

The article I read was titled “Hubble Confirms Comet C/2014 UN271 is an Absolute Unit, Astronomically Speaking”. It talks about how Comet C/2014 UN271 officially has the largest nucleus ever seen in a comet, with the diameter measuring at an estimated 80 miles across. Before this discovery, the largest comet measured was C/2002 VQ94. It is estimated to be 60 miles across. In January 2022, astronomers used the Hubble Telescope to get more details about comet C/2014 UN271. The comet was discovered in the fall of 2021, when Pedro Bernardinelli and Gary Bernstein were sifting through data originally collected from 2014-2018 from the Dark Energy Camera (DECam). The Dark Energy Camera is located in Chile. It was originally thought to be a dwarf planet, but when they took new images of C/2014 UN271 this fall, it had grown a coma since it was originally imaged. It is now officially classified as a comet with a nucleus that is about 50 times larger than any other known comets. It is estimated to be about 500 trillion tons. To measure the nucleus, astronomers used a computer model of the comet’s coma glow and then compared it to the Hubble images. When they subtracted the glow, it left them with a good estimate of the nucleus. This comet is traveling at about 22,000 mph. It will not fly very close to the sun but is heading in that direction. The closest to the sun it will get is about 1 billion miles away, but not until 2031. Comets like C/2014 UN271 come from the edge of the solar system and are typically too faint to see. Although this is the largest comet known to date, astronomers believe that more comets this size are likely to exist.

I believe that this article is credible because “Universe Today” always uses credible sources. In this article, they used a NASA press release found at NASA.gov as a source. They also cited a letter in The Astrophysical Journal Letters, found at IOPSCIENCE.org. I have also been reading “Universe Today” for over ten years as my main source of space and astronomy news and have always found them to be credible.

Work Cited

Atkinson, Nancy. “Hubble Confirms Comet C/2014 UN271 is an Absolute Unit, Astronomically Speaking.” Universe Today, 14 April 2022, <https://www.universetoday.com/155450/hubble-confirms-comet-c-2014-un271-is-an-absolute-unit-astronomically-speaking/#more-155450>