



Spectroscopic Record Sheet



Details on acquisitions

Object	Br 4
Coordinates (J2000)	20:42:56.03 +45:55:29.70
Type	

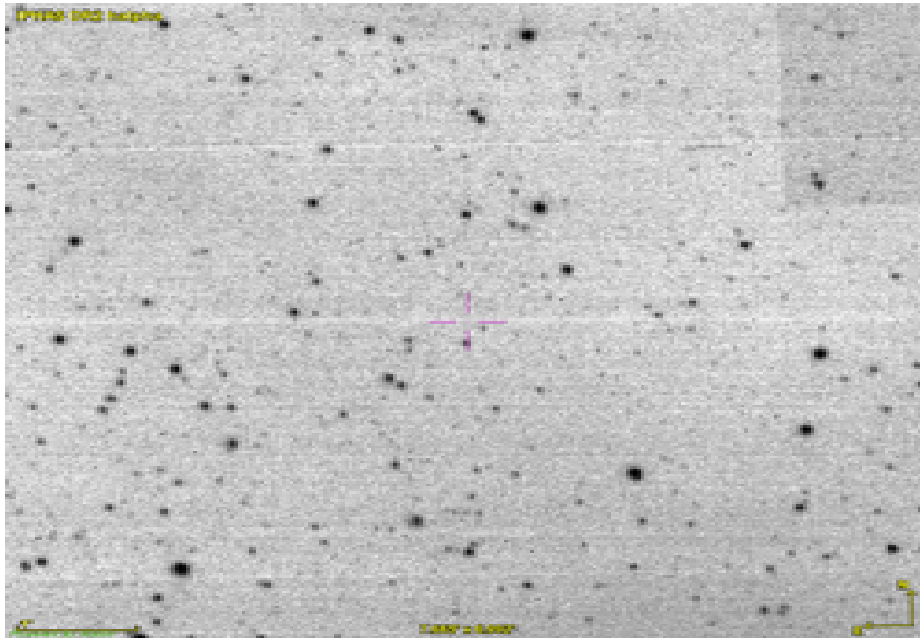
Observation date	9.994/08/2023
Weather conditions	/
Observer	2SPOT
Location	OHP (FR)

Mount	10 Micron GM2000 HPS
Telescope	Celestron C14
Spectroscope	LISA (35um 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	Atik 314L+
Data acquisition Soft	Prism v11.2.3.21
Data processing soft	ISIS V6.1.1

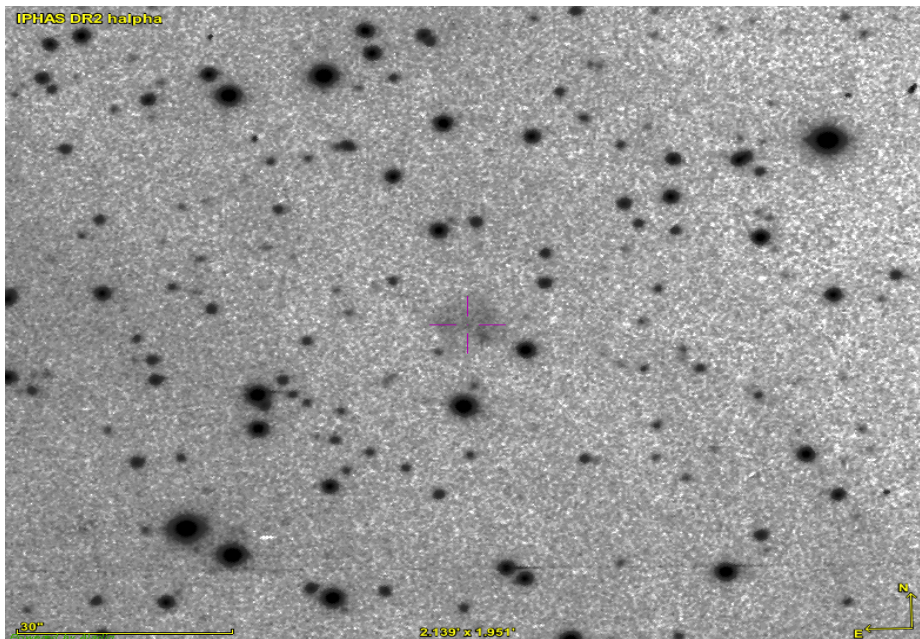
Exposure on object	5 x 1200 s
Master Dark	Corrected
Master Flat	Corrected
Master Offset	Corrected
Neon-Argon calibration	Corrected

Reference star calib.	HD143807_A0V
Exposure on ref star	11 x 30 s
Ref star Sp. date	9.895/08/2023

Slit position



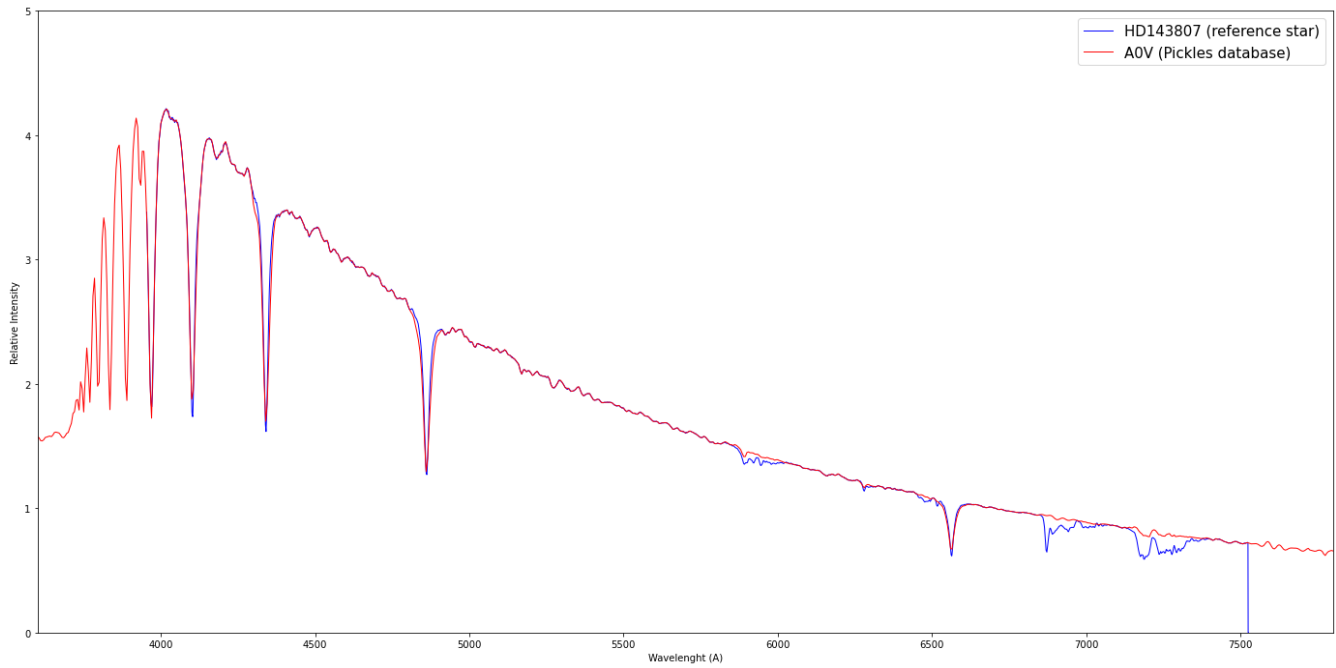
Object picture(s)



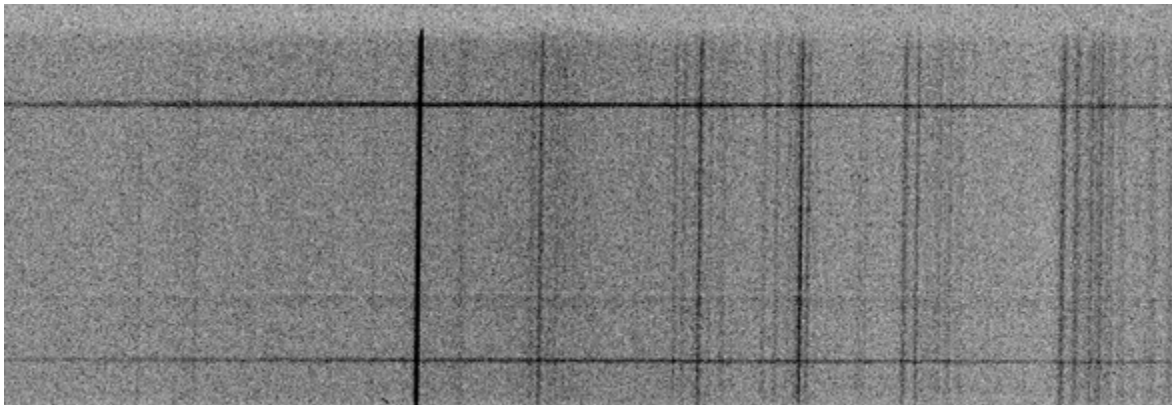


Instrumental Response and 2D Spectra

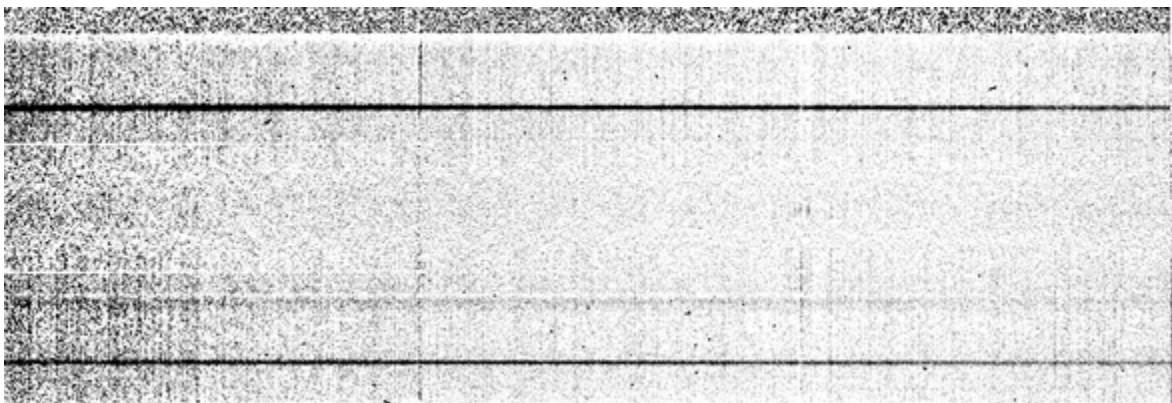
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)



2D Raw spectrum

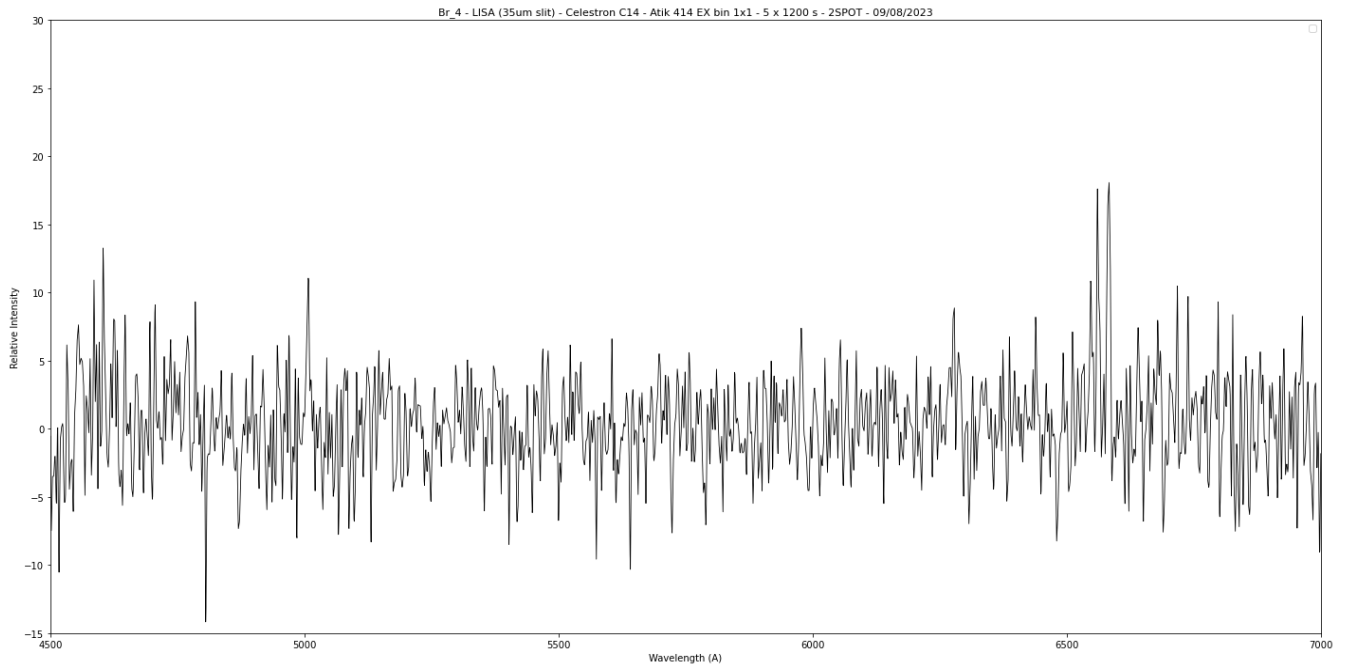


2D Processed spectrum





Results



Comments

[OIII](5007), Halpha and [NII] lines detected.

The [OIII] line is weak but present. Strong [NII](6583) line.

Br 4 is probably a true PN.