



Spectroscopic Record Sheet



Details on acquisitions

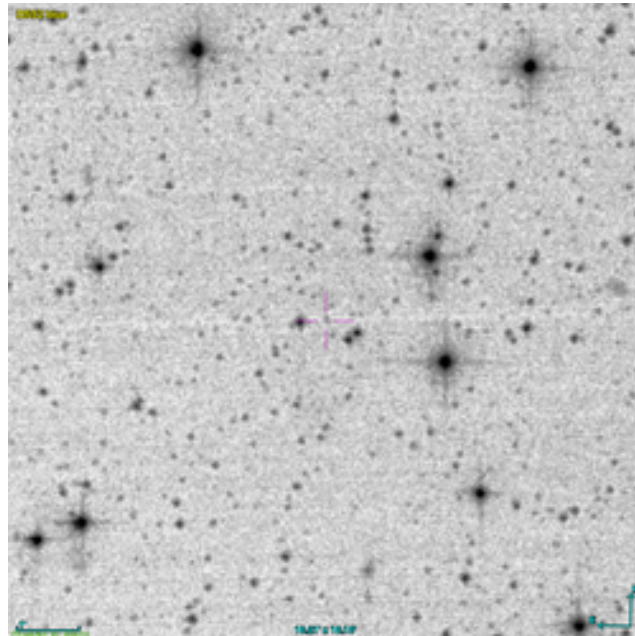
Object	Pa 163
Coordinates (J2000)	09:24:55.20 -31:45:02.88
Type	Likely PN

Observation date	19.307/12/2025
Weather conditions	/
Observer	2SPOT
Location	Deep Sky Chile (CL)

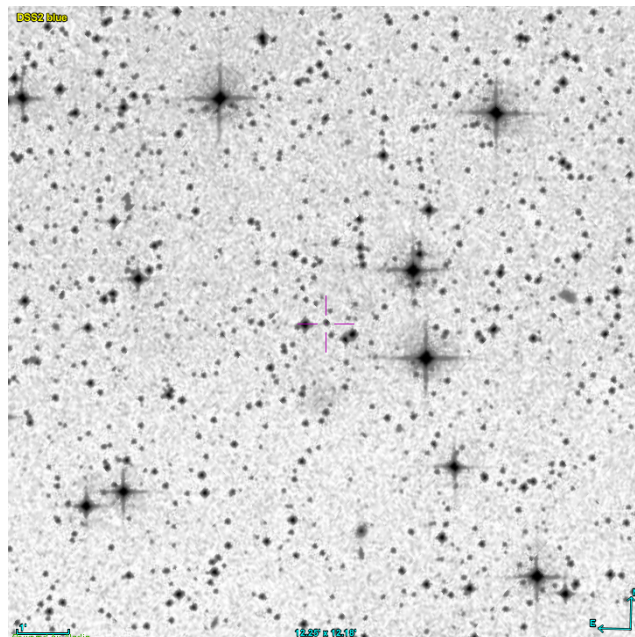
Mount	10 Micron GM3000 HPS
Telescope	Newton 300mm F/4
Spectroscope	Alpy 600 (23um slit)
Resolution (bin 1x1)	~1nm at 656 nm
Principal camera	Atik 414 EX
Dispersion (bin 1x1)	~0,3 nm/pixel at 656 nm
Cam temperature	-10°C
Binning	2x2
Guiding camera	ASI 178MM
Data acquisition Soft	Prism v11.2.3.21
Data processing soft	ISIS V6.1.1

Exposure on object	7 x 1200 s
Master Dark	Corrected
Master Flat	Corrected
Master Offset	Corrected
Neon-Argon calibration	Corrected
Reference star calib.	HD71459_B3V
Exposure on ref star	5 x 26.02776 s
Ref star Sp. date	19.266/12/2025

Slit position



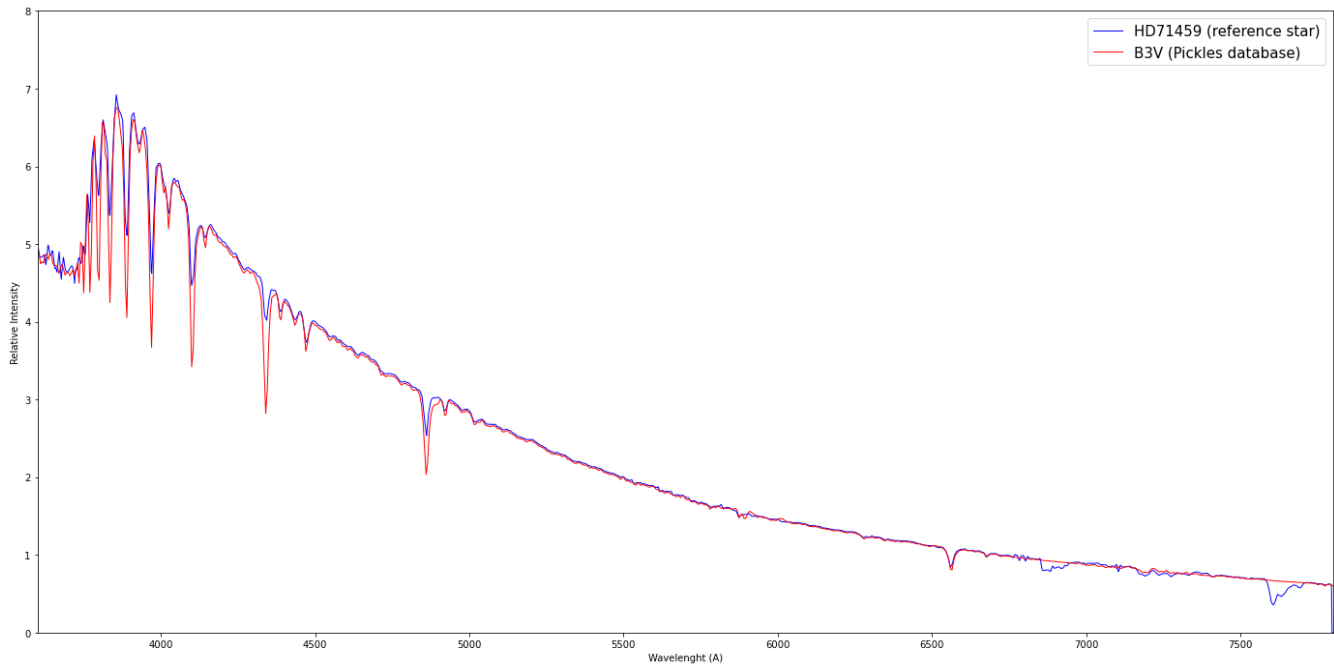
Object picture(s)



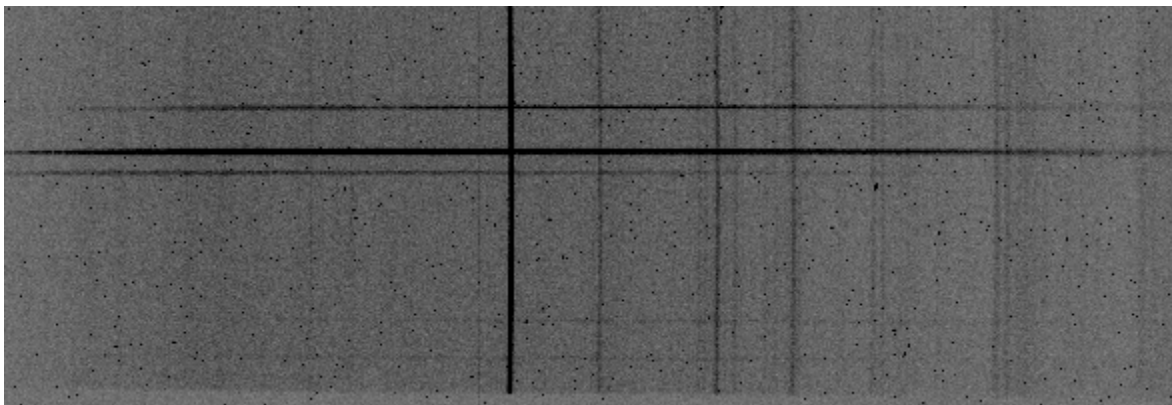


Instrumental Response and 2D Spectra

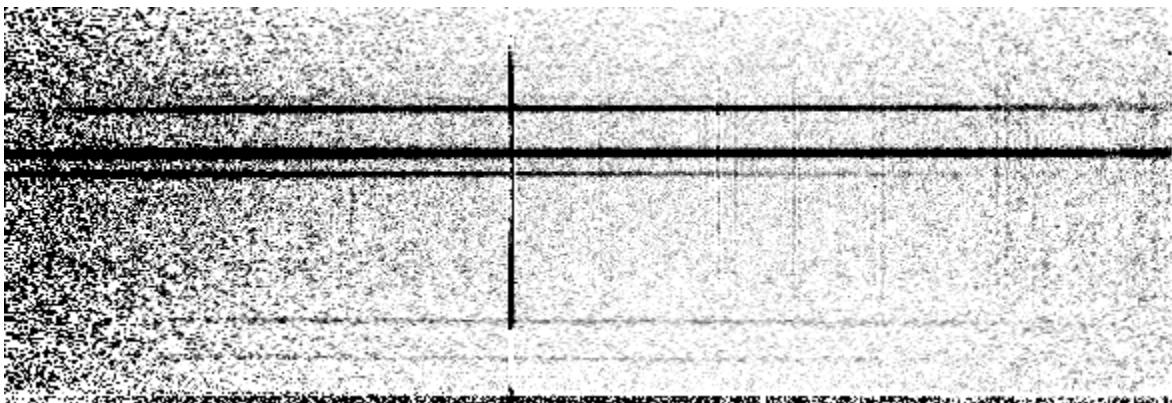
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)



2D Raw spectrum

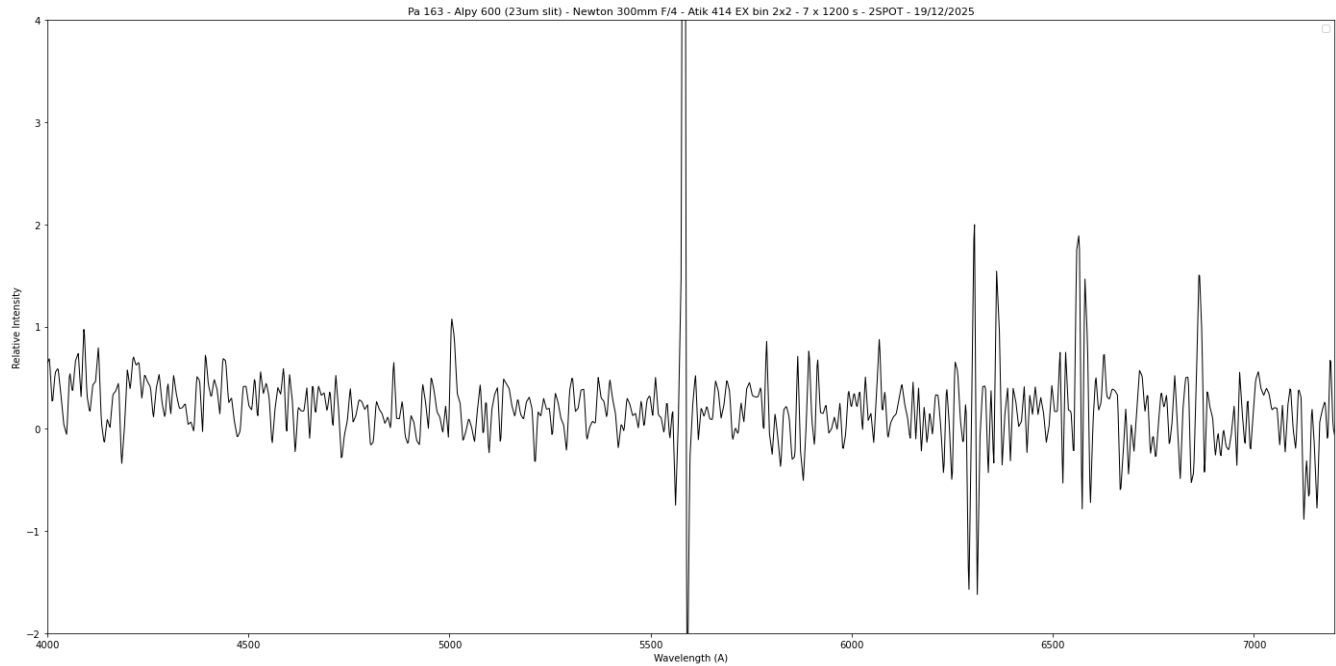


2D Processed spectrum





Results



Comments

Object already classified as Likely PN.
[OIII] and Halpha lines detected.
Weak signal, Pa 163 could be a PN.