



# Spectroscopic Record Sheet



## Details on acquisitions

Object	Pa 161
Coordinates (J2000)	19:43:28.58    -13:44:59.40
Type	Possible PN

Observation date	26.324/04/2023
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	Atik 314L+
Data acquisition Soft	Prism v11.2.3.21
Data processing soft	ISIS V6.1.1

Exposure on object	5 x 1200 s
Master Dark	Corrected
Master Flat	Corrected
Master Offset	Corrected
Neon-Argon calibration	Corrected

Reference star calib.	/_/_
Exposure on ref star	/
Ref star Sp. date	/

Slit position



Object picture(s)



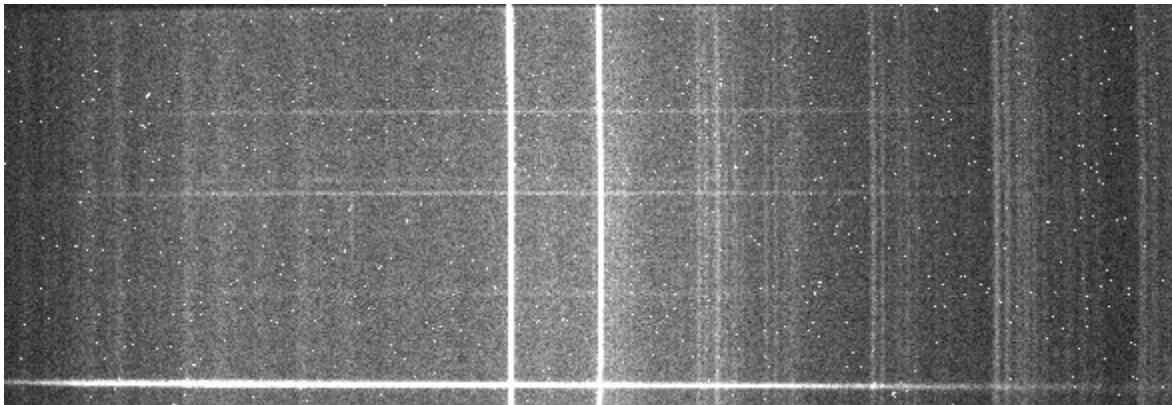


## Instrumental Response and 2D Spectra

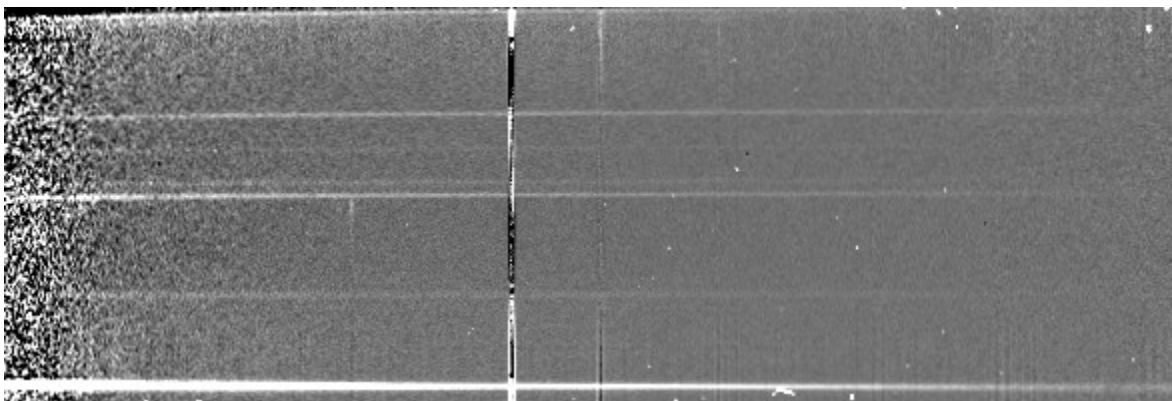
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)

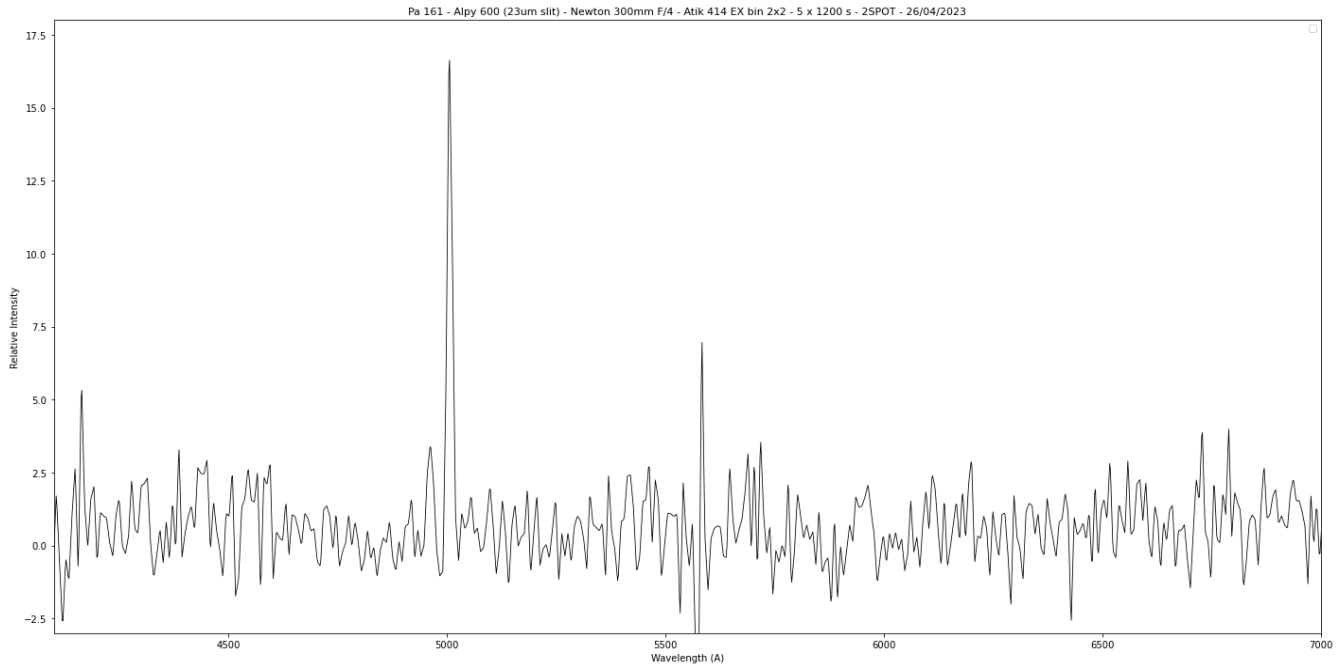
No reference star was used here  
but a standard instrumental response  
taken at the same height as the target.

2D Raw spectrum



2D Processed spectrum





## Comments

Pa 161 is very faint and, as a result, the spectrum is quite noisy.  
 The slit has been placed on the edge of the nebula, on the East part.  
 The spectrum only shows the [OIII] doublet.