

## **NGC 6888, the Crescent Nebula**

This is an image of NGC 6888, the Crescent Nebula, captured on my setup in southern Spain. Wikipedia describes it as an emission nebula located in the constellation Cygnus about 5000 light years away and about 25 light years across - discovered by William Herschel in 1792. I find this to be a fascinating target. Its odd shape is due to the fast stellar wind from a very large star. That "wind" is colliding with and energizing the slower "wind/material" ejected by that star when it became a Red Giant, creating this fascinating shape.

This is a narrow band image processed in HOO, which is to say, Ha in the red channel and OIII in the green and blue channels. Ha and OIII filters only allow narrow bands of the visual light spectrum to pass through - with Ha in a narrow band of red and OIII in a narrow band of blue/green.

Consequently, this is not a true color image but it probably displays the structural detail better than a "true color" image could. I also shot shorter exposures of NGC 6888 in RGB (i.e. true color), so I could use the RGB stars instead of the narrow band stars. I think that helps make the image more natural looking. This is done by separating the nebula from the stars in both the Narrow band and RGB images and recombining the narrow band nebula with the RGB stars. The exposures times were as follows:

Ha 101 x 600 sec

OIII 99 x 600 sec

Total 33.3 hours

Red 17 x 180

Green 18 x 180 sec

Blur 18 x 180 sec

Tom Engwall

Finding chart for the Crescent Nebula:

