

An Atlas of Thorium-Argon Spectrum of the 2.4 m Telescope High Resolution Spectrograph(2")

Lijiang Observatory, YNAO, CAS

November 19, 2015

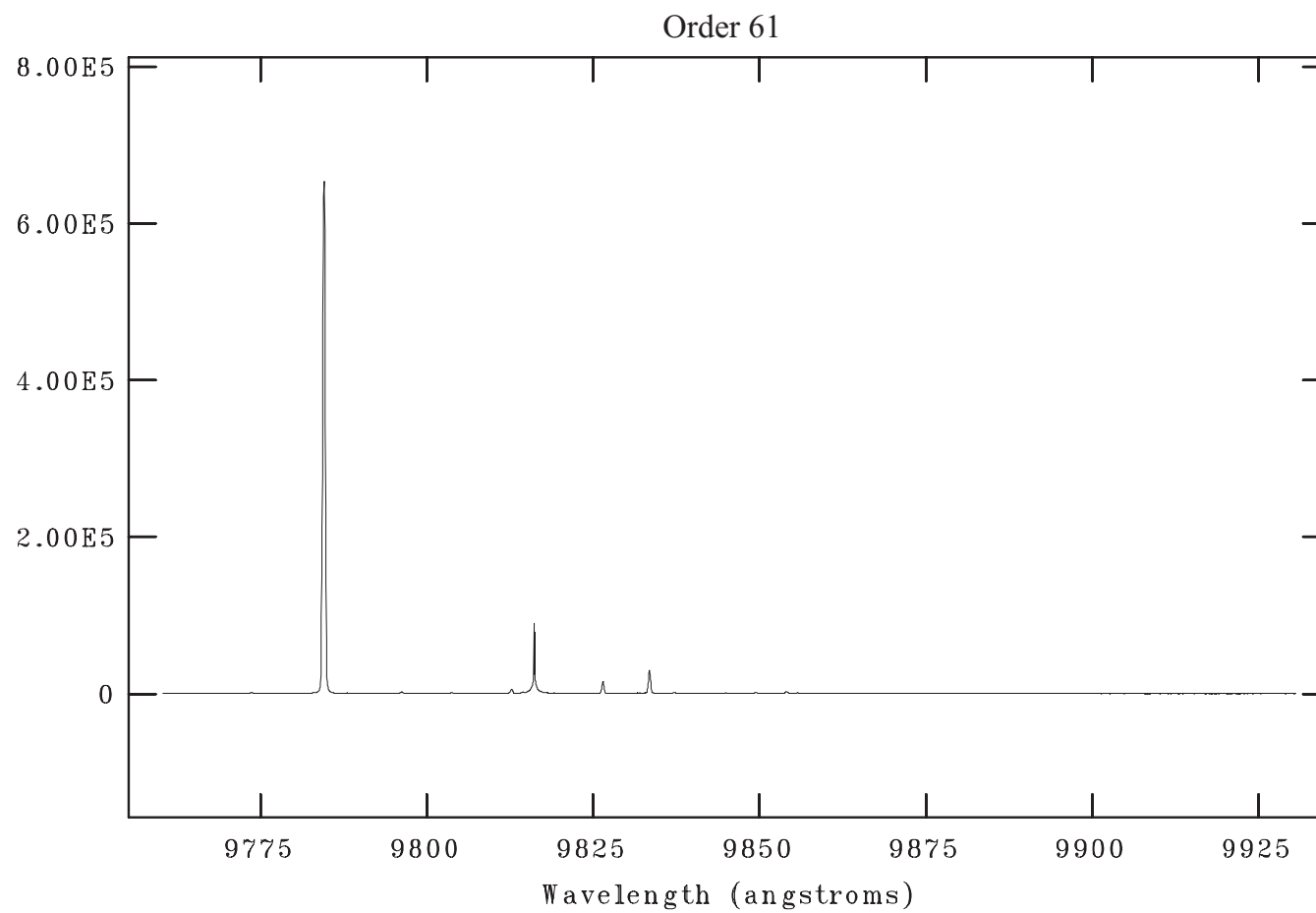
1 Introduction

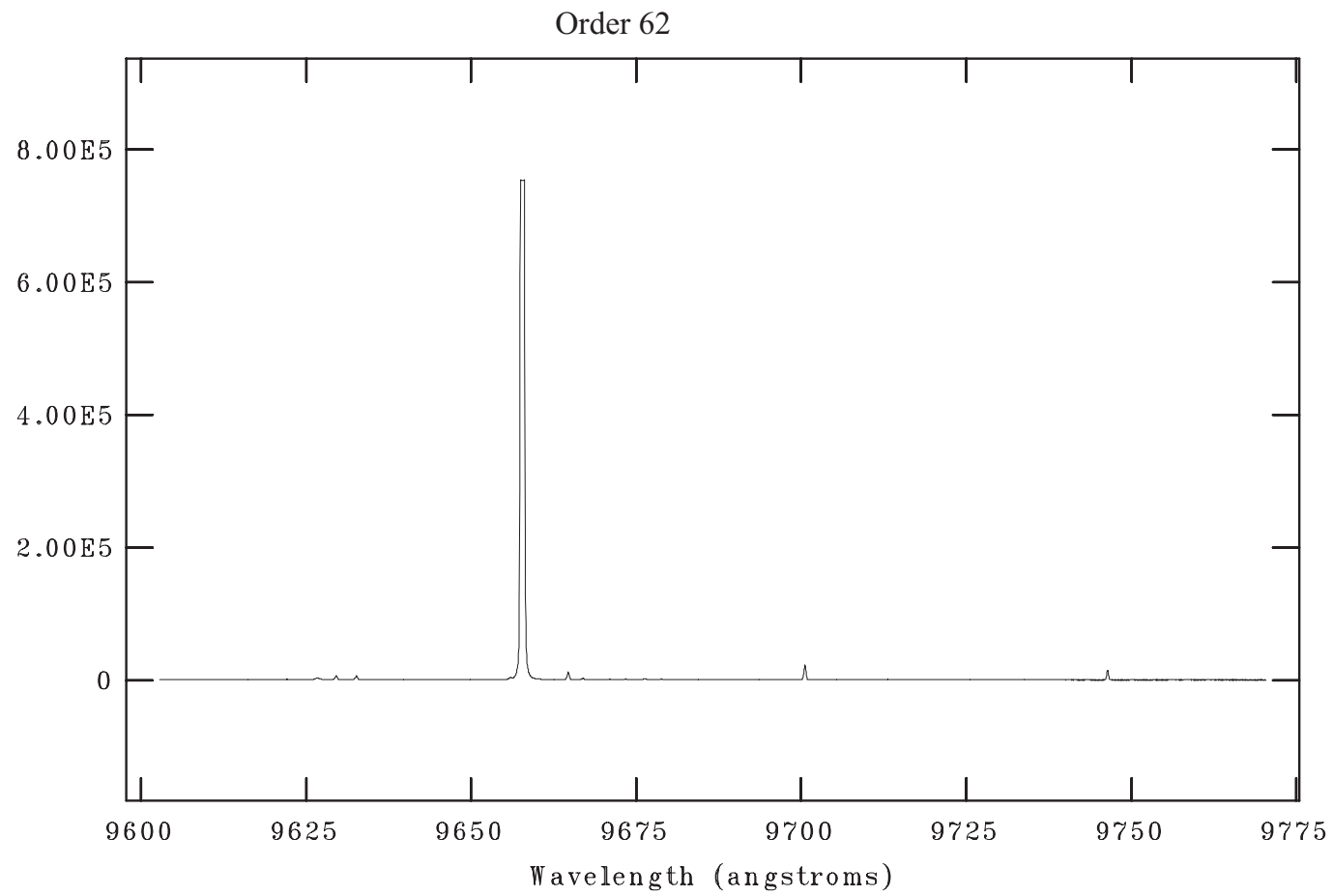
The spectra were taken with the High Resolution Spectrograph (Hires) mounted on the 2.4 m telescope at Lijiang Observatory. With a $4k \times$ CCD, the Hires covering a wavelength coverage of 3815-9930 Å from echelle order 61 to 156 with a spectral resolution ($R = \lambda/\Delta\lambda$) about 32000. The echelle orders were extracted from Thorium-Argon Spectra with IRAF¹. The echelle orders of Hires and the corresponding wavelength ranges are listed in Table 1.

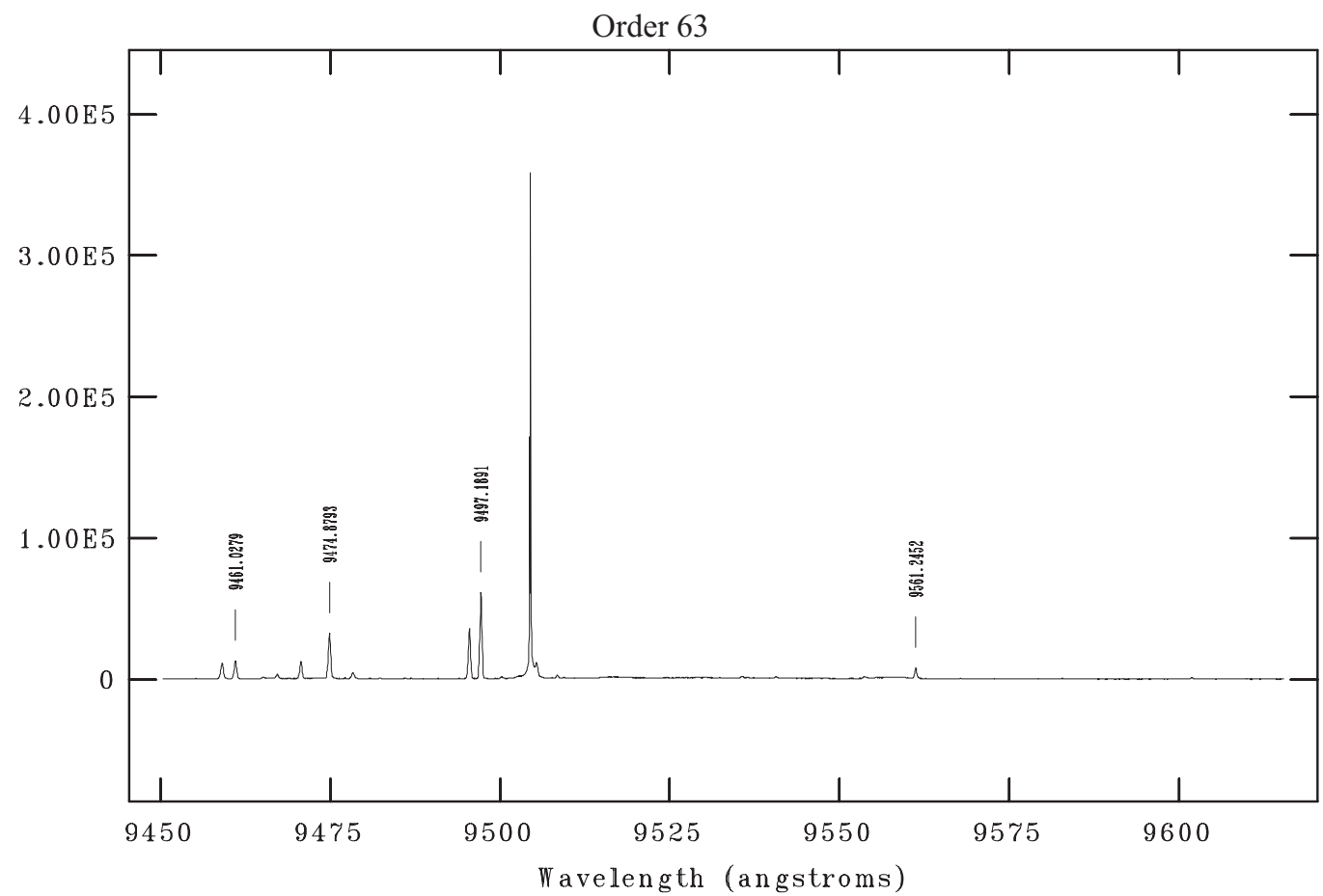
¹IRAF is distributed by the National Optical Astronomy Observatory, which is operated by the Association of Universities for Research in Astronomy, Inc., under cooperative agreement with the National Science Foundation.

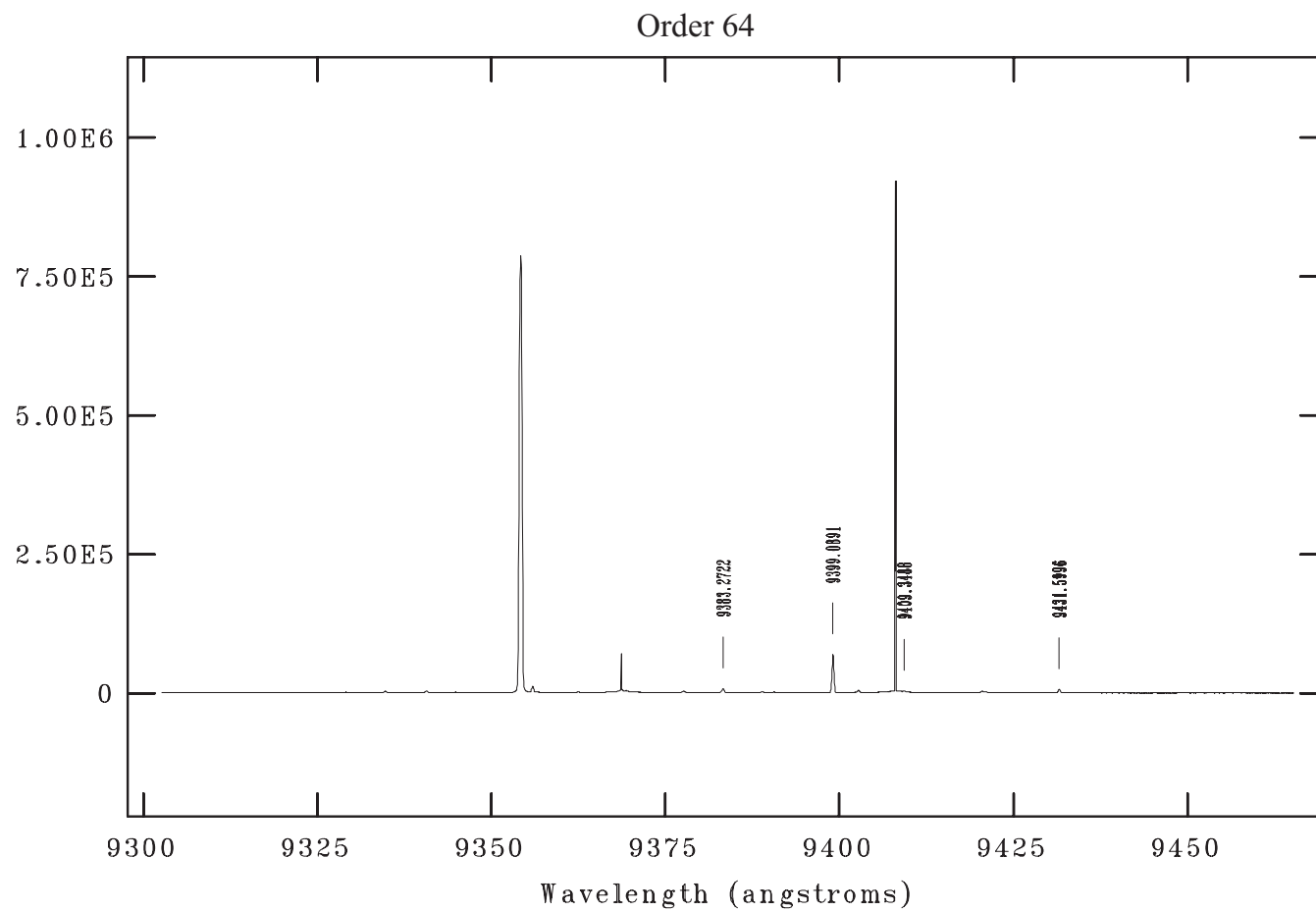
Table 1: The echelle orders of Hires and the corresponding wavelength ranges.

Order	Wavelength(Å)	Order	Wavelength(Å)
61	9760-9930	109	5461-5558
62	9602-9771	110	5412-5507
63	9450-9615	111	5363-5458
64	9303-9465	112	5315-5409
65	9159-9320	113	5268-5361
66	9021-9178	114	5222-5314
67	8886-9041	115	5176-5268
68	8755-8908	116	5132-5222
69	8628-8779	117	5088-5178
70	8505-8654	118	5045-5134
71	8385-8532	119	5002-5091
72	8269-8414	120	4961-5048
73	8155-8298	121	4920-5007
74	8045-8186	122	4879-4966
75	7938-8077	123	4840-4925
76	7834-7971	124	4801-4885
77	7731-7867	125	4762-4846
78	7633-7766	126	4724-4808
79	7536-7668	127	4687-4770
80	7442-7572	128	4650-4733
81	7350-7479	129	4614-4696
82	7260-7388	130	4579-4660
83	7173-7299	131	4544-4624
84	7087-7212	132	4509-4589
85	7004-7127	133	4476-4555
86	6923-7044	134	4442-4521
87	6843-6963	135	4409-4487
88	6765-6883	136	4377-4454
89	6689-6807	137	4345-4422
90	6615-6731	138	4313-4390
91	6542-6657	139	4282-4358
92	6471-6585	140	4252-4327
93	6401-6514	141	4221-4297
94	6333-6445	142	4192-4266
95	6267-6377	143	4162-4236
96	6201-6310	144	4133-4207
97	6137-6245	145	4105-4178
98	6075-6182	146	4077-4149
99	6013-6119	147	4049-4121
100	5953-6058	148	4022-4093
101	5894-5998	149	3995-4066
102	5836-5939	150	3968-4039
103	5780-5881	151	3942-4012
104	5724-5825	152	3916-3986
105	5670-5769	153	3890-3960
106	5616-5715	154	3865-3934
107	5564-5662	155	3840-3908
108	5512-5609	156	3815-3883

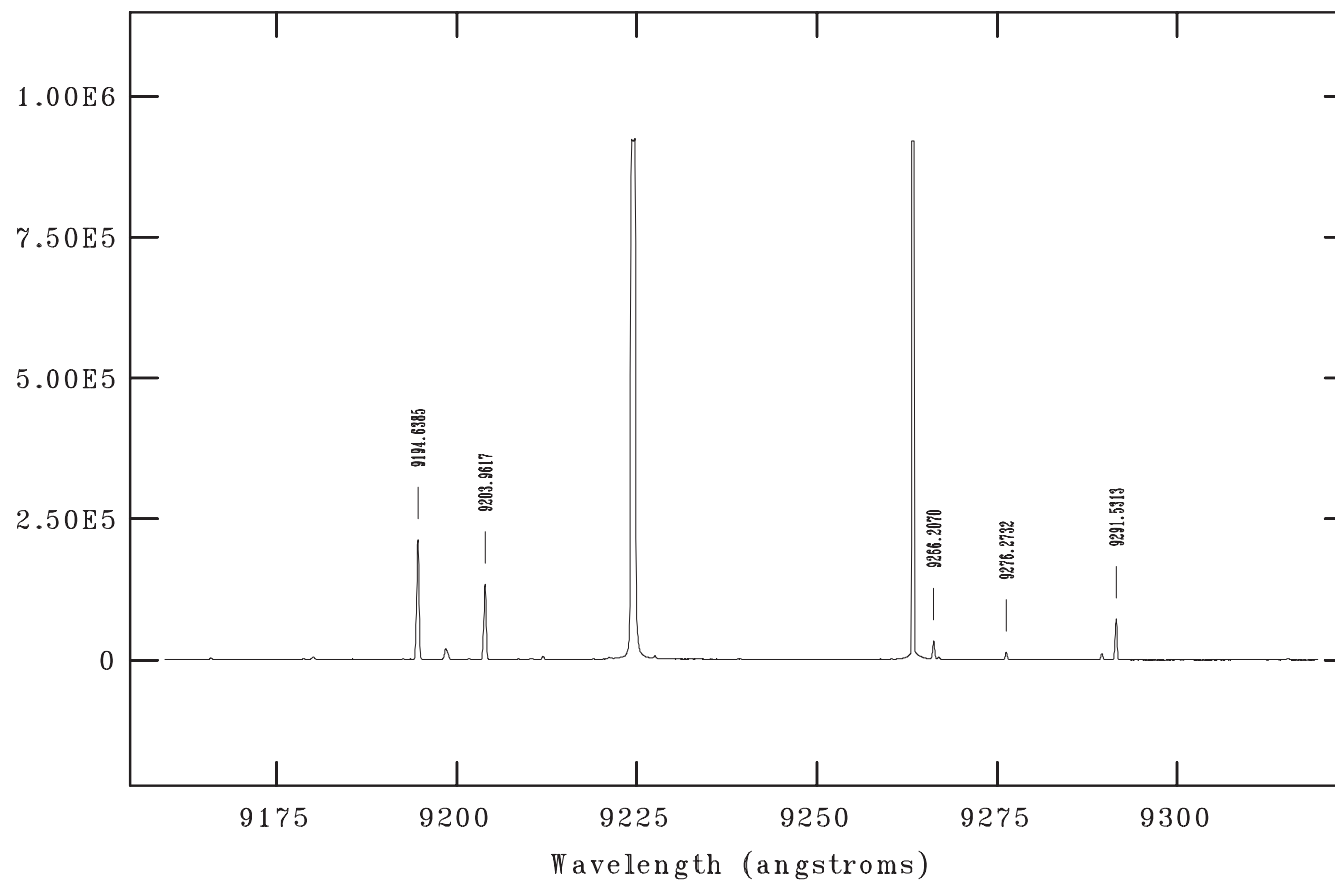


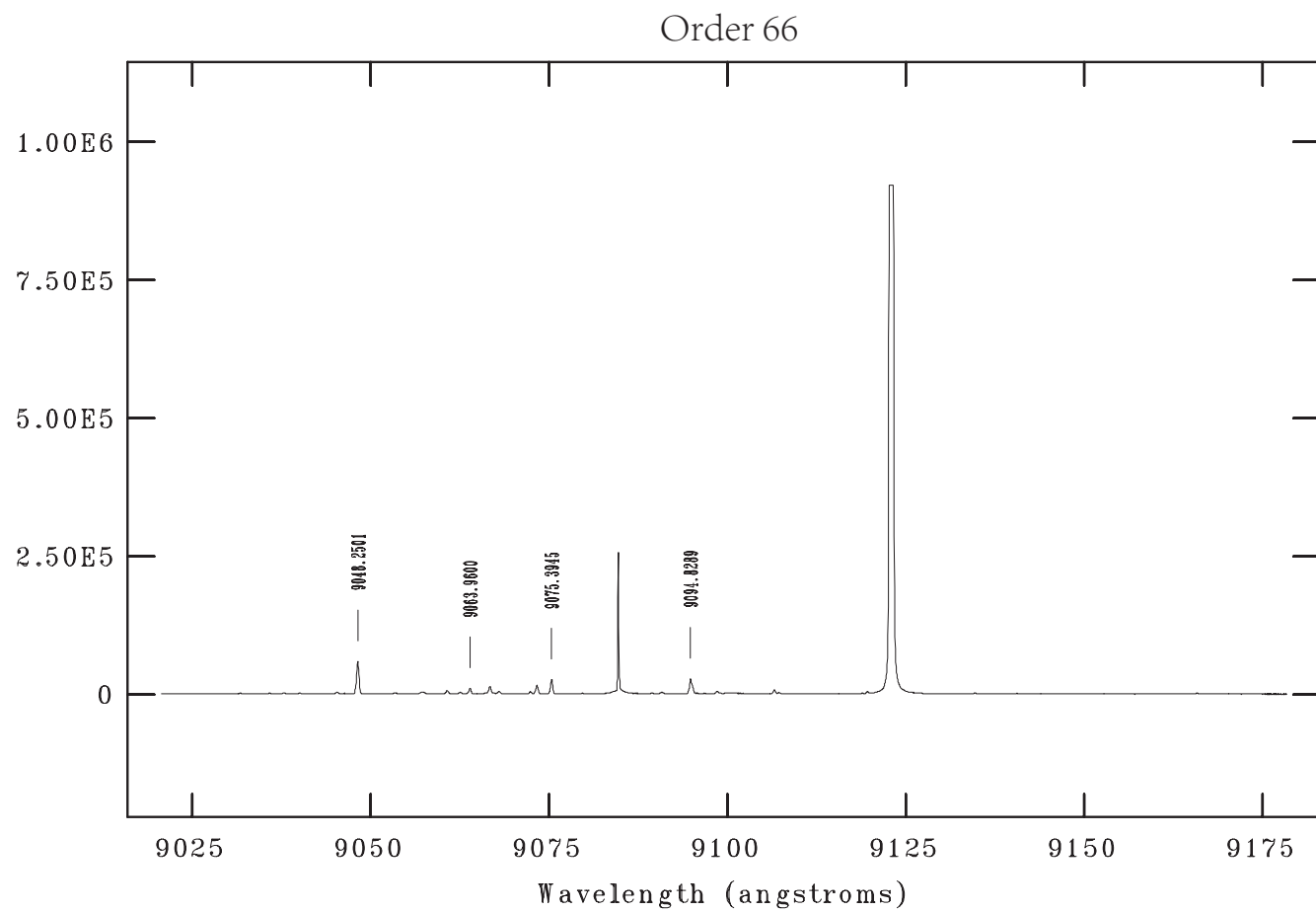


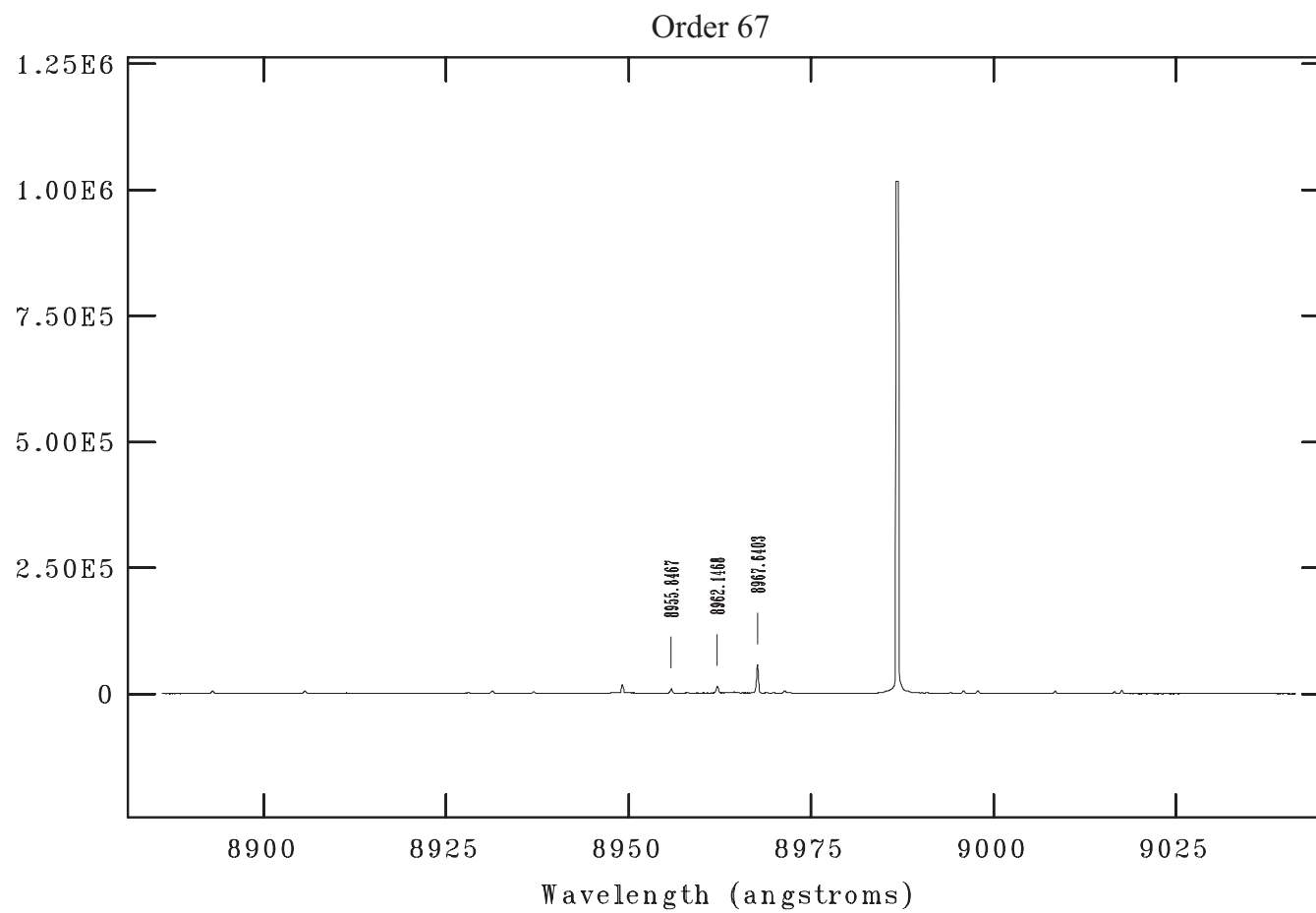


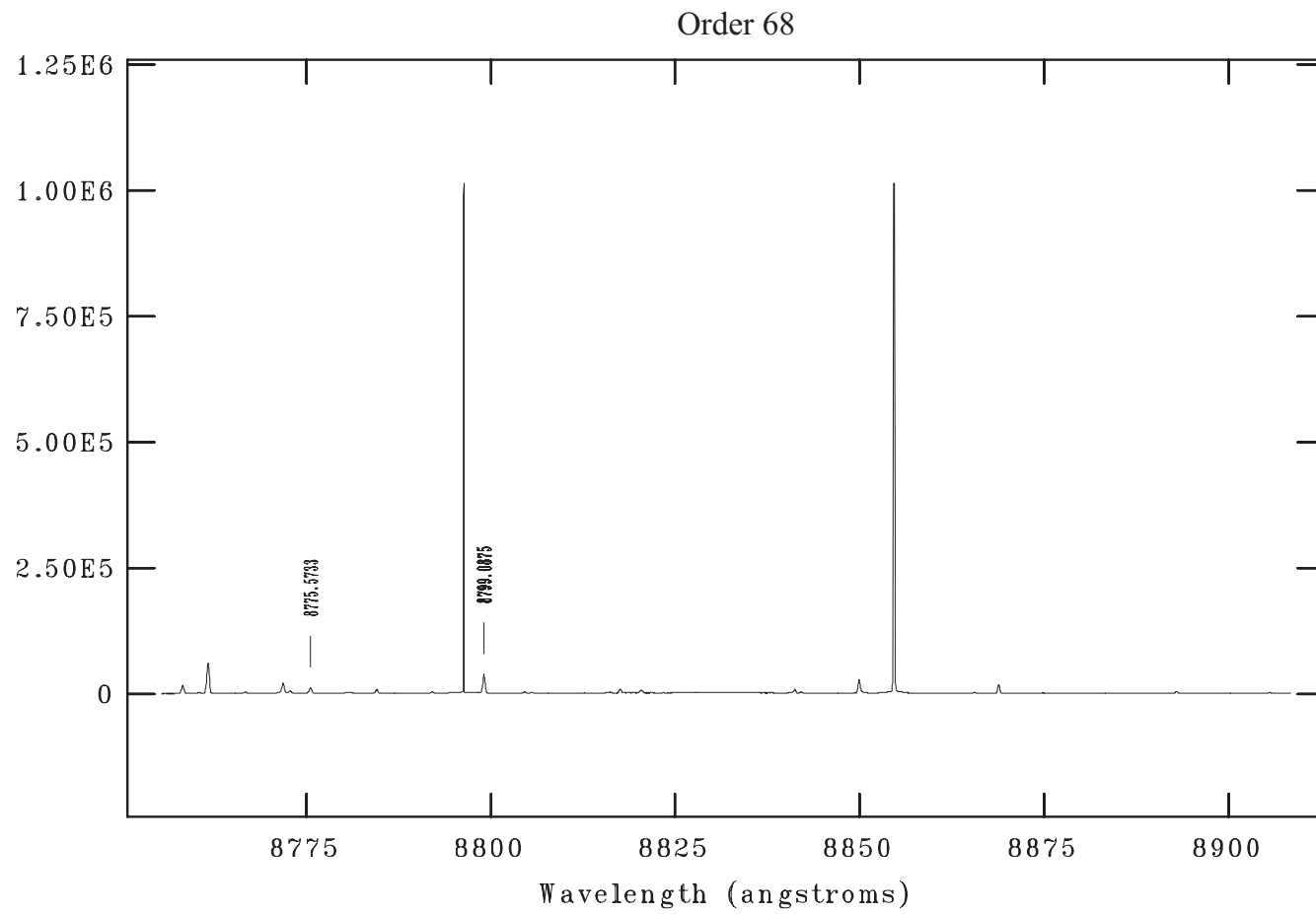


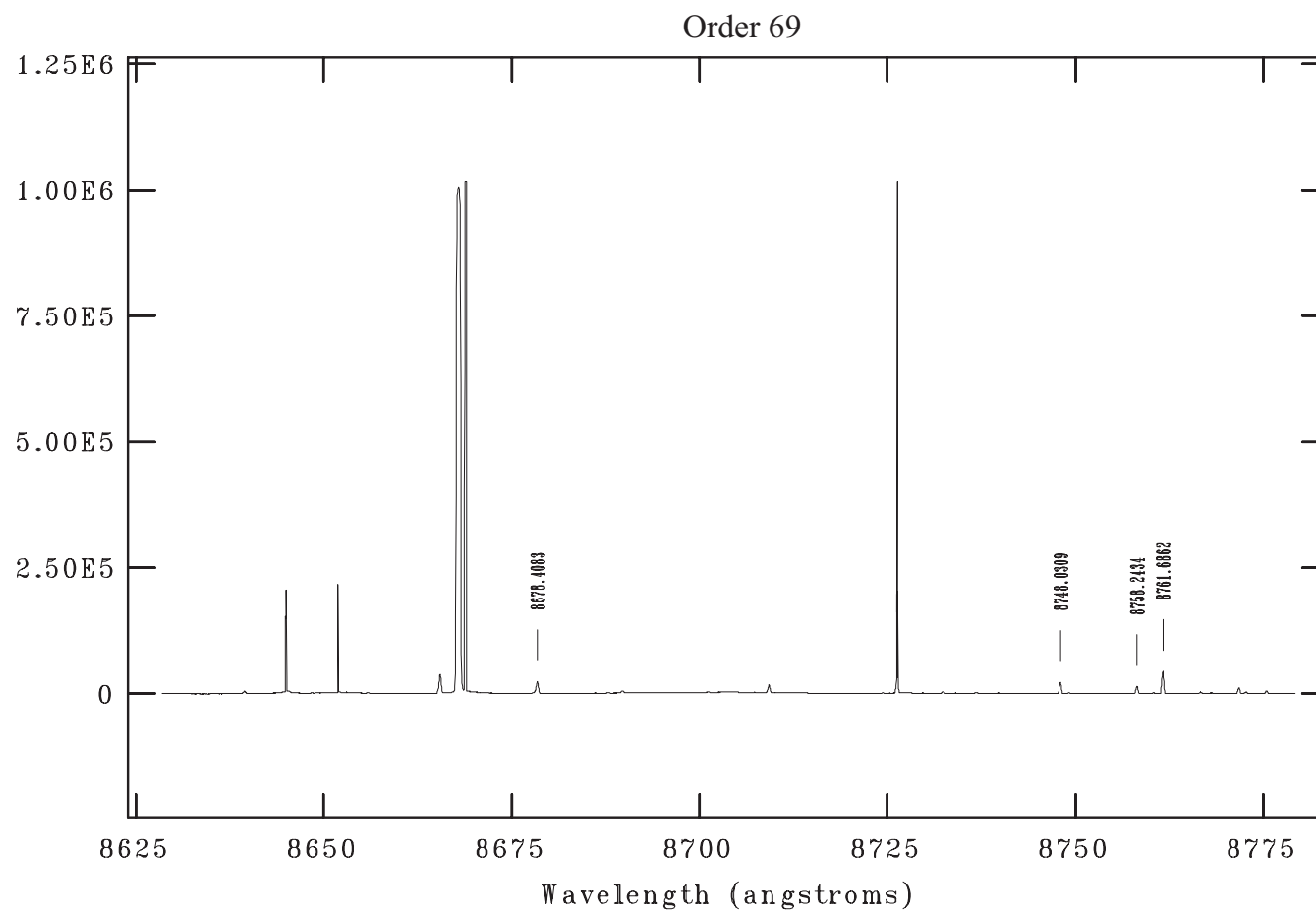
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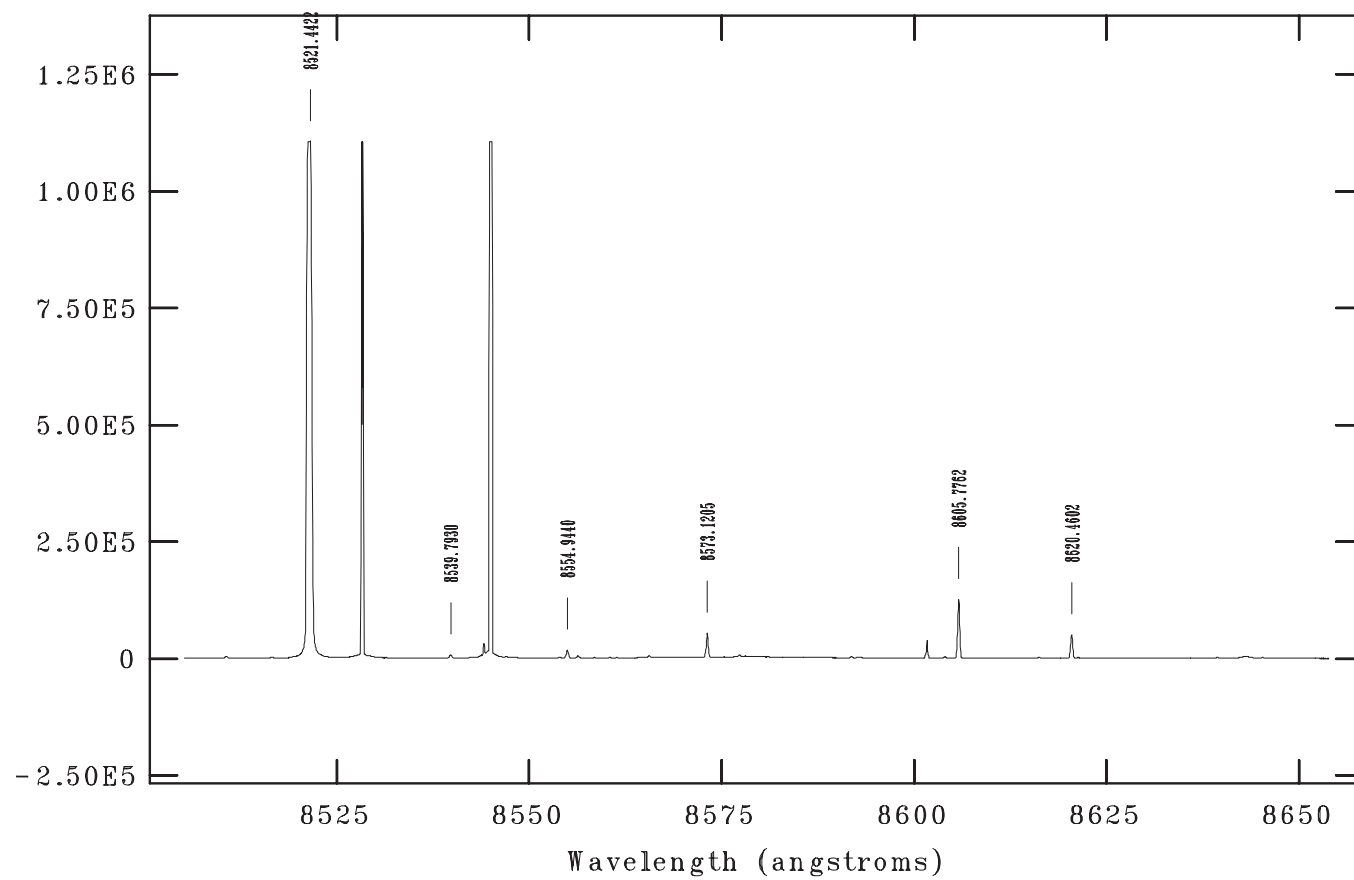


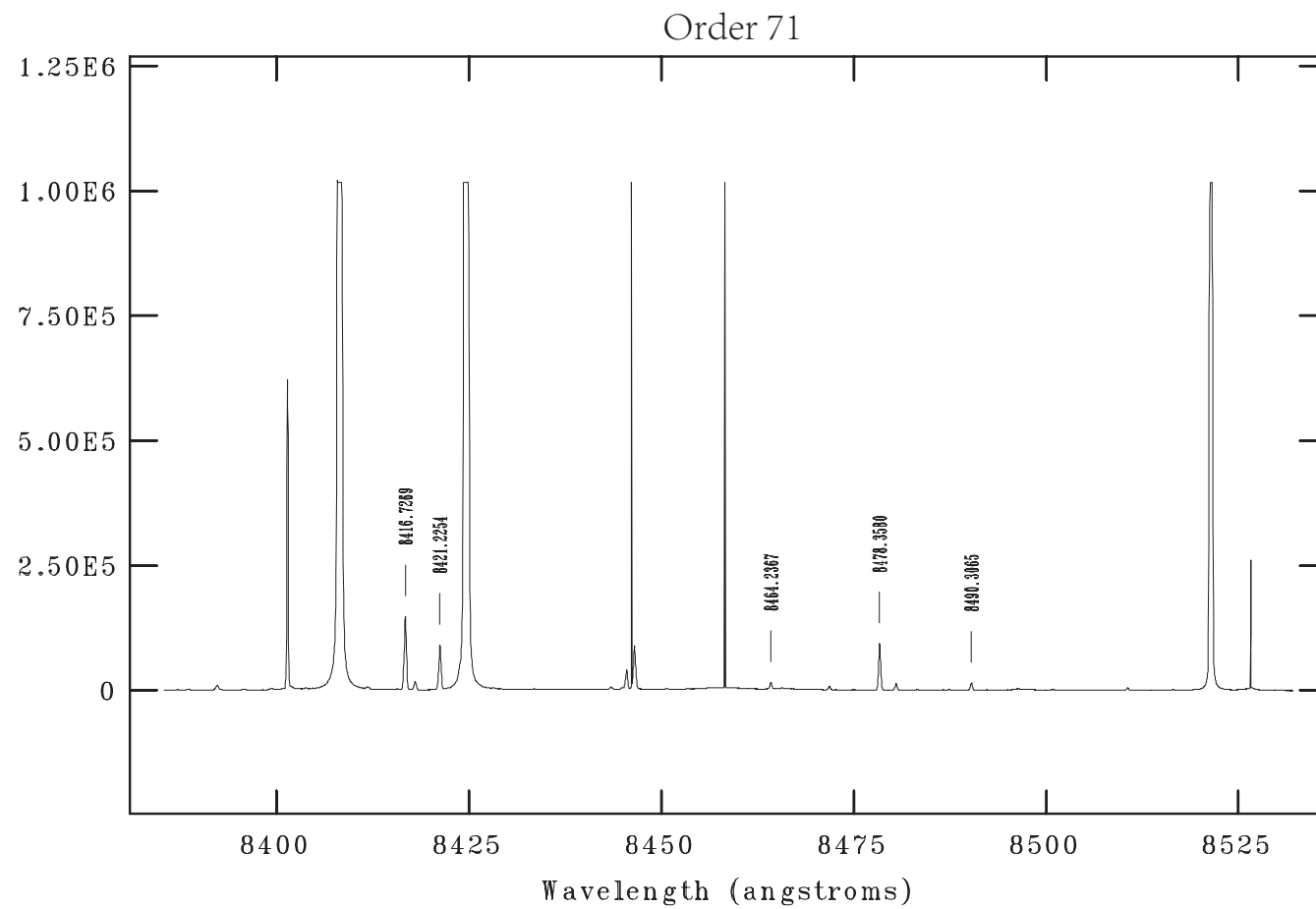


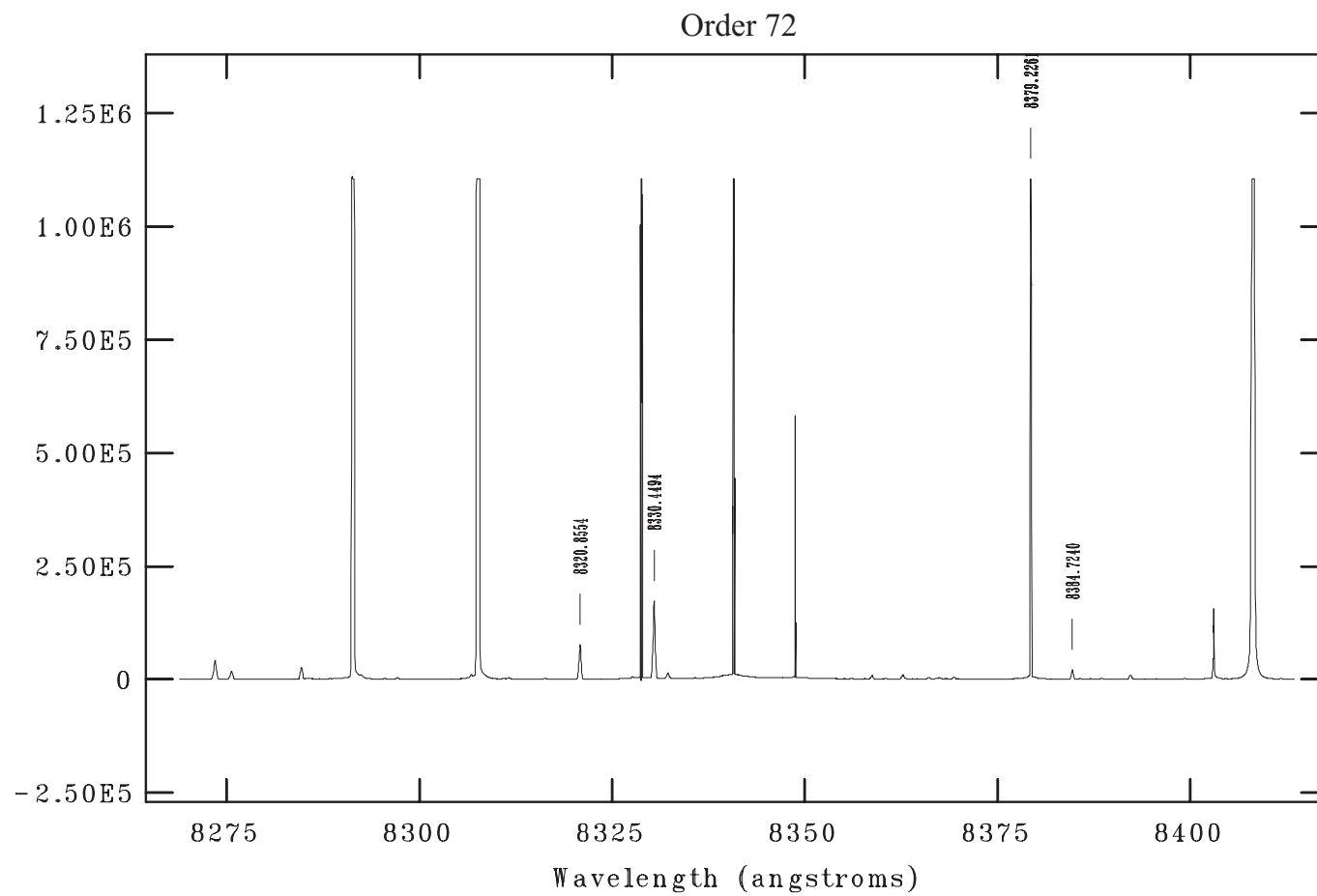


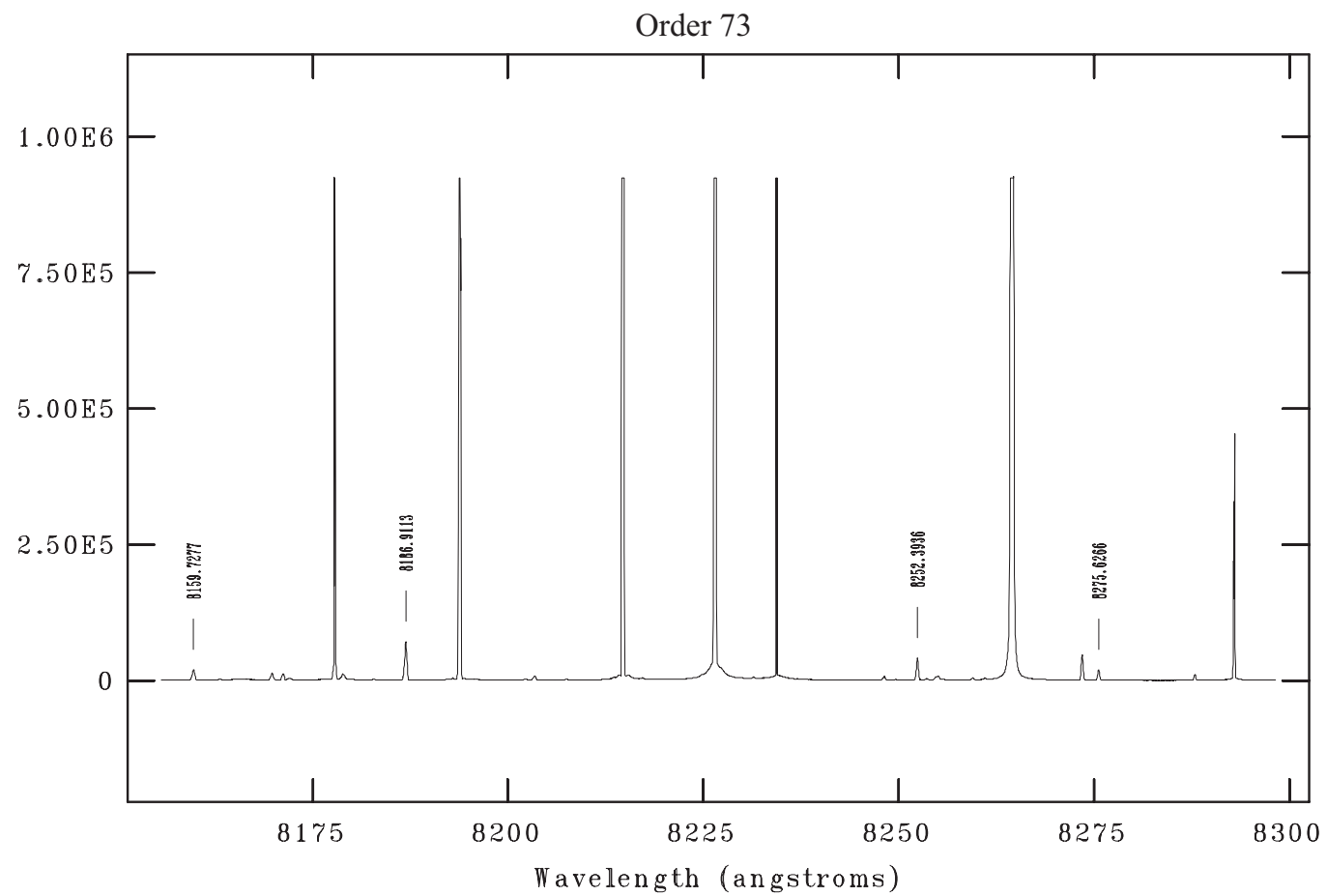


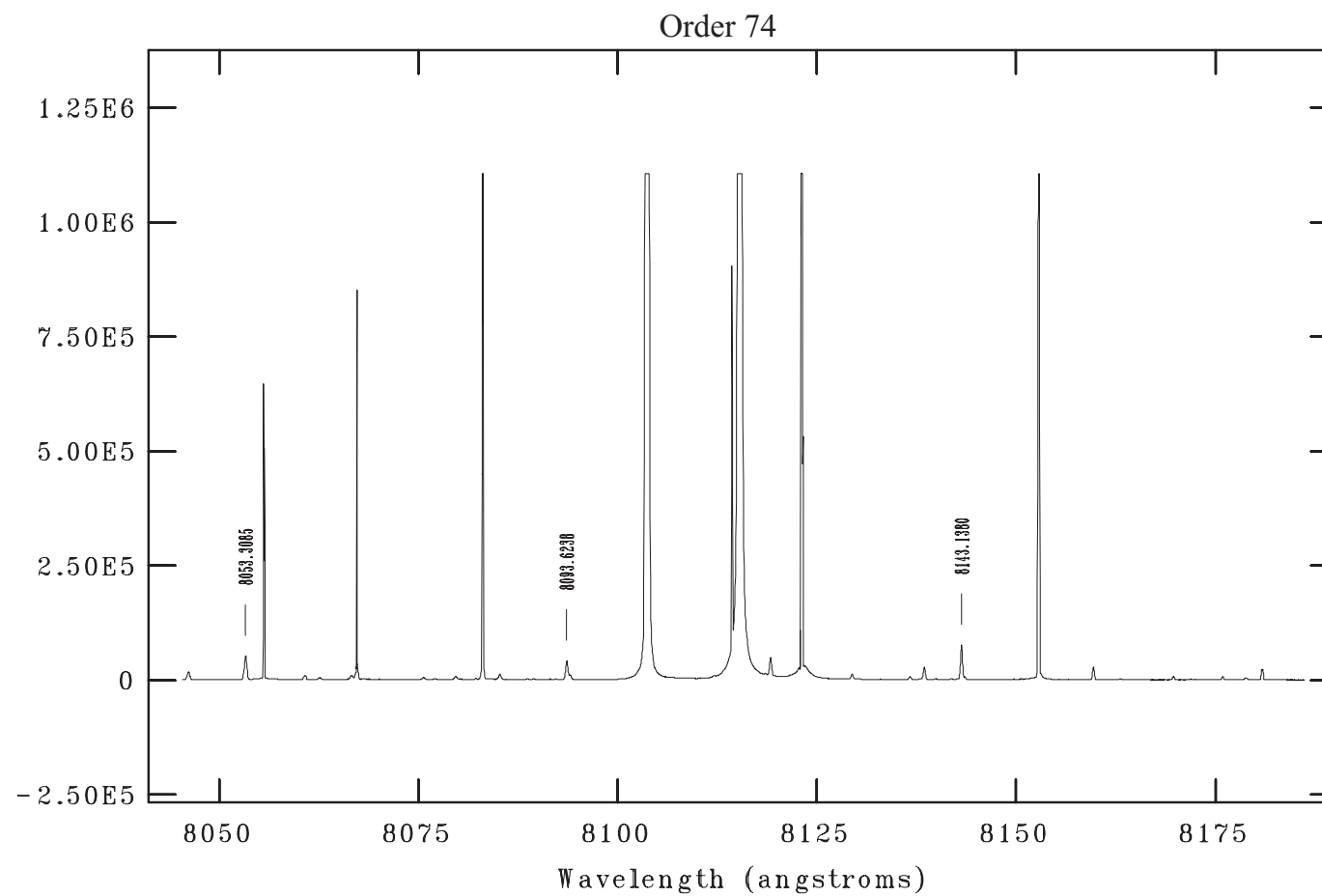
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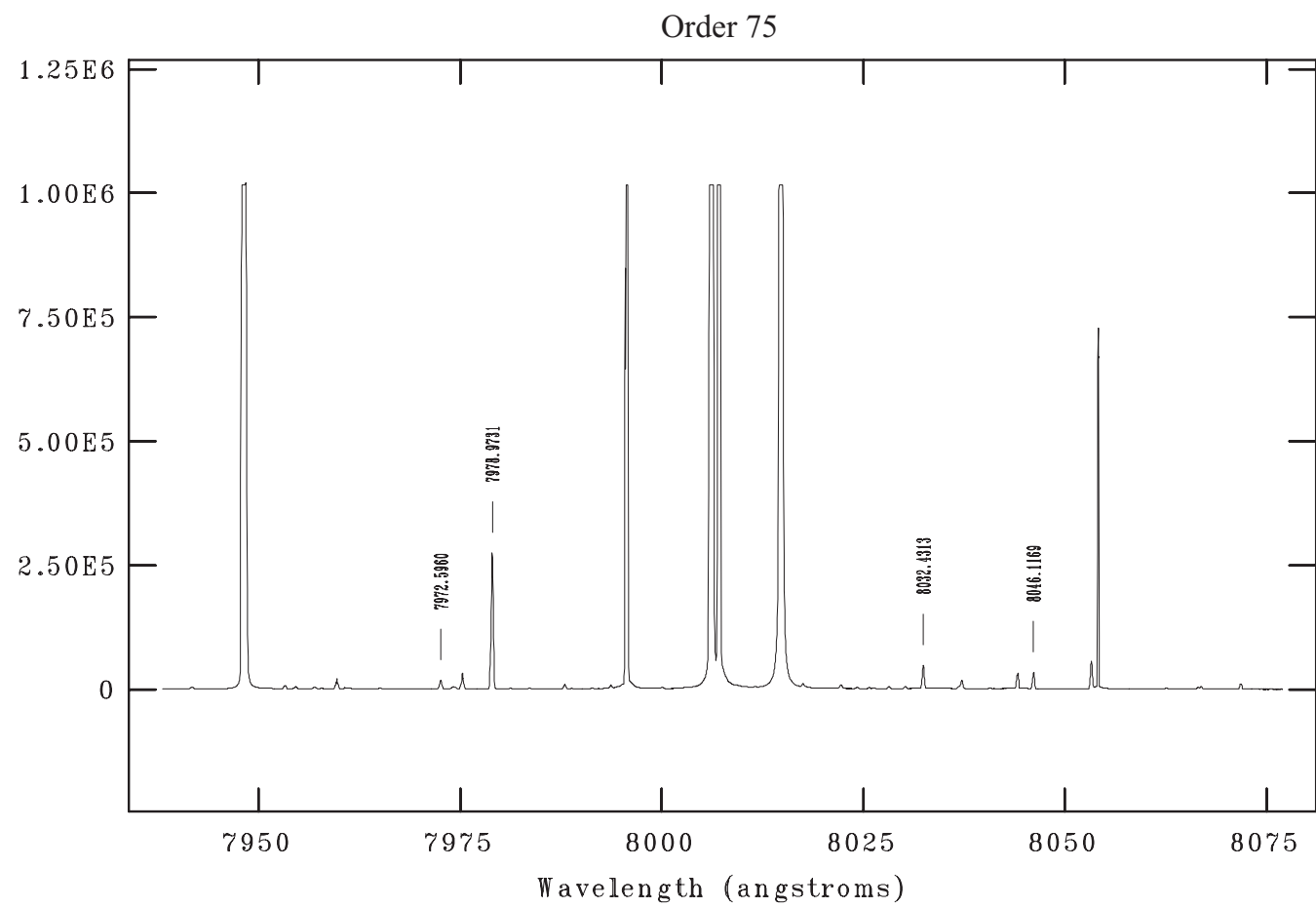


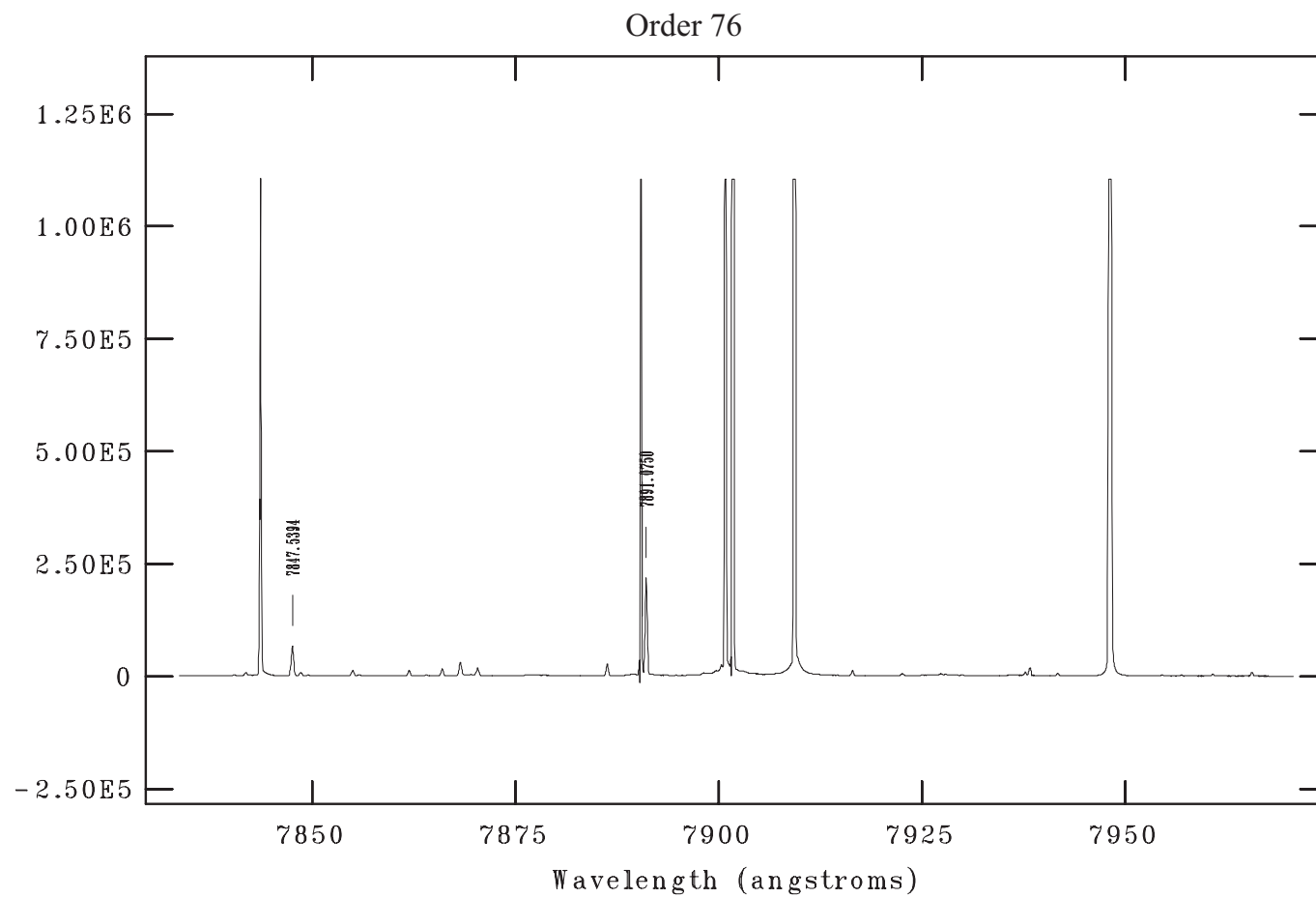


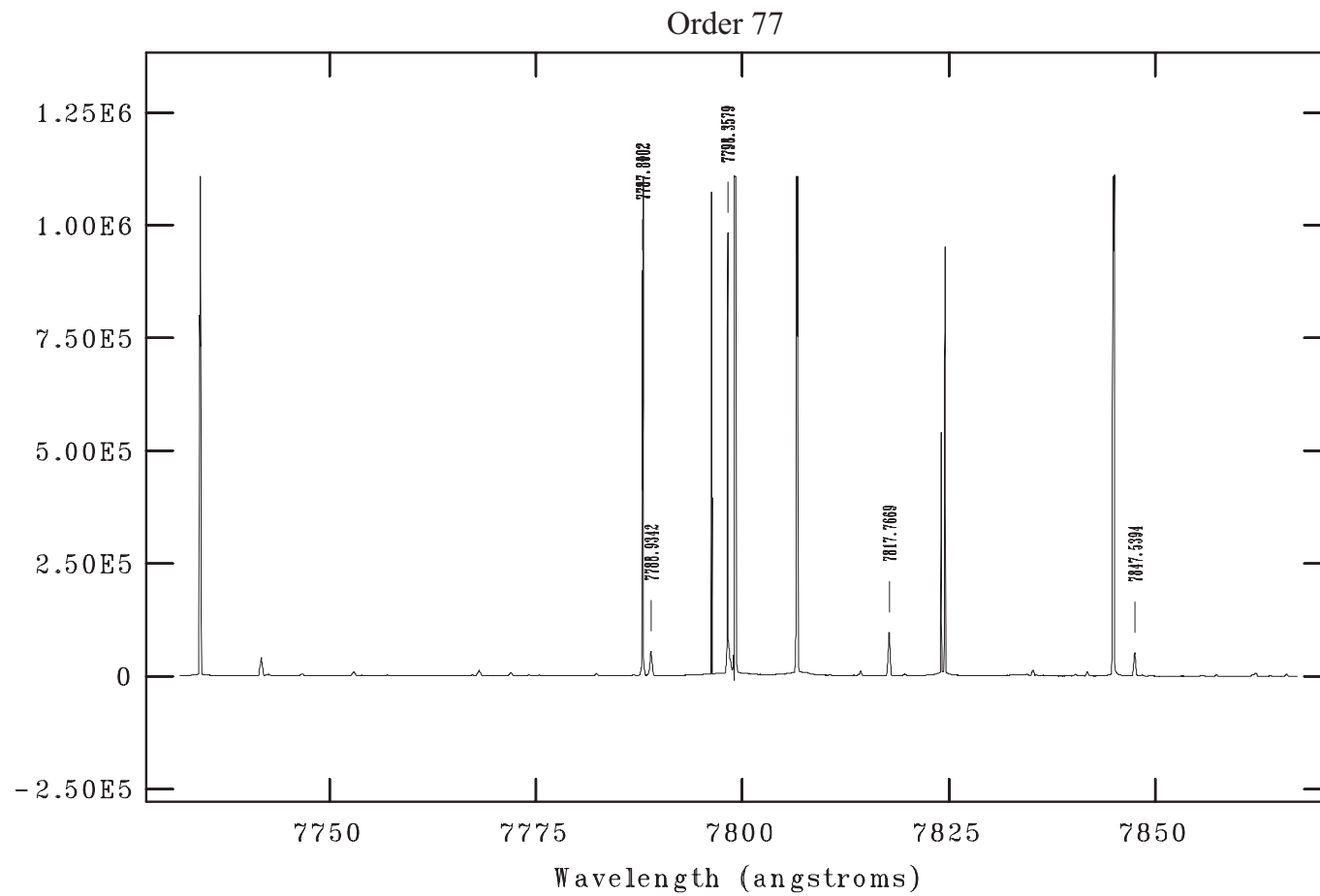


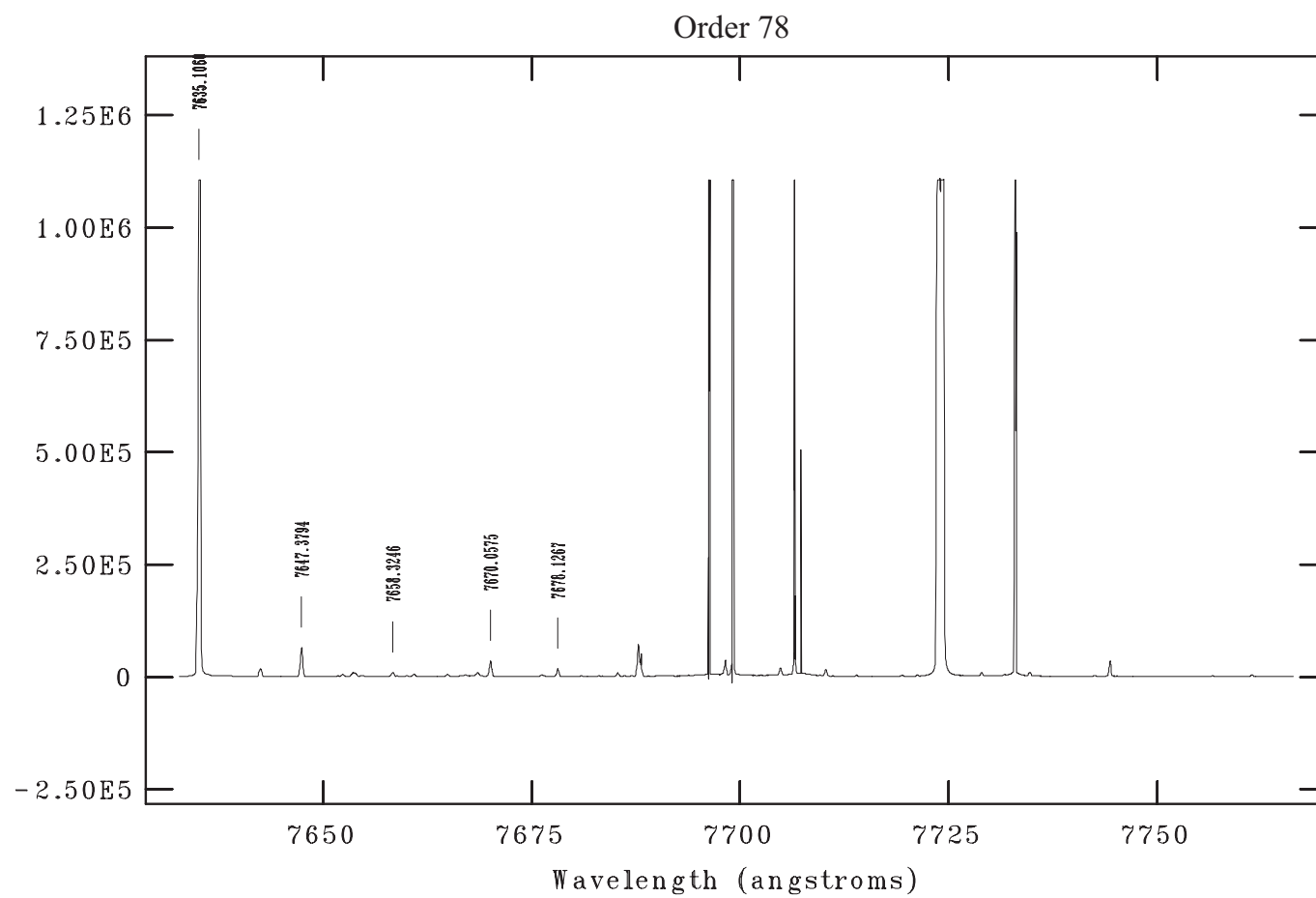


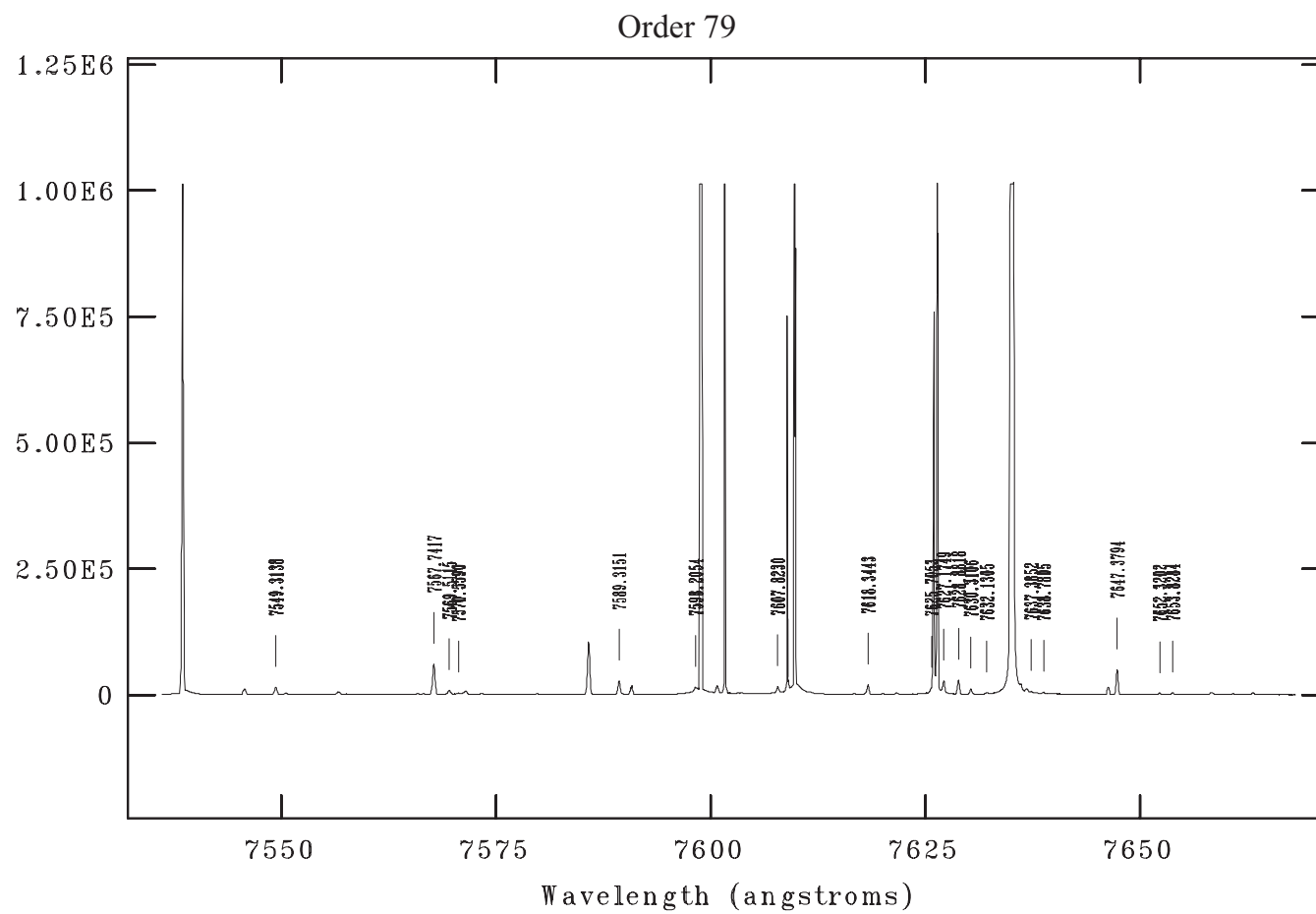


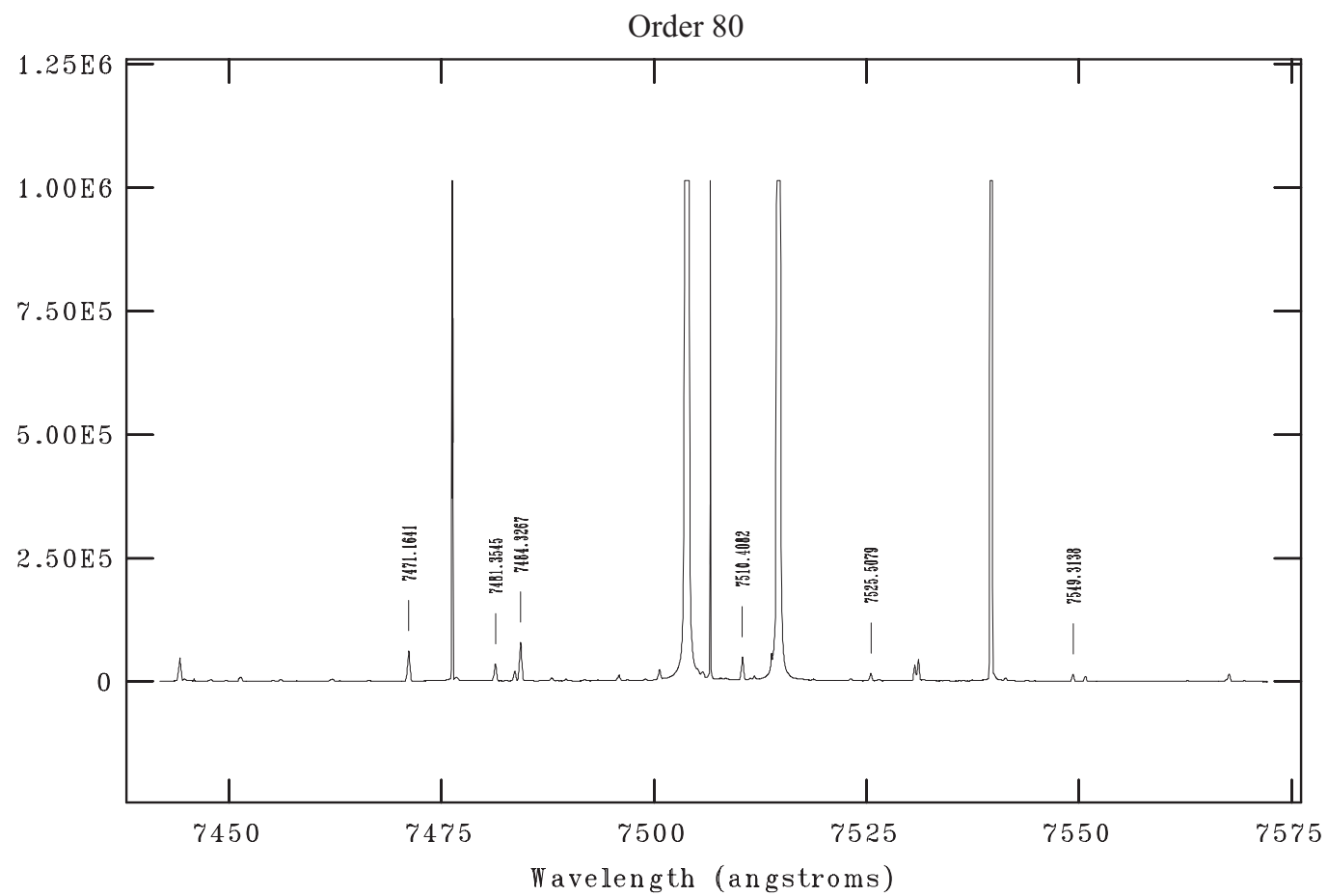


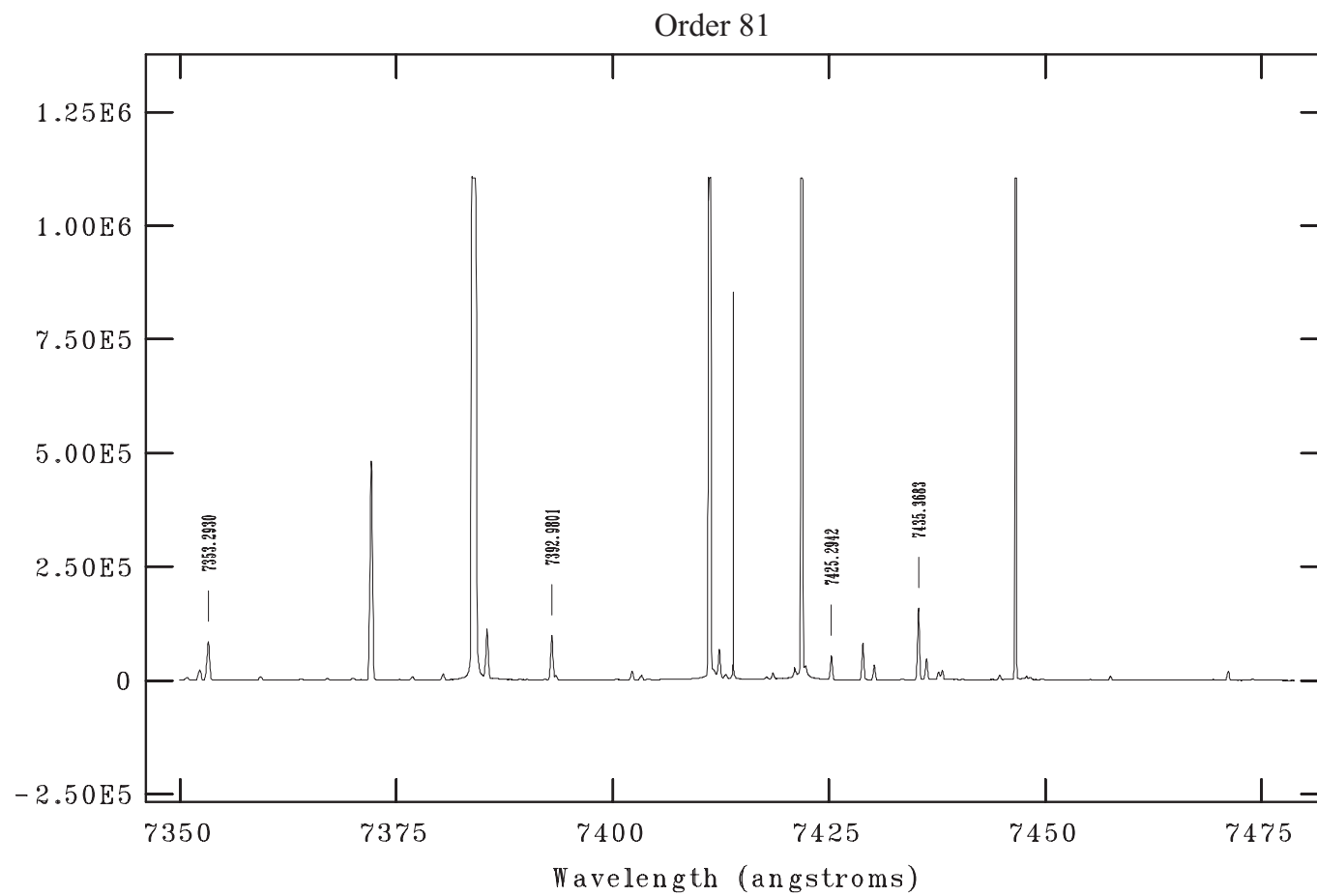




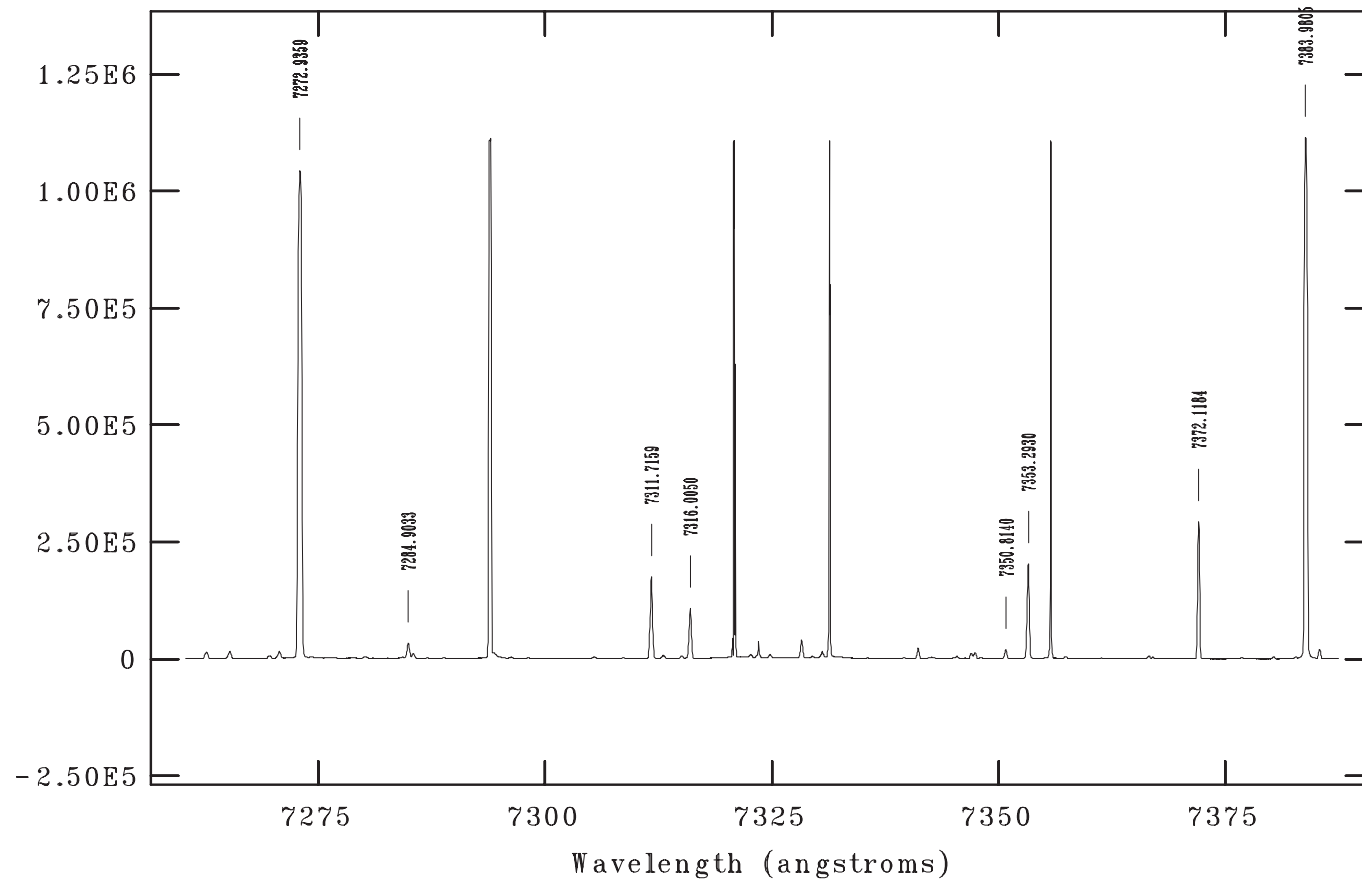


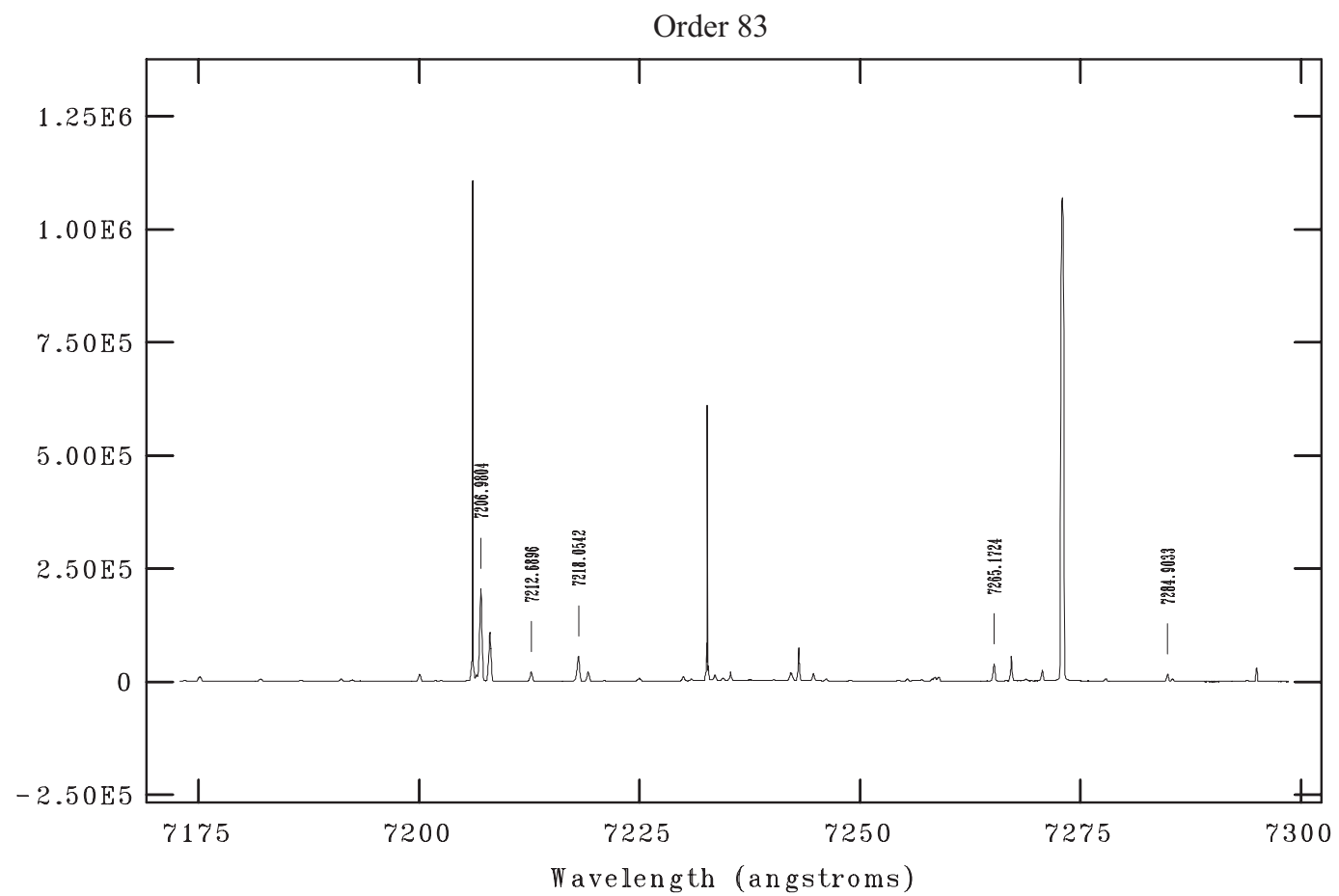




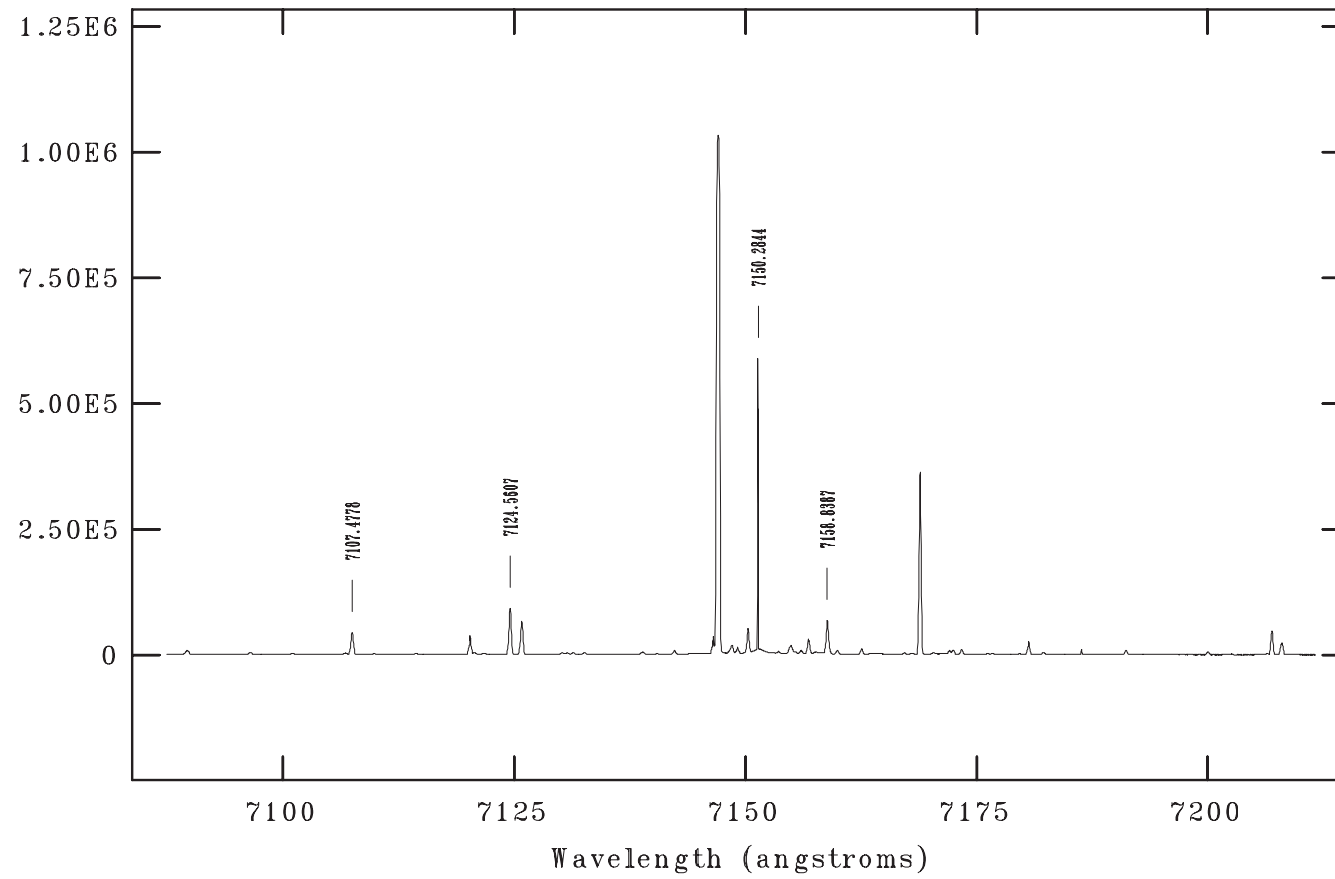


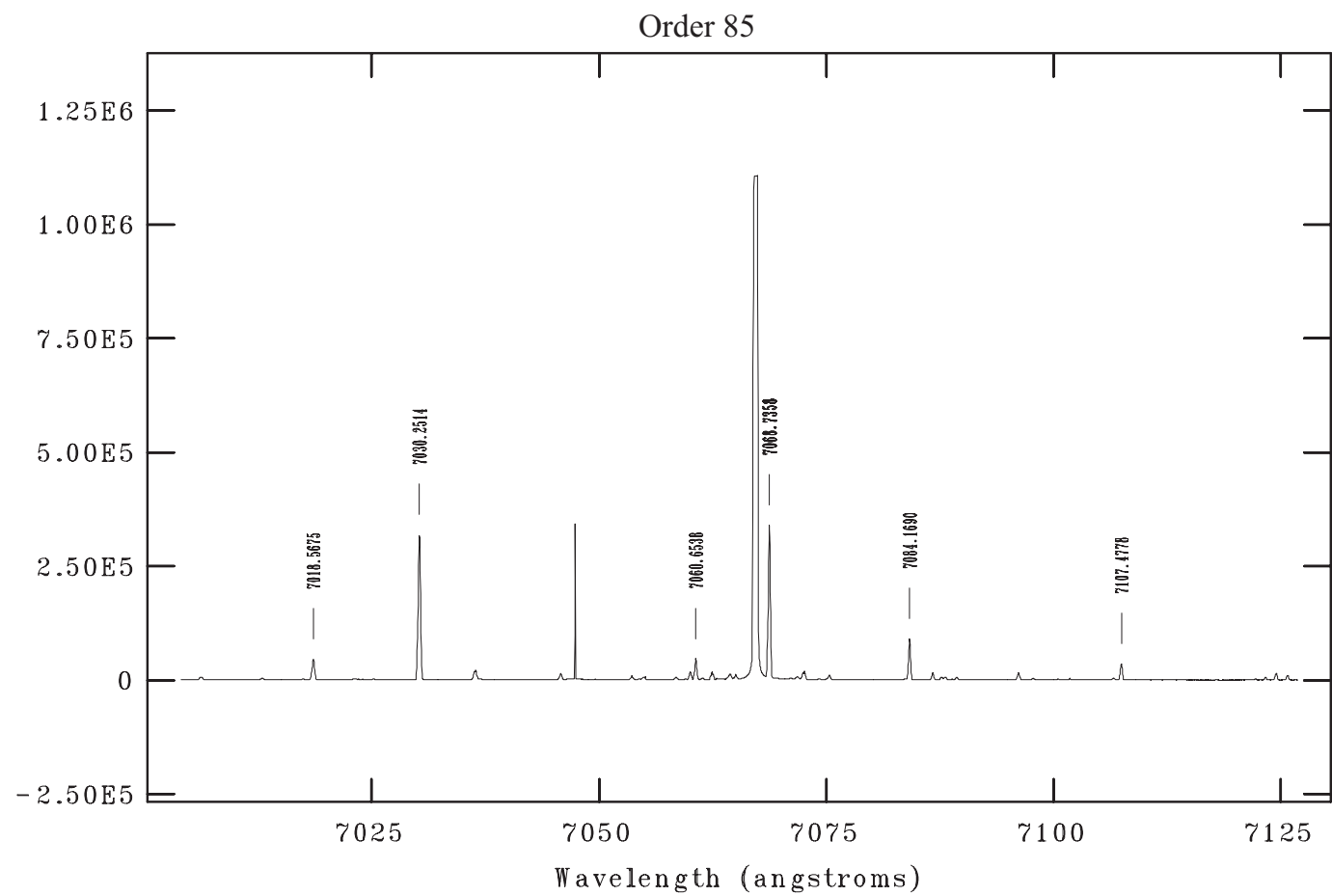
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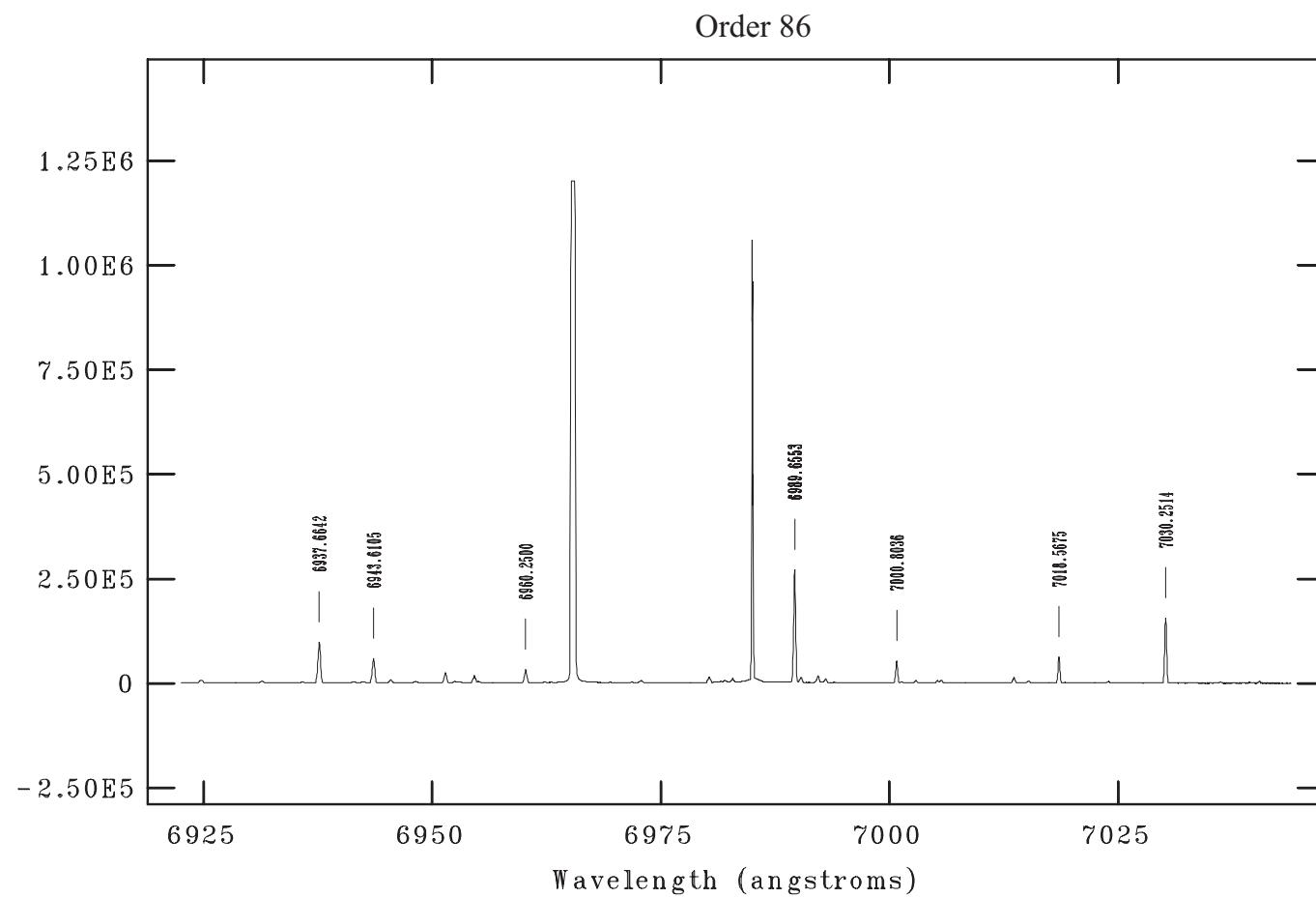


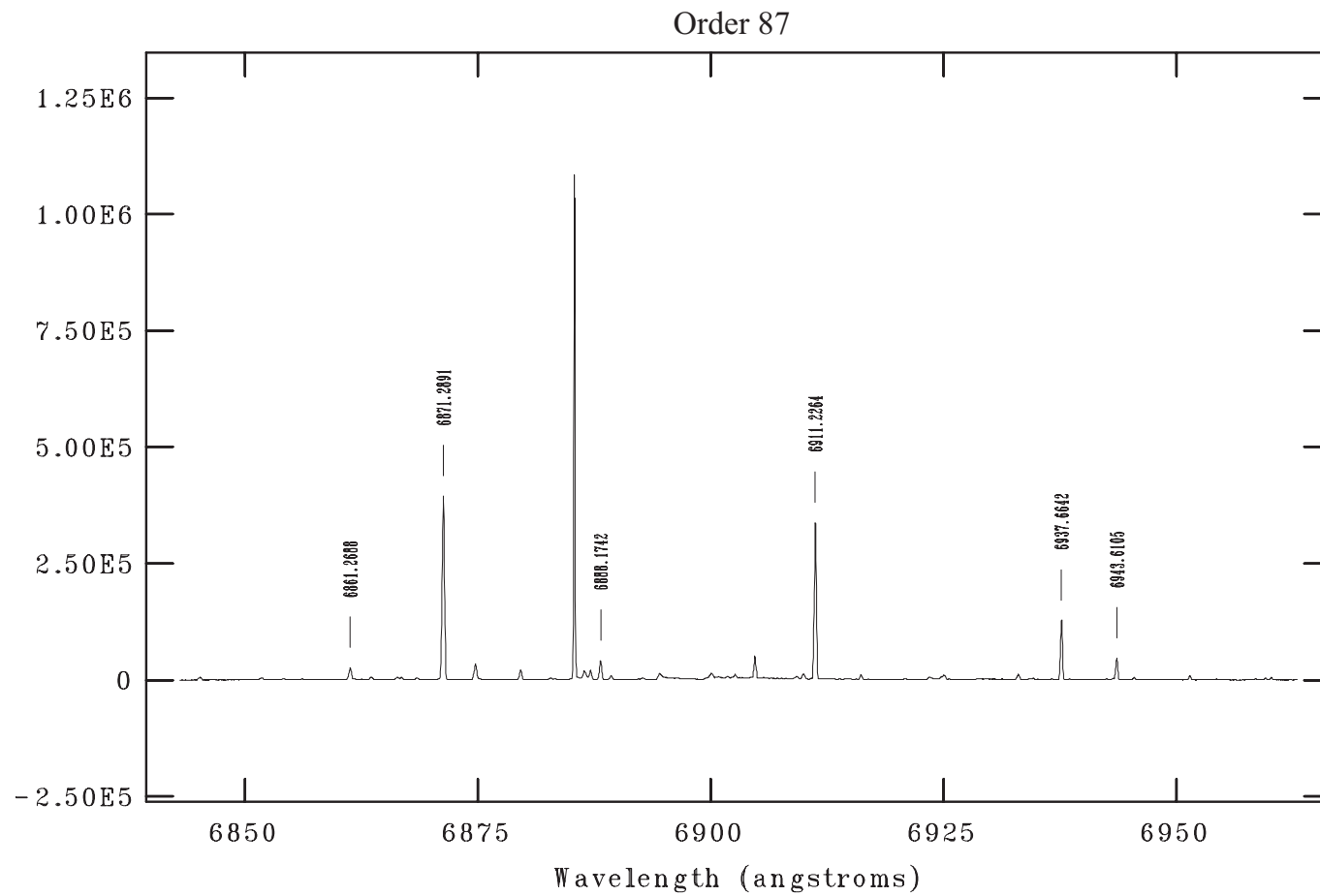


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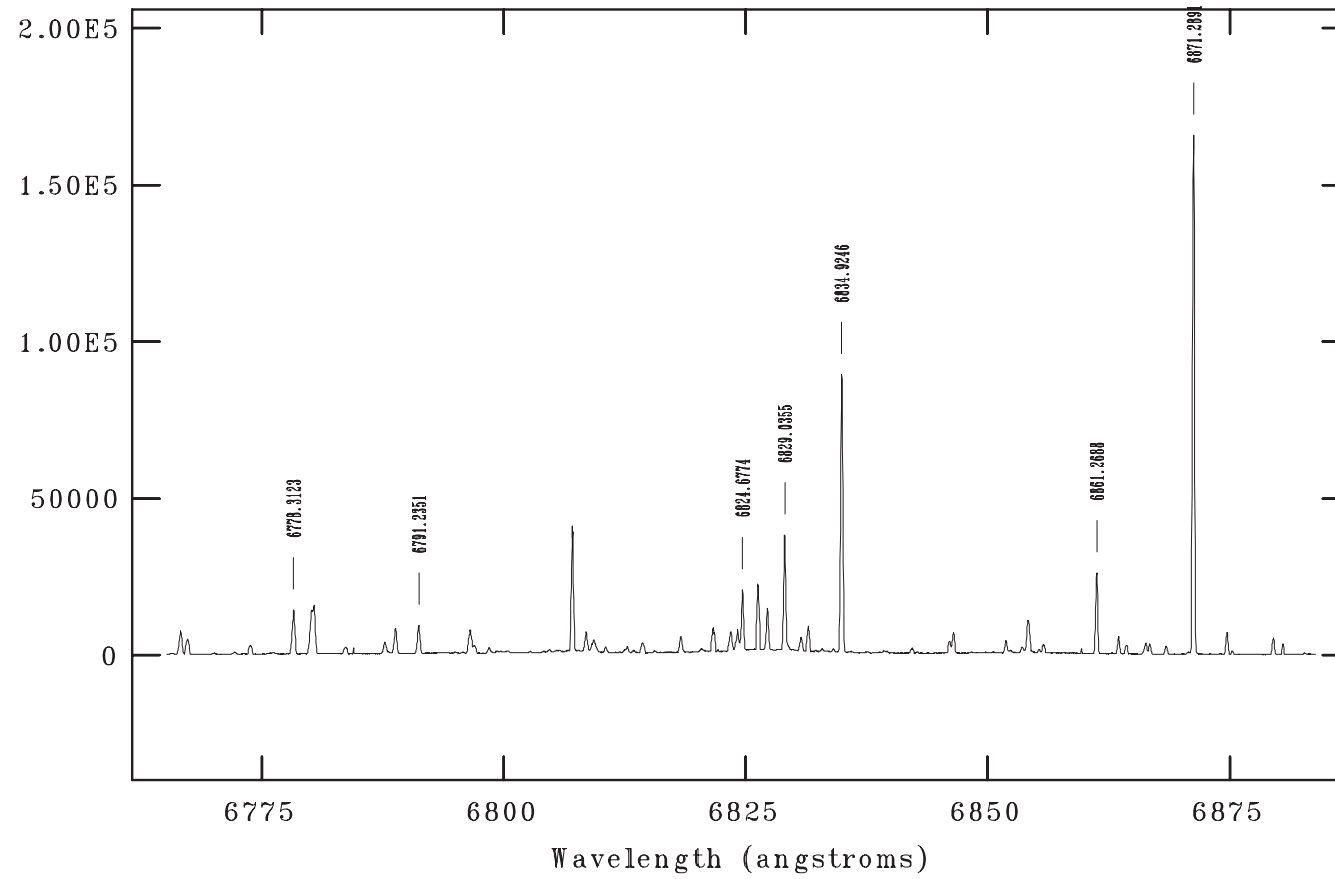


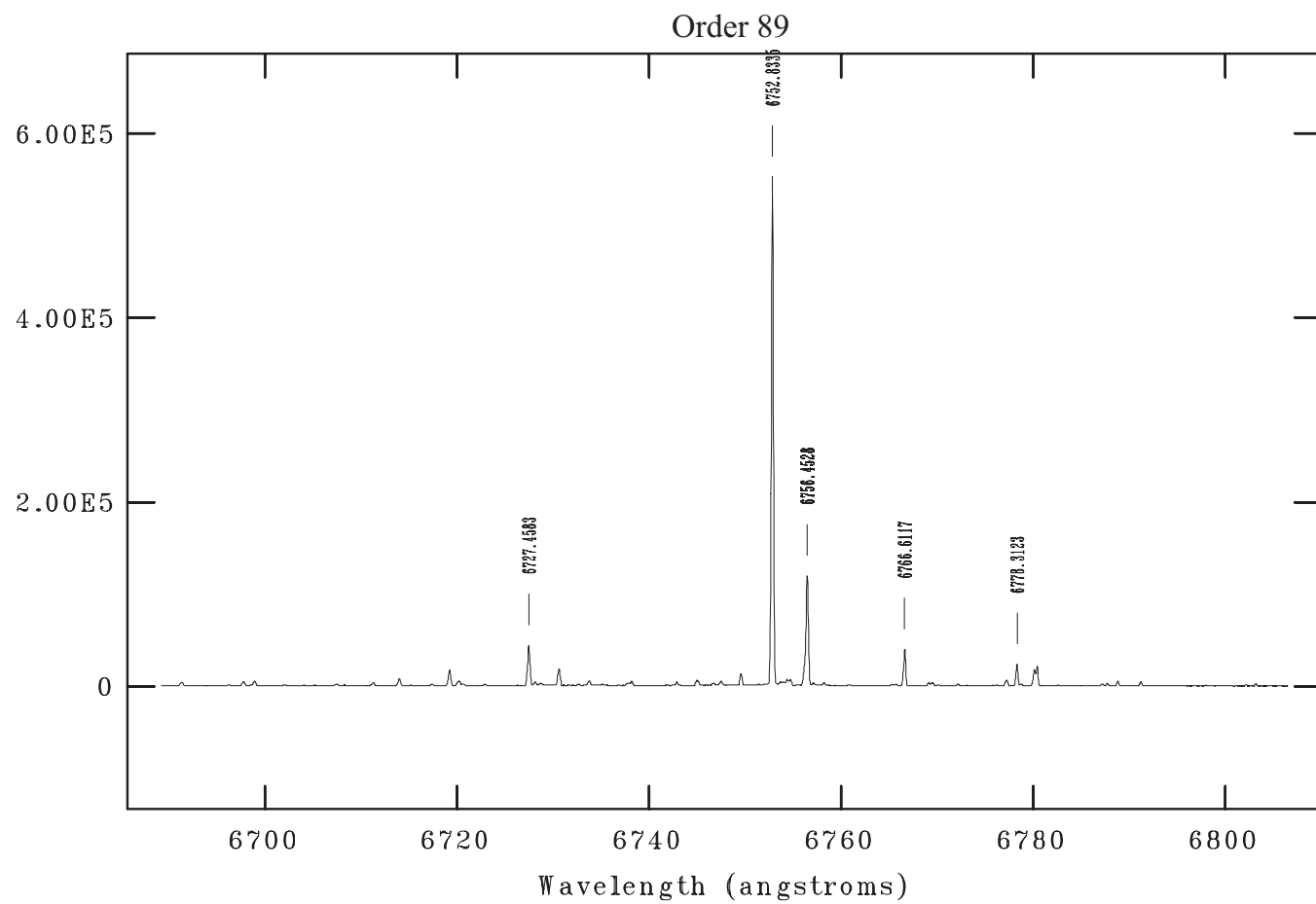


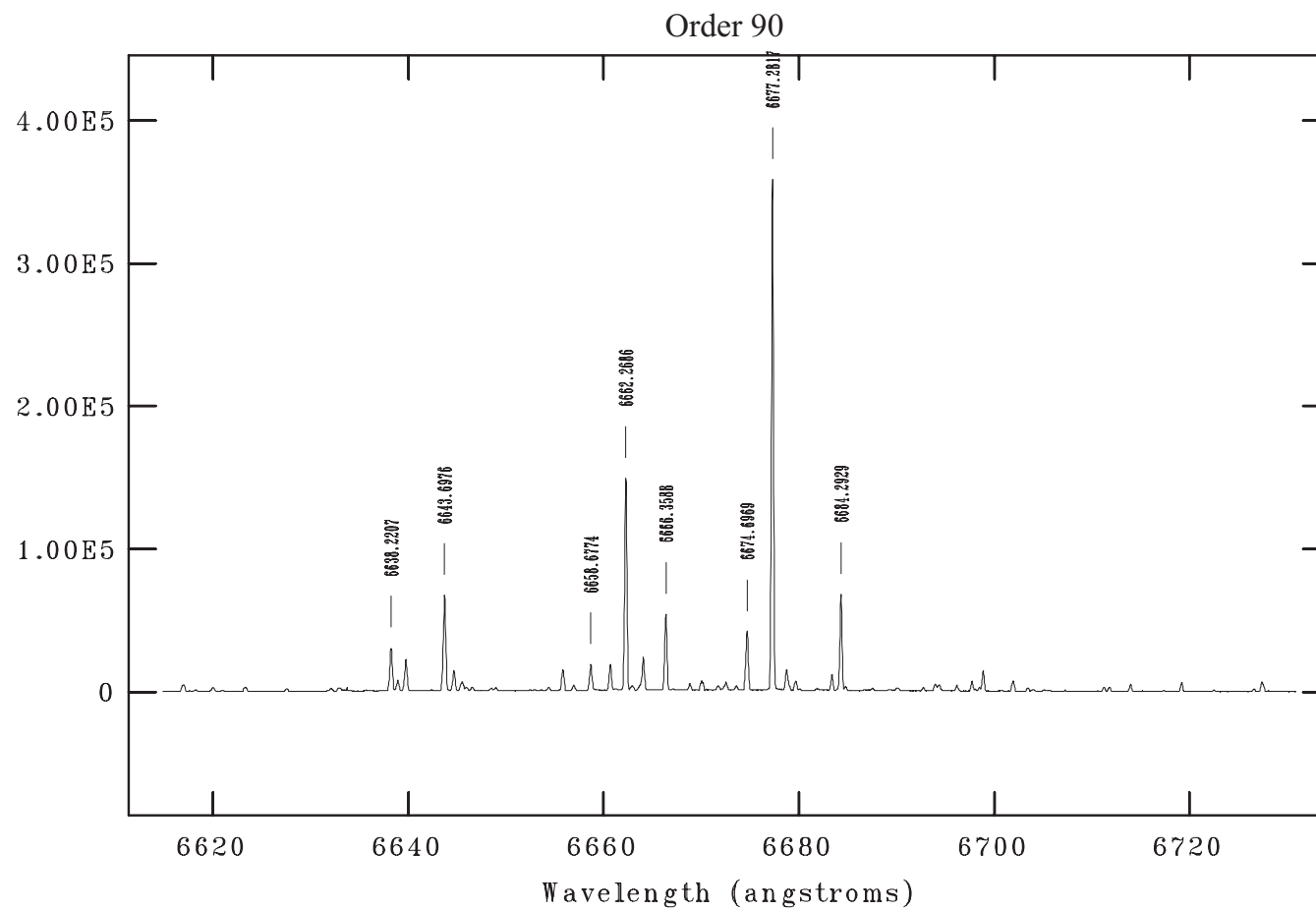


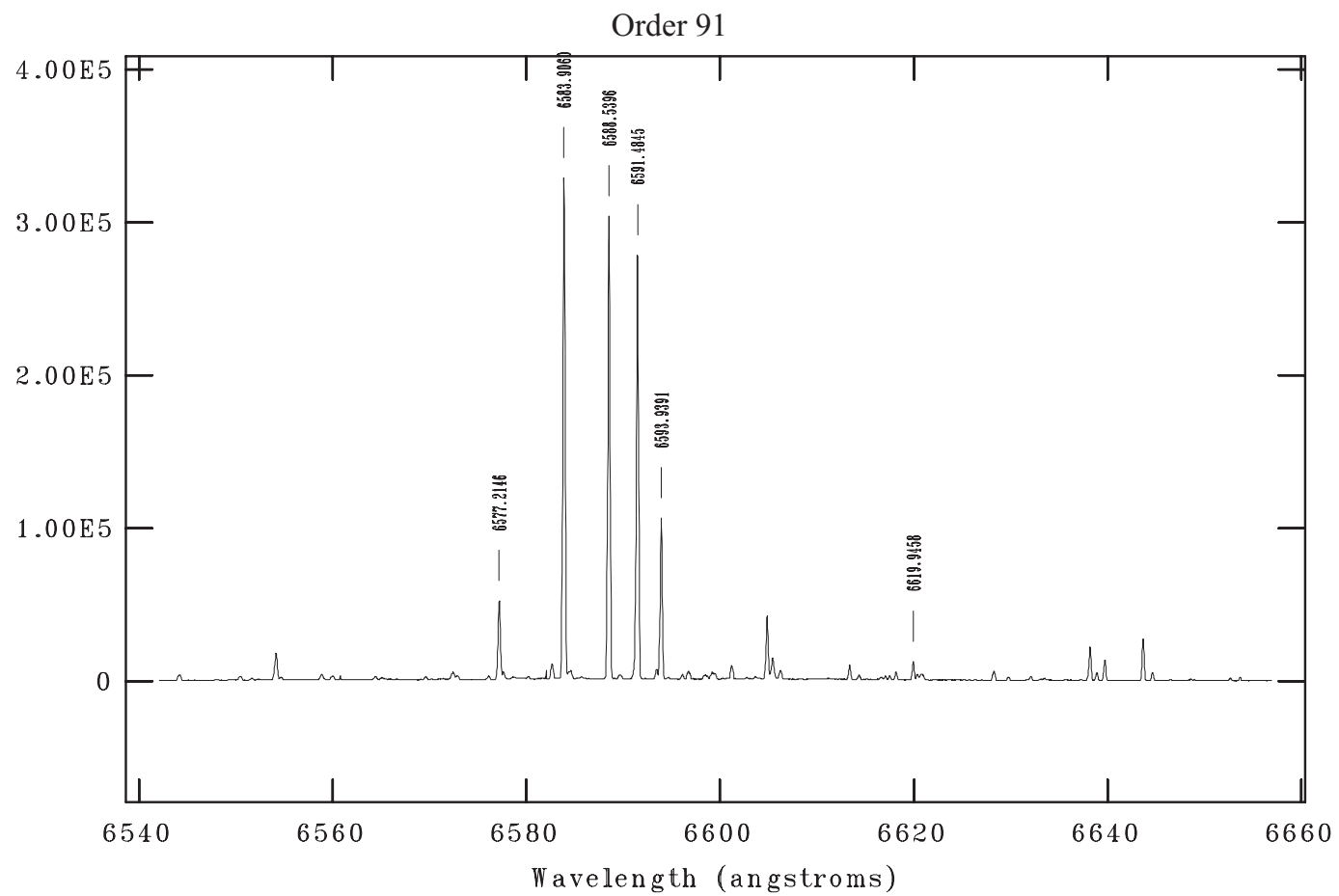


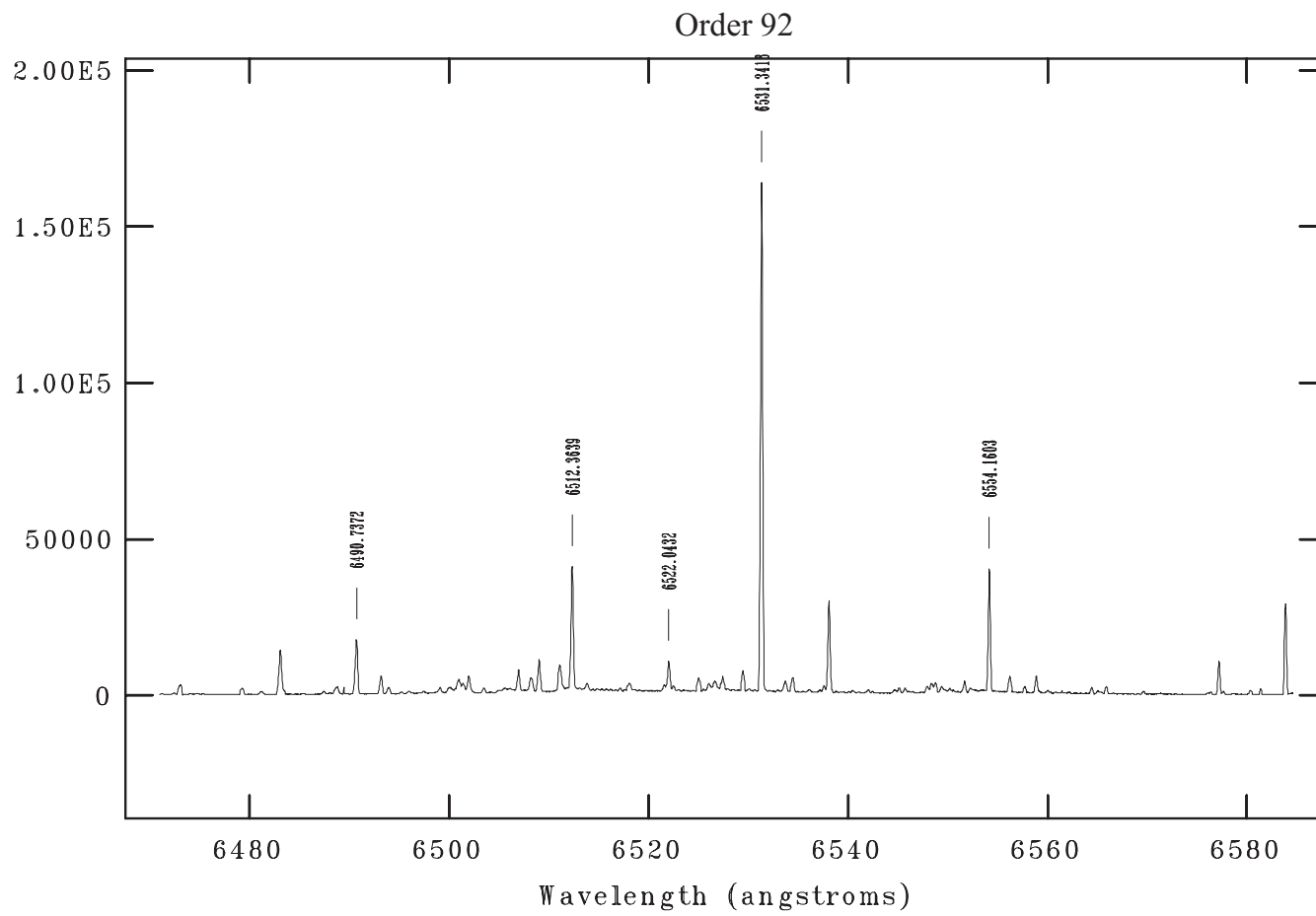
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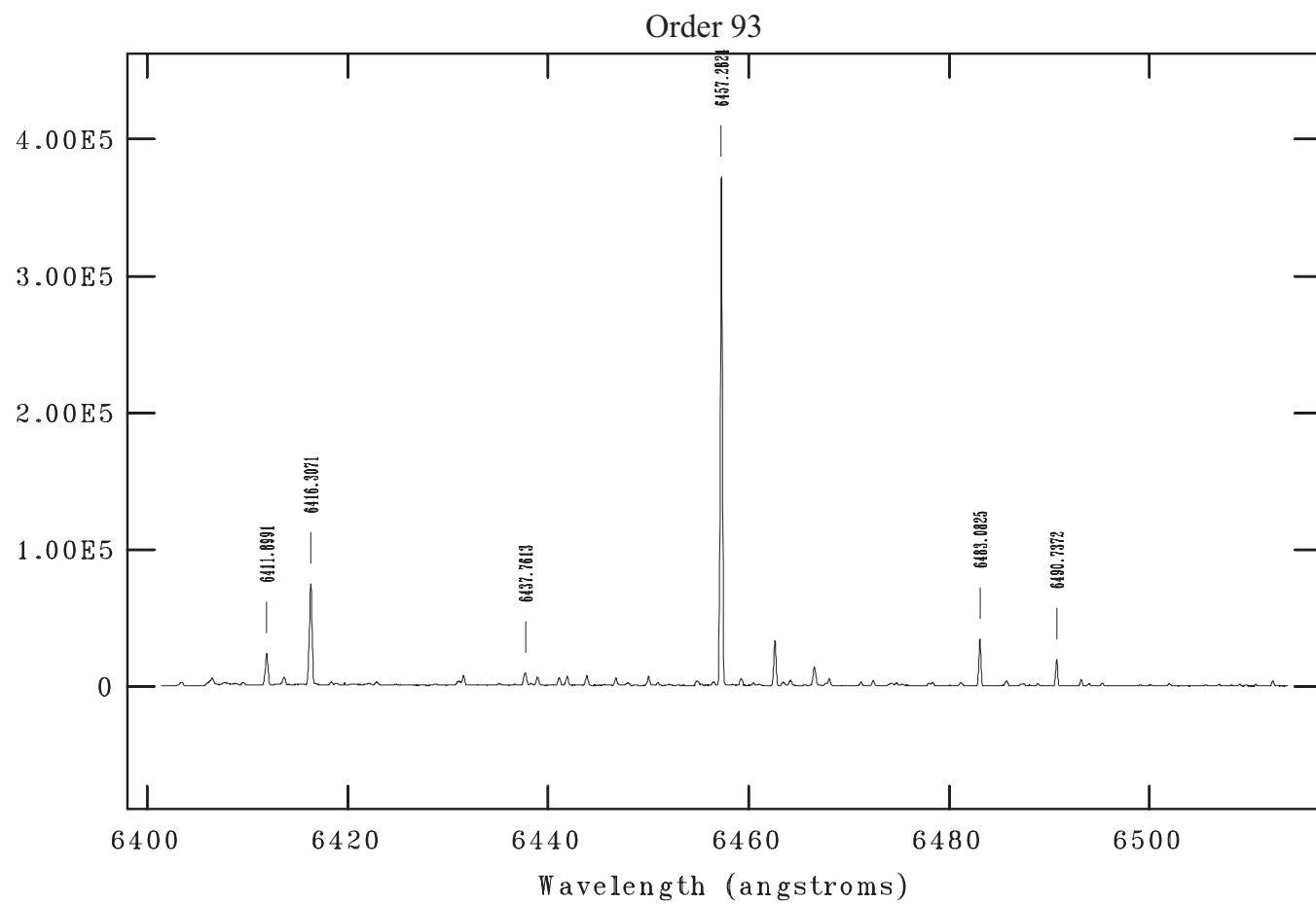


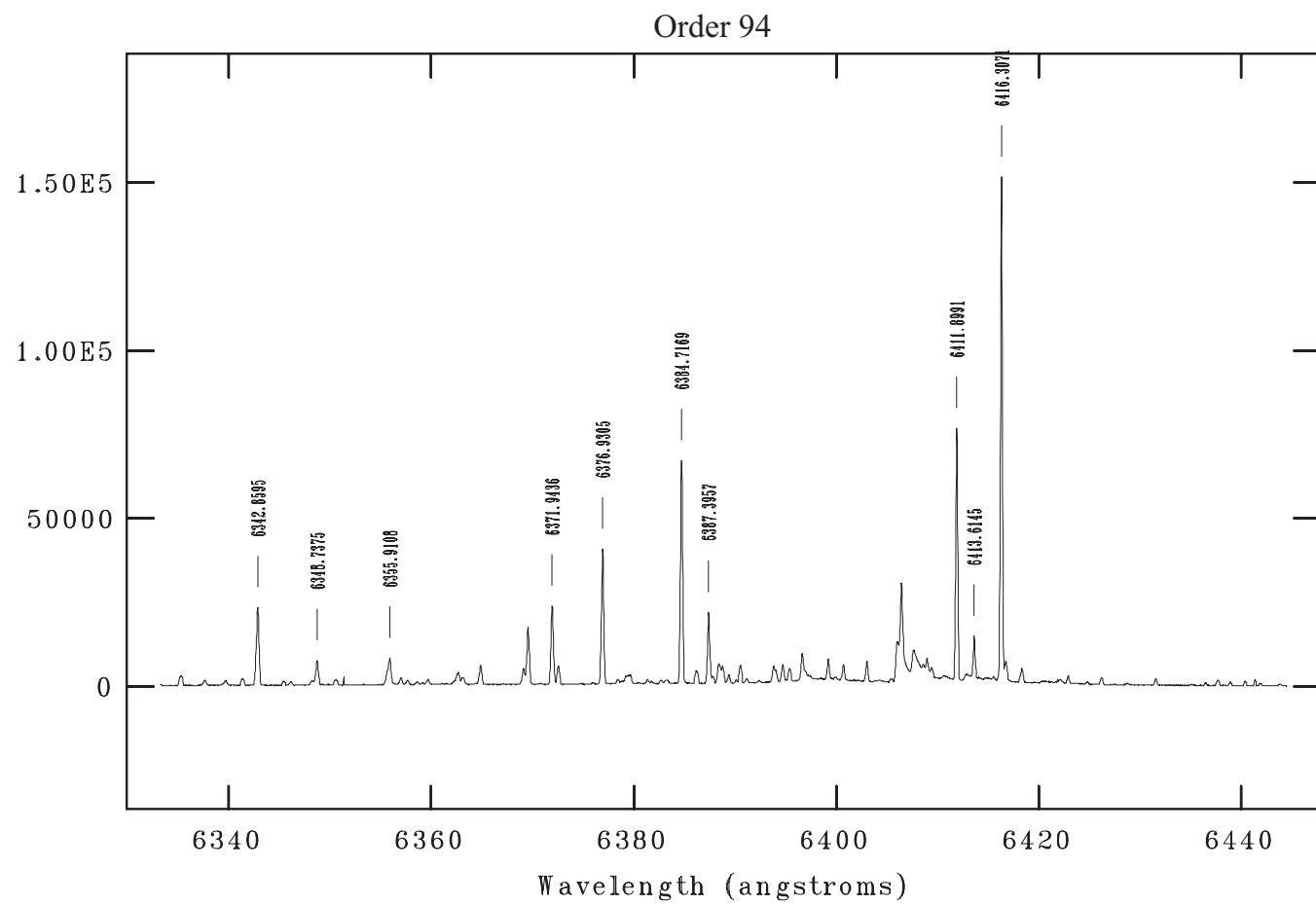


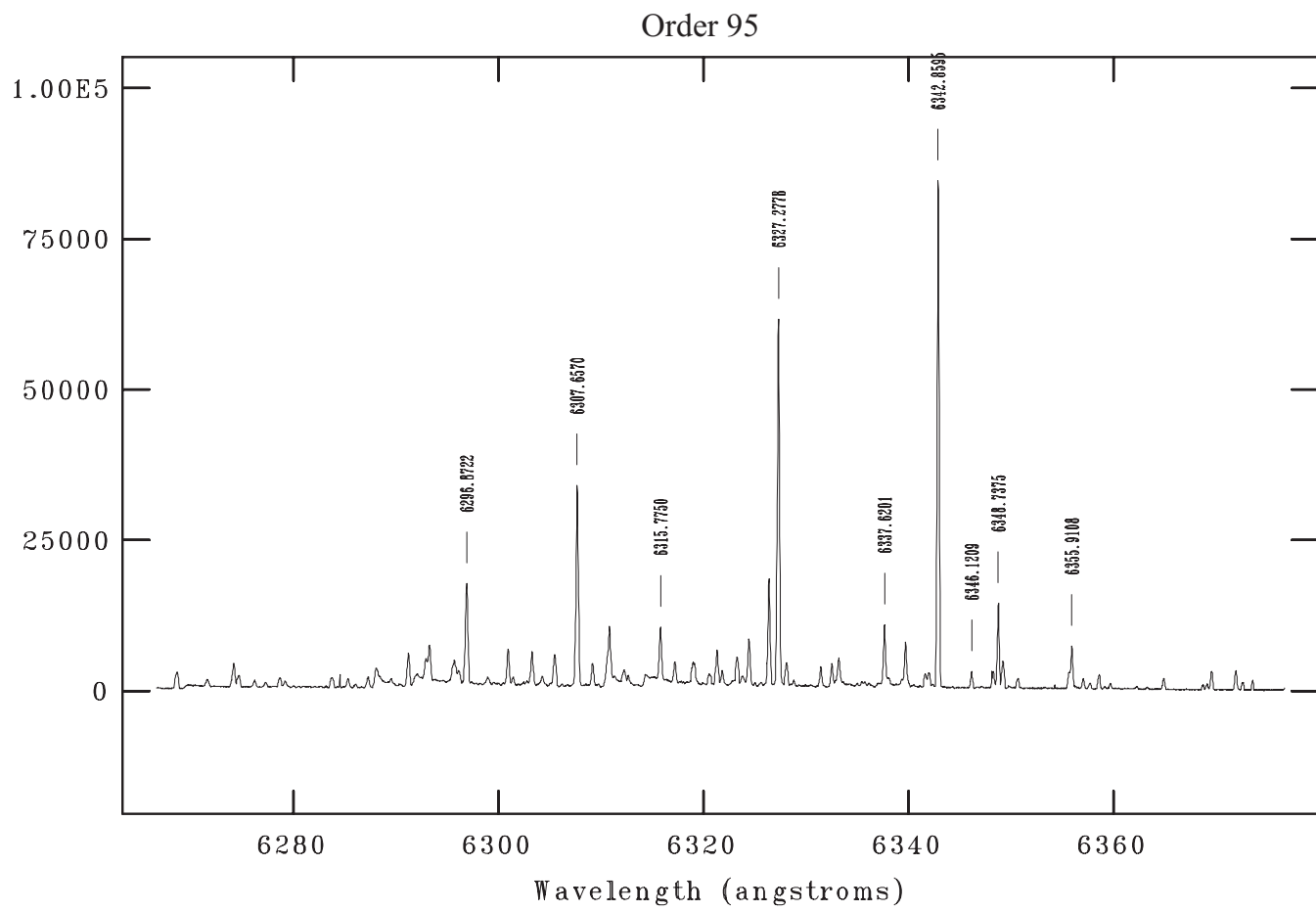


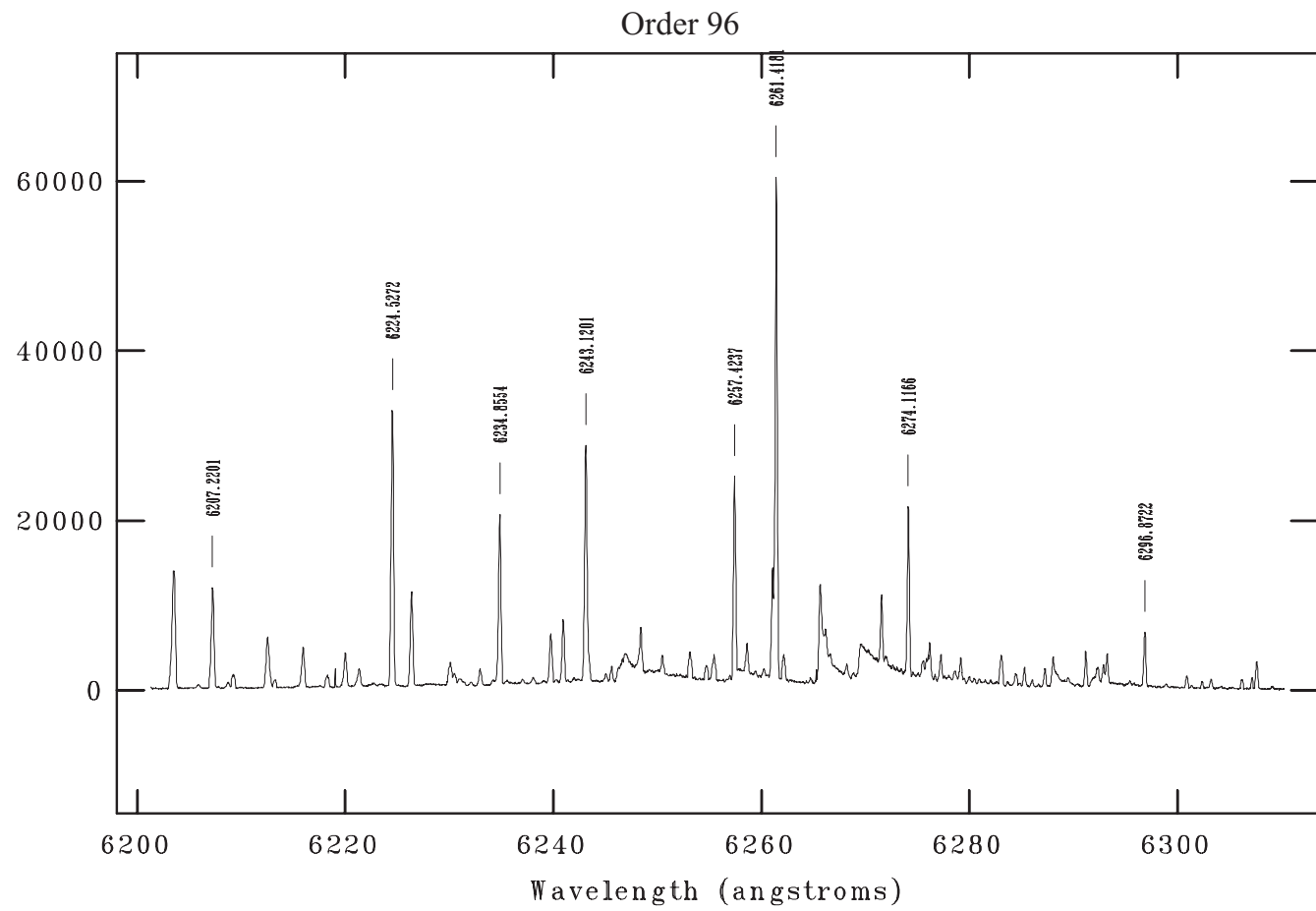


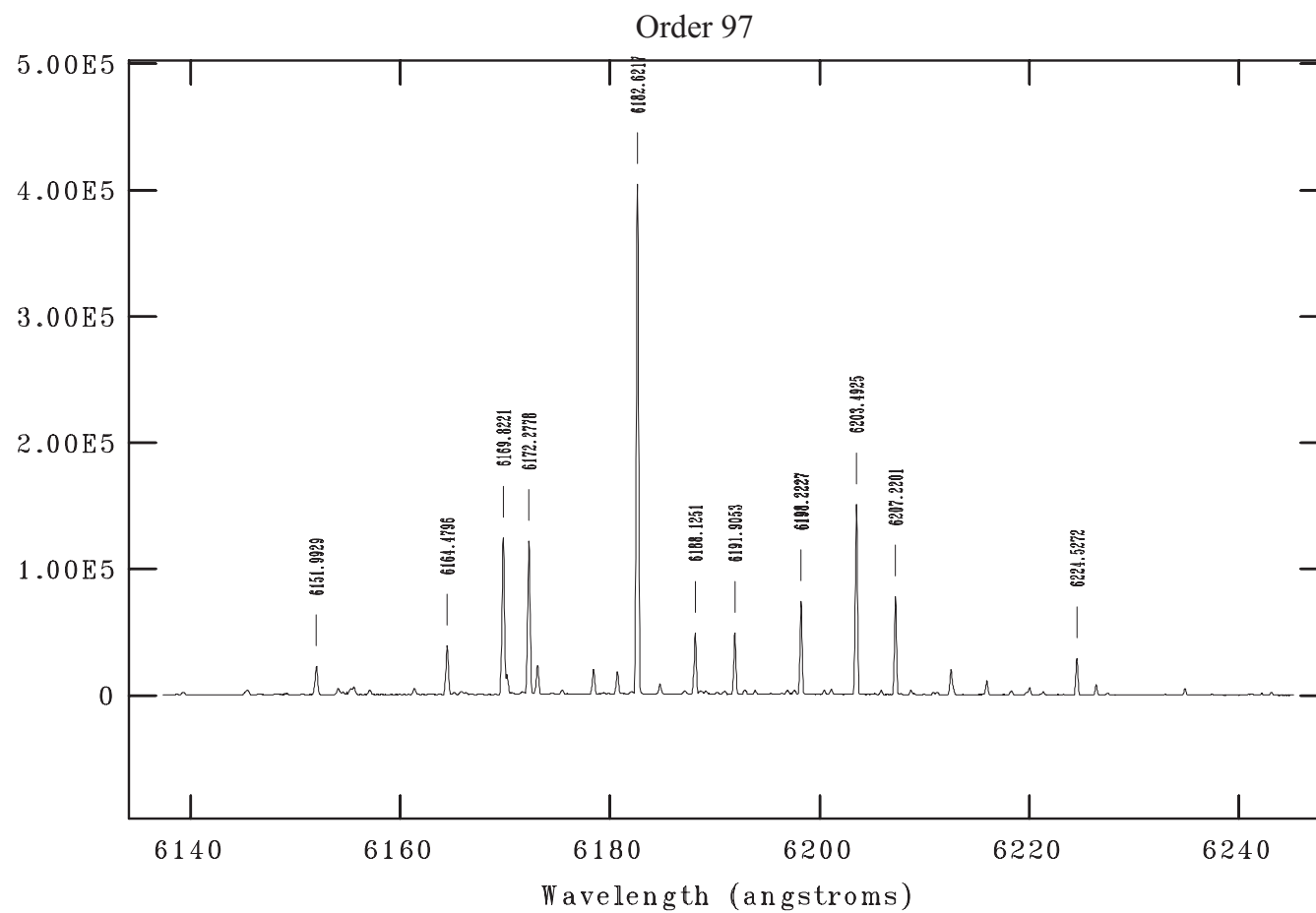


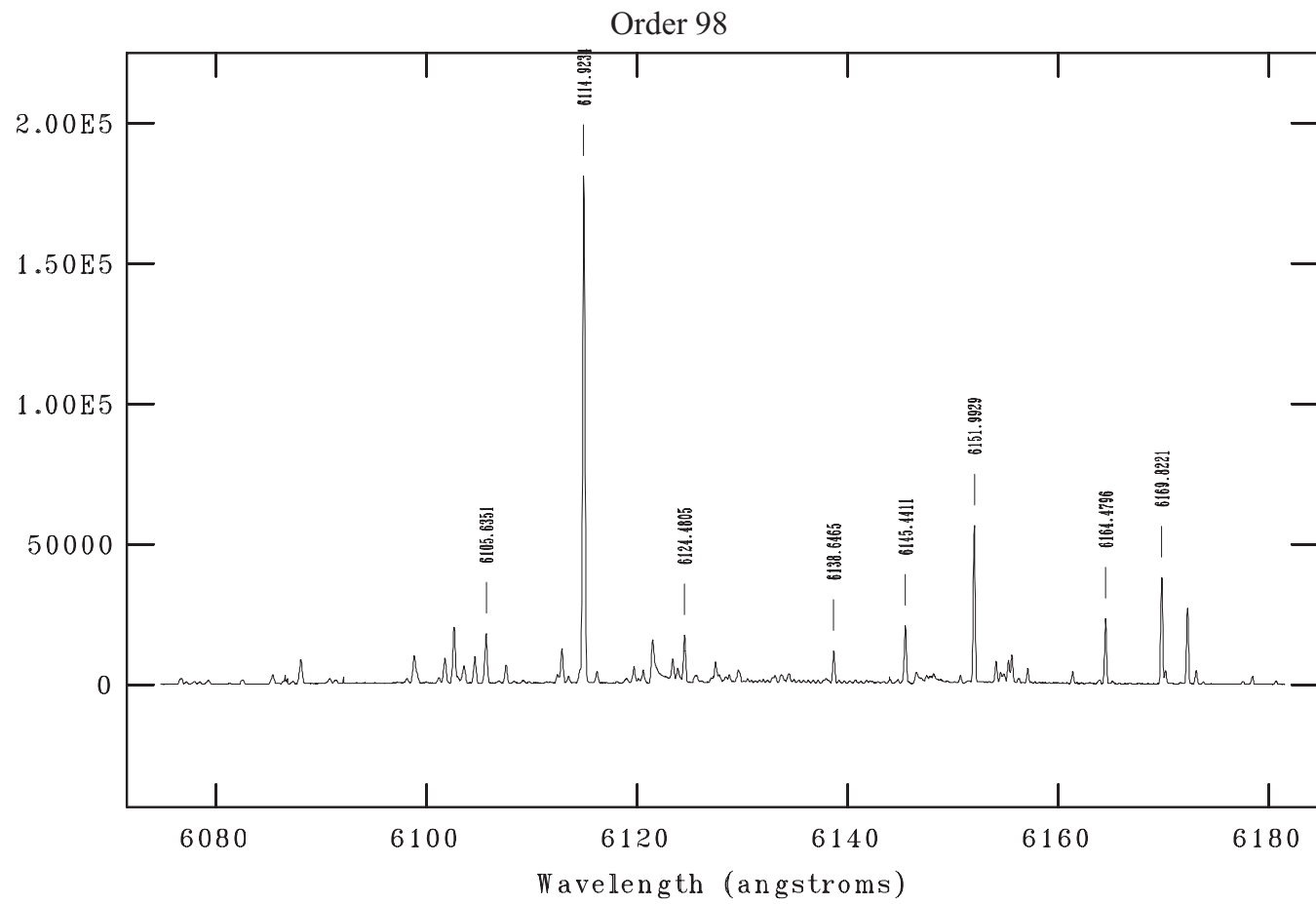




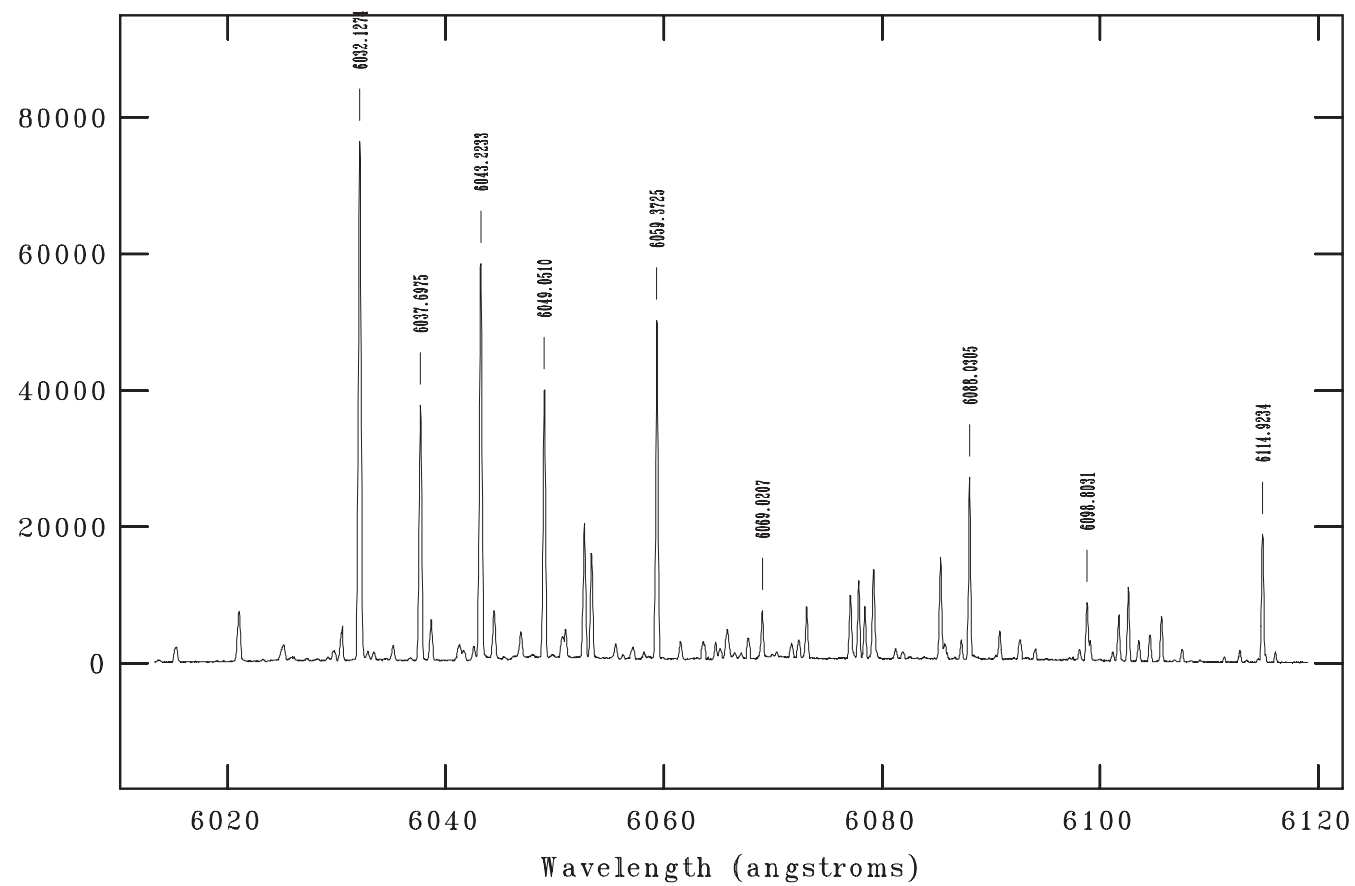


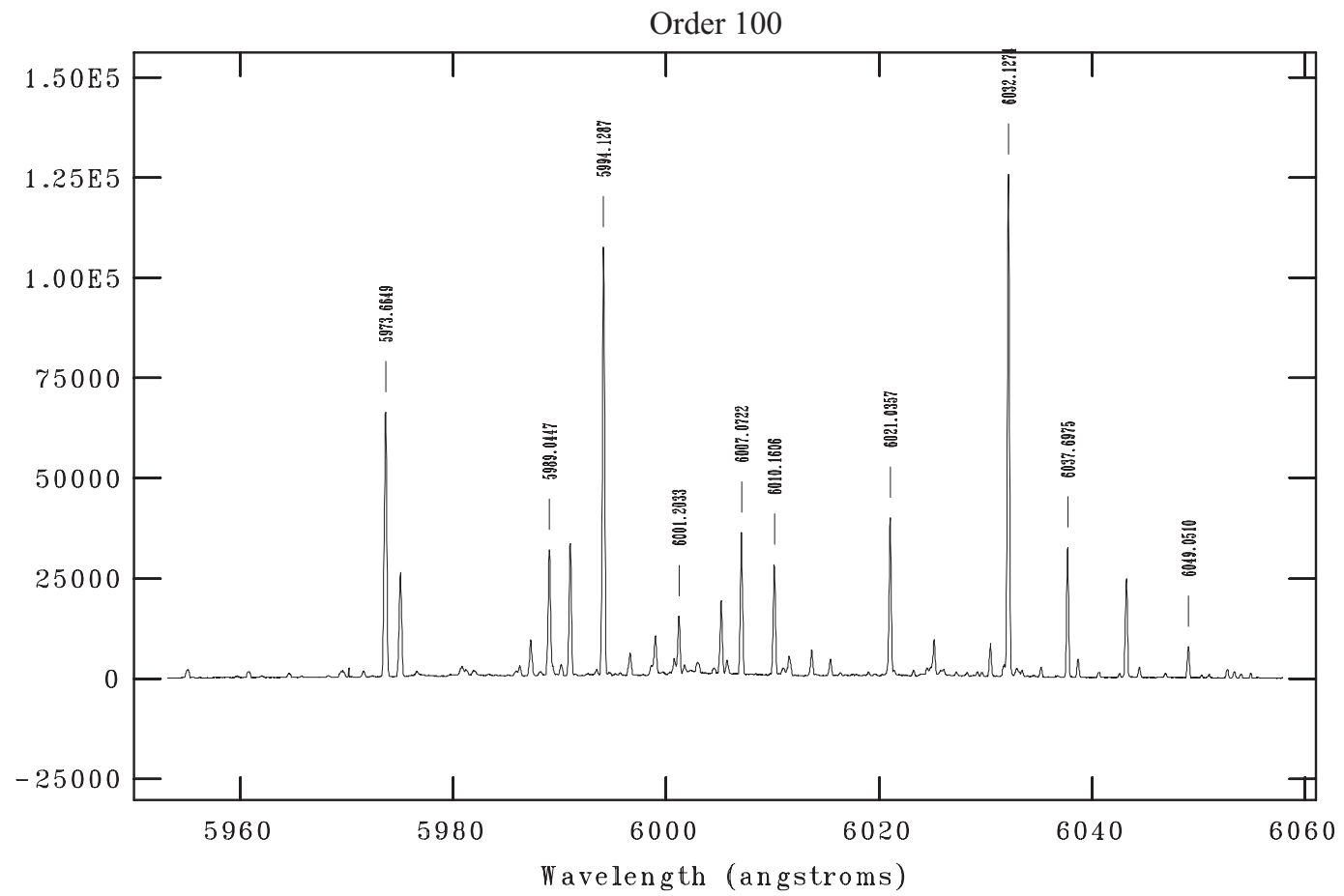


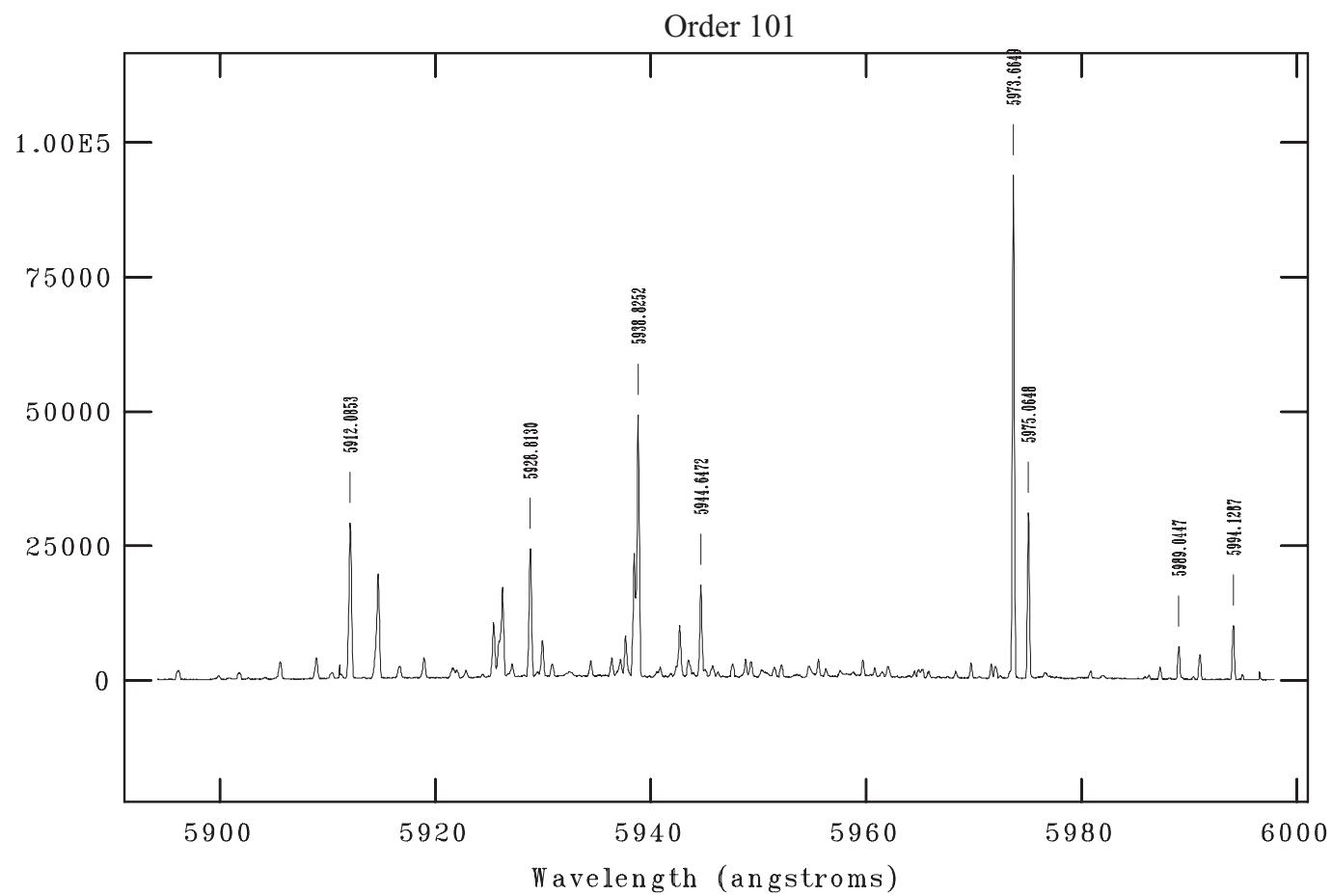


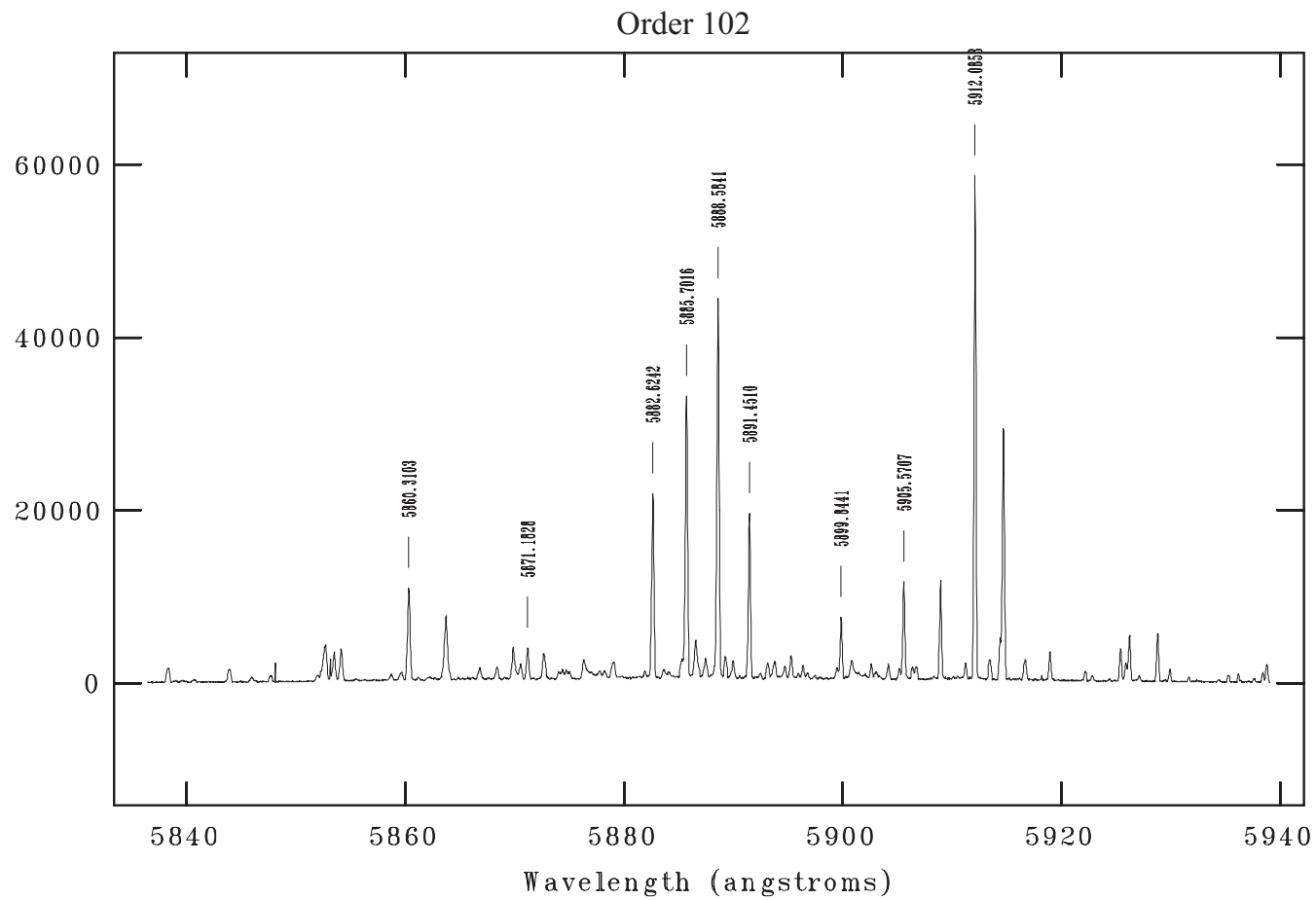


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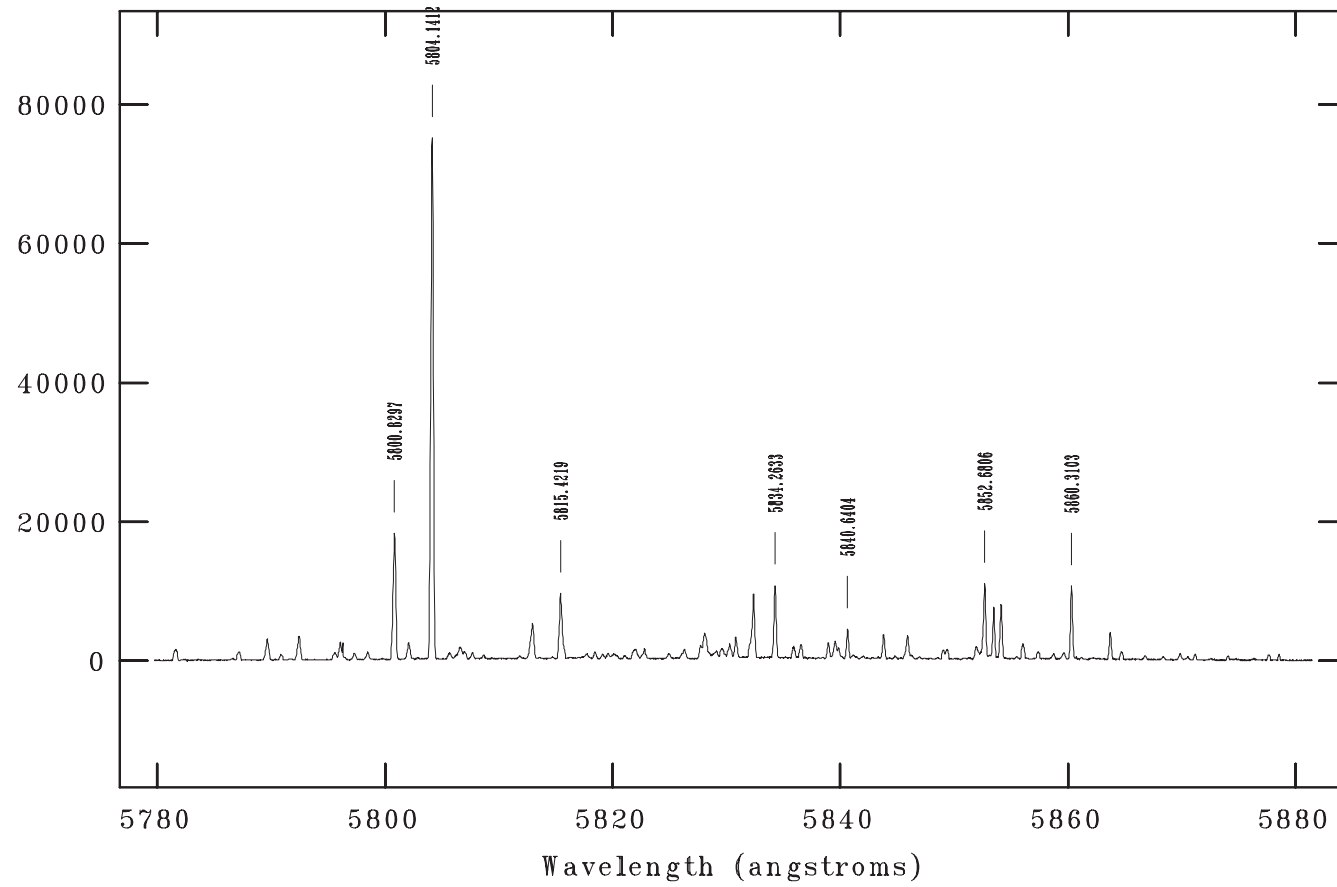


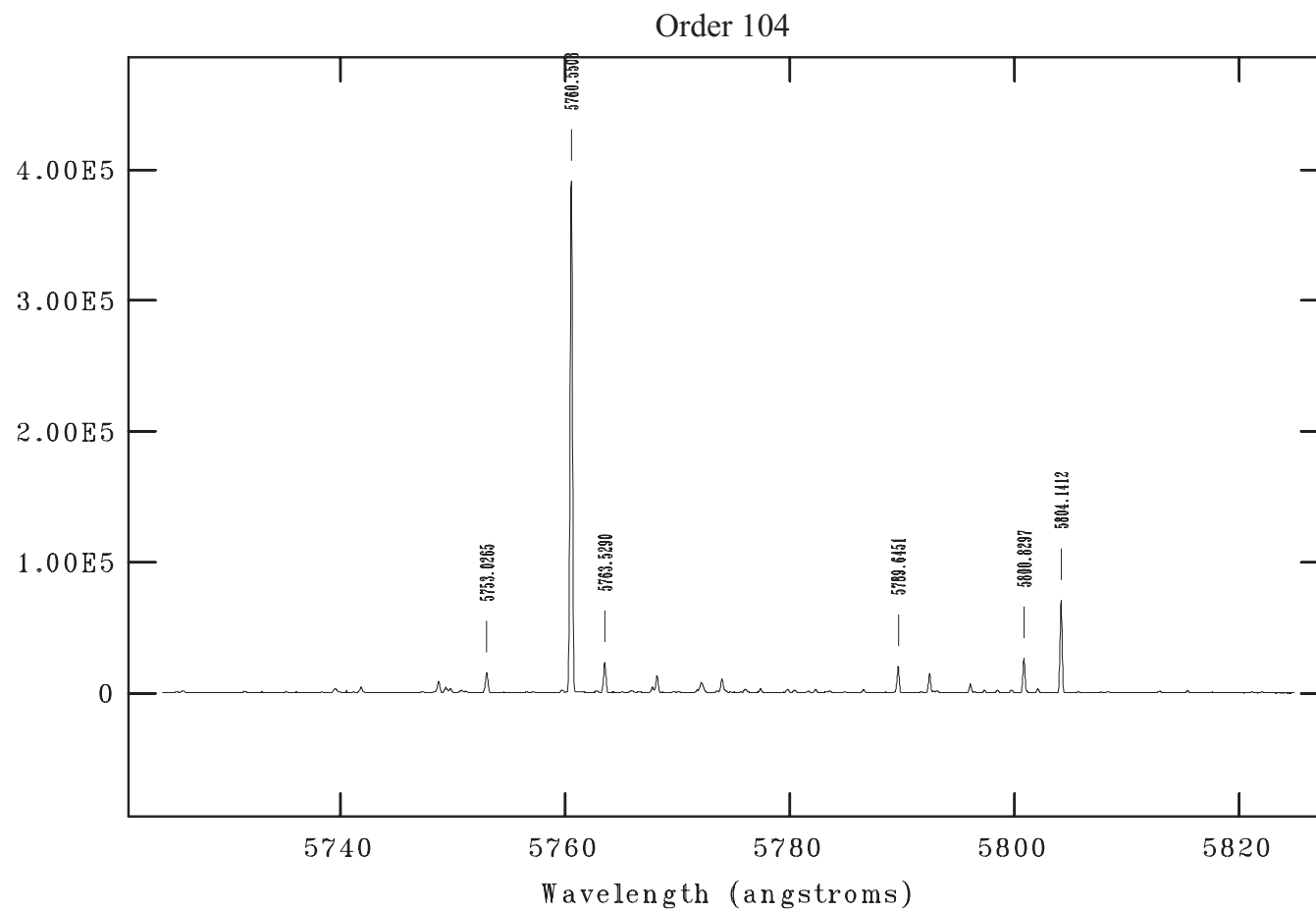


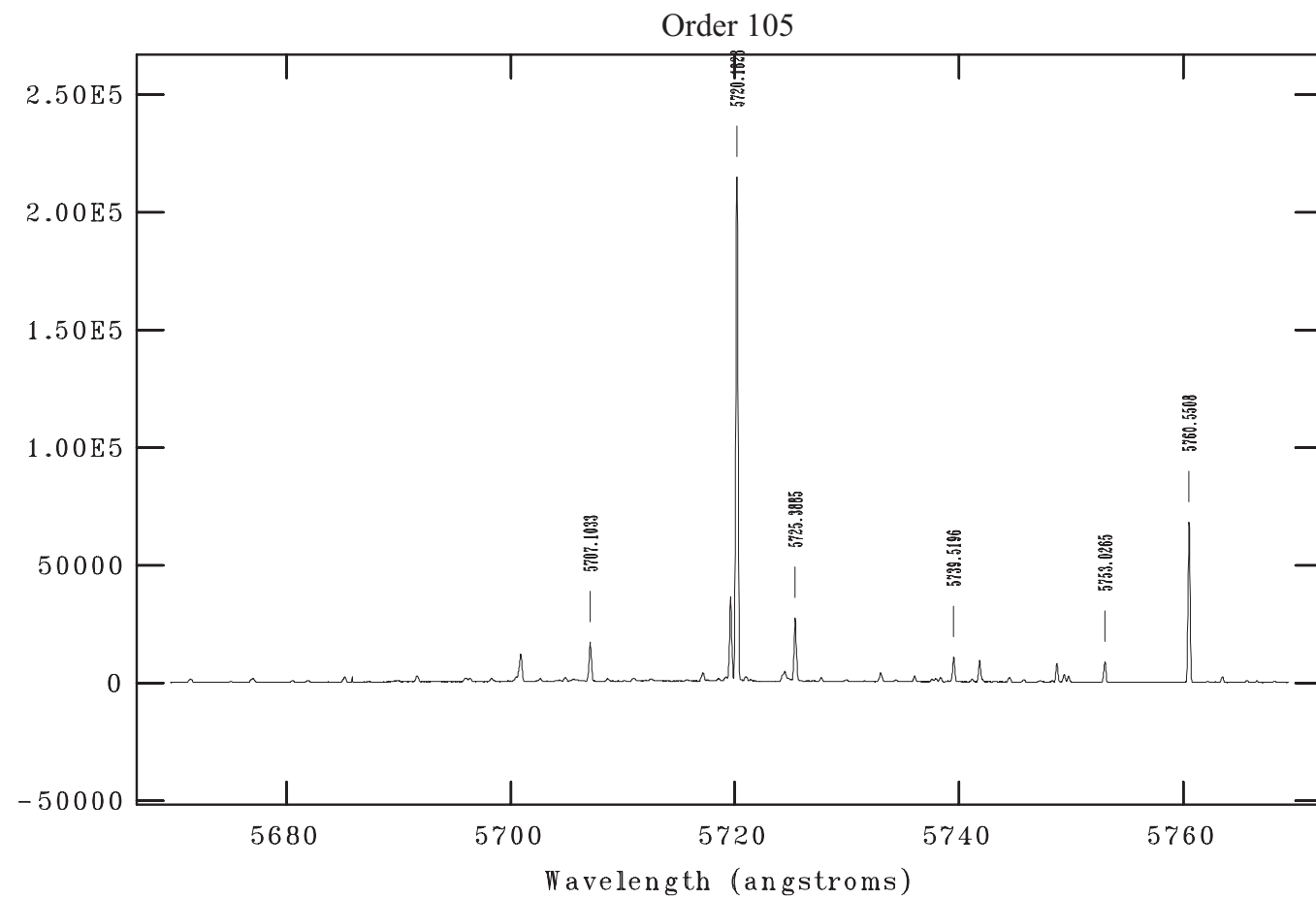


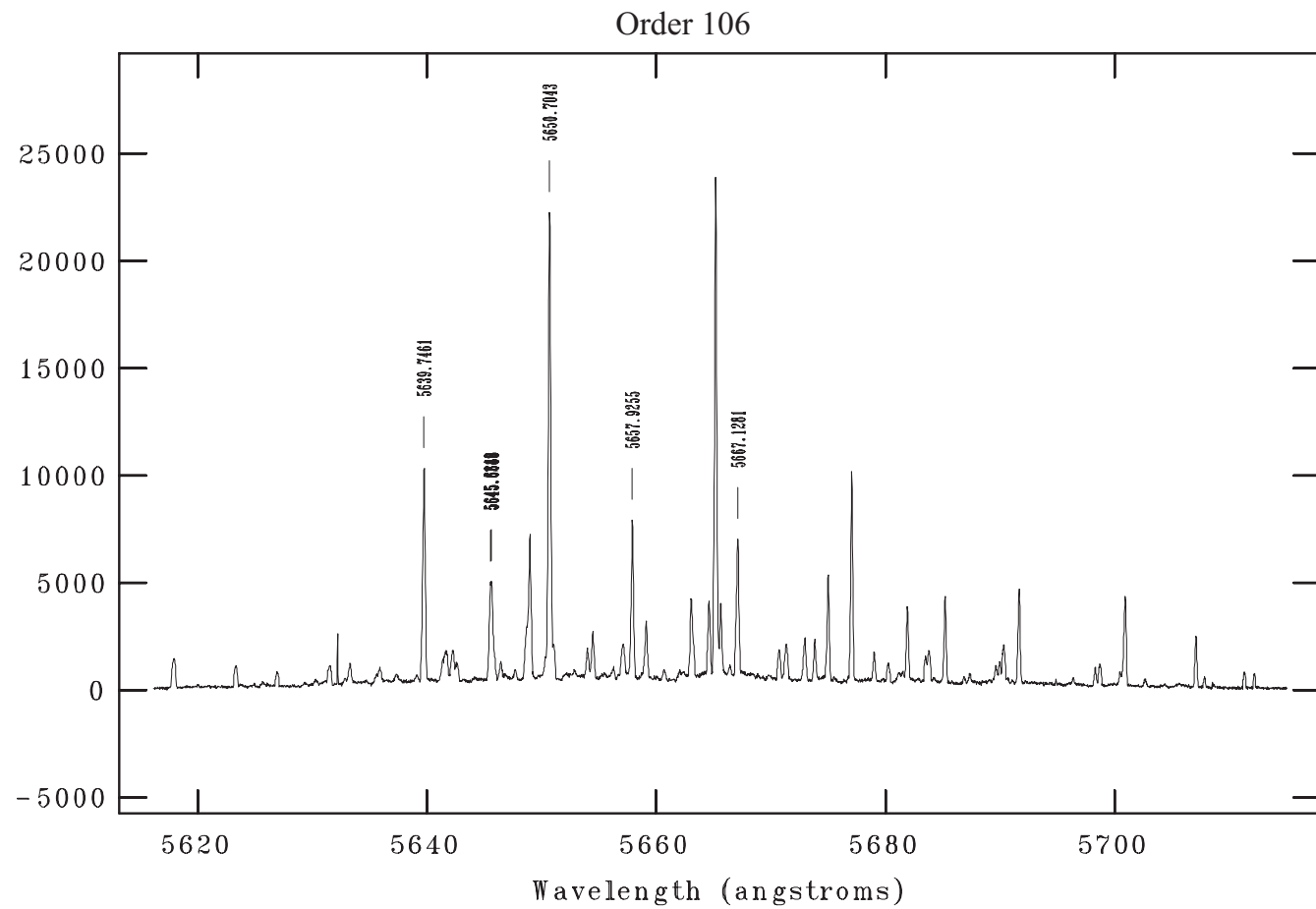


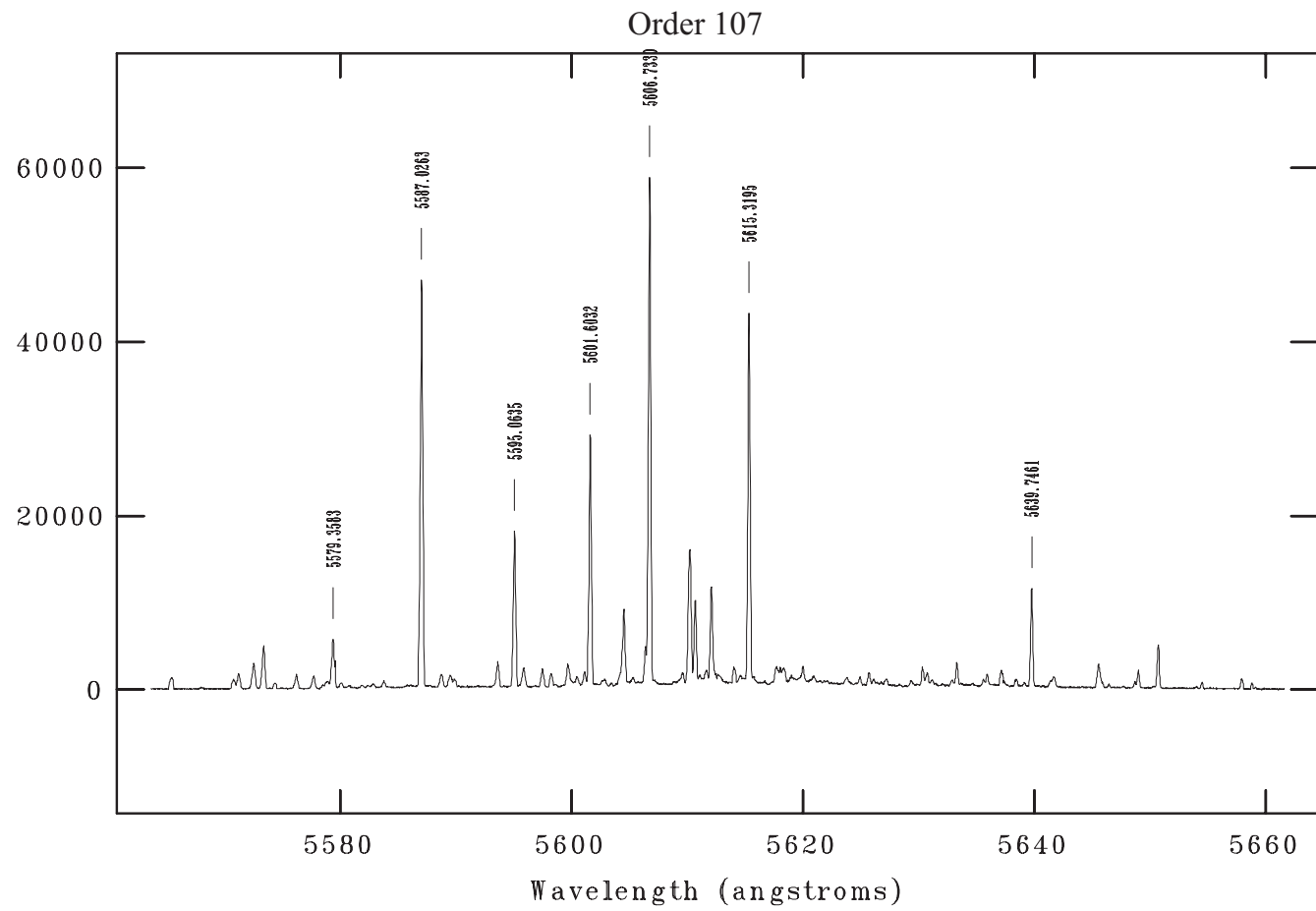
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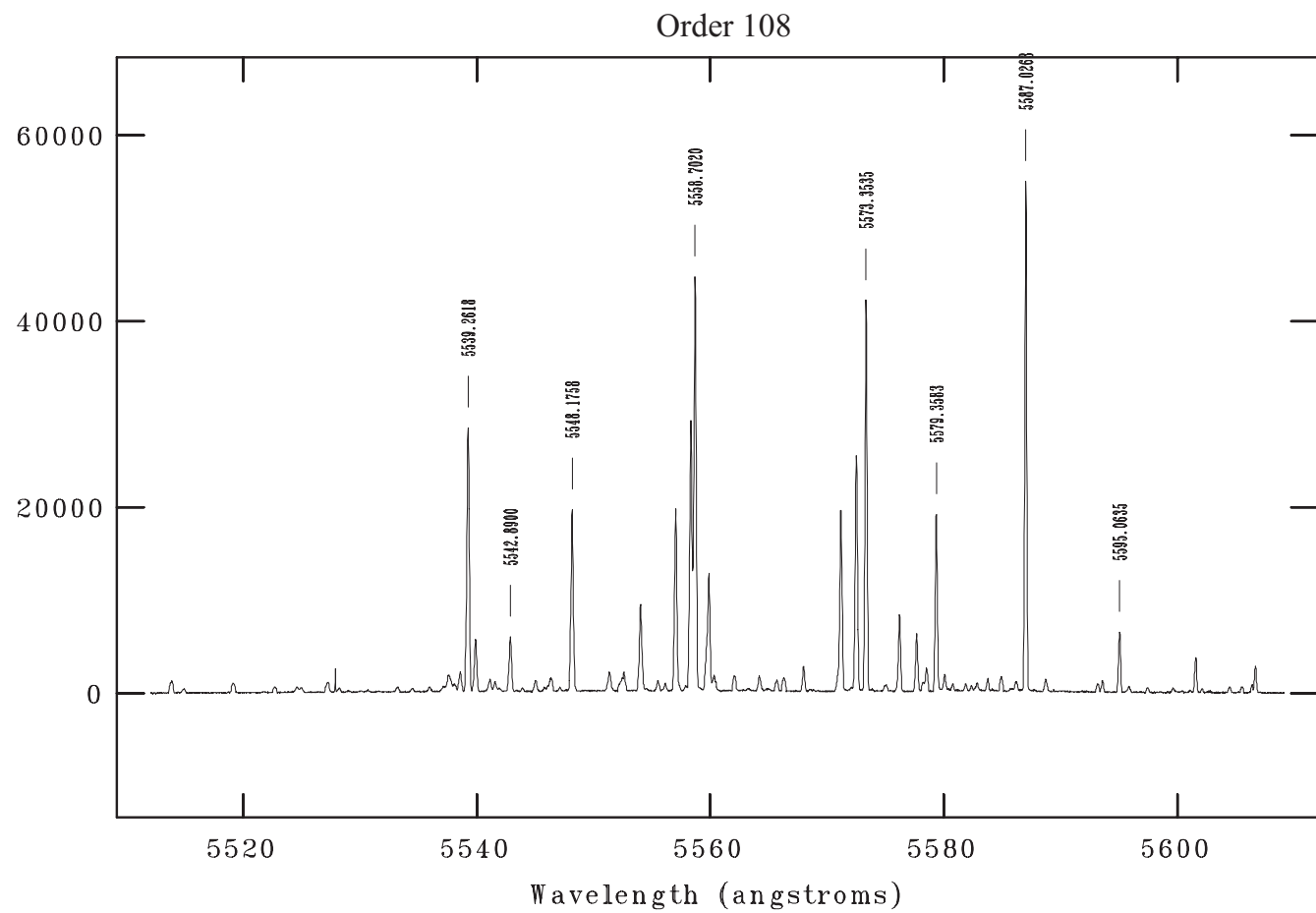


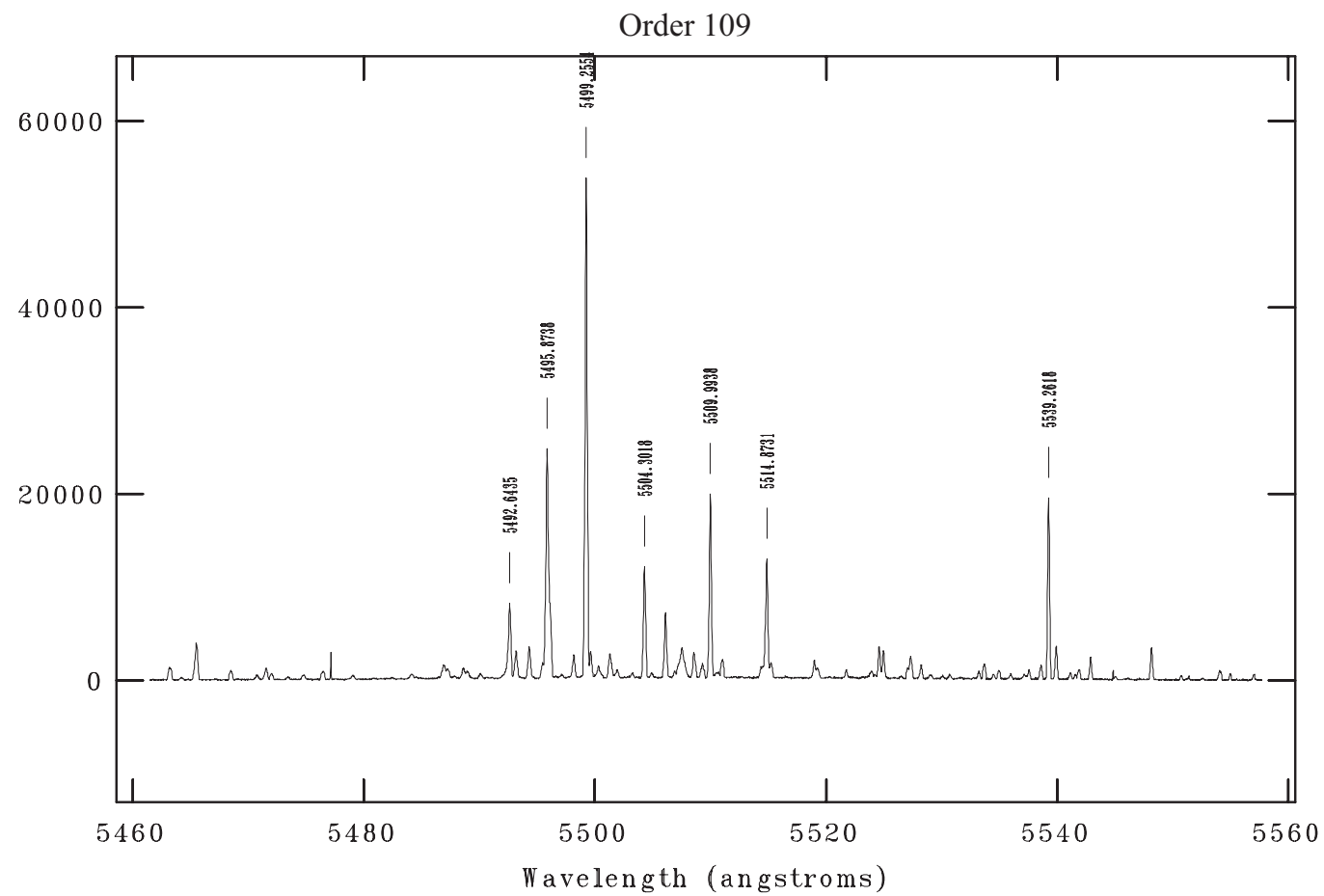




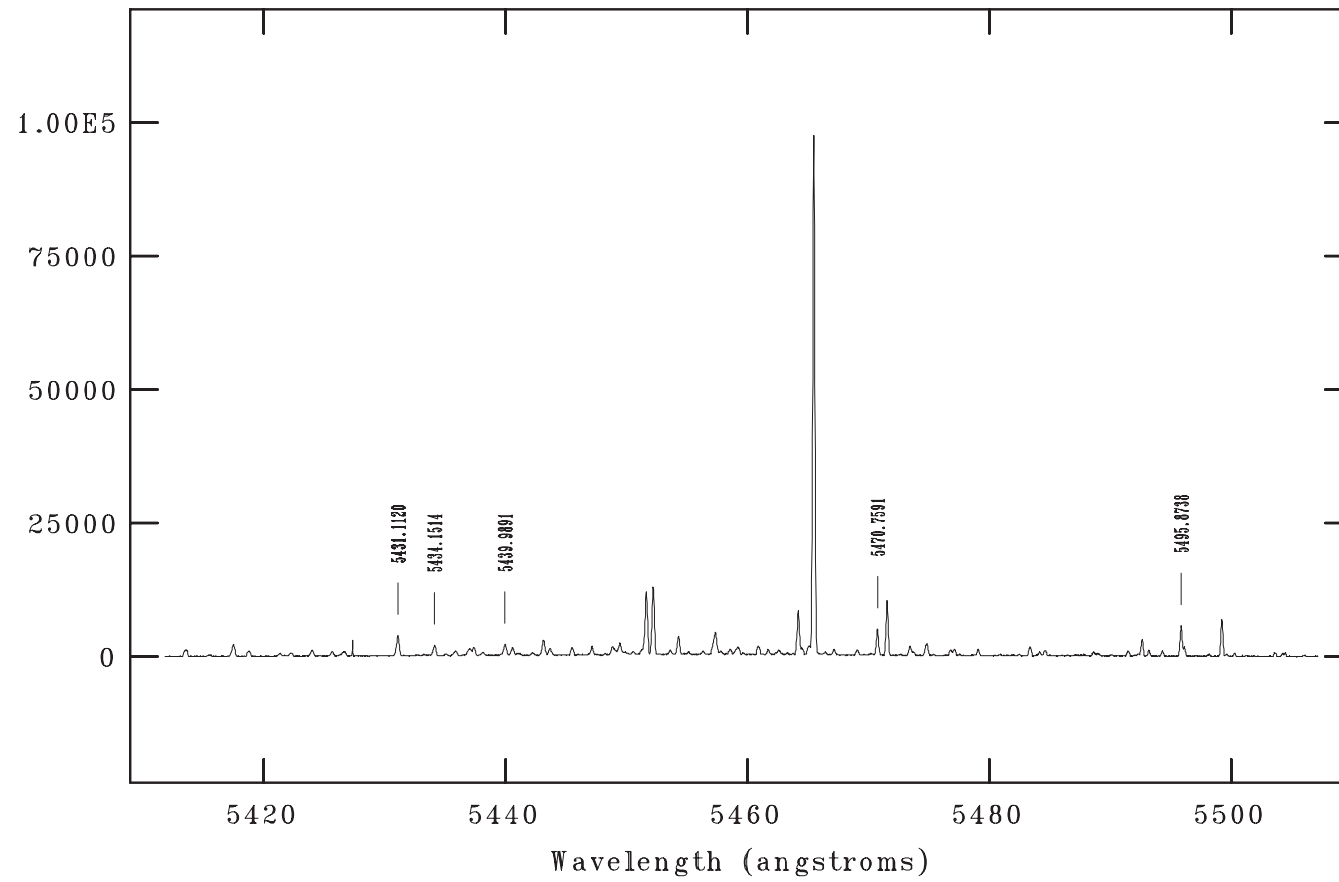


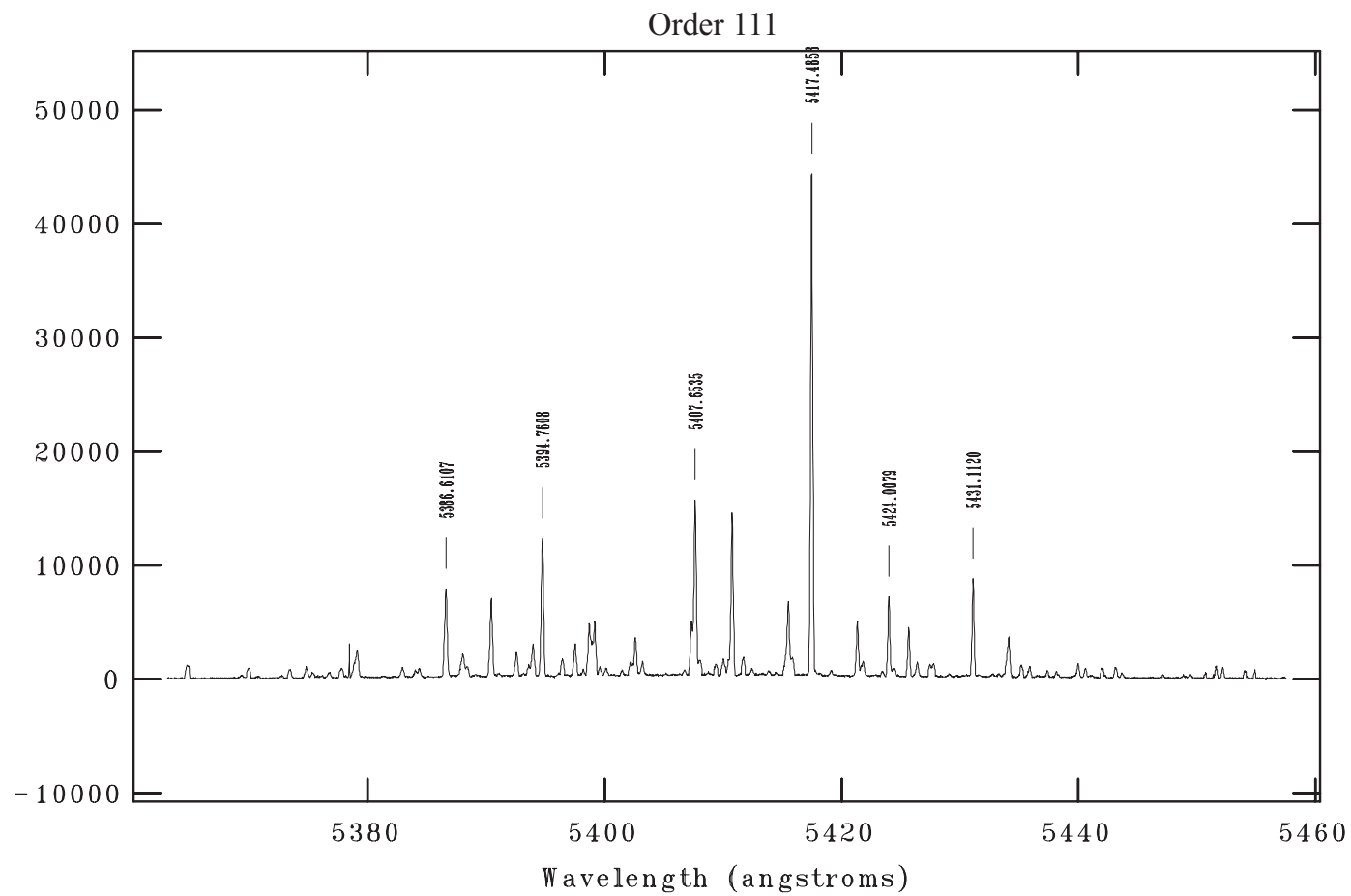


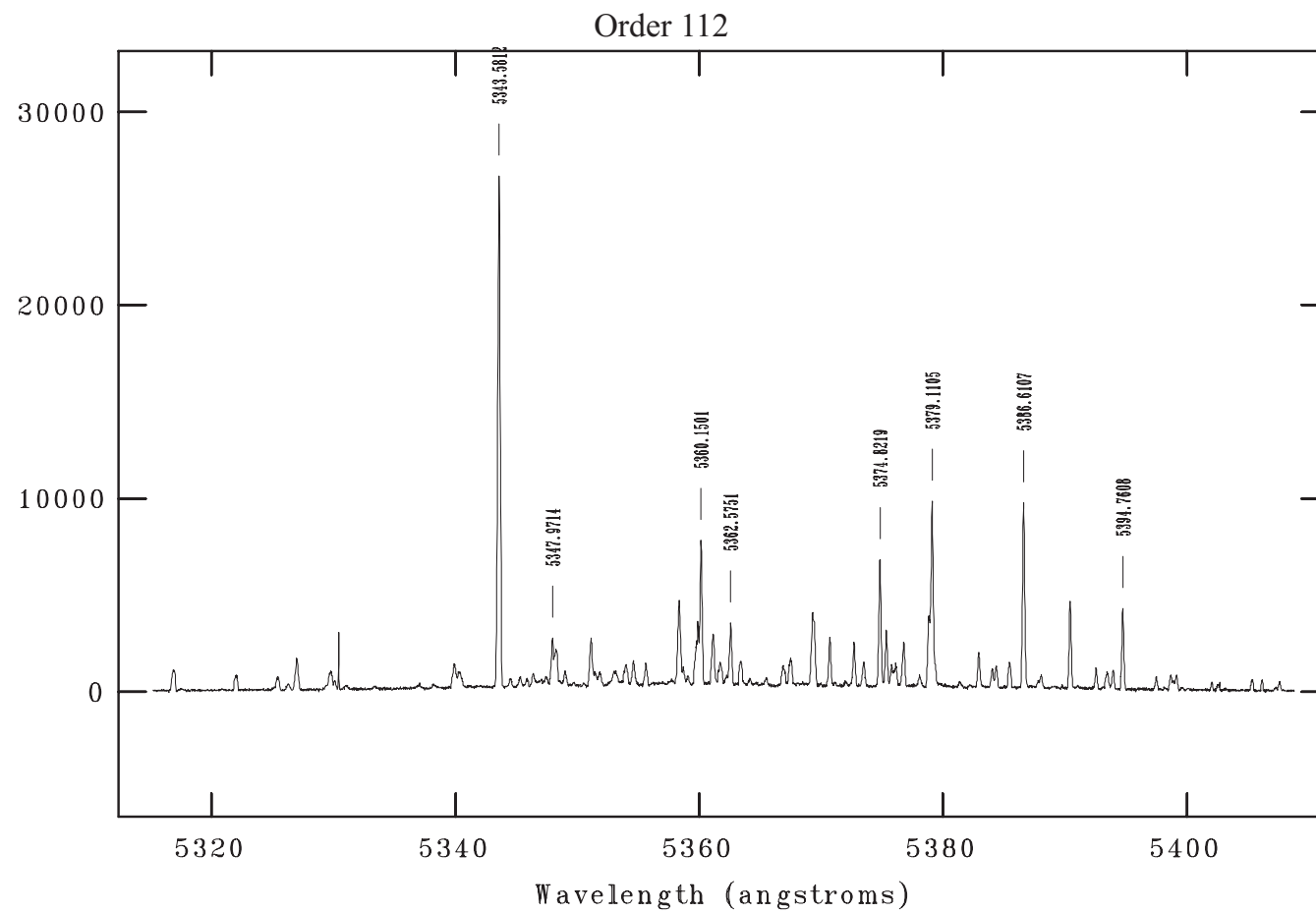


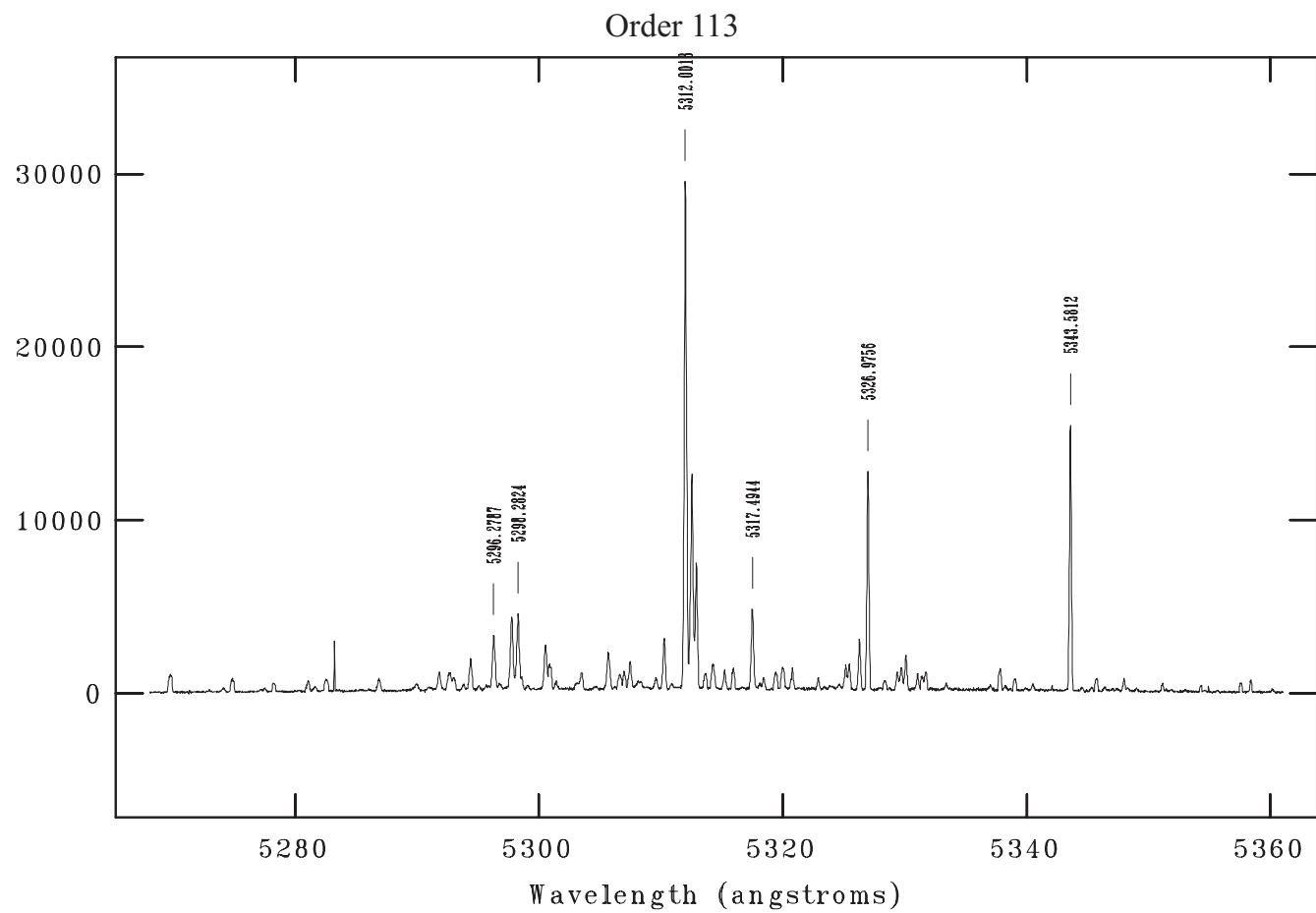


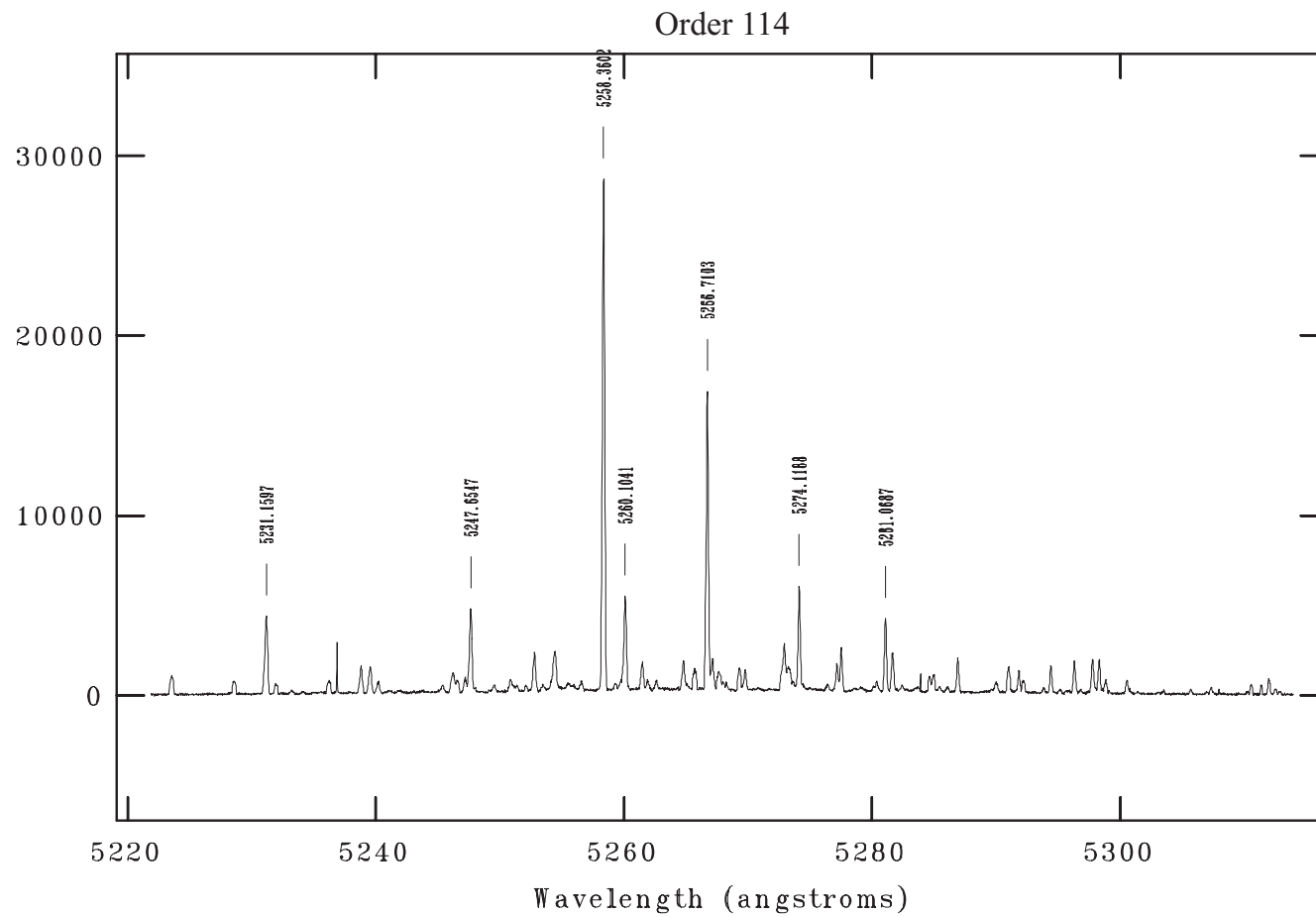
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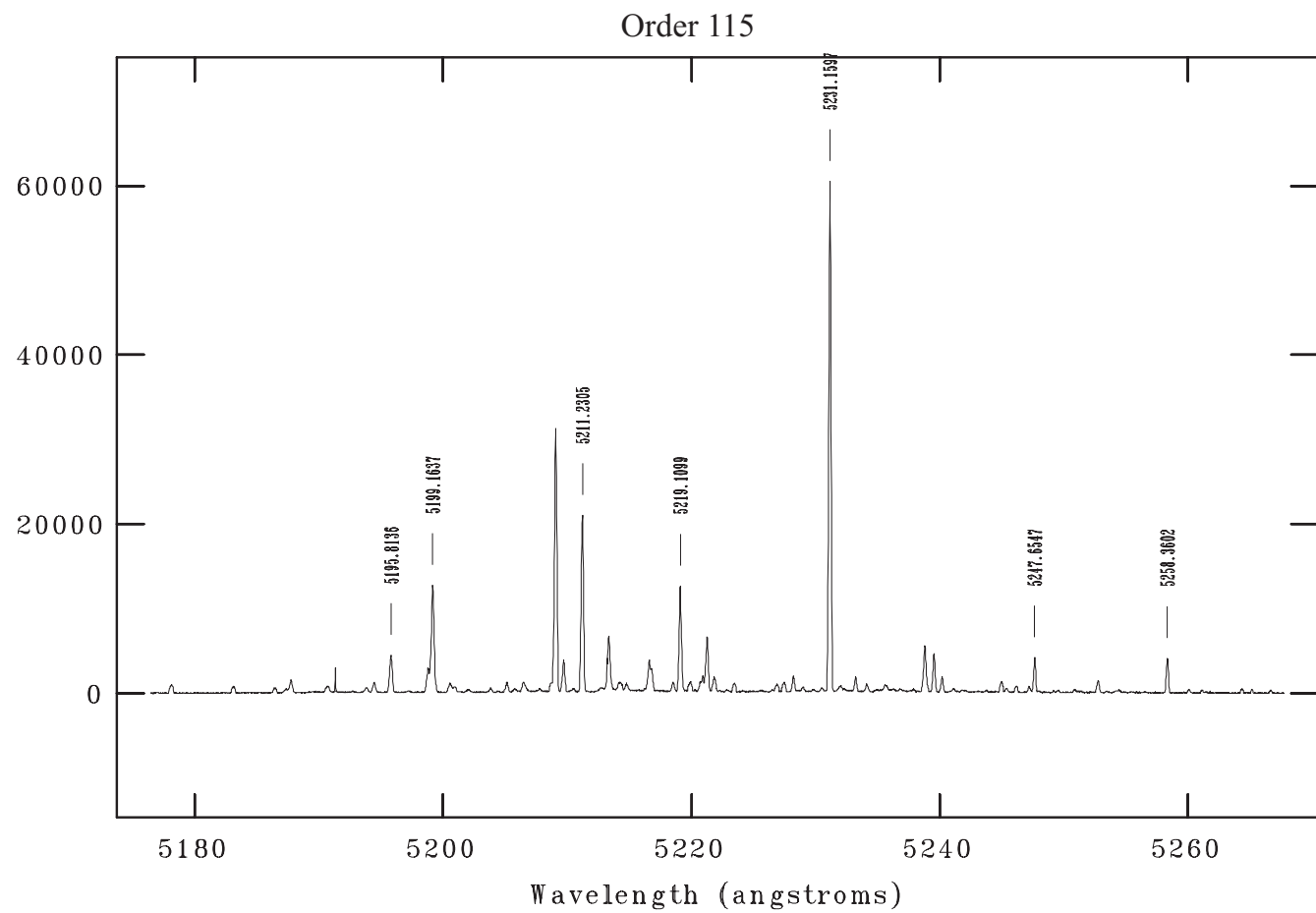




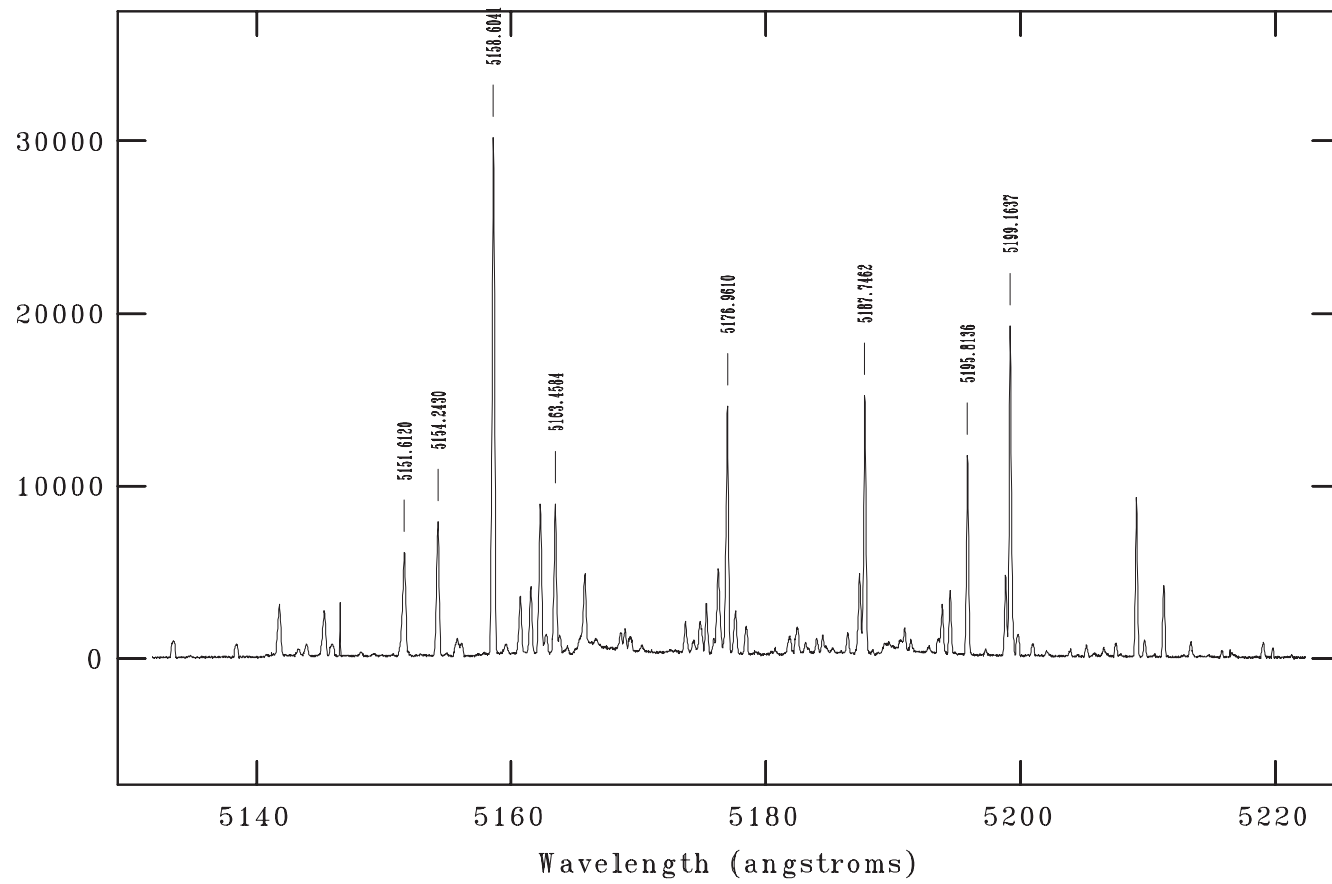




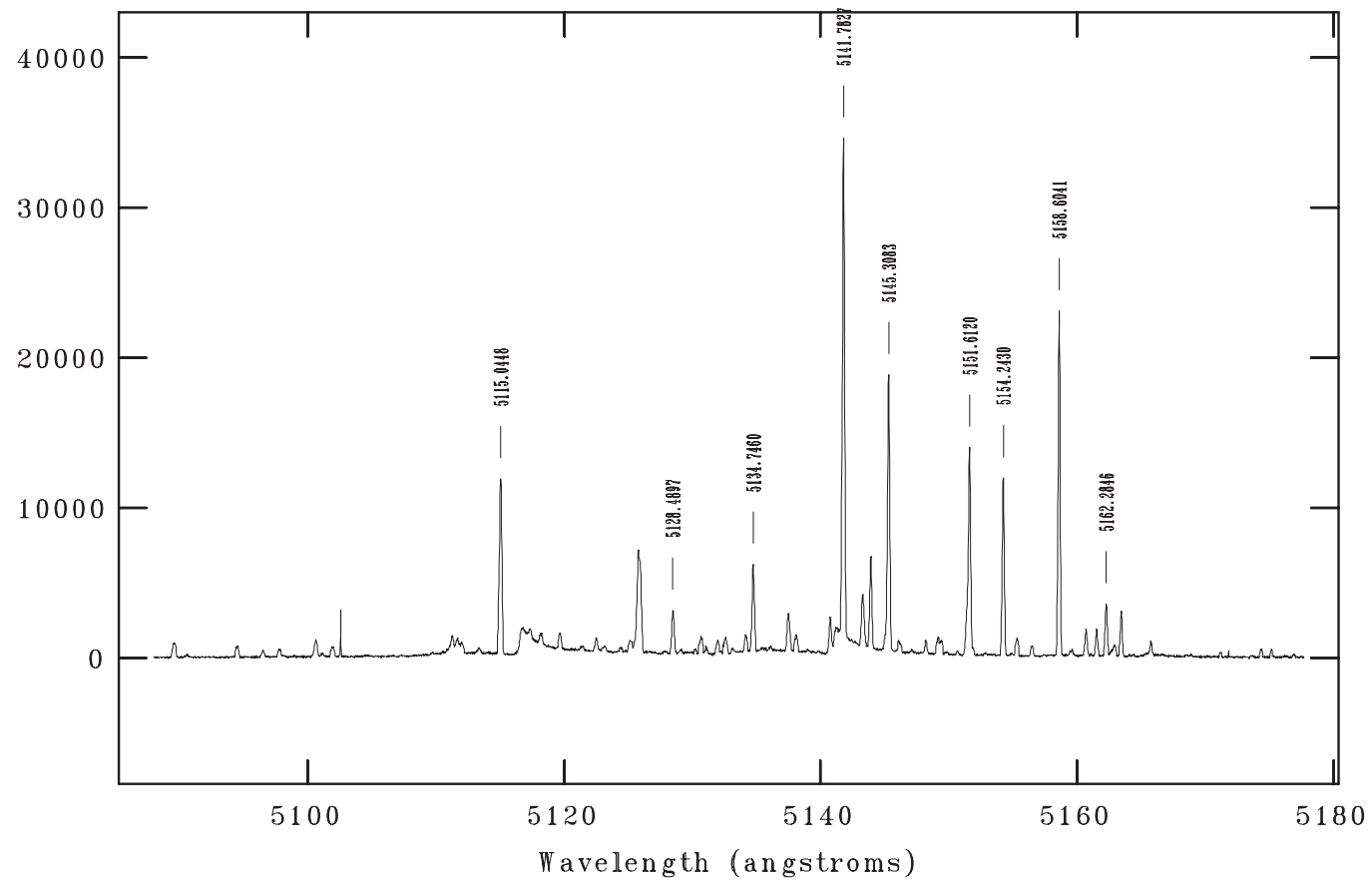


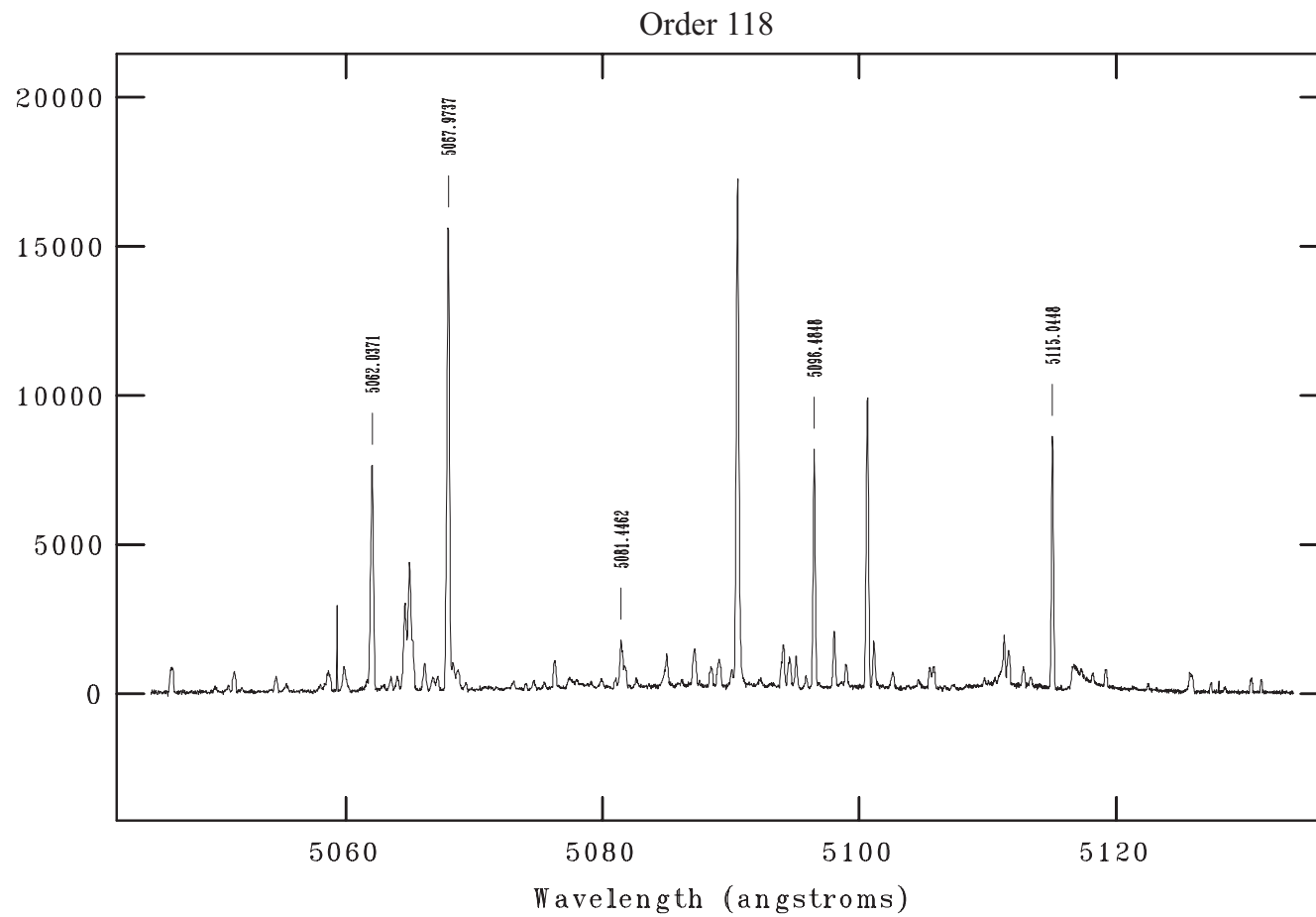


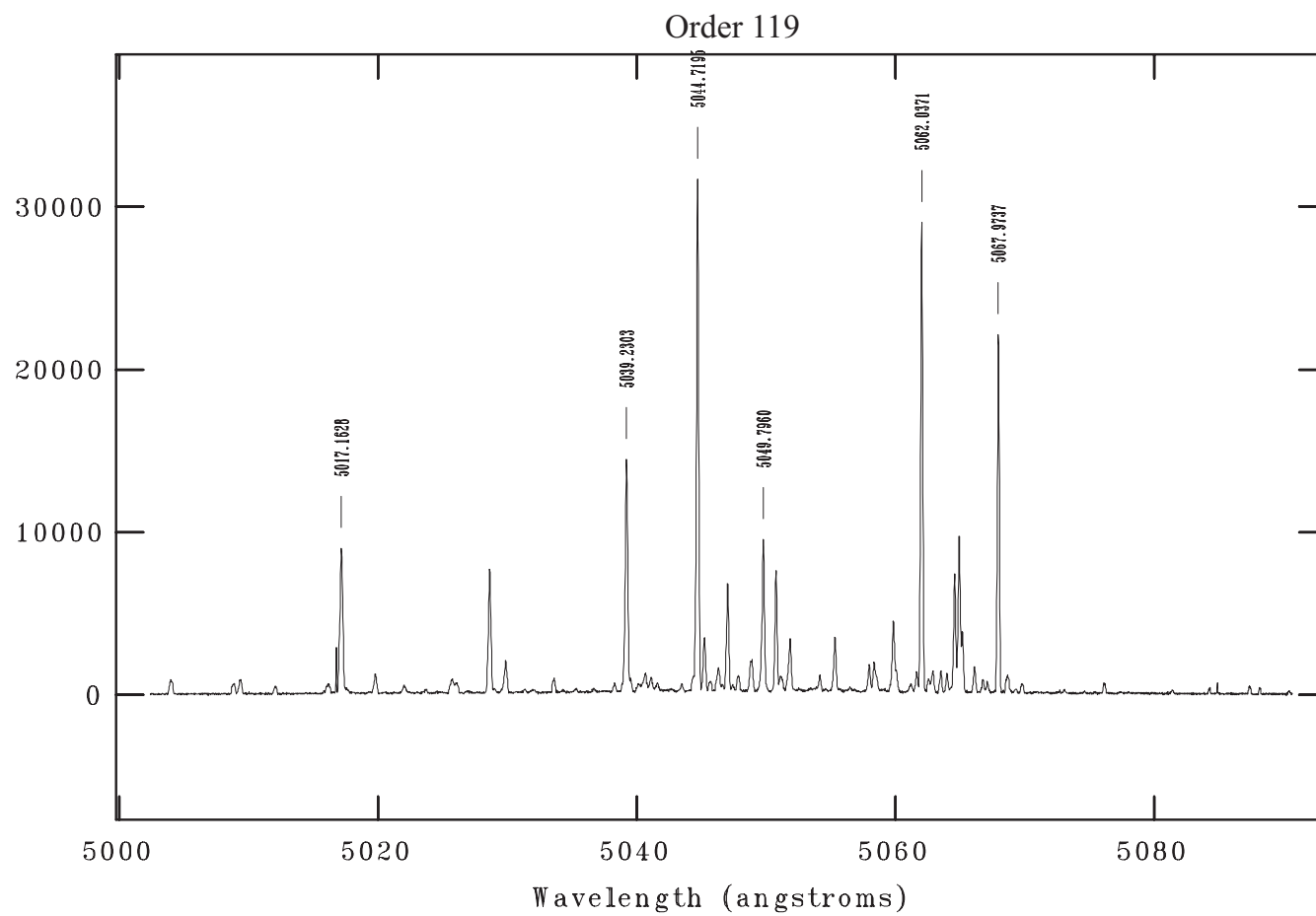
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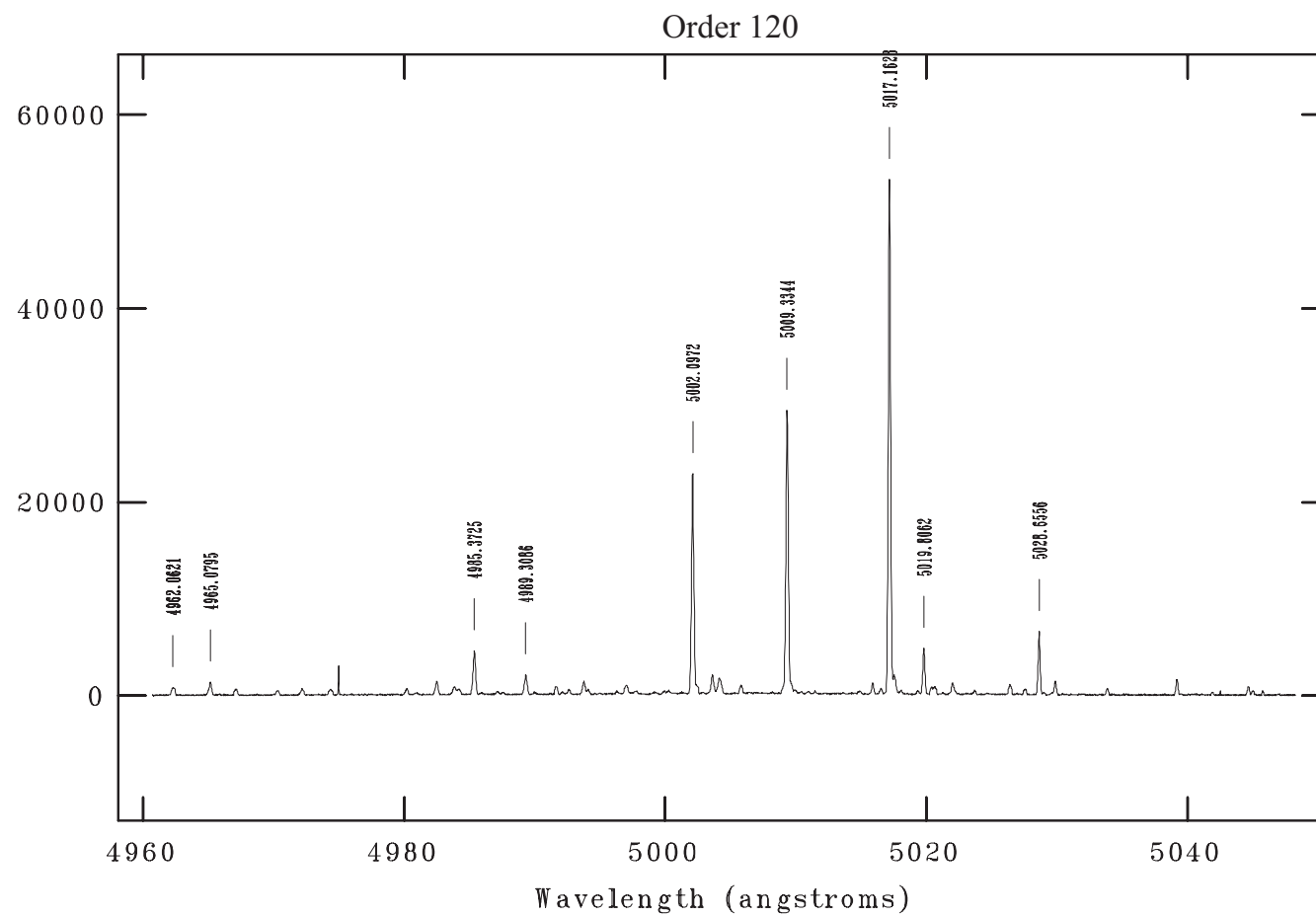


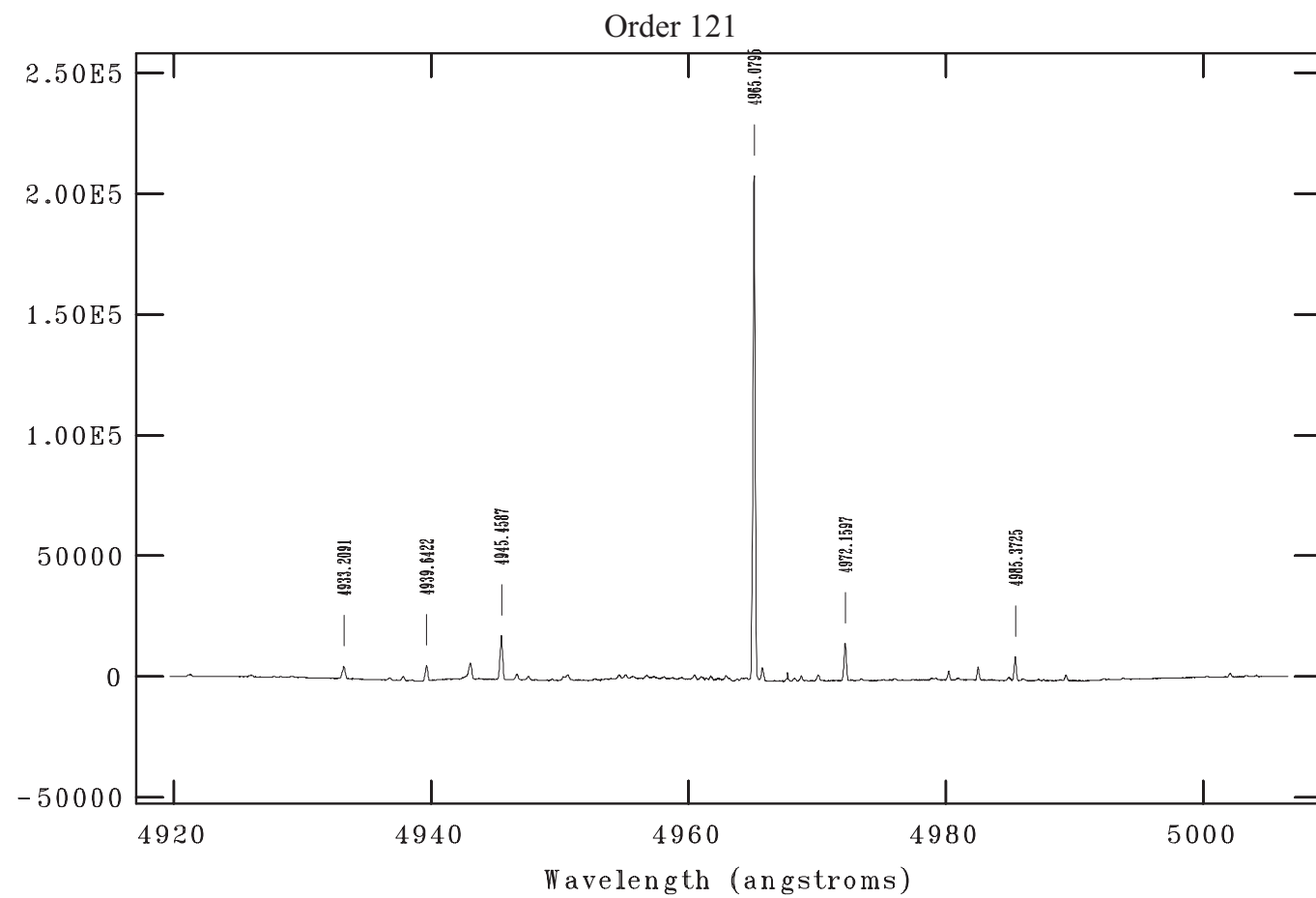
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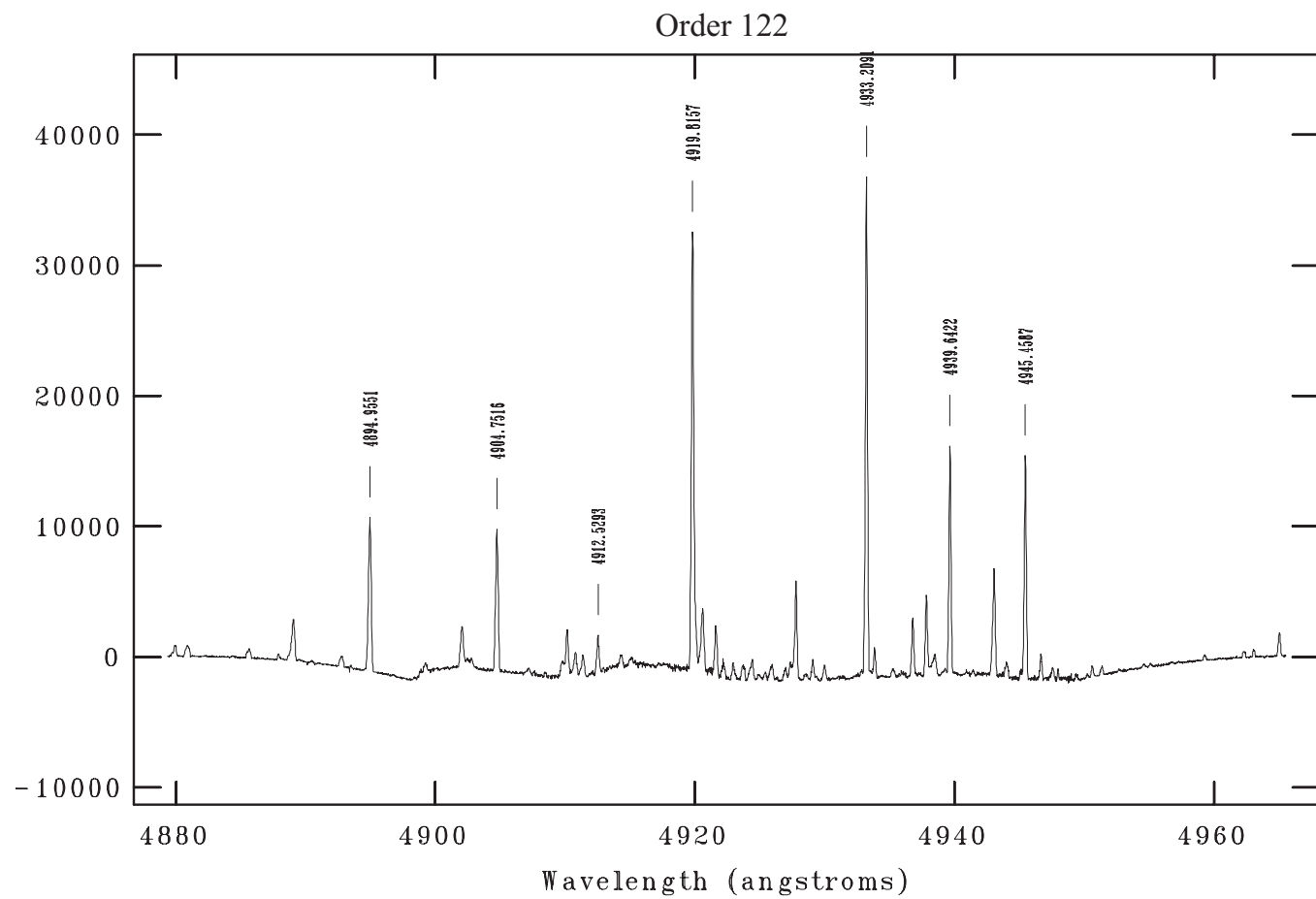


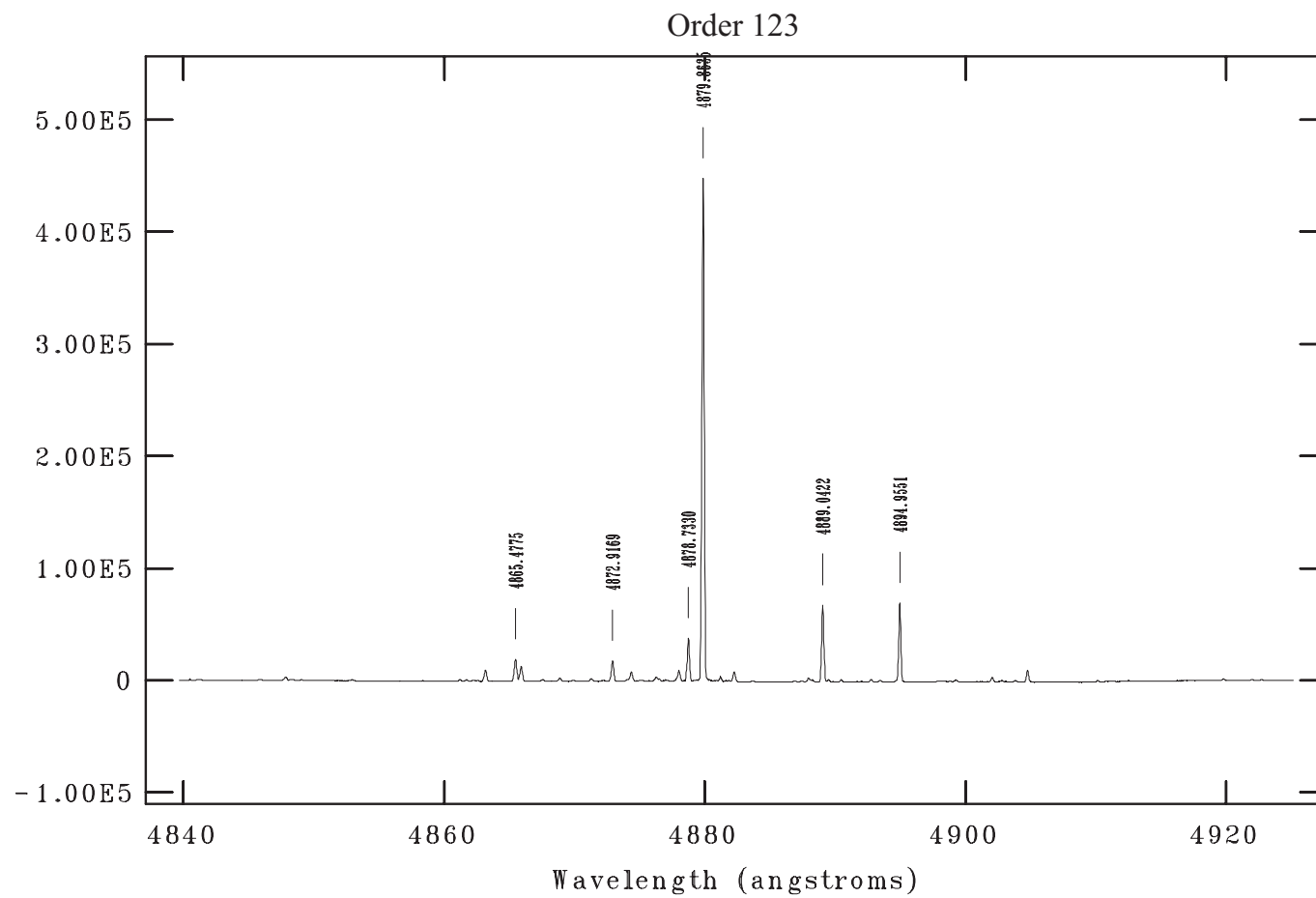


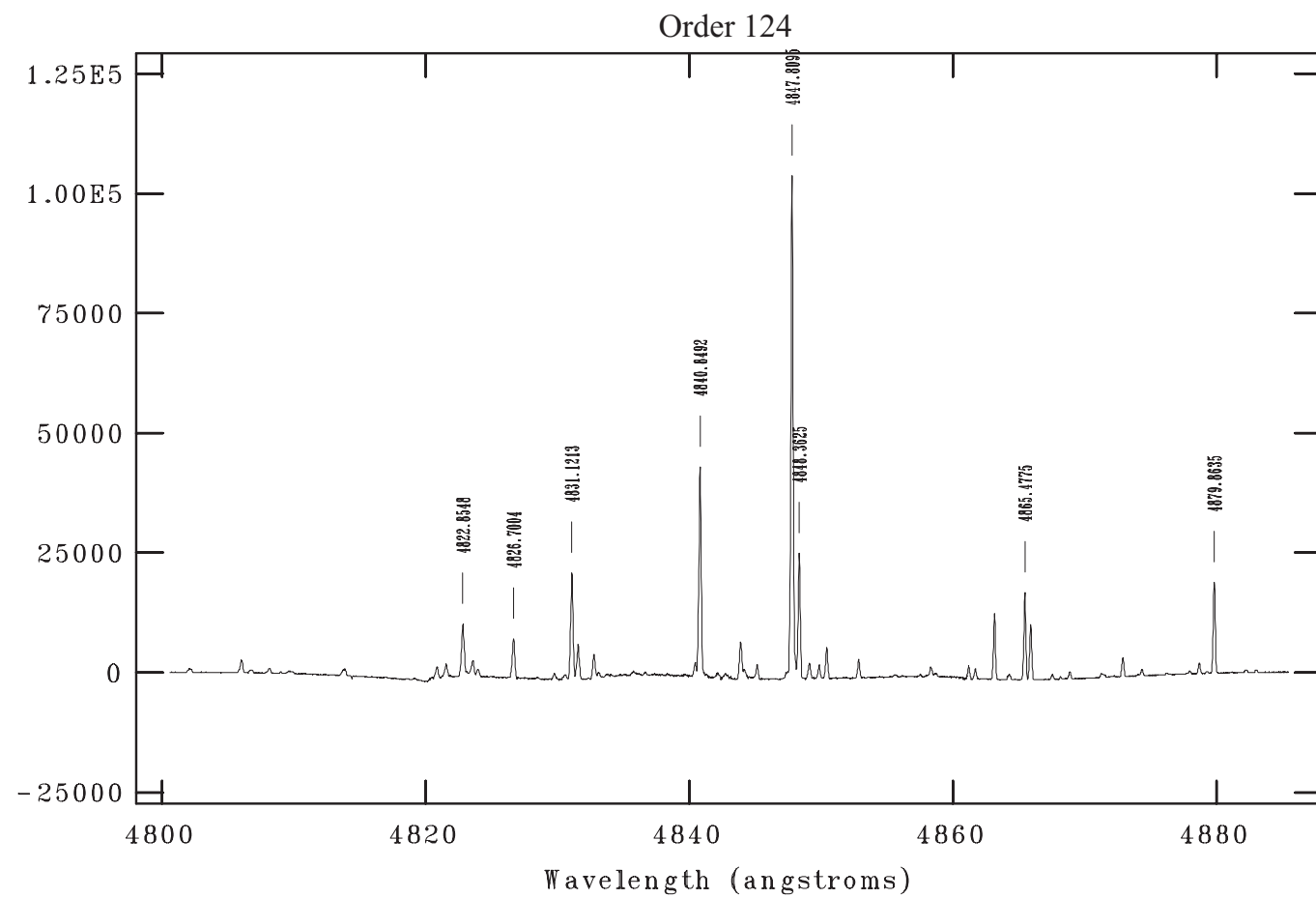


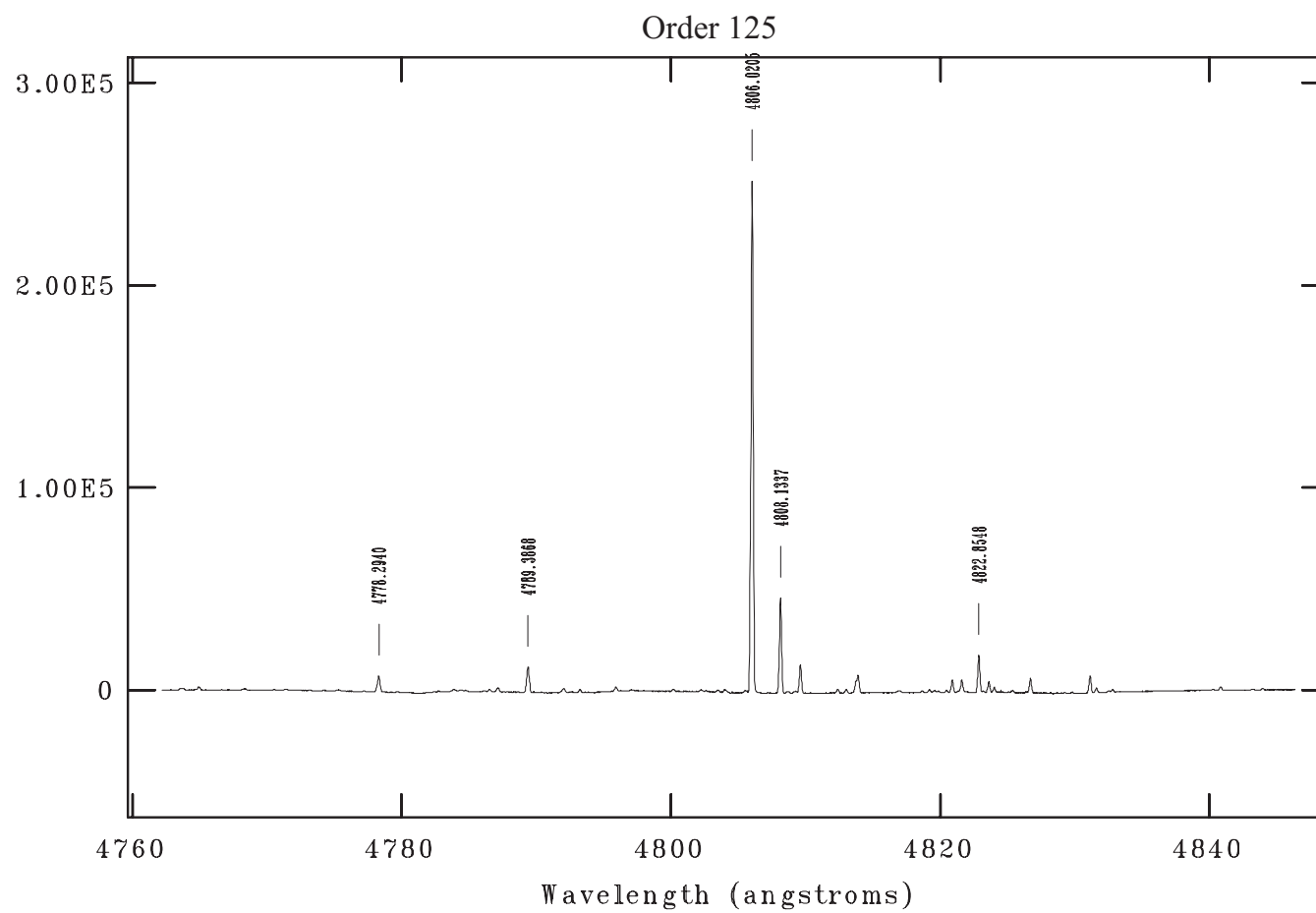


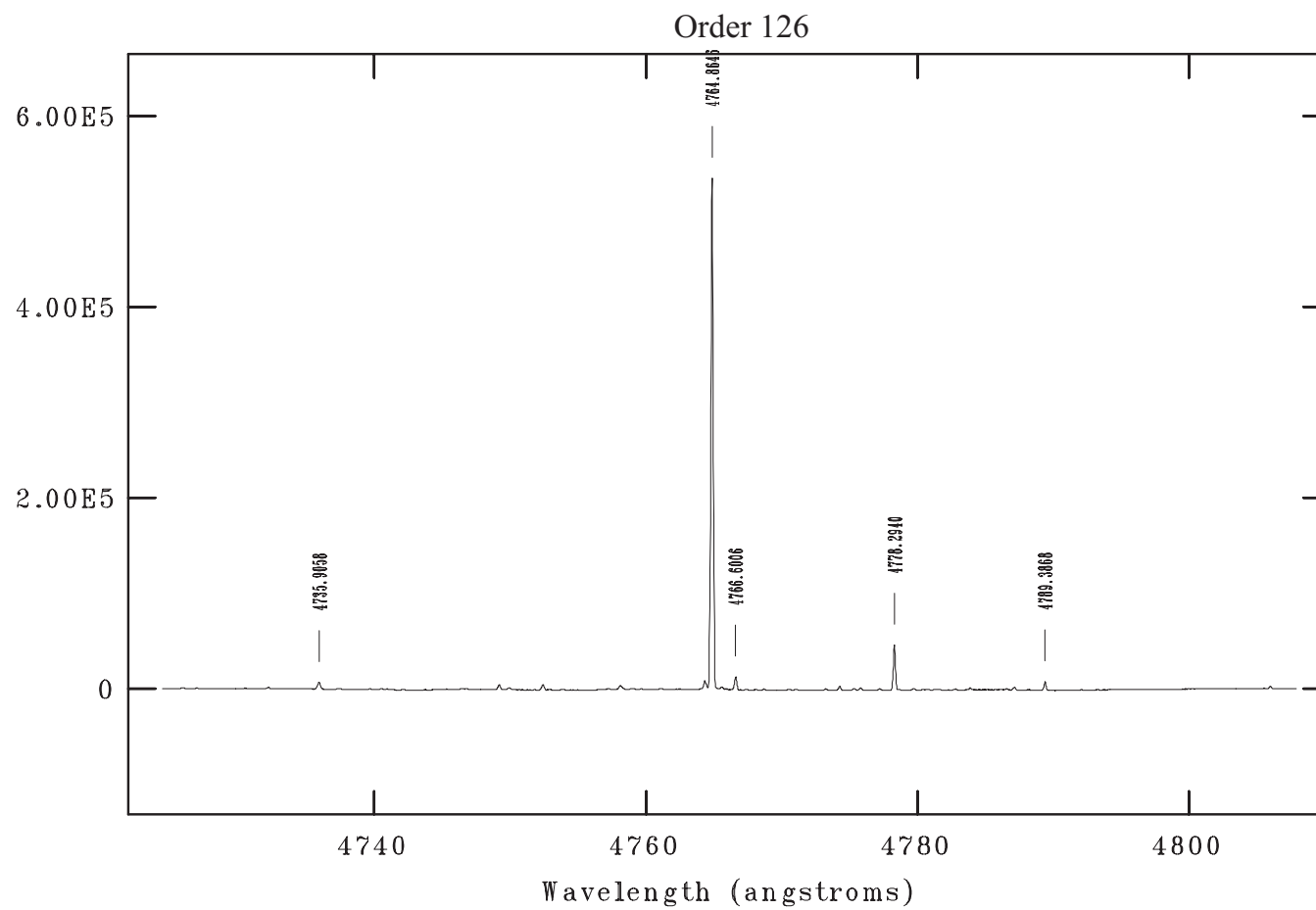


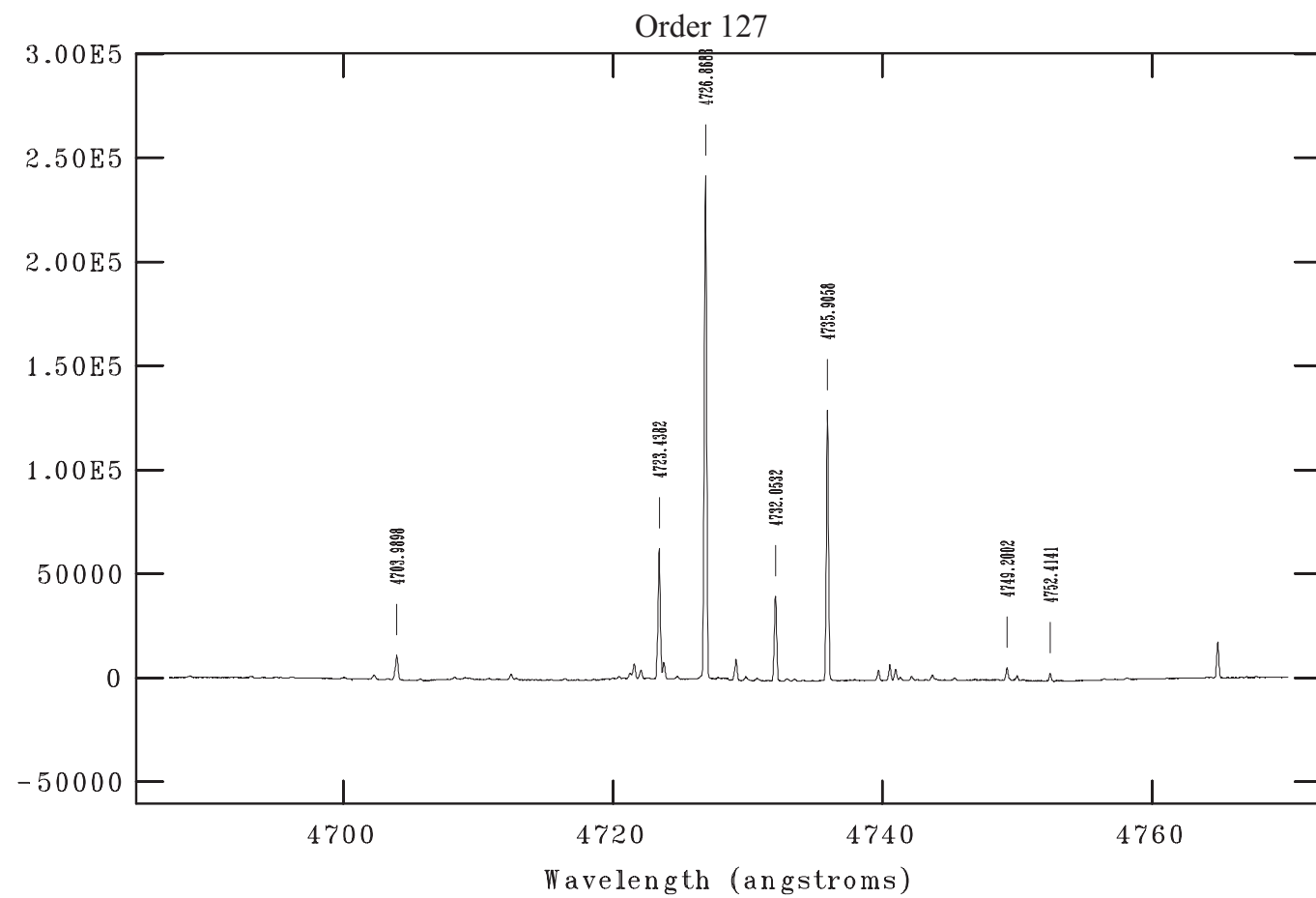


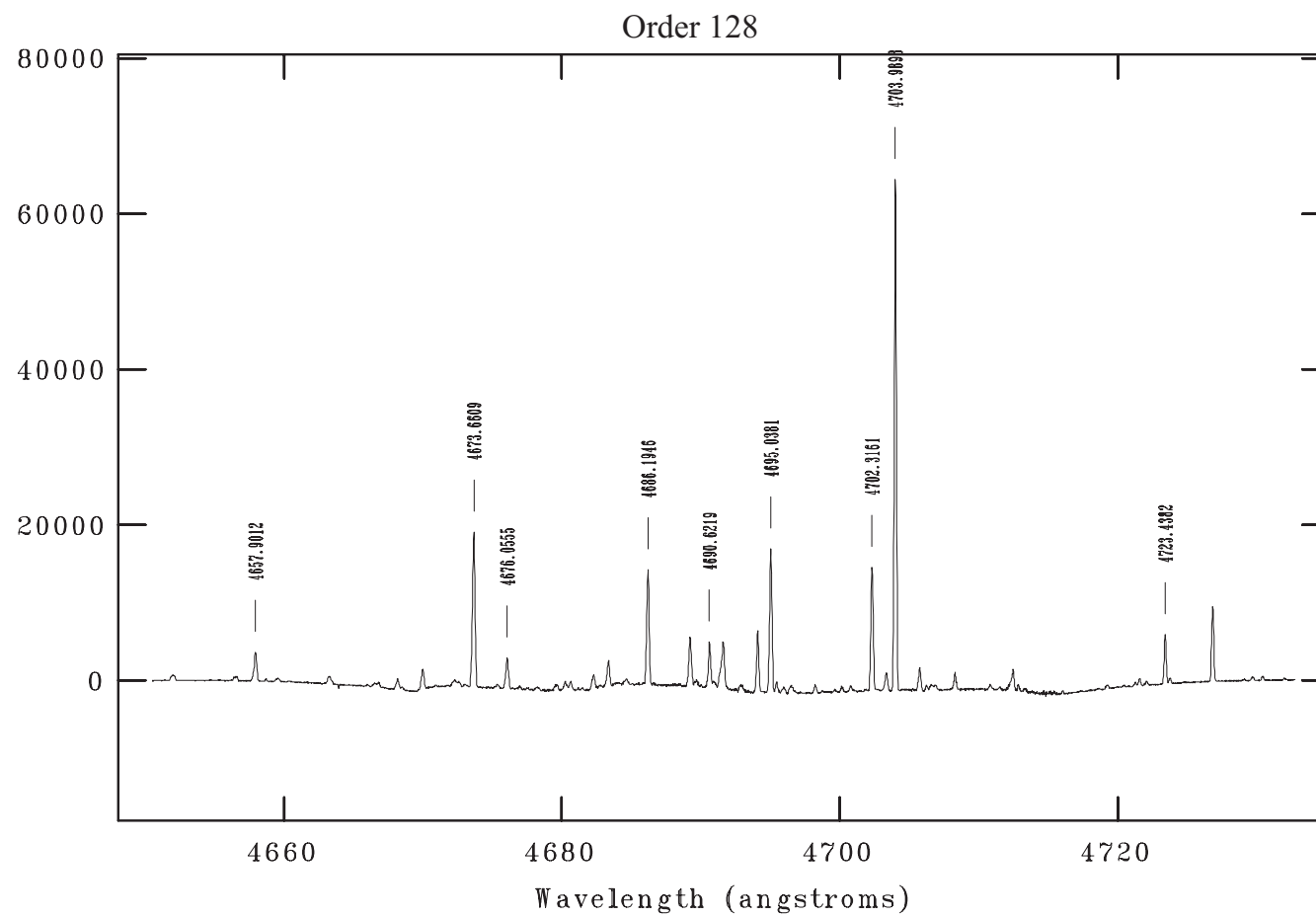


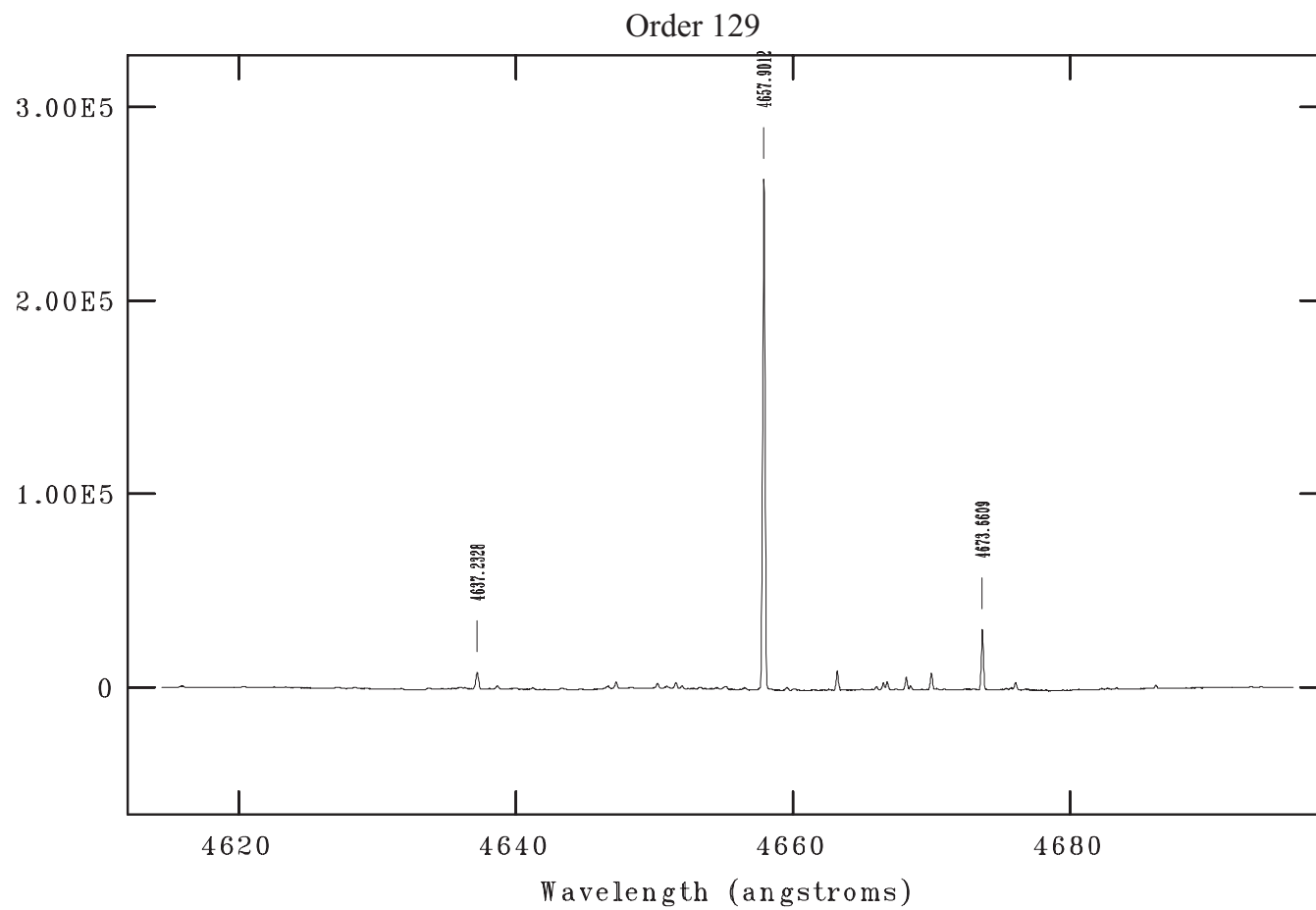


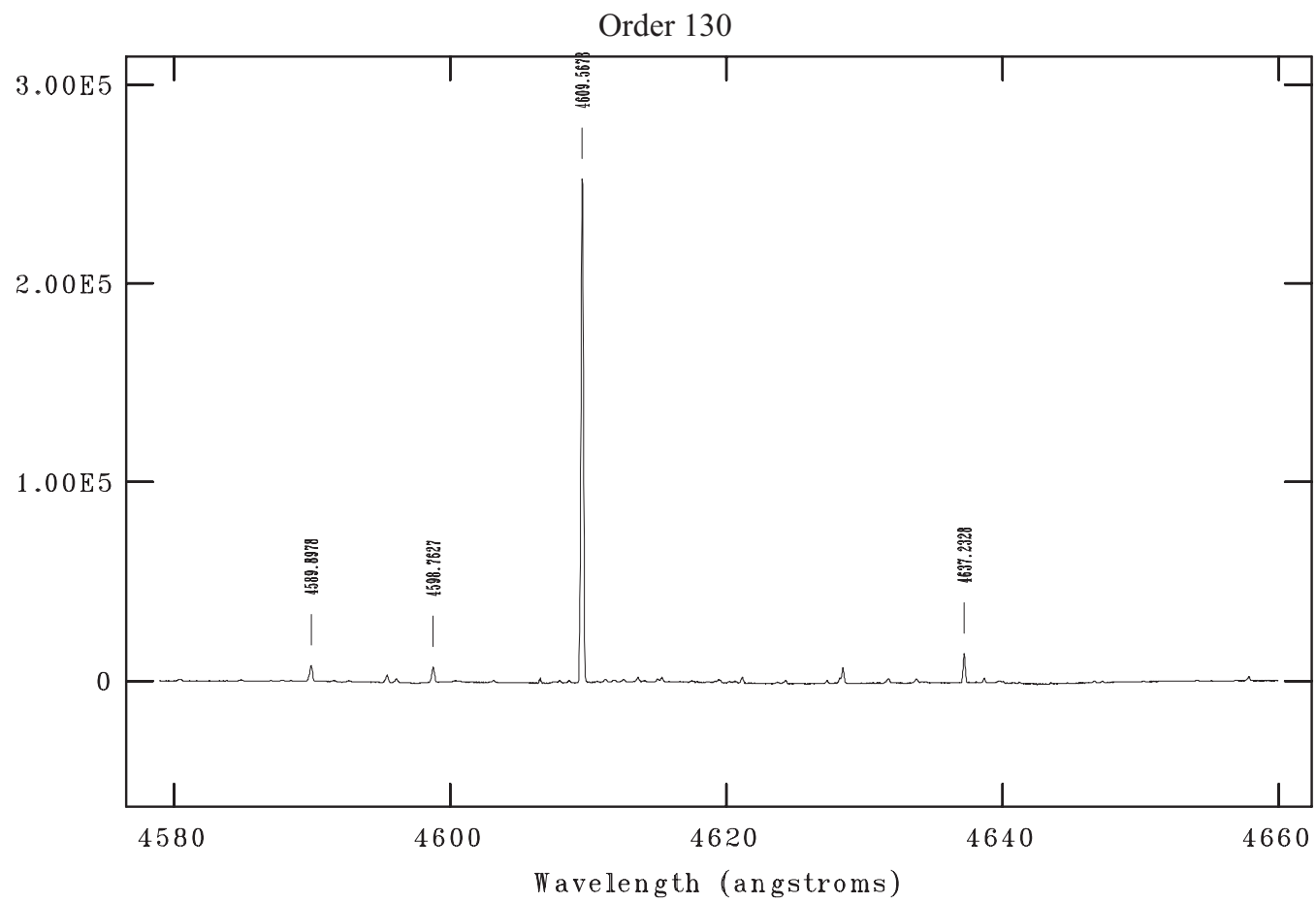


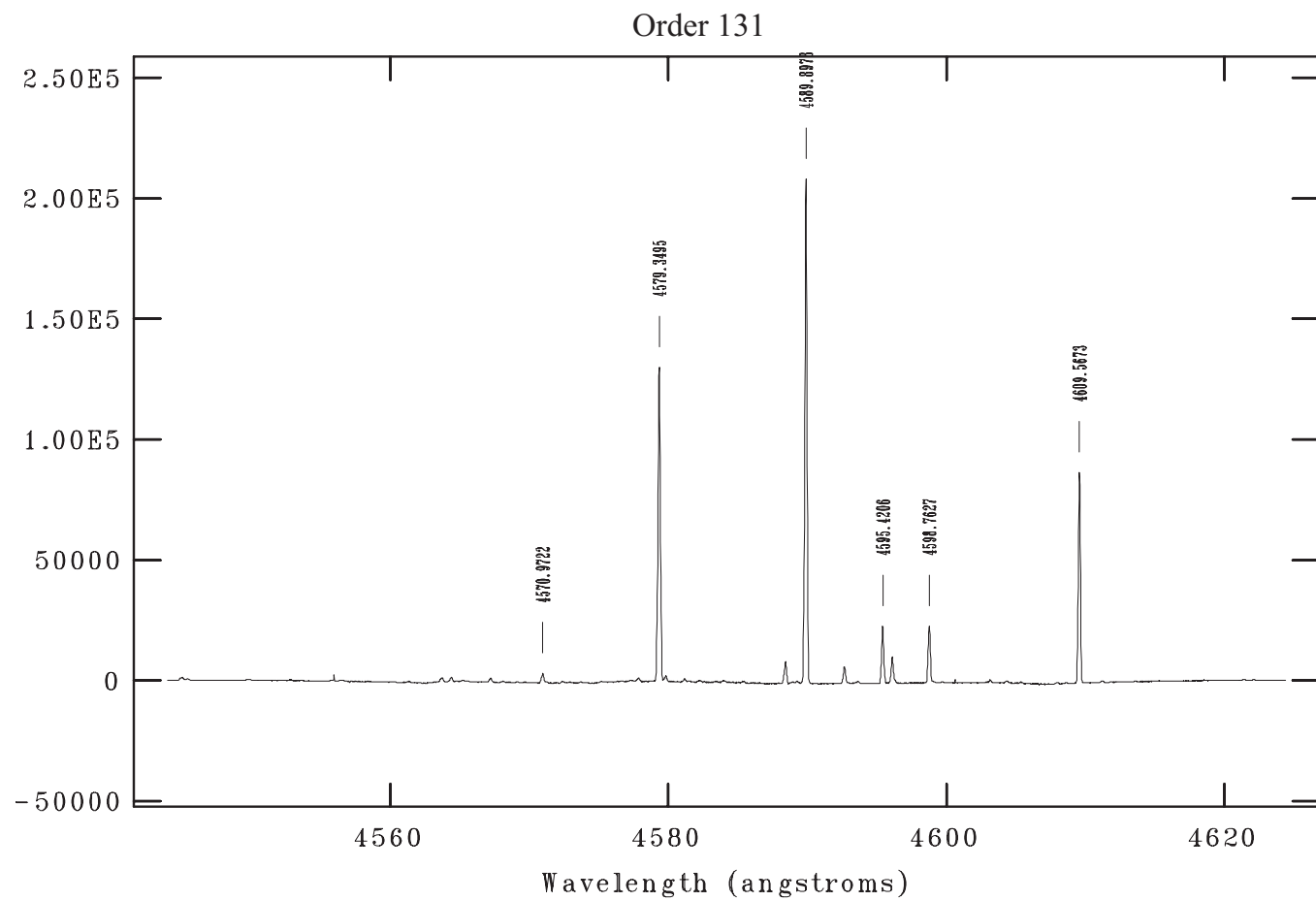


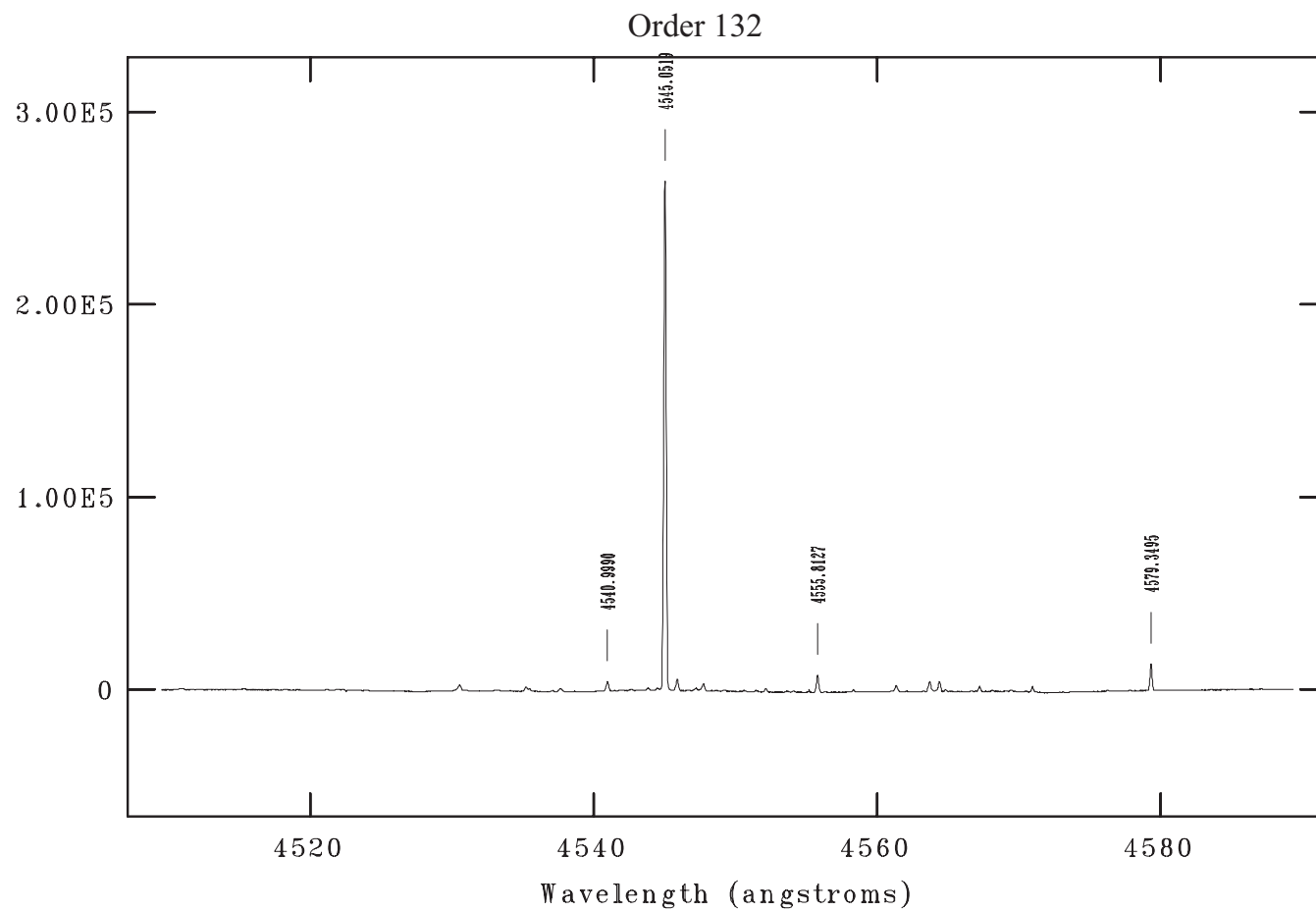


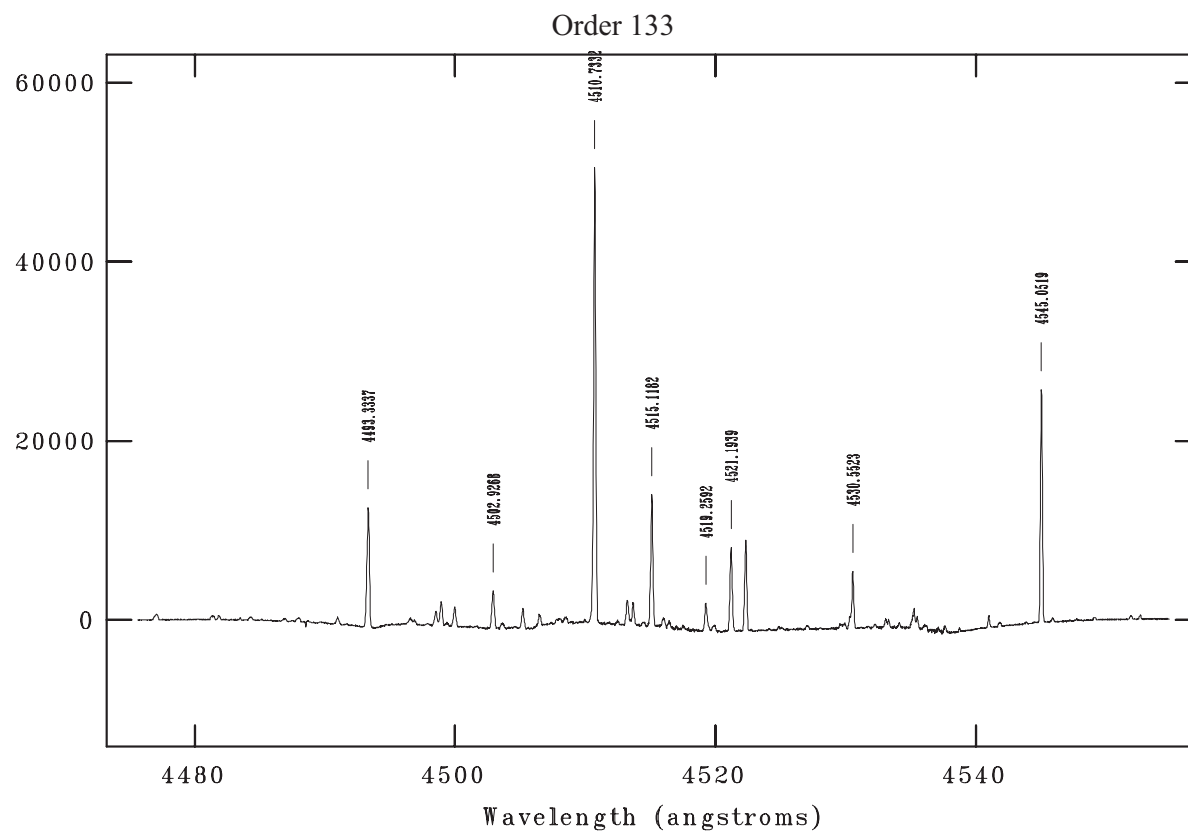


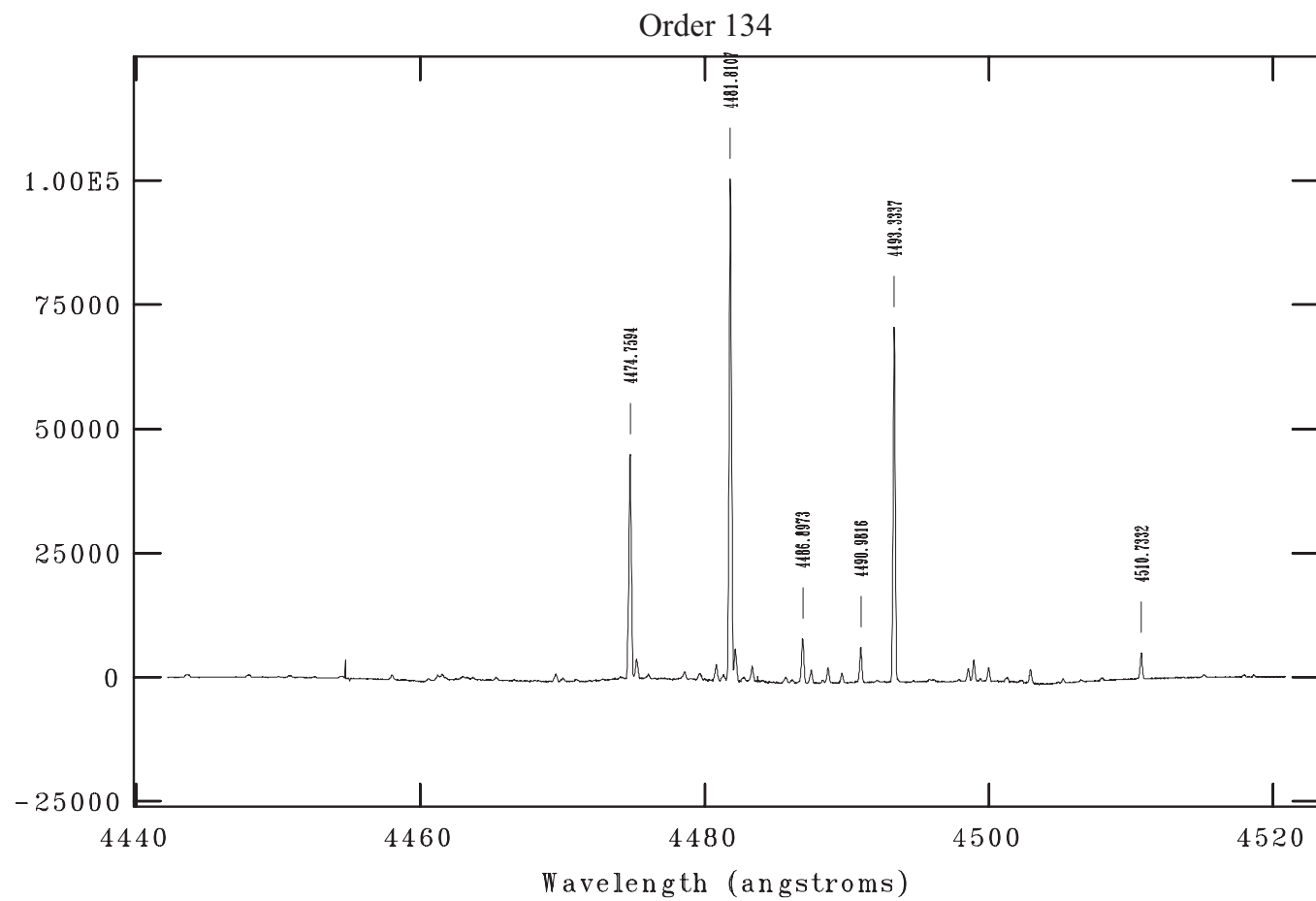


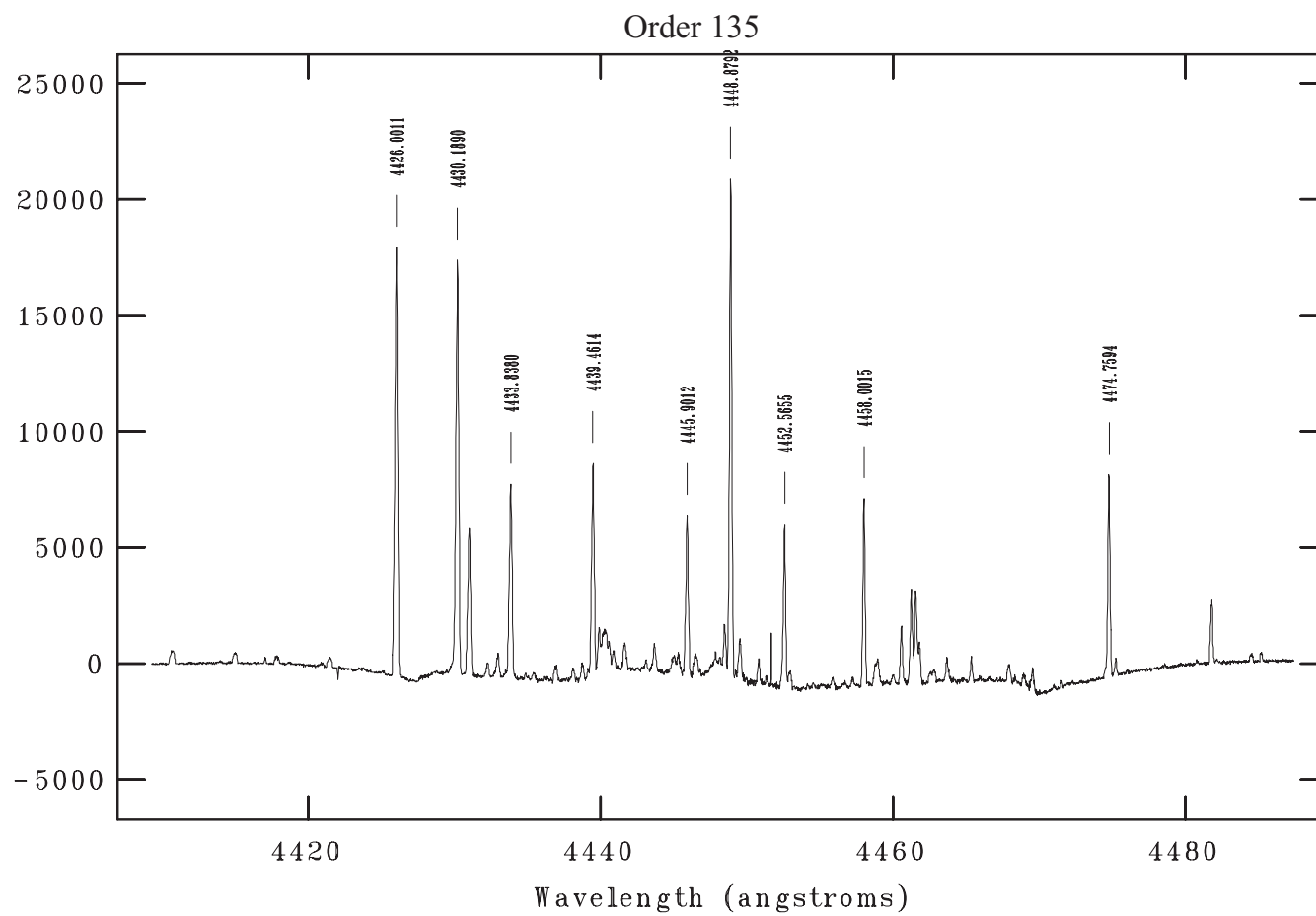


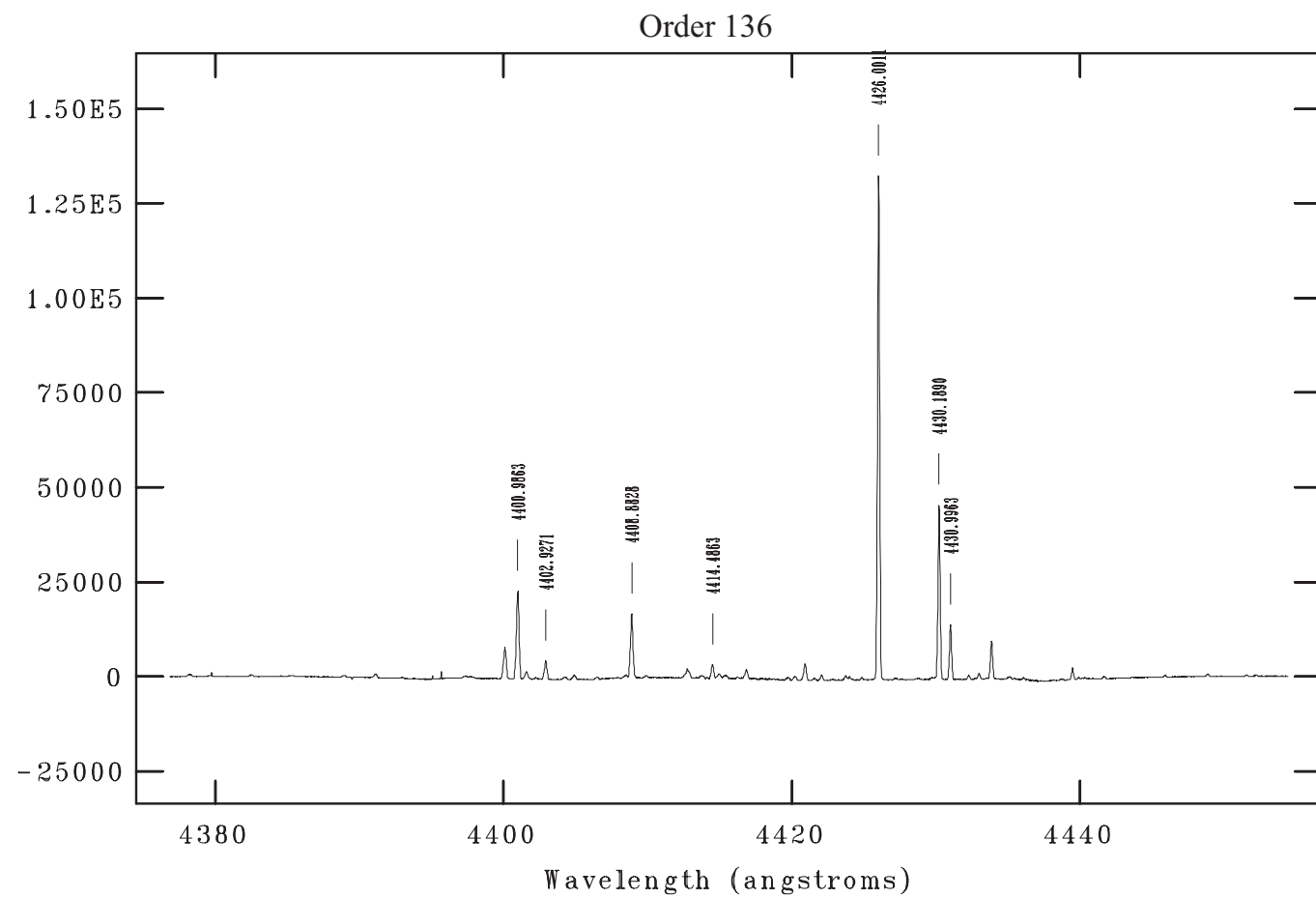


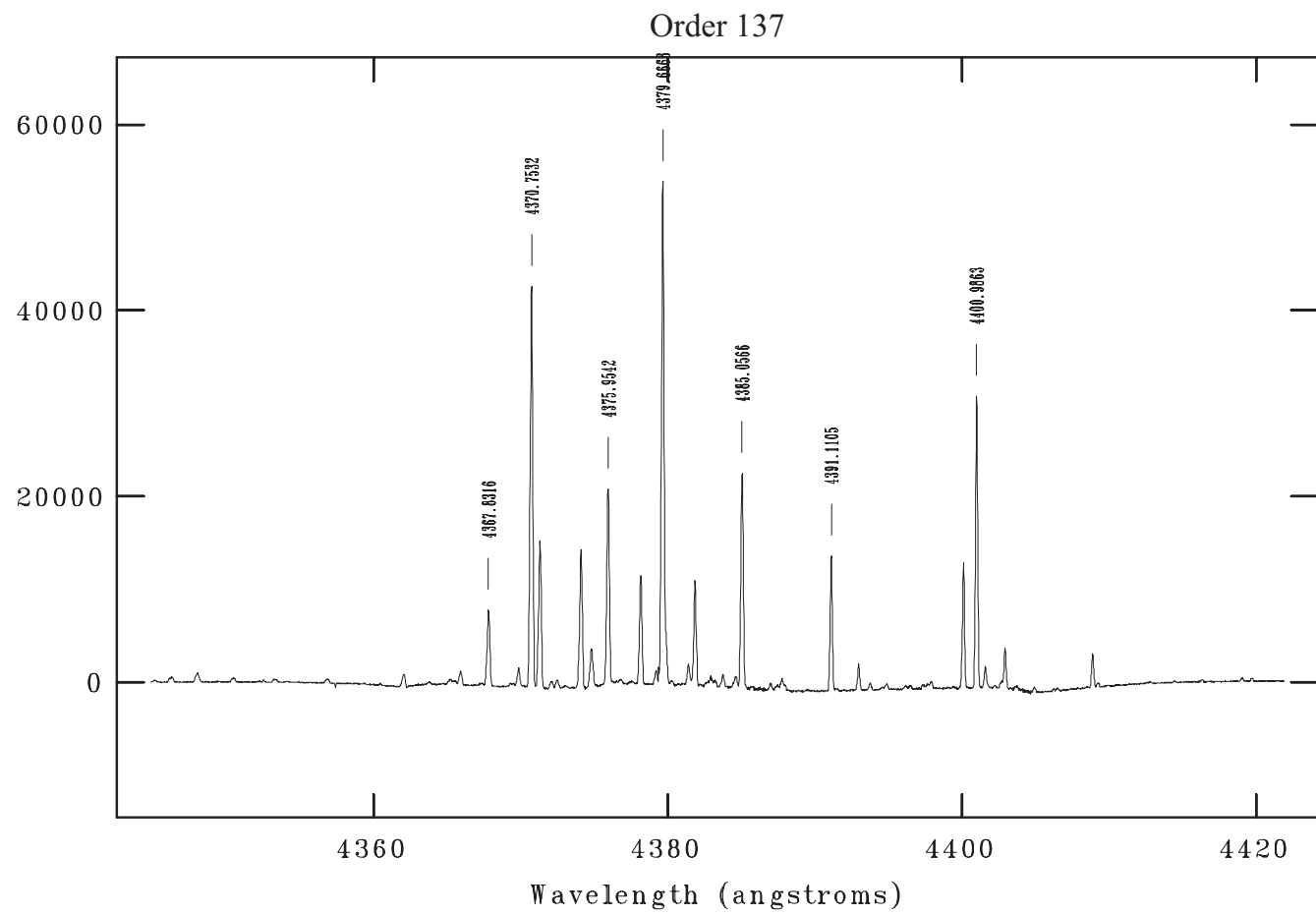


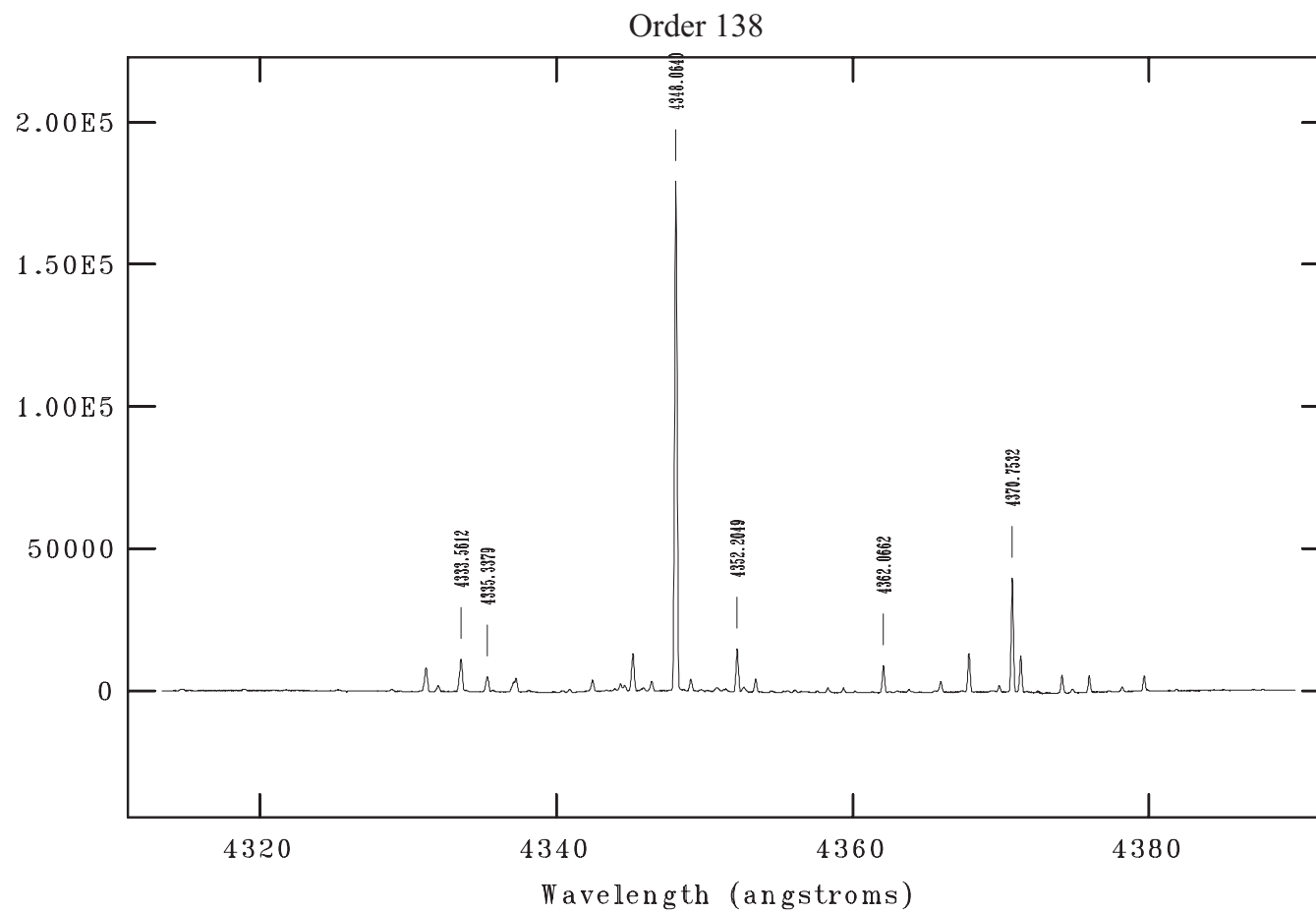


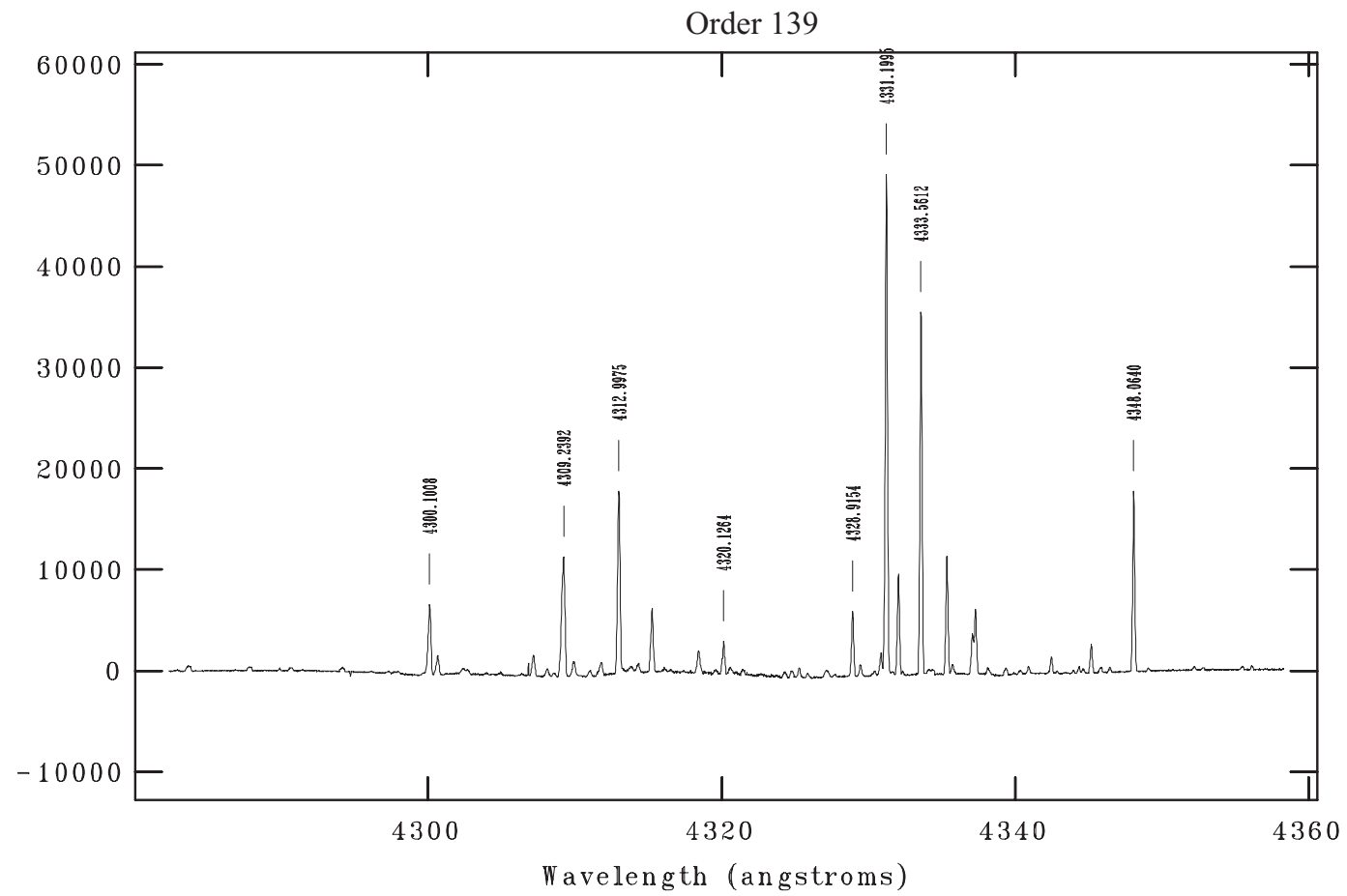


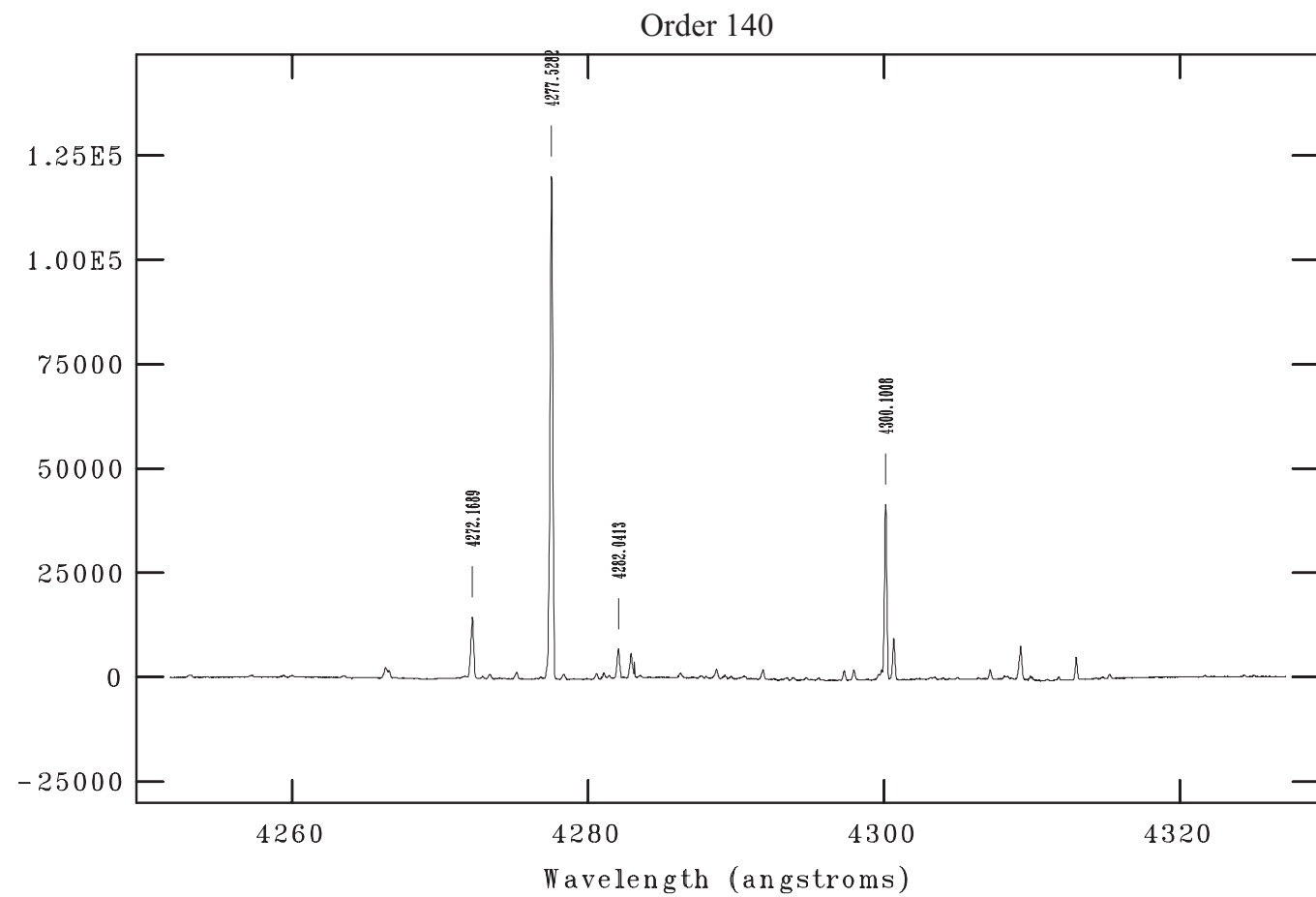


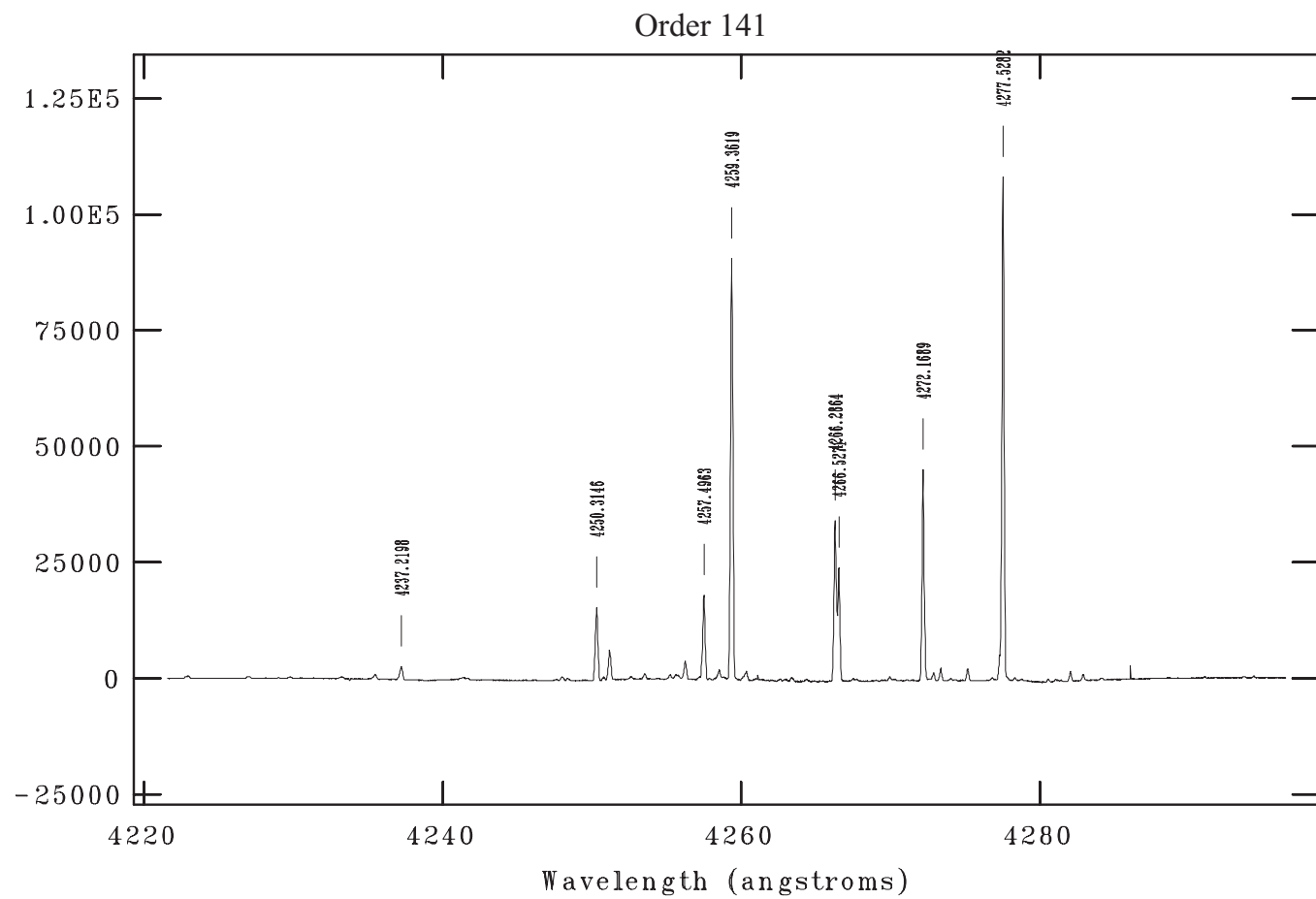




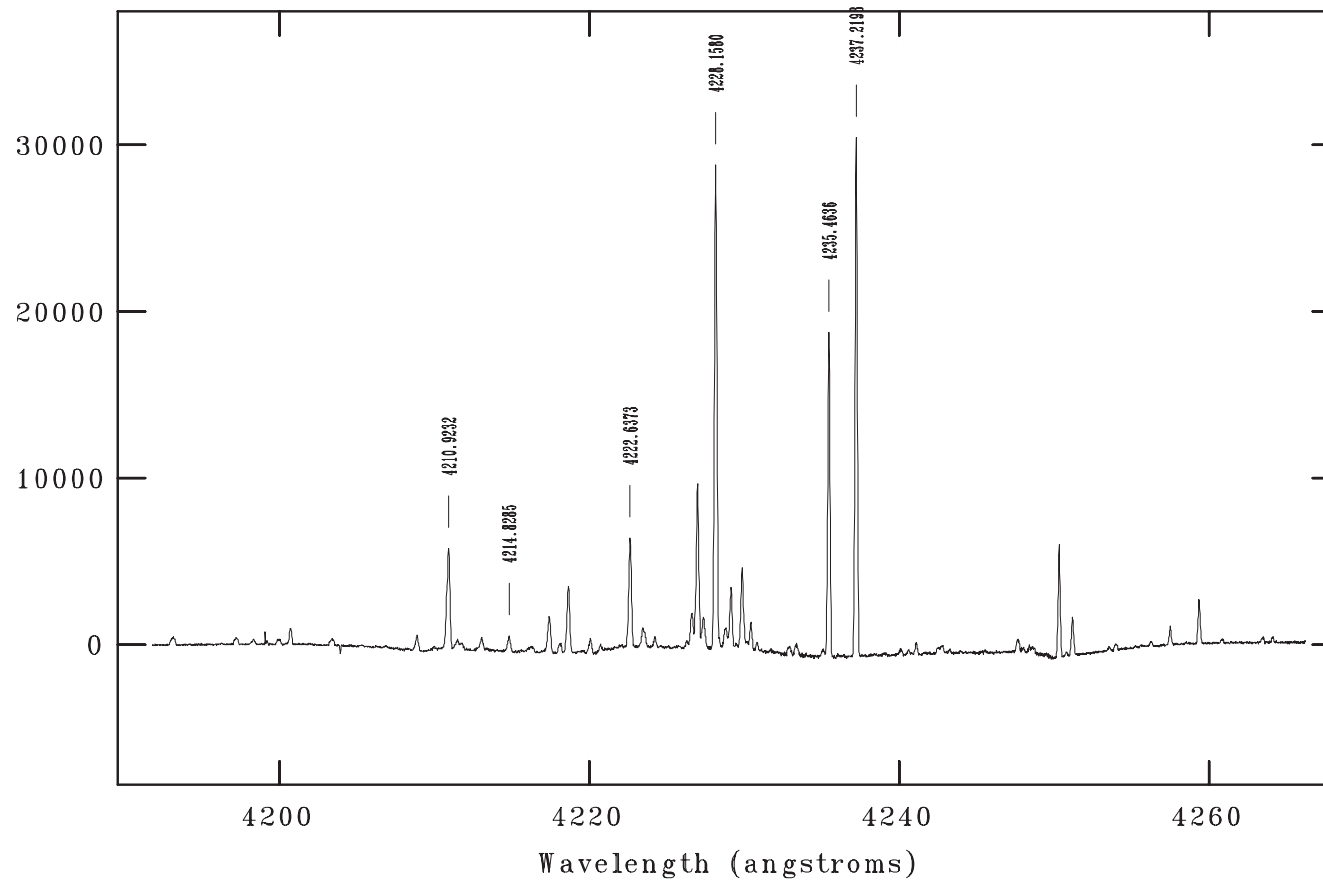


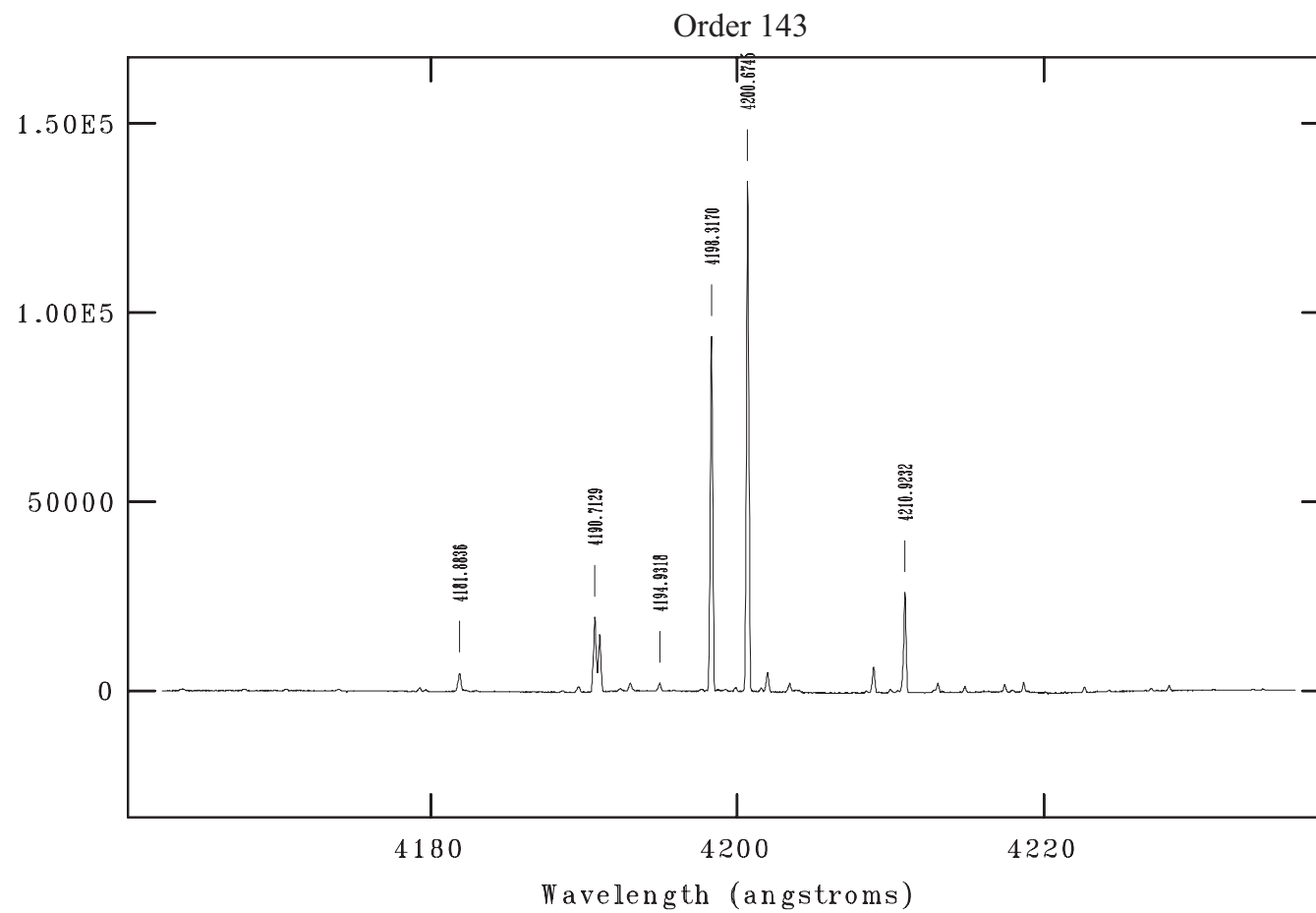


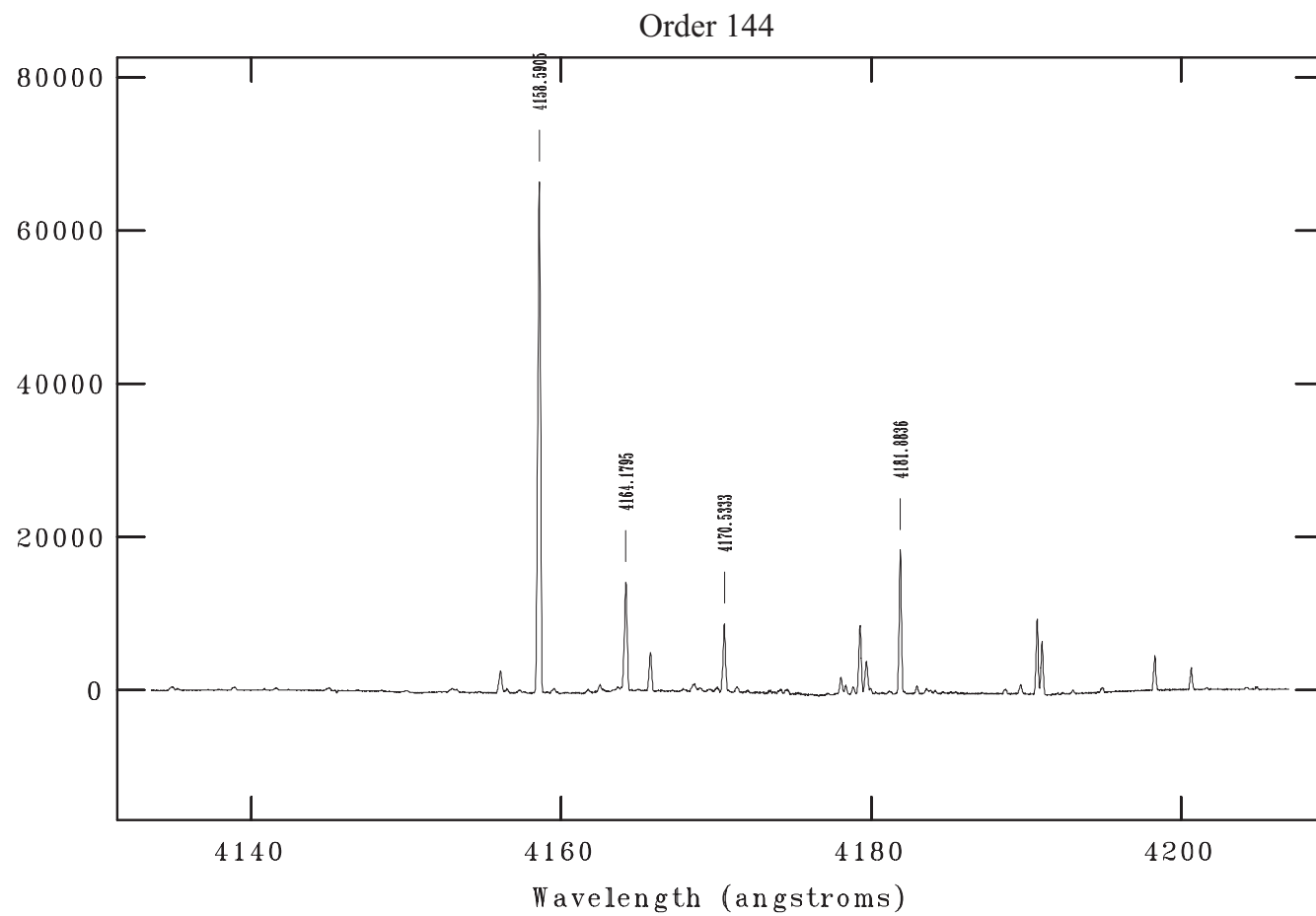


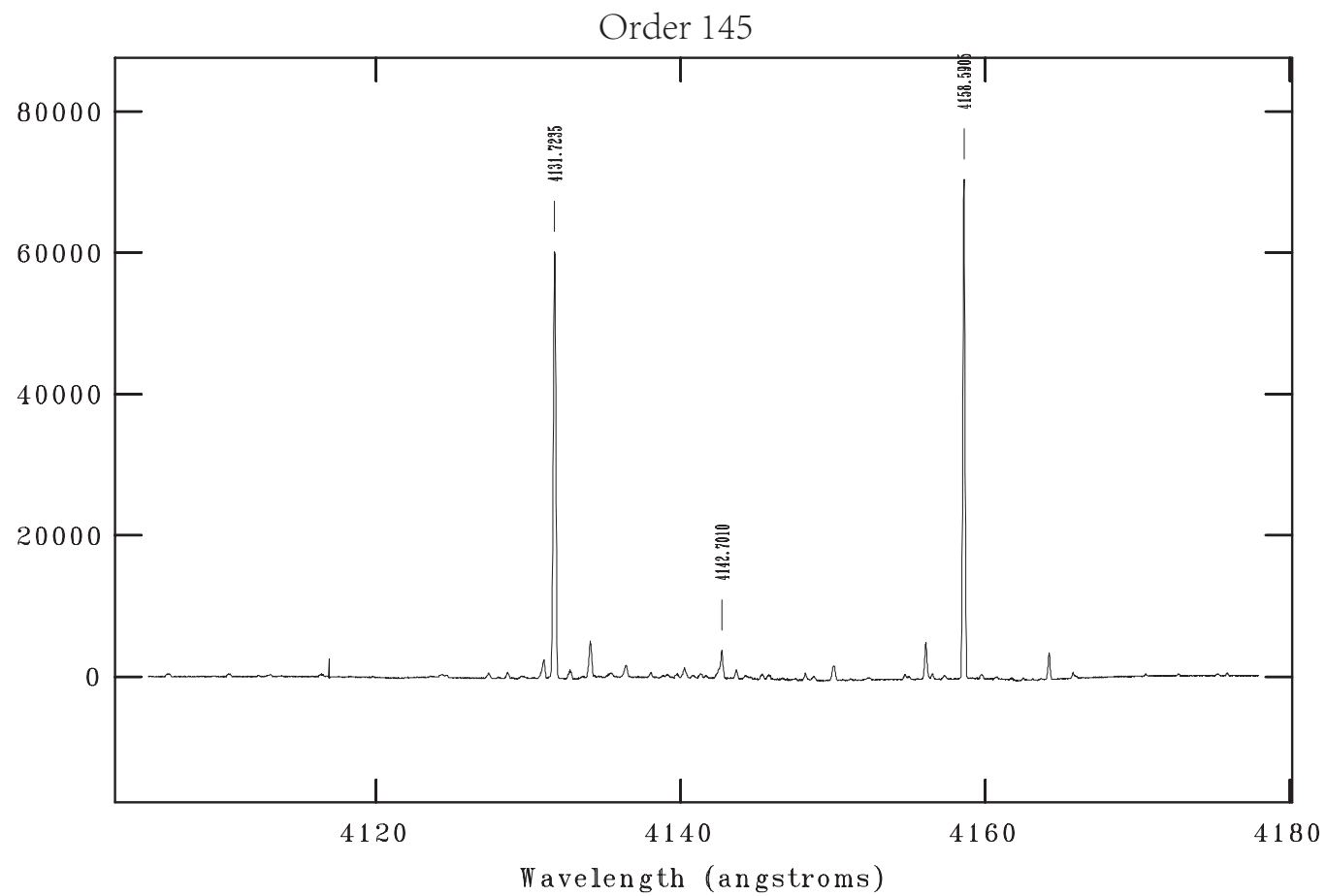


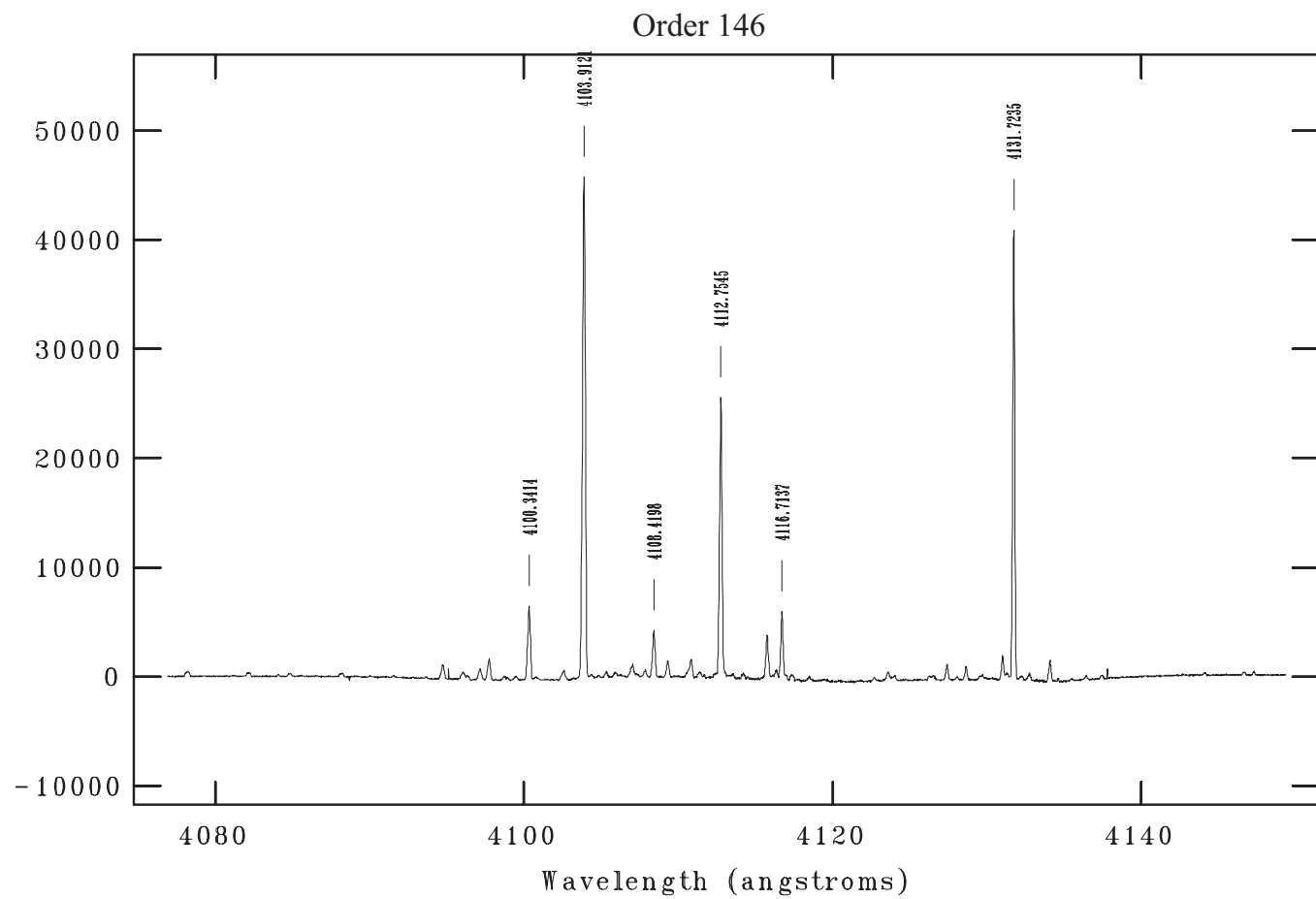
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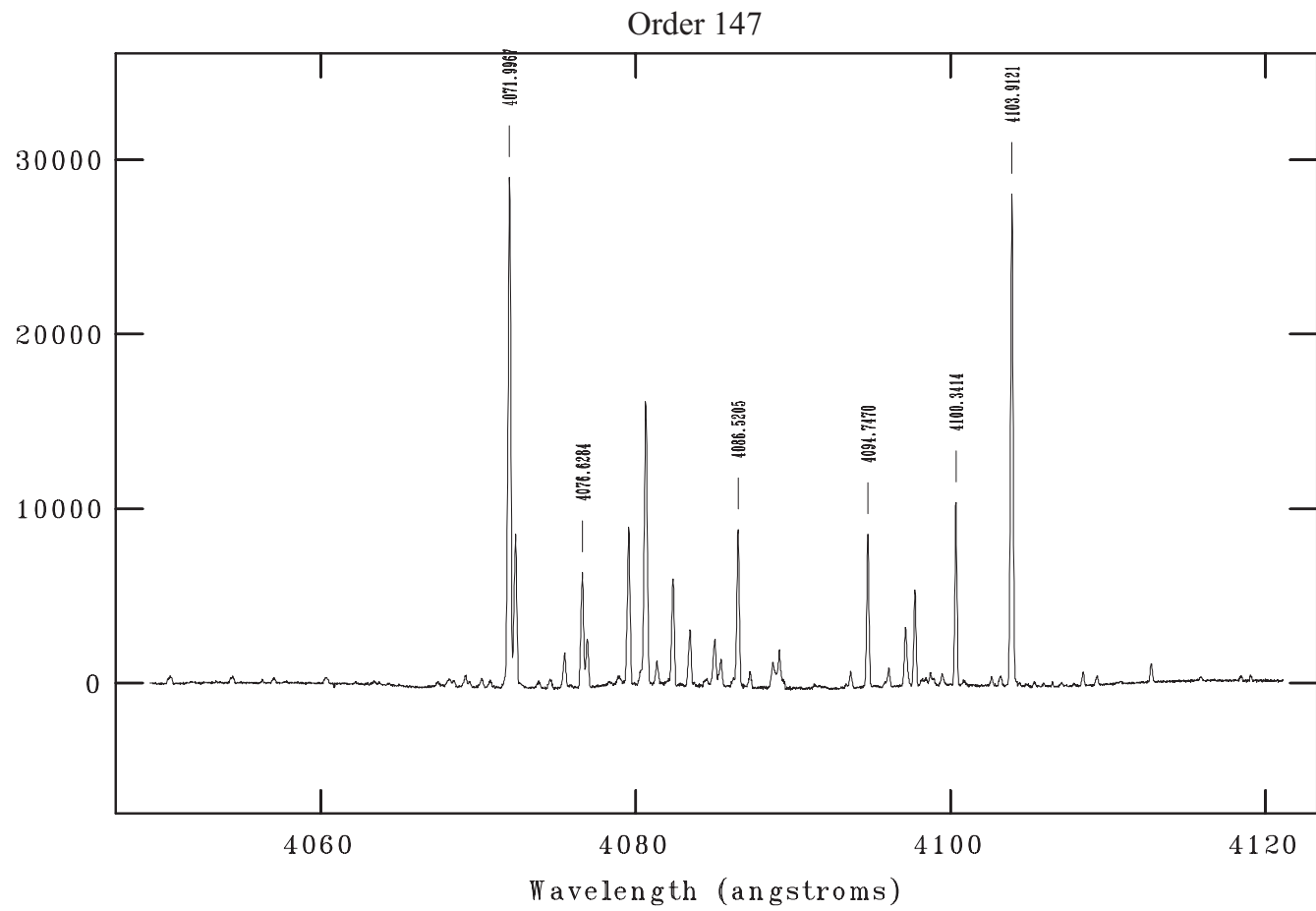


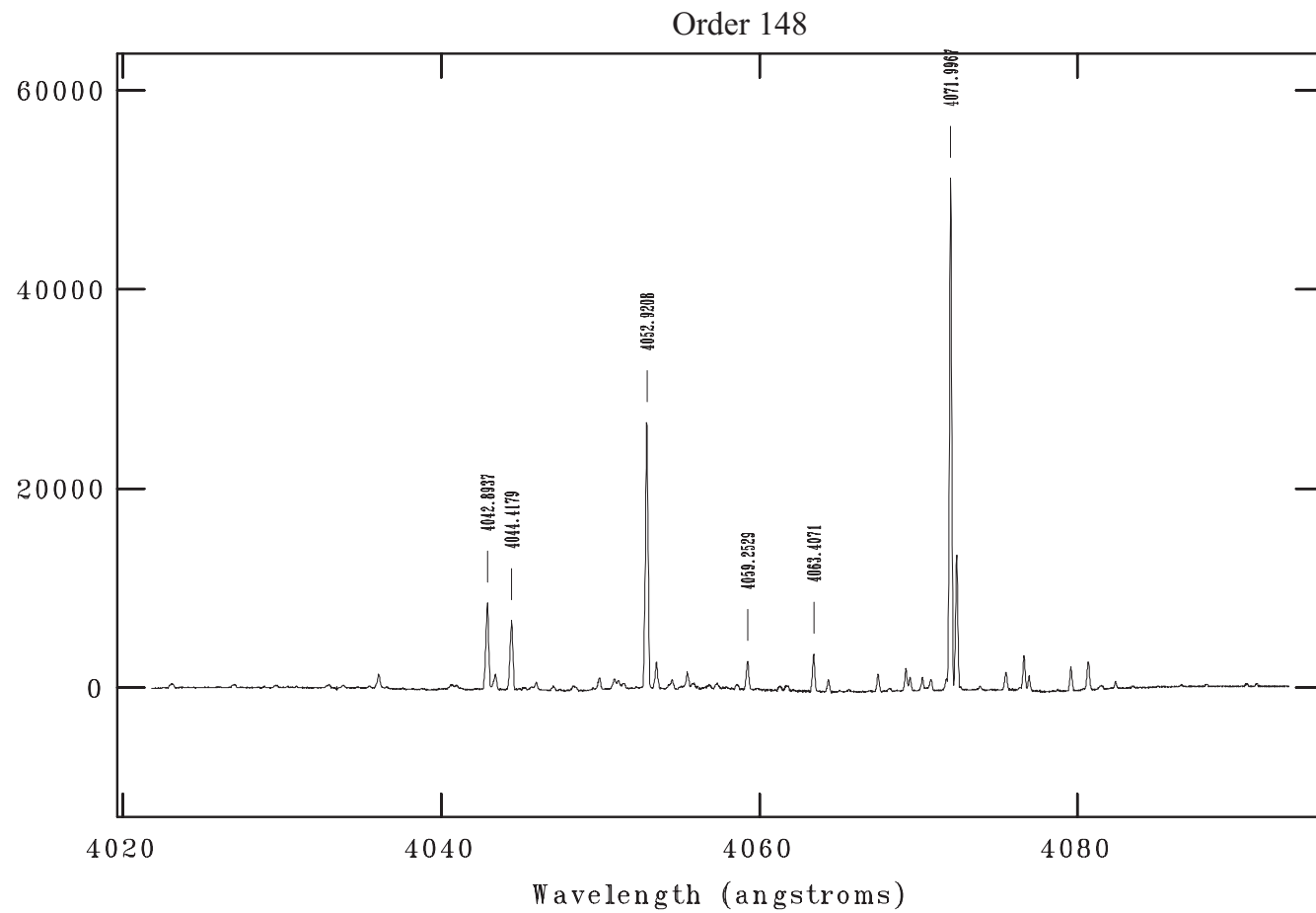


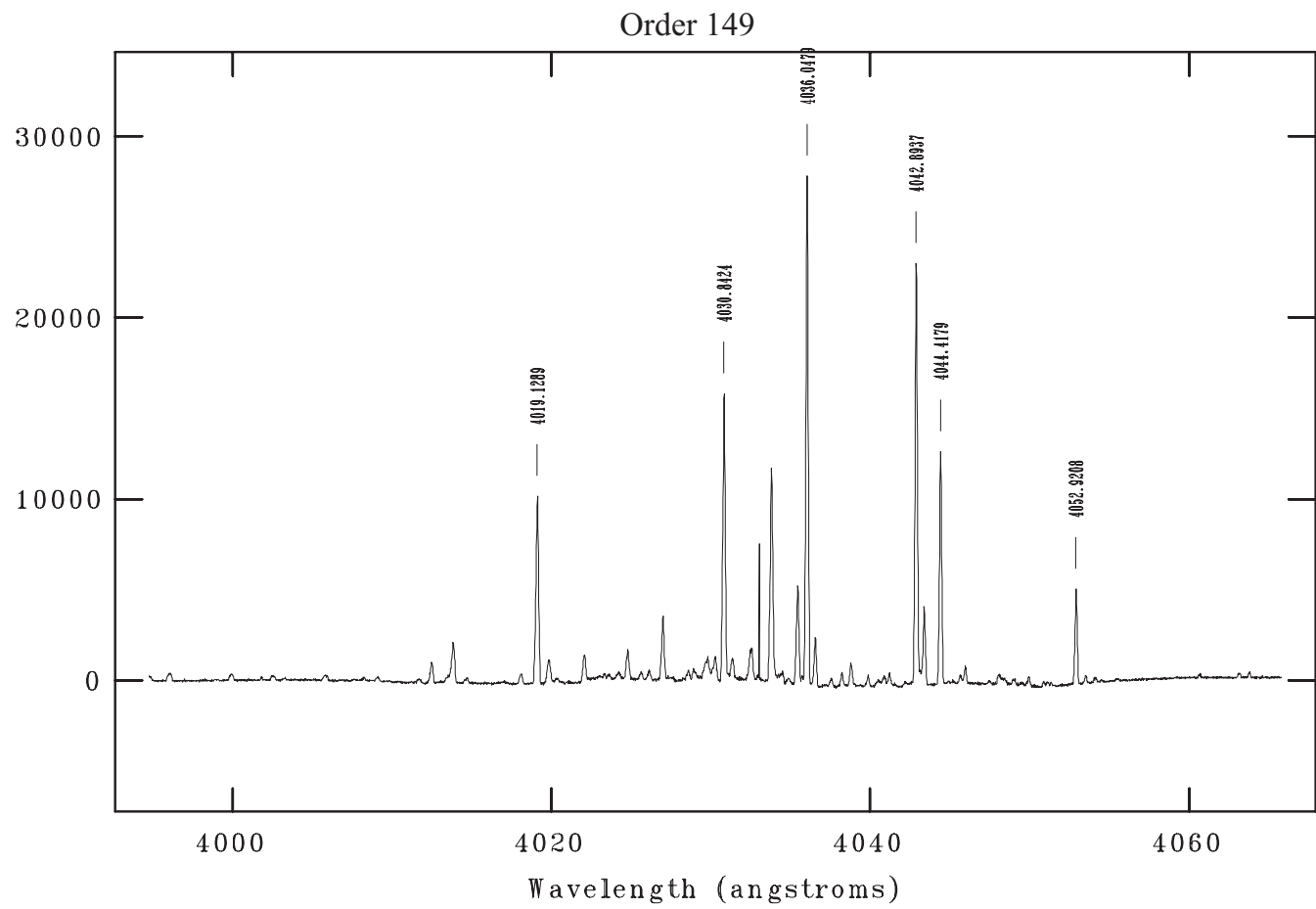


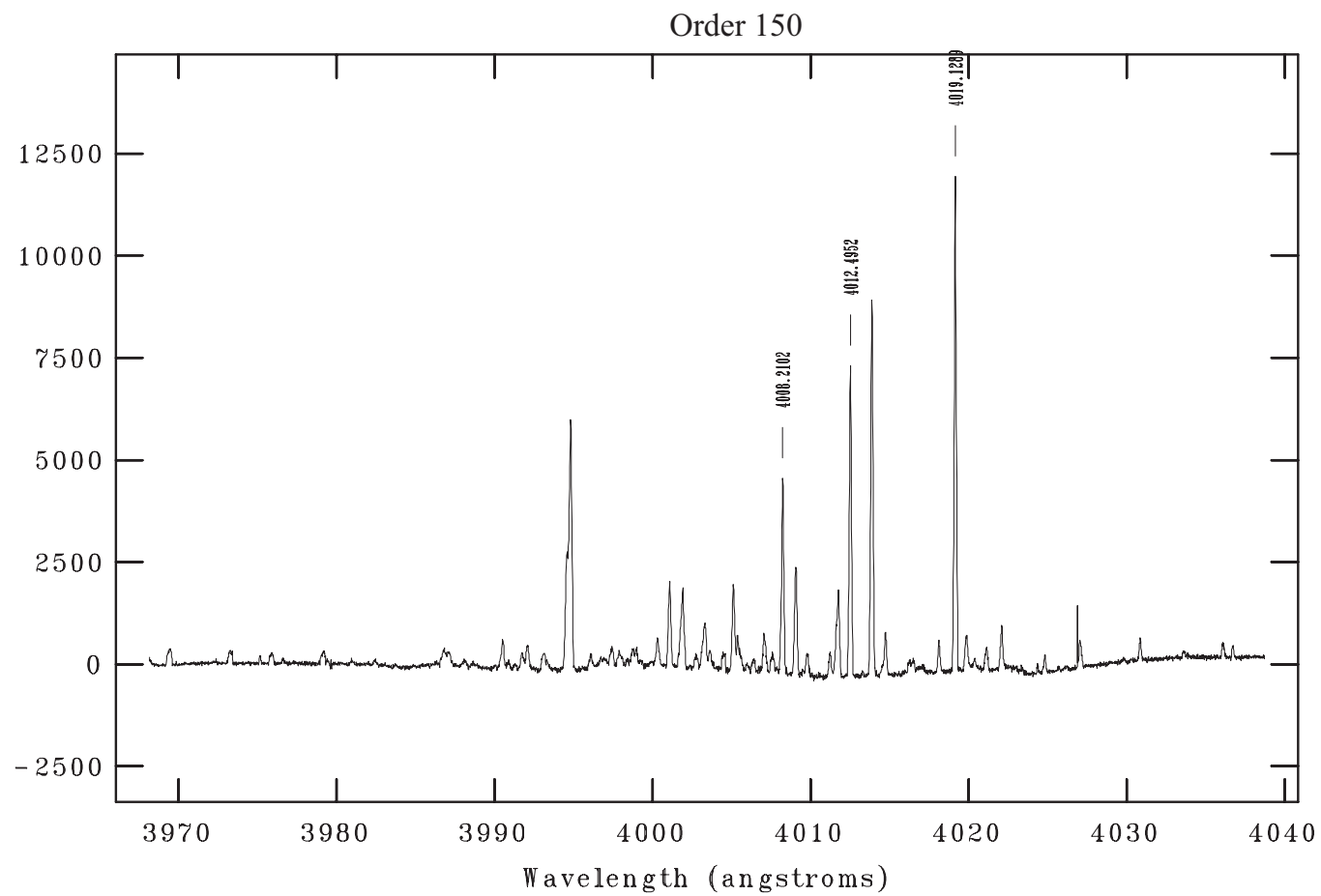




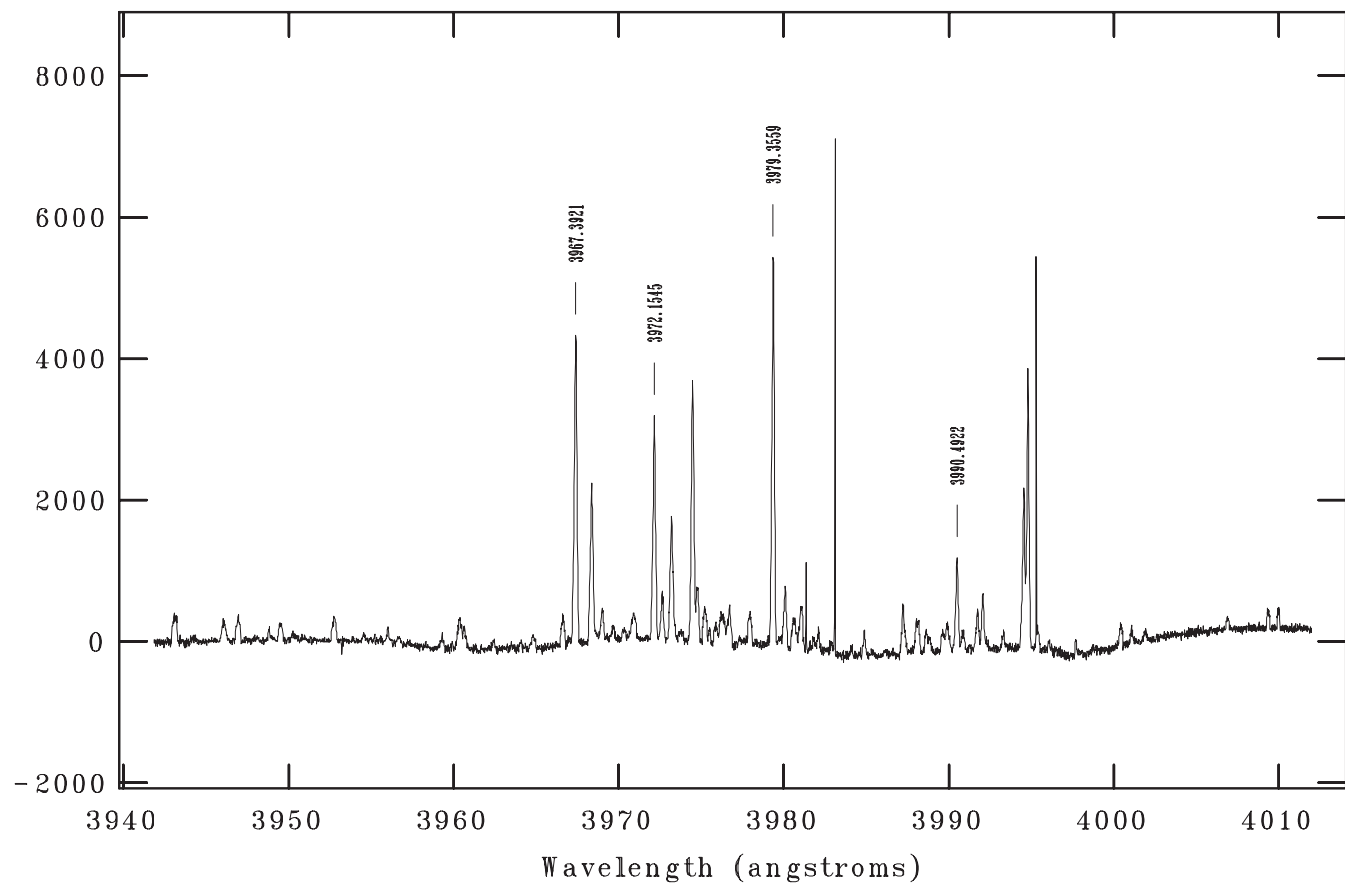


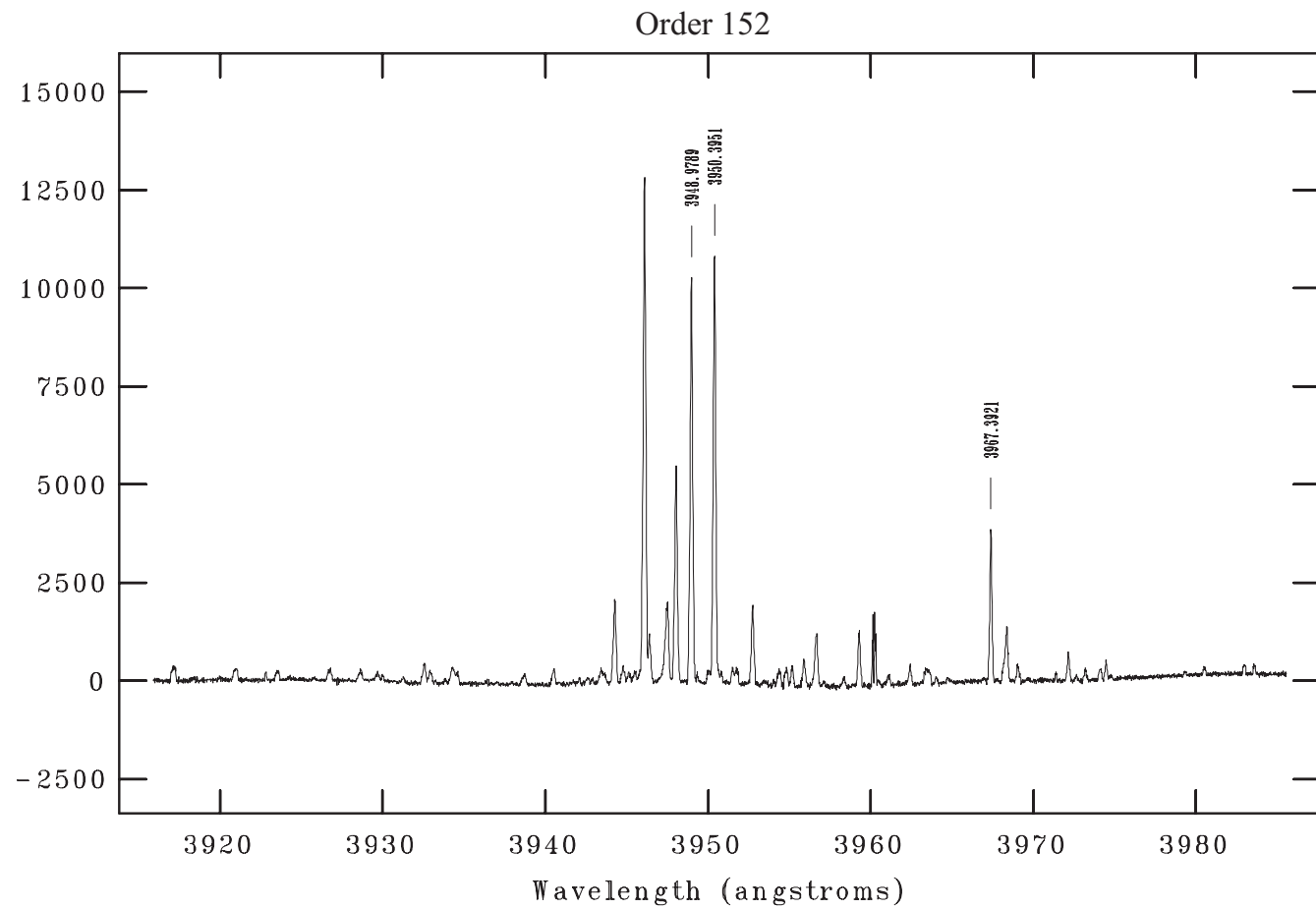






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