January is a Great Time to Observe the Pleiades

- a January 2027 Sky Event from the Astronomy Club of Asheville



At a mere 440 light years away, the **Pleiades** open (galactic) star cluster is one of the closest star groupings of its kind to our solar system. The cluster's very young, hot stars are easily seen with your unaided eyes, and they are often confused and mis-identified as the "Little Dipper" asterism. How many of the Pleiades stars can you see with your unaided eyes? Under clear, dark skies, most folks will see five, although some claim to see seven – hence the cluster's other name the "Seven Sisters". With binoculars or a small telescope, many more stars (all members of the cluster) shine wonderfully into view.

The estimated 1,000+ young stars of the cluster have a similar origin (they're cosmic "siblings") – forming together about 120 million years ago from the same "cloudy" star-forming region. As seen from Earth, the Pleiades are the brightest open star cluster in the night sky!

Mythology reveals that the seven sisters are all children of the Titan Atlas and the ocean nymph Pleione – from whom the star group takes its name. The 7 sisters are named: Maia, Electra, Taygete, Alcyone, Sterope, and Merope.

Located in the zodiac constellation Taurus, the Bull, this spectacular star cluster is found high in the sky during the early evening hours of January.
Look for it above the constellation Orion, the Hunter. Use binoculars to let its splendor warm you on these cold winter nights.

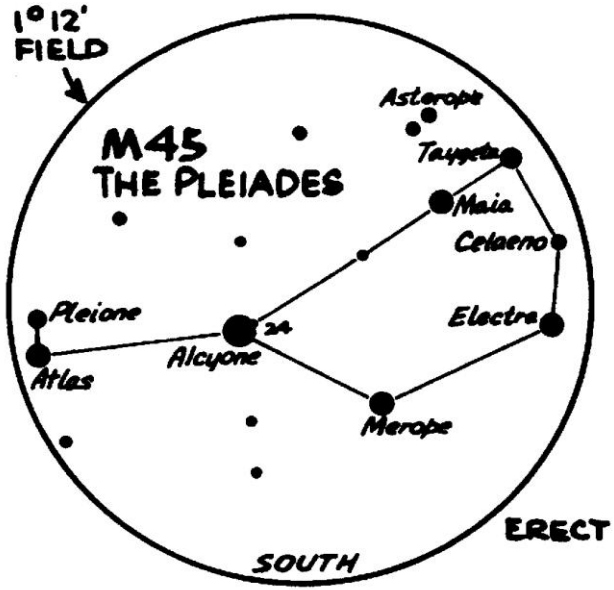


The Pleiades or Seven Sisters

The Pleiades: one of the closest open (or galactic) star clusters to Earth

- 440 light years away
- 35 light years across
- 120 million years old (very young!)
- Pleiades star Alcyone is 1,000 times more luminous than our Sun

> *The numbers, to the right of the star names, represent their visual magnitudes. The lower the number, the brighter the star appears. Alcyone is the brightest Pleiad, and Asterope is the faintest.*



The PLEIADES – WELL-KNOWN OPEN CLUSTER MAKES A PRETTY PICTURE at 50x

THE PLEIADES (*PLEE-uh-deez*)

SEVEN SISTERS

ALCYONE... *al-SIGH-oh-nee*	3.0
ASTEROPE.. *as-TAIR-oh-pee*	5.9
CELAENO... *seh-LEE-noe*	5.4
ELECTRA.... *eh-LEK-tra*	3.8
MAIA..... *MY-uh*	4.0
MEROPE... *MARE-oh-pee*	4.3
TAYGETA... *tah-IJ-ah-tah*	4.4
PLEIONE.. *plee-OH-nee*	5.1
ATLAS..... *AT-lus*	3.8

PLEIONE IS MAMA AND ATLAS IS PAPA. STAR № 24 (MAG 8) MAKES A WIDE DOUBLE WITH ALCYONE AT 117 SECONDS