Subject: looking for 2D FFT code?
Posted by jyli on Tue, 17 Dec 1996 08:00:00 GMT
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Hi,

I am looking for a piece of IDL code that does FFT on an image with M
rows and N colums.

I can't seem to be able to find a 2D FFT routine from IDL library.
I am very surprised.

cheers

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Beauty of style, harmony, grace and good rhythm depend on simplicity.

Subject: Re: looking for 2D FFT code?
Posted by davidf on Fri, 20 Dec 1996 08:00:00 GMT
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William Ryu <wsryu@fas2.fas.harvard.edu >writes:

> [Question about 2D FFTs omitted.]
>
> This question comes up again and again. Maybe it is time for a
> "Getting started with IDL" FAQ?

I've added a tip on doing frequency domain image filtering and
viewing the power specturm to my IDL Programming web page.

David

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Subject: Re: looking for 2D FFT code?
Posted by jyli on Fri, 20 Dec 1996 08:00:00 GMT
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William Ryu (wsryu@fas2.fas.harvard.edu) wrote:
: While it isn't obvious from the help file, IDL's fft() function will
: do multi-dimensional ffts ("The result returned by FFT is a complex
: array that has the same dimensions as the input array.").

With the help of RSI engineers, I think I have found the answer to my problem.

In the beginning, I fed a test image into FFT and the resulting power spectrum was not what I expected. Well now I know it is because the way IDL stores positive and negative frequency components in the FFT complex arrays, one needs to do a shift operation before displaying the spectrum. And now Page 1-280 in the IDL reference manual seems to make a lot sense.

Thanks for those who have responded.

happy holidays and happy IDL programming !

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