



Spectroscopic Record Sheet



Details on acquisitions

Object	Hu4
Coordinates (J2000)	05:28:21.00 +53:31:20.00
Type	PN candidate

Observation date	21.964/11/2020 (d/m/y)
Meteorological conditions	0°C
Observer	L.Mulato
Location	Cornillon France

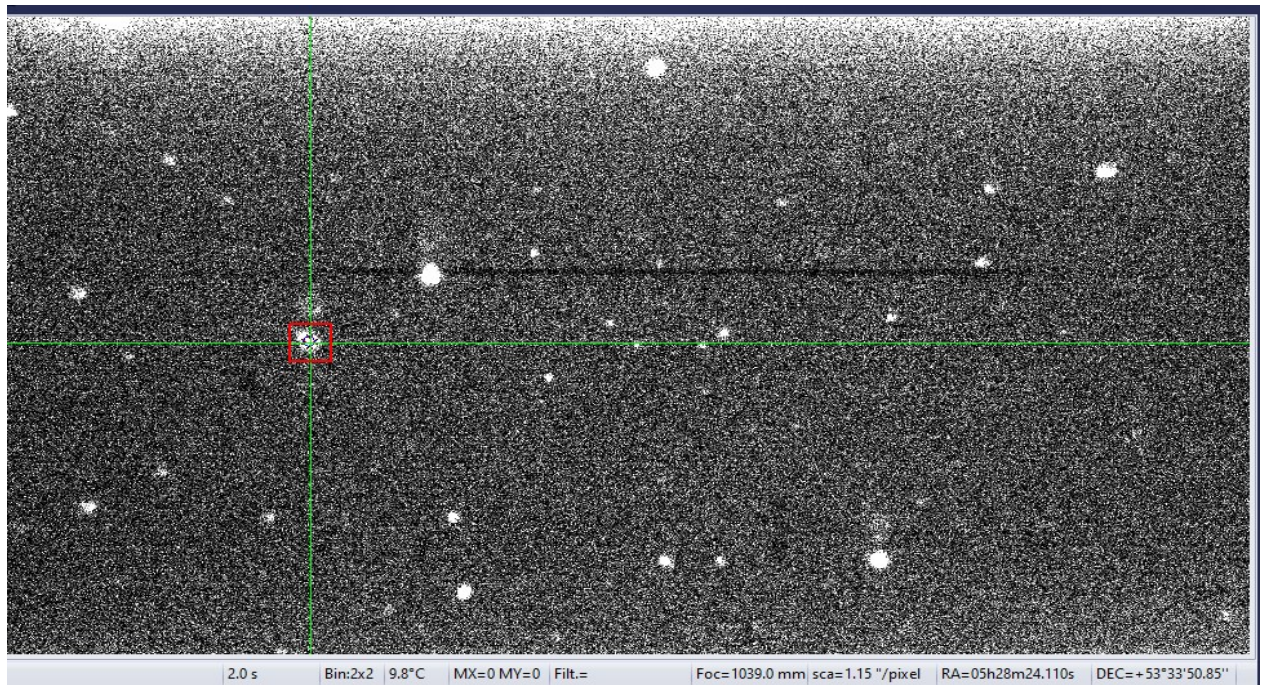
Mount	NEQ6
Telescope	Newton Skywatcher 200 mm F/5
Spectrograph	Alpy 600 - 23 μ m slit
Resolution (bin 1x1)	~ 1 Å at $\lambda 656$ nm
Science camera	ATIK 414 EX
Dispersion (bin 1x1)	$\sim 0,3$ nm/pixel at $\lambda 656$ nm
Cam Temperature	-10 °C
Binning	2x2
Guiding camera	ASI290 MM non cooled
Data acquisition Soft	PRISM V10
Data processing Soft	Isis V5.9.3

Exposure on object	5	x	1200	s
Master Dark date	27/09/2020		(d/m/y)	
Dark Exposure	3	x	1200	s
Dark Temperature	0		°C	
Master Offset date	27/09/2020		(d/m/y)	
Master Flat date	19/11/2020		(d/m/y)	
Neon-Argon calib. date	19/11/2020		(d/m/y)	
Reference star calib.	hd39283_A2V			
Exposure on ref star	13	x	5	s
Ref Star Sp. date	22.031/11/2020			



Images and slit position

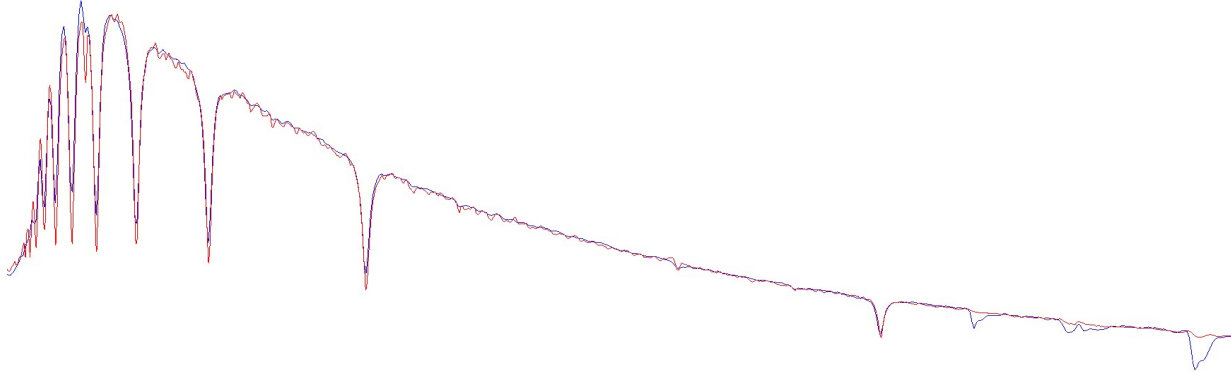
Image Mark Stiles
Orange line : position of the slit



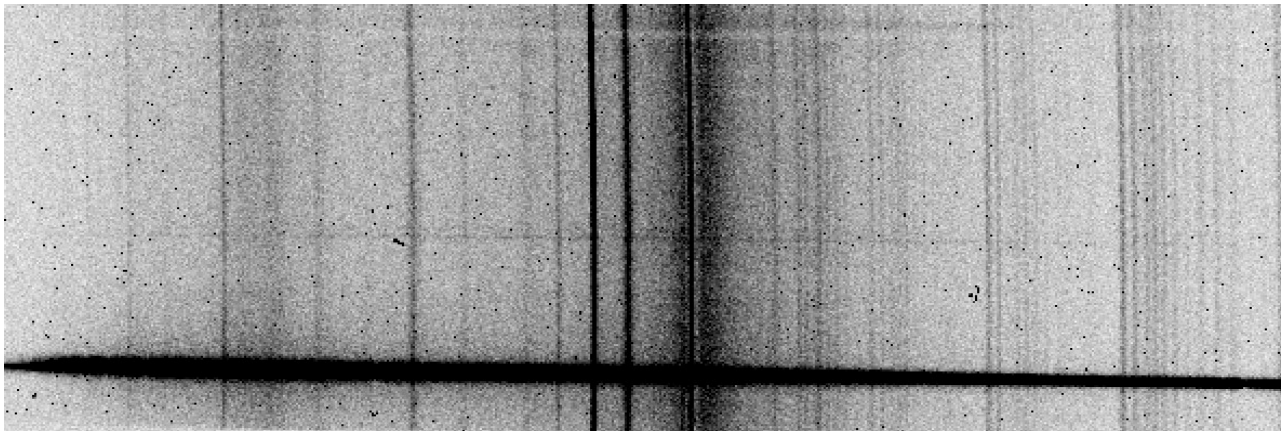


Instrumental Response and 2D Spectrum

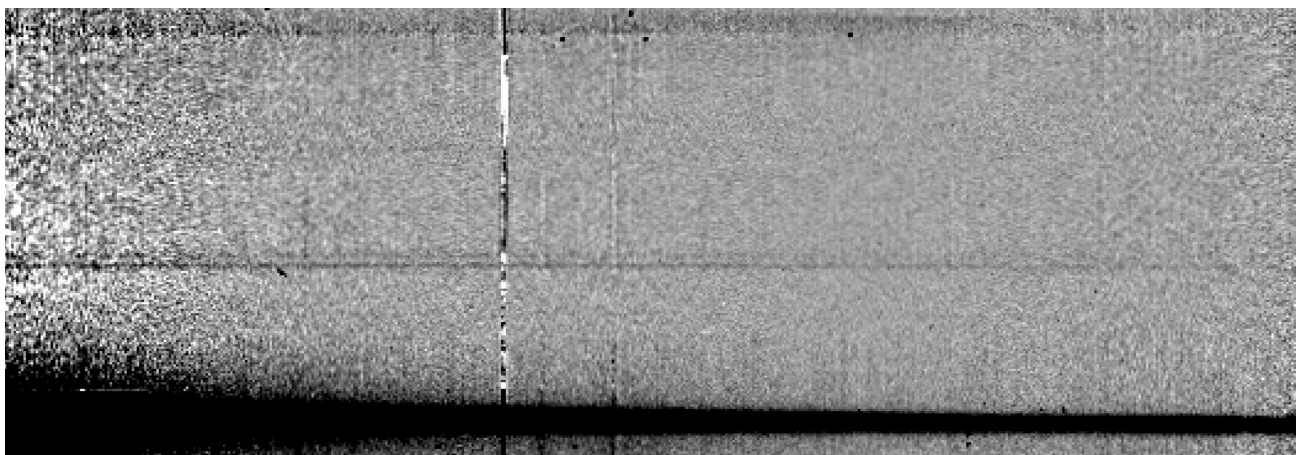
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)

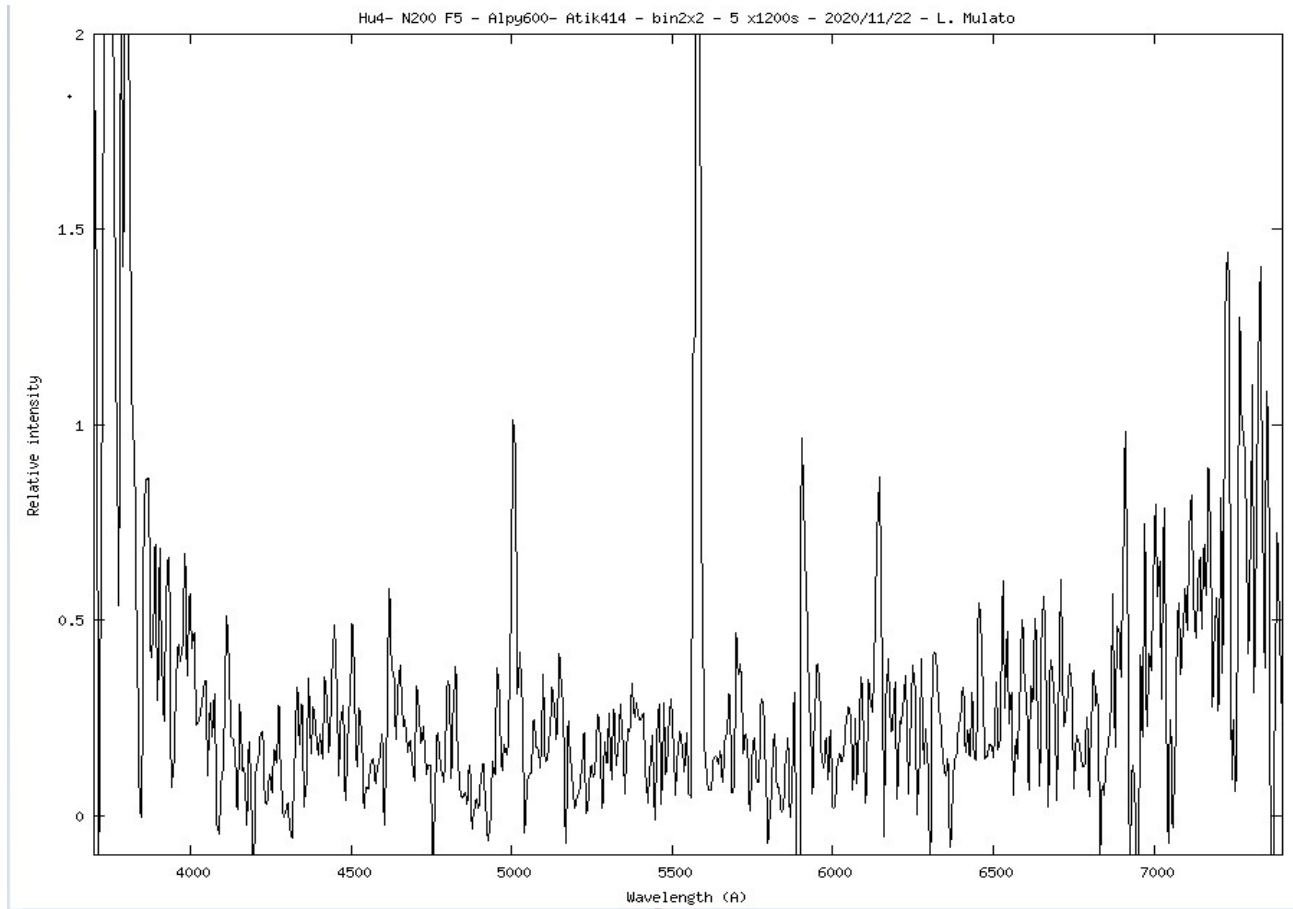


2D Raw spectrum



Processed 2D spectrum





Extremely faint object, only detected line : [OIII] 5007

Hu 4 is certainly a true PN.

Needs better spectrum.