Spectroscopic Record Sheet

Details on acquisitions

Object	Guoyou 4
Coordinates (J2000)	04:51:59.95 -71:05:25.44
Type	New candidate

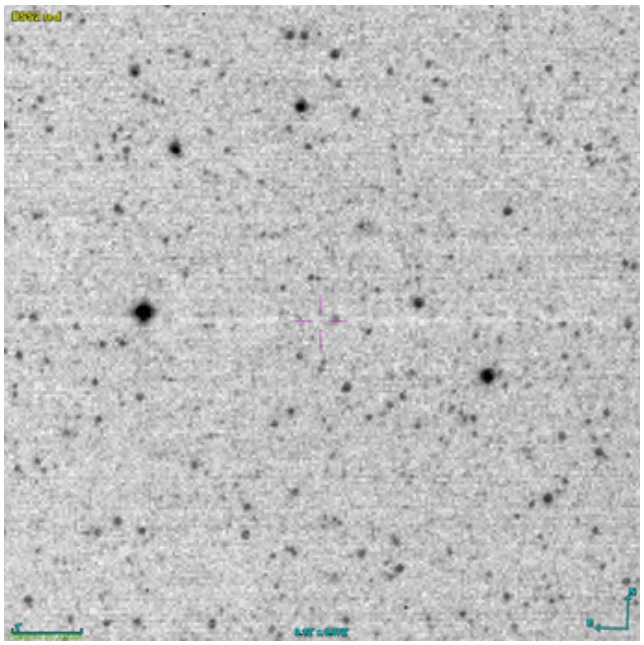
Observation date	9.660/11/2026
Weather conditions	/
Observer	2SPOT
Location	Deep Sky Chile (CL)

Mount	10 Micron GM3000 HPS
Telescope	Newton 300mm F/4
Spectroscope	Alpy 600 (23um slit)
Resolution (bin 1x1)	~1nm at 656 nm
Principal camera	Atik 414 EX
Dispersion (bin 1x1)	~0,3 nm/pixel at 656 nm
Cam temperature	-10°C
Binning	2x2
Guiding camera	ASI 178MM
Data acquisition Soft	Prism v11
Data processing soft	ISIS V6.1.1

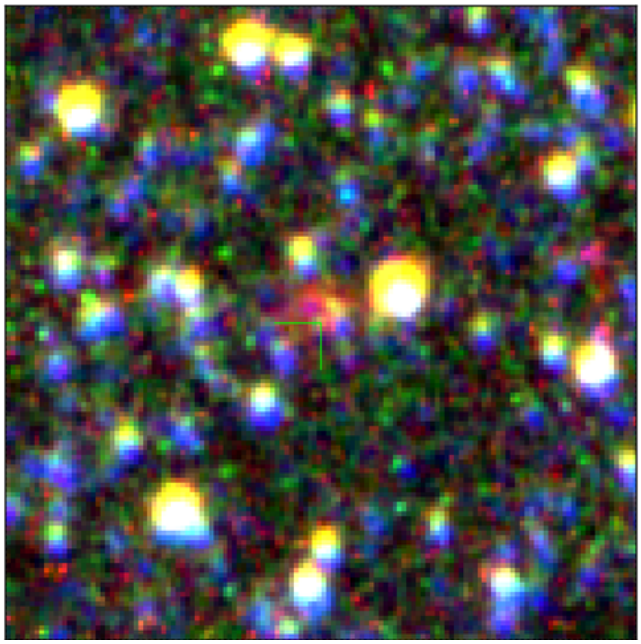
Exposure on object	10 x 1200 s
Master Dark	Corrected
Master Flat	Corrected
Master Offset	Corrected
Neon-Argon calibration	Corrected
Reference star calib.	HD40953_B9V
Exposure on ref star	7 x 7.80643 s
Ref star Sp. date	9.237/11/2026

Slit position and images

Slit position

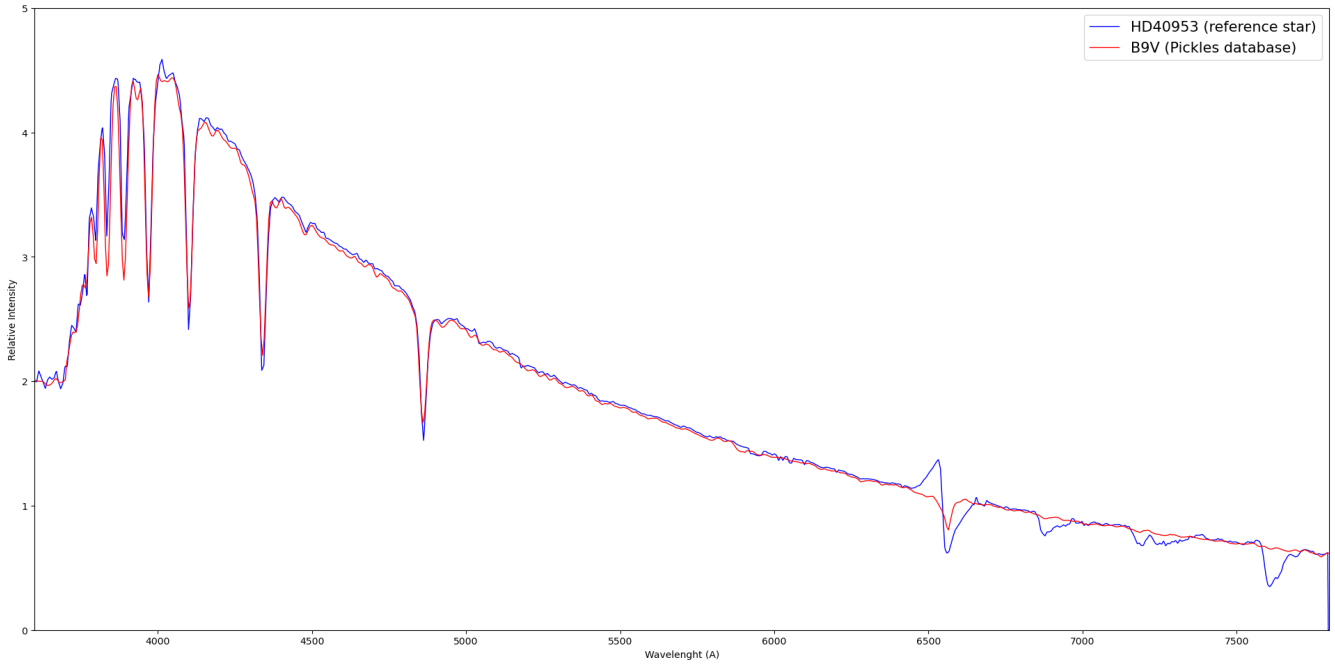


Object picture(s)

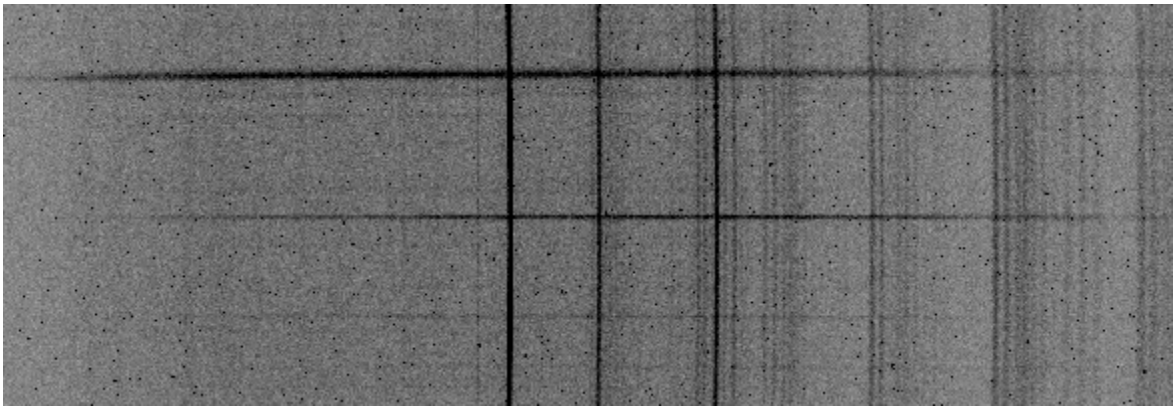


Instrumental Response and 2D Spectra

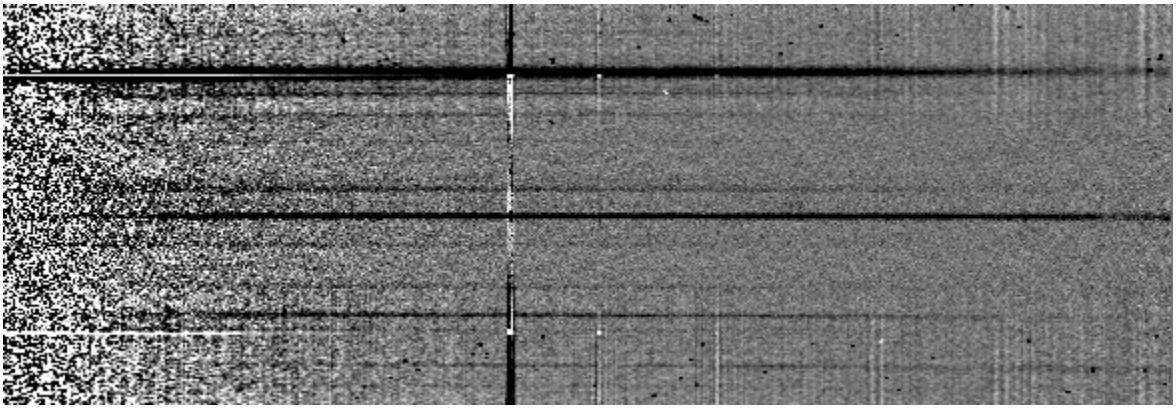
Instrumental response (red = theoritical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)



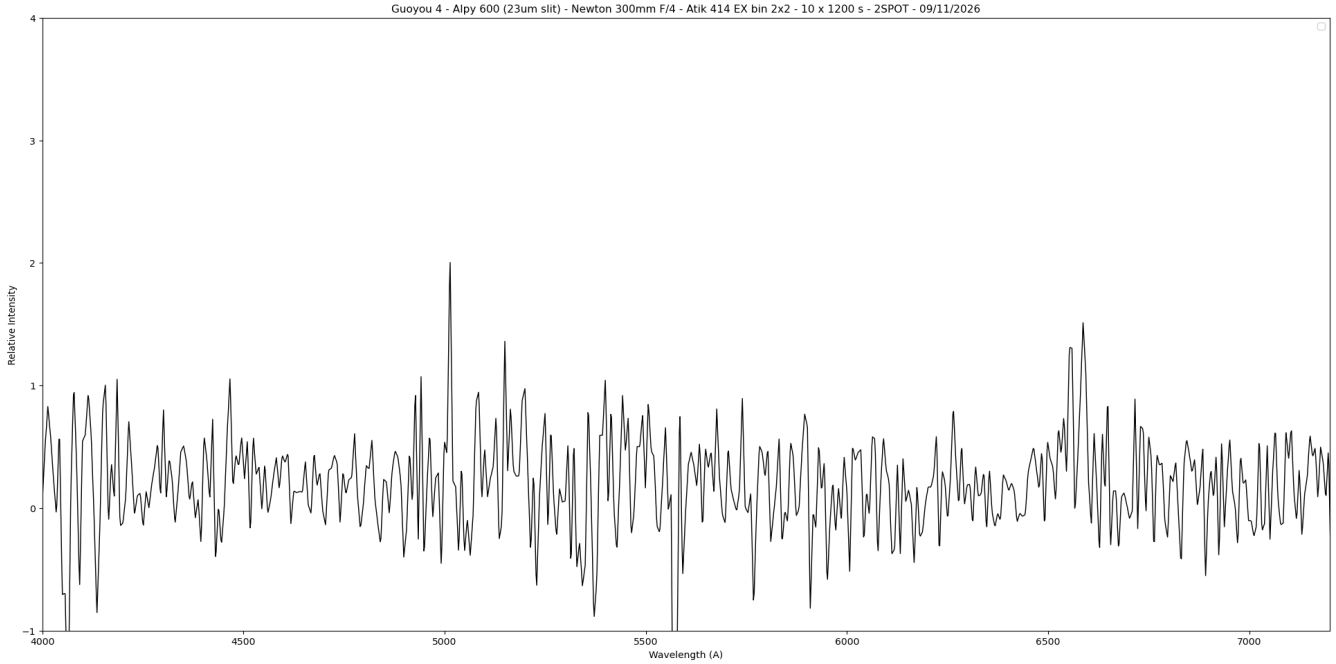
2D Raw spectrum



2D Processed spectrum



Results



Comments

04:51:59.95 -71:05:25.44
Weak lines [OIII](5007Å) and Hα, [NII] detected.
Possible weak redshift.
Guoyou 4 may be related to the Large Magellanic Cloud.