Fun Facts:

**CAT’S EYE NEBULA**

Computer Code: ngc6543

* **Location:**
  + RA: 17h 58m 30s
  + Dec: 66⁰ 38’
* **Other Names:**
  + NGC 6543
* **Basics:**
  + Description: relatively bright planetary nebula in Draco
    - Planetary Nebula are the remains of a sun-like star that has used all of its hydrogen gas (fuel). The Sun will become an object like this in 5 to 6 billion years. The glowing gases were once thought to be planets in the process of forming, hence the name “planetary nebula”.
    - It’s “cat’s eye” is due to a series of gas loops that have been ejected by the central star over the last 1,000 years or so. It is one of the most complex nebulae known, but very powerful instruments are needed to study its interior structure.
  + Visual Magnitude: +8.10 (not visible to naked eye and best in large telescopes)
  + Apparent Size: 0.4 x 0.3 arcminutes
  + Distance: 3,200 light years away
    - It’s suspected the light we’re seeing now left the Cat’s Eye around 1200 BC.
    - This is what was happening on Earth around 1200 BC:
      * Ramses the Great ruled in Egypt.
      * The Assyrians were gaining power in the Middle East.
      * The Trojan War was being fought.
  + Diameter: 0.3 light years across
* **History:**
  + This was discovered by William Herschel on February 15, 1786.
  + It was the first planetary nebula to be investigated spectroscopically by English amateur astronomer William Huggins in 1864.
* **Other Notes:**
  + This is a young planetary nebula. Astronomers think that the jets of high speed gas leading to its shape may suggest a binary star at its center. As the dying star would periodically release gas, the other star would rotate around it, pulling the gases in different directions.
  + Hubble images reveal at least 11 concentric shells around the central portion. These suggest that the star ejects its mass at 1,500-year intervals. We are not certain why it would be doing this.
  + It is currently expanding, although it is difficult to know how rapidly.