Subject: Re: HELP NEEDED! to fit a linear equation containing 2 independant variables
Posted by Craig Markwardt on Sun, 11 Jun 2006 07:14:35 GMT
View Forum Message <> Reply to Message

antoine.dlc@gmail.com writes:
> Dear fellow IDL programmers,
>
> I'm trying to fit the parameters of a linear equation of type:
>
> z = a*x + b*y + c
>
> where a, b,c are constant parameters and x,y are two independant
> variables.
>
> In the past, I used the procedures LMFIT, LINFIT, CURVEFIT to fit
> equations but these only accept 1 independant variable.
>
> Can someone tell me if a procedure exists to fit the parameters of a
> linear equation made of 2 independant variables???
>
> If not, is it possible to give LMFIT, LINFIT, CURVEFIT...etc. 2
> independant variables instead of only 1?

Actually LMFIT and CURVEFIT *can* accept multiple variables. If you read the documentation,

```
;       X:  A row vector of independent variables.  This routine does
;           not manipulate or use values in X, it simply passes X
;           to the user-written function.
```

you can define any "X" vector that you wish as long as it is a single IDL variable. It could be a structure containing X and Y, or a concatenated vector of [X, Y] values. Either way, it is up to your model function to retreive the proper X and Y values from the combined variable.

Happy fitting,
Craig

--
---------- ----------
Craig B. Markwardt, Ph.D. EMAIL: craigmnet@REMOVEcow.physics.wisc.edu
Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
---------- ----------