
Subject: Re: SVDFIT Problems

Posted by [Chris Torrence](#) on Tue, 03 Sep 2002 15:20:39 GMT

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Hi Bill,

Actually, the SVDFIT code **does** use $\text{THRESH} = \text{TOL} * \text{wmax}$. If you look carefully at the IDL code, around line 249, there is the following line:

```
small=WHERE(variance LE max(variance)*thresh, cc)
```

(The variable name "thresh" was an unfortunate choice, and should really have been "tol".)

Internally, the C code is identical to the Numerical Recipes code, except for the TOL value, which is $1\text{e-}9$ for both single and double precision. We could consider adding a TOL keyword to the SVDFIT function, which would allow the user to change this default.

Cheers,

Chris
Research Systems, Inc.

"Bill" <wclodius@lanl.gov> wrote in message
news:3D6F97ED.C81C6C00@lanl.gov...

```
> In my occaisional 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. The obvious source of the problems is that within
> the routine the line
>
>   THRESH = 1.0E-9
>
> does not correspond to the definition in Numerical Recipes
>
>   THRESH = TOL*wmax
>
```
