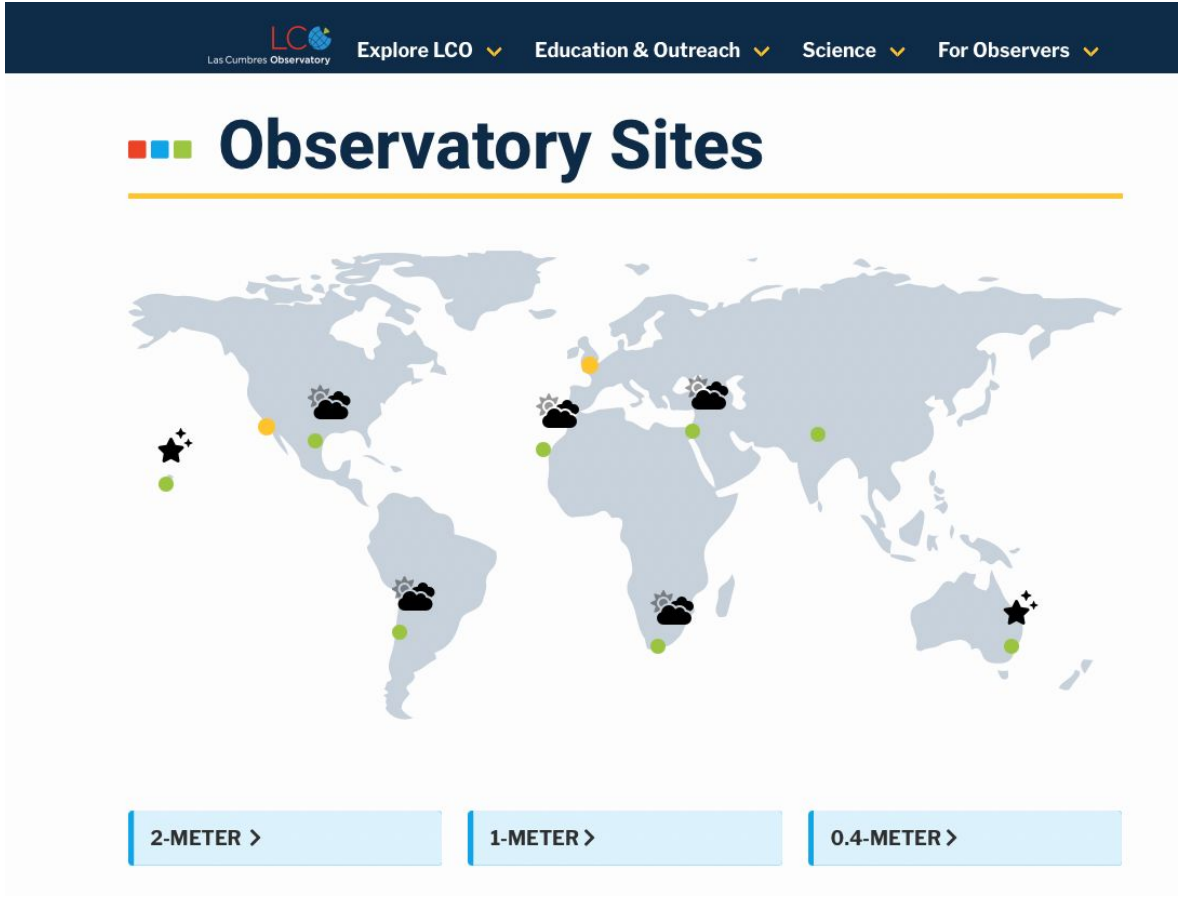
Las Cumbres Global Observatories!

Made available by a Grant provided by Pat & Grady Boyce Foundation for STEM education for children around the world!

Proposal by Chandru Narayan

The remote robotic telescopes of the LCO



We will be using one or more of these 0.4 meter telescopes for scheduling our remote observations!

Let's look at the telescopes

Where is this Telescope?

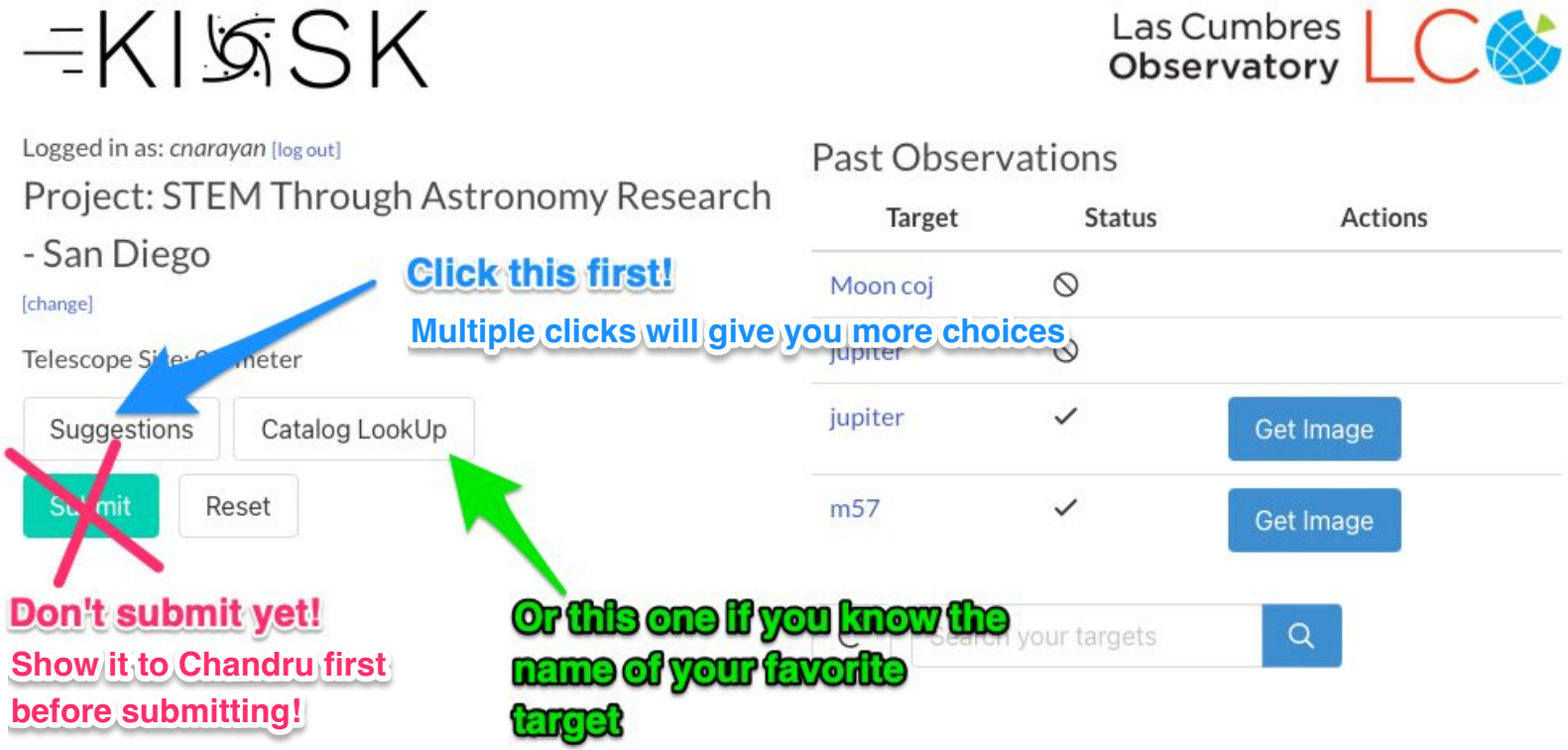
How big is it?

What kind of Telescope is this?

What else can you tell me about it?

Can we use it now?

Prepare an Observation Request - DO NOT SUBMIT YET!!



Sombrero Galaxy

Coordinates: 12h 39m 59.4s, −11° 37′ 23″

From Wikipedia, the free encyclopedia
(Redirected from Sombrero galaxy)

For other uses, see M104 (disambiguation).

The **Sombrero Galaxy** (also known as **Messier Object 104**, **M104** or **NGC 4594**) is a peculiar galaxy of unclear classification[5] in the constellation borders of Virgo and Corvus, being about 9.55 megaparsecs (31.1 million light-years)[2] from our galaxy, within the local supercluster. It has a diameter of approximately 15 kiloparsecs (49,000 light-years),[6] three-tenths the size of the Milky Way. It has a bright nucleus, an unusually large central bulge, and a prominent dust lane in its outer disk, which is viewed almost edge-on. The dark dust lane and the bulge give it the appearance of a sombrero hat. Astronomers initially thought the halo was small and light, indicative of a spiral galaxy; but the Spitzer Space Telescope found that the dust ring was larger and more massive than previously thought, indicative of a giant elliptical galaxy.[7] The galaxy has an apparent magnitude of +8.0,[6] making it easily visible with amateur telescopes, and is considered by some authors to be the galaxy with the highest absolute magnitude within a radius of 10 megaparsecs of the Milky Way.[4] Its large bulge, central supermassive black hole, and dust lane all attract the attention of professional astronomers.

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Sombrero Galaxy

Image taken by Hubble Space Telescope, October 2, 2004

Observation data (J2000 epoch)

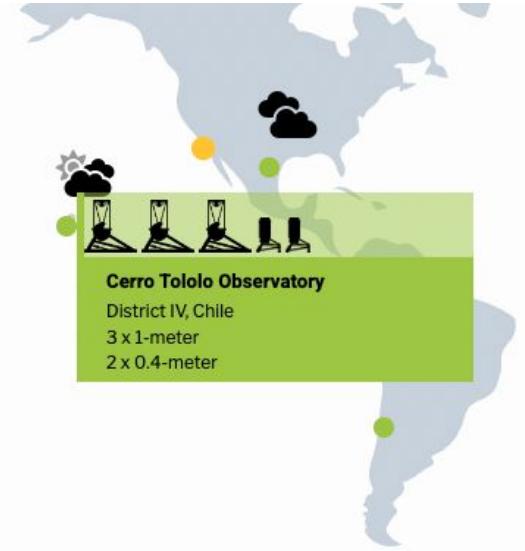
Constellation	Virgo
Right ascension	12h 39m 59.4s[1]
Declination	−11° 37′ 23″[1]
Redshift	0.003416 ±0.000017[1]
Helio radial velocity	1,024 ±5 km/s[1]
Galactocentric velocity	904 ±7 km/s[1]
Distance	9.55 ± 0.31 Mpc (31.1 ± 1.0 Mly)[2]
magnitude (V)	8.0[3]
Absolute magnitude (B)	−21.8[4]
Characteristics	
Type	SA(s)a[1] or E[5]
Size	15 kpc (49,000 ly)

This should be less than 50 Mly
Otherwise the image will be too small for the 0.4 meter telescope!

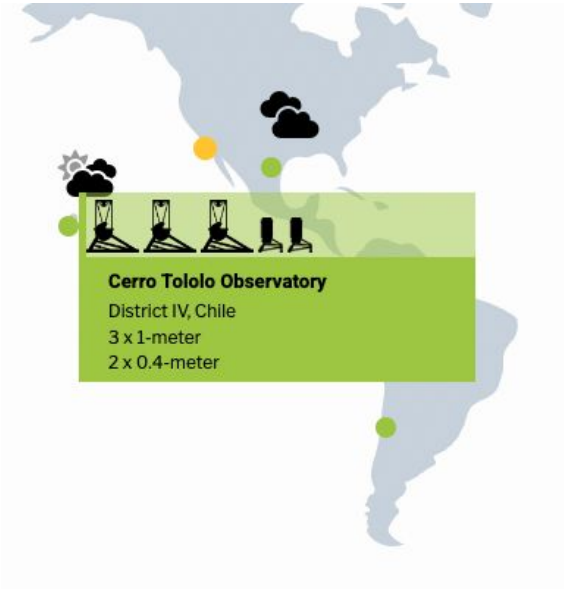
Here is an example you might choose!

Massive Spiral Galaxy M101 - Pinwheel Galaxy!

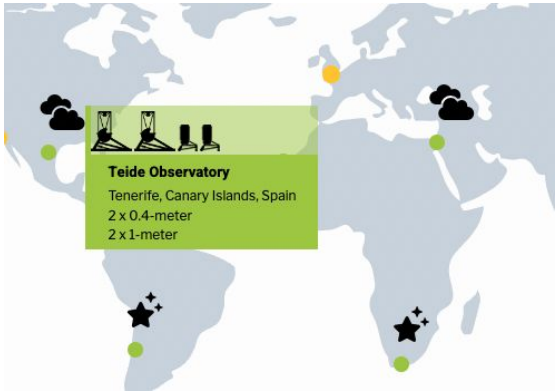
It's twice the size of the Milky way - has a Trillion Stars and is 21 Million Light Years away!



Robotic telescope images - Andromeda Galaxy M31!

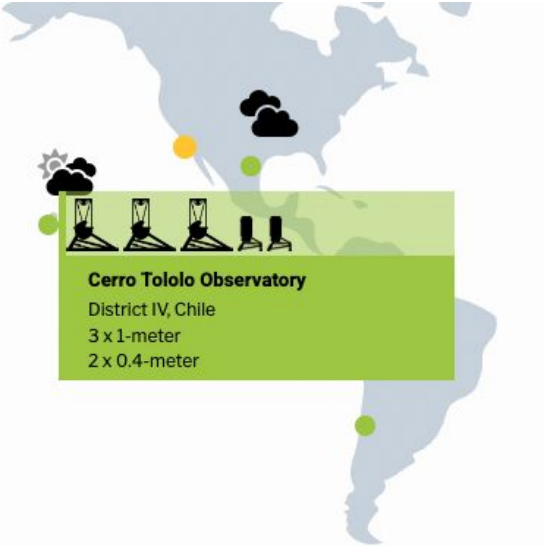


Robotic telescope images - Globular cluster m19!

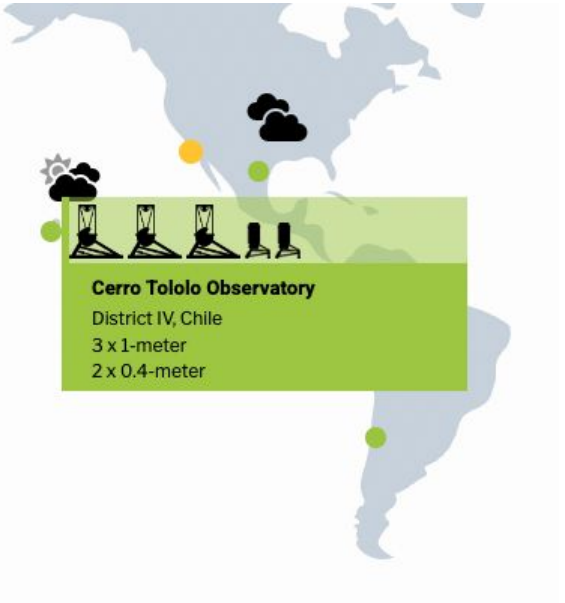


Robotic telescope images - Crab Nebula M1!

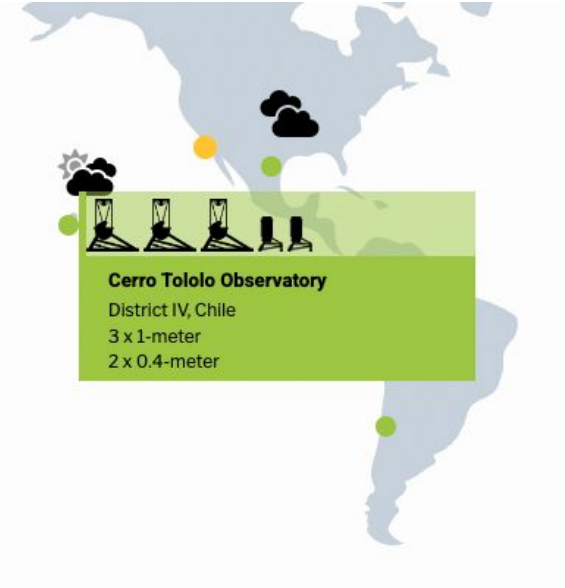
Remnants of a Supernova Explosion in the Milky Way Galaxy!



Robotic telescope images - Sombrero Galaxy m 104!



Robotic telescope images - Spiral galaxy Ngc 925!



The Observatories we got Images from!

Cerro Tololo

Cerro Tololo Inter-American Observatory is home to many NOAO telescopes. Las Cumbres Observatory deployed a full node of three 1-meter telescopes at Cerro Tololo during October 2012. We also have two 0.4-meter telescopes at this site.

For more information about the site, check out the Cerro Tololo Inter-American Observatory website.



Teide

Teide Observatory, on Tenerife, is home to several types of telescopes including solar, optical, and radio. In May, 2015, two LCO 40-cm telescopes were installed here in an Aqawan enclosure. With a generous grant from the Gordon and Betty Moore Foundation, two 1-meter telescopes were installed in 2021.

For more information about the site and the current telescopes, check out the Observatorio del Teide website.

News:

- Two New Telescopes See First Light in Tenerife
- LCO Receives a Grant from the Moore Foundation to Build Two New Telescopes