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Subject: Re: Best fit line for sinusoid

Posted by [David Fanning](#) on Wed, 30 Sep 2015 14:37:45 GMT

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liam.steele@gmx.co.uk writes:

> I was wondering if there was a 'simple' way to get IDL to plot a best fit line for a sinusoidally-varying data set. For example, say temperatures were recorded each hour for 5 days at a certain location, with each measurement having an error of 2 deg C. Then we would have something like:

>

> day = findgen(121)/24

> temp = 15 + 10\*sin(10\*!pi\*findgen(121)/120) + 5\*randomu(seed, 121)

> error = fltarr(121)+2

>

> Is it possible from these three arrays for IDL to work out and plot a best fit line? I have searched online, and can't really find what I'm looking for. (surprisingly I have never had to plot a best fit line to anything before!)

You will do well to start here:

<http://cow.physics.wisc.edu/~craigm/idl/fitting.html>

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.idlcoyote.com/>

Sepore ma de ni thue. ("Perhaps thou speakest truth.")

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