

ObservationReport

ObservationID

0401

on

2025-08-30 22:22

all measures in mm



Main Object	IC5146
Common Name	Cocoon Nebula
Alternate Name	C19
Visual Mag. Size	7,20 12'
Distance	2500 ly
Object R.A. DEC coord.	21h 53m 28.7s +47° 16' 01"
Description	Reflection Nebula
Constellation	Cygnus
Other Objects	



20250830_IC5146_ASI2600_0401-01WM.jpg

StarImage Link	OID0401
Telescopius Link	
Wikipedia Link	https://en.wikipedia.org/

Image Properties

Work Status	PostProcessed	Rating	****
Source Format	Photo	Picture Center R.A.	21h 53m 27.133s
Tot./Act. Frames/Pane	23 23	Picture Center DEC	+47° 16' 40.166"
H / V Panes	1 1	FoV measured H/V [°]	1,218 0,814
Exp. [s] / Frame	180	Above horizon [°]	0
Total Time / Pane [min]	69,00 69,00	View Direction	N
Camera Data	ZWO Optical	ASI2600MCAir	ZWOASI2600
Camera Angle [°]	273,3	Pixel Pitch [µm]	3,761
Gain or ISO	100	Camera Temp. °C	-10

Observation Site

Observation Start	2025-08-30T22:22:05 UTC+/- +1h	Observation End	2025-08-30T23:39:19
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	2,8 15 %	Moon Rise Set	
SQM Outside Temp. °C	21,07 15	Moon Age [d]	0
Moon Phase % Illum.	1st quarter 0 %	Moon ► Target Dist.	UNKNOWN

Optical Configuration TS1624cASI2600CAAx067

Lens or Scope	TSO RC 203/1624c	Focuser	M90 TS1624 Crayford (old
Type Of Build	Ritchey-Chretien Reflector	Focuser Position [mm]	46,46 EAF Steps 0
Brand	TS-Optics	Optical Factor	0,6804
Additional Optics	M48 0.67 Reducer	FoL norm actual [mm]	1104,9696 1104,97
Filter	Optolong 2" L-eNhanche	DawesLimitLink	2,13 Arcsec
Diameter [mm]	203	Optical Scale ["/px]	0,702
Aperture / f-stop	5,44		

Other Hardware & Software

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

More ...

Work Folder	2025\20250830_IC5146_0401_WEENDE
Comment	
Remarks	1. Session Planning

This exposure was used to test whether the distortions around the brighter stars would

disappear when using an OLeN filter and a x0.67 reducer.

2. Location and sky

Good enough for the test.

3. Session Results

Unfortunately, the distortions around the bright stars were still visible. Neither the filter nor the reducer helped correct the image.

4. Plate Solving and Camera Rotation Results

Astrometry.net rotation measurement:

Uncropped Version:

Center (RA, Dec):(328.363, 47.278)

Center (RA, hms):21h 53m 27.133s

Center (Dec, dms):+47° 16' 40.166"

Size:73 x 48.8 arcmin

Radius:0.732 deg

Pixel scale:0.702 arcsec/pixel"

Orientation", [may be incorrect](#), use at your own risk:Up is 273.3 degrees E of N

Cropped Version:

Center (RA, Dec):(328.366, 47.281)

Center (RA, hms):21h 53m 27.937s

Center (Dec, dms):+47° 16' 53.186"

Size:38.6 x 25.7 arcmin

Radius:0.387 deg

Pixel scale:0.702 arcsec/pixel"

Orientation", [may be incorrect](#), use at your own risk:Up is 273.6 degrees E of N

5. Post Processing

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

Post-processing steps in PixInsight:

Version 01:

1. BX: BlurXTerminator
2. NX: NoiseXTerminator
3. PCC: Photometric Color Correction
4. ABE: Automatic Background Extraction
5. HT: Histogram Transfer for stretching
6. CT: Color Transformation to increase saturation

No further image post processing was required.

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

6. Lessons Learned

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7. Main logfile entries

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