
Subject: Re: dfourt

Posted by [Matthew Argall](#) on Fri, 24 Apr 2015 18:44:28 GMT

[View Forum Message](#) <> [Reply to Message](#)

Looking at the code

<http://www.arm.ac.uk/~csj/idl/CLEAN/dfourt.pro>

It seems pretty easy to do. They appear to be building the Fourier transform as described in any undergraduate mathematical methods text (e.g. Boas). Essentially, the inverse transform would be

```
ifft = complex(0, 0)
for i = 0, npts - 1
  ifft = ifft + complex( A[i] * cos(f[i]*t), B[i] * sin(f[i]*t) )
endfor
```

Where A and B are the real and complex fourier coefficients, t is time, and f is frequency.
