

The Revenant of the Swan

The Revenant of the Swan is the large bright star at top center. It is also known as P 34 Cyg but Revenant of the Swan is definitely more poetic. The name is derived from the fact that it is a variable star that has a history of brightening significantly then fading to below naked eye visibility (i.e. dying then coming back to life). It is located in the constellation Cygnus the Swan. The Revenant of the Swan or P 34 Cyg is reported on Wikipedia to be about 5,000 - 6,000 light years away and is described as a hypergiant luminous blue variable. It is considered to be one of the most luminous stars in the Milky Way (by absolute brightness) with a mass about 37 times that of the sun. It was discovered in 1600 by Williem Blaeu, a Dutch astronomer and globe maker as it brightened to 3rd magnitude. However, after six years it faded to below naked eye visibility, but brightened again in 1655 then faded once more by 1662. There were numerous fluctuations after that, but since 1715 it has been around a 5th magnitude star with only minor fluctuations. Today it has a magnitude of 4.8 and varies very little. It is believed that it will eventually evolve into a red supergiant.

Exposures:

Red 76 x 180 sec

Green 78 x 180 sec

Blue 75 x 180 sec

Lum 73 x 180 Sec

Total 15 hours 6 min

My AstrobIn link to this image: <https://astrob.in/sk7blk/0/>

Processing Notes:

P 34 Cyg is located in Cygnus surrounded by a beautiful star field with a lovely background nebula. I took pains to make sure that the nebula was preserved by making sure it was not erased in the background extraction. We have many tools now in Pixinsight for dealing with gradients and backgrounds but I found the "Gradient Correction" process (with the Gradient simplified model checked) to be most effective in preserving this nebula. I am also using the Selective Color Correction script to create better color variation in the nebula.

Tom Engwall