
Subject: Re: fft and least squares problem
Posted by [rogass](#) on Tue, 14 Aug 2012 18:22:11 GMT
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Finally, I found the mistake - sitting in front of this pc :)

Here is the code:

```
s=size(im,/dim)*1.  
im1 =im  
dx=.25  
dy=.3  
im2=image_shift(im1,dx,dy);more precise then  
interpolate(im,findgen(s[0])+dx,findgen(s[1])+dy,/grid,/cubic)  
fim1=fft(im1,-1)  
fim2=fft(im2,-1)  
corr=fim1*conj(fim2)/abs(fim1*fim2)  
corr=shift(corr,s/2)  
phase=atan(imaginary(corr)/real_part(corr))  
wx=(findgen(s) mod s[0])  
wy=(rebin(findgen(1,s[1]),s))  
wx-=s[0]/2  
wy-=s[1]/2  
wx*=2.*!pi/s[0]  
wy*=2.*!pi/s[1]  
r=5;fitting radius  
phase2=phase[s[0]/2 - r : s[0]/2 + r,s[1]/2 - r : s[1]/2 + r]  
wx2=wx[s[0]/2 - r : s[0]/2 + r,s[1]/2 - r : s[1]/2 + r]  
wy2=wy[s[0]/2 - r : s[0]/2 + r,s[1]/2 - r : s[1]/2 + r]  
print,la_least_squares(transpose([[wx2[*]], [wy2[*]]]),phase2 [*])
```

Thanks Helder!

Cheers

CR
