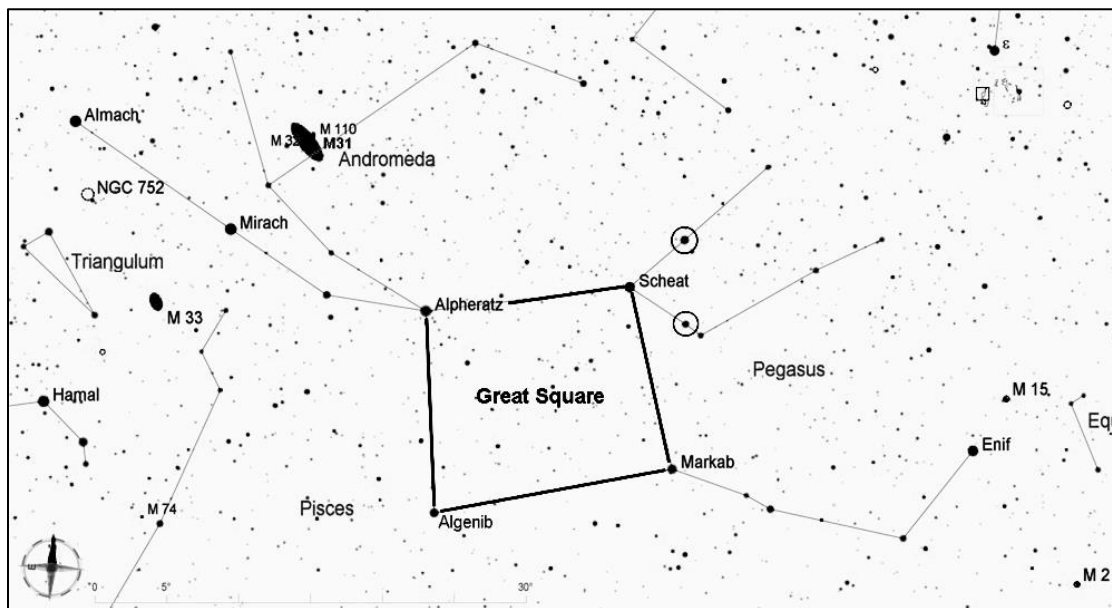


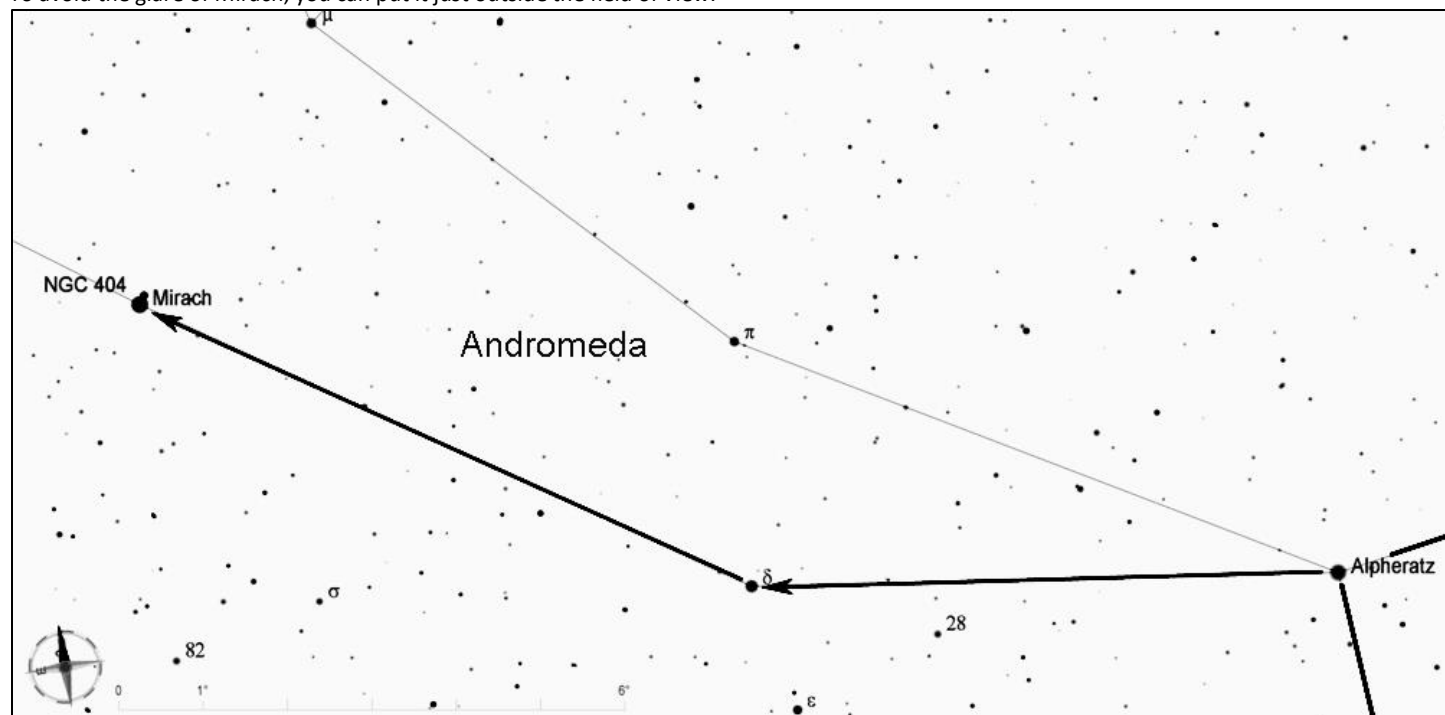
## NGC 404, Mirach's Ghost, Galaxy in Andromeda

NGC 404 is classified as a lenticular galaxy, one that is somewhere between a spiral galaxy and an elliptical galaxy. It appears as a round glow with a much brighter center when viewed through a telescope at medium to high power. It is very easy to find because it is so close to the bright star Mirach (both seen in the picture here). Despite the presence of the bright star, the 10th magnitude galaxy is surprisingly easy to see through a telescope of medium or large aperture. The galaxy is about 10 million light years away.



Start by finding the Great Square of Pegasus, which rises in the eastern sky during the early fall evenings, is high overhead later in the fall, and sinks in the western sky during early winter. To be sure you know how the square is oriented in the sky, look for the two stars outside the northwest corner of the square (circled in the chart here) that form a small triangle with Scheat.

The constellation Andromeda stretches to the northeast from the Great Square, starting at the second-magnitude star Alpheratz. Using the naked eye, look to the east of Alpheratz for the star delta ( $\delta$ ) Andromedae, then move on to the brighter star Mirach. NGC 404 is just 7 arcminutes (about 1/10 of a degree) northeast of Mirach, so the bright star and dim galaxy should be visible together through a telescope, even at high magnification. To avoid the glare of Mirach, you can put it just outside the field of view.



From [www.skyledge.net](http://www.skyledge.net) by Jim Mazur. Star charts created with *Cartes du Ciel*.