

The “Magnificent Four” of our mid-winter evenings:

The Eagle, The Swan, The Trifid and The Lagoon nebulae

Currently these four deep-sky targets are located favourably for astro-photography in our night skies – allowing for imaging sessions to start early in the evening. Engaging these nebulae when at $\pm 30^\circ$ above the eastern horizon allowed for about 4 hours imaging time per target before they reached zenith (**Photo 1**) – provided the technology played along. After zenith a meridian flip was indicated – unfortunately “wandering” into heavier light-polluted skies – “shooting” west, across the city of Pretoria as from my location.

Imaging was conducted over the span of 5 consecutive evenings. One target per evening, except for Messier 20, for which photons were captured over 2 imaging sessions.

A detailed discussion on the nebulae to follow at a later stage.



Imaging at zenith

Hardware: Camera: Canon Ra mirrorless camera, Settings: ISO 3200, combination of 30 – and 120 sec exposures

Telescope: Takahashi TOA 150, 6" apochromatic refractor; f-ratio 7.3, fl 1100mm.

Guiding setup: Takahashi 65mm refractor, ZWO 1600MM cooled camera.

Mount: Losmandy G-11 "GT" Gemini.

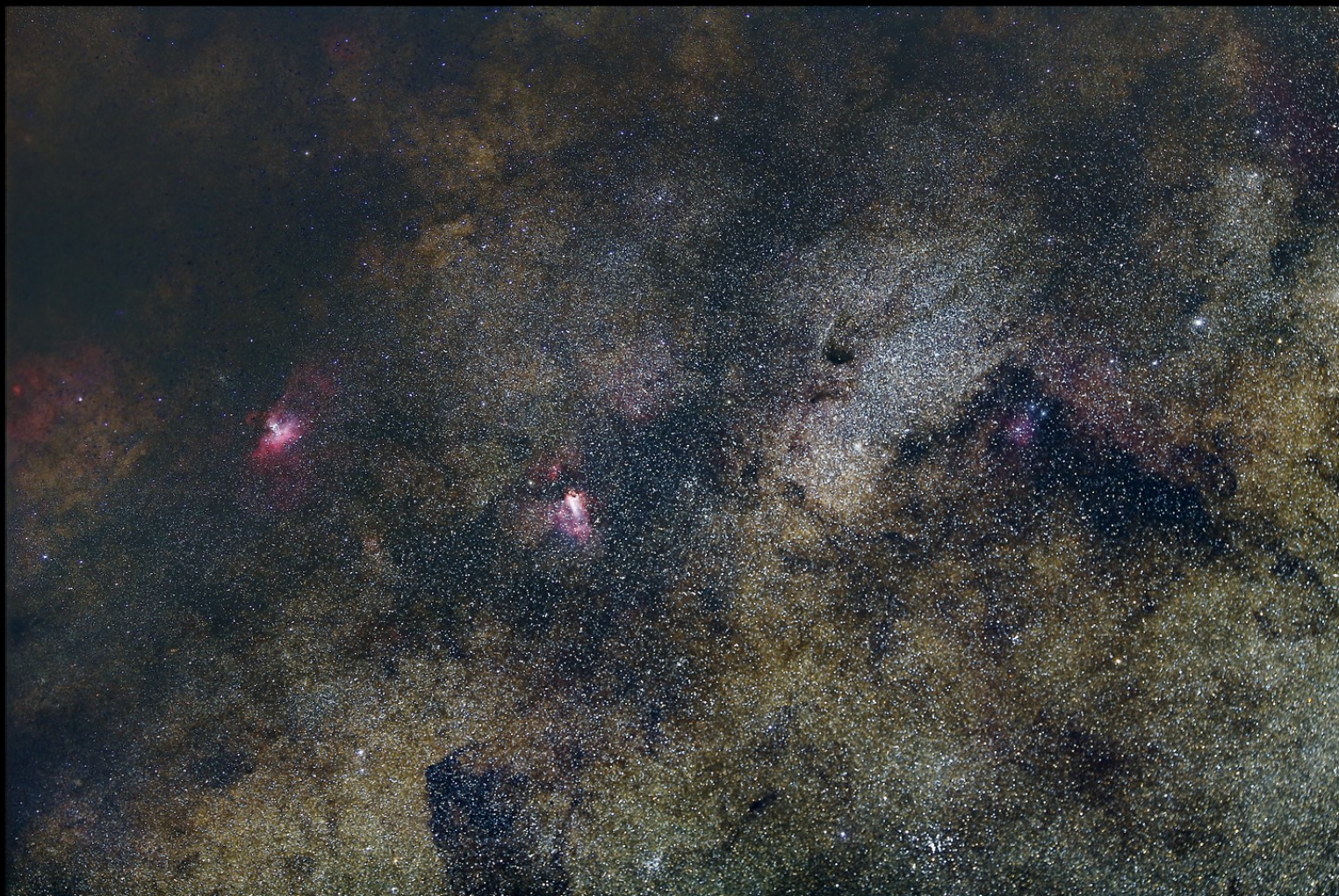
Software: Camera control: BackYard EOS; Guiding: PHD; Mount control: Cartes du Ciel; Stacking and post processing: Deep Sky Stacker, PixInsight, Photo, Paint.Net; Picasa 3

The Milky Way. Left to right: Eagle; Swan; Trifid; Lagoon
Karoo 2018 Canon 1Dx DSLR, Canon 24 -105 mm lens, f/2.8. Mosaic of 6 panels



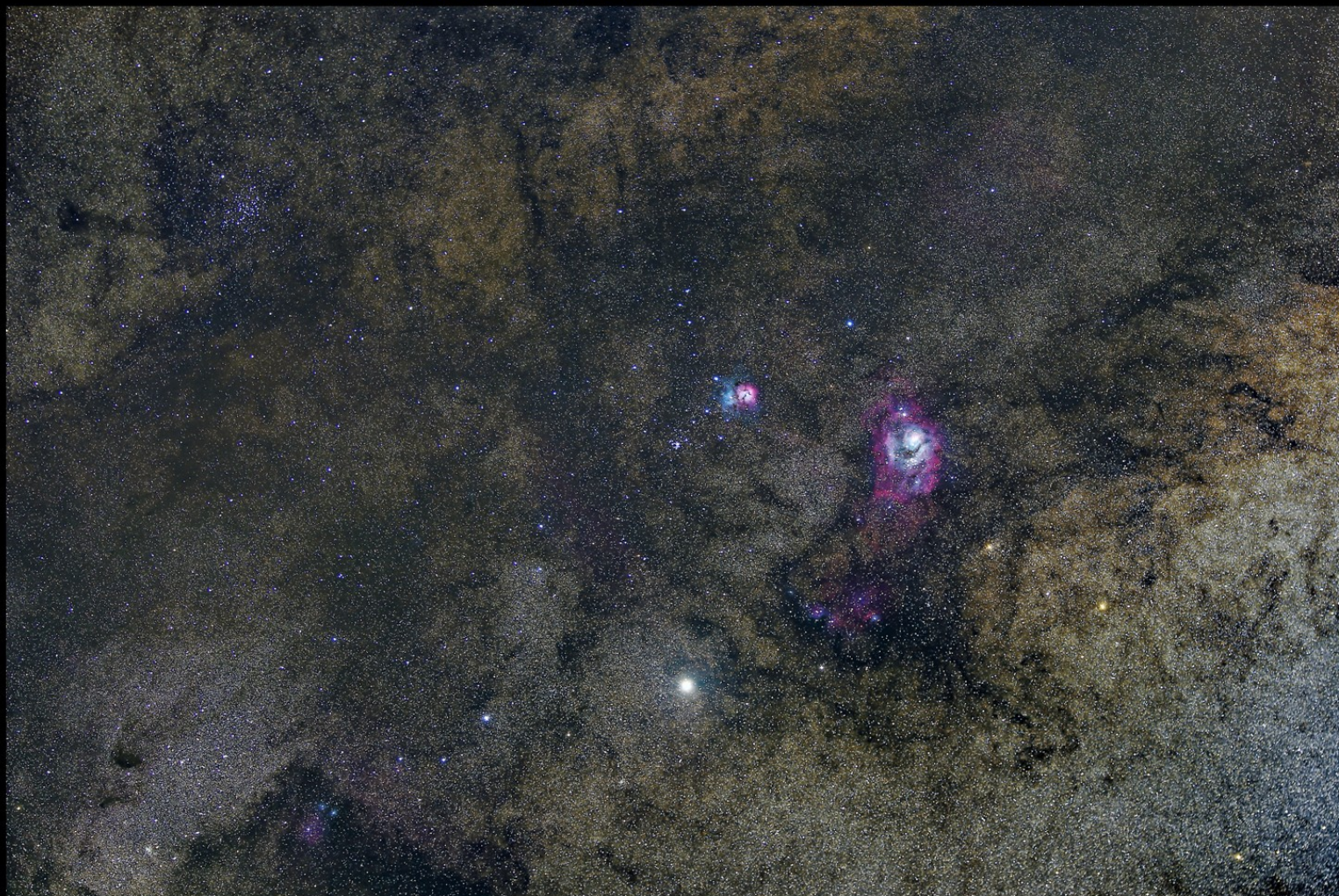
The Eagle and Swan nebulae

Karoo 2018. Canon1Dx DSLR, Canon 200mm f/2.0 lens. Stacks of 60 sec subs, 1 hour integration



The Trifid and Lagoon nebulae

Karoo 2018. Canon1Dx DSLR, Canon 200mm f/2.0 lens. Stacks of 60 sec subs, 1 hour integration



The Eagle nebula

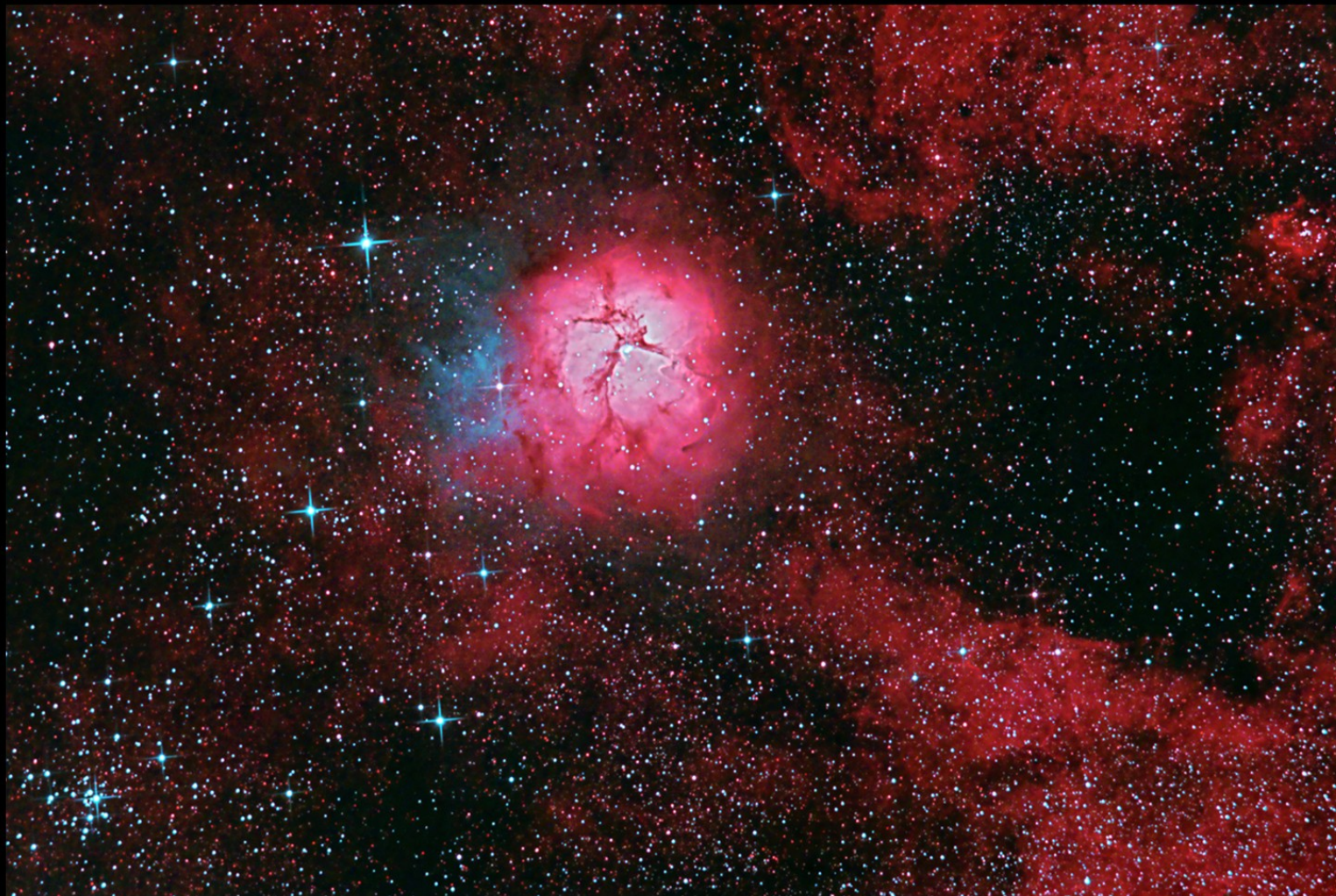


The Swan nebula



The Trifid nebula

M 20



The Lagoon nebula

