

ObservationReport

ObservationID

0396

on

2025-08-16 23:06

all measures in mm



Main Object	IC1318
Common Name	Gamma Cygni Nebula
Alternate Name	
Visual Mag. Size	2,20 50' × 30'
Distance	1.500 ly
Object R.A. DEC coord.	20h 16m 48.0s +41° 57' 24"
Description	Emission Nebula
Constellation	Cygnus
Other Objects	



20250816_IC1318_ASI294_0396-01WM.jpg

StarImage Link	OID0396
Telescopius Link	
Wikipedia Link	https://en.wikipedia.org/wi

Image Properties

Work Status	PostProcessed	Rating	****
Source Format	Photo	Picture Center R.A.	20 28 10.531
Tot./Act. Frames/Pane	6 6	Picture Center DEC	+39 54 42.63
H / V Panes	1 1	FoV measured H/V [°]	0,83° 3,76°
Exp. [s] / Frame	180	Above horizon [°]	0
Total Time / Pane [min]	18,00 18,00	View Direction	N
Camera Data	ZWO Optical	ASI2600MCAir	ZWOASI2600
Camera Angle [°]	-179,954	Pixel Pitch [µm]	3,761
Gain or ISO	100	Camera Temp. °C	-10

Observation Site

Observation Start	2025-08-16T23:06:43 UTC+/- +1h	Observation End	2025-08-16T23:33:09
Observation Site	DE Göttingen Weende	Site Elevation / Bortle	182 4
Province	NDS	Site Coordinates	51° 34' N, 9° 56' E

Sky & Moon

Sky Index Total Clouds	5,0 16 %	Moon Rise Set	22:21:00 12:41:00
SQM Outside Temp. °C	0 24	Moon Age [d]	20,4
Moon Phase % Illum.	3rd quarter 75 %	Moon ► Target Dist.	3,76°

Optical Configuration

Lens or Scope	TSO RC 203/1624c	Mechanical Focuser	M90 TS1624 Rack Pinion Focus
Type Of Build	Ritchey-Chretien Reflector	Electronic Focuser	☒
Brand	TS-Optics	Focuser Position Steps	5016 [mm] 16,53
Additional Optics	M54 ZWO ASI CAA Rotator	Optical Factor	1
Filter	-	FoL norm actual [mm]	1609 1613
Diameter [mm]	203	DawesLimitLink	<u>1,46 Arcsec</u>
Aperture / f-stop	8,00	Optical Scale ["/px]	0,482

Other Hardware & Software

GuideScope	ZWO 30/120 mini	Mount	iOptron iEQ45 Pro
GuiderHW	ASIAIR	SessionControl	ASIAIR
GuiderSW	ASIAIR	PostProcessingSW	PixInsight, GraXpert, BlurXTerminator, NoiseXTerminator

More ...

Work Folder	2025\20250816_IC1318_0396_WEENDE
Comment	
Remarks	Second Test of new TSO RC 203/1624c (Carbon) 1. Session Planning

Needed an easy target to test the collimation of the TSO 203/1624c.

2. Location and sky

The sky was moonlit. It was rather bright, but it was still sufficiently dark for this test.

3. Session Results

The collimation of the TSO 203/1624 Carbon is almost OK and just needs a little fine tuning.

The measured back focus of the device is 244.3 mm instead of the nominal 245 mm.

Instead of the nominal focal length of 1624 mm, a value of 1612 mm was measured. The measured differences are probably manufacturing tolerances.

After the measurement, the telescope underwent further collimation, and the new test is still pending.

4. Plate Solving and Camera Rotation Results

Astrometry.net rotation measurement: Up is 179.9 degrees east of north.

5. Post Processing

Image selection, registration, background enhancement and color correction were done in PixInsight.

Post-processing steps in PixInsight:

1. GX: GraXpert for gradient correction
2. BX: BlurXTerminator
3. NX: NoiseXTerminator
4. PCC: Photometric Color Correction
5. HT: Histogram Transfer for stretching
6. CT: Color Transformation to increase saturation

Both versions are very similar in quality and appearance.

No further image post processing was required.

No color or hue changes were made; the final image has natural colors.

6. Lessons Learned

There was no real learning experience during this session, except perhaps that gradient correction is not necessary for an object such as this (globular cluster), as the lights were already very uniform.

7. Main logfile entries

n.a.