
Subject: Re: LINFIT CHISQ and SIGMA values are correct??

Posted by [wlandsman](#) on Wed, 05 Aug 2015 02:19:21 GMT

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You are giving linfit negative errors -- $\text{alog10}(0.2) = -0.69897$

If you use the absolute value of $\text{alog10}(\text{err})$ you will get consistent results.

But probably it is better to do your logarithmic transformation correctly

if $z = \text{alog10}(y)$ then $dz = 0.434 \cdot dy/y$ (I think)

where dy is your original err and dz is your transformed err .

On Tuesday, August 4, 2015 at 3:54:39 PM UTC-4, Krishnakumar M.A wrote:

> Hi,

>

> I was trying to do a linfit in the following data (I'm using IDL 6.3).

>

> -----

>

> x = [150.0, 235.0, 325.0, 410.0, 610.0]

> y = [200.0, 35.0, 8.4, 3.0, 0.6]

> err = [25.0, 5.0, 2.1, 0.8, 0.2]

>

> result = linfit(alog10(x),alog10(y),MEASURE_ERRORS=alog10(err), CHISQ=chi,
> COVAR=covmatrix, SIGMA=error, YFIT=fit)
