

ObservationReport

ObservationID

0010

on

2022-03-02 19:11

all measures in mm



Main Object	M42
Common Name	Orion Nebula
Alternate Name	NGC1976
Visual Mag. Size	4,00 85,0x60,0'
Distance	1400 ly
Object R.A. DEC coord.	05h 36m 28.67s -05° 26' 08,2"
Description	Bright Nebula
Constellation	Orion
Other Objects	



20220302_M42_ASI294_0010-02WM.jpg

StarImage Link [OID0010](#)

Telescopius Link

Wikipedia Link <https://en.wikipedia.org/wi>

Image Properties

Work Status	Published	Rating	41' 12.8" x 28' 3.9"
Source Format	Photo	Picture Center R.A.	83,8178
Tot./Act. Frames/Pane	5 1	Picture Center DEC	-5,3723
H / V Panes	1 1	FoV measured H/V [°]	41' 12.8" 28' 3.9"
Exp. [s] / Frame	180	Above horizon [°]	
Total Time / Pane [min]	3,00 3,00	View Direction	

Camera Data	ZWO Optical	ASI294MC Pro	ZWOASI294
Camera Angle [°]	-98,263	Pixel Pitch [µm]	4,630
Gain or ISO	120	Camera Temp. °C	

Observation Site

Observation Start	2022-03-02T19:11:20 UTC+/- +1h	Observation End	2022-03-02T19:11:24
Observation Site	DE Göttingen MBR	Site Elevation / Bortle	182 4
Province	NDS	Site Coordinates	51° 34' N, 9° 56' E

Sky & Moon

Sky Index Total Clouds	2,8	%	Moon Rise Set	07:37:00 17:46:00
SQM Outside Temp. °C		0	Moon Age [d]	29,2
Moon Phase % Illum.	new	0,1	%	Moon ► Target Dist.

Optical Configuration

Lens or Scope	TSO RC 203/1624s	Mechanical Focuser	M90 TS1624 Crayford
Type Of Build	Ritchey-Chretien Reflector	Electronic Focuser	☐
Brand	TS-Optics	Focuser Position	0 [mm]
Additional Optics	-	► Optical Factor	1
Filter	OIII	FoL norm actual [mm]	1624 1600
Diameter [mm]	203	DawesLimitLink	1,45 Arcsec
Aperture / f-stop	8,00	Optical Scale ["/px]	0,588

Other Hardware & Software

Guide Scope + Camera	Omegon 50/200 ASI120MM	Mount	iOptron iEQ45 Pro
GuiderHW	ASiAirPro	SessionControl	ASiAirPro
GuiderSW	NONE	PostProcessingSW	PixInsight

More ...

Work Folder	2022\20220302_M42_0010_GOE-MBR
Comment	Orion Nebula (M42)
Remarks	Calibration was very bad, neither focus nor polar alignment properly done. Orion nebula was only visible for a very short time before disappearing behind neighbors trees. Improved the single photo using my new standard image processing procedure in PixInsight below:

5. Post Processing

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

- 1: Blink
- 2: SubframeSelector
- 3: FBPP: Fast Batch Pre Processor
- 4: DC: Dynamic Crop + Plate Solve
- 5: GX: GraXpert
- 6: BX: BlurXTerminator
- 7: NX: NoiseXTerminator
- 8: SPCC: Spectrometric Color Calibration
- 9: MAS: Multiscale Adaptive Stretch

No further image post processing was required.

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