Spectroscopic Record Sheet

Details on acquisitions

Object	PaJ194949.4+064755
Coordinates (J2000)	19 49 49.47 +06 47 55.43
Type	PN Candidate

Observation date	27.897/08/2020 (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)	~1 Å at λ656 nm
Science camera	ATIK 414 EX
Dispersion (bin 1x1)	~0,3 nm/pixel at λ656 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	7 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	09/12/2020 (d/m/y)
Neon-Argon calib. date	28/08/2020 (d/m/y)
Reference star calib.	HD192425_A2V
Exposure on ref star	17 x 7 s
Ref Star Sp. date	27.975/08/2020

Images and slit position

Image WISE

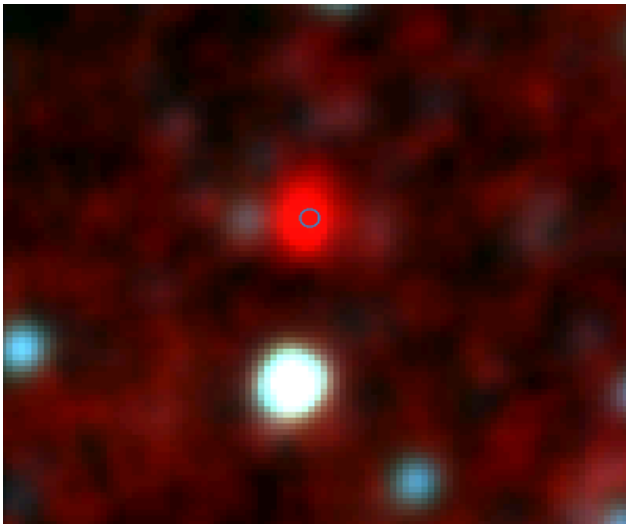
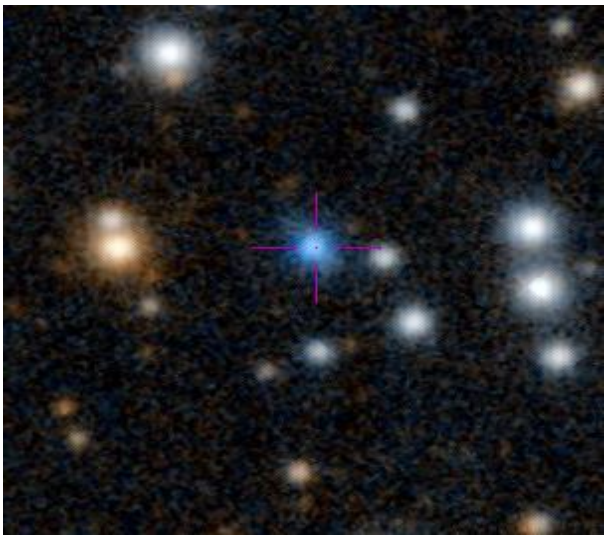
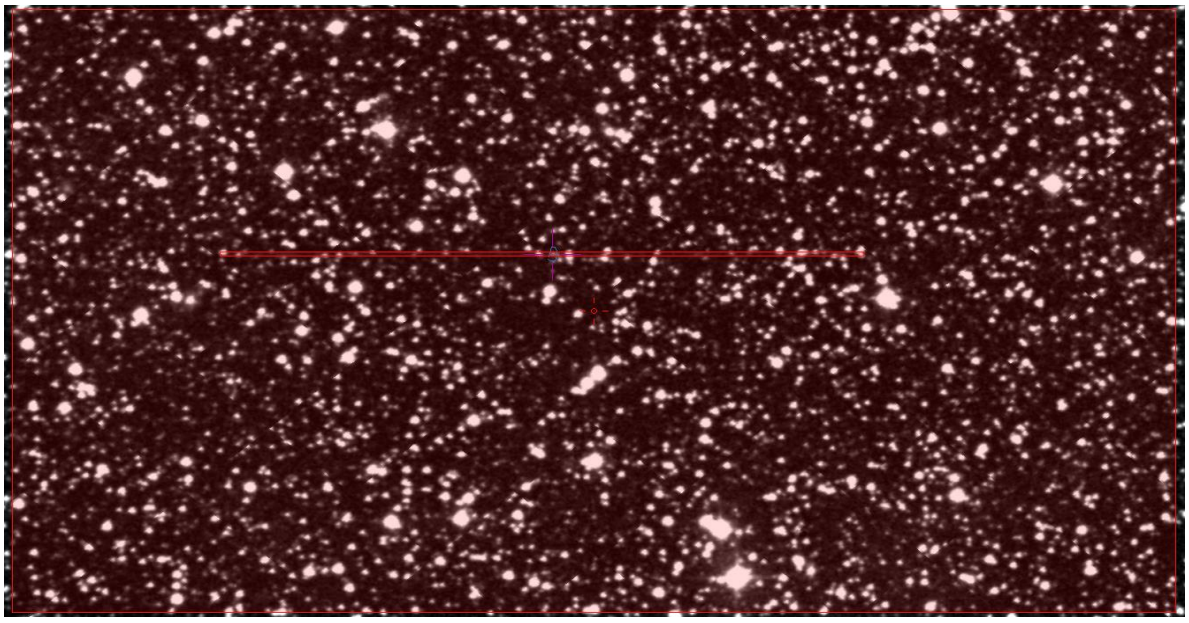


Image PanSTARRS

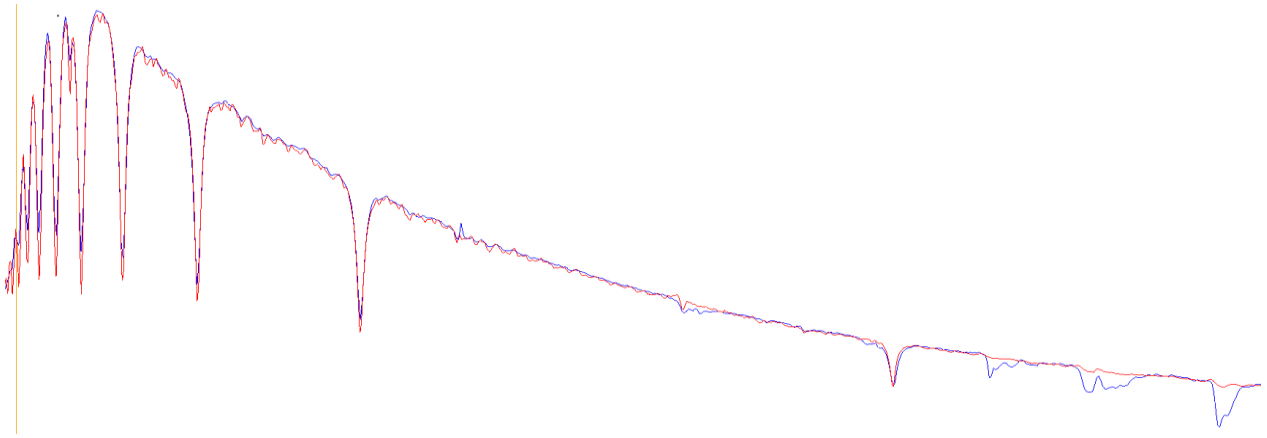


Slit position
DSS2 Red

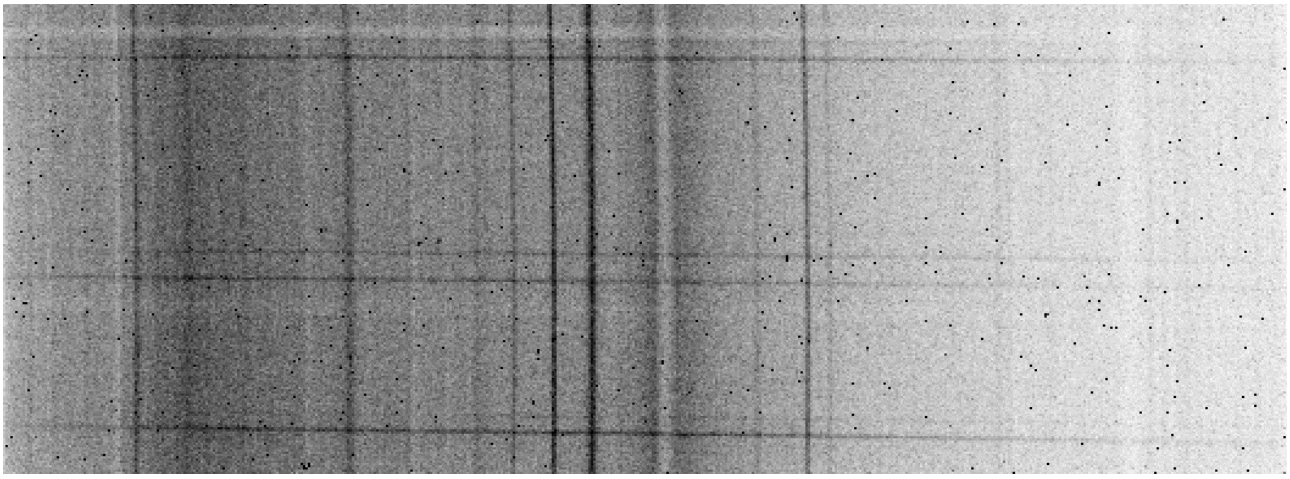


Instrumental Response and 2D Spectrum

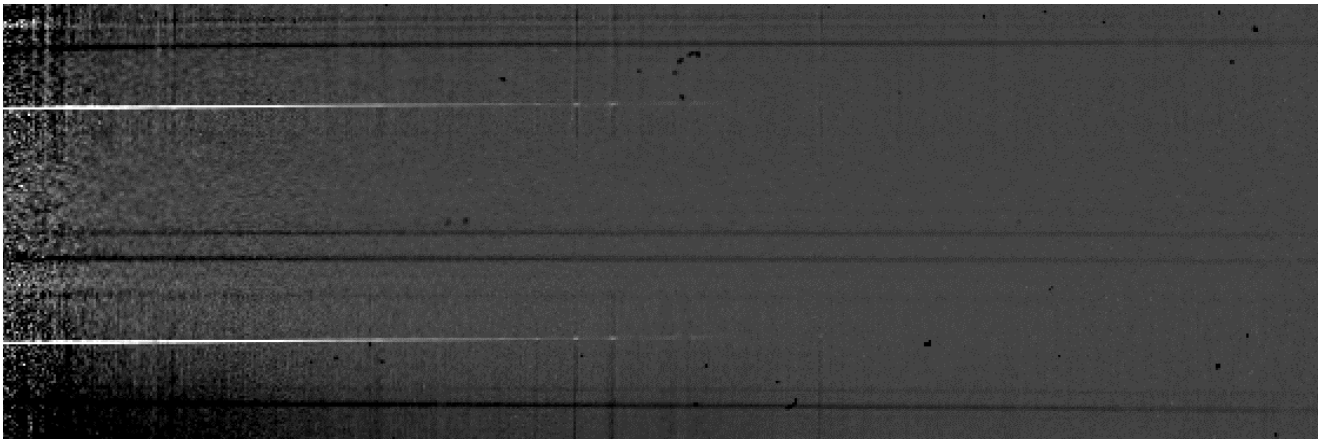
Instrumental response (red = theoritical ref star spectrum ; blue = acquired ref star spectrum with instrumental response correction applied)



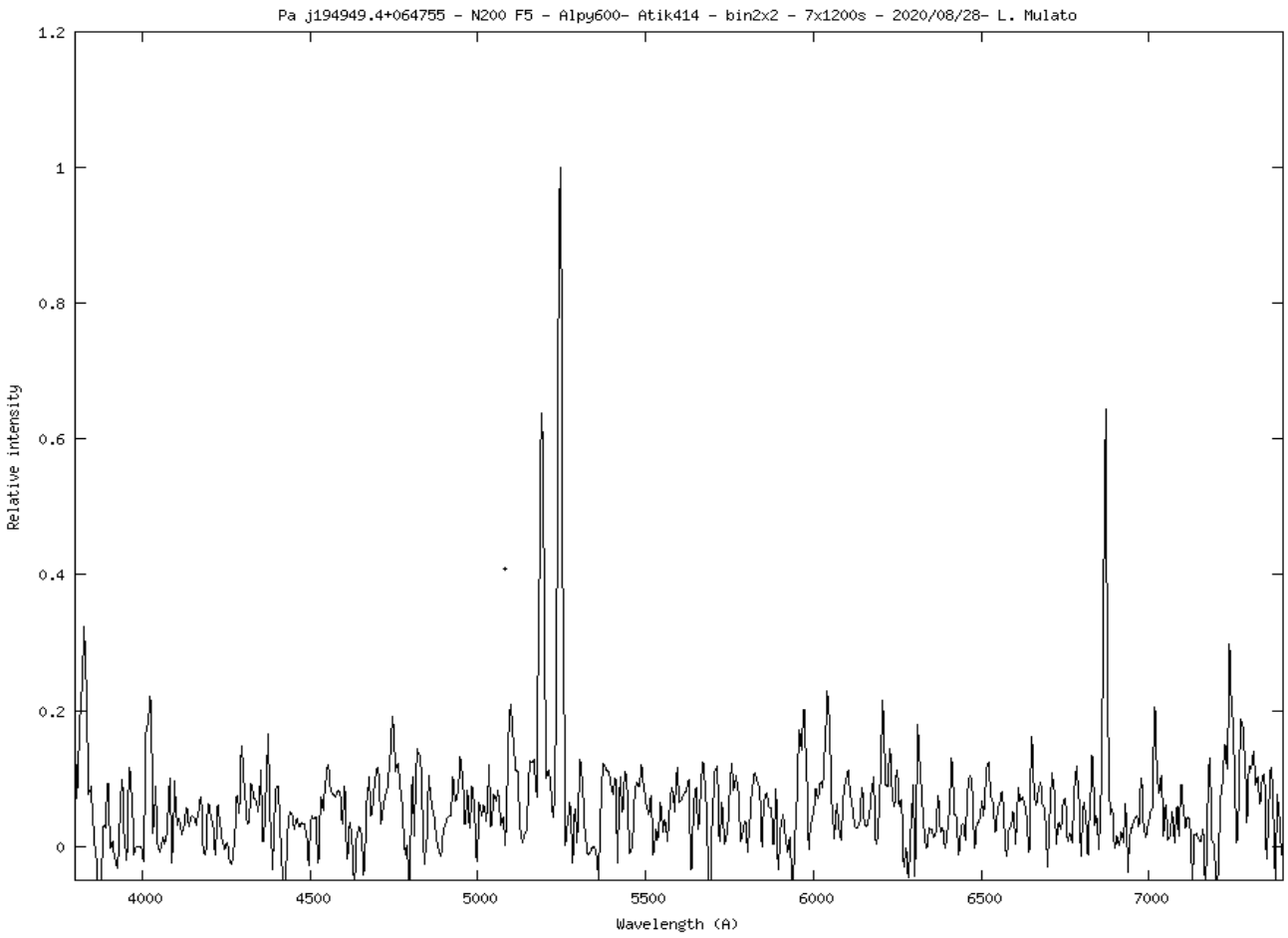
2D Raw spectrum



Processed 2D spectrum



Results



Comments :

Promising object with convincing MIR colors, slight projections towards the NE and SW on PanStarrs.
Lines detected [O III] doublet > Hbeta, Halpha.
Redshift detected :

Line	Rest [A]	Obs [A]	Δλ [A]	uλ [A]	v [km/s]	uv [km/s]
Hb	4861,4	5098,8	237,4	1,7	14294	101
[OIII]	4958,9	5190,5	231,6	1,7	13683	99
[OIII]	5006,8	5245,5	238,6	1,7	13959	97
Ha	6562,8	6870,8	308,0	1,6	13749	69

PaJ194949.4+064755 is an AGN, with a RV of ~14 000 km/s.