Subject: How to use mpfitfun.pro for fitting?
Posted by Sonu Tabitha on Mon, 27 Jun 2016 05:14:38 GMT
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I went through the documentation but I didn't understand it much. Can anyone of you please give me a sample mpfitfun.pro (with the definition of function)?

PS:Infact I am having a set of flux values(measured) for 4 sources at 5 frequency bands. I know the expression of flux and it's a function of 5 parameters.

Subject: Re: How to use mpfitfun.pro for fitting?
Posted by Helder Marchetto on Mon, 27 Jun 2016 11:00:35 GMT
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On Monday, June 27, 2016 at 6:14:40 AM UTC+1, Meegle_Jade wrote:

> I went through the documentation but I didn't understand it much. Can anyone of you please give me a sample mpfitfun.pro (with the definition of function)?

> PS:Infact I am having a set of flux values(measured) for 4 sources at 5 frequency bands. I know the expression of flux and it's a function of 5 parameters.

Hi.

I'm not sure what the problem with the function definition is. In the instructions I found this:

; FUNCTION MYFUNCT, X, P

function mySineFunction, x, p

- ; ; The independent variable is X
- ; ; Parameter values are passed in "P"
- : YMOD = ... computed model values at X ...
- : return, YMOD
- : END

And it worked for me. But anyhow, below is an example that works well for me (adapted from something that I use):

```
return, p[0] + p[1] * sin(x * p[2] /!radeg + p[3])
end

pro doTheFit, angles, xPos
;************ fit x ***********
xSineFit = double(angles)
ySineFit = double(xPos)
yerr = 1
starty = [-800d, 1000d, 1d, -90d]
xResult = mpfitfun('mySineFunction', xSineFit, ySineFit, yerr, startY)
print, xResult
end
```

I hope this helps.

Cheers, Helder

Subject: Re: How to use mpfitfun.pro for fitting?
Posted by Sonu Tabitha on Mon, 27 Jun 2016 15:49:56 GMT
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On Monday, June 27, 2016 at 10:44:40 AM UTC+5:30, Meegle_Jade wrote:

> I went through the documentation but I didn't understand it much. Can anyone of you please give me a sample mpfitfun.pro (with the definition of function)?

>

> PS:Infact I am having a set of flux values(measured) for 4 sources at 5 frequency bands. I know the expression of flux and it's a function of 5 parameters.

Thanks a lot for the reply.

Subject: Re: How to use mpfitfun.pro for fitting?
Posted by Sonu Tabitha on Mon, 27 Jun 2016 15:54:13 GMT
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On Monday, June 27, 2016 at 10:44:40 AM UTC+5:30, Meegle_Jade wrote:

> I went through the documentation but I didn't understand it much. Can anyone of you please give me a sample mpfitfun.pro (with the definition of function)?

>

> PS:Infact I am having a set of flux values(measured) for 4 sources at 5 frequency bands. I know the expression of flux and it's a function of 5 parameters.

So where should I write the function? Should I save in the dothefit.pro textfile or should I save the function seperately in another text file?

Subject: Re: How to use mpfitfun.pro for fitting?
Posted by Craig Markwardt on Mon, 27 Jun 2016 21:23:39 GMT
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On Monday, June 27, 2016 at 11:54:16 AM UTC-4, Meegle_Jade wrote:

> So where should I write the function? Should I save in the dothefit.pro textfile or should I save the function seperately in another text file?

Maybe it's worth starting with the tutorial.

https://www.physics.wisc.edu/~craigm/idl/mpfittut.html

See if you can master that first before going to your more complicated problem.

But yes, *typically* one writes the user fitting function as a stand-alone file. David Fanning's tips can help:

http://www.idlcoyote.com/tips/namefiles.html

It's also possible to put everything in an IDL "script" file that you can use ".RUN" with. The only trick is that the fitting function has to be at the top, and then the executable statements appear last. I do this all the time.

Craig

Subject: Re: How to use mpfitfun.pro for fitting?
Posted by Sonu Tabitha on Tue, 28 Jun 2016 01:57:10 GMT
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On Monday, June 27, 2016 at 10:44:40 AM UTC+5:30, Meegle_Jade wrote:

- > I went through the documentation but I didn't understand it much. Can anyone of you please give me a sample mpfitfun.pro (with the definition of function)?
- > PS:Infact I am having a set of flux values(measured) for 4 sources at 5 frequency bands. I know the expression of flux and it's a function of 5 parameters.

Thanks a lot!