Subject: Re: ratio imaging

Posted by gerhard.holst on Tue, 12 Mar 2002 08:28:03 GMT

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Craig Markwardt <craigmnet@cow.physics.wisc.edu> wrote in message news:<on1yev3r9q.fsf@cow.physics.wisc.edu>...

- > Dan Larson <drl16@cornell.edu> writes:
- >> I am trying to do simple ratiometric
- >> imaging with IDL. Of course, since
- >> there is some pixelation noise, the
- >> ratio is not very robust. I have
- >> experimented with a number of
- >> different filters (median, Gaussian
- >> deconvolution, smooth) to try and
- >> remove some of this instability.
- >> Is there a filtering technique which
- >> is minimally perturbative that will
- >> remove some numerical artificats
- >> without changing the boundaries of
- >> objects?

>

- > Dan, you should be filtering the two images, *before* computing the
- > ratio, right? I would have said that goes without saying, but now I
- > am saying it. [The reason of course is that the ratio does not have
- > a nice compact statistical distribution, so averaging is less
- > robust. 1

>

> Craig

Dan,

if your are looking for more edge preserving filters you might search for topics like "Savitzky-Golay" and "LOESS", both are filters that might consume a little more time in calculation (especially the LOESS I have found on the web, if you are interested I can look for the link), but they do a good job in smoothing while edge keeping, much better than boxcar, median etc.

Gerhard