



# February 2012

10:00 pm on February 1  
 9:00 pm on February 15  
 8:00 pm 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**

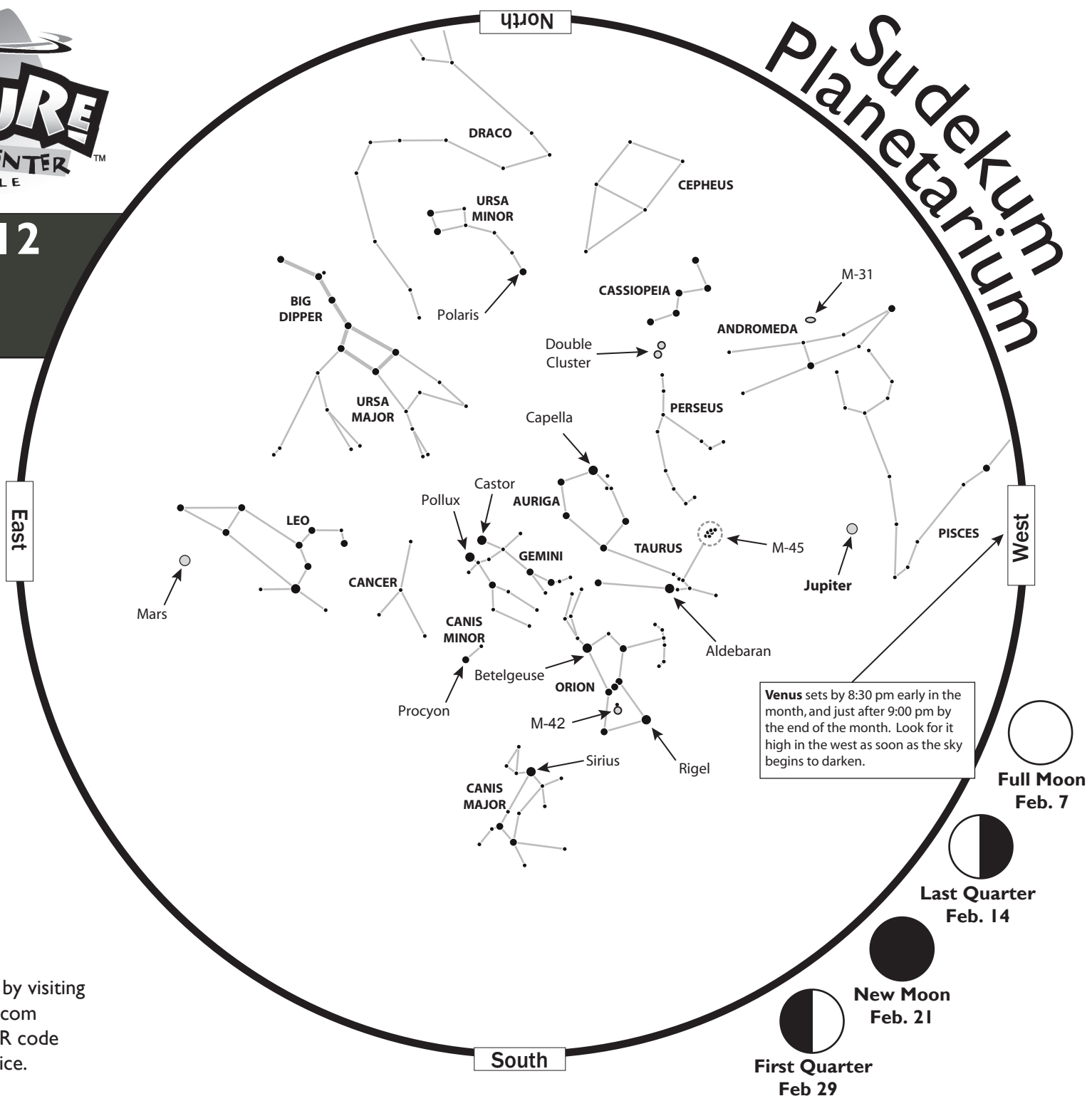
**Scan the sky with binoculars:** the darker the sky, the better.

- M-31: The Andromeda Galaxy
- M-42: The Orion Nebula
- M-45: The Pleiades open star cluster
- The Double Cluster in Perseus

From Nashville:		
	Sunrise	Sunset
Feb. 1	6:48 AM	5:13 PM
Feb. 15	6:35 AM	5:28 PM
Mar. 1	6:17 AM	5:42 PM



Find this chart online by visiting [SudekumPlanetarium.com](http://SudekumPlanetarium.com) or by scanning this QR code with your mobile device.



Venus sets by 8:30 pm early in the month, and just after 9:00 pm by the end of the month. Look for it high in the west as soon as the sky begins to darken.

# SUDEKUM PLANETARIUM

JUDITH PAYNE TURNER THEATRE

## February 2012

### Be a Planet Hunter

Brave the cold and look at the real sky on the next clear night! You don't even have to spend a long time outside. This month, you can find two planets and a constellation in the time it takes to get out of the car and into the house.

The first bright 'star' you'll find hovering in the twilight is the planet **Venus**, which drops below the horizon during mid-evening. Higher in the sky is the planet **Jupiter**, which will set in the southwest later in the evening.

At the start of the month, Venus will be about 30 degrees below Jupiter in the west. By the end of February, only 10 degrees will separate these two planets.

Impress friends and strangers on **February 25** when you identify the Venus near the **crescent Moon**. Convince them it's more than a fluke when you show them Jupiter near the Moon on **February 26**. Score more oohs and aahs when you bring out your binoculars to show them the Moon, the **Pleiades star cluster**, and more. Then, tell everyone to get their own FREE star chart, every month, from our web site.

Elusive **Mercury** will appear very low in the west during the last four days of the month. Just 30 minutes after sunset, Mercury will sit 10 degrees above the horizon. This means you need a clear view with no trees or haze. Scanning with binoculars makes it easier to locate Mercury before looking with your eyes.

As **February begins**, Mars rises at 8:30 pm near the tail of **Leo the lion**. As **March begins**, Mars and Leo will be rising at sunset, around 6

pm. This means you could see four planets in the sky at one time as the month comes to close. Bring your total to five by looking down for a *really* close-up view of planet Earth.

Come back outside later - after 1 am on **February 1**, or 11 pm on the **29<sup>th</sup>**, and you can also catch pale yellow **Saturn** in the east, right next to blue-white **Spica** in **Virgo the maiden**. The star and the planet appear about the same brightness but show very different colors.

While you are comparing colors, you might also compare Mars to the star **Betelgeuse** in the left shoulder of **Orion the hunter**.

### Be a Citizen Scientist

Light pollution threatens our "right to starlight", but also affects energy use, wildlife and health. **GLOBE at Night** is an international campaign to raise awareness of the impact of light pollution. Citizen-scientists measure night sky brightness and submit their observations online. Reports are compiled to make a map of light pollution levels around the world.

In the last six years, people in 115 countries have submitted 66,000 measurements. Anyone can participate by completing five easy steps.

- 1) *Find your location's latitude and longitude.*
- 2) *Find Orion or Leo by going outside more than an hour after sunset (about 8-10pm local time).*
- 3) *Compare your nighttime sky to one of the Globe At Night magnitude charts and select the one which most closely matches what you see.*
- 4) *Report your observation.*
- 5) *Compare your observation to thousands of others from around the world.*

There are three chances to participate in the coming months: February 12-21, March 13-22, and April 11-20, 2012. Download finder charts, a phone app, and more at [globeatnight.org](http://globeatnight.org)

### Meet Other Astronomy Enthusiasts

The **Barnard-Seyfert Astronomical Society** (BSAS) meets on the **third Wednesday of every month from 7:30 to 9:00 pm** at the Cumberland Valley Girl Scout Council Building at 4522 Granny

White Pike. Visitors are always welcome. For more information about the club and to learn about this month's guest speaker, visit [bsasnashville.com](http://bsasnashville.com)

### Look Through a Telescope

The next **FREE public star party** is set for **Saturday, February 25 from 7:30 to 9:30 pm** at the **Shelby Bottoms Nature Center** in East Nashville. Members of the **Barnard-Seyfert Astronomical Society** (BSAS) will set up telescopes to provide views of Jupiter, Mars, the Pleiades, the Orion Nebula, and more.

Star parties depend on good weather. If it's cloudy, the event will be cancelled. Please check our website for upcoming star parties and updates before traveling, and don't forget to **dress warmly!**

### Expert + Coffee = Science Cafe

On the third Thursday of each month, Adventure Science Center hosts a Science Cafe, at different locations around town.

On **Thursday, February 16, from 7 to 8 pm**, **Jason Wright, senior meteorologist with the National Weather Service**, will be at **Adventure Science Center** to discuss severe weather. Questions about how weather patterns are observed, interpreted and predicted are sure to come up, as well as how weather has changed over the years.

Then, at 8:15 pm, the **Sudekum Planetarium** will get you close to volcanoes, earthquakes and tornados in **Forces of Nature**. Tickets for this show will be just \$4 per person.

Check our website for upcoming speakers related to the premiere of **Natural Selection: Darwin's Mystery of Mysteries**, opening in the Sudekum Planetarium **March 1, 2012**.

### Take a Leap on Leap Day

What are the rules for determining leap years? Why do we even have leap years? Visit [timeanddate.com/date/leapyear.html](http://timeanddate.com/date/leapyear.html) for a simple explanation.