Subject: Re: TRIANGULATE/TRIGRID problem in IDL 5.3 (SGI) Posted by Kenneth P. Bowman on Fri, 20 Apr 2001 00:16:34 GMT View Forum Message <> Reply to Message

In article <3ADF1226.EF649510@ssec.wisc.edu>, Liam E. Gumley <Liam.Gumley@ssec.wisc.edu> wrote:

- > However the interpolated column and row arrays have bogus values along
- > the top and bottom edges of the satellite swath (the edges are curves in
- > the example). For example, along the bottom edge of the interpolated
- > swath there are cyan pixels where the pixels should be darker blue. This
- > causes the bilinear interpolated image (not shown here) to have very
- > noticeable artifacts.

I'm not certain if this is your problem, but if you have a 2-D array with, say, missing values in it, when you interpolate you will get artifacts along the edges of the missing regions. You can fill the missing regions with NaN's (and lose some pixels along the edges), or you could, for example, extrapolate instead of interpolating when one of the interpolants is missing. That generally requires some knowledge of the nature of the missing data (e.g., shape of the missing regions, etc.).

In order to make contour plots of station data from Texas, we ended up creating a mask to mask out any grid boxes outside the state boundary. We let TRIANGULATE and TRIGRID do what they wanted, and then masked out artifacts along the edges.

Ken