

November 2007

10:00 p.m. on November 1
8:00 p.m. on November 15
7:00 p.m. on December 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**

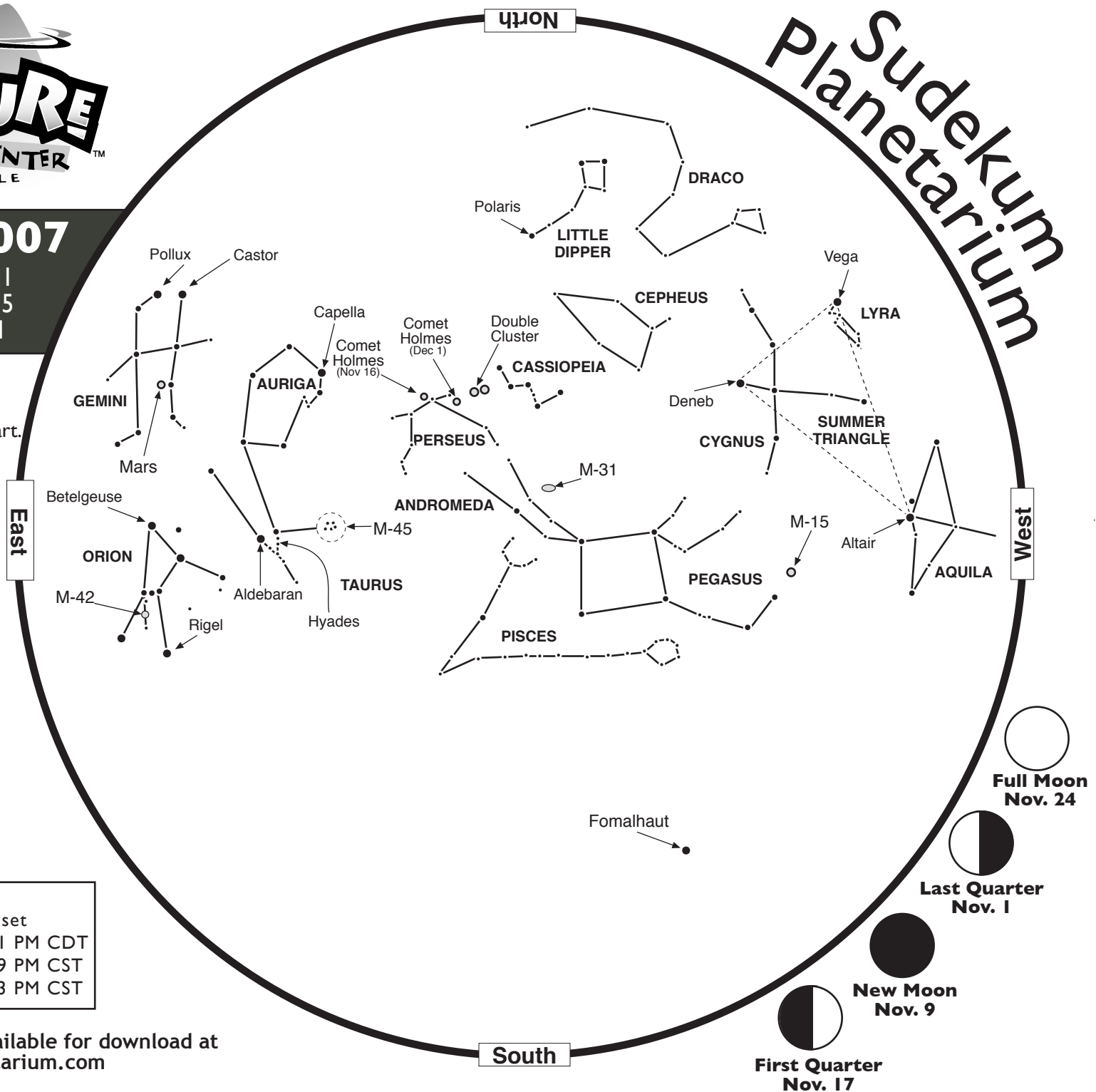
Scan the sky with binoculars:
the darker the sky, the better.

- **Globular Star Cluster:**
M-15 in Pegasus
- **Open Star Clusters:**
M-45 - The Pleiades
"Double Cluster" between Perseus and Cassiopeias
The Hyades form the face of Taurus
- **A Spiral Galaxy:**
M-31 in Andromeda
- **A Nebula:**
M-42 - the Orion Nebula

From Nashville:

	Sunrise	Sunset
November 1	7:10 AM CDT	5:51 PM CDT
November 15	6:24 AM CST	4:39 PM CST
December 1	6:39 AM CST	4:33 PM CST

FREE monthly star charts are available for download at
www.SudekumPlanetarium.com





November 2007

All I Want for Christmas Are Astronomy Presents

Thursday, November 15, 2007 at 7:30 PM
Adventure Science Center

Dr. Spencer L. Buckner
Department of Physics & Astronomy
Austin Peay State University
Clarksville, Tennessee

Are you thinking of buying your child a new telescope for Christmas? Maybe your spouse is hoping to find a new eyepiece in their stocking on Christmas morning. There are hundreds of good gifts you can give to your favorite amateur astronomer this Christmas with prices ranging from under \$20 to over \$10,000. Selecting the right gift that fits your budget and the recipient can be a daunting task.

In this talk, Dr. Buckner will explore the basic types of telescopes and mounts along with their advantages and disadvantages. He will also discuss the dazzling variety of astronomical accessories such as planispheres, eyepieces, tripods, dew zappers, and much more. He will conclude with suggestions on where you can find good astronomical equipment at reasonable prices and sales people knowledgeable about the products they sell.

Don't Forget to Fall Back!

This year, Daylight Saving Time ends at 2:00 am on **November 4**. This is later than in years past, due to a new federal law passed in 2005. The times you see listed on the front of the star chart take the time change into account.

November Skies

Have you been watching Mars? This is a good time to keep an eye on the red planet because it's rising earlier and growing brighter every night this month. Currently situated right between the two brothers of the constellation **Gemini the twins**, Mars rises above the horizon just after 9:30 PM Daylight Time at the beginning of November. As December begins, it rises around 6:30 PM Standard Time.

Try taking a look at Mars through a small telescope, but don't expect to get too excited. Mars may be close to Earth and relatively bright, but it's still a small planet, and there's not a lot to see. With ideal observing conditions and a good telescope, you might be able to see some surface features, but most people will just see a pale pink dot in the eyepiece.

The view will be improve in mid to late December, so you should plan to join us for the star party on the 15th. Details are below.

If you're out early in the morning, between 3:00 am and dawn, try to catch a glimpse of **Venus**. Venus is very bright right now and is almost impossible to miss if you have a clear view to the east. Take note on the morning of November 5, when a slim crescent **Moon** joins Venus in the morning sky.

While you're up, take a look higher in the sky for **Saturn**. The ringed planet won't be as bright as Venus, but it will still stand out, just underneath the constellation **Leo the lion**. If you're not positive you've found it, try binoculars. They won't reveal the rings, but you should be able to see that Saturn looks a little larger than a point. With a small telescope the magnificent rings become visible.

Ten Years and Counting...

We didn't have room back in August to mention it here, but as of then, we're now less than ten years away from a **total solar eclipse** visible from right here in Nashville. On **August 21, 2017**, we

will get the rare opportunity to see the Moon completely cover up the Sun's face.

Despite what you may have seen on a certain television program about people with superpowers, total solar eclipses are not global events. They are not visible across the entire world at one time.

During a total solar eclipse, the Moon casts a shadow on a small point on the Earth. As a result, you have to be in just the right spot on Earth at just the right time to see the Moon perfectly cover the Sun. A few miles too far from that location, and the best you'll see will be a **partial solar eclipse**.

Fortunately, the Moon is orbiting the Earth, and the Earth is rotating. As a result, the Moon's shadow moves across the Earth, allowing more people to see totality. During the 2017 eclipse, the Moon's shadow cuts a narrow path from South Carolina, through Nebraska, to Oregon. The path is long, but it's also narrow, scarcely more than 50 miles wide.

And guess what state capital just happens to be in this narrow path? That's right, Columbia, South Carolina. Just kidding, Nashville's in the path too! In fact, the point of **greatest eclipse**, that is, the point on the Earth where the total eclipse lasts the longest, is just northwest of Hopkinsville, Kentucky. There, totality will last for just 2 minutes and 40 seconds. Weather permitting, it will be a beautiful and unforgettable view, not to be missed.

To learn more, and to find an interactive map showing the exact path of totality, visit NASA's guide at <http://tinyurl.com/2dm6sq>.

Star Party

Join us on Friday, **December 15, 2007**, from 8:00 to 10:00 PM at Ridgefield at Edwin Warner Park for a **FREE** public star party. Dress warmly along with the **Barnard-Seyfert Astronomical Society** as we watch the sky for the Geminid meteor shower, bright Mars, and a thin crescent Moon. Directions to Ridgefield are available on our website.

*For information about the Sudekum Planetarium
and Adventure Science Center, visit www.SudekumPlanetarium.com
For current night sky information, call AstroLine at 615-401-5092.*