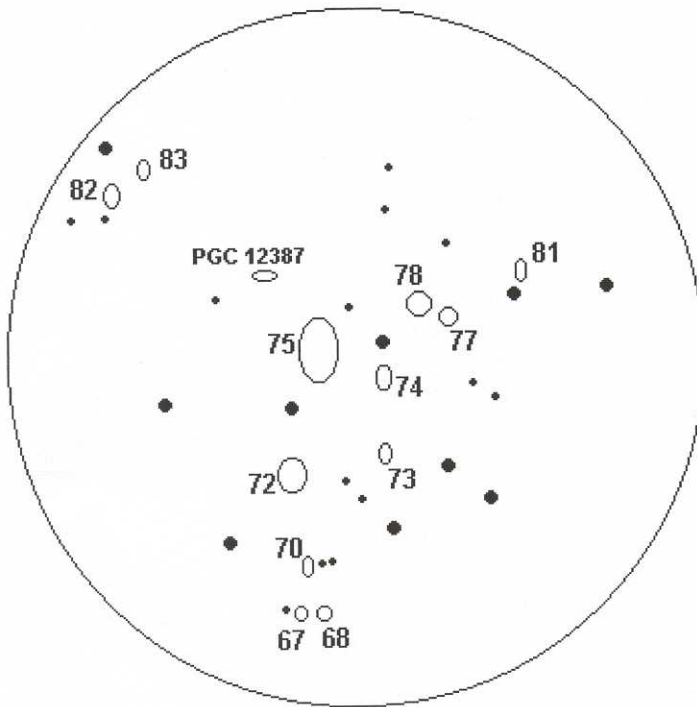


Perseus A Galaxy Identification and Notes

All galaxies are NGC objects, numbered NGC 12xx, except for PGC 12387. This observation was with the 10" scope, scaled view with 12mm (119x eyepiece), but details are filled in at high power, using the 7.5mm eyepiece (190x). To see all the galaxies in this view took an observation of 1 hour and 10 minutes, under very nice skies, though aurora was always present, brightening later in the observations. Magnitudes quoted are from Guide 7.

The easiest galaxy is NGC 1275 (m.12.4). It is oval, and slightly brighter to middle, but otherwise homogeneous. Second easiest is NGC 1272 (m.12.8), homogeneous and ghostly.



All other galaxies can also be called ghostly – faint wisps, and mostly featureless, except for their outside oval or roundish shapes. The exception is NGC 1267, which has a bright and very stellar nucleus. NGC 1278 (m.13.4), NGC 1274 (m.14.9), NGC 1273 (m.14.3), NGC 1282 (m.13.7), NGC 1267 (m.14.0) are not particularly hard. NGC 1277 (m.14.6), NGC 1270 (m.14.0), NGC 1283 (m.14.7), NGC 1268 (m.15.0) took some looking, while NGC 1281 (m.14.5) and especially PGC 12387 (m. 16.2) were difficult, and both took over one hour to see.

More galaxies, all in the 16th magnitude range were suspected, but the aurora began to pick up and the sky washed out after 70 minutes of observing.

As with all my observing, I first star-hop to the field, then search for everything I can find before I consult a detailed chart. After sketching what is easily visible, I then turned to Uranometria II, which has an expanded chart in the back, and then to a DSS photograph in order to track down and identify the faintest of the galaxies.

There is another way to observe NGC 1275, and that is with an AAVSO chart! NGC 1275 is a Seyfert galaxy that has a stellar nucleus that varies in brightness. It varies irregularly from about 12.5v to 13.0 v. I did not make an estimate this time.

This was an awesome Challenge! PGC 12387 is the faintest object I've seen in the 10-inch scope, and it is only 0.2 magnitudes brighter than the faintest variable star I've estimated. Seeing galaxies this faint simply takes time. You don't see faint details if you don't take the time to observe! Your eyes keep collecting faint photons as long as you keep looking, and your brain continues to form images even when the photons take an hour to come in significant numbers! My general rule is, no matter how faint the object is, that if you can't see it, you just simply haven't looked long enough!