



Messier 16 - Van Maatee
Charlie Elliott Astronomy Image of the Month



“WHAT’S UP”

A presentation of “what’s up” in the
night sky



This Month's Sky: October 2014

- **Our Solar System Tonight**
- **Target List**
- **Reminders:**
 - September Zodiacal Light
 - Autumnal Equinox
- **Total Lunar Eclipse**
- **PSSG!!!!**
- **Comet Siding Spring/Mars**
- **Gee Whiz of the Month**
- **CE Observing Challenge**



Our Solar System Tonight

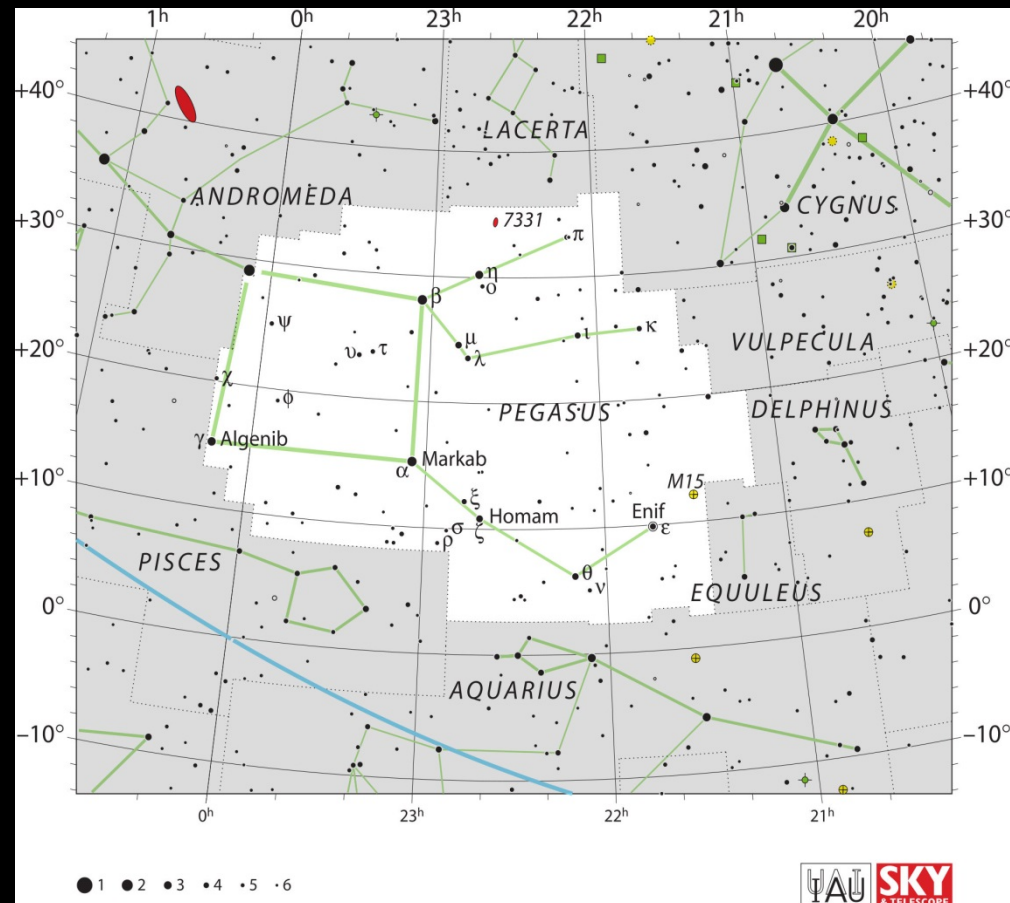
Body	Rises	Sets
Sun	7:24 A.M.	7:38 P.M.
Moon	3:18 A.M.	5:00 P.M.
Mercury	9:33 A.M.	8:37 P.M.
Venus	6:39 A.M.	7:19 P.M.
Mars	12:52 P.M.	10:49 P.M.
Jupiter	4:00 A.M.	5:40 P.M.
Saturn	11:35 A.M.	10:12 P.M.
Uranus	8:23 P.M.	8:59 A.M.
Neptune	6:39 P.M.	5:51 A.M.



Pegasus Over Charlie Elliott

Pegasus Deep Sky Objects
Visible Tonight...
(Be sure to ask for a sky map!)

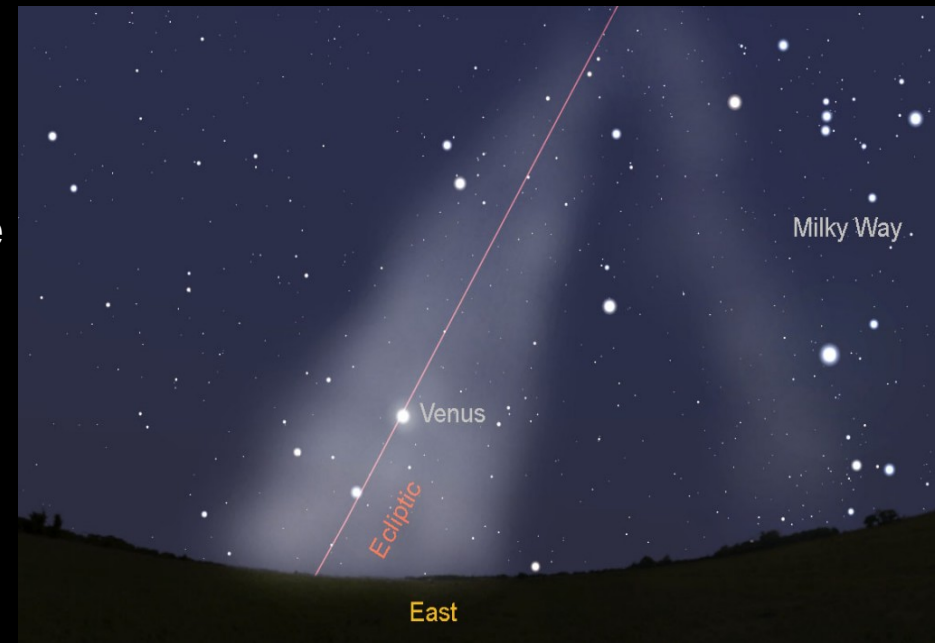
Object	Description	Magnitude
NGC 7317-7320	Galaxy Cluster	13.2
NGC 7331	Spiral Galaxy	10.4
NGC 7479	Spiral Galaxy	10.9
NGC 7217	Spiral Galaxy	11
M15	Globular Cluster	6.2





Zodiacal Light Returns

The Zodiacal Light is light from our Sun diffused by a belt of orbital “space dust.” Good seeing conditions and a dark sky are required to see this phenomena. Look for it in the East before sunrise from 9/21 to 10/5.





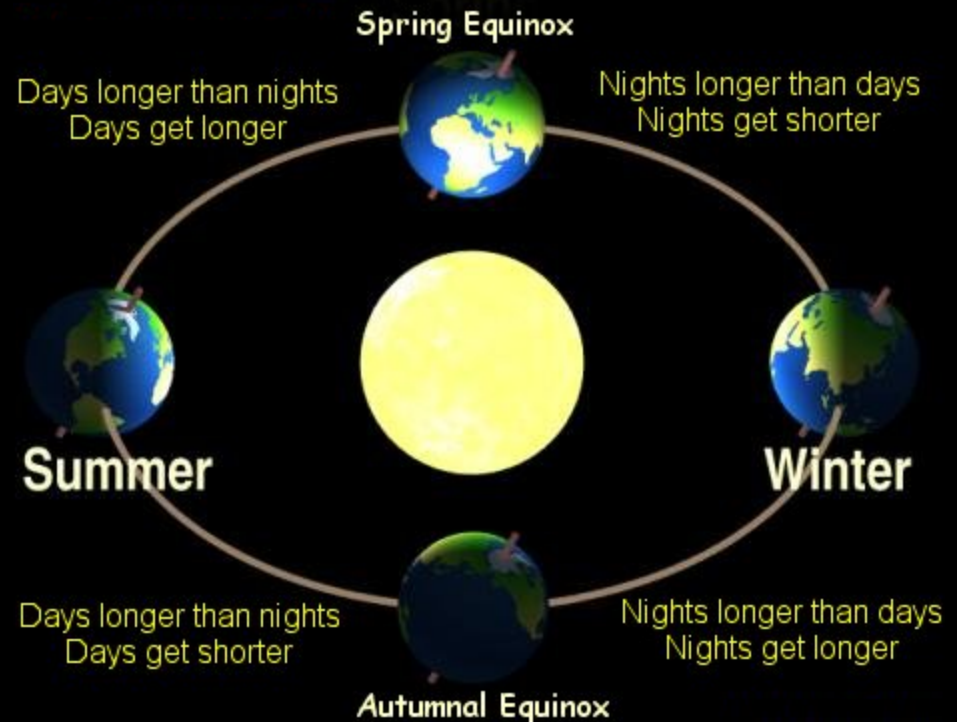
Zodiacal Light





The Autumnal Equinox

The 2013 Autumnal Equinox occurs on Monday, September 22, 2014, at 10:29 PM EDT. An equinox occurs twice each year. Once on or around March 20th, and again on or around September 22nd. An equinox occurs when the tilt of the Earth is inclined neither away nor toward the sun, causing the number of minutes of darkness and the number of minutes of light to be almost equal on that day. The term “equinox” is derived from the Latin words *aequus* (equal) and *nox* (night).





Total Lunar Eclipse

Total Eclipse of the Moon
Night of October 7–8





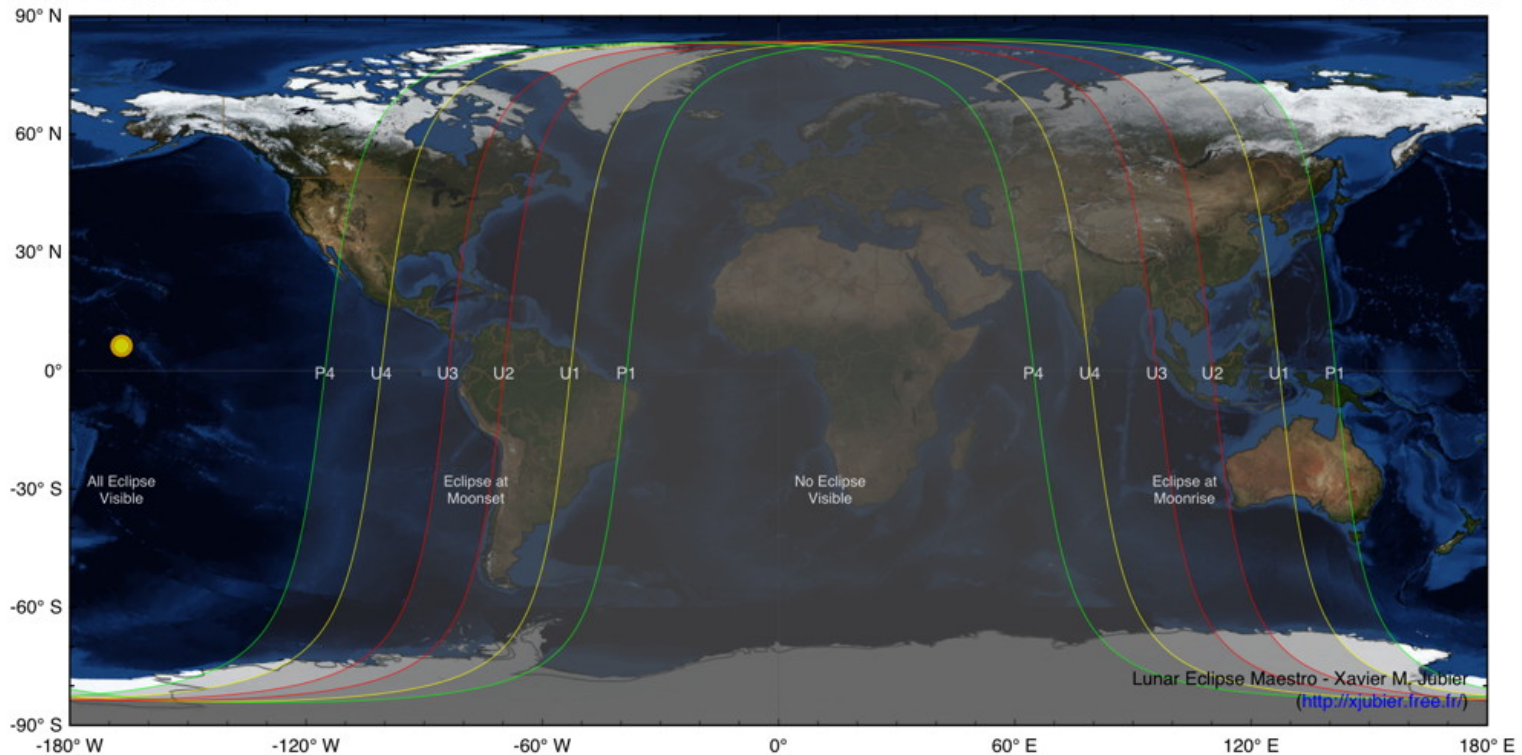
Total Lunar Eclipse

Total Lunar Eclipse of 2014 Oct 08

Eclipse Contacts
P1: 08:15:37 UTC
U1: 09:14:50 UTC
U2: 10:25:11 UTC
U3: 11:24:01 UTC
U4: 12:34:21 UTC
P4: 13:33:41 UTC

Greatest Eclipse: 10:54:36.5 UT J.D.: 2456938.955370
Penumbral Magnitude: 2.1456 P. Radius: 1.2786° Gamma: 0.3827
Umbral Magnitude: 1.1659 U. Radius: 0.7451° Axis: 0.3824°
Saros Series: 127 Member: 42 of 72
 ΔT : 67.52s
Rule: CdT (Danjon)

Eclipse Durations
Umbral: 05h18m03s
Umbral: 03h19m31s
Total: 00h58m50s





PEACHSTATE STARGAZE!!!! (PSSG)

Sunday October 19 thru Sunday October 26, 2014





PEACHSTATE STARGAZE!!!! (PSSG)

Big Telescopes!





PEACHSTATE STARGAZE!!!! (PSSG)

Interesting Telescopes!





PEACHSTATE STARGAZE!!!! (PSSG)

First Class Accommodations!

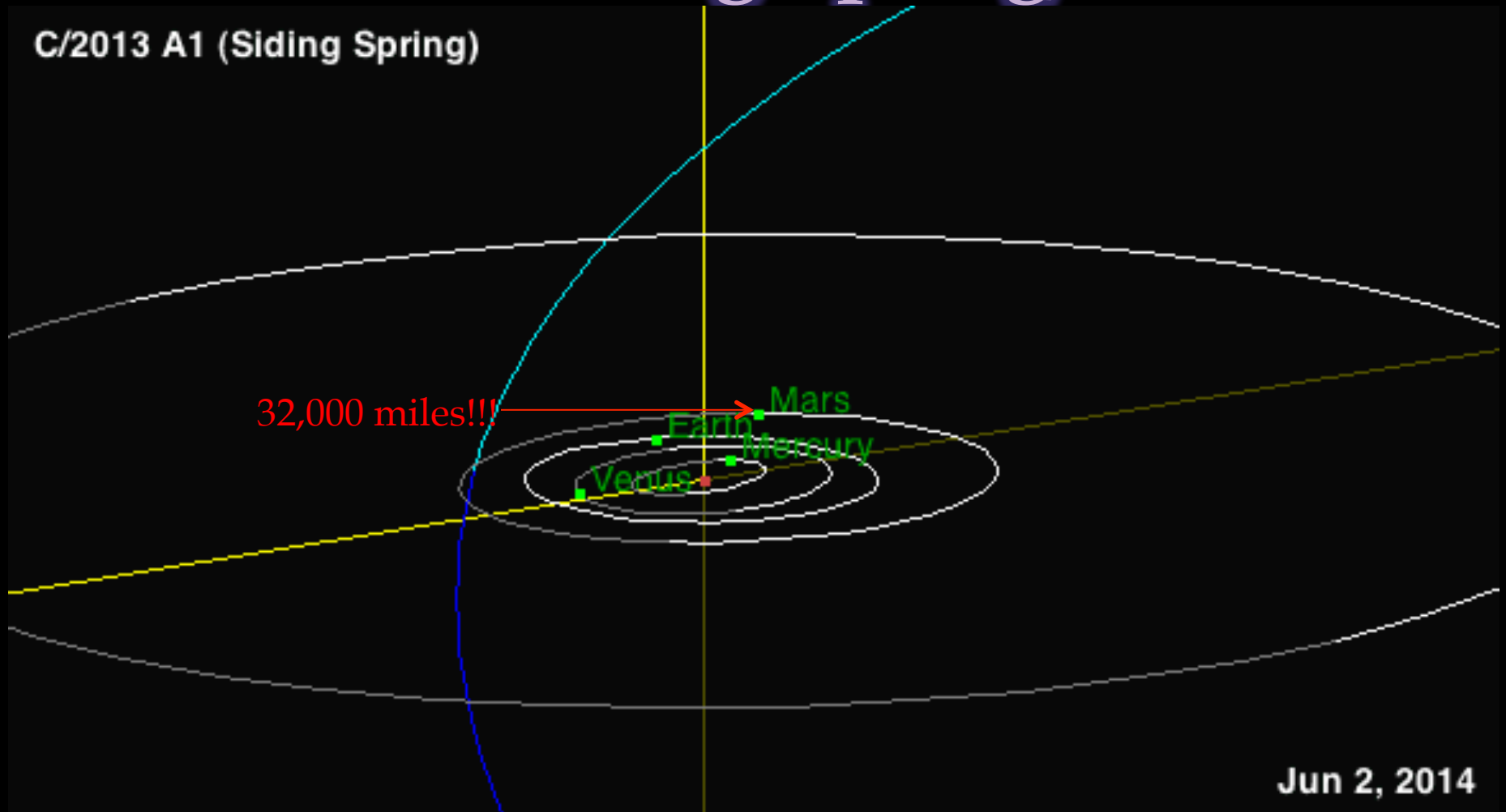




Comet Siding Spring/Mars

C/2013 A1 (Siding Spring)

32,000 miles!!!



Jun 2, 2014



Gee Whiz Question(s) of the Month

Astronomy Fact or Fiction

Topic: The changing of the seasons is caused by the distance between the Earth and the Sun.



Gee Whiz Question(s) of the Month

FICTION!

The changing of the seasons on Earth is a direct result of the change in the Earth's tilt towards or away from the Sun. During the Northern hemisphere summer, the Earth is tilted towards the Sun while the Southern hemisphere is tilted away. The Earth is actually CLOSER to the Sun during Northern Hemisphere winter!



CE Observing Challenge

Start one of the following AL Observing Programs

- Binocular Messier Program
- Constellation Hunter Program
- Urban Observing Program
- Double Star Program
- Lunar Program
- Messier Program

www.astroleague.org/al/obsclubs/AlphabeticObservingClubs.html



Next Meeting

October 18, 2014 5:00 p.m.

Campbell Building

(Regular location)



Useful Websites

- Stellarium for Windows
- SkySafari for Android
- Sky and Telescope: <http://www.skyandtelescope.com>
- Farmers Almanac: <http://www.almanac.com/astronomy>
- CEA Facebook page: <http://bit.ly/CEAAstronomy>
- Virtual Moon Atlas



Messier 16 - Van Maatee
Charlie Elliott Astronomy Image of the Month