

Vandenberg Amateur Astronomical Society
presents
The Sidereal Times



Eclipse image courtesy S. Hanson page 5.

Meeting News:

The September meeting started at 7:00PM at the Manzanita School. Picked up 2 new members, Cal Cluff and Ron McCann. Discussed VAAS picnic and Star Parties.

There is a Star party scheduled for 6 Oct at the VAAS observatory...weather permitting. 13 October Star Party Figueroa Mtn.

Reminder: October meeting **12 October** see you there.



Lunar Calendar:

Last $\frac{1}{4}$ 8 Oct.

New 15 Oct

First $\frac{1}{4}$ 22 Oct

Full 29 Oct

Presidents Message

The Fall Equinox has arrived to the Northern Hemisphere on 22 September according to the calendar. The nights are getting longer which means that there is a better chance for getting a decent amount of viewing time before midnight rolls around. Personally, I enjoy the star parties but regret getting back home well after midnight. Often times I find myself getting to bed shortly before dawn which really messes me up for a few days. Here's to early clear skies.

This is also the time of year when nominations are taken for VAAS officers. Please think about it and if you would like to serve as a VAAS officer. At the October meeting we'll be asking for nominations. It has been a while since we had a VAAS picnic. The picnic's main purpose is to provide a social time for the VAAS members and their family to gather around the camp-fires, so to speak, and have a good time. The event is mostly pot luck with the VAAS treasury picking up the bill for meats and water. We are targeting 27 October at Lompoc's River Park starting about noon. Let's all come and have a great time.

On **Saturday 13 Oct** there is a star party scheduled at Figueroa Mtn. Site 1.5 at 7:30PM. Narrow road with many blind curves so please drive carefully. There are no facilities at this site. The nearest rest room is at Figueroa camp ground about 2 miles away.

Dave

Activity report

Manzanita Charter School held an open house event. LtCol Guerrio had a presentation titled "Going to Space thru science/math/language" with the major themes of how we are affected in our daily lives by various satellites and events in space and how Education can be applied to careers. Dave C. and Vahan Y attended.

Astronomy Day part 2 is scheduled for Saturday Oct. 20th. We discussed where to hold the "Sidewalk" event either in Lompoc or Santa Maria. Topic for the Oct meeting.

Orionids meteor shower on Saturday 20 – 21 Oct.

Star Party's

On Saturday 08 Sept. 8:00 PM. Dave Covey, Vahan Yeterian, Vince Tobin, Dave McNally and Ron McCann gathered at the Observatory. The sky was clear with the marine layer blocking only 20% above the horizon. We used the 14" scope to visually look at some deep sky objects such as M13. The star party broke up about midnight. Vince and Dave then did a realignment of the 14" scope's computer so that the Go-To mode was operative.

Saturday 15 September Figueroa Mt. Site 1.5 a bit before 8:00 PM. The weather was mostly clear skies with a light wind but warm. Vahan, Dave C. Morrie Cobb and son Steve, former member John Law, Cal Cluff, Ron McCann Vince Tobin and Geza Kurczviel and Andy (did not catch his last name) were in attendance. Some attendees were working their scopes visually and some were working to capture images of deep sky objects such as M13 and M57. It was shirt sleeve weather all night. The star party broke up about 2 AM. In summary a great gathering of folks at this star party an a good time was had by all.

Observatory Maintenance

Vahan and Dave McNally installed a new carpet in the observatory and adjusted the dome drive motor tension to prevent skipping in the track. Additionally they washed the dome with a solution of Bleach and water to prevent any regrowth of mold and Lichen. In general the only remaining work is painting the facility.

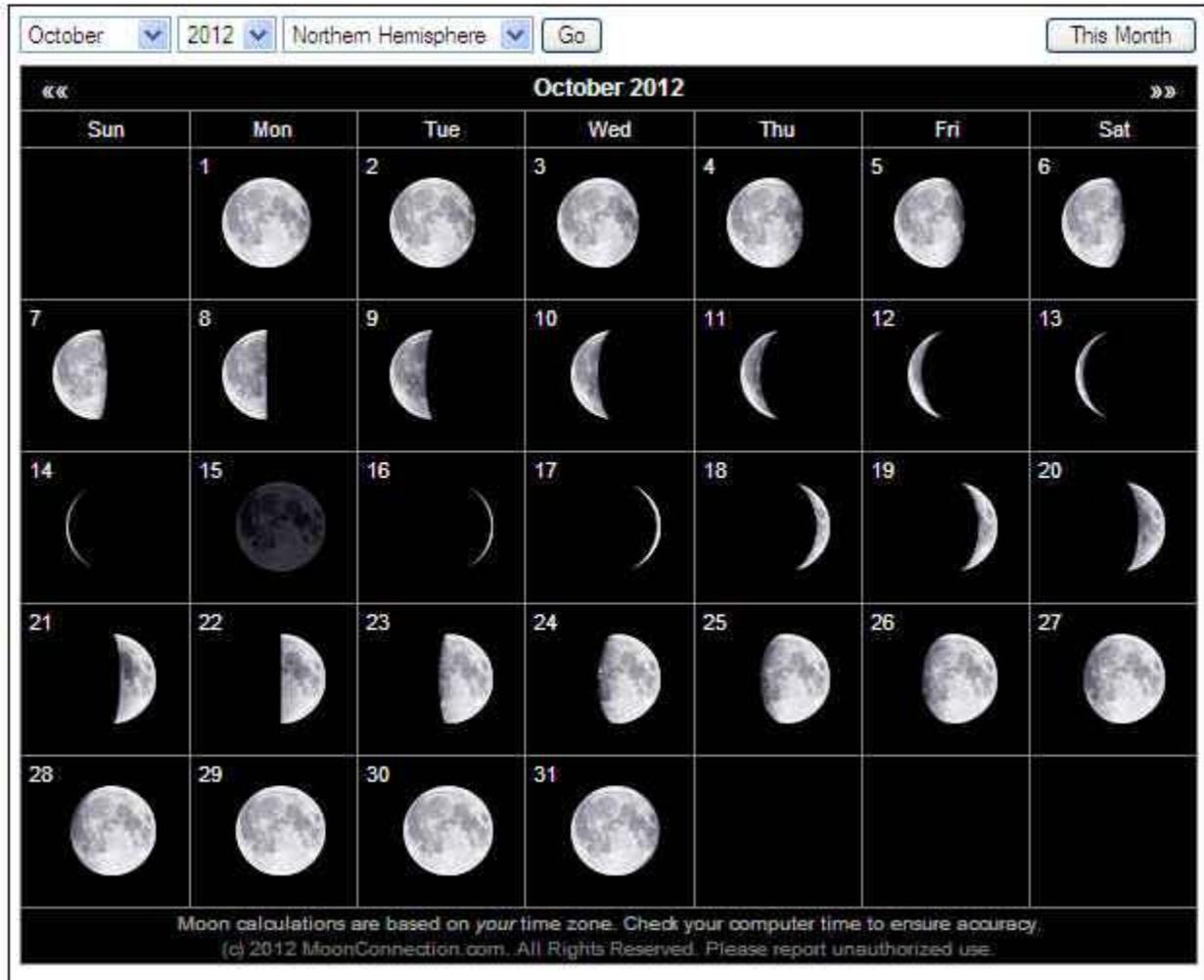
Special Topics

Sometimes it is interesting to view some double stars. It serves two purposes; First, it is a way of determining seeing conditions in arc seconds, Second one can determine the resolution capability of your telescope. Resolution capability can be determined using the Dawes criteria formula of $4.56 / \text{Aperture in inches}$. Example; $4.56 / 8 \text{ inches} = 0.57 \text{ arc seconds}$. Of course this is theoretical but for all intents and purposes gives one a point of reference. Select a star or stars from the table below and see what the smallest angle you are able to resolve. If the seeing conditions are exceptional 2 to 3 arc seconds can be achieved.

Double stars

<u>Star</u>	<u>Distance arc seconds</u>
γ Gamma Cassiopeiae	2.0
23 Ursa Major	22.8
20 Draconis	1.0
α Alpha Cassiopeiae	1.8
η Eta Cassiopeiae	10.1
ζ Zeta Aquarii	2.0
41 Aquarii	5.0
20 Persei	14.0
ζ Zeta Persei	12.9
β Beta Orionis	9.2
λ Lambda Orionis	4.4
α Alpha Geminorum	6.8
ζ Zeta Ursa Major (Mizar)	14.5
ρ Rho Herculis	4.0
β Beta Cygnus	34.6
ζ Zeta Corona Borealis	6.3
α Alpha Scorpius (Arcturus)	2.9
ω Omega Aurigae	5.8
α Alpha Tauri (Aldebaran)	31.4
λ Lambda Geminorum	10.0

October Moon



Moon Phase:

8th Last quarter, 15th New Moon, 22nd First Quarter, 29th Full Moon

Moon Folklore

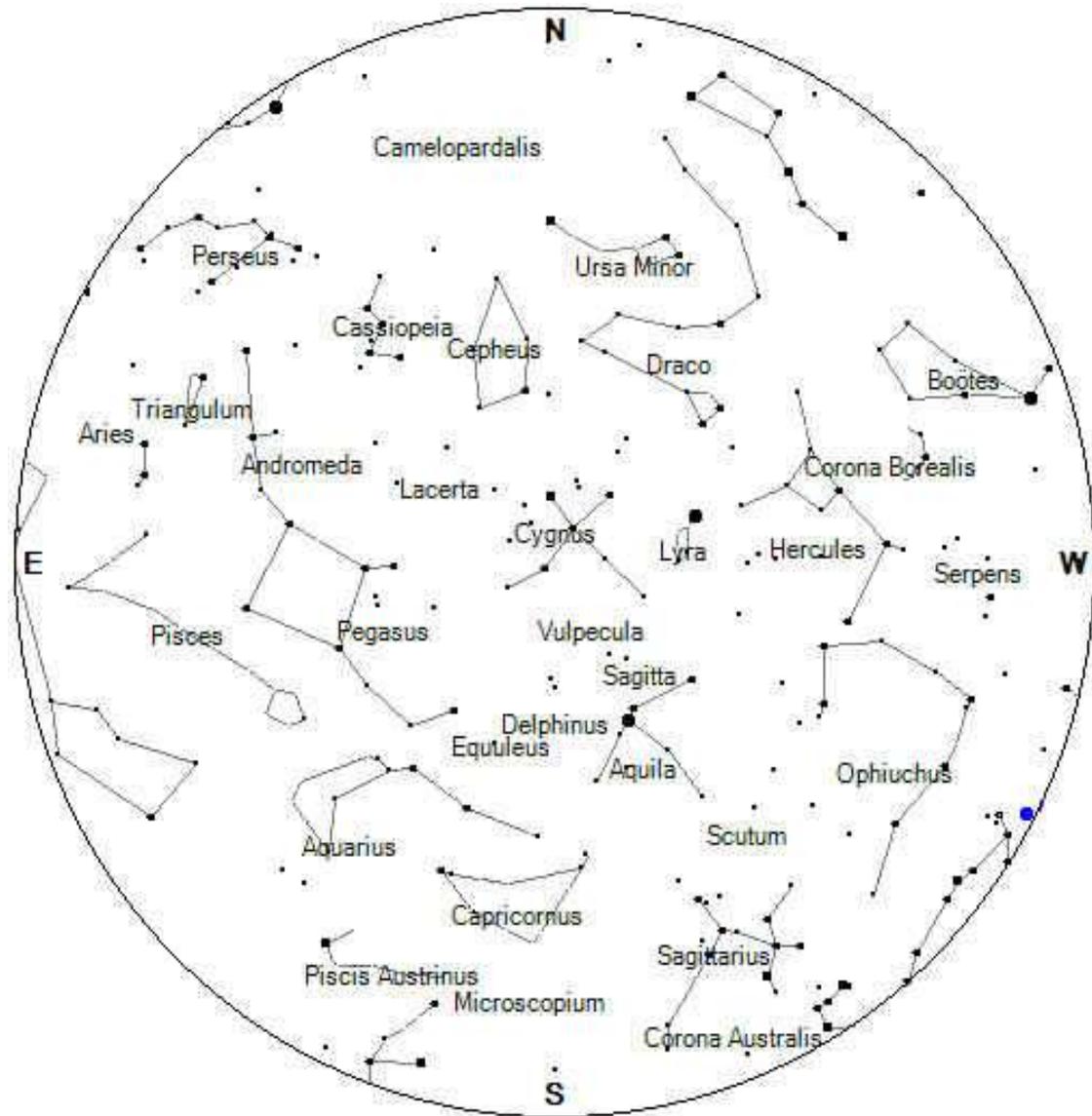
When a person sees a New Moon for the first time they are to bow to it 3 times in honor of the ancient Egyptian trinity, Oriris, Isis and Horus.

If you see the New Moon for the first time and are holding something in both hands you will never want for anything.

Upon seeing the New Moon bow to her and turn over the coins in your pocket. This will bring you good luck in all your affairs.

October Sky

Objects of interest M31, M57, M15, M13, M27, Uranus, Double Cluster



Date/Time (Local Time)

Year:	2012	Month:	10	Day:	6	Hour:	20	Minute:	34
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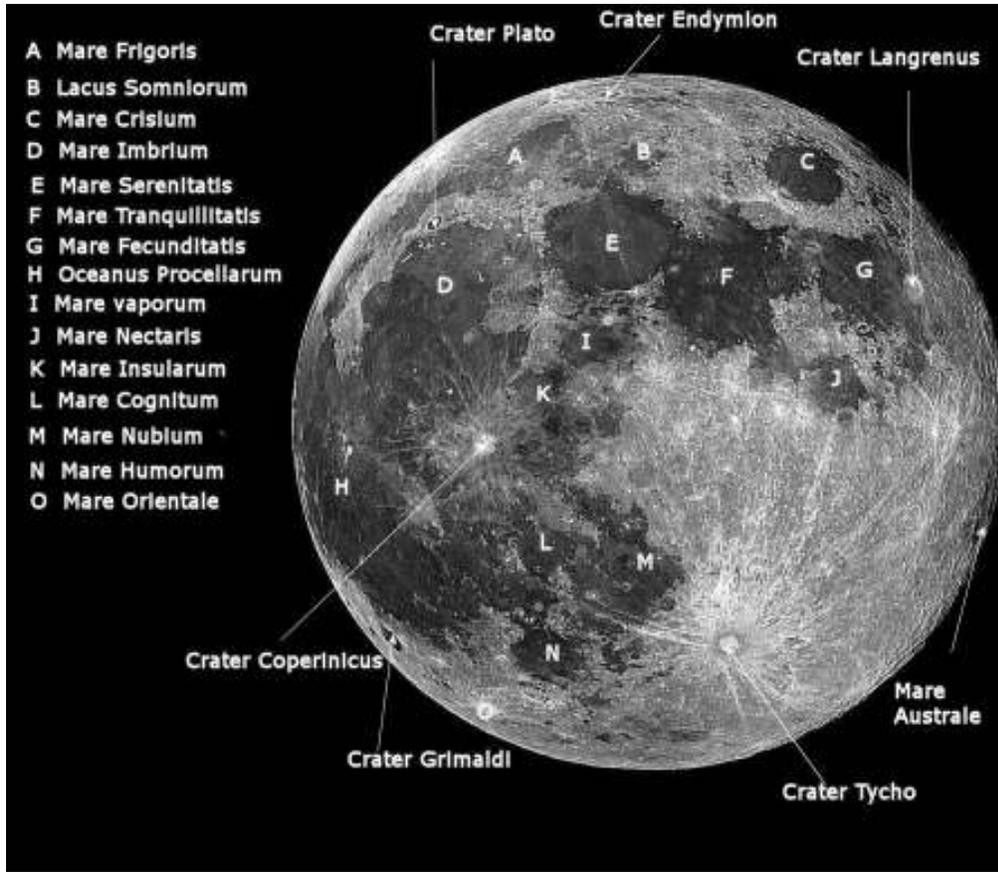
Annular Eclipse Photo Courtesy S. Hanson



Editor's note: My long time friend and amateur Astronomer Steve observed and photographed the annular eclipse and made a very nice presentation of the event. Herein are the particulars;
Date: May 20th 2012, Time; 6:27 PM (first shot) to 7:33PM (last shot).
Location: South end of Kanaraville, Utah on the centerline of the eclipse path.
Camera: Sony DSC-HX200V digital camera.
Aperture F5.6
ISO 100,
Speed 1/1000 sec.
Focal length 840 mm (35 mm equivalent).
Filter: Thousand Oaks Optical special solar Mylar film with yellow tint.
Tripod mount.

For what its worth

I thought it might be of interest to some so I made up a chart that identifies some of the major features of the full Moon as seen with the naked eye (or scope) and a translation of the language from Latin to English.



Mare Frigoris ...Sea of Cold
Lacus Somniorum...Lake of Dreams
Mare Crisium...Sea of Crises
Mare Imbrium...Sea of Showers or rains
Mare Serenitatis...Sea of Serenity
Mare Tranquillitatis...Sea of Tranquility
Mare Fecunditatis...Sea of Fertility
Oceanus Procellarum...Ocean of Storms
Mare Vaporum... Sea of Vapors
Mare Nectaris... Sea of Nectar
Mare Insularum...Sea of Islands
Mare Cognitum...Sea that has become Known
Mare Nubium...Sea of Clouds
Mare Humorum...Sea of Moisture
Mare Orientale... Eastern Sea
Mare Australe...Southern Sea

Club Officers



President
Dave Covey



Treasurer
Liberty Partridge



Vice President
Vince Tobin



Newsletter Editor
Vahan Yeterian

*“Astronomy compels the soul to look upward,
and leads us from this world to another”.*
(Plato)



Club Meeting

Club meeting **12 October** 2012 7:00 PM
Hope to see you there.....

Star Parties (as always weather permitting)
6 October (Observatory around 7 pm)
13 October Figueroa Mtn.

Other Astronomy Club Meetings

Central Coast Astronomical Society

Link to web site...

<http://www.centralcoastastronomy.org/>

Santa Barbara Astronomical Unit

Link to web site...

[http:// www.sbau.org/#AU_EVENTS_Calendar](http://www.sbau.org/#AU_EVENTS_Calendar)

Night Time Bright Objects (no scope required)

Link to “Heavens Above” web site

[http:// www.heavens-above.com/](http://www.heavens-above.com/)

(Iridium Satellite)

(ISS Visible Pass)

Be sure to set the nearest location from their pull-down menu.

The web site link below will take you to some Great Milky Way interactive images and how It was developed. (Type it in the search box.)

<http://skysurvey.org/>

VAAS web site that includes a discussion group.

Vince Tobin runs the web site and sends reminders to those that have registered into the discussion group.

<http://tech.groups.yahoo.com/group/vaastronomy/>