



A presentation of what's up, what's rising and what's setting
In short...

“All of the Above”



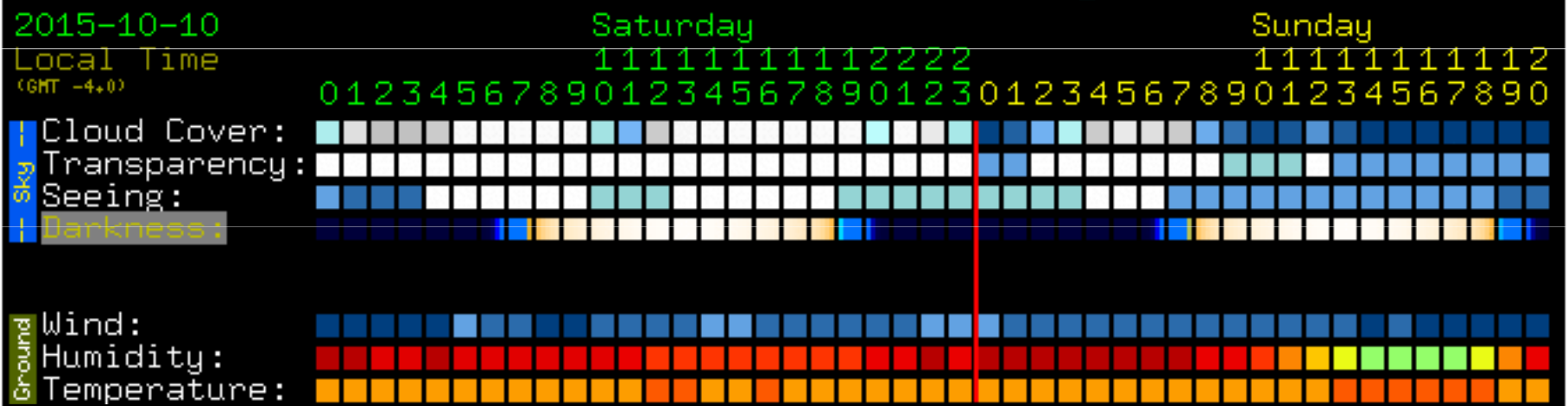
This Month's Sky: October 2015

- **Conditions over the Jon Wood Field**
- **The Planets**
- **The Sun**
- **The Moon**
- **Celestial Events**
- **The Constellations**
- **Target List**
- **Challenges**



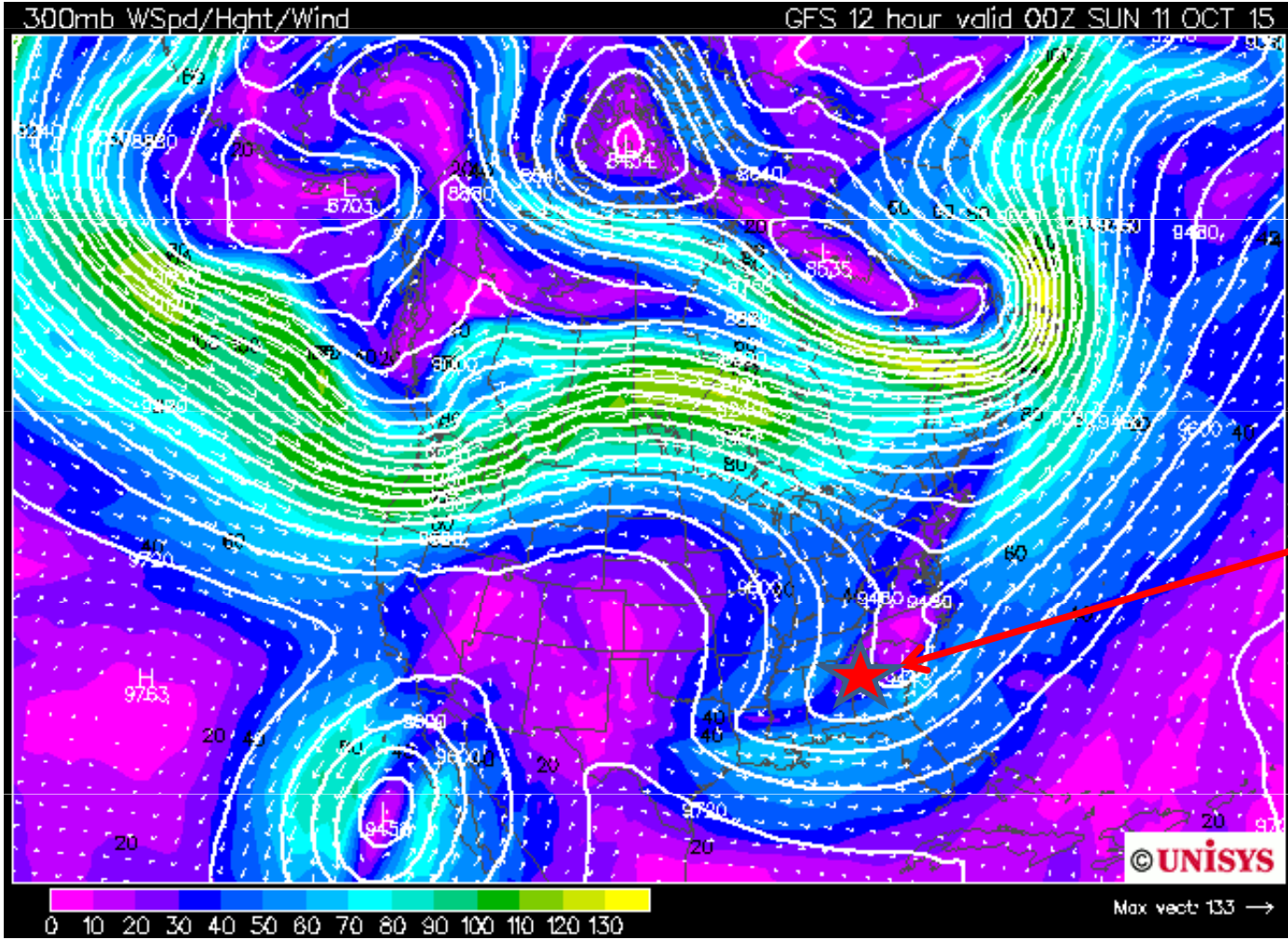
Current Conditions at Jon Wood Field

Charlie Elliott WLC Clear Sky Chart



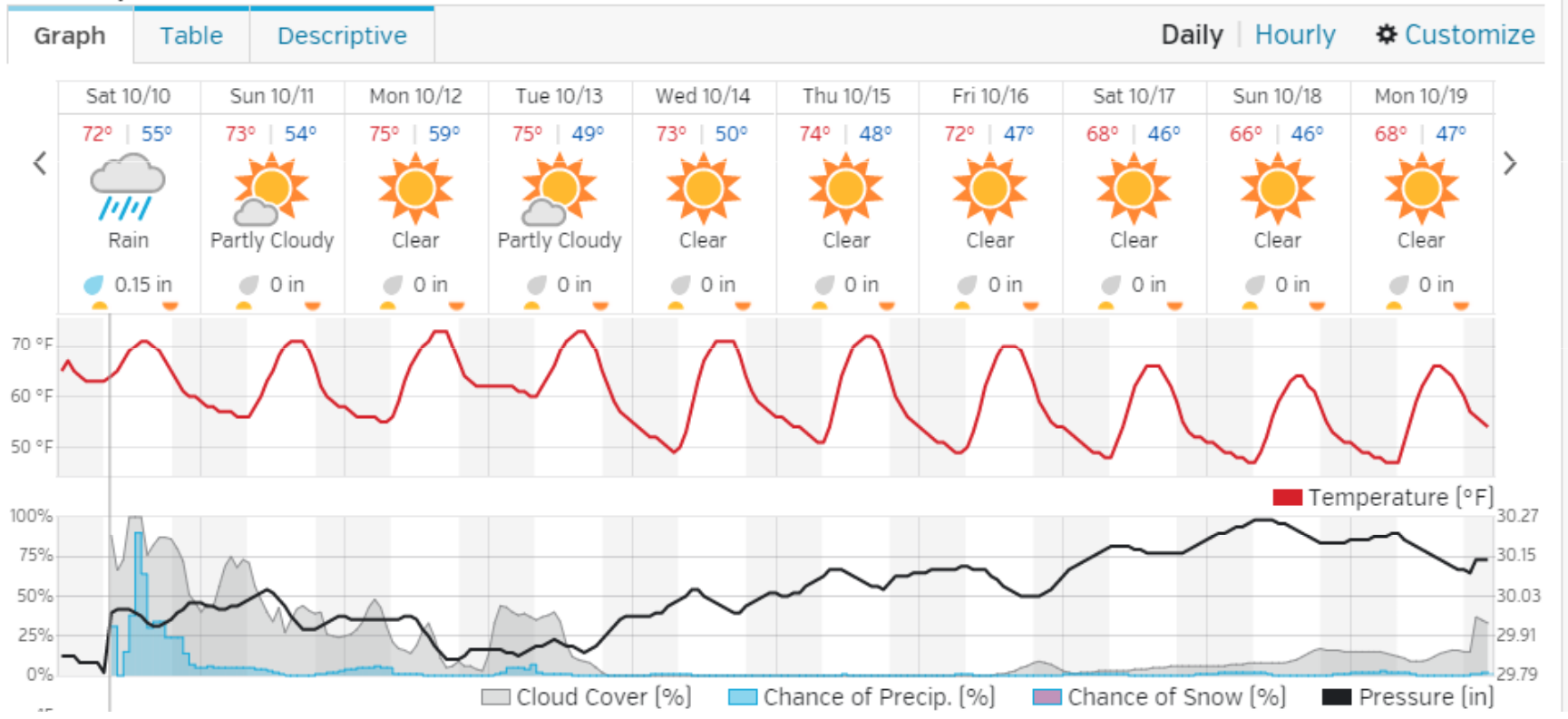


Current Conditions at Jon Wood Field



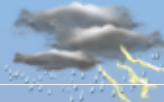


























Current Conditions at Jon Wood Field





Current Conditions at Jon Wood Field

Today Oct 10	Sun Oct 11	Mon Oct 12	Tue Oct 13	Wed Oct 14
 71° Lo 56° A thunderstorm in spots	 73° Lo 55° Partly sunny	 77° Lo 60° Partly sunny	 74° Lo 47° Plenty of sunshine	 75° Lo 52° Sunny and beautiful
 Poor for stargazing	 Very Good for stargazing	 Very Good for stargazing	 Excellent for stargazing	 Excellent for stargazing
 Cloud Cover 88%  Precip 2%  Hours of Precip 1	 Cloud Cover 26%  Precip 0%  Hours of Precip 0	 Cloud Cover 32%  Precip 41%  Hours of Precip 1	 Cloud Cover 0%  Precip 4%  Hours of Precip 0	 Cloud Cover 0%  Precip 6%  Hours of Precip 0



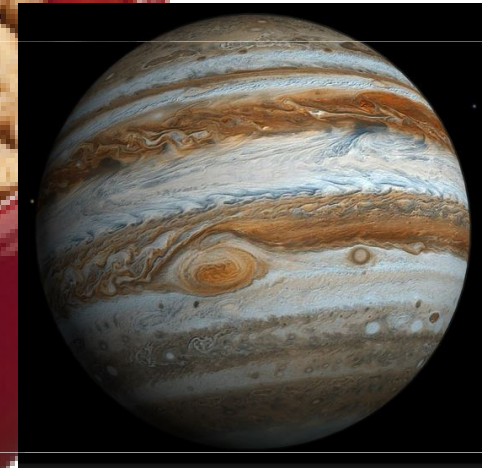
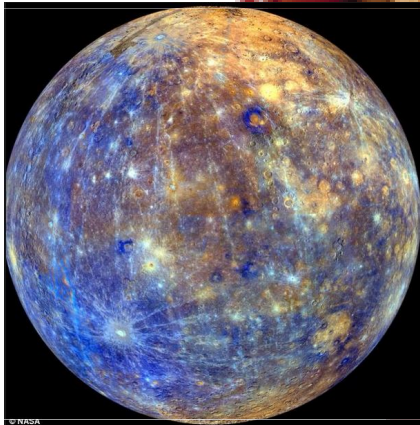
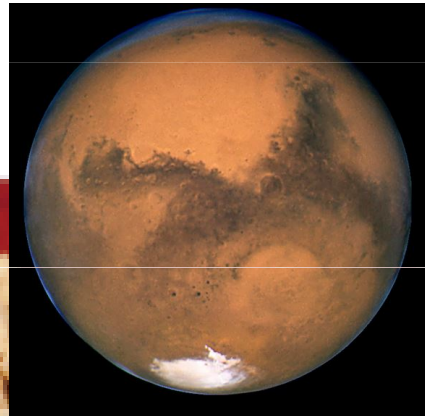
The Planets: October 10, 2015

Body	Constellation	Rise	Set	When to View
Sun	Virgo	7:38 AM	7:10 PM	Huh?
Moon	Leo	5:30 AM	6:04 PM	Dawn
Mercury	Virgo	6:24 AM	6:29 PM	Dawn
Venus	Leo	4:06 AM	5:01 PM	Dawn
Mars	Leo	4:42 AM	5:36 PM	Dawn
Jupiter	Leo	4:57 AM	5:42 PM	Dawn
Saturn	Libra	11:12 AM	9:31 PM	Early Evening
Uranus	Pisces	7:10 PM	7:53 AM	Dusk-til-Dawn
Neptune	Aquarius	5:22 PM	4:38 AM	Dusk-til-Dawn
Pluto*	Sagittarius	2:14 PM	12:23 AM	Early Evening

* Pluto looks more like a planet every day.

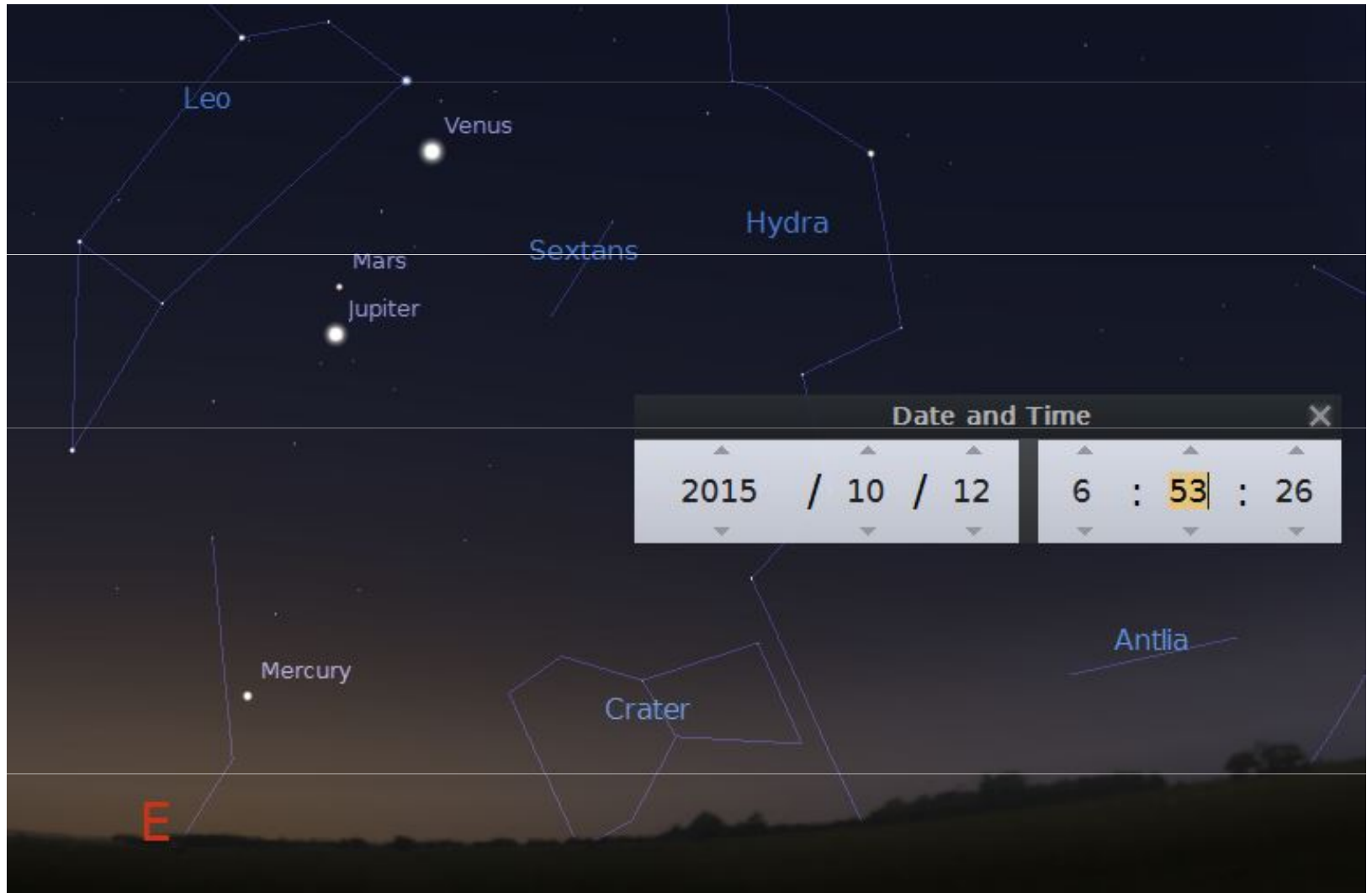


October 12: Four Planets for Breakfast





October 12: Four Planets for Breakfast





October 18: Mars and Jupiter within 0.4°



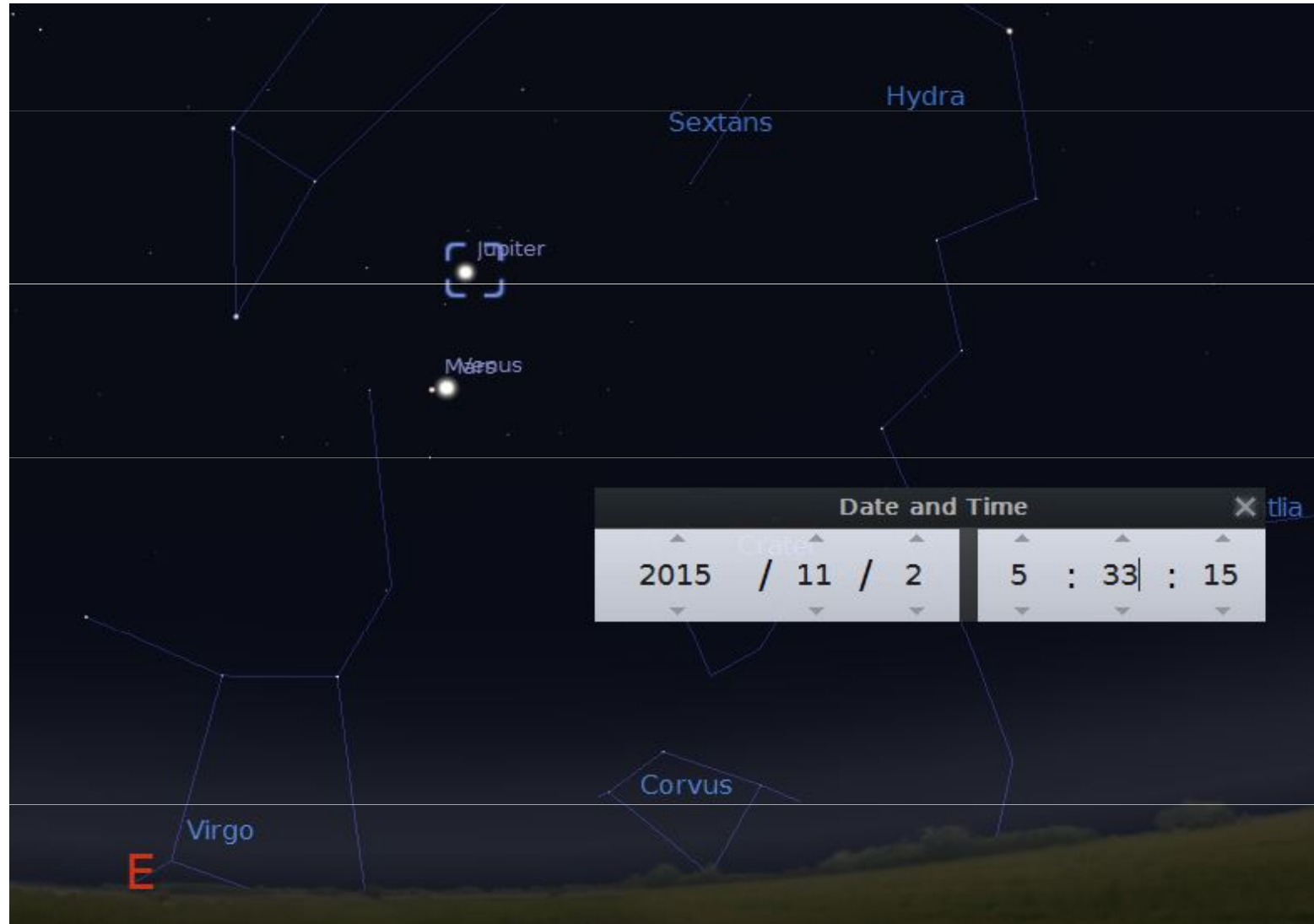


October 25&26: Venus and Jupiter within 1.1°





November 2nd: Venus and Mars within 0.6°



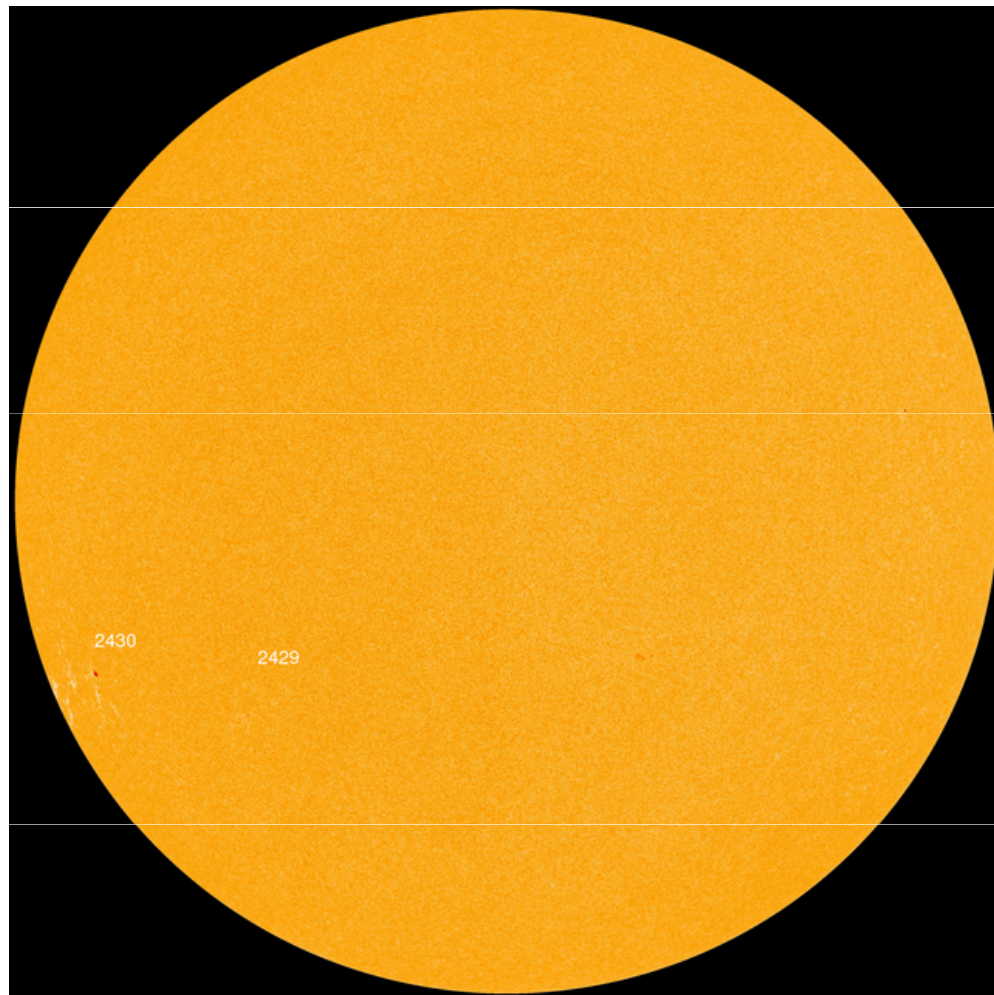


The Solar Update



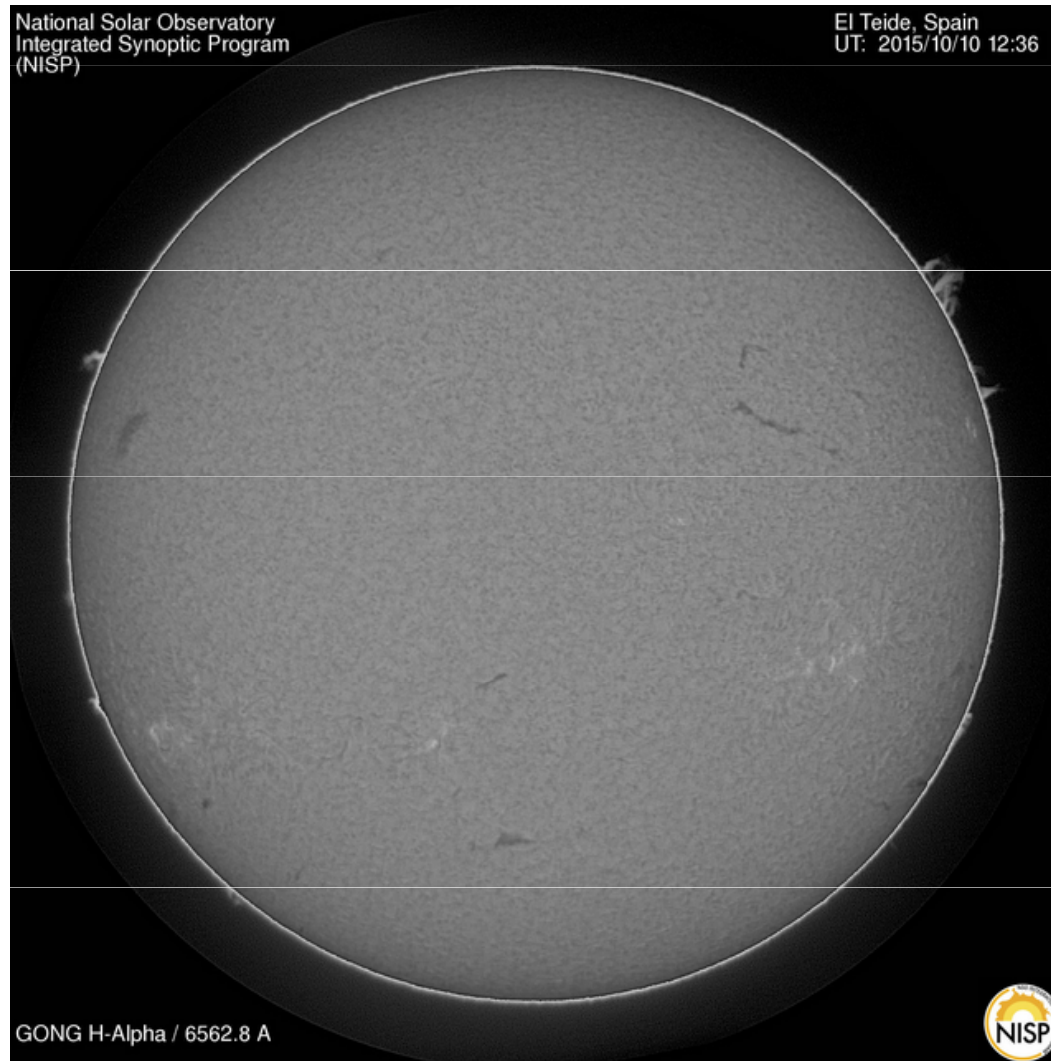


The Sun: October 10, 2015



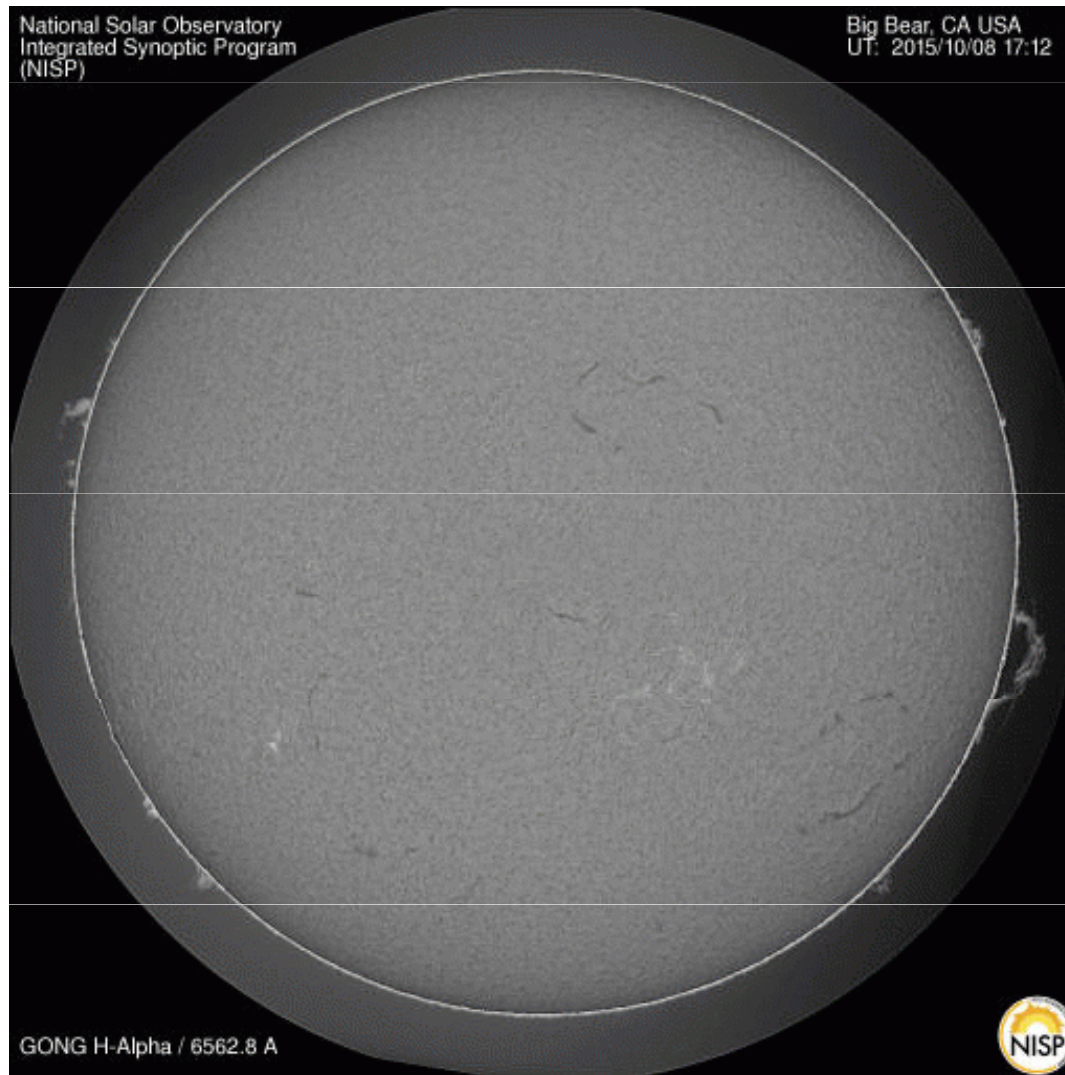


The Sun-H α : October 10, 2015





The Sun-H α : October 8, 2015



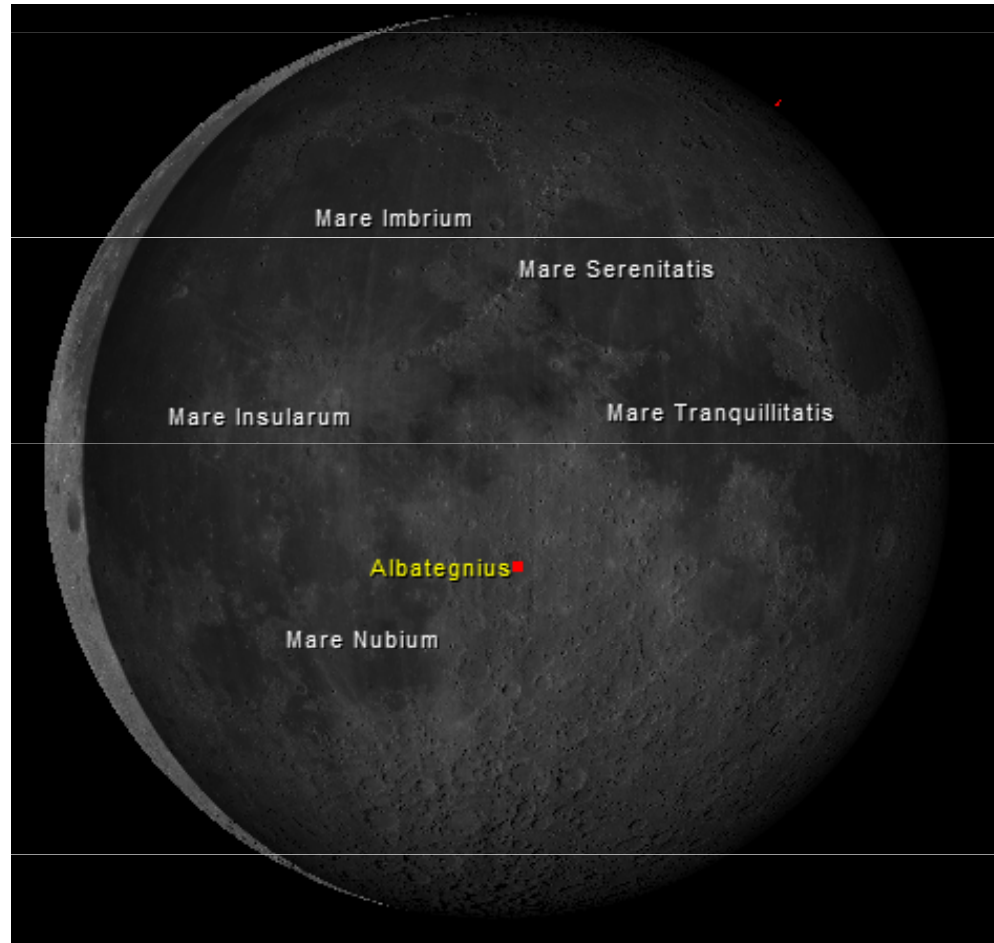


The Lunar Update





The Moon: October 10, 2015



Lunation: 27.5 Days

Illumination: 4%

Distance:

250,759 mi

403,558 km

1.34 Light Second

Apparent Diameter: 30.6'

Location: Virgo



Lunar Events

- **October 12th: New Moon**
- **October 20th: 1st Quarter**
- **October 23rd: Moon passes 3° North of Neptune**
- **October 26th: Moon passes 0.9° South of Uranus**
- **October 27th: Full Moon**
- **October 29th: Moon passes 0.6° North of Aldebaran**



Comet Update

- Cata
- 100,
- Pere



Comet C/2013 US10 (Catalina) imaged on August 9, 2015. // José J. Chambó

▪ Look in Virgo December – April. Estimated that it could reach 4th magnitude. Finder charts will be available next month.



Constellation Action

Last Chance for 2015

Sagittarius

Ophiuchus

Hercules

Corona Borealis

Scutum

Cpricornus

Aquila

High in the Sky (Chiropractor time for binocular users):

Pegasus

Cygnus

Andromeda

Pisces

Cassiopeia

Cepheus

New to the game:

Perseus

Triangulum

Cetus

Aries

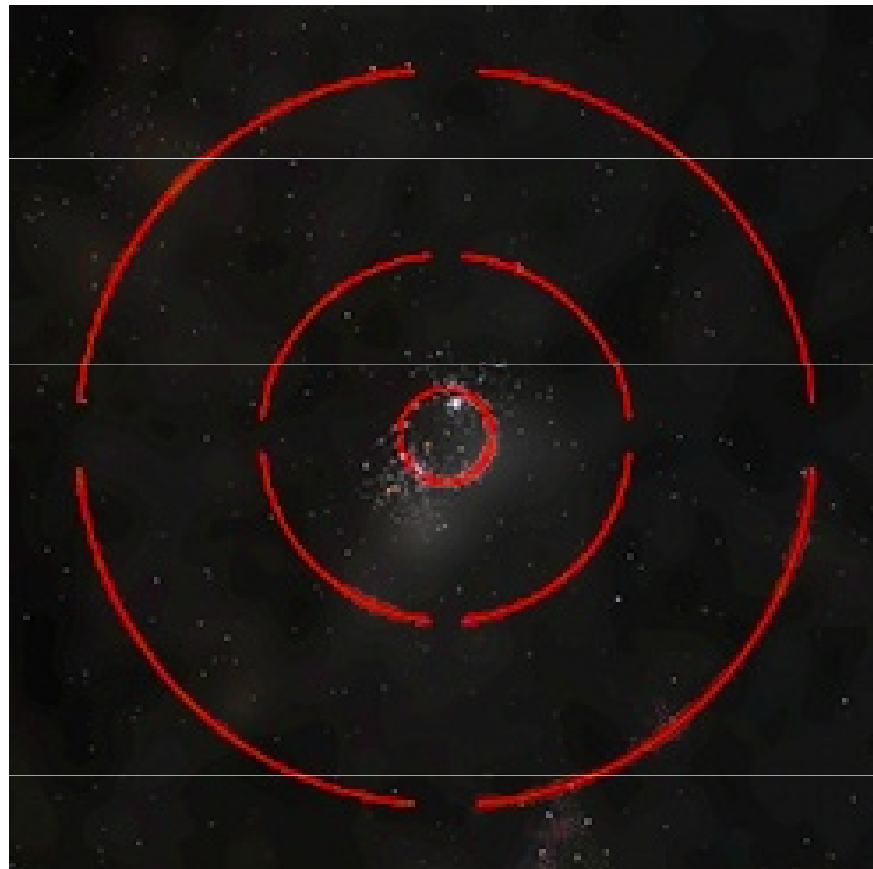
Sculptor

Auriga

Camelopardalis








September Target Lists





October Target List: Relaxing






Naked Eye and Binocular

Target	Type	Constellation	Notes	Image
M76	PN	Perseus	Little Dumbbell	
NGC 869/884	OC	Perseus	Double Cluster – two for one	
Kemble - 1	OC	Camelopardalis	Kemble's Cascade - Open Cluster/Asterism	
M2	GC	Aquarius	Globular Cluster	
NGC 253	GX	Sculptor	Sculptor Galaxy	








October Target List: Intriguing

Small to medium telescopes

Target	Type	Constellation	Notes	Image
NGC 7662	PN	Andromeda	Blue Snowball Nebula	
Melotte 15	OC	Perseus	Open cluster in the core of the Heart Nebula (IC 1805)	
NGC 288	GC	Sculptor	Globular Cluster in Sculptor – shares wide FOV with NGC 253	
NGC 253	GX	Sculptor	Sculptor Galaxy – Easily seen with wide range of instruments	
NGC 7331	GX	Pegasus	Nearly edge-on galaxy. Also Caldwell 30.	



October Target List: Taxing Light Buckets

Target	Type	Constellation	Notes	Image
NGC 40	PN	Cepheus	Bowtie Nebula	
NGC 6543	PN	Draco	Cat's Eye Nebula – Can you see the structure?	
Alpha Piscium	DS	Pisces	Alrescha – 1.7" separation. Tight but can be split	
NGC 404	GX	Andromeda	Ghost of Mirach – located northwest of Mirach	
NGC 7417- NGC 7420	GX	Pegasus	Stephan's Quintet – 5 Mag 12-13 galaxies in tight group	



October Observing Challenge Object: NGC 1275 – Perseus A

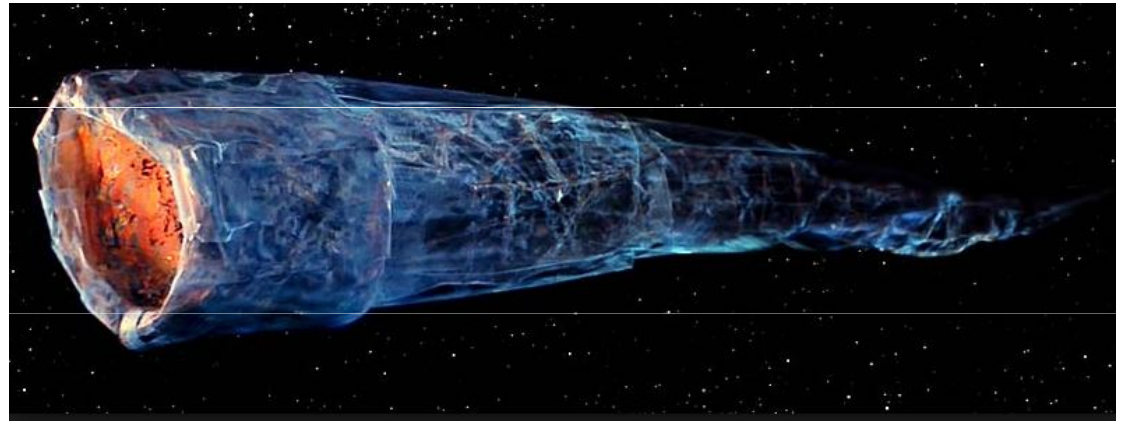
- Also Caldwell 24
- Seyfert Galaxy in Perseus
- Radio Source Perseus A
- RA:03 19 48
- DEC: +41 30 42
- 237M Light Years
- Mag: +12.6
- Think about what you are seeing!





October ~~Observing~~ Challenge Object: Doomsday Machine

- Magnitude +15
- Large blue shift
- Closing rapidly
- IR filter helps
- 12" scope is best but should be visible in 4" soon and Binoculars by Thanksgiving.





Celestial Events to Note: A Month of Conjunctions

- **October 11th: Peach State Star Gaze**
- **October 12th: New Moon**
- **October 18th: Mars/Jupiter Conjunction 0.4°**
- **October 26th: Venus/Jupiter Conjunction 1.1°**
- **October 29th: Moon/Aldebaran Conjunction 0.6°**
- **November 2nd: Venus Mars Conjunction 0.6°**
- **November 14th: CE Astronomy Club Meeting**



Clear Skies!