
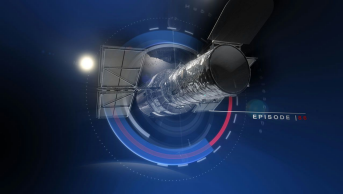





ESO, Karl-Schwarzschild-Str.2
D-85748 Garching bei München,
Germany
Telephone: +49 (0)89 3200 6855
Telefax: +49 (0)89 3200 6480
hubble@eso.org

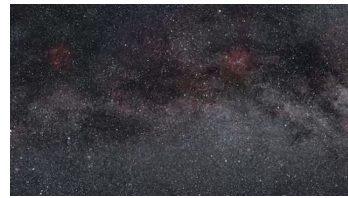
www.spacetelescope.org

Keywords: Bubble Nebula, anniversary, Our Place in Space

Hubblecast Episode 92: Hubble captures birthday bubble	Visual notes
<p>00:00 [Narrator] 1. On 24th of April 1990, Hubble was sent into orbit aboard the space shuttle <i>Discovery</i>, the first space telescope of its kind. Now it is celebrating its 26th anniversary!</p> <p>As in previous years Hubble has captured a dramatic new cosmic landscape to celebrate this event. A new addition to its iconic collection of images of the Universe.</p>	
<p>00:29 2. Intro</p>	
<p>00:46 [Narrator] 3. In 2015, Hubble observed the dazzling star cluster Westerlund 2 to celebrate a quarter of a century in space. An image which was unveiled in a simultaneous</p>	

celebration in science centres and museums across Europe.

This year, Hubble turned its eye towards another famous object: NGC 7635, better known as the Bubble Nebula. A complex and colourful cloud of gas that lies 8000 light-years away.



01:29

4. Although it looks delicate, the 10 light-year diameter bubble offers evidence of violent processes at work.

The bubble is created by an energetic flow of gas, known as a stellar wind, which comes from the massive star within it. This rare and brilliant star is several hundred thousand times more luminous than the Sun.

It is the pressure of the stellar wind that forces the material of the nearby interstellar cloud into this bubble-like form. The radiation of the star also heats up the denser regions of the cloud, causing them to glow.

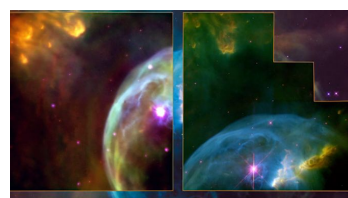
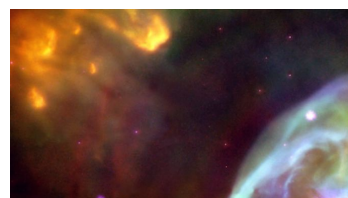
But it is this cloud that can also one day put an end to the Bubble's expansion. For now, the constant pressure from the star is still overpowering the cloud's resistance and the sphere continues to grow at more than 100 000 kilometres per hour.



02:33

5. This is not Hubble's first peek at the Bubble Nebula. Over fifteen years ago Hubble was used to capture beautiful images of the nebula that received worldwide attention.

This earlier data also allowed astronomers to study and understand the structure and motions of the material within this system for the very first time.



02:58

6. Whilst important, the original images are far surpassed by this new birthday snap. The new image not only shows the inner regions of the nebula in greater clarity, but also captures the surroundings of the Bubble Nebula. And it allows a stunning look at the much larger complex of stars and shells in this region.



03:23

7. This spectacular new image will not only be used to celebrate the 26th anniversary of Hubble, but also as a backdrop for the upcoming Hubble exhibition “Our Place in Space”. From early 2017 this exhibition will travel to cities across Europe to bring Hubble to a space near you.



Ends 04:40