



# February 2009

10:00 p.m. on February 1  
 9:00 p.m. on February 15  
 8:00 p.m. on March 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.

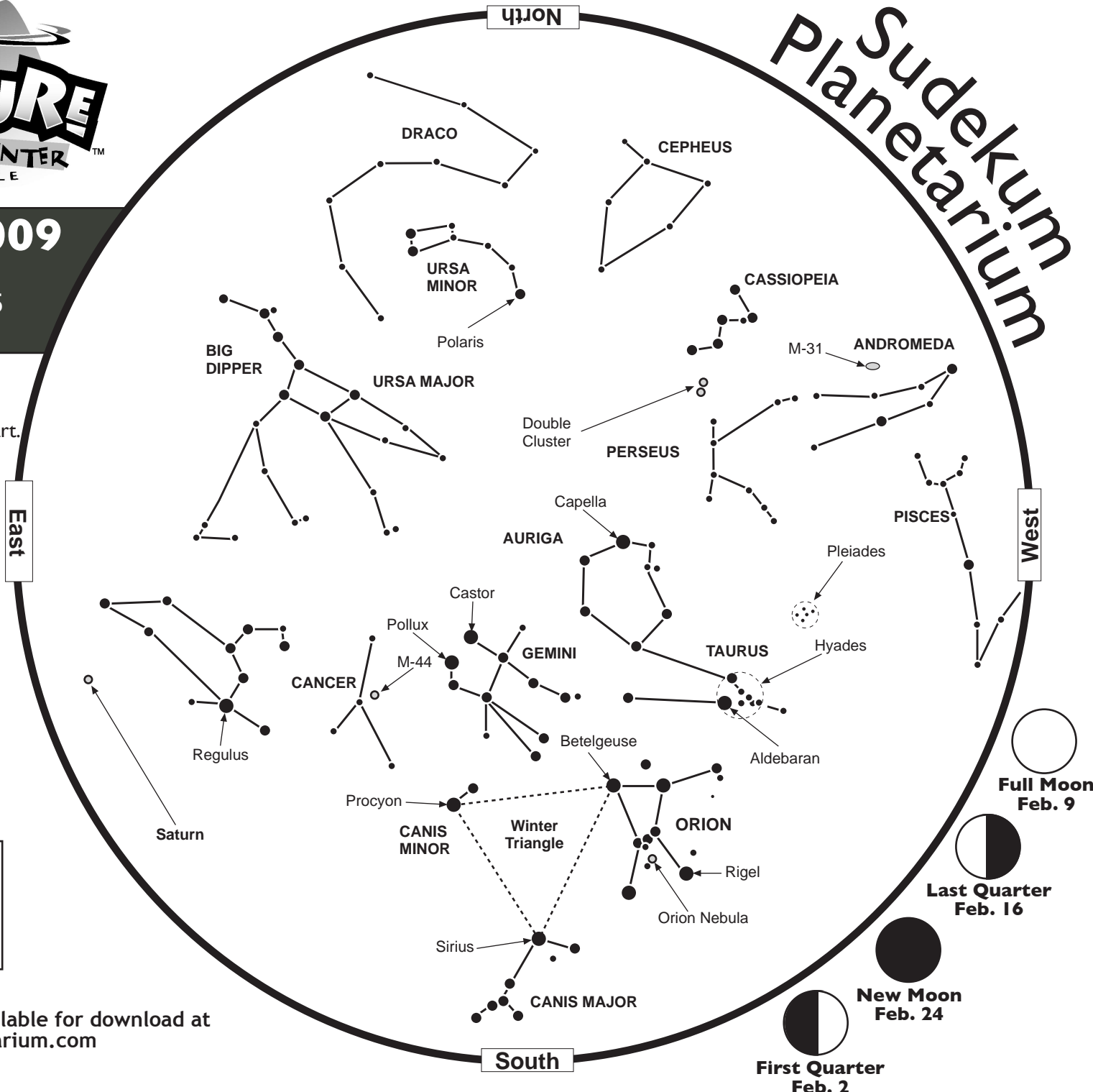
- **Bright Stars**
- **Medium Bright Stars**
- **Faint Stars**

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

- **Open Star Clusters:**  
 M-44 - The Beehive  
 M-45 - The Pleiades  
 "Double Cluster" between Perseus and Cassiopeia  
 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
February 1	6:48 AM	5:14 PM
February 15	6:34 AM	5:29 PM
March 1	6:17 AM	5:42 PM

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



Sudekum Planetarium

East

West

North

South

Full Moon Feb. 9

Last Quarter Feb. 16

New Moon Feb. 24

First Quarter Feb. 2

— THE NEW —  
**SUDEKUM  
PLANETARIUM**  
AT ADVENTURE SCIENCE CENTER

**February 2009**

**Venus, a Green Flash,  
And a Micro Dipper**

**Venus** has been blazingly bright in the western sky after sunset since September 2008. Now this 'evening star' is preparing to relinquish its rule, as it appears slightly lower in the west each night.

Careful observing through binoculars or a small telescope will reveal the same things **Galileo Galilei** saw 400 years ago when he first pointed his small telescope at the sky. Galileo saw that Venus shows phases, similar to Earth's Moon. From this, he correctly deduced that Venus orbits the Sun (not the Earth) and is closer to the Sun than the Earth.

Over the next few months, Venus will pass between the Earth and Sun. For right now, Venus appears as a thinning crescent in the evening sky. If have a clear view of the horizon, without trees or buildings in the way, watch closely at the moment Venus sets. You may just see the brilliant light from Venus refracted through the thick haze of Earth's atmosphere, resulting in a brief green or blue flash of light. Venus sets just before 9:00 PM early in the month and just after 8:30 PM by the end of the month.

On the evening of **February 27**, a slim **crescent Moon** will join Venus in the western sky. Impress your friends and neighbors by telling about this event in advance.

Another pretty pair to look for in binoculars will appear on the evening of **February 3**, when a **first quarter Moon** will pass close by the **Pleiades star cluster**.

Many people mistake the Pleiades for the **Little Dipper**, which can be found in the northern sky. Even so, the Pleiades could also be described as a kite or a micro-dipper.

The Pleiades are commonly called the **Seven Sisters**, but only six stars are visible to the unaided eye in this **open star cluster**. Through binoculars, more than 100 stars can be seen in this tiny patch of sky.

Normally, planets are easy to spot, like Venus, but that is not always the case. **Saturn** is currently near the rear end of **Leo the lion**, but it is unusually dim because we are currently seeing the rings of the planet edge-on. This alignment occurs every fifteen years. Without sunlight reflecting off the vast surface area of the rings, Saturn appears unexpectedly faint.



**The International Year  
of Astronomy:  
Great Observatories  
Image Unveiling**

Galileo, born February 15, 1564, began observing the sky through his small telescope in 1609, making this year the 400<sup>th</sup> anniversary of his discoveries that changed the world.

The Sudekum Planetarium and Adventure Science Center are proud to be one of 100 sites across the country to unveil two new mural-sized images taken by NASA's Hubble Space Telescope, Spitzer Space Telescope, and Chandra X-ray Observatory.

The stunning photographs of the spiral galaxy known as Messier 101 commemorate the International Year of Astronomy and will be unveiled at the **Adventure Science Center** in Nashville on **February 19, 2009**, at **7:30 pm** at the monthly meeting of the Barnard-Seyfert Astronomical Society.

One 6-by-3-foot image presents three striking full-color images that showcase the galaxy's features in the infrared light observed by Spitzer, the visible light observed by Hubble, and the X-ray light observed by Chandra.

Another 3-by-3-foot image of Messier 101 combines the view from all three telescopes

into one amazing composite. It's like seeing with your eyes, night vision goggles, and X-ray vision all at once!

A wealth of information and images from the Hubble Space Telescope can be found at <http://hubblesite.org/>. While they are not as well known as Hubble, anyone can access details about the Spitzer Space Telescope at <http://www.spitzer.caltech.edu/> and the Chandra X-ray Observatory details are at <http://chandra.harvard.edu/>.

**Party Under the Stars**

The next **FREE public star party** is set for **Saturday, February 28, 2009**, from **7:30 - 9:30 PM**, at **Shelby Bottoms Park**. Admission is **FREE**, but please call the Shelby Bottoms Nature Center at 862-8539 to reserve your place.

Be prepared to observe deep-sky objects such as the Andromeda Galaxy, the Orion Nebula, the Pleiades star cluster, and more. Telescopes are provided by members of the Barnard-Seyfert Astronomical Society (BSAS).

For directions, check the Sudekum Planetarium web site where you can find helpful tips for enjoying a star party. If it is cloudy or raining, the star party will be canceled. If the weather is questionable, visit our web site or call AstroLine at (615) 401-5092 before leaving home.

**Get a Daily Dose of Astronomy**

<http://365daysofastronomy.org/>

The 365 Days of Astronomy Project publishes one podcast per day, for all 365 days of 2009. The podcast episodes are written, recorded and produced by people around the world.

For information about programs and events at the Sudekum Planetarium and Adventure Science Center, visit [www.SudekumPlanetarium.com](http://www.SudekumPlanetarium.com)

For current night sky information, call AstroLine at 615-401-5092.