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Subject: Re: pixelwise regression for time series images  
Posted by [Bringfried Stecklum](#) on Thu, 13 May 2010 09:57:52 GMT  
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blofton wrote:

> I've written a program that uses LINFIT to calculate a linear model to  
> each pixel in a multitemporal, registered series of images. That is,  
> I fit a line in the time (z-) dimension at each x,y pixel location.  
> However, I am using nested loops to do this and it takes a while to  
> run. For larger images (1024X1024) there is no hope. I am wondering  
> if you've come across a better (IDL-esque) method of doing this; I've  
> not seen anything online.

>  
> Thanks for any suggestions,  
>  
> brad

One can do that without loops. Just write down the regression equations, keeping in mind that the summation has to be done for the 3rd dimension. Actually this is what I like about IDL, you can think of bigger entities than just a single value. I attached a function which works for me.

Regards,  
Bringfried

### File Attachments

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1) [lincfit.pro](#), downloaded 126 times

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