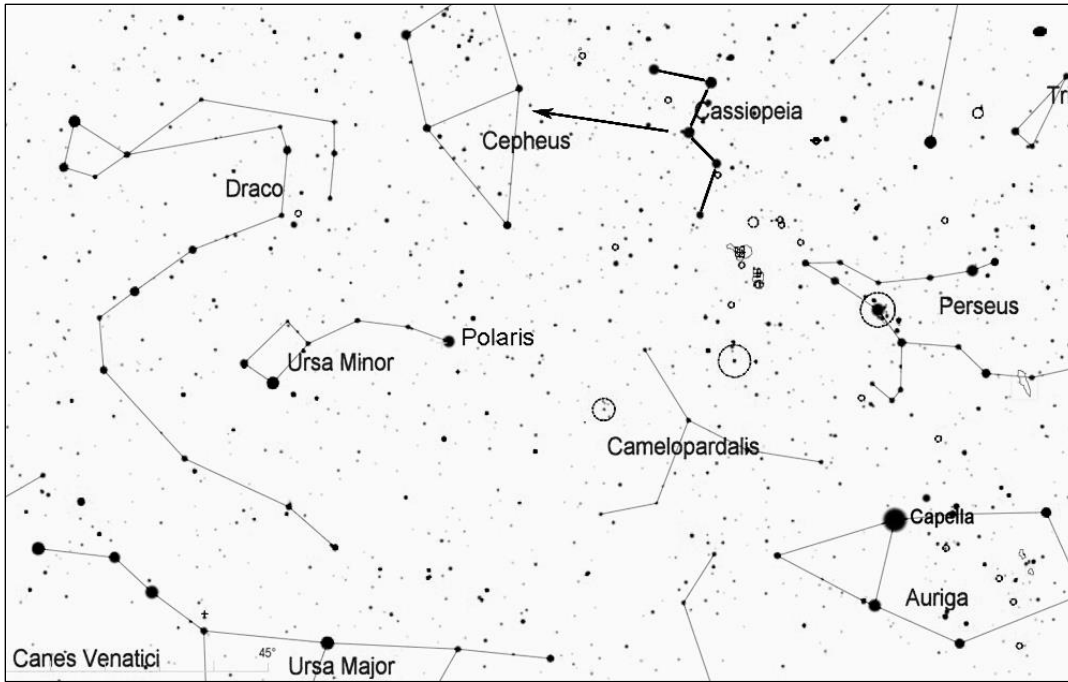


NGC 7023 (Caldwell 4), Iris Nebula in Cepheus

NGC 7023, sometimes called the Iris Nebula, is an example of a reflection nebula--the dust in this nebula shines simply by reflecting the light of the star its center (a magnitude 7 star that appears much brighter than the nebula through the eyepiece). The nebula is large in extent, more than 1/4 degree in width, but only the brighter center may be visible through a telescope. It is about 1300 light years away.



Find the constellation Cassiopeia, which has a 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".

As shown below, use the stars of Cassiopeia to direct you to the nearby constellation Cepheus. It has the shape of a house with a pointy roof, though the house appears upside down when Cepheus is high in the sky above Polaris.

First locate the upside-down house formed by the five brightest stars of Cepheus. Visualize a line down the side of the pointy roof that is away from Cassiopeia, and extend this line about 3 degrees from the end of the roof. This is the location of the Iris Nebula. The nebula is centered on a 7th magnitude star, and it is brightest in the center and much dimmer around the edges.

