Subject: Curvefit issues
Posted by vorticitywolfe on Thu, 06 Apr 2006 22:16:30 GMT
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Hello,

I'm trying to fit a simple 1 parameter function to this data (see below A,B); however, I am getting an error message " % GFUNCT: Incorrect number of arguments." What's going on? It seems trivial, but I don' see where it is faltering.  Thanks for the help!

Jon

```
;****************************************************** ******
pro test

 A=[0.910000, 0.460000, 0.870000,0.740000]
 B=[4.46684,1.99526,28.1838, 11.2202]

weights = A
weights(*) = 1.0

;Provide an initial guess of the function's parameters.
G = 300.0

;Compute the parameters.
fit = CURVEFIT(A, B, weights, G, FUNCTION_NAME='gfunct')

PRINT, 'Function parameters: ', G
END

PRO gfunct, A, G, F
  F = G * A^(2.0)
end
```

Subject: Re: Curvefit issues
Posted by Benjamin Luethi on Fri, 07 Apr 2006 07:51:44 GMT
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Hi,

CURVEFIT assumes that gfunct provides the derivative as well.
Either program it in gfunct or use CURVEFIT with the /NODERIVATIVE option.

Ben

On Fri, 07 Apr 2006 00:16:30 +0200, Jonathan Wolfe

<vorticitywolfe@gmail.com> wrote:

```
>  Hello,
>
>  I'm trying to fit a simple 1 parameter function to this data (see below
>  A,B); however, I am getting an error message " % GFUNCT: Incorrect
>  number of arguments." What's going on? It seems trivial, but I don' see
>  where it is faltering.  Thanks for the help!
>
>  Jon
>   ;********************************************************** ******
>  pro test
>
>   A=[0.910000, 0.460000, 0.870000,0.740000]
>   B=[4.46684,1.99526,28.1838, 11.2202]
>
>  weights = A
>  weights(*) = 1.0
>
>  ;Provide an initial guess of the function's parameters.
>  G = 300.0
>
>  ;Compute the parameters.
>  fit = CURVEFIT(A, B, weights, G, FUNCTION_NAME='gfunct')
>
>  PRINT, 'Function parameters: ', G
>  END
>
>  PRO gfunct, A, G, F
>    F = G * A^(2.0)
>  end
>
```

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Subject: Re: Curvefit issues
Posted by vorticitywolfe on Fri, 07 Apr 2006 16:23:27 GMT
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Thanks Ben,

The /noderivative worked.  Wish the manual was a little more explicit
on this function.  Thanks again!

Jon

Subject: Re: Curvefit issues
Posted by Craig Markwardt on Fri, 07 Apr 2006 17:56:47 GMT
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"Jonathan Wolfe" <vorticitywolfe@gmail.com> writes:
> Thanks Ben,
>
> The /noderivative worked. Wish the manual was a little more explicit
> on this function. Thanks again!

Let me toot my own horn here and recommend that you give my MPFIT
package a try. It's lots more robust than CURVEFIT. You can drop in
MPCURVEFIT as a replacement for CURVEFIT, but there are other fit
drivers too.

Craig

See http://cow.physics.wisc.edu/~craigm/idl/
under Curve Fitting

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Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
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