Subject: Re: How to calculate 3SIGMA in Linfit!
Posted by d.poreh on Tue, 12 Jun 2012 18:10:16 GMT
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On Tuesday, June 12, 2012 10:54:26 AM UTC-7, Craig Markwardt wrote:
> 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
Thanks
I have noticed that, and i thought it is a statistical matter. Why it is like that. Is this thing (subtracting mean()) some kind of normalization or what?
Cheers,
Dave