Subject: Best fit line for sinusoid Posted by liam.steele on Wed, 30 Sep 2015 14:22:57 GMT

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Hi all,

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!)

Cheers,

Liam