Subject: Fitting with three parameters ???
Posted by atmospheric physics on Mon, 16 Jun 2014 10:49:18 GMT
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Hello,

I have two columns of data, say variables X and Y. Now I want to fit the data with a function Y = x1 - x2 * exp(-x3 * X). I do not know what the values of x1, x2 and x3.

Can anyone say if there is automatic way in IDL to define our fitting function and then obtain the fitted parameters to the data? How is non-linear fitting done in IDL? Also, I would like to know which function will be able to give me R2 correlation coefficient?

Thanks in advance, Madhavan

Subject: Re: Fitting with three parameters ???
Posted by Moritz Fischer on Mon, 16 Jun 2014 10:55:47 GMT
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Hi.

You should take a look at Craig's MPFIT routines: http://cow.physics.wisc.edu/~craigm/idl/fitting.html cheers

Am 16.06.2014 12:49, schrieb Madhavan Bomidi:

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>

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>

Subject: Re: Fitting with three parameters ???
Posted by Russell Ryan on Mon, 16 Jun 2014 19:22:37 GMT
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There are dozens of ways to do this, the MPFIT library is just one (albeit a very good one). IDL

has several functions for minimization and there are dozens more available else where.
http://www.exelisvis.com/docs/routines-47.html
Russell
On Monday, June 16, 2014 6:49:18 AM UTC-4, Madhavan Bomidi wrote:
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> > > > > > > > > > > > > > > > > > >

> Madhavan