

# Star Guide: Cluster proves to be worthy objects

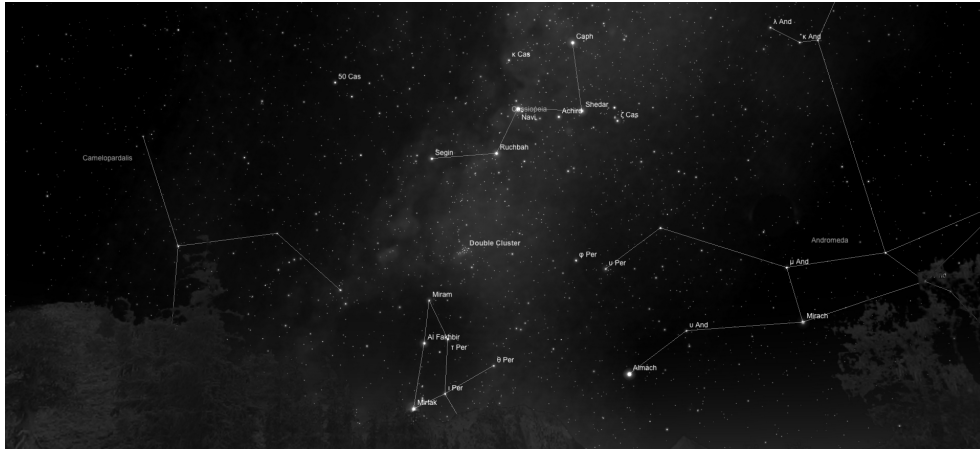
By Tony Berendsen

Many years ago while visiting the Museum of Modern Art in San Francisco I went on a docent tour of modern abstract paintings. There was one giant wall sized painting dedicated to a single room. It was blue, that's all, just a blue wall. I had no idea of how to appreciate a blue wall. The docent brought to our attention that when walking into the room the blue wall changed our spatial interpretation of the room size: such is art.

Many years ago a friend showed me the Double Cluster in Perseus through his telescope. I saw two clusters, side by side, that's all. I had no idea of how to appreciate what I was seeing. Then he explained to me that both clusters were very distant (over 7,000 light years) and were very young with lots of young brilliant blue white stars: such is astronomy.

Since then, the Double Cluster has become one of my favorite objects to view. It can be seen with the naked eye as a nebulous star, in binoculars as two distinct star clusters, and through a telescope as a stellar jewelry box filled with brilliant bluish white stars.

Both star clusters are designated as NGC (New General Catalog) objects and are only a few hundred light years apart. NGC 869 is composed of more than 200 stars with an estimated average age of 5.6 million years. NGC 884 has 175 stars and younger at an average age of 3.2 million years old. Due to their close proximity to each other they may have formed from the same molecular gas cloud.



Double Cluster is worth another look.  
Photo/Simulation Curriculum

Both clusters have been measured as blue shifted and heading toward our area of space at 49,000 mph. No worries though since they are very distant. One of the amazing things about these clusters is their brightness making them the most distant naked eye star clusters visible to the naked eye.

In comparison with the Pleiades, which is a mere 150 light years distant, if the double cluster were that close, the stars would be as bright as Vega and cover almost a quarter of the night sky.

To find the double cluster, break out your favorite astronomy app and point to the northeast to find Cassiopeia in the early evening. Two of the stars making the “W” shape of the constellation (Navi and Ruchbah) create a line to follow toward the horizon to the constellation Perseus. Look for a semi bright nebulous star on that line of site. Grab your binoculars, or telescope with a low power eyepiece, and the clusters will appear.

Gazing at the Double Cluster I’m always amazed at the size and scale of the cosmos they represent. Looking across to the next arm of our galaxy, seeing these young bright stars in the distance: such is discovery.

*Tony Berendsen runs Tahoe Star Tours. He may be reached at*

775. 232.0844 or [tony@tahoestartours.com](mailto:tony@tahoestartours.com).