



Charlie Elliott Chapter of the Atlanta Astronomy Club



Larry Owens The Transit of Venus with airplane 2012-06-05



“WHAT’S UP”

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



This Month's Sky- July 2012

- **Our Solar System Tonight**
- **This Month's Astro Events**
- **Target List**
- **CE Observing Challenge**



Our Solar System Tonight

	Rises	Sets
Sun	7:02 A.M.	8:21 P.M.
Moon	8:03 A.M.	8:44 P.M.
Mercury	5:35 A.M.	7:22 P.M.
Venus	3:33 A.M.	5:33 P.M.
Mars	11:54 A.M.	11:00 P.M.
Jupiter	1:32 A.M.	3:40 P.M.
Saturn	11:43 A.M.	11:06 P.M.
*Uranus	10:08 P.M.	10:29 A.M.
*Neptune	8:32 P.M.	7:37 A.M.
Pluto	5:10 P.M.	3:28 A.M.



This Month's Astro Events

Planets, Planets, Planets!!!

- **Mars and Saturn still share the sky**
- **Neptune shines at its brightest**
- **Uranus reaches peak**

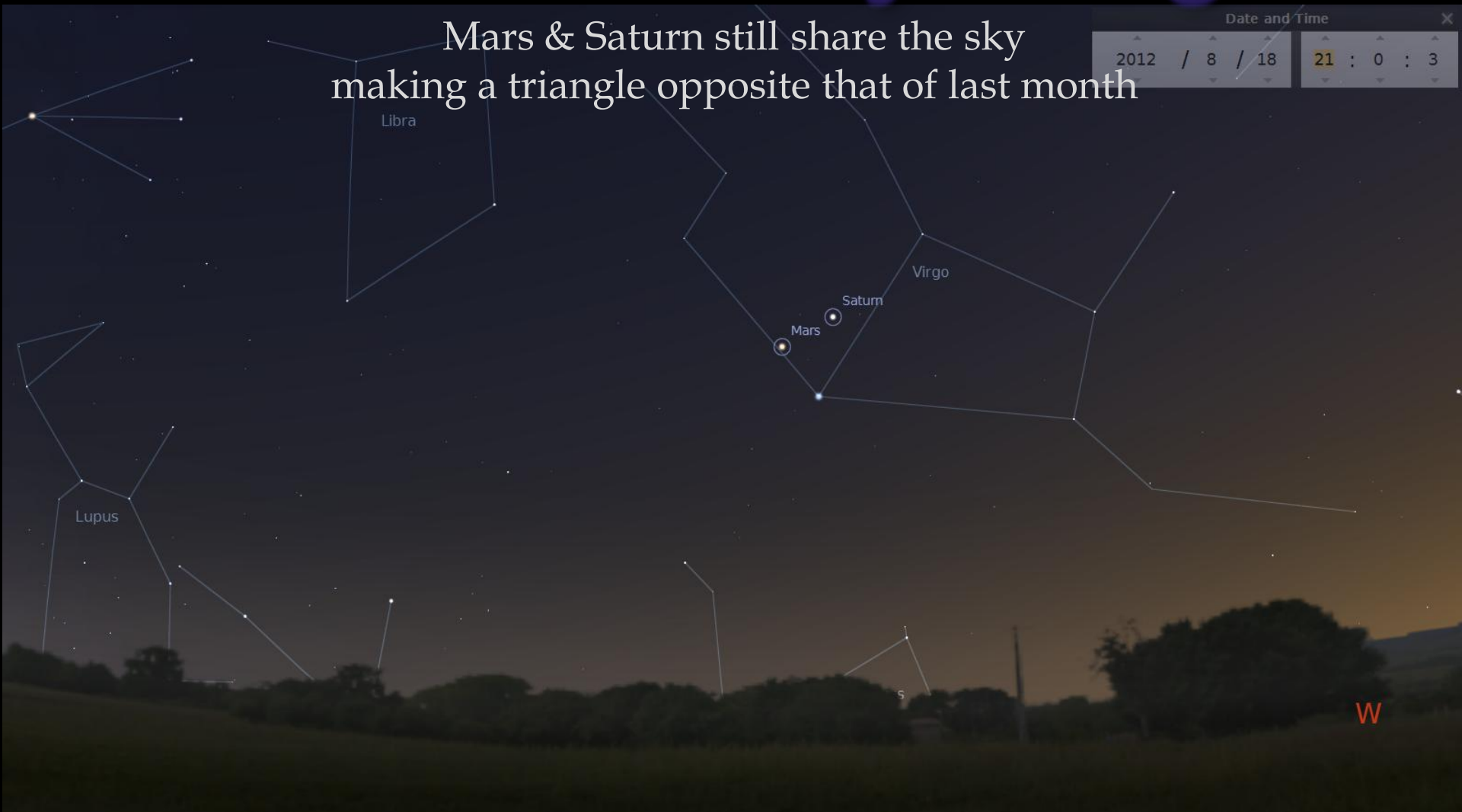


Mars & Saturn sky sharing

Mars & Saturn still share the sky making a triangle opposite that of last month

Date and Time

2012	/	8	/	18	21	:	0	:	3
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Neptune is Bright...relatively

Neptune reaches opposition shining at its brightest all year

Date and Time

2012	/	8	/	18	22	:	0	:	0
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Neptune
 Magnitude: 7.83
 Absolute Magnitude: 32.09
 RA/DE (J2000): 22h15m46.2s/-11°26'43.0"
 RA/DE (of date): 22h16m27s/-11°22'56"
 Hour angle/DE: 19h57m12s/-11°22'56" (geometric)
 Hour angle/DE: 19h57m22s/-11°20'56" (apparent)
 Az/Alt: +116°44'17"/+16°48'34" (geometric)
 Az/Alt: +116°44'17"/+16°51'38" (apparent)
 Ecliptic Geocentric (of date): +331°53'02.0"/-0°37'11.0"
 Obliquity (of date): +23°26'16.0"
 Distance: 28.98722853AU
 Apparent diameter: +0°00'06.0"





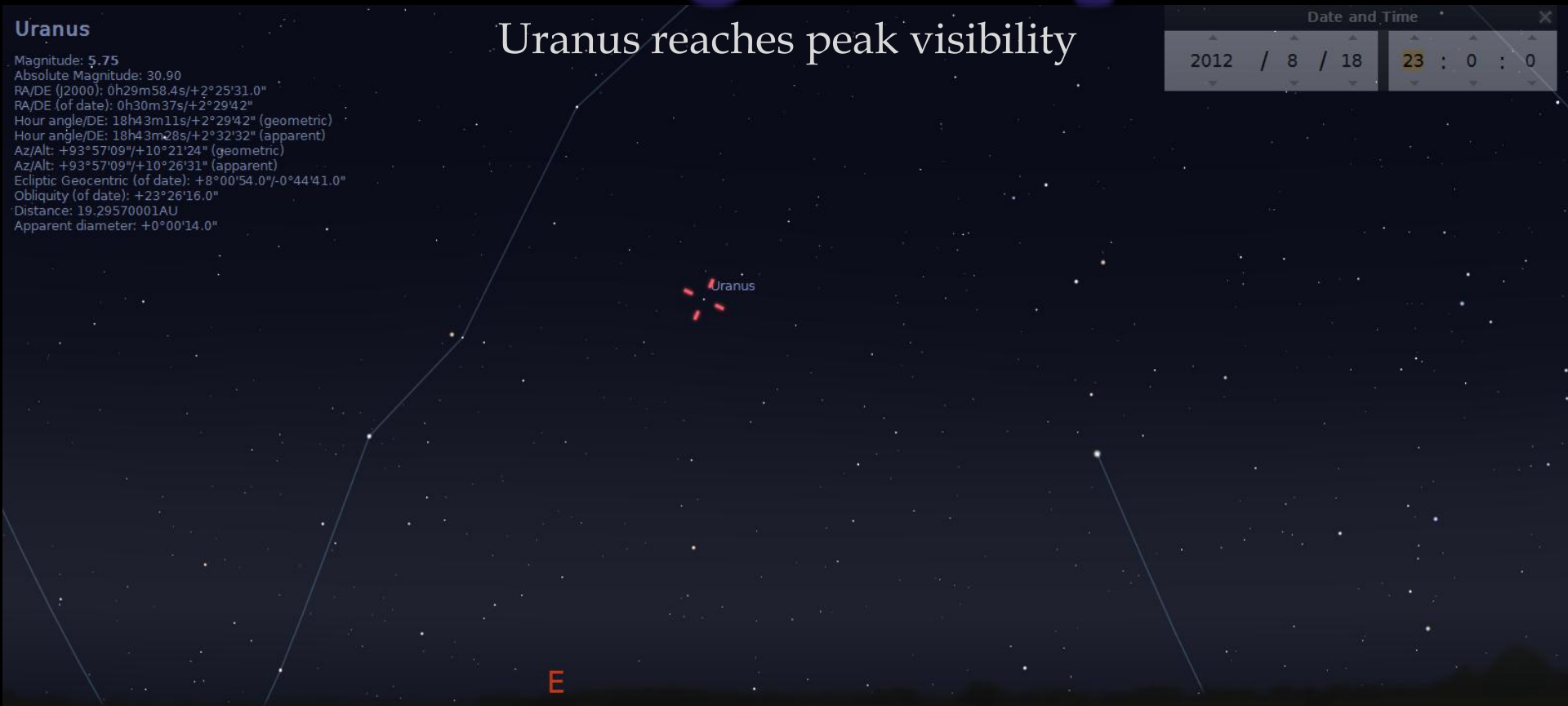
Late Aug.-Mid Sept

Uranus reaches peak visibility

Date and Time					
2012	/	8	/	18	
				23	: 0 : 0

Uranus

Magnitude: 5.75
 Absolute Magnitude: 30.90
 RA/DE (J2000): 0h29m58.4s/+2°25'31.0"
 RA/DE (of date): 0h30m37s/+2°29'42"
 Hour angle/DE: 18h43m11s/+2°29'42" (geometric)
 Hour angle/DE: 18h43m28s/+2°32'32" (apparent)
 Az/Alt: +93°57'09"/+10°21'24" (geometric)
 Az/Alt: +93°57'09"/+10°26'31" (apparent)
 Ecliptic Geocentric (of date): +8°00'54.0"/-0°44'41.0"
 Obliquity (of date): +23°26'16.0"
 Distance: 19.29570001AU
 Apparent diameter: +0°00'14.0"





Target List

Many spectacular objects litter the late Summer night sky. Focus on the South to Southeast along the Milky Way for some magnificent Clusters and Nebulas!

Object	Type	Mag	Constellation
NGC 6231	Cluster w/ Nebulosity	2.6	Scorpius
Butterfly Cluster	Open Cluster	4.2	Scorpius /Sagittarius
M7	Open Cluster	3.3	Scorpius
M8 (Lagoon)	Nebula	5.8	Sagittarius
M20 (Trifid)	Nebula	6.3	Sagittarius
M22	Globular Cluster	5.1	Sagittarius
M25	Open Cluster	4.6	Sagittarius
M16 (Eagle)	Nebula	6	Above Sagittarius
M11 (Wild Duck)	Open Cluster	5.8	Scutum

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Target List

Focus on the North to Northeast along the Milky Way for some more magnificent Clusters and Nebulas!

Object	Type	Mag	Constellation
NGC 869	Double Cluster	4	3° below Cassiopeia
M31	Galaxy	3.5	Andromeda
NGC 281	Cluster w/ Nebulosity	7	Cassiopeia
IC1396	Cluster w/ Nebulosity	3.5	Sagittarius
M39	Open Cluster	4.6	2° below Deneb
NGC 7160	Open Cluster	6.1	Cepheus

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Ursa Minor

Cepheus

IC 1396

M39

Lacerta

NGC 7686

Pegasus

Cassiopeia

Camelopardalis

Double cluster

Great Nebula in Andromeda

Andromeda

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CE Observing Challenge

- **NGC 6905– “Blue Flash Nebula”**
 - Magnitude 10.9
 - Look in or around Delphinus
 - Rises at 7:58 pm



Useful Websites

- <http://www.almanac.com/astronomy/>
- <http://astrojourney.wordpress.com>
- <http://www.astronomy.com/>



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