



Spectroscopic Record Sheet



Details on acquisitions

Object	SFO 1
Coordinates (J2000)	18:46:54.06 -08:01:30.10
Type	New candidate

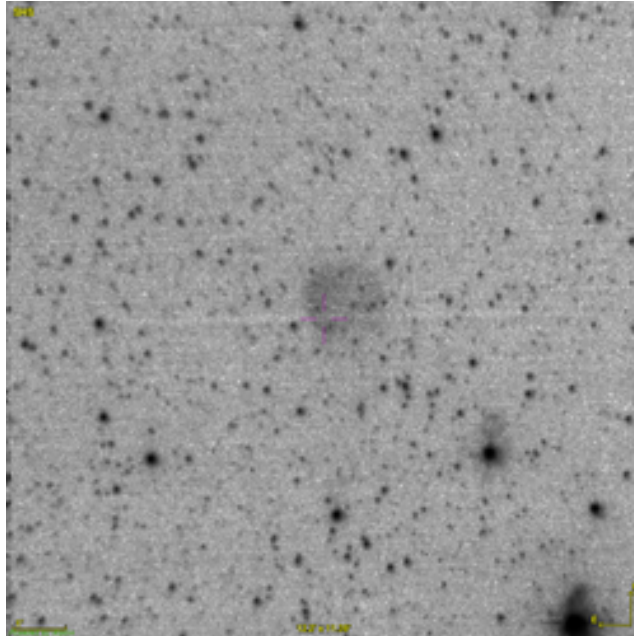
Observation date	26.078/09/2024
Weather conditions	/
Observer	2SPOT
Location	Deep Sky Chile (CL)

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

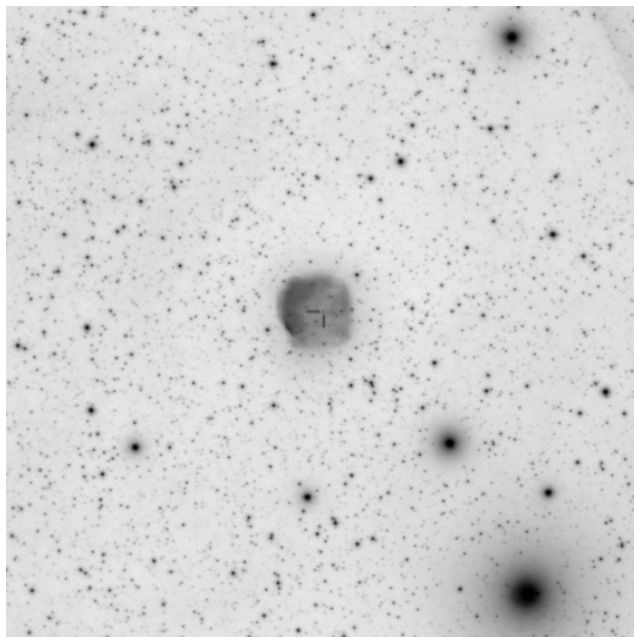
Exposure on object	8 x 1200 s
Master Dark	Corrected
Master Flat	Corrected
Master Offset	Corrected
Neon-Argon calibration	Corrected

Reference star calib.	HD188899_A2V
Exposure on ref star	14 x 1.5 s
Ref star Sp. date	26.146/09/2024

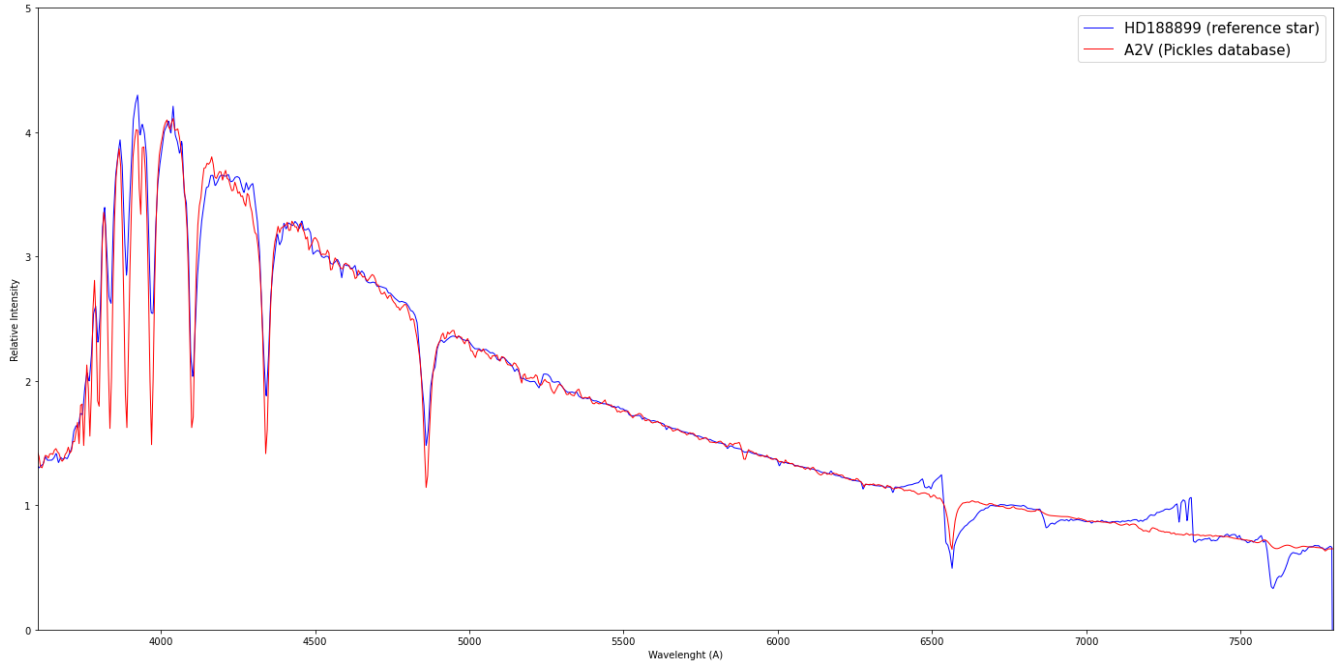
Slit position



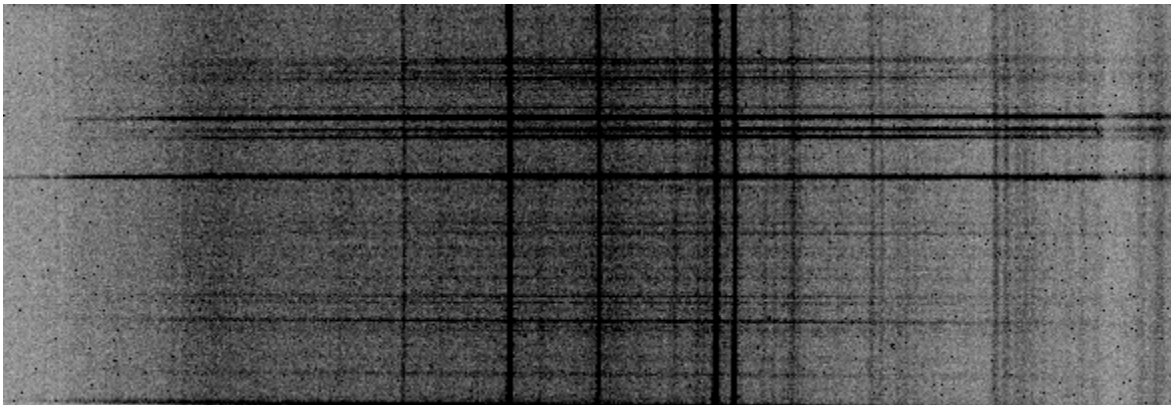
Object picture(s)



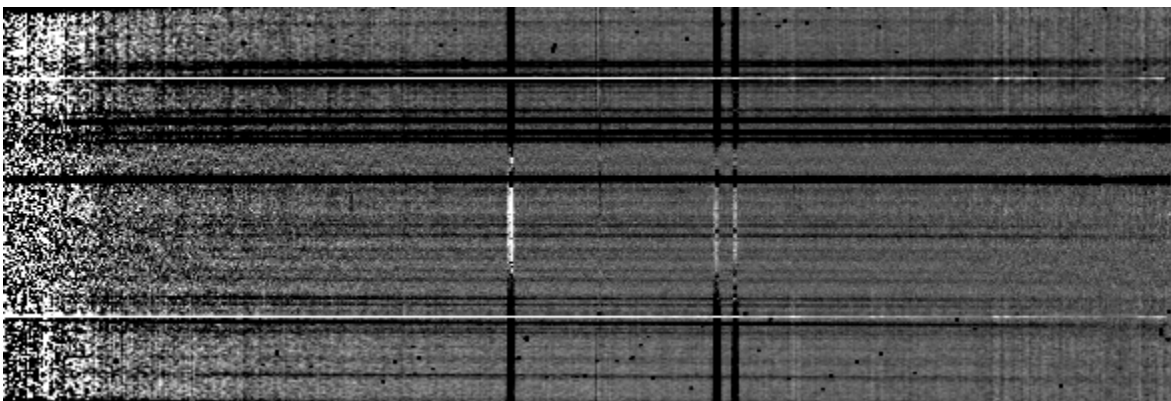
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)

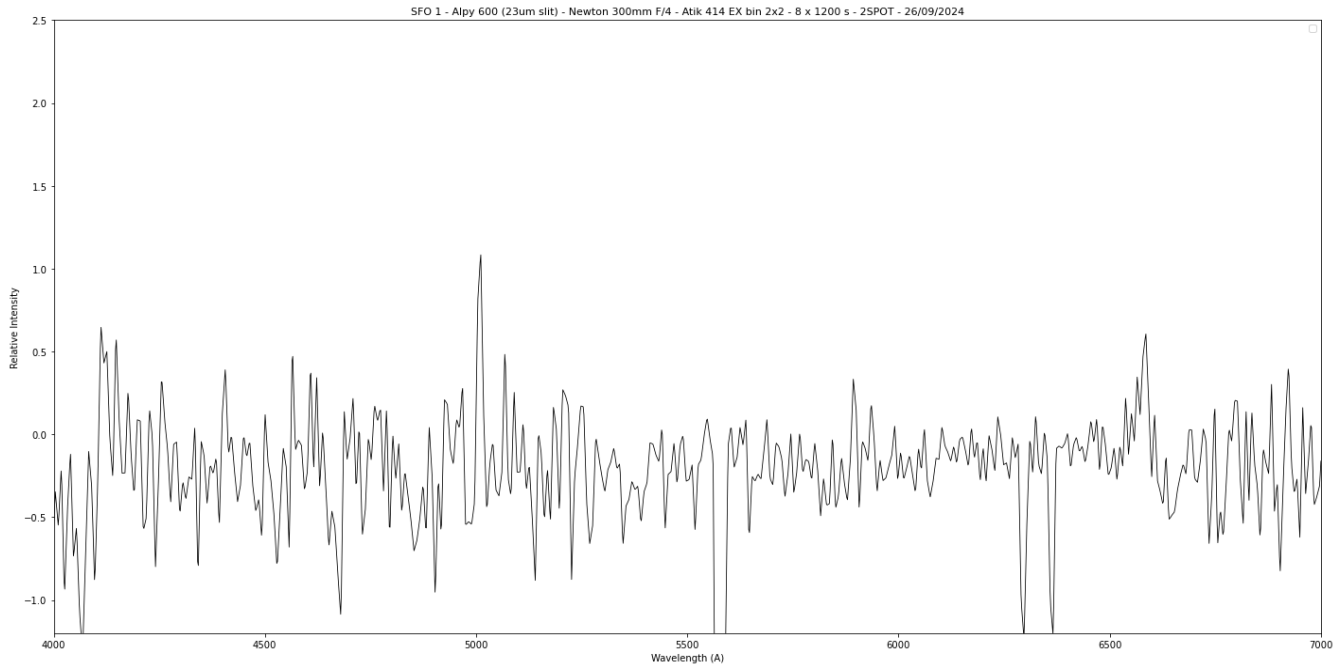


2D Raw spectrum



2D Processed spectrum





Comments

Strong [OIII](5007) and [NII] lines detected.

The Halpha line is also present, but after processing, it appears only very faintly after the sky background has been subtracted. SFO 1 is certainly a true PN.