

Offered Title: Follow up: The Bright Stars of Winter

In January of this year I wrote about a "Circle of Jewels", the bright stars of winter. This is a follow up with a little technical information about each star. For a star's magnitude, a smaller number means brighter.

Sirius (magnitude -1.44) is in Canis Major, the large dog and is 8.6 light years from Earth. Sirius is twice the size as our Sun and has a companion, a white dwarf.

Canopus (magnitude -0.72) is 313 light years away and lies on the southern horizon in the constellation Carina, keel of a ship. From our location we can catch Canopus, south of Sirius, in February.

Capella (magnitude 0.08) is 41 light years away and a quadruple star system! Is it fair to compare their collective brightness with other stars? I don't think so, but I don't make the rules. Capella is in the constellation Auriga the charioteer.

Rigel (variable magnitude 0.05-0.18), lies about 800 light years away, and has several small, visual (not gravitational) companions. Its 80 times the size of our Sun, a very big, young, blue-white star burning hydrogen like there's no tomorrow and will die young (hundreds of millions vs. billions of years) as a supernova. It's in Orion the hunter, the bright white star forming his left foot.

Procyon (magnitude 0.34) is about 11 light years away, and about 2 times the size of our Sun. Procyon is in the constellation Canis minor, the little dog, northeast of Sirius, and east of Betelgeuse (Orion). It has a small companion, a white dwarf.

Betelgeuse (variable magnitude 0 – 1.3) is about 600 light years away and about 800 times the size of our Sun. It's an old red supergiant star that might engulf Jupiter if it were in the Sun's position. It is in the constellation Orion, at his right shoulder.

Aldebaran (magnitude 0.85) is about 65 light years away. It is an old red giant star about 44 times the size of our Sun. It is in Taurus the bull and floats in front of the Hyades star cluster. Aldebaran has a companion, a red dwarf star.

Pollux (magnitude 1.14) is about 34 light years away and 10 times the Sun's size. It's a yellow giant star and in the constellation Gemini the twins.

Regulus (magnitude 1.35) is about 70 light years away and about twice the size of our Sun. It's a young blue-white star residing in Leo the lion. It is thought to have small companions: red, and white dwarfs.

Castor (magnitude 1.57) is about 50 light years away and is a sextuple star system! Not fair I say. See Capella. Castor is in Gemini also.

What's in the Sky?

December 24; all night; all directions: Watch for signs of Santa...warping or wrinkling of stars due to his faster than light speed sleigh and reindeer.

December 25; 10pm CST; east: A waning Moon and Regulus (Leo) make a pretty pair