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Subject: Re: fitting contours with ellipse

Posted by [fburton](#) on Tue, 05 Jan 2010 11:22:52 GMT

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In article <2219a304-4c24-4d4d-ab33-4e8c2dce92de@m25g2000yqc.googlegroups.com>, collinritzinger <b0burk02@gmail.com> wrote:

> I have several contour maps and I'd like to have a more quantitative  
> way of describing how 'peaked' or 'boxy/circular' they are. I was  
> thinking of doing this by fitting an ellipse to the contours and  
> examining best fit parameters. People have done this for blobs before  
> (see [http://www.dfanning.com/ip\\_tips/fit\\_ellipse.html](http://www.dfanning.com/ip_tips/fit_ellipse.html)) but I'm not so  
> sure how to go about it for contours. Do you all have any ideas?  
> Thanks!

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.

Francis

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