
Subject: What are the errors in the FFT?

Posted by [monty](#) on Thu, 08 Feb 2007 16:53:55 GMT

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For a given function $f(t)$ I am finding:

$\text{FFT}(\text{FFT}(f(t), -1), 1) - f(t)$ varies between about 10^{-7} to 10^{-8} for floating point
and about 10^{-14} to 10^{-16} for double precision

(I.e. the inverse transform of the transform deviates from the original function)

Is this a problem with the IDL implementation of the FFT, or is this a more fundamental issue with the algorithm itself?

-Monty Wood
