

WEEKLY SKY REPORT

June 29 – July 5, 2025

CONSTELLATIONS & The BLAZE STAR

Leo the lion is heading towards San Francisco as it gets dark, with the red planet Mars keeping pace right at its front paws. Across from it in the east is the constellation Lyra with its centerpiece star Vega, which is the second-brightest star in the northern skies. The brightest star in our nighttime sky is Arcturus in Boötes, that herder of stars, which is almost directly overhead at 9:00 p.m. The Big Dipper in the constellation Ursa Major is hovering above Boötes and the curve of its handle points to the star Arcturus, which is at the base of the ice cream cone-shaped Boötes. Arcturus in its ancient Greek naming is Guardian of the Bear, so it is keeping a watch on the big bear and her cub. Corona Borealis, which happens to look just like a scoop of ice cream, is just to the east of its lost ice cream cone Boötes. It is here where we hope to will see the overdue explosion of the Blaze Star, a recurrent nova binary star just to the lower left side of Corona Borealis. This pair of stars spend about 80 years with one star stealing gas off the other. This leads to a certain irritation on the part of the victim star and results in an outburst seen here, 80 years after the actual explosion.

READING RECOMMENDATION

The Vera C. Rubin Observatory in Chile has revealed images of great wonder in just its first week on the job. More than 2,000 new asteroids! A video compilation of 10 million galaxies-a sampling of the some 20 billion galaxies that Rubin will observe in its career! Now is a great time to learn about the namesake astronomer, Vera C. Rubin, who was one of the astronomers who discovered and named dark matter. Here are a few of the books in our collection:

Vera Rubin: a life, by Jacqueline Mitton (2021)

Shining star: Vera Rubin discovers dark matter (2023)

The stuff between the stars : how Vera Rubin discovered most of the universe (2021)

Telescopes @ Berkeley Public Library!

We have 5 Orion StarBlast Astro Reflector Telescopes that you can borrow! Each BPL Branch has a telescope, which may be borrowed for 1 week. Place a hold on it and then pick it up from your branch when it is ready. It is fairly easy to carry at 13 lbs., and stands about 2 feet tall.

Here's what you get:

"A great compact grab-and-go telescope designed for entry-level and intermediate astronomy enthusiasts. Substantial 4.5" aperture and fast f/4 focal ratio provides bright, detailed views of solar system targets like the Moon and planets, as well as wide-field celestial objects like nebulae and star clusters."



Much of the information for this report comes from the wonderful web site, Heavens Above. You can enter your home city location and bookmark it for easy access: <http://www.heavens-above.com>. Other stellar sources include: <http://www.space.com> and <http://www.nasa.gov>. And check [spacex.com](http://www.spacex.com) for launches.

Binoculars @ Berkeley Public Library!

Thanks to a generous donation from the Cal Falcons program, we have 9 Vortex-Raptor binocular kits that you can put on hold and pick up at the location of your choice.

Here's what you get:

Porro prism performance in a mid-size, wide-angle design, the Raptors deliver a bright, crisp image with excellent color fidelity - even in low light conditions. With a wide range of interpupillary distance, they can easily be adjusted to fit anyone in the family, making them ideal for serious, hard-core youth hunters. The kit comes with a copy of The Sibley Field Guide to Birds of Western America and a pocket guide to local birds of the SF Bay Area. But it is also great for looking at planets, the moon and the stars!

