Subject: Re: regress
Posted by David Fanning on Wed, 18 Mar 2009 01:03:17 GMT
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anniebryant@gmail.com writes:

> I have two 2D arrays I would like to regress. Both were created with
> the variance command and are intarr(673,274). Does one of these need
> to be a vector? Both need to be a vector? If so, is there a way to
> convert them from an array to a vector? I watched someone do this
> very quickly yesterday, but can not remember how.
>
> I thought this would be quite simple, but I haven't done a regression
> in IDL before and am hoping I can figure it out.

OK, if you just want to do a linear fit through the data,
I guess you can use REGRESS. I always have used LINFIT, but
in a quick test case, they appear to return the same results.

You will have to reformat both your images into vectors.
So, using LINFIT:

```
r = Linfit(Reform(d1, 673*274), Reform(d2, 673*274), YFIT=yfit
Print, 'Slope: ', r[1], '  Intercept: ', r[0]
Plot, Reform(d1, 673*274), Reform(d2, 673*274), PSYM=3
OPlot, Reform(d1, 673*274), yfit
```

Using REGRESS:

```
slope = Regress(Reform(d1, 673*274), Reform(d2, 673*274), $
    YFIT=yfit, CONST=intercept)
Plot, Reform(d1, 673*274), Reform(d2, 673*274), PSYM=3
OPlot, Reform(d1, 673*274), yfit
```

Cheers,

David
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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")