
Subject: Re: GAUSS2DFIT - TILT ?

Posted by [Craig Markwardt](#) on Mon, 11 Dec 2000 18:42:54 GMT

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Hi Thomas--

I get problems with your program as well, as shown here.

```
      constant scale width_x width_y center_x center_y tilt
Should:  5.000 100.000 16.000  6.400 64.000 76.800  1.000
Is:      4.841 100.218  7.378 10.076 63.884 76.800  0.000
```

This exact subject came up a few months ago by Ken Bowman. I suggested he try MPFIT2DPEAK, available from my IDL library. So far I have found this routine to be a little more robust in finding peaks and establishing rotations.

In your example I obtained the "right" answer with MPFIT2DPEAK:

```
IDL> yfit = mpfit2dpeak(z, b,xvec,yvec,/tilt)
Should:  5.000 100.000 16.000  6.400 64.000 76.800  1.000
Is:      4.999 100.004  6.386 16.007 63.995 76.814  2.571
```

Note that the fitted X and Y axes are flipped from your initial definition, hence the fitted value of $2.571 = 1.000 + \text{!dpi}/2$. Of course you can easily put the semi-major axis under the X column with a simple transformation.

<http://cow.physics.wisc.edu/~craigm/idl/idl.html>

Craig

```
IDL> print, !version
{ x86 linux unix 5.2.1 Jun  4 1999}
```

"Zeschke" <zeschke@bessy.de> writes:

```
> Why does the following example not work correctly ?
> This program use the "GAUSS2DFIT.PRO" - Routine. The "Tilt"-Parameter-Fit
> does not work.
> What can I do ?
>
>
> Thanks for any help
> Thomas
```

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Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
