
Subject: Maximum likelihood fitting of an exponential fitting function in IDL

Posted by [atmospheric physics](#) on Tue, 04 Aug 2015 16:01:38 GMT

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Dear All,

I have an exponential decay function as defined below:

```
FUNCTION tfunc,X,E
  T = EXP(-((1000.0d*X)^E[1])/E[0])
  RETURN,T
END
```

I was using MPFITFUN to get the fitting coefficients. Though this is working fine, I find that the fitting line is deviating away from the more likelihood points in the case when there were some outliers. Can I know if there is a maximum likelihood fitting function in IDL so that I can get the fitting line close to more number of points?

Look forward to your suggestions,

Thanking you,
With regards,
Madhavan

Subject: Re: Maximum likelihood fitting of an exponential fitting function in IDL

Posted by [Bill Nel](#) on Tue, 04 Aug 2015 17:27:27 GMT

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On Tuesday, August 4, 2015 at 12:01:41 PM UTC-4, Madhavan Bomidi wrote:

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>

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>

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> Thanking you,

> With regards,

> Madhavan

You might try taking the log of your data before fitting it (to a line).

--Wayne

Subject: Re: Maximum likelihood fitting of an exponential fitting function in IDL
Posted by [Jeremy Bailin](#) on Wed, 12 Aug 2015 17:35:37 GMT

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On Tuesday, August 4, 2015 at 12:01:41 PM UTC-4, Madhavan Bomidi wrote:

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> Look forward to your suggestions,

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> Thanking you,

> With regards,

> Madhavan

ML_DISTFIT in JBIU does maximum likelihood fitting:

<http://www.simulated-galaxies.ua.edu/jbiu/>

It's kind of clunky, though, so YMMV.

-Jeremy.
