Subject: Re: How to calculate 3SIGMA in Linfit!
Posted by Craig Markwardt on Tue, 12 Jun 2012 17:54:26 GMT
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On Tuesday, June 12, 2012 10:53:03 AM UTC-4, Craig Markwardt wrote:
> On Tuesday, June 12, 2012 3:07:40 AM UTC-4, dave poreh wrote:
>> On Monday, June 11, 2012 6:25:35 PM UTC+2, Craig Markwardt wrote:
>>> On Monday, June 11, 2012 3:51:50 AM UTC-4, dave poreh wrote:
>>>> Dear folks
>>>> hi,
>>>> i want to calculate 3sigma in linfit function. sigma function just give me the SD and i could not do 3*sigma to get 3sigma. As far as i understood first i need to transfer data to normal function and then i find SD and 3SD=3sigma.
>>>
>>> I'm assuming you want to calculate a 3 sigma confidence limit. But of what? The slope coefficient? Offset coefficient?
>>>
>>> As far as I understand, 3 sigma is indeed usually 3 times the 1 sigma error estimate. When your fitting function is non-linear it gets more complicated, but yours is not-nonlinear.
>>>
>>> Craig
>> I want to measure velocity of the time series that means i would have a velocity and +- 3sigma error.

As a practical matter, I recommend that you subtract the average time value (or center-time value) from the time column of your samples.

The result returned from LINFIT() will then be mean position at the center time, and the mean velocity at the center time.

If you don't subtract the mean time value, then that can introduce some nasty correlations between the slope and offset coefficients.

Craig