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Subject: Re: TRIANGULATE/TRIGRID problem in IDL 5.3 (SGI)

Posted by [James Kuyper](#) on Fri, 20 Apr 2001 15:04:57 GMT

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Ben Tupper wrote:

...

- > IDL's TRIGRID routine interpolates out to the limits of the 'outer-hull'
- > defined by the Delaunay triangulation. The curviness of the data swath
- > (almost banana-shaped) has introduced a subtle concavity. There is a triangle

This data set sounds familiar to me. Is it MODIS data from the Terra satellite? If so, then I'm the one responsible for the program that generates the geolocation information Liam's using. In that case, it's not really a banana shape. Seen in a proper 3-D context, without map distortion, it's actually a bow-tie shape - the edges are actually arcs of what in spherical geometry are called "small" circles: they have radii of less than 90 degrees, bending inward. However, the radius of those "small" circles is pretty large, so they're almost great-circle arcs. The two longest arcs should have radii of about 89.6 degrees.

...

- > doesn't seem practical for your situation. Your data comes in sets of 10
- > (should it be decades or decaduplets?); is each set a scan line? If so,
- > perhaps you could assemble the extremes from each scan line to use as the
- > masking boundary.

If I'm right about it being MODIS data, the sets of 10 represent a single frame of data. It's the complete set of 1354 frames that represents a single scan. Those two numbers, 10 and 1354, are the reason I suspect this is MODIS data. The MODIS instrument collects 3000 frames of data a second, and produces one such scan every 1.477 seconds (the missing 1.026 seconds is the time it spends not looking at the earth during each scan).