Subject: Re: Constrained fit of a straight line: fixed intercept Posted by David Grier on Fri, 27 Aug 2010 08:39:17 GMT

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On 8/27/10 12:36 AM, Joe Daal wrote:
> Hi,
>
> I am not sure how easy this problem is, but it sure gave me hell
> I have the following vector arrays: X, Y,& Y errors. There are 5
> elements in each and they do form a nice line describes by Y = A + BX.
> I need to fit this line with B as a free parameter and constrain A to
> pass by the the third point.
> So the problem narrows down to one parameter as: Y = (Y0 - BX0) + BX,
> whre Y0 and B0 and the third point values (i.e., X[2] and Y[2]).
> I tried using MPFIT with the PARINFO keyword. It just didn't work.
> Any ideas? Thanks....
> -Joe
How about:
pivot = 2
dy = y - y[pivot]
dx = x - x[pivot]
w = where(dx ne 0, count)
if count gt 0 then $
B = mean(dy[w]/dx[w]) 
else $
B = 0.
TTFN,
David
```