



First Light

The Newsletter of the Cape Cod Astronomical Society



August 2006

Vol. 17 No. 4

Mooncusser's 21st Century Almanac By Jim Carlson

First Quarter – Wed. August 02 at 04:47 EDT
Full Moon – Wed. August 09 at 06:54 EDT
Last Quarter – Tue. August 15 at 21:52 EDT
New Moon – Wed. August 23 at 15:11 EDT

Object	August 01 (EDT)	August 15 (EDT)	August 30 (EDT)
Sun	R: 05:33 S: 19:59	05:49 19:40	06:04 19:17
Mercury	R: 04:22 S: 18:47	04:26 18:58	05:53 19:21
Venus	R: 03:39 S: 18:40	04:09 18:47	04:44 18:43
Moon	R: 11:47 S: 22:46	22:55 13:23	12:50 22:05
Mars	R: 07:54 S: 21:15	07:44 20:37	07:33 19:59
Jupiter	R: 13:23 S: 23:46	12:31 22:50	11:42 21:56
Saturn	R: 06:04 S: 20:18	05:15 19:24	04:25 18:30
Uranus	R: 21:27 S: 08:45	20:27 07:43	19:26 06:41
Neptune	R: 20:21 S: 06:36	19:21 05:35	18:21 04:34
Pluto	R: 16:35 S: 02:47	15:35 01:46	14:36 00:43

August 2006 Events (UT)

- 01 – Spica 0.4° north of the Moon at 1:00 UT (subtract 4 hours for EDT, which is 21:00 EDT July 31st).
- 02 – Jupiter 5° north of the Moon.
- 03 – Venus at ascending node.
- 04 – Antares 0.4° north of the Moon at 04:18 UT.
- 05 – Asteroid (6) Hebe at opposition.
- 06 – Mercury 9° south of Pollux.
- 07 – Mercury at greatest western elongation rising before the Sun in the a.m. Saturn in conjunction with the Sun.
- 08 – Venus 7° south of Pollux at 07:00 UT.
- 09 – Neptune 3° north of the Moon at 12:00 UT.
- 10 – Mercury 2° from Venus at 21:00 UT.
- 11 – Neptune at opposition. Uranus 0.3° north of the Moon at 06:00 UT.
- 12 – Asteroid (1) Ceres at opposition. Perseid meteors peak at around 23:00 UT (subtract 4 hours for EDT).
- 13 – Mercury at descending node.

- 14 – Double shadow transit of Io and Europa on Jupiter in progress at around 07:03 UT.
- 16 – Mercury 1° south of M44. Moon 0.6° north of M45.
- 17 – Mercury at perihelion.
- 19 – Venus 1° south of M44.
- 21 – Double shadow transit of Io and Europa on Jupiter in progress at approximately 08:57 UT. Astronomical twilight begins at 08:12 UT.
- 22 – Venus 3° south of the Moon.
- 24 – Asteroid (2) Pallas stationary.
- 25 – Mars 0.6° north of the Moon at 14:00 UT.
- 26 – Moon at apogee (252,444 miles). Venus 0.7° north of Saturn at 23:00 UT.
- 28 – Mercury at greatest northern heliocentric latitude. Spica 0.5° north of the Moon at 08:00 UT.
- 30 – Jupiter 5° north of the Moon at 01:00 UT (21:00 EDT July 29).

Sources: TheSky6, Software Bisque
Observer's Handbook 2006, Royal Astronomical Society of Canada

The times of rise, transit, and set are for the days listed. On August 1st, for example, Neptune will set at 06:36 EDT and rise at 20:21 EDT.

August 3rd CCAS Meeting

The speaker for the evening will be Larry Marschall, professor of physics and astronomy at Gettysburg College. We will meet for dinner at 5:30 at the Hearth 'N Kettle in *Orleans*, not S. Yarmouth. The title of Larry's talk is "The Mystery of Algol, the Demon Star.". This will be Larry's fourth presentation to CCAS, at least by my memory. Not only is he a knowledgeable, well trained professional, Larry is a real good speaker. This is not an event to be missed.

Dues Are Due

Yes, it is that time of year. Your annual society dues of \$30 are due. On the first of August, they will be past due. With a membership that varies between 25 and 30, our annual revenue budget is between \$750 and \$900. That budget covers our annual liability insurance premium of about \$270. This last year it also paid for realuminizing the primary and secondary mirrors on the 14" scope,

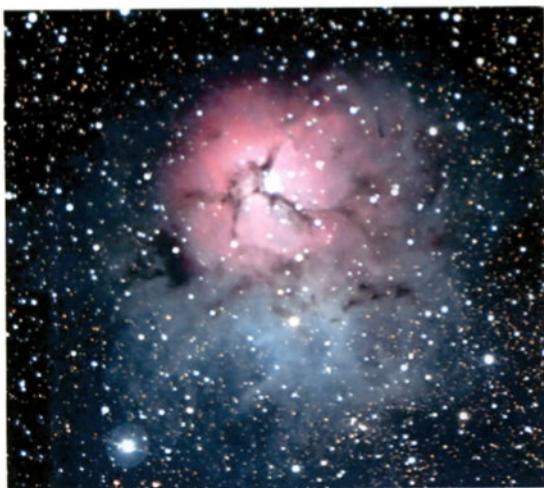
40% of the cost for a new digital projector for our monthly meetings, a three copy license for Microsoft Office (which this editor is using at this very time), and a 40G portable hard drive and .5G stick drive to support the preparation of programs for our monthly meetings. Where else can you get such a deal. As the old late night commercial says "You can't beat it with a stick!" Come on folks, let's get your dues in.

A New Regular "First Light" Item

As somewhat of a surprise, the program for July's meeting was quite well received. A goodly number of members (it has to be a small number given the size of our club) have said that they enjoyed the astronomical scavenger hunt. Perhaps it's the kid in all of us. Anyway, that response has led directly to a monthly "First Light" item entitled Astro Trivia. For August, the trivia question, to be discussed and answered at the August meeting, is "What is speculum

Recognition of Excellence

Every now and then, each of us comes across something that stands out and begs to be recognized. As you have read in these columns, I lurk (that means I usually don't actively participate) on a goodly number of web sites. One of those sites is the SACImaging site on YahooGroups. Yesterday, I came across a ccd photo made by Ray Stann who is one of the moderators of the site and is experienced imager who uses SAC cameras.



Ray spends a lot of time helping newbies and other members of the SACImaging group to get their cameras going and taking astro pictures. He even finds time to get out and take some shots as the image above shows.

Ray took this photo in the California desert at Anza under conditions which he described as poor but which we on Cape Cod would die for. His scope was a Celestron NexStar 11 GPS with a HyperStar attachment for f1.8. Admittedly nice stuff; but, his camera was a \$950, one shot color SAC10. Twelve five minute guided images were stacked and process for the final image (ps, copying, cropping, and pasting the image has somewhat decreased the quality and drastically decreased the field of view of the original). When is the last time you saw M20, the Trifid, looking so good for such modest efforts. Thank you Ray Stann.

PS The original can be seen at <http://rays.astronomyspot.com/SAC%2010/M20%20-%20The%20Trifid%20Nebula.htm>

Another Season, Another Class

The feature article in last month's "First Light" focused on Jon Greenberg's classes on Observational Astronomy for Beginners. It is another season and Jon will be offering another class in that series which are cosponsored by Nauset Community Education and Cape Cod Astronomical Society. The course is designed for those with no or little experience observing the skies; but, experienced observers are welcome. CCAS members Bill Boyd, Peter Kurtz, and Betsy Young will be assisting Jon. Binoculars, a 10" Schmidt-Cassegrain, and two Dob's will give participants a wide range of observing experiences.

Preregistration is available through Nauset Community Education, 78 Eldredge Park Way, Orleans, MA 02653, 508-255-4300. For information other than registration, call Jon Greenberg at 508-255-8605.

Cape Cod Astronomical Society

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The **Cape Cod Astronomical Society** meets at pm on the first Thursday of every month at Dennis-Yarmouth Regional High School Yarmouth, Massachusetts. Meetings are open to the public. Membership dues are \$30 for adults and \$15 for students in two year colleges, no charge for students in K-12 schools.

Cape Cod Astronomical Foundation

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