Subject: Re: Help: multiple linear regression fit
Posted by Craig Markwardt on Tue, 12 Aug 2003 15:55:39 GMT
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fishdick91@hotmail.com (fishdick91@hotmail.com) writes:

> Hi everyone,
>
> I've set up a model: y = a1*x1 + a2*x2 + a3*x3 to fit my experiment
> data,
> and am using 'regress' function to perform this fit.
> However, the 'regress' function always return a big const which I
> don't need.
> So question 1:
> how can I fix the const when fitting?

And what of the MPFIT family of functions? Using the driver MPFITEXPR, you can set up an expression that almost exactly matches your case:

```
EXPR = 'P(0)*X(*,0) + P(1)*X(*,1) + P(2)*X(*,2)'
```

(of course you need the core routine MPFIT too). You would need to set up X as an Nx3 array, and Y as an N-vector.

Some people seem to resist using a non-linear regression tool for a linear problem on the basis of, "it's *ONLY* linear regression!" Originally I might explain that the heart of any non-linear regression package is a linear solver, so it's really all the same. Recently I just shrug and say, "their loss."

Happy fitting,
Craig

http://cow.physics.wisc.edu/~craigm/idl/idl.html (under fitting)