
Subject: Re: IDL - EXP fitting function

Posted by [Christopher Thom](#) on Thu, 26 Mar 2009 22:55:14 GMT

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Quoth glen_andy@hotmail.com:

> On Mar 26, 5:12 pm, David Fanning <n...@dfanning.com> wrote:

>> glen_a...@hotmail.com writes:

>>> Greetings everyone! My first post! I have some data x, y, that i would

>>> like to fit to a fitting function of the kind $y_{fit} = \text{EXP}(a + b \cdot x)$.

>>> where a and b are constants which i would like found. Any ideas on how

>>> to do this?

>>

>> ab = LinFit(x, y)

>> a = ab[0]

>> b = ab[1]

>>

>> Cheers,

>>

>> David

>> --

>> David Fanning, Ph.D.

>> Fanning Software Consulting, Inc.

>> Coyote's Guide to IDL Programming:<http://www.dfanning.com/>

>> Sepore ma de ni thui. ("Perhaps thou speakest truth.")

>

> Thanks for getting back to me David,

>

> Does the linfit function work when i would like my data to be fitted to

> an $\text{EXP}(a + bx)$ function? I didn't think that a linear function would be

> correct when considering the EXP? Or am i getting confused going from

> real space to log space!

No, linfit() fits a linear model of the form $y = A + B \cdot x$, so it will not
"just work". why don't you just fit a linear model in logspace?

```
res = linfit(x, alog(yfit))
```

```
a = res[0]
```

```
b = res[1]
```

cheers

chris
