
Subject: Re: doubt in chisq value

Posted by [wlandsman](#) on Mon, 01 Nov 2010 14:48:52 GMT

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On Nov 1, 2:43 am, sid <gunvicsi...@gmail.com> wrote:

> Hi,
> I am fitting my data with svdfit (2 degree polynomial), now I need
> to know how exactly the chisq value is calculated in this routine,
> because I need to know the goodness of fit. For my data which I am
> fitting I am getting chisq values which varies from 6.3534419e-07 to
> 8.0278877e-09 for different datasets. But please help how the routine
> is performing the chisq calculation and how can I find the goodness of
> fit from it.
> thanking you
> sid

You are almost certainly supplying unrealistic error bars (sigma values).

Chisq can be calculated from the single line (e.g. see curvefit.pro)

$$\text{chisq} = \text{total}(\text{Weights} * (\text{y} - \text{yfit})^2) / \text{nfree}$$

where weights = $1/\text{sigma}^2$, and nfree is the number of data points minus the number of free parameters.

--Wayne
