
Subject: Re: CCD saturation

Posted by [JMB](#) on Mon, 27 Oct 2008 16:47:06 GMT

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Hi Wox,

If you haven't solved your problem yet, here are some ideas to help:

- If your streaks are vertical, you can try to search for them in the columns of your image matrix.

First you need to identify a threshold to separate "active" pixels from noisy background:

e.g. $T1 = \text{mean}(\text{image}) \times 4$,

Then look for columns that are corrupted by streaks:

for $i=0, \text{Ncols}-1$ do $\text{column}[i] = \text{total}(\text{img}[i, *]) > T1$

You get for each column the number of "active" pixels and if this number is higher than a specific threshold this column contains a streak and you can set the pixels of this column equal to zero (or background value)

The problem is that by doing this you miss now the "good" pixels from the center of your active spot/star.

A way to retrieve the center of your bright spots without taking the streak is to use the median function:

e.g. $\text{median}(\text{img}, 5) > T2$

where $T2$ is a threshold on the image brightness.

You can visualize the result of the median function by typing:

`tvscf, median(img,5) > T2 ; 0 < T2 < 255` for 8 bit images.

Playing around with the size of the median filter and the value of $T2$, you may be able to create a mask that filter out the streaks and let you only the large spots.

If it doesn't seem clear, please ask

Jérôme
