

GIRAFFE

Th-Ar arc map

Blue Prism

L.A. Balona

Settings:
Blue: 260
Red: 45400

These arc maps were taken with GIRAFFE in April 1998 using standard settings.

The tables on the next few pages give all arc wavelengths longwards of 3900Å.

L.A. Balona
April 1998.

Table 1: Central wavelength and dispersion ($\text{\AA}/\text{pixel}$) as a function of order number. N is the number of useful arc lines for wavelength calibration.

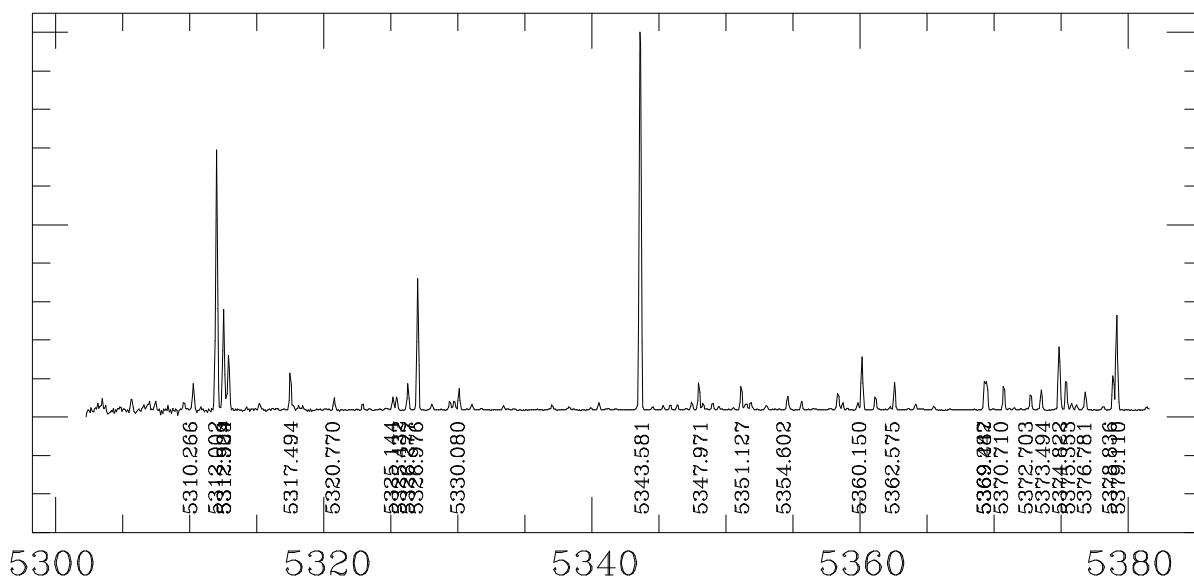
Order	N	Cen Wav	Dispersion
105	9	5445.580	0.079
106	12	5393.695	0.078
107	12	5342.804	0.078
108	13	5293.020	0.077
109	11	5243.868	0.076
110	10	5195.976	0.075
111	11	5148.750	0.074
112	7	5102.422	0.073
113	12	5056.898	0.074
114	12	5011.942	0.073
115	12	4967.969	0.072
116	12	4924.850	0.072
117	11	4882.419	0.070
118	12	4840.693	0.070
119	9	4799.642	0.069
120	9	4759.365	0.070
121	14	4719.657	0.069
122	15	4680.736	0.068
123	13	4642.297	0.067
124	11	4604.600	0.067
125	12	4567.382	0.066
126	13	4530.925	0.066
127	14	4495.054	0.066
128	9	4459.539	0.065
129	13	4424.722	0.064
130	15	4390.506	0.064
131	18	4356.604	0.063
132	14	4323.448	0.063
133	11	4290.616	0.062
134	11	4258.458	0.062
135	14	4226.729	0.061
136	11	4195.330	0.061
137	7	4164.601	0.061
138	10	4134.333	0.061
139	14	4104.197	0.060
140	13	4074.731	0.059
141	12	4045.599	0.059
142	14	4016.955	0.058
143	13	3988.643	0.058
144	11	3960.789	0.057
145	13	3933.242	0.057
146	12	3906.118	0.056

3900.577	3955.170	4011.592	4072.628	4140.235	4221.692	4273.357	4332.030
3900.878	3955.890	4011.740	4073.856	4140.386	4222.637	4274.025	4332.340
3901.662	3956.691	4012.495	4074.642	4141.632	4223.440	4275.160	4333.561
3903.102	3959.300	4013.857	4075.503	4142.474	4224.241	4276.807	4333.937
3903.481	3960.269	4014.514	4075.907	4142.701	4224.615	4277.314	4335.338
3904.083	3962.420	4014.716	4076.628	4143.649	4226.299	4277.528	4337.071
3905.186	3963.469	4018.099	4076.943	4147.540	4226.727	4278.323	4337.277
3907.160	3964.030	4019.129	4078.302	4148.182	4226.988	4279.063	4338.108
3907.543	3964.726	4020.354	4078.875	4148.727	4227.387	4280.568	4339.872
3908.749	3966.965	4021.150	4079.574	4151.145	4228.158	4281.068	4340.895
3908.980	3967.392	4021.751	4080.358	4154.721	4228.417	4281.414	4342.444
3909.139	3968.467	4022.067	4080.706	4156.517	4229.148	4282.041	4343.382
3910.773	3969.003	4023.338	4081.368	4158.591	4229.454	4282.898	4343.604
3911.576	3969.664	4024.802	4081.591	4159.660	4229.864	4283.518	4343.952
3911.909	3972.155	4025.656	4082.082	4161.739	4230.427	4284.975	4344.327
3913.645	3972.640	4027.009	4082.387	4162.509	4230.824	4285.182	4345.168
3914.162	3973.196	4029.826	4083.469	4163.647	4233.287	4286.229	4346.437
3915.295	3974.477	4030.293	4084.619	4163.948	4235.464	4287.081	4347.639
3915.849	3974.759	4030.842	4085.042	4164.180	4236.047	4288.669	4348.064
3916.418	3975.467	4034.246	4085.256	4164.255	4237.220	4289.655	4348.598
3917.269	3976.415	4034.922	4085.434	4165.766	4239.787	4290.394	4349.072
3918.070	3979.043	4035.460	4086.521	4168.046	4240.595	4291.810	4350.272
3918.512	3979.356	4036.048	4087.285	4168.634	4241.095	4292.306	4351.272
3919.023	3980.090	4036.565	4088.726	4170.533	4241.972	4293.770	4352.205
3921.780	3980.755	4037.561	4089.138	4171.341	4242.720	4294.719	4352.612
3922.219	3981.106	4038.229	4091.348	4172.626	4243.020	4295.585	4352.820
3923.800	3981.828	4038.804	4093.392	4173.448	4243.261	4295.815	4353.449
3924.403	3982.102	4039.865	4093.671	4174.440	4243.924	4297.307	4354.482
3925.093	3982.896	4040.916	4094.747	4178.060	4247.599	4299.839	4355.320
3925.719	3984.880	4041.204	4096.076	4178.366	4247.989	4300.101	4355.526
3926.046	3986.074	4042.894	4097.748	4178.848	4248.391	4300.650	4356.044
3927.806	3987.206	4043.130	4098.732	4179.960	4249.476	4302.526	4357.613
3928.623	3988.600	4043.395	4098.933	4181.884	4249.679	4303.989	4358.320
3929.290	3988.846	4044.418	4100.341	4182.934	4250.315	4304.957	4359.372
3929.669	3990.492	4044.927	4102.618	4184.138	4250.775	4306.367	4360.167
3930.330	3991.731	4045.227	4103.912	4185.145	4251.185	4307.176	4360.718
3931.257	3992.053	4045.965	4104.382	4187.141	4253.538	4308.122	4361.307
3932.226	3992.273	4047.481	4104.838	4190.713	4253.867	4308.600	4362.066
3932.911	3993.299	4048.288	4105.915	4191.029	4255.237	4309.239	4362.472
3933.238	3994.549	4049.536	4107.051	4192.362	4256.254	4311.799	4363.794
3933.661	3994.792	4049.945	4107.861	4193.016	4257.496	4312.998	4364.040
3934.274	3996.062	4050.887	4108.420	4194.932	4257.898	4313.308	4365.930
3936.353	3996.669	4051.499	4109.323	4198.317	4258.520	4313.602	4366.966
3936.672	3997.865	4052.921	4110.826	4200.675	4259.362	4314.319	4367.418
3937.041	3998.404	4053.528	4112.755	4207.612	4260.333	4315.254	4367.832
3937.924	3998.733	4054.302	4115.759	4208.411	4260.984	4315.948	4369.876
3938.614	3998.953	4054.526	4116.714	4208.891	4261.275	4316.109	4370.753
3942.073	4000.281	4057.941	4118.489	4209.196	4261.492	4316.373	4371.329
3944.253	4001.058	4059.253	4124.040	4210.923	4261.967	4317.840	4372.490
3945.507	4001.894	4063.407	4127.412	4213.067	4262.612	4318.416	4374.124
3945.820	4003.106	4064.331	4128.050	4213.378	4263.356	4319.097	4374.785
3946.146	4003.309	4065.619	4128.640	4214.828	4264.106	4320.126	4375.954
3947.331	4003.574	4067.451	4129.512	4215.627	4264.340	4325.274	4376.531
3947.505	4005.093	4069.201	4131.002	4216.070	4266.286	4325.860	4378.177
3948.030	4005.363	4069.283	4131.724	4216.372	4266.527	4327.715	4379.667
3948.979	4005.961	4069.461	4132.753	4217.431	4267.519	4328.688	4380.286
3950.395	4006.381	4070.238	4134.068	4218.665	4269.064	4328.915	4381.402
3950.805	4007.019	4071.751	4134.324	4220.065	4269.943	4330.412	4381.860
3951.515	4008.210	4071.997	4135.480	4220.732	4272.169	4330.844	4385.057
3952.761	4009.011	4072.385	4138.041	4221.153	4272.874	4331.199	4385.753

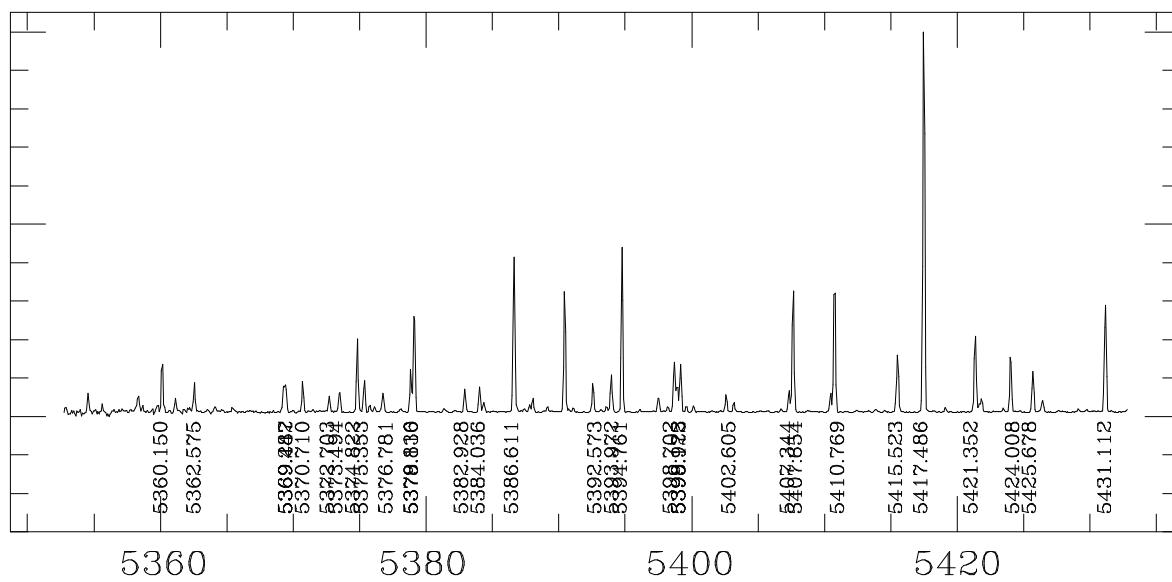
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4376.531	4439.879	4500.577	4561.348	4623.117	4691.345	4762.524	4831.121
4378.177	4440.574	4502.927	4562.080	4623.891	4691.635	4764.346	4831.597
4379.667	4440.866	4504.631	4562.476	4624.136	4691.884	4764.865	4832.423
4380.286	4441.608	4505.217	4563.661	4624.314	4694.091	4765.595	4832.802
4381.402	4443.086	4506.473	4564.405	4624.678	4695.038	4766.601	4833.676
4381.860	4443.666	4507.834	4564.835	4625.054	4695.454	4768.058	4837.412
4385.057	4445.034	4510.526	4567.240	4625.275	4698.225	4773.241	4838.355
4385.753	4445.901	4510.733	4568.143	4625.494	4700.140	4775.313	4840.474
4388.101	4447.230	4512.483	4568.524	4627.298	4700.771	4775.794	4840.849
4388.968	4447.835	4513.223	4570.972	4628.202	4702.316	4776.779	4842.168
4391.110	4448.879	4513.680	4571.220	4628.441	4703.358	4777.191	4843.941
4391.389	4449.521	4514.057	4571.531	4631.762	4703.990	4778.294	4844.165
4392.974	4450.804	4514.550	4573.704	4633.766	4705.299	4779.729	4844.755
4393.759	4452.565	4515.118	4574.028	4637.233	4705.761	4780.751	4844.925
4396.139	4454.139	4515.627	4574.306	4638.126	4706.251	4781.290	4845.163
4396.478	4454.774	4517.035	4575.234	4638.685	4707.045	4781.526	4847.326
4397.010	4456.708	4519.259	4575.426	4639.519	4708.294	4782.761	4847.810
4397.915	4457.236	4521.194	4576.740	4639.704	4710.824	4783.639	4848.363
4399.406	4458.002	4521.741	4577.582	4640.046	4712.006	4783.862	4849.140
4400.097	4458.738	4522.323	4579.350	4643.557	4712.481	4784.040	4849.862
4400.386	4459.548	4522.784	4579.827	4644.707	4712.841	4786.531	4850.440
4400.986	4460.557	4524.129	4581.173	4646.686	4714.672	4787.148	4852.868
4401.581	4461.528	4524.838	4584.367	4647.251	4715.431	4788.678	4853.609
4402.245	4463.666	4525.446	4588.426	4647.956	4717.391	4789.387	4856.276
4402.600	4463.835	4526.029	4589.122	4649.978	4719.442	4790.437	4857.538
4402.927	4464.139	4527.709	4589.267	4650.234	4719.980	4791.516	4858.094
4408.883	4465.341	4528.021	4589.898	4651.555	4720.459	4792.082	4858.333
4409.899	4465.975	4528.410	4592.666	4651.989	4720.781	4793.245	4861.217
4413.374	4468.321	4528.974	4592.967	4654.006	4721.276	4793.905	4861.717
4413.632	4469.189	4530.319	4593.644	4655.213	4721.591	4795.913	4863.172
4414.486	4469.525	4530.552	4595.421	4656.185	4722.089	4796.243	4865.477
4414.767	4470.991	4531.713	4596.097	4656.552	4723.438	4800.172	4865.910
4416.237	4474.759	4532.258	4596.308	4657.901	4723.784	4801.052	4867.556
4416.845	4475.221	4533.077	4598.763	4659.570	4724.772	4802.671	4868.274
4418.416	4478.403	4533.304	4599.705	4660.394	4726.868	4803.956	4868.528
4419.769	4478.596	4534.120	4600.872	4662.594	4727.849	4805.606	4868.881
4420.257	4479.638	4534.403	4602.886	4663.203	4728.133	4806.020	4871.289
4421.544	4480.266	4535.255	4603.145	4664.970	4729.128	4808.134	4872.031
4422.048	4480.545	4535.490	4604.653	4666.005	4729.880	4809.614	4872.917
4423.720	4481.811	4535.980	4605.824	4666.516	4730.659	4811.871	4874.364
4424.837	4483.347	4537.643	4606.502	4666.798	4730.882	4812.376	4876.495
4426.001	4486.897	4540.999	4607.378	4668.172	4732.053	4813.007	4877.002
4428.554	4487.495	4542.051	4607.935	4669.666	4734.046	4813.720	4877.813
4429.635	4488.312	4543.415	4608.620	4669.984	4735.906	4813.896	4878.009
4429.823	4488.680	4543.869	4609.567	4672.437	4737.917	4817.021	4878.733
4430.189	4489.664	4544.514	4610.081	4673.661	4739.676	4818.648	4879.350
4430.996	4490.672	4545.052	4610.627	4675.376	4740.529	4819.193	4879.864
4432.252	4490.982	4545.916	4611.860	4676.056	4740.958	4820.465	4881.205
4432.963	4492.101	4546.676	4612.543	4676.972	4741.304	4820.885	4881.853
4433.491	4493.334	4547.250	4613.604	4678.235	4742.117	4821.588	4882.243
4433.838	4494.691	4547.759	4615.024	4680.238	4742.567	4821.865	4885.984
4434.827	4494.962	4548.326	4615.334	4680.646	4743.687	4822.014	4886.866
4434.956	4495.238	4551.474	4615.884	4682.232	4745.337	4822.855	4888.261
4435.679	4496.315	4552.154	4616.452	4682.732	4747.618	4823.182	4889.042
4436.048	4496.638	4553.838	4617.907	4683.352	4748.591	4823.606	4889.490
4436.284	4497.914	4555.813	4619.479	4686.195	4749.200	4823.997	4889.855
4436.996	4498.538	4556.387	4620.241	4686.572	4749.971	4824.648	4890.458
4438.746	4498.940	4558.346	4620.448	4690.334	4752.414	4826.700	4891.038
4439.124	4499.704	4559.057	4621.163	4690.622	4757.220	4828.660	4891.661

4892.759	4965.731	5041.600	5143.267	5234.107	5345.312	5433.292	5530.076
4893.445	4967.063	5043.515	5143.917	5238.814	5346.378	5433.700	5530.698
4894.955	4967.653	5044.720	5145.308	5239.552	5347.971	5434.151	5535.971
4898.804	4968.756	5045.248	5146.056	5240.197	5349.005	5435.123	5537.556
4899.240	4970.078	5046.353	5148.212	5247.655	5349.461	5435.724	5538.609
4902.055	4972.160	5046.637	5149.207	5250.873	5351.127	5435.892	5539.262
4902.794	4975.092	5047.043	5151.612	5253.444	5351.837	5437.388	5539.911
4904.752	4975.949	5048.937	5154.243	5254.465	5354.602	5438.137	5541.147
4907.209	4976.594	5049.796	5158.604	5258.360	5355.636	5439.989	5541.582
4909.843	4977.391	5050.784	5161.540	5260.104	5358.706	5440.601	5541.936
4910.158	4980.186	5051.889	5162.285	5261.472	5359.827	5441.215	5542.890
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4910.793	4980.951	5057.987	5165.773	5265.551	5361.156	5443.119	5545.806
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4911.379	4983.532	5061.656	5168.922	5269.793	5365.471	5447.154	5547.134
4912.043	4985.373	5062.037	5170.223	5270.266	5369.282	5448.272	5548.176
4912.529	4985.949	5062.932	5173.672	5272.644	5369.447	5449.479	5551.372
4913.479	4987.147	5063.516	5174.799	5272.927	5370.710	5451.652	5552.623
4914.121	4987.558	5063.999	5175.325	5273.132	5372.703	5452.219	5555.531
4915.416	4989.309	5064.602	5175.912	5274.119	5373.494	5455.152	5556.149
4917.822	4992.126	5064.945	5176.229	5276.409	5374.822	5458.968	5557.045
4919.816	4992.637	5066.136	5176.404	5277.146	5375.353	5461.736	5557.921
4921.613	4993.749	5066.777	5176.961	5277.500	5375.769	5462.613	5558.342
4922.944	4994.106	5067.138	5177.623	5280.086	5376.130	5464.206	5558.702
4924.422	4997.819	5067.974	5178.480	5280.344	5376.781	5467.170	5559.891
4925.425	4999.940	5069.338	5180.721	5281.069	5378.836	5470.759	5564.201
4925.950	5000.246	5074.646	5182.527	5281.628	5379.110	5477.552	5567.999
4926.253	5002.097	5075.466	5183.090	5286.887	5381.371	5479.075	5570.927
4927.299	5003.598	5079.137	5183.604	5289.897	5382.928	5480.891	5571.191
4927.780	5004.128	5079.908	5183.990	5291.816	5384.036	5484.147	5572.095
4929.086	5008.190	5081.446	5184.453	5294.397	5386.611	5487.841	5572.465
4929.985	5009.334	5084.699	5184.731	5295.089	5388.051	5488.629	5573.354
4933.209	5009.937	5084.993	5186.413	5296.279	5392.573	5488.925	5574.915
4933.852	5010.417	5085.296	5187.337	5297.743	5393.600	5489.088	5576.204
4934.331	5011.477	5086.177	5187.746	5298.282	5393.972	5490.119	5577.685
4936.775	5013.165	5089.219	5190.872	5300.523	5394.761	5492.644	5579.358
4937.829	5014.754	5090.051	5193.826	5301.404	5397.516	5493.204	5580.077
4938.505	5015.889	5090.546	5194.458	5306.986	5398.702	5494.331	5580.755
4939.060	5016.536	5095.064	5195.814	5307.466	5398.922	5495.874	5581.967
4939.271	5017.163	5096.485	5197.236	5309.609	5399.175	5496.137	5582.867
4939.642	5017.508	5098.043	5198.800	5310.266	5399.622	5498.184	5583.762
4941.416	5018.053	5100.621	5199.164	5312.002	5400.145	5499.255	5585.847
4941.917	5019.806	5101.130	5202.009	5312.529	5402.605	5499.648	5587.026
4943.064	5020.546	5109.733	5203.848	5312.904	5403.199	5501.281	5587.735
4943.708	5021.253	5111.278	5205.152	5315.228	5406.755	5501.944	5588.751
4945.459	5022.005	5115.045	5207.801	5317.494	5407.344	5504.302	5590.113
4946.664	5022.174	5117.292	5209.725	5318.427	5407.654	5506.113	5593.613
4947.575	5023.708	5118.202	5211.230	5320.770	5410.769	5506.920	5594.460
4950.251	5028.656	5122.499	5213.349	5322.899	5415.523	5507.538	5595.064
4950.626	5029.012	5125.489	5216.597	5325.144	5417.486	5508.559	5597.476
4952.691	5029.630	5125.950	5216.814	5325.432	5419.128	5509.994	5598.479
4953.532	5029.637	5128.490	5218.527	5326.277	5421.352	5514.873	5599.655
4957.296	5029.892	5130.234	5219.110	5326.976	5421.663	5518.989	5601.122
4958.099	5035.337	5131.072	5220.707	5329.374	5421.836	5519.235	5601.603
4958.724	5036.728	5133.105	5220.926	5329.698	5424.008	5521.753	5602.863
4961.381	5038.302	5134.746	5221.271	5329.756	5425.678	5524.582	5604.515
4961.726	5039.230	5136.121	5228.225	5330.080	5426.408	5524.957	5606.386
4962.062	5039.526	5137.473	5228.995	5337.015	5429.105	5527.295	5606.733
4963.188	5040.681	5140.774	5231.160	5340.498	5431.112	5528.227	5609.574
4965.079	5041.122	5141.783	5233.225	5343.581	5432.765	5529.097	5610.681

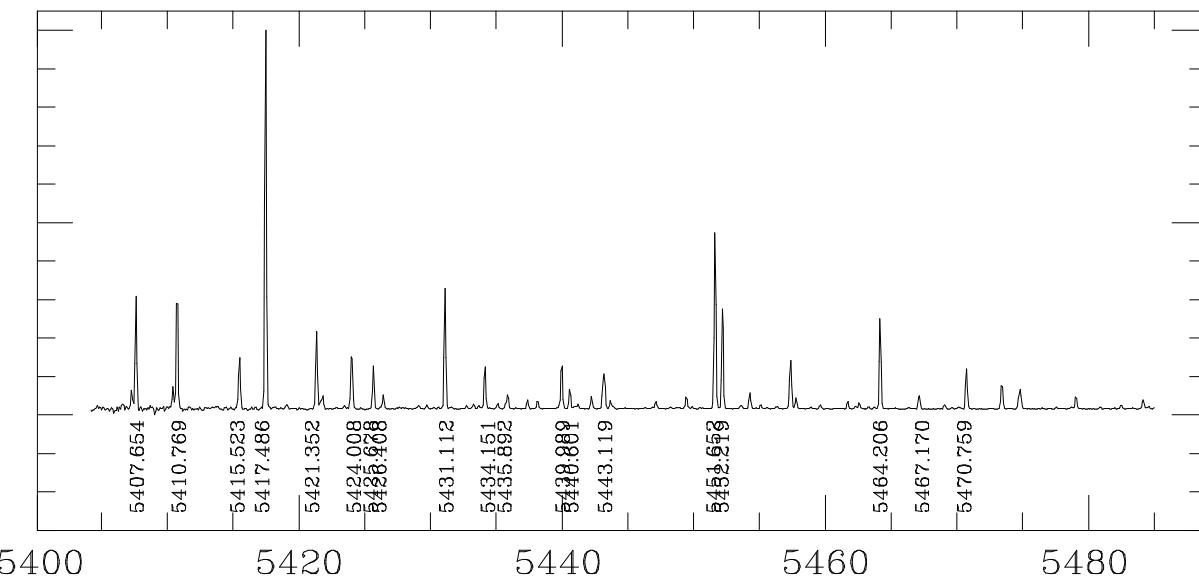
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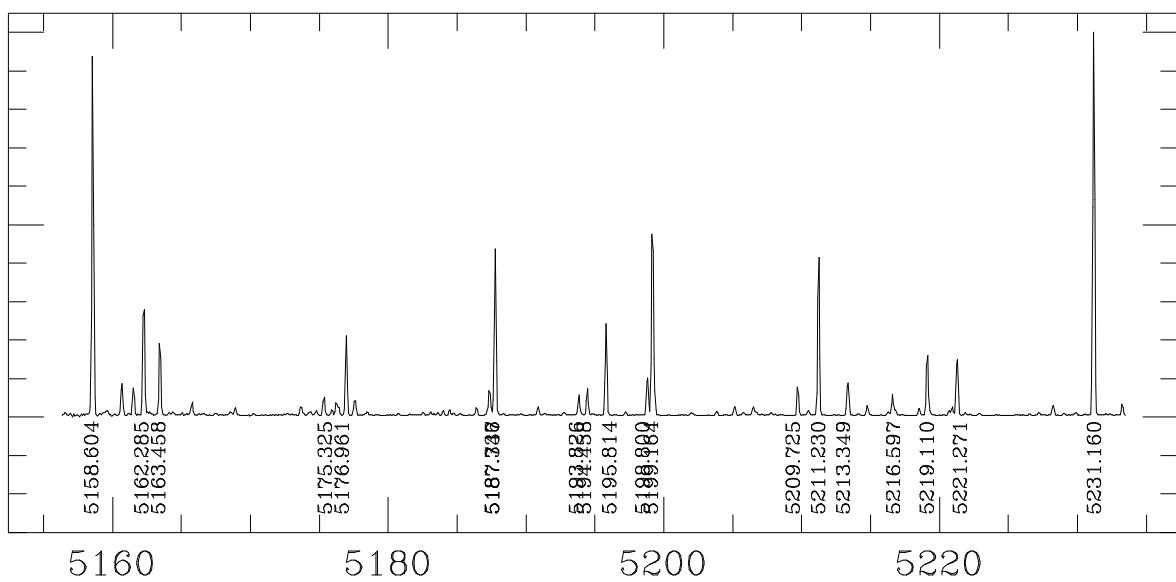
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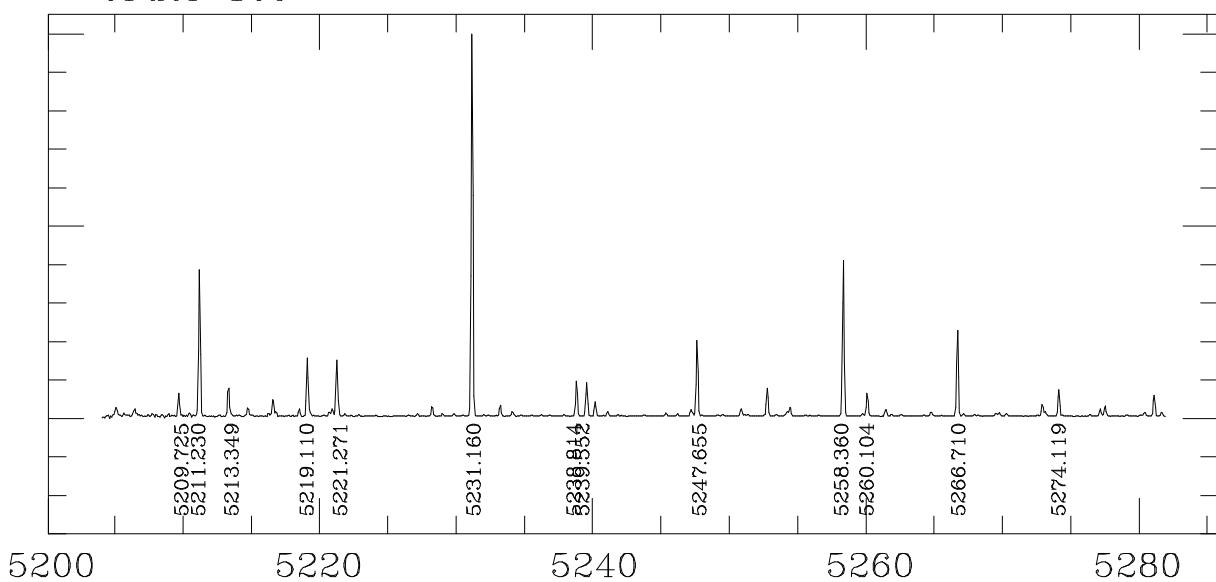
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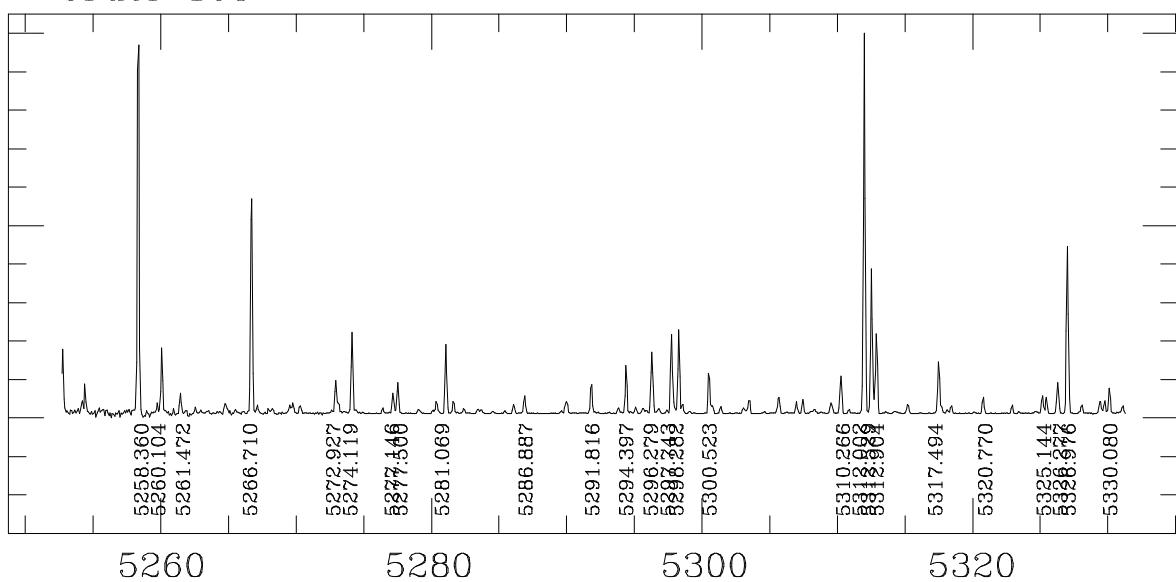
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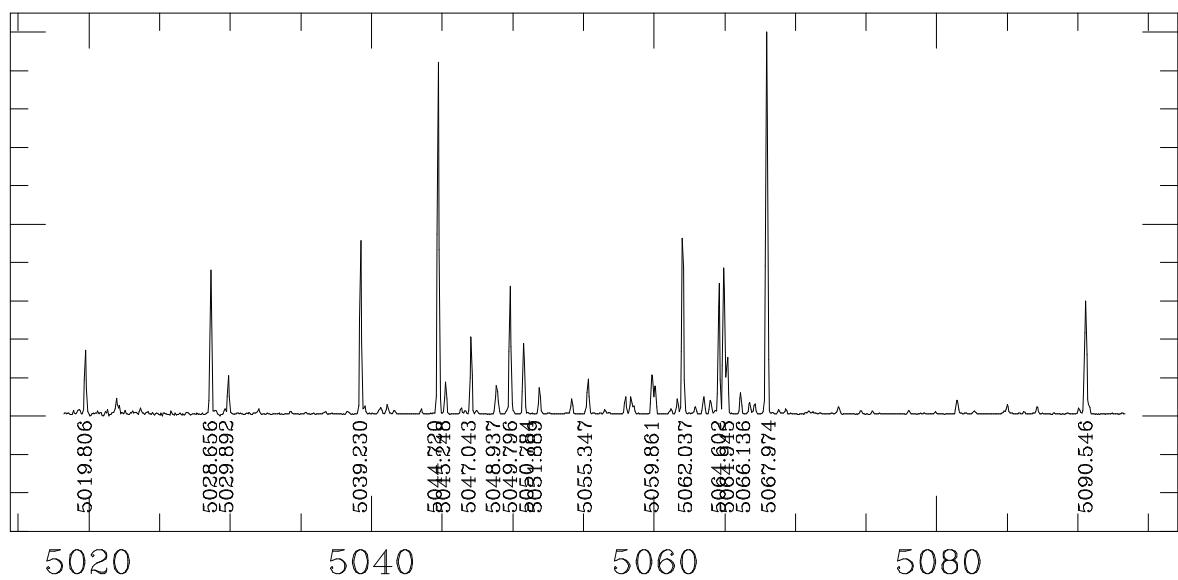
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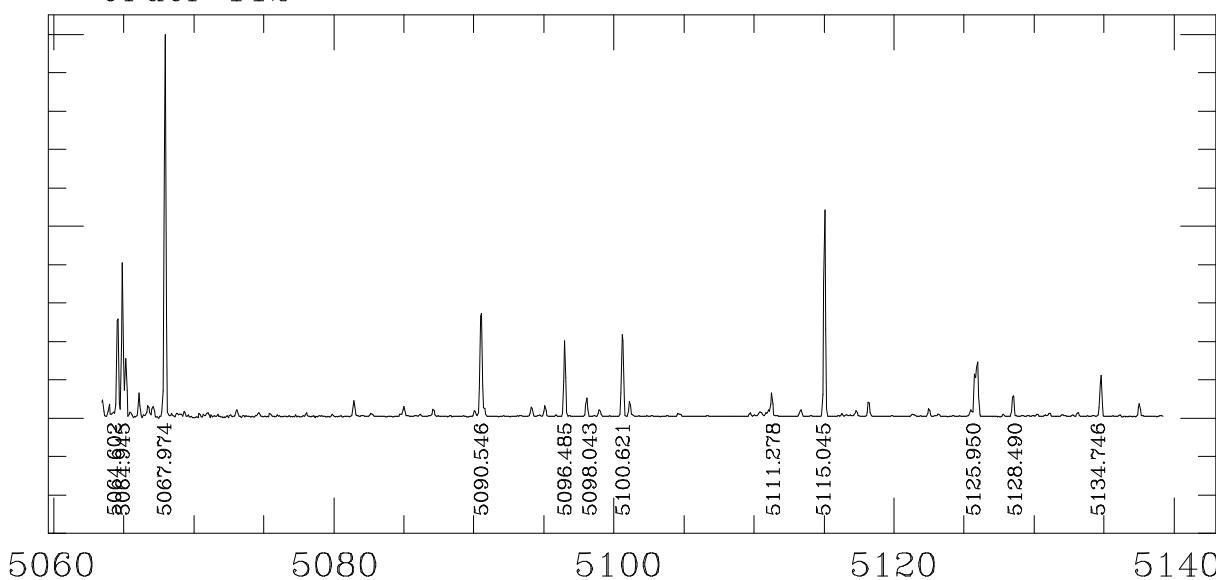
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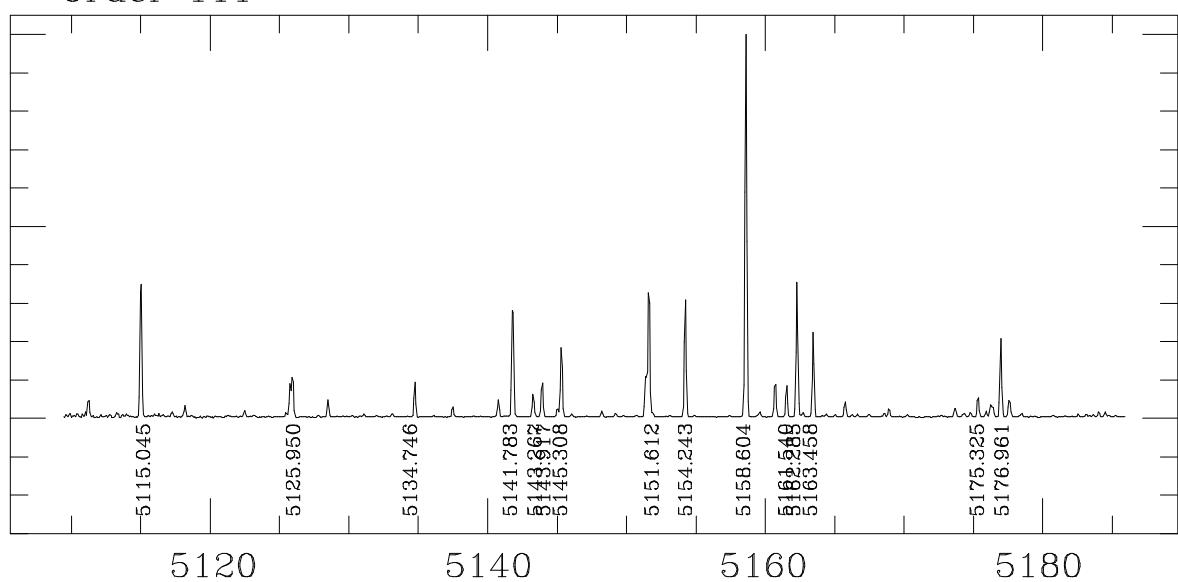
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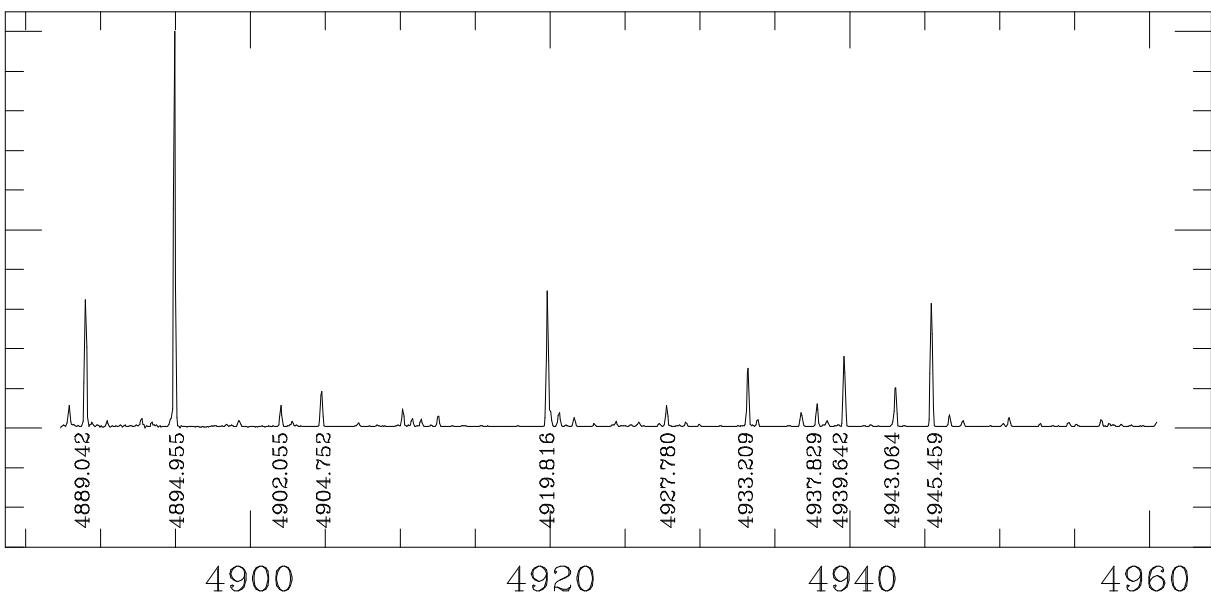
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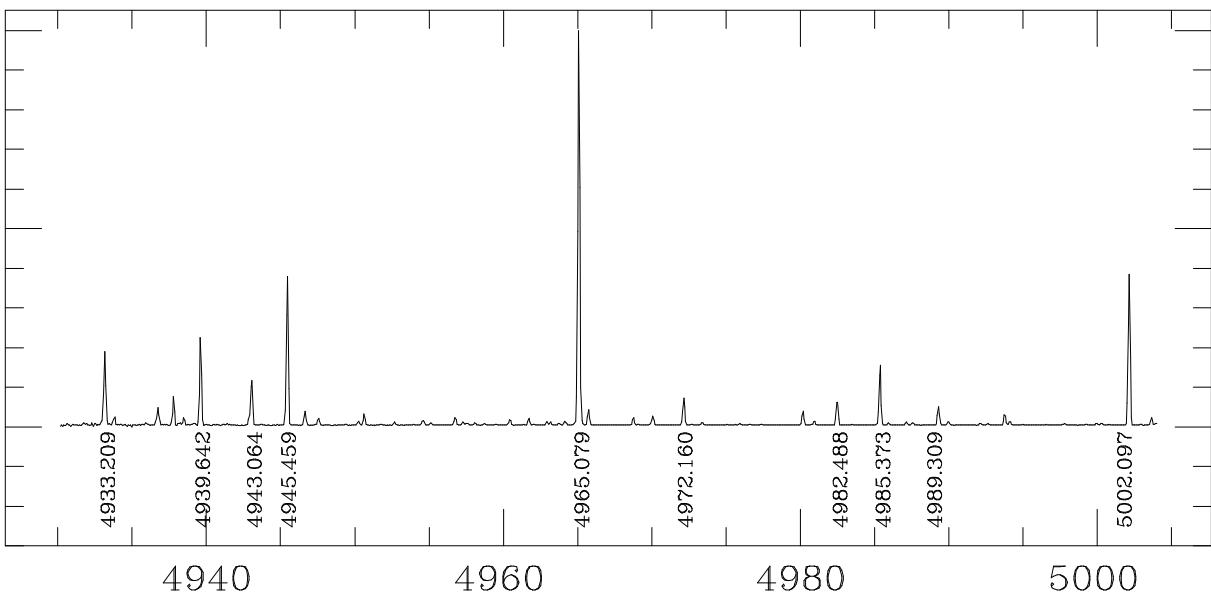
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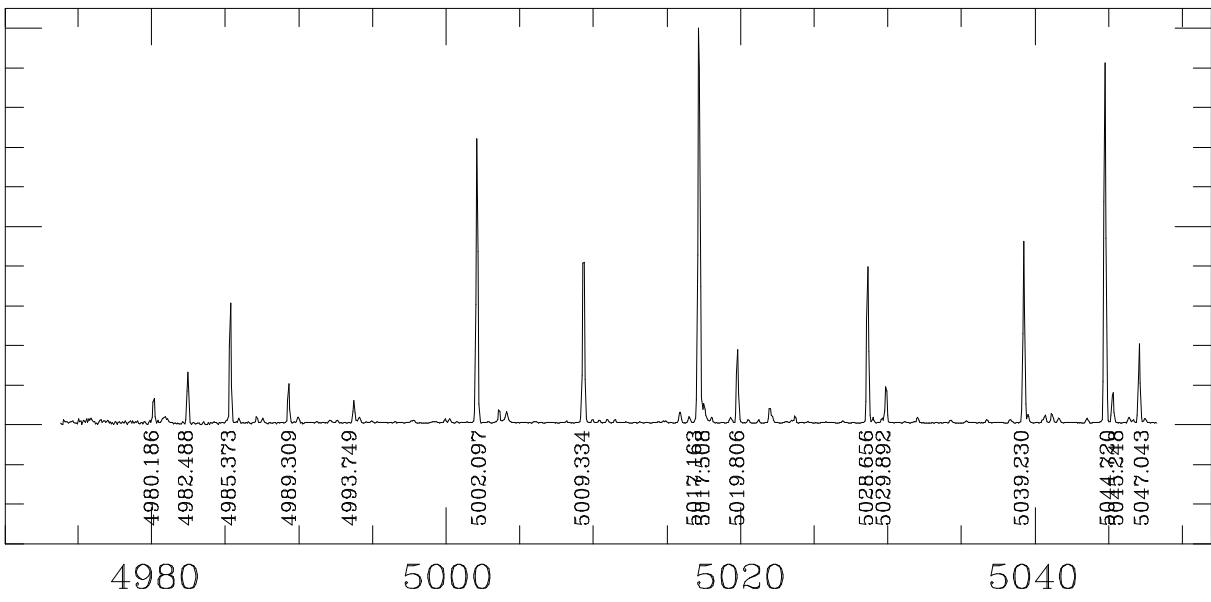
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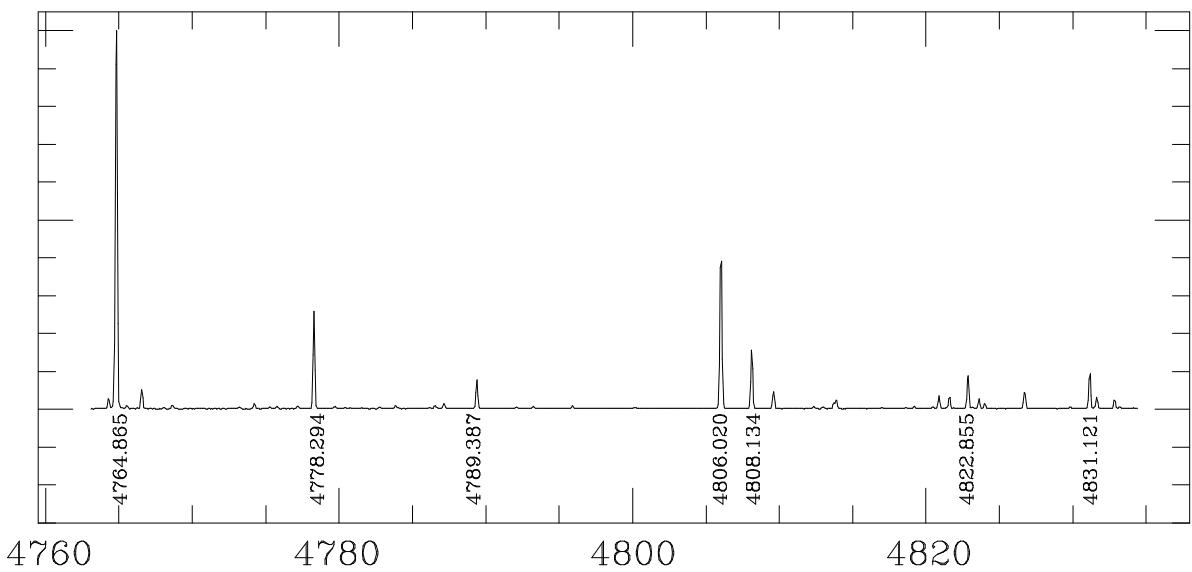
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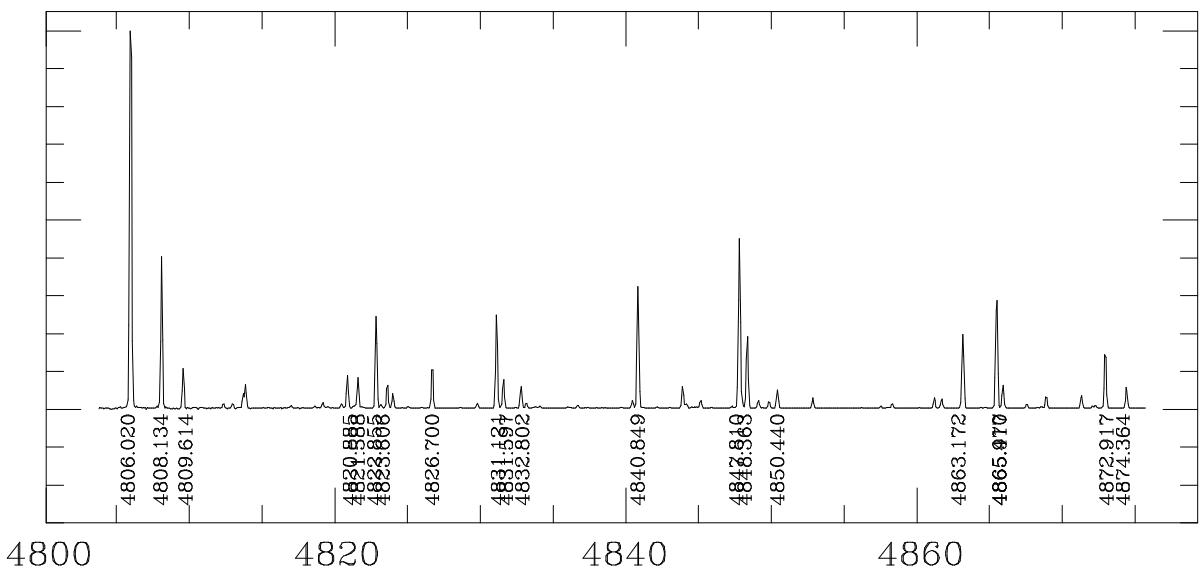
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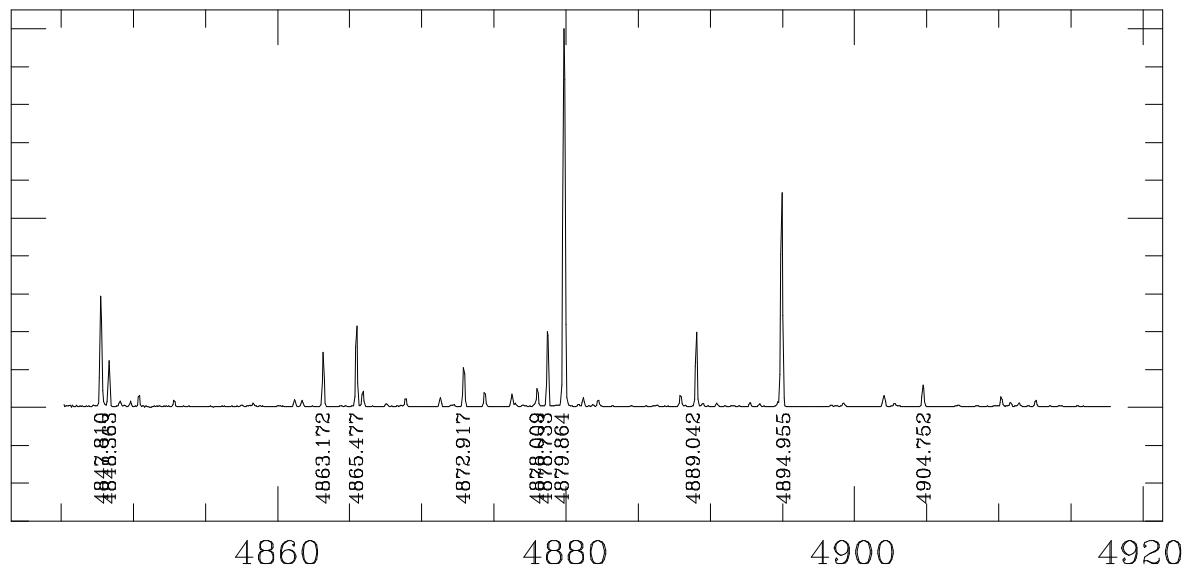
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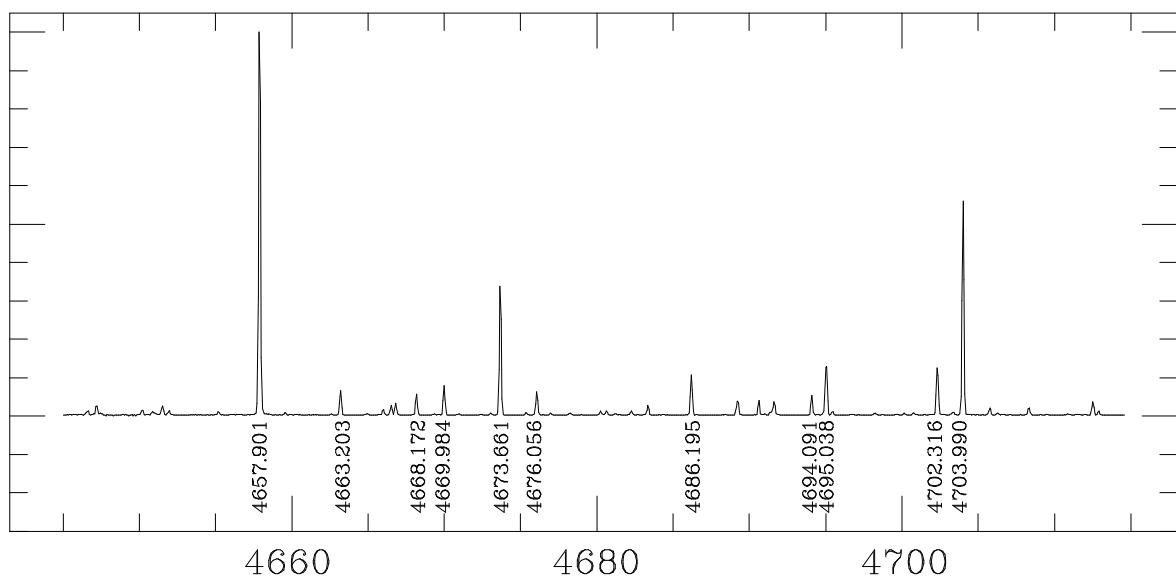
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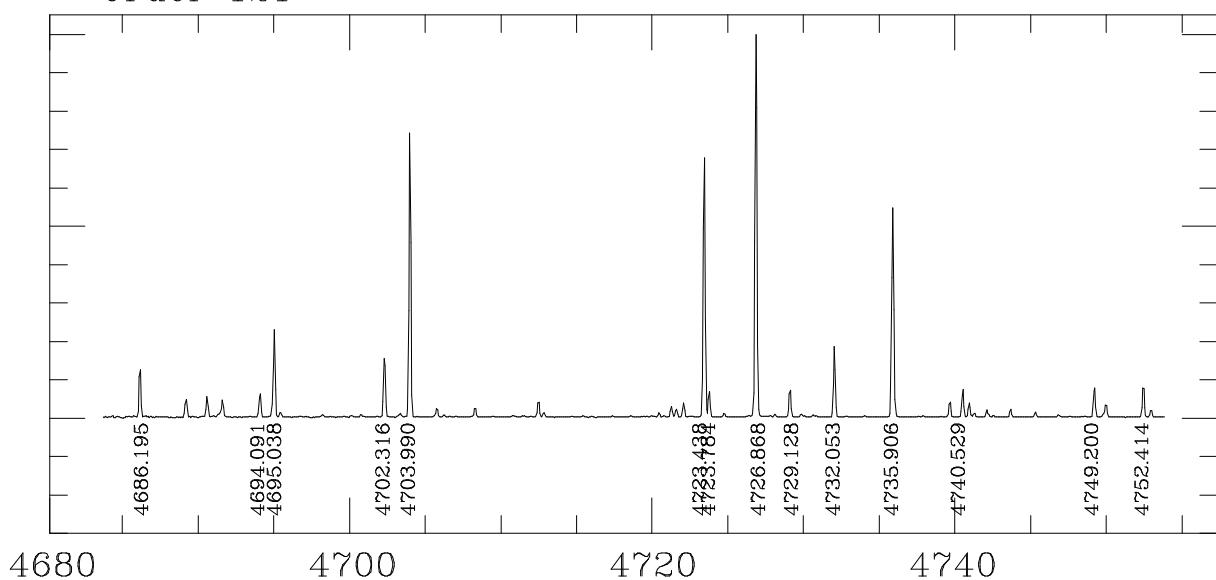
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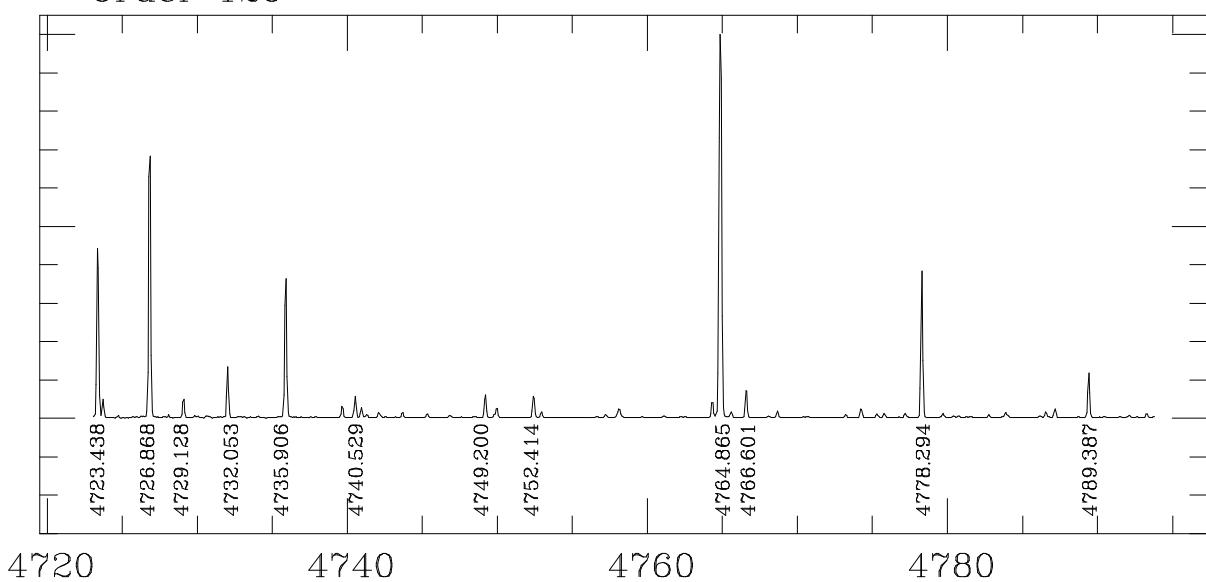
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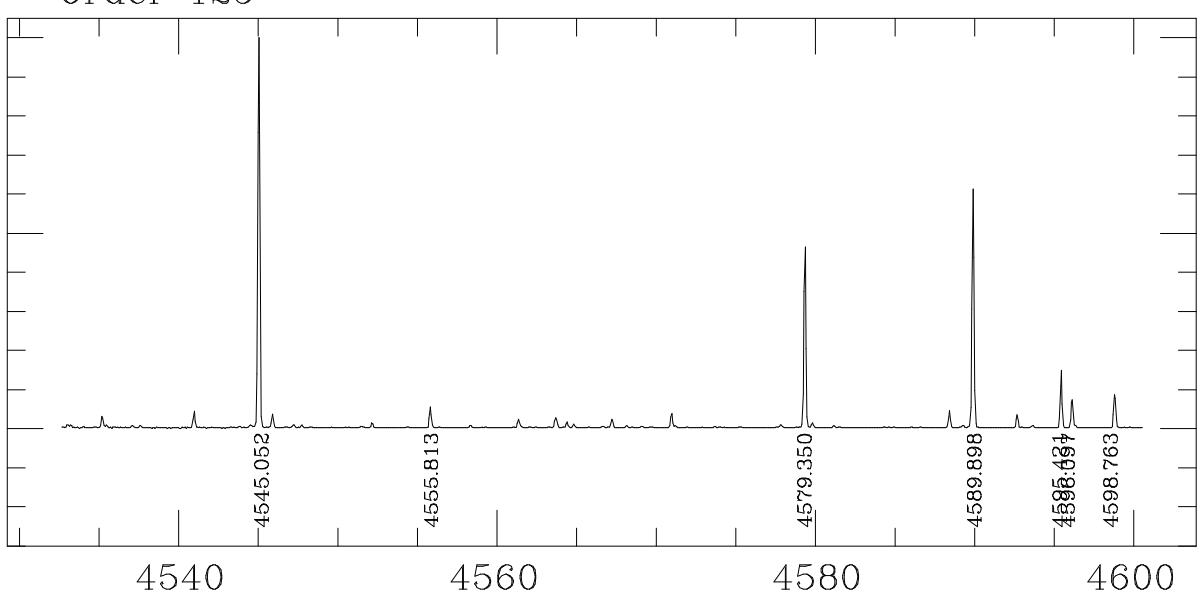
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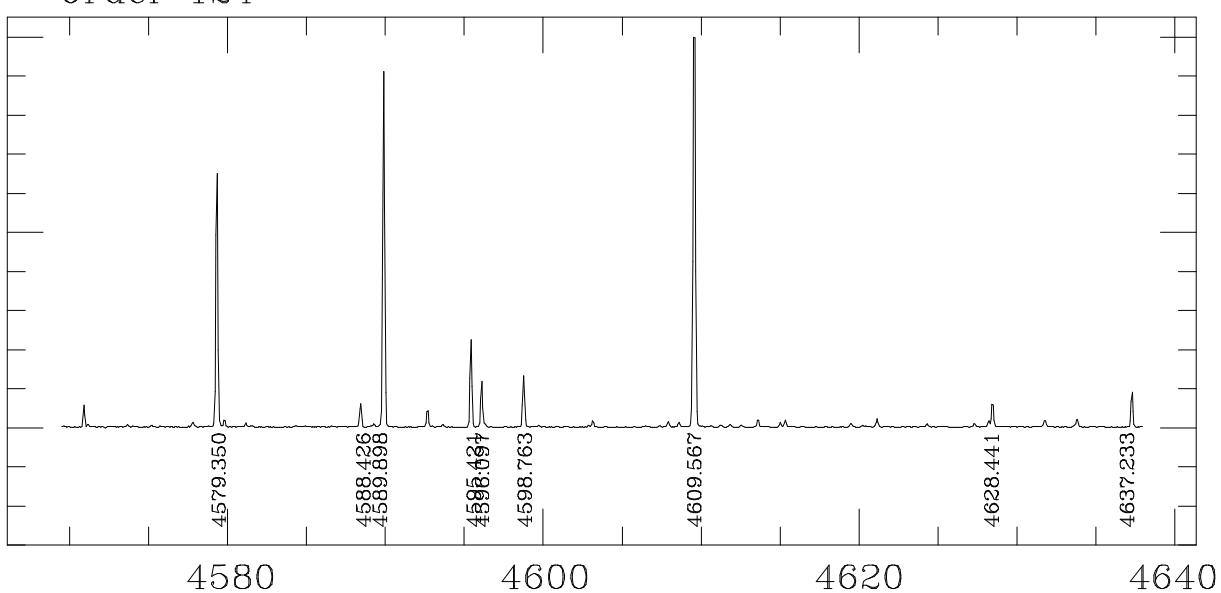
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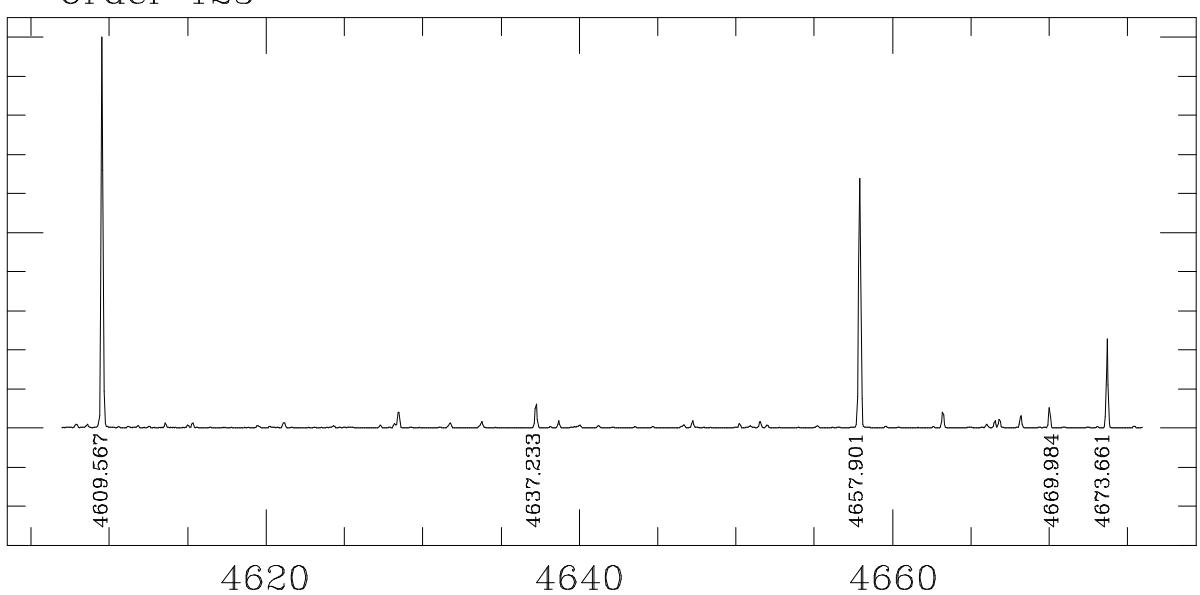
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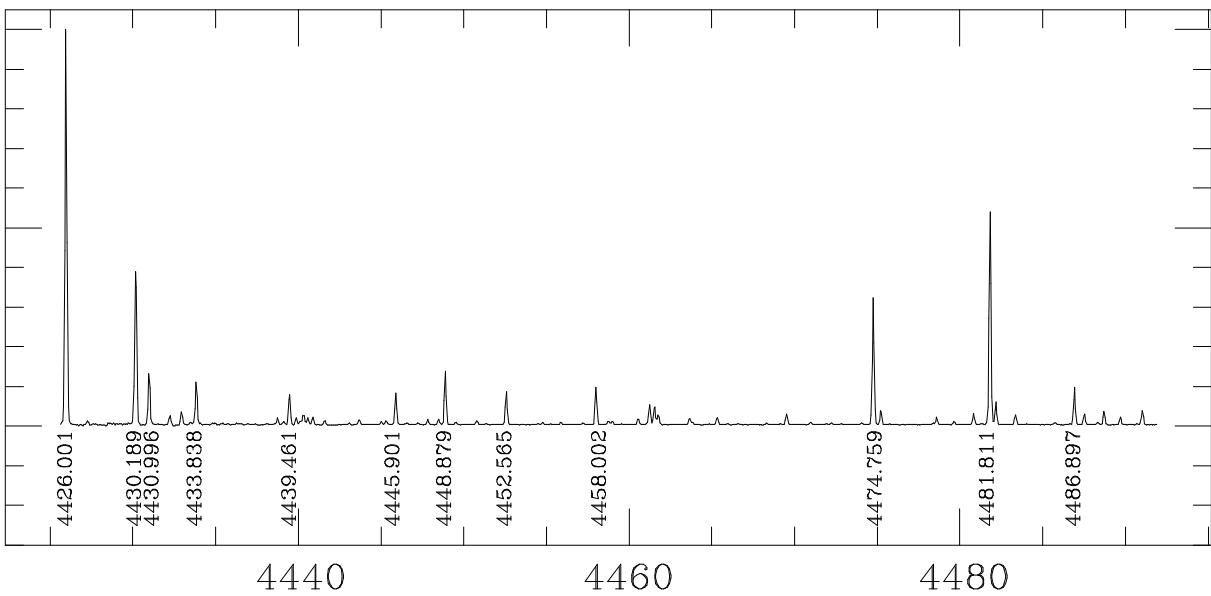
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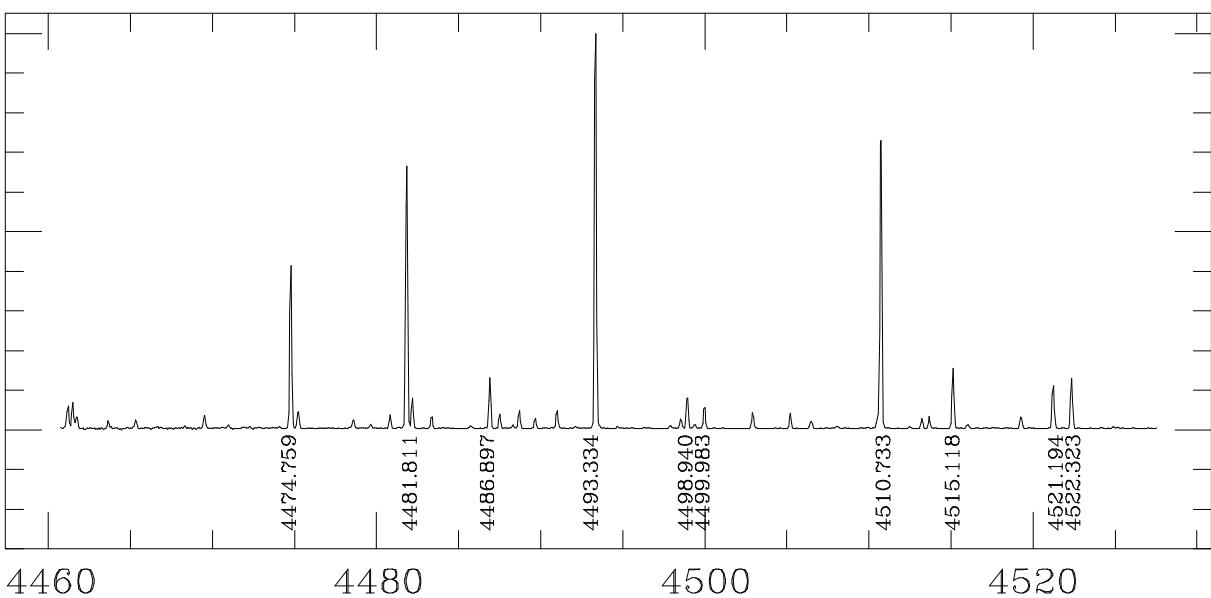
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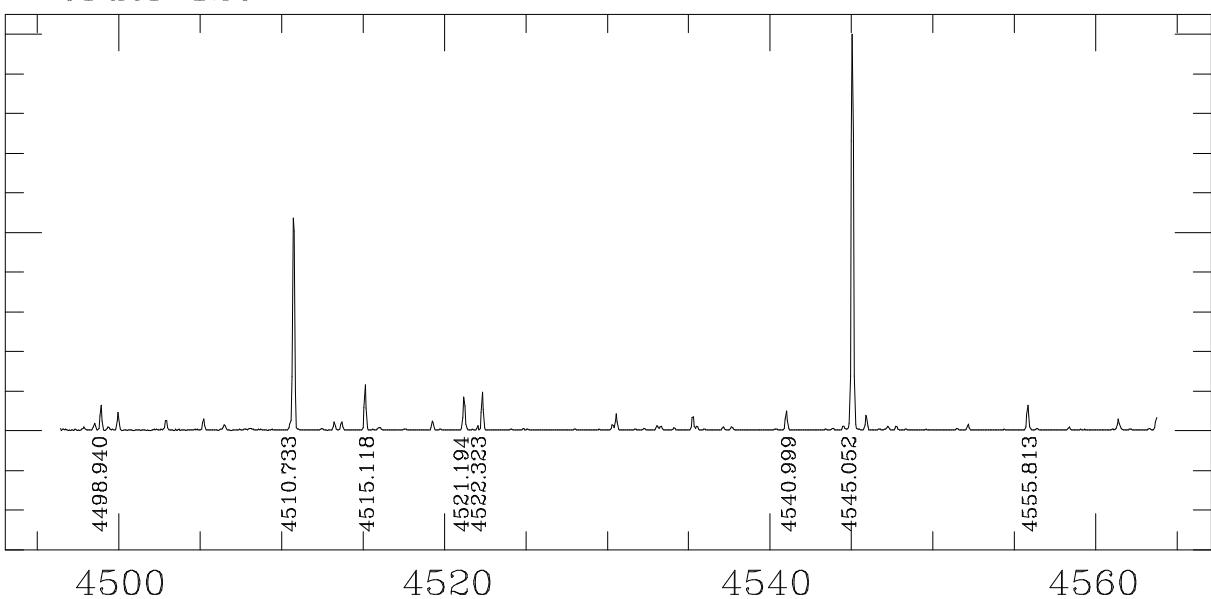
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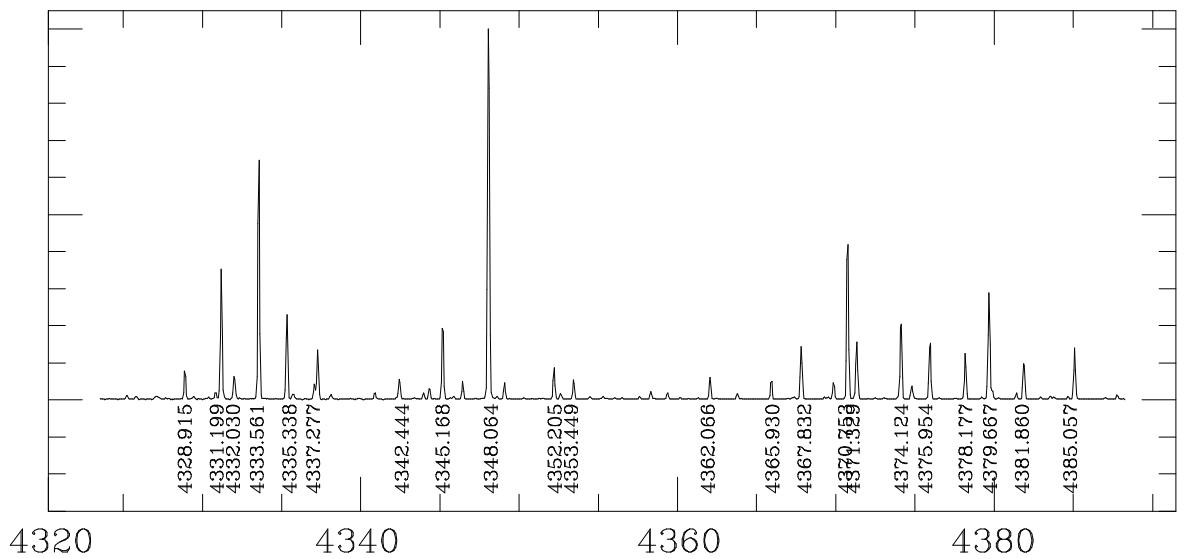
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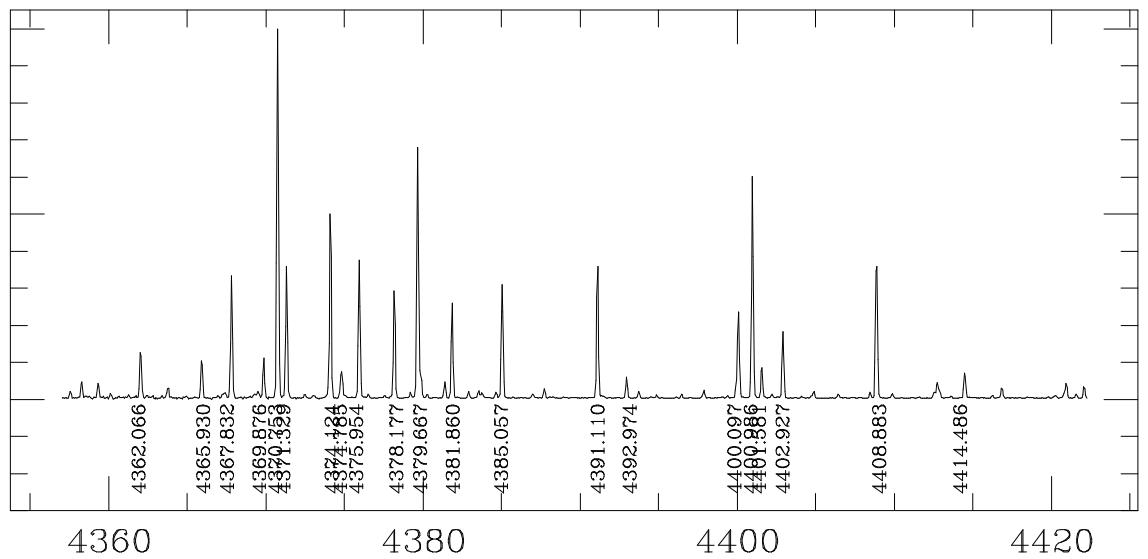
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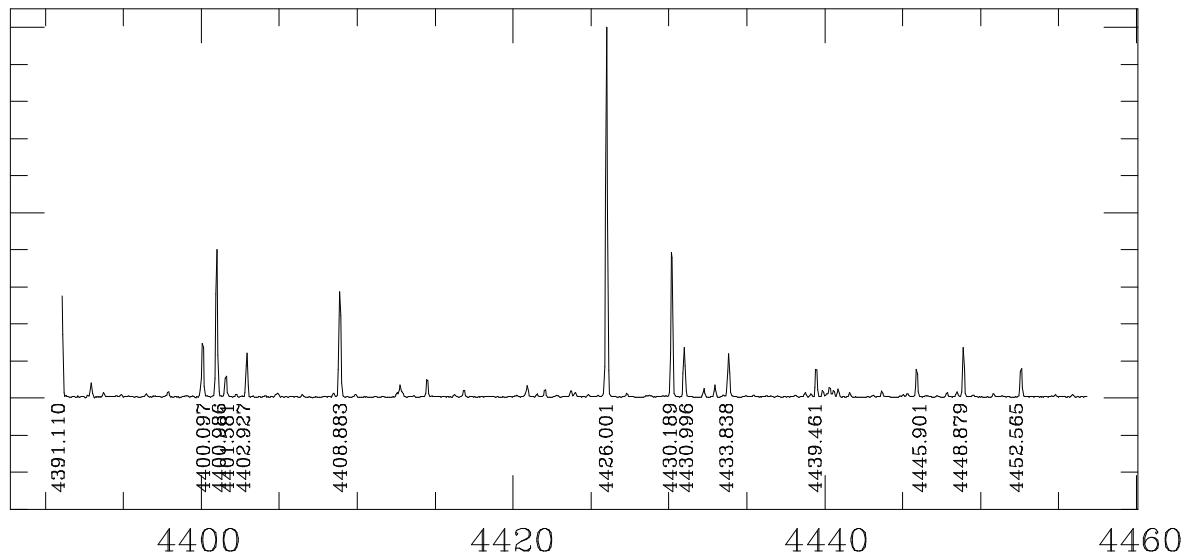
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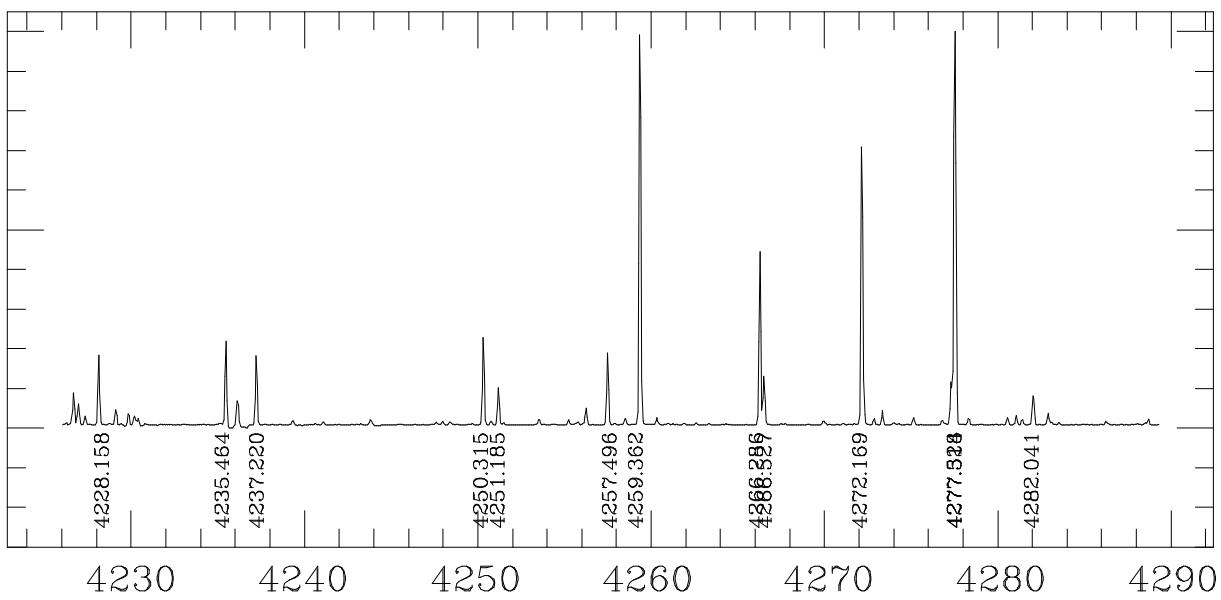
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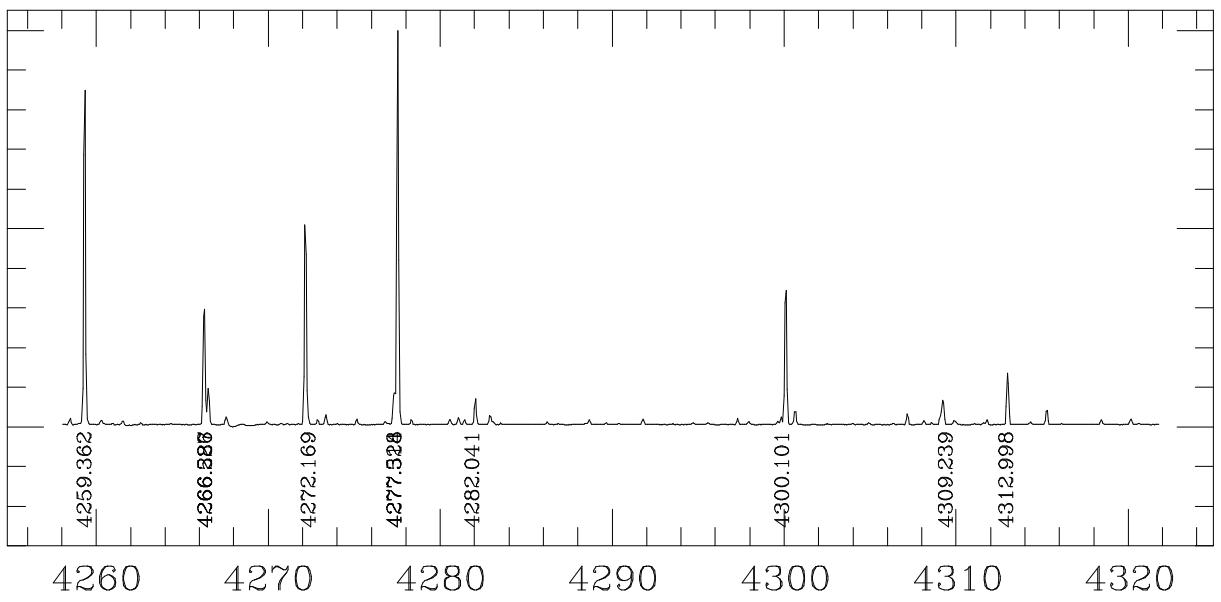
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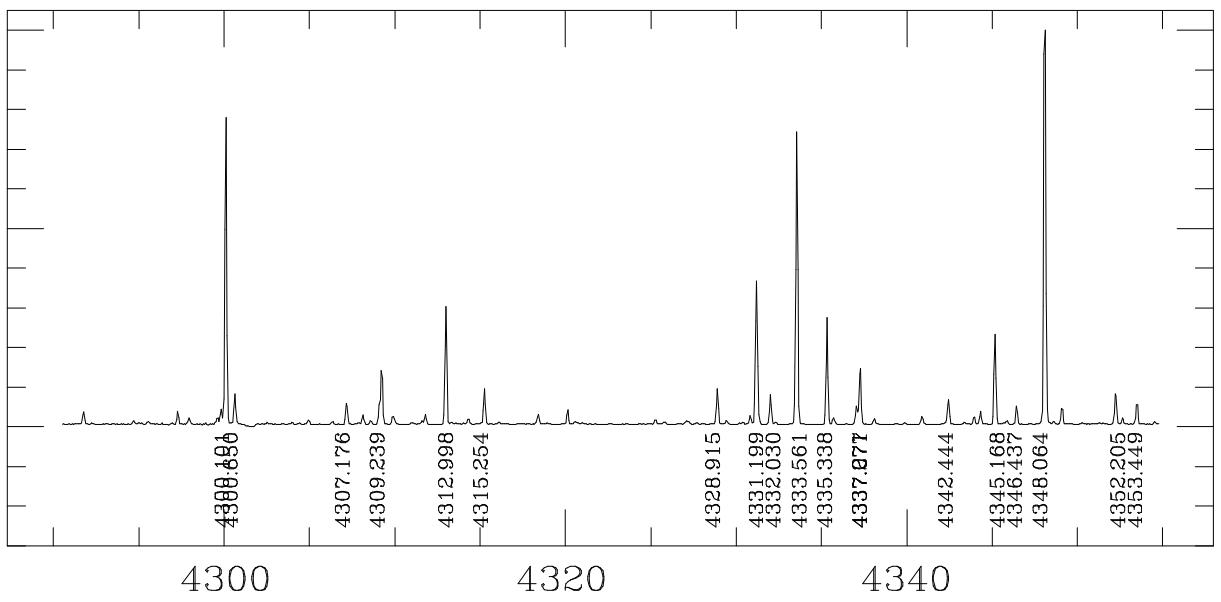
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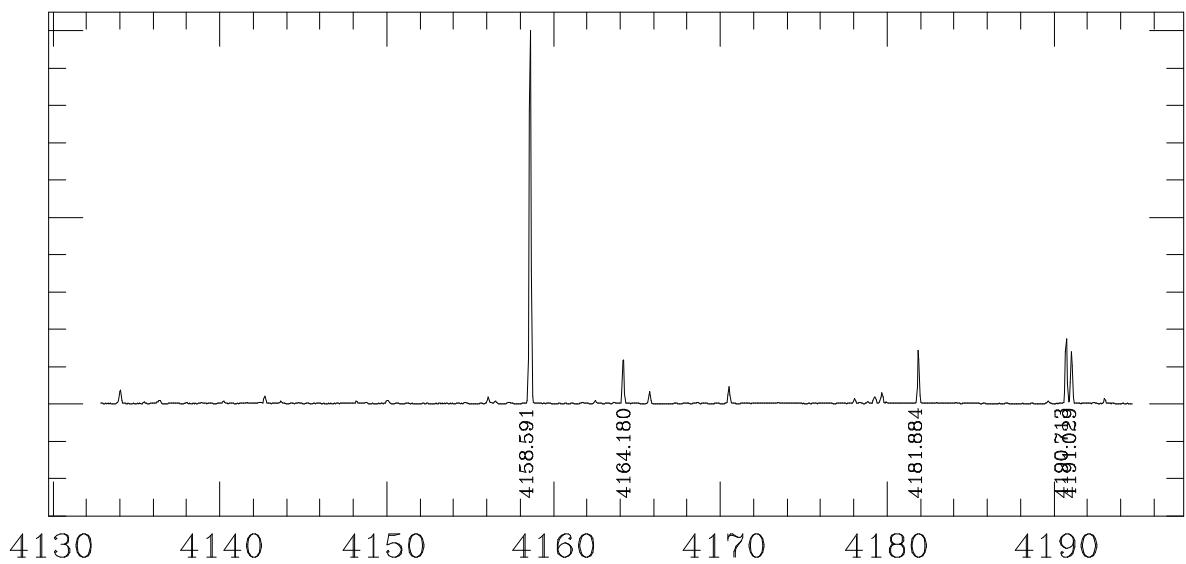
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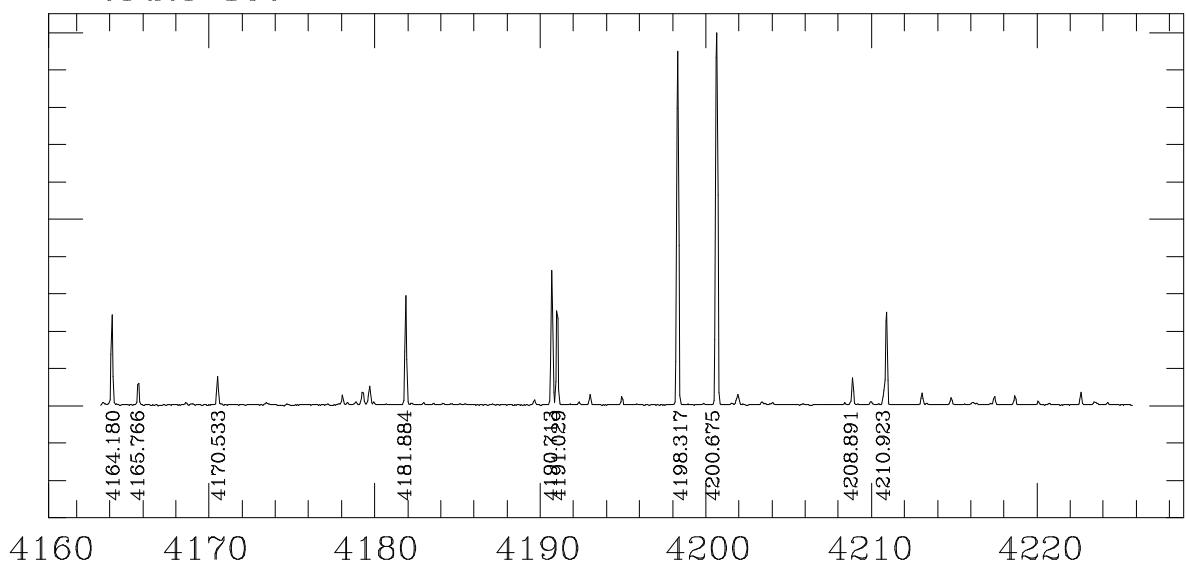
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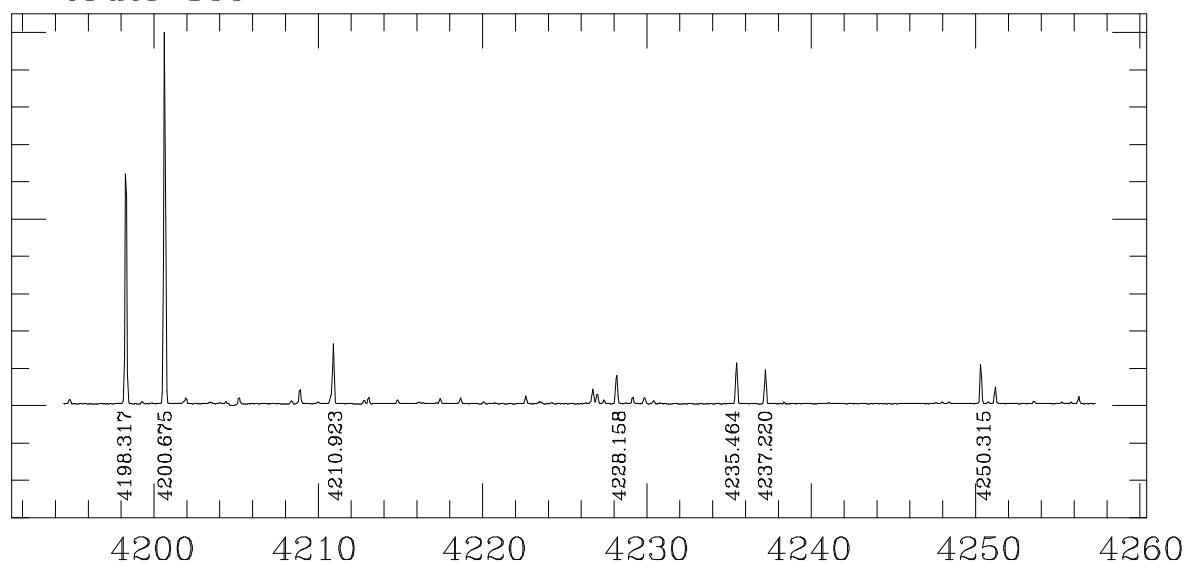
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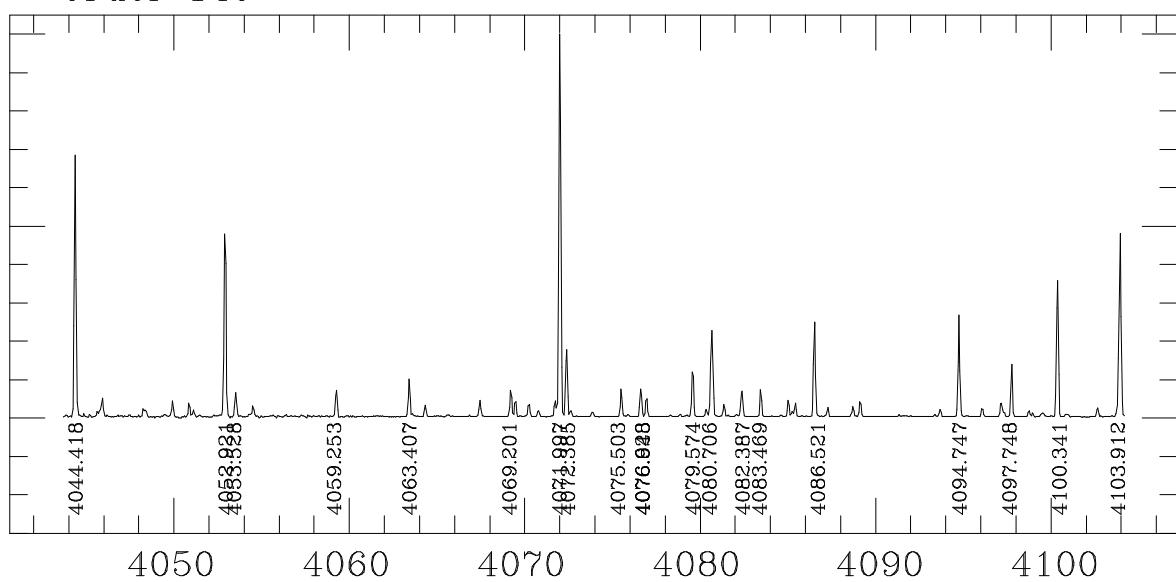
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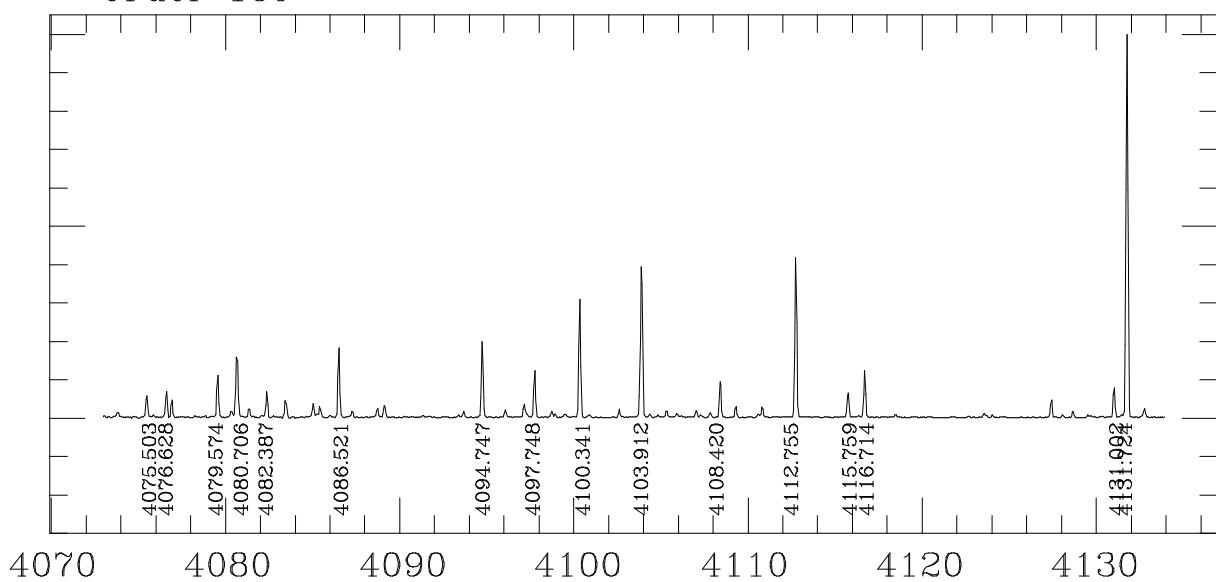
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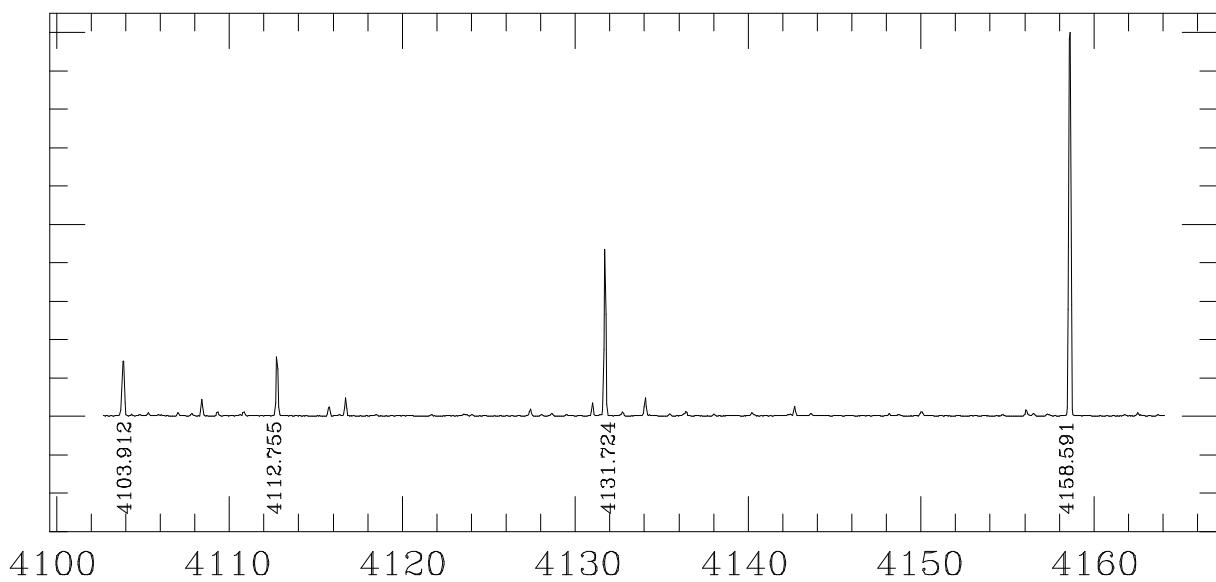
Order 140



Order 139



Order 138



Order 143

