



Spectroscopic Record Sheet



Details on acquisitions

| | |
|---------------------|--------------------------|
| Object | DeGaPe 77 |
| Coordinates (J2000) | 05:35:20.50 -70:13:53.90 |
| Type | / |

| | |
|--------------------|-----------------------|
| Observation date | 8.189/02/2022 |
| Weather conditions | Temp: 12°C - Hum: 40% |
| Observer | 2SPOT |
| Location | Deep Sky Chile (CL) |

| | |
|-----------------------|--------------------------|
| Mount | 10 Micron GM3000 HPS |
| Telescope | Ritchey-Chrétien RC12 |
| Spectroscope | Alpy 600 (23um slit) |
| Resolution (bin 1x1) | ~1 Å at I656 nm |
| Principal camera | Atik 414 EX |
| Dispersion (bin 1x1) | ~0,3 nm/pixel at I656 nm |
| Cam temperature | -10°C |
| Binning | 1x1 |
| Guiding camera | Atik 314L+ |
| Data acquisition Soft | Prism v10.4.12.911 |
| Data processing soft | ISIS V6.1.1 |

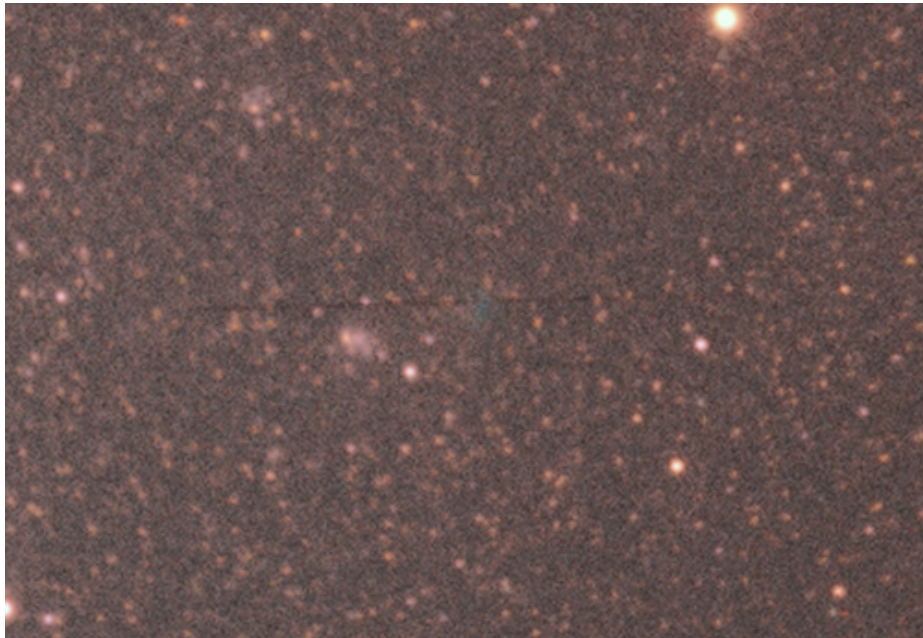
| | |
|------------------------|------------|
| Exposure on object | 6 x 1200 s |
| Master Dark | Corrected |
| Master Flat | Corrected |
| Master Offset | Corrected |
| Neon-Argon calibration | Corrected |

| | |
|-----------------------|---------------|
| Reference star calib. | HD42525_A0V |
| Exposure on ref star | 10 x 20 s |
| Ref star Sp. date | 8.248/02/2022 |

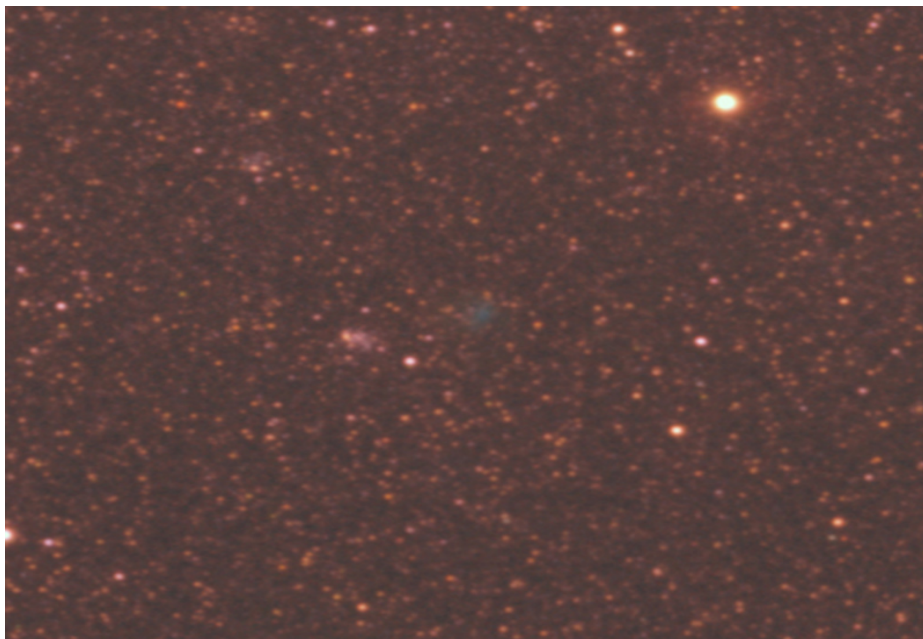


Slit position and images

Slit position



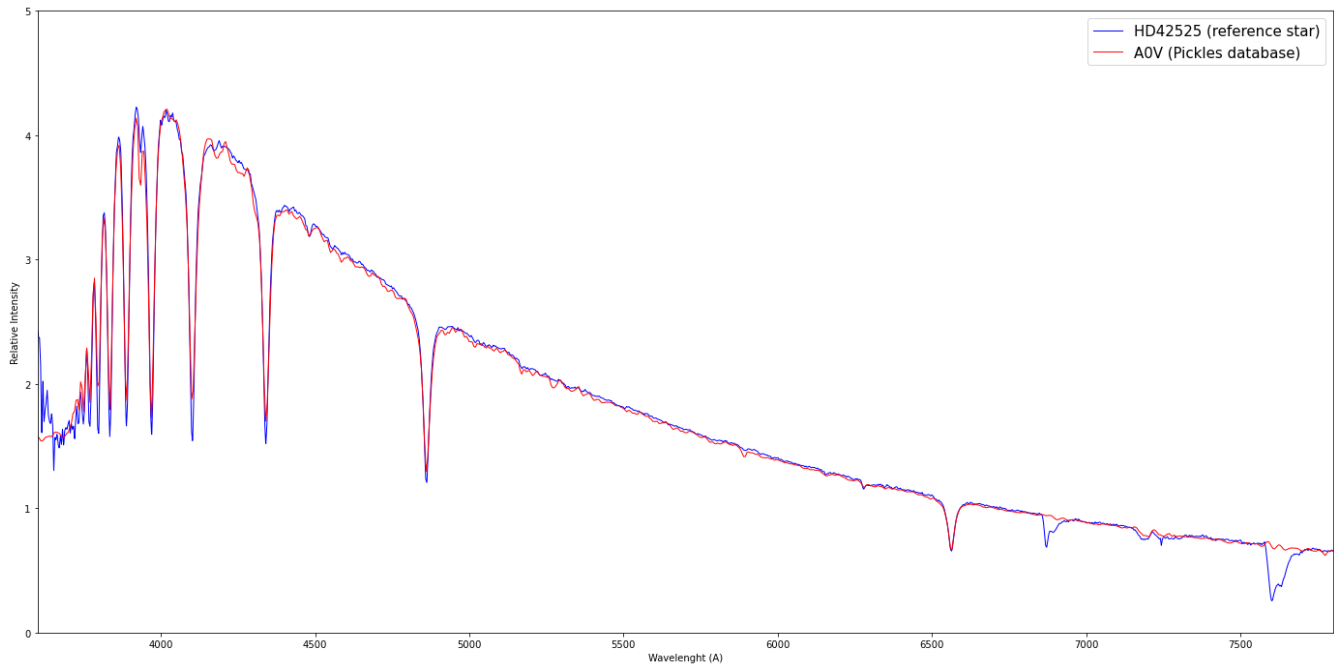
Object picture(s)



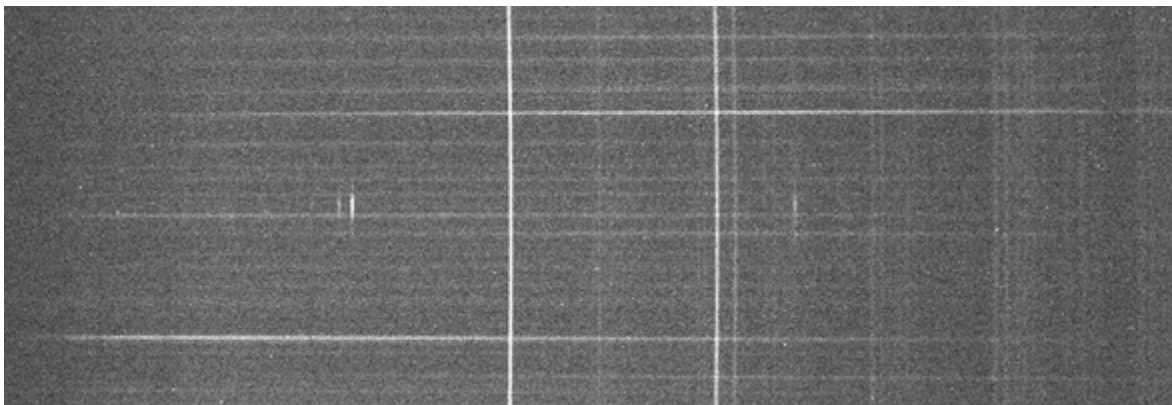


Instrumental Response and 2D Spectrum

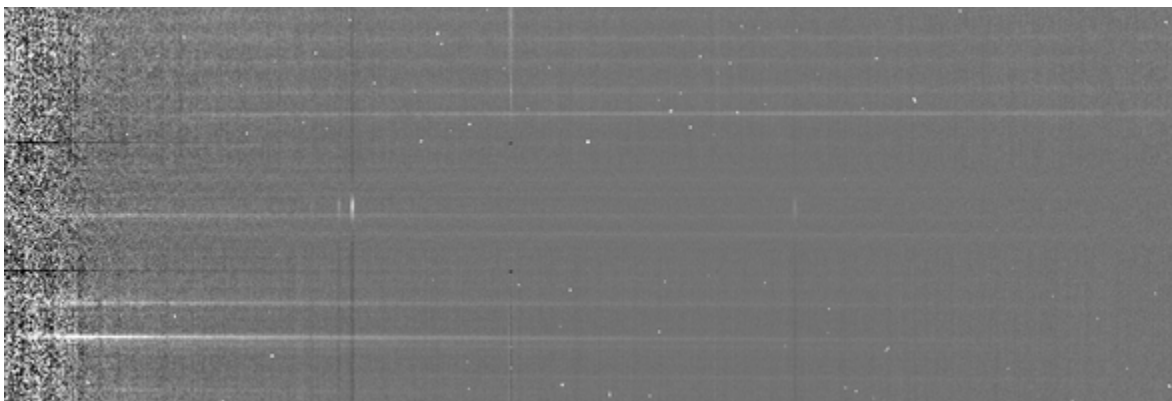
Instrumental response (red = theoretical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)

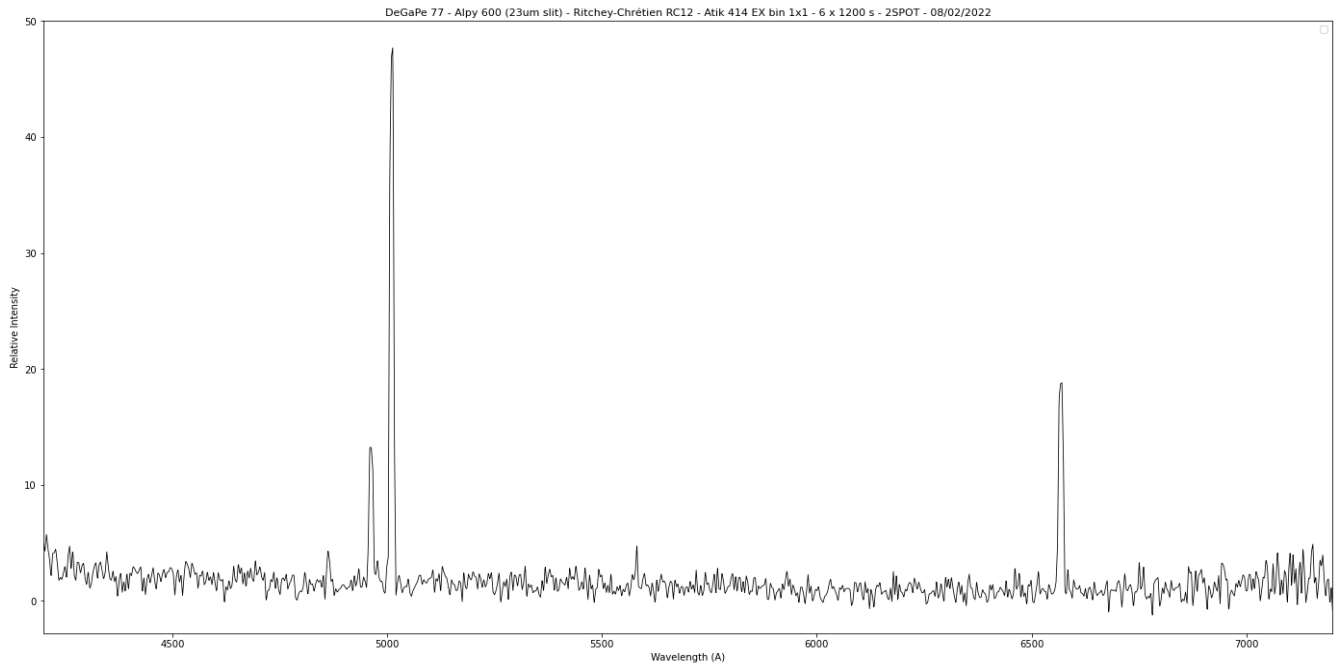


2D Raw spectrum



2D Processed spectrum





Comments

DeGaPe 77 was discovered on a SHO picture of the Large Magellanic Cloud.
Hb, [OIII] and H α lines are very well visible. Noise is not significant.

A redshift of a few Angstroms is measurable on all those lines.

It reminds some objects in HASH showing the same redshift like: RP4791, RP4758, RP1401, RP1878 or SMP LMC 31