

**Evening planets:** Venus attains gr elongation 46° E of Sun on Aug. 19, yet is quite low at dusk, in W to WSW as month progresses. The brilliant planet of mag. -4.3 to -4.6 sets only 1.9 hours to 1.5 hours after Sun, from lat. 40° N. Using telescope, observe Venus around sunset, or even earlier, to follow its changing phase: On Aug. 1, it's gibbous, 58 percent illuminated and 1/3 arcminute across; on Aug. 31, it's a crescent, 42 percent lit, grown to nearly 1/2 arcmin across. On what date will Venus appear exactly half full? Venus passes Saturn on Aug. 7, Mars on Aug. 18, and Spica on Aug. 31; see calendar. **Saturn**, near mag. +1.1, appears 7° UL of Venus on Aug. 1, within 2.8° N (UR) of Venus on Aug. 7, to 20° LR of Venus on Aug. 31. The slowly opening rings are tipped 4.0° from edgewise at midmonth. **Mars**, now faint at mag. +1.5, appears 7° UL of Venus and 2° LL of Saturn on Aug. 1, goes 1.9° N (UR) of Venus on Aug. 18, and ends ~ 4° UR of Venus and Spica on Aug. 31. **Don't miss gathering of Venus-Mars-Saturn on Aug. 7 and surrounding days!** On five evenings during July 31-Aug. 18 the three bodies form a nearly isosceles triangle, with the stated planet at the vertex (equidistant from other two) on following dates: Jul. 31 (Venus); Aug. 5 (Saturn); Aug. 7 (Mars); Aug. 10 (Venus); and Aug. 18 (Saturn). **Mercury** is very low, just N of W at dusk in first two weeks, fading from mag. +0.1 to +0.6 while staying 18°-20° LR of Venus. Viewers across southern U.S. can follow it longer, but it fades to mag. +1 on Aug. 18, and to +2 on Aug. 24. **Bright Jupiter** rises nearly due E about 2.3 hours after sunset on Aug. 1, narrowing to 0.9 hrs after on the 31st, from lat. 40° N. On latter date, Jupiter rises 16 min. before Saturn sets, allowing observation of both planets about 1° above horizon one hr after sunset.

**Dawn:** **Jupiter**, approaching its Sept. 21 opposition, brightens from mag. -2.7 to -2.9 in August. It is already past S at dawn on Aug. 1 and passes through SSW and SW toward WSW as August progresses. From late evening until morning twilight begins, binoculars show 5.7-mag. **Uranus** nearly 3.1° W of Jupiter on Aug. 1, to 1.8° W on the 31st.

**The Moon** is New Aug. 9 at 11:08 p.m. EDT. First unaided-eye view of Moon of Ramadan for U.S. occurs in Hawaii on Aug. 10 about 20 min. after sunset, with thin crescent 5° N of W and 12° LR of Mercury. Rest of U.S. must wait until at least Aug. 11. **Moon, four planets, and Spica:** See Aug. 11-14. After passing Full on Aug. 24, a waning gibbous Moon passes Jupiter on night of Aug. 26.

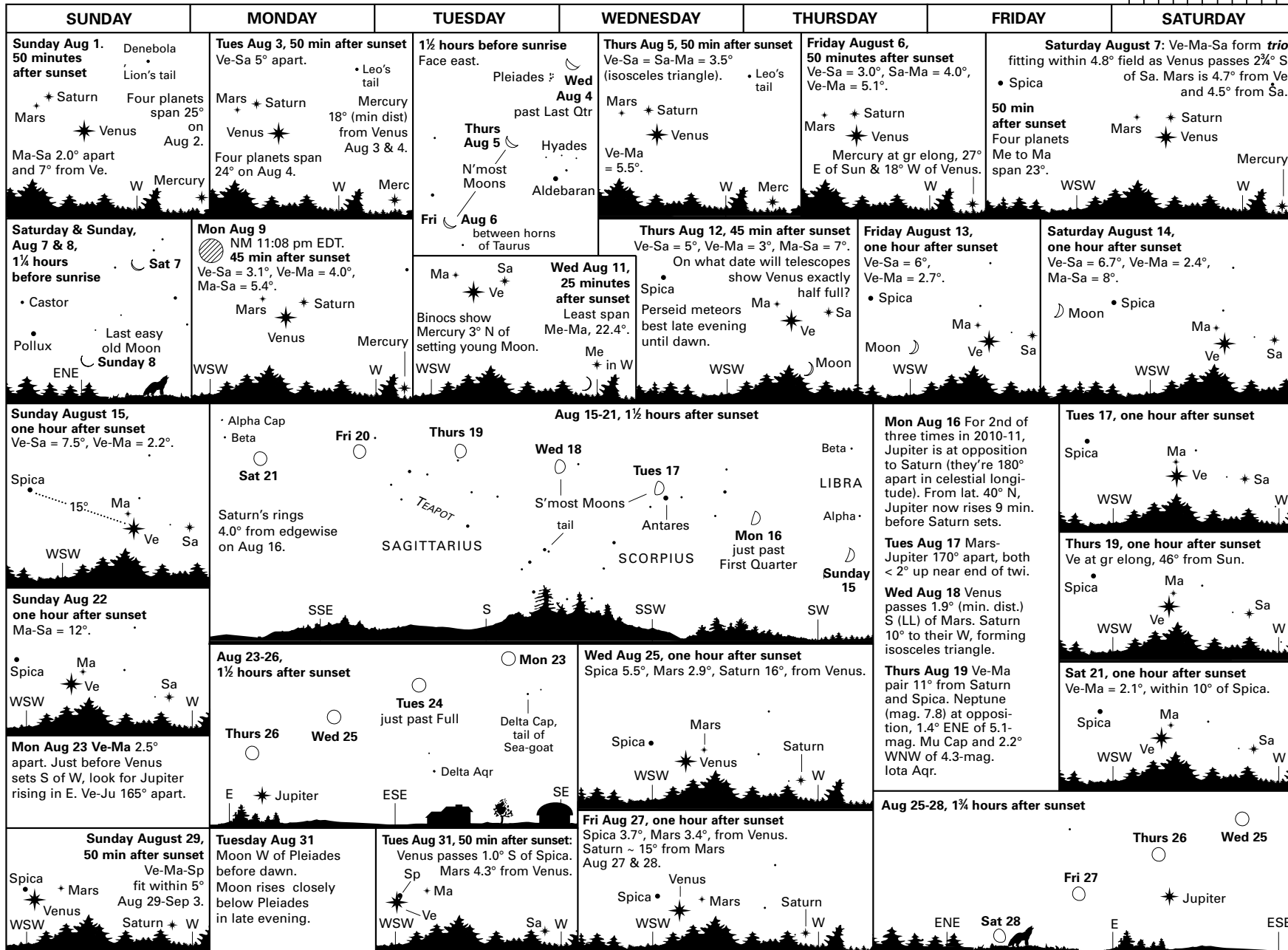
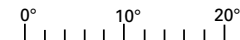
**Planetarium business office:**  
(517) 355-4676

**Night Sky Notes** on World Wide Web:  
<http://www.pa.msu.edu/abrams/nightskynotes/>

# ©ABRAMS PLANETARIUM SKY CALENDAR AUGUST 2010

An aid to enjoying the changing sky

Use this scale to measure angular distances between objects on diagrams below.



Robert C. Victor, Patti Toivonen  
ISSN 0733-6314

**Subscription:** \$11.00 per year, starting anytime, from *Sky Calendar*, Abrams Planetarium, Michigan State University, East Lansing, MI 48824

# August Evening Skies

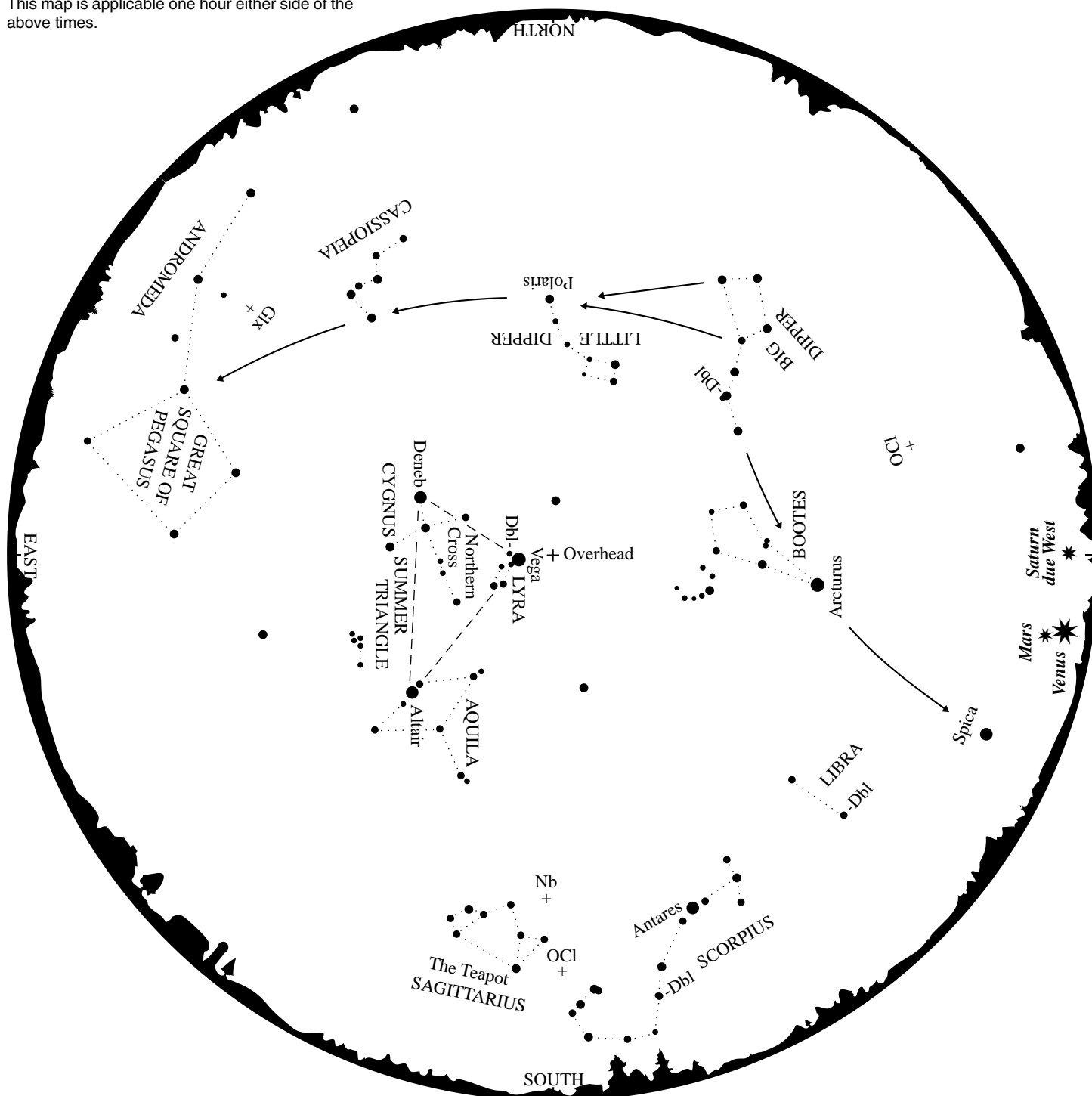
This chart is drawn for latitude 40° north, but should be useful to stargazers throughout the continental United States. It represents the sky at the following local daylight times:

Late July	11 p.m.
Early August	10 p.m.
Late August	9 p.m.

This map is applicable one hour either side of the above times.

© 2010 Abrams Planetarium

**Subscription:** \$11.00 per year, from *Sky Calendar*, Abrams Planetarium, Michigan State University, East Lansing, MI 48824-1324.



The planets Venus, Mars, and Saturn are plotted at map time, mid-August 2010. Eight objects of first magnitude or brighter are visible. In order of brightness they are: Venus, Arcturus, Vega, Altair, Antares, Spica, Saturn, and Deneb. In addition to stars, other objects that should be visible to the unaided eye are labeled on the map. The double star (Dbl) at the bend of the handle of the Big Dipper is easily detected. The double star in Scorpius is somewhat harder. Much more difficult is the double star near Vega in Lyra.

The open or galactic star cluster (OCI) known as Coma Berenices, "The Hair of Berenice," is located between the horizon and Bootes. A more compact open cluster is located between Sagittarius and the "tail" of Scorpius. Nearby, marked (Nb) above the "spout" of the "teapot," is the Lagoon Nebula, a cloud of gas and dust out of which stars are forming. The position of an external star system, called the Andromeda Galaxy, is also indicated (Glx). Try to observe these objects with unaided eye and binoculars.

—D. David Batch