



## Spectroscopic Record Sheet



### Details on acquisitions

Object	StDr43
Coordinates (J2000)	22:16:18.23 +54:18:42.10
Type	PN Candidate

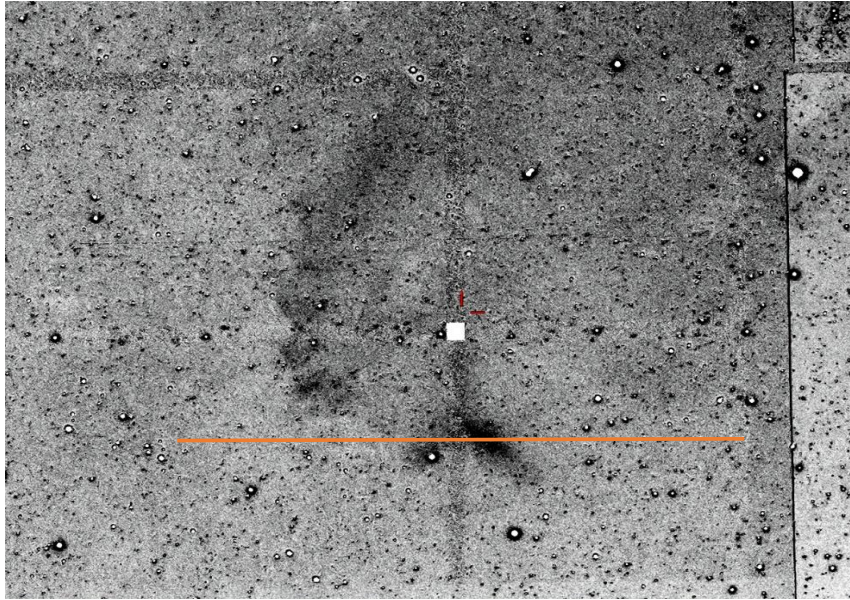
Observation date	15.988/08/2020	(d/m/y)
Meteorological conditions	20°C	
Observer	L.Mulato	
Location	Cornillon	France

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

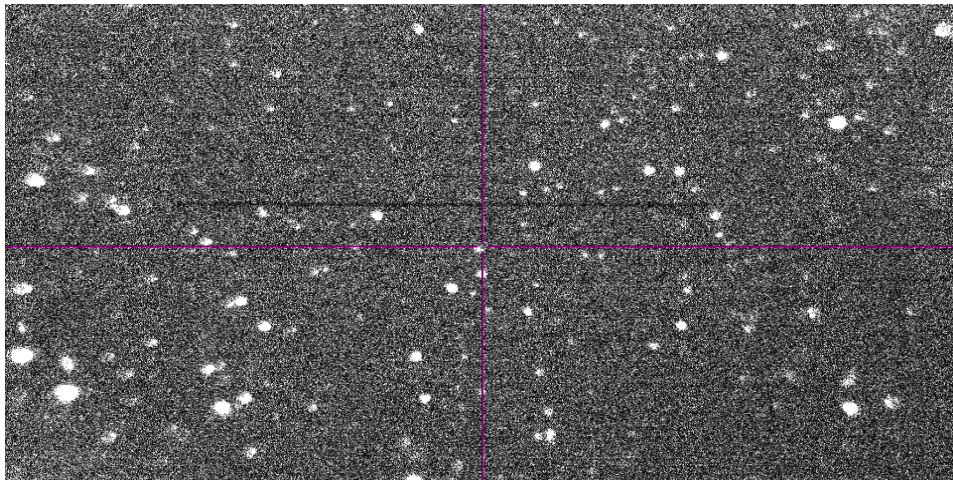
Exposure on object	3	x	1200	s
Master Dark date	28/06/2020	(d/m/y)		
Dark Exposure	18	x	1200	s
Dark Temperature	0	°C		
Master Offset date	22/05/2020	(d/m/y)		
Master Flat date	14/07/2020	(d/m/y)		
Neon-Argon calib. date	16/08/2020	(d/m/y)		
Reference star calib.	hd222439			
Exposure on ref star	20	x	2,5	s
Ref Star Sp. date	16.038/08/2020			

Image Ha, orange = line slit position

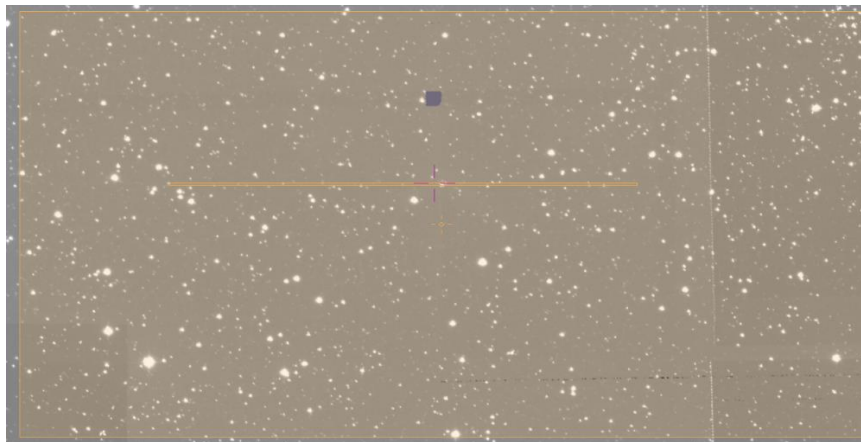
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Autogudier  
Slit position



Slit position  
Iphas

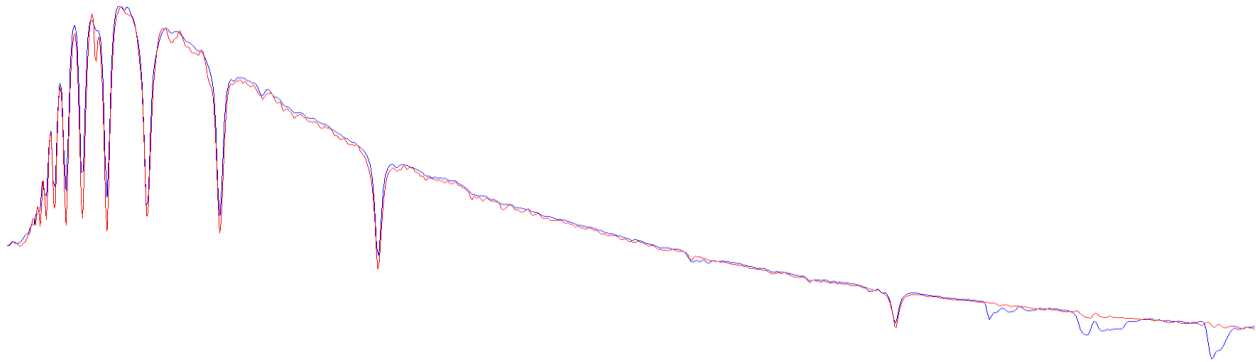




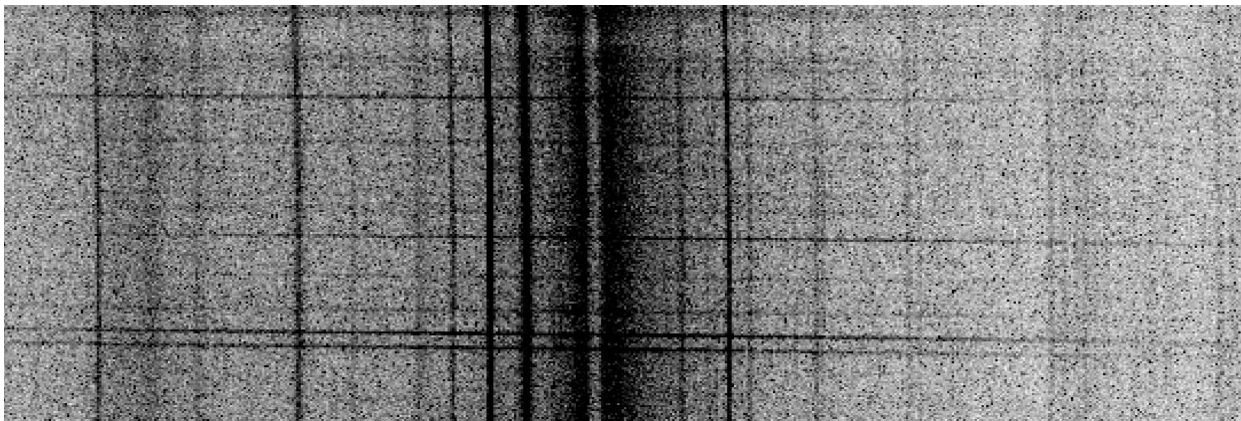


## Instrumental Response and 2D Spectrum

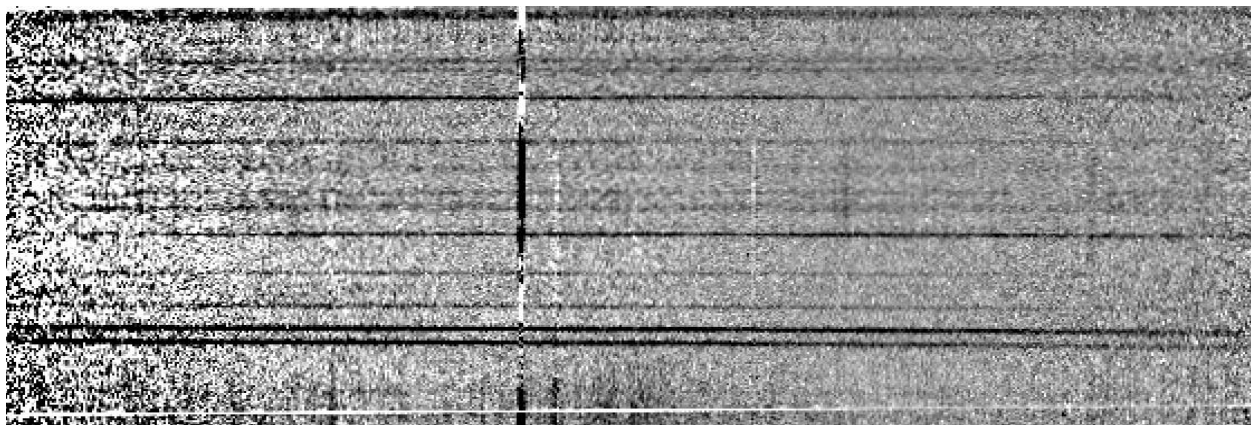
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)

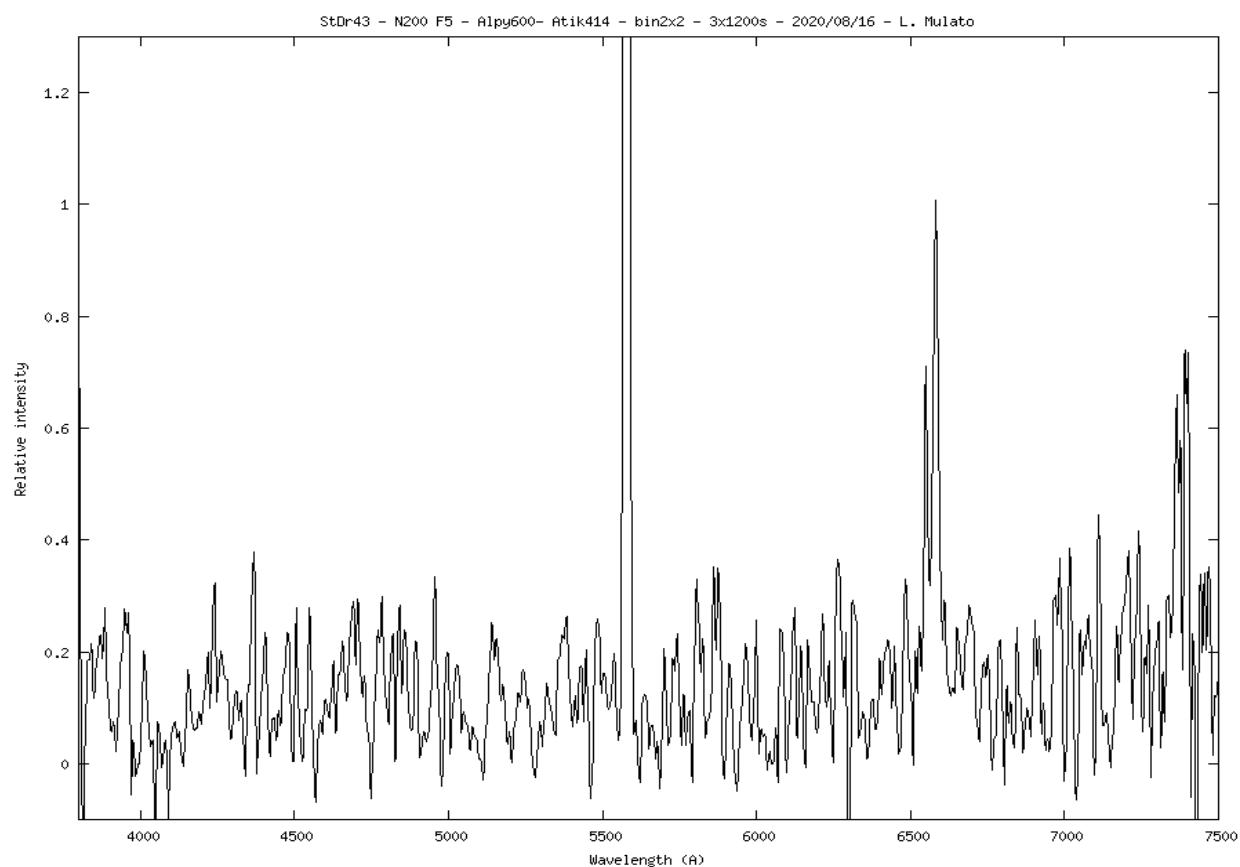


2D Raw spectrum



Processed 2D spectrum





## Comments :

Detected lines : [N II], no or very weak Ha, nothing in blue.

StDr 43 is a very faint and extended nebula.

Weather conditions were bad, only 3 frames of 20 minutes could have been saved.

Needs a better spectrum. If [NII] >> Ha is confirmed, then StDr 43 could be a PN.