



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 (Summer's Best)**
- **CE Observing Challenge**



Our Solar System Tonight

	Rises	Sets
Sun	6:40 A.M.	8:43 P.M.
Moon	9:09 A.M.	10:06 P.M.
Mercury	7:46 A.M.	9:00 P.M.
Venus	3:47 A.M.	5:33 P.M.
Mars	12:20 P.M.	12:06 A.M.
Jupiter	3:02 A.M.	5:04 P.M.
Saturn	1:21 P.M.	12:52 A.M.
Uranus	12:00 A.M.	12:18 P.M.
Neptune	10:20 A.M.	9:28 A.M.
Pluto	6:58 P.M.	5:18 A.M.



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This Month's Astro Events

- **Mars reaches magnitude 1 and approaches Saturn and Spica**
- **Delta Aquarid and Perseid Meteor Showers**



Starting Mid-July

Mars moves closer to Saturn and Spica

Mars

Magnitude: 1.19 (extincted to: 1.76)
Absolute Magnitude: 31.80
RA/DE (J2000): 12h36m59.3s/-3°56'12.3"
RA/DE (of date): 12h37m38s/-4°00'20"
Hour angle/DE: 4h04m18s/-4°00'20" (geometric)
Hour angle/DE: 4h04m10s/-3°58'48" (apparent)
Az/Alt: +248°58'43"/+20°42'55" (geometric)
Az/Alt: +248°58'43"/+20°45'18" (apparent)
Ecliptic Geocentric (of date): +190°13'07.1"/+0°02'39.5"
Obliquity (of date): +23°26'15.6"
Distance: 1.56379988AU
Apparent diameter: +0°00'06.0"
Phase Angle: +38°01'13"
Elongation: +70°32'07"
Phase: 0.89
Illuminated: 89.4%





Meteor Showers

Shower	Best Viewing	Point of Origin	Date of Maximum	#/Hour	Associated Comet
Delta Aquarid	Predawn	South	July 30	10	N/A
Perseid	Predawn	Northeast	Aug 11-13	50	Canes Venatici

*NOTE: #/Hour is based on a moonless rural sky. Here at CE you can probably expect to see half of the listed #/hour.



Target List (Summer's Best)

Many spectacular objects litter the 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 (Summer's Best)

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

N



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>



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