



<p>ESOCast Episode 28: ESO Hidden Treasures Competition</p>	
<p>00:00 [Visuals start]</p> <p>[Narrator]</p> <p>1. The observations from ESO's telescopes are stored in a huge archive — a vast and complex vault of online information usually only visited by professional astronomers on a mission.</p> <p>And yet, an amateur astronomer from Russia managed to uncover a veritable gem in the flood of data, thereby winning a trip to Chile to observe with the Very Large Telescope.</p> <p>How did he manage it? And could you do the same?</p>	<p>Images:</p> <p>Some cool footage of the VLT</p> <p>Footage of the actual archive room: large dark room filled with blinking computers.</p>
<p>00:40 ESOCast intro</p> <p>2. This is the ESOCast! Cutting-edge science and life behind the scenes of ESO, the European Southern Observatory. Exploring the ultimate frontier with our host Dr J, aka Dr Joe Liske.</p>	<p>ESOCast introduction</p>
<p>00:57 [Dr J]</p> <p>3. Hello and welcome to the ESOCast. In this episode we're going to take a deep plunge into the vast archives of ESO, and we're going to show you how a group of very dedicated and talented amateur astronomers managed to unearth some hidden treasures.</p>	<p>Images from ESO Top 100</p>

<p>01:17 [Narrator]</p> <p>4. As the world's most productive ground-based astronomical observatory, ESO has many terabytes of data coming from its La Silla and Paranal Observatories that need to be safely stored.</p> <p>In addition to using these data for scientific research, ESO often delves into its archive to find raw data that can be polished into breathtaking astronomical images that can be shared with the public.</p> <p>However, turning the raw data into the images that you see is an intricate process that requires technical processing skills, as well as an artistic eye.</p> <p>The archive is publicly available, so anyone can go in search of potential images. But aside from professional astronomers and ESO's public outreach team, not many other people have ventured into the vast archive.</p>	<p>VLT and La Silla footage</p> <p>Images from the archive</p> <p>Footage of Oli and Richard working on image processing.</p>
<p>02:12 [Dr J]</p> <p>5. So how can we encourage people just like you to go and delve into the archive and to test your skills at producing beautiful astronomical images with professional data?</p> <p>We knew, of course, that there are lots of talented amateur astronomers out there, but we had to find a way to get them excited about ESO's data. And so we came up with the idea of a competition — ESO's Hidden Treasures.</p> <p>The challenge was tough: find a dataset in the archive with the potential for making a visually stunning image, and then process the data.</p> <p>As a reward for the hard work, however, we put up a great first prize: the chance to not only visit ESO's Very Large Telescope in Chile, but to actually use it to observe the night sky.</p> <p>Nevertheless, despite the great prizes, we were a little worried that not many people would be up for the challenge and that many participants would give up half way. We were in for a big surprise.</p>	<p>ESO HQ outdoor</p> <p>Visuals of the Hidden Treasures</p> <p>Footage of astronomers at the VLT?</p> <p>VLT footage</p>
<p>03:15 [Narrator]</p> <p>6. The competition opened on 4 October 2010. Participants were asked to upload their entries to an ESO Flickr group that was created specifically for the competition. The competition was promoted via ESO's Twitter Feed using the hashtag</p>	<p>Community coordinator at computer with the announcement.</p> <p>Footage of Community coordinator managing ESO's Facebook Page, Twitter account and Flickr</p>

<p>#esotreaasures, and Facebook page by ESO's Community Coordinator Oana Sandu.</p> <p>Tweets about the competition from people around the world were picked up by science journalists, creating valuable coverage of the competition in the media.</p>	<p>account.</p>
<p>03:49 [Dr J]</p> <p>7. To our surprise, entries quickly started coming in.</p> <p>By the end of the competition, we had almost 100 entries, which was a fantastic response.</p>	<p>View of entries on our Flickr group.</p> <p>Still images of entries</p> <p>(Show images with music)</p>
<p>04:01 [Narrator]</p> <p>8. Once the competition had closed, the judging panel, which included science communication professionals and image processing specialists, met to evaluate many images.</p> <p>Several of the entrants submitted more than one image that deserved an award, so the judges made the decision to choose the ten best entrants, rather than the ten best images. This led to a total of 20 winning images.</p> <p>Russian amateur astrophotographer Igor Chekalin, aka Flickr user igorfp, caught the attention of the jury. Working from his home in the countryside, and with limited access to internet, Igor's skills and artistic eye won him first place in the competition for his wonderful image of Messier 78.</p>	<p>Footage of the jury</p>
<p>04:51 [Olivier Hainaut]</p> <p>The data of Messier 78 that Igor has found are really superb, both in terms of quality and in terms of depth.</p> <p>He has processed the raw images with great skill and he assembled them very well to produce this final image. Igor has also applied some smart post-processing filters to enhance the details of the nebula. The colours are wonderfully subtle; they show the light diffused by the nebula and the dark dust that partially obscures it.</p> <p>In my opinion, this is one of the very best images ever obtained with the 2.2-metre telescope on La Silla.</p>	<p>Jury chair Olivier Hainaut pointing at the winning image on his computer screen</p>

<p>05:32 [Dr J]</p> <p>9. The competition proved that there are lots of talented amateur astronomers out there who are capable of producing really astonishing results with ESO's observations, just like the pros.</p> <p>And finally, well done, Igor! I'm sure you are going to have a great time at Paranal, it's a lot of fun to observe with the VLT.</p> <p>This is Dr J signing off for the ESOcast. Join me again next time for another cosmic adventure.</p>		<p>Still image of Igor Chekalin</p> <p>Igor's winning image of M78</p>
<p>05:56 [Outro]</p>		<p>ESOcast is produced by ESO, the European Southern Observatory.</p> <p><i>ESO, the European Southern Observatory, is the pre-eminent intergovernmental science and technology organisation in astronomy designing, constructing and operating the world's most advanced ground-based telescopes.</i></p>

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