
Subject: Re: Speaking of curve fitting...

Posted by [Vince Hradil](#) on Thu, 31 Jan 2008 16:42:43 GMT

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On Jan 31, 10:17 am, Paul van Delst <Paul.vanDe...@noaa.gov> wrote:

> Lasse Clausen wrote:

>> ... run the following code, spot the difference and explain, s'il vous

>> plait.

>

>> nn = 1000

>> xx1 = dindgen(nn)

>> xx2 = timegen(nn, start=julday(5,25,1980,11,23))

>

>> yy1 = sin(2.*2.*!pi*xx1/(nn-1.))

>

>> d = poly_fit(xx1, yy1, 6, yfit=yfit1, /double)

>> d = poly_fit(xx2, yy1, 6, yfit=yfit2, /double)

>

> Try

> d = poly_fit(xx2-xx2[0], yy1, 6, yfit=yfit2, /double)

>

>> !p.multi = [0,1,2]

>> plot, xx1, yy1, /xstyle

>> oplot, xx1, yfit1, linestyle=1

>> plot, xx2, yy1, /xstyle

>> oplot, xx2, yfit2, linestyle=1

>

>> end

>

>> I had a quick look at POLY_FIT.PRO but I can spot nothing which could

>> explain the above behaviour. I run 32bit IDL 6.4 on some Linux.

>

>> Cheers

>> Lasse Clausen

Sure that works, but the underlying issue is still there - why should it matter?

My guess: propagation of (roundoff) errors when poly_fit.pro calculates the b-matrix.
