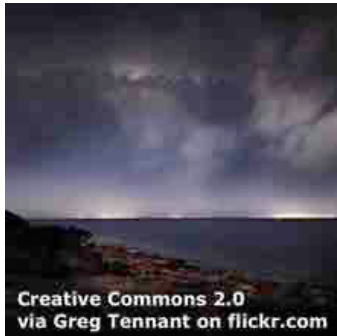


World's largest digital camera installed in Chile

24th March 2025



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via Greg Tennant on flickr.com

The world's largest ever digital camera has become operational in an observatory in Chile. The Large Synoptic Survey Telescope camera was funded by U.S. government agencies. The enormous device was installed in the Vera C. Rubin Observatory in

the South American nation. Astronomers will now commence a period of testing. They will use the camera to observe the southern hemisphere skies over the next decade. The Department of Energy's Office of Science commented on how momentous the completion of the telescope was. It called the camera "a triumph of science and engineering". It added: "We look forward to seeing the unprecedented images this camera will produce."

The camera is the size of a small car and weighs 2,721 kg. It has a massive 3-billion-pixel sensor. In comparison, today's top-of-the-range smartphone cameras have 200 million pixels. Astronomers will repeatedly scan the sky to take time-lapse images of space. Lead researcher Aaron Roodman said: "We like to say that we're going to make a colour movie of the entire Southern Hemisphere sky." In particular, he hopes to capture images that will shed light on how galaxies formed. Roodman's team will also investigate dark matter – the invisible substance that makes up a significant portion of the universe. In addition, the camera will map our Milky Way galaxy in greater detail than ever before.

Sources: space.com / msn.com / interestingengineering.com

Writing

It is essential for humans to understand and explore space. Discuss.

Chat

Talk about these words from the article.

digital camera / observatory / device / nation / astronomer / testing / telescope / small car / pixel / sensor / space / galaxies / dark matter / invisible / map / detail

True / False

- 1) The digital camera was privately funded. T / F
- 2) The camera is now fully functional after testing was concluded. T / F
- 3) The camera will be used to look at skies in the southern hemisphere. T / F
- 4) The U.S. government hailed the camera as a triumph of engineering. T / F
- 5) The camera weighs more than a bus. T / F
- 6) The new digital camera has 200 million pixels. T / F
- 7) Astronomers will use the camera to look at the origins of galaxies. T / F
- 8) The camera will be used to study light matter. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|----------------------------|-------------------|
| 1. operational | a. best |
| 2. funded | b. gadget |
| 3. device | c. enormous |
| 4. commence | d. important |
| 5. momentous | e. chart |
| 6. massive | f. up and running |
| 7. top-of-the-range | g. percentage |
| 8. entire | h. financed |
| 9. portion | i. whole |
| 10. map | j. start |

Discussion – Student A

- a) What do you think of digital cameras?
- b) What do you think of the huge digital camera in the article?
- c) How important is it to explore space?
- d) What do you want to know about our universe?
- e) Are skies different in the southern and northern hemispheres?
- f) What do you think is a triumph of science?
- g) What do you think is a triumph of engineering?
- h) What images do you look forward to seeing?

Phrase Match

- | | |
|--|-----------------------------|
| 1. funded by | a. scan the sky |
| 2. Astronomers will now commence a period | b. unprecedented images |
| 3. observe the southern | c. on how galaxies formed |
| 4. It called the camera a triumph of science | d. U.S. government agencies |
| 5. look forward to seeing the | e. hemisphere skies |
| 6. It has a massive 3-billion- | f. of testing |
| 7. Astronomers will repeatedly | g. matter |
| 8. shed light | h. and engineering |
| 9. investigate dark | i. our Milky Way galaxy |
| 10. the camera will map | j. pixel sensor |

Discussion – Student B

- What do you think about what you read?
- Is a digital or film camera best?
- How many pixels does your camera have?
- What do you like taking photos of?
- How important is it to have a good camera?
- What do you know about dark matter?
- What do you know about the Milky Way?
- What questions would you like to ask the scientists?

Spelling

- in an votrayrobes in Chile
- The oursemno device was installed
- mrsoatnerso will now commence
- the southern spheerihme
- a pmuirth of science
- seeing the cedentupernd images
- a massive 3-billion- sliexp sensor
- shed light on how xelgaasi formed
- gtevniasiet dark matter
- blisnievi
- ctubseasn
- significant tnorpoi of the universe

Answers – Synonym Match

1. f	2. h	3. b	4. j	5. d
6. c	7. a	8. i	9. g	10. e

Comprehension Questions

Listen to / read the news article. Answer these questions. (Answers are on p. 27 of the 27-page PDF.)

1.	Who was the digital camera funded by?
2.	What will stargazers now start?
3.	For how long will astronomers use the camera to look into space?
4.	What did the U.S. government say the telescope was a triumph of?
5.	What does the government department look forward to seeing?
6.	How big is the camera?
7.	How many pixels does the camera's sensor have?
8.	What kind of images will the camera take?
9.	What does the researcher hope the camera will shed light on?
10.	What will the camera help to map?

Speaking – Photos

Rank these with your partner. Put the best things to take photos of at the top. Change partners often and share your rankings.

- | | |
|-------------------|------------|
| • The countryside | • Stars |
| • Sights | • Yourself |
| • Cats and dogs | • Food |
| • Friends | • Flowers |

Answers – True False

1	F	2	F	3	T	4	T	5	F	6	F	7	T	8	F
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Answers to Phrase Match and Spelling are in the text.