



# September 2007

10:00 p.m. on September 1  
 9:00 p.m. on September 15  
 8:00 p.m. on October 1

**To use this chart:** hold the chart in front of you and turn it so the direction you are facing is at the bottom of the chart

- **Bright Stars**
- **Medium Bright Stars**
- **Faint Stars**

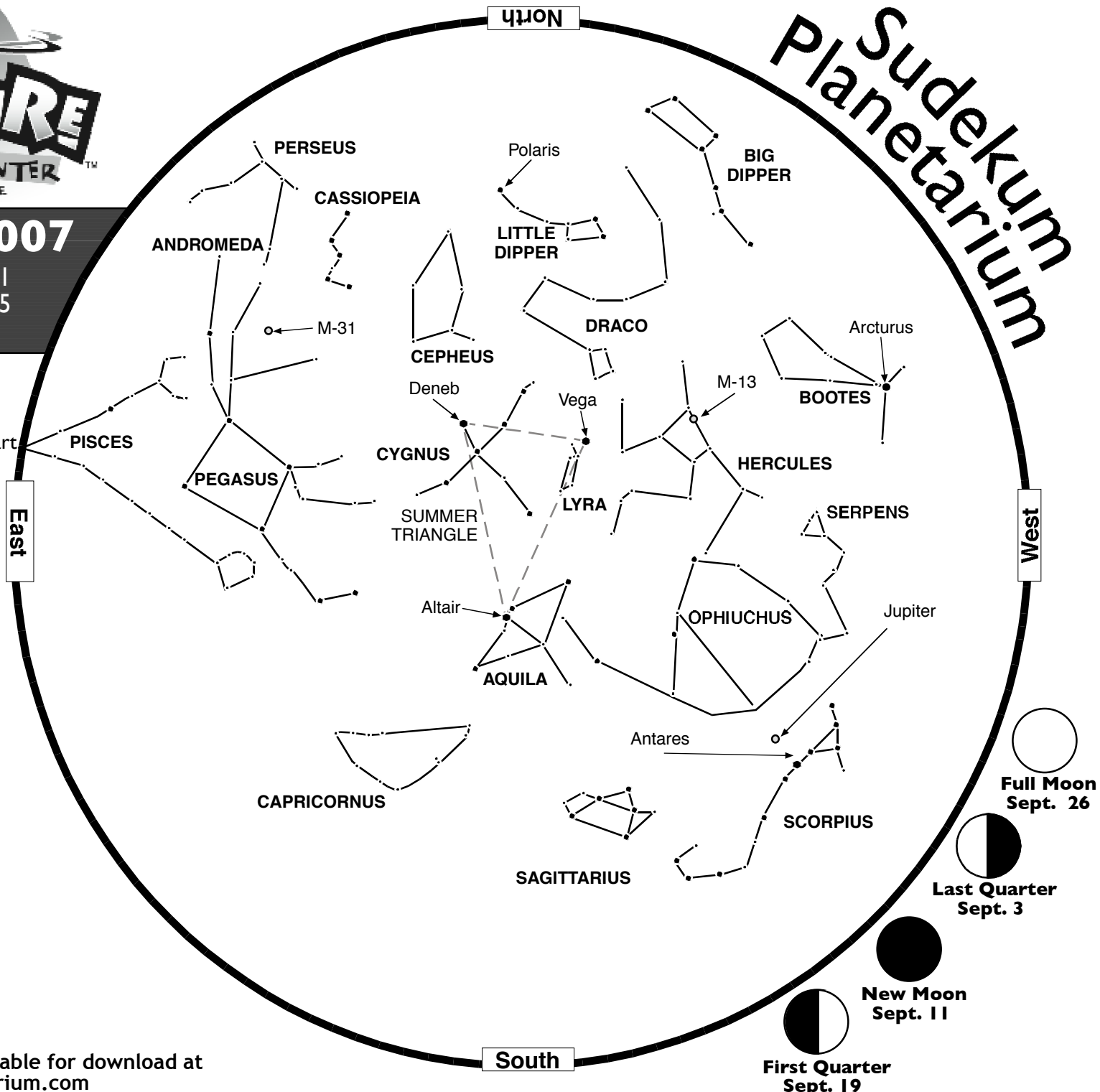
**Scan the sky with binoculars:** the darker the sky, the better.

- **Globular Star Cluster:**  
M-13 in Hercules
- **A Spiral Galaxy:**  
M-31 in Andromeda

From Nashville:	Sunrise	Sunset
September 1	6:18 AM	7:15 PM
September 15	6:29 AM	6:55 PM
October 1	6:42 AM	6:31 PM

FREE monthly star charts are available for download at [www.SudekumPlanetarium.com](http://www.SudekumPlanetarium.com)

# Sudekum Planetarium





## September 2007

### September Skies

Now that the temperatures have cooled down a bit, and it's bearable to go outside at night, you'll find an interesting variety of objects to observe in the sky this month.

**September 8** - Get up early and face the eastern horizon at 5:00 AM. The first thing you will notice is the really bright star just above the horizon. It is often called the **morning star** when seen in this part of the sky. However, it is no star; it's the second planet from the Sun, **Venus**.

Venus will be visible every morning this month, but on this particular morning, a thin **crescent Moon** will appear slightly above and left of brilliant Venus. Grab a pair of binoculars and take a moment to look at the banana-shaped Moon. Can you see the **earthshine**? Light reflected from the Earth's surface faintly illuminates the dark part of the Moon.

Move your binoculars up and to the right, but only just a little bit. If the sky is clear and steady, you may just see the pretty **Beehive star cluster**, also known as **M33**. Together, the Moon and the Beehive will make a pretty sight in binoculars.

**September 18** - Shortly after the Sun has set, and as the sky just begins to darken, look for **Jupiter** low in the western sky. To the left of Jupiter will be a **thick crescent Moon**, almost **first quarter**.

Jupiter is visible every evening this month, setting at about 11:30 PM on the 1st and at 10:00 PM by the 30th. By the end of October, the giant planet will be lost in the glow of sunset.

This is another chance to get out your binoculars and study the Moon. Focus your attention on the **terminator**, the line between light and dark on the face of the Moon. It is there that you will see the most detail. OK, that's the Moon tonight. Go out tomorrow night, and the terminator will have moved a short distance to the left, revealing the craters and mountains in new detail.

If you have a clear western horizon, look for the red star **Antares**, below Jupiter. This star marks the heart of **Scorpius the scorpion**, but it would be easy to mistake it for the planet Mars. That might explain why the star is called Antares. 'Ares' is another name for Mars, and 'ante' means 'not', 'against', or 'rival of'. So, the meaning of the name Antares is simple: "That's not Mars".

If you want to see **Mars**, it rises in the east late in the evening at about 11:30 PM. During the month it slides from the horns of **Taurus the bull** to the feet of **Gemini the twins**. It doesn't look like much to the unaided eye, through binoculars, or even through a telescope. Wait until December when Mars will be substantially brighter in the evening sky, and conveniently visible after sunset instead of the middle of the night.

To get the latest news from Mars, visit [marsrovers.jpl.nasa.gov](http://marsrovers.jpl.nasa.gov). At this writing the intrepid rovers **Spirit and Opportunity** are still working on the surface of Mars. Their future is still uncertain as almost two months of severe martian dust storms have reduced their power generation and brought science to a standstill. The weather on Mars has improved slightly, but we will know more in the coming weeks. Meanwhile, the **Phoenix lander** is on its way to join them. To learn more about Phoenix, visit [phoenix.lpl.arizona.edu](http://phoenix.lpl.arizona.edu).

For more information about Sudekum Planetarium visit [www.SudekumPlanetarium.com](http://www.SudekumPlanetarium.com).  
For night sky information, call  
AstroLine at 615-401-5092.

**September 21 through 26** - If you thought Venus was bright early in the month, just watch. It will be at its brightest over these several days. Meanwhile, **Saturn** is now just now rising early enough that you can see it before the glow of dawn hides it. Look for it below and to the left of Venus, near the bright star **Regulus**, in **Leo the Lion**.

**September 23 - 4:51 AM** - You're up early to look at Venus and Saturn, so you might as well celebrate the **September Equinox** while you're at it. In the northern hemisphere, this time marks the beginning of autumn, and spring for the southern half of our planet.

**September 29** - Full Moon was just a few days ago, so if you go out about 10:00 PM the Moon will be hanging in the east. Above and to the right is a pretty little cluster of stars called the **Pleiades** or the 'Seven Sisters'. In astronomers' catalogs, its also known as M45.

When there is no big, bright Moon nearby, this little grouping makes a good eye test. Some people only see three or four stars while others report seeing all seven. When the Moon is near the Pleiades, you won't see as many of its stars.

Pull out the binoculars again and see how the surface of the Moon looks different than it did just a few weeks ago. You'll find that there are many more stars in the Pleiades star cluster than you can see with just your eyes.

### Star Parties

Several star parties are scheduled through the end of the year. Visit our web site for more details.

- **September 14-16, 2007**, Tennessee Star Party at the TAG Youth Camp in Lynchburg, TN. Go to <http://www.bsasnashville.com/> for details.

- **Friday, December 15, 2006**. 8:00 to 10:00 PM at Ridgefield at Edwin Warner Park. Join us and the Barnard-Seyfert Astronomical Society as we watch the sky for the Geminid meteor shower, a bright Mars, and a thin crescent Moon.