

Skywatchers

Newsletter of the China Lake Astronomical Society

Volume 44 No. 7

July 1, 2007

NEXT MEETING 7:30 p.m., Monday, July 2, 2007

Maturango Museum, 100 East Las Flores Avenue, Ridgecrest, California

PROGRAM FOR THE JULY 2 MEETING – Dr. Gary Peterson – Triton’s cryogenic world

Dr. Gary Peterson returns to us from San Diego State University. This year he will discuss the cryogenic world of Triton, the largest moon of Neptune. Last year he discussed Pluto, which has many macroscopic similarities to Triton, but more data (Voyager II in 1989) is available for Triton than for Pluto.

DATES TO KEEP IN MIND

Monday, July 2, 2007: Regular CLAS Meeting at the Maturango Museum, 7:30 p.m.

Friday, July 13, 2007: Regular monthly Star Party, see details below

Wednesday, July 25, 2007: Deadline for next Skywatchers Newsletter

Monday, August 5, 2007: Regular CLAS Meeting at the Maturango Museum in Ridgecrest, 7:30 p.m.

STAR PARTY SCHEDULE FOR THE 2007 SEASON:

Star Parties will be held on the dates listed below. Star Parties are an activity where members and guests join together to share views of the skies. If you have a telescope, bring it. If not, come and look through someone else’s. Star parties are held at a site in the open desert south of Ridgecrest. To reach the star party site from Ridgecrest, go south on China Lake Boulevard 6.5 miles from its intersection with Ridgecrest Boulevard. Continue straight across Highway 395 and you will be on Brown Road (Old Highway 395). Follow Brown Road as it curves to the right and goes west. After 2.3 miles there will be a 30-inch orange cone on the left. Turn left and follow the dirt road marked by 12-inch cones. The CLAS Star party is 0.5 miles along this road. Watch for signs and cones, which will be put out about a half hour before viewing starts. Call Carroll Evans 760-375-5681, or Bruce Churchill 760-375-7247, for more information.

Friday, July 13: Signs out at 8:30 p.m., Star viewing at 9:00 p.m.

Friday, August 10: Signs out at 8:30 p.m., Star viewing at 9:00 p.m.

Friday, September 7: Signs out at 7:30 p.m., Star viewing 8:00 p.m.

Friday, October 12: Signs out at 7:00 p.m., Star viewing at 7:30 p.m.

Friday, November 9: Signs out at 5:30 p.m., Star viewing at 6:00 p.m.

THE SKY IN JULY (Roger Brower)

1. Venus is in the evening sky. Look for it in the west-southwest soon after sunset, at the first part of the month. By the end of the month it will set only 45 minutes after sunset. It will reappear in the morning sky in late August.
2. Mercury becomes a morning object about the middle of the month, and reaches greatest western elongation on the 20th. Look for it before 4:30 a.m.
3. Saturn remains in the southwest evening sky near Venus this month, and will also disappear as an evening object about three weeks into the month.
4. Jupiter is still in the evening sky for July. Look for it in the south after sunset.

MATURANGO MUSEUM OBSERVATORY

The China Lake Astronomical Society will again open the Maturango Museum's observatory to the public on some Thursday evenings this summer. Viewing will start about one hour after sunset, and continue until about 10:00 p.m. The public is invited, free of charge, on the evenings of July 12, August 9, and September 6. The observatory's main telescope will be pointed at objects of interest at the time, and members of the astronomy club will bring other telescopes, so that guests may observe a variety of objects.

CHINA LAKE ASTRONOMICAL SOCIETY MEMBER PASSES AWAY (Carroll Evans)

Roger Alan Young passed away on Wednesday May 30, 2007, from a recurrence of lung cancer, which had been in remission. He was 57 years old, and had been a member of the Astronomy Club since 1980. He will be remembered as a knowledgeable member who attended most meetings. Roger was well traveled, and some of his trips were related to astronomy, including chasing eclipses.

While we knew Roger as an amateur astronomer, he had several other hobbies. He raced motorcycles and entered marksman contests. He won trophies in both categories. Roger was well respected and known for his problem-solving ability at work. He was employed as an engineer at the Naval Air Warfare Center at China Lake.

Roger was preceded in death by his father, Ronald Young, and is survived by his mother Ruth Young. Roger served in the United States Army. The U. S. Army Honor Guard from Ft. Irwin, California supplied Military Honors at his services.

STAR WATCH (Bob Stewart)

There is only one bright near-naked eye variable star that you may want to check out in July.

SS Virgo

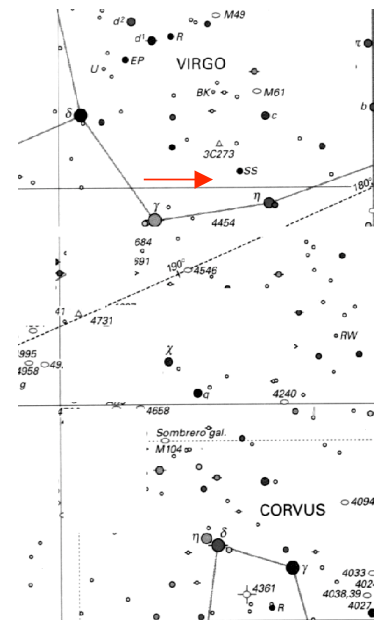
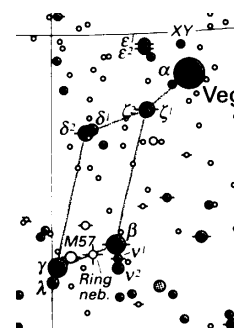
This Mira type red giant should reach its maximum brightness of mag. 6.8 on July 23d when the constellation Virgo is high in the southern sky. This star is a long-term variable with a period of 364 days, so it should be near its maximum brightness and you can watch it fade to its minimum of mag. 8.9 over the rest of the summer. The star is easy to find just west of the bright star Gamma Virginis and just above Eta Virginis, the brightest in an arc of 7 and 8th magnitude stars.

For a comparison chart go to: http://www.aavso.org/charts/VIR/SS_VIR/

A Variable and a Double

All the variables that I have mentioned in the last couple of months have been long-term variables whose brightness is controlled by the internal physics of the star. Another type of variable is an Eclipsing Binary Star. These are binary systems of stars with an orbital plane lying near the observer's line-of-sight. The components periodically eclipse one another, causing a decrease in the apparent brightness of the system. The period of the eclipse, which is the orbital period of the system, can range from minutes to years. A

good example of an eclipsing double is Beta Lyra, which is high in the sky at this time of year, located right near the famous Ring Nebula. But there's even more. In addition to the eclipsing pair the system also has a third star, which at a magnitude of 7.2, can easily be seen with binoculars. The two primary components are so close together that they cannot be resolved optically, forming a "spectroscopic binary." Beta Lyra changes its apparent magnitude from +3.4 to +4.6 continuously over a period of 12.9075 days so you can watch it dim and brighten and enjoy the view of its colorful blue companion. To estimate its brightness, compare it to Gamma and Delta Lyra at magnitudes 3.3 and 4.3



Next Month: More variables plus some colorful doubles. And don't forget to send in observations and pictures to [your web site \(www.chinalakeastro.org\)](http://www.chinalakeastro.org).

CLAS STAR PARTY 6/15/07 by Alex Shlanta

The June 2007 CLAS Star Party was held off of Brown Road southwest of Ridgecrest, starting around 9:00 pm., with about 20 people attending. Three telescopes were set up for viewing: Jerry Ott had his 14-inch Starmaster Truss Mounted Dobsonian Telescope, Bill Weiss had his new William Optics Fluoro Star 110mm apochromatic f/6.5 refractor, and I had my 10-inch XT10 Orion Dobsonian Intelliscope. The other CLAS members attending were Ken Pringle, Roger Brower, Peter Eiserloh, and Chuck Morgan. The weather was fair for a Star Party. The sky was clear but there was a bit of haze, the temperature was about 80 deg F, and there was a 10 – 15 mph WSW wind. A moderate amount of turbulence limited seeing, particularly in the western direction.

Most of the guests had limited experience viewing the night sky, so quite a bit of time was spent introducing them to the major stars and constellations. Venus was in the western sky in a quarter phase that surprised most of the guests. Saturn was also in the west and the view was not too clear due to wind and turbulence, but the rings could be distinguished. Jupiter was bright and all four Galilean moons were clearly visible. Globular clusters M13, M22, M5, and M4 were seen as well. The dual colored Albireo was a favorite of several guests. The Lagoon Nebula M8 was especially impressive looking through Bill's William refractor using a Lumicon UHC filter. M57 was impressive, with the shape very distinguishable through Jerry's Starmaster telescope. Looking through my 10" Dobsonian I had the best view ever of M51, the Whirlpool Galaxy. Whirlpool galaxy. Other galaxies viewed were M81, M82, and M104 the Sombrero galaxy. Additional viewing included M27 the dumbbell nebula, NGC6992 the Veil Nebula, M20 the Trifid Nebula, and Bernard 86 the Ink spot.

The crowds started dispersing around 10:00 pm and the star party ended about 11:30 pm.

OUR PRESENCE ON THE WEB (Bob Stewart)

Check us out at <http://ChinaLakeAstroSoc.org>, We will continue to upgrade the site, and will soon allow members to post pictures and comments. People can find the new web site on Google or Yahoo, if they do a search on "China Lake Astronomy" or "Ridgecrest Astronomy."

You may have noticed the "hit counter" that has been installed at the top of the home page. We always get at least a couple of visitors a day to the site. I've added the list of star parties from the Skywatchers Newsletter to the Activities page as well as the list of Tillie Creek Forest Service presentations over the summer. The "Sky Watch" page lists astronomical events. Send in any you hear about to claswebmaster@yahoo.com.

Lost your Skywatchers Newsletter? Our "Latest Newsletter" link can get you to a new one, plus you will have access to archives. I'll be glad to post any pictures you send in on the Pictures page.

Favicon: I have put up a "favicon" on our ULR. A "favicon" is a small image that appears to the left of the URL as an identifying icon for the club. The one I have now is supposed to be an image of Saturn, but looks like a small yellow blob! (The Saturn Nebula?). I also have an image of a moon and star that I'll try later. Let's see if we can get some other images. Just make them simple so that they will show up well as a small image. E-mail them to me as an attachment (claswebmaster@yahoo.com) and I'll convert them to the proper format. Thanks to Robert Shaw for the idea.

Finally, remember to mention the web site (<http://ChinaLakeAstroSoc.org>) when discussing the club and include it in all printed material that you distribute.

TILLIE CREEK PRESENTATIONS (Carroll Evans)

This year's Tillie Creek Forest Service presentations are scheduled for Saturday evenings June 9, July 21 and August 11. If you can help by bringing a telescope, please do. Contact Carroll Evans at 375-5681.

Rich Burdge of the Kern River Valley Astronomical Society gave a good talk. After his talk the audience got a chance to view objects through telescopes after the talk. The initial cloud cover dissipated, as it usually does. So far as I can recall, we have never lost out to clouds at Tillie Creek.

MEMBERSHIP INFORMATION

Basic CLAS dues are \$20.00 per year, which includes the *Skywatchers Newsletter*. As a benefit of membership you may also receive *Astronomy Magazine* and/or *Sky and Telescope Magazine*. The fee schedule is as follows:

Basic membership	\$20.00 per year
Membership with Astronomy magazine	\$54.00 per year
Membership with Sky and Telescope magazine	\$53.00 per year
Membership with both S & T and Astronomy	\$87.00 per year

Send your check to: Roger Brower, Treasurer, China Lake Astronomical Society, P.O. Box 1783, Ridgecrest, CA 93556.

PRESIDENT – Earl Wilson – 760-876-5455 (email zearl.email@gmail.com)
VICE-PRESIDENT – Bruce Churchill - 760-375-7247 (email bchurchill@atsecure.net)
SECRETARY – Ted Hodgkinson - 661- 824-2738 (email ghodkinson@sbcglobal.net)
TREASURER – Roger Brower - 760-375-1181 (email brower@iwvisp.com)
NEWSLETTER EDITOR – Carroll Evans Jr. - 760-375-5681 (email clevans@ridgenet.net)

WESTERN AMATEUR ASTRONOMERS WEB SITE <http://www.waa.av.org/>

Meetings of the China Lake Astronomical Society are held at the **Maturango Museum** at 7:30 p.m. on the first Monday evening of each month, except when the first Monday is a holiday.

**SKYWATCHERS, Newsletter of the
CHINA LAKE ASTRONOMICAL SOCIETY
POST OFFICE BOX 1783
RIDGECREST, CA 93556-1783**

FIRST CLASS

NEXT MEETING: 7:30 p.m., MONDAY JULY 2, 2007: “Dr. Gary Peterson – Triton’s cryogenic world” AT THE MATURANGO MUSEUM, 100 EAST LAS FLORES AVE.

CLAS WEB PAGE <http://www.chinalakeastro.org>

INDEX OF CLAS NEWSLETTERS <http://www.ridgenet.net/~clevans/clas/>