

### Spectroscopic Record Sheet



#### Details on acquisitions

Object BMP J0715-2805

Coordinates (J2000) 07:15:02.30 -28:05:43.73

Type Likely PN

Observation date 17.114/12/2025

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 6 x 1200 s

Master Dark Corrected

Master Flat Corrected

Master Offset Corrected

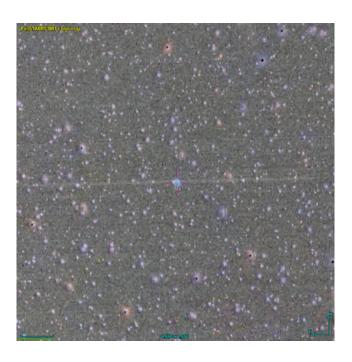
Neon-Argon calibration Corrected

Reference star calib. HD46936\_B8V Exposure on ref star 5 x 4.89358 s Ref star Sp. date 17.159/12/2025



# Slit position and images

## Slit position

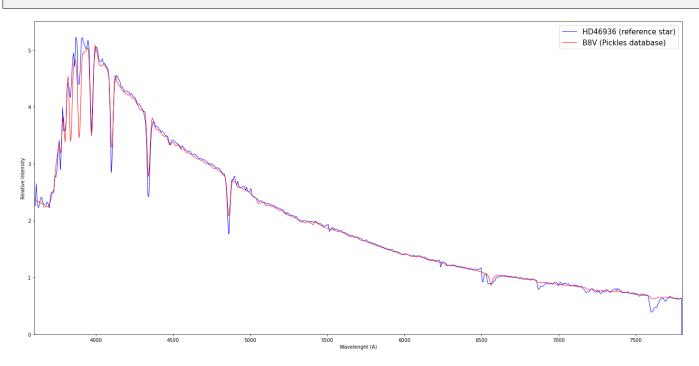


## Object picture(s)

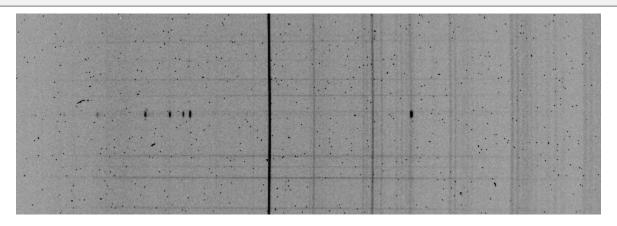


## Instrumental Response and 2D Spectra

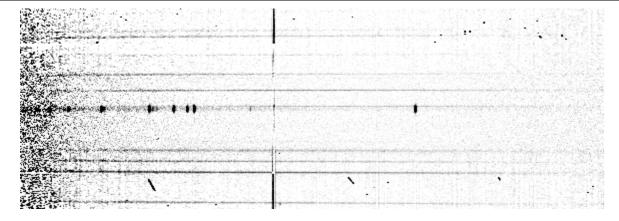
Instrumental response (red = theoritical ref star spectrum; blue = acquired ref star spectrum with instrumental response correction applied)



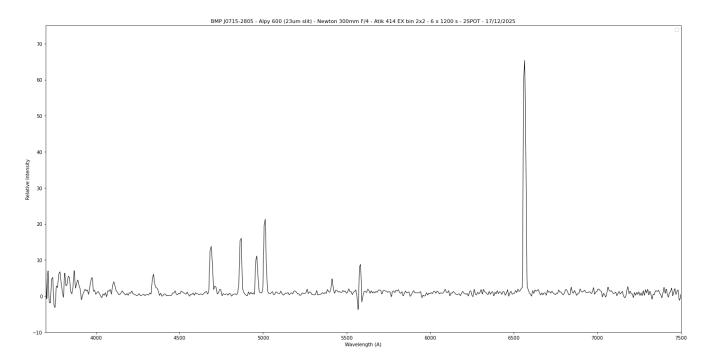
#### 2D Raw spectrum



#### 2D Processed spectrum



#### Results



#### Comments

Object already classified as Likely PN.

[NeIII], Hdelta, Hgamma, strong HeII(4686A), Hbeta, [OIII], HeII(5412A) and Halpha lines detected.

BMP J0715-2805 could be a PN with very high excitation (strong 4686 HeII line and absence of [NII] and [SII] lines)