



# Cosmic Graffiti

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They say a picture is worth a thousand words, and this is particularly true for images of objects in space! Many telescopes can each observe the same planet, star, or galaxy and can each find something new or different!

This new picture of the middle region of the Milky Way that resembles cosmic graffiti art has uncovered new details about the history of how stars were born in our galaxy. Astronomers have new clues for a dramatic event that happened long ago: a burst of star formation so intense that resulted in over a hundred thousand supernova explosions!

These bursts are amongst the most energetic events in the Universe and are so bright that they often briefly outshine an entire galaxy before fading from view over several weeks or months. During this short period, a supernova can give off as much energy as the Sun will in its entire lifetime!

As it turns out, most of the stars in our galaxy are very old. It was found that about 80% of the stars in the center region of the Milky Way formed in the earliest years of our galaxy, between 8 and 13.5 billion years ago. It is estimated that the Milky Way contains somewhere between 100 and 400 billion stars in total.

Image credit: ESO/Nogueras-Lara et al.

## COOL FACT

Our Solar System doesn't lie in the centre of the Milky Way, or even at the edge. We lie in the outer part of a spiral arm called the Orion Arm. It takes around 200 million years for the Solar System to orbit the galactic centre just once!

This Space Scoop is based on a Press Release from [ESO](#).  
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