





### "WHAT'S UP"

A presentation of "what's up" in the night sky



### This Month's Sky: July 2013

- Our Solar System Tonight
- "I'm a little teapot"
- Conjunction Junction
- Jupiter is back for the early birds
- Wave at Saturn
- Saturn's Moons
- Gee Whiz Question of the Month
- CE Observing Challenge



# Our Solar System Tonight

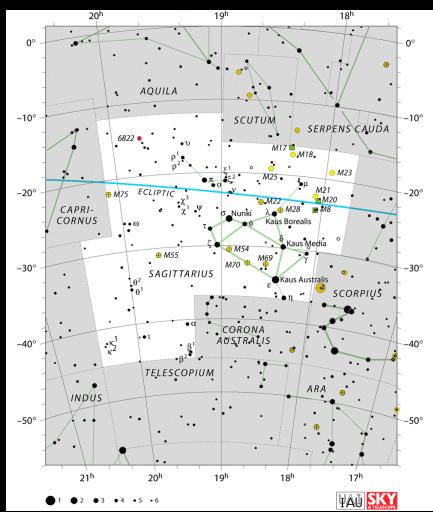
	Rises	Sets
Sun	06:37 a.m.	08:50 p.m.
Moon	10:38 a.m.	11:16 p.m.
Mercury	6:31 a.m.	8:12 p.m.
Venus	8:49 a.m.	10:30 p.m.
Mars	05:00 a.m.	07:25 p.m.
Jupiter	5:22 a.m.	7:41 p.m.
Saturn	2:55 p.m.	2:04 a.m.
Uranus	12:50 a.m.	1:17 p.m.
Neptune	11:07 p.m.	10:19 a.m.
Pluto	7:50 p.m.	6:06 a.m.

### Sagittarius Over Charlie Elliott

Scorpius Deep Sky Objects Visible Tonight...

(Be sure to ask for a sky map!)

Object	Description	Magnitude
M8	Nebula (Lagoon)	6
M20	Nebula (Trifid)	6.3
M21	Open Cluster	5.9
M22	Globular Cluster	5.1
M69	Globular Cluster	7.6
M54	Globular Cluster	7.6
M24	Star Cloud	11
NGC 6818	Nebula (Little Gem)	9.4





# Conjunction Junction

From the 20<sup>th</sup> to the 22<sup>nd</sup>, Jupiter and Mars pass within 1 degree of each other.

Date and Time -×
2013 / 7 / 20 5 : 0 : 0

Bellatrix

F



# Conjunction Junction

Venus slips under Leo's brightest star, Regulus, between the 21st and 23rd.





# Early bird gets Jupiter

Magnitude: -1.46

RA: 6h 18m 4s Dec: +23d 10' 55"

Rises: 5:15 Sets: 19:37





# Say Hello to Saturn





### Say Hello to Saturn

Cassini will start obtaining the Earth part of the mosaic at 2:27 p.m. PDT (5:27 p.m. EDT or 21:27 UTC) and end about 15 minutes later, all while Saturn is eclipsing the sun from Cassini's point of view. The spacecraft's unique vantage point in Saturn's shadow will provide a special scientific opportunity to look at the planet's rings. The July 19 image will be the first to capture the Saturn system with Earth in natural color, as human eyes would see it.





# Saturn's Line Up



Earth, Mansfield, GA, 38m FOV 0.0508° 45.1 FPS 2013-07-24 00:00:00

### Gee Whiz Question of the Month

Approximately how much of the energy released by the Sun actually reaches Earth?

### Gee Whiz Question of the Month

### One half of One billionth!



# CE Observing Challenge

#### **NGC 6380**

- Globular Cluster in Scorpius
- Magnitude 11.3

Right Ascension: 17h 35m 25.3s

Declination: -39° 04' 32.2"

#### **ENJOY!!**



### **Useful Websites**

- Stellarium for Windows
- SkySafari for Android
- http://www.skyandtelescope.com
- http://solarsystem.nasa.gov/news
- http://astroceanomy.com
- http://www.almanac.com/astronomy



