



June 2006

11:00 p.m. on June 1
 10:00 p.m. on June 15
 9:00 p.m. on July 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 clusters:

- M-13 in Hercules
- M-4 in Scorpius
- M-5 in Serpens

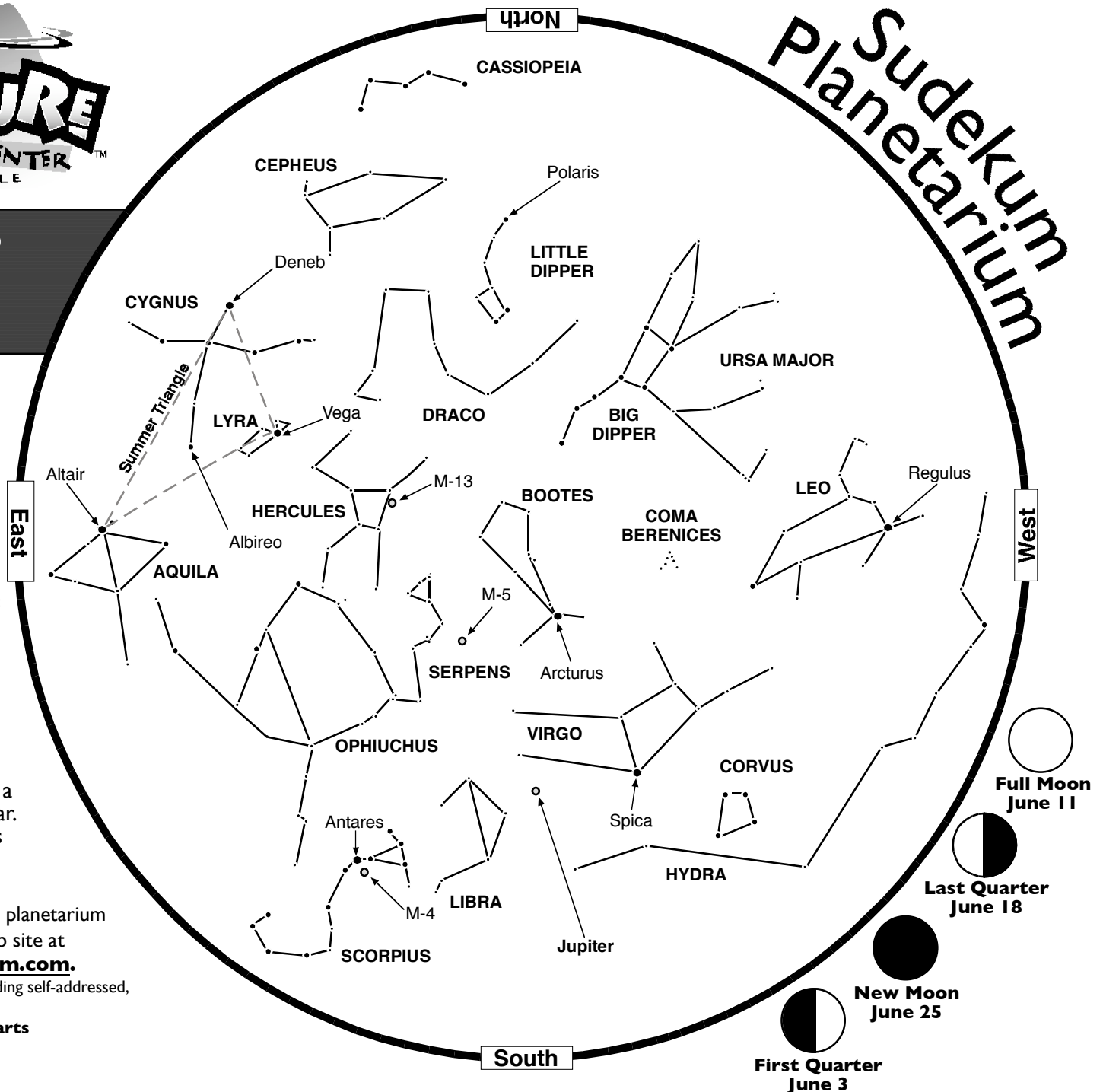
Look at the star Albireo through a telescope. It's actually a double star. One star is blue and the other is yellow.

Monthly star charts, feature articles, and planetarium show schedules are available on our web site at

www.SudekumPlanetarium.com.

You may also receive monthly star charts by sending self-addressed, stamped envelopes (one per flyer) to:

Sudekum Planetarium Star Charts
 800 Fort Negley Blvd.
 Nashville, TN 37203-4899





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So Long Saturn, June is for Jupiter

Way back in the fall of 2005, Mars was spectacular in the evening sky. Now, it's just a faint, pink dot low in the west-northwest after sunset. It will be much easier to find on the evening of **June 17** because **Saturn** will be shining nearby. Both planets will require some effort to find as they are soon to be setting with the Sun and lost in the glow of twilight.

Even though they will be gone, they are not easily forgotten. In fact, armchair astronomers can explore Mars and Saturn from the air-conditioned, bug-free confines of home using the internet. Those robust rovers, **Spirit** and **Opportunity**, continue their adventures on Mars. You can get all the latest details at their website <http://marsrovers.jpl.nasa.gov>. As of this writing, Spirit is hunkering down for another long, cold Martian winter. Meanwhile, Opportunity's wheels dug into loose soil during a drive on sol 833 (May 29, 2006). Can it escape? Log on to find out what happens.

In addition to the rovers, there are FOUR active spacecraft in orbit at Mars. **Mars Global Surveyor** (MGS) arrived in 1997; **Mars Odyssey** in 2001; **Mars Express** in 2003, and **Mars Reconnaissance Orbiter** (MRO) in 2006. MRO is currently aerobraking through Mars' atmosphere to finalize its orbit. In addition to relaying information from the rovers on the surface, each of the orbiters are performing a great variety of scientific studies. There is a tremendous amount of news at <http://mars.jpl.nasa.gov/>.

Less publicized but just as exciting are the activities of the **Cassini** spacecraft orbiting

Saturn. Cassini is conducting a VERY detailed survey of Saturn and its moons. Of special interest is Saturn's largest moon, **Titan**. Upon arrival at Saturn in 2004, the **Huygens probe** was released so that it could descend through Titan's thick atmosphere and discover what lies beneath that murky haze. To see some incredible images and follow the mission's progress go to <http://saturn.jpl.nasa.gov>.

If you do want to get out and see a real planet, **Jupiter** (bet you thought we'd never get to it) is THE bright star in the southern sky after the Sun goes down. It practically grabs your attention. Of course, an easy way to tell the difference between the stars and the planets is to remember that usually, stars twinkle, while planets don't. That, and Jupiter is the brightest thing visible in the night sky right now, except for the Moon.

Through binoculars, Jupiter will appear as a bright white disk. Look carefully, and you might be able to see as many as four tiny dots close to the disk of the planet. These are four of Jupiter's largest moons, called the **Galilean satellites** because they were first observed by Galileo way back in 1610. In fact, your binocular view is similar to what Galileo would have seen almost four hundred years ago. Try watching those moons carefully over the course of several nights, and you can watch them change position as they orbit around Jupiter.

A completely different Galileo took a close up look at Jupiter from 1995 to 2003. The **Galileo** spacecraft (<http://galileo.jpl.nasa.gov/>) orbited the giant planet observing its atmosphere, the rings, and its dozens of moons. Unfortunately, the spacecraft's high gain antenna did not fully deploy, drastically lowering the amount of data it could send back to Earth. Even so, Galileo returned the most stunning and detailed views we have of the largest planet in our solar system.

Nine Planets - And Counting

How many planets are there in our solar system? Nine, right? Or is it eight? Maybe it's ten, or twelve, or more. And just what IS a planet, anyway? These are questions that have been on our minds lately, because the staff of the Sudekum Planetarium has just completed production of a new, original program called - you guessed it - **Nine Planets And Counting**.

This new show not only explores the planets in our neighborhood, it addresses that nagging question of just how many 'planets' there are in the solar system. With the discovery of new and bigger objects out beyond Neptune, it seems that this conundrum is on many people's minds - old and young alike.

Nine Planets and Counting is offered seven days a week through the end of August. Check our website for a complete schedule and information about other programs and events in the Planetarium and at Adventure Science Center.

So how many planets are there? Take our tour of our solar system, and see for yourself. The answer may surprise you.

Summer Star Party

The next FREE public star party is scheduled for **Saturday, August 12, 2006 from 8:30 - 10:30 pm** at the **Special Events Field at Edwin Warner Park**. Members of the Barnard-Seyfert Astronomical Society (BSAS) will provide telescopes and commentary on the Moon, planets, and other objects that might be visible. Mark your calendar, and hope for clear skies! For more about BSAS, visit <http://www.bsasnashville.com>.

For a full list of events and more info, visit <http://www.SudekumPlanetarium.com>.

For information about programs and events at the Sudekum Planetarium and Adventure Science Center, visit www.SudekumPlanetarium.com

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