Spectroscopic Record Sheet

Details on acquisitions

Object	kn60
Coordinates (J2000)	07:00:06.63 12:14:41.30
Type	PN candidate

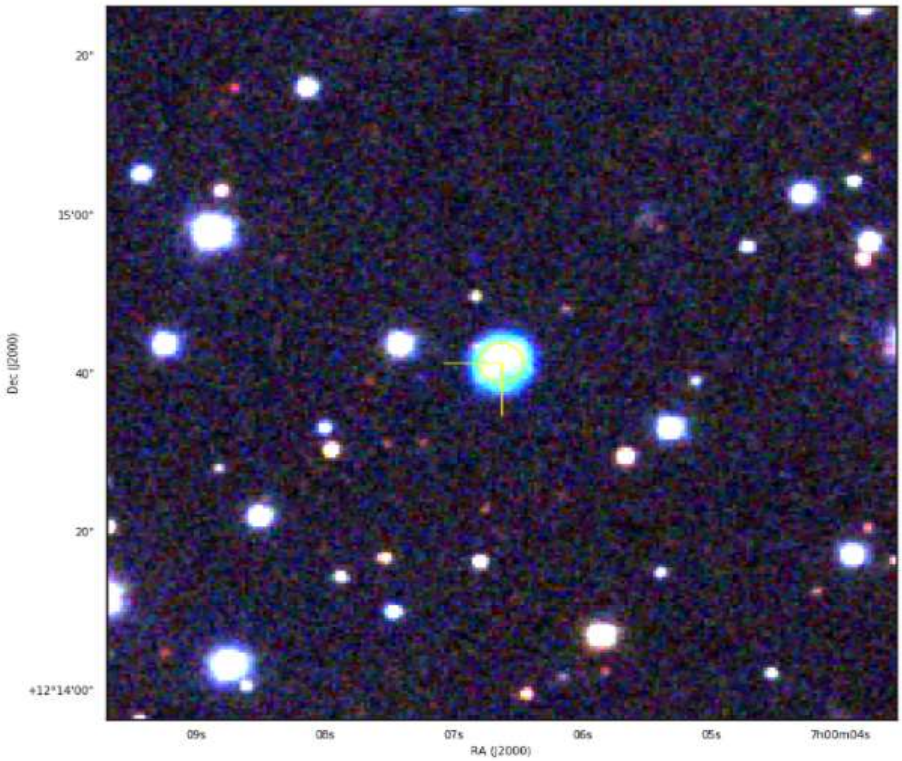
Observation date	12.836/03/2021 (d/m/y)
Meteorological conditions	10°C
Observer	L.Mulato
Location	Cornillon France

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

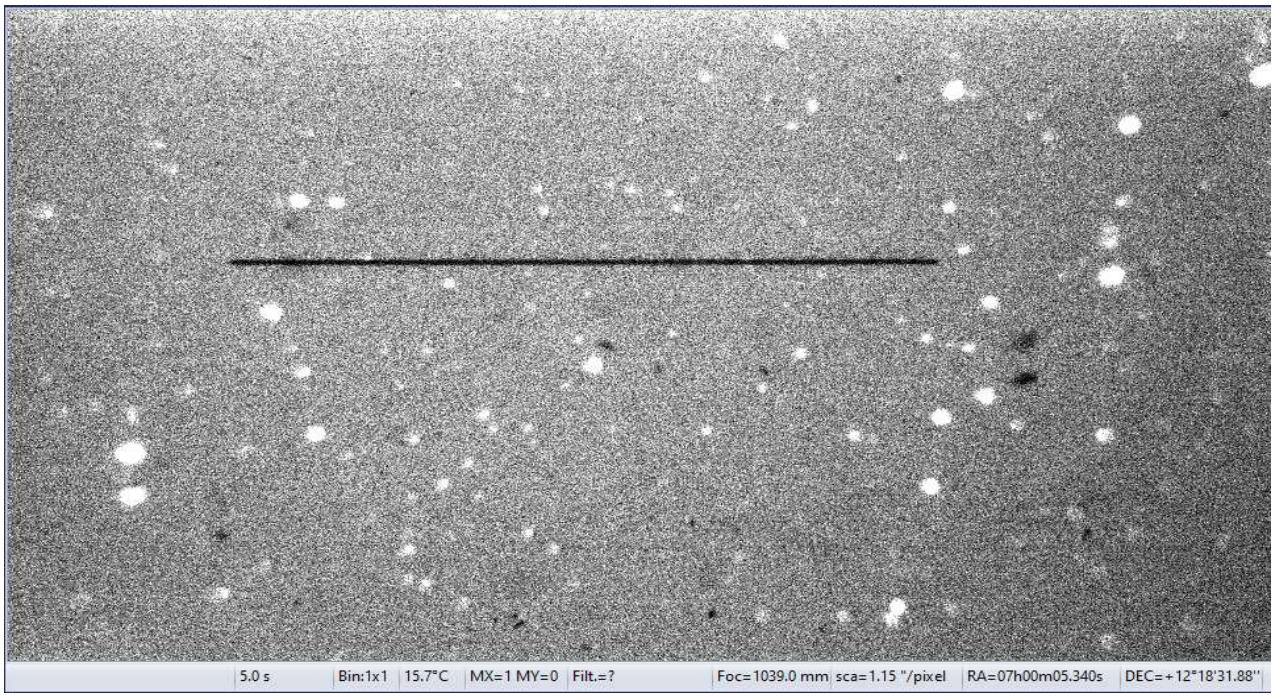
Exposure on object	8 x 1200 s
Master Dark date	27/09/2020 (d/m/y)
Dark Exposure	3 x 1200 s
Dark Temperature	-10 °C
Master Offset date	27/09/2020 (d/m/y)
Master Flat date	30/04/2021 (d/m/y)
Neon-Argon calib. date	12/03/2021 (d/m/y)
Reference star calib.	HD48097_A2V
Exposure on ref star	15 x 6 s
Ref Star Sp. date	12.902/03/2021

Images and slit position

Image SHS

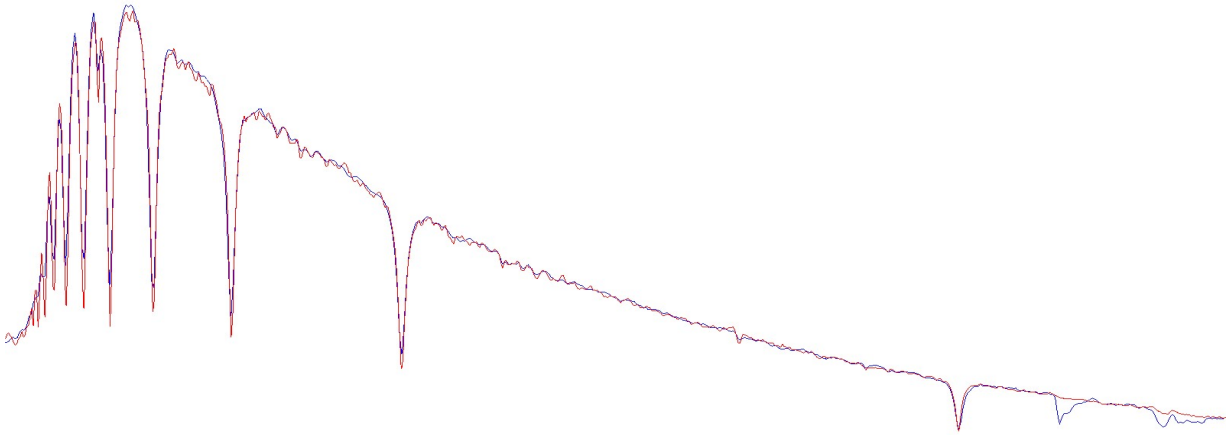


Autoguider image with slit position :

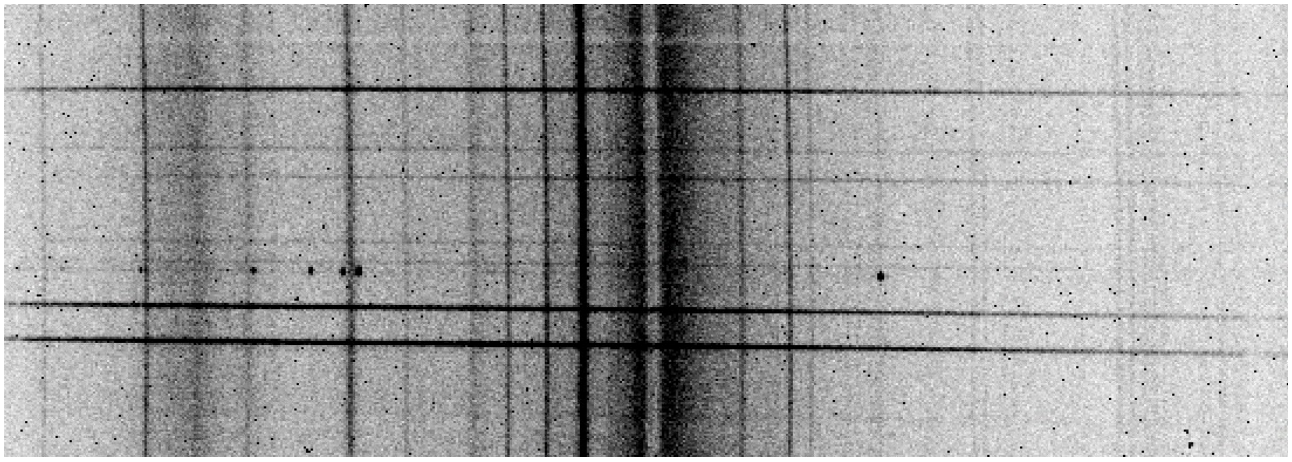


Instrumental Response and 2D Spectrum

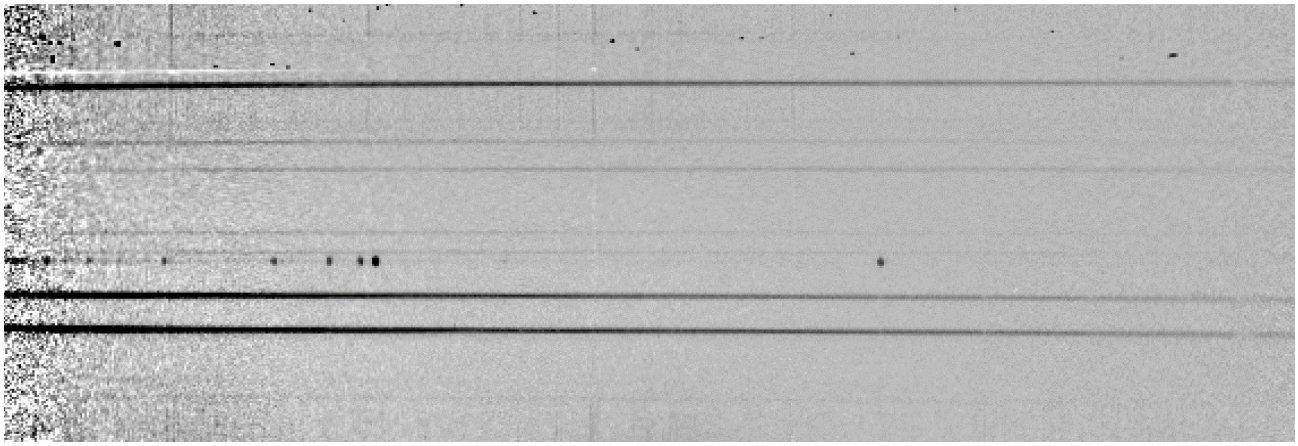
Instrumental response (red = theoritical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)



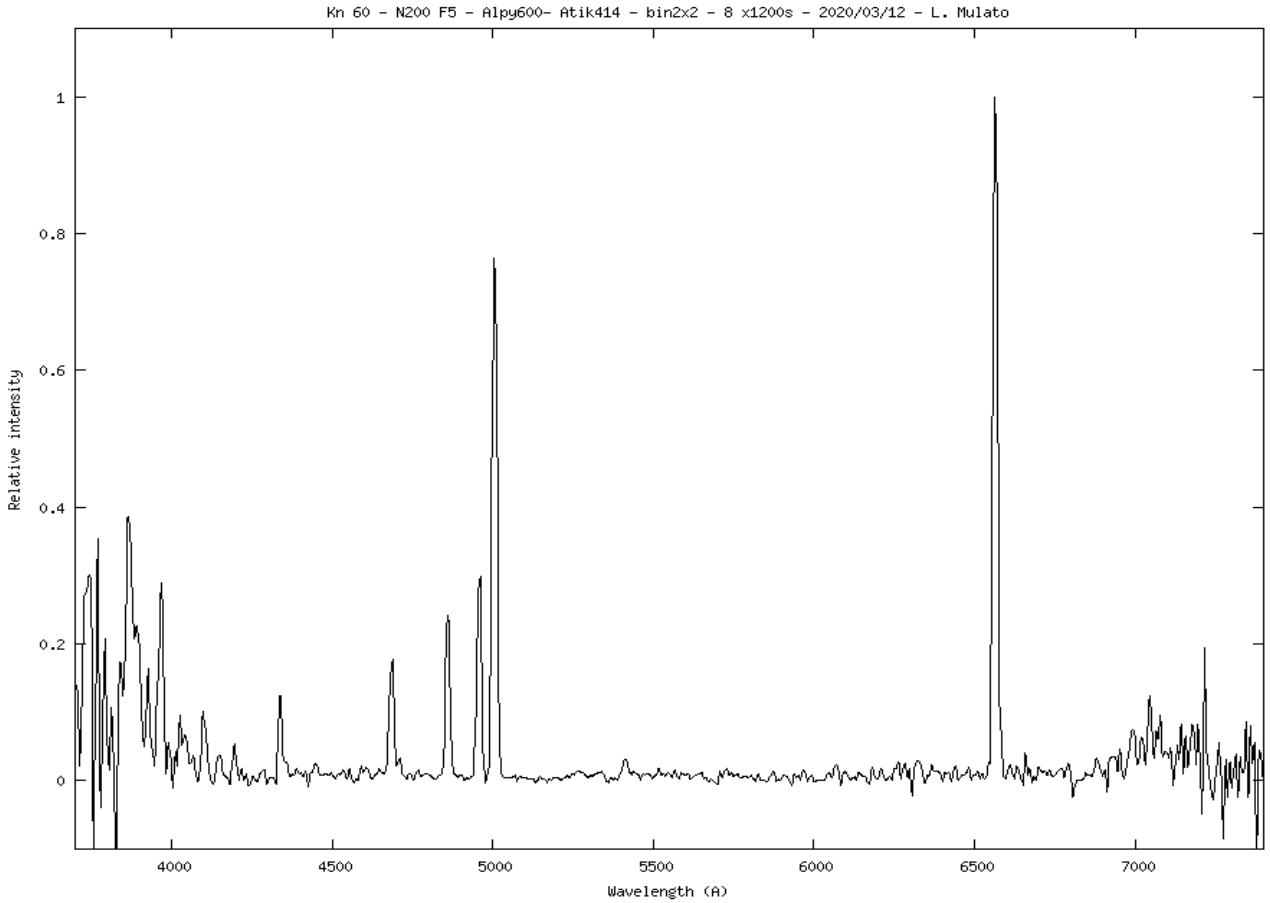
2D Raw spectrum



Processed 2D spectrum



Results



Detected lines : H-alpha only in red, HeII at 5412 A ; strong [OIII] and HeII 4686 ~ H-bêta. [Ne III] in near UV.
Hot continuum also visible on 2D spectrum.
Kn 60 is an high excitation PN.