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Observation and modelling of main sequence star chromospheres X. Radiative budgets on Gl 867A and AU Mic (dM1e), and a two-component model chromosphere for Gl 205 (dM1) ⋆

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Table 1: List of the spectral lines sensitive to chromospheric activity. We give the difference equivalent widths between Gl867A and Gl 205, the continuum fluxes from Allard et al. (1997), the difference radiative losses in the lines as well as their identification. We also give the number of the corresponding spectral order as well as the original catalog from which we identified each line.

Vacuum Wavelength (Å)	λ Gl 205 (Å)	δEW (mÅ)	Continuum Flux 105ergs/s/cm^2	δF 104ergs/s/cm^2	Identification	Order No.	Remarks
3933.66	3933	2780	1.58 @3950A	43.9	Ca II	2	Coluzzi
3968.47	3968	2780	1.58 @3950A	43.9	Ca II	3	Coluzzi
4226.73	4226	3010	3.75 @4210A	112.9	Ca I	12	Coluzzi
4325.76	4325.4	910	3.91 @4330A	35.58	Fe I	16	Coluzzi
4340.47	4340.	1820	“ @4330A	71.16	H I	16	Coluzzi
-	Total	910	“ @4330A	35.58	-	16	
4827.46	4827.2	41	4.20 @4845A	1.83	V I	31	Coluzzi
4829.38	4829.05	25	“ @4845A	1.07	Cr I	31	Coluzzi
4831.63	4831.37	25	“ @4845A	1.03	Cr I	31	Coluzzi
4840.89	4840.60	18	“ @4845A	0.75	Fe I	31	Coluzzi
4848.49	4848.20	32	“ @4845A	1.34	Ti I	31	Coluzzi
4851.47	4851.24	30	“ @4845A	1.24	Cr I	31	Coluzzi
4856.01	4855.78	22	“ @4845A	0.93	Ti I	31	Coluzzi
4861.33	4861.0	2450	“ @4845A	126.	HI	31	Coluzzi
4864.74	4864.50	29	“ @4845A	1.21	V I	31	Coluzzi
-	Total	221	“ @4845A	9.30	-	31	
4978.20	4977.82	23	2.75 @5000A	0.63	Ti I	35	Coluzzi
4978.11	4978.26	21	“ @5000A	0.57	Fe I	35	Coluzzi
4979.84	4979.89	25	“ @5000A	0.70	Fe I	35	Coluzzi
4981.73	4981.47	14	“ @5000A	0.39	Ti I	35	Coluzzi
4982.81	4982.51	13	“ @5000A	0.36	Na I	35	Coluzzi
4991.11	4990.83	18	“ @5000A	0.50	Fe II	35	Coluzzi
4994.13	4993.84	17	“ @5000A	0.48	Fe I	35	Coluzzi
4999.50	4999.23	15	“ @5000A	0.41	Ti I	35	Coluzzi
5007.21	5007.07	42	“ @5000A	1.15	Ti I	35	Coluzzi
5009.65	5009.38	11	“ @5000A	0.30	Ti I	35	Coluzzi
5012.07	5011.78	18	“ @5000A	0.50	Fe I	35	Coluzzi
5013.3	5013.02	21	“ @5000A	0.56	Ti I, Cr I	35	Coluzzi
5014.28	5013.95	18	“ @5000A	0.50	Ti I	35	Coluzzi
5019.20	5018.89	18	“ @5000A	0.50	Cr I	35	Coluzzi
5021.9	5021.78	29	“ @5000A	0.79	Fe I, Cr I	35	Coluzzi
5024.84	5024.55	12	“ @5000A	0.34	Ti I	35	Coluzzi
5026.50	5026.17	17	“ @5000A	0.48	Ni I	35	Coluzzi
-	Total	331	“ @5000A	9.11		35	
5035.91	5035.67	14	2.74 @5045A	0.38	Ti I	36	Coluzzi
5036.47	5036.17	11	“ @5045A	0.31	Ti I	36	Coluzzi
5036.93	5036.66	15	“ @5045A	0.40	Fe I	36	Coluzzi
5038.40	5038.14	12	“ @5045A	0.34	Ti I	36	Coluzzi
5039.96	5039.67	20	“ @5045A	0.54	Ti I	36	Coluzzi
5041.07	5040.80	18	“ @5045A	0.49	Ni I, Fe I	36	Coluzzi
5042.20	5041.89	21	“ @5045A	0.57	Ni I	36	Coluzzi
5045.40	5045.13	19	“ @5045A	0.52	Ti I	36	Coluzzi
5047.28	5047.10	13	“ @5045A	0.36	S II	36	Coluzzi
5048.75	5048.49	26	“ @5045A	0.72	Cr I	36	Coluzzi
5051.64	5051.30	22	“ @5045A	0.61	Fe I	36	Coluzzi
5051.90	5051.64	16	“ @5045A	0.45	Cr I	36	Coluzzi
5052.88	5052.58	25	“ @5045A	0.67	Ti I	36	Coluzzi
5062.11	5061.86	16	“ @5045A	0.45	Ti I	36	Coluzzi
5064.65	5064.35	17	“ @5045A	0.48	Ti I	36	Coluzzi
5065.91	5065.66	14	“ @5045A	0.39	Cr I	36	Coluzzi
5068.10	5067.72	25	“ @5045A	0.67	Cl II	36	Coluzzi
5068.77	5068.48	30	“ @5045A	0.81	Fe I	36	Coluzzi
-	Total	333	“ @5045A	9.14		36	

5166.29	5165.98	21	2.40 @5175A	0.51	Fe I	39	Coluzzi
5167.32	5167.07	35	" @5175A	0.84	Mg I	39	Coluzzi
5168.90	5168.64	19	" @5175A	0.45	Fe I	39	Coluzzi
5171.60	5171.27	25	" @5175A	0.59	Fe I	39	Coluzzi
5172.68	5172.35	23	" @5175A	0.55	Mg I	39	Coluzzi
5173.74	5173.49	20	" @5175A	0.48	Ti I	39	Coluzzi
5177.23	5176.79	21	" @5175A	0.49	Fe I	39	Coluzzi
5183.60	5183.26	23	" @5175A	0.55	Mg I	39	Coluzzi
5188.85	5188.58	11	" @5175A	0.28	Ca I	39	Coluzzi
5191.46	5191.18	29	" @5175A	0.69	Fe I	39	Coluzzi
5192.97	5192.70	22	" @5175A	0.53	Ti I	39	Coluzzi
5194.94	5194.67	24	" @5175A	0.57	Fe I	39	Coluzzi
5196.57	5196.53	10	" @5175A	0.21	Cr I	39	Coluzzi
5198.71	5198.38	21	" @5175A	0.49	Fe I	39	Coluzzi
-	Total	302	" @5175A	7.24		39	
5204.46	5204.21	16	3.02 @5215A	0.49	Al II	40	Coluzzi
5206.1	5205.73	14	" @5215A	0.42	Ti I, Cr I	40	Coluzzi
5210.39	5210.07	21	" @5215A	0.62	Ti I	40	Coluzzi
5215.19	5214.92	20	" @5215A	0.59	Fe I	40	Coluzzi
5216.17	5215.96	18	" @5215A	0.54	Cr I	40	Coluzzi
5218.20	5217.83	22	" @5215A	0.67	Cu I	40	Coluzzi
5221.34	5221.09	19	" @5215A	0.57	Cl II	40	Coluzzi
5222.68	5222.32	17	" @5215A	0.52	Cr I, Ti I	40	Coluzzi
5223.62	5223.31	25	" @5215A	0.75	Ti I	40	Coluzzi
5224.56	5224.29	34	" @5215A	1.01	Cr I, Ti I	40	Coluzzi
5227.19	5226.89	20	" @5215A	0.59	Fe I	40	Coluzzi
5229.86	5229.58	28	" @5215A	0.84	Fe I	40	Coluzzi
5232.95	5232.58	18	" @5215A	0.54	Fe I	40	Coluzzi
5235.07	5234.86	25	" @5215A	0.77	V II	40	Coluzzi
5238.57	5238.26	30	" @5215A	0.92	Ti I, Fe II	40	Coluzzi
-	Total	326	" @5215A	9.86		40	
5240.47	5240.20	26	4.56 @5260A	1.20	Cr I	41	Coluzzi
5240.88	5240.58	22	" @5260A	1.01	V I	41	Coluzzi
5241.46	5241.28	13	" @5260A	0.60	Cr I	41	Coluzzi
5242.50	5242.21	25	" @5260A	1.12	Fe I	41	Coluzzi
5246.57	5246.28	28	" @5260A	1.27	Ti I	41	Coluzzi
5247.56	5247.25	24	" @5260A	1.32	Cr I	41	Coluzzi
5247.84	5247.63	21	" @5260A	0.93	Cr II	41	Coluzzi
5250.21	5249.91	22	" @5260A	1.01	Fe I	41	Coluzzi
5250.65	5250.35	24	" @5260A	1.08	Fe I	41	Coluzzi
5250.95	5250.67	17	" @5260A	0.79	Ti I	41	Coluzzi
5251.49	5251.18	21	" @5260A	1.01	Ti I	41	Coluzzi
5252.11	5251.82	18	" @5260A	0.82	Ti I	41	Coluzzi
5253.48	5253.15	17	" @5260A	0.79	Fe I	41	Coluzzi
5254.93	5254.63	19	" @5260A	0.86	Cr I, Fe I	41	Coluzzi
5255.81	5255.47	30	" @5260A	1.39	Gd I, Ti I	41	Coluzzi
5260.38	5260.01	17	" @5260A	0.79	Ca I	41	Coluzzi
5261.71	5261.43	20	" @5260A	0.89	Ca I	41	Coluzzi
5262.24	5261.97	25	" @5260A	1.12	Ca I	41	Coluzzi
5263.31	5262.91	11	" @5260A	0.49	Fe I	41	Coluzzi
5264.15	5263.89	22	" @5260A	1.01	Mg II, Cr I	41	Coluzzi
5265.16	5264.83	11	" @5260A	0.41	Cr I	41	Coluzzi
5266.50	5266.21	17	" @5260A	0.79	Ti I, Co I	41	Coluzzi
5269.54	5269.22	25	" @5260A	1.12	Fe I	41	Coluzzi
5270.27	5270.01	16	" @5260A	0.71	Ca I	41	Coluzzi
5272.01	5271.68	24	" @5260A	1.08	Cr I	41	Coluzzi
5273.18	5272.84	15	" @5260A	0.67	Fe I	41	Coluzzi
5273.38	5273.09	18	" @5260A	0.82	Fe I, Fe II	41	Coluzzi
5275.17	5274.89	26	" @5260A	1.20	Cr I	41	Coluzzi
5275.69	5275.40	14	" @5260A	0.64	Cr I	41	Coluzzi
5276.03	5275.72	25	" @5260A	1.12	Cr I	41	Coluzzi
5281.69	5281.49	16	" @5260A	0.75	Ni I	41	Coluzzi

5282.38	5282.01	14	“ @5260A	0.64	Ti I	41	Coluzzi
5283.63	5283.29	33	“ @5260A	1.49	Fe I	41	Coluzzi
-	Total	672	“ @5260A	30.63		41	
5300.01	5299.69	33	2.50 @5310A	0.82	Ti I	42	Coluzzi
5300.75	5300.43	25	“ @5310A	0.64	Cr I	42	Coluzzi
5301.04	5300.78	31	“ @5310A	0.78	Co I	42	Coluzzi
5301.94	5301.67	30	“ @5310A	0.76	Sc I	42	Coluzzi
5302.31	5302.01	38	“ @5310A	0.94	Fe I	42	Coluzzi
5307.30	5307.08	15	“ @5310A	0.37	Cr I, Ca II	42	Coluzzi
5309.27	5309.05	15	“ @5310A	0.37	Ru I	42	Coluzzi
5312.88	5312.56	20	“ @5310A	0.49	Cr I	42	Coluzzi
5313.24	5312.90	20	“ @5310A	0.49	Ti I	42	Coluzzi
5324.19	5323.86	19	“ @5310A	0.48	Fe I	42	Coluzzi
5328.04	5327.71	46	“ @5310A	1.15	Fe I	42	Coluzzi
5329.12	5328.89	27	“ @5310A	0.68	Cr I	42	Coluzzi
5332.90	5332.59	23	“ @5310A	0.57	Fe I	42	Coluzzi
-	Total	341	“ @5310A	8.53		42	
5336.16	5335.75	16	3.22 @5350A	0.50	Co I	43	Coluzzi
5338.33	5338.02	11	“ @5350A	0.34	Ti I	43	Coluzzi
5339.29	5339.05	17	“ @5350A	0.56	Ca II	43	Coluzzi
5339.94	5339.60	18	“ @5350A	0.58	Fe I	43	Coluzzi
5341.03	5340.78	24	“ @5350A	0.76	Fe I, Sc I	43	Coluzzi
5342.96	5342.60	22	“ @5350A	0.71	Sc I	43	Coluzzi
5344.17	5343.94	20	“ @5350A	0.63	Nb I	43	NIST
5345.81	5345.45	12	“ @5350A	0.39	Cr I	43	Coluzzi
5348.32	5348.02	20	“ @5350A	0.63	Cr I	43	Coluzzi
5349.47	5349.15	15	“ @5350A	0.48	Ca I	43	Coluzzi
5349.74	5349.45	28	“ @5350A	0.89	Fe I	43	Coluzzi
5353.5	5353.15	33	“ @5350A	1.06	Co I, Ce II	43	Coluzzi
5356.10	5355.80	30	“ @5350A	0.95	Sc I	43	Coluzzi
5361.72	5361.47	28	“ @5350A	0.89	Ti I	43	Coluzzi
5364.87	5364.55	25	“ @5350A	0.80	Fe I	43	Coluzzi
5365.40	5365.04	19	“ @5350A	0.61	Fe I	43	Coluzzi
5365.91	5365.37	16	“ @5350A	0.52	Kr I	43	NIST
5366.65	5366.29	21	“ @5350A	0.69	Ti I	43	Coluzzi
5367.47	5367.16	25	“ @5350A	0.80	Fe I	43	Coluzzi
5369.59	5369.33	28	“ @5350A	0.89	Co I	43	Coluzzi
5369.97	5369.65	16	“ @5350A	0.52	Fe I	43	Coluzzi
5371.5	5371.17	17	“ @5350A	0.56	Cr I, Fe I	43	Coluzzi
5373.71	5373.56	36	“ @5350A	1.16	Fe I, Cr I	43	Coluzzi
5375.35	5374.99	33	“ @5350A	1.06	Sc I	43	Coluzzi
5376.59	5376.30	28	“ @5350A	0.89	Ti I	43	Coluzzi
5379.58	5379.29	23	“ @5350A	0.74	Fe I	43	Coluzzi
-	Total	579	“ @5350A	18.64		43	
5383.37	5383.12	30	4.68 @5400A	1.38	Fe I	44	Coluzzi
5384.22	5383.86	20	“ @5400A	0.92	Fe I	44	Coluzzi
5384.63	5384.35	19	“ @5400A	0.89	Ti I	44	Coluzzi
5386.98	5386.67	18	“ @5400A	0.84	Cr I	44	Coluzzi
5387.5	5387.26	25	“ @5400A	1.15	Fe I, Cr I	44	Coluzzi
5388.52	5388.29	33	“ @5400A	1.53	Mn I	44	Coluzzi
5389.18	5388.84	25	“ @5400A	1.19	Ti I	44	Coluzzi
5389.46	5389.18	34	“ @5400A	1.62	Fe I	44	Coluzzi
5390.00	5389.68	37	“ @5400A	1.73	Ti I	44	Coluzzi
5393.17	5392.82	20	“ @5400A	0.92	Fe I	44	Coluzzi
5394.7	5394.40	33	“ @5400A	1.53	Mn I, Fe I	44	Coluzzi
5397.1	5396.81	25	“ @5400A	1.15	Ti I, Fe I	44	Coluzzi
5398.29	5398.00	16	“ @5400A	0.77	Fe I	44	Coluzzi
5399.49	5399.18	25	“ @5400A	1.15	Mn I	44	Coluzzi
5440.6	5400.30	33	“ @5400A	1.53	Ne I, Cr I	44	Coluzzi
5404.12	5403.86	31	“ @5400A	1.46	Fe I	44	Coluzzi
5405.78	5405.53	20	“ @5400A	0.92	Fe I	44	Coluzzi
5407.4	5407.11	44	“ @5400A	2.07	Mn I, AL II	44	Coluzzi

5410.91	5410.60	17	“ @5400A	0.80	Fe I	44	Coluzzi
5415.20	5414.94	25	“ @5400A	1.15	Fe I	44	Coluzzi
5420.36	5420.09	39	“ @5400A	1.80	Mn I	44	Coluzzi
5424.07	5423.78	34	“ @5400A	1.57	Fe I	44	Coluzzi
-	Total	600	“ @5400A	28.09		44	
5426.26	5425.92	16	6.17 @5450A	0.96	Ti I	45	Coluzzi
5429.14	5428.83	25	“ @5450A	1.52	Ti I	45	Coluzzi
5429.70	5429.37	30	“ @5450A	1.82	Fe I	45	Coluzzi
5432.55	5432.23	43	“ @5450A	2.68	Mn I	45	Coluzzi
5432.98	5432.68	20	“ @5450A	1.21	Fe II	45	Coluzzi
5434.53	5434.26	35	“ @5450A	2.17	Fe I	45	Coluzzi
5435.87	5435.58	22	“ @5450A	1.37	Ni I	45	Coluzzi
5436.70	5436.36	38	“ @5450A	2.33	Ti I	45	Coluzzi
5438.31	5437.94	29	“ @5450A	1.77	Ti I	45	Coluzzi
5445.05	5444.76	20	“ @5450A	1.21	Fe I	45	Coluzzi
5446.92	5446.65	24	“ @5450A	1.47	Fe I	45	Coluzzi
5453.65	5453.44	25	“ @5450A	1.57	Ti I	45	Coluzzi
5455.61	5455.36	18	“ @5450A	1.12	Fe I	45	Coluzzi
5460.50	5460.16	20	“ @5450A	1.21	Ti I	45	Coluzzi
5462.97	5462.62	24	“ @5450A	1.47	Fe I	45	Coluzzi
5466.46	5466.17	32	“ @5450A	1.98	Y I	45	Coluzzi
5466.99	5466.72	20	“ @5450A	1.21	Fe I	45	Coluzzi
5470.63	5470.25	39	“ @5450A	2.38	Mn I	45	Coluzzi
5471.20	5470.99	26	“ @5450A	1.62	Ti I	45	Coluzzi
5472.7	5472.38	23	“ @5450A	1.42	Ti I, Fe I	45	Coluzzi
5474.0	5473.66	25	“ @5450A	1.52	Fe I, Mn II	45	Coluzzi
-	Total	551	“ @5450A	34.00		45	
5476.57	5476.24	13	6.61 @5500A	0.86	Fe I	46	Coluzzi
5476.91	5476.59	16	“ @5500A	1.03	Ni I	46	Coluzzi
5477.70	5477.38	21	“ @5500A	1.41	Ti I	46	Coluzzi
5481.4	5481.08	54	“ @5500A	3.58	Mn I, Ti I	46	Coluzzi
5483.35	5483.10	30	“ @5500A	1.95	Co I	46	Coluzzi
5484.62	5484.28	34	“ @5500A	2.28	Sc I	46	Coluzzi
5487.75	5487.47	15	“ @5500A	0.98	Fe I	46	Coluzzi
5488.21	5487.92	20	“ @5500A	1.30	Ti I	46	Coluzzi
5490.15	5489.84	32	“ @5500A	2.12	Ti I	46	Coluzzi
5490.84	5490.53	25	“ @5500A	1.68	Ti I	46	Coluzzi
5497.52	5497.18	22	“ @5500A	1.46	Fe I	46	Coluzzi
5497.92	5497.62	25	“ @5500A	1.62	Ti I	46	Coluzzi
5501.47	5501.17	18	“ @5500A	1.19	Fe I	46	Coluzzi
5503.90	5503.54	20	“ @5500A	1.30	Ti I	46	Coluzzi
5505.9	5505.60	36	“ @5500A	1.95	Mn I, Fe I	46	Coluzzi
5506.78	5506.49	25	“ @5500A	1.62	Fe I	46	Coluzzi
5511.80	5511.52	26	“ @5500A	1.74	Ti I	46	Coluzzi
5512.53	5512.16	27	“ @5500A	1.79	Ti I	46	Coluzzi
5512.98	5512.65	26	“ @5500A	1.74	Ca I	46	Coluzzi
5514.35	5513.99	24	“ @5500A	1.57	Ti I	46	Coluzzi
5514.54	5514.28	30	“ @5500A	1.95	Ti I	46	Coluzzi
5516.77	5516.37	25	“ @5500A	1.62	Mn I	46	Coluzzi
5518.74	5518.46	17	“ @5500A	1.14	S II	46	Coluzzi
5520.50	5520.14	33	“ @5500A	2.16	Sc I	46	Coluzzi
-	Total	606	“ @5500A	40.05		46	
5525.14	5524.81	30	6.61 @5550A	2.01	Fe II	47	Coluzzi
5528.4	5528.12	29	“ @5550A	1.89	Mg I	47	Coluzzi
5530.78	5530.50	15	“ @5550A	0.98	Co I	47	Coluzzi
5533.01	5532.67	15	“ @5550A	0.98	Mo I	47	Coluzzi
5537.76	5537.51	35	“ @5550A	2.33	Mn I	47	Coluzzi
5541.03	5540.67	11	“ @5550A	0.76	Sc I	47	Coluzzi
5543.93	5543.73	23	“ @5550A	1.51	Fe I	47	Coluzzi
5545.93	5545.61	20	“ @5550A	1.30	V I, Co I	47	Coluzzi
5547.0	5546.74	28	“ @5550A	2.85	Fe I, V I	47	Coluzzi
5553.69	5553.34	24	“ @5550A	1.57	Ni I	47	Coluzzi

5554.90	5554.52	22	“ @5550A	1.46	Fe I	47	Coluzzi
5563.60	5563.34	15	“ @5550A	0.98	Fe I	47	Coluzzi
5565.48	5565.11	16	“ @5550A	1.03	Ti I	47	Coluzzi
5567.40	5567.14	21	“ @5550A	1.35	Fe I	47	Coluzzi
5569.63	5569.36	18	“ @5550A	1.19	Fe I	47	Coluzzi
5571.0	5570.72	19	“ @5550A	1.25	N IV	47	Coluzzi
5572.85	5572.55	19	“ @5550A	1.25	Fe I	47	Coluzzi
5576.10	5575.77	25	“ @5550A	1.68	Fe I	47	Coluzzi
-	Total	384	“ @5550A	25.36		47	
5578.73	5578.39	27	6.46 @5600A	1.75	Ni I	48	Coluzzi
5581.97	5581.64	30	“ @5600A	1.96	Ca I	48	Coluzzi
5583.23	5582.68	25	“ @5600A	1.64	O II	48	Coluzzi
5584.49	5584.16	21	“ @5600A	1.32	V I	48	Coluzzi
5585.91	5585.35	21	“ @5600A	1.38	Ne I	48	Coluzzi
5586.76	5586.39	22	“ @5600A	1.43	Fe I	48	Coluzzi
5587.86	5587.52	19	“ @5600A	1.06	Ni I	48	Coluzzi
5588.76	5588.46	16	“ @5600A	1.06	Ca I	48	Coluzzi
5590.12	5589.79	15	“ @5600A	0.95	Ca I	48	Coluzzi
5592.3	5592.01	31	“ @5600A	2.01	Ni I, V I	48	Coluzzi
5594.47	5594.13	22	“ @5600A	1.43	Ca I	48	Coluzzi
5597.87	5597.43	18	“ @5600A	1.16	Cr I	48	Coluzzi
5598.48	5598.17	15	“ @5600A	0.95	Fe I, Ca I	48	Coluzzi
5601.29	5600.98	24	“ @5600A	1.53	Ca I	48	Coluzzi
5602.85	5602.56	30	“ @5600A	1.91	Ca I	48	Coluzzi
5604.52	5604.18	16	“ @5600A	1.01	Th II	48	NIST
5604.94	5604.36	21	“ @5600A	1.33	V I	48	Coluzzi
5615.31	5614.98	16	“ @5600A	1.01	Fe I	48	Coluzzi
5615.65	5615.32	16	“ @5600A	1.06	Fe I	48	Coluzzi
5619.60	5619.26	21	“ @5600A	1.53	Fe I	48	Coluzzi
5624.6	5624.23	33	“ @5600A	2.12	Fe I, V I	48	Coluzzi
5626.01	5625.75	41	“ @5600A	2.65	V I	48	Coluzzi
5627.63	5627.34	24	“ @5600A	1.53	V I	48	Coluzzi
-	Total	525	“ @5600A	33.96		48	
5628.66	5628.37	29	5.75 @5650A	1.64	Cr I	49	Coluzzi
5629.17	5628.90	20	“ @5650A	1.13	Nb I	49	NIST
5630.14	5629.79	13	“ @5650A	0.75	Y I	49	Coluzzi
5632.47	5632.09	16	“ @5650A	0.94	V I	49	Coluzzi
5633.97	5633.57	29	“ @5650A	1.65	Fe I	49	Coluzzi
5638.27	5637.89	21	“ @5650A	1.18	Fe I	49	Coluzzi
5644.14	5643.81	20	“ @5650A	1.13	Ti I	49	Coluzzi
5646.11	5645.78	22	“ @5650A	1.27	V I	49	Coluzzi
5648.57	5648.25	19	“ @5650A	1.08	Ti I	49	Coluzzi
5657.45	5657.11	25	“ @5650A	1.42	V I	49	Coluzzi
5658.54	5658.25	18	“ @5650A	1.04	Fe I	49	Coluzzi
5658.82	5658.54	18	“ @5650A	1.04	Fe I	49	Coluzzi
5662.15	5661.83	18	“ @5650A	1.04	Ti I	49	Coluzzi
5662.5	5662.18	20	“ @5650A	1.13	C II, Fe I	49	Coluzzi
5662.94	5662.57	25	“ @5650A	1.42	Fe I	49	Coluzzi
5668.37	5668.00	29	“ @5650A	1.65	V I	49	Coluzzi
5670.83	5670.50	26	“ @5650A	1.51	V I	49	Coluzzi
5671.81	5671.49	34	“ @5650A	1.98	Sc I	49	Coluzzi
5675.41	5675.09	27	“ @5650A	1.56	Ti I	49	Coluzzi
-	Total	427	“ @5650A	24.57		49	
5682.63	5682.28	23	4.57 @5700A	1.05	Na I	50	Coluzzi
5684.19	5683.86	30	“ @5700A	1.35	Sc II	50	Coluzzi
5686.53	5686.22	21	“ @5700A	0.98	Fe I	50	Coluzzi
5686.83	5686.57	27	“ @5700A	1.24	Sc I	50	Coluzzi
5688.2	5687.85	53	“ @5700A	2.44	Na I	50	Coluzzi
5698.37	5698.17	30	“ @5700A	1.35	Fe I	50	Coluzzi
5700.14	5699.84	43	“ @5700A	1.95	Sc I	50	Coluzzi
5701.55	5701.22	22	“ @5700A	1.01	Fe I	50	Coluzzi
5702.31	5701.96	19	“ @5700A	0.86	Cr I	50	Coluzzi

5702.67	5702.36	13	" @5700A	0.60	Ti I	50	Coluzzi
5703.6	5703.25	28	" @5700A	1.27	V I, Ni II	50	Coluzzi
5707.03	5706.73	30	" @5700A	1.39	Ca I	50	Coluzzi
5708.19	5707.82	25	" @5700A	1.12	Ti I	50	Coluzzi
5708.60	5708.31	21	" @5700A	0.98	Sc I	50	Coluzzi
5709.38	5709.10	41	" @5700A	1.88	Fe I	50	Coluzzi
5711.08	5710.73	35	" @5700A	1.62	Mg I	50	Coluzzi
5711.75	5711.52	51	" @5700A	2.32	Sc I	50	Coluzzi
5712.78	5712.41	16	" @5700A	0.71	Cr I	50	Coluzzi
5715.1	5714.77	23	" @5700A	1.05	Ni I, Fe I, Ti I	50	Coluzzi
5716.45	5716.09	20	" @5700A	0.90	Ti I	50	Coluzzi
5717.30	5716.98	17	" @5700A	0.79	Sc I	50	Coluzzi
5717.86	5717.52	25	" @5700A	1.16	Fe I	50	Coluzzi
5719.82	5719.55	30	" @5700A	1.35	Cr I	50	Coluzzi
5720.45	5720.14	20	" @5700A	0.90	Ti I	50	Coluzzi
5724.07	5723.79	21	" @5700A	0.98	Sc I	50	Coluzzi
5727.02	5726.73	33	" @5700A	1.50	V I	50	Coluzzi
5727.66	5727.33	30	" @5700A	1.39	V I	50	Coluzzi
5731.26	5730.88	39	" @5700A	1.80	V I	50	Coluzzi
-	Total	786	" @5700A	35.90		50	
5735.7	5735.33	18	4.79 @5750A	0.86	Zr I, Ca I	51	Coluzzi
5737.04	5736.76	29	" @5750A	1.38	V I	51	Coluzzi
5739.46	5739.23	21	" @5750A	1.03	Ti I	51	Coluzzi
5739.98	5739.67	16	" @5750A	0.79	Ti I	51	Coluzzi
5741.86	5741.54	21	" @5750A	1.03	Fe I	51	Coluzzi
5743.44	5743.12	36	" @5750A	1.73	V I	51	Coluzzi
5745.99	5745.77	17	" @5750A	0.83	Ru I	51	NIST
5748.34	5748.04	18	" @5750A	0.86	Ni I	51	Coluzzi
5748.86	5748.54	16	" @5750A	0.79	V I	51	Coluzzi
5752.04	5751.69	14	" @5750A	0.66	Fe I	51	Coluzzi
5752.89	5752.78	20	" @5750A	0.94	Ti I	51	Coluzzi
5754.68	5754.31	32	" @5750A	1.53	Ni I	51	Coluzzi
5761.41	5761.00	20	" @5750A	0.94	V I	51	Coluzzi
5762.30	5761.99	16	" @5750A	0.79	Ti I	51	Coluzzi
5762.99	5762.68	28	" @5750A	1.34	Fe I	51	Coluzzi
5766.33	5766.02	19	" @5750A	0.90	Ti I	51	Coluzzi
5774.04	5773.76	28	" @5750A	1.34	Ti I	51	Coluzzi
5775.09	5774.75	27	" @5750A	1.30	Fe I	51	Coluzzi
5776.7	5776.23	28	" @5750A	1.34	V I, Ta I	51	Coluzzi
5780.8	5780.41	43	" @5750A	2.04	Ni I, Ti I, Fe I	51	Coluzzi
5782.13	5781.79	39	" @5750A	1.89	Cu I	51	Coluzzi
5783.1	5782.73	25	" @5750A	1.21	Cr I	51	Coluzzi
5783.93	5783.52	25	" @5750A	1.21	Cr I	51	Coluzzi
-	Total	561	" @5750A	27.26		51	
5785.67	5785.38	11	5.37 @5810A	0.62	Ti I	52	Coluzzi
5785.98	5785.58	25	" @5810A	1.32	Ti I	52	Coluzzi
5787.04	5786.76	17	" @5810A	0.93	Cr I	52	Coluzzi
5787.99	5787.55	25	" @5810A	1.32	Cr I	52	Coluzzi
5790.66	5790.31	16	" @5810A	0.84	Hg I	52	Coluzzi
5791.0	5790.66	31	" @5810A	1.67	Cr I, Fe I	52	Coluzzi
5793.1	5792.73	18	" @5810A	0.97	Si I, Fe II	52	Coluzzi
5804.27	5803.93	26	" @5810A	1.41	Ti I	52	Coluzzi
5809.25	5808.91	17	" @5810A	0.93	Fe I	52	Coluzzi
5823.68	5823.39	21	" @5810A	1.10	Ti I	52	Coluzzi
-	Total	207	" @5810A	11.09		52	
5838.66	5838.21	12	6.03 @5870A	0.74	Cr I	53	Coluzzi
5839.47	5839.15	13	" @5870A	0.79	Ho I	53	NIST
5839.78	5839.40	12	" @5870A	0.74	Ti I	53	Coluzzi
5844.61	5844.23	15	" @5870A	0.89	Cr I	53	Coluzzi
5847.01	5846.69	19	" @5870A	1.14	Ni I	53	Coluzzi
5848.09	5847.67	11	" @5870A	0.69	Fe I	53	Coluzzi
5852.4	5852.01	20	" @5870A	1.19	Cr I, Ne I	53	Coluzzi

5883.18	5852.90	21	“ @5870A	1.24	Fe I	53	Coluzzi
5857.45	5857.13	19	“ @5870A	1.14	Ca I	53	Coluzzi
5866.45	5866.14	23	“ @5870A	1.39	Ti I	53	Coluzzi
5867.57	5867.28	17	“ @5870A	1.04	Ca I	53	Coluzzi
5875.62	5875.38	144	“ @5870A	8.68	He I D3	53	Coluzzi
5889.95	5889.60	171	“ @5870A	10.31	Na I D1	53	Coluzzi
5895.92	5895.59	152	“ @5870A	9.17	Na I D2	53	Coluzzi
5898.30	5898.11	43	“ @5870A	2.57	Fe I	53	Coluzzi
5899.30	5899.02	24	“ @5870A	1.44	Ti I	53	Coluzzi
-	Total	248	“ @5870A	14.98		53	
5900.02	5899.96	58	6.61 @5930A	3.85	V I	54	Coluzzi
5901.91	5901.44	55	“ @5930A	3.63	Ta I	54	NIST
5911.0	5910.78	31	“ @5930A	2.06	Fe IV	54	Coluzzi
5918.55	5918.31	45	“ @5930A	3.63	Ti I	54	Coluzzi
5919.60	5919.00	44	“ @5930A	2.93	C II	54	Coluzzi
5920.00	5919.60	68	“ @5930A	4.50	Fe III	54	Coluzzi
5922.11	5921.72	31	“ @5930A	2.06	Ti I	54	Coluzzi
5922.72	5922.51	47	“ @5930A	3.09	Ca II	54	Coluzzi
5924.53	5924.23	61	“ @5930A	4.01	V I	54	Coluzzi
5928.50	5928.31	29	“ @5930A	1.89	Fe I	54	Coluzzi
5932.38	5932.06	55	“ @5930A	3.63	Ru I	54	NIST
5932.95	5932.80	49	“ @5930A	3.26	S II	54	Coluzzi
5940.7	5940.30	40	“ @5930A	2.66	Ti I, S II	54	Coluzzi
5941.36	5940.99	63	“ @5930A	4.17	Fe II	54	Coluzzi
5941.76	5941.54	73	“ @5930A	4.82	Ti I	54	Coluzzi
5942.71	5942.52	119	“ @5930A	7.86	Fe I	54	Coluzzi
5946.37	5945.93	123	“ @5930A	8.13	O III	54	Coluzzi
5947.30	5947.01	125	“ @5930A	8.24	Fe I	54	Coluzzi
5949.35	5949.09	43	“ @5930A	2.82	Fe I	54	Coluzzi
5952.75	5952.40	11	“ @5930A	0.76	Fe I	54	Coluzzi
5955.12	5954.91	39	“ @5930A	2.55	Fe I	54	Coluzzi
-	Total	1220	“ @5930A	80.54		54	
5956.70	5956.40	13	6.92 @5980A	0.91	Fe I	55	Coluzzi
5958.22	5957.92	31	“ @5980A	2.16	Fe I	55	Coluzzi
5959.05	5958.62	36	“ @5980A	2.49	S I	55	NIST
5962.68	5962.42	23	“ @5980A	1.59	Au I	55	NIST
5965.83	5965.45	25	“ @5980A	1.71	Ti I	55	Coluzzi
5967.10	5966.64	26	“ @5980A	1.81	Eu I	55	NIST
5968.48	5968.26	39	“ @5980A	2.67	Sc I	55	NIST
5970.30	5970.04	24	“ @5980A	1.65	Sn I	55	NIST
5971.6	5971.32	28	“ @5980A	1.93	Co II	55	Coluzzi
5975.4	5975.15	51	“ @5980A	3.52	Fe I, Cr I	55	Coluzzi
5977.25	5976.94	72	“ @5980A	4.99	Gd I	55	NIST
5980.89	5980.52	29	“ @5980A	1.98	Ti I	55	Coluzzi
5984.60	5984.26	25	“ @5980A	1.71	V I	55	Coluzzi
5999.03	5998.66	24	“ @5980A	1.65	Ti I	55	Coluzzi
6002.6	6002.31	19	“ @5980A	1.30	Ti I, V I	55	Coluzzi
6003.03	6002.70	30	“ @5980A	2.04	Fe I	55	Coluzzi
6008.58	6008.31	38	“ @5980A	2.61	Fe I	55	Coluzzi
6013.50	6013.15	39	“ @5980A	2.67	Mn I	55	Coluzzi
-	Total	569	“ @5980A	39.38		55	Coluzzi
6039.69	6039.15	11	7.08 @6040A	0.81	V I	56	Coluzzi
-	6063.61	10	“ @6040A	0.70	?	56	Coluzzi
6064.63	6064.10	11	“ @6040A	0.75	Ti I	56	Coluzzi
6068.53	6068.20	10	“ @6040A	0.70	Al II	56	Coluzzi
-	Total	42	“ @6040A	2.96		56	
6078.50	6078.12	17	6.76 @6100A	1.27	Fe I	57	Coluzzi
6081.42	6081.08	17	“ @6100A	1.16	V I	57	Coluzzi
6082.72	6082.41	26	“ @6100A	1.44	Fe I	57	Coluzzi
6085.2	6084.93	20	“ @6100A	1.33	Ti I, Fe I	57	Coluzzi
6090.18	6089.87	22	“ @6100A	1.50	V I	57	Coluzzi
6091.18	6090.85	19	“ @6100A	1.27	Ti I	57	Coluzzi

6092.81	6092.47	18	“ @6100A	1.22	Ti I	57	Coluzzi
6096.69	6096.34	14	“ @6100A	0.94	Fe I	57	Coluzzi
6097.12	6096.93	10	“ @6100A	0.66	S II	57	Coluzzi
6098.66	6098.31	17	“ @6100A	1.39	Ti I	57	Coluzzi
6102.72	6102.41	12	“ @6100A	1.00	Ca I	57	Coluzzi
6108.12	6107.77	25	“ @6100A	1.66	Ni I	57	Coluzzi
6110.07	6109.65	13	“ @6100A	0.89	As II	57	Coluzzi
6111.62	6111.27	38	“ @6100A	2.55	V I	57	Coluzzi
6116.18	6115.90	10	“ @6100A	0.56	Ni I	57	Coluzzi
6119.50	6119.20	17	“ @6100A	1.16	V I	57	Coluzzi
6122.22	6121.86	10	“ @6100A	0.56	Ca I	57	Coluzzi
6126.21	6125.90	22	“ @6100A	1.50	Mn II, Ti I	57	Coluzzi
6127.49	6127.13	20	“ @6100A	1.33	Zr I	57	Coluzzi
6127.91	6127.62	30	“ @6100A	1.99	Fe I	57	Coluzzi
6129.0	6128.61	16	“ @6100A	1.05	Ni I, Mn II	57	Coluzzi
6134.58	6134.23	14	“ @6100A	0.94	Zr I	57	Coluzzi
-	Total	405	“ @6100A	27.38		57	
6135.36	6135.04	25	6.03 @6160A	1.63	V I	58	Coluzzi
6136.62	6136.27	24	“ @6160A	1.44	Fe I	58	Coluzzi
6137.00	6136.62	13	“ @6160A	0.79	Fe I	58	Coluzzi
6137.70	6137.36	34	“ @6160A	2.07	Fe I	58	Coluzzi
6141.7	6141.34	10	“ @6160A	0.49	Ba II, Fe I	58	Coluzzi
6143.23	6142.87	16	“ @6160A	0.94	Zr I	58	Coluzzi
6146.23	6145.83	28	“ @6160A	1.68	Ti I	58	Coluzzi
6147.85	6147.51	22	“ @6160A	1.34	Fe I	58	Coluzzi
6150.1	6149.82	18	“ @6160A	1.09	Fe II, V I	58	Coluzzi
6151.62	6151.29	17	“ @6160A	1.04	Fe I	58	Coluzzi
6154.23	6153.89	34	“ @6160A	2.07	Na I	58	Coluzzi
6156.10	6155.63	24	“ @6160A	1.44	Ca I	58	Coluzzi
6157.73	6157.36	11	“ @6160A	0.69	Fe I	58	Coluzzi
6160.75	6160.40	27	“ @6160A	1.69	Na I	58	Coluzzi
6161.29	6160.90	15	“ @6160A	0.89	Ca I	58	Coluzzi
6162.17	6161.83	10	“ @6160A	0.59	Ca I	58	Coluzzi
6163.76	6163.41	16	“ @6160A	0.94	Ca I	58	Coluzzi
6166.44	6166.12	23	“ @6160A	1.39	Ca I	58	Coluzzi
6169.06	6168.69	17	“ @6160A	1.04	Ca I	58	Coluzzi
6169.56	6169.23	17	“ @6160A	1.04	Ca I	58	Coluzzi
6170.34	6170.04	26	“ @6160A	1.58	V I	58	Coluzzi
6173.34	6173.02	25	“ @6160A	1.53	Fe I	58	Coluzzi
6191.19	6190.85	15	“ @6160A	0.89	Ni I	58	Coluzzi
6191.73	6191.34	20	“ @6160A	1.19	Y I	58	Coluzzi
-	Total	530	“ @6160A	31.94		58	
6199.2	6198.85	26	5.75 @6230A	1.51	Fe II, V I	59	Coluzzi
6210.68	6210.30	37	“ @6230A	2.12	Sc I	59	Coluzzi
6213.44	6213.12	16	“ @6230A	0.84	Fe I	59	Coluzzi
6213.87	6213.56	26	“ @6230A	1.51	V I	59	Coluzzi
6216.37	6216.08	35	“ @6230A	2.03	V I	59	Coluzzi
6219.3	6218.99	16	“ @6230A	0.94	Fe I, Fe II	59	Coluzzi
6221.4	6221.24	17	“ @6230A	0.99	Fe I, Ti I	59	Coluzzi
6224.51	6224.20	12	“ @6230A	0.71	V I	59	Coluzzi
6229.23	6228.79	20	“ @6230A	1.13	Fe I	59	Coluzzi
6230.7	6230.45	30	“ @6230A	1.75	Fe I, V I	59	Coluzzi
6233.19	6232.87	16	“ @6230A	0.94	V I	59	Coluzzi
62 39.4	6239.13	25	“ @6230A	1.46	Fe II, Sc I	59	Coluzzi
6239.95	6239.48	16	“ @6230A	0.89	Fe II	59	Coluzzi
6240.14	6239.82	18	“ @6230A	1.04	V I	59	Coluzzi
6242.80	6242.47	16	“ @6230A	0.89	V I	59	Coluzzi
6243.1	6242.77	25	“ @6230A	1.42	V I, Al II	59	Coluzzi
6246.33	6245.98	14	“ @6230A	0.67	Fe I	59	Coluzzi
6247.90	6247.70	14	“ @6230A	0.67	F II	59	NIST
6251.83	6251.49	19	“ @6230A	1.08	V I	59	Coluzzi
6252.56	6252.23	40	“ @6230A	2.31	Fe I	59	Coluzzi

6256.37	6256.08	23	“ @6230A	1.32	Ni I, Fe I	59	Coluzzi
6256.9	6256.57	28	“ @6230A	1.61	O I, V I	59	Coluzzi
6258.59	6258.29	39	“ @6230A	2.21	Ni I, V I	59	Coluzzi
6258.96	6258.64	22	“ @6230A	1.27	Sc I	59	Coluzzi
-	Total	551	“ @6230A	31.68		59	
6261.10	6260.85	34	6.31 @6290A	2.12	Ti I	60	Coluzzi
6265.14	6264.79	24	“ @6290A	1.50	Fe I	60	Coluzzi
6266.32	6265.98	25	“ @6290A	1.55	V I	60	Coluzzi
6268.84	6268.49	26	“ @6290A	1.66	V I	60	Coluzzi
6274.67	6274.30	23	“ @6290A	1.45	V I	60	Coluzzi
6278.30	6278.10	80	“ @6290A	5.07	Au I	60	Coluzzi
6280.22	6279.63	27	“ @6290A	1.71	Cr I	60	Coluzzi
6285.19	6284.79	21	“ @6290A	1.30	V I	60	Coluzzi
6288.07	6287.70	34	“ @6290A	2.17	Sc I	60	NIST
6290.55	6290.16	35	“ @6290A	2.22	Fe I	60	Coluzzi
6293.38	6292.97	25	“ @6290A	1.61	Rh I	60	NIST
6295.25	6295.14	36	“ @6290A	2.28	Ti I	60	Coluzzi
6298.57	6298.49	35	“ @6290A	2.22	V I	60	Coluzzi
6299.42	6299.18	42	“ @6290A	2.63	Er I	60	Coluzzi
6301.52	6301.14	31	“ @6290A	1.97	Fe I	60	Coluzzi
6302.51	6302.03	45	“ @6290A	2.85	Fe I	60	Coluzzi
6303.41	6302.77	27	“ @6290A	1.71	Eu II	60	Coluzzi
6303.75	6303.41	21	“ @6290A	1.30	Ti I	60	Coluzzi
6306.19	6305.78	48	“ @6290A	3.05	Fe I	60	Coluzzi
6307.25	6306.62	25	“ @6290A	1.55	La II	60	Coluzzi
6312.24	6311.88	21	“ @6290A	1.30	Ti I	60	Coluzzi
6314.67	6314.30	19	“ @6290A	1.19	Ni I	60	Coluzzi
6315.32	6315.04	33	“ @6290A	2.06	Fe I	60	Coluzzi
6318.02	6317.70	32	“ @6290A	2.02	Fe I, Ti I	60	Coluzzi
-	Total	768	“ @6290A	48.48		60	
6326.85	6326.54	26	6.76 @6360A	1.77	V I	61	Coluzzi
6330.10	6329.74	18	“ @6360A	1.21	Cr I	61	Coluzzi
6335.34	6334.99	21	“ @6360A	1.44	Fe I	61	Coluzzi
6336.10	6335.75	24	“ @6360A	1.61	Ti I	61	Coluzzi
6336.84	6336.45	21	“ @6360A	1.39	Fe I	61	Coluzzi
6339.1	6338.78	24	“ @6360A	1.61	V I, Ni I	61	Coluzzi
6344.15	6343.78	23	“ @6360A	1.55	Fe I	61	Coluzzi
6355.04	6354.69	23	“ @6360A	1.55	Fe I	61	Coluzzi
6357.10	6356.62	32	“ @6360A	2.16	Zr I	61	Coluzzi
6358.69	6358.29	30	“ @6360A	2.05	Fe I	61	Coluzzi
6359.90	6359.58	21	“ @6360A	1.44	Ti I	61	Coluzzi
6362.9	6362.47	19	“ @6360A	1.27	Cr I, Fe I	61	Coluzzi
6366.3	6366.03	25	“ @6360A	1.66	O I, Ti I	61	Coluzzi
-	Total	307	“ @6360A	20.73		61	
6393.31	6393.26	24	6.92 @6420A	1.64	Fe I	62	Coluzzi
6400.01	6399.61	22	“ @6420A	1.53	Fe I	62	Coluzzi
6408.03	6407.67	19	“ @6420A	1.30	Fe I	62	Coluzzi
6411.67	6411.27	21	“ @6420A	1.42	Fe I	62	Coluzzi
6413.35	6413.00	38	“ @6420A	2.61	Sc I	62	Coluzzi
6414.93	6414.34	16	“ @6420A	1.13	Cr I	62	Coluzzi
6419.98	6419.65	26	“ @6420A	1.81	Fe I	62	Coluzzi
6430.85	6430.45	25	“ @6420A	1.71	Fe I	62	Coluzzi
6435.15	6434.65	29	“ @6420A	1.98	V I	62	Coluzzi
6439.07	6438.74	21	“ @6420A	1.48	Ca I	62	Coluzzi
6449.21	6448.69	38	“ @6420A	2.61	Zr II	62	Coluzzi
6449.81	6449.47	22	“ @6420A	1.53	Ca I	62	Coluzzi
6450.23	6449.92	46	“ @6420A	3.18	Co I	62	Coluzzi
6452.35	6451.94	44	“ @6420A	3.07	V I	62	Coluzzi
6455.60	6455.25	21	“ @6420A	1.42	Ca I	62	Coluzzi
-	Total	411	“ @6420A	28.43		62	
6462.57	6462.23	21	6.76 @6490A	1.39	Ca I	63	Coluzzi
6464.7	6464.35	43	“ @6490A	2.94	Fe I, Ca I	63	Coluzzi

6466.97	6466.67	42	“ @6490A	2.83	V I	63	Coluzzi
6471.66	6471.29	19	“ @6490A	1.27	Ca I	63	Coluzzi
6472.84	6472.47	40	“ @6490A	2.71	Xe I	63	NIST
6473.52	6473.17	60	“ @6490A	4.04	Ti II	63	Coluzzi
6475.63	6475.09	78	“ @6490A	5.26	Fe I	63	Coluzzi
6476.24	6475.78	95	“ @6490A	6.83	Bi I	63	NIST
6481.87	6480.07	82	“ @6490A	5.54	Fe I	63	Coluzzi
6484.72	6483.90	60	“ @6490A	4.04	Cr I	63	Coluzzi
6487.43	6486.81	34	“ @6490A	2.33	Fe II	63	Coluzzi
6491.61	6490.85	69	“ @6490A	4.66	Ti II	63	Coluzzi
6493.05	6492.92	41	“ @6490A	2.77	Fe II	63	Coluzzi
6493.78	6493.36	23	“ @6490A	1.55	Ca I	63	Coluzzi
6494.98	6494.55	33	“ @6490A	2.21	Fe I	63	Coluzzi
6496.45	6495.88	57	“ @6490A	3.88	Fe I	63	Coluzzi
6501.21	6500.80	34	“ @6490A	2.27	Cr I	63	Coluzzi
6504.16	6503.81	15	“ @6490A	1.00	V I	63	Coluzzi
6508.13	6507.70	31	“ @6490A	2.10	Ti I	63	Coluzzi
6508.74	6508.54	54	“ @6490A	3.66	Ca I	63	Coluzzi
6512.61	6512.07	39	“ @6490A	2.61	Hf II	63	Coluzzi
6515.25	6514.73	87	“ @6490A	5.87	Re I	63	Coluzzi
6517.01	6516.57	67	“ @6490A	4.66	Fe II	63	Coluzzi
6518.38	6517.98	59	“ @6490A	3.99	Fe I	63	Coluzzi
6519.70	6519.45	55	“ @6490A	3.71	Rh I	63	NIST
6524.36	6523.86	69	“ @6490A	4.66	Si III	63	Coluzzi
-	Total	1308	“ @6490A	88.41		63	
6531.44	6531.61	36	6.92 @6560A	2.49	V I	64	Coluzzi
6532.89	6532.94	62	“ @6560A	4.26	Ni I	64	Coluzzi
6533.97	6534.62	26	“ @6560A	1.81	Fe I	64	Coluzzi
-	6537.28	18	“ @6560A	1.25	?	64	Coluzzi
6537.92	6538.12	24	“ @6560A	1.65	Cr I	64	Coluzzi
6543.98	6544.47	49	“ @6560A	3.40	Fe I	64	Coluzzi
6546.79	6546.45	29	“ @6560A	1.98	Sr I	64	Coluzzi
6548.1	6548.27	62	“ @6560A	4.31	N II	64	Coluzzi
6548.87	6549.21	48	“ @6560A	3.29	Ti II	64	Coluzzi
6552.77	6553.19	90	“ @6560A	6.24	Fe I	64	Coluzzi
6554.26	6554.42	42	“ @6560A	2.89	Ti I	64	Coluzzi
6556.07	6556.25	34	“ @6560A	2.33	Ti I	64	Coluzzi
6557.87	6557.68	46	“ @6560A	3.18	Sc I	64	Coluzzi
6562.81	6562.94	2980	“ @6560A	206.22	H I	64	Coluzzi
6564.52	6564.67	43	“ @6560A	2.95	Be I	64	Coluzzi
6569.23	6569.31	34	“ @6560A	2.39	Fe I	64	Coluzzi
6572.78	6572.60	49	“ @6560A	3.35	Ca I	64	Coluzzi
6572.90	6572.94	46	“ @6560A	3.18	Cr I	64	Coluzzi
6574.24	6574.42	28	“ @6560A	1.93	Fe I	64	Coluzzi
6575.18	6575.36	105	“ @6560A	7.26	Ti I	64	Coluzzi
6581.22	6581.36	32	“ @6560A	2.21	Fe I	64	Coluzzi
6587.16	6587.14	17	“ @6560A	1.19	Ta I	64	Coluzzi
6592.91	6593.04	22	“ @6560A	1.53	Ti I	64	Coluzzi
6593.87	6594.08	27	“ @6560A	1.87	Fe I	64	Coluzzi
-	Total	968	“ @6560A	66.96		64	
6605.55	6605.58	52	6.91 @6630A	3.62	Mn I	65	Coluzzi
6609.11	6608.66	24	“ @6630A	1.64	Fe I	65	Coluzzi
6609.56	6609.28	26	“ @6630A	1.81	Fe I	65	Coluzzi
6621.24	6620.70	14	“ @6630A	0.96	Ni I	65	Coluzzi
6624.86	6624.50	34	“ @6630A	2.38	V I	65	Coluzzi
6630.02	6629.63	19	“ @6630A	1.30	Cr I	65	Coluzzi
6643.64	6643.21	25	“ @6630A	1.76	Ni I	65	Coluzzi
6647.90	6647.65	15	“ @6630A	1.02	Fe I	65	Coluzzi
6651.26	6650.90	14	“ @6630A	0.96	Ti I	65	Coluzzi
6661.08	6660.65	33	“ @6630A	2.26	Cr I	65	Coluzzi
6663.44	6663.02	28	“ @6630A	1.93	Fe I	65	Coluzzi
-	Total	285	“ @6630A	19.66		65	

6674.70	6674.50	17	6.71 @6710A	1.15	Th I	66	NIST
6676.86	6676.72	16	“ @6710A	1.10	Fe I	66	Coluzzi
6677.99	6677.65	43	“ @6710A	2.86	Fe I	66	Coluzzi
6687.57	6687.10	16	“ @6710A	1.04	Y I	66	Coluzzi
-	6691.25	39	“ @6710A	2.64	?	66	Coluzzi
6694.32	6693.91	23	“ @6710A	1.54	Ho I	66	NIST
6695.97	6695.62	54	“ @6710A	3.63	Al I	66	NIST
6698.63	6698.24	25	“ @6710A	1.71	Al I	66	NIST
6710.31	6710.48	13	“ @6710A	0.88	Fe I	66	Coluzzi
6713.14	6712.80	25	“ @6710A	1.65	Fe I	66	Coluzzi
6714.44	6714.13	24	“ @6710A	1.60	Ta I	66	Coluzzi
6716.68	6716.30	27	“ @6710A	1.81	Ti I	66	Coluzzi
6717.68	6717.28	24	“ @6710A	1.60	Ca I	66	Coluzzi
-	6723.58	21	“ @6710A	1.43	?	66	Coluzzi
6726.66	6726.59	16	“ @6710A	1.10	Fe I	66	Coluzzi
6727.50	6727.23	14	“ @6710A	0.94	Pm I	66	NIST
6729.15	6728.62	21	“ @6710A	1.43	W I	66	NIST
-	Total	419	“ @6710A	28.12		66	
6766.49	6766.05	48	6.76 @6780A	3.27	V I	67	Coluzzi
6767.77	6767.33	49	“ @6780A	3.33	Ni I	67	Coluzzi
-	Total	97	“ @6780A	6.60		67	
8498	-	147	5.73 @8500A	8.42	Ca II	-	Coluzzi
8542	-	172	5.69 @8550A	9.78	Ca II	-	Coluzzi
8662	-	147	5.68 @8650A	8.34	Ca II	-	Coluzzi
-	Total		total	1020.73		-	
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