Subject: Re: shading in contour plots
Posted by David Fanning on Sun, 10 Jul 2005 10:02:48 GMT
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C. Hoyle writes:

> Is it possible to create an accurate, filled contour plot with data
> which does not vary smoothly?

Depends entirely on the definition of "accurate", I suppose.
But if you are new to IDL, it's not likely. :-)

> Im trying to create a contour plot of trend data. I would like to add
> some shading in a single colour to indicate where the trends are
> significant, i.e. I have a 2-d array filled with 1s and 0s, and call
> contour with this array and the /cell_fill keyword. If I use
> levels=[1], I get a plot composed of large rectangular patches, even
> though the data is rather finely gridded, and the significance is not
> distributed in large rectangular areas. If I change the levels to
> levels=[0.1,1.], the plot looks completely different (much larger
> shaded areas), despite the fact that there are only ones and zeros in
> the array I'm plotting. Anyone got an idea of what Im doing wrong
> here?

I suspect just about everything, but this probably has more to do
with IDL and its documentation than it does with you. If you are
serious about filled contour plots, you might want to read these
articles:

   http://www.dfanning.com/tips/contour_hole.html
   http://www.dfanning.com/tips/contour_fill.html
   http://www.dfanning.com/tips/nlevels.html
   http://www.dfanning.com/color_tips/fill_colors.html

I suspect you *might* be able to get things to work, however,
if you tried setting your levels value to something like this:

   levels = [0.0, 0.5]

Depending upon how small your array actually is, this will
probably give you some resemblance to what you are expecting
to see.

Cheers,

David

P.S. If you are still struggling, tell us something about

the size of the array you are contouring and let us see
the contour code you are using.

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