FICHE D'OBSERVATION SPECTROSCOPIQUE

Details of acquisitions

Object	StDr 53
Coordinates (J2000)	22 :44 :54.68 +55 :09 :25.6
Type	PN Candidates

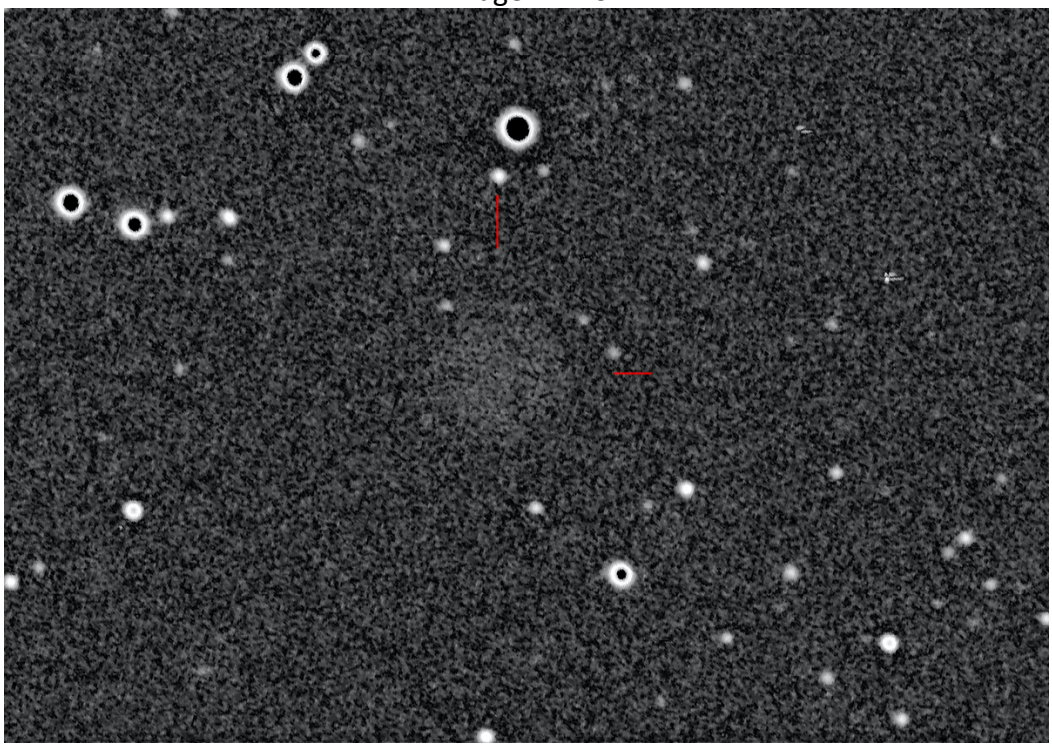
Observation date	2023/09/08 at 21:48 UTC
Wheater conditions	22°C - no wind - seeing 2,5'' - Humidity 60% - sky clear
Observer	Emmanuel Soubrouillard
Location	Pierrefeu du Var France

Mont	AP 900
Telescope	Newton Skywatcher 300 F/4
Spectrograph	Alpy 600 – 23 um slit
Resolution (bin 1x1)	482 at λ 569,2 nm
Science camera	ZWO 533 mm Pro
Dispersion (bin 1x1)	2.00 A/Pix
Camera Temp	-10°C
Binning	1x1
Guiding camera	ZWO 174 mm no cooled
Data acquisition soft	Demetra V3.7.8 Prism V11.4.13
Data processing soft	ISIS V6.1.1

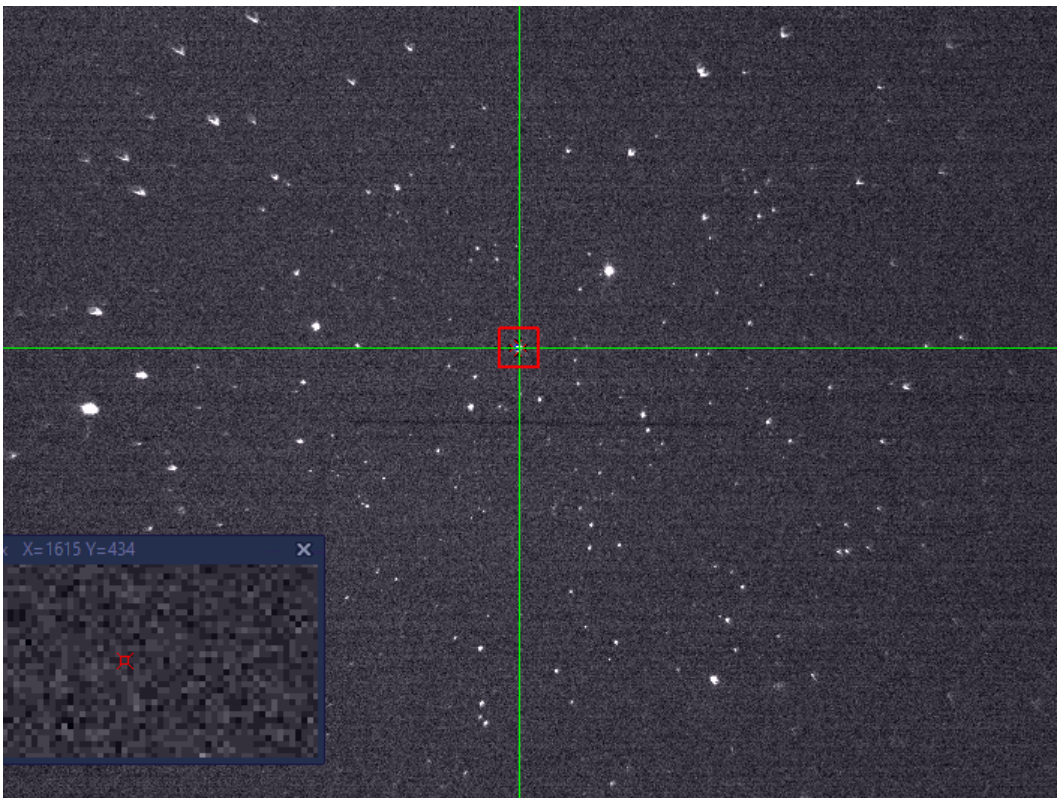
Exposer object	6*1200s
Master Dark Date	2023/07/04
Dark exposure	9*1200s
Dark temperature	-10°C
Master offset date	2023/09/08
Master flat date	2023/09/08
Neon-Argon calib. date	2023/09/08
Ref Star calibration	HD 213470
Exposure on ref star	8*20s
Ref star Sp. Date	2023/09/09 at 00:07 UTC

Images and slit position

Image IPHAS



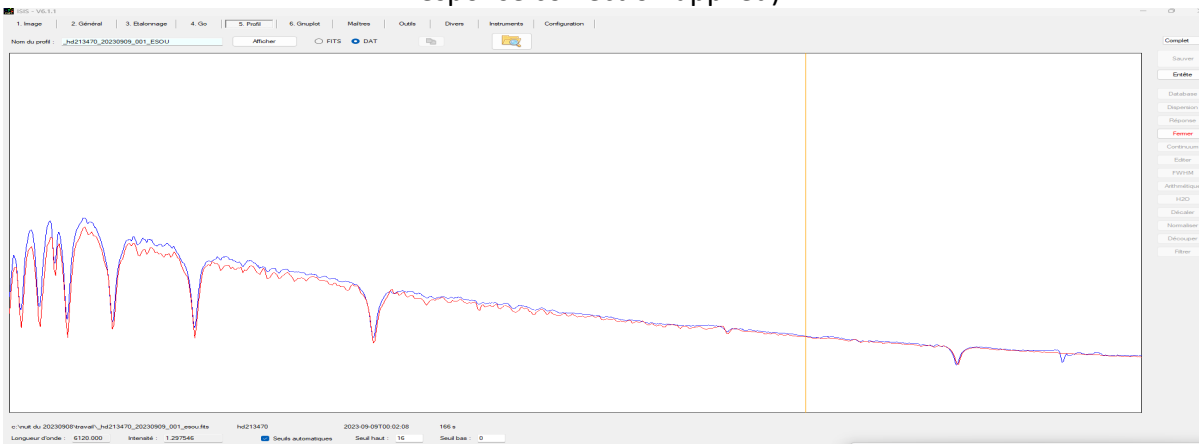
StDr 53
Autoguider slit position



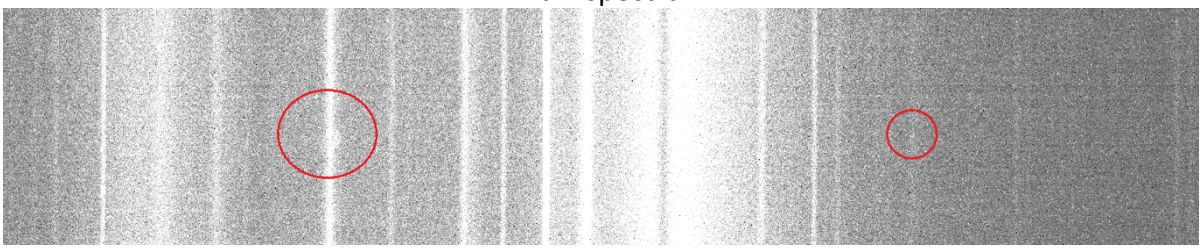
Instrumental Response and 2D Spectrum

Instrumental response

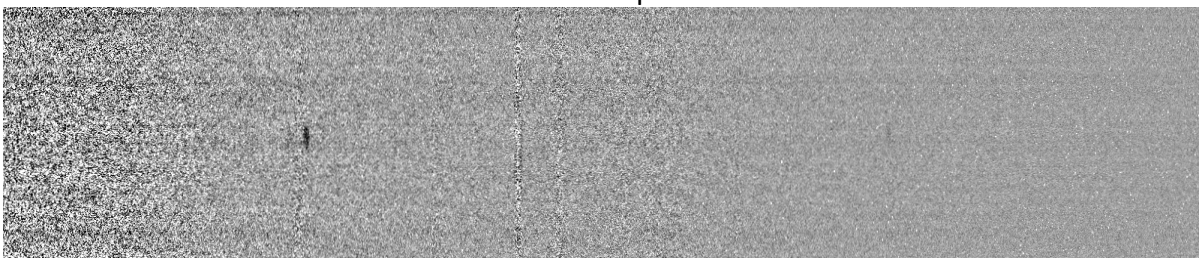
(Red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)



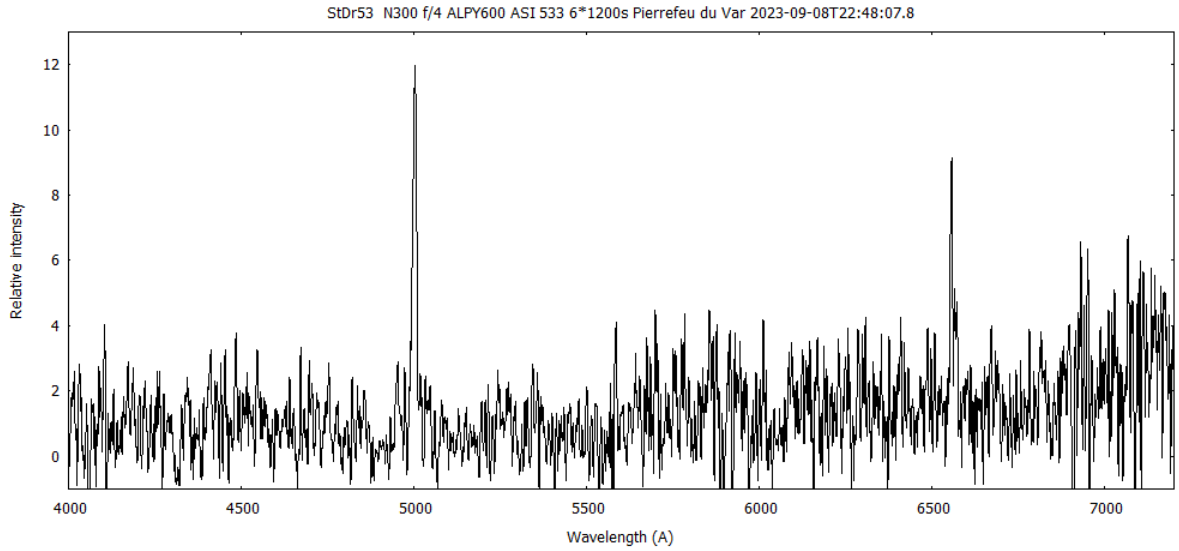
2D Raw spectrum



Processed 2D spectrum



Results



Comments :
Lines detected : H-alpha, O III, No continuum.
Possible PN