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Subject: Re: Point Spread Function Simulation  
Posted by [pgrigis](#) on Thu, 24 Sep 2009 15:35:57 GMT  
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On Sep 24, 11:23 am, Jacob Mendez <jake.men...@gmail.com> wrote:  
> Hello, I'm trying to generate a simulated 2D point spread function to  
> test a program that I am writing and I am wondering what might be a  
> good way to do this.

It's pretty easy:

```
nx=512;dimensions of images  
ny=512  
sigma=10;width of psf
```

```
x=findgen(nx)-nx/2;x axis of image  
y=findgen(ny)-ny/2
```

```
xx=x#(x*0+1);create 2D coordinates  
yy=(y*0+1)#y
```

```
zz=exp(-0.5*(xx^2+yy^2)/sigma^2);compute PSF
```

Ciao,  
Paolo

>  
> My program will take 2D point spread functions and generate 1D line  
> spread functions at incremental rotations of the 2D PSF.  
>  
> Thanks

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