



Spectroscopic Record Sheet



Details on acquisitions

Object	DeGaPe 85
Coordinates (J2000)	18:12:46.90 -23:55:11.70
Type	/

Observation date	30.351/03/2025
Weather conditions	/
Observer	2SPOT
Location	Deep Sky Chile (CL)

Mount	10 Micron GM3000 HPS
Telescope	Newton 300mm F/4
Spectroscope	Alpy 600 (23um slit)
Resolution (bin 1x1)	~1nm at 656 nm
Principal camera	Atik 414 EX
Dispersion (bin 1x1)	~0,3 nm/pixel at 656 nm
Cam temperature	-10°C
Binning	1x1
Guiding camera	ASI 178MM
Data acquisition Soft	Prism v11.2.3.21
Data processing soft	ISIS V6.1.1

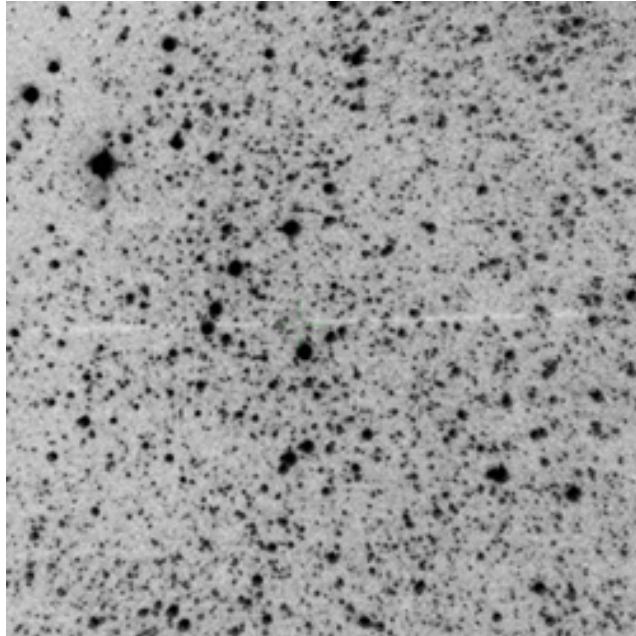
Exposure on object	9 x 1200 s
Master Dark	Corrected
Master Flat	Corrected
Master Offset	Corrected
Neon-Argon calibration	Corrected

Reference star calib.	HD158643_A0V
Exposure on ref star	24 x 10 s
Ref star Sp. date	30.422/03/2025

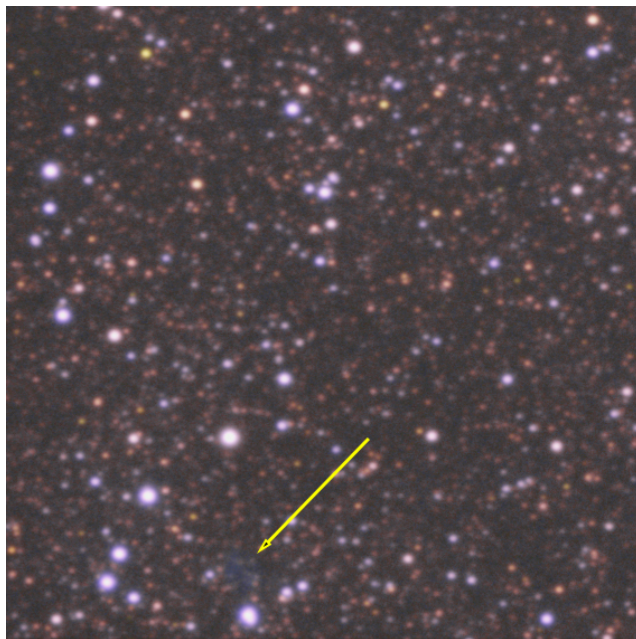


Slit position and images

Slit position



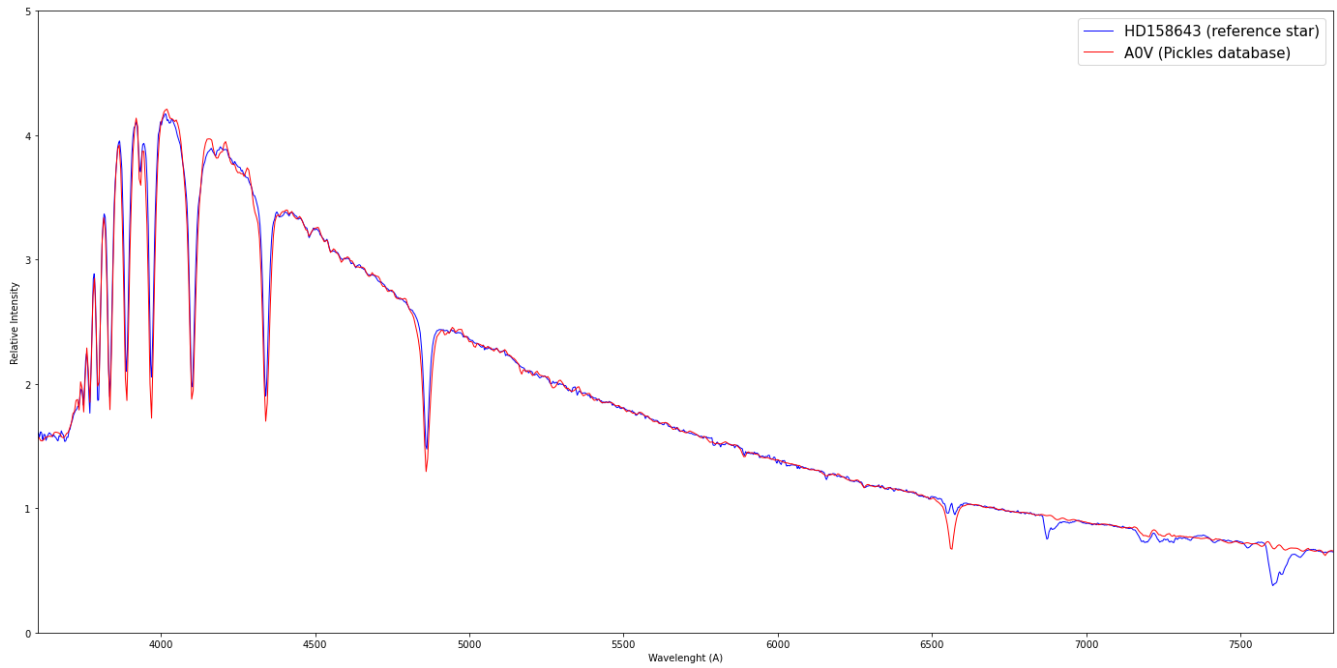
Object picture(s)



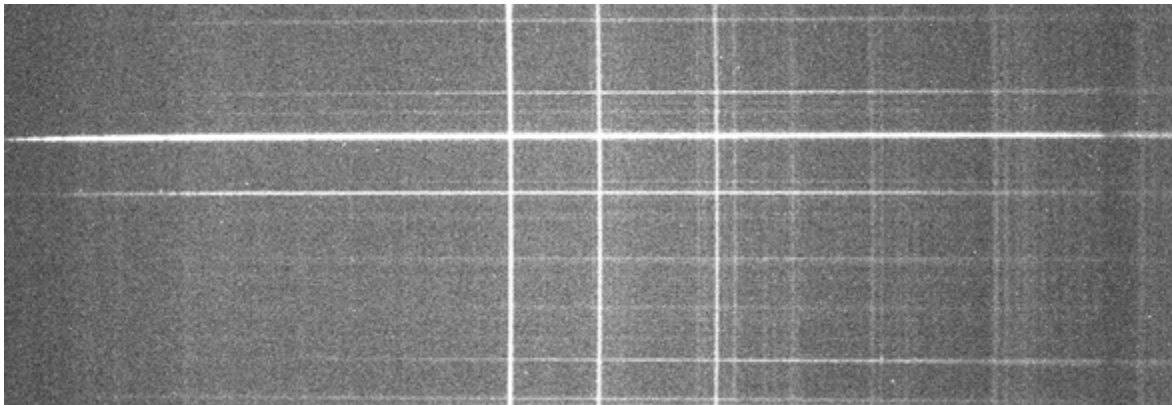


Instrumental Response and 2D Spectra

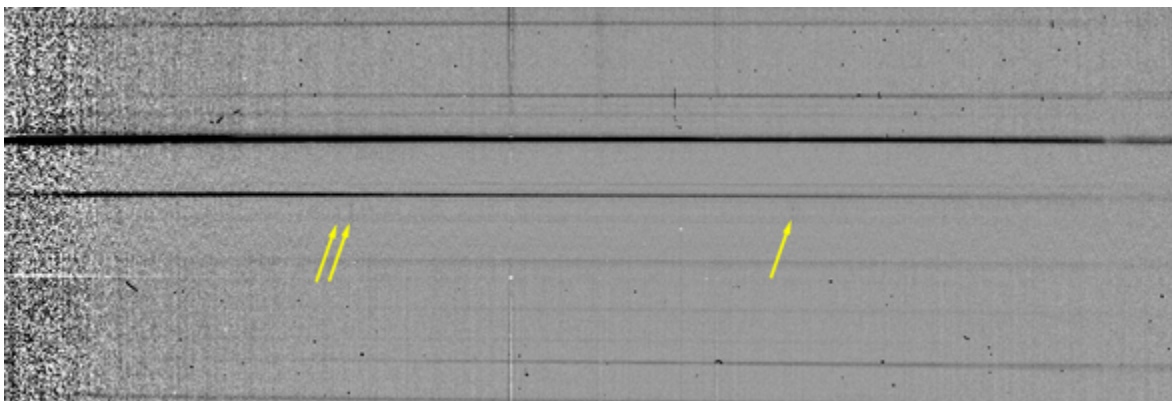
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)

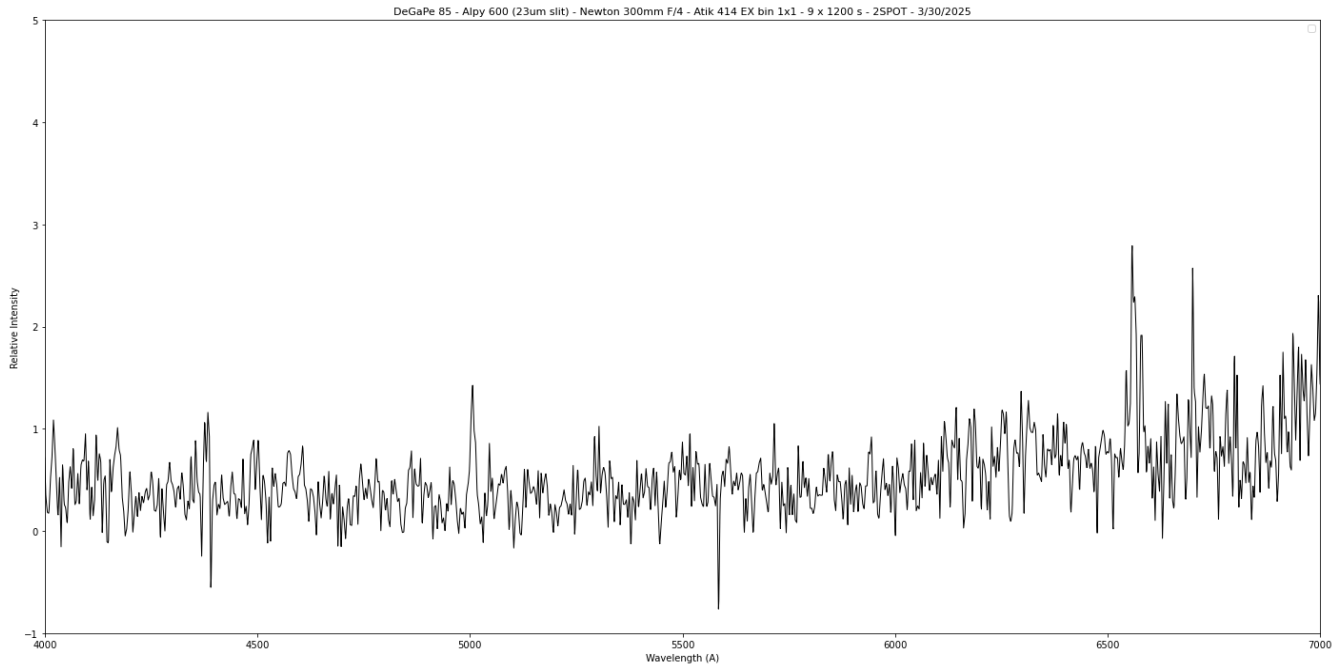


2D Raw spectrum



2D Processed spectrum





Comments

DeGaPe 85 shows interesting characteristics:

- isolated signal
- "condensed" morphology
- diameter approx. 30 arcseconds
- blue color on SHO image (APO_Team)
- signal visible on OIII and Ha images (APO_Team)
- signal visible on WISE 4
- signal visible on SHS and VPHAS DR4
- 1d spectrum shows [OIII](5007), Halpha and [NII](6548,6583)
- noise is relatively contained and lines stand out well
- the 2d spectrum also shows very faint [OIII](4959) (see 2d spectrum above)

Considering these characteristics, DeGaPe 85 has True PN potential.

PS: link to Ha, OIII and SHO pictures: planetarynebulae.net/EN/page_np.php?id=1251