Fig. 1   ThAr #19 Hα − 1.

NOAO/IRAF V2.16.1 rz@jaen1 Thu 08:07:09 11-Nov-2021
[thar02.20210304.fit[*,20]]: 35. ap:20 beam:73

Hα

Wavelength (angstroms)

6531.3418
6538.112
6554.1603
6577.2146
6583.9060
6588.5396
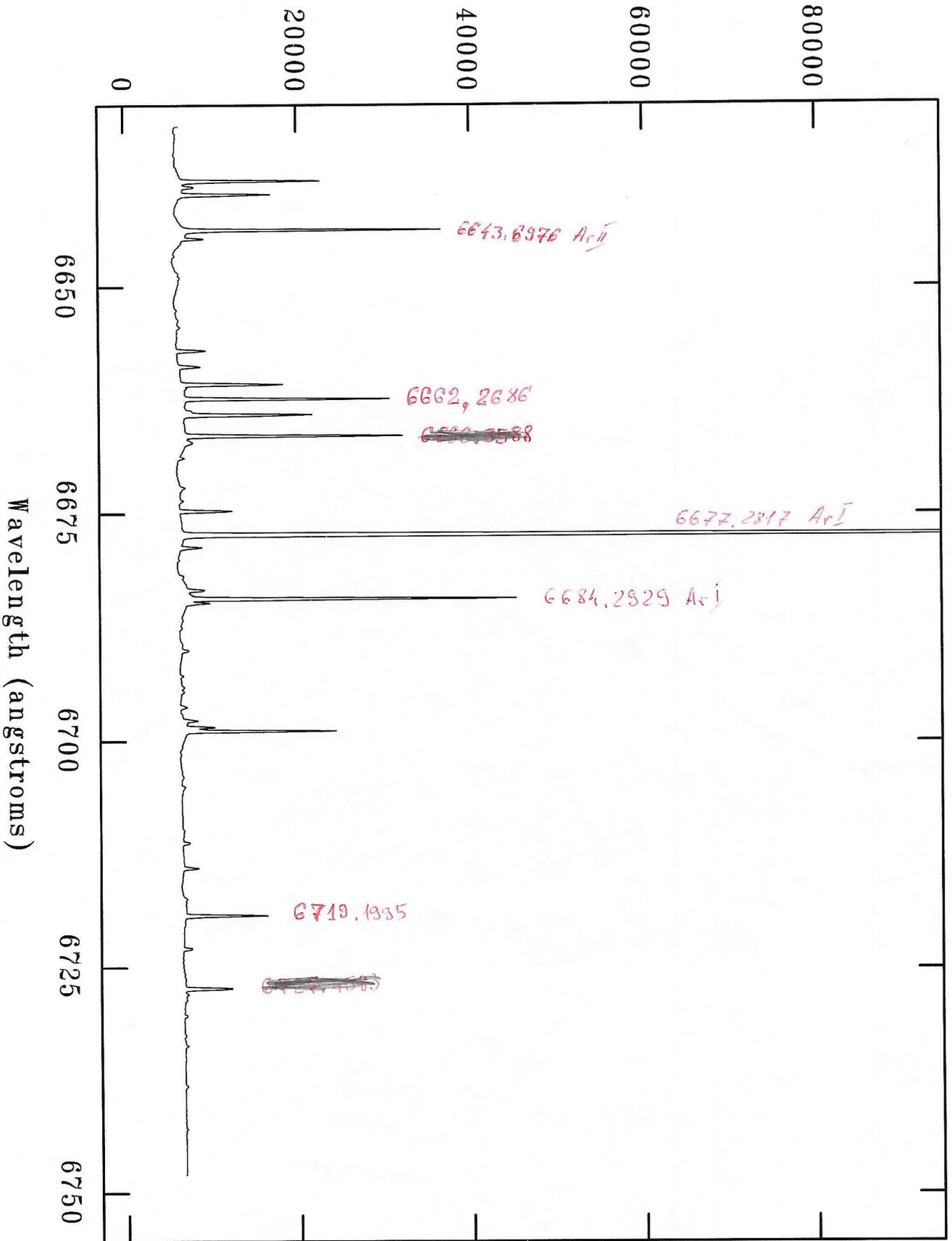6591.4845
6593.9381
6604.8534
6632.0837

*.fits
hedit @li.1
imagetyp
object add +

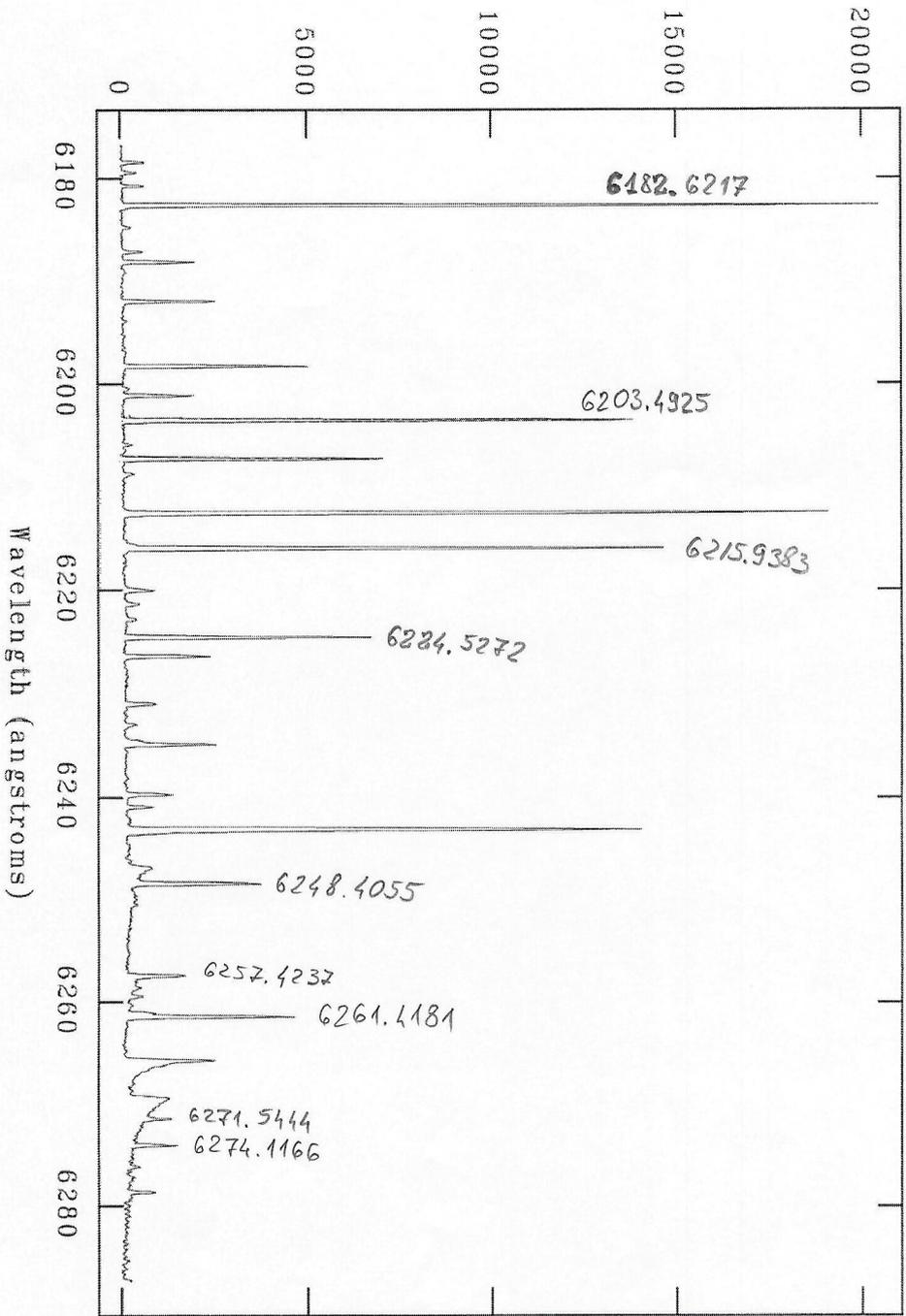Xorder = 6
yorder = 6
± 0.02 Å

NOAO/IRAF V2.14.1 rz@mars.astro.bas.bg Thu 14:06:21 20-Nov-2014
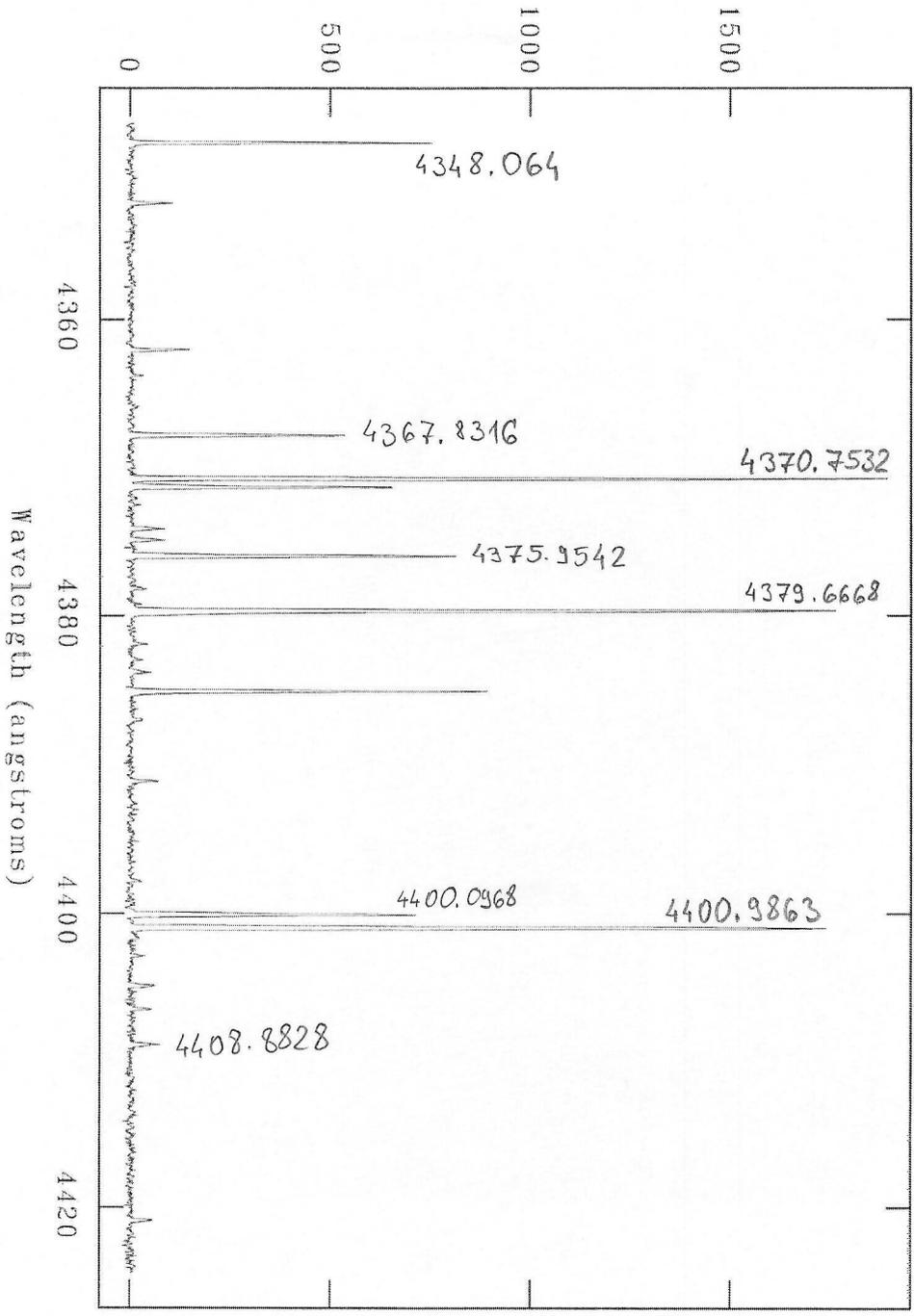[ThAr.Rozhen1.fits[*,15]]: 60. ap:15 beam:71

Wavelength (angstroms)

6643.6976 ArII

6662.2686

6666.3588

6677.2817 ArI

6684.2929 ArI

6719.1955

6725.1176

NOAO/IRAF rz@mars.astro.bas.bg Thu Nov 20 14:12:09 2014

#1-1

NOAO/IRAF V2.16.1 rzamanov@mars21 Wed 09:53:25 31-Aug-2022
[Flat_ThAr_25s_02.20220817.fit[*,25]]: 25. ap:25 beam:75

Wavelength (angstroms)

6182.6217
6203.4925
6215.9383
6224.5272
6248.4055
6257.4232
6261.4181
6271.5444
6274.1166

Hα + 4

NOAO/IRAF V2.16.1 rzamanov@mars21 Thu 11:39:34 31-Aug-2023
[ThAr_01.20230830.fit[*,56]]: 25. ap:56 beam:108

Wavelength (angstroms)

4348.064
4367.8316
4370.7532
4375.9542
4379.6668
4400.0968
4400.9863
4408.8828

#56
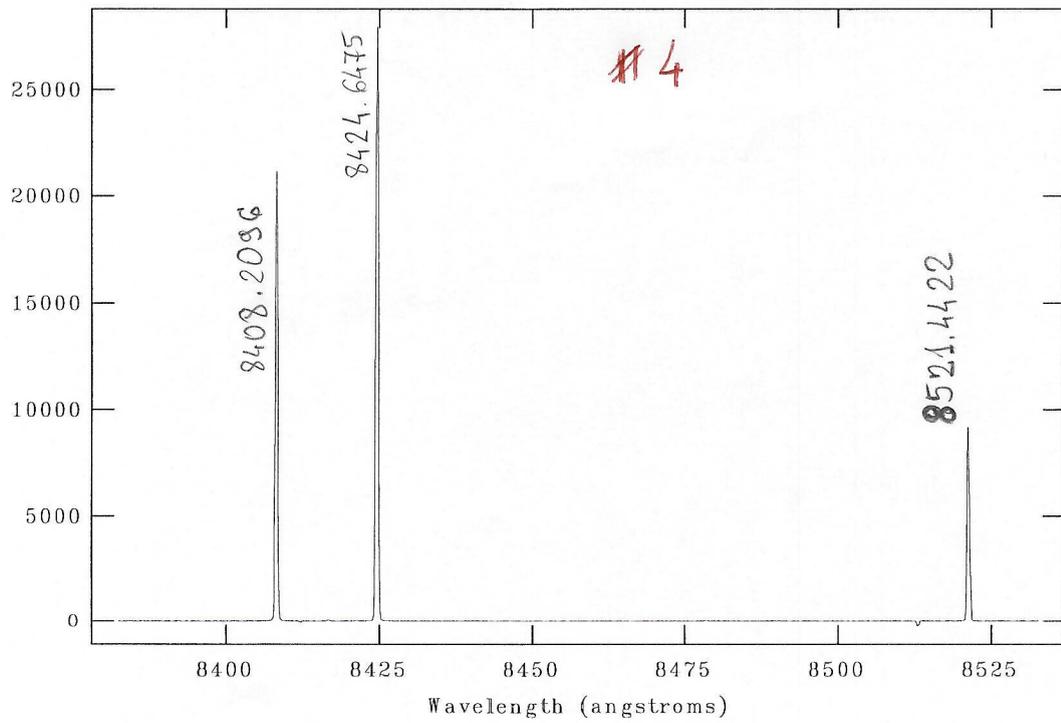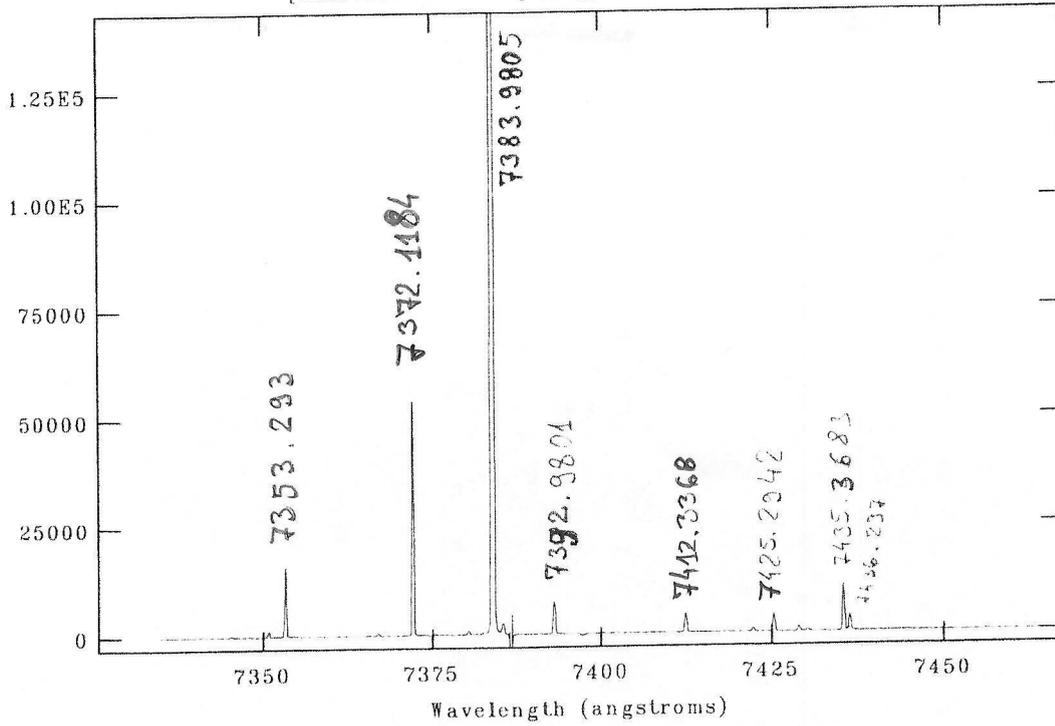Hα + 36

#4   Hβ – 16   #4

NOAO/IRAF V2.16.1 rzamanov@mars21 Thu 08:14:11 31-Aug-2023
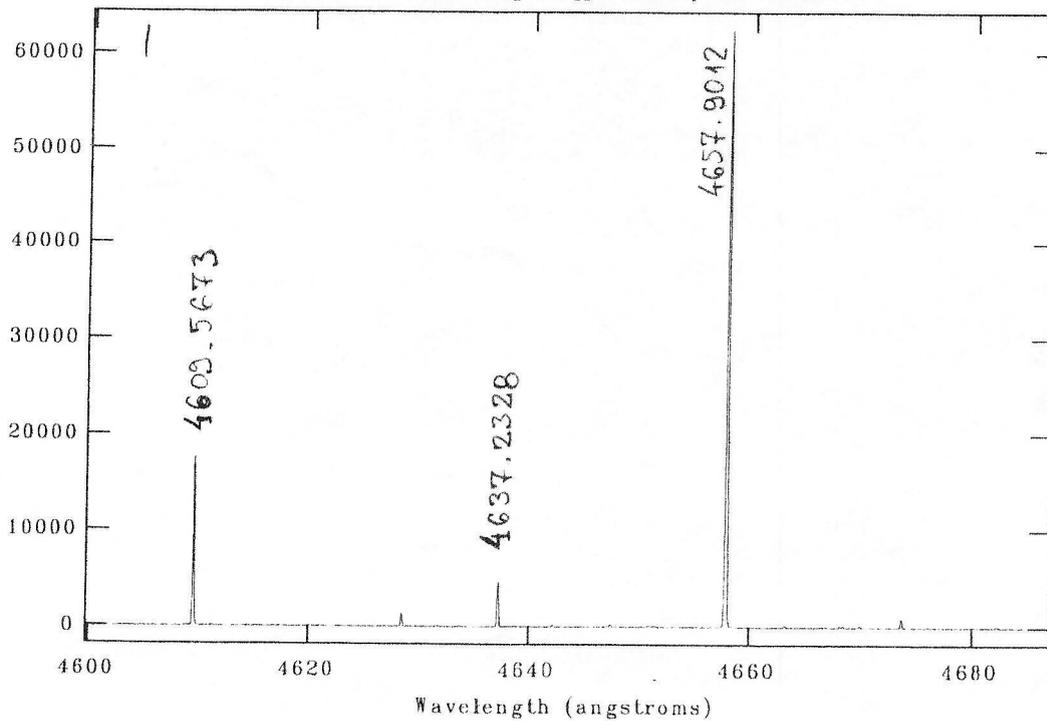[ThAr_01.20230829.fit[*,4]]: 25. ap:4 beam:56

#4

8408.2096
8424.6475
8521.4422

#12   H$_\alpha$ - 8

Plot showing peaks labeled:
- 7353.293
- 7372.1184
- 7383.9805
- 7392.9804
- 7412.3368
- 7425.2942
- 7435.3683
- 7436.234

Y-axis: 0, 25000, 50000, 75000, 1.00E5, 1.25E5
X-axis: Wavelength (angstroms) — 7350, 7375, 7400, 7425, 7450

#50   H$_\alpha$ +30

Plot showing peaks labeled:
- 4609.5673
- 4637.2328
- 4657.9012

Y-axis: 0, 10000, 20000, 30000, 40000, 50000, 60000
X-axis: Wavelength (angstroms) — 4600, 4620, 4640, 4660, 4680

NOAO/IRAF V2.16.1 rzamanov@mars21 Wed 07:45:22 12-Mar-2025
[ThAr-60-2.20250309.fit[*,44]]: 60. ap:44 beam:97

Wavelength (angstroms)

4847.8095

4865.910

4879.8635

4889.0422

4904.7516

Hβ
Hα + 25