

---

Subject: Re: IDL question about IMSL\_NLINLSQ  
Posted by [wy](#) on Wed, 22 Jul 2009 10:57:10 GMT  
[View Forum Message](#) <> [Reply to Message](#)

---

> I'm using IMSL\_NLINLSQ to solve nonlinear equations right now. I've  
> got results utilizing argument like "MAX\_STEP=0.01,TOL\_AFCN=0.01", but  
> I have an prompt as below:  
>  
> "IMSL Error: IMSL\_NLINLSQ: Warning: MATH\_UNBOUNDED: Five consecutive  
> steps of length "MAX\_STEP" have been taken; either the function is  
> unbounded below, or has a finite asymptote in some direction or the  
> maximum allowable step size "MAX\_STEP" is too small."  
>  
> I changed the arguments to be more sensitive seemingly like  
> "MAX\_STEP=0.0001,TOL\_AFCN=0.00001", but the computer ran much quicker.  
> It's rather terrible. (The prompt also existed.)  
>  
> In fact, I can get entirely different results from MATLAB 'fsolve'  
> function using the same Levenberg-Marquardt algorithm. The results  
> from MATLAB don't change with initial values and the residuals are  
> negligible, while residuals from IDL lie in between 0.1 and 0.2.  
>  
> I'm really confused. Could someone help me explain this?

---