

# ObservationReport

ObservationID

**0373**

on

2025-03-21 22:21

all measures in mm



<b>Main Object</b>	<b>M106</b>		
Common Name			
Alternate Name	NGC4258		
Visual Mag.   Size	8,40	18' x 6.9'	
Distance	23.7 ± 1.5 Mly		
Object R.A.   DEC coord.	12h 18m 57.5s	+47° 18' 14"	
Description	galaxy SBbc		
Constellation	Canes Venatici		
Other Objects	<input type="text" value="NGC4218"/>	<input type="text" value="NGC4220"/>	
	<input type="text" value="NGC4226"/>	<input type="text" value="NGC4232"/>	
	<input type="text" value="NGC4248"/>	<input type="text" value="NGC4288"/>	
	<input type="text" value="NGC4346"/>	<input type="text" value="NGC4217"/>	



20250321\_M106\_ASI2600\_0373-01WM.jpg

StarImage Link [M106\\_20250321](#)Telescopus Link [M 106](#)Wikipedia Link [M 106](#)

## Image Properties

Work Status	Published		Rating	***	
Source Format	Photo		Picture Center R.A.	12h 18' 57.292"	
Tot./Act. Frames/Pane	10	10	Picture Center DEC	+47° 17' 39.82"	
H / V Panes	1	1	FoV measured H/V [°]	2d 14' 47.4" 1d 30' 4.9"	
Exp. [s] / Frame	180		Above horizon [°]	0	
Total Time / Pane [min]	30,00	30,00	View Direction	N	
<b>Camera Data</b>	<b>ZWO Optical</b>		<b>ASI2600MCAir</b>	<b>ZWOASI2600</b>	
Camera Angle [°]	0		Pixel Pitch [µm]	3,761	
Gain or ISO	100		Camera Temp. °C	-10	

## Observation Site

Observation Start	2025-03-21T22:21:22 UTC+/- +1h	Observation End	2025-03-21T22:48:55	
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	5,0	0	%	Moon Rise   Set	00:49:00	07:42:00
Outside Temp. °C	2			Moon Age [d]	19,4	
Moon Phase   % Illum.	3rd quarter	74	%	Moon ► Target Dist.	UNKNOWN	

## Optical Configuration

<b>TS600ASI2600</b>		<b>TS600ASI2600T275ZWOC</b>	
Lens or Scope	TSO APO 90/600	Focuser	M90 TS600 Rack + Pinion
Type Of Build	APO Triplet Refractor	Focuser Position [mm]	38,83 EAF Steps 13389
Brand	TS-Optics	Optical Factor	1
Additional Optics	M54 ZWO ASI CAA Rotator	FoL norm   actual [mm]	599 599
Filter	Optolong 2" L-eNhance	<a href="#">DawesLimitLink</a>	<a href="#">1,74 Arcsec</a>
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, GraXpert, BlurXTerminator, NoiseXTerminator

## More ...

Work Folder	<a href="#">2025\20250321_M106_0373_WEENDE</a>
Comment	

**1. Session Planning**

Wanted to capture some galaxies. 2 different targets selected in Plan Mode (first near M81, second near M106) with predefined camera rotation settings to test the ZWO CAA camera rotator.

**2. Location and sky**

Quite good

**3. Session Results**

too few light frames (was too tired to continue!)

**4. Plate Solving and Camera Rotation Results**

ASI AIR Plate Solve result:

```

Projection ..... Gnomonic
Projection origin ..... [3123.627999 2087.456273] px -> [RA: 12 18 57.288 Dec: +
47 17 39.77]
Resolution ..... 1.295 arcsec/px
Rotation ..... -104.465 deg
Reference system ..... ICRS
Observation start time ... 2025-03-21 21:18:20 UTC
Observation end time .... 2025-03-21 21:48:53 UTC
Geodetic coordinates ..... 9 56 05 E 51 34 26 N 0 m
Focal distance ..... 599.07 mm
Pixel size ..... 3.76 um
Field of view ..... 2d 14' 47.4" x 1d 30' 4.9"
Image center ..... RA: 12 18 57.292 Dec: +47 17 39.82 ex: -0.012646 px
ey: +0.007368 px
Image bounds:
  top-left ..... RA: 12 12 54.811 Dec: +48 11 04.19 ex: -1.250714 px
ey: -1.670255 px
  top-right ..... RA: 12 16 23.267 Dec: +46 01 05.01 ex: +1.722321 px
ey: -1.364026 px
  bottom-left ..... RA: 12 21 39.051 Dec: +48 34 00.73 ex: -1.217181 px
ey: +0.714741 px
  bottom-right ..... RA: 12 24 47.615 Dec: +46 23 07.23 ex: +0.707487 px
ey: +0.705568 px

```

**5. Post Processing**

```

In PixInsight:
1. SubFrame Calibrator
2. FBPP - Fast Batch Pre Processor
3. GraXpert (outside PixInsight) for gradient correction
4. PCC - Photometric Color Correction
5. BlurXTerminator
6. NoiseXTerminator
7. HT - Histogram Transfer for a full stretch
8. CT - Curves Transformation

```

**6. Lessons Learned**

ZWO CAA rotator works fine in Plan mode!

**7. Main logfile entries**

```

2025/03/21 22:12:51 [Autorun|Begin] M106 Start
2025/03/21 22:12:54 [AutoCenter|Begin] Auto-Center 1#
2025/03/21 22:12:54 Mount slews to target position: RA:12h20m9s DEC:+47°10'26"
...
2025/03/21 22:13:06 Plate Solve
...
2025/03/21 22:13:31 Solve succeeded: RA:12h20m9s DEC:+47°10'0" Angle = 39.872, Star
number = 957
2025/03/21 22:13:31 [AutoCenter|End] The target is centered
2025/03/21 22:13:31 CAA starts rotating: current angle = 39.9, target angle = 105.2
2025/03/21 22:14:11 CAA rotation completed
2025/03/21 22:14:13 Start Tracking
2025/03/21 22:14:19 [Guide] ReSelect Guide star
2025/03/21 22:14:21 [Guide] Start Guiding
2025/03/21 22:14:25 [Guide] Guide Settle
2025/03/21 22:14:29 [Guide] Settle Done
2025/03/21 22:14:29 Shooting 40 light frames, exposure 180.0s Bin1
...
2025/03/21 22:18:03 Auto focus succeeded, the focused position is 13389
2025/03/21 22:18:03 [AutoFocus|End] Auto focus succeeded
...
2025/03/21 22:18:20 Exposure 180.0s image 1#
...
2025/03/21 22:45:52 Exposure 180.0s image 10#
2025/03/21 22:48:55 [Guide] Dither
2025/03/21 22:48:55 [Guide] Dither Settle
2025/03/21 22:49:03 [Guide] Settle Done
2025/03/21 22:49:03 Exposure 180.0s image 11#
2025/03/21 22:49:14 Stop Autorun Manually
2025/03/21 22:49:15 [Guide] Stop Guiding
2025/03/21 22:49:15 [Autorun|End] Pause Autorun

```