Subject: Re: azimuthal median
Posted by Wox on Tue, 15 Jan 2008 09:48:12 GMT
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On Mon, 14 Jan 2008 14:22:10 +0100, Bringfried Stecklum
<stecklum@tls-tautenburg.de> wrote:

> Hi folks,
>
> I am looking for a faster way to compute the azimuthal median in
> dependence on radius than the brute-force method, i.e. getting the index
> of pixels within a certain annulus, and using median(image[idx]). Is
> this another case for the histogram wizards out there?
>
> regards,
>
> Bringfried

I'm not familiar azimuthal median but what about image warping:

```
; Make azimuthal range
a0=0.
a1=2*!pi
ai=0.1
na=ceil((a1-a0)/ai)+1
ai=(a1-a0)/(na-1)
a=a0+ai*indgen(na)

; Make radial range
r0=10.
r1=20.
ri=0.1
nr=ceil((r1-r0)/ri)+1
ri=(r1-r0)/(nr-1)
r=r0+ri*indgen(nr)

; Radius and azimuth for warped image
r=rebin(r,nr,na,/sample)
a=rebin(transpose(a),nr,na,/sample)

; X and Y for warped image (xc,yc is center)
xmap=xc+r*cos(a)
ymap=yc+r*sin(a)

; Warped image
oimage=Interpolate(image,xmap,ymap,/cubic)
```

; Median
m=median(oimage,dim=1)