Subject: Re: Fitting a function with multiple independent variables
Posted by Sean Davis on Wed, 20 Apr 2005 16:30:24 GMT
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maarten wrote:

> Hello,
>
> You can use the built in routine curvefit.
> cheers maarten
>
> Sean Davis wrote:
>> Hello all,
>>
>> I am currently trying to fit a function with multiple independent
>> variables. I have used IDL's REGRESS routine, which does a multiple
>> linear regression, such as fits to something like:
>>
>> Y = 5 + 3*X1 - 4*X2
>>
>> But what if I want one of my independent variables to vary non-linearly,
>> like
>>
>> Y = 5 + 3*X1^2 - 4*X2
>>
>> (I assume this is called non-linear regression?)
>>
>> I've heard of Craig M.'s fitting library, so I suppose I should look
>> there. But for the record, are there any built-in programs in IDL to do
>> this???
>>
>> Thanks,
>> Sean
>>
Actually, CURVEFIT does not work for that task. CURVEFIT fits a function with multiple parameters (a,b,c), like

y = a*x + b*x^2 + c*exp(x),

but not functions with multiple independent variables AND paramaters, like

y = a*x1 + b*x2^2 + c*exp(x3)

-Sean