

NASA, ESA, CSA and STScI

"Cosmic Cliffs" in Carina: What looks much like craggy mountains on a moonlit evening is actually the edge of a nearby, young, star-forming region NGC 3324 in the Carina Nebula. Captured in infrared light by the Near-Infrared Camera (NIRCam) on the NASA/ESA/CSA James Webb Space Telescope, this image reveals previously obscured areas of star birth.

NASA, ESA, CSA, STScI, and the Webb ERO Production Team

Southern Ring Nebula: The bright star at the centre of NGC 3132, while prominent when viewed by the NASA/ESA/CSA James Webb Telescope in near-infrared light, plays a supporting role in sculpting the surrounding nebula. A second star, barely visible at lower left along one of the bright star's diffraction spikes, is the nebula's source. It has ejected at least eight layers of gas and dust over thousands of years.

Tarantula Nebula: In this mosaic image stretching 340 light-years across, Webb's Near-Infrared Camera (NIRCam) displays the Tarantula Nebula star-forming region in a new light, including tens of thousands of never-before-seen young stars that were previously shrouded in cosmic dust.

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NASA's James Webb Space Telescope: unfolding the universe in stunning detail

On 12 July 2022, NASA revealed the first full-colour images and spectroscopic data taken by the James Webb Space Telescope (JWST) that was in development for 30 years prior to its launch on Christmas Eve last year.

The JWST is the successor to the famous Hubble Space Telescope, with the ability to peer far deeper into the universe and to take images in much higher definition and detail. It is the largest and most powerful space science telescope ever constructed.

The James Webb Space Telescope mission is an international collaboration between NASA, the European Space Agency (ESA), and the Canadian Space Agency (CSA).

Using revolutionary technology, Webb will observe a part of space and time never seen before, providing a wealth of amazing views into an era when the very first stars and galaxies formed – over 13.5 billion years ago. Webb can explore our own solar system's residents with new eyes, as well as study the atmospheres of distant worlds.

For more information about the James Webb Space Telescope, visit: <https://webb.nasa.gov/> or www.webbtelescope.org.

For all the latest images in hi-resolution, visit: <https://esaweb.org/images/>.

Ngomhlaka 12 July ngonyaka ka 2022, I NASA yembule okokuqala, isithombe kanye ne spectroscopic data, eyathathwa isibonakude esibizwa nge James Webb Space Telescope (JWST) eyayikhandwe eminyakeni engu 30 ngaphambi kokuthi iqalise ukusebenza ngasoku elendulela ukhisimuzi ngonyaka owendlule. Isibonakude I JWST silandela esinye isibona kude asaziwa kakhulu esibizwa nge Hubble Space Telescope futhi sesikwazile ukunikeza ulwazi oluningi kwizazi zezinkanyezi.

Translated by Zamantimande Kunene

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D. Quest: Science for South Africa

2022-09

Quest Volume 18 Number 3

Academy of Science of South Africa (ASSAf)

Academy of Science of South Africa (ASSAf)

Academy of Science of South Africa (ASSAf) (2022) Quest: Science for South Africa, 18(3).

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