Subject: Re: Matrix expansion performance
Posted by Ricardo Bugalho on Tue, 29 Mar 2005 09:55:29 GMT
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"Kenneth P. Bowman" <kpb@null.com> wrote in message
news:kpb-E62DD6.07500028032005@news.tamu.edu...
> In article <d28tre$j32$1@pegasus.fccn.pt>,
> "Ricardo Bugalho" <rbugalho@ibili.uc.pt> wrote:
>
>> I have a matrix A (m,n) is and I want to create a matrix B(m,n,p) such
>> that
>> each B(*,*,i) slice equals A. p is very large and n is usually smaller
>> than
>> m so I have:

>
> This should be quite fast, if I understand your problem correctly:

I think I didn't make clear the ranges of m,n and p.
In the problem I have at hand, m is always 8, n is usually 5 (min 1, max 16)
and p is in the range of 10,000 to 100,000.
Looping over p is a BadThing(tm) due to IDL's high interpretation overhead.

>
> B = BYTARR(m,n,p)
> FOR k = 0, p-1 DO B[0,0,k] = A
>
> This will avoid subscript arrays and should access memory efficiently on
> most machines.