
Subject: Overlaying filled contour plots

Posted by [Simon de Vet](#) on Fri, 27 Jul 2001 14:57:49 GMT

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I have two sets of data for a series of points. One set indicates the values of a certain parameter, the others are the values of another parameter.

Is there a way to overlay two filled contour plots? I'd like, for example, to have one of the values plotted in red, the other in blue, with purple (or another colour) where they overlap. These contour maps have two levels each (on and off), so I don't need to worry about shades of red or shades of blue. I just need contours for four states: both on (purple), both off (white), one on other off and vice versa (red and blue).

Any ideas?

-- Simon

Subject: Re: Overlaying filled contour plots

Posted by [Simon de Vet](#) on Tue, 31 Jul 2001 13:37:55 GMT

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Craig Markwardt wrote:

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> Pavel is on the right track here I think. Couldn't you do the following:
>
> y = on1 * 2 + on2
> contour, y, levels=[0,1,2,3]
>
> Then adjust your color table to match what you need. ( like, 0=black,
> 1=red, 2=blue, 3=purple).
```

This was my first idea, but I'm afraid of the interpolation that IDL does automatically.

With just two possibilities, all entries are 1's or 0's, and IDL interpolates the contour boundary as being halfway between the two, which is reasonable.

With four possibilities, the interpolation should cause some troubles. If I have a 00 point given value 0 (black) next to a 11 point given value 3 (purple), IDL will interpolate a 1 and a 2 between them, so instead of a purple bounding a black, I'll have a purple bounding a blue bounding a red bounding a black. This interpolation gives misleading results, and I'd like to avoid it if possible.

I'm also working with postscript output, and have never used TV output, so I don't know if it's usable in my situation.

Thanks for the help. I'll keep playing, and see what I can come up with.

-- Simon

Subject: Re: Overlaying filled contour plots
Posted by [Martin Schultz](#) on Wed, 01 Aug 2001 12:55:06 GMT
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Hi Simon,

I once did something like this using the MIN_VALUE keyword. Basically, the idea is to "blank" out all values from each of the contour data sets that you don't want to see, by setting them to something (NaN or -9.99e30 or so), then call contour with /Overplot, min_value=-8.e30

Martin

Simon de Vet <sdevet@is2.dal.ca> writes:

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> of red or shades of blue. I just need contours for four states: both on
> (purple), both off (white), one on other off and vice versa (red and
> blue).
>
> Any ideas?
>
>
> -- Simon
>

--

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