Subject: Re: Radar Gridding Advice Sought Posted by Paul Van Delst[1] on Wed, 09 Jul 2008 14:11:07 GMT

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David Fanning wrote:

> 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.

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? Average the signal? What about sidelobes? (Do radars have them? I have no idea.)

cheers,

paulv