Eps Ind (4750K, 4.5)				mA	ミクロ乱流＝0.0km/s	
				等価幅	元素量	
11.00	4751.822	2.104	−2.090	34.4	6.21	
11.00	6154.226	2.102	−1.560	79.8	6.31	
					6.26	
12.00	4702.991	4.346	−0.666	690.0	7.48	
12.00	5711.088	4.346	−1.833	175.0	7.84	
12.00	6318.717	5.108	−1.730	39.6	7.07	
12.00	6319.237	5.108	−1.950	33.7	7.18	
					7.39	
13.00	6696.023	3.143	−1.347	65.4	6.18	
13.00	6698.673	3.143	−1.647	38.7	6.08	
					6.13	
14.00	4947.607	5.082	−1.760	27.3	7.34	
14.00	5684.484	4.954	−1.650	35.1	7.36	
14.00	6131.573	5.616	−1.556	12.9	7.35	
14.00	6131.852	5.616	−1.615	16.0	7.51	
14.00	6142.483	5.619	−1.295	15.5	7.17	
14.00	6145.016	5.616	−1.310	23.6	7.42	
14.00	6155.134	5.619	−0.754	46.3	7.25	
14.00	6237.319	5.614	−0.975	20.6	6.98	
14.00	6243.815	5.616	−1.242	18.2	7.20	
14.00	6244.466	5.616	−1.093	13.6	6.90	
14.00	6414.980	5.871	−1.035	80.0	**8.14**	
					7.33	
20.00	5260.387	2.521	−1.719	70.2	6.31	
20.00	5512.980	2.933	−0.464	185.0	6.48	
20.00	5857.451	2.933	0.240	358.0	6.41	
20.00	5867.562	2.933	−1.570	58.0	6.37	
20.00	6102.723	1.879	−0.793	380.0	6.16	
20.00	6122.217	1.886	−0.316	710.0	6.26	
20.00	6156.023	2.521	−2.497	28.0	6.17	
20.00	6166.439	2.521	−1.142	120.0	6.17	
20.00	6169.042	2.523	−0.797	160.0	6.13	
20.00	6439.075	2.526	0.390	400.0	6.22	
20.00	6455.598	2.523	−1.340	106.0	6.47	
20.00	6471.662	2.526	−0.686	186.0	6.54	
20.00	6493.781	2.521	−0.109	230.0	6.18	
20.00	6499.650	2.523	−0.818	129.0	6.24	
20.00	6508.850	2.526	−2.162	28.4	5.87	

					6.26	
21.00	4743.830	1.448	0.422	65.5	3.50	
21.00	5081.574	1.448	0.469	68.3	3.56	
21.00	5356.091	1.865	0.168	23.2	3.21	
21.00	5520.497	1.865	0.293	38.1	3.45	
21.00	5686.847	1.440	0.376	65.9	3.49	
21.00	6210.658	0.000	−1.529	73.8	3.68	
21.00	6239.762	0.000	−1.780	37.0	3.13	
21.00	6305.657	0.021	−1.240	107.0	3.99	
					3.50	
21.01	5239.813	1.455	−0.765	43.6	3.22	
21.01	5526.790	1.768	0.024	54.1	3.02	
21.01	5684.202	1.507	−1.074	29.2	3.22	
21.01	6245.637	1.507	−1.030	17.4	2.82	
21.01	6279.753	1.500	−1.265	17.4	3.04	
					3.06	
				2016.5.1.		
				new EW		**previous**
22.00	4518.022	0.826	−0.325	150.0	4.81	**190=**
22.00	4548.763	0.826	−0.354	140.0	4.75	**180=**
22.00	4562.628	0.021	−2.656	67.0	5.12	
22.00	4617.269	1.749	0.389	116.0	4.87	**133=**
22.00	4681.909	0.048	−1.071	195.0	5.01	
22.00	4693.665	0.021	−2.710	69.0	5.19	
22.00	4715.302	0.048	−2.680	68.0	5.16	
22.00	4758.118	2.249	0.425	82.0	4.90	
22.00	4759.270	2.256	0.514	90.0	4.96	
22.00	4820.411	1.502	−0.441	93.0	5.06	
22.00	4856.010	2.256	0.440	90.0	5.03	
22.00	4909.098	0.826	−2.401	39.1	5.06	
22.00	4926.148	0.818	−2.170	59.0	5.31	
22.00	4941.571	2.160	−1.010	28.8	5.01	
22.00	4964.717	1.969	−0.820	50.0	4.98	
22.00	4981.731	0.848	0.504	410.0	4.92	450−
22.00	4989.130	1.981	−0.160	85.0	4.93	
22.00	4991.065	0.836	0.380	350.0	4.88	320−
22.00	4997.096	0.000	−2.118	101.0	5.12	110−
22.00	4999.503	0.826	0.250	360.0	5.03	
22.00	5009.645	0.021	−2.259	89.0	5.09	
22.00	5016.161	0.848	−0.574	132.0	4.85	140−
22.00	5024.844	0.818	−0.602	138.0	4.90	145−
22.00	5043.584	0.836	−1.733	78.0	5.26	

22.00	5109.431	1.443	−1.435	42.2	4.90	
22.00	5147.478	0.000	−2.012	107.0	5.07	120−
22.00	5152.184	0.021	−2.024	98.0	4.97	115−
22.00	5219.702	0.021	−2.292	95.0	5.18	
22.00	5223.620	2.092	−0.490	57.0	4.90	
22.00	5230.968	2.239	−1.108	15.9	4.80	
22.00	5247.289	2.103	−0.640	40.0	4.74	
22.00	5250.921	0.826	−2.363	36.0	4.90	
22.00	5259.973	2.738	−0.180	31.6	4.85	
22.00	5288.794	2.427	−1.077	20.9	5.15	
22.00	5295.775	1.067	−1.633	66.9	5.19	
22.00	5313.236	1.067	−2.658	27.9	5.29	
22.00	5351.068	2.778	0.010	36.0	4.79	
22.00	5366.639	0.818	−2.583	36.0	5.08	
22.00	5384.630	0.826	−2.910	30.0	5.28	
22.00	5426.250	0.021	−3.006	67.7	5.28	
22.00	5453.643	1.443	−1.610	46.8	5.13	
22.00	5460.499	0.048	−2.804	72.9	5.23	
22.00	5465.772	1.067	−3.117	19.6	5.50	
22.00	5471.193	1.443	−1.400	55.0	5.07	
22.00	5474.223	1.460	−1.230	55.0	4.96	
22.00	5490.148	1.460	−0.933	76.0	5.04	
22.00	5490.846	0.048	−3.350	44.0	5.08	
22.00	5530.440	3.351	−0.302	16.5	5.30	
22.00	5648.565	2.495	−0.260	51.8	4.98	
22.00	5662.150	2.318	0.010	68.0	4.80	
22.00	5679.916	2.472	−0.570	30.2	4.86	
22.00	5689.460	2.297	−0.360	56.9	4.96	
22.00	5702.656	2.292	−0.590	42.0	4.91	
22.00	5713.880	2.289	−1.127	30.5	5.25	
22.00	5716.445	2.297	−0.720	37.0	4.95	
22.00	5720.436	2.292	−0.900	29.4	4.96	
22.00	5739.469	2.249	−0.600	41.0	4.92	
22.00	5880.269	1.053	−2.045	50.9	5.13	
22.00	5903.315	1.067	−2.145	46.0	5.14	
22.00	5918.535	1.067	−1.460	71.6	5.03	
22.00	5922.109	1.046	−1.466	81.7	5.16	
22.00	5937.809	1.067	−1.890	53.0	5.03	
22.00	5940.649	0.048	−3.822	25.7	5.08	
22.00	5941.751	1.053	−1.510	73.0	5.05	
22.00	5944.660	0.000	−4.059	20.0	5.10	
22.00	5953.160	1.887	−0.329	81.0	5.08	
22.00	5965.828	1.879	−0.409	79.0	5.11	
22.00	5978.541	1.873	−0.496	67.0	4.94	

22.00	6031.670	0.048	−4.199	13.2	5.06	
22.00	6064.626	1.046	−1.944	56.0	5.12	
22.00	6091.171	2.267	−0.423	55.0	5.04	
22.00	6092.792	1.887	−1.379	30.0	4.97	
22.00	6098.658	3.062	−0.010	17.0	4.64	
22.00	6126.216	1.067	−1.425	81.0	5.15	
22.00	6220.474	2.677	−0.140	34.0	4.72	
22.00	6258.102	1.443	−0.355	113.0	4.87	
22.00	6266.011	1.749	−2.501	14.0	5.47	
22.00	6273.388	0.021	−4.248	13.0	5.05	
22.00	6295.248	0.048	−4.489	6.0	4.94	
22.00	6312.236	1.460	−1.552	50.0	5.04	
22.00	6325.164	0.021	−3.972	24.9	5.14	
22.00	6336.099	1.443	−1.743	48.0	5.20	
22.00	6359.889	0.048	−4.282	8.6	4.90	
22.00	6508.120	1.430	−2.146	20.0	4.91	
22.00	6554.223	1.443	−1.218	57.8	4.86	
22.00	6556.062	1.460	−1.074	68.0	4.95	
22.00	6599.105	0.900	−2.085	65.9	5.22	
22.00	6668.376	3.583	0.204	15.9	5.00	
					5.03	
22.01	4708.662	1.237	−2.340	42.0	4.98	
22.01	5336.771	1.582	−1.590	58.9	5.00	
					4.99	
						hfs syn
23.00	4710.556	2.130	−0.120	23.0	3.97	*** no match
23.00	4875.493	0.040	−0.810	130.0	4.29	4.05
23.00	5584.492	1.064	−1.202	37.2	4.04	3.93
23.00	5592.972	0.040	−3.230	10.9	4.05	3.98
23.00	5626.018	1.043	−1.240	54.9	4.45	no hfs data
23.00	5627.633	1.081	−0.363	95.0	4.38	4.08
23.00	5646.108	1.051	−1.190	48.9	4.28	4.23
23.00	5657.435	1.064	−1.020	54.0	4.24	4.24
23.00	5668.361	1.081	−1.030	55.0	4.29	4.13
23.00	5670.853	1.081	−0.420	100.0	4.54	4.43
23.00	5727.048	1.081	−0.012	130.0	4.42	4.48
23.00	5727.652	1.051	−0.870	79.9	4.60	4.58
23.00	5731.241	1.064	−0.730	112.0	4.98	*** no match
23.00	5737.059	1.064	−0.740	83.9	4.55	4.43
23.00	5743.447	1.081	−0.970	66.9	4.48	4.23
23.00	5748.896	1.893	−0.850	14.1	4.06	4.03
23.00	6002.295	1.218	−1.780	10.8	4.01	3.9
23.00	6039.722	1.064	−0.650	60.3	3.96	3.88

23.00	6058.139	1.043	−1.374	35.8	4.12	3.95
23.00	6081.441	1.051	−0.579	78.2	4.24	4.03
23.00	6090.214	1.081	−0.062	98.0	4.06	4.08
23.00	6111.645	1.043	−0.715	77.9	4.35	3.93
23.00	6119.523	1.064	−0.320	76.4	3.95	3.93
23.00	6135.361	1.051	−0.746	67.1	4.18	3.93
23.00	6150.157	0.301	−1.780	96.0	4.88	3.98
23.00	6189.364	0.275	−2.970	22.3	4.43	4.28
23.00	6199.197	0.287	−1.300	112.0	4.60	3.93
23.00	6213.866	0.301	−2.050	57.5	4.37	4.08 *
23.00	6240.140	0.267	−2.590	32.1	4.28	4.08
23.00	6242.829	0.262	−1.550	85.2	4.40	3.68
23.00	6243.105	0.301	−0.980	122.0	4.41	3.98
23.00	6251.827	0.287	−1.340	104.0	4.53	3.98
23.00	6256.887	0.275	−2.010	61.7	4.39	3.98
23.00	6266.307	0.275	−2.290	53.5	4.48	4.15
23.00	6274.649	0.267	−1.670	79.6	4.42	4.08
23.00	6285.150	0.275	−1.510	72.2	4.12	3.83
23.00	6296.487	0.301	−1.590	67.5	4.12	3.83
23.00	6326.840	1.868	−0.810	21.7	4.20	*** no match
23.00	6349.475	1.853	−0.890	7.0	3.66	3.68
23.00	6531.415	1.218	−0.840	56.7	4.21	3.98
23.00	6543.500	1.195	−1.660	18.1	4.10	3.98
23.00	6605.967	1.195	−1.320	33.4	4.16	3.95
					4.29	**4.05**
24.00	4700.611	2.710	−1.255	47.0	5.68	
24.00	4708.013	3.168	0.110	108.0	5.61	
24.00	4718.420	3.195	0.090	111.0	5.68	
24.00	4730.710	3.079	−0.192	78.0	5.71	
24.00	4801.025	3.122	−0.131	76.6	5.63	
24.00	4953.717	3.122	−1.550	19.2	5.67	
24.00	5091.884	1.004	−3.039	73.6	6.04	
24.00	5214.132	3.369	−0.740	36.6	5.62	
24.00	5220.892	3.385	−1.034	31.8	5.79	
24.00	5238.961	2.709	−1.305	46.4	5.60	
24.00	5247.565	0.961	−1.640	180.0	5.62	
24.00	5287.178	3.438	−0.907	27.3	5.57	
24.00	5293.376	3.375	−1.360	18.4	5.74	
24.00	5296.691	0.983	−1.400	220.0	5.60	
24.00	5300.745	0.983	−2.120	125.0	5.71	
24.00	5304.180	3.464	−0.692	40.0	5.65	
24.00	5312.856	3.449	−0.562	46.4	5.63	
24.00	5318.771	3.438	−0.688	38.1	5.58	

24.00	5345.796	1.004	−0.980	340.0	5.61	
24.00	5348.315	1.004	−1.290	270.0	5.70	
24.00	5628.643	3.422	−0.772	37.1	5.68	
24.00	5694.740	3.857	−0.310	42.9	5.74	
24.00	5719.816	3.013	−1.660	21.7	5.68	
24.00	5729.206	3.845	−1.058	10.8	5.67	
24.00	5838.669	3.011	−1.780	18.5	5.70	
24.00	5844.595	3.013	−1.760	18.4	5.68	
24.00	5982.874	3.168	−2.021	9.3	5.75	
24.00	6330.091	0.941	−2.920	81.6	5.73	
24.00	6501.185	0.983	−4.295	15.1	5.63	
24.00	6529.178	3.892	−1.300	6.2	5.66	
24.00	6537.921	1.004	−4.069	34.5	5.96	
24.00	6630.011	1.030	−3.560	36.5	5.51	
24.00	6661.075	4.193	−0.190	27.5	5.65	
24.00	6669.281	4.175	−0.560	14.9	5.66	
					5.68	
24.01	5313.563	4.074	−1.779	30.7	6.45	
					6.45	
25.00	4739.087	2.941	−0.490	88.0	5.49	
25.00	4761.512	2.953	−0.138	116.0	5.49	
25.00	4762.367	2.888	0.425	158.0	5.20	
25.00	5004.892	2.920	−1.630	33.7	5.40	
25.00	5117.934	3.134	−1.140	45.7	5.43	
25.00	5377.637	3.844	−0.109	69.9	5.73	
25.00	5399.499	3.853	−0.287	71.0	5.94	
25.00	5420.355	2.143	−1.462	180.0	6.12	
25.00	5432.546	0.000	−3.795	160.0	6.15	
25.00	5470.637	2.164	−1.702	143.0	6.32	
25.00	5516.774	2.178	−1.847	120.0	6.11	
25.00	5537.760	2.187	−2.017	115.0	**6.40**	
25.00	6605.504	4.435	−1.248	18.2	6.23	
					5.85	
Fe I	**(4750, 4.5)**	**Eps Ind**	**log gf**	**EW (mA)**	**VT=0.01**	**rem**
26	4325.762	1.608	0.006	2800.0	7.282	
26	4383.545	1.485	0.200	4000.0	7.275	
26	4404.750	1.557	−0.142	2650.0	7.324	
26	4415.122	1.608	−0.615	1730.0	7.471	
26	4445.471	0.087	−5.441	79.0	7.676	
26	4602.001	1.608	−3.154	115.0	7.469	
26	4602.941	1.485	−2.209	260.0	7.327	

26	4716.837	3.251	−3.410	17.0	7.556	
26	4735.843	4.076	−1.325	68.0	7.762	maa maa spshow
26	4813.113	3.274	−2.890	41.0	7.729	
26	4848.883	2.279	−3.137	65.0	7.360	
26	4855.673	3.368	−1.772	95.0	7.703	
26	4859.741	2.875	−0.764	460.0	7.473	
26	4869.463	3.546	−2.520	41.0	7.690	
26	4875.877	3.332	−2.020	97.0	7.644	
26	4885.430	3.882	−0.971	93.3	7.418	
26	4907.732	3.430	−1.840	82.5	7.377	
26	4908.599	2.484	−4.160	13.0	7.255	
26	4909.383	3.929	−1.231	67.7	7.340	
26	4910.017	3.397	−1.408	130.0	7.713	
26	4910.325	4.191	−0.459	94.0	7.196	
26	4910.565	4.218	−0.433	97.0	7.243	
26	4911.529	4.256	−2.240	28.8	7.763	spshow not good
26	4911.779	3.928	−1.790	52.6	7.471	
26	4917.230	4.191	−1.180	68.3	7.343	
26	4950.106	3.417	−1.670	120.0	7.592	
26	4962.572	4.178	−1.182	75.0	7.647	
26	4966.088	3.332	−0.871	202.0	7.232	
26	4970.646	3.960	−1.873	38.0	7.374	
26	4985.253	3.928	−0.560	153.0	7.616	
26	4988.950	4.154	−0.890	130.0	7.679	
26	5001.863	3.881	0.010	223.0	7.080	
26	5004.044	4.209	−1.400	68.8	7.577	
26	5016.478	4.256	−1.690	44.3	7.522	
26	5025.303	4.284	−2.040	23.1	7.456	
26	5057.481	4.191	−1.583	23.3	6.947	
26	5058.496	3.642	−2.830	40.0	8.036	spshow not good
26	5068.766	2.940	−1.042	270.0	7.262	
26	5088.153	4.154	−1.780	68.0	7.928	spshow not good
26	5096.998	4.283	−0.268	110.0	7.269	
26	5115.777	3.573	−2.740	33.0	7.719	
26	5141.739	2.424	−1.964	159.9	7.383	
26	5197.936	4.301	−1.640	44.4	7.517	
26	5217.389	3.211	−1.070	220.0	7.348	
26	5221.036	4.294	−1.580	25.6	7.129	
26	5223.183	3.635	−1.783	43.0	7.028	
26	5225.526	0.110	−4.789	131.6	7.572	
26	5232.940	2.940	−0.058	850.0	7.307	
26	5236.202	4.186	−1.497	38.0	7.282	
26	5242.491	3.634	−0.967	117.0	7.408	
26	5247.050	0.087	−4.946	112.1	7.496	

26	5250.209	0.121	−4.938	130.9	7.722	
26	5250.646	2.198	−2.181	175.5	7.446	
26	5253.021	2.279	−3.940	29.3	7.284	
26	5253.462	3.283	−1.573	120.0	7.321	
26	5262.881	3.251	−2.660	39.5	7.434	
26	5285.127	4.434	−1.640	36.5	7.510	
26	5294.547	3.640	−2.860	25.1	7.657	
26	5295.312	4.415	−1.690	33.8	7.487	
26	5300.403	4.593	−1.750	10.5	7.099	
26	5307.361	1.608	−2.987	140.0	7.440	
26	5315.775	3.640	−2.836	7.5	6.954	
26	5321.108	4.434	−0.951	56.0	7.164	
26	5322.041	2.279	−2.803	85.2	7.335	
26	5324.179	3.211	−0.103	550.0	7.227	
26	5326.142	3.573	−2.071	45.0	7.365	
26	5332.900	1.557	−2.777	155.0	7.290	
26	5358.113	3.301	−3.635	15.8	7.768	
26	5364.871	4.445	0.228	217.7	7.288	
26	5365.399	3.573	−1.020	84.0	7.169	
26	5367.466	4.415	0.443	160.0	6.760	
26	5379.574	3.694	−1.514	82.7	7.591	
26	5386.333	4.154	−1.770	44.1	7.477	
26	5389.479	4.415	−0.410	115.1	7.303	
26	5393.167	3.241	−0.715	313.5	7.357	
26	5405.775	0.990	−1.844	770.0	7.265	
26	5415.199	4.386	0.642	333.1	7.239	
26	5417.033	4.415	−1.680	44.1	7.681	
26	5421.850	4.549	−1.780	26.0	7.545	
26	5422.150	4.320	−2.260	17.0	7.539	
26	5434.524	1.011	−2.122	570.0	7.301	
26	5436.295	4.386	−1.540	44.9	7.533	
26	5436.588	2.279	−2.964	72.0	7.241	
26	5464.280	4.143	−1.402	47.5	7.384	
26	5473.900	4.154	−0.760	106.0	7.369	
26	5483.099	4.154	−1.407	56.9	7.381	
26	5491.832	4.186	−2.188	16.7	7.345	
26	5501.465	0.958	−3.047	260.0	7.425	
26	5524.250	4.154	−2.830	17.0	7.919	spshow not good
26	5536.580	2.831	−3.810	15.2	7.374	
26	5539.280	3.642	−2.660	25.9	7.475	
26	5539.817	4.294	−2.530	10.0	7.516	
26	5543.936	4.217	−1.140	71.3	7.400	
26	5549.949	3.694	−2.910	18.3	7.560	
26	5552.692	4.955	−1.990	10.1	7.698	

26	5560.211	4.434	−1.190	59.0	7.456	
26	5561.243	4.607	−1.210	15.0	6.744	
26	5569.618	3.417	−0.486	316.4	7.277	
26	5579.340	4.231	−2.400	23.0	7.757	spshow not good
26	5586.756	3.368	−0.120	480.0	7.255	
26	5592.645	4.294	−2.004	18.1	7.334	
26	5609.961	3.640	−3.240	9.2	7.450	
26	5611.356	3.635	−2.990	15.5	7.472	
26	5618.632	4.209	−1.276	60.4	7.364	
26	5621.603	5.106	−1.787	9.6	7.631	
26	5633.946	4.991	−0.270	69.1	7.376	
26	5636.696	3.640	−2.610	29.6	7.521	
26	5638.262	4.220	−0.870	106.0	7.542	
26	5639.551	0.000	−7.455	6.2	7.175	
26	5640.307	4.638	−1.374	18.0	7.044	
26	5645.833	4.607	−0.961	16.9	6.561	
26	5649.987	5.099	−0.920	38.0	7.584	
26	5651.469	4.473	−2.000	25.7	7.685	
26	5652.318	4.260	−1.950	33.7	7.593	
26	5653.865	4.386	−1.640	39.4	7.518	
26	5655.176	5.064	−0.640	60.0	7.712	
26	5661.345	4.284	−1.736	29.1	7.302	
26	5677.684	4.103	−2.700	12.3	7.563	
26	5686.530	4.548	−0.446	84.1	7.400	
26	5698.020	3.640	−2.680	26.7	7.507	
26	5704.733	5.033	−1.409	20.1	7.571	
26	5709.932	4.256	−2.340	19.0	7.602	
26	5712.131	3.417	−1.990	62.4	7.189	
26	5731.762	4.256	−1.300	70.0	7.582	
26	5732.296	4.991	−1.560	16.1	7.555	
26	5741.848	4.256	−1.854	44.8	7.716	
26	5742.960	4.178	−2.510	16.0	7.591	
26	5752.032	4.549	−1.177	63.0	7.803	
26	5753.122	4.260	−0.688	92.1	7.251	
26	5754.403	3.642	−2.700	20.7	7.359	
26	5838.372	3.943	−2.340	28.5	7.483	
26	5849.683	3.694	−2.990	13.3	7.448	
26	5853.148	1.485	−5.280	28.7	7.651	
26	5855.076	4.608	−1.478	22.8	7.229	
26	5856.088	4.294	−1.328	39.0	7.194	
26	5859.586	4.549	−0.419	90.0	7.408	
26	5861.109	4.283	−2.450	13.2	7.542	
26	5862.357	4.549	−0.127	124.3	7.498	
26	5880.027	4.558	−1.940	15.6	7.426	

26	5902.473	4.593	−1.810	21.3	7.580	
26	5905.671	4.652	−0.730	60.7	7.234	
26	5907.863	3.695	−3.512	11.4	7.893	
26	5916.247	2.453	−2.994	79.0	7.556	
26	5929.677	4.548	−1.410	37.1	7.420	
26	5930.180	4.652	−0.230	120.0	7.382	
26	5934.655	3.928	−1.170	115.0	7.492	
26	5940.991	4.178	−2.150	25.6	7.509	
26	5943.578	2.198	−4.178	24.9	7.288	
26	5952.718	3.984	−1.440	66.2	7.280	
26	5956.694	0.859	−4.605	91.1	7.610	
26	5976.777	3.943	−1.243	94.0	7.674	
26	5983.680	4.549	−1.468	64.4	8.107	spshow not good
26	5984.815	4.733	−0.196	81.9	7.254	
26	6003.011	3.881	−1.120	135.0	7.570	
26	6007.960	4.652	−0.597	69.8	7.436	
26	6008.556	3.884	−0.986	131.9	7.725	
26	6012.210	2.223	−4.038	39.5	7.533	
26	6015.244	2.223	−4.680	14.0	7.461	
26	6024.058	4.548	−0.120	185.0	7.630	
26	6027.051	4.076	−1.089	73.5	7.524	
26	6034.035	4.312	−2.420	11.2	7.463	
26	6065.482	2.608	−1.530	230.0	7.418	
26	6078.491	4.796	−0.321	105.0	7.707	
26	6079.008	4.652	−1.120	53.6	7.526	
26	6082.710	2.223	−3.573	59.5	7.519	
26	6093.643	4.607	−1.500	28.4	7.388	
26	6094.373	4.652	−1.940	13.9	7.461	
26	6097.081	2.176	−4.652	5.4	6.898	
26	6098.244	4.558	−1.880	14.4	7.323	
26	6120.246	0.915	−5.950	19.5	7.357	
26	6127.906	4.143	−1.399	55.0	7.534	
26	6136.615	2.453	−1.400	250.0	7.215	
26	6145.410	3.368	−3.700	5.7	7.343	
26	6151.617	2.176	−3.299	75.9	7.505	
26	6157.728	4.076	−1.260	64.6	7.523	
26	6165.360	4.143	−1.474	39.4	7.229	
26	6173.334	2.223	−2.880	76.5	7.142	
26	6187.398	2.832	−4.148	8.6	7.382	
26	6187.989	3.943	−1.720	62.6	7.472	
26	6199.506	2.559	−4.430	13.5	7.574	
26	6200.313	2.608	−2.437	112.0	7.565	
26	6220.780	3.881	−2.460	20.7	7.340	
26	6221.672	0.859	−6.613	6.4	7.360	

26	6226.734	3.883	−2.220	25.8	7.233	
26	6229.226	2.845	−2.805	39.7	7.009	
26	6232.640	3.654	−1.223	110.0	7.478	
26	6240.646	2.223	−3.233	62.0	7.220	
26	6246.318	3.602	−0.733	202.0	7.269	
26	6252.555	2.404	−1.687	210.0	7.271	
26	6265.132	2.176	−2.550	135.0	7.454	
26	6270.223	2.858	−2.464	71.0	7.316	
26	6271.278	3.332	−2.703	40.9	7.418	
26	6297.793	2.223	−2.740	95.0	7.269	
26	6301.500	3.654	−0.718	175.0	7.457	
26	6302.494	3.686	−0.973	100.0	7.150	
26	6322.685	2.588	−2.426	114.0	7.545	
26	6330.848	4.733	−1.740	38.0	7.956	
26	6335.330	2.198	−2.177	166.0	7.325	
26	6336.823	3.686	−0.856	185.0	7.386	
26	6338.876	4.795	−1.060	48.0	7.515	
26	6355.028	2.845	−2.350	87.3	7.439	
26	6364.364	4.795	−1.430	22.6	7.374	
26	6380.743	4.186	−1.376	50.6	7.447	
26	6392.538	2.279	−4.030	39.6	7.559	
26	6393.600	2.433	−1.432	255.0	7.219	
26	6408.018	3.686	−1.018	150.0	7.627	
26	6411.648	3.654	−0.595	210.0	7.211	
26	6421.350	2.279	−2.027	156.0	7.167	
26	6464.662	0.958	−6.636	45.2	8.735	telluric−weak for UVES do not fit on spshow spshow for the Sun is also not good
26	6475.624	2.559	−2.942	79.5	7.586	
26	6481.870	2.279	−2.984	80.9	7.329	
26	6483.944	1.485	−4.738	10.0	6.445	
26	6494.980	2.404	−1.273	275.0	7.098	
26	6496.466	4.795	−0.570	50.0	7.064	
26	6498.938	0.958	−4.699	68.0	7.311	
26	6518.366	2.831	−2.460	80.0	7.414	
26	6533.928	4.558	−1.460	45.0	7.600	
26	6538.494	4.143	−2.807	7.0	7.432	
26	6569.214	4.733	−0.420	76.0	7.238	
26	6574.227	0.990	−5.023	53.6	7.354	
26	6581.209	1.485	−4.679	35.6	7.168	
26	6591.313	4.593	−2.070	15.0	7.601	
26	6593.870	2.433	−2.422	133.0	7.532	
26	6608.025	2.279	−4.030	39.6	7.546	
26	6609.110	2.559	−2.692	94.7	7.536	
26	6627.544	4.548	−1.680	16.2	7.166	

26	6633.412	4.835	−1.490	22.4	7.470	
26	6633.749	4.558	−0.799	61.0	7.201	
26	6634.106	4.795	−1.430	21.5	7.341	
26	6646.931	2.608	−3.990	16.0	7.266	
26	6648.080	1.011	−5.424	20.0	6.930	
26	6653.851	4.154	−2.520	9.5	7.280	
26	6663.441	2.424	−2.479	120.0	7.457	
26	6665.427	1.557	−4.701	14.8	6.692	
26	6667.418	2.453	−4.400	14.0	7.420	
26	6677.985	2.692	−1.418	219.8	7.345	
26	6703.566	2.758	−3.160	42.3	7.300	
26	6710.318	1.485	−4.880	27.0	7.148	
26	6725.356	4.103	−2.300	16.0	7.267	
26	6726.666	4.607	−1.133	50.0	7.540	
26	6732.065	4.584	−2.210	9.2	7.461	
26	6733.150	4.638	−1.580	31.0	7.555	
				mean =	**7.419**	
26.01	5264.812	3.230	−3.133	11.9	7.22	
26.01	6149.258	3.889	−2.841	8.3	7.44	
26.01	6247.557	3.892	−2.435	10.3	7.18	
26.01	6456.383	3.903	−2.185	19.2	7.40	
					7.31	
27.00	4813.467	3.216	0.050	65.0	5.34	
27.00	4966.581	0.432	−4.117	19.7	5.06	
27.00	5247.911	1.785	−2.070	49.9	5.39	
27.00	5342.695	4.021	0.690	43.4	5.07	
27.00	5352.045	3.576	0.060	34.6	4.84	
27.00	5359.192	4.149	0.340	12.3	4.60	
27.00	5483.344	1.710	−1.490	93.8	5.55	
27.00	5523.291	2.328	−1.566	20.6	4.66	
27.00	5530.774	1.710	−2.060	45.2	5.16	
27.00	5590.720	2.042	−1.870	37.1	5.18	
27.00	5647.234	2.280	−1.560	31.7	4.97	
27.00	6093.143	1.740	−2.440	25.1	5.03	
27.00	6188.996	1.710	−2.450	28.6	5.09	
27.00	6282.638	1.740	−2.160	36.7	5.04	
					5.07	
28.00	4701.346	3.480	−1.220	46.0	6.17	
28.00	4701.530	4.088	−0.390	47.0	6.07	
28.00	4731.793	3.833	−0.850	53.0	6.33	
28.00	4806.984	3.679	−0.640	66.3	6.20	

28.00	4852.547	3.542	−1.070	47.0	6.13	
28.00	4855.406	3.542	0.000	98.0	5.80	
28.00	4912.020	3.768	−0.800	49.8	6.16	
28.00	4913.968	3.743	−0.630	62.1	6.17	
28.00	4935.831	3.941	−0.350	70.8	6.21	
28.00	4945.443	3.796	−0.820	51.2	6.22	
28.00	4965.166	3.796	−0.753	44.3	6.24	
28.00	5003.734	1.676	−2.800	67.8	6.44	
28.00	5035.357	3.635	0.290	84.1	5.43	
28.00	5042.182	3.658	−0.580	64.4	6.05	
28.00	5084.089	3.679	0.030	82.9	5.68	
28.00	5099.927	3.679	−0.100	69.8	5.67	
28.00	5155.762	3.898	0.011	105.0	6.20	
28.00	5468.100	3.847	−1.610	20.0	6.38	
28.00	5578.711	1.676	−2.640	90.3	6.54	
28.00	5625.312	4.089	−0.700	43.5	6.27	
28.00	5641.880	4.105	−1.070	23.4	6.21	
28.00	5669.935	4.266	−0.964	14.9	6.06	
28.00	5682.198	4.105	−0.470	37.3	5.93	
28.00	5694.977	4.089	−0.610	42.2	6.16	
28.00	5748.346	1.676	−3.260	46.9	6.29	
28.00	6007.306	1.676	−3.330	36.6	6.12	
28.00	6053.679	4.236	−1.070	13.3	6.03	
28.00	6086.276	4.266	−0.530	39.3	6.20	
28.00	6108.107	1.676	−2.450	67.3	5.91	
28.00	6111.066	4.088	−0.870	16.9	5.79	
28.00	6130.130	4.266	−0.960	19.1	6.15	
28.00	6175.360	4.089	−0.559	31.1	5.87	
28.00	6176.807	4.088	−0.260	46.3	5.86	
28.00	6177.236	1.826	−3.500	17.1	5.90	
28.00	6204.600	4.088	−1.100	18.6	6.09	
28.00	6223.981	4.105	−0.910	15.0	5.79	
28.00	6314.653	1.935	−1.770	81.3	5.74	
28.00	6322.164	4.154	−1.170	14.9	6.10	
28.00	6370.341	3.542	−1.940	9.3	5.94	
28.00	6378.247	4.154	−0.830	23.9	6.03	
28.00	6414.581	4.154	−1.180	11.4	5.97	
28.00	6532.871	1.935	−3.390	30.1	6.27	
28.00	6598.593	4.236	−0.980	22.1	6.22	
28.00	6635.118	4.419	−0.820	13.6	5.99	
28.00	6643.629	1.676	−2.300	110.0	6.35	
					6.07	
30.00	4810.528	4.078	−0.137	52.8	4.46	

					4.46	
38.00	4607.327	0.000	−0.570	108.0	3.73	
					3.73	
39.00	4505.944	1.374	0.120	10.0	2.31	
39.00	4643.688	0.000	−0.450	43.0	2.41	
39.00	6435.004	0.066	−0.820	16.7	1.79	
					2.17	
39.01	4124.907	0.409	−1.500	20.0	2.11	
39.01	4900.120	1.033	−0.090	57.0	2.48	
					2.30	
40.00	4507.113	0.543	−0.430	25.0	2.43	
40.00	4553.022	0.520	−1.220	25.0	**3.18**	
40.00	4739.480	0.651	0.230	46.0	2.57	
40.00	4815.621	0.604	−0.030	39.4	2.54	
40.00	5955.366	0.000	−2.330	8.3	2.82	
40.00	6127.475	0.154	−1.060	34.1	2.67	
40.00	6134.585	0.000	−1.280	28.8	2.54	
40.00	6140.535	0.519	−1.410	7.0	2.45	
40.00	6143.252	0.071	−1.100	29.9	2.48	
					2.63	
40.01	4208.977	0.713	−0.510	77.0	3.61	
					3.61	
41.00	4168.120	0.000	−0.320	52.0	**2.70**	
41.00	4573.075	0.267	−0.560	8.6	1.52	
41.00	4606.756	0.348	−0.370	16.0	1.78	
					2.00	
44.00	4584.443	1.002	−0.550	11.0	2.02	
					2.02	
49.00	4511.307	0.274	−0.213	7.5	0.75	
					0.75	
56.01	6496.897	0.604	−0.377	84.3	1.91	
					1.91	
57.01	4322.500	0.173	−0.930	13.0	1.25	
57.01	4558.457	0.321	−0.970	10.0	1.28	

57.01	4662.498	0.000	−1.240	11.0	1.23	
					1.25	
58.01	4083.222	0.701	0.270	30.0	2.17	
58.01	4137.645	0.516	0.440	56.0	**2.61**	
58.01	4486.909	0.295	−0.260	29.0	2.13	
58.01	4562.359	0.478	0.230	27.0	1.76	
					2.17	
60.01	4021.327	0.321	−0.100	21.0	1.47	
60.01	4023.000	0.559	0.040	25.0	1.78	
60.01	4358.160	0.321	−0.160	47.0	2.45	
60.01	4446.380	0.205	−0.350	21.0	1.53	
60.01	4462.979	0.559	0.040	31.0	1.95	
60.01	4506.578	0.064	−1.040	30.0	2.41	
60.01	4943.899	0.205	−1.514	26.0	**2.84**	
60.01	4989.950	0.631	−0.624	58.7	**3.44**	
60.01	5255.502	0.205	−0.670	15.4	1.54	
60.01	5293.160	0.823	0.100	16.8	1.56	
60.01	5319.810	0.550	−0.140	19.7	1.59	
					2.05	
62.01	4566.200	0.333	−0.590	16.0	1.50	
62.01	4577.688	0.248	−0.650	10.0	1.16	
					1.33	
66.01	4449.700	0.000	−1.030	8.0	1.07	
					1.07	
68.01	4009.156	0.000	−1.430	62.0	3.45	
					3.45	