seems like my previous post got lost...
anyway I am suggesting to use interpolation (i.e. BILINEAR)
to convert from cartesian to polar coordinates.
That should be pretty fast.

Ciao,
Paolo

cmejiapr...@gmail.com wrote:
> Hi programmers,
>
> I have an image and I want to map an annulus of it (matrix 981X 981)
> onto a rectangular axes whose columns are the angle, and the rows are
> the radius to the central pixel. I tried:
>
> ;data has the image
> xx1 = findgen(4096,10)*0.
> for i=0,1023 do begin
> roll=i*360./4096.
> SB=rot(data,-roll,1,490.5,490.5,cubic=-0.5,missing=-1,/pivot)
> xx1[i,*]=SB[50:59,490]
> for j=0,9 do xx1[i+2048,j]=SB[930-j,490]
> xx1[i+3072,*]=SB[490,50:59]
> for j=0,9 do xx1[i+1024,j]=SB[490,930-j]
> endfor
>
> But it takes too long to run, i need something faster. Any advise?
> Thanks