Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
1.3498	Fe XXVI	2	2	5.35E−04	3.5841	S XVI	2	4	1.07E−03	5.7391	Al XIII	2	4	1.93E−02
1.3498	Fe XXVI	2	4	1.07E−03	3.5926	S XVI	2	2	7.38E−04	5.7396	Al XIII	2	2	9.67E−03
1.3530	Fe XXVI	2	2	7.38E−04	3.5926	S XVI	2	4	1.48E−03	6.0000	Al XII	1	3	3.20E−03
1.3530	Fe XXVI	2	4	1.48E−03	3.6045	S XVI	2	2	1.06E−03	6.0134	Al XII	1	3	4.40E−03
1.3575	Fe XXVI	2	2	1.06E−03	3.6045	S XVI	2	4	2.12E−03	6.0322	Al XII	1	3	6.31E−03
1.3575	Fe XXVI	2	4	2.12E−03	3.6221	S XVI	2	2	1.60E−03	6.0525	Al XIII	2	4	5.27E−02
1.3641	Fe XXVI	2	2	1.60E−03	3.6221	S XVI	2	4	3.21E−03	6.0537	Al XIII	2	2	2.63E−02
1.3641	Fe XXVI	2	4	3.21E−03	3.6496	S XVI	2	2	2.60E−03	6.0598	Al XII	1	3	9.53E−03
1.3744	Fe XXVI	2	2	2.60E−03	3.6496	S XVI	2	4	5.20E−03	6.1028	Al XII	1	3	1.54E−02
1.3744	Fe XXVI	2	4	5.20E−03	3.6958	S XVI	2	4	9.30E−03	6.1755	Al XII	1	3	2.75E−02
1.3917	Fe XXVI	2	4	9.30E−03	3.6960	S XVI	2	2	4.65E−03	6.1804	Si XIV	2	4	2.77E−01
1.3919	Fe XXVI	2	2	4.65E−03	3.7311	Ar XVIII	2	4	2.77E−01	6.1858	Si XIV	2	2	1.39E−01
1.4249	Fe XXVI	2	4	1.93E−02	3.7365	Ar XVIII	2	2	1.39E−01	6.3139	Al XII	1	3	5.67E−02
1.4254	Fe XXVI	2	2	9.67E−03	3.7843	S XVI	2	4	1.93E−02	6.3809	Mg XII	2	2	5.35E−04
1.4608	Fe XXV	1	3	2.78E−02	3.7848	S XVI	2	2	9.67E−03	6.3809	Mg XII	2	4	1.07E−03
1.4946	Fe XXV	1	3	5.79E−02	3.8828	S XV	1	3	3.20E−03	6.3960	Mg XII	2	2	7.38E−04
1.5024	Fe XXVI	2	4	5.27E−02	3.8916	S XV	1	3	4.41E−03	6.3960	Mg XII	2	4	1.48E−03
1.5035	Fe XXVI	2	2	2.63E−02	3.9039	S XV	1	3	6.34E−03	6.4173	Mg XII	2	2	1.06E−03
1.5732	Fe XXV	1	3	1.56E−01	3.9219	S XV	1	3	9.57E−03	6.4173	Mg XII	2	4	2.12E−03
1.7780	Fe XXVI	2	4	2.77E−01	3.9488	Ar XVII	1	3	7.75E−01	6.4486	Mg XII	2	2	1.60E−03
1.7835	Fe XXVI	2	2	1.39E−01	3.9501	S XV	1	3	1.54E−02	6.4486	Mg XII	2	4	3.21E−03
1.8504	Fe XXV	1	3	7.98E−01	3.9908	S XVI	2	4	5.27E−02	6.4974	Mg XII	2	4	5.20E−03
2.2895	Ca XX	2	2	5.35E−04	3.9920	S XVI	2	2	2.63E−02	6.4975	Mg XII	2	2	2.60E−03
2.2895	Ca XX	2	4	1.07E−03	3.9978	S XV	1	3	2.76E−02	6.5800	Mg XII	2	4	9.30E−03
2.2949	Ca XX	2	2	7.38E−04	4.0885	S XV	1	3	5.71E−02	6.5802	Mg XII	2	2	4.65E−03
2.2949	Ca XX	2	4	1.48E−03	4.2991	S XV	1	3	1.53E−01	6.6348	Al XII	1	3	1.52E−01
2.3026	Ca XX	2	2	1.06E−03	4.6848	Si XIV	2	4	1.07E−03	6.6480	Si XIII	1	3	7.57E−01
2.3026	Ca XX	2	4	2.12E−03	4.6849	Si XIV	2	2	5.35E−04	6.7378	Mg XII	2	4	1.93E−02
2.3138	Ca XX	2	2	1.60E−03	4.6960	Si XIV	2	2	7.38E−04	6.7382	Mg XII	2	2	9.67E−03
2.3138	Ca XX	2	4	3.21E−03	4.6960	Si XIV	2	4	1.48E−03	6.7870	Fe XXIV	2	2	6.91E−03
2.3313	Ca XX	2	2	2.60E−03	4.7116	Si XIV	2	2	1.06E−03	6.7870	Fe XXIV	2	4	1.39E−02
2.3313	Ca XX	2	4	5.20E−03	4.7116	Si XIV	2	4	2.12E−03	7.1037	Mg XI	1	3	3.19E−03
2.3608	Ca XX	2	4	9.30E−03	4.7274	S XVI	2	4	2.77E−01	7.1058	Mg XII	2	4	5.27E−02
2.3610	Ca XX	2	2	4.65E−03	4.7328	S XVI	2	2	1.39E−01	7.1069	Mg XII	2	2	2.63E−02
2.4173	Ca XX	2	4	1.93E−02	4.7345	Si XIV	2	4	3.21E−03	7.1194	Mg XI	1	3	4.40E−03
2.4177	Ca XX	2	2	9.67E−03	4.7346	Si XIV	2	2	1.60E−03	7.1415	Mg XI	1	3	6.31E−03
2.5138	Ca XIX	1	3	2.77E−02	4.7704	Si XIV	2	4	5.20E−03	7.1690	Fe XXIV	2	2	1.32E−02
2.5490	Ca XX	2	4	5.27E−02	4.7705	Si XIV	2	2	2.60E−03	7.1690	Fe XXIV	2	4	2.66E−02
2.5501	Ca XX	2	2	2.63E−02	4.8310	Si XIV	2	4	9.30E−03	7.1709	Al XIII	2	4	2.77E−01
2.5714	Ca XIX	1	3	5.75E−02	4.8312	Si XIV	2	2	4.65E−03	7.1741	Mg XI	1	3	9.52E−03
2.7054	Ca XIX	1	3	1.55E−01	4.9468	Si XIV	2	4	1.93E−02	7.1763	Al XIII	2	2	1.39E−01
2.8294	Ar XVIII	2	2	5.35E−04	4.9472	Si XIV	2	2	9.67E−03	7.2247	Mg XI	1	3	1.53E−02
2.8294	Ar XVIII	2	4	1.07E−03	5.0387	S XV	1	3	7.67E−01	7.3103	Mg XI	1	3	2.73E−02
2.8361	Ar XVIII	2	2	7.38E−04	5.1347	Si XIII	1	3	3.20E−03	7.4722	Fe XXIII	1	3	7.33E−02
2.8361	Ar XVIII	2	4	1.48E−03	5.1462	Si XIII	1	3	4.41E−03	7.4731	Mg XI	1	3	5.65E−02
2.8455	Ar XVIII	2	2	1.06E−03	5.1623	Si XIII	1	3	6.32E−03	7.5960	Na XI	2	2	5.35E−04
2.8455	Ar XVIII	2	4	2.12E−03	5.1861	Si XIII	1	3	9.54E−03	7.5960	Na XI	2	4	1.07E−03
2.8594	Ar XVIII	2	2	1.60E−03	5.2168	Si XIV	2	4	5.27E−02	7.6140	Na XI	2	2	7.38E−04
2.8594	Ar XVIII	2	4	3.21E−03	5.2180	Si XIV	2	2	2.63E−02	7.6140	Na XI	2	4	1.48E−03
2.8810	Ar XVIII	2	2	2.60E−03	5.2231	Si XIII	1	3	1.54E−02	7.6393	Na XI	2	4	2.12E−03
2.8810	Ar XVIII	2	4	5.20E−03	5.2856	Si XIII	1	3	2.75E−02	7.6394	Na XI	2	2	1.06E−03
2.9175	Ar XVIII	2	4	9.30E−03	5.4046	Si XIII	1	3	5.68E−02	7.6766	Na XI	2	4	3.21E−03
2.9177	Ar XVIII	2	2	4.65E−03	5.4352	Al XIII	2	2	5.35E−04	7.6767	Na XI	2	2	1.60E−03
2.9873	Ar XVIII	2	4	1.93E−02	5.4352	Al XIII	2	4	1.07E−03	7.7347	Na XI	2	4	5.20E−03
2.9878	Ar XVIII	2	2	9.67E−03	5.4481	Al XIII	2	2	7.38E−04	7.7349	Na XI	2	2	2.60E−03
3.0185	Ca XX	2	4	2.77E−01	5.4481	Al XIII	2	4	1.48E−03	7.7573	Al XII	1	3	7.50E−01
3.0239	Ca XX	2	2	1.39E−01	5.4662	Al XIII	2	4	2.12E−03	7.8331	Na XI	2	4	9.30E−03
3.0950	Ar XVII	1	3	1.55E−02	5.4663	Al XIII	2	2	1.06E−03	7.8333	Na XI	2	2	4.65E−03
3.1281	Ar XVII	1	3	2.76E−02	5.4929	Al XIII	2	2	1.60E−03	7.8505	Mg XI	1	3	1.51E−01
3.1502	Ar XVIII	2	4	5.27E−02	5.4929	Al XIII	2	4	3.21E−03	7.9859	Fe XXIV	2	4	6.45E−02
3.1514	Ar XVIII	2	2	2.63E−02	5.5344	Al XIII	2	4	5.20E−03	7.9962	Fe XXIV	2	2	3.22E−02
3.1772	Ca XIX	1	3	7.82E−01	5.5346	Al XIII	2	2	2.60E−03	8.0209	Na XI	2	4	1.93E−02
3.1996	Ar XVII	1	3	5.73E−02	5.6048	Al XIII	2	4	9.30E−03	8.0214	Na XI	2	2	9.67E−03
3.3654	Ar XVII	1	3	1.55E−01	5.6050	Al XIII	2	2	4.65E−03	8.3029	Fe XXIII	1	3	1.79E−01
3.5841	S XVI	2	2	5.35E−04	5.6807	Si XIII	1	3	1.52E−01	8.4192	Mg XII	2	4	2.77E−01

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
8.4246	Mg XII	2	2	1.39E−01	9.7080	Ne X	2	4	1.93E−02	11.9882	F IX	2	4	1.93E−02
8.4591	Na XI	2	4	5.27E−02	9.7085	Ne X	2	2	9.67E−03	11.9886	F IX	2	2	9.67E−03
8.4603	Na XI	2	2	2.63E−02	9.74	Fe XXI	5	3	2.42E−03	11.99	Ca XVIII	2	2	6.74E−03
8.467	Fe XXI	1	3	2.36E−02	9.77	Fe XIX	3	5	2.89E−02	11.99	Ca XVIII	2	4	1.35E−02
8.521	Fe XXI	3	3	5.86E−03	9.81	Fe XIX	5	7	5.39E−02	12.12	Fe XVII	1	3	7.42E−01
8.5417	Na X	1	3	3.18E−03	9.88	Fe XVIII	4	4	1.59E−03	12.1321	Ne X	2	4	2.77E−01
8.552	Fe XXI	5	3	5.83E−03	9.88	Fe XVIII	4	2	3.35E−03	12.1375	Ne X	2	2	1.39E−01
8.558	Fe XXI	5	7	6.01E−02	9.98	Fe XVIII	2	4	1.57E−02	12.259	Fe XXI	3	5	1.33E−01
8.5605	Na X	1	3	4.40E−03	9.98	Fe XVIII	2	2	1.32E−02	12.285	Fe XXI	1	3	9.70E−01
8.573	Fe XXI	1	3	7.14E−02	9.991	Fe XX	4	2	6.42E−02	12.325	Fe XXI	5	5	2.37E−01
8.5869	Na X	1	3	6.30E−03	9.991	Fe XX	4	4	1.28E−01	12.325	Fe XXI	3	5	7.25E−01
8.6257	Na X	1	3	9.50E−03	10.0232	Na XI	2	4	2.77E−01	12.380	Fe XXI	5	7	8.09E−01
8.627	Fe XXI	3	3	1.77E−02	10.0286	Na XI	2	2	1.39E−01	12.392	Fe XXI	5	5	1.44E−01
8.660	Fe XXI	5	3	7.07E−04	10.03	Fe XVIII	4	6	4.92E−02	12.397	Fe XXI	3	3	2.40E−01
8.6862	Na X	1	3	1.53E−02	10.12	Fe XX	4	6	1.90E−01	12.465	Fe XXI	5	3	9.56E−03
8.7884	Na X	1	3	2.72E−02	10.12	Fe XVII	1	3	5.05E−02	12.636	Ca XVIII	2	2	1.30E−02
8.98	Fe XXII	2	4	1.25E−01	10.175	Fe XXIII	1	3	3.30E−02	12.636	Ca XVIII	2	4	2.60E−02
8.9828	Na X	1	3	5.63E−02	10.2385	Ne X	2	4	5.27E−02	12.6434	F IX	2	4	5.27E−02
9.05	Fe XXII	2	2	3.91E−03	10.2396	Ne X	2	2	2.63E−02	12.6445	F IX	2	2	2.63E−02
9.051	Fe XX	4	2	2.37E−02	10.33	Fe XVIII	4	4	3.96E−03	12.82	Fe XX	4	4	6.29E−01
9.051	Fe XX	4	4	4.74E−02	10.33	Fe XVIII	4	2	7.81E−03	12.82	Fe XX	4	6	9.44E−01
9.07	Fe XXII	4	4	1.25E−02	10.33	Fe XVIII	4	4	3.91E−02	12.830	Fe XVIII	4	4	2.23E−02
9.07	Fe XXII	4	6	1.12E−01	10.37	Fe XVIII	4	4	1.97E−02	12.844	Fe XVIII	4	2	4.45E−03
9.149	Fe XX	4	6	7.03E−02	10.44	Fe XVIII	2	4	3.92E−02	12.847	Fe XVIII	4	6	4.90E−02
9.15	Fe XXII	4	2	3.87E−03	10.44	Fe XVIII	2	4	1.55E−02	12.881	Fe XVIII	4	4	5.43E−03
9.1688	Mg XI	1	3	7.42E−01	10.44	Fe XVIII	2	2	3.09E−02	13.001	Fe XVIII	2	4	8.80E−03
9.1936	Ne X	2	2	5.35E−04	10.49	Fe XVIII	2	4	7.82E−03	13.015	Fe XVIII	2	2	1.76E−02
9.1936	Ne X	2	4	1.07E−03	10.513	Ne IX	1	3	6.28E−03	13.053	Fe XVIII	2	4	5.36E−02
9.2154	Ne X	2	4	1.48E−03	10.52	Fe XVIII	4	6	7.85E−02	13.143	F VIII	1	3	4.37E−03
9.2155	Ne X	2	2	7.38E−04	10.560	Fe XXIII	1	3	4.32E−02	13.159	Fe XVIII	4	2	4.87E−02
9.2461	Ne X	2	4	2.12E−03	10.5650	Ne IX	1	3	9.47E−03	13.185	F VIII	1	3	6.26E−03
9.2462	Ne X	2	2	1.06E−03	10.619	Fe XXIV	2	4	2.61E−01	13.215	Fe XVIII	4	4	1.59E−02
9.29	Fe XIX	5	3	9.51E−05	10.6426	Ne IX	1	3	1.53E−02	13.244	F VIII	1	3	9.43E−03
9.2912	Ne X	2	4	3.21E−03	10.663	Fe XXIV	2	2	1.31E−01	13.319	Fe XVIII	4	2	1.84E−02
9.2913	Ne X	2	2	1.60E−03	10.7643	Ne IX	1	3	2.71E−02	13.334	F VIII	1	3	1.52E−02
9.34	Fe XIX	5	7	3.16E−02	10.981	Fe XXIII	1	3	6.95E−01	13.339	Fe XVIII	2	2	4.80E−02
9.356	Fe XXI	1	3	6.24E−02	11.0003	Ne IX	1	3	5.61E−02	13.355	Fe XVIII	4	4	9.18E−02
9.36	Fe XIX	1	3	9.44E−03	11.0027	Na X	1	3	7.34E−01	13.374	Fe XVIII	4	6	1.41E−01
9.3616	Ne X	2	4	5.20E−03	11.02	Fe XVII	1	3	9.35E−02	13.397	Fe XVIII	2	4	1.57E−01
9.3617	Ne X	2	2	2.60E−03	11.13	Fe XVII	1	3	3.46E−01	13.4471	Ne IX	1	3	7.24E−01
9.37	Fe XIX	3	3	2.36E−03	11.3529	F IX	2	2	5.35E−04	13.488	F VIII	1	3	2.70E−02
9.421	Fe XXI	3	3	1.55E−02	11.3529	F IX	2	4	1.07E−03	13.503	Fe XVIII	2	2	7.26E−02
9.4330	Na X	1	3	1.50E−01	11.3798	F IX	2	4	1.48E−03	13.541	Fe XVIII	2	4	3.62E−02
9.460	Fe XXI	5	3	1.54E−02	11.3799	F IX	2	2	7.38E−04	13.781	F VIII	1	3	5.57E−02
9.476	Fe XXI	1	3	1.90E−01	11.4177	F IX	2	4	2.12E−03	13.823	Fe XVII	1	3	3.31E−01
9.4807	Ne X	2	4	9.30E−03	11.4178	F IX	2	2	1.06E−03	13.919	Fe XVIII	4	4	2.56E−02
9.4809	Ne X	2	2	4.65E−03	11.44	Fe XXII	2	4	3.28E−01	13.954	Fe XVIII	4	6	2.30E−01
9.482	Fe XXI	5	7	1.59E−01	11.46	Fe XXII	4	6	2.95E−01	14.049	Ca XVIII	2	4	6.26E−02
9.518	Fe XXI	3	5	2.56E−02	11.4734	F IX	2	4	3.21E−03	14.059	Ca XVIII	2	2	3.13E−02
9.52	Fe XIX	5	3	2.76E−03	11.4735	F IX	2	2	1.60E−03	14.121	Fe XVIII	2	4	2.52E−01
9.52	Fe XIX	5	7	2.86E−02	11.51	Fe XXII	2	4	5.38E−02	14.136	Fe XVIII	4	2	1.27E−01
9.543	Fe XXI	3	3	4.69E−02	11.5466	Ne IX	1	3	1.49E−01	14.152	Fe XVIII	4	4	1.05E−01
9.548	Fe XXI	3	5	1.41E−01	11.5603	F IX	2	4	5.20E−03	14.203	Fe XVIII	4	6	9.39E−01
9.558	Fe XXI	5	5	4.58E−02	11.5604	F IX	2	2	2.60E−03	14.208	Fe XVIII	4	4	6.33E−01
9.57	Fe XIX	5	3	3.39E−04	11.60	Fe XXII	4	4	3.23E−02	14.257	Fe XVIII	4	2	1.99E−01
9.583	Fe XXI	5	3	1.87E−03	11.62	Ca XVIII	2	2	3.99E−03	14.344	Fe XVIII	2	2	5.01E−01
9.588	Fe XXI	5	5	2.81E−02	11.62	Ca XVIII	2	4	7.98E−03	14.35	Fe XIX	5	5	2.77E−02
9.59	Fe XIX	1	3	1.10E−02	11.65	Fe XXII	2	2	1.07E−01	14.361	Fe XVIII	2	4	1.04E+00
9.61	Fe XIX	3	3	2.74E−03	11.67	Fe XXII	4	4	1.33E−01	14.3716	O VIII	2	4	1.07E−03
9.63	Fe XXI	1	3	9.80E−03	11.7074	F IX	2	4	9.30E−03	14.3717	O VIII	2	2	5.35E−04
9.64	Fe XIX	1	3	3.37E−02	11.7076	F IX	2	2	4.65E−03	14.373	Fe XVIII	4	6	3.52E−01
9.65	Fe XIX	3	3	8.41E−03	11.77	Fe XXII	2	4	6.80E−01	14.394	Fe XVIII	4	4	3.81E−02
9.68	Fe XIX	5	5	5.84E−03	11.81	Fe XXII	4	2	2.62E−02	14.4057	O VIII	2	4	1.48E−03
9.68	Fe XIX	5	7	3.27E−02	11.92	Fe XXII	4	6	6.04E−01	14.4058	O VIII	2	2	7.38E−04
9.70	Fe XXI	3	3	2.43E−03	11.93	Fe XXII	4	4	6.71E−02	14.418	Fe XVIII	2	4	2.50E−01

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λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
14.44	Fe XIX	5	3	9.18E−03	19.3612	N VII	2	4	9.30E−03	25.71	Ca XIII	5	5	3.94E−02
14.4537	O VIII	2	4	2.12E−03	19.3614	N VII	2	2	4.65E−03	25.74	Ca XIII	1	3	5.55E−01
14.4538	O VIII	2	2	1.06E−03	19.56	Ca XVII	1	3	6.54E−01	25.8302	C VI	2	4	3.21E−03
14.458	F VIII	1	3	1.48E−01	19.8257	N VII	2	4	1.93E−02	25.8303	C VI	2	2	1.60E−03
14.468	Fe XVIII	2	2	1.96E−01	19.8261	N VII	2	2	9.67E−03	25.85	Ca XIII	3	3	1.31E−02
14.5242	O VIII	2	4	3.21E−03	20.86	Ca XVI	2	4	5.04E−02	25.87	Ca XIII	3	5	2.18E−02
14.5243	O VIII	2	2	1.60E−03	20.9095	N VII	2	4	5.27E−02	25.88	Ca XIII	1	3	5.21E−02
14.53	Fe XIX	3	5	1.52E−02	20.9106	N VII	2	2	2.63E−02	25.88	Ca XIII	5	3	1.71E−01
14.60	Fe XIX	1	3	3.63E−02	20.95	Ca XVI	2	2	1.00E−01	25.96	Ca XIII	5	3	1.26E−01
14.610	Fe XVIII	2	4	1.51E−02	21.02	Ca XVI	4	4	1.25E−01	25.97	Ca XIII	5	5	3.76E−01
14.63	Fe XIX	3	3	9.06E−03	21.11	Ca XVI	4	2	2.49E−02	26.0260	C VI	2	4	5.20E−03
14.6343	O VIII	2	4	5.20E−03	21.147	Ar XIV	4	6	1.14E−01	26.0261	C VI	2	2	2.60E−03
14.6344	O VIII	2	2	2.60E−03	21.45	Ca XVI	2	4	6.63E−01	26.03	Ca XIII	5	7	4.49E−01
14.67	Fe XIX	3	1	1.20E−02	21.6019	O VII	1	3	6.96E−01	26.04	Ca XIII	3	3	1.70E−01
14.67	Fe XIX	5	7	5.16E−02	21.61	Ca XVI	4	6	5.92E−01	26.06	Ca XIII	5	5	8.01E−02
14.73	Fe XIX	5	3	6.11E−04	21.62	Ca XVI	4	4	6.57E−02	26.07	Ca XIII	1	3	1.69E−01
14.73	Fe XIX	5	5	9.15E−03	22.373	Ar XV	1	3	3.31E−02	26.12	Ca XIII	5	3	5.33E−03
14.8205	O VIII	2	4	9.30E−03	22.550	Ca XV	1	3	3.06E−01	26.13	Ca XIII	3	3	1.25E−01
14.8207	O VIII	2	2	4.65E−03	22.635	Ca XV	3	5	1.27E−01	26.13	Ca XIII	3	5	2.08E−01
14.90	Fe XIX	1	3	6.04E−02	22.640	Ca XV	3	3	7.63E−02	26.16	Ca XIII	1	3	4.98E−01
14.93	Fe XIX	3	3	1.50E−02	22.730	Ca XV	5	5	2.29E−01	26.209	Ar XIII	1	3	4.76E−02
14.93	Fe XIX	3	5	4.52E−02	22.730	Ca XV	1	3	9.27E−01	26.22	Ca XIII	3	5	3.98E−01
14.97	Fe XIX	5	3	3.93E−02	22.735	Ca XV	5	3	7.60E−02	26.277	Ar XIII	3	3	4.75E−02
14.9823	F IX	2	4	2.77E−01	22.759	Ca XV	3	5	6.95E−01	26.29	Ca XIII	3	3	1.32E−01
14.9877	F IX	2	2	1.39E−01	22.777	Ca XV	5	7	7.78E−01	26.32	Ca XIII	1	3	5.29E−01
15.015	Fe XVII	1	3	2.95E+00	22.821	Ca XV	3	3	2.31E−01	26.3572	C VI	2	4	9.30E−03
15.14	Fe XIX	1	3	3.88E−02	22.854	Ca XV	5	5	1.38E−01	26.3574	C VI	2	2	4.65E−03
15.17	Fe XIX	3	3	3.88E−02	22.917	Ca XV	5	3	9.20E−03	26.360	Ar XIII	5	3	4.73E−02
15.1760	O VIII	2	4	1.93E−02	22.97	Ar XIII	3	5	2.58E−02	26.442	Ca XI	1	3	2.86E−02
15.1765	O VIII	2	2	9.67E−03	23.0051	S XIV	2	4	6.03E−02	26.446	Ar XIII	3	5	5.12E−02
15.209	Fe XVIII	4	2	1.26E−02	23.0151	S XIV	2	2	3.01E−02	26.4564	Si XII	2	4	1.29E−02
15.450	Fe XVIII	2	2	1.23E−02	23.03	Ar XIII	5	5	4.62E−02	26.4585	Si XII	2	2	6.45E−03
15.616	Fe XVIII	4	4	6.39E−03	23.570	Ar XIII	3	5	4.10E−03	26.530	Ar XIII	5	5	9.18E−02
15.625	Fe XVIII	4	6	5.76E−02	23.637	Ar XIII	5	5	7.35E−03	26.72	Ca XIII	5	7	2.04E−01
15.766	Fe XVIII	4	2	1.67E−02	23.73	S XII	4	6	1.31E−02	26.75	Ca XIII	5	5	3.63E−02
15.870	Fe XVIII	2	4	6.29E−02	23.771	N VI	1	3	5.46E−02	26.89	S XII	4	6	5.93E−02
16.005	Fe XVIII	4	4	8.20E−02	24.086	Ca XIV	4	4	5.98E−01	26.92	Ca XIII	3	5	1.81E−01
16.0055	O VIII	2	4	5.27E−02	24.133	Ca XIV	4	6	8.95E−01	26.962	Ca XI	1	3	3.04E−01
16.0067	O VIII	2	2	2.63E−02	24.42	S XII	4	6	2.17E−02	26.9896	C VI	2	4	1.93E−02
16.026	Fe XVIII	2	2	6.55E−02	24.590	S XIII	1	3	1.61E−01	26.9901	C VI	2	2	9.67E−03
16.272	Fe XVIII	2	4	3.23E−02	24.737	Ar XV	1	3	6.36E−01	27.380	Ca XII	4	4	1.83E−02
16.807	F VIII	1	3	7.11E−01	24.7792	N VII	2	4	2.77E−01	27.413	Ca XII	4	6	1.65E−01
16.9223	O VII	1	3	3.14E−03	24.7846	N VII	2	2	1.39E−01	27.442	Ar XIII	1	3	2.00E−01
16.9584	O VII	1	3	4.34E−03	24.900	N VI	1	3	1.44E−01	27.470	Ar XIV	2	4	6.54E−01
17.0092	O VII	1	3	6.22E−03	25.040	Ar XII	4	6	1.91E−01	27.517	Ar XIII	3	3	4.99E−02
17.0860	O VII	1	3	9.37E−03	25.327	Ca XI	1	3	6.52E−01	27.517	Ar XIII	3	5	1.49E−01
17.2000	O VII	1	3	1.51E−02	25.420	Ar XIV	2	4	5.10E−02	27.607	Ca XII	2	4	1.81E−01
17.3960	O VII	1	3	2.68E−02	25.51	Ca XIII	5	5	8.39E−02	27.608	Ar XIII	5	3	1.99E−03
17.7680	O VII	1	3	5.52E−02	25.53	Ca XIII	5	7	4.70E−01	27.608	Ar XIII	5	5	2.98E−02
18.6288	O VII	1	3	1.46E−01	25.55	Ca XIII	5	3	5.59E−03	27.608	Ar XIII	5	7	1.66E−01
18.691	Ca XVIII	2	4	2.49E−01	25.5587	C VI	2	4	1.07E−03	27.629	Ar XIV	4	6	5.85E−01
18.732	Ca XVIII	2	2	1.24E−01	25.5588	C VI	2	2	5.35E−04	27.642	Ar XIV	4	4	6.50E−02
18.7747	N VII	2	2	5.35E−04	25.567	Ar XIV	4	4	1.27E−01	27.88	Fe XVI	2	4	5.02E−03
18.7747	N VII	2	4	1.07E−03	25.57	S XII	2	4	4.20E−02	27.895	Ca XII	4	4	8.57E−02
18.818	Ar XV	1	3	1.66E−01	25.6194	C VI	2	4	1.48E−03	27.8967	Si XII	2	4	2.47E−02
18.8193	N VII	2	2	7.38E−04	25.6195	C VI	2	2	7.38E−04	27.9006	Si XII	2	2	1.23E−02
18.8193	N VII	2	4	1.48E−03	25.6585	Si XII	2	4	7.65E−03	27.973	Ca XII	4	6	7.70E−01
18.8819	N VII	2	4	2.12E−03	25.6598	Si XII	2	2	3.83E−03	27.973	Ca XII	4	4	5.34E−01
18.8820	N VII	2	2	1.06E−03	25.66	S XII	4	4	4.18E−03	28.095	Ca XII	4	2	1.76E−01
18.9671	O VIII	2	4	2.77E−01	25.66	S XII	4	6	3.77E−02	28.131	Ca XII	2	4	8.50E−01
18.9725	O VIII	2	2	1.39E−01	25.67	Ca XIII	3	5	4.17E−01	28.210	Ca XII	2	4	2.12E−01
18.9741	N VII	2	4	3.21E−03	25.69	Ca XIII	5	3	1.32E−02	28.222	S XII	2	4	1.26E−01
18.9742	N VII	2	2	1.60E−03	25.7048	C VI	2	2	1.06E−03	28.327	S XII	4	4	1.25E−02
19.1179	N VII	2	4	5.20E−03	25.7048	C VI	2	4	2.12E−03	28.327	S XII	4	6	1.12E−01
19.1180	N VII	2	2	2.60E−03	25.71	Ca XIII	3	3	1.39E−01	28.335	Ca XII	2	2	1.74E−01

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
28.4652	C VI	2	4	5.27E−02	31.5120	Ar IX	1	3	1.53E−01	35.203	S XII	2	2	9.32E−02
28.4663	C VI	2	2	2.63E−02	31.6213	Si XI	1	3	4.15E−05	35.2116	Ca XI	1	3	2.32E−01
28.4766	Si XI	1	3	4.01E−03	31.653	Ca XII	4	4	6.64E−03	35.275	S XII	4	4	1.16E−01
28.478	Ca XII	4	6	3.47E−01	31.661	Ca XII	4	6	5.98E−02	35.366	S XII	4	2	2.32E−02
28.505	Ca XII	4	4	3.82E−02	31.742	Ar XIII	3	5	2.54E−02	35.366	Mg X	2	2	1.65E−03
28.616	Ca XII	4	4	3.84E−02	31.864	Ar XIII	5	5	4.55E−02	35.366	Mg X	2	4	3.31E−03
28.67	Fe XVI	2	4	7.55E−03	31.956	Ca XII	2	4	6.57E−02	35.369	Ar XI	5	7	2.15E−01
28.680	Ca XII	4	2	7.59E−03	32.0552	C V	1	3	6.09E−03	35.398	Ar XI	5	5	3.83E−02
28.751	Ca XII	2	4	1.52E−02	32.105	Ca XII	4	2	1.77E−02	35.469	Ar XI	5	3	2.54E−03
28.787	N VI	1	3	6.75E−01	32.1657	Fe XVI	2	4	2.21E−02	35.580	Ar XI	3	5	1.90E−01
28.864	Ca XII	2	4	3.81E−01	32.1901	C V	1	3	9.17E−03	35.651	Ar XI	3	3	6.33E−02
28.916	Ca XIII	5	7	5.45E−02	32.1916	Fe XVI	2	2	1.11E−02	35.700	Ar XI	1	3	2.52E−01
28.926	S XIII	1	3	3.32E−02	32.242	S XIII	1	3	6.13E−01	35.827	Mg X	2	2	2.42E−03
28.930	Ca XII	2	2	3.01E−02	32.281	Ca XII	4	4	8.82E−02	35.827	Mg X	2	4	4.84E−03
28.959	Ca XIII	5	5	9.72E−03	32.3998	C V	1	3	1.48E−02	35.8340	Ar IX	1	3	3.33E−01
28.963	Ca XIII	5	3	6.48E−04	32.417	Ca XII	2	2	7.02E−02	35.9321	Si X	4	6	4.53E−02
29.044	Ar X	4	4	3.39E−03	32.450	Ar X	4	2	3.40E−02	36.398	S XII	2	4	6.43E−01
29.104	Ar X	4	6	3.04E−02	32.550	Ar X	4	2	1.96E−03	36.518	Mg X	2	2	3.74E−03
29.118	Ar XIII	1	3	3.01E−01	32.550	Ar X	4	4	9.79E−03	36.518	Mg X	2	4	7.48E−03
29.165	Ca XIII	3	5	4.83E−02	32.597	Ca XII	2	4	3.50E−02	36.5373	Ar X	4	4	1.50E−02
29.169	Ca XIII	3	3	1.61E−02	32.610	Ar X	4	6	1.10E−01	36.5600	Ar X	4	6	1.35E−01
29.191	Ar XIII	3	1	9.98E−02	32.641	Ar X	2	2	3.38E−02	36.564	S XII	4	6	5.76E−01
29.197	Ar X	2	4	3.37E−02	32.6670	Ar IX	1	3	2.78E−01	36.573	S XII	4	4	6.40E−02
29.202	Ar XIII	3	3	7.48E−02	32.67	S XII	2	4	1.92E−02	36.6715	Al XI	2	4	5.82E−02
29.207	Ca XIII	1	3	6.43E−02	32.742	Ar X	2	4	3.89E−03	36.6822	Al XI	2	2	2.91E−02
29.217	Ar XIII	3	5	1.25E−01	32.742	Ar X	2	2	7.78E−03	36.7490	Fe XVI	2	4	4.85E−02
29.293	Ar XIV	2	2	2.23E−02	32.7542	C V	1	3	2.61E−02	36.7800	Ar X	2	4	1.49E−01
29.305	Ar XIII	5	3	7.47E−02	32.81	S XII	4	4	1.91E−03	36.8030	Fe XVI	2	2	2.42E−02
29.320	Ar XIII	5	5	2.23E−01	32.81	S XII	4	6	1.72E−02	36.8097	B V	2	4	1.07E−03
29.320	Ar XIII	1	3	9.08E−01	33.007	Al XI	2	2	1.22E−02	36.8098	B V	2	2	5.35E−04
29.350	Ar XIII	3	5	6.81E−01	33.007	Al XI	2	4	2.44E−02	36.8971	B V	2	4	1.48E−03
29.370	Ar XIII	5	7	7.62E−01	33.4262	C V	1	3	5.36E−02	36.8972	B V	2	2	7.38E−04
29.405	Ar XIII	3	3	2.26E−01	33.5133	Si XI	1	3	1.53E−01	36.9829	Ar IX	1	3	5.11E−02
29.416	Al XI	2	2	1.67E−03	33.568	Ar XI	5	3	4.92E−03	37.0200	B V	2	4	2.12E−03
29.416	Al XI	2	4	3.34E−03	33.650	Ar XI	5	7	4.13E−01	37.0201	B V	2	2	1.06E−03
29.454	Ar XIII	5	5	1.36E−01	33.676	Ar XI	5	5	7.35E−02	37.160	Si X	2	4	6.13E−02
29.489	Ar XIV	4	2	2.21E−02	33.732	Ar XI	3	3	1.22E−01	37.198	Si X	4	6	5.51E−02
29.510	Ar XIII	5	3	9.03E−03	33.7342	C VI	2	4	2.77E−01	37.2007	B V	2	4	3.21E−03
29.633	Ca XIII	5	3	4.21E−02	33.7396	C VI	2	2	1.39E−01	37.2008	B V	2	2	1.60E−03
29.793	Al XI	2	2	2.44E−03	33.775	Ar XI	1	3	4.89E−01	37.256	Si X	4	4	6.11E−03
29.793	Al XI	2	4	4.88E−03	33.840	Ar XI	3	5	3.66E−01	37.3464	Ar X	4	4	7.26E−02
29.849	Ca XIII	3	3	4.18E−02	34.099	Ar XI	5	3	1.61E−01	37.3849	Ar X	4	2	9.47E−02
29.889	Ca XIII	1	3	4.17E−02	34.132	S XII	2	2	5.31E−02	37.4300	Ar X	4	6	6.52E−01
29.93	Fe XVI	2	4	1.22E−02	34.2380	Si X	4	6	2.16E−02	37.4772	Ar X	4	4	4.72E−01
30.077	S XIII	1	3	2.61E−02	34.240	Ar XI	5	5	3.59E−01	37.4827	B V	2	4	5.20E−03
30.3218	Si XI	1	3	6.09E−02	34.268	Ar XI	3	3	1.61E−01	37.4828	B V	2	2	2.60E−03
30.376	Al XI	2	2	3.79E−03	34.286	S XII	4	2	5.29E−02	37.6000	Ar X	2	4	7.21E−01
30.376	Al XI	2	4	7.59E−03	34.310	S X	4	6	1.89E−01	37.6228	Ar X	4	2	1.64E−01
30.4270	S XIV	2	4	2.37E−01	34.313	Ar XI	1	3	1.60E−01	37.6390	Ar X	2	2	3.77E−01
30.4468	Ca XI	1	3	2.34E+00	34.330	Ar XI	5	7	4.20E−01	37.644	Mg X	2	2	6.29E−03
30.4690	S XIV	2	2	1.19E−01	34.344	Ar XI	5	3	5.01E−03	37.644	Mg X	2	4	1.26E−02
30.580	Ar XII	4	6	1.23E−01	34.349	Ar XI	5	5	7.50E−02	37.7325	Ar X	2	4	1.88E−01
30.773	Ca XII	4	2	1.24E−02	34.410	Ar XI	3	5	1.98E−01	37.773	S XI	5	7	1.50E−01
30.906	Ar X	4	4	1.05E−02	34.516	Ar XI	3	3	1.25E−01	37.810	Ar XI	5	5	2.83E−02
30.960	Ar X	4	6	9.42E−02	34.520	Ar XI	3	5	3.73E−01	37.8801	Ar X	2	2	1.62E−01
31.0121	Si XII	2	4	5.89E−02	34.533	S XII	2	4	2.60E−01	37.9598	B V	2	4	9.30E−03
31.0227	Si XII	2	2	2.94E−02	34.561	Ar XI	1	3	4.97E−01	37.9600	B V	2	2	4.65E−03
31.054	S XI	5	7	1.65E−01	34.586	S XII	4	6	2.34E−01	38.018	Ar XI	3	5	1.56E−02
31.060	Ca XII	2	2	1.23E−02	34.670	Ar XII	4	6	5.50E−02	38.2135	Ar X	4	4	4.45E−02
31.080	Ar X	2	4	1.04E−01	34.690	S XII	4	4	2.59E−02	38.2300	Ar X	4	6	3.67E−01
31.0826	Si XI	1	3	1.47E−02	34.780	Ar XII	4	4	3.66E−02	38.373	Ar X	4	4	4.05E−02
31.313	Al XI	2	2	6.39E−03	34.880	Ar XII	4	2	1.82E−02	38.4276	Ar X	4	2	8.84E−03
31.313	Al XI	2	4	1.27E−02	34.9728	C V	1	3	1.41E−01	38.4790	Ar X	2	4	1.77E−02
31.347	Ar XII	4	4	5.79E−01	35.0239	Ar IX	1	3	5.24E−01	38.573	Ar XI	5	5	1.00E−02
31.389	Ar XII	4	6	8.68E−01	35.112	S XII	2	4	4.67E−02	38.6090	Si XI	1	3	3.36E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
38.620	Ar XI	5	7	5.60E−02	44.2150	Si IX	3	5	1.39E−01	48.2970	Al XI	2	4	2.24E−01
38.625	Ar XI	5	3	6.67E−04	44.2490	Si IX	5	7	1.56E−01	48.3379	Al XI	2	2	1.11E−01
38.641	Ar X	2	4	4.03E−01	44.2711	Ar X	2	4	3.60E−02	48.3400	Mg IX	1	3	1.43E−01
38.6961	Ar X	2	2	3.51E−02	44.2809	Mg IX	1	3	2.29E−02	48.3851	Si X	2	4	4.40E−02
38.789	Ar XI	3	5	4.98E−02	44.2908	Si IX	5	5	2.78E−02	48.4358	Si X	2	2	8.79E−02
38.842	Ar XI	3	3	1.66E−02	44.518	Si X	2	2	7.78E−03	48.5494	Si X	4	4	1.09E−01
38.8707	B V	2	4	1.93E−02	44.657	Si X	4	2	7.76E−03	48.5531	Na IX	2	2	1.18E−02
38.8711	B V	2	2	9.67E−03	44.691	Si X	2	4	1.35E−02	48.5531	Na IX	2	4	2.35E−02
38.8821	S IX	5	5	6.66E−02	44.7039	Al IX	2	4	5.82E−02	48.5855	B V	2	4	2.77E−01
38.900	Ar XI	1	3	6.62E−02	44.719	Si X	2	2	2.70E−02	48.5909	B V	2	2	1.39E−01
38.956	Fe XV	1	3	1.09E−01	44.7249	Na IX	2	2	3.68E−03	48.6003	Si X	4	2	2.19E−02
38.9660	S IX	5	7	6.36E−02	44.7249	Na IX	2	4	7.34E−03	48.6469	S VII	1	3	2.20E−01
39.0032	S IX	3	5	3.69E−02	44.7429	Al IX	4	6	5.24E−02	48.7389	Ar IX	1	3	2.38E−01
39.030	S XI	1	3	2.92E−01	44.8019	Al IX	4	4	5.81E−03	49.1190	S IX	5	7	2.24E−01
39.110	S XI	3	3	7.28E−02	44.831	Si X	4	4	3.37E−02	49.1316	S IX	5	3	2.67E−03
39.1297	S XI	3	5	1.21E−01	44.859	Si X	4	2	6.73E−03	49.1345	S IX	5	5	4.01E−02
39.220	S XI	5	3	7.26E−02	45.2790	S VIII	4	6	1.63E−01	49.3251	S IX	3	3	6.66E−02
39.2400	S XI	5	5	2.18E−01	45.2946	S VIII	4	4	4.34E−02	49.3280	S IX	3	5	2.00E−01
39.2400	S XI	1	3	8.80E−01	45.3700	S VIII	4	4	1.80E−02	49.3900	S IX	1	3	2.66E−01
39.3000	S XI	3	5	6.58E−01	45.5024	S VIII	2	4	1.73E−02	49.4549	B IV	1	3	2.56E−02
39.3204	S XI	3	3	2.19E−01	45.5785	S VIII	2	4	1.79E−01	49.9870	Si VIII	4	4	1.05E−01
39.3230	S XI	5	7	7.37E−01	46.0900	Na IX	2	2	6.19E−03	50.0190	Si VIII	4	6	1.57E−01
39.4112	S XI	5	5	1.31E−01	46.0900	Na IX	2	4	1.24E−02	50.2190	Mg VIII	4	6	2.16E−02
39.4317	S XI	5	3	8.75E−03	46.2120	S VII	1	3	8.35E−02	50.3499	Fe XVI	2	4	1.59E−01
39.4429	Si X	2	4	1.27E−01	46.3729	S IX	5	7	3.40E−01	50.4347	B IV	1	3	5.21E−02
39.5520	Si X	4	4	1.28E−02	46.3766	S IX	5	3	4.04E−03	50.5239	Si X	2	4	6.28E−01
39.5520	Si X	4	6	1.15E−01	46.4128	S IX	5	5	6.06E−02	50.5551	Fe XVI	2	2	7.93E−02
39.668	Mg X	2	2	1.20E−02	46.5490	S IX	3	3	1.01E−01	50.6909	Si X	4	6	5.62E−01
39.668	Mg X	2	4	2.41E−02	46.585	S IX	5	5	3.68E−02	50.7030	Si X	4	4	6.25E−02
39.717	Ar XI	5	3	4.38E−02	46.5854	S IX	3	5	3.02E−01	51.2032	S VIII	4	4	1.16E−02
39.947	Ar XI	3	3	4.35E−02	46.6067	S IX	1	3	4.02E−01	51.2267	S VIII	4	6	1.04E−01
40.008	Ar XI	1	3	4.34E−02	46.624	S IX	5	3	1.22E−02	51.3859	Mg VIII	2	4	1.60E−02
40.1710	S IX	5	7	1.06E−01	46.759	S IX	3	5	2.04E−02	51.4690	S VIII	2	4	1.16E−01
40.2678	C V	1	3	6.48E−01	46.799	S IX	3	3	1.22E−02	51.4732	Mg VIII	4	4	1.61E−03
40.4722	Si XI	1	3	2.04E−02	46.8429	S IX	3	1	1.62E−02	51.4732	Mg VIII	4	6	1.44E−02
40.6380	Mg IX	1	3	1.29E−02	46.857	S IX	1	3	4.87E−02	51.7891	Na VIII	1	3	3.16E−02
40.9110	Si XII	2	4	2.29E−01	46.891	Si X	2	2	4.75E−02	51.8070	S VII	1	3	6.08E−01
40.9510	Si XII	2	2	1.14E−01	47.045	Si X	4	2	4.73E−02	51.9791	Al X	1	3	5.65E−01
40.9960	B V	2	4	5.27E−02	47.0471	S IX	5	3	1.48E−01	52.6806	S VIII	4	4	5.52E−02
40.9971	B V	2	2	2.63E−02	47.0981	S VII	1	3	1.34E−01	52.6807	B IV	1	3	1.35E−01
41.3570	S X	4	6	1.06E−01	47.1847	S IX	5	3	1.09E−01	52.7028	S VIII	4	2	7.81E−02
41.4760	Ar IX	1	3	2.01E+00	47.2245	S IX	3	3	1.48E−01	52.7562	S VIII	4	6	4.96E−01
41.5431	Al IX	4	6	2.09E−02	47.2489	S IX	5	5	3.28E−01	52.7895	S VIII	4	4	3.90E−01
41.5728	Ar X	4	2	1.27E−02	47.2840	S IX	1	3	1.47E−01	52.8099	Si IX	3	5	1.18E−01
41.8030	Mg IX	1	3	3.32E−02	47.3632	S IX	3	3	1.09E−01	52.8380	Si IX	5	7	1.32E−01
41.8872	Ar X	2	2	1.26E−02	47.4230	S IX	1	3	4.37E−01	52.8589	S IX	5	5	2.91E−02
42.4850	S X	4	2	2.76E−01	47.4279	S IX	3	5	1.82E−01	52.9109	Fe XV	1	3	4.08E−01
42.4950	S X	4	4	5.52E−01	47.4329	S IX	5	7	3.77E−01	52.9180	Si IX	5	5	2.34E−02
42.5431	S X	4	6	8.27E−01	47.4356	S IX	5	5	6.73E−02	52.9553	S VIII	4	2	1.46E−01
42.9345	Ar X	4	4	6.77E−03	47.4890	Si X	2	4	2.36E−01	52.9620	S VIII	2	4	5.49E−01
42.9400	Ar X	4	6	6.09E−02	47.4985	S IX	5	3	4.48E−03	52.963	Al IX	2	2	8.57E−03
42.9898	S XI	3	5	2.65E−02	47.5190	S VIII	4	4	2.64E−02	52.9844	S VIII	2	2	3.10E−01
43.0986	S XI	1	3	6.34E−02	47.5450	Si X	4	6	2.13E−01	53.0721	S VIII	2	4	1.55E−01
43.1229	S XI	5	5	4.76E−02	47.6160	S IX	3	5	3.35E−01	53.0829	S IX	3	5	1.61E−02
43.1956	S XI	3	3	1.59E−02	47.6472	Si X	4	4	2.35E−02	53.101	Al IX	4	2	8.55E−03
43.2700	Ar X	2	4	6.72E−02	47.6544	S X	4	6	5.72E−02	53.2368	Al IX	2	4	1.28E−02
43.3300	S XI	5	3	1.58E−02	47.6793	S IX	3	3	1.12E−01	53.2396	S VIII	2	2	1.46E−01
43.5491	Al IX	4	6	4.47E−02	47.7399	S IX	1	3	4.46E−01	53.2669	Al IX	2	2	2.54E−02
43.6962	Ar X	4	2	1.82E−02	47.7479	S VIII	2	4	1.05E−02	53.3757	Al IX	4	4	3.18E−02
43.7623	Si XI	1	3	5.83E−01	47.7550	Al IX	2	4	1.38E−01	53.4060	Al IX	4	2	6.34E−03
43.8429	Mg IX	1	3	4.87E−02	47.7920	S X	4	4	3.80E−02	53.8057	Si IX	1	3	3.81E−02
43.9200	Ar X	4	4	9.07E−02	47.8041	Al X	1	3	1.72E−02	53.810	Ne VIII	2	2	1.14E−03
44.0437	Ar X	2	2	7.23E−02	47.8560	Al IX	4	6	1.24E−01	53.810	Ne VIII	2	4	2.28E−03
44.0500	Mg X	2	2	2.84E−02	47.8668	Al IX	4	4	1.38E−02	53.8120	Mg VIII	2	4	4.68E−02
44.0500	Mg X	2	4	5.68E−02	47.9051	S X	4	2	1.90E−02	53.8570	Na IX	2	4	5.58E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
53.8665	Na IX	2	2	2.79E−02	57.1318	Mg VIII	4	2	8.13E−04	60.7958	Ne VIII	2	4	2.30E−02
53.8795	Si IX	3	3	3.80E−02	57.3250	Si VII	5	7	6.16E−02	60.8059	Mg VIII	4	2	3.02E−03
53.9049	Mg VIII	4	6	4.21E−02	57.3710	Mg IX	1	3	1.36E−02	60.8369	Si VII	5	7	9.81E−02
53.9078	Mg VIII	4	4	4.68E−03	57.4340	Si VII	5	5	1.95E−02	60.8961	Al IX	2	4	6.19E−01
53.9920	Si IX	5	3	3.80E−02	57.5221	Be IV	2	4	1.07E−03	60.9890	Si VIII	4	2	2.55E−01
54.0891	S VIII	4	4	5.52E−02	57.5222	Be IV	2	2	5.35E−04	61.0191	Si VIII	4	4	5.10E−01
54.1203	S VIII	4	6	3.85E−01	57.5672	Si VII	3	5	1.08E−02	61.0206	Mg VIII	2	4	7.80E−04
54.1750	S IX	5	7	5.76E−02	57.6587	Be IV	2	4	1.48E−03	61.0691	Al IX	4	6	5.55E−01
54.1955	S IX	5	5	1.03E−02	57.6588	Be IV	2	2	7.38E−04	61.0698	Si VIII	4	6	7.64E−01
54.2014	S IX	5	3	6.85E−04	57.7471	Ne VIII	2	2	6.04E−03	61.0780	Al IX	4	4	6.17E−02
54.2170	Al VIII	3	5	1.38E−01	57.7471	Ne VIII	2	4	1.21E−02	61.1438	Mg VIII	4	4	7.79E−05
54.2561	Na VIII	1	3	8.62E−03	57.783	Mg VIII	4	6	5.03E−03	61.1438	Mg VIII	4	6	7.00E−04
54.2579	Al VIII	5	7	1.54E−01	57.8508	Be IV	2	2	1.06E−03	61.3061	Si VII	5	7	2.16E−02
54.2667	S VIII	4	4	4.27E−02	57.8508	Be IV	2	4	2.12E−03	61.5023	Si IX	3	5	2.76E−02
54.2968	Al VIII	5	5	2.75E−02	57.8761	Mg X	2	4	2.18E−01	61.5935	S VIII	4	4	6.93E−03
54.3018	Mg IX	1	3	3.42E−02	57.9200	Mg X	2	2	1.08E−01	61.5992	S VIII	4	6	6.24E−02
54.309	Ne VIII	2	2	1.59E−03	58.0582	Al IX	2	4	4.23E−02	61.5999	Si IX	1	3	6.62E−02
54.309	Ne VIII	2	4	3.20E−03	58.1115	Al IX	2	2	8.45E−02	61.6490	Si IX	5	5	4.96E−02
54.3432	S VIII	4	2	1.10E−02	58.1332	Be IV	2	4	3.21E−03	61.6966	Si IX	3	3	1.65E−02
54.3800	Na VIII	1	3	5.91E−02	58.1333	Be IV	2	2	1.60E−03	61.8442	Si IX	5	3	1.65E−02
54.3858	S VIII	2	4	2.19E−02	58.2235	Al IX	4	4	1.05E−01	61.9785	S VIII	2	4	6.88E−02
54.4311	S IX	3	5	5.12E−02	58.2771	Al IX	4	2	2.10E−02	62.08	Fe XIII	3	1	3.53E−02
54.4370	S IX	3	3	1.71E−02	58.3160	Mg VII	5	7	1.61E−02	62.3531	Fe XIII	1	3	3.49E−01
54.4621	Si VII	5	5	1.91E−02	58.3880	Si VII	5	3	4.13E−02	62.6247	Mg VII	3	5	8.22E−03
54.5161	S IX	1	3	6.82E−02	58.4450	Si VII	5	5	6.18E−02	62.641	Na VII	2	4	8.85E−03
54.5221	Si VII	5	7	6.90E−04	58.5257	Si VII	3	3	4.12E−02	62.6961	Mg VII	5	5	1.48E−02
54.5653	S VIII	2	4	4.25E−01	58.5738	Be IV	2	4	5.20E−03	62.6992	Fe XIII	3	5	2.60E−01
54.5819	Si VII	3	5	1.06E−02	58.5739	Be IV	2	2	2.60E−03	62.7169	Fe XIII	3	3	8.66E−02
54.6427	S VIII	2	2	4.37E−02	58.5784	Si VII	1	3	4.11E−02	62.725	Na VII	4	4	8.84E−04
54.6520	S VII	1	3	4.43E−02	58.5792	Si VII	5	5	1.07E−02	62.725	Na VII	4	6	7.96E−03
54.8531	Mg VIII	2	4	5.17E−02	58.5792	Si VII	5	7	6.03E−02	62.7510	Mg IX	1	3	5.43E−01
54.885	Si X	2	2	2.44E−02	58.5830	Si VII	3	5	3.43E−02	62.9628	Fe XIII	5	7	2.90E−01
54.8860	Mg VIII	4	6	4.64E−02	58.7178	Si VII	3	5	5.36E−02	63.0269	S VIII	4	2	1.87E−02
54.9527	Mg VIII	4	4	5.16E−03	58.751	Al VII	4	6	8.68E−03	63.0653	Fe XIII	5	5	5.16E−02
55.0100	Ne VIII	2	2	2.33E−03	58.8243	Mg VIII	4	6	1.10E−02	63.0832	Fe XIII	5	3	3.45E−03
55.0100	Ne VIII	2	4	4.68E−03	58.8362	S VIII	4	2	2.37E−02	63.1417	Na VII	2	4	1.98E−02
55.0388	Si IX	1	3	2.79E−01	58.8848	Si VIII	4	2	2.92E−02	63.2271	Na VII	4	4	1.97E−03
55.0938	Si IX	3	1	9.29E−02	58.8848	Si VIII	4	4	5.84E−02	63.2271	Na VII	4	6	1.77E−02
55.096	Si X	4	2	2.43E−02	58.8848	Si VIII	4	6	8.76E−02	63.3063	S VIII	4	4	9.36E−02
55.1160	Si IX	3	3	6.96E−02	58.9630	Fe XIV	2	4	2.85E−01	63.3573	Na VII	2	4	5.80E−03
55.1216	Mg VIII	2	4	1.08E−02	59.0378	Mg VIII	2	4	1.24E−01	63.3573	Na VII	2	2	1.16E−02
55.1540	Si IX	3	5	1.16E−01	59.1531	Mg VIII	4	4	1.24E−02	63.3960	Mg VII	5	7	4.11E−02
55.2221	Mg VIII	4	4	2.72E−02	59.1531	Mg VIII	4	6	1.12E−01	63.4300	S VIII	2	2	7.47E−02
55.2338	Si IX	5	3	6.94E−02	59.1874	S VIII	2	2	2.35E−02	63.4433	Na VII	4	2	2.90E−03
55.2719	Si IX	5	5	2.08E−01	59.2364	S VIII	4	2	1.30E−02	63.4433	Na VII	4	4	1.44E−02
55.3048	Si IX	1	3	8.40E−01	59.3195	Be IV	2	4	9.30E−03	63.6910	Na VII	2	4	1.41E−02
55.3558	Si IX	3	5	6.29E−01	59.3197	Be IV	2	2	4.65E−03	63.7131	S VIII	2	4	3.72E−02
55.3828	Si IX	3	3	2.09E−01	59.5792	Fe XIV	4	6	2.54E−01	63.7779	Na VII	4	4	1.41E−03
55.4012	Si IX	5	7	7.04E−01	59.5924	S VIII	2	2	1.29E−02	63.7779	Na VII	4	6	1.27E−02
55.4746	Si IX	5	5	1.26E−01	59.6258	Fe XIV	4	4	2.82E−02	63.9329	Al VIII	1	3	1.45E−01
55.5017	Si IX	5	3	8.37E−03	59.7589	Na VIII	1	3	1.36E−01	63.9697	Al VIII	3	5	1.09E−01
56.0431	Ne VIII	2	2	3.61E−03	59.884	Si VII	5	5	6.24E−03	64.0029	Al VIII	3	3	3.63E−02
56.0431	Ne VIII	2	4	7.21E−03	60.029	Si VII	3	5	3.46E−03	64.0041	Al VIII	5	7	1.22E−01
56.0805	S IX	5	3	4.55E−02	60.0323	Mg VII	1	3	1.36E−02	64.0250	Na VII	2	4	1.29E−02
56.1495	Al IX	2	2	4.40E−02	60.0722	Mg VII	3	1	4.53E−03	64.0644	Be IV	2	4	5.27E−02
56.3041	Al IX	4	2	4.39E−02	60.0722	Mg VII	3	5	5.66E−03	64.0656	Be IV	2	2	2.63E−02
56.3328	S IX	3	3	4.53E−02	60.0722	Mg VII	3	3	3.40E−03	64.0808	Al VIII	5	5	2.18E−02
56.4174	S IX	1	3	4.52E−02	60.1379	Mg VII	5	3	3.39E−03	64.1128	Na VII	4	4	1.29E−03
56.5278	Si VII	5	7	7.72E−02	60.1379	Mg VII	5	5	1.02E−02	64.1128	Na VII	4	6	1.16E−02
56.8990	Al IX	2	4	2.23E−01	60.1614	S VII	1	3	1.60E+00	64.1141	Al VIII	5	3	1.44E−03
56.9450	Al IX	4	6	2.01E−01	60.3145	B IV	1	3	6.11E−01	64.1330	Ca X	2	2	1.94E−03
56.9869	Mg VIII	2	4	1.63E−03	60.6840	Mg VIII	2	2	3.03E−03	64.1330	Ca X	2	4	3.89E−03
57.0242	Mg VIII	2	2	3.26E−03	60.7430	Be IV	2	4	1.93E−02	64.2430	Mg VIII	2	2	9.89E−03
57.0578	Al IX	4	4	2.22E−02	60.7434	Be IV	2	2	9.67E−03	64.3796	Mg VIII	4	2	9.86E−03
57.0943	Mg VIII	4	4	4.06E−03	60.7958	Ne VIII	2	2	1.15E−02	64.4928	Mg VIII	2	4	1.17E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
64.5165	Mg VIII	2	2	2.35E−02	69.3948	Na VII	4	4	2.31E−03	74.5740	Mg VI	4	2	1.54E−03
64.6305	Mg VIII	4	4	2.93E−02	69.4150	Mg VIII	2	4	2.06E−01	74.5740	Mg VI	4	4	3.08E−03
64.6543	Mg VIII	4	2	5.87E−03	69.4169	Na VII	4	2	4.61E−04	74.5740	Mg VI	4	6	4.62E−03
64.7020	Mg VIII	4	6	1.68E−02	69.4483	Si VI	2	4	8.07E−02	74.5941	Al VI	3	5	3.46E−02
64.809	Al VII	4	6	1.64E−02	69.4672	Mg VIII	4	6	1.86E−01	74.6581	Al VI	5	3	6.13E−04
65.3061	Al VIII	1	3	3.61E−02	69.5745	Mg VIII	4	4	2.05E−02	74.6581	Al VI	5	5	9.19E−03
65.3791	Al VIII	3	3	3.61E−02	69.5797	Si VII	3	3	1.28E−01	74.6581	Al VI	5	7	5.15E−02
65.3826	Na VII	2	4	2.53E−02	69.6015	Si VII	5	3	9.48E−02	74.8107	Al VI	3	3	1.53E−02
65.4741	Na VII	4	4	2.52E−03	69.6321	Si VIII	4	6	5.98E−02	74.8107	Al VI	3	5	4.59E−02
65.4741	Na VII	4	6	2.26E−02	69.6541	Si VII	1	3	1.28E−01	74.8380	Fe XIII	1	3	1.01E−01
65.4952	Al VIII	5	3	3.60E−02	69.6641	Si VII	5	5	2.84E−01	74.8436	Fe XIII	5	5	7.57E−02
65.8241	Ca X	2	2	2.92E−03	69.6854	Fe XIV	2	2	6.55E−02	74.8581	Mg VIII	2	4	6.07E−01
65.8241	Ca X	2	4	5.83E−03	69.7900	Si VIII	4	4	3.98E−02	74.8609	Na VII	2	4	1.22E−01
65.850	Ne VII	1	3	2.93E−02	69.7973	Si VII	3	3	9.46E−02	74.8721	Al VI	1	3	6.11E−02
65.9048	Fe XII	4	4	1.75E−01	69.8027	Na VII	2	4	1.07E−02	74.9799	Na VII	4	6	1.10E−01
66.0620	Na VIII	1	3	3.50E−02	69.8256	Na VII	2	2	2.12E−02	74.9810	Na VII	4	4	1.22E−02
66.2972	Fe XII	4	6	2.61E−01	69.8602	Si VII	3	5	1.58E−01	75.0341	Mg VIII	4	6	5.46E−01
66.6214	Al IX	2	2	2.51E−02	69.8722	Si VII	1	3	3.78E−01	75.0436	Mg VIII	4	4	6.06E−02
66.7722	Si VI	4	6	6.80E−03	69.9051	Si VIII	4	2	1.99E−02	75.1236	Na VII	2	4	2.54E−03
66.8391	Al IX	4	2	2.50E−02	69.9070	Na VII	4	4	2.66E−02	75.194	Si VI	4	4	1.97E−02
67.0443	Al VIII	1	3	2.71E−01	69.9300	Na VII	4	2	5.30E−03	75.1975	Na VII	4	6	2.28E−03
67.0961	Al VIII	3	1	9.02E−02	70.0236	Si VII	5	5	5.48E−02	75.2445	Na VII	4	4	2.53E−04
67.1213	Al VIII	3	3	6.76E−02	70.0270	Si VII	5	7	3.07E−01	75.2757	Al VII	4	2	2.40E−01
67.1655	Al VIII	3	5	1.13E−01	70.1201	Na VIII	1	3	9.82E−03	75.3074	Al VII	4	4	4.80E−01
67.2436	Al VIII	5	3	6.75E−02	70.2218	Si VII	3	5	2.73E−01	75.3626	Fe XIII	3	3	2.50E−02
67.2880	Al VIII	5	5	2.03E−01	70.6131	Fe XIV	4	2	6.46E−02	75.3636	Al VII	4	6	7.19E−01
67.3596	Al VIII	1	3	8.12E−01	70.6150	Na IX	2	4	2.10E−01	75.483	Si VI	2	4	7.87E−03
67.3818	Ne VIII	2	2	2.71E−02	70.6399	Na VII	2	4	7.66E−03	75.5881	Fe X	4	4	1.32E−02
67.3818	Ne VIII	2	4	5.41E−02	70.6529	Na IX	2	2	1.05E−01	75.6229	Al VIII	3	5	2.85E−02
67.4068	Al VIII	3	5	6.09E−01	70.7468	Na VII	4	4	7.65E−04	75.6848	Fe X	4	6	1.19E−01
67.4372	Al VIII	3	3	2.03E−01	70.7468	Na VII	4	6	6.88E−03	75.7323	Al VIII	1	3	6.82E−02
67.4641	Al VIII	5	7	6.81E−01	70.9522	Mg VIII	2	4	4.03E−02	75.7650	Ne VII	1	3	1.26E−01
67.5302	Al VIII	5	5	1.22E−01	70.9800	F VII	2	2	2.27E−03	75.7782	Al VIII	5	5	5.11E−02
67.5607	Al VIII	5	3	8.10E−03	70.9800	F VII	2	4	4.54E−03	75.8305	Al VIII	3	3	1.70E−02
67.7870	Ne VII	1	3	5.06E−03	71.0041	Mg VIII	2	2	8.04E−02	75.834	Mg VI	4	6	1.31E−02
67.9799	Mg VII	3	5	2.47E−02	71.1188	Mg VIII	4	4	1.00E−01	75.890	Mg VI	4	4	8.74E−03
68.0640	Mg VII	5	5	4.43E−02	71.1709	Mg VIII	4	2	2.00E−02	75.8922	Fe XIII	5	3	2.49E−02
68.0998	Mg VII	3	5	1.31E−01	71.1810	Si VI	4	6	1.99E−01	75.8938	Al VIII	3	1	2.27E−02
68.1438	Mg VII	5	7	1.47E−01	71.2733	Si VI	4	4	5.48E−02	75.9077	Fe X	4	2	2.21E−02
68.1482	Si VII	5	7	2.55E−01	71.3018	Si VI	4	2	1.09E−02	75.9259	Be IV	2	4	2.77E−01
68.1842	Mg VII	5	5	2.62E−02	71.5328	Si VI	2	4	2.19E−02	75.9313	Be IV	2	2	1.39E−01
68.1900	Si VII	5	5	4.55E−02	71.5615	Si VI	2	2	4.37E−02	75.9867	Al VIII	5	3	1.70E−02
68.3779	Si VII	3	5	2.27E−01	71.9192	Na VII	2	4	1.47E−02	76.0057	Fe X	4	4	1.10E−01
68.4060	Si VII	5	5	3.80E−02	72.0285	S VII	1	3	2.43E−01	76.028	Ca IX	1	3	2.40E−02
68.4219	Na VII	2	4	4.66E−02	72.0300	Na VII	4	4	1.47E−03	76.4018	Al VI	5	5	9.92E−03
68.4505	Mg VIII	2	2	3.99E−02	72.0300	Na VII	4	6	1.32E−02	76.4949	Fe X	2	4	1.30E−01
68.4528	Si VII	5	3	1.27E−02	72.2763	Al VII	4	4	5.25E−02	76.5616	Al VI	3	5	5.50E−03
68.4969	Ca X	2	2	4.70E−03	72.2784	Al VII	4	6	7.86E−02	76.8222	Fe X	2	2	8.71E−02
68.4969	Ca X	2	4	9.39E−03	72.3140	F VII	2	2	3.50E−03	76.9227	Fe X	2	4	4.35E−02
68.5189	Na VII	4	6	4.20E−02	72.3140	F VII	2	4	7.01E−03	76.9687	Mg VII	1	3	8.44E−03
68.5222	Na VII	4	4	4.66E−03	72.6348	Fe XI	5	7	1.12E−01	77.0343	Mg VII	3	3	2.11E−03
68.5951	Si VII	3	5	2.11E−02	72.8911	Fe IX	1	3	6.35E−02	77.0343	Mg VII	3	5	6.32E−03
68.6056	Mg VIII	4	2	3.98E−02	72.8959	Si VI	4	6	1.05E−02	77.1423	Mg VII	5	3	8.42E−05
68.6422	Si VII	3	3	1.27E−02	73.1229	Si VII	5	7	2.31E−01	77.1423	Mg VII	5	5	1.26E−03
68.6691	Si VII	3	1	1.69E−02	73.1336	Si VII	5	3	2.74E−03	77.1423	Mg VII	5	7	7.07E−03
68.7146	Si VII	1	3	5.05E−02	73.1336	Si VII	5	5	4.12E−02	77.2046	Fe X	4	4	1.96E−02
68.8658	Na VII	2	4	4.59E−02	73.1588	Ca X	2	4	1.68E−02	77.2254	Na VII	2	2	1.17E−03
68.9080	Na VII	4	6	4.14E−02	73.1872	Ca X	2	2	8.38E−03	77.2660	Na VIII	1	3	5.17E−01
68.9674	Na VII	4	4	4.59E−03	73.3498	Si VII	3	3	6.84E−02	77.3532	Na VII	4	2	1.17E−03
69.2037	Si VI	4	4	8.10E−03	73.3498	Si VII	3	5	2.05E−01	77.4120	Si VI	4	4	8.11E−03
69.2358	Si VI	4	6	7.29E−02	73.4325	Si VII	1	3	2.73E−01	77.4287	Si VI	4	6	7.30E−02
69.2919	Na VII	2	4	9.24E−04	74.3286	Fe XIII	3	5	4.23E−02	77.7182	Si VI	2	4	8.08E−02
69.2972	Ne VII	1	3	1.17E−02	74.4424	Al VI	5	5	6.24E−02	77.8101	Fe X	4	4	1.86E−02
69.3140	Na VII	2	2	1.84E−03	74.4654	F VII	2	2	5.88E−03	77.8652	Fe X	4	6	1.67E−01
69.3852	Si VII	5	3	1.28E−01	74.4654	F VII	2	4	1.17E−02	77.9448	Al VI	5	3	3.68E−04

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
77.9448	Al VI	5	5	5.52E−03	81.8920	Si VII	3	5	5.27E−02	86.6520	Na VII	4	6	1.70E−01
77.9448	Al VI	5	7	3.09E−02	81.9951	Si VII	1	3	7.02E−02	86.7295	F VII	2	4	5.21E−02
78.1111	Al VI	3	3	9.17E−03	82.0082	Ne VII	1	3	3.64E−02	86.7383	F VII	2	2	2.60E−02
78.1111	Al VI	3	5	2.76E−02	82.0816	Al VI	5	3	1.20E−02	86.7573	Na VII	4	4	1.88E−02
78.1508	Fe X	2	4	7.72E−03	82.2661	Al VI	3	3	1.20E−02	86.7717	Fe XI	5	7	7.74E−02
78.1781	Al VI	1	3	3.67E−02	82.3404	Al VI	1	3	1.20E−02	86.8847	Al VII	4	6	6.14E−02
78.339	Mg VII	1	3	7.46E−02	82.3770	Be III	1	3	1.37E−02	87.0125	Al V	4	4	3.21E−03
78.3566	F VII	2	4	2.22E−02	82.4300	Fe IX	1	3	5.48E−01	87.0201	Al V	4	6	2.88E−02
78.3606	F VII	2	2	1.11E−02	82.5975	Mg VIII	2	2	2.61E−02	87.0246	Fe XI	5	5	1.37E−02
78.407	Mg VII	3	1	2.48E−02	82.7979	Ca X	2	4	3.56E−02	87.0587	Al VII	4	4	4.09E−02
78.407	Mg VII	3	5	3.10E−02	82.8234	Mg VIII	4	2	2.60E−02	87.0633	Fe XI	5	3	9.18E−04
78.407	Mg VII	3	3	1.87E−02	82.8603	Ca X	2	2	1.78E−02	87.1688	Al VII	4	2	2.04E−02
78.4591	Al VI	5	3	9.06E−04	83.0055	Si VI	4	4	6.91E−02	87.2235	Ne VII	1	3	5.92E−03
78.4591	Al VI	5	5	1.36E−02	83.0790	F VI	1	3	1.12E−02	87.2739	Al V	2	4	3.20E−02
78.4591	Al VI	5	7	7.61E−02	83.1283	Si VI	4	6	3.81E−01	87.3317	Al VI	5	3	1.14E−01
78.519	Mg VII	5	3	1.87E−02	83.2020	Be III	1	3	2.43E−02	87.5405	Al VI	3	3	1.14E−01
78.519	Mg VII	5	5	5.59E−02	83.2570	Si VI	4	4	4.22E−02	87.5871	Al VI	5	3	8.46E−02
78.6276	Al VI	3	3	2.26E−02	83.2841	Si VI	4	2	1.38E−02	87.6247	Al VI	1	3	1.14E−01
78.6276	Al VI	3	5	6.77E−02	83.3576	Si VI	2	4	2.76E−02	87.6516	Al VI	5	5	2.53E−01
78.6955	Al VI	1	3	9.03E−02	83.5108	Mg VII	1	3	2.60E−01	87.7757	Al VI	3	1	1.13E−01
78.7714	Fe X	2	4	1.84E−01	83.5601	Mg VII	3	1	8.65E−02	87.7972	Al VI	3	3	8.42E−02
79.1325	Mg VII	3	5	9.96E−02	83.5603	Mg VI	4	6	1.12E−02	87.8620	Al VI	3	5	1.41E−01
79.1680	Mg VII	5	7	1.11E−01	83.5881	Mg VII	3	3	6.48E−02	87.8819	Al VI	1	3	3.37E−01
79.2368	Si VII	5	5	2.99E−02	83.6113	Si VI	2	4	4.20E−01	87.9088	F VI	1	3	1.19E−02
79.2465	Mg VII	5	5	1.99E−02	83.6370	Mg VII	3	5	1.08E−01	87.9947	Fe XI	3	5	6.82E−02
79.2638	Si VII	5	3	9.97E−03	83.6386	Si VI	2	2	5.49E−02	88.0342	Fe XI	3	3	2.27E−02
79.4357	Na VII	2	2	1.27E−02	83.7152	Mg VII	5	3	6.47E−02	88.053	Na VI	3	5	1.88E−02
79.4881	Fe XII	4	6	9.41E−02	83.7643	Mg VII	5	5	1.94E−01	88.079	Ne VIII	2	4	2.01E−01
79.4906	Si VII	3	5	1.66E−02	83.9102	Mg VII	1	3	7.78E−01	88.117	Ne VIII	2	2	1.00E−01
79.5178	Si VII	3	3	9.93E−03	83.9586	Mg VII	3	5	5.82E−01	88.143	Na VI	5	5	3.39E−02
79.5229	Si VII	3	1	1.32E−02	83.9882	Mg VII	3	3	1.94E−01	88.156	Al VI	5	5	4.67E−02
79.5709	Na VII	4	2	1.27E−02	84.0247	Mg VII	5	7	6.52E−01	88.1618	Fe XI	1	3	9.07E−02
79.6150	Si VII	1	3	3.97E−02	84.0869	Mg VII	5	5	1.16E−01	88.163	Al VI	5	3	3.11E−03
79.7588	Na VII	2	4	1.06E−02	84.1166	Mg VII	5	3	7.76E−03	88.163	Al VI	5	7	2.61E−01
79.7862	Na VII	2	2	2.12E−02	84.4260	F VI	1	3	1.72E−02	88.223	Na VI	1	3	1.98E−01
79.8167	Mg VI	4	2	3.70E−02	84.7580	Be III	1	3	4.93E−02	88.248	Na VI	3	5	1.48E−01
79.8301	Mg VI	4	4	7.38E−02	85.2900	Si VII	5	3	4.76E−02	88.270	Na VI	5	7	1.66E−01
79.8569	Mg VI	4	6	1.11E−01	85.2995	Na VII	2	2	3.51E−02	88.277	Na VI	3	3	4.94E−02
79.8933	Na VII	2	4	1.87E−02	85.4554	Na VII	4	2	3.50E−02	88.3088	Be III	1	3	1.27E−01
79.8951	Na VII	4	4	2.65E−02	85.5176	Al VI	5	7	2.09E−01	88.338	Na VI	5	5	2.97E−02
79.9226	Na VII	4	2	5.31E−03	85.5249	Al VI	5	3	2.49E−03	88.367	Al V	4	4	3.27E−02
80.0083	Na VII	4	6	1.68E−02	85.5659	Al VI	5	5	3.73E−02	88.368	Na VI	5	3	1.98E−03
80.0218	Fe XII	4	4	6.23E−02	85.5842	Si VII	3	3	4.75E−02	88.369	Al VI	3	5	2.33E−01
80.0300	Na VII	4	4	1.87E−03	85.6120	Al V	4	4	2.18E−02	88.376	Al VI	3	3	7.76E−02
80.3949	Si VI	4	4	3.43E−02	85.6619	Al V	4	2	2.23E−02	88.425	Al V	4	6	9.06E−02
80.4492	Si VI	4	6	3.08E−01	85.6968	Si VII	1	3	4.74E−02	88.462	Al VI	1	3	3.10E−01
80.4900	Si VI	4	2	5.51E−02	85.7252	Al VI	3	3	6.21E−02	88.547	Al V	4	4	1.00E−02
80.5153	Fe XII	4	2	3.10E−02	85.7664	Al VI	3	5	1.86E−01	88.636	Al V	2	4	1.31E−02
80.5769	Si VI	4	4	2.75E−01	85.8038	Al V	4	6	9.11E−04	88.697	Na VII	2	4	3.78E−02
80.6979	Si VI	4	2	1.20E−01	85.8059	Al VI	1	3	2.48E−01	88.746	Na VII	2	2	7.54E−02
80.7252	Si VI	2	4	3.41E−01	85.8170	Al VI	5	5	3.83E−02	88.817	Al V	2	4	9.99E−02
80.8211	Si VI	2	2	2.20E−01	85.8651	Al V	2	4	8.71E−03	88.866	Na VII	4	4	9.41E−02
80.9088	Si VI	2	4	1.10E−01	85.8657	Al VI	5	3	1.28E−02	88.915	Na VII	4	2	1.88E−02
80.9173	Ca IX	1	3	3.84E−02	85.9152	Al V	2	2	2.23E−02	89.100	Ne VI	4	6	4.14E−02
80.9513	Mg VII	1	3	3.38E−02	85.9217	Al V	4	4	1.01E−04	89.188	Fe XI	5	3	6.78E−02
81.0239	Mg VII	3	3	3.38E−02	86.0187	Al VI	3	5	2.13E−02	89.9009	F VI	1	3	9.69E−03
81.0307	Si VI	2	2	1.20E−01	86.0676	Al VI	3	3	1.28E−02	89.950	Ne VI	2	4	5.59E−02
81.1434	Mg VII	5	3	3.37E−02	86.0896	Ne VI	2	4	2.61E−02	90.056	Ne VI	4	4	5.59E−03
81.5427	Na VI	5	7	5.45E−02	86.0942	Al VI	3	1	1.70E−02	90.056	Ne VI	4	6	5.04E−02
81.6227	Si VII	5	3	7.05E−04	86.1489	Al VI	1	3	5.09E−02	90.207	Fe XI	3	3	6.71E−02
81.6227	Si VII	5	5	1.06E−02	86.1766	Al V	2	4	1.01E−03	90.341	Fe XI	1	3	6.70E−02
81.6227	Si VII	5	7	5.92E−02	86.1868	Ne VI	4	4	2.60E−03	90.631	Al V	4	4	4.72E−02
81.6797	F VI	1	3	5.62E−03	86.1868	Ne VI	4	6	2.34E−02	90.646	Al V	4	6	4.66E−02
81.8910	Be III	1	3	8.57E−03	86.5966	Na VII	2	4	1.89E−01	90.700	Al V	4	2	3.38E−02
81.8920	Si VII	3	3	1.76E−02	86.6230	F VI	1	3	2.43E−02	90.794	Al V	4	2	9.43E−03

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
90.897	Mg VI	4	2	2.80E−02	95.798	Mg V	5	7	6.33E−02	99.6167	Al V	2	4	6.21E−02
90.897	Mg VI	4	4	5.61E−02	95.8318	Al V	4	4	1.12E−03	99.680	Na VI	5	3	1.59E−02
90.897	Mg VI	4	6	8.42E−02	95.8323	Al V	4	6	1.01E−02	99.688	O VI	2	2	5.64E−03
90.914	Al V	2	4	1.88E−02	95.896	Mg V	5	5	1.83E−02	99.688	O VI	2	4	1.13E−02
90.9588	F VI	1	3	4.58E−02	95.917	Mg V	5	3	6.09E−03	99.7658	Al V	2	4	7.65E−03
90.984	Al V	2	2	3.37E−02	95.962	Mg V	3	3	1.88E−02	99.9660	Si VI	2	4	3.86E−02
91.078	Al V	2	2	3.76E−02	95.962	Mg V	3	5	5.64E−02	100.2552	Be III	1	3	5.55E−01
91.110	Ca IX	1	3	6.44E−02	96.0179	Si VI	4	4	7.07E−03	100.471	Na VI	3	5	8.96E−02
91.274	Fe XXI	1	3	5.62E−02	96.0231	Si VI	4	6	6.37E−02	100.515	Na VI	5	7	1.00E−01
91.3702	Si VI	4	2	1.33E−02	96.030	Mg V	1	3	7.51E−02	100.588	Na VI	5	5	1.79E−02
91.738	Na VI	3	5	5.86E−03	96.060	Mg V	3	5	1.01E−02	100.6164	Al VI	5	5	3.05E−02
91.7467	Al V	4	2	5.96E−03	96.081	Mg V	3	3	6.07E−03	100.6381	Al VI	5	3	1.02E−02
91.7971	Si VI	2	2	1.32E−02	96.121	Fe X	4	4	1.26E−01	100.777	Fe XXII	2	4	3.58E−02
91.836	Na VI	5	5	1.06E−02	96.134	Na VI	1	3	6.15E−03	100.8937	Al VI	3	5	1.69E−02
92.0374	Al V	2	2	5.94E−03	96.1489	Al V	2	4	1.12E−02	100.9156	Al VI	3	3	1.01E−02
92.432	Mg V	5	3	9.66E−03	96.149	Mg V	1	3	2.43E−02	100.9247	Al VI	3	1	1.35E−02
92.432	Mg V	5	5	2.90E−02	96.198	Na VI	3	3	1.53E−03	100.95	Mg V	5	3	1.35E−03
92.584	Mg V	3	5	1.61E−02	96.198	Na VI	3	5	4.61E−03	100.95	Mg V	5	5	4.06E−03
92.584	Mg V	3	3	9.64E−03	96.306	Na VI	5	3	6.14E−05	101.0274	Al VI	1	3	4.05E−02
92.6260	Al VI	5	7	2.29E−01	96.306	Na VI	5	5	9.21E−04	101.13	Mg V	3	1	1.80E−03
92.6393	Al VI	5	5	4.08E−02	96.306	Na VI	5	7	5.16E−03	101.13	Mg V	3	5	2.24E−03
92.6409	Al VI	5	3	2.72E−03	96.4399	Si V	1	3	1.08E+00	101.13	Mg V	3	3	1.35E−03
92.648	Mg V	1	3	3.86E−02	96.4895	Si VI	2	4	7.04E−02	101.21	Mg V	1	3	5.39E−03
92.8743	Al VI	3	5	2.03E−01	96.786	Fe X	2	2	9.93E−02	101.220	Ne VI	2	4	9.29E−03
92.8760	Al VI	3	3	6.79E−02	96.840	O VI	2	2	3.37E−03	101.354	Ne VI	4	4	2.32E−02
92.9707	Al VI	1	3	2.71E−01	96.840	O VI	2	4	6.74E−03	101.420	Ne VI	2	4	1.97E−02
93.0300	O VI	2	2	1.07E−03	97.392	Mg V	5	3	5.53E−04	101.540	Ne VI	4	6	1.77E−02
93.0300	O VI	2	4	2.14E−03	97.392	Mg V	5	5	8.29E−03	101.550	Fe XIX	5	3	2.37E−02
93.0330	Fe XV	1	3	1.28E−03	97.392	Mg V	5	7	4.64E−02	101.555	Ne VI	4	4	1.97E−03
93.4690	Fe VIII	4	6	7.30E−02	97.495	Ne VII	1	3	4.86E−01	102.0670	Ca VIII	2	4	4.88E−03
93.6160	Fe VIII	6	8	6.95E−02	97.561	Mg V	3	3	1.38E−02	102.224	Fe XXI	5	3	5.02E−02
93.6297	Fe VIII	6	6	3.47E−03	97.561	Mg V	3	5	4.14E−02	102.226	Fe XXII	2	2	2.28E−02
93.653	Al V	4	4	4.91E−02	97.593	Fe X	2	4	4.94E−02	102.2719	Li III	2	4	1.07E−03
93.755	Al V	4	6	1.71E−01	97.632	Mg V	1	3	5.51E−02	102.2720	Li III	2	2	5.35E−04
93.856	Al V	4	4	1.90E−02	97.871	Fe XXI	3	3	5.25E−02	102.4820	Ca VIII	4	6	4.38E−03
93.882	Al V	4	2	9.79E−03	98.131	Ne VI	2	4	1.22E−01	102.5148	Li III	2	4	1.48E−03
93.9150	O VI	2	2	1.49E−03	98.232	Mg V	5	3	9.98E−03	102.5149	Li III	2	2	7.38E−04
93.9150	O VI	2	4	2.99E−03	98.257	Ne VI	4	4	1.22E−02	102.5178	Ca VIII	4	4	4.86E−04
93.9230	Fe XVIII	4	2	5.21E−02	98.257	Ne VI	4	6	1.10E−01	102.8563	Li III	2	4	2.12E−03
93.956	Al V	2	4	1.96E−02	98.269	Mg V	5	5	2.99E−02	102.8564	Li III	2	2	1.06E−03
93.968	Fe X	4	4	8.77E−03	98.3710	Fe VIII	4	6	1.06E−01	103.004	Na VI	1	3	3.08E−02
94.012	Fe X	4	6	7.90E−02	98.404	Mg V	3	3	9.96E−03	103.078	Na VI	3	3	3.08E−02
94.160	Al V	2	4	1.90E−01	98.441	Mg V	3	5	1.66E−02	103.201	Na VI	5	3	3.07E−02
94.186	Al V	2	2	3.90E−02	98.476	Mg V	1	3	3.98E−02	103.3585	Li III	2	4	3.21E−03
94.288	Na VII	2	4	5.92E−01	98.5480	Fe VIII	6	8	1.01E−01	103.3586	Li III	2	2	1.60E−03
94.468	Na VII	4	6	5.32E−01	98.5490	Fe VIII	6	6	5.02E−03	103.8078	Al V	4	4	2.37E−02
94.479	Na VII	4	4	5.91E−02	98.6260	Mg V	5	3	3.90E−04	103.8820	Al V	4	6	2.13E−01
94.676	Ne VI	2	4	1.03E−04	98.6293	Mg V	5	5	5.86E−03	103.9020	Mg V	5	7	1.31E−01
94.794	Ne VI	4	4	1.03E−05	98.6350	Mg V	5	7	3.28E−02	103.9061	Mg V	5	3	1.56E−03
94.794	Ne VI	4	6	9.25E−05	98.7998	Mg V	3	3	9.74E−03	103.9061	Mg V	5	5	2.33E−02
95.0820	O VI	2	2	2.18E−03	98.8031	Mg V	3	5	2.93E−02	103.9368	Fe XVIII	2	2	4.71E−02
95.0820	O VI	2	4	4.37E−03	98.8720	Mg V	1	3	3.89E−02	103.9378	Mg V	5	3	1.56E−03
95.258	Mg VII	3	5	2.95E−02	99.0964	Si VI	4	2	1.95E−02	103.9390	Mg V	5	5	2.33E−02
95.339	Fe X	4	2	2.53E−02	99.1992	Al V	4	2	3.84E−03	103.9420	Mg V	5	7	1.31E−01
95.374	Fe X	2	4	8.65E−02	99.2201	F VI	1	3	1.11E−01	103.9892	Al V	4	2	4.15E−02
95.383	Mg VII	1	3	7.04E−02	99.2763	Al V	4	4	6.23E−03	104.05	Al VI	5	3	7.17E−04
95.385	Mg VI	4	2	2.10E−01	99.2905	Al V	4	6	5.61E−02	104.05	Al VI	5	5	1.08E−02
95.421	Mg VI	4	4	4.21E−01	99.4243	Al V	4	4	1.92E−02	104.05	Al VI	5	7	6.02E−02
95.423	Mg VII	5	5	5.28E−02	99.4599	Si VI	4	4	9.72E−02	104.0726	Al V	4	4	2.07E−01
95.483	Mg VI	4	6	6.29E−01	99.496	Na VI	1	3	6.40E−02	104.0990	Mg V	3	3	3.89E−02
95.484	Mg VII	3	3	1.76E−02	99.501	Na VI	3	5	2.67E−02	104.0990	Mg V	3	5	1.17E−01
95.556	Mg VII	3	1	2.35E−02	99.5390	Al V	2	2	1.53E−02	104.1217	Al V	4	2	1.02E−01
95.650	Mg VII	5	3	1.76E−02	99.565	Na VI	3	3	1.60E−02	104.1308	Mg V	3	3	3.89E−02
95.798	Mg V	5	3	7.53E−04	99.5988	Si VI	2	2	7.76E−02	104.1320	Mg V	3	5	1.17E−01
95.798	Mg V	5	5	1.13E−02	99.616	Na VI	5	5	4.79E−02	104.1419	Li III	2	4	5.20E−03

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
104.1420	Li III	2	2	2.60E−03	109.800	Mg V	5	3	1.08E−02	113.4578	Ca VIII	4	4	4.32E−03
104.1791	Mg V	1	3	1.56E−01	109.8442	Al VI	3	3	4.89E−02	113.463	Fe VIII	4	4	1.15E−03
104.1800	Al V	2	4	2.37E−01	109.952	Fe XIX	1	3	8.76E−02	113.699	Mg V	5	3	9.70E−02
104.2109	Mg V	1	3	1.56E−01	109.9768	Al VI	1	3	4.89E−02	113.700	Fe VIII	6	4	8.47E−05
104.34	Al VI	3	3	1.79E−02	110.015	Mg V	3	3	1.08E−02	113.763	Fe VIII	4	6	5.43E−02
104.34	Al VI	3	5	5.36E−02	110.104	Mg V	1	3	1.08E−02	113.9046	Li III	2	4	5.27E−02
104.3628	Al V	2	2	1.66E−01	110.224	Ne V	1	3	2.43E−02	113.9057	Li III	2	2	2.63E−02
104.4467	Al V	2	4	8.26E−02	110.275	Ne V	3	1	8.09E−03	113.930	Mg V	3	3	9.68E−02
104.46	Al VI	1	3	7.14E−02	110.275	Ne V	3	5	1.01E−02	113.988	Mg V	5	3	7.17E−02
104.4962	Al V	2	2	1.02E−01	110.275	Ne V	3	3	6.07E−03	114.001	Fe VIII	6	6	2.58E−03
104.8130	O VI	2	2	1.06E−02	110.360	Ne V	5	3	6.07E−03	114.026	Mg V	1	3	9.67E−02
104.8130	O VI	2	4	2.13E−02	110.360	Ne V	5	5	1.82E−02	114.052	Mg V	5	5	2.15E−01
104.8380	Fe VII	7	9	2.49E−02	110.421	Ne V	5	7	5.96E−02	114.07	Ne VI	2	4	3.46E−02
104.8873	F VI	1	3	4.00E−02	110.7707	Mg V	5	3	1.91E−03	114.13	Ne VI	2	2	6.92E−02
104.9721	Fe VII	9	11	2.53E−02	110.8022	Mg V	5	5	2.87E−02	114.197	Mg V	3	1	9.53E−02
104.9789	Fe VII	9	9	1.29E−03	110.8461	Mg V	5	7	1.61E−01	114.220	Mg V	3	3	7.16E−02
105.114	Na VII	2	2	2.71E−02	110.963	Ca X	2	4	1.07E−01	114.24	Ne VI	4	4	8.65E−02
105.351	Na VII	4	2	2.70E−02	110.9899	Mg V	3	3	4.77E−02	114.284	Mg V	3	5	1.19E−01
105.4677	Li III	2	4	9.30E−03	111.0216	Mg V	3	5	1.43E−01	114.30	Ne VI	4	2	1.72E−02
105.4679	Li III	2	2	4.65E−03	111.0810	Mg V	1	3	1.91E−01	114.317	Mg V	1	3	2.86E−01
106.278	Na V	4	4	1.09E−01	111.099	Ne VI	2	4	1.68E−01	114.358	O V	1	3	1.02E−02
106.2850	Fe VII	7	9	3.42E−02	111.162	Ne VI	4	6	1.52E−01	114.41	Fe XXII	4	4	7.90E−02
106.302	Na V	4	6	1.64E−01	111.1891	Mg V	5	5	3.80E−02	114.429	F V	2	4	5.03E−03
106.317	Fe XIX	3	1	3.02E−02	111.199	Ca X	2	2	5.33E−02	114.527	F V	4	4	5.03E−04
106.4180	Fe VII	9	11	3.46E−02	111.2394	Mg V	5	3	1.27E−02	114.527	F V	4	6	4.53E−03
106.4298	Fe VII	9	9	1.77E−03	111.261	Ne VI	4	4	1.68E−02	114.759	Mg V	5	3	2.43E−03
107.014	Na VI	1	3	2.47E−01	111.4099	Mg V	3	5	2.11E−02	114.764	Mg V	5	5	3.65E−02
107.062	Na VI	3	1	8.23E−02	111.4605	Mg V	3	3	1.27E−02	114.782	Mg V	5	7	2.04E−01
107.094	Na VI	3	3	6.18E−02	111.4860	Mg V	3	1	1.69E−02	114.994	Mg V	3	3	6.07E−02
107.156	Na VI	3	5	1.03E−01	111.552	Mg VI	4	6	6.25E−02	114.999	Mg V	3	5	1.83E−01
107.227	Na VI	5	3	6.17E−02	111.5523	Mg V	1	3	5.05E−02	115.092	Mg V	1	3	2.42E−01
107.289	Na VI	5	5	1.85E−01	111.6040	Fe VII	7	9	7.59E−02	115.15	Fe XXI	3	5	2.07E−02
107.5530	Na VI	1	3	7.35E−01	111.6390	Fe VII	5	7	8.09E−02	115.8215	O VI	2	4	4.94E−02
107.61	Na VI	3	5	5.52E−01	111.6906	Fe VII	7	9	2.46E−03	115.8301	O VI	2	2	2.47E−02
107.6338	Na VI	3	3	1.84E−01	111.695	Fe XIX	3	3	2.15E−02	116.161	O V	1	3	1.39E−02
107.683	Na VI	5	7	6.18E−01	111.7388	Fe VII	5	7	3.41E−03	116.196	Fe VIII	4	6	1.12E−01
107.7113	Al V	4	4	7.35E−02	111.7415	Fe VII	9	11	7.69E−02	116.29	Fe XXII	4	2	2.01E−02
107.74	Na VI	5	5	1.10E−01	111.746	Mg VI	4	4	4.16E−02	116.444	Fe VIII	6	6	5.33E−03
107.7685	Na VI	5	3	7.35E−03	111.7636	Fe VII	9	9	3.93E−03	116.808	Fe VII	5	7	1.62E−06
107.8680	Fe VIII	4	6	1.98E−01	111.7671	Fe VII	5	5	2.73E−02	116.912	Fe VII	5	3	3.08E−04
107.9461	Al V	4	6	3.53E−01	111.7702	Fe VII	7	7	5.05E−03	116.951	Fe VII	7	7	4.06E−05
107.9988	Li III	2	4	1.93E−02	111.8505	Fe VII	9	9	2.87E−02	116.970	Fe VII	7	9	4.22E−04
107.9992	Li III	2	2	9.67E−03	111.864	Mg VI	4	2	2.08E−02	116.992	Fe VII	5	7	4.50E−04
108.0037	Al V	4	2	1.47E−02	111.8703	Fe VII	7	7	2.57E−02	117.106	Fe VII	9	11	4.27E−04
108.008	Ne V	3	5	2.45E−02	111.879	Na V	4	6	1.36E−02	117.127	Fe VII	9	7	3.65E−04
108.0576	Al V	4	4	3.92E−02	111.8986	Fe VII	7	5	2.43E−03	117.135	Fe VII	7	9	4.27E−03
108.0770	Fe VIII	6	8	1.88E−01	111.9304	Fe VII	9	7	6.23E−05	117.136	Fe VII	7	7	2.81E−05
108.0821	Fe VIII	6	6	9.40E−03	112.0307	Fe VII	9	7	1.91E−03	117.138	Fe VII	5	7	5.91E−03
108.090	Ne V	5	5	4.89E−03	112.077	Na V	4	2	4.52E−03	117.146	Fe VII	9	9	2.19E−05
108.1121	Al V	2	4	2.93E−02	112.2530	Fe VIII	4	6	9.32E−03	117.17	Fe XXII	2	2	6.17E−02
108.122	Fe XXI	1	3	5.31E−02	112.4716	Fe VIII	4	4	8.37E−02	117.173	F V	2	2	4.48E−04
108.355	Fe XIX	5	5	6.67E−02	112.4848	Fe VIII	6	6	8.68E−02	117.174	Fe VII	5	5	4.72E−02
108.3818	Fe VII	7	9	4.95E−02	112.7044	Fe VIII	6	4	6.19E−03	117.197	Fe VIII	6	8	1.05E−01
108.4067	Al V	2	2	5.85E−02	112.8301	F VI	1	3	2.19E−03	117.228	F V	2	4	2.23E−04
108.4328	Fe VII	7	9	2.22E−03	112.9059	Ca VIII	2	4	4.34E−02	117.275	F V	4	2	1.12E−04
108.4610	Al V	2	4	3.91E−01	112.932	Fe VIII	6	8	5.21E−02	117.282	Fe VII	7	7	4.46E−02
108.4959	Fe VII	5	7	3.07E−03	112.9415	F VII	2	4	1.90E−01	117.311	Fe VII	9	9	4.97E−02
108.5180	Fe VII	9	11	5.01E−02	112.9780	F VII	2	2	9.52E−02	117.312	Fe VII	9	7	3.46E−07
108.5323	Fe VII	9	9	2.56E−03	113.080	Fe VIII	4	6	1.28E−04	117.318	Fe VII	7	5	4.21E−03
108.5835	Fe VII	9	9	2.58E−02	113.2396	F V	2	4	1.50E−03	117.331	F V	4	4	5.58E−04
108.6198	Fe VII	7	7	2.31E−02	113.2593	F V	2	2	2.99E−03	117.458	Fe VII	9	7	3.31E−03
108.7710	Fe VII	9	7	1.72E−03	113.315	Fe VIII	6	6	1.19E−03	117.50	Fe XXI	3	3	1.22E−02
109.306	Ne VI	2	2	2.93E−02	113.3354	F V	4	4	3.73E−03	117.8535	Si V	1	3	2.46E−01
109.463	Ne VI	4	2	2.92E−02	113.3550	F V	4	2	7.47E−04	117.989	Na V	4	2	2.45E−02
109.5156	Al VI	5	3	4.91E−02	113.4505	Ca VIII	4	6	3.89E−02	117.989	Na V	4	4	4.90E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
117.989	Na V	4	6	7.34E−02	122.033	Mg V	1	3	2.58E−01	126.959	Mg IV	2	2	6.18E−03
118.000	O V	1	3	5.68E−03	122.370	Fe VII	5	3	6.11E−03	127.024	Fe VII	7	7	7.25E−04
118.424	Mg IV	4	4	2.24E−03	122.488	Ne VI	2	4	5.72E−01	127.068	Fe VII	7	5	5.79E−03
118.424	Mg IV	4	6	2.02E−02	122.685	Ne VI	4	4	5.71E−02	127.108	Fe VII	5	7	1.18E−01
118.478	Mg IV	4	2	1.96E−03	122.685	Ne VI	4	6	5.14E−01	127.116	Fe VII	7	9	1.10E−01
118.487	Mg IV	4	4	9.84E−03	122.869	Fe VII	5	5	1.13E−03	127.161	Mg IV	2	4	3.09E−03
118.495	Al V	4	2	1.33E−02	123.028	Fe VII	7	5	6.42E−03	127.231	Fe VII	9	7	6.51E−03
118.636	Ne V	1	3	4.78E−02	123.140	Fe VII	5	7	3.21E−05	127.256	Fe VII	9	11	1.12E−01
118.648	Fe VIII	4	4	7.11E−03	123.169	Mg IV	4	4	9.08E−03	127.278	Fe VII	7	7	7.38E−03
118.659	F V	4	6	2.15E−02	123.266	Mg IV	4	6	8.17E−02	127.323	Fe VII	9	9	5.74E−03
118.66	Fe XX	4	2	2.00E−02	123.293	F V	2	4	3.60E−03	127.387	Fe VII	5	7	4.41E−05
118.69	Fe XXI	3	1	1.61E−02	123.299	Fe VII	7	7	8.01E−04	127.428	Fe VII	7	9	3.19E−05
118.694	Ne V	3	1	1.59E−02	123.407	F V	4	4	3.60E−04	127.432	Fe VII	5	5	3.52E−04
118.694	Ne V	3	5	1.99E−02	123.407	F V	4	6	3.24E−03	127.486	Fe VII	9	7	9.10E−05
118.694	Ne V	3	3	1.19E−02	123.494	Fe VII	9	7	7.21E−03	127.557	Fe VII	7	7	3.34E−04
118.737	Mg IV	2	4	2.23E−02	123.508	Mg IV	2	4	9.06E−02	127.603	Fe VII	7	5	3.14E−05
118.762	Ne V	1	3	1.78E−01	123.661	F V	2	4	5.24E−02	127.636	Fe VII	9	9	3.72E−04
118.792	Mg IV	2	2	7.84E−03	123.75	Na VI	3	5	3.06E−02	127.695	Fe VII	5	7	1.73E−04
118.793	Ne V	5	3	1.19E−02	123.773	F V	4	6	4.72E−02	127.766	Fe VII	9	7	2.48E−05
118.793	Ne V	5	5	3.58E−02	123.775	F V	4	4	5.24E−03	127.866	Fe VII	7	7	1.30E−03
118.801	Mg IV	2	4	3.93E−03	123.83	Fe XXI	5	3	1.16E−02	127.936	Fe VII	7	9	1.24E−04
118.820	Ne V	3	3	4.45E−02	123.87	Na VI	1	3	7.32E−02	128.076	Fe VII	9	7	9.71E−05
118.820	Ne V	3	5	1.33E−01	123.92	Na VI	5	5	5.48E−02	128.146	Fe VII	9	9	1.45E−03
118.907	Fe VIII	6	4	4.25E−02	123.97	Na VI	3	3	1.83E−02	128.448	Fe VII	7	9	9.74E−03
118.919	Ne V	5	3	1.78E−03	124.15	Na VI	5	3	1.83E−02	128.465	Fe VII	5	7	1.35E−02
118.919	Ne V	5	5	2.67E−02	124.416	Mg IV	4	2	2.20E−02	128.639	Fe VII	7	7	1.02E−01
118.981	Al V	2	2	1.32E−02	124.525	Mg IV	4	4	2.41E−03	128.660	Fe VII	9	9	1.13E−01
119.010	Ne V	5	7	1.49E−01	124.540	Mg IV	4	6	2.16E−02	128.74	Fe XXI	1	3	4.78E−02
119.102	O V	1	3	2.95E−02	124.616	O V	1	3	5.00E−02	128.851	Fe VII	9	7	7.55E−03
119.327	F V	2	2	5.74E−05	124.641	Mg IV	4	2	6.76E−03	129.710	Mg IV	4	4	4.26E−02
119.380	Fe VIII	4	2	3.53E−02	124.650	Mg IV	4	4	3.39E−02	129.7291	Al IV	1	3	7.78E−01
119.433	F V	4	2	5.73E−05	124.762	Mg IV	2	2	2.20E−02	129.857	Mg IV	4	6	1.48E−01
119.976	F V	2	4	4.23E−02	124.871	Mg IV	2	4	2.40E−02	129.872	Fe VII	5	7	2.64E−01
119.983	Fe XIX	3	5	3.35E−02	124.988	Mg IV	2	2	2.70E−02	129.968	Mg IV	4	4	1.65E−02
120.023	F V	4	6	3.81E−02	124.998	Mg IV	2	4	1.35E−02	129.979	Mg IV	4	2	8.48E−03
120.030	Fe VII	5	7	1.35E−01	125.178	Na V	4	2	1.86E−01	130.049	Fe VII	7	7	1.65E−02
120.083	F V	4	4	4.22E−03	125.216	Na V	4	4	3.71E−01	130.086	Mg IV	2	4	1.69E−02
120.093	Ar VIII	2	4	2.92E−02	125.266	Fe VII	9	11	4.03E−02	130.249	Fe VII	7	9	2.47E−01
120.147	Ca IX	1	3	2.58E−01	125.286	Na V	4	6	5.57E−01	130.266	Fe VII	9	7	2.04E−04
120.157	Ar VIII	2	2	1.46E−02	125.389	F V	2	4	8.56E−04	130.345	Mg IV	2	4	1.65E−01
120.181	Fe VII	7	7	8.44E−03	125.461	F V	2	2	1.71E−03	130.356	Mg IV	2	2	3.39E−02
120.215	Fe VII	7	9	1.27E−01	125.462	Mg IV	4	2	1.12E−02	130.4134	Al V	4	2	1.99E−02
120.366	Fe VII	9	7	1.04E−04	125.506	F V	4	4	2.14E−03	130.466	Fe VII	9	9	1.28E−02
120.400	Fe VII	9	9	6.55E−03	125.524	Fe VII	7	9	3.96E−02	130.610	Ne V	1	3	5.19E−02
120.401	Fe VII	9	11	1.29E−01	125.5252	Al V	4	4	7.14E−03	130.619	Ne V	3	5	2.16E−02
120.524	F V	2	4	8.24E−03	125.5300	Al V	4	6	6.43E−02	130.680	Ne V	3	3	1.29E−02
120.564	F V	2	2	1.64E−02	125.579	F V	4	2	4.28E−04	130.738	Ne V	5	5	3.89E−02
120.633	F V	4	4	2.06E−02	125.726	Fe VII	9	9	2.05E−03	130.777	Fe VII	9	11	2.50E−01
120.672	F V	4	2	4.11E−03	125.742	Ne V	1	3	1.83E−02	130.800	Ne V	5	3	1.29E−02
120.841	Fe VII	5	7	3.29E−05	125.808	Ne V	3	1	6.11E−03	130.8472	Al V	4	4	9.90E−02
120.995	Fe VII	7	7	8.20E−04	125.808	Ne V	3	5	7.63E−03	130.941	Fe VIII	4	6	5.69E−01
121.183	Fe VII	9	7	7.36E−03	125.808	Ne V	3	3	4.58E−03	131.0015	Al V	2	2	7.91E−02
121.22	Fe XXI	5	5	3.56E−02	125.813	Mg IV	2	2	1.12E−02	131.240	Fe VIII	6	8	5.40E−01
121.318	O V	1	3	1.96E−04	125.918	Ne V	5	3	4.57E−03	131.2477	N V	2	4	2.03E−03
121.332	Fe VII	5	5	1.15E−03	125.918	Ne V	5	5	1.37E−02	131.2480	N V	2	2	1.02E−03
121.487	Fe VII	7	5	6.53E−03	125.921	Fe VII	5	7	4.21E−02	131.257	Fe VIII	6	6	2.70E−02
121.546	Mg IV	4	4	4.89E−04	126.0699	Al V	2	4	7.11E−02	131.4391	Al V	2	4	3.94E−02
121.553	Fe VII	5	3	6.17E−03	126.088	Fe VII	7	7	2.62E−03	131.520	F V	2	2	7.30E−03
121.645	Mg V	5	7	2.17E−01	126.292	Fe VII	9	7	3.23E−05	131.649	F V	4	2	7.29E−03
121.656	Mg V	5	5	3.88E−02	126.601	Mg IV	4	2	1.54E−03	131.990	Ne V	3	5	7.93E−02
121.658	Mg V	5	3	2.59E−03	126.802	Mg IV	4	4	7.73E−03	132.040	Ne V	5	7	8.88E−02
121.83	Fe XX	4	4	3.88E−02	126.855	Fe VII	5	7	2.90E−05	132.111	Ne V	5	5	1.58E−02
121.876	Mg IV	2	4	4.88E−03	126.899	Fe VII	5	5	1.02E−03	132.1221	Mg IV	4	4	2.57E−04
121.921	Mg V	3	5	1.93E−01	126.912	Fe VII	5	3	5.48E−03	132.1238	Mg IV	4	6	2.31E−03
121.923	Mg V	3	3	6.45E−02	126.929	F VI	1	3	4.46E−01	132.163	Mg V	5	5	3.09E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
132.176	Mg V	5	3	1.03E−02	138.391	Mg IV	2	2	1.52E−02	146.8379	Mg IV	4	2	1.41E−02
132.3777	N V	2	4	2.83E−03	138.639	Ne VI	4	2	2.83E−02	146.9522	Mg IV	4	6	2.96E−01
132.3782	N V	2	2	1.42E−03	138.689	Mg IV	2	4	7.59E−03	147.006	Mg IV	2	4	2.82E−02
132.475	Mg V	3	5	1.71E−02	139.0289	O V	1	3	5.79E−02	147.0515	Mg IV	4	4	3.28E−02
132.488	Mg V	3	3	1.02E−02	139.961	Na IV	5	5	6.92E−03	147.28	Ca XII	2	2	5.94E−02
132.492	Mg V	3	1	1.37E−02	139.964	Na IV	5	3	2.31E−03	147.320	Mg IV	2	2	5.62E−02
132.512	Mg IV	2	4	2.56E−03	140.1183	Mg IV	4	4	1.42E−02	147.4238	N V	2	4	2.00E−02
132.618	Mg V	1	3	4.10E−02	140.1717	Mg IV	4	6	1.28E−01	147.4273	N V	2	2	9.99E−03
132.687	F V	2	4	7.55E−03	140.178	Na IV	3	5	3.83E−03	147.535	Mg IV	2	4	3.27E−01
132.8026	Mg IV	4	4	4.50E−03	140.181	Na IV	3	1	3.06E−03	147.944	F V	2	4	1.46E−01
132.8142	Mg IV	4	6	4.05E−02	140.181	Na IV	3	3	2.31E−03	148.000	F V	4	6	1.31E−01
132.818	F V	4	4	1.89E−02	140.265	F V	2	2	1.20E−02	148.107	F V	4	4	1.46E−02
132.83	Fe XXIII	1	3	1.52E−01	140.274	Na IV	1	3	9.20E−03	148.642	Na V	4	6	6.45E−02
132.85	Fe XX	4	6	5.33E−02	140.3563	N V	2	4	1.06E−02	148.660	Ne IV	4	2	4.82E−02
132.885	F V	2	2	1.51E−02	140.3581	N V	2	2	5.31E−03	148.787	Ne IV	4	4	9.65E−02
133.017	F V	4	2	3.77E−03	140.412	F V	4	2	1.20E−02	148.856	Na V	4	4	4.29E−02
133.084	F V	2	4	1.03E−02	140.4249	Mg IV	4	2	7.91E−02	148.942	Ne IV	4	6	1.45E−01
133.197	Mg IV	2	4	4.49E−02	140.4730	Mg IV	4	2	2.74E−02	149.001	Na V	4	2	2.14E−02
133.208	F V	4	6	9.25E−03	140.5219	Mg IV	4	4	1.37E−01	150.004	Fe VII	5	7	6.17E−06
133.216	F V	4	4	1.03E−03	140.557	Mg IV	2	4	1.42E−01	150.0893	O VI	2	4	1.77E−01
133.482	Fe VII	5	7	1.12E−04	140.58	Ca XV	3	3	6.55E−02	150.1246	O VI	2	2	8.84E−02
133.669	Fe VII	7	7	2.80E−03	140.866	Mg IV	2	2	7.89E−02	150.168	Fe VII	5	5	2.16E−04
133.875	Fe VII	5	5	3.91E−03	140.914	Mg IV	2	2	1.10E−01	150.188	Fe VII	5	3	1.17E−03
133.898	Fe VII	9	7	2.51E−02	140.963	Mg IV	2	4	5.48E−02	150.240	Fe VII	7	7	1.54E−04
133.9926	N V	2	4	4.13E−03	141.04	Ca XII	4	2	6.21E−02	150.286	Na IV	5	3	1.24E−03
133.9933	N V	2	2	2.07E−03	142.15	Fe XXI	3	5	3.24E−02	150.292	Na IV	5	5	1.87E−02
134.064	Fe VII	7	5	2.23E−02	142.26	Fe XXI	3	3	1.08E−02	150.298	Na IV	5	7	1.05E−01
134.128	Fe VII	5	3	2.11E−02	142.435	Ne V	1	3	2.27E−01	150.334	F IV	3	5	1.02E−02
134.407	F V	2	4	1.28E−01	142.441	Ne V	3	1	7.56E−02	150.405	Fe VII	7	5	1.23E−03
134.537	F V	4	6	1.15E−01	142.519	Ne V	3	3	5.67E−02	150.422	F IV	5	5	1.83E−02
134.542	F V	4	4	1.28E−02	142.582	Ne V	3	5	9.45E−02	150.4923	O V	1	3	1.51E−05
134.9958	Li III	2	4	2.77E−01	142.661	Ne V	5	3	5.67E−02	150.530	Fe VII	9	7	1.38E−03
135.0012	Li III	2	2	1.39E−01	142.724	Ne V	5	5	1.70E−01	150.536	Na IV	3	3	3.10E−02
135.5232	O V	1	3	7.77E−02	143.219	Ca VIII	2	4	1.15E−01	150.543	Na IV	3	5	9.31E−02
135.656	Ne V	1	3	2.68E−02	143.219	Ne V	1	3	6.73E−01	150.642	Na IV	1	3	1.24E−01
135.732	Ne V	3	3	2.68E−02	143.273	Ne V	3	5	5.05E−01	150.688	Na IV	5	5	3.57E−02
135.77	Fe XXII	2	4	4.31E−02	143.304	Ne V	3	3	1.68E−01	150.714	Na IV	5	3	1.19E−02
135.861	Ne V	5	3	2.68E−02	143.344	Ne V	5	7	5.66E−01	150.807	Fe VII	5	7	6.59E−01
136.02	Fe XXII	4	2	1.33E−02	143.416	Ne V	5	5	1.01E−01	150.853	Fe VII	7	9	6.18E−01
136.4239	N V	2	4	6.38E−03	143.448	Ne V	5	3	6.72E−03	150.940	Na IV	3	5	1.97E−02
136.4250	N V	2	2	3.18E−03	144.019	Ne IV	4	6	4.32E−03	150.966	Na IV	3	3	1.19E−02
136.430	Na IV	5	3	2.91E−02	144.069	Ca VIII	4	6	1.02E−01	151.005	F IV	5	7	3.33E−02
136.547	Na IV	5	3	1.93E−02	144.108	Ca VIII	4	4	1.14E−02	151.023	Fe VII	9	11	6.26E−01
136.551	Na IV	5	5	5.81E−02	144.151	Ne IV	4	4	2.88E−03	151.047	Fe VII	7	7	4.12E−02
136.636	Na IV	3	3	2.91E−02	144.278	Ne IV	4	2	1.44E−03	151.050	Na IV	3	1	1.58E−02
136.724	Na IV	1	3	2.91E−02	144.31	Ca XV	5	3	6.38E−02	151.073	Na IV	1	3	4.74E−02
136.754	Na IV	3	3	1.93E−02	144.968	Na IV	5	3	8.28E−05	151.145	Fe VII	9	9	3.19E−02
136.758	Na IV	3	5	3.22E−02	144.972	Na IV	5	5	1.24E−03	151.340	Fe VII	9	7	5.07E−04
136.842	Na IV	1	3	7.72E−02	144.979	Na IV	5	7	6.95E−03	151.433	Fe VII	5	7	5.14E−02
136.847	Na IV	5	3	7.29E−04	145.201	Na IV	3	3	2.07E−03	151.488	Fe VII	7	9	3.72E−02
136.850	Na IV	5	5	1.09E−02	145.205	Na IV	3	5	6.20E−03	151.512	Fe VII	5	5	4.11E−01
136.855	Na IV	5	7	6.12E−02	145.300	Na IV	1	3	8.26E−03	151.516	O IV	2	4	4.22E−06
137.055	Na IV	3	3	1.82E−02	145.390	F V	2	2	2.10E−02	151.516	O IV	2	2	8.45E−06
137.057	Na IV	3	5	5.46E−02	145.548	F V	4	2	2.10E−02	151.52	Fe XXI	5	5	6.09E−03
137.143	Na IV	1	3	7.27E−02	145.65	Fe XXI	5	7	3.55E−02	151.604	O IV	4	2	2.11E−06
137.20	Ca XV	1	3	6.71E−02	146.062	Na IV	5	3	1.42E−03	151.604	O IV	4	4	1.05E−05
137.404	Mg V	5	3	7.27E−04	146.064	Na IV	5	7	1.19E−01	151.65	Fe XXI	5	3	4.05E−04
137.407	Mg V	5	5	1.09E−02	146.065	Na IV	5	5	2.13E−02	151.674	Fe VII	7	7	3.88E−01
137.411	Mg V	5	7	6.10E−02	146.083	Mg V	5	3	5.07E−02	151.753	Fe VII	7	5	3.66E−02
137.741	Mg V	3	3	1.81E−02	146.299	Na IV	3	3	3.56E−02	151.782	Fe VII	9	9	4.33E−01
137.745	Mg V	3	5	5.43E−02	146.302	Na IV	3	5	1.07E−01	151.970	Fe VII	9	7	2.88E−02
137.882	Mg V	1	3	7.24E−02	146.399	Na IV	1	3	1.42E−01	152.282	S VI	2	4	2.47E−03
137.9660	Mg IV	4	2	3.82E−03	146.465	Mg V	3	3	5.05E−02	152.290	S VI	2	2	1.24E−03
138.2615	Mg IV	4	4	1.90E−02	146.5260	Mg IV	4	4	7.07E−02	152.338	F V	2	4	3.05E−02
138.387	Ne VI	2	2	2.84E−02	146.623	Mg V	1	3	5.05E−02	152.391	F V	2	2	6.11E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
152.511	F V	4	4	7.63E−02	164.109	Ca XIII	1	3	1.05E−01	169.549	F IV	3	5	2.33E−02
152.564	F V	4	2	1.52E−02	164.17	Ca XVI	4	4	9.83E−02	169.583	O IV	4	2	2.92E−03
152.944	F IV	1	3	1.53E−02	164.7940	N IV	1	3	3.96E−03	169.610	F IV	5	3	1.40E−02
152.997	F IV	3	1	5.12E−03	164.82	Ar XIII	5	3	7.10E−02	169.661	F IV	5	5	4.19E−02
152.997	F IV	3	3	3.84E−03	165.093	Fe VI	6	8	4.75E−03	169.748	F IV	1	3	1.64E−01
153.011	F IV	3	5	6.40E−03	165.175	Fe VI	4	6	9.96E−03	169.790	F IV	3	5	1.23E−01
153.088	F IV	5	3	3.83E−03	165.278	Fe VI	8	8	7.11E−02	169.813	F IV	3	3	4.11E−02
153.102	F IV	5	5	1.15E−02	165.314	Fe VI	6	6	1.21E−01	169.839	F IV	5	7	1.38E−01
153.141	F IV	5	7	3.82E−02	165.489	Fe VII	5	3	1.57E−03	169.902	F IV	5	5	2.47E−02
154.88	Ca XVI	2	4	4.17E−02	165.499	Fe VI	8	6	4.26E−01	169.924	F IV	5	3	1.64E−03
155.082	Na IV	5	3	6.40E−03	165.500	Fe VI	4	4	1.39E−01	170.0740	N IV	1	3	1.31E−02
155.239	Na IV	5	3	7.99E−02	165.500	Fe VI	10	8	4.97E−01	170.577	Fe X	4	4	1.46E−01
155.349	Na IV	3	3	6.39E−03	165.530	Ar X	4	2	6.70E−02	170.630	Ar X	2	2	6.50E−02
155.446	Na IV	5	3	5.61E−02	165.630	Fe VII	5	5	2.90E−04	171.073	Fe IX	1	3	3.05E+00
155.462	Na IV	1	3	6.38E−03	165.640	Fe VI	6	4	3.71E−01	171.074	O IV	2	4	3.61E−02
155.507	Na IV	3	3	7.98E−02	165.722	Fe VII	5	7	8.27E−06	171.123	O IV	4	6	3.25E−02
155.508	Na IV	5	5	1.68E−01	165.780	Fe VI	4	2	3.48E−01	171.187	O IV	4	4	3.61E−03
155.620	Na IV	1	3	7.97E−02	165.919	Fe VII	7	5	1.65E−03	171.3285	S VI	2	4	1.03E−02
155.687	Na IV	3	1	7.47E−02	165.9450	N IV	1	3	4.09E−03	171.3645	S VI	2	2	5.15E−03
155.714	Na IV	3	3	5.60E−02	165.982	F V	2	4	5.44E−01	171.5756	Li II	1	3	4.40E−02
155.776	Na IV	3	5	9.33E−02	166.012	Fe VII	7	7	2.06E−04	171.59	Ca XV	1	3	5.94E−02
155.828	Na IV	1	3	2.23E−01	166.176	F V	4	6	4.90E−01	171.6507	Mg IV	4	4	7.13E−03
155.853	S VI	2	4	3.69E−03	166.187	F V	4	4	5.44E−02	171.6554	Mg IV	4	6	6.42E−02
155.865	S VI	2	2	1.84E−03	166.346	Li II	1	3	7.74E−03	172.1689	O V	1	3	3.95E−01
155.92	Fe XXII	4	6	3.37E−02	166.365	Fe VII	9	7	1.86E−03	172.1711	N IV	1	3	7.82E−05
156.493	Na IV	5	3	1.68E−03	166.641	O IV	2	4	2.10E−03	172.310	Mg IV	2	4	7.10E−02
156.508	Na IV	5	5	2.52E−02	166.744	O IV	4	6	1.89E−03	172.492	Ne IV	4	2	1.54E−01
156.537	Na IV	5	7	1.41E−01	166.748	O IV	4	4	2.10E−04	172.525	Ne IV	4	4	3.09E−01
156.681	Ca XIII	5	3	2.74E−02	167.0737	N IV	1	3	5.32E−03	172.620	Ne IV	4	6	4.63E−01
156.764	Na IV	3	3	4.18E−02	167.2401	Li II	1	3	1.25E−02	173.800	O IV	2	4	6.91E−03
156.780	Na IV	3	5	1.26E−01	167.44	Ca XVI	4	2	1.93E−02	173.852	O IV	2	2	1.38E−02
156.880	Na IV	1	3	1.67E−01	167.474	Ne V	3	5	3.18E−02	173.916	O IV	4	4	1.72E−02
157.626	Ne IV	4	6	2.28E−02	167.486	Fe VIII	4	4	4.81E−04	173.969	O IV	4	2	3.44E−03
157.781	Ne IV	4	4	1.51E−02	167.5608	O IV	2	4	5.65E−04	174.1042	O IV	2	4	2.88E−02
157.79	Ca XVI	2	2	8.18E−02	167.609	Ne V	1	3	7.63E−02	174.2212	O IV	4	4	2.88E−03
157.862	Ne IV	4	2	7.59E−03	167.655	Fe VIII	4	6	5.34E−05	174.2212	O IV	4	6	2.59E−02
158.079	O IV	2	2	2.83E−07	167.6692	O IV	4	4	5.64E−05	174.534	Fe X	4	6	1.28E+00
158.121	O IV	2	4	1.42E−07	167.670	Ne V	5	5	5.73E−02	174.6020	N IV	1	3	2.32E−02
158.175	O IV	4	2	7.09E−08	167.7086	O IV	4	6	5.08E−04	175.266	Fe X	2	4	1.41E+00
158.218	O IV	4	4	3.54E−07	167.7090	N IV	1	3	1.29E−02	175.443	Fe X	4	2	1.26E−01
158.342	F IV	1	3	2.63E−02	167.726	Ne V	3	3	1.91E−02	176.02	Ca XV	3	5	2.42E−02
158.398	F IV	3	1	8.79E−03	167.830	Ne V	3	1	2.54E−02	176.346	Fe VII	7	9	5.59E−05
158.398	F IV	3	3	6.59E−03	167.922	Ne V	5	3	1.91E−02	176.56	Fe XI	5	3	1.13E−02
158.428	F IV	3	5	1.10E−02	168.003	Fe VIII	6	4	3.54E−05	176.566	Ar VII	1	3	1.79E−01
158.496	F IV	5	3	6.58E−03	168.024	Fe VIII	4	4	9.54E−02	176.599	Fe VII	5	7	7.71E−05
158.526	F IV	5	5	1.98E−02	168.086	Na IV	5	7	1.93E−01	176.745	Fe VII	9	9	6.50E−04
158.601	F IV	5	7	6.38E−02	168.0957	Na IV	5	5	3.45E−02	176.92	Ca XV	3	3	1.45E−02
158.923	Ar VIII	2	4	8.29E−02	168.0988	Na IV	5	3	2.30E−03	176.927	Fe VII	7	7	5.82E−04
159.08	Ar XIII	1	3	7.36E−02	168.173	Fe VIII	6	6	4.96E−04	177.171	Fe VII	5	5	6.15E−04
159.099	O IV	2	4	3.54E−03	168.198	O IV	2	4	8.39E−04	177.243	Fe X	4	4	6.22E−01
159.175	Ar VIII	2	2	4.14E−02	168.254	O IV	2	2	1.68E−03	177.25	Ca XV	3	1	1.92E−02
159.197	O IV	4	4	8.85E−03	168.307	O IV	4	4	2.10E−03	177.329	Fe VII	9	7	4.32E−05
159.835	Ca XIII	3	1	3.58E−02	168.363	O IV	4	2	4.19E−04	177.502	Fe VII	7	5	5.48E−05
160.0724	Al IV	1	3	2.45E−01	168.405	Ca XIII	3	5	4.25E−02	178.0142	Li II	1	3	1.12E−01
160.2283	Mg IV	4	2	1.32E−02	168.4089	Na IV	3	5	1.71E−01	178.06	Fe XI	5	5	1.68E−01
160.802	Mg IV	2	2	1.31E−02	168.4120	Na IV	3	3	5.73E−02	178.546	F IV	3	5	1.74E−02
161.4939	S VI	2	4	5.87E−03	168.544	Fe VIII	6	4	5.71E−01	178.609	F IV	1	3	4.18E−02
161.5136	S VI	2	2	2.94E−03	168.5454	Na IV	1	3	2.29E−01	178.670	F IV	5	5	3.13E−02
161.61	Ar XIII	3	3	7.24E−02	168.7428	Li II	1	3	2.18E−02	178.681	F IV	3	3	1.04E−02
161.676	Ca IX	1	3	1.93E−03	168.87	Ca XVI	2	2	2.47E−02	178.724	F IV	3	1	1.39E−02
161.742	Ca XIII	5	5	7.98E−02	168.929	Fe VIII	4	2	4.74E−01	178.805	F IV	5	3	1.04E−02
161.75	Fe XXII	4	4	3.62E−03	169.434	F IV	1	3	5.60E−02	179.827	F IV	3	5	7.29E−03
162.5557	N V	2	4	4.57E−02	169.472	O IV	2	2	2.93E−03	179.840	F IV	1	3	1.74E−02
162.5644	N V	2	2	2.28E−02	169.481	F IV	3	1	1.86E−02	179.912	F IV	3	3	4.37E−03
162.925	Ca XIII	3	3	2.64E−02	169.498	F IV	3	3	1.40E−02	179.952	F IV	5	5	1.31E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
179.97	Ca XVI	4	2	2.32E−02	184.281	Ca V	5	5	9.39E−03	192.82	Ca XVII	1	3	1.85E−01
180.038	F IV	5	3	4.37E−03	184.409	Na III	2	2	2.45E−02	192.8229	N IV	1	3	5.98E−03
180.0693	Mg IV	4	2	2.02E−02	184.417	Ca V	5	3	3.13E−03	193.52	Fe XII	4	4	5.09E−01
180.073	Ar VI	2	4	4.04E−02	184.52	Ar XI	5	3	2.96E−02	193.804	Na III	4	4	3.29E−02
180.29	Ar XIV	2	4	4.54E−02	184.543	Fe X	4	2	2.90E−01	193.87	Ca XIV	4	6	6.49E−02
180.355	O IV	2	2	6.89E−03	184.71	Fe XI	5	3	1.66E−01	193.968	Fe VIII	4	4	2.42E−02
180.407	Fe X	2	2	4.90E−01	185.101	Ca V	3	5	5.20E−03	194.037	Na III	4	6	9.59E−02
180.41	Fe XI	5	7	9.33E−01	185.213	Fe VIII	6	8	6.77E−01	194.11	Ar XI	3	5	4.69E−02
180.481	O IV	4	2	6.89E−03	185.239	Ca V	3	3	3.12E−03	194.122	Na III	4	2	6.56E−03
180.60	Fe XI	3	3	2.78E−01	185.402	O IV	2	2	5.46E−03	194.168	Na III	4	4	1.06E−02
180.6143	Mg IV	4	4	1.01E−01	185.535	O IV	4	2	5.46E−03	194.319	Na III	2	4	1.31E−02
180.718	Ar VI	4	6	3.62E−02	185.538	Ca V	1	3	1.25E−02	194.39	Ar XIV	2	2	2.72E−02
180.792	Ar VI	4	4	4.02E−03	186.5143	Mg III	1	3	4.74E−01	194.638	Na III	2	2	2.62E−02
180.795	Mg IV	2	2	8.03E−02	186.599	Fe VIII	4	6	7.05E−01	194.661	Fe VIII	6	4	1.45E−01
181.023	Na III	4	6	3.96E−03	186.61	Ca XIV	4	4	4.50E−02	194.685	Na III	2	4	1.06E−01
181.027	Na III	4	4	4.39E−04	186.84	S XI	1	3	8.24E−02	195.12	Fe XII	4	6	7.58E−01
181.14	Fe XI	1	3	1.10E+00	187.024	S V	1	3	6.82E−03	195.388	Fe VII	9	11	7.20E−04
181.1497	O IV	2	4	4.91E−02	187.026	F IV	1	3	2.14E−02	195.389	Fe X	4	4	5.17E−05
181.2755	O IV	4	6	4.42E−02	187.08	Ar XI	3	1	3.89E−02	195.5285	Na III	4	6	9.16E−03
181.2764	O IV	4	4	4.91E−03	187.104	F IV	3	3	2.14E−02	195.5287	Na III	4	4	1.02E−03
181.301	Fe VII	5	7	1.55E−05	187.240	Fe VIII	6	6	3.34E−02	195.8596	O IV	2	4	1.14E−01
181.344	Mg IV	2	4	4.00E−02	187.240	F IV	5	3	2.14E−02	195.972	Fe VIII	4	2	1.20E−01
181.476	Na III	2	4	4.38E−03	187.46	Fe XI	5	3	1.71E−01	196.0061	O IV	4	6	1.03E−01
181.515	F IV	1	3	9.34E−02	187.97	Ar XIV	4	4	1.09E−01	196.0078	O IV	4	4	1.15E−02
181.530	F IV	3	5	7.00E−02	188.22	Fe XI	5	5	4.90E−01	196.045	Fe VII	5	7	7.55E−04
181.570	F IV	5	7	7.84E−02	188.67	S XI	3	3	8.16E−02	196.0525	Na III	2	4	1.02E−02
181.589	F IV	3	3	2.34E−02	188.81	Ar XI	5	5	8.68E−02	196.423	Fe VII	7	9	7.06E−04
181.648	Fe VII	7	7	3.86E−04	188.8582	Na III	4	4	3.10E−03	196.450	Fe VII	7	7	4.70E−05
181.658	F IV	5	5	1.40E−02	188.8711	Na III	4	6	2.79E−02	196.650	Fe VIII	4	4	7.54E−04
181.718	F IV	5	3	9.33E−04	189.02	Fe XI	3	1	2.17E−01	196.918	Fe VII	9	9	3.65E−05
181.7413	N IV	1	3	4.17E−02	189.14	Fe XI	3	3	1.62E−01	196.946	Fe VII	9	7	5.80E−07
181.757	Na IV	5	5	3.12E−02	189.3468	Na III	2	4	3.09E−02	197.2278	N IV	1	3	1.05E−01
181.766	Na IV	5	3	1.04E−02	189.57	Ar XI	3	3	2.88E−02	197.362	Fe VIII	6	4	4.51E−03
181.866	O IV	2	4	5.21E−03	189.73	Fe XI	1	3	6.47E−01	197.433	Fe XIII	1	3	7.28E−01
181.887	O IV	2	2	1.04E−02	190.043	Fe X	2	2	2.82E−01	198.549	S VIII	4	2	7.31E−02
181.90	Ca XV	5	5	4.21E−02	190.426	Na IV	5	3	7.37E−04	199.040	C IV	2	2	9.34E−04
181.994	O IV	4	4	1.30E−02	190.434	Na IV	5	5	1.10E−02	199.040	C IV	2	4	1.87E−03
182.015	O IV	4	2	2.60E−03	190.445	Na IV	5	7	6.20E−02	199.2792	Li II	1	3	4.62E−01
182.071	Fe VII	9	7	3.47E−03	190.457	Ca V	5	7	1.59E−02	199.550	Ca V	5	3	1.70E−02
182.123	Na IV	3	5	1.74E−02	190.560	Ca V	5	5	2.83E−03	199.7594	F IV	1	3	1.99E−01
182.132	Na IV	3	1	1.39E−02	190.567	F V	2	2	2.99E−02	199.8037	F IV	3	1	6.63E−02
182.133	Na IV	3	3	1.04E−02	190.603	Ca V	5	3	1.89E−04	199.8494	F IV	3	3	4.97E−02
182.17	Fe XI	3	5	8.25E−01	190.828	Na IV	3	3	1.84E−02	199.9341	F IV	3	5	8.28E−02
182.288	Na IV	1	3	4.16E−02	190.836	Na IV	3	5	5.52E−02	200.0045	F IV	5	3	4.96E−02
182.310	Fe X	2	4	2.42E−01	190.838	F V	4	2	2.98E−02	200.021	Fe XIII	3	5	5.39E−01
182.391	Fe VII	5	5	5.39E−04	190.95	Ar XI	1	3	1.14E−01	200.0894	F IV	5	5	1.49E−01
182.5115	Na III	4	2	2.25E−04	190.999	Na IV	1	3	7.35E−02	200.512	Ca V	3	3	1.70E−02
182.706	O IV	2	4	1.75E−02	191.012	Na III	4	2	1.40E−03	200.6760	C IV	2	4	2.60E−03
182.708	Ca VIII	2	2	7.72E−02	191.27	S XI	5	3	8.05E−02	200.6764	C IV	2	2	1.30E−03
182.741	Fe VII	7	5	3.08E−03	191.307	Na III	4	4	6.96E−03	200.7878	Ne III	5	3	6.34E−05
182.826	O IV	4	6	1.58E−02	191.36	Ar XIV	4	2	2.14E−02	200.7955	Ne III	5	5	9.52E−04
182.835	O IV	4	4	1.75E−03	191.437	Ca V	3	5	1.41E−02	200.8061	Ne III	5	7	5.33E−03
182.86	Ca XV	5	3	1.40E−02	191.4794	S VI	2	4	2.09E−02	200.863	Ca V	1	3	1.69E−02
182.9678	Na III	2	2	2.25E−04	191.481	Ca V	3	3	4.70E−03	200.98	Ca XV	1	3	5.40E−02
183.41	Ar XIV	2	2	8.94E−02	191.512	Na III	2	2	5.57E−03	201.0125	F IV	1	3	5.89E−01
183.46	Ca XIV	4	2	2.28E−02	191.5602	S VI	2	2	1.05E−02	201.0475	Ne III	3	3	1.59E−03
183.558	Na III	4	4	2.37E−03	191.800	Ca V	1	3	1.87E−02	201.0552	Ne III	3	5	4.76E−03
183.571	Na III	4	6	2.13E−02	191.808	Na III	2	4	2.78E−03	201.0655	F IV	3	5	4.42E−01
183.73	Na III	4	2	6.23E−03	192.004	Fe VIII	4	2	3.86E−03	201.1036	F IV	3	3	1.47E−01
183.747	Na III	4	4	3.12E−02	192.02	Fe XI	3	3	1.67E−01	201.127	Fe XIII	3	3	1.79E−01
183.945	Na III	4	2	2.45E−02	192.04	Fe XXIV	2	4	4.82E−02	201.1600	Ne III	1	3	6.33E−03
184.019	Na III	2	4	2.37E−02	192.39	Fe XII	4	2	2.56E−01	201.1604	F IV	5	7	4.94E−01
184.157	Ca VIII	4	2	7.66E−02	192.555	S V	1	3	1.12E−02	201.2225	F IV	5	5	8.82E−02
184.192	Na III	2	2	2.49E−02	192.63	Fe XI	1	3	1.66E−01	201.2607	F IV	5	3	5.88E−03
184.210	Na III	2	4	1.24E−02	192.82	Fe XI	3	5	2.65E−01	201.565	Fe X	2	4	5.01E−04

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
201.58	Fe XI	5	5	1.97E−02	209.619	Fe XIII	3	5	1.18E−01	220.083	Fe XIV	4	4	4.76E−02
201.689	Ar XIII	1	3	6.40E−02	209.916	Fe XIII	5	3	7.10E−02	220.3673	Ca IV	2	2	3.35E−03
202.044	Fe XIII	1	3	2.95E−01	210.461	Ar XIII	5	5	4.61E−02	220.6763	F III	4	6	4.37E−03
202.1485	Na III	4	4	6.78E−03	211.006	Ar XIII	5	3	1.53E−02	220.8400	F III	4	4	2.90E−03
202.1825	Na III	4	6	6.09E−02	211.315	Fe XIV	2	4	4.96E−01	220.9497	Ar VI	4	6	4.02E−02
202.414	Fe XIII	3	1	9.81E−02	211.4034	N IV	1	3	4.52E−03	220.9564	F III	4	2	1.45E−03
202.4909	Na III	4	2	5.21E−02	211.931	Fe VII	7	9	1.03E−02	220.9757	Ar VI	4	4	4.47E−03
202.606	S VIII	2	2	7.16E−02	212.121	S XII	2	4	5.06E−02	221.15	Ar XV	1	3	2.05E−01
202.7084	Na III	2	4	6.76E−02	212.1648	F III	4	6	1.80E−03	221.241	S IX	5	3	3.21E−02
202.7189	Na III	4	2	1.47E−02	212.2333	Ne III	5	7	3.82E−02	221.425	S XII	4	2	2.43E−02
202.7608	Na III	4	4	7.36E−02	212.2335	Ne III	5	5	6.83E−03	222.7852	C IV	2	4	1.80E−02
202.8847	O IV	2	2	2.18E−02	212.3125	F III	4	4	1.20E−03	222.7887	C IV	2	2	9.03E−03
202.9608	S V	1	3	2.01E−02	212.4139	C IV	2	4	9.68E−03	223.0897	Ne III	5	7	6.89E−02
202.989	Ca VII	3	5	6.04E−02	212.4157	C IV	2	2	4.83E−03	223.0986	Ne III	5	5	1.23E−02
203.0436	O IV	4	2	2.18E−02	212.508	Fe VII	9	9	5.31E−04	223.1042	Ne III	5	3	8.20E−04
203.0527	Na III	2	2	5.19E−02	212.5236	Ne III	3	5	3.41E−02	223.2512	S V	1	3	3.08E−02
203.0542	C IV	2	4	3.77E−03	212.663	Fe VII	9	11	1.04E−02	223.262	S IX	3	1	4.25E−02
203.0549	C IV	2	2	1.88E−03	213.768	Fe XIII	5	5	2.09E−01	223.4193	Ne III	3	5	6.14E−02
203.2819	Na III	2	2	5.87E−02	213.9747	O IV	2	4	2.51E−02	223.4249	Ne III	3	3	2.05E−02
203.3240	Na III	2	4	2.93E−02	214.0277	O IV	2	2	5.01E−02	223.5638	Ne III	1	3	8.19E−02
203.35	Ar XIV	4	2	2.60E−02	214.1516	O IV	4	4	6.26E−02	223.743	Si IX	1	3	9.47E−02
203.700	Ca VII	1	3	1.44E−01	214.2046	O IV	4	2	1.25E−02	224.250	Ar XII	4	6	7.09E−02
203.795	Fe XIII	5	5	1.06E−01	214.2300	Na III	4	4	5.54E−02	224.305	Fe VIII	6	8	3.01E−02
203.826	Fe XIII	5	7	5.93E−01	214.5868	Na III	4	2	1.11E−02	224.55	Ca XVI	4	6	4.14E−02
204.002	Ca VII	5	5	1.08E−01	214.804	F III	4	2	1.88E−02	224.726	S IX	5	5	9.50E−02
204.376	Ca VII	3	3	3.60E−02	214.804	F III	4	4	3.76E−02	225.024	Si IX	3	3	9.41E−02
204.736	Ca VII	3	1	4.79E−02	214.8589	Na III	2	4	2.21E−02	225.220	S IX	3	3	3.16E−02
204.943	Fe XIII	5	3	7.02E−03	214.8624	F III	4	6	5.64E−02	225.78	Ca XVI	4	4	4.58E−03
205.257	Ar XIII	3	5	2.62E−02	215.0455	Na III	4	4	2.30E−02	226.034	O III	5	7	3.25E−04
205.403	Ca VII	5	3	3.58E−02	215.167	S XII	2	2	9.98E−02	226.0550	F III	4	2	3.20E−02
205.4864	Na IV	5	3	5.27E−02	215.2178	Na III	2	2	4.41E−02	226.0938	F III	4	4	6.39E−02
205.774	Ar XIII	3	3	1.57E−02	215.3362	Na III	4	6	2.07E−01	226.1690	F III	4	6	9.58E−02
205.8368	O IV	2	2	2.26E−03	215.37	Ca XV	5	7	4.23E−02	226.579	S IX	1	3	1.25E−01
205.914	Fe XIII	3	3	7.23E−02	215.490	Ar XII	4	2	2.46E−02	227.000	Si IX	5	3	9.33E−02
205.924	Ar XIII	3	1	2.09E−02	215.6792	Na III	2	4	2.29E−01	227.2469	Ne III	5	3	4.93E−02
205.9546	Na IV	3	3	5.26E−02	216.62	Ca XV	5	3	5.01E−04	227.2579	Ca IV	4	4	5.27E−04
206.0005	O IV	4	2	2.26E−03	217.03	Ca XV	5	5	7.51E−03	227.3078	Ca IV	4	6	4.74E−03
206.1540	Na IV	1	3	5.25E−02	217.3265	Ne III	5	7	2.49E−02	227.4313	Ne III	5	3	3.72E−02
206.6326	C IV	2	4	5.81E−03	217.3322	Ne III	5	5	4.44E−03	227.49	S XII	2	2	3.04E−02
206.6336	C IV	2	2	2.90E−03	217.3378	Ne III	5	3	2.97E−04	227.4943	Ne III	5	5	1.12E−01
206.86	Fe XI	3	5	1.06E−02	217.6365	Ne III	3	5	2.21E−02	227.5796	Ne III	3	3	4.92E−02
206.8729	Na III	4	2	3.48E−03	217.6421	Ne III	3	3	7.40E−03	227.7238	Ne III	1	3	4.92E−02
207.1826	O IV	2	4	1.26E−01	217.691	Fe VIII	4	6	3.26E−02	227.7371	Ne III	3	1	4.95E−02
207.2386	O IV	4	6	1.13E−01	217.7740	Ne III	1	3	2.96E−02	227.7646	Ne III	3	3	3.71E−02
207.2959	Na III	4	4	1.74E−02	218.1306	Ne III	5	5	3.01E−02	227.8277	Ne III	3	5	6.19E−02
207.3483	O IV	4	4	1.26E−02	218.1816	Ne III	5	3	9.99E−03	227.9090	Ne III	1	3	1.49E−01
207.4593	Na III	2	2	1.39E−02	218.200	S XII	4	4	1.23E−01	228.628	Ca VI	4	6	1.00E−01
207.712	Fe VII	5	7	1.12E−02	218.290	Ar XII	4	4	4.85E−02	228.8264	O III	1	3	4.79E−03
207.8847	Na III	2	4	6.93E−03	218.3407	Ne III	5	3	8.77E−04	228.832	S IX	3	5	5.19E−02
208.167	Fe VII	7	7	6.99E−04	218.3456	Ne III	5	7	7.37E−02	228.8615	Ne III	5	3	8.02E−04
208.33	Ca XV	3	3	1.30E−02	218.3572	Ne III	5	5	1.32E−02	228.8797	Ca IV	2	4	5.23E−03
208.4072	Ne III	5	5	8.82E−03	218.4371	Ne III	3	5	1.67E−02	228.8852	Ne III	5	5	1.20E−02
208.4089	Ne III	5	3	2.94E−03	218.4452	Ne III	5	3	4.71E−03	228.8857	O III	3	3	4.79E−03
208.480	Ne IV	4	6	6.63E−02	218.4882	Ne III	3	3	9.97E−03	228.9218	Ne III	5	7	6.74E−02
208.59	Ca XVI	2	4	4.96E−02	218.5120	Ne III	3	1	1.34E−02	228.9868	O III	5	3	4.79E−03
208.6867	Ne III	3	1	3.92E−03	218.564	Fe VIII	6	6	1.55E−03	229.1989	Ne III	3	3	2.01E−02
208.6870	Ne III	3	5	4.90E−03	218.6211	Ne III	1	3	4.00E−02	229.2227	Ne III	3	5	6.01E−02
208.6887	Ne III	3	3	2.93E−03	218.6478	Ne III	3	3	2.19E−02	229.3452	Ne III	1	3	8.00E−02
208.72	Ca XV	3	5	3.90E−02	218.6643	Ne III	3	5	6.57E−02	229.734	Ca VI	4	4	6.65E−02
208.723	Fe VII	9	7	8.60E−06	218.7526	Ne III	3	3	4.71E−03	229.8703	Na III	4	2	1.25E−02
208.732	Ne IV	4	4	4.42E−02	218.7809	Ne III	1	3	8.76E−02	230.089	Fe X	4	4	2.02E−04
208.8099	Ne III	1	3	1.18E−02	218.8634	Ca IV	4	2	3.37E−03	230.1050	F III	4	2	2.62E−02
208.899	Ne IV	4	2	2.21E−02	218.8858	Ne III	1	3	4.70E−03	230.1126	F III	4	4	5.23E−02
209.2742	N V	2	4	1.59E−01	219.123	Fe XIV	4	6	4.30E−01	230.1238	F III	4	6	7.85E−02
209.3076	N V	2	2	7.96E−02	219.9032	Ar VI	2	4	4.49E−02	230.1390	He II	2	4	1.07E−03

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
230.1391	He II	2	2	5.35E−04	240.243	Fe X	2	4	1.05E−03	250.14	Al VIII	5	3	1.02E−01
230.495	Ca VI	4	2	3.31E−02	240.2737	F IV	3	1	2.67E−02	250.1654	Ca IV	2	4	4.76E−03
230.5945	Na III	2	2	1.24E−02	240.3694	F IV	5	3	2.00E−02	250.5121	Na III	4	4	7.01E−03
230.6856	He II	2	2	7.38E−04	240.5460	F III	4	6	7.15E−03	250.5169	Na III	4	6	6.31E−02
230.6856	He II	2	4	1.48E−03	240.696	Fe XIII	1	3	2.04E−01	251.1340	Ne III	5	7	1.47E−01
230.7680	N III	2	4	4.53E−04	240.7350	F III	4	4	4.77E−03	251.1420	Ne III	5	5	2.63E−02
230.7890	N III	2	2	9.06E−04	240.8570	F III	4	2	2.38E−03	251.1449	Ne III	5	3	1.76E−03
230.8609	N III	4	4	1.13E−03	240.859	O III	1	3	3.72E−02	251.3695	Ca IV	2	2	9.47E−03
230.8819	N III	4	2	2.27E−04	240.925	O III	3	3	9.32E−03	251.3725	Na III	2	4	6.99E−02
231.0431	Fe VII	7	9	5.17E−03	240.925	O III	3	5	2.79E−02	251.5484	Ne III	3	5	1.32E−01
231.097	Fe VIII	6	8	1.31E−02	240.9344	Ca IV	2	2	3.88E−02	251.5513	Ne III	3	3	4.38E−02
231.4541	He II	2	2	1.06E−03	241.037	O III	5	3	3.72E−04	251.7274	Ne III	1	3	1.75E−01
231.4541	He II	2	4	2.12E−03	241.037	O III	5	5	5.58E−03	251.7339	Ca IV	2	4	6.65E−02
231.520	Fe X	4	4	2.73E−03	241.037	O III	5	7	3.13E−02	251.952	Fe XIII	5	3	1.94E−01
231.6909	Fe VII	5	7	7.13E−03	241.2734	Ca IV	4	2	3.70E−04	252.197	Fe XIV	2	4	1.49E−01
231.7284	Fe VII	9	9	6.01E−02	241.3362	Ca IV	2	4	4.50E−02	253.79	Si X	2	4	5.82E−02
231.7336	Mg III	1	3	2.39E−01	241.7076	Ca IV	2	4	7.38E−04	255.0394	O III	3	5	2.87E−03
231.884	Fe VIII	4	6	1.37E−02	241.90	Ar XIII	3	3	1.41E−02	255.10	Fe XXIV	2	2	1.81E−02
231.9774	Ca IV	4	4	1.51E−03	242.20	Ar XIII	3	5	4.24E−02	255.1555	O III	1	3	6.88E−03
231.9834	Ca IV	4	6	1.36E−02	242.3922	Ca IV	4	2	6.96E−03	255.1649	O III	5	5	5.16E−03
232.0462	Fe VII	5	7	5.30E−04	242.3927	Ca IV	4	4	4.83E−02	255.2293	O III	3	3	1.72E−03
232.2567	Fe VII	7	7	5.38E−02	242.594	S XI	3	5	2.91E−02	255.2860	O III	3	1	2.29E−03
232.4428	Fe VII	5	5	5.68E−02	242.849	S XI	3	3	1.74E−02	255.3550	O III	5	3	1.72E−03
232.5842	He II	2	4	3.21E−03	242.872	S XI	3	1	2.32E−02	255.7234	F III	4	2	1.13E−01
232.5843	He II	2	2	1.60E−03	243.0264	He II	2	4	1.93E−02	255.7699	F III	4	4	2.25E−01
232.6138	Fe VII	7	7	1.32E−02	243.0269	He II	2	2	9.67E−03	255.8627	F III	4	6	3.38E−01
232.876	Fe VIII	6	6	6.48E−04	243.1023	Ca IV	2	2	1.47E−03	256.3166	He II	2	4	5.27E−02
232.9493	Fe VII	9	7	3.99E−03	243.740	Ar XIV	2	4	5.36E−02	256.3177	He II	2	2	2.63E−02
233.0123	Fe VII	7	5	5.07E−03	244.2382	Ca IV	2	2	6.91E−03	256.38	Si X	2	2	1.15E−01
233.3085	Fe VII	9	7	1.18E−01	244.2387	Ca IV	2	4	1.91E−02	256.685	S XIII	1	3	2.30E−01
233.6008	N III	2	4	6.91E−04	244.3071	O III	3	5	1.21E−03	257.147	S X	4	2	2.69E−02
233.6200	N III	2	2	1.38E−03	244.4223	O III	5	5	2.18E−03	257.372	Ar XIV	4	6	4.57E−02
233.6676	Ca IV	2	4	1.50E−02	244.4237	O III	1	3	2.90E−03	257.394	Fe XIV	2	2	2.93E−01
233.6960	N III	4	4	1.72E−03	244.4913	O III	3	3	7.25E−04	257.963	Ca V	5	5	3.86E−02
233.7152	N III	4	2	3.45E−04	244.5350	O III	3	1	9.67E−04	257.987	Ar XIV	4	4	5.06E−03
233.7625	Fe VII	5	5	1.84E−02	244.6067	O III	5	3	7.25E−04	258.247	Ca V	5	3	1.29E−02
234.3385	Fe VII	7	5	1.05E−01	244.9034	C IV	2	4	4.07E−02	258.37	Si X	4	4	1.43E−01
234.3472	He II	2	4	5.20E−03	244.9113	C IV	2	2	2.03E−02	259.496	S X	4	4	5.34E−02
234.3473	He II	2	2	2.60E−03	246.004	Si VI	4	2	8.02E−02	259.574	Ca V	3	5	2.13E−02
234.50	S XII	4	2	2.95E−02	246.209	Fe XIII	3	3	1.99E−01	259.861	Ca V	3	3	1.28E−02
235.2229	Fe VII	5	3	9.88E−02	246.895	S XI	5	5	5.14E−02	259.987	Ca V	3	1	1.70E−02
235.5568	S V	1	3	7.87E−03	247.159	S XI	5	3	1.71E−02	260.450	Ca V	1	3	5.10E−02
236.27	Ar XIII	1	3	5.79E−02	247.2051	N IV	1	3	3.27E−01	261.06	Si X	4	2	2.82E−02
237.3307	He II	2	4	9.30E−03	247.40	Al VIII	1	3	1.03E−01	262.6617	O III	1	3	1.09E−02
237.3309	He II	2	2	4.65E−03	248.2291	Ca IV	4	4	1.20E−02	262.7266	O III	3	1	3.63E−03
237.9941	N III	2	4	8.63E−04	248.3204	N III	2	4	2.74E−03	262.7398	O III	3	3	2.71E−03
238.0351	N III	2	2	1.72E−03	248.3703	N III	2	2	5.48E−03	262.7476	O III	3	5	4.53E−03
238.0930	N III	4	4	2.15E−03	248.4279	N III	4	4	6.84E−03	262.8731	O III	5	3	2.71E−03
238.1340	N III	4	2	4.32E−04	248.45	Al VIII	3	3	1.02E−01	262.8809	O III	5	5	8.15E−03
238.1941	Ne III	5	3	1.13E−02	248.4779	N III	4	2	1.37E−03	263.6942	O III	1	3	1.04E−01
238.3598	O IV	2	4	5.04E−01	248.5380	O III	1	3	6.64E−02	263.7271	O III	3	5	7.78E−02
238.5596	Ne III	3	3	1.13E−02	248.5718	O III	3	5	4.98E−02	263.7729	O III	3	3	2.59E−02
238.5697	O IV	4	6	4.54E−01	248.6079	O III	3	3	1.66E−02	263.8170	O III	5	7	8.72E−02
238.5792	O IV	4	4	5.04E−02	248.6158	O III	5	7	5.58E−02	263.8614	O III	5	5	1.56E−02
238.703	Fe X	2	4	1.95E−03	248.6391	Ca IV	4	6	6.06E−02	263.9073	O III	5	3	1.04E−03
238.7180	Ne III	1	3	1.13E−02	248.6911	O III	5	5	9.97E−03	264.230	S X	4	6	7.86E−02
239.1378	Ca IV	4	2	9.79E−03	248.71	Ar XIII	5	7	4.62E−02	264.2582	O III	1	3	7.36E−02
239.5336	Ca IV	4	4	4.54E−03	248.7272	O III	5	3	6.64E−04	264.3251	O III	3	1	2.46E−02
239.816	S XI	1	3	7.05E−02	248.9872	S VI	2	4	5.47E−02	264.3372	O III	3	3	1.84E−02
239.8552	F IV	3	5	3.34E−02	249.124	Si VI	2	2	7.92E−02	264.3457	O III	3	5	3.07E−02
239.8996	Ca IV	4	4	1.86E−03	249.16	Ar XIII	5	3	5.49E−04	264.4721	O III	5	3	1.84E−02
240.0155	F IV	1	3	8.01E−02	249.2714	S VI	2	2	2.74E−02	264.4806	O III	5	5	5.52E−02
240.0537	Ca IV	4	6	4.08E−02	249.4146	Ca IV	4	2	2.39E−03	264.787	Fe XIV	4	4	3.55E−01
240.0787	F IV	5	5	6.01E−02	249.48	Ar XIII	5	5	8.23E−03	264.8226	N III	2	4	6.54E−03
240.1453	F IV	3	3	2.00E−02	249.7734	Ca IV	4	4	6.70E−03	264.8460	N III	2	2	1.31E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
264.9449	N III	4	4	1.64E−02	276.9456	Fe VI	8	8	4.36E−03	291.8007	Fe VI	6	4	6.87E−02
264.9684	N III	4	2	3.27E−03	277.001	Mg VII	3	3	1.12E−01	291.811	S XI	5	5	9.16E−03
266.8055	N III	2	4	2.84E−03	277.2332	Fe VI	4	6	6.10E−04	292.1390	Ar VI	2	2	8.27E−02
266.8471	N III	2	2	5.68E−03	277.25	Si X	4	2	3.42E−02	292.4424	N III	2	4	4.84E−02
266.8945	Na III	4	2	2.03E−02	277.5701	Fe VI	10	8	3.05E−02	292.5907	N III	4	6	4.35E−02
266.9298	N III	4	4	7.09E−03	277.6268	Fe VI	6	6	7.42E−03	292.5916	N III	4	4	4.83E−03
266.9714	N III	4	2	1.42E−03	277.9466	Fe VI	4	4	8.52E−03	292.763	Si IX	3	5	3.29E−02
266.9716	O III	1	3	1.18E−01	278.1496	Fe VI	8	6	2.61E−02	292.800	Si IX	3	1	2.63E−02
266.9868	O III	3	5	8.86E−02	278.2447	Fe VI	4	2	2.13E−02	292.857	Si IX	3	3	1.98E−02
267.0267	Ne III	5	5	3.06E−02	278.3422	Fe VI	6	4	2.27E−02	293.0436	Fe VI	8	10	1.47E−02
267.0306	O III	5	7	9.92E−02	278.402	Mg VII	5	3	1.11E−01	293.3807	Fe VI	6	8	2.52E−02
267.0314	Ne III	5	3	1.02E−02	278.4367	N III	2	2	1.15E−03	293.4875	Fe VI	10	12	1.88E−02
267.0523	O III	3	3	2.95E−02	278.443	Si VII	3	5	5.81E−02	293.7429	Fe VI	10	10	1.29E−01
267.1244	O III	5	5	1.78E−02	278.5719	N III	4	2	1.15E−03	293.8204	Fe VI	4	6	2.82E−02
267.1900	O III	5	3	1.18E−03	278.694	Al V	4	2	8.39E−02	293.9646	Fe VI	8	8	1.08E−01
267.4861	Ne III	3	5	1.70E−02	279.6309	O IV	2	2	3.14E−02	294.0349	Ar VI	4	2	8.22E−02
267.4905	Ne III	3	1	1.36E−02	279.9330	O IV	4	2	3.14E−02	294.1171	S IV	2	4	9.70E−04
267.4909	Ne III	3	3	1.02E−02	280.0260	C III	1	3	1.64E−02	294.2624	Fe VI	6	6	9.67E−02
267.6428	Na III	4	4	1.01E−01	280.1090	O III	3	5	4.61E−03	294.2789	S IV	2	2	1.93E−03
267.6901	Ne III	1	3	4.07E−02	280.15	Al IX	2	4	6.28E−02	294.3369	Fe VI	8	10	1.79E−02
267.8713	Na III	2	2	8.07E−02	280.2337	O III	1	3	1.11E−02	294.5163	Fe VI	4	4	1.12E−01
268.348	N III	2	4	5.97E−03	280.2605	O III	5	5	8.30E−03	294.6682	Fe VI	10	8	1.17E−02
268.473	N III	4	4	5.97E−04	280.3226	O III	3	3	2.77E−03	294.8498	Fe VI	8	6	1.88E−02
268.473	N III	4	6	5.37E−03	280.4081	O III	3	1	3.69E−03	294.9425	S IV	4	4	2.42E−03
268.6251	Na III	2	4	4.03E−02	280.4744	O III	5	3	2.77E−03	294.9605	Fe VI	6	4	1.87E−02
269.0726	N III	2	2	5.44E−04	281.394	Al V	2	2	8.31E−02	295.0151	Fe VI	6	8	1.79E−02
269.1989	N III	4	2	5.43E−04	281.402	S XI	1	3	6.33E−02	295.0423	Fe VI	10	10	1.29E−03
270.074	N III	2	4	7.82E−03	282.0632	N III	2	4	2.71E−02	295.0870	S IV	2	4	8.90E−03
270.201	N III	4	4	7.82E−04	282.2020	N III	4	4	2.71E−03	295.1051	S IV	4	2	4.83E−04
270.201	N III	4	6	7.04E−03	282.2020	N III	4	6	2.44E−02	295.1692	Ne II	4	2	7.71E−03
270.300	Ca V	5	7	7.40E−02	282.42	Al IX	2	2	1.24E−01	295.6055	Fe VI	8	8	2.11E−03
270.324	C III	1	3	7.72E−03	283.1406	Ne III	5	3	7.35E−04	295.6337	Fe VI	4	6	2.00E−02
270.493	Ca V	5	5	1.31E−02	283.1567	Ne III	5	5	1.10E−02	295.8396	S IV	4	6	7.99E−03
270.521	Fe XIV	4	2	6.96E−02	283.1803	Ne III	5	7	6.18E−02	295.8506	Ne II	2	2	7.69E−03
270.570	Ca V	5	3	8.79E−04	283.6573	Ne III	3	3	1.84E−02	295.9178	S IV	4	4	8.88E−04
271.0807	N III	2	2	6.34E−04	283.6734	Ne III	3	5	5.51E−02	296.0813	Fe VI	6	6	2.14E−03
271.2089	N III	4	2	6.34E−04	283.8813	Ne III	1	3	7.34E−02	296.117	Si IX	5	5	5.86E−02
271.98	Si X	2	2	3.49E−02	284.04	Al IX	4	4	1.55E−01	296.213	Si IX	5	3	1.95E−02
272.263	Ca V	3	5	6.55E−02	284.163	Fe XV	1	3	8.24E−01	296.3170	Fe VI	10	8	3.70E−05
272.342	Ca V	3	3	2.19E−02	284.970	Ca V	5	3	6.58E−02	296.5494	Ca IV	4	2	1.59E−03
272.524	N III	2	4	1.10E−02	285.587	S XI	3	3	1.56E−02	296.6760	Fe VI	8	6	5.93E−05
272.639	Si VII	5	3	3.56E−02	285.822	S XI	3	5	4.68E−02	296.9570	Ca III	1	3	1.17E+00
272.654	N III	4	4	1.10E−03	285.8574	N III	2	2	1.91E−03	299.3170	Ca IV	2	2	1.58E−03
272.654	N III	4	6	9.92E−03	286.0000	N III	4	2	1.91E−03	299.518	S XII	4	6	5.10E−02
272.990	Ca V	1	3	8.71E−02	286.0949	S V	1	3	9.83E−02	299.6596	N III	2	2	5.45E−03
273.5339	S IV	2	4	2.73E−03	286.38	Al IX	4	2	3.07E−02	299.792	S XII	4	4	5.66E−03
273.7903	S IV	2	2	5.47E−03	286.936	Ca V	3	3	6.53E−02	299.8163	N III	4	2	5.44E−03
273.9770	N III	2	2	8.10E−04	287.655	Ca V	1	3	6.52E−02	300.3314	S IV	2	2	3.41E−03
274.051	C III	1	3	1.13E−02	288.4232	C III	1	3	3.25E−03	300.5170	Si IV	2	4	2.07E−03
274.1079	N III	4	2	8.10E−04	288.434	S XII	2	4	5.89E−02	300.5315	Si IV	2	2	1.04E−03
274.175	Si VII	3	1	4.72E−02	289.151	Fe XIV	4	2	5.48E−02	300.56	Al IX	2	2	3.77E−02
274.203	Fe XIV	2	2	5.78E−02	289.9296	Fe VI	6	8	8.82E−04	301.1921	S IV	4	2	3.40E−03
274.2476	S IV	4	4	6.82E−03	290.4669	Fe VI	4	6	1.85E−03	302.190	Ca XVIII	2	4	5.38E−02
274.5053	S IV	4	2	1.37E−03	290.4998	Fe VI	8	8	1.32E−02	303.325	Si XI	1	3	2.65E−01
275.2824	O III	1	3	1.39E−02	290.690	Si IX	1	3	7.95E−02	303.355	Fe XIII	1	3	6.49E−02
275.353	Si VII	5	5	1.06E−01	290.8446	S IV	2	2	2.07E−03	303.4129	O III	1	3	1.60E−01
275.3682	O III	3	3	1.39E−02	290.8989	Fe VI	6	6	2.25E−02	303.4607	O III	3	1	5.32E−02
275.5146	O III	5	3	1.39E−02	291.0197	Fe VI	4	2	6.46E−02	303.5171	O III	3	3	3.99E−02
275.667	Si VII	3	3	3.52E−02	291.1869	Fe VI	10	8	9.23E−02	303.6223	O III	3	5	6.66E−02
276.154	Mg VII	1	3	1.12E−01	291.3260	C III	1	3	4.51E−02	303.6950	O III	5	3	3.99E−02
276.193	N III	2	4	1.65E−02	291.3660	Fe VI	4	4	2.58E−02	303.7804	He II	2	4	2.77E−01
276.326	N III	4	4	1.66E−03	291.4730	Fe VI	8	6	7.90E−02	303.7858	He II	2	2	1.39E−01
276.326	N III	4	6	1.49E−02	291.566	S XI	5	3	6.11E−04	303.8003	O III	5	5	1.20E−01
276.4274	Fe VI	6	8	2.91E−04	291.578	S XI	5	7	5.13E−02	305.05	Al IX	4	2	3.72E−02
276.839	Si VII	1	3	1.40E−01	291.6517	S IV	4	2	2.06E−03	305.5962	O III	1	3	4.70E−01

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
305.6561	O III	3	5	3.52E−01	322.757	Ca V	5	5	1.75E−03	335.410	Fe XVI	2	4	2.65E−01
305.7019	O III	3	3	1.18E−01	323.0680	Ca IV	2	4	1.56E+00	336.553	Ar V	3	5	5.94E−02
305.7562	N III	2	2	6.79E−03	323.307	Mg IV	2	2	8.65E−02	336.554	Ca V	3	3	4.02E−03
305.7674	O III	5	7	3.95E−01	323.4307	N III	2	4	1.73E−02	337.543	Ca V	1	3	1.60E−02
305.8365	O III	5	5	7.06E−02	323.4872	N III	2	2	3.48E−02	337.554	Ar V	1	3	1.42E−01
305.8824	O III	5	3	4.70E−03	323.51	Al VIII	1	3	8.51E−02	337.993	Ar V	5	5	1.07E−01
305.9193	N III	4	2	6.79E−03	323.6133	N III	4	4	4.34E−02	338.056	Ca V	3	5	6.66E−03
307.249	Al VI	5	3	3.76E−02	323.6698	N III	4	2	8.69E−03	338.426	Ar V	3	3	3.55E−02
308.563	Al VI	3	1	4.99E−02	323.8752	S IV	2	2	3.19E−05	338.825	Ca VII	1	3	1.14E+00
309.596	Al VI	5	5	1.12E−01	324.109	Ca V	3	3	2.90E−03	338.8312	Ca IV	4	2	1.05E−01
309.850	Al VI	3	3	3.73E−02	324.477	Ca V	5	7	9.73E−03	339.006	Mg VIII	4	2	4.05E−02
310.1697	C III	1	3	2.84E−02	324.5682	Ne II	4	4	5.00E−04	339.007	Ar V	3	1	4.71E−02
310.2335	Si IV	2	4	3.25E−03	324.5686	Ne II	4	6	4.50E−03	339.882	Ar V	5	3	3.53E−02
310.2575	Si IV	2	2	1.63E−03	324.8763	S IV	4	2	3.18E−05	339.966	Ca VII	3	5	8.53E−01
310.907	Al VI	1	3	1.49E−01	325.026	Ca V	1	3	1.16E−02	340.2839	Ca IV	4	4	5.22E−01
311.5476	N III	2	4	1.59E−02	325.281	Ca V	3	5	8.67E−03	340.385	Ca V	5	3	2.83E−01
311.549	Fe XIII	3	5	2.63E−02	325.31	Al VIII	3	1	2.82E−02	340.700	Ca VII	3	3	2.84E−01
311.6309	N III	4	6	1.44E−02	325.31	Al VIII	3	5	3.53E−02	341.113	Fe XI	5	3	1.60E−02
311.7170	N III	4	4	1.60E−03	325.31	Al VIII	3	3	2.12E−02	341.2868	Ca IV	4	2	4.50E−01
311.796	Mg VIII	2	4	6.86E−02	325.3924	Ne II	2	4	4.99E−03	341.4206	S IV	2	4	4.64E−03
311.926	Na VI	1	3	1.24E−01	326.5170	Ne II	4	4	3.94E−03	341.7995	S IV	2	2	9.27E−03
312.164	Fe XIII	3	3	1.58E−02	326.5376	Ne II	4	6	3.55E−02	341.949	Si IX	1	3	7.05E−02
312.237	Al VI	3	5	6.17E−02	326.7856	Ne II	4	2	2.38E−02	342.395	Ca VII	5	7	9.48E−01
312.4202	C IV	2	4	1.35E−01	327.1371	Si IV	2	4	5.57E−03	342.4492	Ca IV	2	2	4.15E−01
312.4511	C IV	2	2	6.78E−02	327.1811	Si IV	2	2	2.79E−03	342.5332	S IV	4	4	1.16E−02
312.606	Na VI	3	3	1.23E−01	327.2441	Ne II	4	2	7.04E−03	342.817	Ca VII	5	5	1.69E−01
313.0580	Ne III	5	3	5.46E−02	327.2605	Ne II	4	4	3.51E−02	342.9146	S IV	4	2	2.31E−03
313.5385	Ne II	4	4	1.38E−03	327.3511	Ne II	2	4	3.93E−02	343.194	Ca V	3	3	2.80E−01
313.6897	Ne III	3	3	5.45E−02	327.6210	Ne II	2	2	2.38E−02	343.564	Ca VII	5	3	1.12E−02
313.745	Na VI	5	3	1.23E−01	328.0819	Ne II	2	2	2.81E−02	343.9331	Ca IV	2	4	2.07E−01
313.754	Mg VIII	2	2	1.37E−01	328.0984	Ne II	2	4	1.41E−02	344.223	Ca V	1	3	2.80E−01
313.9637	Ne III	1	3	5.45E−02	328.20	Al VIII	5	3	2.10E−02	344.760	Ca XVIII	2	2	2.36E−02
314.3075	Ne II	2	4	5.50E−04	328.20	Al VIII	5	5	6.30E−02	344.951	Si IX	3	3	1.74E−02
314.33	Si VIII	4	2	2.99E−02	328.4717	Ne II	4	2	7.95E−04	344.9577	Ca IV	2	2	4.46E−01
314.4652	Ne II	4	6	1.40E−02	328.9752	Ne II	4	4	3.97E−03	345.124	Si IX	3	5	5.24E−02
314.7151	N III	2	4	1.94E−01	329.1090	Ca IV	4	4	8.20E−02	345.723	Fe X	4	2	2.86E−02
314.8564	N III	4	6	1.74E−01	329.3158	Ne II	2	2	3.17E−03	346.852	Fe XII	4	2	1.78E−02
314.8879	N III	4	4	1.93E−02	329.3802	Ca IV	4	2	1.23E−01	347.029	Ca VII	1	3	4.64E−01
315.039	Mg VIII	4	4	1.69E−01	329.6655	S IV	2	4	1.95E−02	347.40	Si X	2	4	6.62E−02
315.2188	F III	4	6	6.76E−02	329.7741	Ne II	4	4	9.29E−03	347.972	Ca VII	3	1	1.54E−01
315.5361	F III	4	4	4.50E−02	329.8219	Ne II	2	4	1.58E−03	348.183	Fe XIII	1	3	5.33E−02
315.7465	F III	4	2	2.25E−02	330.2163	Ne II	4	2	1.85E−03	348.7892	F II	5	3	5.57E−03
316.21	Si VIII	4	4	5.94E−02	330.5472	S IV	4	6	1.76E−02	348.7951	F II	5	5	1.68E−02
317.039	Mg VIII	4	2	3.37E−02	330.6249	Ne II	2	4	3.71E−03	348.997	Ca VII	3	3	1.16E−01
318.4521	Ne II	4	2	5.02E−04	330.6595	Ne II	4	4	4.22E−03	349.046	Fe XI	3	1	2.08E−02
318.8245	Ne II	4	4	2.51E−03	330.7027	S IV	4	4	1.95E−03	349.2011	F II	3	1	7.42E−03
319.0550	Ne II	4	4	9.17E−03	330.7887	Ne II	4	6	3.80E−02	349.2045	F II	3	3	5.57E−03
319.2455	Ne II	2	2	2.00E−03	331.0694	Ne II	2	2	7.40E−03	349.2104	F II	3	5	9.29E−03
319.3475	Ne II	4	6	2.59E−02	331.4350	Ca IV	4	4	6.11E−01	349.3862	F II	1	3	2.22E−02
319.4825	Ne II	4	2	1.83E−03	331.5149	Ne II	2	4	4.21E−02	349.617	Si IX	5	3	6.90E−04
319.6197	Ne II	2	4	1.00E−03	331.9845	Ca IV	4	6	7.32E−01	349.6391	Ar III	5	5	4.97E−03
319.83	Si VIII	4	6	8.82E−02	332.1048	S IV	2	4	1.50E−03	349.7947	Ar III	5	3	1.66E−03
319.8460	Ca IV	4	4	1.58E−01	332.1348	N III	2	2	6.14E−03	349.795	Si IX	5	5	1.03E−02
319.8514	Ne II	2	4	3.66E−03	332.3273	N III	4	2	6.14E−03	349.873	Si IX	5	7	5.79E−02
319.9245	Ne II	4	4	2.87E−03	332.5213	Ca IV	2	4	8.12E−01	350.645	Na VII	2	4	7.54E−02
319.9820	Ca IV	4	6	1.41E+00	332.6404	S IV	4	6	1.35E−03	351.0039	Ar III	3	5	2.75E−03
320.2809	Ne II	2	2	7.31E−03	332.79	Al X	1	3	2.87E−01	351.0887	Mg V	5	3	3.96E−02
320.7251	Ne II	2	4	2.87E−02	332.7982	Ca IV	2	2	4.87E−01	351.1607	Ar III	3	3	1.65E−03
320.803	Fe XIII	5	5	4.60E−02	333.1575	S IV	4	4	1.49E−04	351.2234	Ar III	3	1	2.20E−03
320.994	Mg IV	4	2	8.71E−02	333.852	Ca V	5	3	4.05E−03	351.371	Ca VII	3	5	1.91E−01
321.0267	S IV	2	2	8.89E−03	334.171	Fe XIV	2	4	7.09E−02	351.7265	Ar III	1	3	6.58E−03
321.455	Fe XIII	5	3	1.53E−02	334.8960	Ca IV	2	4	2.42E−01	351.9658	Ar III	5	3	7.23E−04
321.602	Ca V	5	3	1.17E−04	335.253	Mg VIII	2	2	4.10E−02	351.9899	Ar III	5	5	1.08E−02
322.0102	S IV	4	2	8.86E−03	335.330	Ca V	5	5	1.21E−02	352.003	Ca VII	5	3	1.15E−01
322.5741	C III	1	3	4.52E−02	335.357	Ca V	3	1	5.37E−03	352.106	Fe XII	4	4	3.50E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
352.15	Al VII	4	2	3.17E−02	361.9708	Fe V	7	7	2.20E−03	371.7263	Ar III	5	5	8.95E−03
352.2009	Mg V	3	1	5.27E−02	362.3765	Fe V	7	5	1.26E−03	371.7425	Ar III	5	7	5.02E−02
352.2086	Ar III	5	7	6.07E−02	362.4544	Ne II	2	2	9.78E−03	371.7736	Ar III	5	3	5.97E−04
352.2436	Ne II	4	2	2.52E−03	362.6004	Fe V	9	7	7.33E−04	372.025	Fe XIII	5	5	7.49E−03
352.275	Na VII	2	2	1.50E−01	363.4426	Fe V	1	3	4.39E−03	372.0751	Na II	1	3	2.18E−01
352.662	Fe XI	5	5	4.65E−02	363.6304	Fe V	3	3	3.65E−04	372.240	Fe XIII	5	3	4.99E−04
352.9549	Ne II	4	4	1.25E−02	363.773	Mg VII	1	3	9.20E−02	373.2693	Ar III	3	5	4.46E−02
353.0920	Mg V	5	5	1.18E−01	363.9947	Fe V	5	3	1.54E−03	373.3171	Ar III	3	3	1.49E−02
353.2145	Ne II	2	2	1.00E−02	364.1512	Fe V	3	1	1.46E−03	373.8027	O III	3	5	3.47E−02
353.294	Na VII	4	4	1.88E−01	364.2815	Fe V	5	7	5.14E−03	373.9566	Ar III	1	3	5.93E−02
353.3005	Mg V	3	3	3.94E−02	364.467	Fe XII	4	6	5.07E−02	374.0036	O III	1	3	8.31E−02
353.3489	Ar III	3	3	1.80E−02	364.7942	Fe V	7	7	2.56E−02	374.0725	O III	5	5	6.23E−02
353.3731	Ar III	3	5	5.40E−02	364.9108	N II	1	3	1.03E−03	374.1620	O III	3	3	2.08E−02
353.4231	F II	5	5	2.15E−02	364.9715	Fe V	3	5	1.92E−02	374.1977	N III	2	4	4.41E−01
353.4661	F II	5	3	7.16E−03	364.9756	N II	3	3	1.03E−03	374.3278	O III	3	1	2.76E−02
353.77	Al VII	4	4	6.31E−02	365.0850	N II	5	3	1.03E−03	374.4324	O III	5	3	2.07E−02
353.833	Fe XIV	4	6	6.03E−02	365.177	Mg VII	3	1	3.05E−02	374.4342	N III	4	6	3.97E−01
353.8496	F II	3	5	1.19E−02	365.234	Mg VII	3	5	3.82E−02	374.4421	N III	4	4	4.41E−02
353.8927	F II	3	3	7.15E−03	365.243	Mg VII	3	3	2.29E−02	374.5722	O II	4	6	7.04E−04
353.9131	F II	3	1	9.52E−03	365.3384	Fe V	5	5	4.48E−02	374.7367	Ca IV	2	4	2.12E−02
353.92	Ar XVI	2	4	5.79E−02	365.4336	Fe V	9	7	7.69E−02	374.8098	O II	4	4	4.69E−04
353.9218	Ar III	1	3	7.18E−02	365.4395	Fe V	1	3	7.69E−02	374.9559	O II	4	2	2.35E−04
353.9297	Ne II	2	4	5.01E−03	365.543	Fe X	2	2	2.71E−02	375.2363	F II	5	3	1.72E−02
354.0793	F II	1	3	2.86E−02	365.6294	Fe V	3	3	5.76E−02	375.2995	F II	5	5	5.16E−02
354.163	Ca VIII	2	4	7.68E−01	365.8541	Fe V	7	5	5.12E−02	375.4309	F II	5	3	2.31E−02
354.2249	Mg V	1	3	1.57E−01	365.9976	Fe V	5	3	2.69E−02	375.6921	F II	3	1	2.29E−02
354.418	Ca VII	5	5	3.42E−01	367.3043	Ar III	5	7	1.79E−02	375.7170	F II	3	3	1.72E−02
354.4814	Ar III	5	5	8.76E−03	367.3929	Ar III	5	5	3.20E−03	375.7804	F II	3	5	2.86E−02
354.6056	Ar III	5	3	2.92E−03	367.4744	Ar III	5	3	2.14E−04	375.9122	F II	3	3	2.30E−02
354.950	Na VII	4	2	3.72E−02	367.5530	Ar III	5	3	1.28E−02	375.9274	F II	1	3	6.87E−02
354.9620	Ne II	4	4	3.27E−02	367.674	Mg VII	5	5	6.83E−02	376.1227	F II	1	3	2.30E−02
355.3292	Mg V	3	5	6.53E−02	367.684	Mg VII	5	3	2.27E−02	376.3305	B III	2	4	1.50E−02
355.4512	Ne II	4	2	6.54E−03	368.071	Mg IX	1	3	3.14E−01	376.3335	B III	2	2	7.51E−03
355.8843	Ar III	3	5	4.84E−03	368.0883	Ar III	5	3	1.85E−02	376.6243	F II	5	3	5.12E−04
355.9480	Ne II	2	4	1.31E−02	368.122	Fe XIII	5	7	4.24E−02	376.6501	F II	5	5	7.69E−03
356.0095	Ar III	3	3	2.90E−03	368.3101	Ar III	5	5	5.55E−02	376.6871	F II	5	7	4.30E−02
356.01	Si X	4	6	5.81E−02	368.9002	Ar III	3	5	1.59E−02	376.6930	O II	4	4	2.90E−02
356.05	Si X	4	4	6.46E−03	368.9752	S IV	2	2	1.59E−02	376.7450	O II	4	6	4.36E−02
356.0800	Ar III	3	1	3.87E−03	368.9823	Ar III	3	3	5.31E−03	376.8500	F II	5	3	1.18E−03
356.4399	Ne II	2	2	2.61E−02	369.0615	Ar III	3	3	1.27E−02	377.1086	F II	3	3	1.28E−02
356.519	Fe XI	3	3	1.53E−02	369.153	Fe XI	3	5	2.47E−02	377.1345	F II	3	5	3.84E−02
356.5398	Ne II	4	4	1.11E−02	369.5708	Ar III	3	1	2.46E−02	377.3205	F II	1	3	5.11E−02
356.5911	Ar III	1	3	1.16E−02	369.6013	Ar III	3	3	1.84E−02	377.3349	F II	3	3	1.18E−03
356.639	Fe XIV	4	4	6.64E−03	369.6070	Ar III	1	3	2.12E−02	377.5470	F II	1	3	1.18E−03
356.8001	Ne II	4	6	9.94E−02	369.6450	Ca IV	4	6	1.94E−02	378.1362	Na III	4	2	8.89E−02
356.89	Al VII	4	6	9.39E−02	369.6866	Ar III	1	3	1.27E−02	378.21	Na VII	2	2	4.53E−02
357.5346	Ne II	2	4	1.10E−01	369.8249	Ar III	3	5	3.07E−02	378.6765	F II	5	3	8.68E−05
357.955	Ne V	1	3	1.39E−01	369.8584	F II	5	3	1.31E−03	378.6798	F II	5	5	1.30E−03
357.9692	Ca III	1	3	3.83E+00	370.2281	Ar III	1	3	7.36E−02	378.6837	F II	5	7	7.29E−03
358.486	Ne V	3	3	1.39E−01	370.2751	S IV	4	2	1.60E−02	379.1661	F II	3	3	2.17E−03
358.621	Fe XI	1	3	6.09E−02	370.3254	F II	3	3	1.31E−03	379.1694	F II	3	5	6.50E−03
359.365	Ca VIII	4	6	6.82E−01	370.4086	Ca IV	4	4	2.15E−03	379.3803	F II	1	3	8.66E−03
359.385	Ne V	5	3	1.38E−01	370.5298	F II	1	3	1.31E−03	380.0999	Na III	2	2	8.84E−02
359.638	Fe XIII	3	5	3.88E−02	370.7319	F II	5	3	2.61E−04	381.2	Al VIII	1	3	7.49E−02
359.651	Ca VIII	4	4	7.56E−02	370.7330	F II	5	5	3.92E−03	381.30	Na VII	4	2	4.49E−02
359.838	Fe XIII	3	3	1.29E−02	370.7360	F II	5	7	2.19E−02	383.70	Al VIII	3	3	1.86E−02
360.6558	Fe V	7	9	9.47E−04	370.9562	F II	5	3	6.47E−05	383.79	Al VIII	3	5	5.58E−02
360.761	Fe XVI	2	2	1.22E−01	370.9695	F II	5	5	9.70E−04	384.9573	Fe V	9	11	7.10E−02
361.2808	Fe V	9	9	3.67E−03	370.9901	F II	5	7	5.43E−03	384.97	Al IX	2	4	7.08E−02
361.4321	Ne II	4	2	9.80E−03	371.2012	F II	3	3	6.52E−03	385.0331	Fe V	7	9	6.22E−02
361.4660	Fe V	5	7	1.76E−03	371.2023	F II	3	5	1.96E−02	385.3009	Fe V	5	7	5.57E−02
361.5106	Fe V	3	5	2.57E−03	371.4065	F II	1	3	2.60E−02	385.4622	N II	1	3	2.00E−03
361.5603	Si IV	2	4	1.08E−02	371.4260	F II	3	3	1.62E−03	385.5345	N II	3	3	2.00E−03
361.6589	Si IV	2	2	5.37E−03	371.4394	F II	3	5	4.84E−03	385.6567	N II	5	3	2.00E−03
361.8706	Fe V	5	5	1.10E−03	371.6315	F II	1	3	6.46E−03	385.7456	Fe V	9	9	9.66E−03

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
385.7519	Fe V	3	5	5.41E−02	407.7630	Ca VII	1	3	2.70E−01	429.8428	N II	5	5	1.38E−03
385.8745	Fe V	7	7	1.74E−02	408.3775	Si III	1	3	2.86E−03	429.8964	N II	5	3	4.58E−04
386.1618	Fe V	5	5	2.32E−02	408.6844	Na IV	5	3	4.19E−02	429.9180	O II	4	2	6.18E−02
386.2028	C III	1	3	2.32E−01	409.6136	Na IV	3	1	5.58E−02	430.0410	O II	4	4	1.24E−01
386.2622	Fe V	1	3	1.73E−01	410.3711	Na IV	5	5	1.26E−01	430.1765	O II	4	6	1.86E−01
386.4743	Fe V	3	3	1.44E−02	410.4827	Ca VII	3	3	2.68E−01	430.465	Mg VIII	2	4	7.63E−02
386.5901	Fe V	9	7	6.42E−04	410.5405	Na IV	3	3	4.17E−02	430.4837	N II	3	5	2.13E−04
386.7380	Fe V	7	5	1.65E−03	411.171	Na VIII	1	3	3.48E−01	430.6360	N II	5	5	3.83E−04
386.7848	Fe V	7	9	3.70E−02	411.3337	Na IV	1	3	1.67E−01	430.9113	F II	5	7	8.18E−02
386.8810	Fe V	3	1	5.75E−02	411.8043	B III	2	4	3.31E−02	430.9153	F II	5	5	1.46E−02
386.8858	Fe V	5	3	6.05E−02	411.8113	B III	2	2	1.66E−02	430.9168	F II	5	3	9.74E−04
387.2026	Fe V	5	7	6.90E−02	412.2426	Na IV	3	5	6.94E−02	431.189	Mg VII	3	3	1.99E−02
387.5038	Fe V	9	9	1.43E−01	414.351	Na VI	1	3	1.00E−01	431.2421	N II	1	3	1.24E−02
387.6173	Fe V	3	5	1.01E−01	414.6468	Ca VII	5	3	2.65E−01	431.3129	N II	3	5	5.20E−03
387.6493	O II	4	6	1.89E−03	415.553	Na VI	3	1	3.32E−02	431.313	Mg VII	3	5	5.97E−02
387.73	Al VIII	5	3	7.37E−04	415.553	Na VI	3	5	4.15E−02	431.3326	N II	3	1	4.16E−03
387.7819	Fe V	7	7	8.62E−02	415.553	Na VI	3	3	2.50E−02	431.3326	N II	3	3	3.11E−03
387.82	Al VIII	5	5	1.10E−02	417.568	Na VI	5	3	2.49E−02	431.4025	N II	5	7	7.17E−03
387.8977	O II	4	4	1.26E−03	417.568	Na VI	5	5	7.45E−02	431.4486	N II	1	3	8.53E−03
387.96	Al VIII	5	7	6.18E−02	417.660	S XIV	2	4	6.39E−02	431.4658	N II	5	5	9.34E−03
388.0313	Fe V	5	5	4.30E−02	418.5958	O II	4	6	7.34E−03	431.4855	N II	5	3	3.11E−03
388.0545	O II	4	2	6.32E−04	418.8786	O II	4	4	4.89E−03	431.5393	N II	3	3	2.14E−03
388.5046	Fe V	9	7	2.87E−02	419.0633	O II	4	2	2.44E−03	431.5494	F II	3	5	7.29E−02
388.6130	Fe V	7	5	4.91E−02	419.6440	F IV	1	3	1.58E−01	431.5510	F II	3	3	2.43E−02
389.14	Ar XVI	2	2	2.63E−02	420.0410	F IV	3	3	1.58E−01	431.6516	N II	3	5	6.40E−03
390.2249	F II	5	3	3.79E−03	420.7270	F IV	5	3	1.58E−01	431.6923	N II	5	3	8.54E−05
390.7449	F II	3	3	3.78E−03	422.0107	F II	5	3	1.06E−02	431.8047	N II	5	5	1.28E−03
390.9724	F II	1	3	3.78E−03	422.6188	F II	3	3	1.06E−02	431.8285	F II	1	3	9.71E−02
391.5491	S IV	2	4	5.15E−05	422.8850	F II	1	3	1.06E−02	432.8699	Ca VIII	2	2	3.82E−01
391.9062	O II	4	2	2.73E−02	423.8166	Si III	1	3	1.81E−03	433.176	Ne VI	2	2	5.05E−02
391.9380	O II	4	4	5.47E−02	426.4018	N II	1	3	1.72E−03	434.5568	Ca IV	4	6	6.09E−03
391.9954	O II	4	6	8.21E−02	426.4903	N II	3	3	4.31E−04	434.594	Mg VII	5	3	7.91E−04
392.36	Al IX	4	4	6.94E−03	426.5403	N II	3	5	7.18E−04	434.6710	N II	1	3	5.62E−03
392.40	Al IX	4	6	6.25E−02	426.6302	N II	3	5	3.84E−03	434.7168	N II	3	5	4.22E−03
393.0063	S IV	4	6	4.62E−05	426.6397	N II	5	3	4.31E−04	434.720	Mg VII	5	5	1.19E−02
393.0132	S IV	4	4	5.13E−06	426.6437	Si III	1	3	4.15E−04	434.7629	N II	3	3	1.41E−03
393.6752	F II	5	7	3.22E−02	426.6898	N II	5	5	1.29E−03	434.7925	N II	5	7	4.72E−03
393.6769	F II	5	5	5.75E−03	426.7736	N II	5	7	4.30E−03	434.8721	N II	5	5	8.43E−04
393.6778	F II	5	3	3.83E−04	426.7797	N II	5	5	7.67E−04	434.917	Mg VII	5	7	6.64E−02
394.2061	F II	3	5	2.87E−02	426.8109	N II	1	3	5.12E−03	434.9182	N II	5	3	5.62E−05
394.2070	F II	3	3	9.56E−03	426.8996	N II	3	3	1.28E−03	435.3035	N II	1	3	1.07E−02
394.4385	F II	1	3	3.82E−02	427.0493	N II	5	3	5.11E−05	435.3957	N II	3	1	3.56E−03
395.9206	Ar III	5	3	2.38E−02	427.7926	N II	3	5	2.72E−04	435.3957	N II	3	3	2.67E−03
396.3640	Ar III	5	7	1.39E−01	427.9430	N II	5	5	4.89E−04	435.4119	N II	3	5	4.45E−03
396.3961	Ar III	5	3	1.66E−03	427.9781	N II	1	3	6.51E−04	435.5515	N II	5	3	2.67E−03
396.4263	Ar III	5	5	2.48E−02	428.0673	N II	3	3	1.63E−04	435.5677	N II	5	5	8.00E−03
396.8782	Ar IV	4	6	6.13E−02	428.0954	Ca VIII	2	4	1.94E−01	435.6315	F II	5	3	8.80E−03
397.6716	Ar III	3	3	2.37E−02	428.2178	N II	5	3	1.63E−04	435.6347	F II	5	5	2.64E−02
398.1513	Ar III	3	3	4.12E−02	428.3429	N II	1	3	1.97E−03	435.648	Ne VI	4	2	5.03E−02
398.1818	Ar III	3	5	1.24E−01	428.4260	N II	3	5	8.20E−04	436.1063	N II	1	3	3.82E−02
398.3974	Ar III	1	3	2.36E−02	428.4323	N II	3	1	6.55E−04	436.1394	Ca VIII	4	4	4.74E−01
398.5629	Ar IV	4	4	4.07E−02	428.4323	N II	3	3	4.92E−04	436.1529	N II	3	5	2.87E−02
398.8788	Ar III	1	3	1.65E−01	428.5742	N II	3	5	5.05E−03	436.1989	N II	3	3	9.56E−03
399.281	Mg VI	4	2	3.41E−02	428.5768	N II	5	5	1.48E−03	436.2248	N II	5	7	3.21E−02
399.6569	Ar IV	4	2	2.03E−02	428.5831	N II	5	3	4.92E−04	436.2746	F II	3	1	1.17E−02
399.821	Ne VI	2	4	8.44E−02	428.6916	N II	5	7	5.65E−03	436.2796	F II	3	3	8.79E−03
400.667	Mg VI	4	4	6.78E−02	428.7012	N II	1	3	6.72E−03	436.2828	F II	3	5	1.47E−02
401.136	Ne VI	2	2	1.68E−01	428.7251	N II	5	5	1.01E−03	436.3092	N II	5	5	5.74E−03
401.926	Ne VI	4	4	2.10E−01	428.7907	N II	3	3	1.68E−03	436.3552	N II	5	3	3.82E−04
403.255	Ne VI	4	2	4.18E−02	428.9417	N II	5	3	6.72E−05	436.5632	F II	1	3	3.51E−02
403.310	Mg VI	4	6	1.01E−01	429.140	Mg VII	1	3	8.00E−02	436.672	Mg VIII	4	4	7.52E−03
403.7201	Ca III	1	3	7.00E−01	429.6548	N II	1	3	1.83E−03	436.735	Mg VIII	4	6	6.77E−02
405.8483	Ne II	4	4	6.52E−03	429.6911	N II	3	5	7.65E−04	437.2545	Si III	1	3	4.83E−03
405.8538	Ne II	4	6	5.87E−02	429.7446	N II	3	1	6.11E−04	437.7578	Ca IV	4	4	6.72E−04
407.1377	Ne II	2	4	6.50E−02	429.7446	N II	3	3	4.58E−04	438.7741	C II	2	4	1.28E−03

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
438.8251	C II	2	2	2.57E−03	456.1633	Fe III	7	5	9.58E−05	473.9224	Ar III	5	5	2.69E−01
438.8962	C II	4	4	3.22E−03	456.3495	Fe III	7	7	1.00E−03	474.4931	N II	1	3	4.36E−02
438.9473	C II	4	2	6.43E−04	456.5456	Fe III	7	9	3.59E−03	474.5463	N II	3	1	1.45E−02
439.4419	N II	3	5	2.80E−04	456.6116	Fe III	5	3	1.34E−04	474.6027	N II	3	3	1.09E−02
439.6006	N II	5	5	5.03E−04	456.7941	Fe III	5	5	1.34E−03	474.7067	N II	3	5	1.81E−02
439.6128	N II	1	3	6.70E−04	456.9809	Fe III	5	7	3.21E−03	474.7877	N II	5	3	1.09E−02
439.7069	N II	3	3	1.68E−04	456.9816	Ca IV	2	4	2.89E−04	474.8919	N II	5	5	3.26E−02
439.7666	N II	3	1	2.24E−04	457.0155	Fe III	3	3	1.56E−03	475.1616	Ar III	3	3	4.47E−01
439.8658	N II	5	3	1.68E−04	457.1983	Fe III	3	5	3.12E−03	475.2839	S III	3	5	1.13E−02
441.0960	Ca VIII	4	2	9.37E−02	457.2138	Fe III	1	3	4.68E−03	475.6477	N II	1	3	1.19E−01
441.6097	N II	1	3	1.36E−02	457.4712	Ar VI	2	4	9.42E−01	475.6985	N II	3	5	8.91E−02
441.6771	N II	3	1	4.52E−03	457.8154	Si IV	2	4	2.36E−02	475.7040	Ar III	5	7	1.50E+00
441.7046	N II	3	3	3.39E−03	458.115	Ar V	1	3	5.79E−01	475.7579	N II	3	3	2.96E−02
441.7624	N II	3	5	5.65E−03	458.1548	Si IV	2	2	1.18E−02	475.8038	N II	5	7	9.97E−02
441.8649	N II	5	3	3.39E−03	458.971	Ar V	3	1	1.93E−01	475.8845	N II	5	5	1.78E−02
441.9227	N II	5	5	1.02E−02	459.722	Ar V	3	3	1.45E−01	475.9056	Ar II	4	6	1.06E−01
442.0279	N II	3	5	3.46E−02	459.897	Na V	4	2	3.64E−02	475.9438	N II	5	3	1.19E−03
442.0562	N II	1	3	4.61E−02	460.7284	Ne II	4	2	8.57E−02	476.1981	Ar III	1	3	1.79E+00
442.1334	N II	5	7	3.87E−02	461.050	Na V	4	4	7.27E−02	476.3551	S III	1	3	2.70E−02
442.1513	N II	3	3	1.15E−02	461.0947	Ca IV	2	2	5.73E−04	476.4335	Ar III	3	5	1.34E+00
442.1885	N II	5	5	6.91E−03	461.223	Ar V	3	5	2.40E−01	476.4942	S III	5	5	2.02E−02
442.3119	N II	5	3	4.60E−04	461.7127	Ca VIII	2	2	7.66E−02	477.0338	S III	3	3	6.74E−03
443.8158	Ca IV	2	4	6.62E−03	462.0096	Ar VI	4	6	8.40E−01	477.1049	Ar II	4	4	5.31E−02
445.0393	Ne II	4	2	1.95E−02	462.1373	Ar VI	4	4	9.33E−02	477.3812	S III	3	1	8.98E−03
445.700	S XIV	2	2	2.99E−02	462.3908	Ne II	2	2	8.54E−02	477.5241	Ar II	4	4	1.17E−02
445.999	Ar V	1	3	1.40E+00	462.413	Ar V	5	3	1.44E−01	478.2530	S III	5	3	6.72E−03
446.2552	Ne II	4	4	9.74E−02	463.263	Na V	4	6	1.09E−01	479.0056	Ar II	4	2	1.47E−03
446.5902	Ne II	2	2	7.78E−02	463.932	Ar V	5	5	4.29E−01	480.1925	Ar II	4	4	7.33E−03
446.944	Ar V	3	5	1.05E+00	464.365	F V	2	4	9.63E−02	480.3860	Ar II	2	4	2.10E−02
447.522	Ar V	3	3	3.48E−01	464.9740	Ar II	4	2	9.72E−03	480.407	Ne V	1	3	1.10E−01
447.8146	Ne II	2	4	3.89E−02	465.220	Ne VII	1	3	3.89E−01	480.5269	S III	1	3	1.79E−02
448.2921	N II	1	3	2.57E−03	465.374	F V	2	2	1.92E−01	480.8110	Ar II	2	4	1.17E−01
448.3900	N II	3	3	2.57E−03	465.8367	Ar II	4	6	1.01E−02	480.9698	S III	3	1	5.95E−03
448.5552	N II	5	3	2.57E−03	465.979	F V	4	4	2.40E−01	481.2176	S III	3	3	4.46E−03
448.7736	N II	3	5	6.57E−04	466.1306	Si III	1	3	1.41E−02	481.281	Ne V	3	1	3.66E−02
448.9390	N II	5	5	1.18E−03	466.240	Ca IX	1	3	1.09E+00	481.364	Ne V	3	5	4.57E−02
448.9460	N II	1	3	1.58E−03	466.3528	C II	2	4	2.97E−03	481.364	Ne V	3	3	2.74E−02
449.0441	N II	3	3	3.94E−04	466.4085	C II	2	2	5.92E−03	481.7088	S III	3	5	7.42E−03
449.059	Ar V	5	7	1.17E+00	466.4907	C II	4	4	7.40E−03	481.8536	Ar III	5	3	2.26E−01
449.1228	N II	3	1	5.25E−04	466.5272	Ar III	5	3	8.91E−02	482.3130	Ar II	2	2	5.84E−03
449.2097	N II	5	3	3.93E−04	466.5465	C II	4	2	1.48E−03	482.4550	Fe III	9	11	3.23E−02
449.487	Ar V	5	5	2.08E−01	466.5588	N II	3	5	1.52E−03	482.4583	S III	5	3	4.45E−03
450.072	Ar V	5	3	1.38E−02	466.7281	N II	1	3	3.64E−03	482.4667	Fe III	9	9	4.40E−03
450.5615	Ca IV	4	4	7.32E−04	466.7376	N II	5	5	2.73E−03	482.4788	Fe III	9	7	2.93E−04
451.2090	Ar IV	4	2	5.21E−01	466.8342	N II	3	3	9.10E−04	482.5452	Ar III	5	5	6.75E−01
451.8708	N III	2	2	3.16E−02	466.9339	N II	3	1	1.21E−03	482.9520	S III	5	5	1.33E−02
451.8745	Ar IV	4	4	1.04E+00	466.995	F V	4	2	4.78E−02	482.987	Ne V	5	3	2.73E−02
452.2272	N III	4	2	3.16E−02	467.0132	N II	5	3	9.09E−04	482.987	Ne V	5	5	8.19E−02
452.6394	N II	1	3	2.22E−02	467.3918	Ar III	5	5	2.67E−01	483.4832	Fe III	7	9	2.82E−02
452.6964	N II	3	1	7.41E−03	468.0899	Ar II	2	2	9.65E−03	483.4954	Fe III	7	7	7.92E−03
452.7391	N II	3	3	5.56E−03	468.4782	Ar III	3	1	1.18E−01	483.5076	Fe III	7	5	7.53E−04
452.8161	N II	3	5	9.25E−03	468.9603	Ar III	3	3	8.86E−02	483.5164	Ar II	2	4	2.92E−03
452.9076	N II	5	3	5.55E−03	469.6299	Ar II	4	6	1.93E−02	484.1125	Ar III	3	1	2.98E−01
452.9271	Ar IV	4	6	1.56E+00	469.6327	Ar II	4	4	2.14E−03	484.1668	S III	1	3	5.78E−02
452.9846	N II	5	5	1.67E−02	469.8339	Ar III	3	5	1.48E−01	484.2042	Fe III	5	7	2.53E−02
453.2276	N II	1	3	6.24E−02	469.9699	Ar III	1	3	3.54E−01	484.2164	Fe III	5	5	1.05E−02
453.2569	N II	3	5	4.68E−02	471.0835	Ca VIII	4	2	7.51E−02	484.2288	Fe III	5	3	1.05E−03
453.3276	N II	3	3	1.56E−02	471.9201	F II	5	3	6.97E−04	484.4497	Ar III	3	3	2.24E−01
453.3451	N II	5	7	5.25E−02	471.9492	F II	5	5	1.04E−02	484.5562	S III	3	5	4.34E−02
453.4257	N II	5	5	9.36E−03	471.9962	F II	5	7	5.86E−02	484.6705	Fe III	3	5	2.46E−02
453.4964	N II	5	3	6.25E−04	472.6639	Ar III	5	3	1.80E−02	484.6830	Fe III	3	3	1.23E−02
454.5593	Ca IV	4	2	1.45E−04	472.6808	F II	3	3	1.75E−02	484.8680	S III	3	3	1.44E−02
455.4438	Fe III	9	7	3.73E−05	472.7100	F II	3	5	5.23E−02	484.9061	Fe III	1	3	3.68E−02
455.6391	Fe III	9	9	5.60E−04	472.8115	Ar II	2	4	2.13E−02	485.1487	Ar III	3	5	3.72E−01
455.7561	Fe III	9	11	4.11E−03	473.0137	F II	1	3	6.96E−02	485.2495	S III	5	7	4.85E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
485.5272	Ar III	1	3	8.93E−01	497.1010	Fe III	9	7	1.57E−04	518.9089	Ar II	4	4	3.83E−02
485.8142	S III	5	5	8.65E−03	498.0787	Fe III	7	9	2.01E−04	519.3270	Ar II	4	6	3.45E−01
486.0684	Fe III	9	7	1.14E−03	498.1803	Fe III	7	7	4.69E−04	520.665	Si XII	2	2	3.45E−02
486.1276	S III	5	3	5.76E−04	498.1856	Fe III	7	5	2.68E−04	522.092	Ar V	1	3	3.05E−01
486.2110	Fe III	9	9	5.70E−03	498.4454	Ar II	4	2	4.98E−04	522.2128	He I	1	3	3.07E−02
486.741	Na VII	2	4	8.29E−02	498.9038	Fe III	5	3	3.28E−04	522.7925	Ar II	2	4	3.80E−01
486.8839	Al III	2	4	1.78E−03	498.9328	Fe III	5	7	3.75E−04	524.181	Ar V	3	3	3.03E−01
486.9124	Al III	2	2	8.90E−04	498.9381	Fe III	5	5	2.34E−04	524.6804	Ar II	4	4	1.31E−01
487.0880	Fe III	7	5	1.95E−03	499.3859	Fe III	3	3	7.80E−05	525.6881	Fe IV	6	8	1.83E−01
487.1002	Fe III	7	7	3.42E−03	499.4056	Fe III	3	1	3.12E−04	526.2929	Fe IV	6	6	1.38E−01
487.2272	Ar II	4	2	9.32E−02	499.406	Si XII	2	4	7.19E−02	526.4969	Ar II	4	2	2.60E−02
487.2435	Fe III	7	9	1.47E−03	499.4203	Fe III	3	5	5.46E−04	526.6342	Fe IV	6	4	9.14E−02
487.2783	Ar II	4	4	9.53E−02	499.6228	Fe III	1	3	9.36E−04	527.683	Ar V	5	3	3.01E−01
487.3410	Fe III	9	11	2.91E−05	499.9193	Ar II	4	4	2.49E−03	528.0375	Ar III	5	5	2.72E−03
487.5848	Fe III	9	9	3.97E−06	500.0449	Ar II	4	4	3.25E−04	528.6512	Ar II	2	4	5.20E−02
487.7990	Fe III	9	7	2.64E−07	500.8017	Ar II	4	6	2.93E−03	529.3555	N II	1	3	1.03E−01
487.8074	Fe III	5	5	1.71E−03	501.1897	Ar II	4	4	2.90E−02	529.4132	N II	3	1	3.43E−02
487.8196	Fe III	5	7	2.73E−03	501.3873	Ar II	4	2	5.80E−03	529.4919	N II	3	3	2.57E−02
487.9107	Fe III	5	3	2.39E−03	501.8507	Fe III	9	7	1.07E−04	529.6372	N II	3	5	4.29E−02
488.1085	Ne III	5	3	4.38E−02	501.9760	Fe III	9	9	1.61E−03	529.7223	N II	5	3	2.57E−02
488.2683	Fe III	3	5	3.98E−03	502.0277	Ar II	2	2	1.97E−03	529.8677	N II	5	5	7.71E−02
488.3718	Fe III	3	3	5.68E−04	502.1599	Fe III	9	11	1.17E−02	529.8965	Ar III	5	7	2.66E−02
488.4530	Ar III	5	3	2.58E−01	502.8553	Fe III	7	5	2.74E−04	530.2754	C II	2	4	3.62E−02
488.5983	Fe III	1	3	6.81E−03	502.9507	Fe III	7	7	2.88E−03	530.3587	C II	4	6	3.25E−02
488.6231	Fe III	7	9	2.55E−05	503.0765	Fe III	7	9	1.03E−02	530.4489	Ar III	5	3	9.02E−04
488.7928	Ar II	4	6	1.80E−01	503.5229	Ar II	2	4	9.85E−04	530.4538	C II	4	4	3.62E−03
488.8382	Fe III	7	7	7.11E−06	503.5515	Fe III	5	3	3.85E−04	530.4954	Ar II	2	2	1.04E−01
488.8742	Ne III	3	1	5.82E−02	503.6220	Fe III	5	5	3.85E−03	531.1566	Ar III	3	5	1.50E−03
488.9616	Ar II	4	2	1.90E−02	503.6503	Ar II	2	4	3.23E−03	532.4100	Ar III	5	5	4.73E−03
488.9797	Fe III	7	5	6.78E−07	503.7177	Fe III	5	7	9.22E−03	533.5116	N II	1	3	2.99E−01
489.1954	Ar II	4	4	2.00E−02	504.0427	Fe III	3	3	4.47E−03	533.5818	N II	3	5	2.24E−01
489.5045	Ne III	5	5	1.31E−01	504.1133	Fe III	3	5	8.96E−03	533.5966	Ar III	3	3	8.96E−04
489.5627	Fe III	5	7	2.27E−05	504.2840	Fe III	1	3	1.35E−02	533.6501	N II	3	3	7.48E−02
489.570	Na VI	1	3	8.60E−02	504.8117	Ar II	2	4	1.15E−02	533.7293	N II	5	7	2.51E−01
489.6459	Ne III	3	3	4.36E−02	505.0121	Ar II	2	2	2.30E−02	533.8157	N II	5	5	4.48E−02
489.7047	Fe III	5	5	9.48E−06	506.163	F V	2	2	5.74E−02	533.8841	N II	5	3	2.99E−03
489.7913	Fe III	5	3	9.48E−07	507.0576	He I	1	3	1.88E−03	534.2643	Ar III	5	3	3.14E−04
490.1692	Fe III	3	5	2.20E−05	507.3883	O III	1	3	1.85E−01	534.6659	Ar III	3	1	1.19E−03
490.2560	Fe III	3	3	1.10E−05	507.6799	O III	3	3	1.85E−01	534.9041	Ar III	1	3	3.58E−03
490.3138	Ne III	1	3	1.75E−01	507.7178	He I	1	3	2.59E−03	535.206	F VI	1	3	4.43E−01
490.4843	Fe III	1	3	3.31E−05	508.081	F V	4	2	5.72E−02	535.5811	Ar III	3	5	2.35E−02
490.6495	Ar II	2	2	9.26E−02	508.1778	O III	5	3	1.85E−01	537.0296	He I	1	3	7.52E−02
490.7013	Ar II	2	4	3.79E−02	508.4347	Ar III	5	7	1.58E−01	537.4577	Ar III	3	3	7.80E−03
491.0508	Ne III	3	5	7.26E−02	508.4849	N II	3	5	4.35E−03	538.4075	C II	2	2	6.05E−04
491.1208	Ar III	3	3	2.57E−01	508.6044	Ar III	5	5	2.82E−02	538.5914	C II	4	2	6.04E−04
491.248	Na VI	3	3	2.14E−02	508.6431	He I	1	3	3.69E−03	538.7842	Ar III	1	3	3.11E−02
491.340	Na VI	3	5	6.43E−02	508.6680	Ar III	5	3	1.88E−03	539.0861	O II	4	6	6.52E−02
491.862	Na VII	4	4	8.21E−03	508.6680	N II	1	3	1.05E−02	539.3950	Ca VII	1	3	6.65E−02
491.949	Na VII	4	6	7.38E−02	508.6974	N II	5	5	7.84E−03	539.5473	O II	4	4	4.35E−02
492.2282	Ar III	1	3	2.56E−01	508.7940	N II	3	3	2.61E−03	539.8540	O II	4	2	2.17E−02
492.4084	Ar II	2	2	7.54E−02	508.9282	N II	3	1	3.48E−03	541.128	Ne IV	4	2	3.90E−02
492.6455	Ar II	2	4	1.99E−01	509.0067	N II	5	3	2.61E−03	541.1818	Fe III	9	11	5.68E−02
494.066	Na VI	5	3	8.52E−04	509.9979	He I	1	3	5.53E−03	541.1856	Fe III	9	9	7.75E−03
494.159	Na VI	5	5	1.27E−02	510.5509	Ar II	4	4	9.56E−04	541.1885	Fe III	9	7	5.17E−04
494.381	Na VI	5	7	7.15E−02	510.5564	Ar II	4	6	8.60E−03	542.073	Ne IV	4	4	7.79E−02
494.5586	Fe III	9	7	6.09E−03	511.1384	Al III	2	4	2.96E−03	542.4650	Fe III	7	9	4.96E−02
495.4251	Fe III	7	5	4.05E−03	511.1907	Al III	2	2	1.48E−03	542.4679	Fe III	7	7	1.39E−02
495.6268	Fe III	7	7	2.03E−03	511.4976	Ar III	3	5	1.40E−01	542.4706	Fe III	7	5	1.32E−03
496.0420	Fe III	5	3	2.13E−03	511.5619	Ar III	3	3	4.67E−02	543.2033	Ar II	4	2	1.30E−01
496.1693	Fe III	5	5	3.54E−03	512.0982	He I	1	3	8.83E−03	543.2580	C II	2	4	3.49E−02
496.3716	Fe III	5	7	4.05E−04	512.7635	Ar III	1	3	1.87E−01	543.3603	Fe III	5	7	4.44E−02
496.5186	Fe III	3	3	4.55E−03	514.3100	Ar II	2	4	9.49E−03	543.3629	Fe III	5	5	1.85E−02
496.6462	Fe III	3	5	1.52E−03	515.6166	He I	1	3	1.54E−02	543.3638	Fe III	5	3	1.85E−03
496.7528	Fe III	1	3	6.06E−03	518.2383	B III	2	4	1.02E−01	543.4432	C II	4	6	3.15E−02
496.9999	Fe III	9	9	7.84E−04	518.2652	B III	2	2	5.11E−02	543.4453	C II	4	4	3.49E−03

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
543.7305	Ar II	4	2	8.11E−03	572.0137	Ar II	4	2	5.15E−02	630.7851	Ca VII	3	3	1.25E−02
543.892	Ne IV	4	6	1.16E−01	572.033	Ne V	5	3	9.22E−04	633.8441	Ca VI	4	4	3.18E−02
543.9349	Fe III	3	5	4.31E−02	572.105	Ne V	5	5	1.38E−02	635.9945	C II	2	2	6.14E−03
543.9358	Fe III	3	3	2.16E−02	572.338	Ne V	5	7	7.74E−02	636.2511	C II	4	2	6.13E−03
544.1072	Ca VII	3	5	2.75E−02	572.6439	F IV	5	3	3.04E−02	636.8246	Ar III	5	3	2.67E−05
544.1644	Ca VII	3	3	1.65E−02	572.6603	F IV	5	5	9.11E−02	637.2601	Ar III	5	5	4.00E−04
544.2168	Fe III	1	3	6.47E−02	573.3620	Ar II	4	4	2.57E−01	637.2853	Ar III	5	7	2.25E−03
544.2719	Ca VII	3	1	2.20E−02	574.010	Ca X	2	2	1.66E−01	637.9170	Ca V	5	3	1.39E−02
544.7332	Ar VI	2	4	2.18E−01	574.3888	S II	4	6	3.68E−03	639.1500	Ca VII	5	7	4.13E−02
546.1768	Ar II	4	4	4.04E−02	576.0509	S II	4	4	2.44E−03	640.4144	Ca VII	5	5	7.36E−03
546.8533	F II	5	3	5.55E−02	576.7365	Ar II	2	2	2.05E−01	640.4161	S II	4	2	8.68E−02
547.4606	Ar II	2	2	1.29E−01	576.8748	C II	2	2	2.34E−03	640.6720	Ca VII	5	3	4.90E−04
547.5408	B II	1	3	2.42E−02	576.9780	S II	4	2	1.22E−03	640.9043	S II	4	4	1.74E−01
547.8750	F II	3	3	5.54E−02	577.0859	C II	4	2	2.34E−03	641.3669	Ar III	3	3	6.64E−04
547.9961	Ar II	2	2	3.22E−02	578.1072	Ar II	2	4	1.02E−01	641.7715	S II	4	6	2.60E−01
548.3223	F II	1	3	5.54E−02	578.6044	Ar II	4	4	5.50E−02	641.8086	Ar III	3	5	1.99E−03
548.9044	Ar VI	2	2	4.33E−01	580.2632	Ar II	4	6	4.93E−01	641.9041	Ca VI	4	6	4.71E−02
549.3195	C II	2	4	6.06E−03	582.8450	Ca VIII	2	4	7.25E−02	643.1042	Ca V	3	1	1.83E−02
549.3785	C II	2	2	1.21E−02	583.4371	Ar II	2	4	5.45E−01	643.2568	Ar III	1	3	2.64E−03
549.5110	C II	4	4	1.51E−02	584.3340	He I	1	3	2.85E−01	644.6349	N II	1	3	2.24E−01
549.5700	C II	4	2	3.03E−03	585.754	Ar VII	1	3	1.24E+00	644.8372	N II	3	3	2.24E−01
550.031	Al XI	2	4	7.73E−02	586.1955	B II	1	3	5.14E−02	645.1789	N II	5	3	2.24E−01
550.4810	Ar II	2	4	1.60E−02	588.9153	Ar VI	2	2	8.73E−02	646.5344	Ca V	5	5	4.10E−02
551.1218	S IV	2	2	8.69E−02	593.5055	S II	4	2	2.76E−02	647.8551	Ca V	3	3	1.37E−02
551.3621	Ar VI	4	4	5.39E−01	593.8317	S II	4	4	5.52E−02	651.5312	Ca V	1	3	5.41E−02
551.4479	Ca VII	5	5	4.88E−02	594.0723	Fe III	9	7	1.09E−02	654.031	F V	2	4	9.99E−02
551.5066	Ca VII	5	3	1.63E−02	594.4699	S II	4	6	8.28E−02	655.9997	Ca IV	4	2	2.95E−02
551.6808	C II	2	2	1.12E−03	594.8000	C II	2	4	1.17E−01	656.1211	F III	4	2	4.18E−02
551.8739	C II	4	2	1.12E−03	595.0219	C II	4	6	1.06E−01	656.7450	Ca V	3	5	2.24E−02
553.3293	O IV	2	4	1.12E−01	595.0245	C II	4	4	1.17E−02	656.8688	F III	4	4	8.35E−02
553.4593	Ar III	5	3	1.22E−01	595.2906	Fe III	7	5	7.22E−03	657.237	F V	4	4	9.94E−03
554.0268	S IV	4	2	8.65E−02	595.6144	Fe III	7	7	3.61E−03	657.3187	S IV	2	4	1.18E+00
554.0756	O IV	2	2	2.24E−01	596.1650	Fe III	5	3	3.79E−03	657.333	F V	4	6	8.95E−02
554.5134	O IV	4	4	2.79E−01	596.3654	Fe III	5	5	6.31E−03	658.3291	F III	4	6	1.25E−01
555.2628	O IV	4	2	5.58E−02	596.6708	Ar VI	4	2	8.62E−02	661.3959	S IV	4	6	1.06E+00
555.6358	Ar VI	4	2	1.07E−01	596.6903	Fe III	5	7	7.20E−04	661.4554	S IV	4	4	1.17E−01
555.7660	Ar II	4	4	1.74E−06	596.8535	Fe III	3	3	8.11E−03	661.8689	Ar II	4	6	7.93E−02
556.8170	Ar II	4	6	1.57E−05	596.9351	Ca VIII	4	6	6.37E−02	662.2674	S II	4	6	2.77E−02
556.8869	Ar III	3	3	1.21E−01	597.0544	Fe III	3	5	2.70E−03	664.3136	S II	4	4	1.84E−02
557.765	Ca X	2	4	3.43E−01	597.1919	Fe III	1	3	1.08E−02	664.5623	Ar II	4	4	8.77E−03
558.3112	Ar III	1	3	1.21E−01	597.7001	Ar II	4	2	6.86E−02	665.5197	S II	4	2	9.18E−03
558.594	Ne VI	2	4	9.07E−02	597.8576	Ca VIII	4	4	7.07E−03	669.6982	Ca IV	2	2	2.89E−02
558.7550	S II	4	2	6.24E−03	600.6734	S II	4	6	7.68E−03	670.9455	Ar II	2	4	8.68E−02
558.9240	S II	4	4	1.25E−02	602.4410	S II	4	4	5.10E−03	671.0164	N II	3	5	3.20E−02
559.1310	S II	4	6	1.87E−02	602.8585	Ar II	2	2	6.80E−02	671.3864	N II	5	5	5.75E−02
560.2233	Ar II	2	4	1.73E−05	603.4303	S II	4	2	2.55E−03	671.4114	N II	1	3	7.66E−02
560.2394	C II	2	4	5.71E−02	605.6691	F II	5	3	4.41E−02	671.6309	N II	3	3	1.91E−02
560.3173	Al III	2	4	5.35E−03	606.2877	F II	3	1	5.89E−02	671.7734	N II	3	1	2.56E−02
560.4331	Al III	2	2	2.67E−03	606.8039	F II	5	5	1.32E−01	671.8513	Ar II	4	6	8.02E−02
560.4367	C II	4	6	5.14E−02	606.9226	F II	3	3	4.41E−02	672.0016	N II	5	3	1.92E−02
560.4386	C II	4	4	5.71E−03	607.4716	F II	1	3	1.76E−01	672.8563	Ar II	4	4	8.90E−03
562.711	Ne VI	4	4	9.00E−03	608.0621	F II	3	5	7.34E−02	676.1252	F IV	1	3	1.00E−01
562.803	Ne VI	4	6	8.10E−02	608.3968	O IV	2	2	6.70E−02	677.1563	F IV	3	3	2.50E−02
566.6134	Si III	1	3	1.55E−02	609.793	Mg X	2	4	8.42E−02	677.2145	F IV	3	5	7.49E−02
568.120	Al XI	2	2	3.75E−02	609.8286	O IV	4	2	6.69E−02	677.7290	S III	1	3	1.64E+00
568.418	Ne V	1	3	9.28E−02	615.6283	Ne I	1	3	6.48E−03	678.4559	S III	3	5	1.23E+00
569.758	Ne V	3	3	2.31E−02	618.6717	Ne I	1	3	1.60E−02	678.9410	F IV	5	3	9.96E−04
569.830	Ne V	3	5	6.94E−02	619.1024	Ne I	1	3	5.69E−03	678.9996	F IV	5	5	1.49E−02
570.6395	F IV	1	3	1.22E−01	624.3854	Ca VII	1	3	5.03E−02	679.0211	Al II	1	3	8.56E−04
571.1560	S II	4	2	1.20E−02	624.941	Mg X	2	2	4.10E−02	679.1037	S III	3	3	4.09E−01
571.3016	F IV	3	1	4.05E−02	626.8232	Ne I	1	3	1.31E−02	679.2168	F IV	5	7	8.36E−02
571.3640	S II	4	4	2.40E−02	629.6020	Ca VI	4	2	1.60E−02	679.4006	Ar II	2	4	8.81E−02
571.3737	F IV	3	3	3.05E−02	629.7320	O V	1	3	5.15E−01	680.6767	S III	5	7	1.37E+00
571.3900	F IV	3	5	5.07E−02	629.7388	Ne I	1	3	8.56E−03	680.698	F I	4	2	1.95E−02
571.7790	S II	4	6	3.60E−02	630.5353	Ca VII	3	5	3.74E−02	680.9246	S III	5	5	2.45E−01

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
680.9743	S III	3	5	2.85E−02	730.9630	Fe III	5	5	1.16E−02	749.2419	O I	3	3	1.11E−03
681.4888	S III	1	3	6.83E−02	731.1343	Fe III	7	9	9.91E−03	749.2672	O I	3	5	1.85E−03
681.5772	S III	5	3	1.63E−02	731.6140	Fe III	5	7	1.85E−02	749.6279	O I	1	3	4.44E−03
681.719	Na IX	2	4	9.24E−02	731.8454	Fe III	3	1	1.54E−02	750.2215	S IV	4	4	6.24E−01
682.576	F I	2	2	1.95E−02	731.9102	Fe III	3	3	3.85E−03	750.6197	F I	4	2	1.15E−03
682.8788	S III	3	3	1.70E−02	731.9984	Fe III	3	5	2.70E−02	750.6395	F I	2	4	9.62E−03
683.0663	S III	3	1	2.27E−02	732.1288	F I	4	4	1.07E−03	751.8889	F I	4	4	5.76E−03
683.4615	S III	5	5	5.11E−02	732.4192	Fe III	1	3	4.62E−02	752.9035	F I	2	2	4.60E−03
683.5274	Al II	1	3	9.45E−04	733.0300	F I	4	2	2.14E−04	753.7147	Si II	2	4	9.14E−04
684.9981	N III	2	4	1.35E−01	734.2961	Fe III	9	11	1.32E−02	753.7603	S IV	4	2	1.24E−01
685.3800	S III	5	3	1.69E−02	734.3012	F I	2	4	4.26E−04	754.1803	F I	2	4	2.30E−03
685.5151	N III	2	2	2.68E−01	734.4775	F I	4	2	5.49E−04	754.1927	Si II	2	2	1.83E−03
685.8174	N III	4	4	3.35E−01	734.6793	F I	4	4	5.27E−04	754.9369	Ar VI	2	4	6.68E−02
686.3357	N III	4	2	6.70E−02	734.7958	F I	4	6	4.74E−03	755.3500	Si II	4	4	2.28E−03
686.4884	Ar II	4	4	3.74E−04	735.2078	F I	2	2	8.52E−04	755.7654	O I	5	3	1.99E−03
687.0526	C II	2	4	3.36E−01	735.2474	Fe III	9	7	1.20E−04	755.7945	O I	5	5	5.97E−03
687.3453	C II	4	6	3.02E−01	735.3444	Fe III	9	9	1.80E−03	755.8301	Si II	4	2	4.56E−04
687.3521	C II	4	4	3.36E−02	735.4759	F I	4	4	2.75E−03	756.6704	O I	3	3	1.98E−03
689.9354	Al II	1	3	9.95E−04	735.8963	Ne I	1	3	1.49E−01	756.6996	O I	3	5	3.31E−03
691.0373	Ar II	4	2	7.42E−05	736.6639	F I	2	2	2.19E−03	757.0640	O I	1	3	7.95E−03
693.3019	Ar II	2	4	1.48E−04	736.7783	Fe III	5	3	4.31E−04	763.3337	N III	2	2	8.20E−02
693.9473	B II	1	3	9.93E−02	736.8669	F I	2	4	5.26E−03	763.6564	S II	4	2	3.98E−01
694.146	Na IX	2	2	4.54E−02	737.0185	Fe III	7	5	3.07E−04	764.3513	N III	4	2	8.19E−02
695.8289	Al III	2	4	9.26E−03	737.6108	Fe III	7	7	3.22E−03	764.4158	S II	4	4	7.95E−01
696.2170	Al III	2	2	4.62E−03	737.6683	F I	2	4	1.09E−03	765.1467	N IV	1	3	6.16E−01
697.9419	Ar II	2	2	2.94E−04	737.6688	O I	5	3	2.82E−04	765.6838	S II	4	6	1.19E+00
698.7270	S III	1	3	7.83E−01	737.6791	O I	5	5	8.48E−04	767.0653	Ar VI	4	6	5.92E−02
699.4905	Al II	1	3	1.05E−03	737.7085	Fe III	7	9	1.16E−02	767.7290	Ar VI	4	4	6.57E−03
700.1497	S III	3	5	3.26E−01	737.8303	Fe III	3	3	5.01E−03	769.3528	O I	5	3	4.77E−03
700.1883	S III	3	3	1.95E−01	738.3475	Fe III	1	3	1.50E−02	769.4083	O I	5	5	1.43E−02
700.24	Ar VIII	2	4	3.85E−01	738.5310	O I	3	3	2.82E−04	770.2600	O I	3	1	6.35E−03
700.2880	S III	3	1	2.60E−01	738.5413	O I	3	5	4.71E−04	770.2907	O I	3	3	4.76E−03
702.3370	O III	1	3	1.37E−01	738.6667	Fe III	5	5	4.29E−03	770.3464	O I	3	5	7.93E−03
702.7792	S III	5	5	5.84E−01	738.9059	O I	1	3	1.13E−03	770.4089	Ne VIII	2	4	1.03E−01
702.8181	S III	5	3	1.95E−01	739.0710	O I	5	3	3.63E−04	770.6986	O I	1	3	1.90E−02
702.8379	O III	3	1	4.56E−02	739.0792	O I	5	5	1.09E−03	775.3621	Be II	2	2	4.96E−03
702.8957	O III	3	3	3.42E−02	739.2617	Fe III	5	7	1.03E−02	775.3621	Be II	2	4	9.92E−03
702.8996	O III	3	5	5.70E−02	739.7240	Fe III	3	5	1.00E−02	776.9265	F I	4	4	3.54E−03
703.8505	O III	5	3	3.41E−02	739.9365	O I	3	3	3.63E−04	778.0877	F I	4	2	7.06E−04
703.8545	O III	5	5	1.02E−01	739.9447	O I	3	5	6.05E−04	779.3734	F I	2	4	1.41E−03
705.353	Ar V	1	3	6.12E−02	740.3129	O I	1	3	1.45E−03	779.9106	F I	4	4	1.95E−03
709.171	Ar V	3	1	2.03E−02	741.0311	O I	5	3	4.93E−04	780.3240	Ne VIII	2	2	5.05E−02
709.171	Ar V	3	3	1.52E−02	741.0492	O I	5	5	1.48E−03	780.3935	F I	4	6	1.76E−02
709.216	Ar V	3	5	2.53E−02	741.1833	Al II	1	3	1.09E−03	780.5419	F I	2	2	2.82E−03
713.81	Ar VIII	2	2	1.88E−01	741.9012	O I	3	3	4.92E−04	782.3763	F I	2	4	1.94E−02
714.6993	Al II	1	3	1.10E−03	741.9194	O I	3	5	8.21E−04	786.4683	S V	1	3	1.42E+00
715.595	Ar V	5	3	1.51E−02	742.2796	O I	1	3	1.97E−03	787.7105	O IV	2	4	1.11E−01
715.641	Ar V	5	5	4.53E−02	743.5740	Be II	2	2	2.73E−03	790.0069	F I	4	2	3.18E−03
718.0899	Ar II	4	2	3.64E−02	743.5740	Be II	2	4	5.48E−03	790.1122	O IV	4	4	1.10E−02
723.3606	Ar II	4	4	1.81E−01	743.7195	Ne I	1	3	1.21E−02	790.1990	O IV	4	6	9.93E−02
724.2881	S III	1	3	3.52E−01	743.9009	O I	5	3	7.09E−04	791.5136	O I	5	3	1.55E−02
725.5485	Ar II	2	2	1.44E−01	743.9292	O I	5	5	2.13E−03	791.8749	F I	4	4	1.58E−02
725.710	Be II	2	2	1.68E−03	744.7778	O I	3	3	7.09E−04	791.9732	O I	5	5	4.65E−02
725.710	Be II	2	4	3.38E−03	744.8061	O I	3	5	1.19E−03	792.2330	O I	3	1	2.07E−02
725.8584	S III	3	3	3.51E−01	744.9045	S IV	2	4	2.51E−01	792.5063	O I	3	3	1.55E−02
727.4700	F I	4	4	3.15E−04	745.1591	O I	1	3	2.83E−03	792.5370	F I	2	2	1.27E−02
727.5302	F I	4	6	2.83E−03	745.7606	F I	4	4	1.91E−03	792.9381	O I	1	3	6.18E−02
727.6821	Fe III	9	7	7.75E−03	746.7680	F I	4	2	3.82E−04	792.9671	O I	3	5	2.58E−02
728.6849	S III	5	3	3.50E−01	748.0149	F I	2	4	7.61E−04	794.4170	F I	2	4	6.31E−03
728.8121	Fe III	9	9	3.87E−02	748.3546	O I	5	3	1.11E−03	794.4767	Al II	1	3	5.65E−04
729.3490	Fe III	7	5	1.33E−02	748.3694	F I	4	4	9.65E−04	803.2406	Si II	2	4	4.62E−03
729.6149	F I	2	4	3.14E−03	748.3798	O I	5	5	3.33E−03	804.6561	Si II	2	2	1.00E−03
729.9971	Fe III	7	7	2.32E−02	748.3932	S IV	2	2	5.00E−01	805.0981	Si II	4	4	4.61E−04
730.8751	Fe III	5	3	1.62E−02	748.5951	F I	4	6	8.69E−03	805.0981	Si II	4	6	4.15E−03
730.9297	Ar II	2	4	7.15E−02	749.0284	F I	2	2	1.52E−03	806.5202	Si II	4	2	1.00E−03

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
806.9592	F I	4	4	4.83E−03	842.0250	Be II	2	4	2.08E−02	875.7212	N I	4	6	5.33E−03
806.9654	F I	4	6	4.34E−02	842.0306	Be II	2	2	1.04E−02	876.0577	Ar I	1	3	9.30E−02
808.0781	Fe III	9	7	2.28E−03	843.7191	Si II	2	4	1.67E−02	876.0670	N I	4	6	1.87E−03
809.5992	F I	2	4	4.81E−02	843.7651	Ar IV	4	4	2.59E−02	876.6458	N I	4	4	1.25E−03
809.6556	S IV	2	2	1.04E−01	845.4112	Fe III	7	5	4.55E−02	876.9879	N I	4	2	6.22E−04
810.6650	O I	5	3	7.38E−04	845.6911	Fe III	9	7	6.83E−02	877.7983	O I	5	3	1.97E−02
810.9339	Fe III	7	7	7.55E−04	845.7683	Si II	4	6	1.50E−02	877.8787	O I	5	5	5.89E−02
811.0512	O I	5	5	2.22E−03	845.7688	Si II	4	4	1.67E−03	878.7331	Ar III	5	5	2.88E−02
811.2856	Fe III	7	5	1.51E−03	846.5307	Fe III	5	3	2.38E−02	878.9720	O I	3	1	2.61E−02
811.4968	O I	3	1	9.83E−04	847.5805	Fe III	5	5	3.98E−02	879.0194	O I	3	3	1.96E−02
811.7064	O I	3	3	7.38E−04	847.9197	Fe III	3	3	5.11E−02	879.1001	O I	3	5	3.26E−02
812.0936	O I	3	5	1.23E−03	848.0700	Si II	2	2	2.79E−03	879.5507	O I	1	3	7.83E−02
812.1594	O I	1	3	2.95E−03	848.6028	Fe III	1	3	6.80E−02	879.6212	Ar III	3	3	9.60E−03
812.9297	Fe III	5	7	1.51E−04	848.8194	Fe III	7	7	2.27E−02	879.9466	Ar I	1	3	2.68E−02
813.2832	Fe III	5	5	1.32E−03	848.9730	Fe III	3	5	1.70E−02	883.11	F VII	2	4	1.15E−01
813.3788	Fe III	9	9	6.94E−02	850.1409	Si II	4	2	2.78E−03	883.1800	Ar III	1	3	3.83E−02
814.1370	Fe III	9	7	1.38E−02	850.5962	Ar IV	4	6	3.85E−02	884.6967	Mg II	2	4	3.00E−04
814.2379	Fe III	5	3	7.90E−04	850.9068	Fe III	9	9	6.09E−04	884.7189	Mg II	2	2	1.50E−04
814.5651	Fe III	3	5	5.64E−04	851.0063	Fe III	5	7	4.52E−03	885.9729	N I	4	2	3.00E−03
815.5229	Fe III	3	3	1.69E−03	854.0739	Fe III	7	9	1.56E−04	886.2261	N I	4	4	5.99E−03
815.9411	S IV	4	2	1.03E−01	854.2001	Fe III	9	7	1.22E−04	886.3326	N I	4	6	8.99E−03
816.1548	Fe III	1	3	2.25E−03	857.3918	Fe III	7	7	3.63E−04	887.4051	Ar III	3	5	1.58E−02
816.1694	Fe III	3	1	2.77E−02	858.0918	C II	2	2	1.30E−02	887.4580	N I	4	6	3.28E−03
816.2722	Fe III	7	9	1.78E−02	858.5512	Fe III	9	7	1.05E−03	888.0237	N I	4	4	2.19E−03
817.0359	Fe III	7	7	4.14E−02	858.5590	C II	4	2	1.30E−02	888.3719	N I	4	2	1.10E−03
818.3812	Fe III	7	5	2.36E−02	858.6091	Fe III	9	9	1.57E−02	889.7228	Si II	2	4	4.34E−02
818.5752	Si II	2	4	8.18E−03	858.6464	Fe III	7	5	2.69E−03	890.79	F VII	2	2	5.73E−02
818.9707	Fe III	5	3	2.90E−02	859.6232	Fe III	5	7	2.89E−04	892.0011	Si II	4	6	3.89E−02
819.0619	Fe III	5	7	3.30E−02	859.7227	Fe III	9	11	1.15E−01	892.0024	Si II	4	4	4.33E−03
820.2707	Fe III	3	3	6.88E−03	860.5925	Fe III	5	3	3.76E−03	899.4063	Si II	2	2	5.70E−03
820.4139	Fe III	5	5	2.06E−02	860.6215	Mg II	2	4	1.53E−04	901.7359	Si II	4	2	5.69E−03
820.5041	Si II	4	6	7.35E−03	860.6319	Mg II	2	2	7.62E−05	903.6235	C II	2	4	1.68E−01
820.5045	Si II	4	4	8.16E−04	860.8843	Fe III	5	5	3.76E−02	903.9616	C II	2	2	3.36E−01
820.9100	Fe III	1	3	8.25E−02	861.7756	Fe III	7	7	2.82E−02	904.1416	C II	4	4	4.19E−01
820.9211	Si II	2	2	1.60E−03	861.8339	Fe III	7	9	1.01E−01	904.4801	C II	4	2	8.39E−02
821.7184	Fe III	3	5	4.81E−02	862.0280	Fe III	3	3	4.38E−02	906.2074	N I	4	2	5.57E−03
822.152	Ar V	1	3	4.33E−02	862.1904	Fe III	7	5	2.07E−04	906.4316	N I	4	4	1.11E−02
822.8615	Si II	4	2	1.59E−03	862.3208	Fe III	3	5	8.75E−02	906.6185	N I	4	6	1.67E−02
823.2563	Fe III	9	11	1.61E−02	862.4020	N I	4	6	5.35E−04	906.8765	S II	4	6	1.87E−01
824.7988	Fe III	9	9	2.19E−03	862.7341	Fe III	1	3	1.31E−01	907.3752	Mg II	2	4	4.42E−04
826.3869	Fe III	9	7	1.45E−04	862.9877	N I	4	4	3.57E−04	907.4115	Mg II	2	2	2.21E−04
827.029	Ar V	3	5	3.23E−02	863.3394	N I	4	2	1.78E−04	909.6974	N I	4	6	6.67E−03
827.343	Ar V	3	3	1.08E−02	864.0299	Fe III	5	7	8.99E−02	910.2782	N I	4	4	4.45E−03
827.7742	Fe III	7	9	1.40E−02	864.4469	Fe III	5	5	1.80E−04	910.4849	S II	4	4	1.24E−01
829.3738	Fe III	7	7	3.91E−03	864.7423	Fe III	5	3	2.52E−04	910.6454	N I	4	2	2.22E−03
830.6322	Fe III	7	5	3.71E−04	865.2270	N I	4	6	7.68E−04	912.7361	S II	4	2	6.21E−02
831.4615	Fe III	5	7	1.25E−02	865.8346	N I	4	4	5.11E−04	915.6131	N II	1	3	1.60E−01
832.7263	Fe III	5	5	5.19E−03	865.8953	Fe III	3	5	4.19E−04	915.8795	N II	3	1	5.36E−02
832.7583	O II	4	2	4.44E−02	866.1796	N I	4	2	2.56E−04	916.0172	N II	3	5	6.69E−02
832.9294	O III	1	3	1.07E−01	866.1917	Fe III	3	3	5.99E−05	916.0213	N II	3	3	4.02E−02
833.3303	O II	4	4	8.86E−02	866.3054	Fe III	3	1	2.39E−04	916.7068	N II	5	5	1.21E−01
833.6201	Fe III	5	3	5.18E−04	866.8000	Ar I	1	3	1.06E−01	916.7109	N II	5	3	4.02E−02
833.7153	O III	3	3	2.66E−02	866.9046	Fe III	1	3	7.18E−04	919.658	O I	5	3	7.85E−06
833.7487	O III	3	5	8.00E−02	869.4042	N I	4	6	1.16E−03	919.658	O I	5	5	1.18E−04
834.0703	Fe III	3	5	1.21E−02	869.4238	N I	4	4	2.26E−03	919.658	O I	5	7	6.59E−04
834.4654	O II	4	6	1.32E−01	869.4820	N I	4	6	3.40E−03	919.7810	Ar II	4	2	1.81E−02
834.858	Ar V	5	7	3.58E−02	869.7542	Ar I	1	3	1.19E−02	919.917	O I	5	3	1.76E−04
834.9670	Fe III	3	3	6.04E−03	870.0260	N I	4	4	7.71E−04	920.9630	H I	2	2	5.35E−04
835.0589	O III	5	3	1.07E−03	870.3317	Mg II	2	4	2.11E−04	920.9630	H I	2	4	1.07E−03
835.0924	O III	5	5	1.60E−02	870.3463	Mg II	2	2	1.05E−04	920.998	O I	3	3	1.96E−04
835.2891	O III	5	7	8.94E−02	870.3675	N I	4	2	3.86E−04	920.998	O I	3	5	5.88E−04
835.6294	Fe III	1	3	1.81E−02	871.0999	Ar III	5	3	9.70E−03	921.258	O I	3	3	1.75E−04
835.779	Ar V	5	5	6.39E−03	875.2774	N I	4	2	1.78E−03	921.581	O I	1	3	7.83E−04
836.101	Ar V	5	3	4.26E−04	875.5287	Ar III	3	1	1.29E−02	921.841	O I	1	3	1.75E−04
840.0277	Ar IV	4	2	1.30E−02	875.6567	N I	4	4	3.55E−03	921.857	O I	5	3	1.08E−05

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
921.857	O I	5	5	1.62E−04	936.6295	O I	5	7	3.02E−03	958.525	F I	2	4	3.14E−02
921.857	O I	5	7	9.03E−04	936.8022	Fe II	2	2	1.68E−05	963.9903	N I	4	6	1.57E−02
922.200	O I	5	3	2.42E−04	936.8341	Fe II	4	4	1.23E−05	964.6256	N I	4	4	1.05E−02
923.1503	H I	2	2	7.38E−04	937.1225	Fe II	4	6	1.55E−05	965.0413	N I	4	2	5.22E−03
923.1503	H I	2	4	1.48E−03	937.5362	Fe II	4	6	1.46E−05	971.7371	O I	5	3	1.54E−04
923.204	O I	3	3	2.68E−04	937.6515	Fe II	10	12	1.45E−02	971.7376	O I	5	5	2.31E−03
923.204	O I	3	5	8.05E−04	937.8033	H I	2	4	5.20E−03	971.7382	O I	5	7	1.30E−02
923.548	O I	3	3	2.42E−04	937.8035	H I	2	2	2.60E−03	972.5366	H I	2	4	1.93E−02
923.790	O I	1	3	1.07E−03	937.8395	Fe II	2	4	1.33E−05	972.5370	H I	2	2	9.67E−03
923.8784	Fe II	10	8	6.83E−03	937.8405	O I	5	3	8.67E−04	973.2339	O I	3	3	3.84E−03
924.135	O I	1	3	2.42E−04	937.8699	Fe II	10	10	2.22E−03	973.2343	O I	3	5	1.15E−02
924.950	O I	5	3	1.53E−05	938.0112	Fe II	10	8	3.46E−03	973.8852	O I	1	3	1.53E−02
924.950	O I	5	5	2.29E−04	938.0200	O I	3	3	8.99E−04	976.4481	O I	5	3	3.27E−03
924.950	O I	5	7	1.29E−03	938.0200	O I	3	5	2.70E−03	977.0201	C III	1	3	7.67E−01
925.446	O I	5	3	3.50E−04	938.6249	O I	1	3	3.59E−03	977.9594	O I	3	3	3.26E−03
926.2122	Fe II	10	10	3.01E−02	938.7080	Fe II	6	8	3.86E−06	978.6170	O I	1	3	3.26E−03
926.2256	H I	2	4	2.12E−03	939.1614	Fe II	10	8	1.78E−04	988.5778	O I	5	3	5.35E−04
926.2257	H I	2	2	1.06E−03	939.2346	O I	3	3	8.65E−04	988.6549	O I	5	5	8.03E−03
926.306	O I	3	3	3.81E−04	939.5904	Fe II	8	6	6.00E−03	988.7734	O I	5	7	4.49E−02
926.306	O I	3	5	1.15E−03	939.6630	Fe II	4	2	7.29E−03	989.799	N III	2	4	1.22E−01
926.804	O I	3	3	3.50E−04	939.8412	O I	1	3	8.65E−04	989.8731	Si II	2	4	1.71E−01
926.896	O I	1	3	1.52E−03	940.0572	Fe II	6	4	7.47E−03	990.1269	O I	3	3	1.34E−02
927.1745	Fe II	8	8	1.65E−02	940.1924	Fe II	10	10	1.52E−02	990.2043	O I	3	5	4.01E−02
927.394	O I	1	3	3.49E−04	940.6746	Fe II	2	2	4.16E−03	990.8010	O I	1	3	5.34E−02
928.1111	Fe II	8	6	1.19E−02	941.2667	Fe II	8	10	1.22E−02	991.511	N III	4	4	1.22E−02
929.5168	O I	5	3	2.27E−05	941.4091	Fe II	8	8	8.35E−03	991.577	N III	4	6	1.10E−01
929.5168	O I	5	5	3.41E−04	941.5532	Fe II	8	6	5.13E−04	992.6828	Si II	4	6	1.53E−01
929.5168	O I	5	7	1.90E−03	941.7830	Fe II	4	4	2.05E−04	992.6956	Si II	4	4	1.70E−02
929.5250	Fe II	8	10	8.52E−03	942.0945	Fe II	6	6	3.19E−03	993.229	B I	2	4	4.08E−05
929.6128	Fe II	6	8	1.58E−02	942.5676	Fe II	8	8	4.08E−03	993.380	B I	4	4	1.02E−04
930.0233	Fe II	6	4	1.47E−02	942.7991	Fe II	2	4	1.45E−02	1010.903	B I	2	4	1.66E−04
930.2566	O I	5	3	5.32E−04	943.6062	Fe II	8	10	4.30E−03	1011.058	B I	4	4	4.15E−04
930.5543	Fe II	6	6	6.31E−03	943.8278	Fe II	4	6	1.12E−02	1012.495	S III	1	3	4.25E−02
930.5810	Fe II	10	8	3.21E−07	943.9229	Fe II	6	8	7.97E−03	1015.502	S III	3	1	1.41E−02
930.7482	H I	2	2	1.60E−03	944.0678	Fe II	6	6	5.54E−03	1015.567	S III	3	3	1.06E−02
930.7482	H I	2	4	3.21E−03	944.523	S VI	2	2	2.20E−01	1015.779	S III	3	5	1.76E−02
930.8862	O I	3	3	5.67E−04	945.0877	Fe II	6	8	1.03E−02	1020.6989	Si II	2	2	1.51E−02
930.8862	O I	3	5	1.70E−03	945.191	C I	1	3	1.52E−01	1021.108	S III	5	3	1.06E−02
931.4820	O I	1	3	2.27E−03	945.338	C I	3	3	1.52E−01	1021.323	S III	5	5	3.16E−02
931.6282	O I	3	3	5.31E−04	945.579	C I	5	3	1.52E−01	1023.7002	Si II	4	2	1.51E−02
931.7124	Fe II	4	4	4.04E−04	945.7998	Fe II	6	4	9.55E−04	1025.7218	H I	2	4	5.27E−02
932.0537	Ar II	2	2	1.78E−02	945.8083	Fe II	4	6	8.60E−03	1025.7229	H I	2	2	2.63E−02
932.2249	O I	1	3	5.30E−04	946.7033	Mg II	2	4	6.65E−04	1025.7616	O I	5	7	1.58E−02
932.2453	Fe II	4	6	2.21E−02	946.7694	Mg II	2	2	3.32E−04	1025.7626	O I	5	5	2.82E−03
932.6807	Fe II	10	10	3.98E−06	946.8479	Fe II	4	2	1.32E−03	1025.7633	O I	5	3	1.88E−04
932.7069	Fe II	2	4	2.87E−02	947.5468	Fe II	4	4	6.80E−03	1025.9681	Mg II	2	4	9.36E−04
932.8612	Fe II	10	8	4.89E−05	947.8750	Fe II	2	2	9.30E−03	1026.1134	Mg II	2	2	4.68E−04
932.9449	Fe II	8	6	9.25E−07	948.5754	Fe II	2	4	7.38E−03	1027.4305	O I	3	5	1.41E−02
933.1907	Fe II	6	4	1.52E−05	948.6855	O I	5	3	6.25E−05	1027.4313	O I	3	3	4.70E−03
933.3550	Fe II	8	6	3.14E−05	948.6855	O I	5	5	9.37E−04	1028.1571	O I	1	3	1.88E−02
933.378	S VI	2	4	4.45E−01	948.6855	O I	5	7	5.24E−03	1031.9261	O VI	2	4	1.33E−01
933.9252	Fe II	8	8	7.35E−06	949.7429	H I	2	4	9.30E−03	1036.2986	Be II	2	4	5.51E−02
934.8913	Fe II	4	4	3.42E−05	949.7431	H I	2	2	4.65E−03	1036.3193	Be II	2	2	2.75E−02
935.1264	Fe II	6	4	1.73E−06	950.1121	O I	3	3	1.56E−03	1036.3367	C II	2	2	1.22E−01
935.2738	Al II	1	3	3.00E−03	950.1121	O I	3	5	4.68E−03	1037.0182	C II	4	2	1.23E−01
935.4137	Fe II	6	6	9.99E−06	950.7327	O I	1	3	6.24E−03	1037.6167	O VI	2	2	6.61E−02
935.5176	Fe II	10	12	2.59E−05	950.8846	O I	5	3	1.57E−03	1038.29	S I	5	3	7.22E−04
935.7989	Fe II	4	2	2.39E−06	951.871	F I	4	2	1.58E−02	1038.29	S I	5	5	2.16E−03
935.8260	Fe II	6	6	2.98E−05	952.3178	O I	3	3	1.56E−03	1039.2304	O I	5	3	9.04E−03
935.8926	Fe II	2	4	4.87E−05	952.9413	O I	1	3	1.56E−03	1040.9425	O I	3	3	9.03E−03
936.0401	Fe II	8	10	2.19E−05	953.4152	N I	4	2	1.16E−02	1041.6876	O I	1	3	9.02E−03
936.2219	Fe II	8	8	1.75E−05	953.6549	N I	4	4	2.31E−02	1042.58	S I	3	1	9.57E−04
936.3991	Fe II	6	8	1.85E−05	953.9699	N I	4	6	3.47E−02	1042.58	S I	3	5	1.20E−03
936.6295	O I	5	3	3.60E−05	954.827	F I	4	4	7.89E−02	1042.58	S I	3	3	7.18E−04
936.6295	O I	5	5	5.40E−04	955.546	F I	2	2	6.31E−02	1044.51	S I	1	3	2.87E−03

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
1045.75	S I	5	3	4.17E−03	1089.6881	Fe II	8	8	3.90E−03	1122.3438	C I	5	5	8.83E−04
1045.75	S I	5	5	1.25E−02	1091.2987	Fe II	8	6	4.89E−04	1122.447	C I	1	3	5.88E−03
1047.652	B I	2	4	1.15E−03	1092.67	S I	5	5	1.10E−02	1122.5183	C I	1	3	1.40E−03
1047.697	B I	2	2	2.31E−03	1093.0576	Fe II	6	8	9.83E−03	1122.5241	Fe III	9	7	7.97E−02
1047.820	B I	4	4	2.89E−03	1093.06	S I	5	3	3.68E−03	1122.653	C I	3	3	1.48E−03
1047.865	B I	4	2	5.78E−04	1094.6782	Fe II	6	6	5.29E−03	1122.7250	C I	3	3	3.50E−04
1048.2199	Ar I	1	3	2.44E−01	1095.9112	Fe II	6	4	9.12E−04	1122.7727	C I	3	1	4.67E−04
1050.10	S I	3	1	5.53E−03	1096.6073	Fe II	8	6	8.89E−03	1122.8427	Fe II	8	6	5.22E−02
1050.10	S I	3	5	6.92E−03	1096.7824	Fe II	6	4	4.31E−03	1122.994	C I	5	3	5.88E−05
1050.10	S I	3	3	4.15E−03	1096.8768	Fe II	10	8	1.38E−02	1123.0654	C I	5	3	3.50E−04
1050.35	S I	5	5	2.15E−02	1097.0191	Fe II	4	6	8.20E−03	1124.1227	Fe II	6	4	2.53E−02
1050.54	S I	5	3	7.20E−03	1097.42	S I	3	5	6.09E−03	1124.8742	Fe III	7	5	5.31E−02
1052.06	S I	1	3	1.65E−02	1097.82	S I	3	3	3.66E−03	1125.4476	Fe II	10	8	3.00E−03
1054.74	S I	3	5	1.19E−02	1098.02	S I	3	1	4.87E−03	1126.4207	Fe II	6	6	4.96E−02
1054.93	S I	3	3	7.16E−03	1098.2574	Fe II	4	4	6.48E−03	1126.5914	Fe II	4	4	5.67E−02
1055.02	S I	3	1	9.54E−03	1099.0447	Fe II	4	2	1.26E−03	1126.7231	Fe III	5	3	2.78E−02
1055.2617	Fe II	10	8	7.15E−04	1099.1323	Fe II	4	4	9.67E−03	1126.8397	Fe II	8	8	2.90E−02
1056.91	S I	1	3	2.86E−02	1099.6395	Fe II	2	4	7.04E−03	1126.9553	Fe II	8	6	5.20E−03
1059.16	S I	5	3	4.67E−03	1099.96	S I	1	3	1.46E−02	1127.0984	Fe II	10	10	1.32E−02
1059.16	S I	5	5	1.40E−02	1100.0198	Fe II	6	6	8.44E−03	1127.8597	Fe II	6	4	6.47E−03
1059.54	S I	5	3	2.06E−04	1100.4288	Fe II	2	2	8.85E−03	1128.0424	Fe III	7	7	2.64E−02
1059.54	S I	5	5	6.19E−04	1100.5166	Fe II	2	4	1.38E−02	1128.0457	Fe II	2	4	8.10E−02
1059.5641	Fe II	8	8	2.55E−04	1101.5260	Fe II	8	8	4.94E−03	1128.075	C I	1	3	2.04E−03
1060.4420	Fe II	8	6	4.56E−04	1102.3836	Fe II	4	6	4.13E−03	1128.252	C I	3	1	6.80E−04
1062.664	S IV	2	4	4.87E−02	1104.9693	Fe II	6	8	1.09E−03	1128.284	C I	3	3	5.10E−04
1062.7497	Fe II	6	8	5.64E−05	1107.4120	Fe II	10	8	3.37E−05	1128.408	C I	3	5	8.50E−04
1063.1764	Fe II	10	10	6.78E−02	1109.8407	Fe II	8	6	9.71E−05	1128.4833	Fe II	10	10	2.95E−03
1063.63	S I	3	1	6.20E−03	1110.2803	Fe II	10	10	4.18E−04	1128.5567	Fe II	4	2	6.30E−03
1063.63	S I	3	5	7.76E−03	1112.0277	Fe II	6	4	1.81E−04	1128.627	C I	5	3	5.10E−04
1063.63	S I	3	3	4.65E−03	1112.0480	Fe II	10	12	2.72E−03	1128.7181	Fe III	5	5	4.62E−02
1063.6328	Fe II	6	6	4.33E−04	1112.1511	Fe II	8	8	7.71E−04	1128.752	C I	5	5	1.53E−03
1063.9718	Fe II	10	8	1.54E−02	1113.3362	Fe II	6	6	1.05E−03	1128.8166	C I	3	5	6.62E−03
1064.00	S I	3	1	2.74E−04	1113.7643	Fe II	4	2	2.51E−04	1128.8995	Fe II	4	6	2.43E−02
1064.00	S I	3	5	3.42E−04	1114.1258	C I	3	5	2.25E−03	1129.0777	C I	3	5	8.69E−04
1064.00	S I	3	3	2.05E−04	1114.4435	Fe II	4	4	1.29E−03	1129.135	C I	5	7	7.41E−03
1065.64	S I	1	3	1.85E−02	1114.457	C I	5	7	2.52E−03	1129.1607	C I	5	5	1.32E−03
1065.8427	Fe II	4	6	2.12E−04	1114.4611	C I	5	5	4.50E−04	1129.1851	Fe III	3	3	5.94E−02
1066.01	S I	1	3	8.20E−04	1114.63	C I	1	3	3.00E−03	1129.196	C I	1	3	8.82E−03
1066.6599	Ar I	1	3	6.65E−02	1114.83	C I	3	3	7.50E−04	1129.3175	C I	1	3	2.08E−03
1067.5437	Fe II	8	10	1.92E−02	1115.0440	Fe II	8	10	2.30E−03	1129.405	C I	3	3	2.21E−03
1068.3456	Fe II	8	8	3.71E−02	1115.17	C I	5	3	3.00E−05	1129.4221	C I	5	5	1.56E−03
1069.0440	Fe II	6	4	2.19E−04	1115.1857	Fe II	2	2	1.76E−03	1129.5267	C I	3	3	5.21E−04
1070.1346	Fe II	8	6	2.66E−02	1115.6612	Fe II	6	8	1.94E−03	1129.5943	C I	3	1	6.95E−04
1071.2764	Fe II	4	4	4.93E−04	1115.7577	Fe II	4	6	1.63E−03	1129.749	C I	5	3	8.81E−05
1071.5842	Fe II	6	8	3.54E−02	1115.8666	Fe II	2	4	1.40E−03	1129.8712	C I	5	3	5.21E−04
1072.5914	Fe II	2	4	7.03E−04	1117.244	C I	3	5	3.87E−04	1130.0161	Fe II	2	2	3.60E−03
1072.973	S IV	4	6	4.34E−02	1117.393	C I	3	5	3.10E−03	1130.3427	Fe II	8	8	7.22E−03
1073.2763	Fe II	6	4	3.30E−02	1117.581	C I	5	5	6.97E−04	1130.3448	Fe II	4	4	1.77E−04
1073.3211	Fe II	4	2	3.22E−02	1117.724	C I	5	7	3.47E−03	1130.3969	Fe III	1	3	7.92E−02
1073.3841	Fe II	6	6	1.41E−02	1117.730	C I	5	5	6.19E−04	1130.4432	Fe II	6	8	6.42E−03
1073.518	S IV	4	4	4.83E−03	1117.866	C I	1	3	4.13E−03	1130.5596	Fe II	6	6	2.76E−03
1074.6411	Fe II	2	2	1.84E−02	1117.9202	C I	1	3	9.87E−04	1131.1888	Fe III	3	5	1.98E−02
1075.5264	Fe II	4	4	9.05E−04	1118.070	C I	3	3	1.04E−03	1131.8089	Fe II	2	4	1.26E−02
1075.6347	Fe II	4	6	4.94E−02	1118.1252	C I	3	3	2.47E−04	1131.9080	Fe III	5	7	5.27E−03
1076.8518	Fe II	2	4	6.41E−02	1118.408	C I	5	3	4.12E−05	1132.0078	Fe II	8	10	3.73E−03
1081.8748	Fe II	10	12	1.38E−02	1118.4629	C I	5	3	2.47E−04	1133.0566	Fe II	4	6	9.66E−03
1083.4204	Fe II	10	10	2.12E−03	1121.453	C I	1	3	1.35E−03	1133.4048	Fe II	8	10	8.33E−04
1083.9937	N II	1	3	1.09E−01	1121.641	C I	3	1	4.49E−04	1133.6653	Fe II	10	8	6.66E−04
1084.5659	N II	3	3	2.71E−02	1121.660	C I	3	3	3.36E−04	1133.9688	Fe II	6	8	6.89E−03
1084.5841	N II	3	5	8.14E−02	1121.758	C I	3	5	5.61E−04	1134.1653	N I	4	2	3.85E−03
1085.1381	Fe II	10	8	1.70E−04	1121.9748	Fe II	10	8	8.14E−02	1134.4149	N I	4	4	7.70E−03
1085.5328	N II	5	3	1.09E−03	1121.999	C I	5	3	3.36E−04	1134.9803	N I	4	6	1.16E−02
1085.5511	N II	5	5	1.63E−02	1122.0038	C I	3	5	4.42E−03	1138.383	C I	1	3	3.34E−03
1085.7096	N II	5	7	9.11E−02	1122.098	C I	5	5	1.01E−03	1138.557	C I	3	1	1.11E−03
1087.9559	Fe II	8	10	1.17E−02	1122.328	C I	5	7	4.95E−03	1138.595	C I	3	3	8.37E−04

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
1138.6323	Fe II	8	8	1.60E−03	1161.749	S I	3	1	6.45E−03	1238.341	S I	1	3	5.73E−04
1138.743	C I	3	5	1.40E−03	1163.996	S I	1	3	1.93E−02	1238.82	N V	2	4	1.57E−01
1138.946	C I	5	3	8.37E−04	1188.833	C I	1	3	1.29E−02	1239.332	S I	3	3	1.04E−04
1139.093	C I	5	5	2.51E−03	1188.992	C I	3	1	4.31E−03	1239.366	S I	3	5	3.12E−04
1139.514	C I	3	5	1.06E−02	1189.065	C I	3	3	3.23E−03	1239.925	Mg II	2	4	3.72E−04
1139.766	C I	3	5	1.37E−03	1189.249	C I	3	5	5.38E−03	1240.395	Mg II	2	2	1.85E−04
1139.79	C I	1	3	1.41E−02	1189.447	C I	5	3	3.23E−03	1241.905	S I	5	3	1.02E−03
1139.812	C I	5	7	1.18E−02	1189.631	C I	5	5	9.69E−03	1242.066	S I	1	3	4.14E−04
1139.865	C I	5	5	2.12E−03	1190.20	S III	1	3	2.53E−02	1242.80	N V	2	2	7.80E−02
1140.01	C I	3	3	3.53E−03	1190.416	Si II	2	4	2.93E−01	1247.107	S I	5	3	8.86E−07
1140.010	C I	1	3	3.28E−03	1193.009	C I	3	5	3.56E−02	1247.134	S I	5	5	1.33E−05
1140.117	C I	5	5	2.46E−03	1193.031	C I	1	3	4.76E−02	1247.160	S I	5	7	7.44E−05
1140.223	C I	3	3	8.20E−04	1193.240	C I	5	7	3.99E−02	1248.044	S I	3	3	1.01E−03
1140.316	C I	3	1	1.09E−03	1193.264	C I	3	3	1.19E−02	1250.584	S II	4	2	5.20E−03
1140.35	C I	5	3	1.41E−04	1193.290	Si II	2	2	5.84E−01	1250.816	S I	1	3	1.01E−03
1140.574	C I	5	3	8.19E−04	1193.393	C I	5	5	7.13E−03	1253.297	S I	3	3	2.20E−05
1140.5813	Fe II	8	6	1.15E−03	1193.649	C I	5	3	4.75E−04	1253.325	S I	3	5	6.61E−05
1142.3118	Fe II	6	8	1.53E−03	1193.679	C I	3	5	4.40E−03	1253.811	S II	4	4	1.03E−02
1142.3656	Fe II	10	8	1.65E−03	1193.995	C I	1	3	1.05E−02	1255.27	Si I	1	3	2.89E−01
1143.2260	Fe II	10	10	2.05E−02	1194.06	S III	3	5	1.89E−02	1256.093	S I	1	3	8.80E−05
1144.2735	Fe II	6	6	6.11E−04	1194.063	C I	5	5	7.91E−03	1256.49	Si I	3	3	2.89E−01
1144.9390	Fe II	10	12	1.33E−01	1194.229	C I	3	3	2.64E−03	1258.80	Si I	5	3	2.89E−01
1145.5152	Fe II	6	4	1.43E−03	1194.406	C I	3	1	3.51E−03	1259.519	S II	4	6	1.55E−02
1146.8315	Fe II	4	6	2.14E−03	1194.45	S III	3	3	6.29E−03	1260.422	Si II	2	4	1.18E+00
1146.9516	Fe II	8	6	4.74E−03	1194.500	Si II	4	4	7.29E−01	1260.5333	Fe II	10	8	1.76E−02
1147.4092	Fe II	8	8	3.77E−02	1194.615	C I	5	3	2.64E−03	1260.735	C I	1	3	3.87E−02
1148.0788	Fe II	4	4	3.91E−05	1197.394	Si II	4	2	1.46E−01	1260.927	C I	3	1	1.29E−02
1148.2773	Fe II	8	10	1.13E−01	1199.5496	N I	4	6	1.63E−01	1260.996	C I	3	3	9.67E−03
1148.9564	Fe II	4	2	1.23E−02	1200.2233	N I	4	4	1.08E−01	1261.122	C I	3	5	1.61E−02
1149.5892	Fe II	2	4	2.77E−03	1200.7098	N I	4	2	5.41E−02	1261.426	C I	5	3	9.67E−03
1150.2904	Fe II	6	4	8.84E−03	1200.97	S III	5	7	2.10E−02	1261.552	C I	5	5	2.90E−02
1150.4691	Fe II	2	2	8.62E−02	1201.73	S III	5	5	3.75E−03	1262.860	S I	5	3	2.00E−03
1150.6851	Fe II	6	6	5.12E−02	1202.12	S III	5	3	2.50E−04	1264.738	Si II	4	6	1.06E+00
1151.1458	Fe II	6	8	9.50E−02	1206.500	Si III	1	3	1.68E+00	1265.002	Si II	4	4	1.18E−01
1151.21	B I	2	4	1.94E−02	1214.281	S I	5	3	1.99E−05	1266.6772	Fe II	8	8	6.26E−03
1151.28	B I	2	2	3.88E−02	1214.294	S I	5	5	2.99E−04	1267.4220	Fe II	8	6	1.12E−02
1151.42	B I	4	4	4.85E−02	1214.318	S I	5	7	1.68E−03	1269.208	S I	3	3	1.99E−03
1151.49	B I	4	2	9.70E−03	1215.6682	H I	2	4	2.77E−01	1270.769	S I	5	3	4.14E−05
1152.4281	Fe II	4	2	1.38E−03	1215.6736	H I	2	2	1.39E−01	1270.780	S I	5	7	3.47E−03
1152.8755	Fe II	4	4	6.28E−02	1216.424	S I	5	3	2.32E−04	1270.787	S I	5	5	6.21E−04
1153.2719	Fe II	4	6	7.94E−02	1218.513	S I	5	3	1.81E−05	1271.2325	Fe II	6	8	1.38E−03
1153.9500	Fe II	2	2	7.89E−04	1218.570	S I	5	5	2.72E−04	1271.9826	Fe II	6	6	1.06E−02
1154.3985	Fe II	2	4	6.83E−02	1218.595	S I	5	7	1.52E−03	1272.075	S I	1	3	1.99E−03
1155.809	C I	1	3	6.05E−03	1220.149	S I	3	3	4.96E−04	1272.6129	Fe II	6	4	5.41E−03
1155.979	C I	3	1	2.01E−03	1220.163	S I	3	5	1.49E−03	1275.1443	Fe II	4	6	5.21E−03
1156.026	S I	5	5	1.46E−02	1221.752	S I	5	3	3.55E−04	1275.7778	Fe II	4	4	1.21E−02
1156.028	C I	3	3	1.52E−03	1222.313	S I	3	3	2.31E−04	1277.197	S I	3	3	1.02E−03
1156.199	C I	3	5	2.52E−03	1222.799	S I	1	3	1.98E−03	1277.216	S I	3	5	3.08E−03
1156.276	S I	5	3	4.87E−03	1224.422	S I	3	3	4.50E−04	1277.245	C I	1	3	1.07E−01
1156.389	C I	5	3	1.51E−03	1224.471	S I	5	3	1.27E−05	1277.282	C I	3	5	8.03E−02
1156.560	C I	5	5	4.53E−03	1224.480	S I	3	5	1.35E−03	1277.513	C I	3	3	2.67E−02
1157.769	C I	3	5	1.83E−02	1224.506	S I	5	5	1.91E−04	1277.550	C I	5	7	9.00E−02
1157.910	C I	1	3	2.44E−02	1224.544	S I	5	7	1.07E−03	1277.6431	Fe II	2	4	1.73E−02
1158.019	C I	5	7	2.05E−02	1224.972	S I	1	3	2.31E−04	1277.723	C I	5	5	1.61E−02
1158.035	C I	3	5	2.33E−03	1227.091	S I	1	3	1.80E−03	1277.954	C I	5	3	1.07E−03
1158.130	C I	3	3	6.10E−03	1227.692	S I	3	3	3.53E−04	1279.890	C I	3	5	8.82E−03
1158.132	C I	5	5	3.66E−03	1229.607	S I	5	3	5.77E−04	1280.100	S I	1	3	4.11E−03
1158.324	C I	1	3	5.57E−03	1230.375	S I	1	3	3.53E−04	1280.135	C I	1	3	2.12E−02
1158.397	C I	5	5	4.18E−03	1230.438	S I	3	3	3.17E−04	1280.333	C I	5	5	1.59E−02
1158.492	C I	5	3	2.44E−04	1230.473	S I	3	5	9.51E−04	1280.404	C I	3	3	5.29E−03
1158.544	C I	3	3	1.39E−03	1233.132	S I	1	3	1.26E−03	1280.597	C I	3	1	7.05E−03
1158.674	C I	3	1	1.86E−03	1233.279	S I	5	3	4.17E−06	1280.847	C I	5	3	5.29E−03
1158.907	C I	5	3	1.40E−03	1233.312	S I	5	5	6.26E−05	1286.79	Al I	2	4	4.82E−03
1161.344	S I	3	5	8.07E−03	1233.345	S I	5	7	3.51E−04	1288.65	Al I	4	4	1.21E−02
1161.595	S I	3	3	4.84E−03	1235.624	S I	3	3	5.74E−04	1295.653	S I	5	5	8.36E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
1296.174	S I	5	3	2.78E−02	1519.598	B I	4	4	4.27E−04	1600.763	B I	4	6	3.27E−02
1302.1715	O I	5	3	5.04E−02	1519.598	B I	4	6	3.85E−03	1600.846	B I	4	2	6.75E−03
1302.336	S I	3	5	4.62E−02	1524.173	B I	2	2	1.02E−02	1608.4511	Fe II	10	8	8.92E−02
1302.862	S I	3	3	2.77E−02	1524.527	B I	4	2	1.02E−02	1614.566	Si I	1	3	7.37E−03
1303.110	S I	3	1	3.70E−02	1525.282	B I	2	4	5.90E−03	1615.949	Si I	3	1	2.45E−03
1303.430	S I	5	3	4.60E−03	1525.637	B I	4	4	5.89E−04	1616.579	Si I	3	3	1.84E−03
1304.370	Si II	2	2	8.71E−02	1525.637	B I	4	6	5.31E−03	1618.4680	Fe II	8	8	3.18E−02
1304.8607	O I	3	3	5.03E−02	1526.707	Si II	2	2	1.32E−01	1619.044	Si I	3	5	3.07E−03
1305.884	S I	1	3	1.11E−01	1532.094	B I	2	2	1.69E−02	1619.527	Si I	3	5	1.48E−02
1306.0317	O I	1	3	5.02E−02	1532.452	B I	4	2	1.69E−02	1620.405	Si I	5	3	1.84E−03
1309.276	Si II	4	2	8.67E−02	1533.431	Si II	4	2	1.31E−01	1621.6856	Fe II	8	6	5.68E−02
1310.194	S I	3	3	4.58E−03	1533.805	B I	2	4	8.46E−03	1622.882	Si I	5	5	5.50E−03
1313.249	S I	1	3	4.57E−03	1534.164	B I	4	4	8.46E−04	1623.366	Si I	5	5	2.66E−02
1316.543	S I	5	7	2.26E−02	1534.164	B I	4	6	7.62E−03	1623.497	Si I	1	3	3.55E−02
1316.615	S I	5	5	4.03E−03	1543.399	B I	2	2	1.50E−02	1625.532	Si I	3	3	8.86E−03
1316.622	S I	5	3	2.69E−04	1543.762	B I	4	2	1.50E−02	1625.705	Si I	1	3	8.51E−02
1323.516	S I	3	5	2.01E−02	1546.424	B I	2	4	1.28E−02	1625.9123	Fe II	6	8	7.01E−03
1323.523	S I	3	3	6.69E−03	1546.789	B I	4	4	1.28E−03	1627.050	Si I	3	1	1.18E−02
1326.642	S I	1	3	2.67E−02	1546.789	B I	4	6	1.14E−02	1627.746	Si I	3	3	2.13E−02
1328.834	C I	1	3	6.08E−02	1548.1950	C IV	2	4	1.90E−01	1629.1596	Fe II	6	6	5.38E−02
1329.085	C I	3	1	2.03E−02	1550.7700	C IV	2	2	9.52E−02	1629.400	Si I	5	3	8.84E−03
1329.100	C I	3	5	2.54E−02	1558.701	B I	2	2	9.92E−03	1629.441	Si I	3	5	6.36E−02
1329.123	C I	3	3	1.52E−02	1559.071	B I	4	2	9.92E−03	1629.9478	Si I	5	7	7.13E−02
1329.577	C I	5	5	4.57E−02	1560.309	C I	1	3	7.14E−02	1631.1285	Fe II	6	4	2.74E−02
1329.600	C I	5	3	1.52E−02	1560.682	C I	3	5	5.36E−02	1631.624	Si I	5	3	8.48E−04
1334.532	C II	2	4	1.27E−01	1560.709	C I	3	3	1.79E−02	1633.328	Si I	5	5	1.27E−02
1335.663	C II	4	4	1.27E−02	1561.340	C I	5	5	1.07E−02	1634.3498	Fe II	4	6	2.63E−02
1335.708	C II	4	6	1.14E−01	1561.367	C I	5	3	7.15E−04	1636.3313	Fe II	4	4	6.14E−02
1341.890	Ca II	2	4	1.47E−03	1561.438	C I	5	7	6.00E−02	1639.4012	Fe II	2	4	8.75E−02
1342.554	Ca II	2	2	7.32E−04	1566.286	B I	2	4	2.06E−02	1649.858	Ca II	2	4	5.79E−04
1362.461	B II	1	3	1.01E+00	1566.302	Si I	1	3	1.85E−02	1651.164	Mg I	1	3	7.77E−04
1378.654	B I	2	4	1.95E−01	1566.661	B I	4	4	2.06E−03	1651.991	Ca II	2	2	2.90E−04
1378.875	B I	2	2	3.90E−01	1566.661	B I	4	6	1.85E−02	1656.267	C I	3	5	6.16E−02
1378.944	B I	4	4	4.88E−01	1567.725	Si I	3	1	6.18E−03	1656.929	C I	1	3	1.48E−01
1379.165	B I	4	2	9.74E−02	1568.196	Si I	3	3	4.63E−03	1657.008	C I	5	5	1.11E−01
1381.5527	S I	5	3	1.27E−04	1568.618	Si I	1	3	3.18E−02	1657.379	C I	3	3	3.69E−02
1385.5103	S I	3	1	1.70E−04	1570.518	Si I	3	3	7.94E−03	1657.907	C I	3	1	4.93E−02
1388.4358	S I	5	5	3.81E−04	1571.796	Si I	5	3	4.62E−03	1658.121	C I	5	3	3.69E−02
1389.1537	S I	3	3	1.26E−04	1573.301	B I	2	2	7.29E−03	1658.312	Mg I	1	3	1.11E−03
1392.5892	S I	1	3	5.06E−04	1573.678	B I	4	2	7.29E−03	1661.478	Be I	1	3	1.56E−02
1393.755	Si IV	2	4	5.24E−01	1573.884	Si I	5	7	2.66E−02	1662.609	B I	2	2	8.29E−03
1396.1130	S I	3	5	2.10E−04	1574.128	Si I	5	3	3.17E−04	1663.030	B I	4	2	8.29E−03
1401.5142	S I	5	3	1.42E−02	1574.847	Si I	3	5	2.37E−02	1666.849	B I	2	4	7.32E−02
1402.770	Si IV	2	2	2.60E−01	1578.477	Si I	5	5	4.74E−03	1667.273	B I	4	4	7.31E−03
1409.3371	S I	3	3	1.41E−02	1584.852	Si I	1	3	7.21E−03	1667.273	B I	4	6	6.58E−02
1412.8732	S I	1	3	1.41E−02	1586.137	Si I	3	1	2.40E−03	1668.429	Mg I	1	3	1.67E−03
1413.16	Al I	2	4	3.98E−02	1586.792	Si I	3	3	1.80E−03	1670.787	Al II	1	3	1.81E+00
1414.24	Al I	2	2	7.97E−02	1586.891	Si I	3	5	1.24E−02	1682.6733	Si I	3	5	4.77E−03
1415.40	Al I	4	4	9.95E−02	1588.731	Si I	3	5	2.99E−03	1683.412	Mg I	1	3	2.71E−03
1416.48	Al I	4	2	1.99E−02	1589.173	Si I	1	3	5.03E−02	1686.8185	Si I	5	5	8.55E−03
1425.0300	S I	5	7	1.21E−01	1590.477	Si I	5	3	1.79E−03	1687.0924	Si I	1	3	1.14E−02
1425.1879	S I	5	5	2.16E−02	1590.577	Si I	5	5	2.23E−02	1689.2902	Si I	3	3	2.85E−03
1425.2191	S I	5	3	1.44E−03	1591.123	Si I	3	3	1.26E−02	1690.789	Si I	3	1	3.79E−03
1426.117	Be I	1	3	3.57E−04	1592.021	Si I	1	3	2.97E−02	1693.2935	Si I	1	3	1.56E−01
1433.2781	S I	3	5	1.07E−01	1592.426	Si I	5	5	5.38E−03	1693.4681	Si I	5	3	2.84E−03
1433.3096	S I	3	3	3.57E−02	1593.977	Si I	3	3	7.43E−03	1695.5074	Si I	3	3	3.88E−02
1436.9672	S I	1	3	1.42E−01	1594.145	Si I	3	1	9.91E−03	1696.207	Si I	3	5	1.17E−01
1473.9943	S I	5	7	3.44E−02	1594.566	Si I	5	7	4.22E−02	1697.941	Si I	5	7	1.31E−01
1474.3785	S I	5	5	6.14E−03	1594.829	Si I	5	3	5.01E−04	1699.7162	Si I	5	3	1.55E−03
1474.5706	S I	5	3	4.09E−04	1594.950	Si I	3	5	3.77E−02	1700.419	Si I	5	5	2.32E−02
1483.0385	S I	3	5	3.05E−02	1597.697	Si I	5	3	7.41E−03	1707.061	Mg I	1	3	4.85E−03
1483.2329	S I	3	3	1.01E−02	1598.674	Si I	5	5	7.51E−03	1747.7937	Mg I	1	3	1.02E−02
1487.1500	S I	1	3	4.05E−02	1600.372	B I	2	4	3.63E−02	1762.8918	Al I	2	4	2.66E−01
1491.765	Be I	1	3	8.44E−07	1600.455	B I	2	2	6.75E−03	1763.661	Si I	1	3	1.21E−02
1519.246	B I	2	4	4.27E−03	1600.763	B I	4	4	3.63E−03	1765.030	Si I	3	1	4.04E−03

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
1765.6323	Al I	2	2	5.31E−01	2148.234	Al I	4	2	5.29E−04	2349.329	Be I	1	3	1.39E+00
1766.063	Si I	3	3	3.03E−03	2151.376	Al I	4	6	3.79E−02	2351.1301	Fe I	9	7	1.04E−04
1766.3542	Si I	3	5	5.05E−03	2151.405	Al I	4	4	4.21E−03	2359.8278	Fe II	4	6	3.77E−02
1766.3813	Al I	4	4	6.63E−01	2151.4717	Ca I	1	3	2.03E−02	2365.5518	Fe II	8	8	4.49E−02
1769.1327	Al I	4	2	1.32E−01	2165.2570	Al I	2	2	8.02E−04	2367.5905	Fe II	10	8	4.25E−03
1770.629	Si I	5	3	3.02E−03	2167.4534	Fe I	9	7	1.50E−01	2367.7750	Al I	2	4	6.48E−02
1770.9225	Si I	5	5	9.06E−03	2169.5069	Al I	2	4	6.47E−02	2370.1800	Fe I	3	3	2.15E−03
1807.3113	S I	5	3	8.45E−02	2170.5235	Al I	4	2	8.00E−04	2372.1546	Fe I	5	5	2.24E−03
1808.013	Si II	2	4	2.56E−03	2171.9780	Fe I	5	7	5.02E−03	2372.7939	Al I	2	2	4.86E−03
1816.928	Si II	4	6	2.29E−03	2174.7522	Al I	4	6	5.81E−02	2373.8466	Al I	4	6	5.82E−02
1817.451	Si II	4	4	2.55E−04	2174.7942	Al I	4	4	6.46E−03	2374.0743	Al I	4	4	6.46E−03
1817.8453	B I	2	2	1.56E−02	2192.5244	Fe I	5	5	8.34E−02	2374.3491	Fe I	7	7	5.56E−03
1818.3495	B I	4	2	1.56E−02	2196.7282	Fe I	3	3	8.57E−02	2374.4612	Fe II	10	10	5.27E−02
1820.3412	S I	3	3	8.39E−02	2199.8694	Al I	2	2	1.30E−03	2375.2435	Fe I	1	3	7.94E−03
1825.8960	B I	2	4	1.75E−01	2201.4114	Fe I	3	5	3.41E−02	2379.1199	Al I	4	2	4.84E−03
1826.2448	S I	1	3	8.36E−02	2201.4136	Ca I	1	3	1.88E−02	2381.4887	Fe II	6	8	9.88E−03
1826.3990	B I	4	6	1.58E−01	2205.3059	Al I	4	2	1.30E−03	2382.5610	Fe I	3	5	6.21E−03
1826.4047	B I	4	4	1.75E−02	2205.3554	Al I	2	4	1.00E−01	2382.7652	Fe II	10	12	3.43E−01
1827.9351	Mg I	1	3	2.83E−02	2208.6665	Si I	1	3	5.22E−02	2383.7884	Fe II	8	6	1.22E−02
1836.5100	Si I	3	5	1.22E−02	2210.7493	Al I	4	6	9.01E−02	2389.3582	Fe II	8	8	9.68E−02
1841.1521	Si I	1	3	2.91E−02	2210.8191	Al I	4	4	1.00E−02	2390.7013	Fe I	5	7	5.38E−03
1841.4489	Si I	5	5	2.18E−02	2211.5814	Si I	3	5	3.90E−02	2396.1497	Fe II	6	4	2.27E−02
1843.7699	Si I	3	3	7.27E−03	2212.4348	Si I	3	3	1.30E−02	2396.3559	Fe II	8	10	2.89E−01
1845.5202	Si I	1	3	2.71E−01	2217.3593	Si I	5	7	4.36E−02	2399.2893	Ca I	1	3	1.54E−03
1846.1116	Si I	3	1	9.67E−03	2218.7476	Si I	5	5	7.79E−03	2399.9728	Fe II	6	6	1.31E−01
1847.4735	Si I	3	5	2.03E−01	2219.6065	Si I	5	3	5.19E−04	2405.1638	Fe II	4	2	3.14E−02
1848.1505	Si I	3	3	6.76E−02	2251.4880	Fe I	9	9	9.24E−04	2405.6186	Fe II	6	8	2.43E−01
1848.7480	Si I	5	3	7.25E−03	2258.7062	Al I	2	2	2.33E−03	2407.3942	Fe II	4	4	1.61E−01
1850.6720	Si I	5	7	2.27E−01	2259.9821	Fe I	7	5	7.00E−04	2411.2533	Fe II	4	6	2.03E−01
1852.4716	Si I	5	5	4.05E−02	2260.2097	Fe I	9	11	5.32E−03	2411.8023	Fe II	2	2	2.20E−01
1853.1522	Si I	5	3	2.70E−03	2264.1647	Al I	2	4	1.33E−01	2414.0450	Fe II	2	4	1.75E−01
1854.716	Al III	2	4	5.75E−01	2264.4378	Al I	4	2	2.32E−03	2426.149	Li I	2	2	3.41E−04
1862.790	Al III	2	2	2.86E−01	2265.7550	Fe I	7	7	1.11E−03	2426.149	Li I	2	4	6.82E−04
1934.5351	Fe I	9	7	1.11E−02	2269.7979	Al I	4	6	1.20E−01	2448.4509	Fe I	9	7	2.32E−03
1937.2684	Fe I	9	7	9.46E−03	2269.9241	Al I	4	4	1.34E−02	2462.9259	Fe I	7	5	7.16E−03
1940.6605	Fe I	7	5	5.19E−03	2272.7718	Fe I	7	9	2.92E−03	2463.3922	Fe I	9	9	5.32E−02
1977.5979	Si I	1	3	5.39E−02	2275.8946	Fe I	3	1	1.60E−03	2473.6195	Fe I	5	3	1.15E−02
1979.2055	Si I	3	1	1.80E−02	2276.1686	Ca I	1	3	1.08E−02	2473.6422	Fe I	7	7	1.19E−01
1980.6184	Si I	3	3	1.34E−02	2276.7289	Fe I	9	7	7.51E−03	2475.780	Li I	2	2	5.29E−04
1983.2328	Si I	3	5	2.24E−02	2280.6408	Fe I	5	7	2.05E−03	2475.780	Li I	2	4	1.05E−03
1986.3640	Si I	5	3	1.34E−02	2284.0088	Fe I	1	3	6.03E−03	2480.5253	Fe I	5	5	1.59E−01
1988.9937	Si I	5	5	4.02E−02	2284.3599	Fe I	3	5	2.01E−03	2484.0209	Fe I	9	11	5.44E−01
2026.4768	Mg I	1	3	1.22E−01	2284.7903	Fe I	7	5	7.16E−03	2484.9373	Fe I	3	3	2.10E−01
2066.436	B III	2	4	2.43E−01	2287.9552	Fe I	5	3	1.05E−02	2488.8936	Fe I	7	9	5.07E−01
2067.893	B III	2	2	1.21E−01	2293.2314	Fe I	7	9	2.98E−03	2490.5036	Fe I	1	3	6.46E−01
2083.442	Ca I	1	3	6.24E−03	2294.5545	Fe I	5	5	8.53E−04	2491.3957	Fe I	5	7	4.48E−01
2084.7848	Fe I	9	7	1.89E−02	2295.1151	Fe I	3	1	9.39E−03	2491.4643	Na I	2	4	3.33E−05
2089.562	B I	2	4	3.51E−02	2297.6344	Fe I	3	3	3.18E−03	2491.4788	Na I	2	2	1.66E−05
2090.214	B I	4	6	3.15E−02	2298.4949	Fe I	7	7	1.13E−02	2491.9065	Fe I	3	5	4.50E−01
2090.228	B I	4	4	3.51E−03	2298.8769	Fe I	9	9	2.43E−02	2497.5243	B I	2	2	8.08E−02
2098.103	Ca I	1	3	9.97E−03	2299.3682	Fe I	3	3	1.27E−03	2498.4762	B I	4	2	8.07E−02
2103.0207	Fe I	7	7	5.82E−03	2299.9282	Fe I	5	5	5.51E−03	2501.8858	Fe I	9	7	4.96E−02
2113.6379	Fe I	1	3	3.80E−02	2300.8501	Fe I	5	7	5.51E−03	2507.6522	Si I	3	5	9.85E−02
2118.986	Al I	2	4	2.01E−02	2302.3924	Fe I	1	3	2.09E−02	2511.5910	Fe I	7	5	8.81E−02
2119.3459	Ca I	1	3	1.54E−02	2304.1334	Fe I	1	3	1.74E−02	2512.8905	Na I	2	4	5.20E−05
2124.030	Al I	4	4	2.01E−03	2304.2898	Fe I	3	5	6.35E−03	2512.9113	Na I	2	2	2.60E−05
2124.03	Al I	4	6	1.81E−02	2309.7092	Fe I	3	5	1.36E−02	2515.0725	Si I	1	3	2.36E−01
2127.972	Al I	2	2	3.69E−04	2313.8155	Fe I	5	7	1.32E−02	2516.8696	Si I	5	5	1.77E−01
2130.335	Al I	2	4	2.87E−02	2321.0705	Fe I	7	9	1.46E−02	2518.8595	Fe I	5	3	1.07E−01
2133.058	Al I	4	2	3.68E−04	2328.1112	Fe II	6	4	3.96E−02	2519.9600	Si I	3	3	5.88E−02
2135.407	Al I	4	6	2.58E−02	2333.5156	Fe II	8	6	8.15E−02	2523.6083	Fe I	9	9	2.79E−01
2135.433	Al I	4	4	2.86E−03	2338.7248	Fe II	4	4	8.87E−02	2524.8669	Si I	3	1	7.83E−02
2139.2667	Fe I	9	7	1.50E−03	2344.2139	Fe II	10	8	1.26E−01	2525.0517	Fe I	3	1	1.08E−01
2143.075	Al I	2	2	5.31E−04	2345.0011	Fe II	2	4	1.26E−01	2528.1946	Fe I	7	7	1.80E−01
2146.230	Al I	2	4	4.22E−02	2349.0223	Fe II	6	6	7.71E−02	2529.2682	Si I	5	3	5.86E−02

Table 2. Finding list of lines

λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}	λ, Å	Ion	g_i	g_k	f_{ik}
2529.8954	Fe I	5	5	9.35E−02	3021.9526	Fe I	7	7	6.24E−02					
2530.5960	Fe I	3	3	3.69E−02	3026.7235	Fe I	1	3	1.45E−01					
2536.3689	Fe I	1	3	2.82E−01	3038.2727	Fe I	3	5	6.65E−02					
2541.7352	Fe I	3	5	1.49E−01	3048.4911	Fe I	5	7	5.51E−02					
2544.604	Na I	2	4	8.85E−05	3059.9750	Fe I	7	9	2.92E−02					
2544.636	Na I	2	2	4.42E−05	3083.0462	Al I	2	4	1.62E−01					
2546.7427	Fe I	5	7	9.14E−02	3093.6062	Al I	4	6	1.45E−01					
2550.3784	Fe I	7	9	4.52E−02	3093.7347	Al I	4	4	1.61E−02					
2563.070	Li I	2	2	8.59E−04	3131.327	Be II	2	4	3.33E−01					
2563.070	Li I	2	4	1.71E−03	3131.973	Be II	2	2	1.66E−01					
2586.6500	Fe II	10	8	5.48E−02	3233.5637	Li I	2	2	1.61E−03					
2594.644	Na I	2	4	1.70E−04	3233.5637	Li I	2	4	3.20E−03					
2594.695	Na I	2	2	8.52E−05	3303.319	Na I	2	4	9.01E−03					
2599.1465	Fe II	8	6	9.48E−02	3303.929	Na I	2	2	4.50E−03					
2600.1729	Fe II	10	10	2.40E−01	3441.5918	Fe I	9	7	2.38E−02					
2607.8664	Fe II	6	4	1.18E−01	3441.9748	Fe I	7	5	1.57E−02					
2612.6542	Fe II	8	8	1.31E−01	3444.8634	Fe I	5	3	8.53E−03					
2614.6051	Fe II	4	2	1.14E−01	3466.8532	Fe I	3	3	2.15E−02					
2618.3991	Fe II	6	6	5.02E−02	3476.4453	Fe I	5	5	1.78E−02					
2621.1912	Fe II	4	4	3.22E−03	3477.6972	Fe I	1	3	3.09E−02					
2622.4518	Fe II	2	2	6.52E−02	3491.5727	Fe I	7	7	1.11E−02					
2626.4511	Fe II	8	10	6.75E−02	3498.8414	Fe I	3	5	9.39E−03					
2629.0777	Fe II	2	4	2.28E−01	3527.0488	Fe I	5	7	2.96E−03					
2631.8321	Fe II	4	6	1.75E−01	3650.3426	Fe I	9	7	6.99E−05					
2632.1081	Fe II	6	8	1.25E−01	3680.9611	Fe I	9	9	2.80E−03					
2653.2654	Al I	2	2	1.47E−02	3684.1032	Fe I	7	5	4.12E−04					
2661.1778	Al I	4	2	1.46E−02	3706.6201	Fe I	7	7	6.62E−03					
2681.137	Na I	2	4	4.01E−04	3708.8770	Fe I	5	3	8.93E−04					
2681.230	Na I	2	2	2.01E−04	3720.9928	Fe I	9	11	4.12E−02					
2719.8329	Fe I	9	7	1.19E−01	3723.6218	Fe I	5	5	1.03E−02					
2721.7082	Fe I	7	5	8.41E−02	3734.3790	Fe I	3	3	1.30E−02					
2722.4504	Ca I	1	3	2.01E−02	3738.1941	Fe I	7	9	3.81E−02					
2724.3840	Fe I	5	3	4.28E−02	3746.6259	Fe I	5	7	3.39E−02					
2738.1192	Fe I	3	3	9.39E−02	3746.9642	Fe I	1	3	4.62E−02					
2741.995	Li I	2	2	1.43E−03	3749.3276	Fe I	3	5	3.21E−02					
2741.995	Li I	2	4	2.88E−03	3825.5288	Fe I	9	7	4.83E−03					
2743.2165	Fe I	5	5	7.10E−02	3857.4650	Fe I	7	5	7.39E−03					
2744.8790	Fe I	1	3	1.20E−01	3861.0058	Fe I	9	9	2.17E−02					
2750.9536	Fe I	7	7	4.41E−02	3879.6724	Fe I	5	3	8.93E−03					
2757.1427	Fe I	3	5	3.82E−02	3887.3834	Fe I	7	7	1.20E−02					
2772.9285	Fe I	5	7	6.65E−03	3896.7600	Fe I	3	1	7.13E−03					
2796.352	Mg II	2	4	6.29E−01	3900.8122	Fe I	5	5	5.89E−03					
2803.531	Mg II	2	2	3.14E−01	3907.5861	Fe I	3	3	1.90E−03					
2852.9642	Mg I	1	3	1.73E+00	3921.3679	Fe I	1	3	1.79E−02					
2853.649	Na I	2	4	1.33E−03	3924.0224	Fe I	7	9	3.19E−03					
2853.850	Na I	2	2	6.64E−04	3929.0319	Fe I	3	5	8.57E−03					
2913.0102	Fe I	9	7	2.60E−03	3931.4095	Fe I	5	7	5.14E−03					
2929.8641	Fe I	7	5	4.73E−03	3934.777	Ca II	2	4	6.50E−01					
2937.7623	Fe I	9	9	1.80E−02	3945.1224	Al I	2	2	1.23E−01					
2942.2029	Fe I	5	3	3.99E−03	3962.6410	Al I	4	2	1.23E−01					
2948.7376	Fe I	7	7	2.37E−02	3969.591	Ca II	2	2	3.22E−01					
2954.8032	Fe I	5	5	2.46E−02	4227.9179	Ca I	1	3	1.94E+00					
2958.2286	Fe I	3	3	2.31E−02	5891.5826	Na I	2	4	6.70E−01					
2966.1205	Fe I	1	3	4.57E−02	5897.5575	Na I	2	2	3.35E−01					
2967.7646	Fe I	9	11	4.42E−02	6709.6127	Li I	2	4	4.99E−01					
2970.9668	Fe I	3	5	2.47E−02	6709.7639	Li I	2	2	2.49E−01					
2974.0004	Fe I	5	7	2.52E−02										
2974.1032	Fe I	7	9	3.13E−02										
2984.4402	Fe I	9	7	2.92E−02										
2995.3000	Fe I	7	5	4.22E−02										
3001.8226	Fe I	5	3	5.14E−02										
3009.0148	Fe I	3	1	4.82E−02										
3018.5063	Fe I	3	3	9.39E−03										
3021.3705	Fe I	5	5	2.64E−02										
3021.5187	Fe I	9	9	1.04E−01										