



Spectroscopic Record Sheet



Details on acquisitions

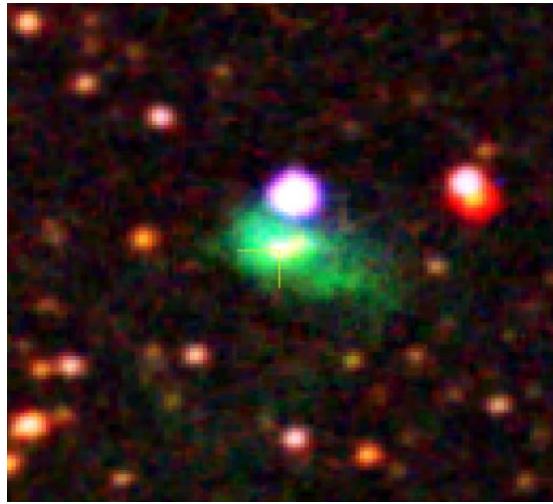
Object	GM 1-11
Coordinates (J2000)	20:24:25.80 34:01:25.00
Type	HII

Observation date	14.904/09/2020 (d/m/y)
Meteorological conditions	20°C
Observer	L.Mulato
Location	Cornillon France

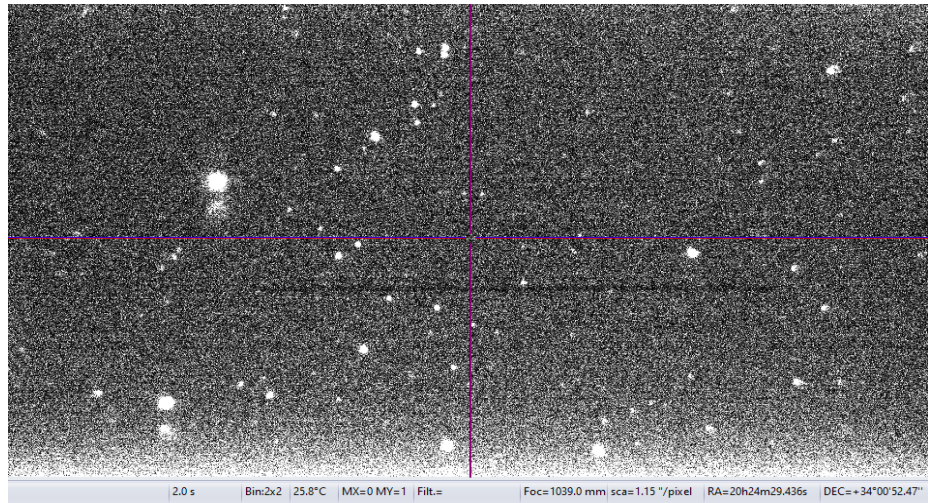
Mount	NEQ6
Telescope	Newton Skywatcher 200 mm F/5
Spectrograph	Alpy 600 - 23 μm slit
Resolution (bin 1x1)	$\sim 1 \text{ \AA}$ at $\lambda 656 \text{ nm}$
Science camera	ATIK 414 EX
Dispersion (bin 1x1)	$\sim 0,3 \text{ nm/pixel}$ at $\lambda 656 \text{ nm}$
Cam Temperature	0 °C
Binning	2x2
Guiding camera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

Exposure on object	4	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	15/09/2020	(d/m/y)		
Neon-Argon calib. date	15/09/2020	(d/m/y)		
Reference star calib.	HD193369			
Exposure on ref star	17	x	9	s
Ref Star Sp. date	14.937/09/2020			

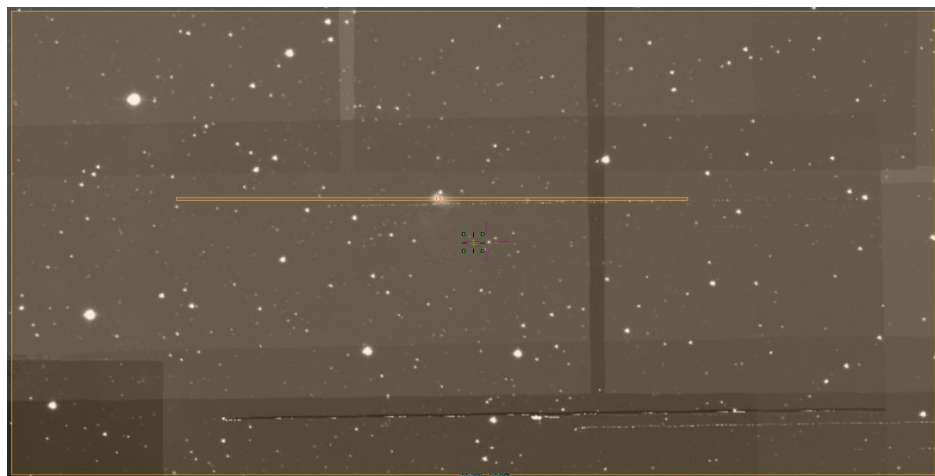
Image SSS irb2



Slit position autoguider



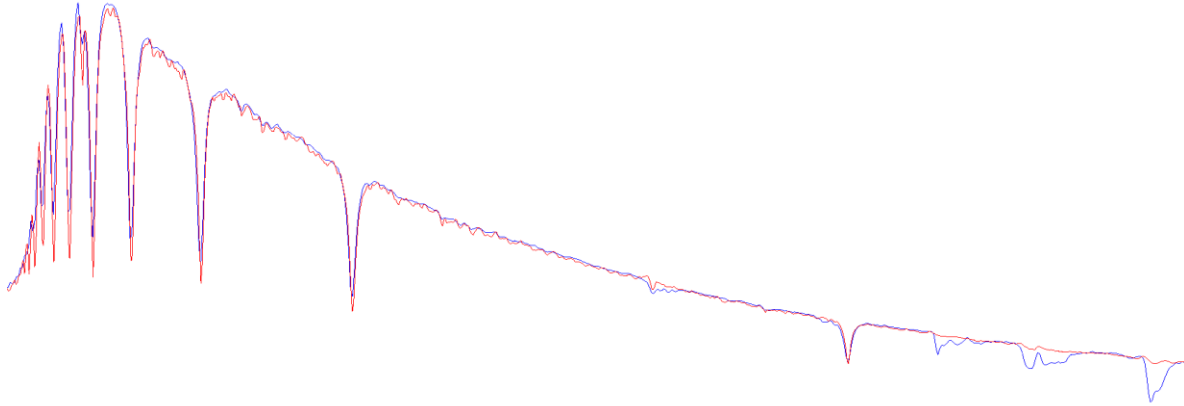
Slit position IPHAS



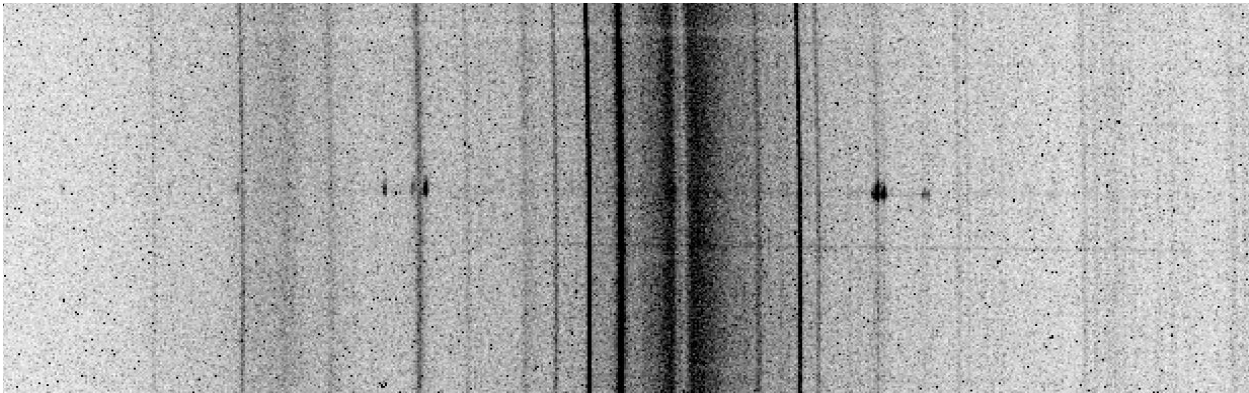


Instrumental Response and 2D Spectrum

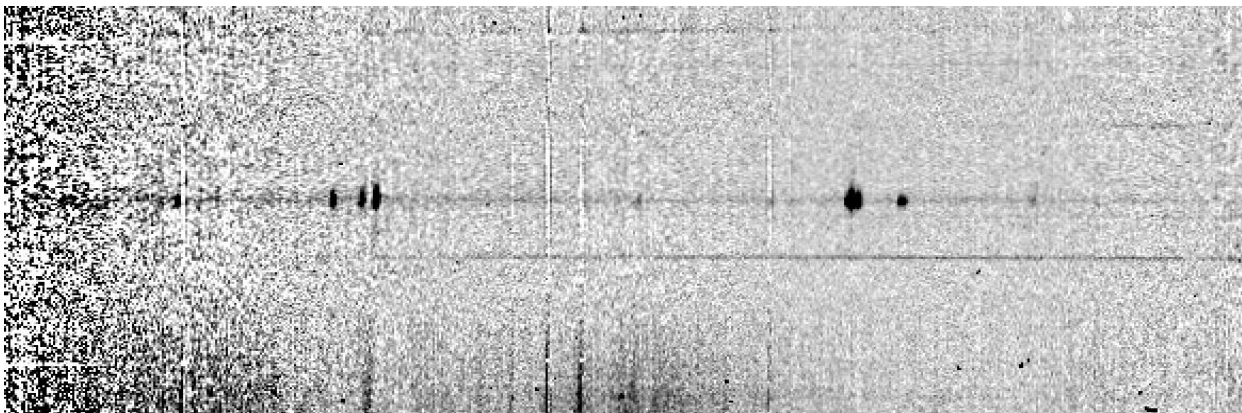
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)

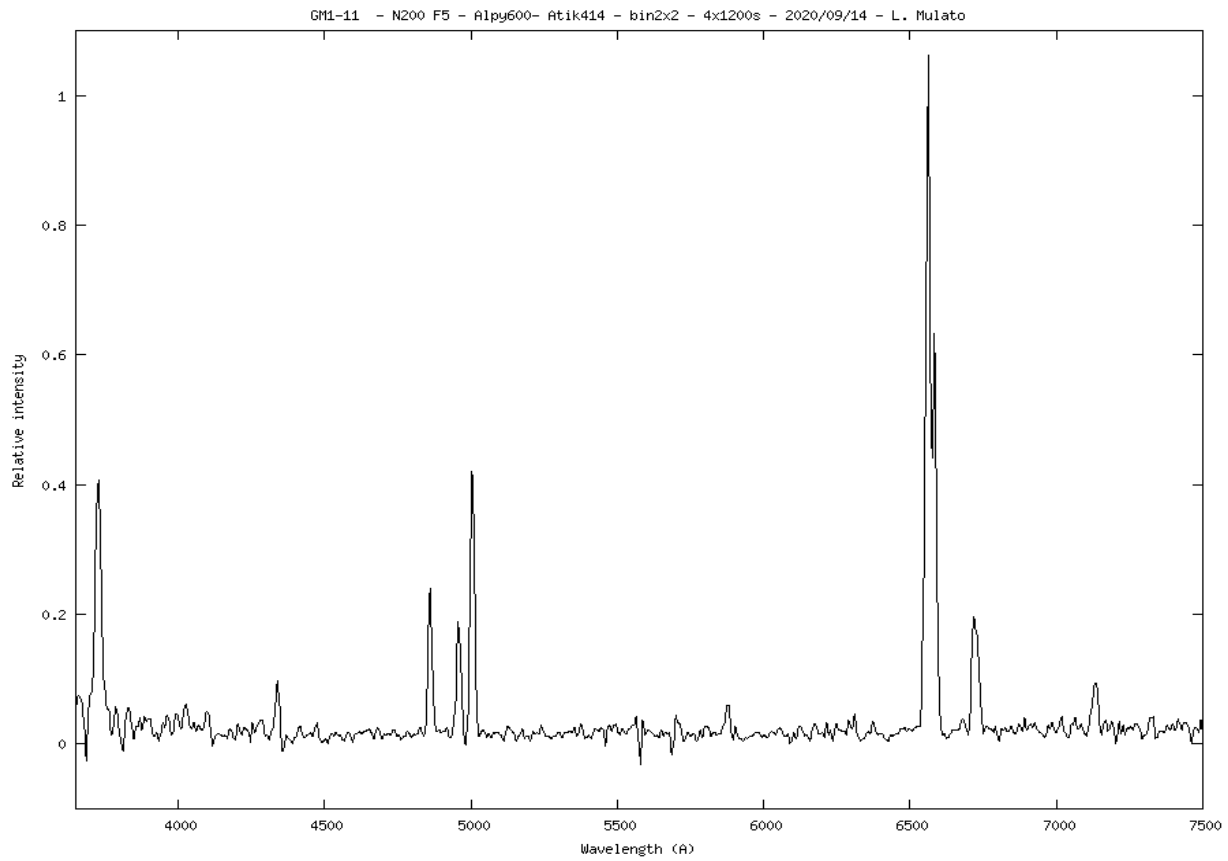


2D Raw spectrum



Processed 2D spectrum





Comments :

Detected lines : [O III] doublet intensity comparable to H β line intensity, H α > [N II], [S II].

Several other lines : H γ , He I, [AR III], [O II] at 3727 and 7325 Å.

GM 1-11 is an HII Region.

