

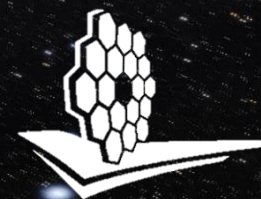
Hands-on Experience

Manipulating astronomical images
and catalogues

Günther Hasinger
Deutsches Zentrum für Astrophysik

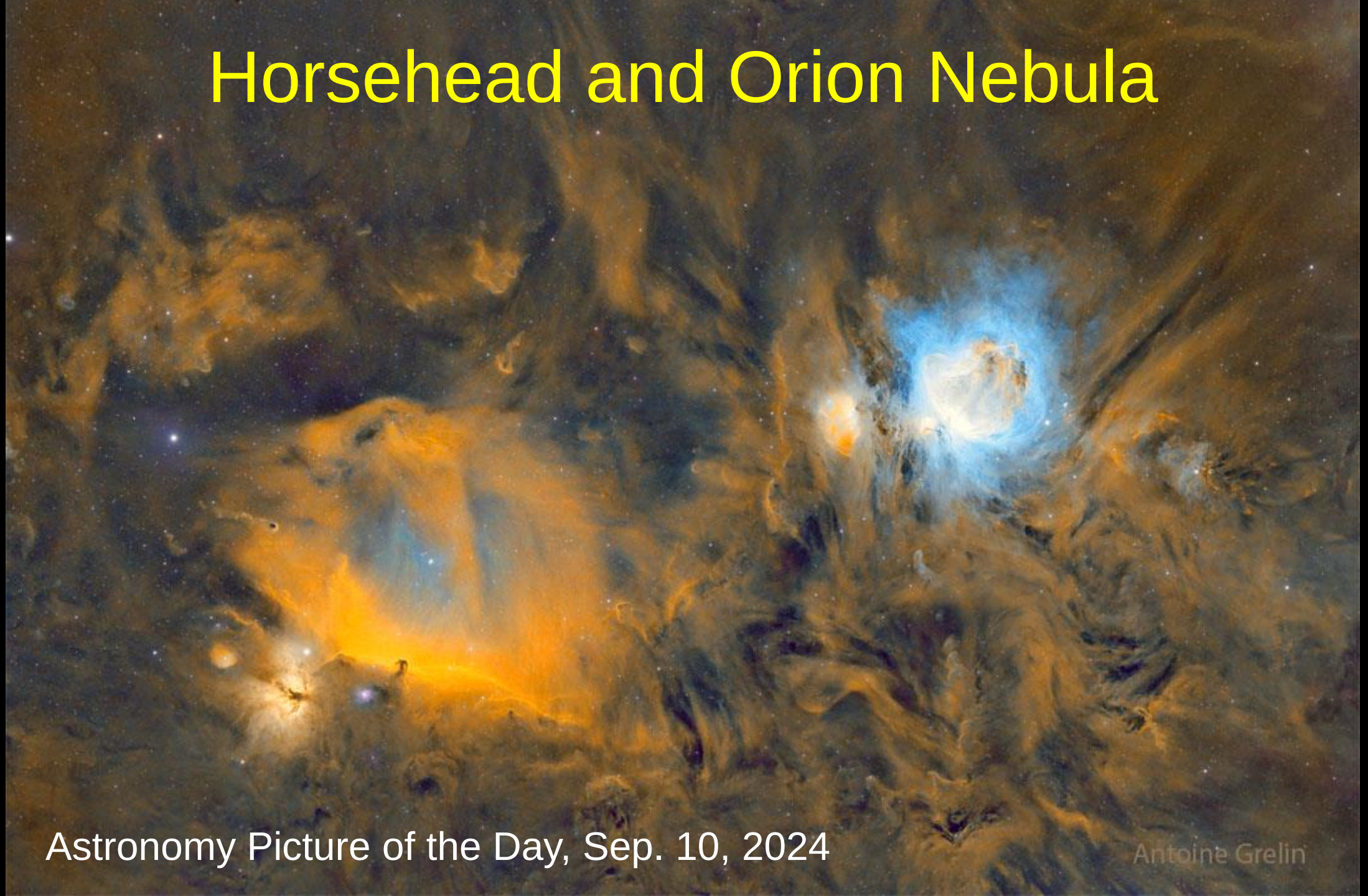
NPA Summer School
HZDR, September 11, 2024







Horsehead and Orion Nebula

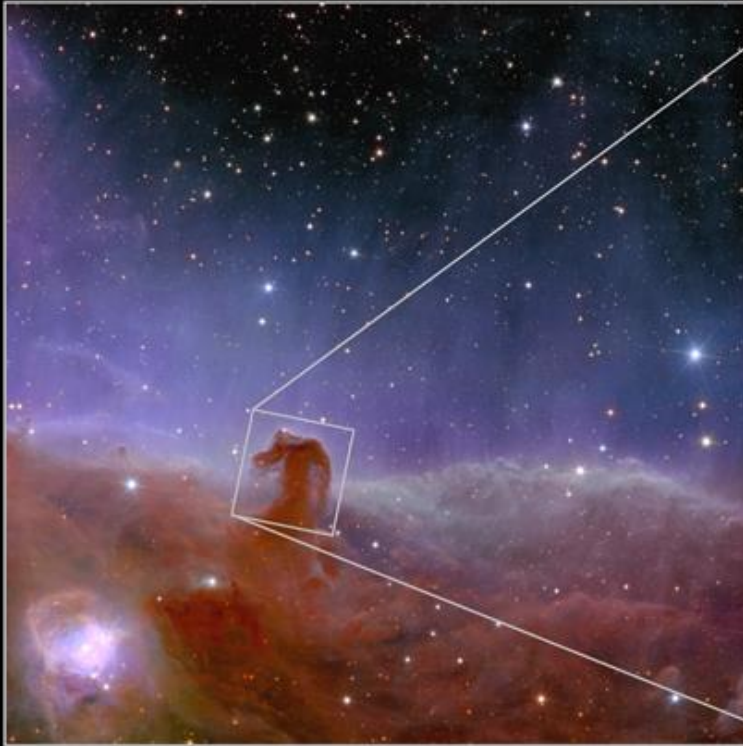


Astronomy Picture of the Day, Sep. 10, 2024

Antoine Grelin

Three images of the Horsehead Nebula

Euclid



Euclid (Visible-Infrared)

Hubble



Hubble (Infrared)

JWST



Webb (Infrared)

NASA, ESA, CSA, Karl Misselt (University of Arizona), Alain Abergel (IAS, CNRS), Mahdi Zamani The Euclid Consortium, Hubble Heritage Project (STScI, AURA)

Now let's start: sky.esa.int

J2000 ▾ 18 20 58.225 -13 53 10.07 FoV: 2.0° X 58' DSS2 color

Sci. Mode ☒ En ▾ Feedback      

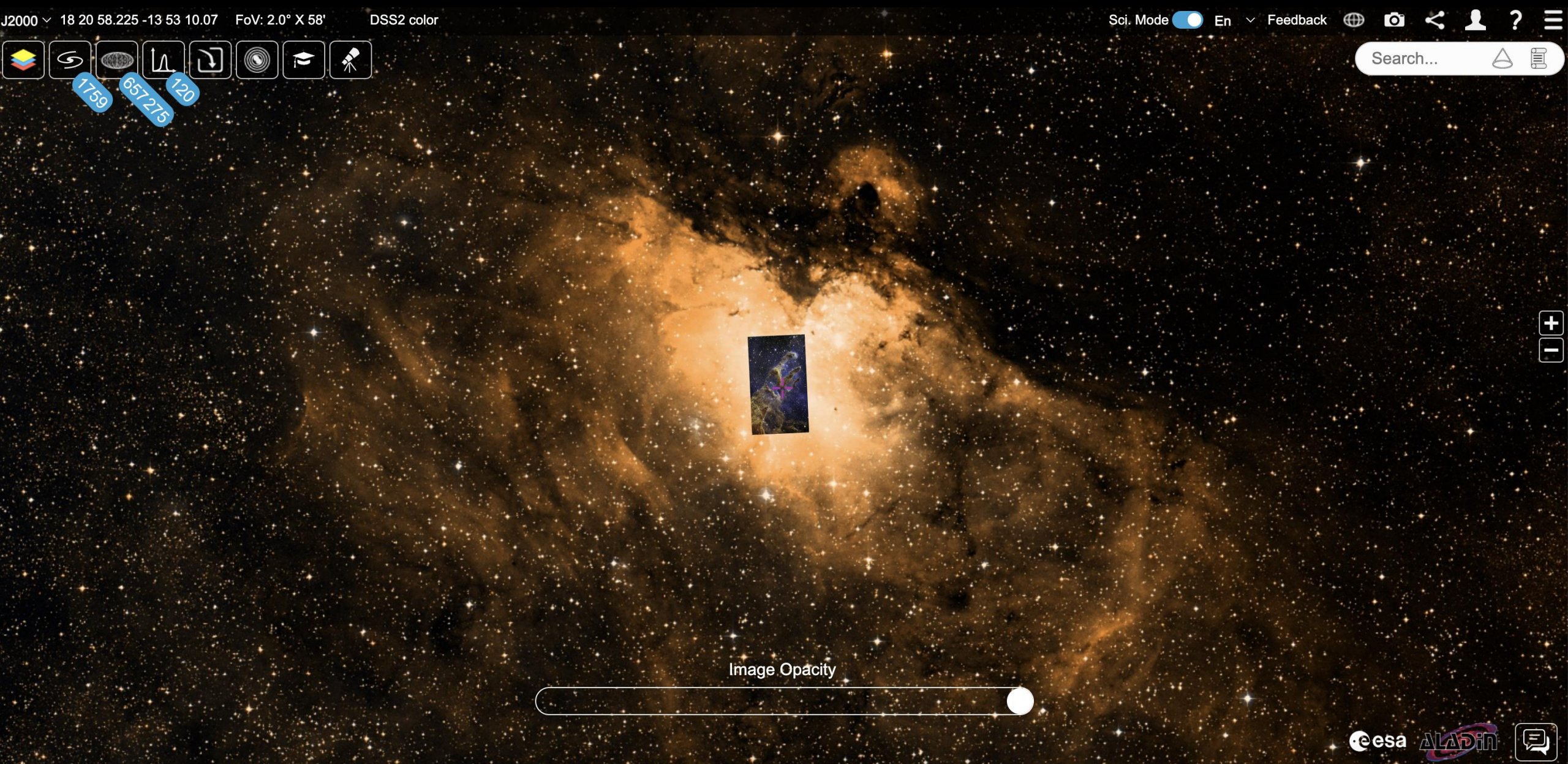
1759

657275

120

Search...



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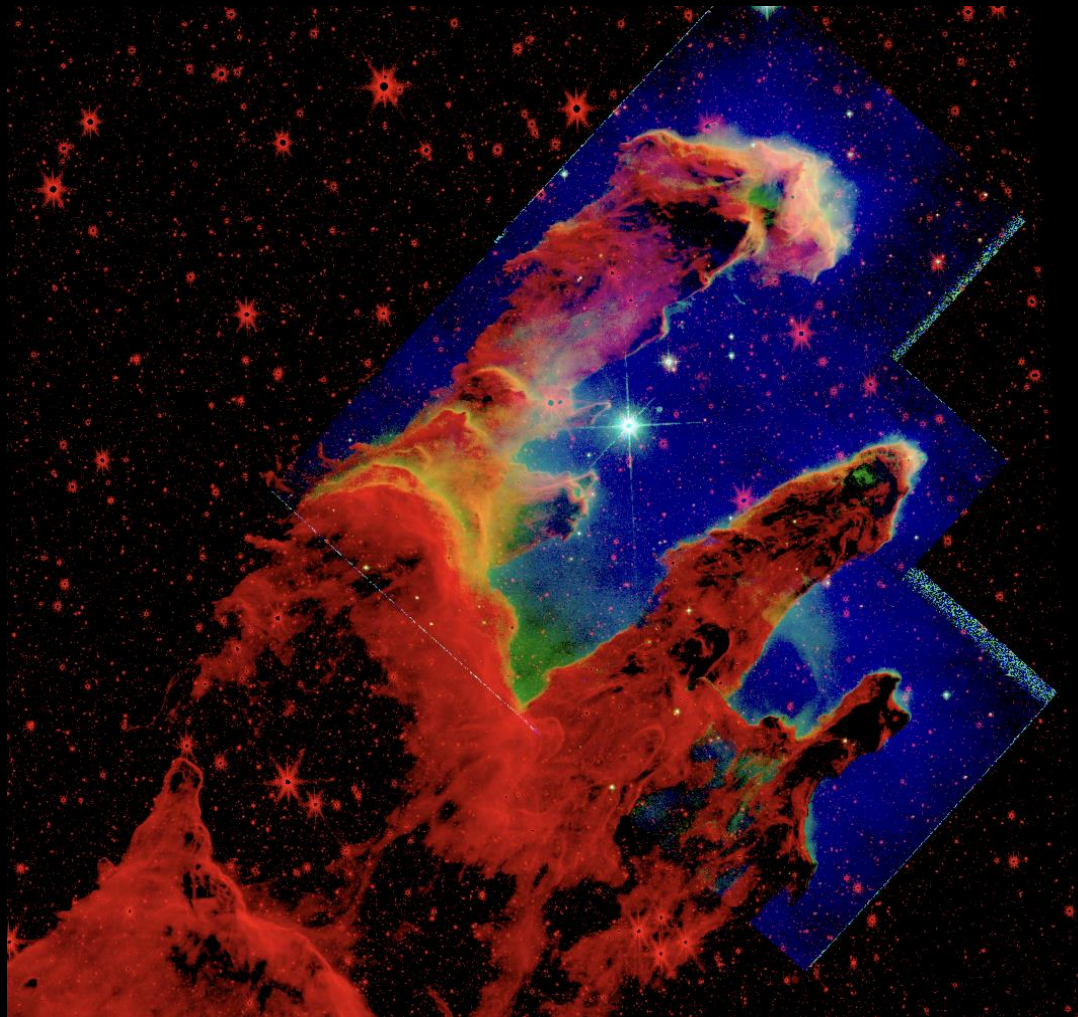
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Image Opacity

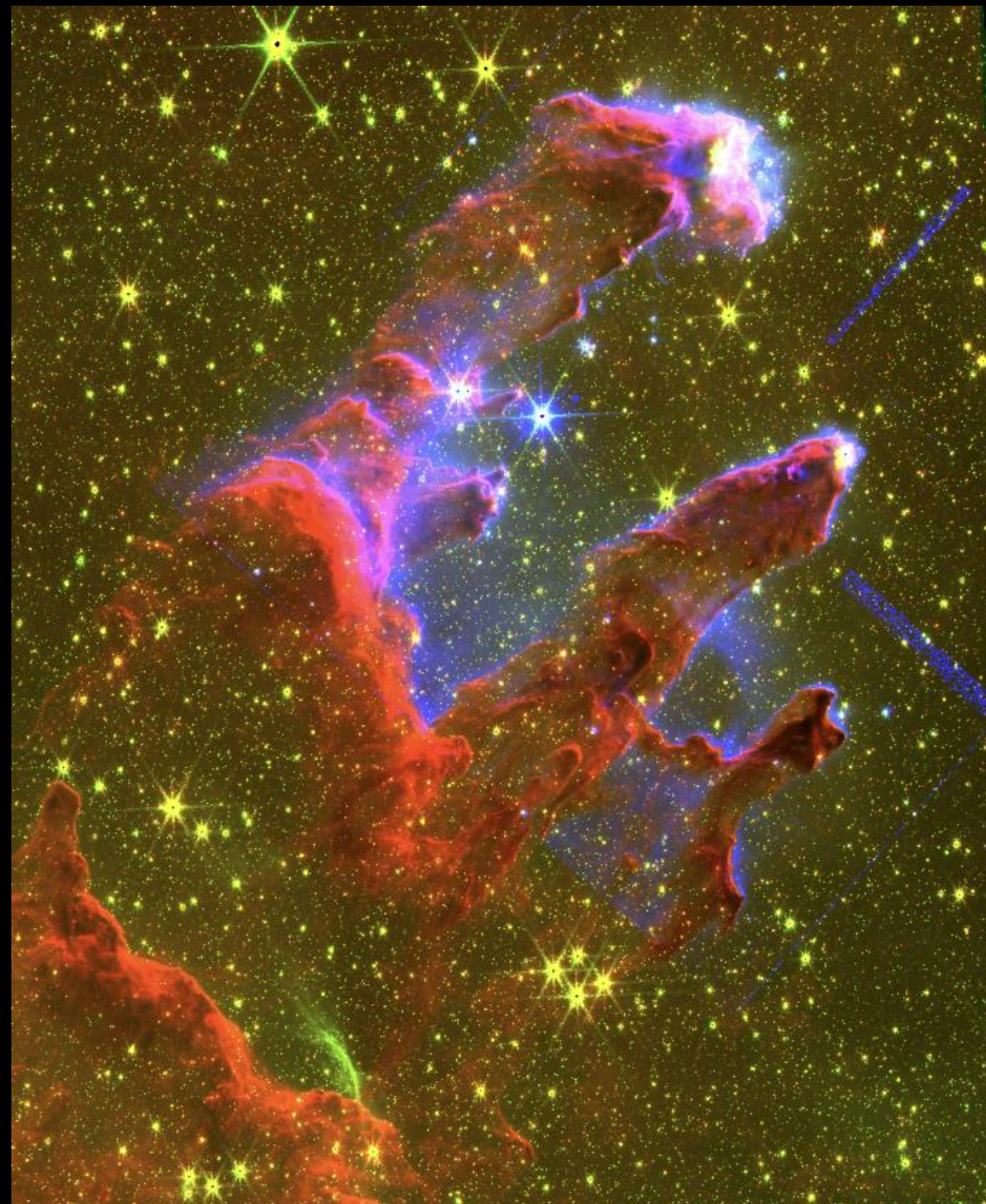
  

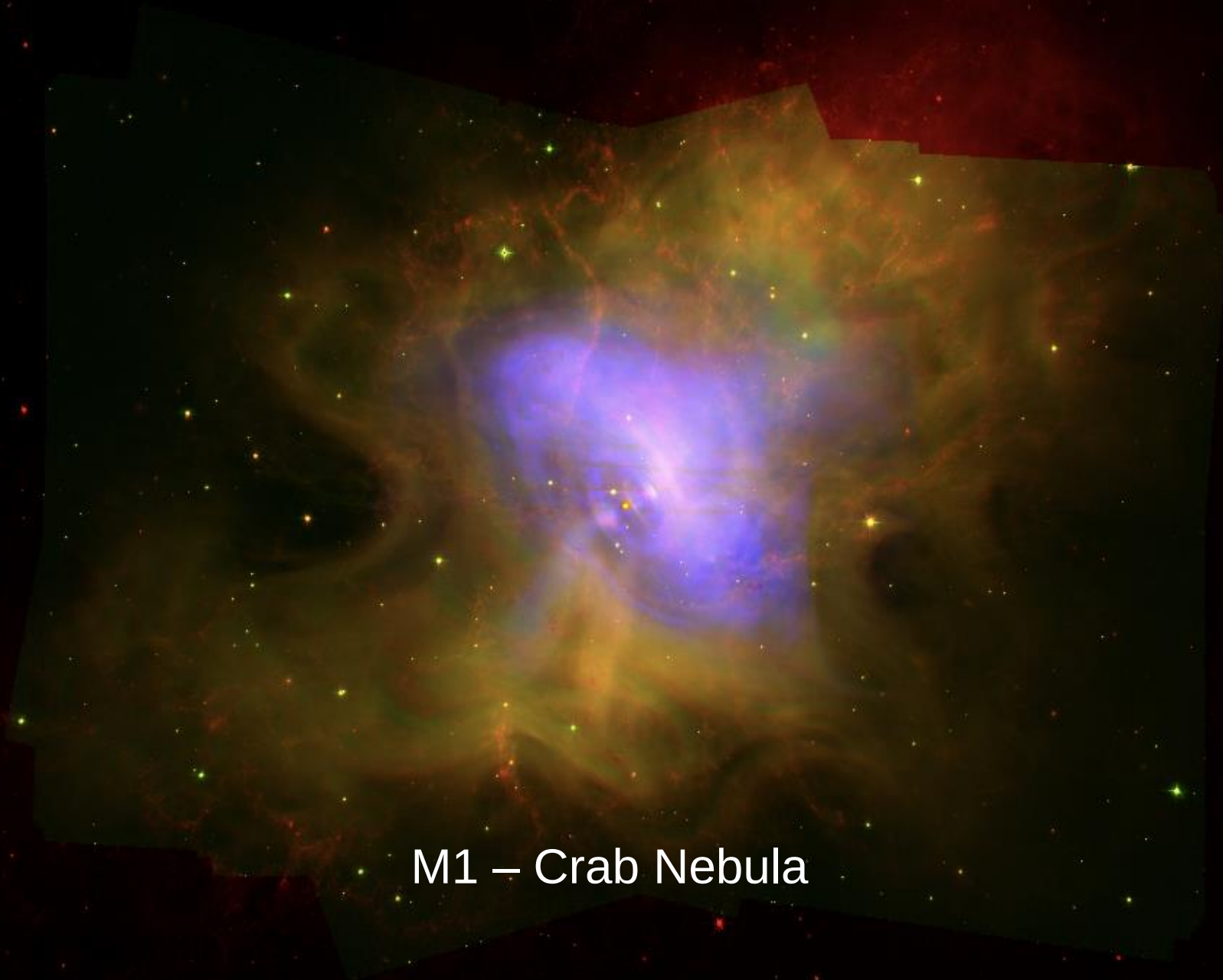
SAOImageDS9 & TopCAT



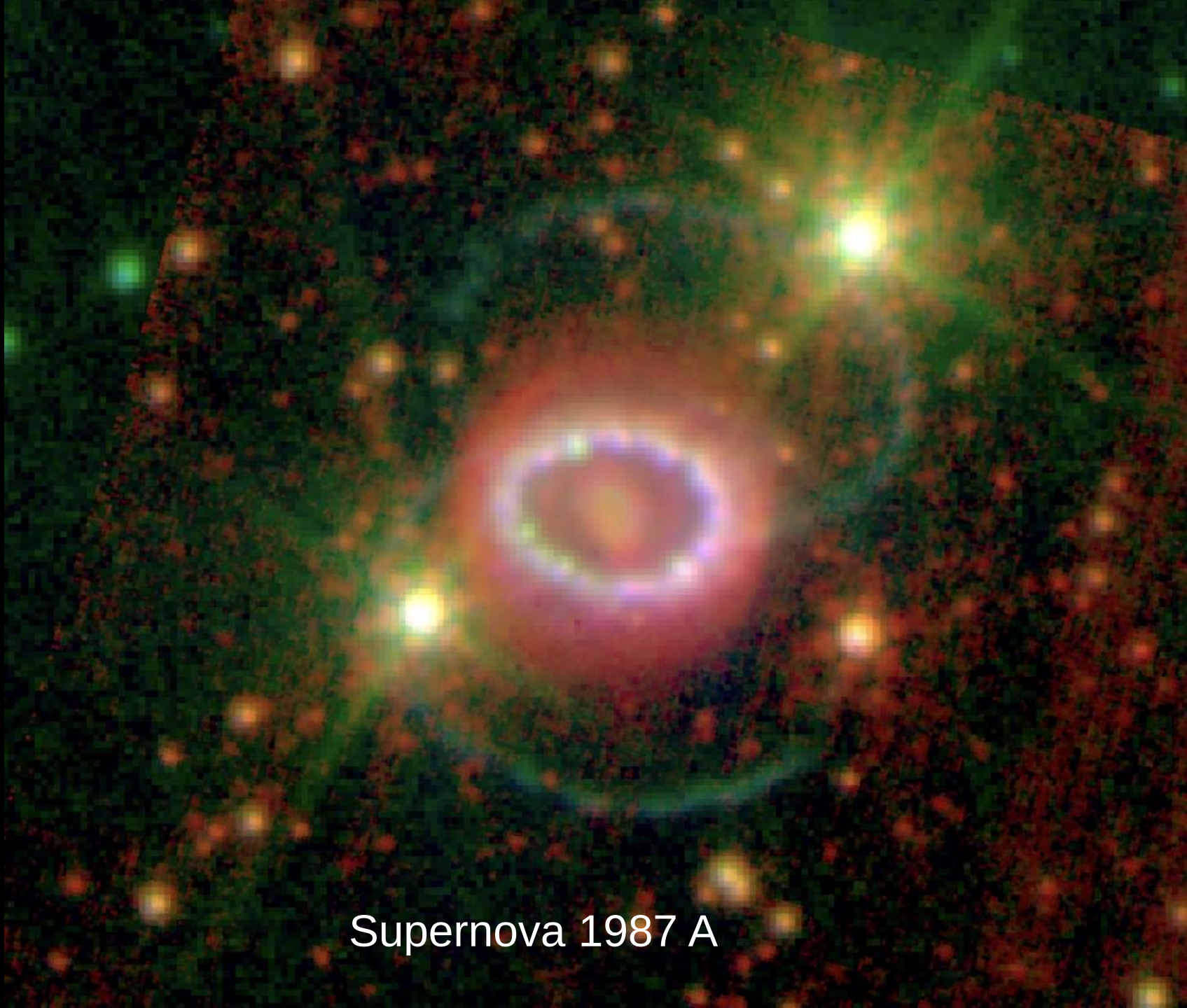


M16 – Pillars of Creation



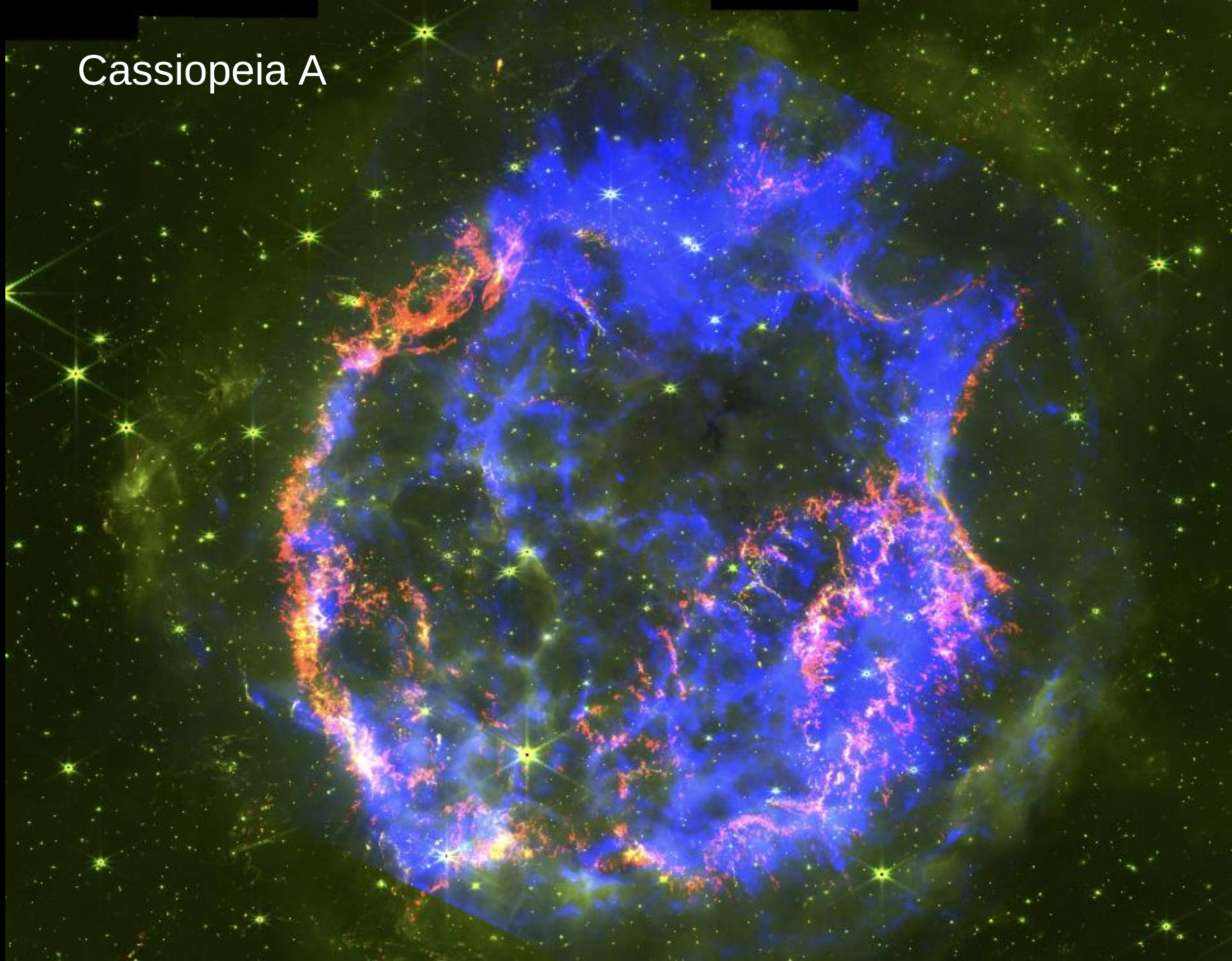


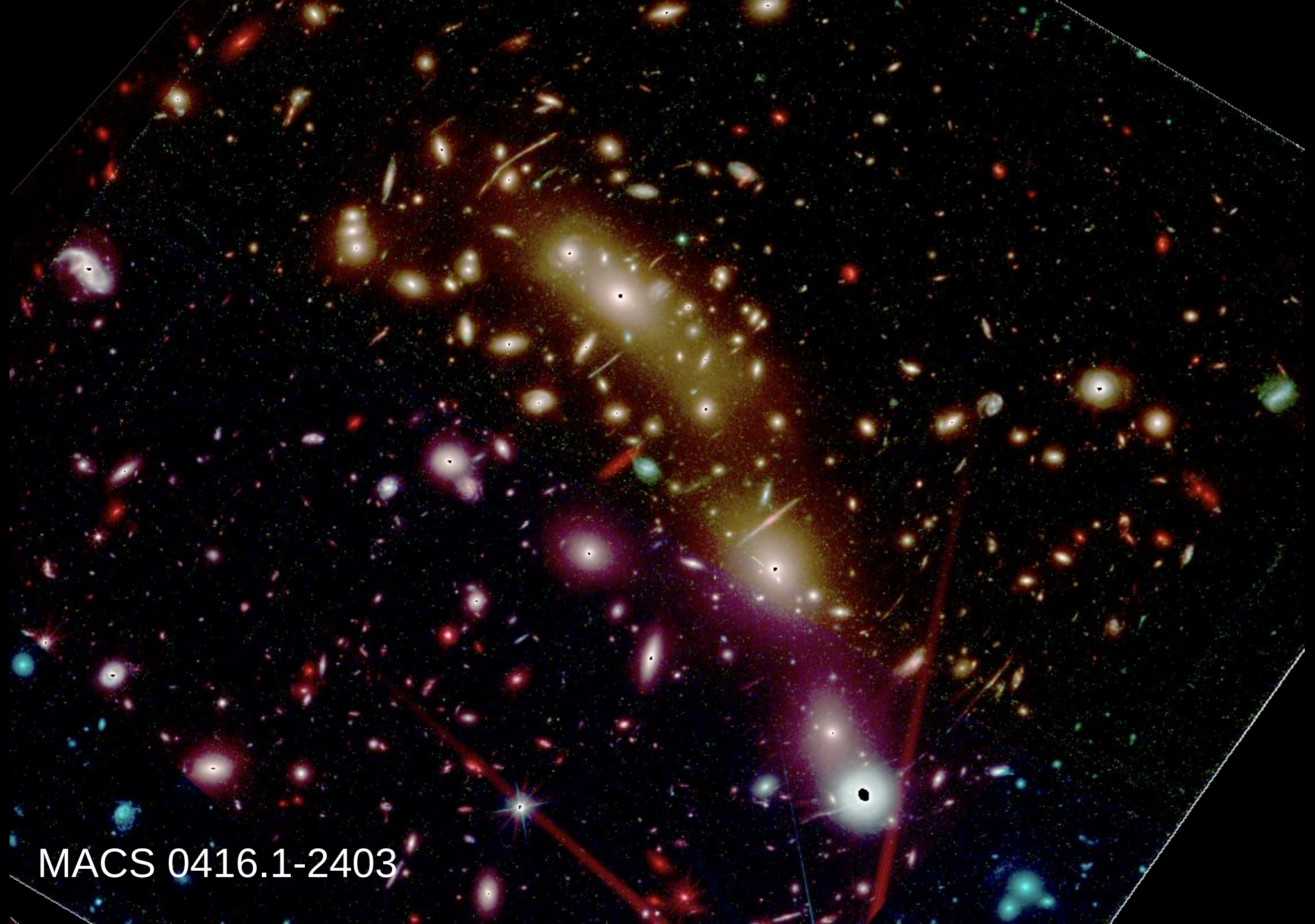
M1 – Crab Nebula



Supernova 1987 A

Cassiopeia A





MACS 0416.1-2403

A composite image of Earth from space, showing the curvature of the planet and the glowing blue atmosphere. The Earth's surface is visible, with landmasses and clouds. A bright, intense light source, possibly the sun, is positioned on the right side of the frame, creating a strong lens flare and illuminating the scene. Several thin, blue lines representing orbital paths or celestial coordinates are overlaid on the image. The background is a deep blue space filled with numerous small, distant stars.

Many thanks for
your attention!