

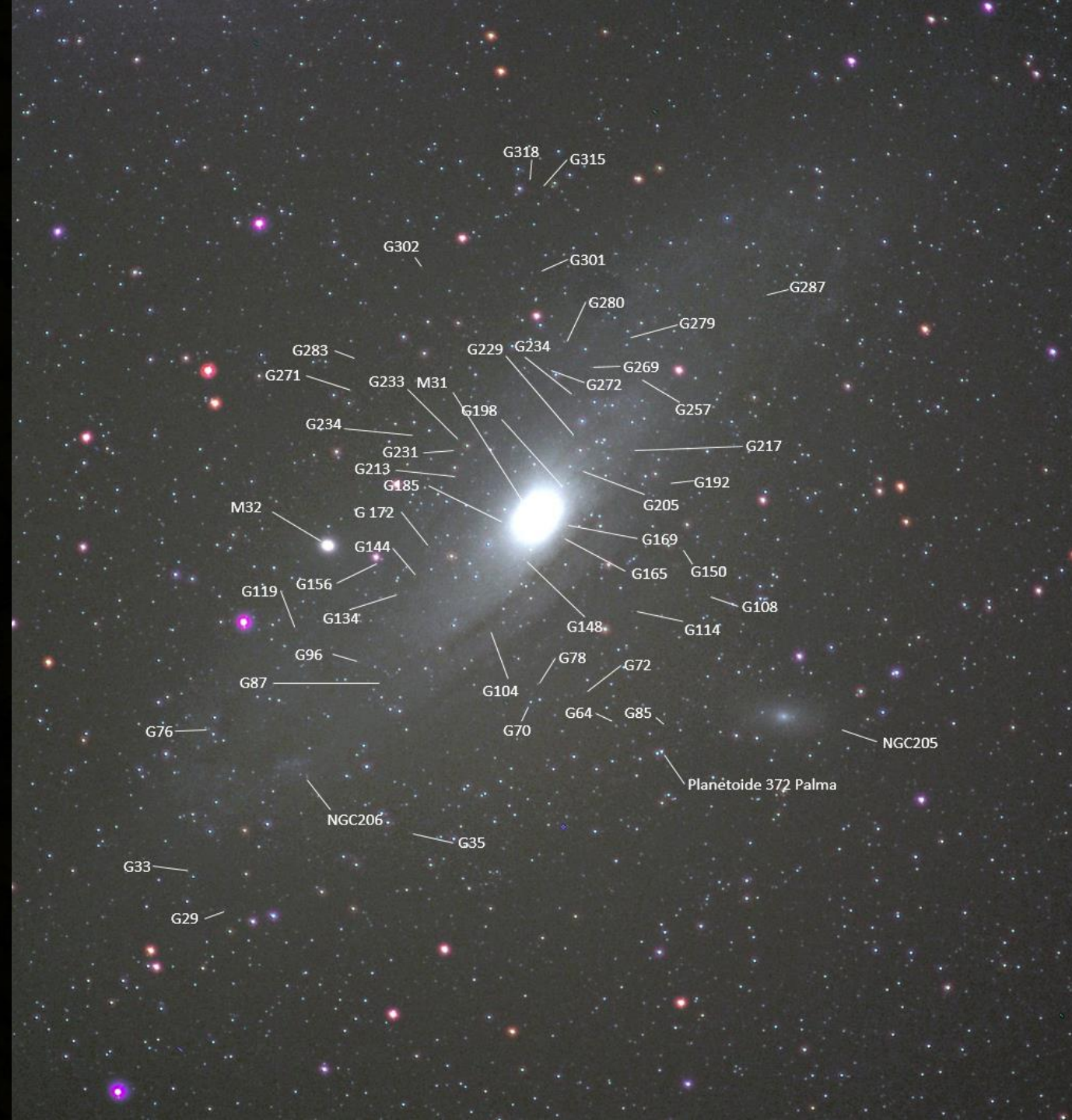
A thick black L-shaped frame surrounds the text. It starts at the top left, goes right, then down, then right again, and finally down to the bottom right corner.

PROFIELWERKSTUK SPECTROSCOPIE

Loek Hol







Begin van een interesse

- Mijn vader
- Eerste keren waarnemen
- Eerste foto's
- Pentax 300mm f4
- Andere hobby's



Profielwerkstuk

- 5^e klas
- Natuurkunde
- Astronomie: maar wat?
- Doel
- Spectroscopie

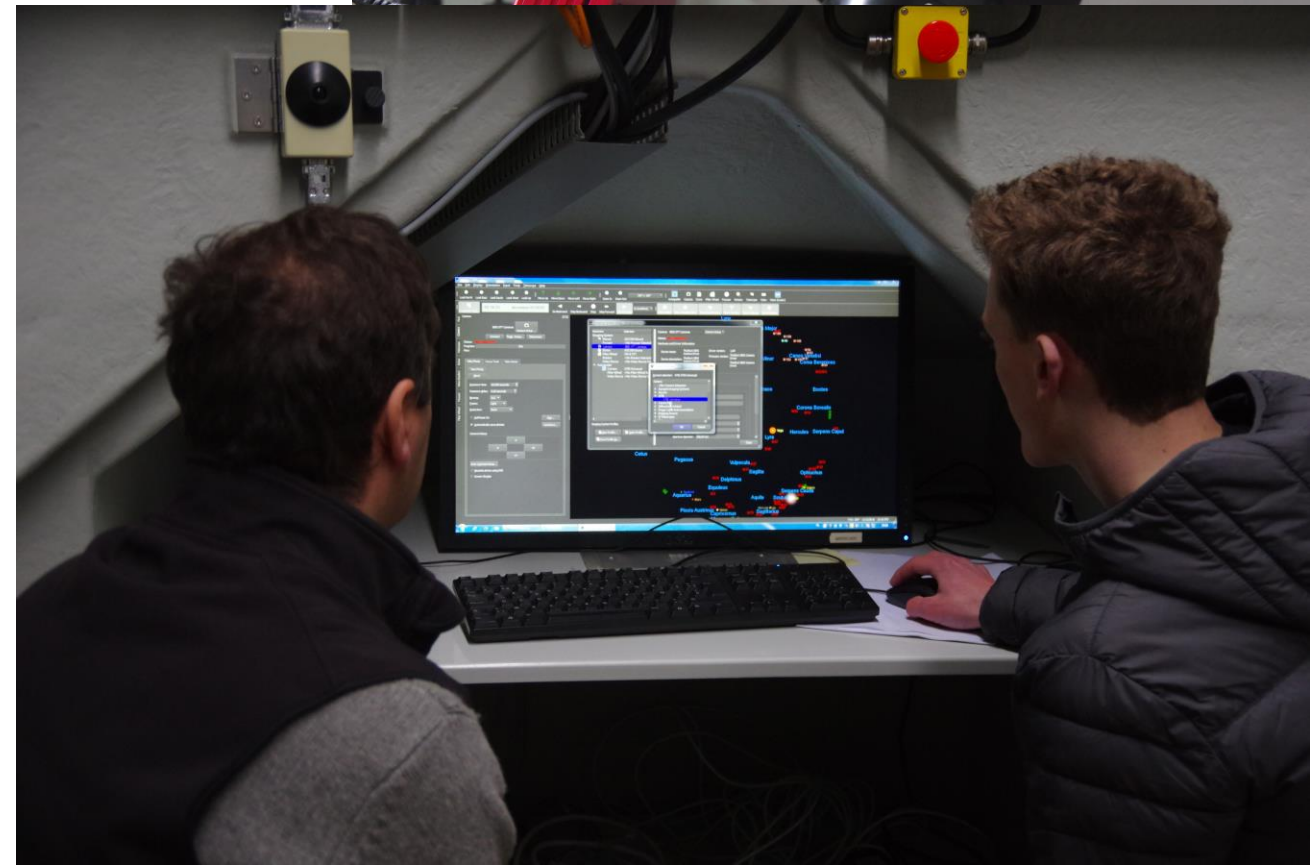
Plan A

- Pentax K3 + filter (SA-100)
- C6 / C14
- Post op Astroforum
- Jean-Pierre



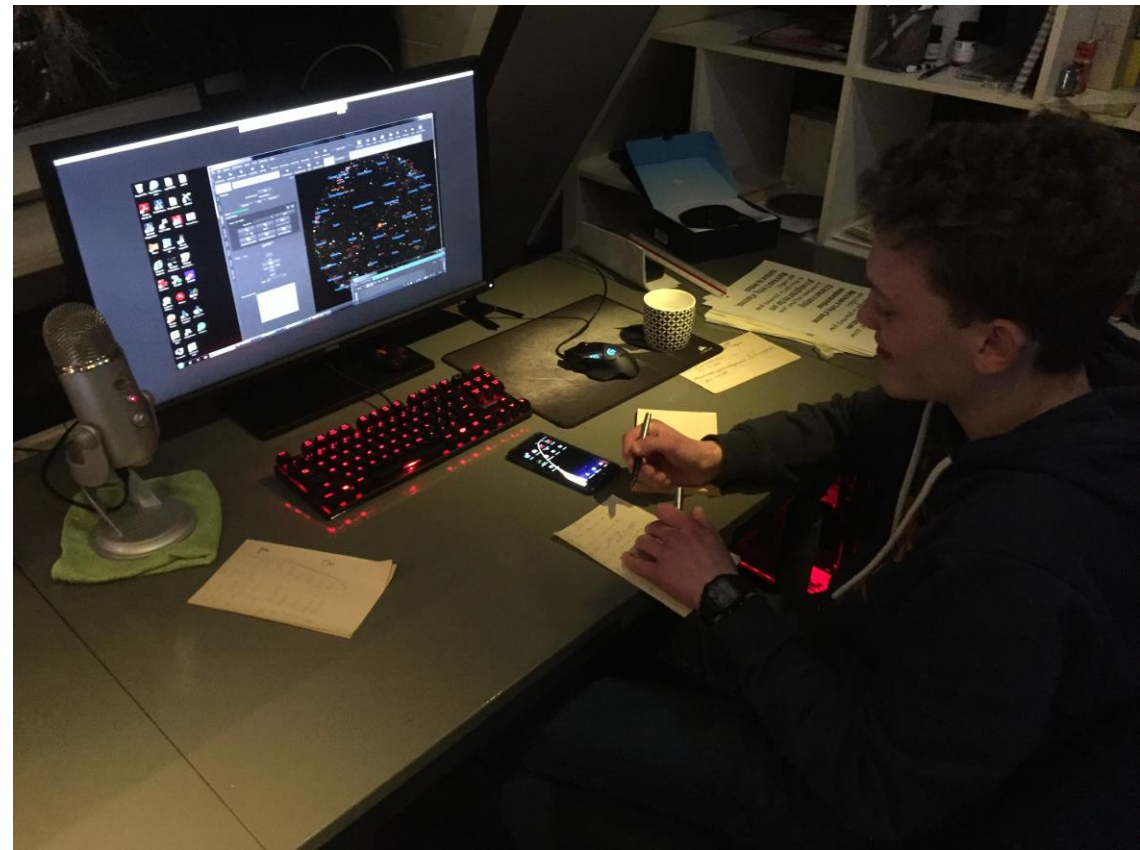
Plan B

- Universiteit Gent
- 21 December 2016
- 40 cm f/8 Astro Optik
- Alpy 600 spectrograaf
- Remote



De waarnemingen

- Eerste poging: 27 December
- Volgcamera
- Tweede poging: 5 januari
- IJs



Objecten

- 3 Criteria:

1. Zichtbaarheid
2. Helderheid
3. Klasse

- Alderamin

- Alioth

- Alnitak

- Bellatrix

- Caph

- Castor

- Megrez

- Merak

- Mirfak

- Mizar

- Navi

- Phecda

- Polaris

- Procyon

- Rigel

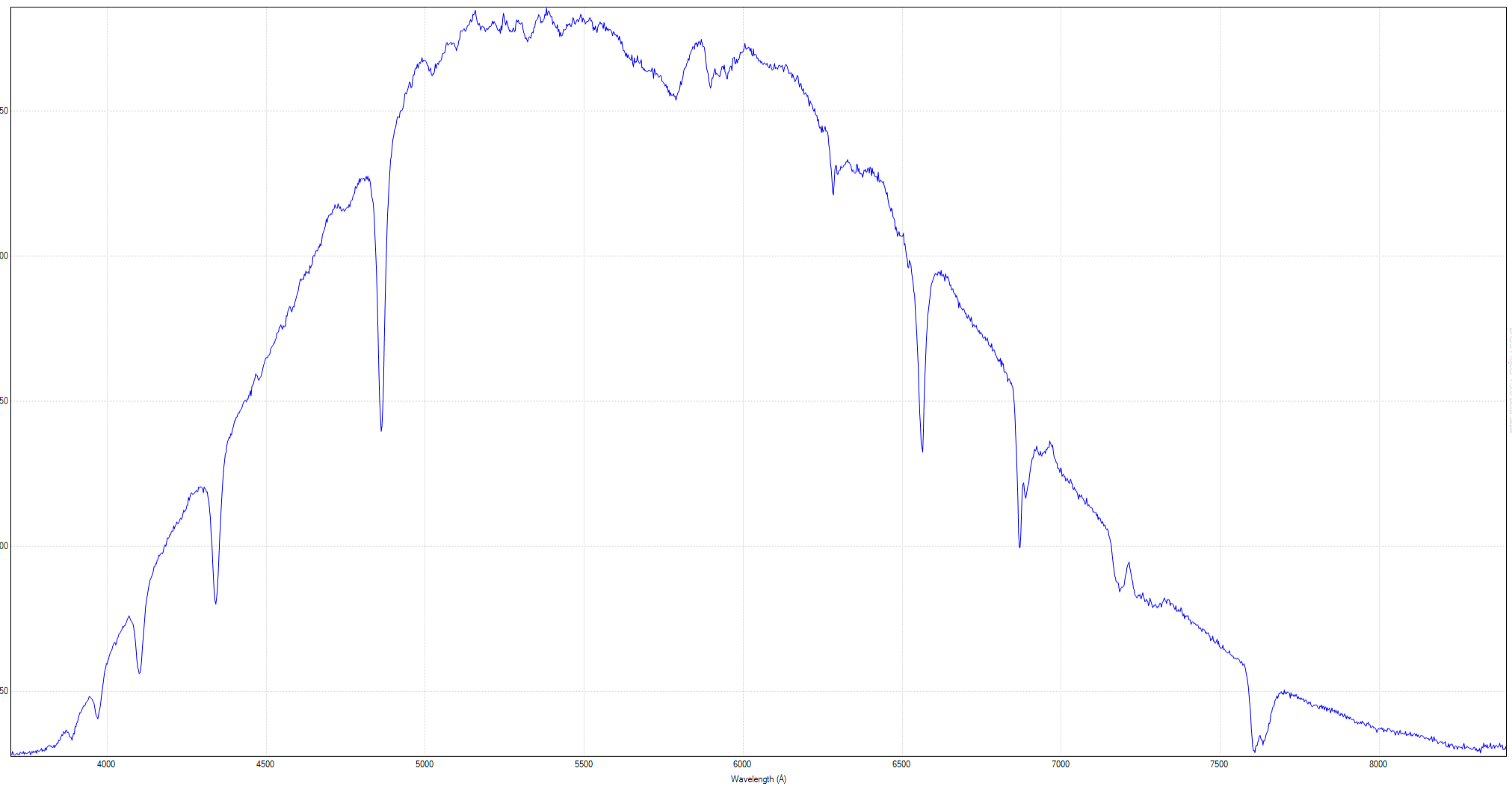
- Ruchbah

- Sirius

- Orionnevel (M42)

Dataverwerking

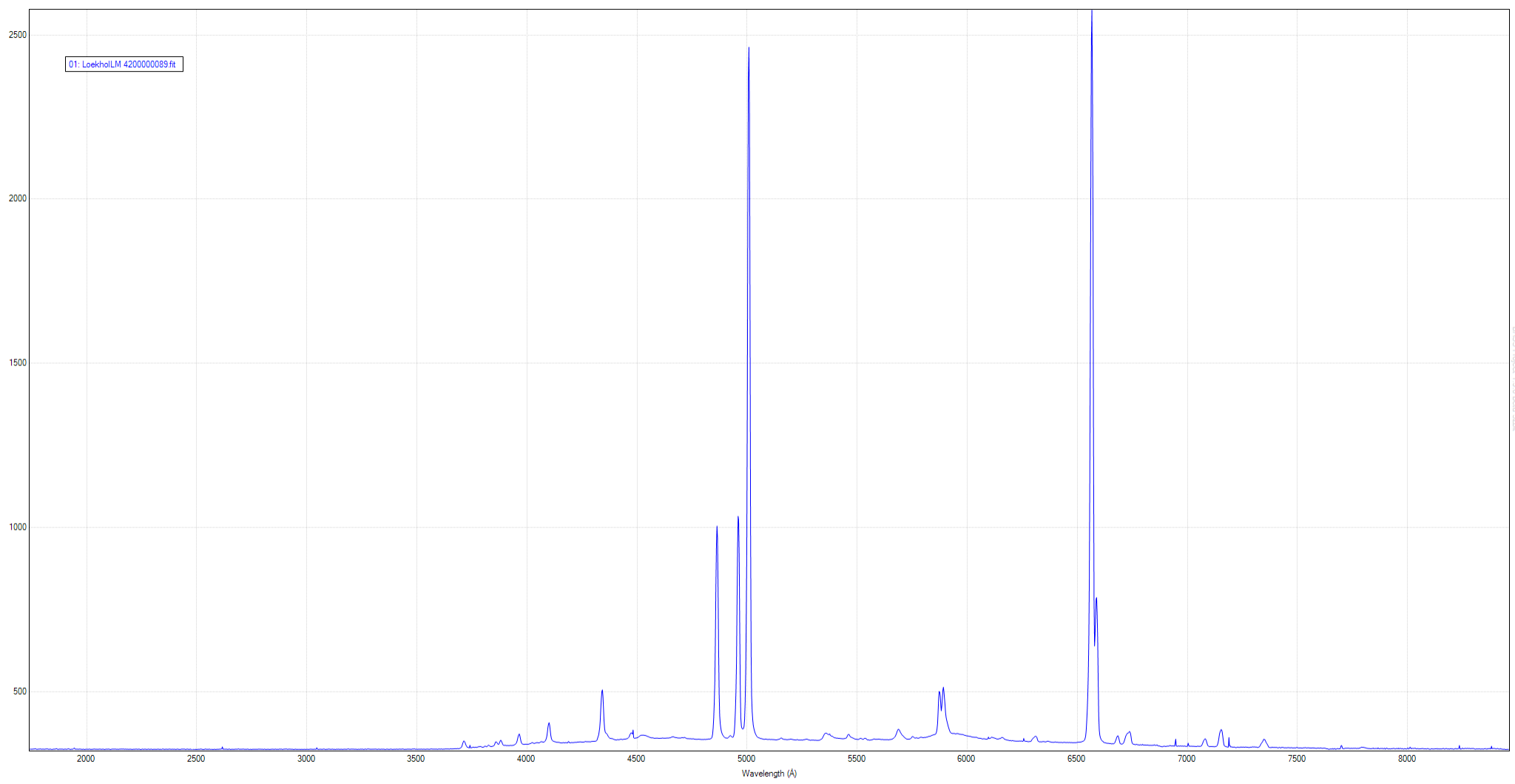
- Bass Project



Profile #02 W=2749 H=1 Average dispersion: 2.51733245 Å/px

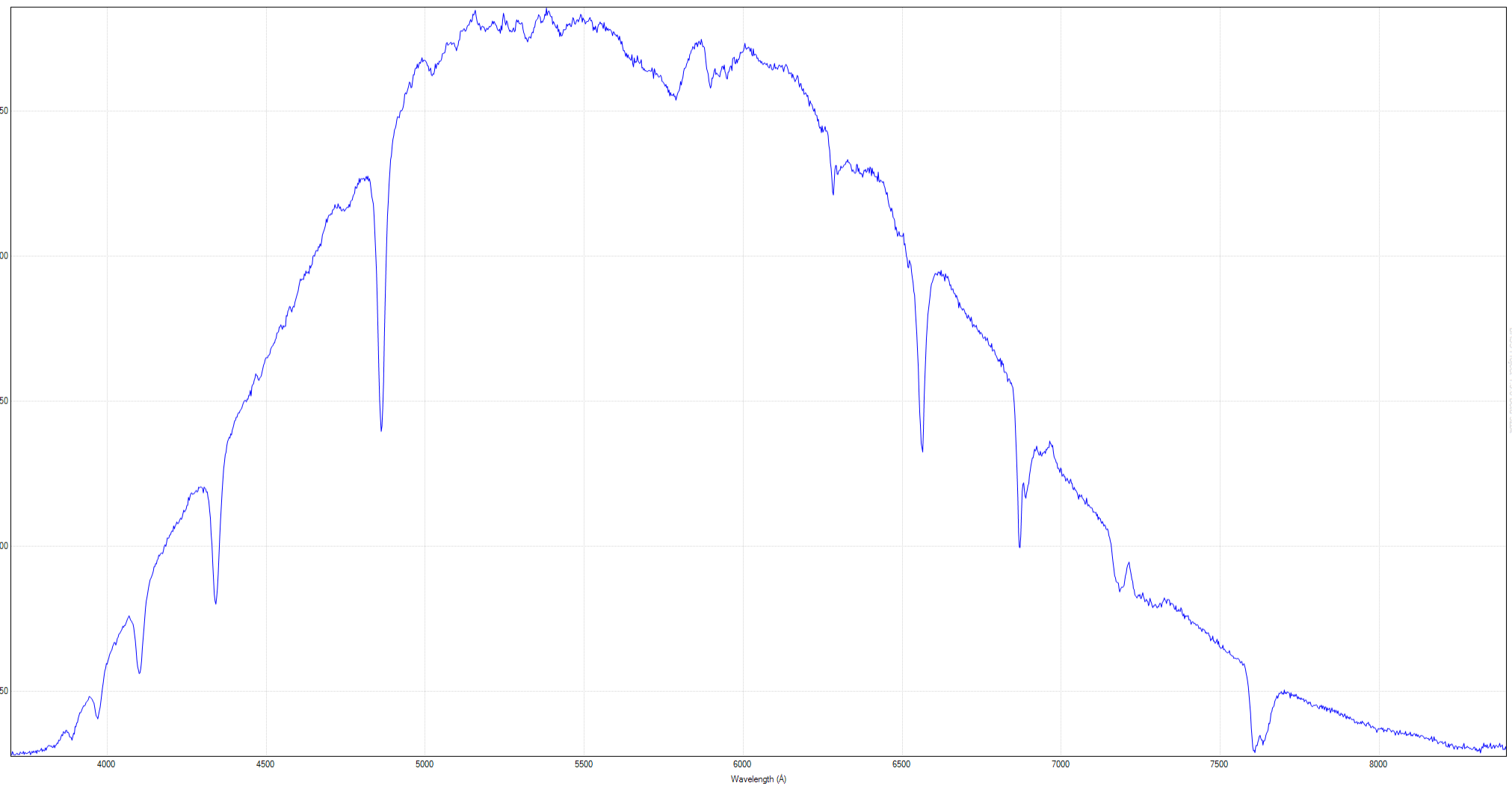
01

01

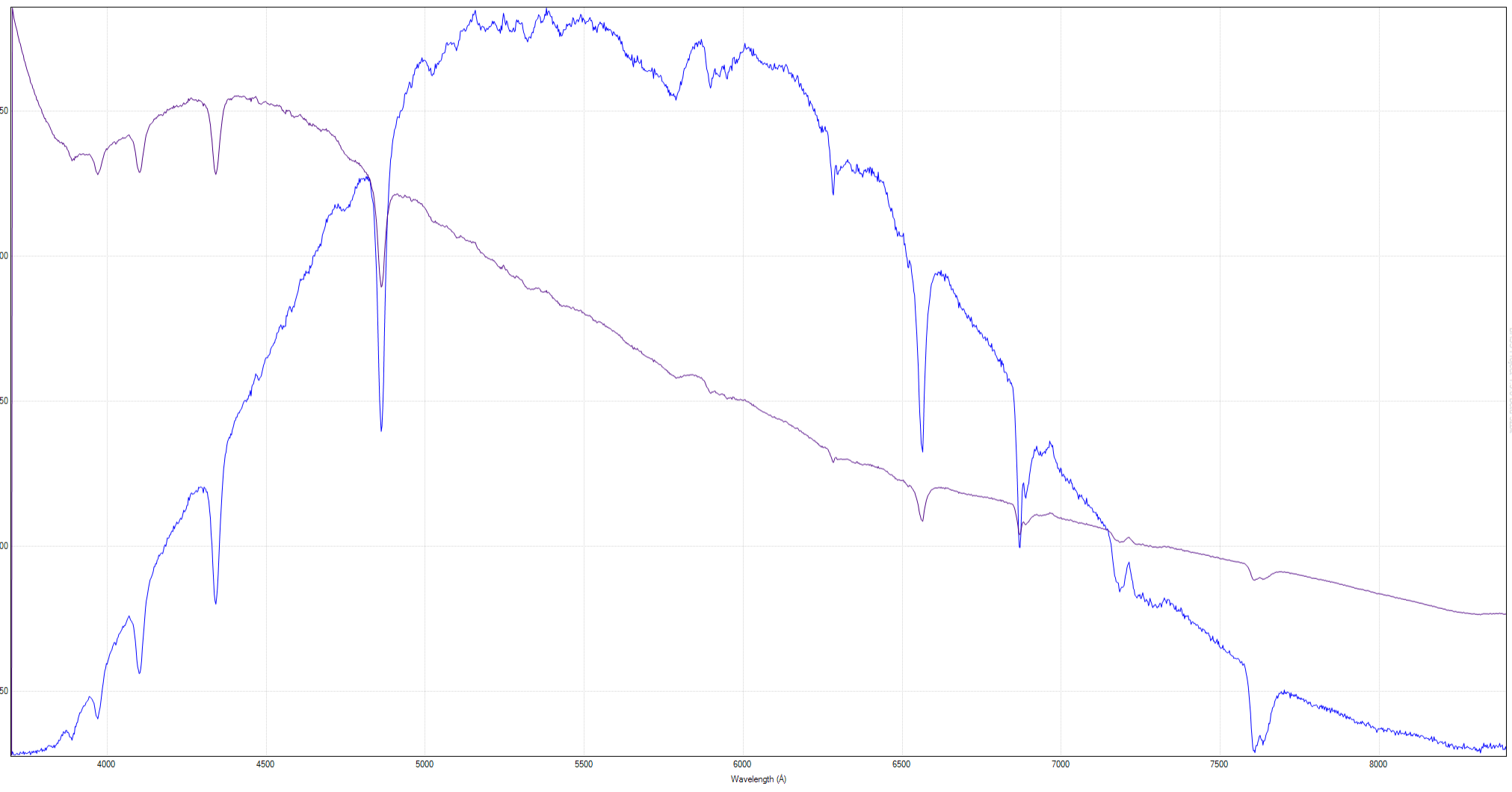


01: LoekholLM 4200000089.fit

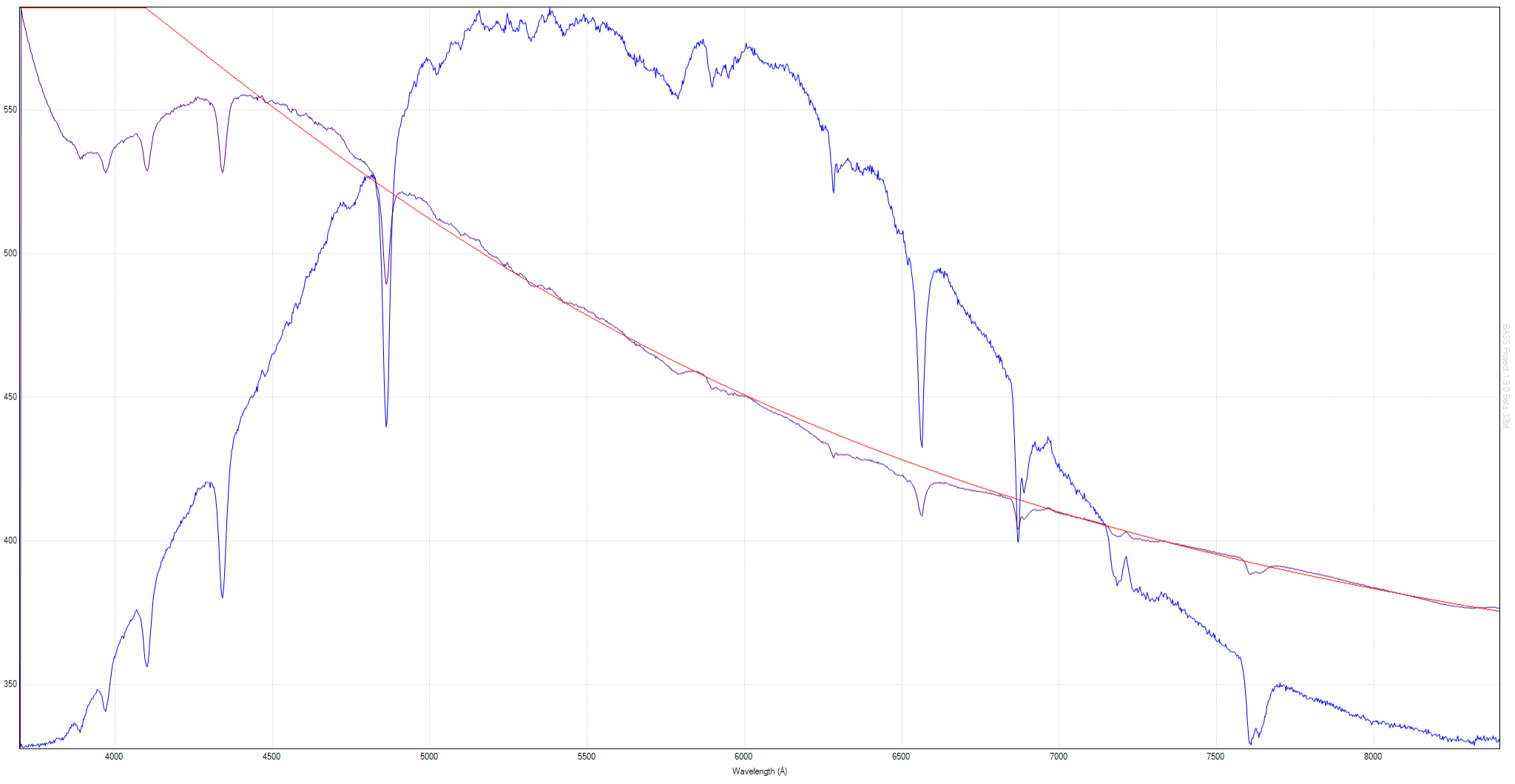
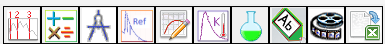
01: LoekholLM 4200000089.fit



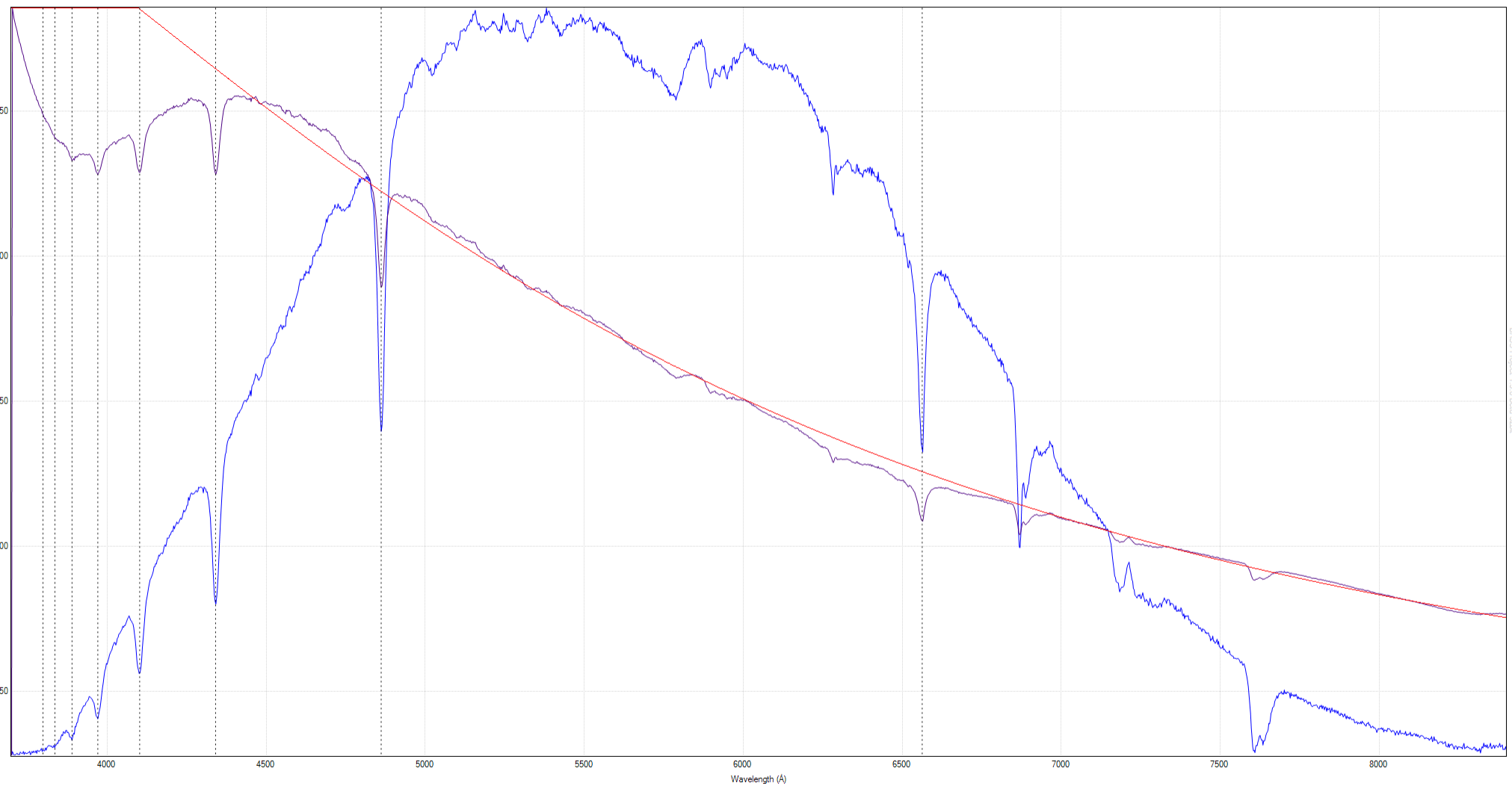
Profile #02 W=2749 H=1 Average dispersion: 2.51733245 Å/px



Profile #02 W=2749 H=1 Average dispersion: 2.51733245 Å/px



Profile #01 W=2749 H=2199 Average dispersion: 2.51733245 Å/px

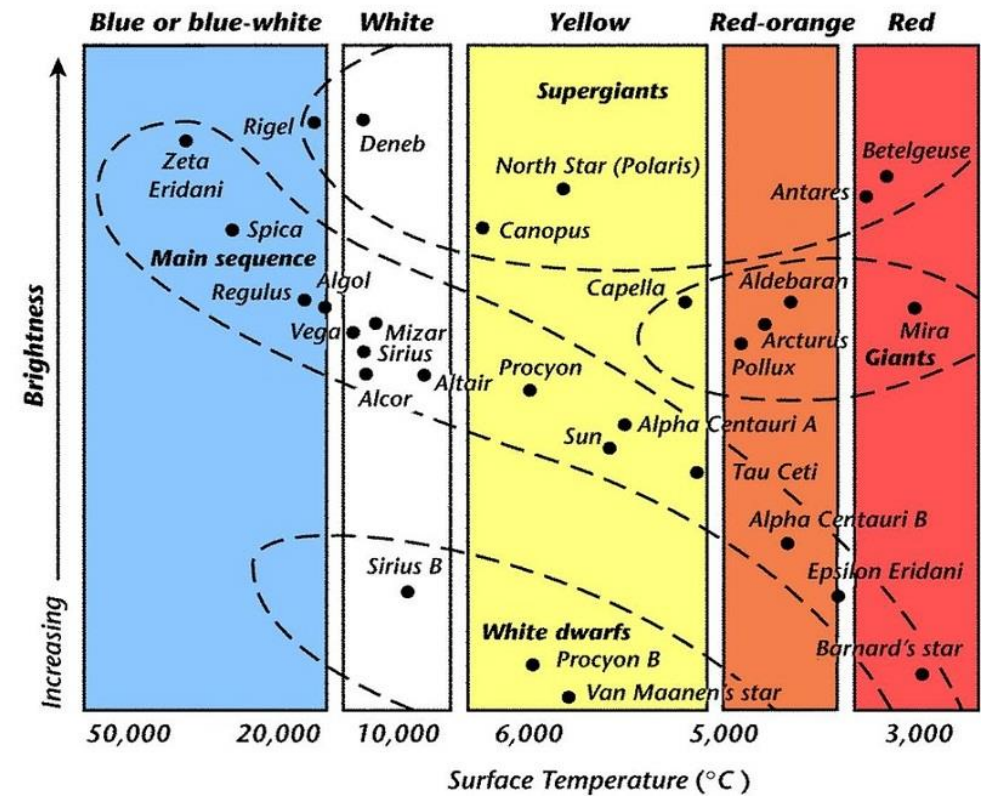


Profile #01 W=2749 H=2199 Average dispersion: 2.51733245 Å/px

Dataverwerking

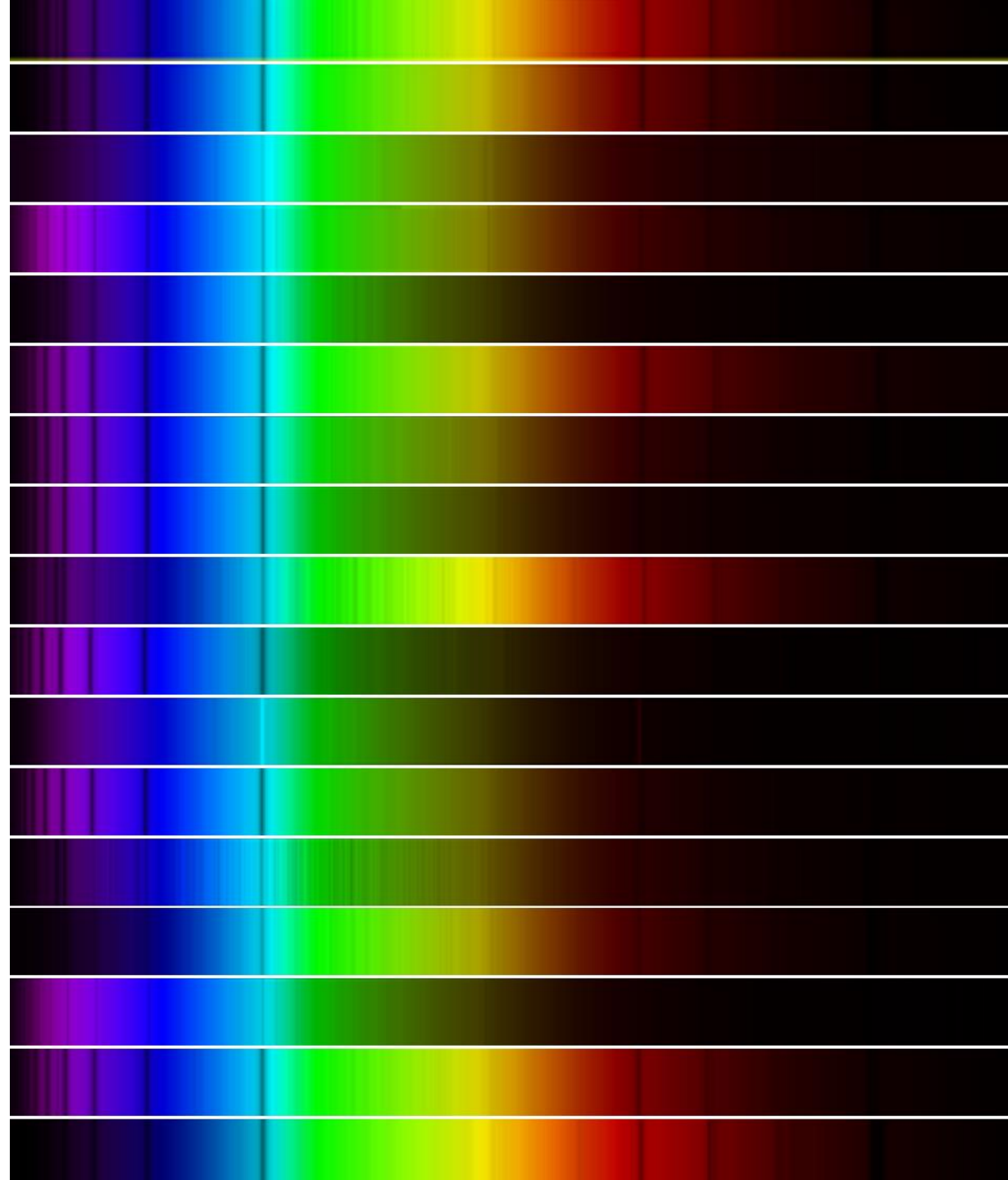
- Temperatuur
- Spectraalklasse
- Hertzsprung-Russell Diagram
- Helderheid $\rightarrow (\sqrt[5]{100})^{(L_Z - L_S)}$

Klasse	Temperatuur	Kleur	Waterstoflijnen
O	≥ 30.000 K	blauw	Zwak
B	10.000–30.000 K	blauw wit	Medium
A	7.500–10.000 K	wit	Sterk
F	6.000–7.500 K	geel wit	Medium
G	5.200–6.000 K	geel	Zwak
K	3.700–5.200 K	oranje	Zeer zwak
M	2.400–3.700 K	rood	Zeer zwak



Resultaten

- Waterstoflijnen
- Gamma Cassiopeiae
- Snelle rotatie



Hertzsprung-Russell Diagram

