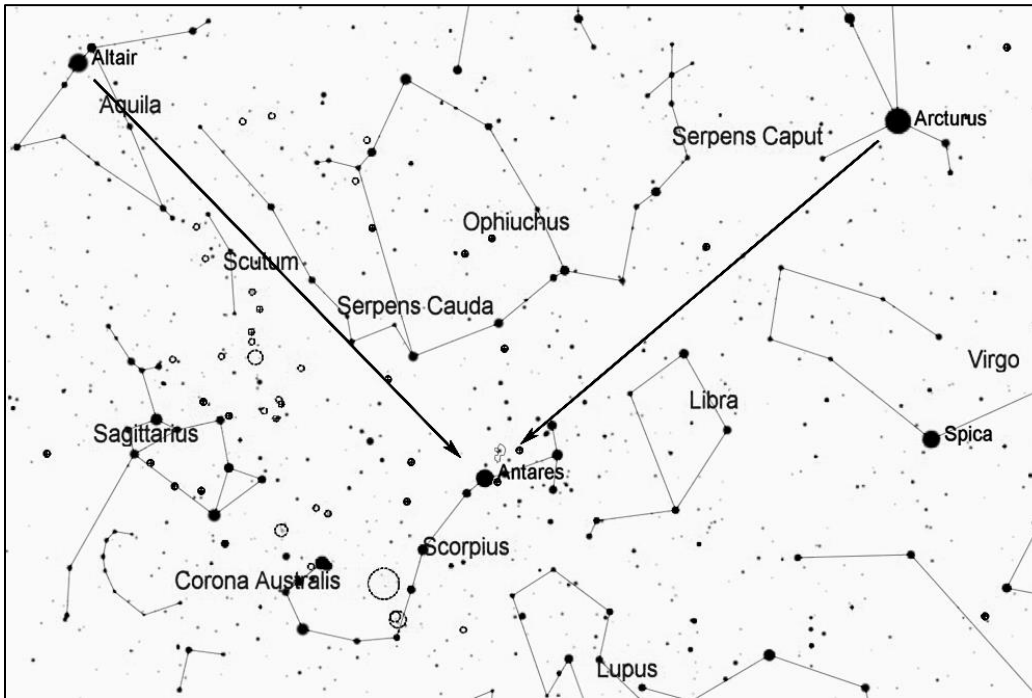


## Messier 19 and 62, Globular Clusters in Ophiuchus

Both of these globular clusters are about magnitude 7.2, making them easy targets for any telescope. Most globular clusters are roughly round and symmetrical, but these two are exceptions. M19 is noticeably oblong in the north-south direction, and bright core of M62 appears to be off-center. With a medium or large scope, some individual stars can be resolved in both clusters.



Start by finding first magnitude Antares, the brightest and reddest star low in the southern sky on summer evenings. To get oriented, note that Antares is about 60 degrees southwest of Altair (part of the Summer Triangle) and a similar distance southeast of Arcturus (part of the Spring Triangle). Antares represents the eye of Scorpius, and on a clear night you should be able to see the curving shape of the scorpion if you have a good view of the southern horizon.

From Antares, look about 12 degrees to the east for 3rd magnitude  $\theta$  (theta) Ophiuchi. M19 is a little more than half way from Antares to  $\theta$  Ophiuchi. To help locate M19, note its position with respect to three pairs of stars of magnitudes 6 and 7 that are circled in the chart below and can be easily seen in a finderscope or binoculars. After observing M19, move 4 degrees south to find M62.

