

# The Objective Lens

University Lowbrow Astronomers Monthly Newsletter Supplement

July 2022

## THE MILKY WAY

(widefield, dark nebulae, nightscapes, reflected images, constellations within... the whole ball of wax)



From **DOUG BOCK**: "On June 22, 2022 I ran a multi-object sequence for about 4 hours. The goal was to collect data of nebula in the central part of the Milky Way. Using the William Optics 105mm f/7 Apochromatic refractor and the ZWO asi2600mc pro camera, These 3 nebulae were captured in less than 1 hour of data each. This refractor has a larger field of view than my 10" RC, thus the interest in imaging these larger objects again. I also ran another set of data on a current comet C/2017 K2 (Panstarrs) The sky conditions were good with a transparency of 4/5 and seeing 3/5 for most of the night."

Messier 20 – the Triffid Nebula – 28 x 2 minute sub frames

Messier 8 – the Lagoon Nebula – 27 x 2 minute sub frames

Messier 17 – the Omega or Swan Nebula – 24 x 2 minute sub frames

Comet C/2017 K2 (Panstarrs) – 50 x 1 minute sub frames – stacked on the comet core"





From **DONOVAN DREW**. The Cocoon Nebula. "The last time I had collected photons from this object I was using a stock Nikon d5300. I was very new to astrophotography as well. I figured it would be good to comeback and give it justice. It's a beautiful star forming region in Cygnus about 4000 light-years away. Very similar to SH2-82 The Little Cocoon I had imaged over a few weeks ago."





From **GLENN W. KAATZ**: "It isn't a photo of the Milky Way itself but rather one of its satellite galaxies - the Large Magellanic Cloud (LMC). I subscribe to a remote telescope service and obtained 36 hours of exposure time through LRGB filters using a scope in Australia. This object is something that we in the Northern Hemisphere don't get to see with our own eyes unless we are willing to travel great distances. Anyway, here are the particulars:

The LMC is a satellite dwarf galaxy of the Milky Way, lying nearly 200,000 light-years away with a radius of about 7,000 light years. It has many star-forming regions, best exemplified by the Tarantula Nebula in the upper right of this image. The raw data for this image was obtained using a remote telescope service, and consisted of 36 hours of imaging time over the course of one year from Australia. The equipment used was:

Takahashi FSQ-106ED f/3.6, 382 mm focal length  
FLI PL16803 monochrome cooled camera  
Astrodon LRGB 2GEN filters  
Paramount MX+ mount  
Starlight Xpress Ultrastar guide camera"





From **ADRIAN BRADLEY**: Adrian's photo over Lake Huron won first prize in the RASC General Assembly competition for the category of images that highlight light pollution.





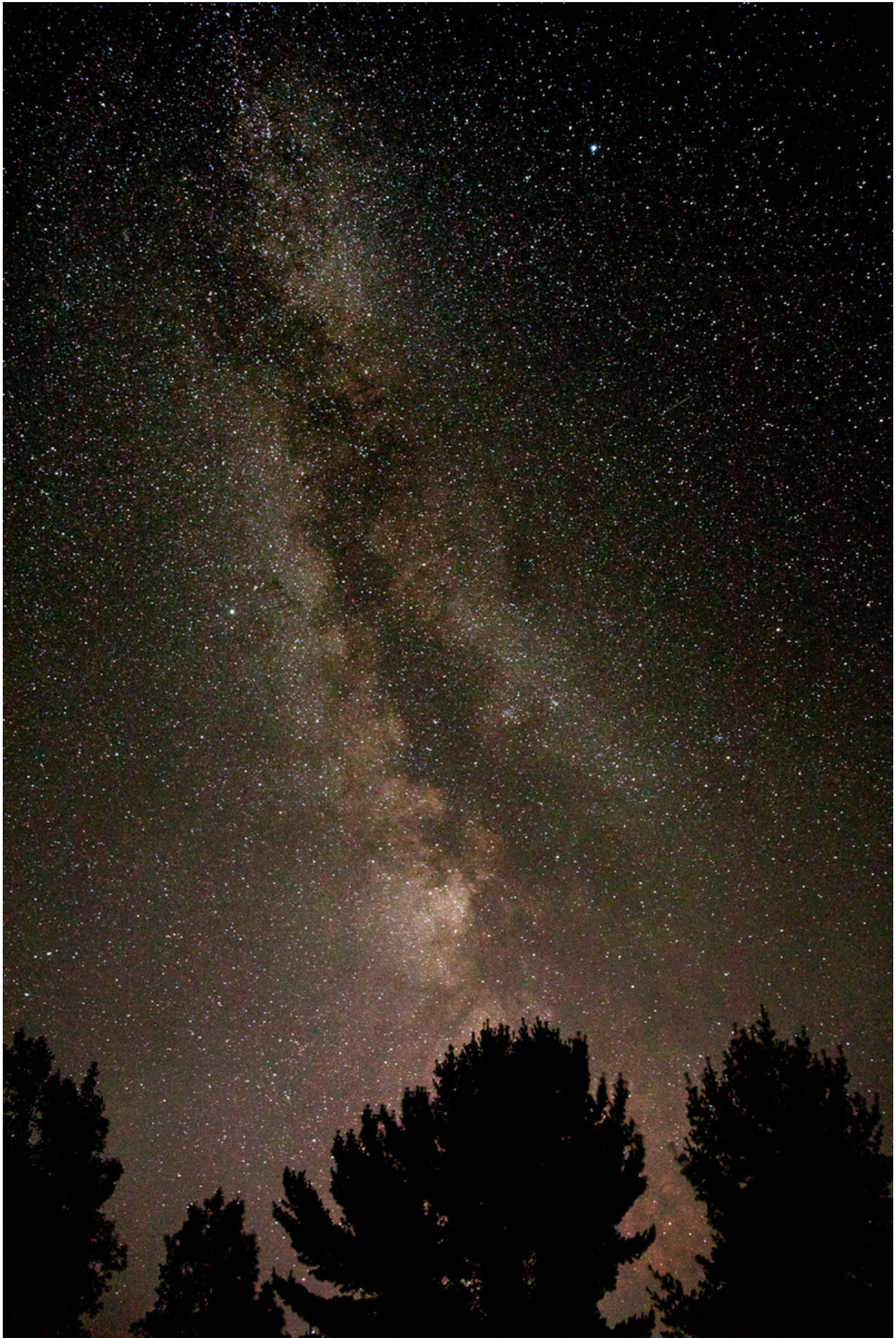
From **DONOVAN DREW**. "NGC 6888, known as the Crescent Nebula. It's an emission nebula about 5000 light-years away formed by the interstellar winds colliding from the Wolf Rayet star WR 136."





From **DONOVAN DREW**. "NGC 6820/6823 ... is a small reflection nebula in the constellation of Vulpecula. About 6000 light-years away. The center cluster formed about two million years ago."





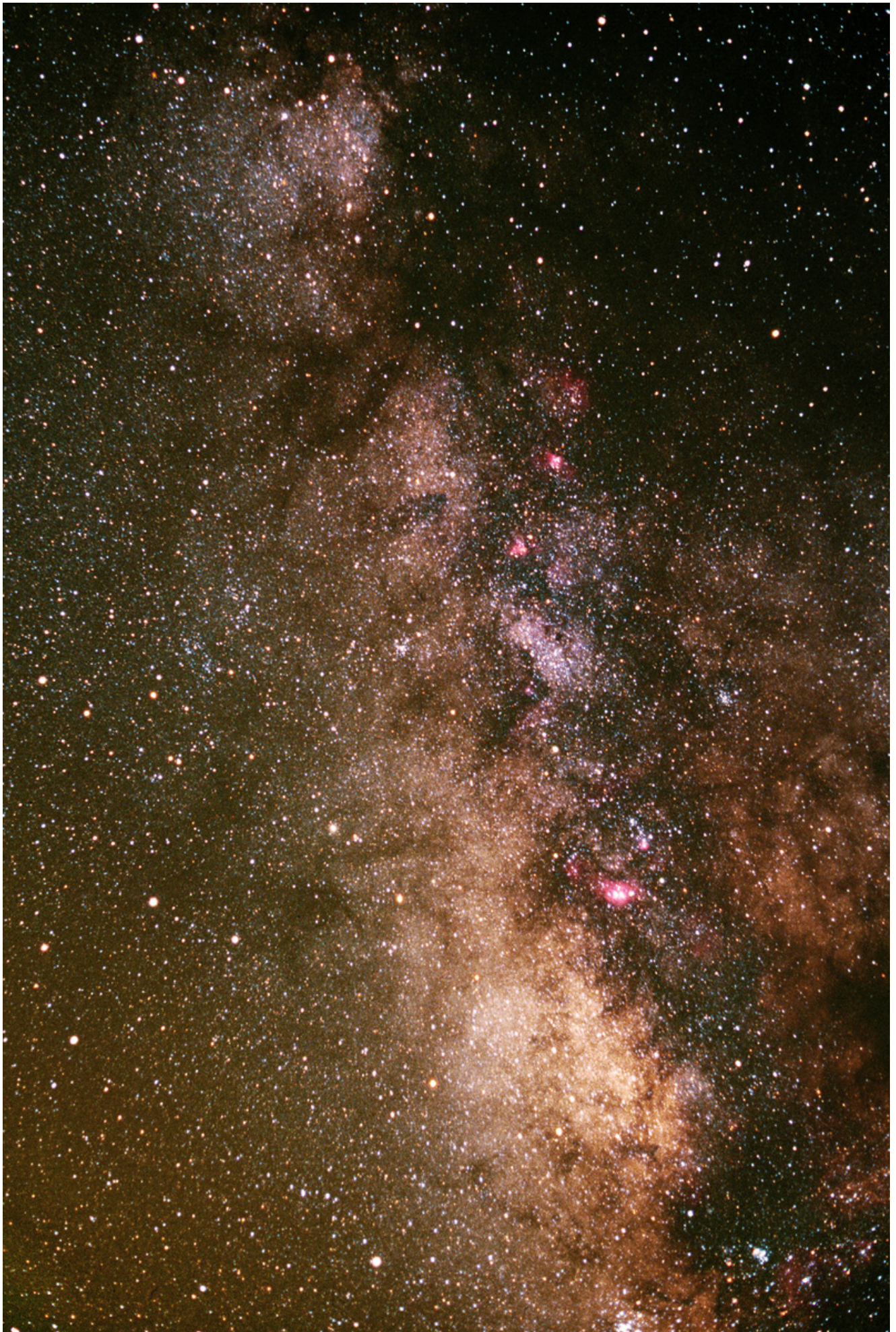
From **DOUG SCOBEL**. Summer Milky Way





From **DOUG SCOBEL**. Winter Milky Way





From **DOUG SCOBEL**. Milky Way Core





From **ADRIAN BRADLEY**. Milky Way, taken in Michigan's Upper Peninsula on June 25.





*Doug Bock*

From **DOUG BOCK**. Milky Way in Arizona. Stack of 17 photographs. From 2014.





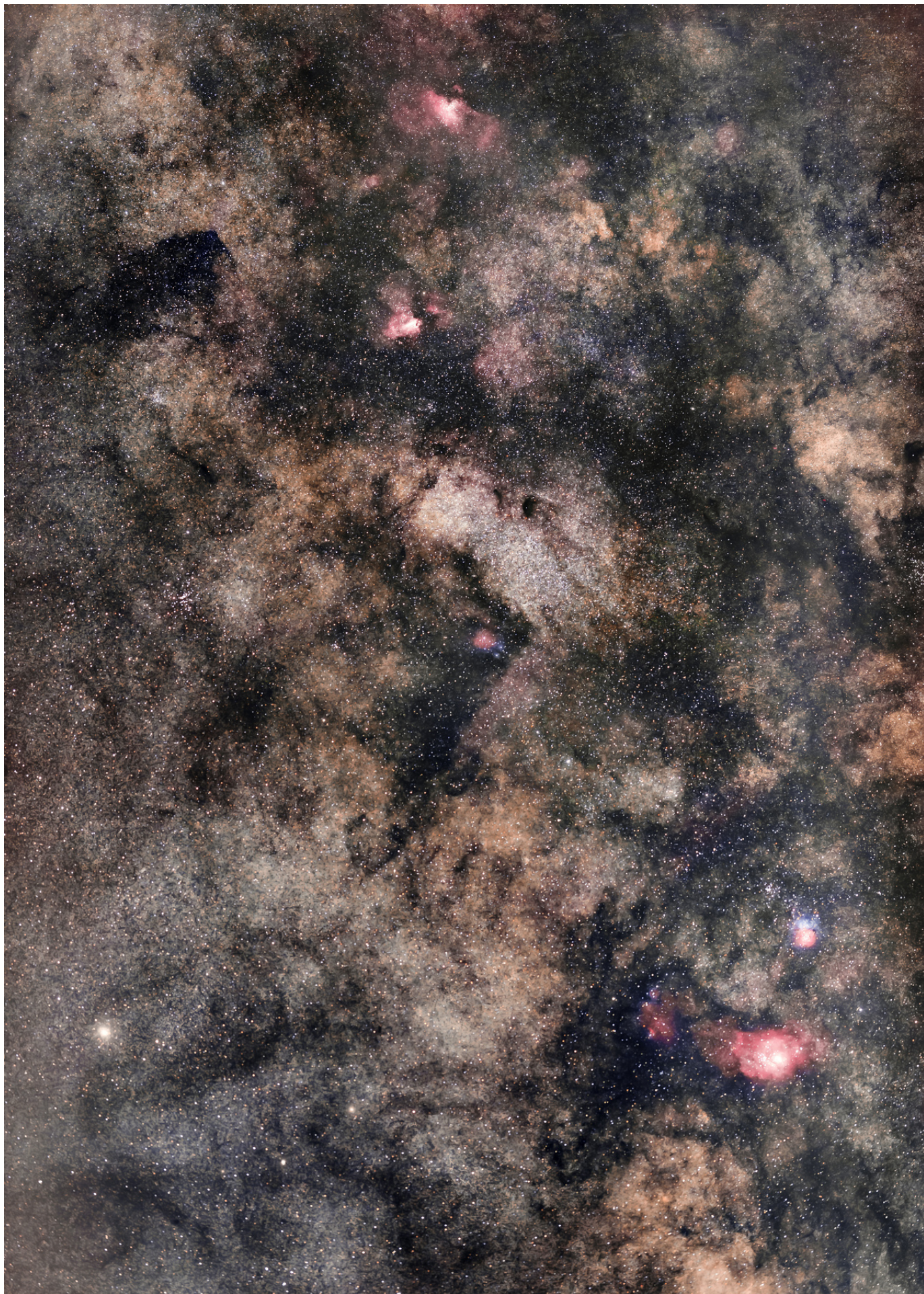
From **ADRIAN BRADLEY**. Milky Way and lighted sky at boat launch area, Lake Hudson Dark Sky Preserve.





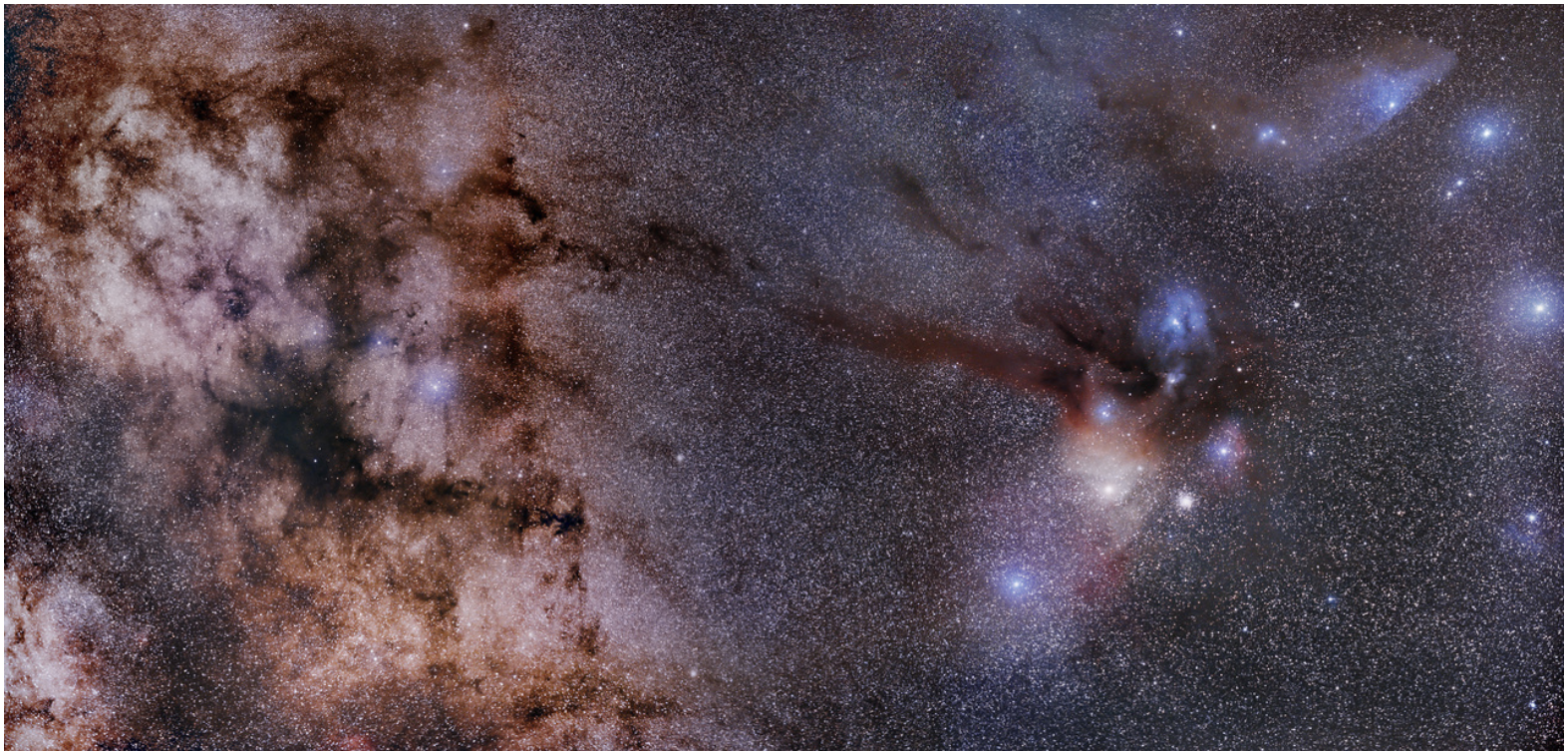
From **AMY CANTU**. "Faint Milky Way over light-polluted Ann Arbor. Taken at Hunt Park. I only got in 20 minutes of exposure before clouds blew in. Stacked, tracked, and blended. Canon 6d mk II, 50mm."





From **AMY CANTU**. "From the Eagle nebula to Lagoon nebula. Taken 35 SW of Ann Arbor. 72 @ 45 sec, 800 ISO, f/2. Canon 6d mk II, Rokinon 135mm. Skywatcher Star Adventurer 2i. Astro Pixel Processor and Photoshop."





From **AMY CANTU**. "Rho Ophiuchi Cloud Complex reaching toward the Dark Horse Nebula / Milky Way core. First try at a mosaic. I had a little trouble but finally got something: Three panels combined, each panel = 39 @ 60-sec, 1600 ISO, f/3.5, with 25 flats, 30 darks, and 50 bias frames. Canon 6d mk II, Rokinon 135mm. Skywatcher Star Adventurer 2i. Astro Pixel Processor and Photoshop."





From **ADRIAN BRADLEY**. Milky Way





From **ADRIAN BRADLEY**. Milky Way at the boat launch area, Lake Hudson Dark Sky Preserve





From **DONOVAN DREW**. Trifid Nebula





From **DONOVAN DREW**. "SH2-82 is an emission/reflection nebula in the constellation Sagitta roughly 3600 light-years away."