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Subject: Re: limits of 'invert'

Posted by [Foldy Lajos](#) on Wed, 16 Nov 2005 18:01:33 GMT

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Hi,

as an example, run time for simple matrix multiplication is proportional to  $n^3$ . For your sizes, this would give a factor of  $10^6$ . A 150x150 array can reside in the CPU cache, so add another 10 for the big array  $\Rightarrow 10^7$ . If "immediate" = 0.1 s, then  $10^7 * 0.1$  s is about two weeks.

And if you run out of physical memory, swapping to disk can add another factor of 100 :-(

regards,  
lajos

On Wed, 16 Nov 2005, queiny wrote:

> Dear IDL & Maths experts:

>

> Is there a limit for the 'invert' or 'la\_invert', program to calculate  
> the inversion of a square matrix, provided by IDL?

>

> When my matrix is 150x150, 'invert' return immediatelly, but when it is  
> '15000x15000', 'invert' runs for more than a day. I am wondering  
> whether it is in some infinite loop, or it simply needs that long.

>

> What is the reasonable upper limit that 'invert' or 'la\_inver' can  
> operate?

>

> Thanks,

>

> Q

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