Subject: NEWTON: Roundoff problem in lnsrch_d
Posted by Nikola on Fri, 29 May 2015 18:14:42 GMT
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I'm solving a system of equations using the intrinsic NEWTON function. For many cases it work fine, but for some cases my code is crashing with a bit cryptic message:

 NEWTON: Roundoff problem in lnsrch_d

I can't google anything on it. Any clues where to look? I guess it indicates a convergence problem, still it's difficult to diagnose what's going on without understanding the message (and without going step by step through NEWTON).

Thanks!

Subject: Re: NEWTON: Roundoff problem in lnsrch_d
Posted by Russell[1] on Fri, 29 May 2015 20:19:58 GMT
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On Friday, May 29, 2015 at 2:14:45 PM UTC-4, Nikola Vitas wrote:
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>
> Thanks!

I have no idea what the error means, but just to be clear what options are you using? Double? Tolerence? etc.

-R

Subject: Re: NEWTON: Roundoff problem in lnsrch_d
Posted by Nikola on Fri, 29 May 2015 22:03:08 GMT
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I use /double. I varied tolerances and the number of iterations, but the result, i.e. the error was the same.

The values in the problem may vary for many orders of magnitude and I'm not surprised that the algorithm does not converge for certain conditions. However, I don't know how to capture this

error and to continue with execution of other cases when it happens.

Subject: Re: NEWTON: Roundoff problem in lnsrch_d
Posted by Matthew Argall on Fri, 29 May 2015 23:30:40 GMT
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Can you provide a short example that causes the error?