	-0.509	43.45	134.4	35.2	95.31	-	52.8
4778.250		2.236	-0.220	-	-	-	30.33	-	-
4999.500		0.830	0.310	123.2	-	63.8	191.8	79.9	96.6
4937.730		0.813	-2.230	-	59.5	-	31.09	-	-
5007.210		0.820	0.170	158.5	249.5	-	180.8	-	121.8
5039.960		0.020	-1.130	73.92	171.1	-	120.2	-	81.3
5064.650		0.050	-0.940	60.15	145.9	-	132.7	-	85.9
5087.060		1.429	-0.780	-	207.1	-	61.23	-	18.5
5210.390		0.048	-0.884	73.41	-	68.4	146.1	33.6	89.7
6556.060		1.460	-1.074	-	98.2	-	51.69	-	12.9
4161.530	Ti II	1.080	-2.160	-	-	-	-	-	-
4417.710		1.160	-1.430	-	78.5	116.7	153.2	-	74.5
4418.330		1.240	-1.990	100.9	-	93.1	123.0	84.6	-
4443.790		1.080	-0.700	-	152.0	-	-	-	-
4468.520		1.130	-0.600	46.3	136.2	-	-	-	111.5
4470.900		1.164	-2.280	51.34	48.9	-	108.4	-	-
4493.510		1.080	-2.730	-	-	-	-	-	-
4563.760		1.221	-0.960	110.4	167.1	169.8	168.3	-	125.4
4571.960		1.571	-0.530	75.23	-	125.9	181.0	163.7	-
4568.310		1.224	-2.650	-	-	-	60.37	-	-
4657.210		1.240	-2.320	49.48	-	-	89.28	-	41.6
4708.665		1.240	-2.370	29.16	35.9	-	74.04	36.2	50.81
4798.510		1.080	-2.670	-	-	-	-	-	63.0
4805.090		2.060	-1.100	-	76.6	93.0	127.3	102.7	78.4
5185.900		1.890	-1.350	62.53	-	87.2	90.35	49.5	70.0
5226.530		1.570	-1.300	82.5	-	-	135.1	-	107.4
4090.570	V I	1.853	-2.099	-	-	-	112.5	-	-
4379.230		0.300	0.580	-	221.0	-	135.9	-	-
4406.630		0.300	-0.190	48.63	151.2	-	143.3	-	-

Table 8A: continued

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 55496	HD 89668	HD 92545	HD 104979	HD 107574	HD 111721
4876.430	V I	2.115	-2.714	-	-	80.1	80.92	-	-
6531.420		1.218	-0.840	-				-	-
5727.048		1.08	−0.012	-	63.4	-	23.32	-	48.1
4274.800	Cr I	0.000	-0.230	-	-	-	-	-	-
4289.720		0.000	-0.360	-	-	-	-	-	81.1
4351.050		0.970	-1.450	-	116.8	-	-	-	-
4600.750		1.000	-1.260	-	-	-	-	-	50.9
4616.140		0.980	-1.190	43.64	179.5	-	123.6	-	63.8
4626.190		0.970	-1.320	60.19	160.1	41.3	110.0	-	46.7
4652.160		1.000	-1.030	-	211.5	71.9	128.1	-	81.2
4737.380		3.087	-0.099	-	73.8	-	100.5	32.0	-
4942.490		0.941	-2.294	-	201.5	-	119.9	-	52.1
5206.040		0.940	0.020	100.6	-	-	246.4	-	122.1
5247.570		0.961	-1.640	50.28	101.2	-	113.7	-	54.7
5345.810		1.003	-0.980	85.61	-	85.3	157.5	-	80.5
5348.312		1.003	-1.290	72.24	-	-	130.8	34.9	69.1
4588.190	Cr II	4.072	-0.630	-	36.1	-	81.32	-	43.2
4592.040		4.073	-1.220	-	-	-	-	-	-
4812.350		3.864	-1.800	-	-	-	57.35	-	-
4634.070		4.073	-1.240	20.6	-	83.2	113.5	-	-
4848.250		3.864	-1.140	-	88.9	-	-	58.1	39.4
4030.750	Mn I	0.000	-0.470	-	-	-	-	-	-
4034.480		0.000	-0.810	-	-	-	-	-	-
4041.360		2.110	0.280	-	-	-	144.1	-	-
4451.580		2.890	0.280	46.9	136.6	-	110.6	-	-
4470.140		2.941	-0.444	-	77.7	-	55.25	-	-
4739.080		2.941	-0.490	-	86.7	-	85.45	-	-
4761.530		2.953	-0.138	-	105.2	-	95.08	-	-
4765.860		2.941	-0.080	-	97.4	-	86.37	-	31.9
4766.420		2.919	0.100	-	166.7	-	108.5	-	39.4
4783.430		2.300	0.040	-	54.6	-	152.6	-	-
5516.770		2.178	-1.847	-	118.3	-	82.36	-	-
4813.480	Co I	3.216	0.050	-	63.9	-	66.51	-	-
4121.320		0.920	-0.320	-	-	-	119.4	-	-
4118.770		1.050	-0.490	-	-	-	-	-	-
4749.660		3.053	-0.321	-	64.2	-	-	-	-
4771.080		3.133	-0.504	-	27.6	-	50.86	-	-
4781.430		1.882	-2.150	-	-	16.1	24.10	-	-
4792.850		3.252	-0.067	-	46.4	-	47.9	-	-
5530.770		1.710	-2.060	-	53.0	-	53.28	-	-
5590.720		2.042	-1.870	-	-	68.9	46.6	-	-
5991.870		2.080	-1.850	-	-	17.2	-	-	-
6454.990		3.632	-0.233	-	-	-	188.3	34.7	-
6632.430		2.280	-2.000	-	37.6	-	26.91	-	-
4470.470	Ni I	3.699	-0.400	-	103.8	-	83.81	-	-
4714.420		3.380	0.230	-	169.8	-	175.7	-	74.2
4732.460		4.106	-0.550	-	-	-	62.06	-	-
4814.590		3.597	-1.680	-	-	-	31.32	-	-
4821.130		4.153	-0.850	-	-	-	39.02	-	-
4852.560		3.542	-1.070	-	49.3	-	61.32	-	-
4855.410		3.540	0.000	-	-	-	-	-	64.0
4857.390		3.740	-1.199	-	82.6	-	65.92	-	48.5
4953.200		3.740	-0.670	-	82.7	25.8	77.75	-	26.1
4937.340		3.606	-0.390	-	65.9	-	91.18	-	51.7
4980.160		3.610	-0.110	-	121.3	69.8	123	65.4	58.8
5035.370		3.630	0.290	-	107.7	-	103.4	-	62.4
5081.120		3.847	0.300	-	-	-	104.6	54.7	-
5082.350		3.657	-0.540	-	-	-	82.11	-	26.2
5084.080		3.678	0.030	36.5	55.8	73.2	90.71	-	52.6
5099.930		3.678	-0.100	-	-	-	93.11	-	33.9
5102.960		1.676	-2.620	45.8	-	-	94.1	-	-
5259.470		3.740	-1.502	-	47.1	-	38.34	-	-
6086.280		4.266	-0.530	-	39.0	-	51.86	-	11.7
6111.070		4.088	-0.785	-	31.8	-	44.22	-	-
6176.810		4.088	-0.148	-	64.9	44.4	75.93	18.2	20.3
6186.710		4.106	-0.777	-	36.5	14.3	-	-	-
6204.600		4.088	-1.060	-	29.5	-	29.2	-	-
6643.640		1.676	-2.300	-	125.0	57.2	141.2	-	73.3
4722.150	Zn I	4.029	-0.370	-	-	-	92.34	-	-
4810.530		4.080	-0.170	56.4	-	-	80.07	-	-

Table 8B: Equivalent widths in mÅ of lines used for the calculation of light element abundances for next 6 objects

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 122202	HD 126681	HD 148897	HD 164922	HD 167768	HD 204613
5682.650	Na I	2.100	-0.700	-	22.8	73.7	137.6	93.2	87.5
5688.220		2.100	-0.400	-	-	93.0	143.4	118.7	106.2
5889.950		0.000	0.100	-	263.2	396.5	-	379.1	377.3
5895.920		0.000	-0.200	-	234.5	340.2	601.4	329.7	-
4702.990	Mg I	4.350	-0.666	147.3	-	186.2	334.3	182.4	232.6
6318.720		5.108	-1.730	-	60.7	35.3	133.2	35.5	88.3
5528.000		4.350	-0.490	-	156.7	212.2	320	205.3	201.8
4098.500	Ca I	2.525	-0.540	-	-	-	130.6	-	79.2
4283.010		1.885	-0.224	-	-	116.9	-	142.3	145.7
4425.430		1.879	-0.385	-	-	158.9	193.2	163.8	142.1
4435.679		1.890	-0.520	-	-	-	140.6	-	139.1
4455.890		1.900	-0.510	-	-	166.8	182.4	141.1	-
4578.550		2.521	-0.560	-	-	117.3	100.2	102.1	77.3
5261.710		2.521	-0.730	-	48.9	120.7	124.8	102.6	86.9
5265.560		2.520	-0.110	-	107.3	-	-	-	-
5512.990		2.932	-0.290	-	42.5	94.6	110.4	87.4	70.4
5581.980		2.523	-0.710	-	50.7	118.2	120.4	99.5	84.1
5588.760		2.530	0.360	-	109.2	162.4	181.7	147.7	129.4
5590.130		2.521	-0.710	-	50.6	115.2	114.3	98.9	80.6
5594.470		2.520	0.100	107.1	89.9	-	-	-	-
5857.450		2.930	0.240	108.7	81.1	149.3	178.7	143.0	111.2
6162.170		1.900	-0.090	-	143.4	223.6	286.2	191.8	174.3
6439.070		2.530	0.390	-	113.7	187.5	200.4	163.9	144.3
6449.820		2.520	-0.550	-	53.9	-	-	113.4	91.5
6455.590		2.523	-1.350	-	25.8	82.3	78.12	-	43.2
6471.670		2.525	-0.590	-	-	122.4	143.0	100.8	81.5
6493.790		2.521	0.140	-	144.1	156.0	160.7	135.7	118.1
6499.650		2.523	-0.590	-	29.9	117.7	112.4	94.4	80.9
6717.690		2.709	-0.610	-	62.3	145.5	155.7	127.6	97.7
4431.110		6.035	-2.520	-	-	-	37.3	67.2	46.5
4400.389	Sc II	0.606	-0.510	-	-	-	-	-	-
5031.021		1.360	-0.260	-	37.0	123.4	81.5	113.6	46.1
6604.600		1.357	-1.480	-	-	75.2	49.3	71.6	41.7
6245.630		1.507	− 1.03			75.6	43.6	64.1	38.9
4512.700	Ti I	0.836	-0.480	-	-	134.8	82.8	89.9	61.7
4453.710		1.873	-0.010	-	-	93.1	72.2	75.3	46.1
4533.239		0.848	0.476	-	-	194.8	152.7	-	100.4
4617.250		1.748	0.389	-	-	110.7	85.7	79.9	52.1
4656.468		0.000	-1.345	-	95.5	156.4	86.3	96.0	59.6
4759.272		2.255	0.514	-	-	78.3	61.5	50.8	39.4
4820.410		1.502	-0.441	-	-	116.0	70.2	-	42.3
4840.880		0.899	-0.509	-	57.9	134.0	84.6	90.2	60.9
4778.250		2.236	-0.220	-	-	37.9	34.3	111.3	13.2
4999.500		0.830	0.310	-	71.7	201.3	140.0	138.6	111.3
4937.730		0.813	-2.230	-	-	62.7	21.9	69.3	-
5007.210		0.820	0.170	-	108.3	201.7	177.6	162.1	139.5
5039.960		0.020	-1.130	-	-	140.3	103.6	111.2	76.7
5064.650		0.050	-0.940	-	-	192.8	119.3	122.5	78.6
5087.060		1.429	-0.780	-	-	89.2	69.4	45.4	-
5210.390		0.048	-0.884	-	58.4	222.4	140.8	115.1	84.1
6556.060		1.460	-1.074	-	-	84.2	47.3	42.8	-
4161.530	Ti II	1.080	-2.160	-	-	-	-	-	75.2
4417.710		1.160	-1.430	101.1	-	156.2	97.7	131.8	123.8
4418.330		1.240	-1.990	-	-	132.4	87.8	113.7	89.5
4443.790		1.080	-0.700	-	-	195.6	142.4	-	146.4
4468.520		1.130	-0.600	-	-	-	130.3	-	151.3
4470.900		1.164	-2.280	-	-	70.3	57.7	-	76.4
4493.510		1.080	-2.730	-	-	107.3	-	-	44.1
4563.760		1.221	-0.960	-	76.7	189.9	148.8	174.5	136.2
4571.960		1.571	-0.530	-	-	223.8	-	150.6	144.2
4568.310		1.224	-2.650	-	-	88.82	36.9	63.2	33.8
4657.210		1.240	-2.320	-	-	116.8	48.1	92.6	65.3
4708.665		1.240	-2.370	-	-	95.2	43.7	83.8	60.9
4798.510		1.080	-2.670	-	-	-	49.5	-	53.9
4805.090		2.060	-1.100	-	-	122.2	119.5	121.3	100.8
5185.900		1.890	-1.350	88.3	32.1	111.1	51.7	93.0	77.5
5226.530		1.570	-1.300	-	49.9	-	-	-	101.8
4090.570	V I	1.853	-2.099	-	-	70.4	92.4	-	69.1
4379.230		0.300	0.580	-	-	176.4	146.8	-	101.7
4406.630		0.300	-0.190	-	-	147.5	133.6	127.3	90.9

Table 8B: Continued

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 122202	HD 126681	HD 148897	HD 164922	HD 167768	HD 204613
4876.430	V I	2.115	-2.714	-	-	61.1	60.5	79.2	67.2
6531.420		1.218	-0.840			56.5	85.7	17.0	
5727.048		1.08	− 0.012	-	-	37.7	-	-	-
4274.800	Cr I	0.000	-0.230	-	-	-	-	-	-
4289.720		0.000	-0.360	-	-	-	-	-	-
4351.050		0.970	-1.450	-	-	-	77.3	-	42.9
4600.750		1.000	-1.260	-	-	-	113.8	-	-
4616.140		0.980	-1.190	-	-	141.7	111.9	104.2	78.0
4626.190		0.970	-1.320	-	71.3	133.3	99.5	98.6	68.6
4652.160		1.000	-1.030	-	91.4	146.0	133.2	109.6	87.9
4737.380		3.087	-0.099	-	-	66.3	76.2	56.0	51.3
4942.490		0.941	-2.294	-	-	126.2	130.7	95.1	62.9
5206.040		0.940	0.020	-	122.4	297.2	-	193.5	162.6
5247.570		0.961	-1.640	-	29.9	135.2	105.4	74.7	61.6
5345.810		1.003	-0.980	74.2	62.5	179.3	157.2	140.5	95.8
5348.312		1.003	-1.290	-	67.8	155.5	127.7	111.8	82.1
4588.190	Cr II	4.072	-0.630	-	-	65.0	61.6	59.8	16.1
4592.040		4.073	-1.220	-	-	-	40.4	-	-
4812.350		3.864	-1.800	-	-	51.3	-	-	31.3
4634.070		4.073	-1.240	-	-	105.8	69.0	69.2	67.3
4848.250		3.864	-1.140	-	-	-	-	-	-
4030.750	Mn I	0.000	-0.470	-	-	-	-	-	-
4034.480		0.000	-0.810	-	-	-	-	-	-
4041.360		2.110	0.280	-	-	-	-	-	-
4451.580		2.890	0.280	-	-	111.3	108.0	-	84.7
4470.140		2.941	-0.444	-	-	36.7	58.5	-	38.1
4739.080		2.941	-0.490	-	-	57.8	81.5	48.3	34.5
4761.530		2.953	-0.138	-	-	74.9	99.5	64.9	53.1
4765.860		2.941	-0.080	-	-	82.0	90.2	71.4	57.5
4766.420		2.919	0.100	-	-	112.8	120.2	-	74.9
4783.430		2.300	0.040	-	-	162.6	181.5	132.0	110.8
5516.770		2.178	-1.847	-	-	72.2	86.6	35.3	16.7
4813.480	Co I	3.216	0.050	-	-	59.3	64.9	44.8	34.7
4121.320		0.920	-0.320	-	-	-	-	-	118.2
4118.770		1.050	-0.490	-	-	-	-	-	-
4749.660		3.053	-0.321	-	-	79.3	72.7	44.9	-
4771.080		3.133	-0.504	-	-	59.8	56.6	-	-
4781.430		1.882	-2.150	-	-	74.9	-	-	-
4792.850		3.252	-0.067	-	-	43.8	47.3	39.1	-
5530.770		1.710	-2.060	-	-	66.4	40.4	-	12.6
5590.720		2.042	-1.870	-	-	51.7	33.7	99.1	-
5991.870		2.080	-1.850	-	-	-	23.9	46.6	-
6454.990		3.632	-0.233	-	-	20.7	25.6	-	-
6632.430		2.280	-2.000	-	-	32.4	22.4	-	-
4470.470	Ni I	3.699	-0.400	-	-	69.2	81.1	62.8	72.7
4714.420		3.380	0.230	-	-	135.2	177.9	125.3	127.0
4732.460		4.106	-0.550	-	-	-	47.3	32.4	37.3
4814.590		3.597	-1.680	-	-	-	19.5	-	-
4821.130		4.153	-0.850	-	-	25.9	48.9	35.9	-
4852.560		3.542	-1.070	-	-	44.7	50.5	41.6	31.5
4855.410		3.540	0.000	-	-	-	108.5	-	76.7
4857.390		3.740	-1.199	-	-	50.3	63.8	51.4	34.2
4953.200		3.740	-0.670	-	22.8	83.8	63.5	57.9	41.8
4937.340		3.606	-0.390	-	23.4	83.1	84.1	68.7	69.3
4980.160		3.610	-0.110	54.9	-	118.2	134.1	-	90.6
5035.370		3.630	0.290	-	71.6	103.7	99.7	88.6	88.0
5081.120		3.847	0.300	53.2	50.1	100.7	108.4	76.7	81.3
5082.350		3.657	-0.540	-	21.1	82.0	72.8	66.1	55.4
5084.080		3.678	0.030	83.2	-	85.9	85.2	78.3	79.3
5099.930		3.678	-0.100	-	23.9	74.9	98.3	73.8	83.3
5102.960		1.676	-2.620	-	-	95.8	65.5	70.5	37.6
5259.470		3.740	-1.502	-	-	-	-	-	-
6086.280		4.266	-0.530	-	-	30.8	57.4	38.9	31.9
6111.070		4.088	-0.785	-	-	28.6	46.8	-	18.4
6176.810		4.088	-0.148	-	-	55.9	76.4	62.2	50.1
6186.710		4.106	-0.777	-	-	23.4	44.2	26.9	14.7
6204.600		4.088	-1.060	-	-	-	-	27.79	-
6643.640		1.676	-2.300	-	43.9	160.2	-	121.3	72.9
4722.150	Zn I	4.029	-0.370	78.0	-	65.2	81.9	82.7	79.2
4810.530		4.080	-0.170	-	-	70.9	70.8	-	75.6

Table 9A: Equivalent widths in mÅ of lines used for abundance determination of heavy elements for the first 6 objects

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 55496	HD 89668	HD 92545	HD 104979	HD 107574	HD 111721
4607.327	Sr I	0.000	-0.570	36.42	140.9	-	91.55	-	-
4854.863	Y II	0.992	-0.380	-	90.5	57.6	120.6	-	-
4883.685		1.084	0.070	-	74.4	89.9	121.2	106.8	51.7
5087.416		1.080	-0.170	103.5	-	72.1	91.82	-	56.2
5119.112		0.992	-1.360	41.16	-	27.4	55.28	-	-
5205.724		1.033	-0.340	42.89	-	-	-	-	-
5289.815		1.033	-1.850	27.11	-	-	33.81	-	-
5544.611		1.738	-1.090	-	-	-	36.53	-	-
5546.009		1.748	-1.100	-	-	22.3	59.74	16.14	o-
5662.925		1.944	0.160	-	92.0	66.8	92.26	83.82	33.8
6613.733		1.748	-1.110	-	39.0	-	61.85	30.5	-
4048.670	Zr II	0.800	-0.480	-	-	-	156.1	-	-
4208.990		0.710	-0.460	-	-	-	-	-	-
4317.321		0.713	-1.380	42.23	-	-	76.87	-	-
4554.036	Ba II	0.000	0.120	193.3	195.0	205.3	383.2	-	181
4130.650		2.720	+0.560	-	-	-	-	-	-
4934.076		0.000	-0.150	186.2	-	230.3	-	241.6	176.0
5853.668		0.604	-1.020	114.9	60.34	119.3	155.6	124.2	61.3
6141.727		0.704	-0.076	137.3	133.8	167.1	247.3	205.3	111.1
6496.897		0.604	-0.377	137.4	105.5	161.0	240.9	193.9	120.1
4123.230	La II	0.320	+0.120	-	-	-	-	-	-
4238.380		0.400	-0.058	-	-	-	108.2	-	-
4322.510		0.170	-1.050	-	-	-	70.35	-	-
4333.760		0.170	-0.160	-	-	-	-	-	-
4619.874		1.754	-0.140	-	-	-	75.11	-	-
4748.726		0.927	-0.860	-	-	-	40.6	-	-
5808.313		0.000	-2.200	-	-	-	24.0	-	-
6320.376		0.170	-1.610	21.49	-	-	66.2	-	-
4073.470	Ce II	0.480	+0.320	-	-	-	47.32	-	-
4117.290		0.740	-0.450	-	-	-	-	-	-
4190.630		0.900	-0.390	-	-	-	-	-	-
4193.870		0.550	-0.400	-	-	-	-	-	-
4257.120		0.460	-1.110	-	-	-	-	-	-
4336.244		0.704	-0.564	-	-	-	52.1	-	-
4418.790		0.860	+0.310	-	-	-	-	-	-
4427.920		0.540	-0.380	-	-	-	78.8	-	-
4460.207		0.477	0.171	-	-	-	193	-	58.6
4560.280		0.910	0.000	-	-	-	-	-	58.6
4562.359		0.478	0.081	28.68	-	-	80.5	-	-
4628.160		0.520	+0.260	82.66	-	-	91.84	-	-
4747.167		0.320	-1.246	-	37.7	18.7	41.46	-	-
4773.941		0.924	-0.498	-	-	-	44.8	-	-
4873.999		1.107	-0.892	-	-	-	47.3	-	21.9
5274.230		1.044	0.323	-	-	-	57.9	20.1	-
5330.556		0.869	-0.760	-	-	-	43.0	-	-
5188.217	Pr II	0.922	-1.145	-	-	-	-	-	-
5259.740		0.630	-0.070	-	-	-	40.7	-	-
5219.045		0.795	-0.240	7.624	-	7.8	25.2	-	-
5292.619		0.648	-0.300	-	36.1	-	50.5	-	-
5322.772		0.482	-0.315	-	-	-	43.7	-	-
5892.251		1.439	-0.352	-	-	-	-	-	19.8
6278.676		1.196	-0.630	-	-	-	-	-	-
4021.327	Nd II	0.320	0.230	-	-	-	53.0	-	-
4059.951		0.205	-0.360	-	-	-	-	-	-
4061.080		0.471	0.550	-	-	-	68.9	-	-
4069.270		0.060	-0.400	-	-	-	-	-	-
4109.448		0.320	+0.180	-	-	-	108.4	-	-
4446.390		0.200	-0.630	-	18.1	-	76.62	-	-
4451.563		0.381	-0.040	47.08	136.2	-	110.6	-	-
4451.980		0.000	-1.340	-	97.9	-	81.52	-	-
4556.133		0.064	-1.610	-	154.2	-	120.1	-	70.7
4797.153		0.559	-0.950	-	-	-	44.7	-	-
4811.342		0.063	-1.140	19.97	21.4	-	72.5	-	-
5089.832		0.204	-1.160	-	-	-	37.6	-	-
5130.590		1.300	+0.100	-	-	-	-	-	-
4859.039		0.320	-0.830	-	44.0	-	102.6	-	-
4947.020		0.559	-1.250	-	-	-	22.7	-	-
4961.387		0.630	-0.710	-	25.9	-	58.3	-	-
4989.953		0.680	-1.400	-	59.7	-	76.5	-	-

Table 9A: continued

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 55496	HD 89668	HD 92545	HD 104979	HD 107574	HD 111721
5212.361	Nd II	0.204	-0.870	-	74.3	-	80.7	-	-
5293.169		0.823	-0.060	-	-	-	90.3	-	-
5276.878		0.859	-0.440	-	-	-	37.8	-	-
5287.133		0.745	-1.300	-	41.5	-	22.2	-	-
5311.480		0.990	-0.560	-	-	-	45.5	-	40.1
5319.820		0.550	-0.210	-	-	-	90.1	-	-
5356.967		1.264	-0.250	-	-	-	37.7	-	-
5361.510		0.68	-0.400	-	88.8	-	-	-	23.1
5371.927		1.412	0.003	-	-	-	-	-	-
5603.648		0.380	-1.830	-	-	-	45.1	-	47.5
5718.118		1.410	-0.340	-	-	-	-	-	-
5825.857		1.081	-0.760	-	8.662	-	27.8	-	-
4318.927	Sm II	0.280	-0.270	-	-	-	-	-	-
4424.337		0.485	-0.260	-	-	-	-	-	-
4434.318		0.378	-0.576	-	-	-	93.0	-	-
4499.475		0.248	-1.413	-	-	-	35.9	-	-
4519.630		0.540	-0.430	-	-	-	60.7	-	-
4577.690		0.250	-0.770	-	-	-	45.7	-	-
4566.210		0.330	-1.245	-	20.8	-	37.9	-	-
4674.600		0.180	-0.560	-	-	-	121.5	-	-
4704.400		0.000	-1.562	-	-	-	55.2	-	-
4615.444		0.544	-1.262	-	48.2	-	-	-	-
4726.026		0.333	-1.849	14.25	-	-	-	-	-
4791.580		0.104	-1.846	-	14.1	-	-	-	-
4815.805		0.185	-1.501	-	-	-	-	-	-
4129.700	Eu II	0.000	+0.204	-	-	-	-	-	-
4205.050		0.000	+0.117	-	-	-	-	-	-
6437.640		1.319	-0.276	-	-	-	-	-	-
6645.130		1.380	+0.204	-	-	-	31.1	-	-
4103.310	Dy II	0.103	-0.346	-	-	-	83.1	-	-
4923.167		0.103	-2.384	-	36.6	-	23.1	-	-

Table 9B: Equivalent widths in mÅ of lines used for abundance determination of heavy elements for the next 6 objects

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 122202	HD 126681	HD 148897	HD 164922	HD 167768	HD 204613
4607.327	Sr I	0.000	-0.570	-	-	89.9	58.5	68.6	77.31
4854.863	Y II	0.992	-0.380	-	-	98.6	53.8	72.2	82.63
4883.685		1.084	0.070	129.5	28.6	114.5	-	80.6	101.4
5087.416		1.080	-0.170	-	23.8	82.3	40.5	66.1	86.53
5119.112		0.992	-1.360	-	-	41.6	19.0	16.2	47.09
5205.724		1.033	-0.340	-	-	-	-	-	92.26
5289.815		1.033	-1.850	-	-	-	-	14.2	15.22
5544.611		1.738	-1.090	-	-	18.6	-	11.7	29.54
5546.009		1.748	-1.100	-	-	32.0	-	15.2	28.13
5662.925		1.944	0.160	-	34.8	83.8	67.8	64.8	72.01
6613.733		1.748	-1.110	-	67.7	26.5	21.2	21.2	27.41
4048.670	Zr II	0.800	-0.480	-	-	181.2	150.6	73.4	170.2
4208.990		0.710	-0.460	-	-	79.1	41.8	-	87.55
4317.321		0.713	-1.380	-	-	87.6	-	44.8	53.37
4554.036	Ba II	0.000	0.120	323.4	139.3	263.4	177.2	206.3	296.6
4130.650		2.720	+0.560	-	-	-	-	-	-
4934.076		0.000	-0.150	334.5	125.8	302.0	-	243.8	-
5853.668		0.604	-1.020	158.0	41.9	128.1	66.0	95.2	106.3
6141.727		0.704	-0.076	263.0	84.8	192.0	125.0	149.4	179.7
6496.897		0.604	-0.377	-	113.5	196.9	123.0	144.3	160.2
4123.230	La II	0.320	+0.120	-	-	-	-	-	-
4238.380		0.400	-0.058	-	-	79.4	-	-	62.10
4322.510		0.170	-1.050	-	-	40.3	-	-	34.52
4333.760		0.170	-0.160	-	-	-	-	-	88.12
4619.874		1.754	-0.140	-	-	-	-	19.7	-
4748.726		0.927	-0.860	-	-	16.0	-	-	-
5808.313		0.000	-2.200	-	-	12.2	-	-	-
6320.376		0.170	-1.610	-	-	25.1	-	-	-
4073.470	Ce II	0.480	+0.320	-	-	-	-	-	-
4117.290		0.740	-0.450	-	-	-	-	-	-
4190.630		0.900	-0.390	-	-	166.6	110.1	-	40.05
4193.870		0.550	-0.400	-	-	-	-	-	-
4257.120		0.460	-1.110	-	-	-	-	-	-
4336.244		0.704	-0.564	-	-	22.6	-	-	14.3
4418.790		0.860	+0.310	-	-	-	-	19.1	59.9
4427.920		0.540	-0.380	-	64.8	-	31.7	31.7	-
4460.207		0.477	0.171	-	-	193.6	161.0	118.4	-
4560.280		0.910	0.000	-	-	-	-	-	-
4562.359		0.478	0.081	75.7	-	-	20.8	57.7	51.03
4628.160		0.520	+0.260	-	18.4	66.5	19.1	39.9	41.46
4747.167		0.320	-1.246	-	-	27.3	-	-	-
4773.941		0.924	-0.498	-	-	16.69	-	-	-
4873.999		1.107	-0.892	-	-	40.1	22.4	-	39.49
5274.230		1.044	0.323	-	-	28.5	-	-	24.64
5330.556		0.869	-0.760	-	-	16.6	-	-	-
5188.217	Pr II	0.922	-1.145	-	-	-	-	-	-
5259.740		0.630	-0.070	8.14	-	24.6	-	-	-
5219.045		0.795	-0.240	-	-	14.2	-	61.3	-
5292.619		0.648	-0.300	7.1	-	29.2	51.3	-	22.23
5322.772		0.482	-0.315	-	-	28.9	-	-	-
5892.251		1.439	-0.352	51.3	-	18.6	-	116.3	-
6278.676		1.196	-0.630	-	-	33.2	-	76.6	-
4021.327	Nd II	0.320	0.230	-	-	47.0	-	-	49.50
4059.951		0.205	-0.360	-	-	49.3	-	-	-
4061.080		0.471	0.550	-	-	83.6	-	-	74.23
4069.270		0.060	-0.400	-	-	-	-	-	-
4109.448		0.320	+0.180	-	-	-	-	-	62.72
4446.390		0.200	-0.630	-	-	79.8	-	-	35.10
4451.563		0.381	-0.040	-	-	111.4	108.0	76.9	84.47
4451.980		0.000	-1.340	-	-	101.0	55.5	47.4	25.90
4556.133		0.064	-1.610	-	49.6	-	139.0	-	99.67
4797.153		0.559	-0.950	-	-	24.9	-	-	-
4811.342		0.063	-1.140	-	-	64.5	14.3	34.1	-
5089.832		0.204	-1.160	-	-	30.7	-	-	-
5130.590		1.300	+0.100	-	9.2	-	-	-	-
4859.039		0.320	-0.830	-	-	85.5	46.2	45.7	42.14
4947.020		0.559	-1.250	98.0	-	12.8	-	11.3	-
4961.387		0.630	-0.710	-	-	30.8	-	-	14.54
4989.953		0.680	-1.400	-	-	52.8	-	-	19.67

Table 9B: continued

Wavelength(Å)	Element	E_{low}(ev)	log gf	HD 122202	HD 126681	HD 148897	HD 164922	HD 167768	HD 204613
5212.361	Nd II	0.204	-0.870	-	15.4	66.4	42.2	34.9	
5293.169		0.823	-0.060	-	-	67.8	-	-	29.11
5276.878		0.859	-0.440	-	-	19.2	-	-	-
5287.133		0.745	-1.300	-	-	-	19.6	-	-
5311.480		0.990	-0.560	-	-	24.5	-	-	-
5319.820		0.550	-0.210	-	-	73.5	-	-	29.94
5356.967		1.264	-0.250	-	-	-	-	-	-
5361.510		0.68	-0.400	-	-	-	80.1	-	-
5371.927		1.412	0.003	-	-	-	-	-	-
5603.648		0.380	-1.830	-	-	23.6	39.2	-	-
5718.118		1.410	-0.340	-	-	-	-	-	-
5825.857		1.081	-0.760	-	-	10.2	-	-	-
4318.927	Sm II	0.280	-0.270	-	-	-	-	-	-
4424.337		0.485	-0.260	-	-	-	-	107.9	64.9
4434.318		0.378	-0.576	-	-	84.0	37.7	-	56.2
4499.475		0.248	-1.413	-	-	26.7	-	-	-
4519.630		0.540	-0.430	-	-	47.6	-	-	18.57
4577.690		0.250	-0.770	-	-	42.0	-	-	-
4566.210		0.330	-1.245	-	-	40.1	16.6	19.1	14.15
4674.600		0.180	-0.560	-	14.4	115.7	-	61.7	-
4704.400		0.000	-1.562	-	-	60.7	29.6	42.2	23.83
4615.444		0.544	-1.262	-	-	-	49.0	-	-
4726.026		0.333	-1.849	-	-	59.1	-	-	-
4791.580		0.104	-1.846	-	-	26.0	-	-	-
4815.805		0.185	-1.501	14.1	-	-	24.8	-	-
4129.700	Eu II	0.000	+0.204	-	-	-	-	84.0	57.42
4205.050		0.000	+0.117	-	-	-	89.6	-	138.4
6437.640		1.319	-0.276	-	-	16.1	-	-	-
6645.130		1.380	+0.204	-	-	29.9	-	22.12	-
4103.310	Dy II	0.103	-0.346	-	-	113.7	-	-	-
4923.167		0.103	-2.384	-	20.5	23.75	8.56	8.56	9.615