

ObservationReport

ObservationID

0367

on

2025-03-04 21:15

all measures in mm



Main Object	IC405		
Common Name	Flaming Star Nebula		
Alternate Name	Caldwell 31		
Visual Mag. Size	6,00	37' × 10'	
Distance	1500 ly		
Object R.A. DEC coord.	05h 16m 05s	+34° 27' 49"	
Description	Emission nebula		
Constellation	Auriga		
Other Objects			



20250304_IC405_ASI2600_0367-01WM.jpg

StarImage Link [IC405_20250304](#)

Telescopius Link

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

Image Properties

Work Status	Published		Rating	****	
Source Format	Photo		Picture Center R.A.	5°16' 42.003"	
Tot./Act. Frames/Pane	10	7	Picture Center DEC	+34°21' 37.52"	
H / V Panes	1	1	FoV measured H/V [°]	2° 14' 52.4"	1° 30' 8.7"
Exp. [s] / Frame	300		Above horizon [°]	0	
Total Time / Pane [min]	35,00	35,00	View Direction	N	

Camera Data

	ZWO Optical	ASI2600MCAir	ZWOASI2600
Camera Angle [°]	-149,876	Pixel Pitch [µm]	3,761
Gain or ISO	100	Camera Temp. °C	-10

Observation Site

Observation Start	2025-03-04T21:15:29 UTC+/- +1h	Observation End	2025-03-04T22:01:03	
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	3,5	0	%	Moon Rise Set	08:24:00	00:49:00
Outside Temp. °C	3			Moon Age [d]	5	
Moon Phase % Illum.	1st quarter	31	%	Moon ► Target Dist.	UNKNOWN	

Optical Configuration

	TS600ASI2600i	TS600ASI2600T281			
Lens or Scope	TSO APO 90/600	Focuser	M90 TS600 Rack + Pinion		
Type Of Build	APO Triplet Refractor	Focuser Position [mm]	29,95	EAF Steps	10327
Brand	TS-Optics	Optical Factor	1		
Additional Optics	M63 WO Rotator	FoL norm actual [mm]	599	599	
Filter	Optolong 2" L-eNhanche	DawesLimitLink	1,74 Arcsec		
Diameter [mm]	90	Optical Scale ["/px]	1,295		
Aperture / f-stop	6,66				

Other Hardware & Software

GuideScope	ASI2600 Guide Sensor	Mount	ZWO AM3		
GuiderHW	ASIAIR Pro	SessionControl	ASIAIR Pro		
GuiderSW	ASiAir App	PostProcessingSW	PixInsight		

More ...

Work Folder [2025\20250304_IC405_0367_GOE-MBR](#)

Comment

Remarks [1. Session Planning](#)

Enter Text

[2. Location and sky](#)

Enter Text

3. Session Results

Enter Text

4. Plate Solving and Camera Rotation Results

```
Projection ..... Gnomonic
Projection origin ..... [3124.185511 2088.074711] px -> [RA: 5 16 42.003 Dec: +
34 21 37.52]
Resolution ..... 1.295 arcsec/px
Rotation ..... -149.876 deg
Reference system ..... ICRS
Observation start time ... 2025-03-04 20:10:26 UTC
Observation end time .... 2025-03-04 21:01:01 UTC
Geodetic coordinates ..... 9 56 06 E 51 34 26 N 0 m
Focal distance ..... 598.79 mm
Pixel size ..... 3.76 um
Field of view ..... 2d 14' 52.4" x 1d 30' 8.7"
Image center ..... RA: 5 16 42.003 Dec: +34 21 37.52 ex: -0.018487 px
ey: -0.132779 px
Image bounds:
  top-left ..... RA: 5 10 10.407 Dec: +34 15 50.85 ex: -1.528220 px
ey: -1.188133 px
  top-right ..... RA: 5 19 32.530 Dec: +33 08 41.53 ex: +1.453545 px
ey: -1.924195 px
  bottom-left ..... RA: 5 13 46.452 Dec: +35 34 17.49 ex: -1.347282 px
ey: +1.628915 px
  bottom-right ..... RA: 5 23 14.543 Dec: +34 26 06.41 ex: +0.794244 px
ey: +0.967042 px
```

5. Post Processing

Steps in PixInsight

1. Process Blink to deselect frames with satellite traces
2. Process Subframe Selector to disregard all frames below FWHM 3
3. FBPP on remaining 8 images with drizzle integration, resulting master frame has an extreme green background (sky was not quite clear!)
4. Proceeded with masterLight_BIN-1_6248x4176_EXPOSURE-180.00s_FILTER-NoFilter_RGB_drizzle_1x_autocrop.xisf file
5. renamed the master file to 20250221_NGC1499_ASI2600_0363-01.
6. Automatic Background Extraction
7. PCC Photometric Color Calibration
8. Deconvolution: BlurXTerminator
9. De-Noise: NoiseXTerminator
10. Curves Transformation to enhance the colors
11. Histogram Transform to generate a final full stretched image
12. Plate solved the final picture to calculate field of view and center coordinates

saved as .jpg for publishing [6. Lessons Learned](#)

Enter Text

7. Main logfile entries

Enter Text