
Subject: Re: fitting contours with ellipse

Posted by [David Fanning](#) on Tue, 05 Jan 2010 13:02:40 GMT

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Francis Burton writes:

- > One requirement for a 'good fit' in this case is to have as
- > much of the ellipse represented by data points as possible
- > (i.e. no big gaps). The set of coordinates returned by CONTOUR
- > using the PATH_INFO keyword should be well-spaced at least;
- > whether there are enough coordinates will depend on the size
- > of the contour path in relation to the grid spacing. I would
- > simply feed the coordinates to the ellipse-fitting routine
- > and see if it produces sensible results for your data.

Alas, the problem with the contours that come from the contour command is that some of the time they are NOT "well spaced". In fact, they are vectors. So, if a contour segment is straight (say along an edge) there will be no points at all between the ends of the straight segment.

It was to get around this problem (among others) that I wrote ArcSample, which samples a closed curve at approximately equal intervals. It essentially digitizes a contour line so you can do something useful with it later. (I used it in my ActiveContour program.)

<http://www.dfanning.com/programs/arcsample.pro>

Cheers,

David

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Coyote's Guide to IDL Programming: <http://www.dfanning.com/>

Sepore ma de ni thui. ("Perhaps thou speakest truth.")
