Subject: Fourier Transform when intervals are not uniform
Posted by Sid[1] on Mon, 10 Oct 2005 17:38:42 GMT
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Hello

I am trying to (2-d) fourier transform when the data is sampled at non-uniform values of x and y (it is uniform in r and theta). I don't know if I should try to :

1. Write my own brute-force FT algorithm (I wrote one, using int_tabulate, gives me "sidelobes" in the 1-d FT of a gaussian)

2. Try and look at the algorithm of FFT in IDL to see if I can just take the FFT in radial co-ordinates.

I looked up the Cooley-Tukey algorithm in Numerical Recipes, but doesn't seem like IDL uses that, since it works for any number of points.

Does anyone know what algorithm the IDL FFT uses / how to get around this?