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Subject: Re: FFT phase?

Posted by [Craig Markwardt](#) on Fri, 25 Jan 2013 02:11:30 GMT

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On Thursday, January 24, 2013 12:28:02 PM UTC-5, xqin...@gmail.com wrote:

> Hi,  
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>  
> just use FFT(y). For example,  $y=A\cos(x+B)$ ,  $C=fft(y)$ . I think  $\text{atan}(C/\text{phase})$  should equal to B, but the return reslut is not. How to obtain A and B from complex C?

It is correct. Example:

```
x = 2*dpi*2*dindgen(16)/16 ;; Angle in radians  
y = 0.7*cos(x + 1.6000)  
c = fft(y,-1)  
print, atan(c[2],/phase)  
==> 1.6000
```

Craig

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