Spectroscopic Record Sheet

Details on acquisitions

Object	StDr97
Coordinates (J2000)	23:14:18.82 +55:59:33.90
Type	PN Candidate

Observation date	21.991/08/2020 (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 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	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	6 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	22/08/2020 (d/m/y)
Reference star calib.	HD14212_A0V
Exposure on ref star	17 x 8 s
Ref Star Sp. date	24.066/08/2020

Images and slit position

Image Ha, orange line = slit position

© IPHAS

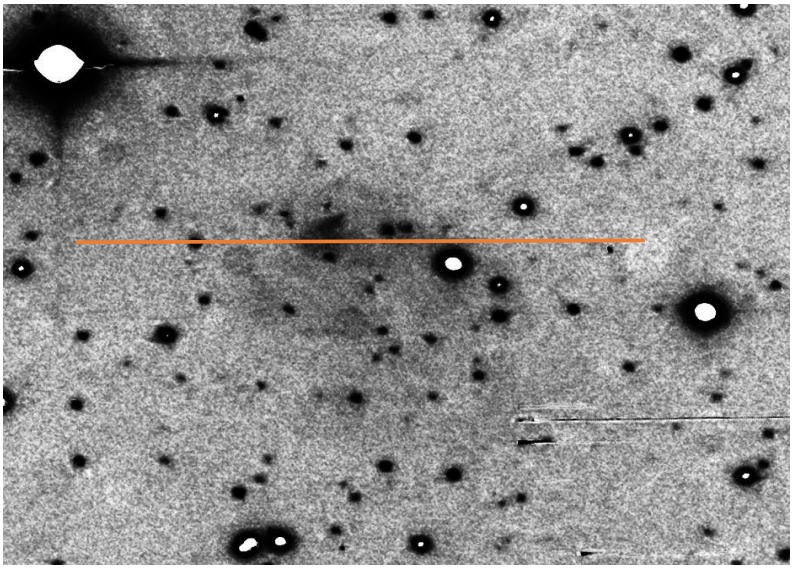
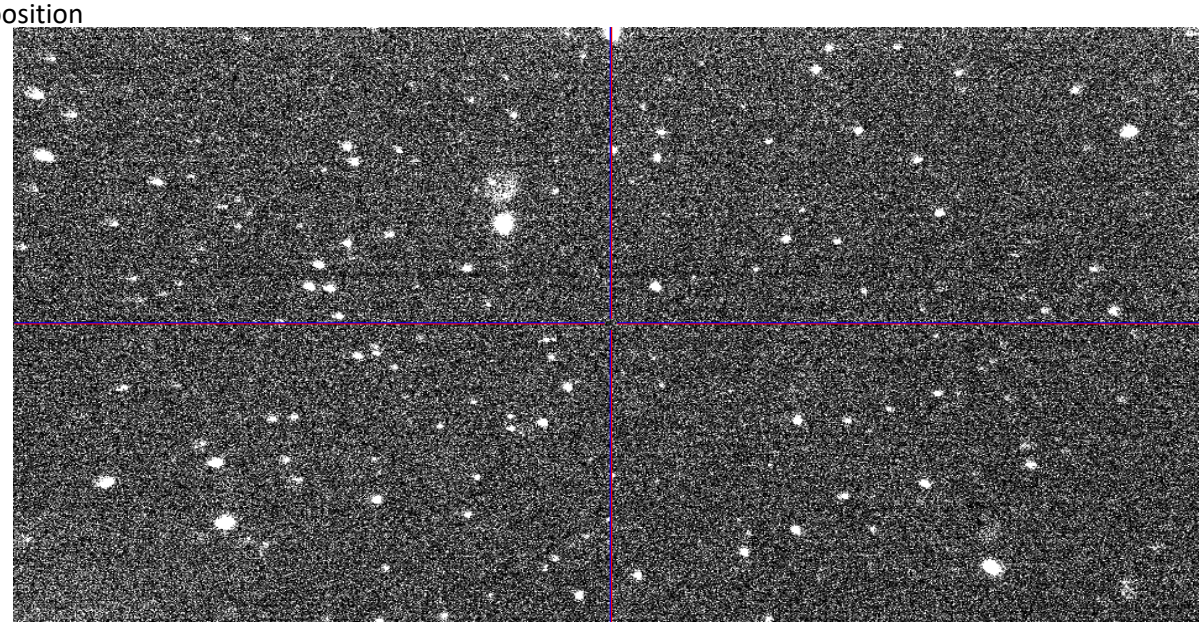
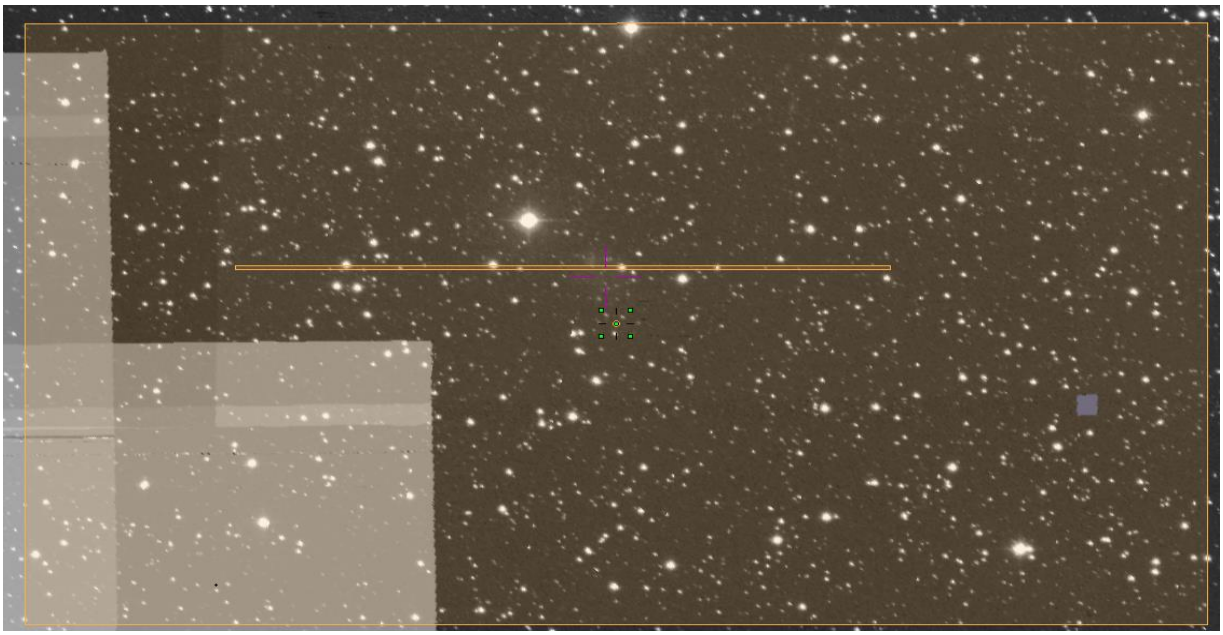


Image HO/RGB © Andreas Zirke

Autoguider
Slit position

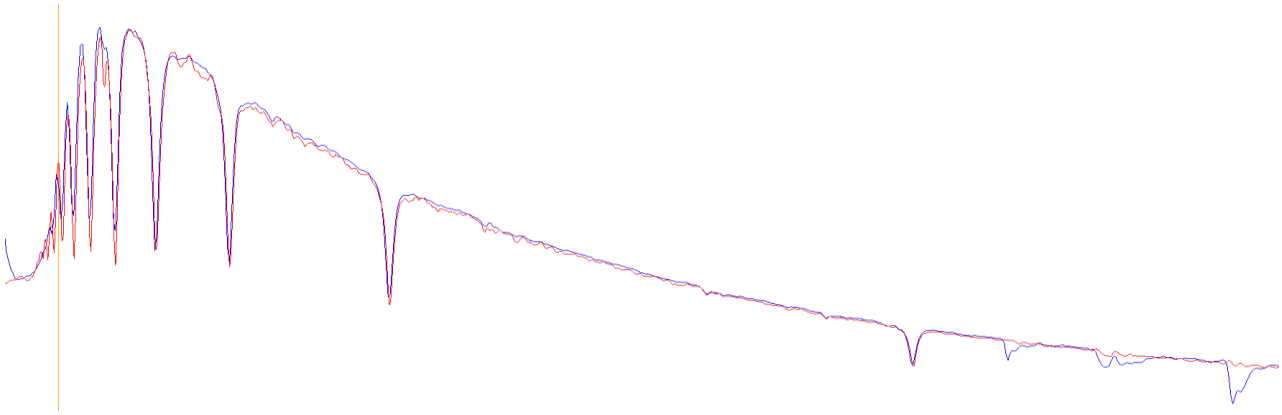


Slit position
IPHAS

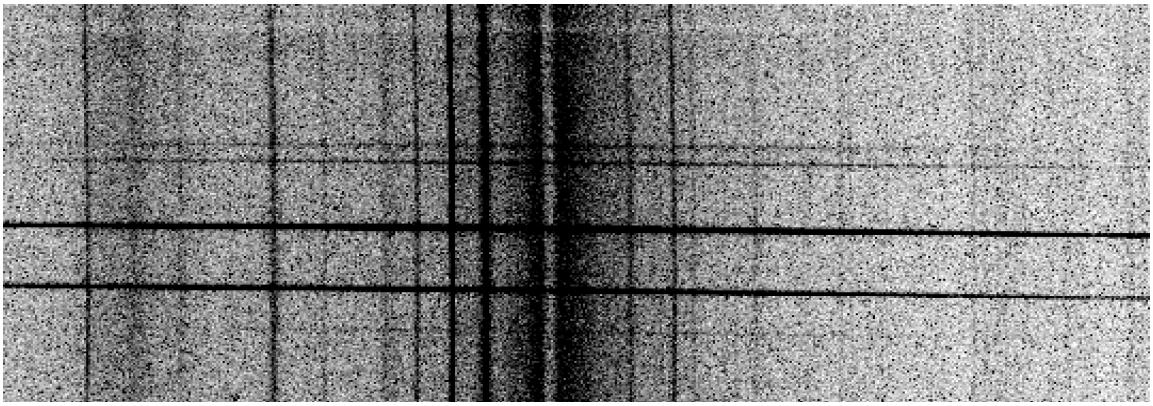


Instrumental Response and 2D Spectrum

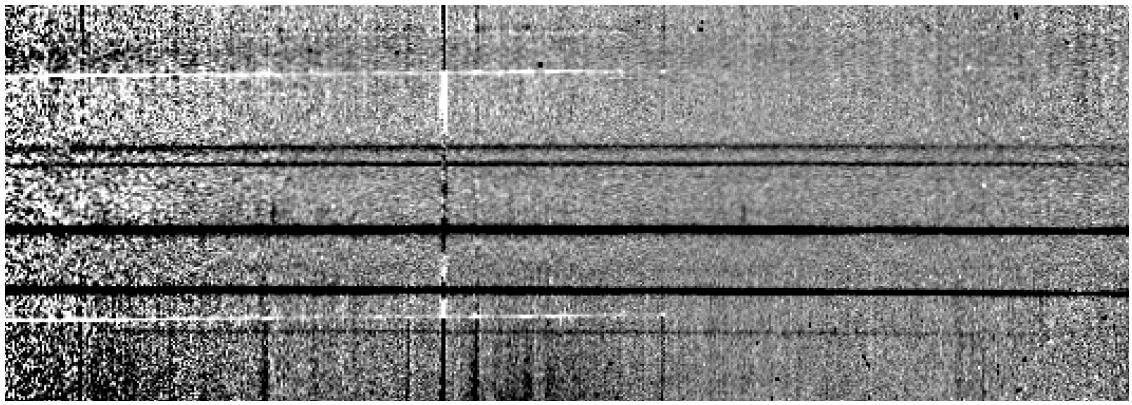
Instrumental response (red = theoritical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)



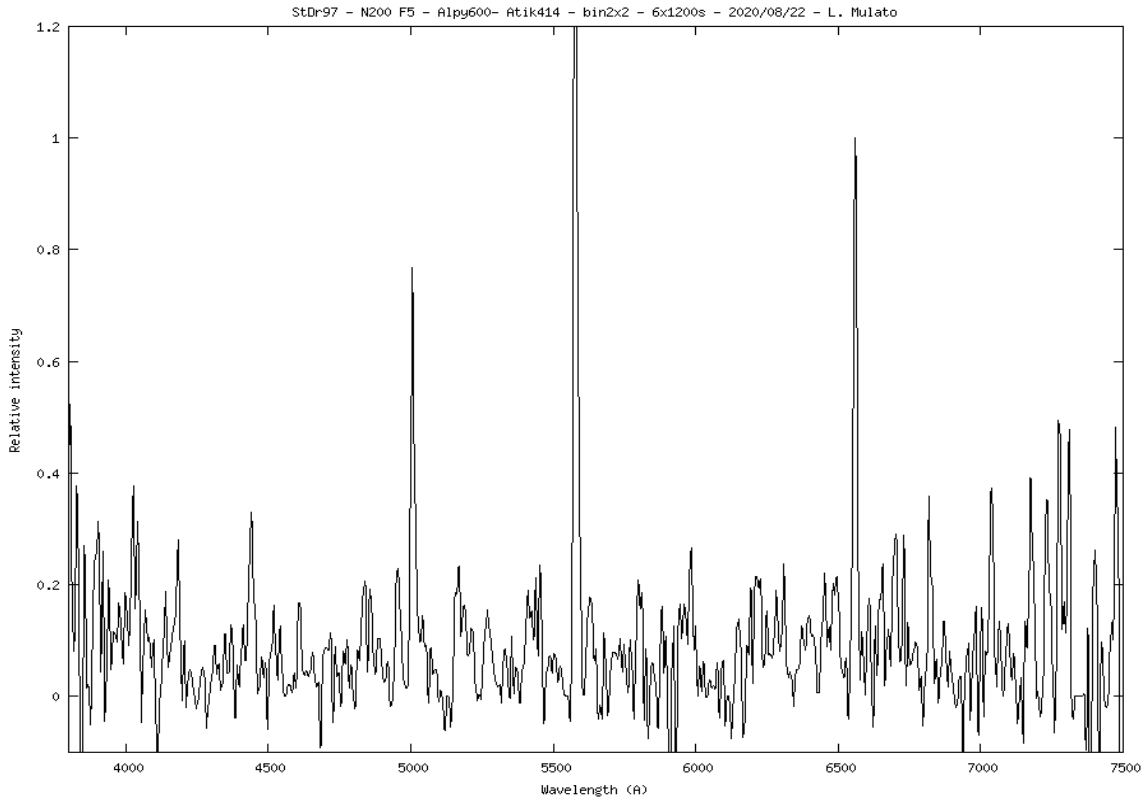
2D Raw spectrum



Processed 2D spectrum



Results



Comments :

Detected lines : Ha and [O III] doublet, no Hb.

Status of StDr97 is unclear, it could be a PN of medium excitation or just an HII Region.