Subject: Re: Radar Gridding Advice Sought
Posted by pgrigis on Wed, 09 Jul 2008 20:02:50 GMT
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Maybe something like this?
(see also http://www.dfanning.com/tips/grid_surface.html)

```
;create some test data in polar coordinates (radar view)
nr=512
nphi=512
r=findgen(nr)/(nr-1)
phi=findgen(nphi)/(nphi-1)*2*!Pi
rr=(phi*0+1)#r
pphi=phi#(r*0+1)

ray=exp(-(rr-0.5)^2*40-(pphi-1.5)^2*0.06)
tvscl,ray

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;

;conversion polar ->cartesian
xx=rr*cos(pphi)
yy=rr*sin(pphi)

;interpolation via triangular mesh (as in http://www.dfanning.com/tips/grid_surface.html
)
Triangulate, xx, yy, triangles, boundaryPts

gridSpace = [0.01, 0.01]
griddedData = TriGrid(xx, yy, ray, triangles, gridSpace,XGrid=xvector,
YGrid=yvector)

tvscl,griddedData
```

Ciao,
Paolo

David Fanning wrote:
> Paul van Delst writes:
>
>> Not a suggestion, but a question: as you say,
>> each ray is its own little wedge since the
>> radar has some finite beamwidth. As the radius
>> of each ray increases, how will you handle
>> "wedge overlap" of adjacent beams?
>
> My current plan is to ignore it. :-)

>
> I'm not trying to do science with this display, I'm
> just looking for fast, beautiful images. :-)
>
>> What about sidelobes? (Do radars have them? I
>> have no idea.)
>
> I have no idea, either. It hasn't been mentioned
> in conversations so far.
>
> Cheers,
>
> David
> --
> David Fanning, Ph.D.
> Fanning Software Consulting, Inc.
> Coyote's Guide to IDL Programming: http://www.dfanning.com/
> Sepore ma de ni thui. ("Perhaps thou speakest truth.")
