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Subject: Re: FFT in 1 dimension

Posted by [Wayne Landsman](#) on Fri, 07 Dec 2001 21:41:10 GMT

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hradilv.nospam@yahoo.com wrote:

> Here's what I came up with. Any comments?

I haven't examined your code in detail, but there is one line where the speed of the program can be improved significantly:

Instead of writing

```
for i=0, nlines-1 do fdata[* ,i] = fft(fdata[* ,i],inverse=inverse)
```

write

```
for i=0, nlines-1 do fdata[0,i] = fft(fdata[* ,i],inverse=inverse)
```

I'm actually not sure why this speed things up. I suppose by writing fdata[0,i] on the left hand side, you've directly specified a starting location to place the computation, but if you instead write fdata[\* ,i] then IDL first extracts a temporary variable, assigns it to the value of the computation, and then writes the temporary variable back into fdata. Still, I would think that the compiler could recognize that these two notations are equivalent.

--Wayne Landsman [landsman@mpb.gsfc.nasa.gov](mailto:landsman@mpb.gsfc.nasa.gov)

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