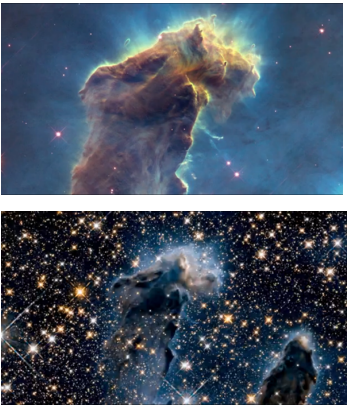

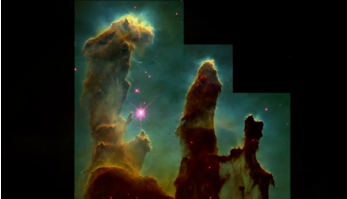




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Hubblecast Episode 82: A new view of the Pillars of Creation	Visual notes
<p>00:00 [Narrator] 1. The NASA/ESA Hubble Space Telescope has revisited one of its most iconic and popular images: the Eagle Nebula's Pillars of Creation.</p> <p>This time Hubble has not just one image for us, but two: alongside the new visible-light image the telescope used infrared light to produce a second breathtaking picture of the region. Between them these images show the pillars in more detail than ever before.</p>	
<p>00:00 2. Intro</p>	
<p>00:00 [Narrator] 3. In 1995, Hubble viewed three towering spires of gas, dust, and newly forming stars within the Eagle Nebula, creating an image that was dubbed the Pillars of Creation.</p>	

Hubble has observed various parts of this big nebula on different occasions throughout the years, capturing dramatic views of its cold, dark hydrogen clouds, energetic young stars, and bauble-like stellar clusters.



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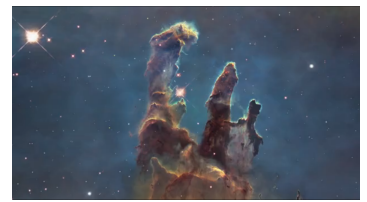
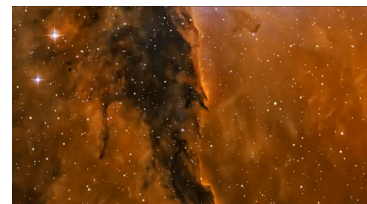
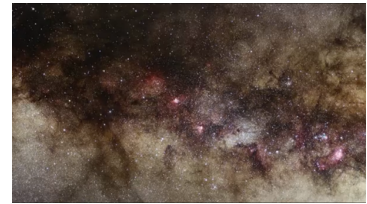
[Narrator]

4 Now, a new Hubble image shows the region in unprecedented detail.

Capturing the multi-coloured glow of gas clouds, wispy tendrils of dark cosmic dust, and the rust-coloured elephants' trunks of the nebula's famous pillars.

The dust and gas in the pillars is seared by the intense radiation from young stars and eroded by strong winds from massive nearby stars. With these new images comes better contrast and a clearer view for astronomers to study how the structure of the pillars is changing over time.

The new image captures almost exactly the same region as shown in 1995, but uses a newer camera, installed in 2009, to capture light from glowing oxygen, hydrogen and sulphur with greater clarity.



00:00

[Narrator]

5. Hubble also has an additional New Year treat for us; the telescope gazed at the same area in infrared light, allowing it to pierce through the obscuring dust and gas and unveil a more unfamiliar — but just as amazing — view of the pillars.

In this ethereal view the entire frame is peppered with bright stars, and baby stars are revealed as they form within the pillars themselves. The ghostly outlines of the pillars seem much more delicate when seen like this, and are silhouetted against an eerie blue haze.

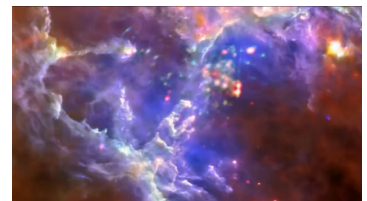


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[Narrator]

6. There have been other infrared views of the region in the past.

In 2012 ESA's Herschel produced an infrared image, which has been combined with an X-ray view from the XMM-Newton Space Observatory to reveal the nebula's hot inner stars, and their effect on their surroundings, in a soup of colour.



The European Southern Observatory's Very Large Telescope captured a ground-based version of the pure infrared image in 2001. But although the VLT image covers a somewhat larger area, this new Hubble image is sharper and reveals much finer details.

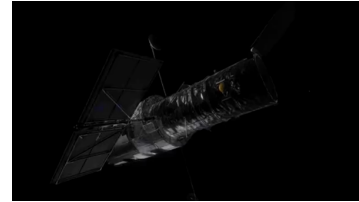


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[Narrator]

7. These two new images highlight how different the Universe can look when observed in different types of light. And, how Hubble has evolved over time to bring us images with greater clarity for better science.

As it enters its 25th year, Hubble is still going strong.



Ends xx:xx