Subject: Re: Best fit line for sinusoid Posted by liam.steele on Wed, 30 Sep 2015 14:51:31 GMT View Forum Message <> Reply to Message

On Wednesday, 30 September 2015 15:37:47 UTC+1, David Fanning wrote: > 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

>

>

>

> David Fanning, Ph.D.

- > Fanning Software Consulting, Inc.
- > Coyote's Guide to IDL Programming: http://www.idlcoyote.com/
- > Sepore ma de ni thue. ("Perhaps thou speakest truth.")

Aha! That looks far more useful than anything I found. Thanks very much.