Subject: Re: Two dimensional fast fourier transforms
Posted by Ewan A. Macpherson on Sun, 08 Dec 1996 08:00:00 GMT
View Forum Message <> Reply to Message

W.K. Wells wrote:
> I am looking for routines for two dimensional fft's written for the
> IDL environment. Any help along these line would be greatly > appreciated.

I don't know whether this method will be too slow for your purposes, but
a 2D FFT can be performed on an array in the following way:

- replace the data in each of the N rows with their M-point, 1D FFT
- then replace the resulting columns with N-point, 1D FFTs
- that's it

--
Ewan Macpherson   <macpherson@earvax.waisman.wisc.edu>
Hearing Development Research Lab, Waisman Center
University of Wisconsin - Madison
http://www.waisman.wisc.edu/~macpherson/

Subject: Re: Two dimensional fast fourier transforms
Posted by peter on Mon, 09 Dec 1996 08:00:00 GMT
View Forum Message <> Reply to Message

Ewan A. Macpherson (Macpherson@Waisman.Wisc.Edu) wrote:
: W.K. Wells wrote:
: > I am looking for routines for two dimensional fft's written for the
: > IDL environment. Any help along these line would be greatly > appreciated.

: I don't know whether this method will be too slow for your purposes, but
: a 2D FFT can be performed on an array in the following way:

: - replace the data in each of the N rows with their M-point, 1D FFT
: - then replace the resulting columns with N-point, 1D FFTs
: - that's it

Or even easier, use the FFT function to do a 2D FFT.

    Y = FFT(X,1)

Peter