Subject: Re: % POLY_FIT: Warning: Invert detected a small pivot element - help needed
Posted by David Gell on Tue, 15 Jun 2010 12:43:57 GMT

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On Jun 12, 1:54 pm, sid <gunvicsi...@gmail.com> wrote:
> Hi,
>   I am fitting my data with 3 degree polynomial using poly_fit,
> after running the program, im getting this warning message % POLY_FIT:
> Warning: Invert detected a small pivot element. Please suggest me if
> there is any way to get rid of this and why exactly im getting this
> kind of warning.
> Note: I read from poly_fit help that by setting the /double keyword,
> we can get rid of this kind of warning. But that doesn't helped me.
> regards
> sid

The small pivot warning is an indication that poly_fit is attempting
to invert an ill-conditioned matrix. These matrices have rows or
columns that are nearly identical. There are other fitting routines
that are more robust, for example singular value decomposition,
SVDFIT. Also, check Craig Markwardt's library of fitting routines,
http://cow.physics.wisc.edu/~craigm/idl/fitting.html.