



## Spectroscopic Record Sheet



### Details on acquisitions

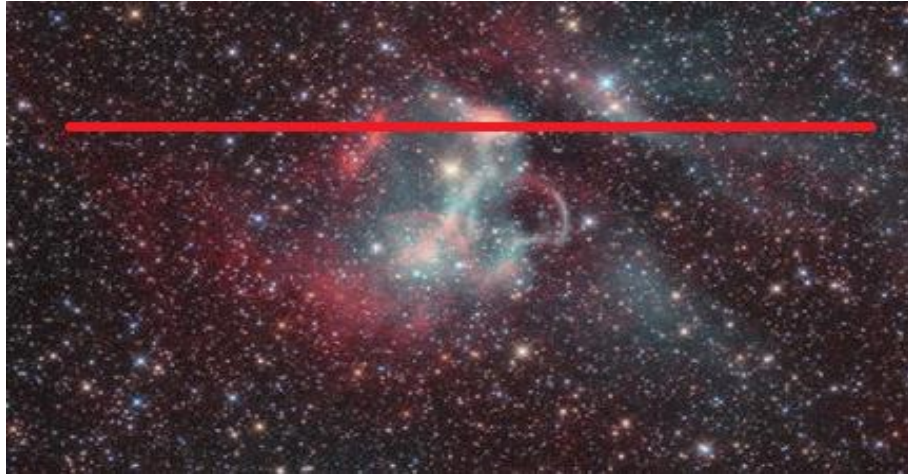
Object	DrZiobj1
Coordinates (J2000)	19:55:52.27 +30:16:09.90
Type	PN Candidate

Observation date	11.930/07/2020 (d/m/y)
Meteorological conditions	20°C
Observer	L.Mulato
Location	Cornillon France

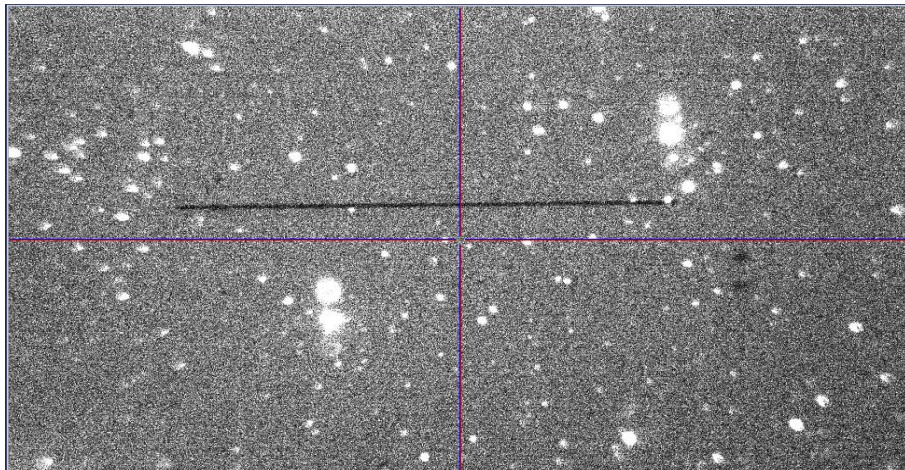
Mount	NEQ6
Telescope	Newton Skywatcher 200 mm F/5
Spectrograph	Alpy 600 - 23 $\mu\text{m}$ slit
Resolution (bin 1x1)	$\sim 1 \text{ \AA}$ at $\lambda 656 \text{ nm}$
Science camera	ATIK 414 EX
Dispersion (bin 1x1)	$\sim 0,3 \text{ nm/pixel}$ at 656 nm
Cam Temperature	0 °C
Binning	2x2
Guiding camera	ASI290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

Exposure on object	3	x	1200	s
Date Master Dark	28/06/2020	(d/m/y)		
Dark Temperature Corr	1			
Date Master Offset	22/05/2020	(d/m/y)		
Date Master Flat	28/06/2020	(d/m/y)		
Neon-Argon calib.	07/12/2020	(d/m/y)		
Reference star calib.	hd205314			
Exposure on ref star	17	x	10	s
Date	12.028/07/2020			

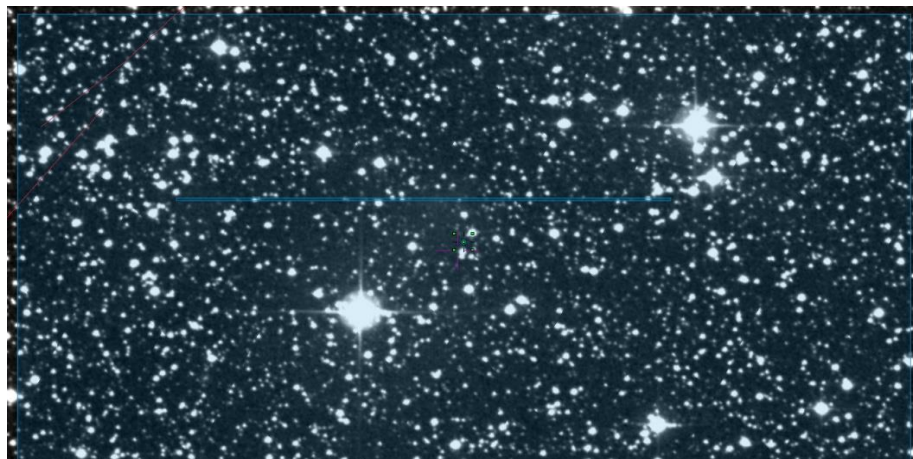
Image A. Zirke



Slit position  
Autoguider



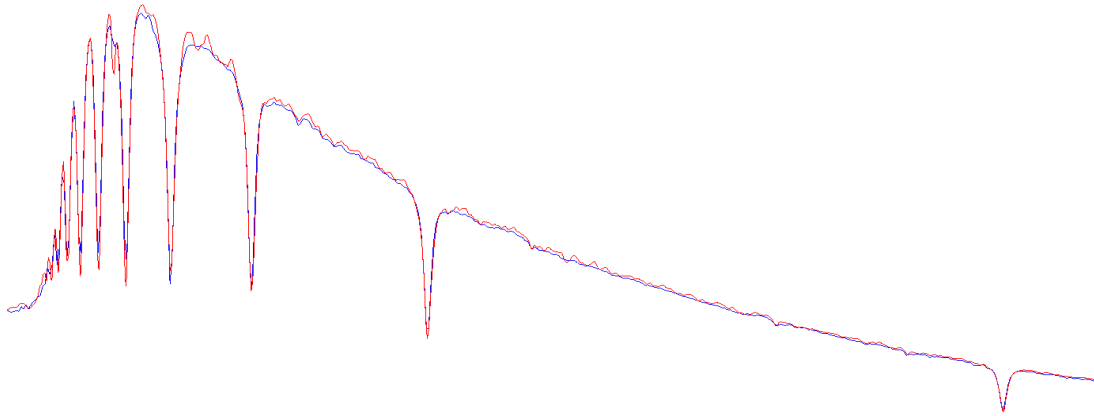
Slit position  
IPHAS



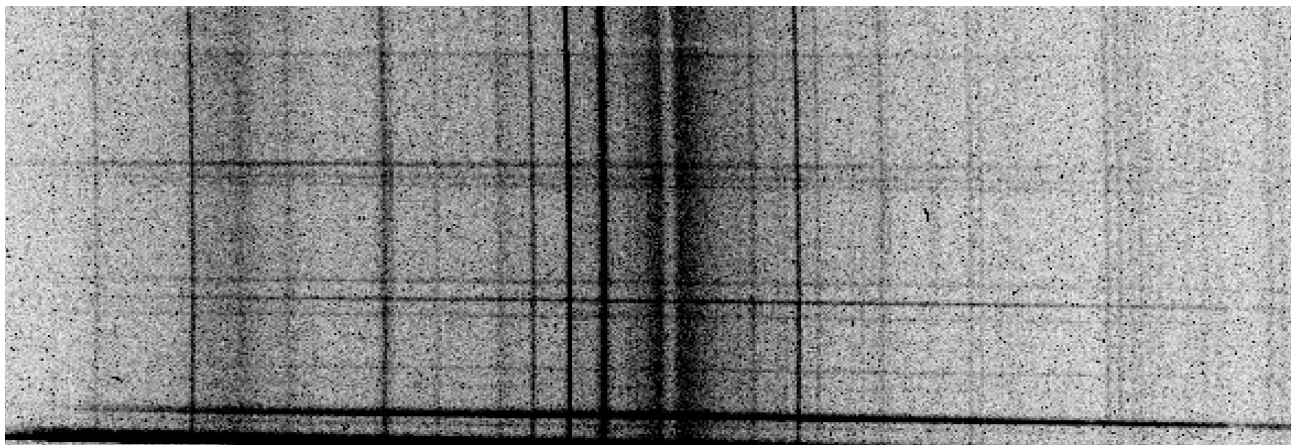


# Instrumental Response and 2D Spectrum

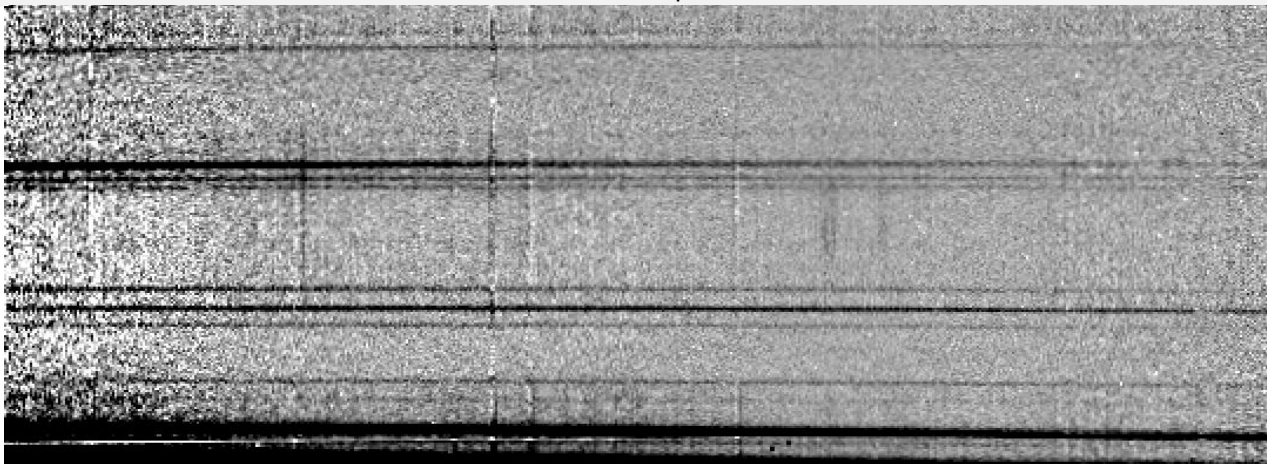
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum)

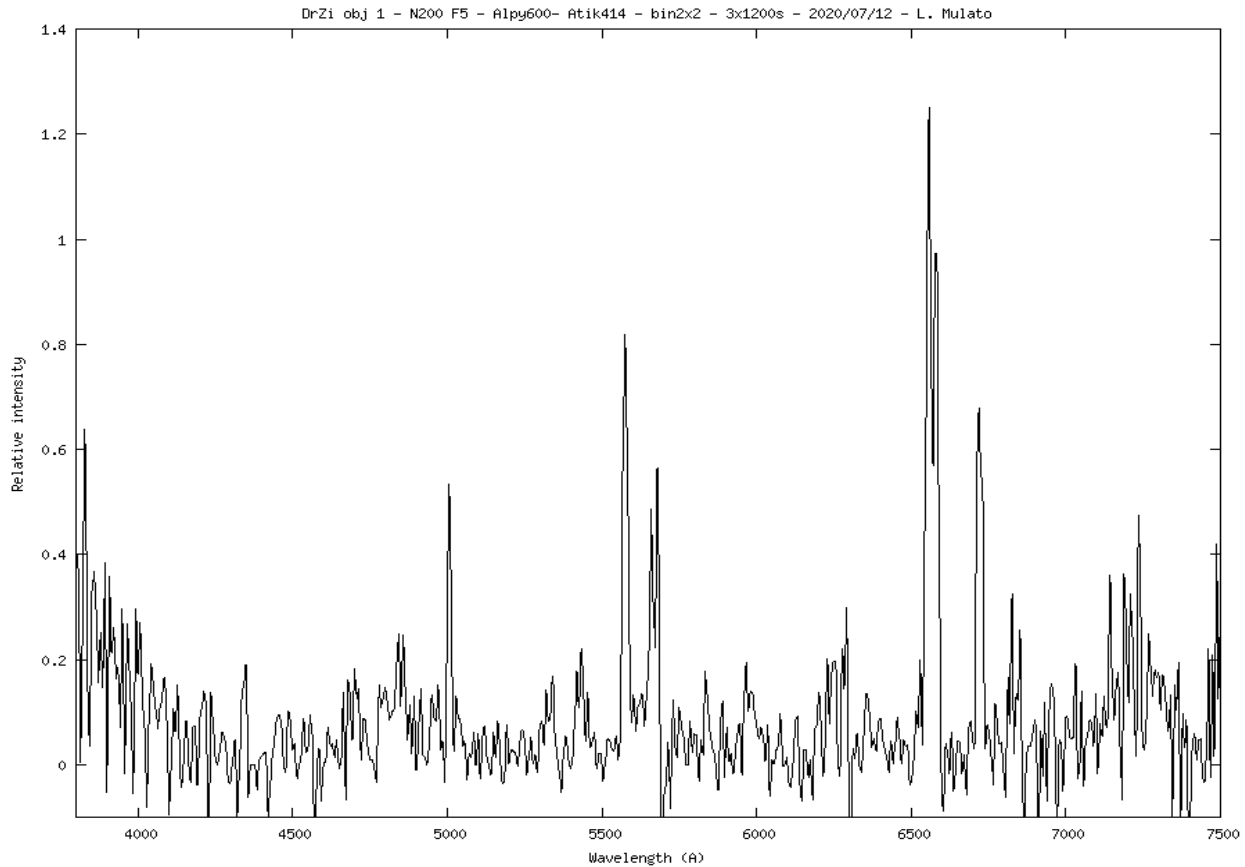


2D Raw spectrum



Processed 2D spectrum





## Comments:

Spectrum of DrZi obj 1 shows  $H\alpha$   $\sim$  [N II] emission lines, and strong [S II] and [O III] emission lines. The narrow band image reveals a complex nebula with many bow shocks. Skylines between 5570-5680 Å couldn't have been removed.

DrZi Obj 1 is likely an HII Region.