

|                    |   |
|--------------------|---|
| <b>Object</b>      | <b>M51</b>  |
| Common Name        | Whirlpool Galaxy  |
| Alternate Name (s) | NGC5194, NGC5195  |
| Visual Magnitude   | 7,92  |
| Distance ► Object  | 28 Mly  |
| Apparent Size      | 13,7x11,7'  |
| Object R.A.        | 13h 30m 48,42s  |
| Object DEC         | +47° 04' 54.7"  |
| WikiLink           | <a href="https://en.wikipedia.org/wiki/Whirlpool_Galaxy">https://en.wikipedia.org/wiki/Whirlpool_Galaxy</a> |



20220322\_M51\_ASI294\_0018-07WM.jpg

|                |                              |
|----------------|------------------------------|
| Link ► Picture | <a href="#">M51_20220322</a> |
| Description    | Spiral Galaxy                |
| Constellation  | Canes Venatici               |

## Picture Data

|                         |                              |                     |                                |
|-------------------------|------------------------------|---------------------|--------------------------------|
| Work Status             | Published                    | Quality             | ***                            |
| Source Format           | Photo                        | Picture Center R.A. | 13h 29m 56.167s                |
| Tot./Act. Frames/Pane   | 22                  6        | Picture Center DEC  | +47° 11' 23.39"                |
| H / V Panes             | 1                      1     | H/V FoV [°]         | 0,6739                  0,4586 |
| Exp. [s] / Frame        | 180                          | Above horizon [°]   | 58,7°                          |
| Total Time / Pane [min] | 18,00                  18,00 | View Direction      | E 78,7°                        |
| <b>Camera Data</b>      | <b>ZWO Optical</b>           | <b>ASI294MC-Pro</b> | <b>ZWOASI294</b>               |
| Camera Angle [°]        | -86214                       | Pixel Pitch [µm]    | 4,63                           |
| Gain or ISO             | 180                          | Camera Temp. °C     | -10                            |

## Observation Site

|                   |                                |                        |                        |
|-------------------|--------------------------------|------------------------|------------------------|
| Observation Start | 2022-03-22T20:36:01 UTC+/- +1h | Observation End        | 2022-03-22T21:48:53    |
| Observation Site  | DE Göttingen MBR               | Site Elevation /Bortle | 182                  5 |
| Province          | NDS                            | Site Coordinates       | 51° 34' N, 9° 56' E    |

## Sky & Moon

|                          |             |    |                 |                                    |         |
|--------------------------|-------------|----|-----------------|------------------------------------|---------|
| Sky Index   Total Clouds | 2,8         | %  | Moon Rise   Set | 22:38:00                  08:01:00 |         |
| Outside Temp. °C         | 7           |    | Moon Age [d]    | 20,2                               |         |
| Moon Phase  % Illum.     | 3rd quarter | 76 | %               | Moon ►Target Dist.                 | 76° 41' |

## Optical Configuration

|                     |                            |                                |  |
|---------------------|----------------------------|--------------------------------|--|
| <b>TS1624AS294c</b> | <b>TS1624ASI294cT235</b>   |                                |  |
| Lens or Scope       | TSO RC 203/1624            | Focuser                        | 2.5" Crayford                          |
| Type Of Build       | Ritchey-Chretien Reflector | Focuser Position [mm]          | 0,00                  EAF Steps      0 |
| Brand               | TS-Optics                  | Optical Factor                 | 1                                      |
| Additional Optics   | -                          | FoL norm actual [mm]           | 1624                  2975,916         |
| Filter              | ClearSky                   | <a href="#">DawesLimitLink</a> | <a href="#">1,45 Arcsec</a>            |
| Diameter [mm]       | 203                        | Optical Scale ["/px]           | 0,588                                  |
| Aperture / f-stop   | 8,00                       |                                |  |

## Other Hardware & Software

|            |               |                  |                     |
|------------|---------------|------------------|---------------------|
| GuideScope | Omegon 50/200 | Mount            | iOptron iEQ45 Pro   |
| GuiderHW   | ASiAirPro     | SessionControl   | ASiAirPro           |
| GuiderSW   | None          | PostProcessingSW | LrC, PS, PixInsight |

## More ...

Work Folder [2022\20220322\\_M51\\_0018\\_GOE-MBR](#)

Comment

Remarks Had to discard most of the 22 frames due to guiding, tracking and focusing issues, also the collimation of the telescope needs to be corrected. The sky was rather bright despite the relatively good seeing index - the final image is therefore only of relatively poor quality.