

ObservationReport

all measures in mm

ObservationID

0312

on

2023-11-16 20:36

Object	IC1805
Common Name	Heart Nebula
Alternate Name (s)	LBN654
Visual Magnitude	6.5
Distance ► Object	6.2 ly
Apparent Size	60x60'
Object R.A.	02h 35m 12.55s
Object DEC	+61° 32' 16.7"
WikiLink	https://en.wikipedia.org/wiki/Heart_Nebula



20231116_IC1805_ASI294_0312-03WM.jpg

Link ► Picture	IC1805_20231116
Description	Emission Nebula
Constellation	Cassiopeia

Picture Data

Work Status	Published	Quality	****
Source Format	Photo	Picture Center R.A.	02h 32m 32.021s
Tot./Act. Frames/Pane	150 150	Picture Center DEC	+61° 36' 34.962"
H / V Panes	1 1	H/V FoV [°]	1,8268 1,2434
Exp. [s] / Frame	180	Above horizon [°]	0
Total Time / Pane [min]	450,00 450,00	View Direction	N
Camera Data	ZWO	ASI294MC-Pro	ZWOASI294
Camera Angle [°]	113,872	Pixel Pitch [µm]	4,63
Gain or ISO	120	Camera Temp. °C	-10

Observation Site

Observation Start	2023-11-16T20:36:21 UTC+/- +h	Observation End	2023-11-17T04:56:48
Observation Site	ES La Palma Jardin	Site Elevation /Bortle	470 3
Province	La Palma	Site Coordinates	28° 38' 52.0" N, 017° 53' 4

Sky & Moon

Sky Index Total Clouds	3,9 0 %	Moon Rise Set	10:46:00 20:54:00
Outside Temp. °C	20	Moon Age [d]	2
Moon Phase % Illum.	1st quarter 8 %	Moon ► Target Dist.	UNKNOWN

Optical Configuration

TS600AS294	TS600ASI294T252		
Lens or Scope	TSO APO 90/600	Focuser	M90 TS600 Rack + Pinion
Type Of Build	APO Triplet Refractor	Focuser Position [mm]	59,76 EAF Steps 20606
Brand	TS-Optics	Optical Factor	1
Additional Optics	M63 WO Rotator	FoL norm actual [mm]	599
Filter	-	DawesLimitLink	1,74 Arcsec
Diameter [mm]	90	Optical Scale ["/px]	1,595
Aperture / f-stop	6,66		

Other Hardware & Software

GuideScope	ZWO 30/120 mini	Mount	EQ6R-PRO
GuiderHW	ASIAIR	SessionControl	ASIAIR
GuiderSW	ASIAIR	PostProcessingSW	PS, PixInsight, LrC

More ...

Work Folder [2023\20231116_IC1805_0312_La-Palma-Jardin](#)

Comment

Remarks

1. Session Planning

The session was planned using ASIAR Preview and SkyAtlas for camera rotation, coordinates and scheduled start time.

2. Location and sky

All light frames were taken on La Palma (Canary Islands, Spain) at about 500 meters above sea level.

The sky index was 3,9 (good) with no clouds.

3. Session Results

Mediocre final image quality, needs another post-processing.

4. Plate Solving and Camera Rotation Results

ASIAIR SkyAtlas planned rotation:

ASIAIR Plate Solve result after GoTo: RA:2h34m15s DEC:+61°42'56" Angle = -113.872, Star number = 1381

Astrometry.net rotation measurement: RA:02h 32m 32.021s DEC:+61° 36' 34.962" size:

1.83 x 1.25 deg, Radius: 1.109 deg, Orientation: Up is 113.2 degrees E of N

5. Post Processing

Image selection, registration, background improvement and color correction were done in PixInsight (Post Processing using PixInsight (starlust.de)).

Some color saturation applied with Lightroom Classic.

No color or hue changes have been applied; the final image is showing natural colors.

6. Lessons Learned

The image quality could certainly have been significantly improved by using an Optolong 2" L-eNhanse filter during the image acquisition phase.

7. Main logfile entries

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