
Subject: Re: automated PSF

Posted by [Jeremy Bailin](#) on Fri, 02 Apr 2010 13:52:57 GMT

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On Apr 1, 10:09 pm, Gray <grayliketheco...@gmail.com> wrote:

> Hi all,

>

> Anyone have any ideas on how to automate finding the PSF of an image?

> There are other applications out there where I could do it by hand (so

> to speak), but I have a lot of images to process...

>

> --Gray

I'd try getpsf from the IDL astronomy user's library.

-Jeremy.

Subject: Re: automated PSF

Posted by [Gray](#) on Fri, 02 Apr 2010 17:44:26 GMT

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On Apr 2, 9:52 am, Jeremy Bailin <astroco...@gmail.com> wrote:

> On Apr 1, 10:09 pm, Gray <grayliketheco...@gmail.com> wrote:

>

>> Hi all,

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>> Anyone have any ideas on how to automate finding the PSF of an image?

>> There are other applications out there where I could do it by hand (so

>> to speak), but I have a lot of images to process...

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>> --Gray

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> I'd try getpsf from the IDL astronomy user's library.

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> -Jeremy.

The problem with GETPSF is that it requires a list of stars from FIND; however, find requires that you feed it a FWHM for sources in the image, for which you would want to use the FWHM of the PSF, right? If not, then I'm confused.

Subject: Re: automated PSF

Posted by [wlandsman](#) on Fri, 02 Apr 2010 18:30:13 GMT

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- >
- > The problem with GETPSF is that it requires a list of stars from FIND;
- > however, find requires that you feed it a FWHM for sources in the
- > image, for which you would want to use the FWHM of the PSF, right? If
- > not, then I'm confused.

For *finding* sources on an image you don't need to know the FWHM very accurately. FIND will look for locally connected regions of enhanced intensity that are roughly the size of your FWHM -- it will throw out much narrower objects (e.g. cosmic rays) or much larger objects (e.g. due to detector sensitivity variations). It is probably good enough to simply look at your stars to see how many pixels wide they are, though you could do a 2d Gaussian fit if you wanted.

If you want to get accurate photometry in regions where star profiles overlap, *then* you need to know the PSF much more accurately. --
Wayne
