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Subject: Re: 2D FFT Slow. Any ideas?

Posted by [Brian](#) on Mon, 08 Dec 2003 08:02:02 GMT

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Hi,

The IDL code is

```
A=dcomplex(randomn(seed,2048, 2048,/DOUBLE), randomn(seed,2048,
2048,/DOUBLE))
t=systime(1)
FA=fft(A,-1)
print, systime(1)-t
```

The corresponding matlab code is

```
A = randn(2048,2048) + i*randn(2048,2048);
tic; FA=fft2(A); toc
```

I get around 10.4 sec in IDL, and around 3.7 sec in MATLAB 6.5

-brian

"R.G. Stockwell" <noemail@please.com> schrieb im Newsbeitrag  
news:gN3Ab.767\$0\_.32178@news.uswest.net...

> "Brian" <brian.huether@NOdlrSPAM.de> wrote in message

> news:a298a85e9af4e70d51199dcae50c4c81@news.teranews.com...

>> I did a little benchmark between IDL and MATLAB. In each case I created  
a

>> random double precision complex array of size 2048 by 2048 and timed how

>> long the 2D FFT took. In MATLAB 6.5 it took about 3.5 sec, and in IDL,  
it

>> took about 10 sec. Is there a way to have IDL use MATLAB for the FFT,

>> perhaps using activex? Or would the overhead in using activex defeat the

>> purpose?

>>

>> thanks,

>>

>> brian

>>

>>

>

> You could try calling an external routine, some of the best being  
available

> at (fastest ft in the west)

>

> <http://fftw.org/>

>  
> Cheers,  
> bob  
>  
> PS I can't believe active x calls would improve speed, but hey, you never  
> know.  
> And, I'm surprised that the canned IDL is not very fast. Any chance you  
> don't really  
> have a 2048^2 array in idl (did you make a 2049^2 array for instance?)  
>  
> If you post a blip of example code, I can run them here (matlab and idl)  
and  
> verify the time difference,  
> which would be very interesting.  
>  
>

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