Identify Saturated Pixels in an Image

To understand saturation, consider each pixel as a bucket. We can measure the amount of water poured into the bucket until it is full and starts to spill over the sides. When pixels are filled and photons start to “spill” over the sides, this is termed saturation. When a pixel collects over 60,000 counts it begins to saturate. This is why your images should always stay within the range of 600 to 60,000 counts.

You will receive two warnings when you saturate an image. The first will be a warning window which you will have to close by clicking OK.

The second will be a white stripe across the top of the image which will indicate that the image contains saturated pixels. You cannot remove this.

In order to determine exactly what pixels are saturated, select the Display dropdown menu and select Saturation Map. This will show you in red the pixels which have saturated in an image.

If you have two sources in one image and one source does not contain saturated pixels, you can still measure that source as in the example to the left.

However, sources that contain saturated pixels are NOT measurable. You must readjust your sensitivity settings and acquire another image to eliminate the areas of saturation before you can measure.