
Subject: Smooth Contour Plot

Posted by [Sofie Fehlmann](#) on Tue, 01 Nov 2011 10:24:21 GMT

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Dear all,

I have just started using IDL and have now a question:

How can plot smooth 2d Plots? I have tried the following:

```
c1 = contour(data,x,y,rgb_table=34,/fill,n_levels=55)
```

The result is a 2D plot which looks like a surrealistic picture of art. If I use the function `min_curve_surf(data)`, the program crashes. If I increase the number of levels, the result looks even worse.

Is there a way to create a colored 2D plot with smooth color variations?

Subject: Re: Smooth Contour Plot

Posted by [David Fanning](#) on Tue, 01 Nov 2011 15:16:06 GMT

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Sofie Fehlmann writes:

```
> I finally found the solution.  
>  
> Maybe I didn't state the problem very well. I have a matrix with data  
> points. What I wanted to do is the following: Each point should have a  
> certain color such that I get a smooth picture. Somehow, when I  
> changed the number of levels (n_levels), the color scheme just started  
> from the beginning.  
>  
> The following pattern worked finally:  
>  
> levels = 256  
> step = (Max(data) - Min(data)) / levels  
> userLevels = IndGen(levels) * step + Min(data)  
>  
> contour(data,x,y,rgb_table=33,  
> fill,c_value=userlevels,c_color=indgen(levels)+1)  
>  
> Doing so, I have created an array of data-steps. Further, the c_color  
> command defines the corresponding color.
```

Ah, yes, that will smooth things out. Of course, so will displaying your data as an image. ;-)

Cheers,

David

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David Fanning, Ph.D.

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

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