
Subject: Re: Problems getting CURVEFIT to work
Posted by [Craig Markwardt](#) on Wed, 13 Nov 2002 15:18:05 GMT
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Jonathan Greenberg <greenberg@ucdavis.edu> writes:
> On 11/12/02 5:14 PM, in article [onk7jiuv7e.fsf@cow.physics.wisc.edu](#), "Craig
> Markwardt" <craigmnet@cow.physics.wisc.edu> wrote:
>> Jonathan Greenberg <greenberg@ucdavis.edu> writes:
>>> Hi there, I'm trying to use CURVEFIT to fit data to a decay function of the
>>> form:
>>> $f(x) = a(1-e^{(bx)})+c$
>>
>> Problem 1. Your parameters A and C are very highly (anti) correlated
>> with each other. It would be better to recast as $A*EXP(B*X) + C$.
>
> The problem is I need a curve that starts low and asymptotes higher -- I
> have a reason to believe it will asymptote at some maximum, hence the
> $a(1-e^{(bx)})+c$ --> given this, how can I get this to work?

$A*EXP(B*X) + D$ will suit you just fine. It's the same function after all, with $(D=C+A)$. The fit you were doing had C and A almost perfectly anti-correlated, so combining the two will relieve some of that problem.

Craig

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Astrophysics, IDL, Finance, Derivatives | Remove "net" for better response
