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Subject: Re: Fast matrix filling in IDL  
Posted by [Vapuser](#) on Tue, 15 Dec 1998 08:00:00 GMT  
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Phillip & Suzanne David <[pdavid@earthling.net](mailto:pdavid@earthling.net)> writes:

> David Fanning wrote:

>>

>> Stein Vidar Hagfors Haugan ([steinhh@ulrik.uio.no](mailto:steinhh@ulrik.uio.no)) writes:

>>>

>>> A slight modification of David's program, and adding  
>>> my favourite speedup method:

>>>

>>> time = systime(1)

>>> array = rebin(reform(v,m,1,/overwrite),m,n,/sample)

>>> print, 'Time for Rebin Operations: ', systime(1) - time

>>>

>>> On { alpha OSF unix 5.2 Oct 30 1998}, this gives:

>>>

>>> Time for Loop: 0.27343702

>>> Time for Matrix Operations: 0.093750000

>>> Time for Rebin Operations: 0.067382932

>>>

>>> Note that the relative speeds can vary quite a lot on  
>>> different architectures.

>>

>> I guess. Here is what I get with Stein Vidar's modifications  
>> on my Windows NT machine:

>>

>> IDL> Print, !Version

>> { x86 Win32 Windows 5.2 Oct 30 1998}

>> IDL> test

>> Time for Loop: 0.10000002

>> Time for Matrix Operations: 0.019999981

>> Time for Rebin Operations: 0.039999962

>>

>> The Rebin operations are twice as slow as the matrix operations.

>> Hummm. Why!?

>

>

> Here's another result from IDL 5.0.2 on the Mac:

> Time for Loop: 0.30000007

> Time for Matrix Operations: 0.13333333

> Time for Rebin Operations: 0.50000000

>

> Phillip

Almost no differences between the matrix/rebin for an SGI.

```
testspeed
Time for Loop:    0.28050208
Time for Matrix Operations:  0.047688007
Time for Rebin Operations:  0.043171048
IDL> print,!version
{ mipseb IRIX unix 5.1.1 Jul 20 1998}
IDL>
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