

An Eagle of Cosmic Proportions

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This three-color composite mosaic image of the Eagle Nebula (Messier 16) is based on images obtained with the Wide-Field Imager camera on the MPG/ESO 2.2m telescope at the La Silla Observatory. At the center, the so-called "Pillars of Creation" can be seen. This wide-field infrared image shows not only the central pillars, but also several others in the same star-forming region, as well as a huge number of stars in front of, in, or behind the Eagle Nebula. The cluster of bright stars to the upper right is NGC 6611, home to the massive and hot stars that illuminate the pillars. The "Spire" -- another large pillar -- is in the middle left of the image. Credit: ESO

(PhysOrg.com) -- Today ESO has released a new and stunning image of the sky around the Eagle Nebula, a stellar nursery where infant star clusters carve out monster columns of dust and gas.

Located 7000 light-years away, towards the [constellation](#) of Serpens (the Snake), the Eagle Nebula is a dazzling stellar nursery, a region of gas and dust where [young stars](#) are currently being formed and where a cluster of massive, hot stars, NGC 6611, has just been born. The powerful light and strong winds from these massive new arrivals are shaping light-year long pillars, seen in the image partly silhouetted against the bright background of the nebula. The nebula itself has a shape vaguely reminiscent of an eagle, with the central pillars being the "talons".

The [star cluster](#) was discovered by the Swiss astronomer, Jean Philippe Loys de Chéseaux, in 1745. It was independently rediscovered about twenty years later by the French comet hunter, Charles Messier, who included it as number 16 in his famous catalogue, and remarked that the stars were surrounded by a faint glow. The Eagle Nebula achieved iconic status in 1995, when its central pillars were depicted in a [famous image](#) obtained with the NASA/ESA Hubble Space Telescope. In 2001, ESO's Very Large Telescope (VLT) captured another breathtaking image of the nebula, in the near-infrared, giving astronomers a penetrating view through the obscuring dust, and clearly showing stars being formed in the pillars.

The newly released image, obtained with the Wide-Field Imager camera attached to the MPG/ESO 2.2-metre telescope at La Silla, Chile, covers an area on the sky as large as the full Moon, and is about 15 times more extensive than the previous VLT image, and more than 200 times more extensive than the iconic Hubble visible-light image. The whole region around the pillars can now be seen in exquisite detail.

The "Pillars of Creation" are in the middle of the image, with the cluster of young stars, NGC 6611, lying above and to the right. The "Spire" — [another pillar captured by Hubble](#) — is at the centre left of the image.

Finger-like features protrude from the vast cloud wall of cold gas and

dust, not unlike stalagmites rising from the floor of a cave. Inside the [pillars](#), the gas is dense enough to collapse under its own weight, forming young stars. These light-year long columns of gas and dust are being simultaneously sculpted, illuminated and destroyed by the intense ultraviolet light from massive stars in NGC 6611, the adjacent young stellar cluster. Within a few million years — a mere blink of the universal eye — they will be gone forever.

Source: ESO ([news](#) : [web](#))

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