
Subject: Problem with mpfit.pro
Posted by [Payam Bagheri](#) on Mon, 06 Oct 2014 23:26:24 GMT
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Hi there,

Has anyone worked with the fitting procedure mpfit.pro in IDL? When my fitting function exceeds around 3600 characters (I have to use really large fitting functions) the code gives me this error:

```
% MPFITEXPR: ERROR: execution of "The FUNCTION" failed
% MPFITEXPR:      check syntax and parameter usage
```

Has any seen this and knows a work-around?

Thanks,
Payam

Subject: Re: Problem with mpfit.pro
Posted by _____ on Tue, 07 Oct 2014 05:44:36 GMT
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Den tisdagen den 7:e oktober 2014 kl. 01:26:26 UTC+2 skrev Payam Bagheri:

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>

>

>

> Thanks,

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> Payam

According to your error message, you are not using mpfit directly, you are using mpfitexpr.

Mpfitexpr allows you to specify the function to minimize as a string but that is only useful for simple expressions.

If you use mpfit directly, you can specify your function as an idl function and specify just the name of it in the call to mpfit. Then there is no limit to how complicated your fitting function can be.

(OK, I guess there is a limit but it's not 3600 characters...)

Subject: Re: Problem with mpfit.pro

Posted by [Craig Markwardt](#) on Tue, 07 Oct 2014 15:27:08 GMT

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On Monday, October 6, 2014 7:26:26 PM UTC-4, Payam Bagheri wrote:

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It means your string is not a valid IDL expression. The expression must be able to be EXECUTE()ed by IDL. I guess it is possible that IDL has a limit on the string size, but I don't know.

If you have a complicated function, you should be using MPFITFUN. Write your expression into a function once, and use that instead.

Craig
