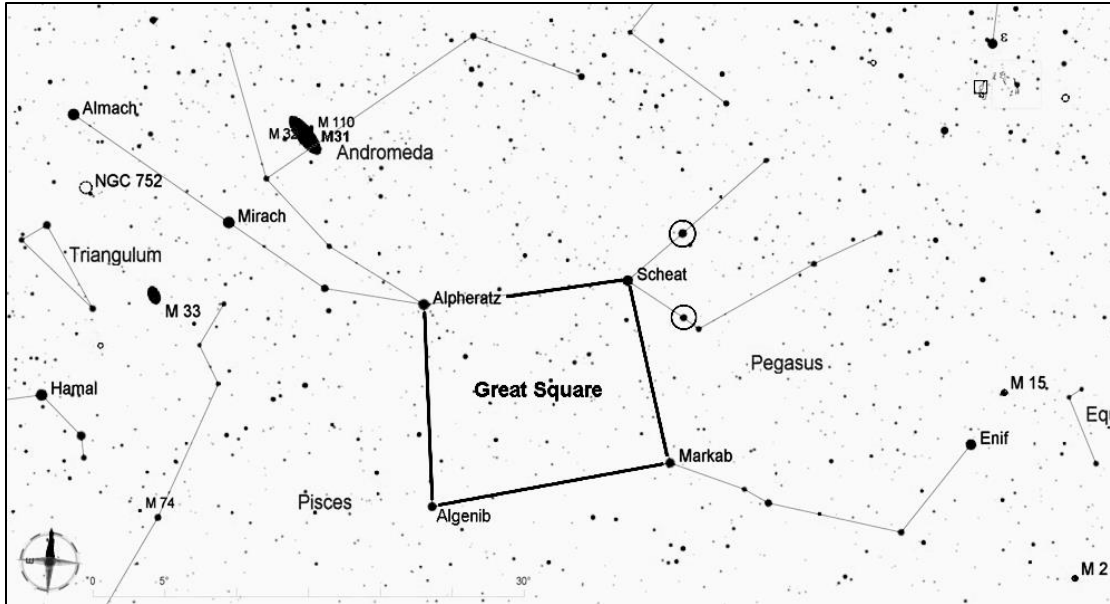


## Almach ( $\gamma$ Andromeda), Double Star

Almach, or gamma Andromedae, is a pretty double star, about 390 light years away. The brighter of the pair is a yellow star of magnitude 2.2, and the dimmer is a blue star of magnitude 5.0. The two stars are separated by 9.8 arcseconds. The blue star itself is a close double, but its two components are very close (averaging 0.3 arcseconds as they orbit every 63 years). It would take a large telescope and excellent seeing conditions to split the two components of the blue star.



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, follow the stars of Andromeda east to Almach, which shines brightly at magnitude 2. Use a telescope with magnification of at least 50x to get a decent view of this close pair of stars.

