Subject: Re: problem with TRIANGULATION option in CONTOUR Posted by David Fanning on Sat, 23 Oct 2010 23:15:23 GMT

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Ben Tupper writes:

- > You might consider running the points through GRID_INPUT first. I
- > really have no idea if that will help in this case, but it often comes
- > to the rescue when interpolating.

Yes, that's a good suggestion.

Or, I would try just gridding the data with Triangulate and Trigrid, and pass the gridded data to Contour. In other words, don't try to use the TRIANGULATION keyword. (I have to admit, I had never heard of this keyword!)

Here are the commands I use to grid irregular data from a book that will be hot of the press in a month or so. I get the X and Y vectors that go with the gridded data from the XGRID and YGRID output keywords to TriGrid.

Triangulate, lonIrr, latIrr, triangles
gridData = Trigrid(lonIrr, latIrr, dataIrr, \$
triangles, NX=41, NY=41, \$
XGrid=xgrid, YGrid=ygrid)
Contour, gridData, xgrid, ygrid, /Cell_Fill, \$
Levels=levels, Background=FSC_Color('white'),\$
Position=[0.125, 0.125, 0.95, 0.80], \$
Color=FSC_Color('black'), XStyle=1, YStyle=1, \$
C_Colors=Indgen(nlevels)+1

Cheers,

David

P.S. If you want to send the data, I'm always looking for perverse examples to add to the book! :-)

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Coyote's Guide to IDL Programming: http://www.dfanning.com/
Sepore ma de ni thui. ("Perhaps thou speakest truth.")