Fun Facts:

**DOUBLE CLUSTER**

Computer Code:

* **Other Names:**
  + NGC 869 & NGC 884
  +  & X Per
  + Eta & Chi Persei
  + Persei Double Cluster
* **Basics:**
  + Description: famous double cluster in Perseus.
    - NGC 869 is Eta Persei
    - NCG 884 is Chi Persei
  + They show up together nicely in binoculars or wide-field telescopes. They are out all year-round, but are highest in the sky when the Big Dipper is at its lowest (late fall & winter).
  + They are about 7,000 light years away.
  + They are likely separated by only a couple hundred light years.
  + Both contain stars that are younger and hotter than the Sun.
    - Many are as much as 50,000x more luminous than our Sun.
    - Most are 3 -5 million years old (compared to the Pleiades Cluster, which is about 75-100 million years old).
    - The makeup of the clusters are similar in this regard, meaning they were likely produced from the same star-forming region.
* **History:**
  + The Double Cluster represents the jeweled handle of Perseus’ sword.
  + First cataloged by Greek astronomer Hipparcos in 130 BC.
  + William Herschel was the first to identify this as two different clusters.
  + In the 1840s, confusion between “nebulous star” and “star” in early measurements by Tycho Brahe and Johann Bayer led to these clusters being named and recorded with typical star names and designations.
  + For some reason, Messier did not include these in his catalog.
* **Other Notes:**
  + Both clusters are blue-shifted, which means they are both moving toward Earth, each at about 12 miles per second.
* **Eta Persei NGC 869**
  + Location:
    - RA: 02h 20m 2s
    - Dec: +57⁰ 12’
  + Visual Magnitude: +5.30
  + Apparent Size: 18.0 arcminutes
  + Diameter: 35.5 light years across
  + More compressed of the two
  + >200 bluish-white stars
* **Chi Persei NGC 884**
  + Location:
    - RA: 02h 23m 6s
    - Dec: +57⁰ 11’
  + Visual Magnitude: +6.09
  + Apparent Size: 18.0 arcminutes
  + Diameter: 50.2 light years across
  + Older of the two clusters
  + About 150 stars, mostly white & bluish-white