Spectroscopic Record Sheet

Details on acquisitions

Object	MPAJ0649-1816
Coordinates (J2000)	06:49:02.70 -18:16:37.92
Type	PN candidate

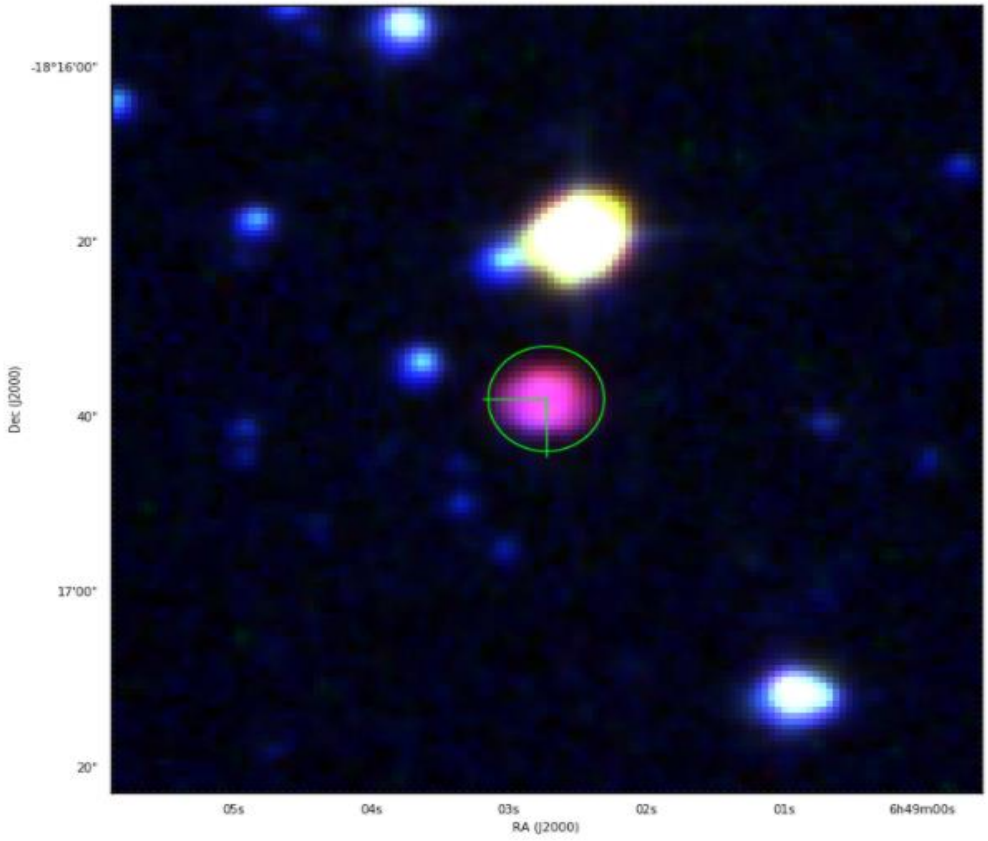
Observation date	19.042/11/2020 (d/m/y)
Meteorological conditions	2°C
Observer	L.Mulato
Location	Cornillon France

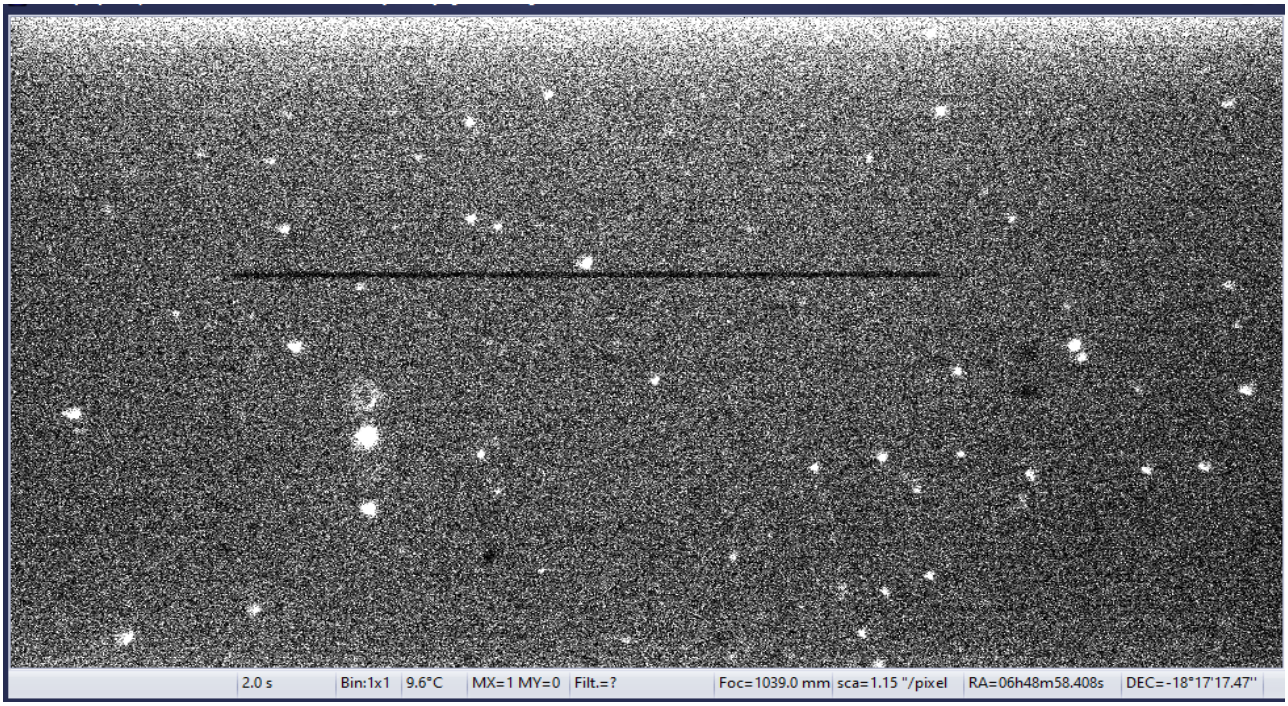
Mount	NEQ6
Telescope	Newton Skywatcher 200 mm F/5
Spectrograph	Alpy 600 - 23 µm slit
Resolution (bin 1x1)	~1 Å at λ656 nm
Science camera	ATIK 414 EX
Dispersion (bin 1x1)	~0,3 nm/pixel at λ656 nm
Cam Temperature	-10 °C
Binning	2x2
Guiding camera	ASI290 MM non cooled
Data acquisition Soft	PRISM V10
Data processing Soft	Isis V5.9.3

Exposure on object	4 x 1200 s
Master Dark date	27/09/2020 (d/m/y)
Dark Exposure	3 x 1200 s
Dark Temperature	-10 °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.	hd55185_A2V
Exposure on ref star	13 x 8 s
Ref Star Sp. date	14.000/01/2021

Images and slit position

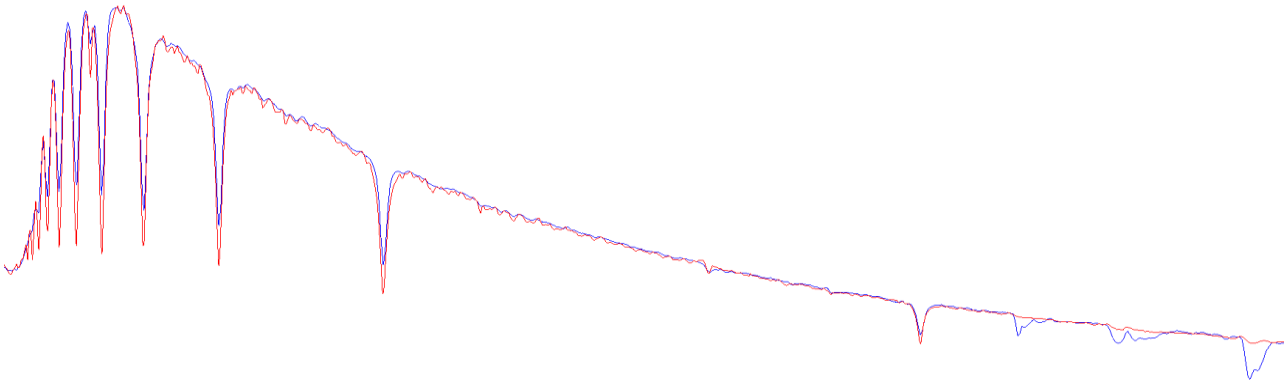
Immage SHS



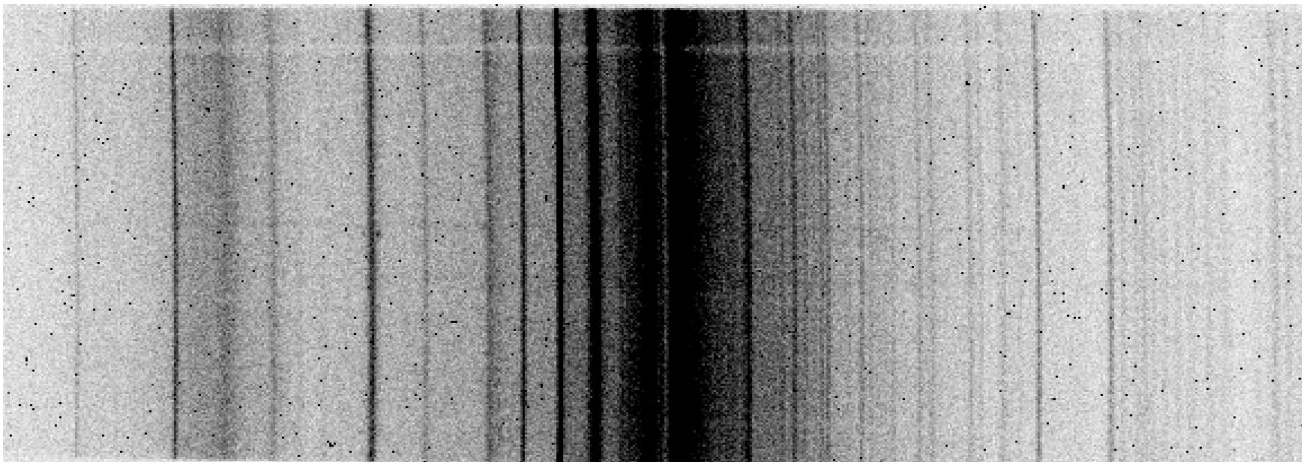


Instrumental Response and 2D Spectrum

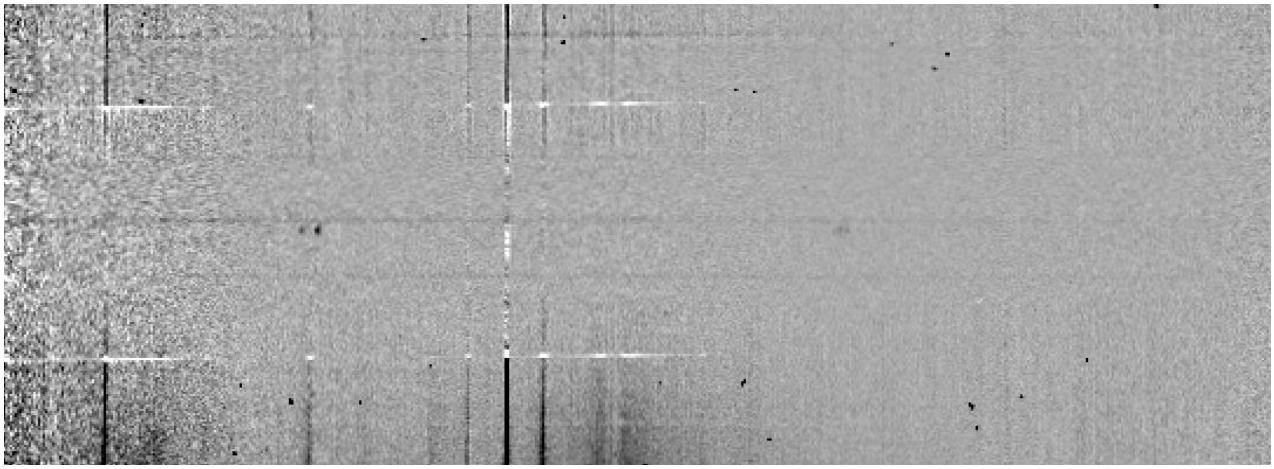
Instrumental response (red = theoritical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)



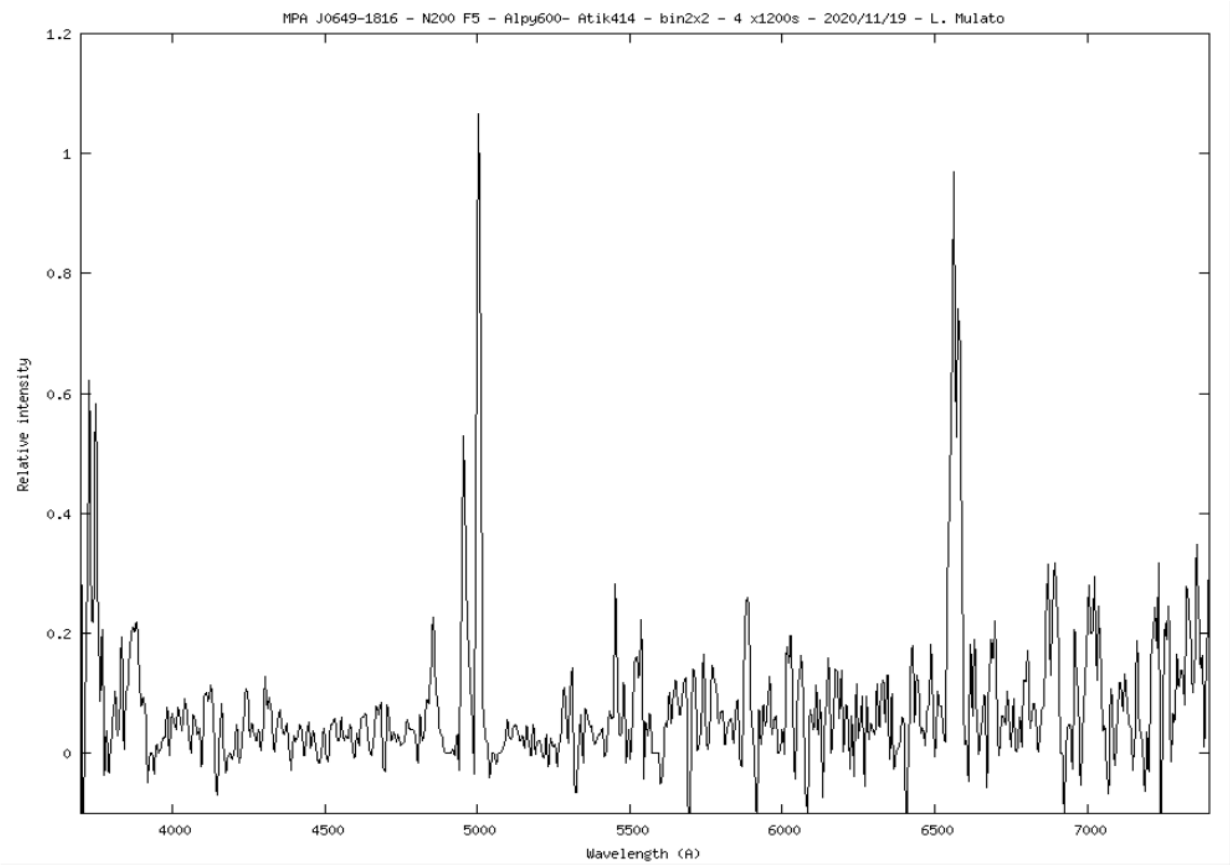
2D Raw spectrum



Processed 2D spectrum



Results



Detected lines : [OIII] >> Hbeta ; [NII]6853~0,8 Halpha.
MPAJ0649-1816 may be a True PN.

NOTA :The reference star spectrum couldn't be taken during MPAJ0649-1816 observing night (the sky suddenly turned cloudy). A reference star spectrum taken at another date (close to the nebula) was used for data reduction.