



<p><b>ESOCast Episode 57: ESO's VLT Celebrates 15 Years of Success</b></p>	
<p><b>00:00</b>  <b>ESOCast intro</b>          1. This is the ESOCast! Cutting-edge science and life behind the scenes of ESO, the European Southern Observatory.</p>	<p><b>Images:</b>          ESOCast introduction</p>
<p><b>00:20</b>          2. On 25 May 1998, the first of the VLT's four Unit Telescopes achieved first light.</p> <p>In the 15 years since, the Very Large Telescope has observed the Universe with unprecedented detail. Here are a few of our favourite images.</p>	<p>Images of VLT</p>
<p><b>00:47</b>          3. This spectacular image of a large spiral galaxy was obtained on 21 September 1998. It is one of VLT's first images.</p>	<p>NGC 1232 - iconic</p>
<p><b>00:54</b>          □          4. This infrared image of a stellar nursery proved that low-mass stars like the Sun can be formed in violent starburst episodes.</p>	<p>NGC 3603</p>

<p><b>01:02</b>  <b>□</b>  5. A famous spiral galaxy that resembles a Mexican hat, hence the name.</p>	<p>Messier 104 (Sombrero galaxy)</p>
<p><b>01:08</b>  <b>□</b>  6. This infrared/optical image reveals what's hidden behind a thick cloud of obscuring dust.</p>	<p>Barnard 68 IR/opt</p>
<p><b>01:16</b>  <b>□</b>  7. A composite of 81 VLT images of the Orion Nebula, the most dramatic nearby stellar nursery.</p>	<p>Orion Nebula</p>
<p><b>01:23</b>  <b>□</b>  8. The VLT takes a look inside the "Pillars of Creation" using the infrared instrument ISAAC.</p>	<p>M16 IR, the Eagle Nebula</p>
<p><b>01:30</b>  <b>□</b>  9. A whimsical dark nebula formed of collapsing gas and dust and lit up by a nearby star.</p>	<p>Horsehead Nebula</p>
<p><b>01:38</b>  <b>□</b>  10. One of the sharpest images ever taken from the ground of the ringed planet.</p>	<p>Saturn</p>
<p><b>01:45</b></p>	<p>AB7 SMC nebula</p>

<p>☐</p> <p>11. A mysterious nebula, created by intense radiation from one of the hottest known stars.</p>	
<p>01:53</p> <p>☐</p> <p>12. A picture-perfect spiral galaxy with a well-defined central bar and long tentacle-like arms.</p>	NGC 613 (galaxy)
<p>02:00</p> <p>☐</p> <p>13. The VLT took the first image ever of a planet outside our Solar System. The red spot is the planet, orbiting a brown dwarf.</p>	First exoplanet image!
<p>02:07</p> <p>☐</p> <p>14. A spiral galaxy revealed in detail by the powerful eye of the VLT.</p>	NGC 7424 (galaxy)
<p>02:15</p> <p>☐</p> <p>15. A very active star-forming galaxy. The numerous white spots in the ring are star-forming regions.</p>	NGC 1097 centre
<p>02:22</p> <p>☐</p> <p>16. A mysterious galaxy that might have swallowed a lesser companion. Thousands of new stars are being formed inside it.</p>	NGC 1313 (galaxy)
<p>02:29</p> <p>☐</p> <p>17. This cosmic “bird” is actually the result of the merger of three distinct galaxies.</p>	ESO 593-IG 008 (interacting galaxy) Tinker Bell Triplet
<p>02:37</p> <p>☐</p> <p>18. A deep look by the VLT into a small, distant patch of the Universe is like diving into a pool full of coloured shapes.</p>	CDF-S deep field
<p>02:46</p> <p>☐</p> <p>19. Thanks to the VLT, astronomers are revealing the secrets of the supermassive black hole lurking at the centre of our Milky Way.</p>	Milky Way Black Hole
<p>02:53</p> <p>☐</p> <p>20. A star 100 times larger than the Sun, captured in this sharp image from the VLT interferometer.</p>	R Leporis
<p>02:59</p> <p>☐</p> <p>21. A beautiful star cluster, imaged in just a few seconds of exposure time, thanks to the VLT’s huge mirror.</p>	Jewel Box cluster
<p>03:06</p>	NGC 3603

<p>03:14</p> <p>22. A cosmic factory where stars form frantically from clouds of gas and dust.</p>	
<p>03:14</p> <p>23. A huge star-forming region, where clouds of gas and dust are illuminated by the intense radiation from hot young stars.</p>	Messier 17
<p>03:22</p> <p>24. An enormous collision of several galaxy clusters where all kinds of strange phenomena are unleashed.</p>	Galaxy Cluster Abell 2744
<p>03:28</p> <p>25. Stellar winds from young stars dramatically shape the clouds of gas and dust from which they were born.</p>	NGC 6729 (star formation)
<p>03:36</p> <p>26. A pair of galaxies located 50 million light-years away. They look close together, but are some 100 000 light-years away from each other.</p>	The Eyes galaxies
<p>03:44</p> <p>27. With this image the central parts of this stellar nursery are revealed in extraordinary detail.</p>	Messier 17
<p>03:50</p> <p>28. This very sharp VLT infrared image allowed astronomers to discover many unknown features in one of the closest star incubators to Earth.</p>	Carina
<p>03:58</p> <p>29. The public chose to image this object with the VLT as the result of a contest held to celebrate ESO's 50th anniversary.</p>	Thor's Helmet (50th)
<p>04:05</p> <p>30. A dying star is casting the outer parts of its atmosphere out into space, as a final colourful gesture before retirement.</p>	Planetary Nebula IC1295
<p>04:12</p> <p>31. The black clumps set against a pink background of glowing gas are known as Bok globules. They are being eroded by the brilliant radiation from the hot young stars around them. Happy 15th birthday VLT!</p>	IC 2948 - Running Chicken/Thackeray's globules

04:22  
[Outro]

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04:48  
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