

Image: Hubble sees turquoise-tinted plumes in Large Magellanic Cloud

October 22 2014



Credit: ESA/Hubble & NASA: acknowledgement: Josh Barrington

The brightly glowing plumes seen in this image are reminiscent of an underwater scene, with turquoise-tinted currents and nebulous strands reaching out into the surroundings.



However, this is no ocean. This image actually shows part of the Large Magellanic Cloud (LMC), a small <u>nearby galaxy</u> that orbits our galaxy, the Milky Way, and appears as a blurred blob in our skies. The NASA/European Space Agency (ESA) Hubble Space Telescope has peeked many times into this galaxy, releasing stunning images of the whirling clouds of gas and sparkling stars (opo9944a, heic1301, potw1408a).

This image shows part of the Tarantula Nebula's outskirts. This famously beautiful nebula, located within the LMC, is a frequent target for Hubble (heic1206, heic1402).

In most images of the LMC the color is completely different to that seen here. This is because, in this new image, a different set of filters was used. The customary R filter, which selects the red light, was replaced by a filter letting through the near-infrared light. In traditional images, the hydrogen gas appears pink because it shines most brightly in the red. Here however, other less prominent emission lines dominate in the blue and green filters.

This data is part of the <u>Archival Pure Parallel Project (APPP)</u>, a project that gathered together and processed over 1,000 images taken using Hubble's <u>Wide Field Planetary Camera 2</u>, obtained in parallel with other Hubble instruments. Much of the data in the project could be used to study a wide range of astronomical topics, including gravitational lensing and cosmic shear, exploring distant star-forming galaxies, supplementing observations in other wavelength ranges with optical data, and examining star populations from stellar heavyweights all the way down to solar-mass stars.

Provided by NASA



Citation: Image: Hubble sees turquoise-tinted plumes in Large Magellanic Cloud (2014, October 22) retrieved 10 May 2024 from https://phys.org/news/2014-10-image-hubble-turquoise-tinted-plumes-large.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.