Subject: Re: Dealing with Large data arrays, reducing memory and ASSOC
Posted by bill.dman on Thu, 14 Jun 2007 13:41:26 GMT
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On Jun 14, 8:33 am, Ambrosia_Everlovely
<ambrosia_everlov...@hotmail.com> wrote:
> Hi,
> I have a fairly large datacube, DC(x,y,t)=DC(512,512,2048) and I want
> to perform an FFT in the t direction. Now I can do,
> FFTDC=fft(DC,-1,dim=3) which takes an excessive amount of memory (19 G
> + 50 G virtual) and slows the whole system down.
> Since this must be a fairly common practice amongst astronomers, can
> anyone provide - or link to - a small IDL algorithm which will allow
> me to use ASSOC or reduce the memory in some way? I have also tried
> TEMPORARY, but this doesn't seem to help at all.
>
> Thankyou!!!!

Assuming you are using single precision, you can limit memory needed
to about 6GB with

fftdc = complexarr(512,512,2048)
for i=0,511 do for j=0,511 do fftdc[i,j,0] = fft(dc[i,j,*],-1)

this should help if your machine has more than 6GB for you to use.