

# ObservationReport

all measures in mm

ObservationID 0303 on 2023-11-13 20:32

<b>Object</b>	<b>M31</b>
Common Name	Andromeda Galaxy
Alternate Name (s)	NGC224
Visual Magnitude	3,44
Distance ► Object	2,45 Mly
Apparent Size	3.167° × 1°
Object R.A.	00h 43m 15s
Object DEC	+41° 16′ 9″
WikiLink	<a href="https://en.wikipedia.org/wiki/Andromeda_Galaxy">https://en.wikipedia.org/wiki/Andromeda_Galaxy</a>



20231113\_M31\_ASI294\_0303-03WM.jpg

Link ► Picture	<a href="#">M31_20231113</a>
Description	Spiral Galaxy
Constellation	Andromeda

## Picture Data

Work Status	Published	Quality	****
Source Format	Photo	Picture Center R.A.	0 43 07.430
Tot./Act. Frames/Pane	99 96	Picture Center DEC	+41 16 46.69
H / V Panes	1 1	H/V FoV [°]	1,8268 1,2434
Exp. [s] / Frame	60	Above horizon [°]	0
Total Time / Pane [min]	96,00 96,00	View Direction	N
<b>Camera Data</b>	<b>ZWO</b>	<b>ASI294MC-Pro</b>	<b>ZWOASI294</b>
Camera Angle [°]	87,546	Pixel Pitch [µm]	4,63
Gain or ISO	120	Camera Temp. °C	-10

## Observation Site

Observation Start	2023-11-13T20:32:16 UTC+/- +h	Observation End	2023-11-13T22:31:51
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	3,5 12 %	Moon Rise   Set	07:36:00 18:21:00
Outside Temp. °C	20	Moon Age [d]	0
Moon Phase  % Illum.	New 0,4 %	Moon ► Target Dist.	UNKNOWN

## Optical Configuration

<b>TS600AS294</b>	<b>TS600ASI294T252</b>		
Lens or Scope	TSO APO 90/600	Focuser	M90 TS600 Rack + Pinion
Type Of Build	APO Triplet Refractor	Focuser Position [mm]	60,35 EAF Steps 20809
Brand	TS-Optics	Optical Factor	1
Additional Optics	M63 WO Rotator	FoL norm actual [mm]	599
Filter	Optolong 2" L-eNhanche	<a href="#">DawesLimitLink</a>	<a href="#">1,74 Arcsec</a>
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, LrC, PixInsight

## More ...

Work Folder [2023\20231113\\_M31\\_0303\\_La-Palma-Jardin](#)

Comment

Remarks

### 1. Session Planning

No big ahead planning as sky conditions were not too good.

### 2. Location and sky

Mediocre (for La Palma skies)

### 3. Session Results

ASI AIR Live Stacking process was used, but the final stacked image was not very convincing in terms of quality (many image errors, strange coloring)

### 4. Plate Solving and Camera Rotation Results

Astrometry.net rotation measurement:

PixInsight Plate Solve: 87,546°

Plate Solve result (ASI AIR): not available

### 5. Post Processing

#### • Pixel Insight

##### • Post Processing Attempt 0001

- Script: WBPP Weighted Batch Proprocessing (rejected 2 frames out of 99)
  - Calibration Files (from ..\\_Astro\\_Calibrations\MastersASi294)
    - Master Bias: MasterBias50\_1.0ms\_20230704-103931.fit
    - Master Dark: MasterDark20\_060.0s\_20230703-175004.fit
    - Master Flat: Master\_Flat20\_TS600AS294\_FilterOleN\_20231111.fit
      - but Mast flat was ignored by WBPP
  - Photometric Color Calibration (PCC)
  - Background Neutralization: Low: 0, High 0.1, Working mode: Rescale as needed
  - Screen Transfer Function and Histogram Transfer to create a fully stretched image.

##### • Post Processing Attempt 0003 (WBPP processing time: 3:57h)

- Script: WBPP Weighted Batch Proprocessing (rejected 3 frames out of 99)
  - Calibration Files (from ..\\_Astro\\_Calibrations\MastersASi294)
    - Master Bias: MasterBias50\_1.0ms\_20230704-103931.fit
    - Master Dark: MasterDark20\_060.0s\_20230703-175004.fit
  - Master Flat: Master\_Flat20\_TS600AS294\_FilterOleN\_20231111.fit, added mast flat manually
  - Photometric Color Calibration (PCC)
  - Background Neutralization: Low: 0, High 0.1, Working mode: Rescale as needed
- Screen Transfer Function and Histogram Transfer to create a fully stretched image.

Lightroom

• Photoshop

### 6. Lessons Learned

None

### 7. Main logfile entries

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