
Subject: Re: Is there an automated way to estimated FWHM on 2-D image
Posted by [Jeremy Bailin](#) on Sun, 20 Sep 2009 12:10:23 GMT

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On Sep 19, 9:02 pm, John Shaw <jds...@udel.edu> wrote:

> Hi,
>
> Longtime reader, first time question:
>
> I was wondering if anyone had a routine for estimating the full-width-
> at-half-maximum (FWHM) of possible point sources in a 2-D array. Most
> of the routines I have found and examined request the FWHM for a
> gaussian to be convolved to find the sources.
>
> What I'd like to do, is provide the source positions and get back the
> FWHM.
>
> I.e., I have many images and need to determine the s/n (signal-to-
> noise) and FWHM without interactively working out the values for each
> image (or point source). I can easily determine the background value
> and the flux values for each point, if I provide the FWHM initially,
> but since the FWHM can change significantly from image to image, this
> is a problem.
>
> My overall goal is to get accurate positions of the point sources with
> accuracy estimates (i.e. (s/n) / (FWHM)). My sticking point seems to
> be the FWHM.
>
> Any help would be appreciated.
>
> Thanks - John

Would PKFIT in the IDL astronomy library give you what you need? You
can get the Gaussian dispersion out, which is easy to convert into a
FWHM.

-Jeremy.
