



## Spectroscopic Record Sheet



### Details on acquisitions

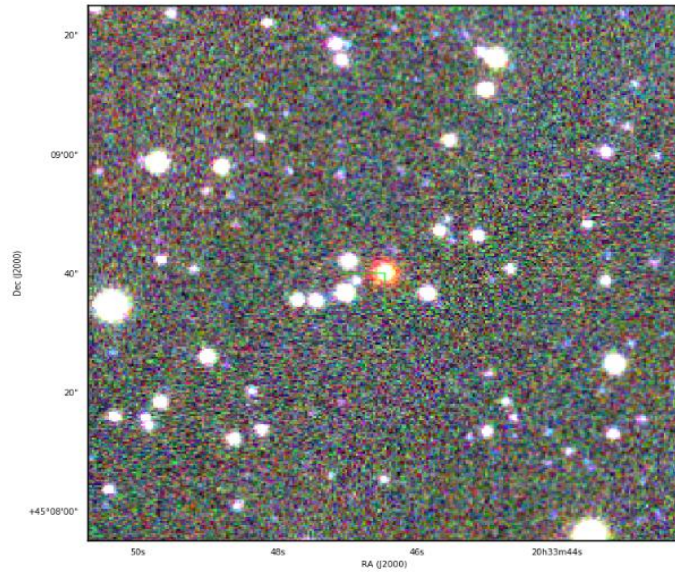
Object	IPHAS J203346.47+450840.1
Coordinates (J2000)	20:33:46.50 45:08:40.09
Type	PN Candidate

Observation date	22.958/05/2020 (d/m/y)
Meteorological conditions	19°C
Observer	L.Mulato
Location	Cornillon France

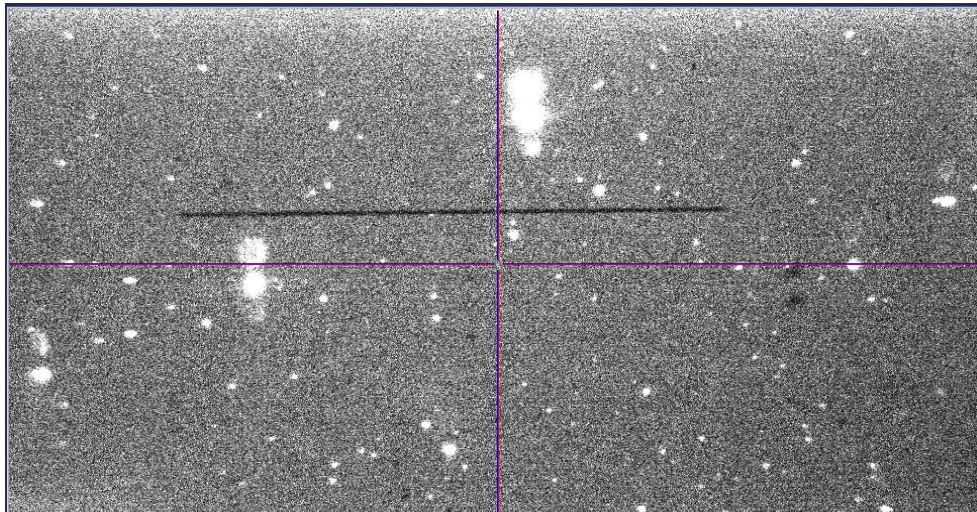
Mount	NEQ6
Telescope	Newton Skywatcher 200 mm F/5
Spectrograph	Alpy 600 - 23 $\mu\text{m}$ slit
Resolution (bin 1x1)	$\sim 1 \text{ \AA}$ at $\lambda 656 \text{ nm}$
Science camera	ATIK 414 EX
Dispersion (bin 1x1)	$\sim 0,3 \text{ nm/pixel}$ at $\lambda 656 \text{ nm}$
Cam Temperature	0 °C
Binning	2x2
Guiding camera	ASI290 MM non cooled
Data acquisition Soft	PRISM V10
Data processing Soft	Isis V5.9.3

Exposure on object	8	x	600	s
Master Dark date	22/05/2020	(d/m/y)		
Dark Exposure	7	x	600	s
Dark Temperature	0	°C		
Master Offset date	22/05/2020	(d/m/y)		
Master Flat date	22/05/2020	(d/m/y)		
Neon-Argon calib. date	22/05/2020	(d/m/y)		
Reference star calib.	hd205314			
Exposure on ref star	25	x	20	s
Ref Star Sp. date	22.996/05/2020			

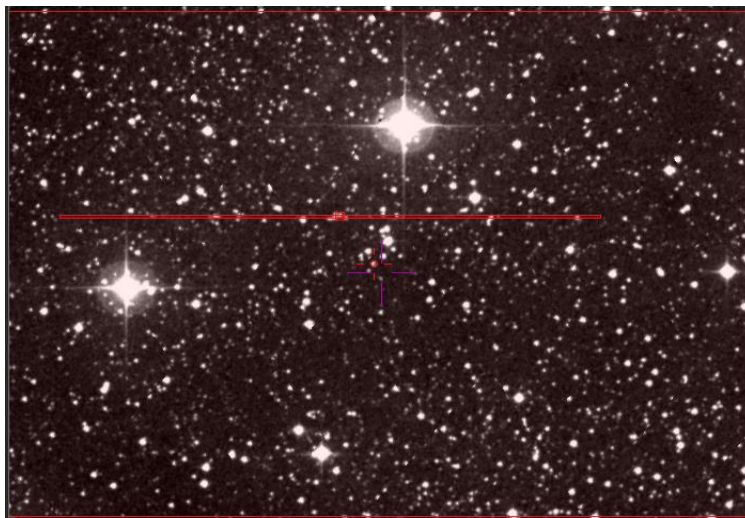
Image Iphas



Slit position  
Autoguider



Slit position  
DSS2

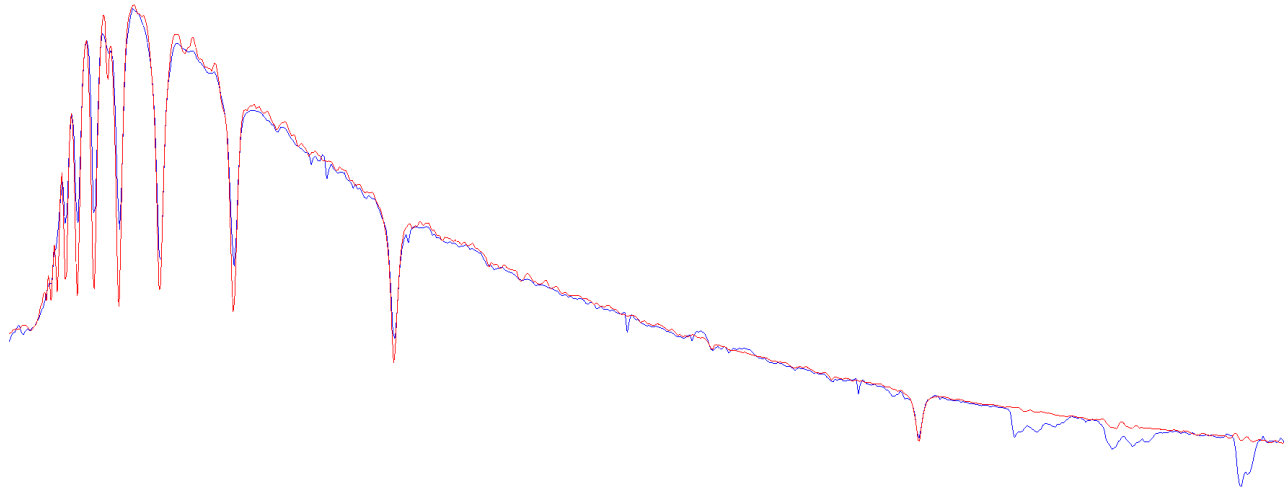




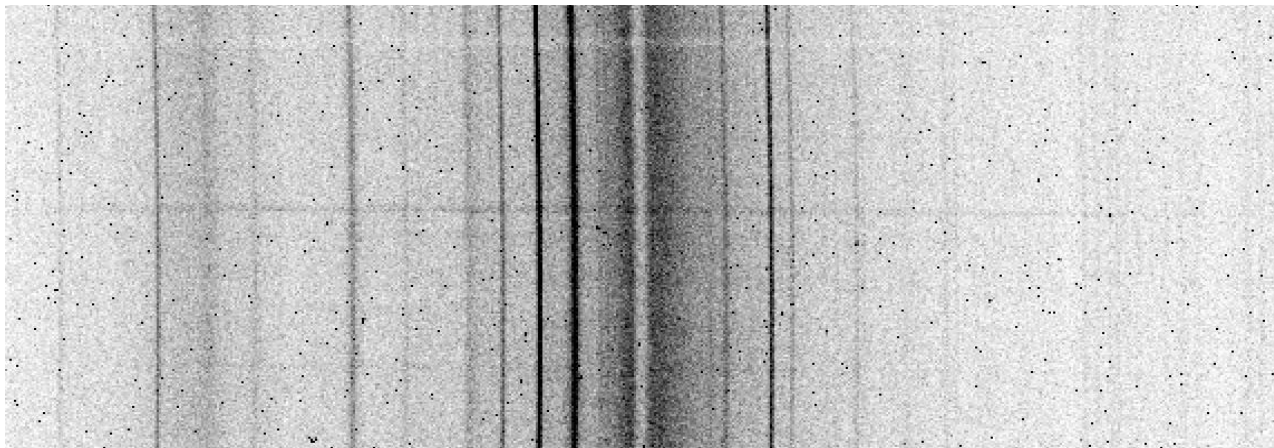


## Instrumental Response and 2D Spectrum

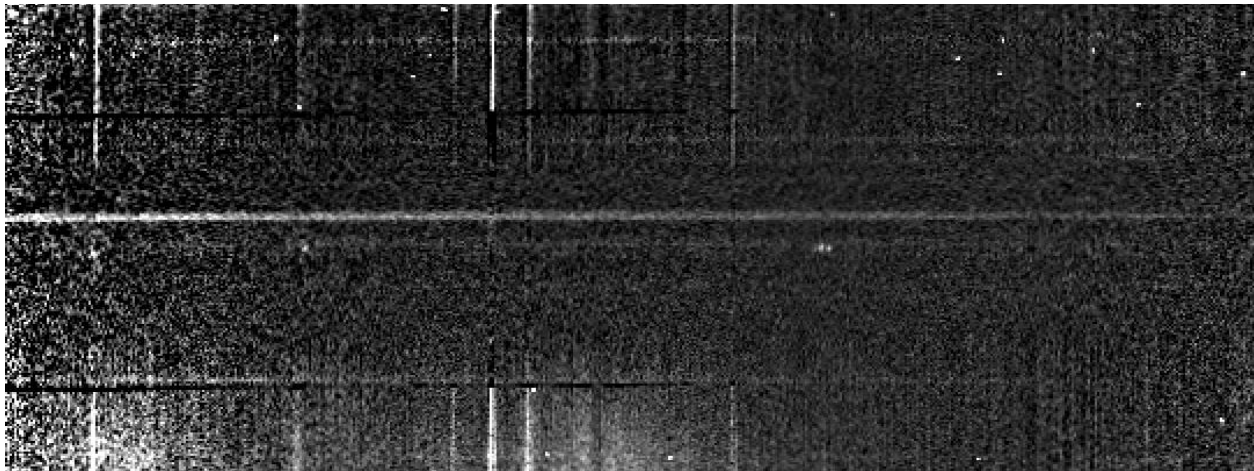
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)

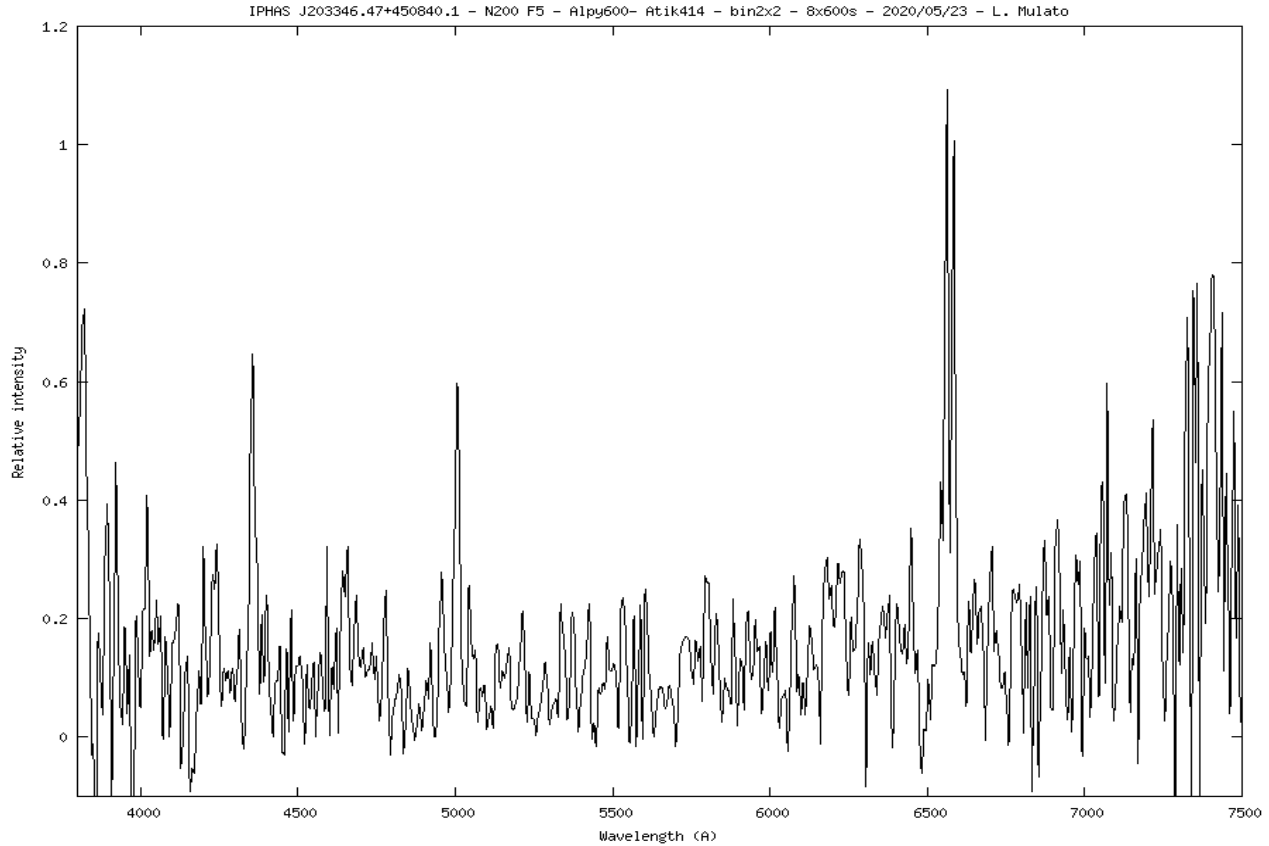


2D Raw spectrum



Processed 2D spectrum





**Comments :**

Detected lines : [N II] (6548+6583) > H-alpha ; [O III]. No H-bêta. Cosmic ray at 4355 Å.

IPHAS J203346.47+450840.1 is a compact and Nitrogen rich object.

MIR WISE : compact source with strong emission in W3/W4 bands.

IPHAS J203346.47+450840.1 is likely a compact reddened PN.