
Subject: Radar Gridding Advice Sought

Posted by [David Fanning](#) on Wed, 09 Jul 2008 13:50:35 GMT

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Folks,

An answer by Paolo this morning reminded me I could use some help on a problem.

I have some radar data in the form of rays of a particular angle and radius. If I simply plot the rays, I get a pie-shaped wedge, with lots of white space between rays that increases as I get further from the point of the wedge. My goal is to clean this up and have the wedge look more like an image.

One method I've tried successfully is to create small polygons for each piece of the wedge and to fill those polygons with the right color with POLYFILL. This works a treat, but is slower than I would like.

So, in my free moments (not too many lately!) I have been thinking about somehow regridding this ray data into an image-like thing, but I am not sure how to go about this. With my polygons, the area of each polygon increases as something like the square of the radius, so obviously I need to take this into consideration as I create and populate a "grid".

Does anyone have any experience with this kind of thing? Any ideas for how you might go about this? I'd be grateful for any suggestions.

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.")

Subject: Re: Radar Gridding Advice Sought

Posted by [Kenneth P. Bowman](#) on Wed, 09 Jul 2008 16:16:56 GMT

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In article <MPG.22de701878b262fd98a3d0@news.frii.com>,

David Fanning <news@dfanning.com> wrote:

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> Does anyone have any experience with this kind of thing?
> Any ideas for how you might go about this? I'd be
> grateful for any suggestions.
>
> Cheers,
>
> David

David,

You should be able to use MAP_IMAGE to do this.

Select the azimuthal equidistant project, which is equivalent to polar coordinates. You will need to create a set of fake coordinates for your radar data. Longitude is equivalent to the radar azimuth, and co-latitude (90 - latitude) is equivalent to radar range.

Ken
