

November Evening Skies

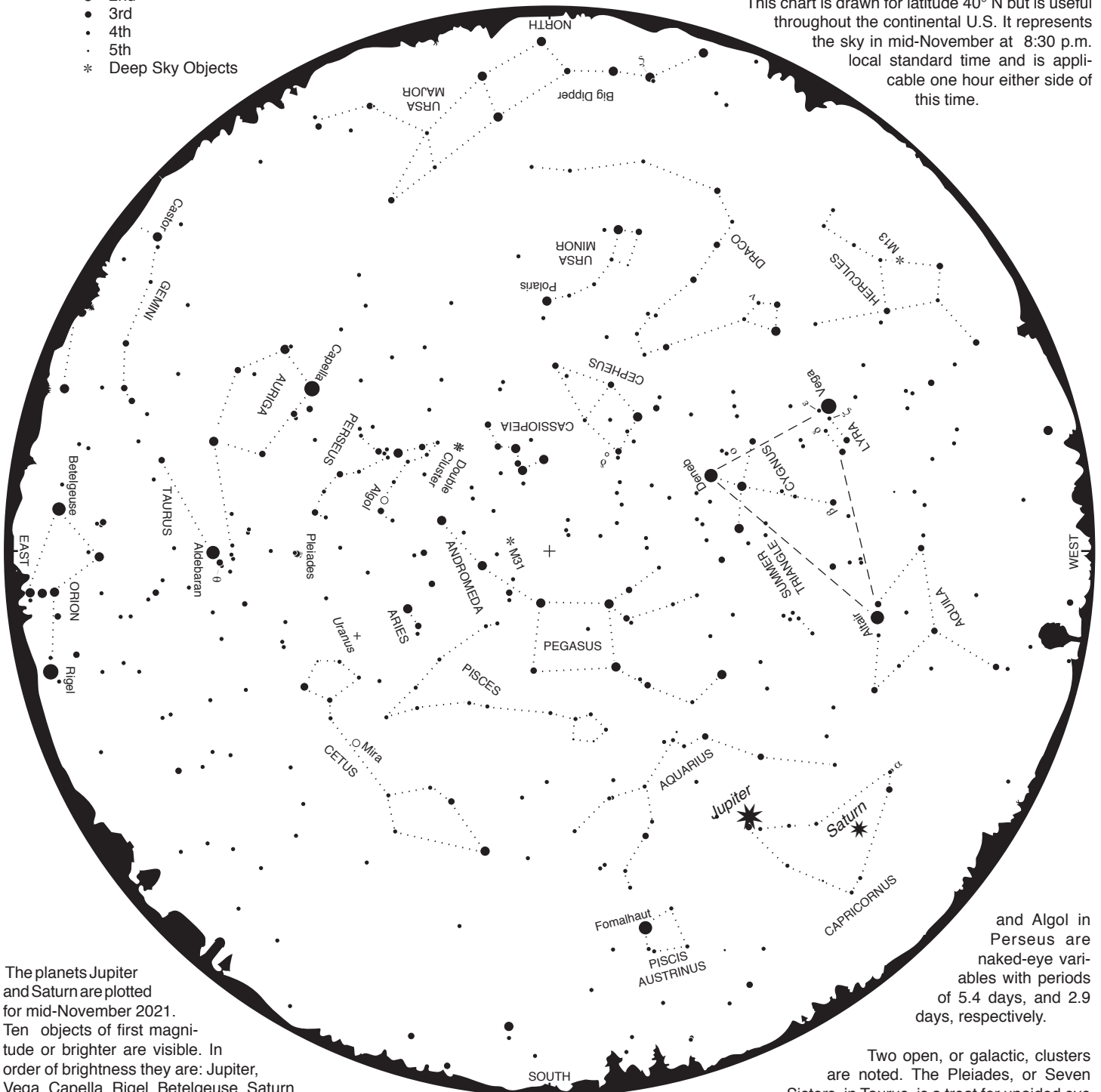
LEGEND Star Magnitudes

- Zero or brighter
- 1st
- 2nd
- 3rd
- 4th
- 5th
- * Deep Sky Objects

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This chart is drawn for latitude 40° N but is useful throughout the continental U.S. It represents the sky in mid-November at 8:30 p.m. local standard time and is applicable one hour either side of this time.



The planets Jupiter and Saturn are plotted for mid-November 2021. Ten objects of first magnitude or brighter are visible. In order of brightness they are: Jupiter, Vega, Capella, Rigel, Betelgeuse, Saturn, Altair, Aldebaran, Fomalhaut, and Deneb.

Our usual monthly maps are designed for stargazers just beginning to find their way around the sky. This month's map is useful for serious stargazers from dark locations. It contains many more stars, inclusive to magnitude 4.5, and some fainter stars as needed to complete patterns or assist in locating special objects.

A selection of double stars (labeled with Greek letters) and "deep sky objects" is also plotted. All are visible with modest equipment; most are within the range of the unaided eye or binoculars.

The double stars, in order of decreasing angular separation, are ζ UMa, δ Lyr, α Cap, ο Cyg, θ Tau, ε Lyr, ν Dra, ζ Lyr, β Cyg. The stars δ in Cepheus,

and Algol in Perseus are naked-eye variables with periods of 5.4 days, and 2.9 days, respectively.

Two open, or galactic, clusters are noted. The Pleiades, or Seven Sisters, in Taurus, is a treat for unaided eye and binoculars. The Double Cluster in Perseus is a fine object if the sky is dark.

M31 is the famous Andromeda Galaxy, a collection of 300 billion stars located 2.5 million light years from Earth. It is barely visible to the unaided eye as a smudge of light. Binoculars in a dark location reveal an impressive oval.