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Subject: Re: SVDFIT Problems

Posted by [Paul Van Delst\[1\]](#) on Fri, 30 Aug 2002 17:08:31 GMT

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Bill wrote:

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> In my occasional attempts to use SVDFIT I have had problems in that it  
> reports singular solutions when other fitting routines, e.g., REGRESS,  
> have had not problems.

Deja vu! I was using the SVDFIT routine just yesterday to fit a second order polynomial. I kept getting an error report for a singular value (even with /DOUBLE). Used POLY\_FIT with no problems

(SVDFIT \_was\_ overkill for what I wanted to do.)

<snip>

> Unfortunately it appears that the code currently relies on a simplified  
> version of the Numerical Recipes routine SVDCMP, that does not return  
> the singular value vector that Numerical Recipes uses to compute wmax. A  
> rewrite to give SVDFIT the proper properties is more work than I am  
> willing to put in at this time.

Thanks for taking the time to nut the problem out and report it here. It really pains me (just having finished the yearly license renewal tooth-pulling process) that these sorts of things are \*still\* found in incarnations of such well-worn linear algebra problems like SVD. I spent about half a day trying to figure out what I was doing wrong until I tossed the lot and surfed over to netlib.org for some fortran routines. I thought IDL was supposed to \*save\* time for this sort of thing?

paulv

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Paul van Delst  
CIMSS @ NOAA/NCEP/EMC  
Ph: (301)763-8000 x7274  
Fax:(301)763-8545

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