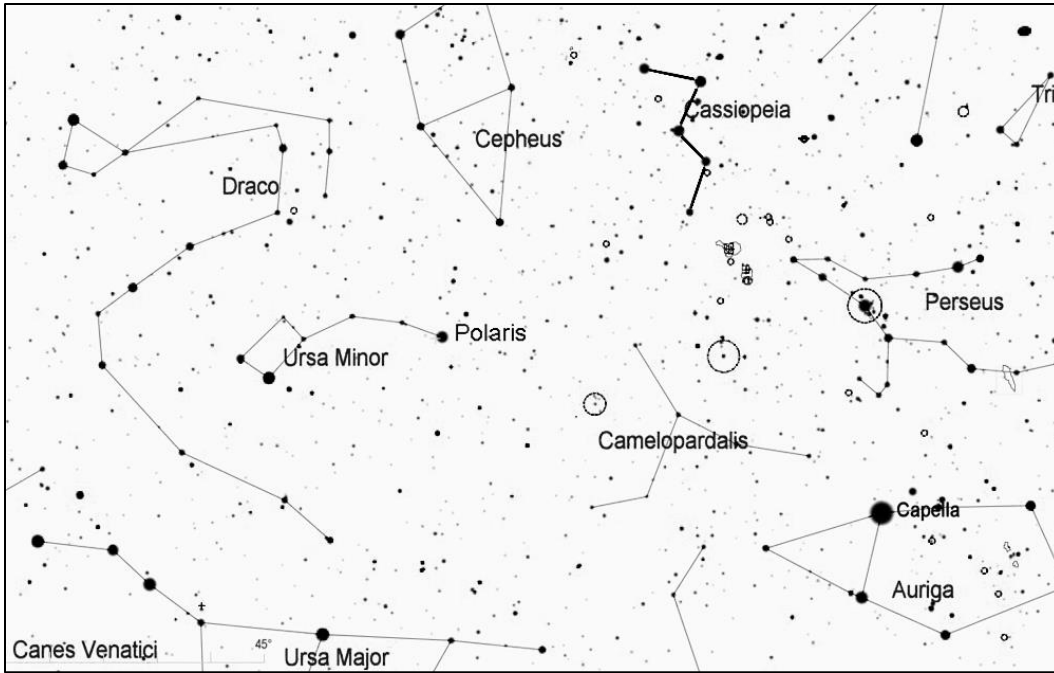


Achird (η Cassiopeiae), Double Star

Achird, or eta (η) Cassiopeiae, is an interesting double star for several reasons. First, it is relatively nearby at a distance of just 19.4 light years; only a few dozen stars are closer. Second, the brighter star of the pair is approximately the same size and brightness as our Sun. Third, the two stars display contrasting colors, which some have described as yellow and purple. The two stars are about 71 astronomical units apart. (An astronomical unit is the distance from the Earth to the Sun).



Find the constellation Cassiopeia, which can be recognized by its distinctive "W" shape (although its orientation changes at different times of year as it circles the north celestial pole). On fall evenings, look for Cassiopeia in the northeast, where its tilt makes it look like a "3", and in the winter look high in the north above Polaris, where it is oriented like an "M".

Once you have located Cassiopeia, Achird is easy to see with the naked eye. Look for a "sixth star" that is near the second angle of Cassiopeia's W shape, as indicated below. A telescope with magnification of at least 50x is needed to see that there are two stars, one much dimmer than the other. Use higher power to get a better view.

